03 FRATTAMINORE ADVANCED DESIGN STUDIO

edited by/a cura di Chiara Barone, Vincenzo Valentino

Master's Program in Architecture
University Federico II Napoli
A.Y. 2020-21

Frattaminore Laboratorio di Sintesi Finale
Corso di Laurea Magistrale 5UE in Architettura
Università degli Studi di Napoli Federico II
A.A. 2020-21

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Napoli: FedOAPress, 2022
(ADS - Advanced Design Studio; 3)
434 pp.; 29,7x42 cm
Access to the electronic version ***Accesso alla versione elettronica***
http://www.fedoabooks.unina.it
ISBN: 978-88-6887-157-4
DOI: 10.6093/978-88-6887-157-4

ADS - Advanced Design Studio
Book Series ***Collana editoriale***
edOAPress - Federico II University Press

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The publication collects the results of the work carried out during the 2020-2021 academic year.
La pubblicazione raccoglie i risultati del lavoro svolto durante l'anno accademico 2020-2021.
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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 2022
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Federico II University Press
fedOA Press
dipartimento di architettura
università degli studi di napoli federico II
scuola politecnica e delle scienze di base

TABLE OF CONTENTS / *INDICE*

10 **Introduction**
Introduzione

12 **ESSAYS / *SAGGI***

14 **Frattaminore, between the atellana city ant the metropolitan landscape tra città atellana e paesaggio metropolitano**
Frattaminore, tra città atellana e paesaggio metropolitano
Pasquale Miano

20 **Urban planning, Naples, its province, Frattaminore**
L'Urbanistica, Napoli, la sua provincia, Frattaminore
Amministrazione comunale Frattaminore

24 **Mapping as a design tool for Frattaminore come uno strumento di progetto per Frattaminore**
Mapping come uno strumento di progetto per Frattaminore
Laura Lieto

28 **The energy efficiency of buildings: an indispensable challenge in the energy transition**
L'efficienza energetica degli edifici: una sfida irrinunciabile nella transizione energetica
Fabrizio Ascione, Margherita Mastellone

34 **Principles of environmental sustainability for a climate-adaptive urban regeneration of the city of Frattaminore**
Principi di sostenibilità ambientale per una rigenerazione urbana clima-adattiva della città di Frattaminore
Eduardo Bassolino

38 **REFERENCE MAPPING/ USERS AND STAKEHOLDERS/ MATERIAL REGULATION/ AFFORDANCES MAPPING/STORYTELLING**
RIFERIMENTI/ UTENTI/ POSSIBILI REGIMI NORMATIVI/ USI ALTERNATIVI DELLO SPAZIO/ NARRAZIONE

48 **PROJECTS / *PROGETTI***

50 Open spaces and new urban mobility
Spazi aperti e nuova mobilità urbana

52 **Experimental typologie and indoor/outdoor crossings: rethinking urban spaces in relation to a new mobility**
Tipologie sperimentali e sconfinamenti indoor/outdoor: ripensare agli spazi urbani in relazione ad una nuova mobilità
Adriana Bernieri

58 **The widespread school** Angela Girardo
66 **Public space in a fragmented place** Rosanna Giuzio
74 **Urban sport - Farming park** Francesco Iuliano
82 **Green park** Fabio Manzo
90 **3D Connection** Angela Marzo
98 **Connecting different souls of a town** Ramona Sorrentino

106 Historical center and archaeological area
Centro storico e area archeologica

108 ***Unveiling heritage to activate new relations between the layers of Frattaminore's historic center***
Disvelare patrimoni per attivare relazioni tra gli strati del centro storico di Frattaminore
Francesca Coppolino

114 **The other side** Federica Alba
122 **Restart Atella** Gabriele Cimmino
130 **Re-creo - Spaces of abandonment** Francesca Marano
138 **Not in ruin but in progress** Beatrice Mariosa
146 **Mobility/archaeology** Giuseppe Maria Marra
154 **The terraces of Frattaminore** Gabriella Masucci
162 **Across the heritage** Anna Nastelli
170 **Every floor a new world** Laura Pagano
178 **Re-imagining Frattaminore** Silvia Paparo
186 **Archaeology - Agriculture** Valeria Parracino
194 **A connective path** Rosario Clemente Perrotta
202 **Inhabited edges** Benedetta Ruggiero
210 **The promenade** Claudia Sorrentino
218 **Across the city** Giovanna Vitelli

226 Industrial archaeology. The case of the ex-former mill
Archeologia industriale. Il caso dell'ex Mulino

228 **Evolving urban archaeologies. Design explorations for architecture in ruins in Frattaminore**
Archeologie urbane in evoluzione. Esplorazioni progettuali per l'architettura in rovina a Frattaminore
Chiara Barone

234 **The productive garden** Alfonso Maria Annunziata
242 **Another brick in the mill** Giuseppe De Vita
250 **Archiculture** Andrea Martino
258 **Re-mark the land** Marta Parente
266 **Open arches** Roberta Vanacore

274 Suburbs and industrial area
Periferie e aree interne

276 **New forms of urbanity, The inclusive project for the suburb**
Nuove forme di urbanità. Il progetto inclusivo per la periferia
Marilena Bosone

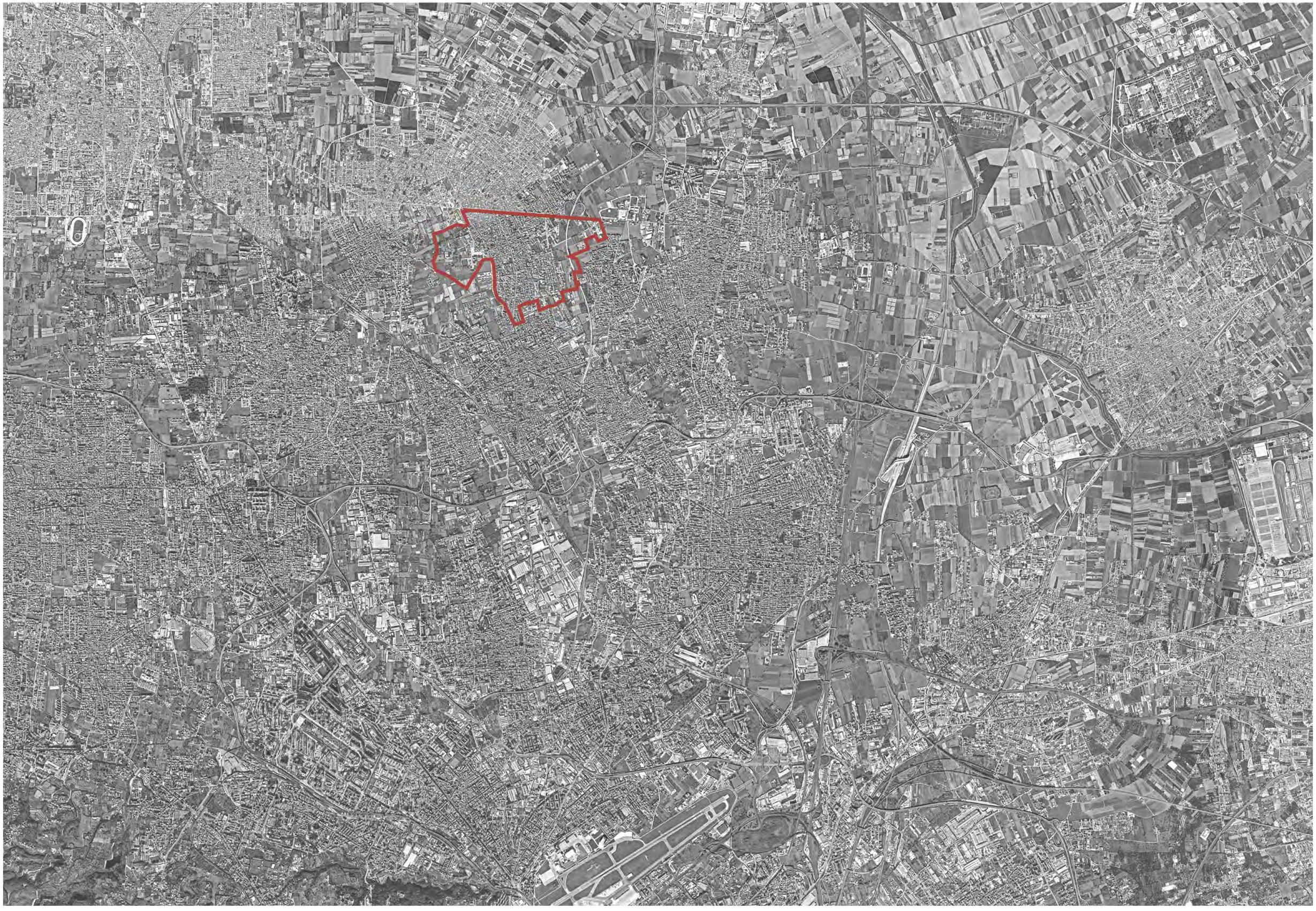
282 **Go through** Gabriele Abbate
290 **Peripheral areas** Luca Battipaglia
298 **Hemp - Orium** Carmela Bottone
306 **The basement square** Andrea Cimmino
314 **Fraincanti** Claudia Giordano
322 **Agri - cultural park** Ilaria Domenica Iazzetta
330 **Take care of limits** Carmela Napolitano

338 Public equipment
Attrezzature di carattere pubblico

340 **The urban project as an architectural derivation. Expansions and contractions of public space in the Frattaminore area**
Il progetto urbano come derivazione architettonica. Espansioni e contrazioni dello spazio pubblico nel territorio di Frattaminore
Vincenzo Valentino

346 **Fratta Middle School** Francesco Caliendo
354 **Take care of the margins** Maria Alessandra Desiderio
362 **Landmark at the border** Caterina Fiscina
370 **Linear park** Sara Liguori
378 **Under the bridge** Marta Matarese
386 **The city's snake** Umberto Molaro
394 **Viggiano Multitasking** Pasquale Notariello
402 **The red wire** Imma Perna
410 **The red wire** Ferdinando Romano
418 **Connectiong the opposites** Maria Russo

428 **INTEGRATED COURSES OF THE DESIGN STUDIO** / ***CORSI INTEGRATI DEL LABORATORIO DI PROGETTAZIONE***



Introduction

The design work carried out on the city of Frattaminore represented, for the students in the last year of the Master's Program in Architecture 5UE, an important experiment, from a design and professional point of view, towards the development of an approach aimed at finding an adequate and factual response to the multiple needs posed by the reality of the context in which it operates.
The book collects the results of the work carried out during the 2020-2021 academic year, highlighting the multiplicity of aspects and design topics addressed, as well as the variety of the proposed solutions.
The structure of the book reflects this experimental approach, starting with the exploration of some preliminary topics and methods, examined in the "Essays" section; continuing through the tool of the "mapping" and the interaction with the environment and with the people who live the places; finally, working on assembling and defining a "synthesis" of data and investigations through the design proposals, described in the "Projects" section. Each project theme includes a theoretical study through an introductory essay, and several design variations to provide, in an alternative way, possible scenarios for the city.
To try to solve the existing critical issues, yet to enhance the potential and the various heritage of the city of Frattaminore, the project proposals were built grafting into the existing, not oriented towards the definition of a closed form and a predetermined function. On the contrary, it has implied to work on the idea of an open form, which reuses what already exists, including multiple possibilities of use and continuously changing its perimeter, extending and incorporating urban pieces of different nature.
Scenarios of new possible meanings and new urban transformations are, therefore, the result of this work, made up of different levels of study and research related to the general idea of Frattaminore as a *city in transition*.

Introduzione

Il lavoro progettuale condotto sulla città di Frattaminore ha rappresentato, per gli studenti all'ultimo anno del corso di studi in Architettura 5UE, un esperimento di grande rilevanza, dal punto di vista progettuale e professionale, verso lo sviluppo di un approccio teso a trovare una risposta adeguata e concreta alle molteplici necessità poste dalla realtà del contesto in cui opera. La pubblicazione raccoglie gli esiti del lavoro svolto nell'arco dell'anno accademico 2020-2021, ponendo in evidenza la molteplicità di aspetti e temi progettuali affrontati, così come la varietà delle soluzioni proposte.
La struttura del libro rispecchia tale approccio sperimentale, a partire dall'esplorazione di alcuni temi e metodi preliminari, esaminati nella sezione "Saggi"; proseguendo attraverso lo strumento del "mapping" e dell'interazione con l'ambiente e con le persone che abitano i luoghi; giungendo, infine, alla messa a sistema e ad una "sintesi" delle informazioni e delle indagini effettuate attraverso le proposte progettuali, descritte nella sezione "Progetti". Ciascun tema progettuale prevede un approfondimento teorico, attraverso un saggio introduttivo, e svariate declinazioni progettuali che provano in maniera alternativa a fornire possibili scenari per la città. Per provare a risolvere le criticità esistenti, ma anche per valorizzare le potenzialità e i vari patrimoni del territorio di Frattaminore, le proposte progettuali sono state costruite attraverso un meccanismo di innesto nell'esistente, non orientato alla definizione di una forma compiuta e di una funzione predeterminata, ma che, al contrario, ha consentito di lavorare su un'idea di forma aperta, che ha riutilizzato quanto esiste, che ha incluso molteplici possibilità di uso e che ha cambiato continuamente la propria perimetrazione, estendendosi e inglobando pezzi urbani di diversa natura. Scenari di nuovi possibili significati e nuove trasformazioni urbane sono, dunque, il risultato di questo lavoro, composto da diversi livelli di approfondimento legati all'idea generale di Frattaminore come *città in transizione*.

ESSAYS / *SAGGI*

REFERENCES

1. R. Carullo (ed.), "Intervista a Valeriano Pastor", in *IUAV. Didattica dell'architettura dal 1926 al 1963*, PolibaPress, Bari 2009.

2. G. De Carlo, (ed. S. Marini), *L'architettura della partecipazione*, Quodlibet, Macerata 2013.

3. P. Gregory, *Territori della complessità. New scapes*, Testo & Immagine, Torino 2003.

4. R. Koolhaas, S. Boeri, S. Kwinter, N. Tazi, *Mutations*, Actar, New York 2001.

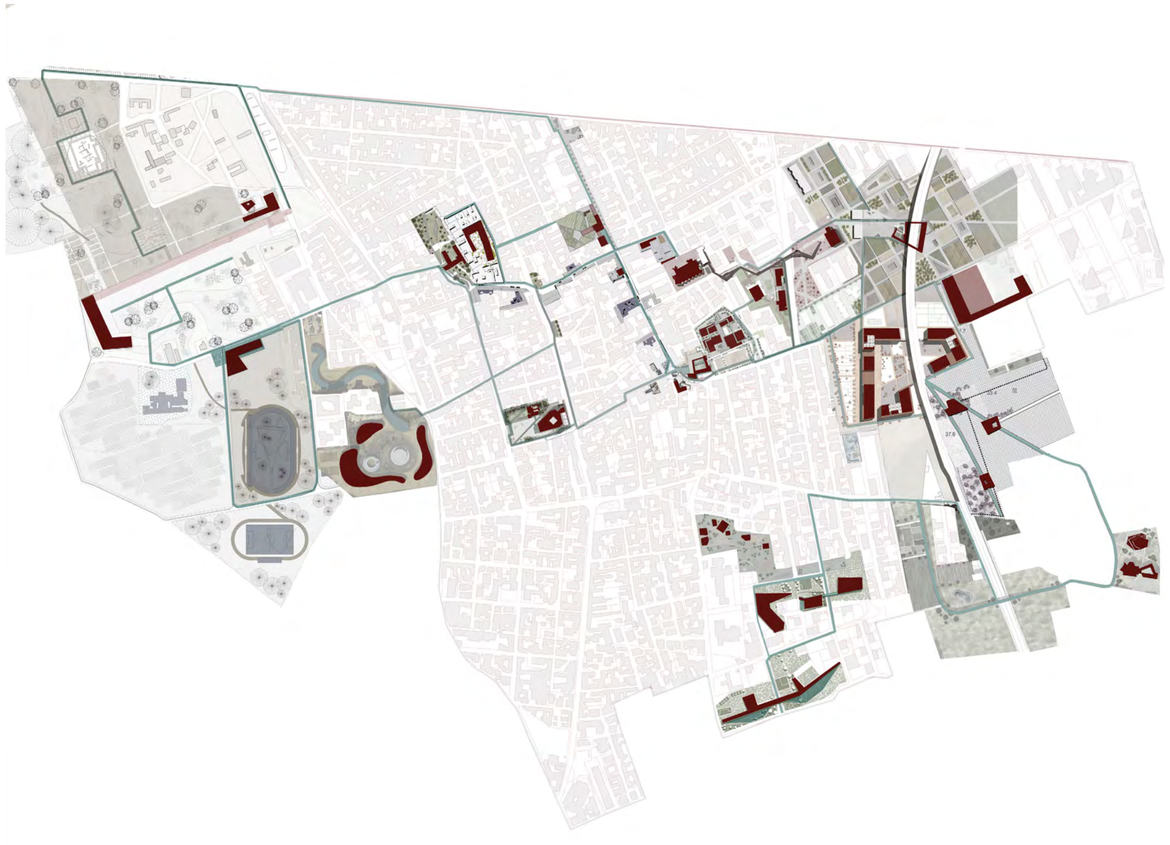
5. P. Miano (ed.), *Healthscape. Nodi di salubrità, attrattori urbani, architetture per la cura*, Quodlibet, Macerata 2020.

6. R. Moneo, *Costruire nel costruito*, M. Bonino (ed.), Allemandi, Torino 2007.

7. M. Vanore, M. Triches (eds.), *Del prendersi cura. Abitare la città-paesaggio*, Quodlibet, Macerata, 2019.

Frattaminore is an urban center to the north of Naples, in immediate contact with the Caserta area: after the experiences of Castelvolturno and Portici, it was chosen as the theme for the Advanced Studio Design due to the peculiarity of the settlement situation in the Atellana city, but also in the large conurbation of municipalities to the north of Naples. Crossing the municipal territory, it's possible to recognize the fragments of the two historical centers, dense but with a building heritage in partial abandonment, and the discontinuous areas of residential and productive expansion, mixed with an agricultural landscape with few permanent features. In this articulated urban and territorial framework, it was not difficult for the students to choose and define the urban and architectural design, to be developed in the interweaving with the other disciplines. The student's attention was mainly focused on the archaeological area and the historical center, on the former Mill area, on the new public facilities, and on the large marginal open spaces. In the Advanced Design studio, the gradual development of the design process at the different scales and the multidisciplinary composition imposed a continuous exchange with the specificities of the sites of interest and with the citizens, to build a knowledge that went beyond just cartographic and archive studies. The aspects of specific knowledge were constantly fed by the study of national and international design references and experiences, central to the current debate, which constituted the starting point to initiate innovative design reflections for the city of Frattaminore. The different field-trips made it possible to enter into the heart of the city, crossing it and fully understanding the heterogeneity existing between the historic centers, built by a rich heritage of partially abandoned buildings, and the fragmentation of the marginal expansion areas, occupied diffusely by more recent residential constructions, tertiary and commercial activities, intersected with permanent agricultural land. This diversity of the two landscapes outlined also made it necessary to track down design topics that could be the trigger for a broader strategy. Thus several recurring design topics emerged, such as the reuse of abandoned buildings in the historic center, the valorization and the improvement of accessibility and usability to the archaeological area, the increase of equipped public spaces, such as parks, gardens, squares, at the service of the population, as well as the recovery of peripheral industrial areas and complexes.
These design, architectural and urban experiments were developed to connect the two landscapes described above in a single overall vision of the Frattaminore territory, from which new possible urban relations and multi-scalar plots emerged, capable, on the one hand, of revitalizing the historical areas and, on the other, of densifying the marginal areas. The students dealt with these project topics divided into macro-groups while developing the chosen project topic more specifically individually and autonomously.
Generally, to try to resolve the existing critical issues, but also to enhance Frattaminore's potential, the design proposals have necessarily been constructed through a mechanism of grafting into the current condition, aimed at defining open solutions, at dialoguing with the existing, but reasoning on new possibilities of use and the definition

Frattaminore è un centro urbano a nord di Napoli, ad immediato contatto con l'area casertana: dopo le esperienze di Castelvolturno e Portici è stato scelto come tema del Laboratorio di Sintesi Finale per la particolarità della situazione insediativa nella città atellana, ma anche nella conurbazione dei comuni a nord di Napoli. Attraversando il territorio comunale si riconoscono i frammenti dei due nuclei storici, densi ma con un patrimonio edilizio in parziale abbandono e le discontinue aree di espansione residenziale e produttive, frammiste ad un paesaggio agricolo con poche permanenze. In questo articolato quadro urbano e territoriale non è stato difficile per gli studenti scegliere e definire il tema di progettazione urbana e architettonica, da sviluppare nell'intreccio con le altre discipline. L'attenzione degli studenti si è maggiormente soffermata sull'area archeologica e sul centro storico, sull'area dell'ex-Mulino, sulle nuove attrezzature pubbliche e sui grandi spazi aperti marginali. Nel laboratorio, lo sviluppo graduale del processo progettuale alle diverse scale e l'articolata composizione multidisciplinare impongono un continuo scambio con le specificità dei siti di interesse e con i cittadini, al fine di costruire una conoscenza che andasse oltre i soli studi cartografici e d'archivio. Gli aspetti di conoscenza specifica sono stati costantemente alimentati dallo studio di riferimenti ed esperienze progettuali di carattere nazionale e internazionale, centrali nel dibattito attuale, che hanno costituito il punto di partenza per avviare riflessioni progettuali innovative per la città di Frattaminore. I diversi sopralluoghi hanno permesso di entrare nel vivo della città, attraversandola e comprendendo fino in fondo l'eterogeneità esistente tra i nuclei storici, costituiti da un ricco patrimonio edilizio parzialmente in abbandono e la frammentazione delle aree periferiche, occupate in maniera diffusa dalle più recenti costruzioni residenziali, da attività terziarie e commerciali, intersecate a permanenze del territorio agricolo. Anche questa diversità dei due paesaggi delineati ha reso necessario rintracciare delle tematiche progettuali che potessero costituire l'innesco per una strategia più ampia. Sono così emersi alcuni temi progettuali ricorrenti, quali il riuso degli edifici in abbandono del centro storico, la valorizzazione e il miglioramento dell'accessibilità e della fruibilità all'area archeologica, l'incremento delle dotazioni degli spazi pubblici attrezzati, come ad esempio parchi, giardini, piazze, a servizio della popolazione, nonché il recupero di aree e complessi industriali periferici. Queste sperimentazioni progettuali, architettoniche e urbane, sono state sviluppate per connettere i due paesaggi prima descritti in un'unica visione complessiva del territorio di Frattaminore, dalla quale sono emerse nuove possibili relazioni urbane e trame multiscalari in grado, da un lato, di rianimare le aree storiche e, dall'altro, di densificare le aree periferiche. Gli studenti hanno affrontato queste tematiche di progetto suddivisi in macrogruppi, pur sviluppando il tema progettuale prescelto più specificamente in maniera singola e autonoma. In linea generale per provare a risolvere le criticità esistenti, ma anche per valorizzare le potenzialità di Frattaminore, le proposte progettuali sono state necessariamente costruite attraverso un meccanismo di innesto nella condizione attuale, volto alla definizione di soluzioni



Next page

Projects for Frattaminore City-Park. General Masterplan (2022)

Drawing by Chiara Barone

Pagina seguente

Progetti per Frattaminore città-parco. Masterplan generale (2022)

Disegno di Chiara Barone

of new relations, incorporating different parts of the city in the compositional and design mechanism from time to time.
From this perspective, the design projects based on a specific topic were developed in the awareness of the need to address it not in isolation, but in a logic of correlation with other design topics, to return to a strategic overall framework, consisting of interrelated projects on multiple and diversified areas of the municipal territory.
In this sense, an attempt has been made to overcome the logic of the design exercise not as the determination of a completed form in a pre-established area, but as a formal strategy that continually changes, that evolves by incorporating the existing, that opens up to multiple uses, that changes its boundaries, weaving new relationships with the elements present in the urban context taken into consideration from time to time.
Recomposing the different frameworks, the idea of Frattaminore emerges as an urban center that can transform itself starting from a series of complex nodes capable of activating new relational plots and articulated processes of redefinition of urban relations.
Complex nodes and relational plots are the starting point for a project in the making, always changing, stratifying, and interpreting the city as the material of the design.
The reactivation of abandoned spaces through reuse, the layering of urban fabrics for the definition of new multi-level spaces, the construction of a new idea of open space, the reconfiguration of disused urban areas and abandoned buildings to which new urban roles have been attributed; the connection between mixed spaces through the definition of inhabited infrastructures and/or new sustainable mobility systems or pedestrian routes, these are the themes on which a new urban vision for Frattaminore could be elaborated and a concrete possibility of dialogue with the municipal administration and citizens. This urban vision has been represented in a unitary design, which tries to hold together all the design projects elaborated for the city of Frattaminore, even with some contradictions and overlaps; in any case it can constitute a useful and innovative reflection on the city. From the overall map it is also possible to arrive at partial syntheses relating to individual macro-areas, which constitute the backbone of the overall strategies. From this overall map it was possible to identify specific design topics for individual areas, which, explored specifically in the individual macro-groups, tried to provide concrete solutions for more restricted urban areas, while preserving coherence with the overall design.
A first design topic is that of the grafting of new public uses in the open spaces widespread in the city, connected and systemised through a new green urban mobility paths: the pedestrianisation of some road axis, the introduction of bicycle and pedestrian paths, and the insertion of new urban connections and crossings makes it possible to create a solid mobility plot, to which diffuse open spaces in the city such as, squares, courts, abandoned gardens or abandoned open spaces cling, which suitably equipped welcome architectural grafts with different public uses, such as spaces for study or sports activities. A second group of students dealt with the topic of the reuse of abandoned buildings in the historic centre, working specifically on the old buildings, also through contemporary additions, which

aperte, tese al dialogo con l'esistente, ma ragionando su nuove possibilità d'uso e sulla definizione di nuove relazioni, inglobando di volta in volta parti diverse della città nel meccanismo compositivo e progettuale.
In quest'ottica i progetti imperniati su uno specifico tema sono stati sviluppati nella consapevolezza della necessità di affrontarlo non in maniera isolata, bensì in una logica di correlazione con altri problemi progettuali, in modo da restituire un quadro complessivo strategico, costituito dai progetti interrelati su molteplici e diversificate aree del territorio comunale. In questo senso si è provato a superare la logica dell'esercizio progettuale non come determinazione di una forma compiuta in un'area precostituita, ma come una strategia formale che muta continuamente, che si evolve inglobando l'esistente, che si apre a molteplici usi, che cambia i suoi confini, intessendo nuove relazioni con gli elementi presenti nel contesto urbano preso di volta in volta in considerazione. Ricomponendo i vari quadri, emerge l'idea di Frattaminore come un centro urbano che può trasformarsi a partire da una serie di nodi complessi in grado di attivare nuove trame relazionali e processi articolati di ridefinizione dei rapporti urbani. Nodi complessi e trame relazionali sono il punto di partenza per progetto in divenire, sempre mutevole, che si stratifica e che interpreta la città come materiale stesso di progetto. La riattivazione degli spazi in abbandono attraverso il riuso, la stratificazione dei tessuti urbani per la definizione di nuovi spazi multilivello, la costruzione di una nuova idea di spazio aperto, la riconfigurazione di aree urbane dismesse e di edifici in abbandono ai quali sono stati attribuiti nuovi ruoli urbani; la connessione tra spazi eterogenei attraverso la definizione di infrastrutture abitate e/o nuovi sistemi di mobilità sostenibile, sono i temi sui quali si è potuta elaborare una nuova visione urbana per Frattaminore e una concreta possibilità di dialogo con l'Amministrazione Comunale e i cittadini. Questa visione urbana è stata rappresentata in un disegno unitario, che prova a tenere insieme tutti i progetti elaborati per la città di Frattaminore, anche con qualche contraddizione e sovrapposizione; in ogni caso può costituire una riflessione utile e innovativa sulla città. Dalla mappa complessiva è anche possibile pervenire a sintesi parziali relative a singole macroaree, che costituiscono l'ossatura portante delle strategie complessive. Da questa mappa complessiva è stato possibile enucleare delle tematiche progettuali specifiche per le singole aree, che, approfondite specificamente nei singoli macrogruppi, hanno provato a dare soluzioni concrete per ambiti urbani più ristretti, pur preservando la coerenza con il disegno complessivo. Un primo tema progettuale è quello dell'innesto di nuovi usi pubblici negli spazi aperti diffusi nella città, connessi e messi a sistema attraverso un nuovo percorso di mobilità urbana green: la pedonalizzazione di alcuni tratti stradali, l'introduzione di piste ciclabili e pedonali, e l'inserimento di nuove connessioni e attraversamenti urbani permette di creare una trama solida di mobilità a cui si aggrappano spazi aperti diffusi nella città come, piazze, corti, giardini in abbandono o slarghi abbandonati, che adeguatamente attrezzati accolgono innesti architettonici con usi pubblici differenti, come spazi per lo studio o per le attività sportive. Un secondo gruppo di studenti ha affrontato il tema del riuso degli edifici in abbandono del centro storico,

Next page

Aerial Photography of Frattaminore

Pagina seguente

Fotografia aerea di Frattaminore

sometimes relate to the original volumetry, sometimes completely detached from it, with the aim of giving new life to the historic building. The specific intervention of reactivation of the ancient machine is linked to the connection of these architectures through a plot of new paths in order to propose a contemporary museum itinerary in the historic centre.
The plot of paths also connects to the archaeological area of Atella, where several integrated actions are hypothesised to improve the accessibility and usability of the site: the new accesses from the southern edge, in contact with the dense core of the contemporary city, and from the north, on the border with the municipality of Succivo, are part of the archaeological site, which relates two opposite parts of the territory, accommodating different uses, while still wishing to protect and enhance the ruins in situ, which are exposed within museum architectural elements widespread in the park. The historical-archaeological path linking the Atella site to the ancient centre is also connected to the third design exploration, which deals with the topic of the reuse of the former Mill building, located in the centre of the town in a privileged position, but for a long time completely abandoned. Starting from the design on an architectural scale, alternative solutions were developed for the revitalisation of the abandoned building: in some cases, punctual grafts have been proposed in/on the ruined body, internal and/or external architectural additions that extend the ancient spatiality to promote the insertion of new contemporary uses to serve the citizens; in other cases, the projects propose new crossings that, starting from the layers of the ancient building, try to reconnect with the layers of the city, investigating the possibility of introducing new high-low relationships linking the former mill to the city; in still other cases, work has been done on the space of the court-garden, proposing significant extensions of the ancient building towards the outside, which could become a public square open to the city. A fourth design topic traces alternative solutions for the bypassing of the infrastructure line, which constitutes a barrier for the municipal territory and becomes the pretext for the redevelopment of the marginal area to the east of Frattaminore. By means of multi-level crossings, a new continuity is guaranteed between the marginal areas and the old centre, reinforced by new pedestrian and bicycle mobility plots. This plot constitutes a new network enriched by a system of new facilities to serve the city. A final design exploration has concerned public facilities, on the one hand densifying the historic centre and grafting new contemporary elements for the insertion of new functions, and on the other proposing a network of new functional condensers, hybrid architectures, which, located in strategic positions, may constitute a functional network usable beyond the municipal area.
In this case the design process, similarly to the experimentation carried out for the reuse of the former mill, moves from the architectural scale to the urban scale, proposing crossings and thematic networks that expand from the new project building into the urban spaces, reconnecting multiple elements to delineate new continuities, for example through sports parks, playground areas, cultural and educational routes.

lavorando in maniera puntuale sui manufatti di antico impianto, anche attraverso aggiunte contemporanee, che talvolta si relazionano alla volumetria originaria, talvolta se ne distaccano completamente, nell'obiettivo di conferire nuova vita all'edificio storico. All'intervento specifico di riattivazione della macchina antica, si collega la messa in relazione di queste architetture, attraverso una trama di percorsi al fine di proporre un itinerario museale contemporaneo nel centro storico.
La trama dei percorsi si collega, inoltre, all'aree archeologiche di Atella, dove si ipotizzano diverse azioni integrate per migliorare l'accessibilità e la fruibilità del sito: i nuovi accessi dal bordo sud, a contatto con il nucleo denso della città contemporanea, e da nord, a confine con il comune di Succivo, si inseriscono nel sito archeologico, che relaziona due parti opposte del territorio, accogliendo usi diversi, pur nella volontà di valorizzare le rovine in situ, messe in mostra all'interno di innesti museali diffusi nel parco. Al percorso storico-archeologico che lega il sito di Atella al centro antico, si connette anche la terza esplorazione progettuale, che affronta il tema del riuso dell'ex Mulino, situato al centro della città in una posizione privilegiata, ma da tempo abbandonato. A partire da un ragionamento in scala architettonica, sono state elaborate soluzioni alternative per la rivitalizzazione dell'edificio: in alcuni casi sono stati proposti inserti puntuali nel o sul corpo in rovina, aggiunte architettoniche interne e/o esterne che ampliano la spazialità antica per favorire l'inserimento di nuovi usi contemporanei a servizio dei cittadini; in altri casi i progetti propongono nuovi attraversamenti che a partire dagli strati del manufatto antico provano a riconnettersi agli strati della città, indagando la possibilità di introdurre nuovi rapporti alto-basso che legano l'ex mulino alla città; in altri casi ancora, si è lavorato sullo spazio della corte-giardino, proponendo estensioni significative dell'edificio antico verso l'esterno, che potrà diventare una piazza pubblica, aperta alla città. Un quarto tema di progetto rintraccia soluzioni alternative per lo scavalcamento della linea infrastrutturale, che costituisce una barriera per il territorio comunale e che diviene il pretesto per la riqualificazione dell'area periferica ad est. Mediante attraversamenti multilivello è garantita una nuova continuità tra le aree periferiche e il centro antico, rafforzata da nuove trame per la mobilità sostenibile. Questa trama costituisce una nuova rete arricchita da un sistema di nuove attrezzature a servizio della città. Un'ultima esplorazione progettuale ha riguardato le attrezzature di carattere pubblico, da un lato densificando il centro storico e innestando elementi contemporanei per l'inserimento di nuove funzioni, dall'altro proponendo una rete di condensatori funzionali, architetture ibride, che, dislocate in posizioni strategiche, possano costituire una rete funzionale fruibile al di là del territorio comunale. In questo caso il processo progettuale, analogamente alla sperimentazione effettuata per il riuso dell'ex mulino, muove dalla scala architettonica per passare poi alla scala urbana, proponendo attraversamenti e reti tematiche che dal nuovo edificio di progetto si espandono negli spazi urbani, riconnettendo molteplici elementi per delineare nuove continuità, attraverso ad esempio parchi sportivi, aree playground, percorsi culturali e didattici.

Next page

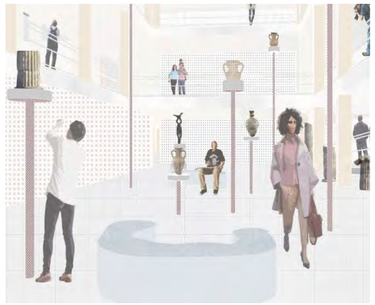
Projects for Frattaminore. Visuals (2021)

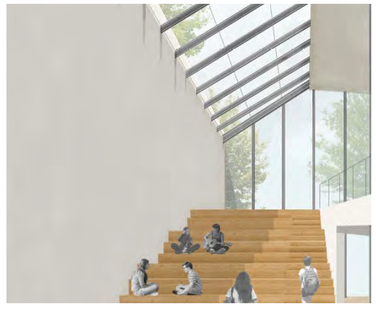
Drawings by Design Studio students

Pagina seguente

Progetti per Frattaminore. Visioni (2021)

Disegni degli studenti del Laboratorio





A long history of modernisation and growth, and at the same time of failures and of missed interventions.
It was looking back on this history that we found in Professor Miano a beacon of competence and wisdom.
Thus from this collaboration what would later become a true synergy over time, it was born the project to involve the students of the last year of the Master's Program of the Department of Architecture of the Federico II University of Naples, the result of which will undoubtedly remain in the history of our community and a shining example of the involvement of young students.

I believe it is important to underline that on the subject of youth participation and how to incentivise and promote it, a lot of words have been written, but in fact concrete experiences are measured each time with criticalities and difficulties inherent to social interaction, certainty in the recognition of skills, and mechanisms for involvement in processes.
In this, 'our' project proved to be ambitious, because it had the ability to go beyond the establishment of a university work laboratory to become a real bridge between the enthusiasm and competence of young students and the local organisation's strong desire to showcase an area rich in history and traditions, rooted in the ancient Atellan culture.
In fact, the practical contribution comes from the work of the students, because there is no idea that can succeed that is not nourished by good practices and correct behaviour, respect and mutual trust.
We can say that we got all this in return and the result was amazing.
The constant interaction between the Municipality and the team acted - one towards the other - influencing their motivations and behaviour.

A process of continuous osmosis that allowed the development of two important things: for the students to get to know the deepest bowels of a land that not everyone were aware of, and thus to feel the streets, the buildings, and the places they passed through were part of their own personal history.

The second important thing was to make Frattaminore embark on a journey of renewed self-discovery.
Because this is precisely what we, the municipal administration, experienced once we became aware of the final product of this experimental project operation.
Beyond the technical acquisition of works, we found in the eyes of these young professionals of tomorrow a new lens through which to review the places we cross every day.

The end result was truly interesting, in a perfect mix of beauty, innovation and the future that will leave those who administer it with an invaluable legacy.
After all, this is the lesson we learn from Europe, the constant stimulus we should

Next page

Photographs of the meeting between the Municipal Administration of Frattaminore and the students of the Advanced Studio Design

Pagina seguente

Fotografie dell'incontro tra amministrazione comunale di Frattaminore e studenti del Corso di Sintesi Finale

Una lunga storia di ammodernamento e di crescita e insieme di fallimenti e di mancati interventi.
È guardando a questa storia che abbiamo trovato nel Professore Miano un faro di competenza e saggezza.
Nasce così, da questa collaborazione quella che poi diverrà nel tempo una vera e propria sinergia, il progetto di coinvolgimento degli studenti dell'ultimo anno del Corso di Laurea Magistrale del Dipartimento di Architettura dell'Università Federico II di Napoli, il cui risultato resterà senza ombra di dubbio nella storia della nostra comunità e un esempio fulgido di coinvolgimento dei giovani.

Credo sia importante sottolineare che sul tema della partecipazione giovanile e su come incentivare e promuoverla si siano scritti fiumi di parole, nei fatti le esperienze concrete si misurano ogni volta con criticità e difficoltà connaturate all'interazione sociale, alla certezza nel riconoscimento delle competenze, ai meccanismi di coinvolgimento nei processi.
In questo il "nostro" progetto si è dimostrato ambizioso, perché ha avuto la capacità di andare oltre la costituzione di un laboratorio di lavoro universitario per divenire un vero e proprio ponte tra l'entusiasmo e la competenza dei giovani studenti e il desiderio forte dell'ente di mettere in mostra un territorio ricco di storia e di tradizioni, che affondano le proprie radici nell'antica cultura atellana.
Di fatto il contributo pratico deriva dal lavoro degli studenti, perché non esiste idea che possa avere fortuna che non si alimenti delle buone prassi e dei corretti comportamenti, del rispetto e della fiducia reciproca.
Possiamo affermare di aver avuto in cambio tutto ciò e il risultato è stato stupefacente.
L'interazione costante tra il Comune e il gruppo di lavoro ha agito – l'uno verso l'altro- influenzandone motivazioni e comportamenti.

Un processo di continua osmosi che ha permesso lo sviluppo di due cose importanti: agli studenti di conoscere le viscere più profonde di una terra di cui non tutti avevano contezza e quindi di sentire come parte di un momento della propria storia personale le strade, i palazzi, i luoghi attraversati.

La seconda cosa importante è stata quella di fare in modo che Frattaminore intraprendesse un viaggio alla rinnovata scoperta di sé stessa.
Perché è proprio questo quello che, noi amministrazione comunale, abbiamo provato, una volta entrati a conoscenza del prodotto finale di questa operazione sperimentale di progetto.
Al di là dell'acquisizione tecnica di elaborati abbiamo trovato negli occhi di questi giovani professionisti di domani una lente nuova attraverso cui rivedere i luoghi che ogni giorno attraversiamo.

Il risultato finale è stato davvero interessante, in un mix perfetto di bellezza,

draw from our participation in the European human and political project, the ability to imagine great things and to pursue some of them.
But this is only possible if urban planning is placed in the hands and minds of those who are not yet tired, of those who still feel the need to imagine, to prefigure better scenarios for the territories we inhabit every day.

Therefore, I cannot do other than thank the professors of this integrated workshop, because it was possible to imagine, to dream, to propose innovative configurations that went far beyond all expectations.
At the same time, I must necessarily thank the students, future architects, who in immersing themselves in this challenge did not spare any kind of energy, any kind of effort.

I started by talking about synergy, I end the same way, because there was nothing that did not work in collaboration.
The trust, the respect, the certainty of growing together.

An unforgettable experience that lays the foundations for the Frattaminore of tomorrow, created by the young professionals of the present and the future.
An immense pride, an emotion to be told.
Special thanks to Professor Miano and the young architects. Frattaminore will be forever grateful to you.

di innovazione, di futuro che lascerà a chi amministra un patrimonio inestimabile.
In fondo è questa la lezione che ci viene dall'Europa, lo stimolo costante cui dovremmo attingere dalla nostra partecipazione al progetto umano e politico europeo, la capacità di immaginare cose grandi e di inseguirne alcune.
Ma ciò è possibile solo se la progettualità è posta nelle mani e nelle menti di chi non è ancora stanco, di chi ancora vive il bisogno di immaginare, prefigurare scenari migliori per i territori che abitiamo quotidianamente.

Dunque, non posso fare altro che ringraziare i docenti di questo laboratorio integrato, perché è stato possibile immaginare, sognare, proporre configurazioni innovative che andassero ben oltre ogni aspettativa.
Allo stesso tempo devo necessariamente ringraziare gli studenti, futuri architetti, che nell'immergersi in questa sfida non hanno risparmiato alcun tipo di energia, alcun tipo di sforzo.

Ho iniziato parlando di sinergia, finisco allo stesso modo, perché non c'è stato nulla che non abbia funzionato nel lavorare collaborando.
La fiducia, il rispetto, la certezza di crescere insieme.

Un'esperienza indimenticabile che pone le basi per la Frattaminore di domani, realizzata dai giovanissimi professionisti del presente e del futuro.
Un orgoglio immenso, un'emozione da raccontare. Un ringraziamento speciale al Professore Miano, ai giovani architetti.
Frattaminore vi sarà per sempre grata.

Next page

Poster of the meeting with the Municipal Administration

Pagina seguente

Locandina dell'incontro con l'amministrazione comunale

REFERENCES

1. E. Braae, H. Steiner (ed.), *Routledge Research Companion to Landscape Architecture*, Routledge, London-New York 2019.

2. J. Panek, R. Netek, "Collaborative Mapping and Digital Participation: A Tool for Local Empowerment in Developing Countries", in *Information*, 10, 2019, p. 255.

One of the most important challenges faced by the students of the Advanced Studio Design was to try to imagine the project for the municipality of Frattaminore starting from unpublished readings and different interpretations of the place.
Archaeological area, historic center, peripheral areas, commercial areas, infrastructures, and agricultural areas are just some of the complex systems that make up the dense and stratified territory of Frattaminore. The complexity of the place and the diversity of the topics to be addressed made it impossible to know only through cartographic studies and archival studies.
The main goal was to know the place in an innovative way, on the spot, to grasp its richness and heterogeneity in all its forms.
What is very evident is the heterogeneity between the historic center of Frattaminore, consisting of a very rich building heritage often in a state of total abandonment, and the expanding suburbs with recent residential and tertiary / commercial buildings.
The lack of adequate public spaces, such as parks, squares, gardens, the lack of equipment serving the growing population and the number of abandoned buildings in the center of the historic city together with the enhancement and improvement of usability and accessibility to the he archaeological area, were the main challenges faced in this architectural and urban workshop path.
Starting from these premises and the will to focus attention on current issues of great importance, linked to the uses of spaces, social practices, the derogation from current planning, atmospheric pollution, the work of the Advanced Studio Design 2020-2021 on the territory of the municipality of Frattaminore has experimented with an approach known as Collaborative Mapping.
There are many references and examples that guide this approach, such as Open Street Map and City Open Source, which allow knowledge of places through specific "filters" and always different techniques.
Some users collect geographical information and citizens / users can be considered "sensors" within a geographical environment: in this way, citizens become part of a collaborative approach, with the common goal of promoting adequate knowledge of the territory and consequently an urban planning that reflects the real conditions of the place.
From a methodological and didactic point of view, the cognitive and planning process can be divided into two main steps.
The first step concerned the knowledge of the territory in relation to different themes / territorial areas and / or types of practices that we wanted to investigate, carried out through a collection of direct and indirect data.
The students dealt with these first analysis divided into groups, according to the project theme they were addressing: the open space and the periphery, the abandoned historic center and the archaeological area, industrial archeology with the area of the former mill, the design of new public equipment.

Una delle più importanti sfide affrontate dagli studenti del Laboratorio di Sintesi finale è stata quella di provare ad immaginare il progetto per il comune di Frattaminore a partire da letture inedite e interpretazioni diverse del luogo.
Area archeologica, centro storico, aree periferiche, aree commerciali, infrastrutture e zone agricole sono solo alcuni dei sistemi complessi che costituiscono il denso e stratificato territorio di Frattaminore.
La complessità del luogo e la diversità dei temi da affrontare rendeva impossibile la sola conoscenza tramite studi cartografici e studi d'archivio. Si è provato a conoscere il luogo in maniera innovativa per coglierne la ricchezza e l'eterogeneità in tutta la sua forma.
Ciò che risulta in maniera molto evidente è l'eterogeneità tra il centro storico di Frattaminore, costituito da un ricchissimo patrimonio edilizio spesso in stato di totale abbandono, e la periferia d'espansione con le recenti edificazioni residenziali e terziarie/ commerciali.
La mancanza di spazi pubblici adeguati, come ad esempio parchi, piazze, giardini, la carenza di attrezzature a servizio della popolazione crescente e la numerosità di edifici in abbandono al centro della città storica insieme alla valorizzazione e al miglioramento della fruibilità e dell'accessibilità all'area archeologica, sono state le principali sfide affrontate in questo percorso laboratoriale di progettazione architettonica e urbana.
A partire da tali premesse e dalla volontà di incentrare l'attenzione su problematiche attuali di grande rilevanza, legate agli usi degli spazi, alle pratiche sociali, alla deroga rispetto alla pianificazione vigente, all'inquinamento atmosferico, il lavoro del Laboratorio di Sintesi Finale 2020-2021 sul territorio del comune di Frattaminore ha sperimentato un approccio definito Collaborative Mapping.
Molteplici sono i riferimenti e gli esempi che guidano tale approccio, come ad esempio Open Street Map e City Open Source, che permettono una conoscenza dei luoghi attraverso "filtri" specifici e tecniche sempre differenti.
Alcuni utenti raccolgono le informazioni geografiche e i cittadini/fruitori possono essere considerati dei "sensori" all'intero di un ambiente geografico: in tal modo i cittadini diventano parte di un approccio collaborativo, con l'obiettivo comune di favorire una adeguata conoscenza del territorio e di conseguenza una pianificazione urbana che rispecchi le reali condizioni del luogo.
Dal punto di vista metodologico e didattico, il processo conoscitivo e progettuale può essere suddiviso in due grandi fasi.
La prima fase ha riguardato la conoscenza del territorio in relazione a diverse tematiche/aree territoriali e/o tipi di pratiche che si volevano indagare, svoltasi attraverso una raccolta dei dati, diretti e indiretti.
Gli studenti hanno affrontato queste prime ricerche suddivisi in macrogruppi, a seconda del tema di progetto che stavano affrontando: lo spazio aperto e la periferia,

Next page

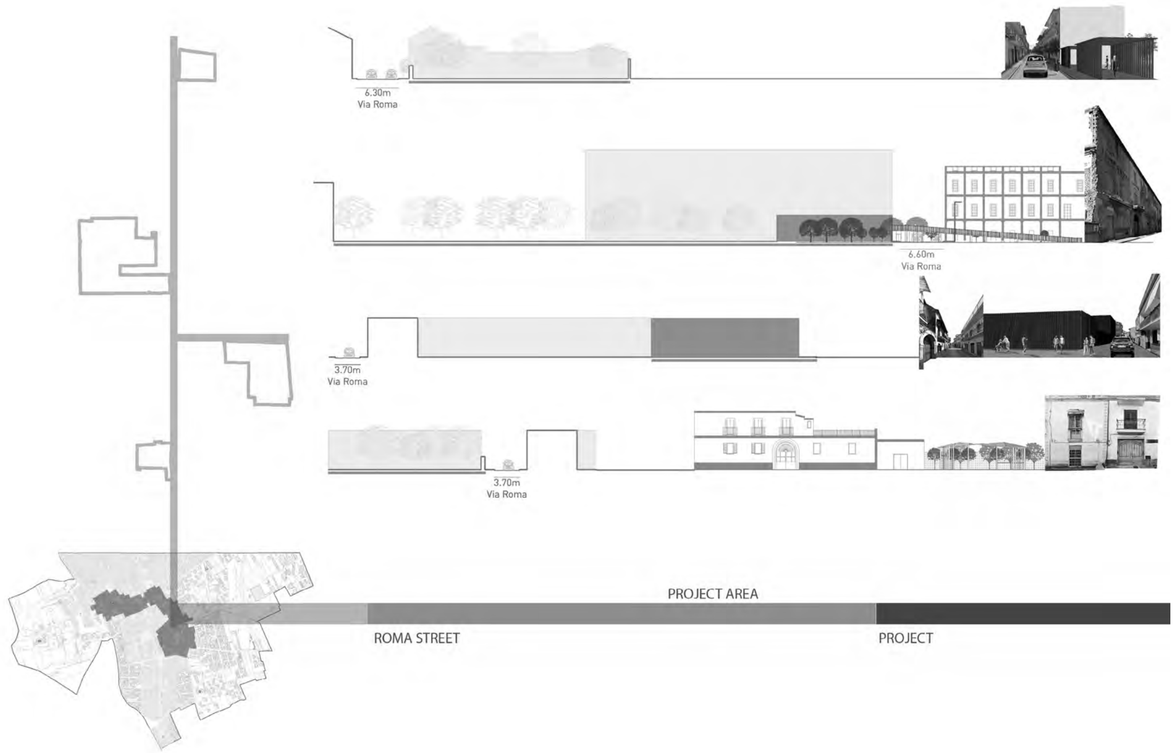
Drawings by Ilaria D. Iazzetta

Pagina seguente

Disegni di Ilaria D. Iazzetta

To be able to act in such a complex area as Frattaminore, these preliminary assessments are essential in order to develop effective project proposals, which are consistent with the context.
In this first phase, some specific mapping techniques were used such as *reference mapping*, a knowledge tool based on the use of references, or similar references and particularly suitable for the place, which help to identify with the context to imagine the change deriving from the project ; the analysis of users and stakeholders, which made it possible to study the users and users of the project to understand if the territory really needed that action in terms of request and use; planning regulation, or the study of the urban planning tool and its derogation, where necessary to propose a project that guarantees an improved condition; in the face of the planning regulation, a material regulation was subsequently elaborated, that is to identify new and possible alternative regulatory schemes that can guide and direct the architectural project.
The second phase then saw the development of an activity of recognition of the possible alternative uses of the project, together with the narration of the design process. Through the *affordance mapping*s students imagine alternative uses, different and possible scenarios that "invade" the space of the project in an innovative way.
This work allowed them to understand the importance of the project to change over time by adapting to the demands arising from local needs, avoiding, due to inactivity, falling back into abandonment.
Subsequently, the story of the design process was dealt with through the storytelling technique, sometimes non-linear to demonstrate how the understanding of the territory affects the project, resulting in a series of changes in progress.
Ultimately, an attempt was made to provide the city of Frattaminore with new tools of knowledge and new scenarios that can guide design choices in a more conscious way, with the main objective of educating the new generations to a project idea that does not separate from the environment, but on the contrary tries to find a continuous dialogue with it.

il centro storico in abbandono e l'area archeologica, l'archeologia industriale con l'area dell'ex mulino, la progettazione di nuove attrezzature pubbliche.
Per poter agire in un territorio così complesso come Frattaminore, tali valutazioni preliminari sono fondamentali al fine di elaborare proposte progettuali efficaci, che siano coerenti con il contesto.
In questa prima fase sono state utilizzate alcune tecniche del mapping specifiche come la *reference mapping*, strumento di conoscenza basato sull'utilizzo di references, ovvero di riferimenti analoghi e particolarmente adeguati al luogo, che aiutano ad immedesimarsi nel contesto per immaginare il cambiamento derivante dal progetto; l'analisi di users e stakeholders, che ha permesso di studiare gli utenti e i fruitori del progetto per comprendere se realmente il territorio necessitava di quell'azione in termini di richiesta e utilizzo; il *planning regulation*, ovvero lo studio dello strumento urbanistico e la sua deroga, li dove necessario per proporre un progetto che garantisca una condizione migliorativa; a fronte del planning regulation, a seguire è stato elaborato un material regulation, ovvero individuare nuovi e possibili alternativi schemi normativi che possano guidare ed indirizzare il progetto di architettura.
La seconda fase ha visto poi lo svolgersi di un'attività di riconoscimento dei possibili usi alternativi del progetto, insieme alla narrazione del processo progettuale.
Sono state sviluppate le *affordances mapping*, ovvero mappe utili per immaginare usi alternativi, scenari diversi e possibili che "invadono" lo spazio del progetto in maniera innovativa.
Ciò ha permesso agli studenti di comprendere l'importanza del progetto di cambiare nel tempo adattandosi alle richieste derivanti dalle necessità locali, evitando, a causa dell'inutilizzo, di ricadere nell'abbandono.
Successivamente è stato affrontato il racconto del processo progettuale attraverso la tecnica dello storytelling, talvolta non lineare per dimostrare come la comprensione del territorio incida sul progetto, determinando una serie di modificazioni in progress.
In definitiva, si è provato a fornire alla città di Frattaminore nuovi strumenti di conoscenza e nuovi scenari che possano indirizzare in maniera più consapevole le scelte progettuali, con il principale obiettivo di educare le nuove generazioni ad un'idea di progetto che non si separa dall'ambiente, ma che al contrario prova a trovare con esso un continuo dialogo.



Next page

Drawings by Silvia Paparo

Pagina seguente

Disegni di Silvia Paparo

THE ENERGY EFFICIENCY OF BUILDINGS: AN INDISPENSABLE CHALLENGE IN THE ENERGY TRANSITION

L'EFFICIENZA ENERGETICA DEGLI EDIFICI: UNA SFIDA IRRINUNCIABILE NELLA TRANSIZIONE ENERGETICA

At both a global and national levels, one of the issues that generate great uncertainty is energy supply, which, now a protagonist of international conflicts, is the basis of the rethinking of our cities and energy policies, towards a sustainable future.
Of growing interest is the environmental problem resulting from climate-altering emissions, the increase in the cost of energy, the resulting social and economic consequences, and the role played by the built environment.
Indeed, in recent decades strong critical issues that depend on energy supply have emerged, such as climate change resulting from high greenhouse gas emissions due to the exploitation of non-renewable energy sources, the scarcity of fossil fuels, and the strong global disparity in energy consumption.
The availability of energy defines the wealth of a country and its economic growth. The backwardness of some countries stems from their energy poverty, and economic vulnerability derives from their energy dependence on other countries.
The scarce availability of energy negatively affects the low-income segments of the population, who may not have access to essential home services such as heating: according to Eurostat data, about 11% of the Italian population has not enough energy to heat one's home, and this value rises furtherly in other EU Member States.
It is therefore essential to adopt strategies that can counteract the total depletion of resources, reduce social disparities, fight global warming and guarantee energy supply.
There are many aspects to intervene in, but the first challenge is to improve energy efficiency, reduce energy demand, and avoid uncontrolled energy expenditure, by limiting the use of fossil sources.
Consistent with this goal, the energy market must move from the prevalent use of energy from non-renewable sources to renewable ones, capable of regenerating themselves with the same speed of their consumption. These include wind, solar, geothermal, hydroelectric, and renewable energy from biomass.
The right way is to focus on a development model based on the reduction of energy consumption, the use of renewable energy sources, and the efficient use of energy itself, therefore on a model of "sustainable development".
In the view of environmental, social, and economic sustainability, the design solutions for the intervention area in the municipality of Frattaminore were conceived.
It is a municipality in the metropolitan city of Naples that needs new equipment and requires urban regeneration.
As part of the Technics of Environmental Control course, integrated with the Urban and Architectural Design course, in evidencing critical issues related to the project area, energy-efficient solutions were identified in compliance with the current regulatory framework, by considering the indoor and outdoor wellbeing requirements.
The search for high standards of

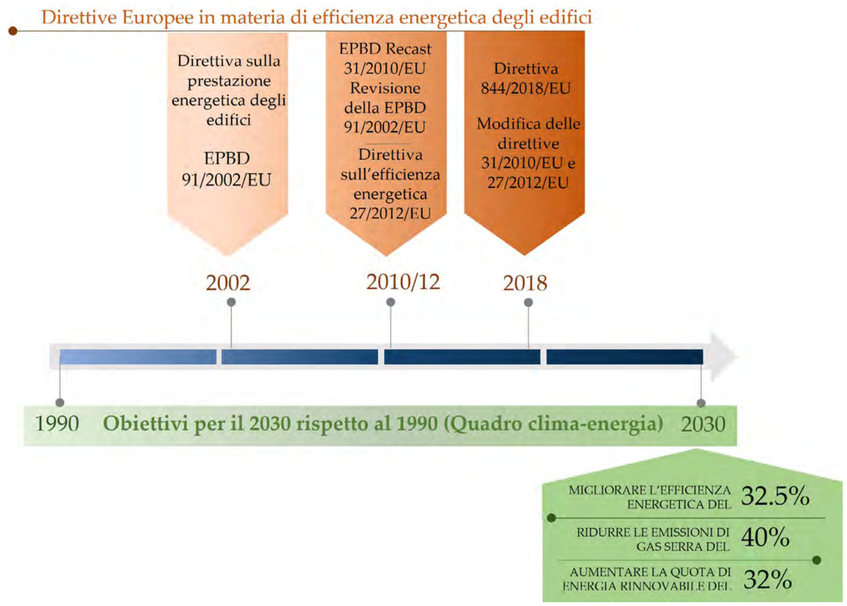
A livello globale e nazionale, una delle tematiche che genera grande incertezza è l'approvvigionamento energetico, che, ormai protagonista di conflitti internazionali, è alla base del ripensamento delle nostre città e delle politiche volte alla futura sostenibilità.
Di crescente interesse è il problema ambientale derivante dalle emissioni climalteranti, l'aumento del costo dell'energia, le conseguenze sociali ed economiche che ne derivano e il ruolo che in tutto questo assume l'ambiente costruito.
Negli ultimi decenni sono infatti emerse delle forti criticità che dipendono dall'approvvigionamento energetico, come il cambiamento climatico derivante dalle elevate emissioni di gas serra per lo sfruttamento di fonti di energia non rinnovabile; la scarsità delle fonti fossili e la forte disparità a livello globale nei consumi energetici.
La disponibilità di energia definisce, infatti, la ricchezza di un paese e la sua crescita economica. Spesso, il basso livello di sviluppo deriva dalla povertà energetica, e la vulnerabilità economica delle nazioni è spesso legata alla loro dipendenza energetica da altri paesi.
La scarsa disponibilità di energia si riversa negativamente sulle fasce di popolazione a basso reddito, che potrebbero non avere accesso a servizi indispensabili in un'abitazione come il riscaldamento: in base ai dati dell'Eurostat, circa l'11% della popolazione italiana non ha energia sufficiente per riscaldare la propria casa, e tale valore risulta ben più alto in altri paesi dell'Unione Europea.
Risulta quindi imprescindibile adottare strategie che possano contrastare il totale esaurimento delle risorse, che riducano le disparità sociali, combattano il surriscaldamento globale e che garantiscano l'approvvigionamento energetico.
Gli aspetti su cui intervenire sono molteplici, ma la prima sfida è migliorare l'efficienza energetica, per ridurre la domanda di energia, evitando il dispendio energetico incontrollato e limitando l'utilizzo di fonti fossili.
Coerentemente a tale obiettivo, il mercato dell'energia deve passare dall'uso prevalente di energia da fonti non rinnovabili a quelle rinnovabili, in grado di rigenerarsi con la stessa velocità con cui sono state consumate. Di queste fanno parte l'eolico, il solare, la geotermia, l'idroelettrico, l'energia rinnovabile ottenibile dalle biomasse. La strada giusta è quella di puntare su un modello di sviluppo incentrato su un ridotto consumo energetico, sull'utilizzo di fonti di energia rinnovabile e sullo sfruttamento efficiente dell'energia stessa, quindi su un modello di "sviluppo sostenibile".
È proprio nell'ottica della sostenibilità sia ambientale che sociale ed economica, che sono state concepite le soluzioni progettuali per l'area di intervento nel comune di Frattaminore.
Si tratta di un comune nella città metropolitana di Napoli che necessita di nuove attrezzature e richiede un intervento di rigenerazione urbana.
Nell'ambito del corso di Tecnica del Controllo Ambientale, integrato al corso di Progettazione Architettonica e Urbana, nel riscontrare

Next page

European directives on the energy efficiency of buildings

Pagina seguente

Direttive Europee in materia di efficienza energetica degli edifici



environmental and energy quality, starting from the single component up to the urban scale, has been a priority objective since the early design phase.
The main interventions regarded the so-called “passive” systems, identifying effective and efficient solutions for both opaque and transparent envelopes to minimize the energy demand of buildings.
Secondly, efficient systems were adopted for microclimatic control, capable of guaranteeing the thermo-hygrometric comfort of the occupants, and finally, another energy efficiency lever was acted upon: systems from renewable sources, adequately designed to offset the energy demand of buildings.
The Urban and Architectural Design course was an opportunity to underline the role that the construction sector assumes in the energy transition and allowed to direct the design, together with the aspects of construction and the execution processes of architectural artifacts, towards energy efficiency with an ecological footprint of building processes.
Bioclimatic architectural solutions such as green roofs or green facades, vented facades, and solar greenhouses, as strategies for mitigating and reducing the energy demand of the building, were combined with active energy systems for the indoor environmental control, conversion systems from renewable sources capable of satisfying the energy demand of buildings but also that of sustainable mobility systems, focusing with strong sensitivity on the standard of zero and plus-zero energy buildings as suggested by the EU objectives on energy efficiency.
The irrefutable challenge toward a low-carbon future that involves various sectors and predominantly that of construction is a common goal of the European energy directive.
Currently responsible for over 40% of European energy consumption, since 2002 the building sector has been the subject of European Directives to improve its energy performance with the “Energy Performance of Building Directive 2002/91/EU”.
Overcoming the national approach to the issue, this directive was then revised in 2010 with “Energy Performance of Building Directive Recast 2010/31/EU” which introduced the pursuit of minimum energy performance requirements for buildings based on optimal cost levels to reach the “nearly zero-energy building” standard from 2019 and 2021 for public and private buildings respectively.
Finally, with Directive 844/2018/EU a long-term strategy is proposed for the energy refurbishment of the existing building stock.
The strategies introduced by these directives are among those measures aimed at achieving the objectives of the 2030 Agenda which promotes an improvement in energy efficiency by 32.5%, a reduction in greenhouse gas emissions by 40%, and an increase in the share of renewable sources by 32% compared to 1990 levels.
To building-scale objectives are added the district and city-scale objectives, as

criticità legate all’area di progetto, sono state individuate soluzioni energeticamente efficienti nel rispetto dell’attuale panorama normativo di riferimento, tenendo conto dei requisiti di benessere, indoor e outdoor.
La ricerca di elevati standard di qualità ambientale ed energetica, partendo dal singolo componente fino alla scala urbana, è stato obiettivo prioritario sin dalle prime fase di progettazione.
Si è agito dunque su sistemi cosiddetti “passivi”, individuando soluzioni efficaci ed efficienti per l’involucro sia opaco che trasparente per ridurre al minimo la domanda energetica degli edifici.
In secondo luogo, sono stati adottati sistemi efficienti per il controllo microclimatico, in grado di garantire il comfort termo-igrometrico degli occupanti, ed infine, si è agito su un’altra leva dell’efficienza energetica: i sistemi da fonti rinnovabile, adeguatamente progettati per compensare la domanda energetica degli edifici.
Il corso di Progettazione Architettonica e Urbana è stato un’occasione per rimarcare il ruolo che il settore edilizio assume nella transizione energetica e ha consentito di indirizzare la progettazione, insieme agli aspetti della costruzione e i processi di esecuzione dei manufatti architettonici, verso l’efficienza energetica con un’impronta ecologica dei processi edilizi.
Soluzioni di architettura bioclimatica quali tetti verdi o facciate verdi, facciate ventilate e serre solari, come strategie di mitigazione e riduzione della domanda energetica dell’edificio, sono state affiancate a sistemi energetici per il controllo ambientale e sistemi di conversione da fonti rinnovabili in grado di soddisfare la domanda energetica degli edifici ma anche l’esigenza di mobilità sostenibile, puntando con forte sensibilità allo standard di zero e *plus-zero energy buildings* come suggerito dagli obiettivi comunitari in materia di efficienza energetica.
L’irrimandabile sfida verso un futuro *low-carbon* che coinvolge diversi settori e in modo preponderante quello delle costruzioni, è obiettivo comune delle direttive europee in materia energetica.
Responsabile attualmente di oltre il 40% del consumo energetico Europeo, a partire 2002, il settore edilizio è stato oggetto di Direttive Europee per migliorarne le prestazioni energetiche con l’“*Energy Performance of Building Directive 2002/91/UE*”.
Superando l’approccio nazionale alla tematica, tale direttiva è stata poi revisionata nel 2010 con “*Energy Performance of Building Directive Recast 2010/31/UE*” che ha introdotto il perseguimento di requisiti minimi di prestazione energetica degli edifici in funzione di livelli ottimali di costo per raggiungere lo standard del “*nearly zero-energy building*” dal 2019 e dal 2021 per edifici pubblici e privati, rispettivamente.
Infine, con la Direttiva 844/2018/UE viene proposta una strategia a lungo termine per la riqualificazione energetica del parco edilizio esistente.
Le strategie introdotte da tali direttive rientrano tra quelle misure volte al raggiungimento degli obiettivi dell’Agenda 2030 che promuove il miglioramento

Next page
Fragmets of projects (2020)
Drawings by Design Studio students

Pagina seguente
Frammenti di progetto (2020)
Disegni degli studenti del Laboratorio

suggested by “100 climate neutral cities by 2030 - by and for the citizens” according to which by 2030, 100 European cities will have to achieve climate neutrality.
This objective coincides with the development of energy communities which is at the basis of our urban districts’ rethinking. In this vein, the energy supply, and therefore the methods of access to energy and the flexibility in the use of the same through thermal storage and “demand-response” supply, would become an indispensable feature in our cities.
At the base of an energy community, there is plurality, intended not only as a multitude of subjects involved but also as diversification in their characteristics that can function in a complementary manner despite the complexity of the entire system. Sharing and collaboration in the management of energy supply, generation, and consumption are part of the concept of the energy community.
The current challenge that the cities of the future must be able to meet 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.
Although starting from a relatively small area, such as the one identified in the municipality of Frattaminore (NA), the objectives and issues addressed during the Technics of Environmental Control course reflect those of the community with a view to sustainable development and the energy transition towards smart cities.

dell’efficienza energetica del 32,5%, una riduzione delle emissioni di gas serra del 40% e un aumento della quota di fonti rinnovabili del 32% rispetto ai livelli del 1990.
Ad obiettivi a scala di edifico, si aggiungono obiettivi a scala di distretto e di città, come quanto suggerito da “*100 climate neutral cities by 2030 - by and for the citizens*” secondo cui entro il 2030, 100 città europee dovranno raggiungere la neutralità energetica.
Questo obiettivo collima con lo sviluppo delle comunità energetiche che è alla base del ripensamento dei distretti urbani. In tal senso, l’approvvigionamento energetico, e quindi le modalità di accesso all’energia e la flessibilità nell’utilizzo della stessa attraverso accumuli termici e la fornitura “*demand-response*”, diventerebbero caratteristica irrinunciabile nelle nostre città.
Alla base di una comunità energetica vi è la pluralità, intensa non solo come moltitudine dei soggetti coinvolti ma anche come diversificazione nelle loro caratteristiche che possono funzionare in maniera complementare nonostante la complessità dell’intero sistema.
La condivisione e la collaborazione nella gestione dell’approvvigionamento energetico, nella generazione e consumo rientrano nel concetto di comunità energetica.
Sfida attuale che le città del futuro devono poter soddisfare è il contrasto della povertà energetica e l’utilizzo di energia da fonti rinnovabili per compensare la domanda energetica degli edifici e del settore automobilistico.
Seppur partendo da un’area relativamente piccola, come quella individuata nel comune di Frattaminore (NA), gli obiettivi e le tematiche affrontate durante il corso di Tecnica del Controllo Ambientale rispecchiano quelli comunitari nell’ottica dello sviluppo sostenibile e della transizione energetica verso le smart cities.

Next page

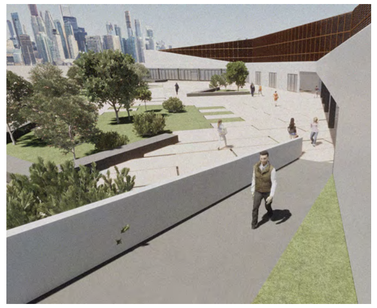
Fragmets of projects (2020)

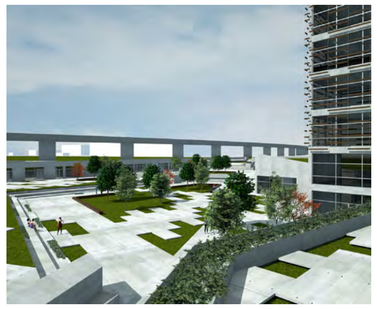
Drawings by Design Studio students

Pagina seguente

Frammenti di progetto (2020)

Disegni degli studenti del Laboratorio





REFERENCES

1. E. Bassolino, L. Ambrosini, F. Scarpati, "Thermal-Perception-Driven Adaptive Design for Wellbeing", in F. Aletta, J. Xiao (eds.) *Outdoor Public Spaces: Case Studies in Naples. In Handbook of Research on Perception-Driven Approaches to Urban Assessment and Design*, IGI Global, Pennsylvania, PA, 2018, pp. 207-239.

2. E. Bassolino, *Climate-adaptive design e tecnologie digitali, Modelli, strumenti e pratiche*, Clean Edizioni, Napoli 2021.

3. E. Bassolino, V. D'Ambrosio, A. Sgobbo, *Data Exchange Processes for the Definition of Climate-Proof Design Strategies for the Adaptation to Heatwaves in the Urban Open Spaces of Dense Italian Cities*, pp.5694. In SUSTAINABILITY 2021, vol. 13 (10).

4. GBC Italia, Sistemi di Certificazione LEED e GBC Italia. https://www.gbcitalia.org/web/guest/certificazione, 2022.

5. MiTE, CAM - Criteri Ambientali Minimi, Roma. https://www.mite.gov.it/sites/default/files/archivio/allegati/GPP/allegato_tec_CAMedilizia.pdf, 2017.

6. 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

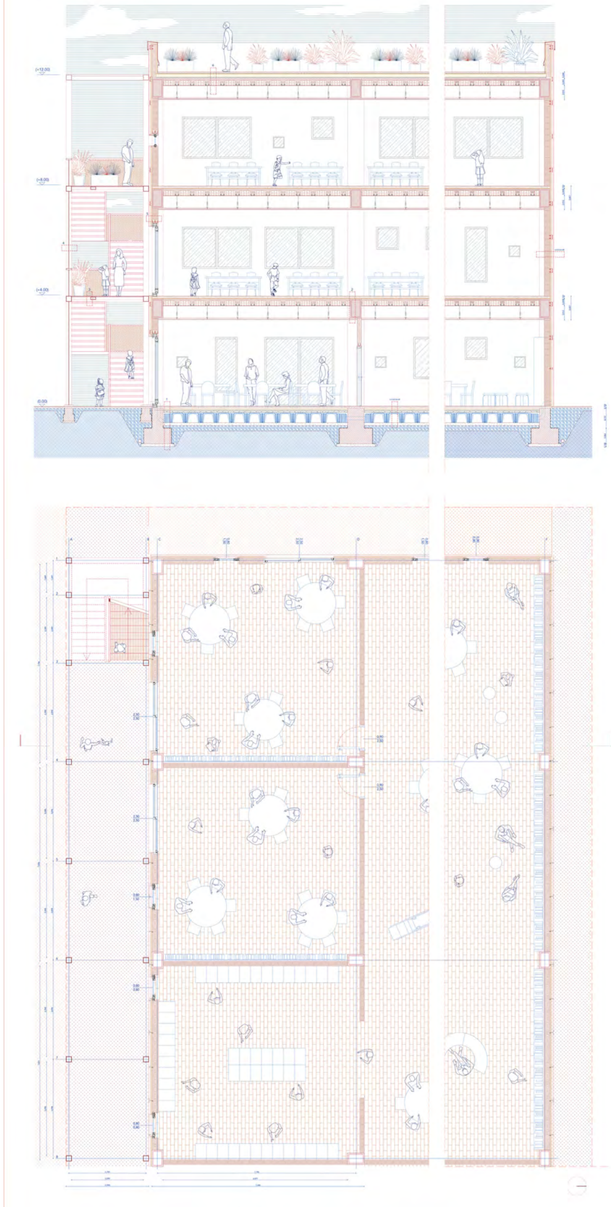
Project *Under the bridge*, by M. Matarese

Pagina seguente

Progetto *Under the bridge*, M. Matarese

The course of Executive Architectural Design within the Advanced Design Studio is structured to promote those topics related to architectural design about issues such as sustainability and environmental compatibility, mitigation of and adaptation to climate change and more generally the sustainable development of our cities (UN, 2015), but also through the introduction of those aspects of a regulatory nature inherent in complex building processes, as expected in professional practice.
With this in mind, the relationship between building, open space and environment is explored from the earliest design stages. Firstly, by analysing the environmental, climatic and microclimatic context of the intervention area, to understand the aspects of major criticality and potential of the environmental context and, secondly, to intervene in the formal and morphological aspects of the architectural organism to be designed.
Through iterative verification phases, in which the architectural form is studied concerning both functional-spatial needs and environmental components, such as sun and wind, the students identify those strategies, linked to the form, that can best exploit the natural components, guaranteeing positive effects on the building, without ever neglecting the minimum regulatory requirements.
The city of Frattaminore, which is located to the north of the city of Naples, presents similar aspects of environmental and climatic criticality to what can be found within the Neapolitan territory. This is due both to the territorial proximity and to the morphological characteristics, but also the similar construction practices used for the construction of buildings and open spaces, which characterise that portion of the territory from the northern outskirts of Naples to the border with the city of Caserta.
In this perspective, also and above all through the use of ICT tools, in particular data exchange processes between software applications for parametric design and dedicated software for environmental analysis (Bassolino et al., 2018; Bassolino et al., 2021), we want to investigate those aspects of environmental criticality related to the exacerbation of temperatures due to the climate change underway, to propose experimental actions of urban regeneration in a perspective of adaptive climate design and site-specific type (Bassolino, 2021).
The design of building artefacts and open spaces is thus supported by instrumental analysis and verification phases that the choices made involve the project area, in a holistic vision that makes the characteristics of the surrounding environment and environmental sustainability the main guidelines.
Aspects related to mitigation, i.e. the containment of climate-altering gas emissions and the environmental impact of building processes linked to the construction of ex-novo architectural artefacts, ranging from construction to management, right up to imagining the demolition phases, are explored by the students through

Il corso di Progettazione Esecutiva dell'Architettura all'interno dell'Advanced Design Studio, è strutturato allo scopo di promuovere quei temi legati al progetto architettonico in relazione a tematiche quali la sostenibilità e la compatibilità ambientale, la mitigazione e l'adattamento ai cambiamenti climatici e più in generale dello sviluppo sostenibile delle nostre città (UN, 2015), ma anche attraverso l'introduzione di quegli aspetti di natura normativa insiti nei processi edilizi complessi, così come si prevede nella pratica professionale.
In quest'ottica, il rapporto edificio, spazi aperti e ambiente è approfondito fin dalle prime fasi progettuali.
Dapprima analizzando in contesto ambientale, climatico e microclimatico dell'area d'intervento, per comprenderne gli aspetti di maggiore criticità e di potenzialità in riferimento al contesto ambientale e, in secondo luogo, allo scopo di intervenire sugli aspetti formali e morfologici dell'organismo architettonico che si intende progettare. Mediante fasi di verifica iterativa, nelle quali la forma architettonica viene studiata in relazione sia alle necessità funzionali-spaziali, sia alle componenti ambientali, quali il sole e il vento, gli allievi individuano quelle strategie, legate alla forma, che maggiormente possano consentire di sfruttare le componenti naturali garantendo effetti positivi sul manufatto edilizio, senza mai tralasciare i requisiti normativi minimi.
La città di Frattaminore, che è situata a nord della città di Napoli, presenta aspetti di criticità ambientale e climatici analoghi a quanto può essere riscontrato all'interno del territorio napoletano.
Questo, di fatto, è dovuto sia alla vicinanza territoriale, sia alle caratteristiche morfologiche, ma anche alle analoghe prassi costruttive impiegate per la realizzazione di edifici e spazi aperti, e che caratterizzano quella porzione di territorio che va dalla periferia nord di Napoli al confine con la città di Caserta. In quest'ottica, anche e soprattutto attraverso l'impiego di strumenti ICT, in particolare di processi di *data exchange* tra applicativi software per la progettazione parametrica e software dedicati per l'analisi ambientale (Bassolino et al., 2018; Bassolino et al., 2021), si vogliono indagare quegli aspetti di criticità ambientale legati all'inasprimento delle temperature dovute ai cambiamenti climatici in atto, con l'obiettivo di proporre azioni sperimentali di rigenerazione urbana in un'ottica di design clima adattivo e di tipo *site specific* (Bassolino, 2021).
Il progetto dei manufatti edilizi e spazi aperti viene così supportato da fasi di analisi strumentali e verifiche che le scelte adoperate comportino sull'area di progetto, in una visione olistica che fa delle caratteristiche dell'ambiente circostante e della sostenibilità ambientale le principali linee guida.
Gli aspetti legati alla mitigazione, quindi al contenimento delle emissioni di gas climalteranti e dell'impatto ambientali di processi edilizi legati alla costruzione di manufatti architettonici ex-novo, che va



the choice of construction systems and building materials that guarantee the lowest environmental impact.
To support the choices, reference is made to the regulatory discipline of the C.A.M. - Minimum Environmental Criteria (MiTE, 2017), which for the construction sector defines the environmental requirements for the various phases of the building process, the regulations in force regarding the containment of primary energy, but also the design indications that can be acquired from environmental assessment systems such as the LEED v.4 protocol and the GBC Home and GBC Quartieri protocols of the Green Building Council Italia (GBC Italia, 2022).
Particular attention has been paid to making conscious choices concerning the definition of technical solutions and the use of building components that would not only guarantee the achievement of minimum performance levels but at the same time allow for the definition of NZEB - Nearly Zero Energy Building and guarantee a reduced environmental impact throughout the entire life cycle.
From a regenerative climate-adaptive design perspective, the design of open spaces follows the indications coming from the results obtained through the use of ICT tools.
Dedicated tools and software acquire the role of decision support tools during the different phases of the design process where actions are defined to counteract the effects of climate change in cities, in particular, in coping with rising urban temperatures.
The inclusion of technical solutions that may fall within intervention categories such as increased vegetation, cool and permeable urban surfaces, solar shading elements, but also water bodies and that are at the same time capable of reducing urban flooding risks, are tested and verified through recursive simulation processes.
The final phase of the work is the definition of technical drawings similar to those of an executive design, in which the students are confronted with the demands of construction techniques and innovative technologies.
The choices of construction systems, products and technical solutions take place in total autonomy, in which the acquisition of the principles of a more environmentally aware design is reflected.
The necessary transition to a more detailed scale increases the degree of awareness in the definition of building processes and construction phases of an architectural organism, acting as a hinge discipline between the teachings in the final synthesis workshop.

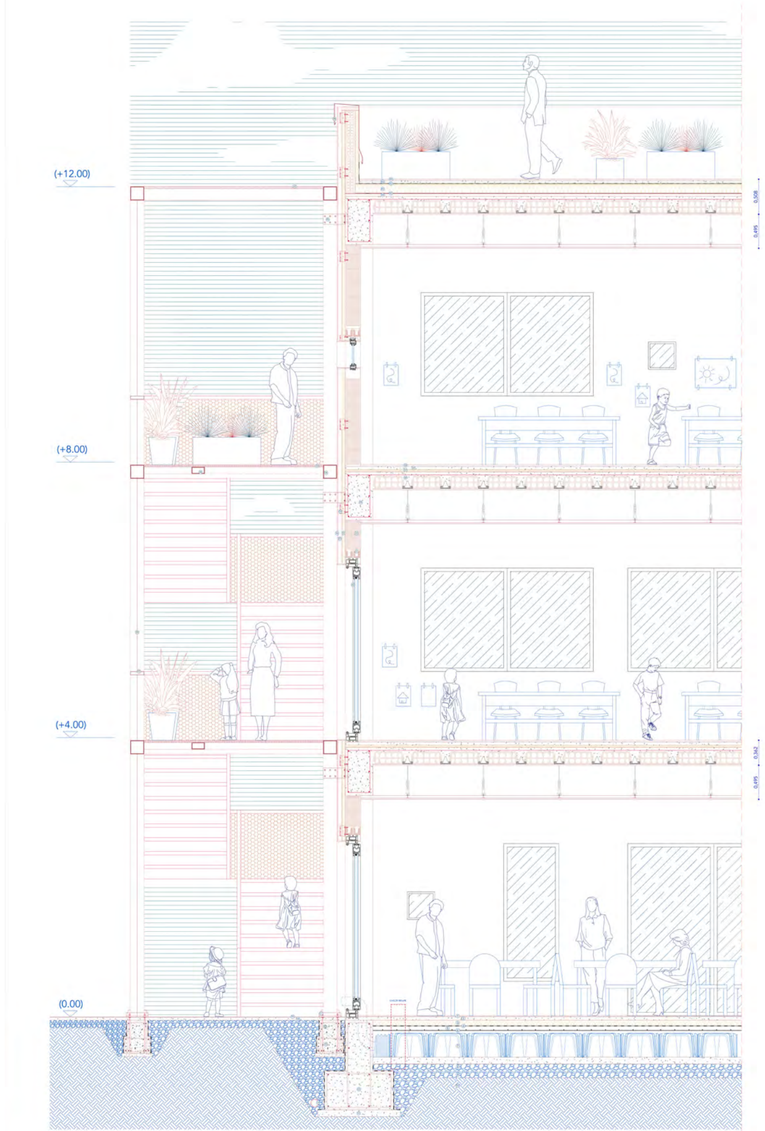
dalla costruzione alla gestione, fino ad immaginare le fasi di demolizione, sono approfonditi dagli allievi mediante la scelta di sistemi costruttivi e di materiali da costruzione che garantissero il minor impatto ambientale.
A supporto delle scelte, sono prese a riferimento la disciplina normativa dei C.A.M. - Criteri Ambientali Minimi (MiTE, 2017), che per il settore dell'edilizia definisce i requisiti ambientali per le varie fasi del processo edilizio, le normative vigenti in riferimento al contenimento dell'energia primaria, ma anche le indicazioni progettuali acquisibili da sistemi di valutazione ambientale quali in particolare il protocollo LEED v.4 e i protocolli GBC Home e GBC Quartieri del Green Building Council Italia (GBC Italia, 2022).
Particolare attenzione è stata posta nell'operare scelte consapevoli in relazione alla definizione di soluzioni tecniche e l'impiego di componenti per l'edilizia che garantissero non solo il raggiungimento dei livelli minimi prestazionali, ma che al tempo stesso consentissero di definire edifici di tipo NZEB – *Nearly Zero Energy Building* e garantissero un ridotto impatto ambientale lungo l'intero ciclo di vita.
In un'ottica di regenerative *climate adaptive design*, il progetto degli spazi aperti segue le indicazioni provenienti dai risultati ottenuti mediante l'uso di strumenti ICT. Tool e software dedicati acquisiscono il ruolo di strumenti di supporto alle decisioni durante le diverse fasi del processo progettuale e in cui le azioni sono definite allo scopo di contrastare gli effetti dei cambiamenti climatici nelle città, in particolare, nel fronteggiare l'aumento delle temperature urbane.
L'inserimento di soluzioni tecniche che possono rientrare all'interno di categorie d'intervento quali, l'aumento della vegetazione, l'inserimento di superfici urbane di tipo cool e permeabili, elementi di schermatura solare, ma anche di corpi d'acqua e che siano allo stesso tempo capaci di ridurre i rischi legati agli allagamenti urbane, sono testate e verificate attraverso processi ricorsivi di simulazione.
La fase conclusiva del lavoro è la definizione degli elaborati tecnici assimilabili a quelli di una progettazione esecutiva, in cui gli allievi si confrontano con le istanze della tecniche costruttive e delle tecnologie innovative.
Le scelte sui sistemi costruttivi, prodotti e soluzioni tecniche avvengono in totale autonomia, in cui si riflette l'acquisizione dei principi di una progettazione maggiormente attenta agli aspetti di carattere ambientale.
Il passaggio necessario ad una scala di approfondimento di dettaglio, aumenta il grado di consapevolezza nella definizione dei processi edilizi e delle fasi costruttive di un organismo architettonico, ponendosi come disciplina di cerniera tra gli insegnamenti presenti nel laboratorio di sintesi finale.

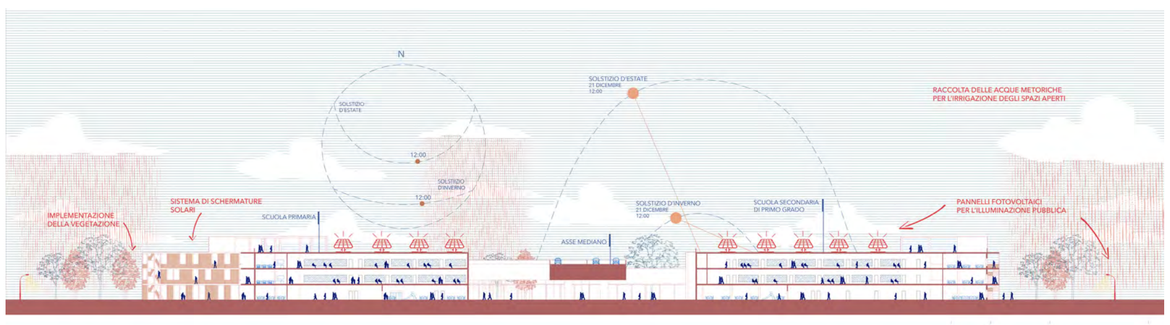
Next page

Project *Under the bridge*, by M. Matarese

Pagina seguente

Progetto *Under the bridge*, M. Matarese



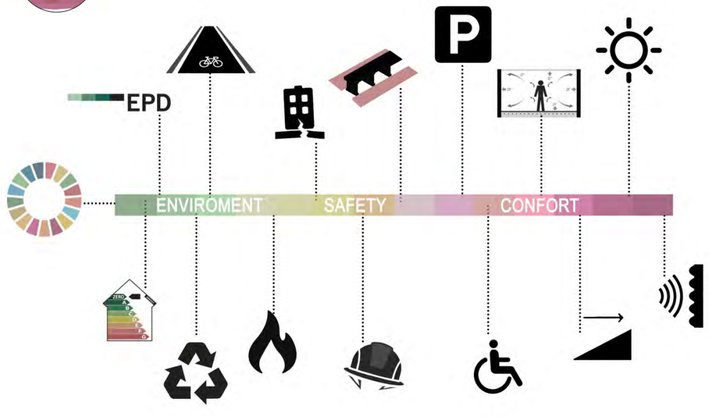


MAPPING / *MAPPE*

REFERENCES MAPPING

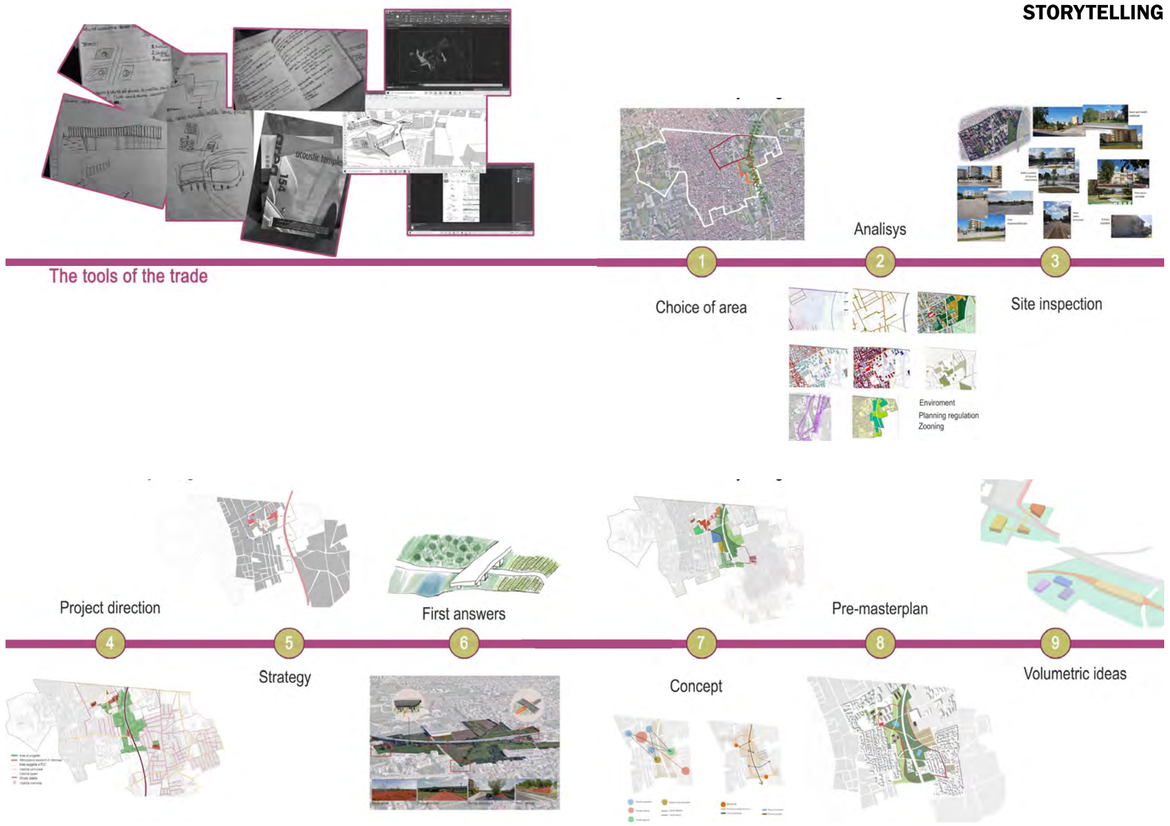
USERS AND STAKEHOLDERS

MATERIAL REGULATIONS

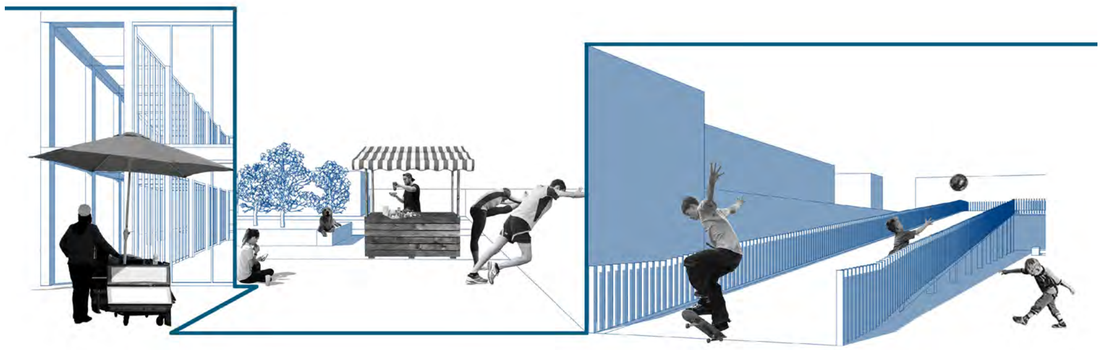


Drawings by Ilaria D. Iazzetta

STORYTELLING



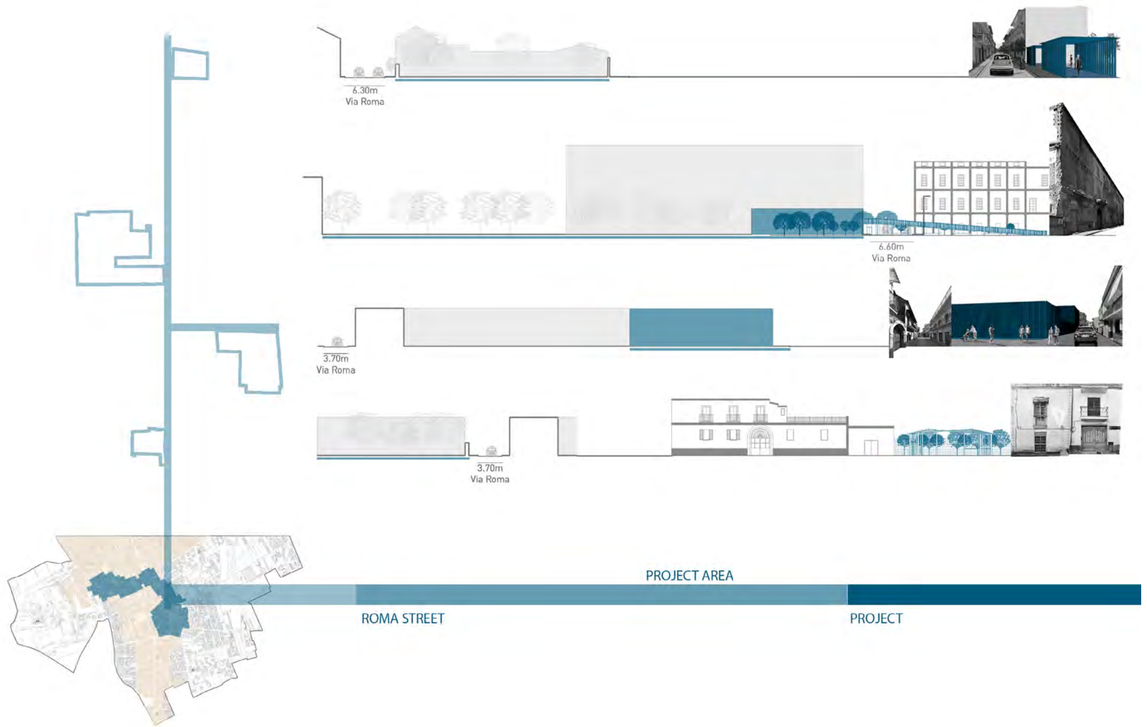
AFFORDANCES MAPPING



USERS AND STAKEHOLDERS

MATERIAL REGULATIONS

STORYTELLING



Drawings by Silvia Paparo

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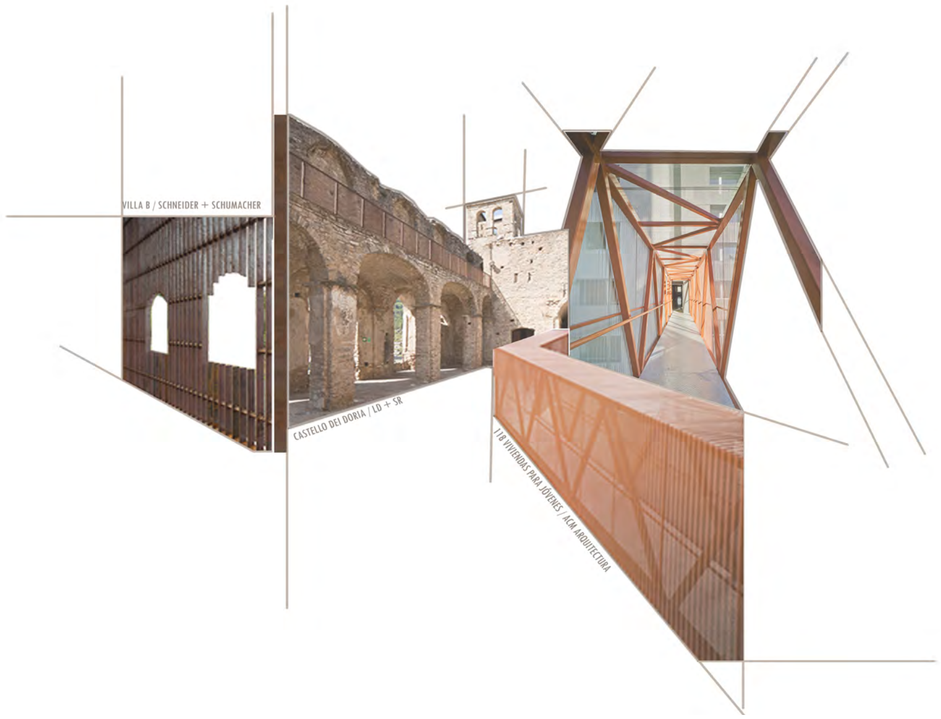


USERS AND STAKEHOLDERS

Drawings by Marta Parente

AFFORDANCES MAPPING

STORYTELLING

REFERENCES MAPPING

THE SAME OBJECT

WITH DIFFERENT POINT OF VIEW

Frattaminore, Napoli

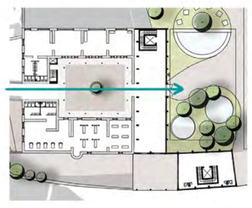
PALAZZO BARONALE, Piazza Crispi

Minto, Australia

SARAH REDFERN PARK - JMD DESIGN

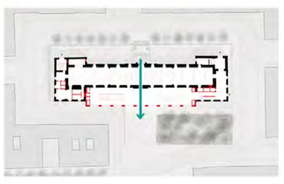
Frattaminore, Napoli

PALAZZO BARONALE, Piazza Crispi



Madrid, Spagna

MUSEO NACIONAL DEL PRADO - OMA

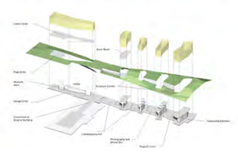


Frattaminore, Napoli

PALAZZO BARONALE, Piazza Crispi

Kansas City, Missouri

NELSON ATKINS MUSEUM- STEVEN HOLL



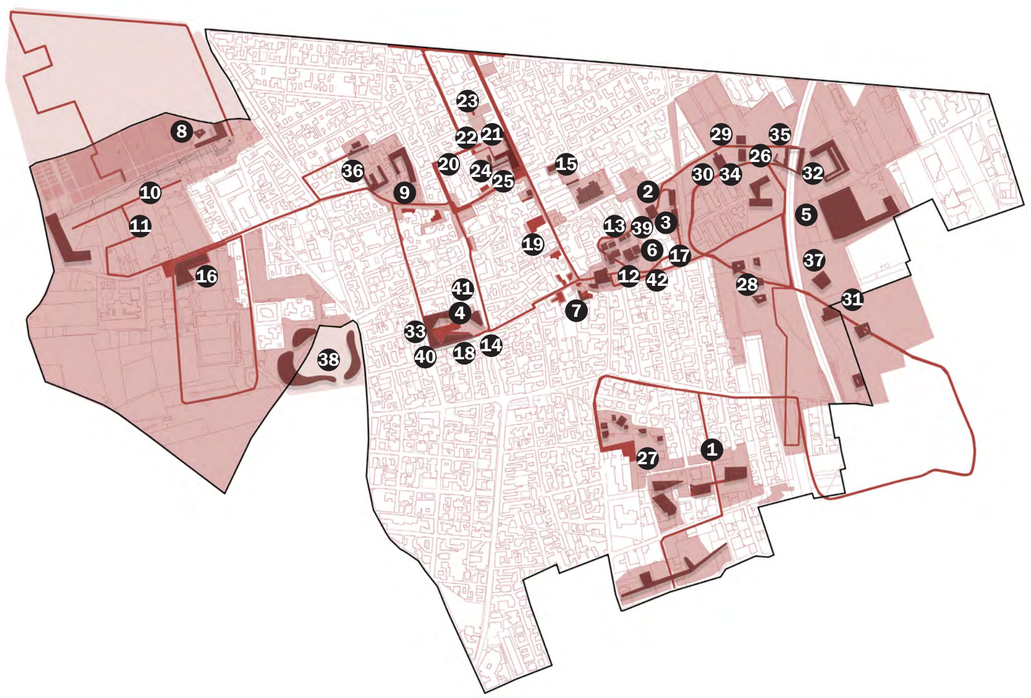
Drawings by Anna Nastelli

PLANNING REGULATIONS

BY PUC

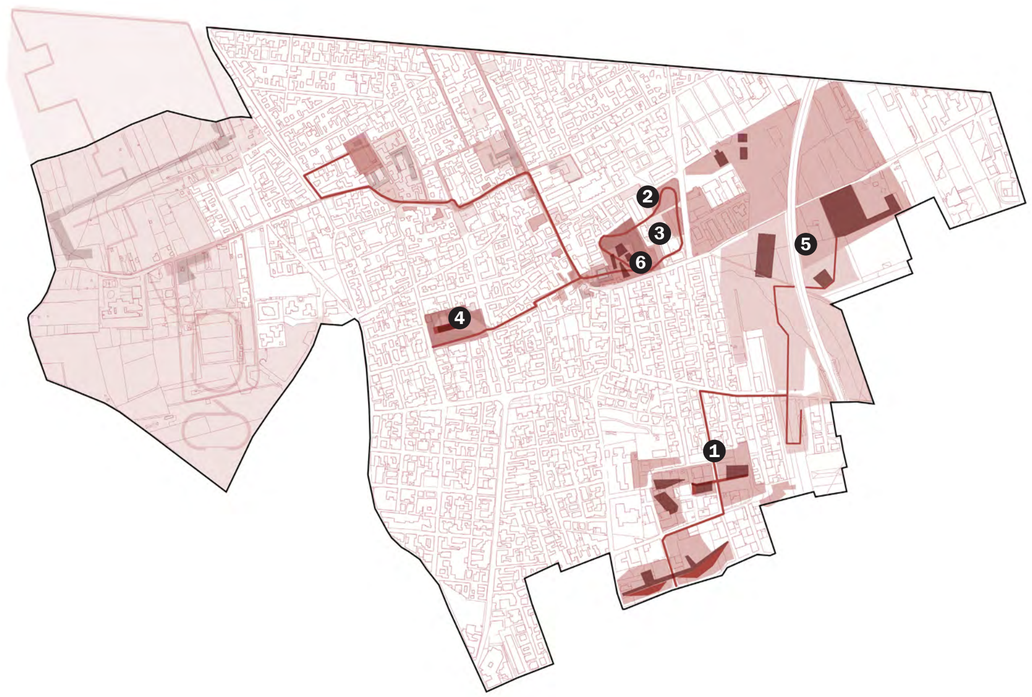
BY ME

MATERIAL REGULATIONS



PROJECTS / PROGETTI

1. The widespread school Angela Girardo
2. Public space in a fragmented place Rosanna Giuzio
3. Urban sport - Farming park Francesco Iuliano
4. Green park Fabio Manzo
5. 3D Connection Angela Marzo
6. Connecting different souls of a town Ramona Sorrentino
7. The other side Federica Alba
8. Restart Atella Gabriele Cimmino
9. Re-creo - Spaces of abandonment Francesca Marano
10. Not in ruin but in progress Beatrice Mariosa
11. Mobility/archaeology Giuseppe Maria Marra
12. The terraces of Frattaminore Gabriella Masucci
13. Across the heritage Anna Nastelli
14. Every floor a new world Laura Pagano
15. Re-imagining Frattaminore Silvia Paparo
16. Archaeology - Agriculture Valeria Parracino
17. A connective path Rosario Clemente Perrotta
18. Inhabited edges Benedetta Ruggiero
19. The promenade Claudia Sorrentino
20. Across the city Giovanna Vitelli
21. The productive garden Alfonso Maria Annunziata
22. Another brick in the mill Giuseppe De Vita
23. Archiculture Andrea Martino
24. Re-mark the land Marta Parente
25. Open arches Roberta Vanacore
26. Go through Gabriele Abbate
27. Peripheral areas Luca Battipaglia
28. Hemp - Orium Carmela Bottone
29. The basement square Andrea Cimmino
30. Fraincanti Claudia Giordano
31. Agri - cultural park Ilaria Domenica Iazzetta
32. Take care of limits Carmela Napolitano
33. Fratta Middle School Francesco Caliendo
34. Take care of the margins Maria Alessandra Desiderio
35. Landmark at the border Caterina Fiscina
36. Linear park Sara Liguori
37. Under the bridge Marta Matarese
38. The city's snake Umberto Molaro
39. Viggiano Multitasking Pasquale Notariello
40. The red wire Imma Perna
41. The red wire Ferdinando Romano
42. Connectiong the opposites Maria Russo



OPEN SPACES AND NEW URBAN MOBILITY
SPAZI APERTI E NUOVA MOBILITÀ URBANA

1. The widespread school Angela Girardo
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REFERENCES

1. N. Emery, *Progettare, costruire, curare. Per una deontologia dell'architettura*, Casagrande, Bellinzona 2010.

2. J. Gehl, *Life Between Buildings: Using Public Space*, Van Nostrand Reinhold, New York 1987.

3. P. Miano, "Movimento e mobilità. Il ruolo del progetto di architettura", in A. Capuano (ed.), *STREETSCAPE. Strade vitali, reti della mobilità sostenibile, vie verdi*, Quodlibet, Macerata 2020, pp. 252-263.

4. V. Valentino, "Corpi tra suolo e sottosuolo. Riverberazioni urbane delle stazioni nei nuovi territori dello spazio pubblico", in P. Miano, A. Bernieri (ed.), *#CURACITTÀ NAPOLI Salubrità e natura nella città collinare*, Quodlibet, Macerata 2020, pp. 113-125.

Next page

Architectures between mobility and public spaces (drawings by F. Iuliano and A. Girardo)

Pagina seguente

Architetture tra mobilità e spazio pubblico (disegni di F. Iuliano e A. Girardo)

Frattaminore is an area of great interest in terms of design experimentation for multiple reasons. The municipality represents, in fact, an autonomous urban center and at the same time the periphery of a large and dense metropolitan city. This dual feature denotes particularly important factors of strategic potential: on the one hand, the possibility of triggering human-scale transformations that can emphasize the pedestrian character of a small center; on the other hand, the proximity and connection to the facilities of larger centers such as Frattamaggiore, Acerra, and Afragola (with particular reference to the proximity to the Naples Afragola High Speed train station). At the same time, however, its location and role within the metropolitan city also denote several critical issues. The first of these concerns the practically absent direct accessibility to neighboring municipalities and to the center of the metropolitan city and the services it offers, considering that the closest train station to the urban center is Frattamaggiore-Grumo Nevano, about two kilometers away, and that there is no high-frequency connection linking it to the center of Frattaminore. The second concerns the lack of attractiveness and characterization of this area within the metropolitan scenario and within the northern ring of Neapolitan municipalities.
These factors are, in any case, a great asset for contemporary urban design, which today reflects much more strongly on the themes of ecology, community, and inclusion, especially in relation between city, architecture and mobility. Frattaminore suits, in fact, to the construction of a scenario of pedestrian capillarity and archipelagos of public space that rethink a different texture of urban plots, blocks and voids, in a redesign that praises free space rather than land occupation but at the same time returns a much more complex picture of urban life in terms of density.
The design experiments conducted as part of the workshop activities have tried to reflect on these issues, interweaving them, moreover, with possible unexplored uses of spaces, both external and internal, in the territory of Frattaminore. A reflection, in fact, on architectural programs and functional uses can represent, in this sense, a great innovation since imagining potential functions, or a mixture of these – that with no interruption are articulated by completely revisiting the typological characteristics of public buildings – means to configure how life inside and between buildings can actually take place.

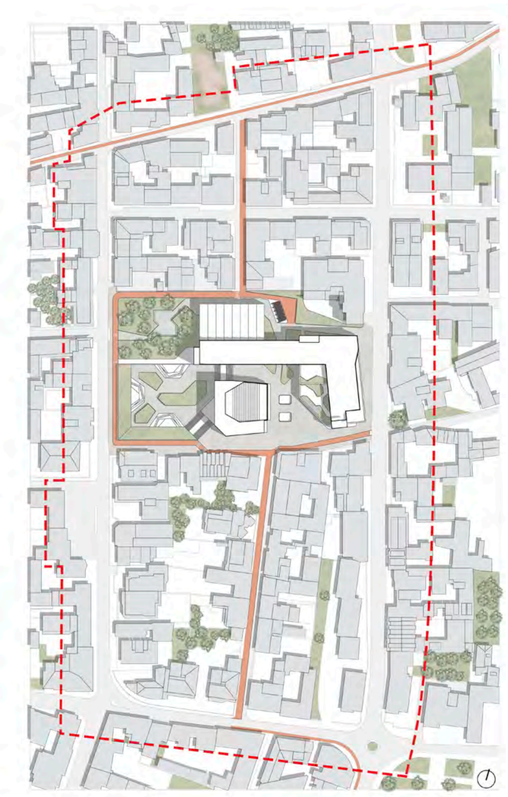
The starting point of this process is to absorb mobility-related infrastructures into urban and architectural design, not only as a legacy of large-scale reasoning but as a starting point for new expansions. In fact, infrastructure design is based on the interweaving of transportation flows and landscape geo-morphological features. Nonetheless, an essential aspect of their design, to restore a habitable dimension of infrastructural space, is the nodal trigger within the linear structure: stations, stops, rest areas. Moreover, these places trigger a reverberation mechanism whereby, starting from intersections with infrastructure, mobility translates into movement between architectural (and non-

Frattaminore è un territorio di grande interesse in termini di sperimentazione progettuale per molteplici motivi. Il comune rappresenta, difatti, un centro urbano autonomo e al tempo stesso la periferia di una grande e densa città metropolitana. Questo duplice carattere denota fattori di potenzialità strategica particolarmente importanti: da un lato, la possibilità di innescare trasformazioni a misura d'uomo che possano enfatizzare il carattere pedonale di un piccolo centro; dall'altro, la vicinanza e la connessione con i servizi dei centri più grandi come Frattamaggiore, Acerra, Afragola (con particolare riferimento alla prossimità con la stazione dell'Alta Velocità di Napoli Afragola). Allo stesso tempo, però, la sua posizione e il suo ruolo all'interno della città metropolitana denotano anche diverse criticità. La prima di queste riguarda l'accessibilità diretta, praticamente assente, ai comuni limitrofi e al centro della città metropolitana e ai servizi che questa offre, considerando che la stazione ferroviaria più prossima al centro urbano è quella di Frattamaggiore-Grumo Nevano, a circa due chilometri di distanza, e che non esiste una connessione ad elevata frequenza che la colleghi al centro di Frattaminore.
La seconda riguarda la mancanza di attrattività e di caratterizzazione di questo territorio all'interno dello scenario metropolitano e, in particolare, della corona nord dei comuni napoletani.
Questi fattori rappresentano, ad ogni modo, una grande ricchezza per il progetto urbano contemporaneo che riflette oggi in maniera molto più marcata sui temi dell'ecologia, della collettività e dell'inclusione, soprattutto in relazione al rapporto tra città, architettura e mobilità. Frattaminore si presta, infatti, alla costruzione di uno scenario di capillarità pedonale e arcipelaghi di spazio pubblico che ripensano ad una tessitura differente delle trame urbane, degli isolati e dei vuoti, in un ridisegno che elogia lo spazio libero piuttosto che l'occupazione di suolo ma al tempo stesso restituisce un quadro molto più complesso di vita urbana in termini di densità.
Le sperimentazioni progettuali condotte nell'ambito delle attività laboratoriali hanno provato a riflettere su queste tematiche, intrecciandole, inoltre, a possibili usi inesplorati degli spazi, sia esterni che interni, nel territorio di Frattaminore. Una riflessione, infatti, sui programmi architettonici e sull'offerta funzionale può rappresentare, in tal senso, una grande innovazione in quanto immaginare potenziali funzioni, o una mescolanza di queste che, senza soluzioni di continuità, si articolino rivisitando completamente le caratteristiche tipologiche degli edifici pubblici, significa configurare come la vita dentro e tra gli edifici possa difatti svolgersi.

Il punto di partenza di questo processo è assorbire nel progetto urbano e architettonico le infrastrutture legate alla mobilità, non solo come lascito di un ragionamento a grande scala ma come punto di inizio di nuove dilatazioni. Il progetto delle infrastrutture è infatti basato su programmazioni territoriali di intreccio tra flussi trasportistici e caratteristiche geo-morfologiche del

architectural) bodies that inhabit the city . Some projects are exemplary in this regard and offer an opportunity to reflect on possible new thematic declinations. In OMA's now iconic design for the McCormick Tribune building (1997) inside the IIT campus in Chicago designed by Mies van der Rohe, the infrastructure is an integral part of the architecture, configuring its upper limit of interior space and, wrapped in a sound-absorbing steel tube, becoming part of the roof itself. This relationship influences the entire architectural configuration of the facility to the point of conceiving the internal composition as a materialization of the flows of students crossing the campus and which will therefore not be interrupted by the construction of the new building but, on the contrary, "functionalized", densified with uses and activities so that in the displacement, in the mobility, precisely, typical of a university campus, they can become one with the architecture as in an urban-type configuration. Another significant aspect of the project is the play of internal elevations, of double heights and depressions, which relate to the constrained height of the elevated railway.
Another project that goes in this direction is the Olympic Sculpture Park in Seattle by Weiss/Manfredi (2007) in which the architecture becomes the crossing, this time at a higher elevation, of a railroad and a freeway, returning, from above, an artificial green hill, inside, a system of galleries, spaces for exhibition and cultural activities related to the sculpture museum/park.
An open space is completely reshaped in COBE's Karen Blixens Plads project for the University of Copenhagen's South Campus (2019). The new plaza, between the university and the Amager Commons nature reserve, represents a transitional space, in architectural terms returned through a hybridization between mineral pavements, also modeled here as hills, and green oases that become larger and larger as they approach the natural landscape of the reserve. In this game of modeling, even the bicycle parking areas find their own spatiality in the relationship between below and above that large circular holes draw in the roof slab, a new walkable ground. This large space from a simple parking lot has been transformed into a space of mobility in a broad and characterizing sense, a new landscape indeed, that only through the dynamism of the ground line creates a completely renewed attractiveness and, in addition to permeability and accessibility, also invites to be enjoyed as a place for staying.
Movement becomes the type-morphological character of architecture and completely marks its unfolding in the Weiss/Manfredi design for the Brooklyn Botanic Garden Visitor Center in Brooklyn, New York (2012): habitable topography that defines a threshold in which the city becomes the botanical garden, and vice versa. The interior spaces are defined as a multi-level continuation of the park's path system. The curvilinear composition, which has its apex and envelopment in the large oval hall, emphasizes reference and connection to the organic components of the place. Movement,

paesaggio. Ciò nonostante, aspetto essenziale della loro progettazione, al fine di restituire una dimensione abitabile dello spazio infrastrutturale, è l'innesco nodale all'interno della struttura lineare: stazioni, fermate, punti di sosta. Questi luoghi innescano a loro volta un meccanismo di riverberazione per cui, a partire dalle intersezioni con le infrastrutture, la mobilità si traduce in movimento tra corpi architettonici (e non) che vivono la città.
Alcuni progetti sono esemplari in tal senso e offrono l'opportunità di riflettere su possibili nuove declinazioni tematiche.
Nel progetto ormai iconico di OMA per l'edificio McCormick Tribune (1997) all'interno del IIT campus di Chicago progettato da Mies van der Rohe, l'infrastruttura è parte integrante dell'architettura, configurandone il limite superiore dello spazio interno e, avvolta in un tubo di acciaio fonoassorbente, diventando parte stessa del tetto. Tale rapporto influenza l'intera configurazione architettonica dell'impianto al punto da concepire la composizione interna come materializzazione dei flussi degli studenti che attraversano il campus e che non saranno quindi interrotti dalla realizzazione del nuovo edificio ma, al contrario, "funzionalizzati", densificati di usi e attività affinché nello spostamento, nella mobilità, appunto, tipica di un campus universitario, possano diventare tutt'uno con l'architettura come in una configurazione di tipo urbano. Altro aspetto significativo del progetto è il gioco di quote interno, di doppie altezze e di avvallamenti, che si rapportano con l'altezza vincolata della ferrovia sopraelevata.
Un altro progetto che va in questa direzione è l'Olympic Sculpture Park a Seattle di Weiss/Manfredi (2007) in cui l'architettura diventa l'attraversamento, stavolta ad una quota superiore, di una ferrovia e di una strada a scorrimento veloce, restituendo, dall'alto, una collina verde artificiale, all'interno, un sistema di gallerie, spazi espositivi e per attività legate al museo/parco delle sculture.
Uno spazio aperto viene completamente rimodellato nel progetto Karen Blixens Plads dello studio COBE per il South Campus dell'Università di Copenaghen (2019). La nuova piazza, tra l'università e la riserva naturalistica Amager Commons, rappresenta uno spazio di transizione, in termini architettonici restituito attraverso una ibridazione tra le pavimentazioni minerali, modellate anche qui come delle colline, e oasi verdi che diventano sempre più ampie approcciandosi al paesaggio naturale della riserva. In questo gioco di modellazione, anche i parcheggi per le biciclette trovano una loro spazialità, ancor di più nel rapporto tra il sotto e il sopra che grandi fori circolari disegnano nel solaio di copertura, nuovo suolo calpestabile.
Questo grande spazio da semplice parcheggio è stato trasformato in uno spazio della mobilità in senso ampio e caratterizzante, difatti un nuovo paesaggio che solo attraverso la dinamicità della linea del suolo crea una attrattività completamente rinnovata e, oltre alla permeabilità e all'accessibilità, invita ad essere fruito anche come luogo dello stare.
Il movimento diventa carattere tipo-morfologico dell'architettura e ne contrassegna completamente lo svolgimento nel progetto di Weiss/Manfredi per il



Next page

Re-Activate Frattaminore Learning Center, **Master Thesis Design Project by Francesco Caliendo, tutors P. Miano, A. Bernieri.**

Pagina seguente

Re-Activate Frattaminore Learning Center, tesi di laurea di Francesco Caliendo, relatore P. Miano, correlatore A. Bernieri.

in this sense, is continuous and never has an interruption: from the city to the garden and back, environments take shape precisely along the spine of the central path.
In each of the cases described, the strategies aim to define a renewed sense of continuity and permeability in order to establish that urban mobility is not limited to the infrastructural dimension of stations or interchanges.
It concerns a profound and lively interaction that is established between the pedestrian and the city and that can spill over into experimental architectural typologies for public buildings, with crossings between outdoor and indoor spaces, whose edges become labile, and it is in the realization of this transition that a new architecture comes to life.

In this direction, for example, *The Widespread School* has tried to reflect, a project for a "decomposed" school in which the urban path becomes a line of union between different elements, juxtaposing them, sectioning them, intersecting them, creating the possibility for hybrid spatial solutions between public and private, between street and playground, between school and city.
The Public Space in a Fragmented Place project is a reinterpretation of fences, gates, and closures that bind Frattaminore to a condition of unexpressed permeability.
In this sense, in the project, spatial successions are re-proposed through the use of wall elements or difference in height that define a different accessibility and visibility to the built elements.
Urban Sport Farming Park is a project in which the agricultural history of the Frattaminore area is re-proposed in a contemporary key through the creation of an urban park characterized by a large athletic track, around which uses are continuously intertwined and agricultural activities are integrated with cultural and sports activities.
In *Frattaminore Green Park*, as part of a strategy to create bicycle paths and enhance public transportation, the project focuses on the regeneration of an abandoned central space for the return of an attractive and sustainable place.
The reasoning on architectural typology is taken to the extreme in the complete dissolution proposed by the *3D Connection* project: here the volume is in fact a three-dimensional grid within which the mobility of a continuous path materializes from time to time some volumes with different uses, preserving the expansion of the large central atrium as the fulcrum of the whole composition.
In the *Connecting Different Souls of a Town* project, the design reflects on the theme of urban margins as places of urban definition and at the same time of threshold and crossing over to areas of recaptured landscape within the compact urban texture.

Brooklyn Botanic Garden Visitor Center di Brooklyn, New York (2012): topografia abitabile che definisce una soglia in cui la città diventa il giardino botanico, e viceversa. Gli spazi interni sono definiti come continuazione a più livelli del sistema di percorsi del parco. La composizione curvilinea, che ha il suo apice e avvolgimento nella grande sala ovale, enfatizza il riferimento e la connessione con le componenti organiche del luogo.
Il movimento, in questo senso, è continuo e non ha mai interruzione: dalla città al giardino e ritorno, gli ambienti prendono forma proprio lungo la spina dorsale del percorso centrale.
In ognuno dei casi descritti, le strategie puntano a definire un rinnovato senso di continuità e permeabilità al fine di stabilire che la mobilità urbana non si esaurisce alla dimensione infrastrutturale delle stazioni o dei nodi di interscambio. Essa riguarda una profonda e vivace interazione che si stabilisce tra il pedone e la città e che può riversarsi in tipologie architettoniche sperimentali per gli edifici pubblici, con sconfinamenti tra spazi esterni e spazi interni, i cui bordi divengono labili ed è proprio nella realizzazione di tale transizione che prende vita una nuova architettura.

In questa direzione ha provato a riflettere, ad esempio, il progetto *The Widespread School*, il progetto per una scuola "scomposta", in cui il percorso urbano diventa linea di unione tra i diversi elementi, accostandoli, sezionandoli, intersecandoli, creando la possibilità per soluzioni spaziali ibride tra pubblico e privato, tra strada e playground, tra scuola e città. Il progetto *Public Space in a Fragmented Place* è una reinterpretazione dei recinti, dei cancelli, delle chiusure che legano Frattaminore ad una condizione di permeabilità inespressa. In tal senso, nel progetto, si ripropongono successioni spaziali attraverso l'utilizzo di elementi murari o salti di quota che definiscono una diversa accessibilità e visibilità agli elementi costruiti.
Urban Sport Farming Park è un progetto in cui la storia agricola del territorio di Frattaminore viene riproposta in chiave contemporanea attraverso la creazione di un parco urbano caratterizzato da una grande pista di atletica, attorno cui gli usi sono continuamente intrecciati e le attività agricole si integrano a quelle culturali e sportive.
In *Frattaminore Green Park*, nel quadro di una strategia di creazione di piste ciclabili e potenziamento del trasporto pubblico, il progetto si concentra sulla rigenerazione di uno spazio centrale abbandonato per la restituzione di un luogo attrattivo e sostenibile.
Il ragionamento sulla tipologia architettonica viene portato all'estremo nella completa dissoluzione proposta dal progetto *3D Connection*: qui il volume è infatti una griglia tridimensionale all'interno della quale la mobilità di un percorso continuo materializza di volta in volta alcuni volumi con diversi usi, conservando la dilatazione del grande atrio centrale come fulcro dell'intera composizione.
Nel progetto *Connecting Different Souls of a Town* la riflessione progettuale riguarda il tema dei margini urbani come luoghi di definizione urbana e al tempo stesso di soglia e di attraversamento verso pezzi di paesaggio riconquistato all'interno della trama urbana compatta.

Next page

Design Strategy, Team 1, drawing by Chiara Barone and Francesco Caliendo

Pagina seguente

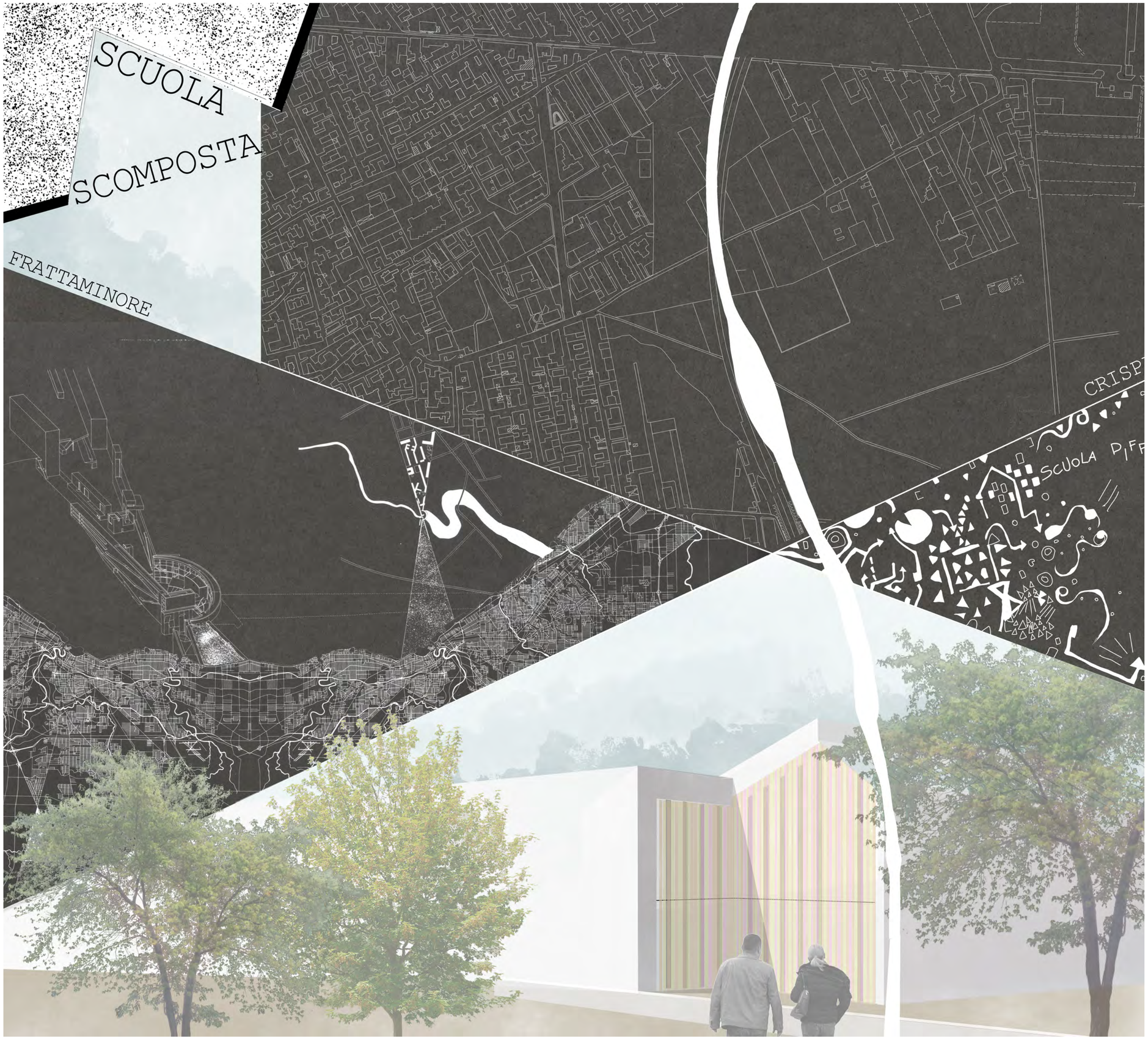
Strategia di progetto, gruppo 1, elaborazione grafica di Chiara Barone e Francesco Caliendo

ANGELA GIRARDO - THE WIDESPREAD SCHOOL

EDGE OF A CITY

Between the urban centers of Frattaminore and Crispano, there is a strip of uncultivated and abandoned land, partly agricultural. It has jagged and imperceptible margins, infact at the edges we find settlements with a hybrid character: not really urban, but not even natural.

The issues of this strip of peri-urban territory is to redesign the edges between the consolidated city and natural spaces and the relationship with the infrastructure. Designing on the edge means rethinking of spaces in order to mediate between the two parts, establishing a new relationship. This goal is pursued by Steven Holl in his pamphlet, Edge of a City, where he experiments new ways of dialogue between urban and rural space, as in the Cleveland Stich Plan project, where five "X" are positioned between the urban edge of the city of Cleveland, acting as stitches. The space on the margin therefore becomes a space of threshold, of transition, of mediation, between what is inside and what is outside. In Steven Holl's project this concept translates into the image of the optical cone: the central point of the cone, the vertex, marks the passage from one side to the other and at the same time is the point where the urban space culminates and the open one begins.



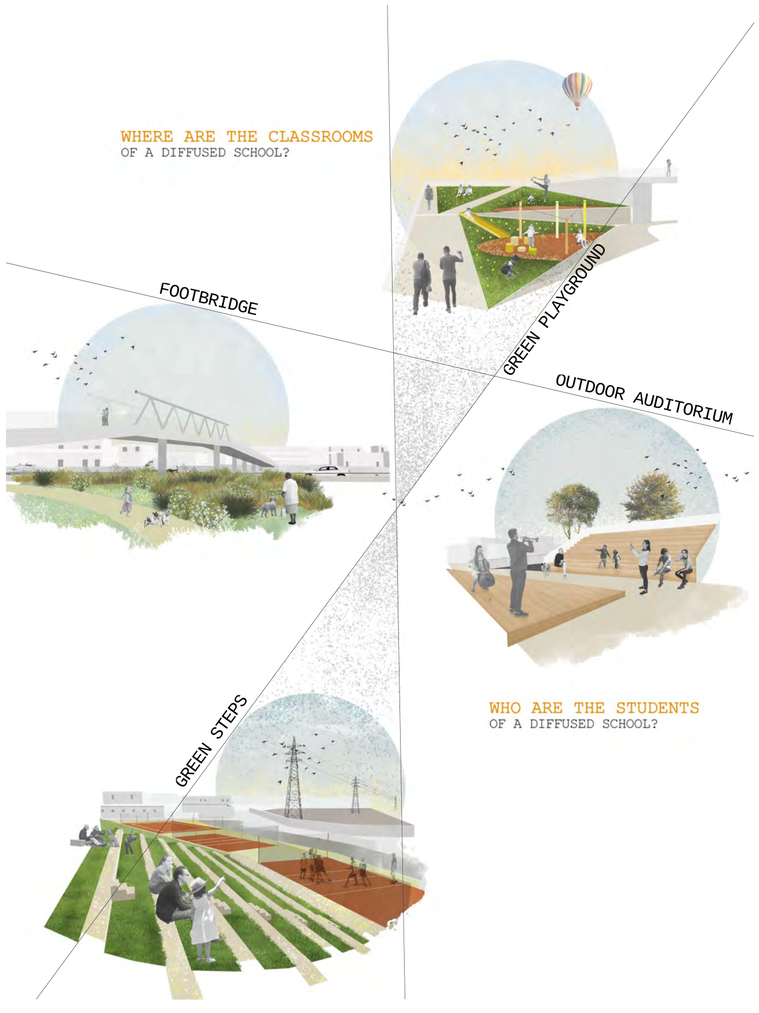
Program

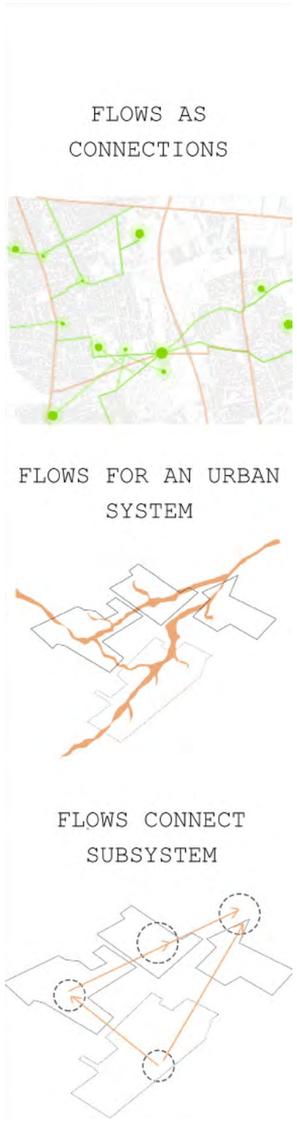
Sport center, school,auditorium, square

Covered area	48144 m²
Outdoor area	39570m²
Above-ground floors	8574 m²
Built volume	25546 m³
Estimated cost	11040862 €

The connection between the two municipality is done with the creation of an urban system (a space of "threshold", included in the lines of the cone) in which the open space plays a fundamental role.

In this marginal area of Frattaminore there are a series of fragmented land, without a clear urban nature. So, the project aim's is to give to this incomplete and jagged part of the municipality, an urban dimension. This is possible through the creation of spaces that allow people to walk the dog, to play and to watch sports, to park, to enjoy rows of trees, to do jogging, to sit on green steps. This is possible only paying attention to the flows of people that cross the urban system. The open space connects and allows the fruition of the building (sport centre, school, auditorium) included in the urban system, that will otherwise be fragmented as the previous areas. Great attention is paid to the green areas, like the green steps, that creates new flows and a place to sit and stay; also the steps, in this case the outdoor auditorium, allow to get on the roof of the school refectory and enter the indoor auditorium; the green playground allow people to go up and down through a series of inclined planes and ramps. Lastly, to create the connection, there is a footbridge in the urban park that concludes the space of threshold.

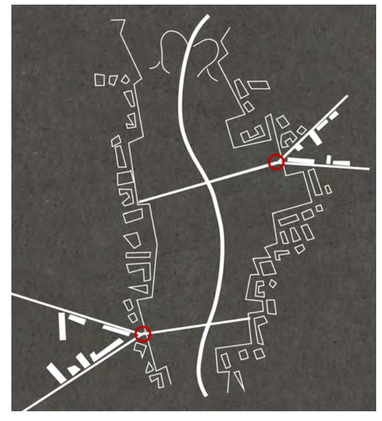




THE SYSTEM OF OPEN SPACE

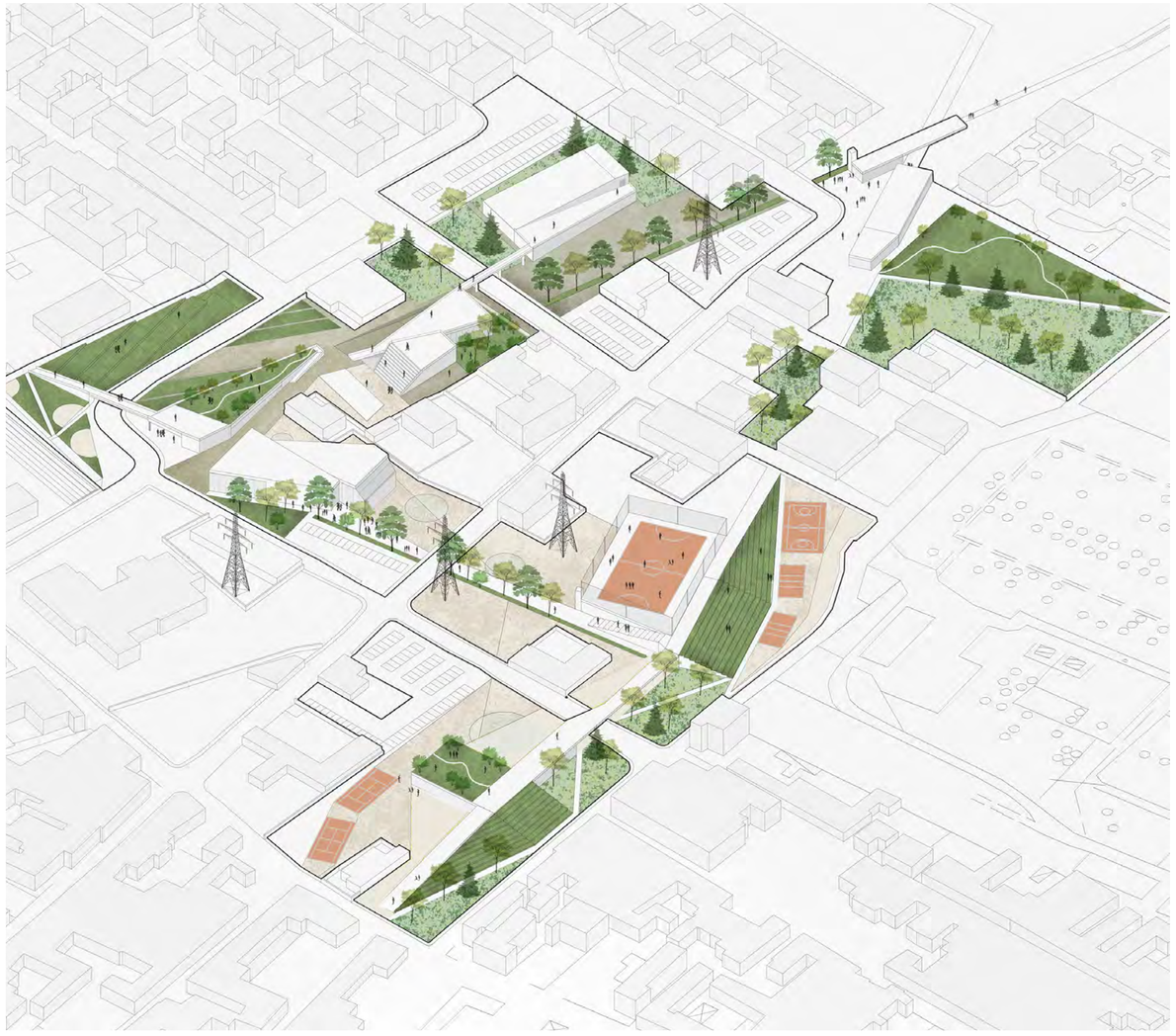
The model of a Diffused School rethink the categories of students, the places where the lessons are taken and the times of the day in which the school is open.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY



DESIGNING THE EDGE

The strategy is connecting Frattaminore to Crispano, through a series of spaces located on the edge between the two municipality.



DESIGN STRATEGY

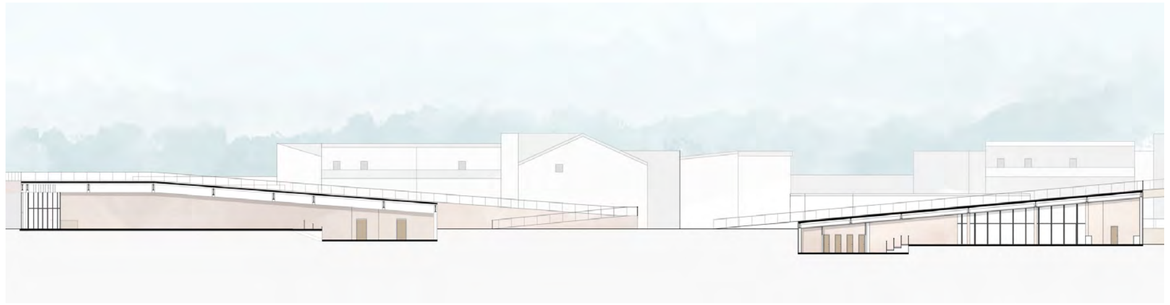
0 10 25 50m

SECTION A

0 10 25 50m

1. Access ramp
2. Covered parking
3. Eleveted walkway
4. Gym entrance
5. Covered pool
6. Services
7. Playgrounds
8. Library
9. Classrooms
10. Tree-lined avenue
11. Area sport
12. Green steps

SECTION B

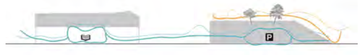


SECTION C

0 4 10 20m

SPORT CENTRE

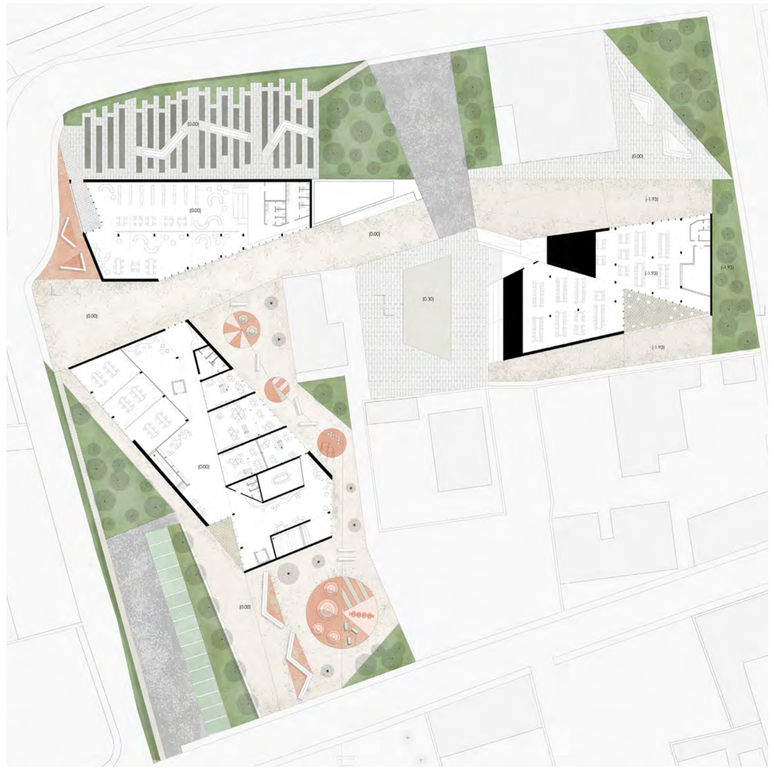
SCHOOL



AUDITORIUM

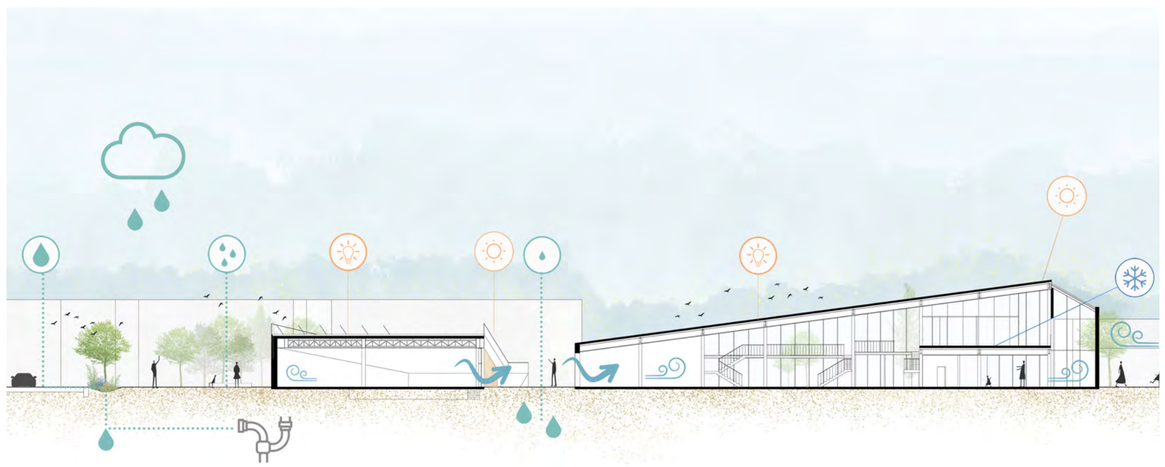
SQUARE

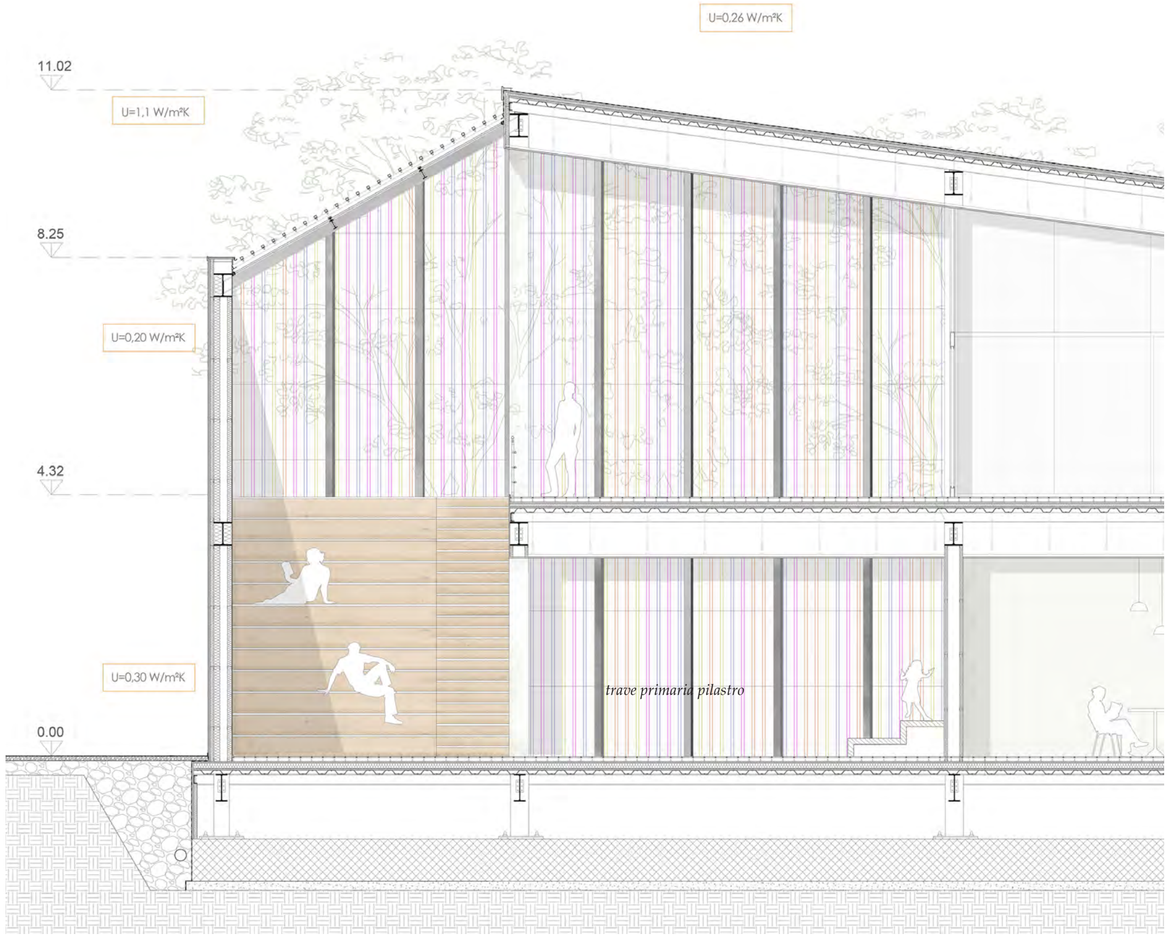
FLUX DIAGRAM



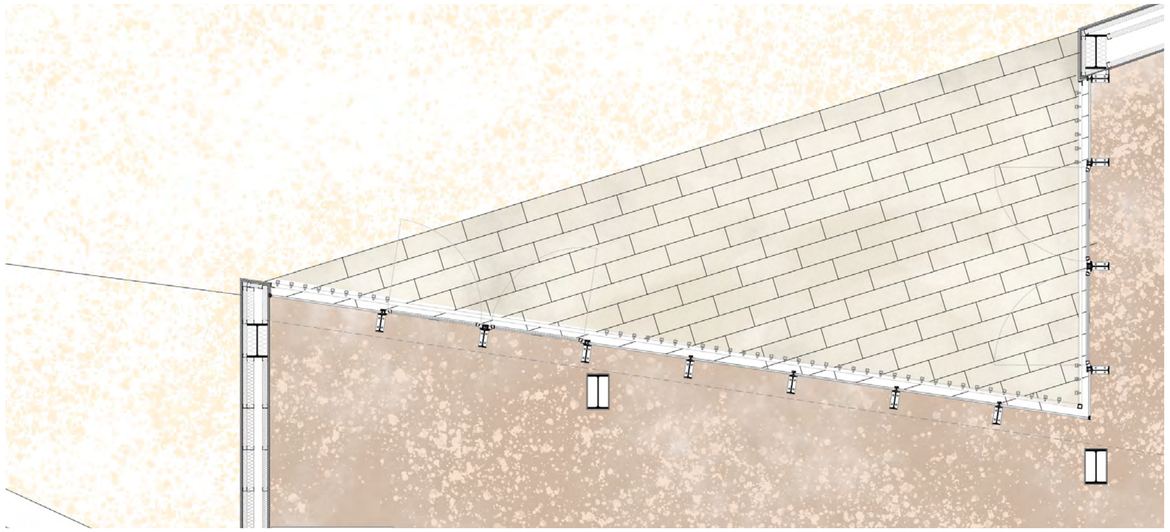
PLAN

0 4 10 20m





1. Foundation slab
2. Primary beam IPE 450
3. Pillar HEA 500
4. Floor in corrugated sheet
5. Panel in OSB
6. Rock wool insulation panel
7. Floating flooring
8. Primary beam HEA 400
9. Secondary beam IPE 160
10. Secondary beam IPE 140
11. Structural glazing frame
12. Substructure for glazing
13. Aluminum flashing
14. Waterproof case
15. Vapor barrier



INDOOR/OUTDOOR RELATION SCALE 1:50

ROSANNA GIUZIO - PUBLIC SPACE IN A FRAGMENTED PLACE

FRAGMENTS OF PUBLIC SPACE

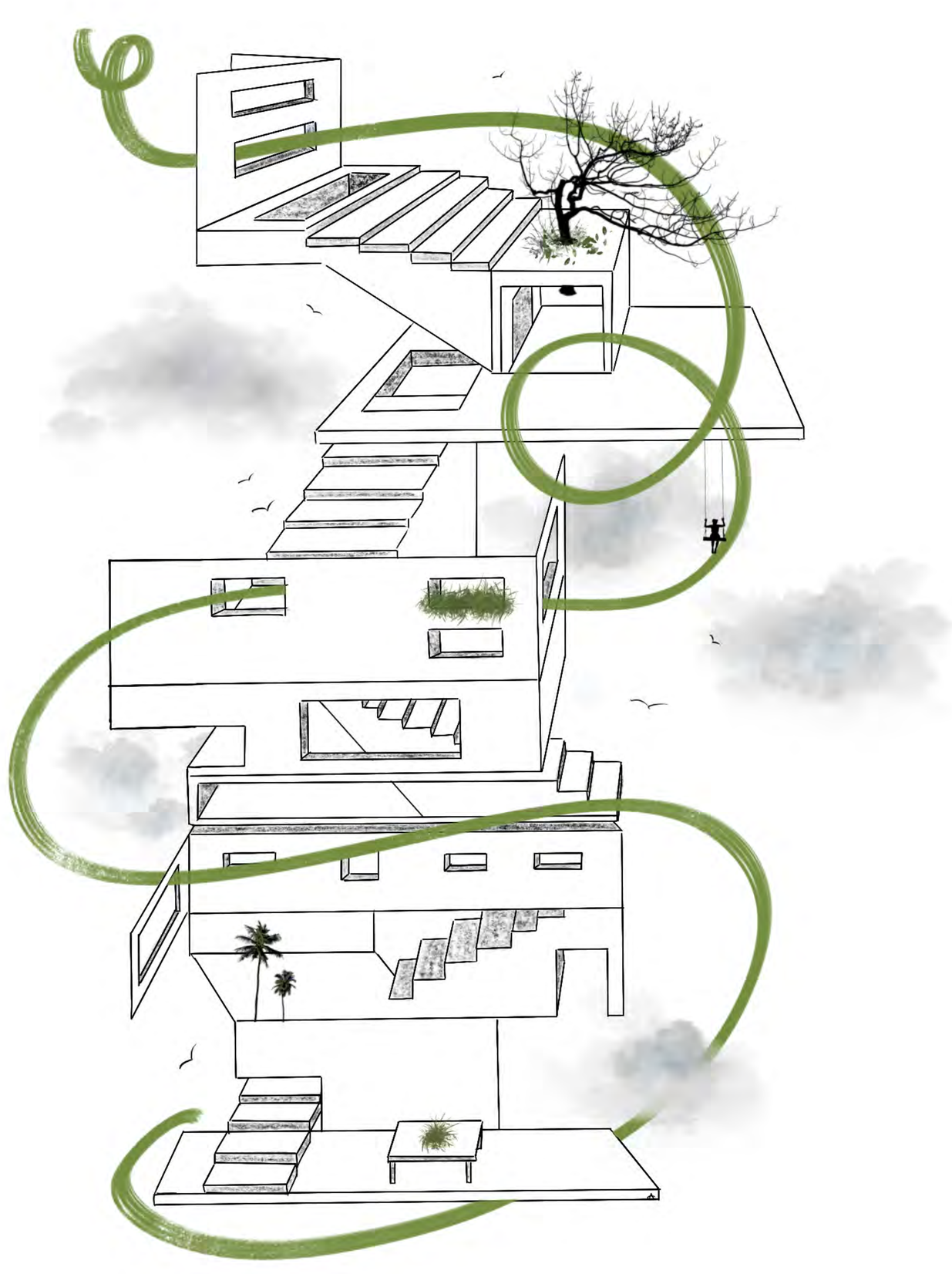
The project started from the direct observation of the place. Visiting Frattaminore one gets the impression of being in a fragmented place, characterized by fenced, abandoned, residual, unthought-of spaces resulting from the strong building, now saturated.

I have defined these spaces as fragments, pieces of a whole that has undergone a rupture. These places are detached and isolated from the rest of the city and could become opportunities for an urban reconfiguration. The design idea is based on creating new fragments, autonomous and isolated but which, following a pre-existing path, form new relationships between them. The area I focused on is the area behind the Baronial palace, near Piazza Crispi and also close to the Colombo Institute. This area is a very large, closed and abandoned area, where uncultivated vegetation invades the place and where most of the fragments are concentrated. The new fragments derive from the design of the paths and from the traces of the surrounding pre-existing buildings. The main route is characterized by a long ramp that ends in a space that has multiple functions including: open-air cinema, exhibition square and open-air theater.

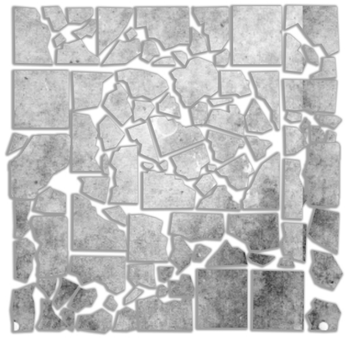
The parks and gardens are the areas identified by the intersections of the parallels and perpendiculars of the surrounding buildings, they will be organized according to a specific character: flower gardens, lawns, free spaces, in order to ensure maximum flexibility of use.

Program: Foyer, Auditorium, Exhibition hall, arts center, school cafè/ restaurant, sports center, sports park, park, cinema outdoor.

Covered area	**2867 m^2**
Outdoor area	**9624m^2**
Above-ground floors	**from 2 to 3**
Built volume	**5734 m^3**
Auditorium and green areas Estimated cost	**2.572.973,66 €**



The functions are different from each other: there is an auditorium with its respective foyer which also contains a small bar, a center for art and crafts, an exhibition hall, school laboratories, a cafè and a sports center.

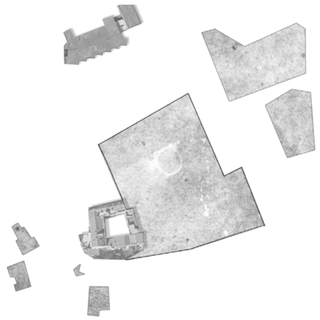


All the volumes are strong geometric elements, to which we wanted to give a character of monumentality and heterogeneity. The first was expressed with an external concrete effect coating, while the heterogeneity was highlighted by the heights that are all different from each other. Each building then contains within it a substructure, independent from the main one, with which we wanted to recreate the fragmentary nature of the place.These fragments divide the building into several parts, distinguished from the envelope by their double height and by the material.

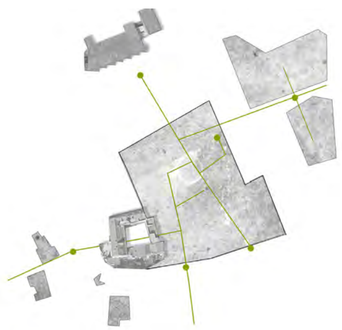
The openings also mark the façade, taking up the heterogeneous peculiarity of the Baronial Palace. The auditorium, located at the center of the project, has an area of 1024 m^2 and a volume of approximately 9209 m^3.

It is divided into three levels in the part intended for services and stairs, while in the audience area it develops at full height. It has a steel structure and double insulators able to satisfy thermal and acoustic needs.

General plan of Frattaminore, where the project area is highlighted. Below photos taken during the survey from Google earth. You can see the abandoned, unfinished and unthought places, the streets have a narrow section and very tall buildings.



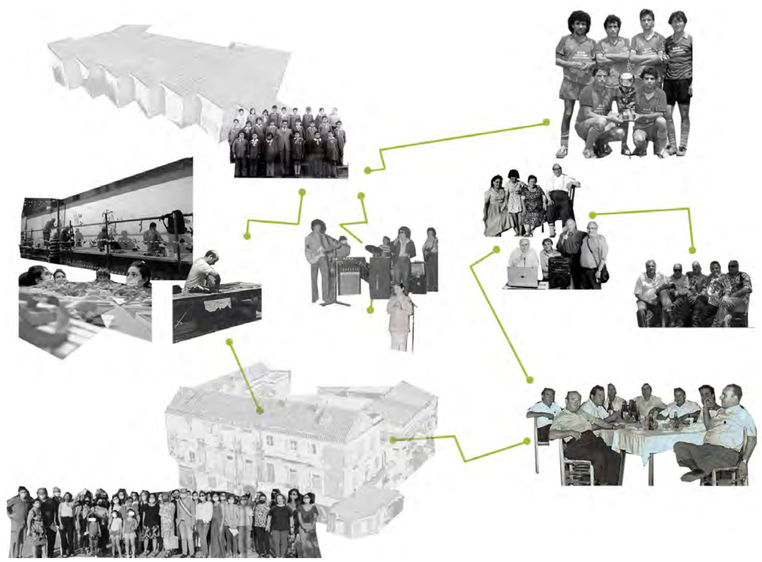
1. Identification of the area



2. Drawing of the ways

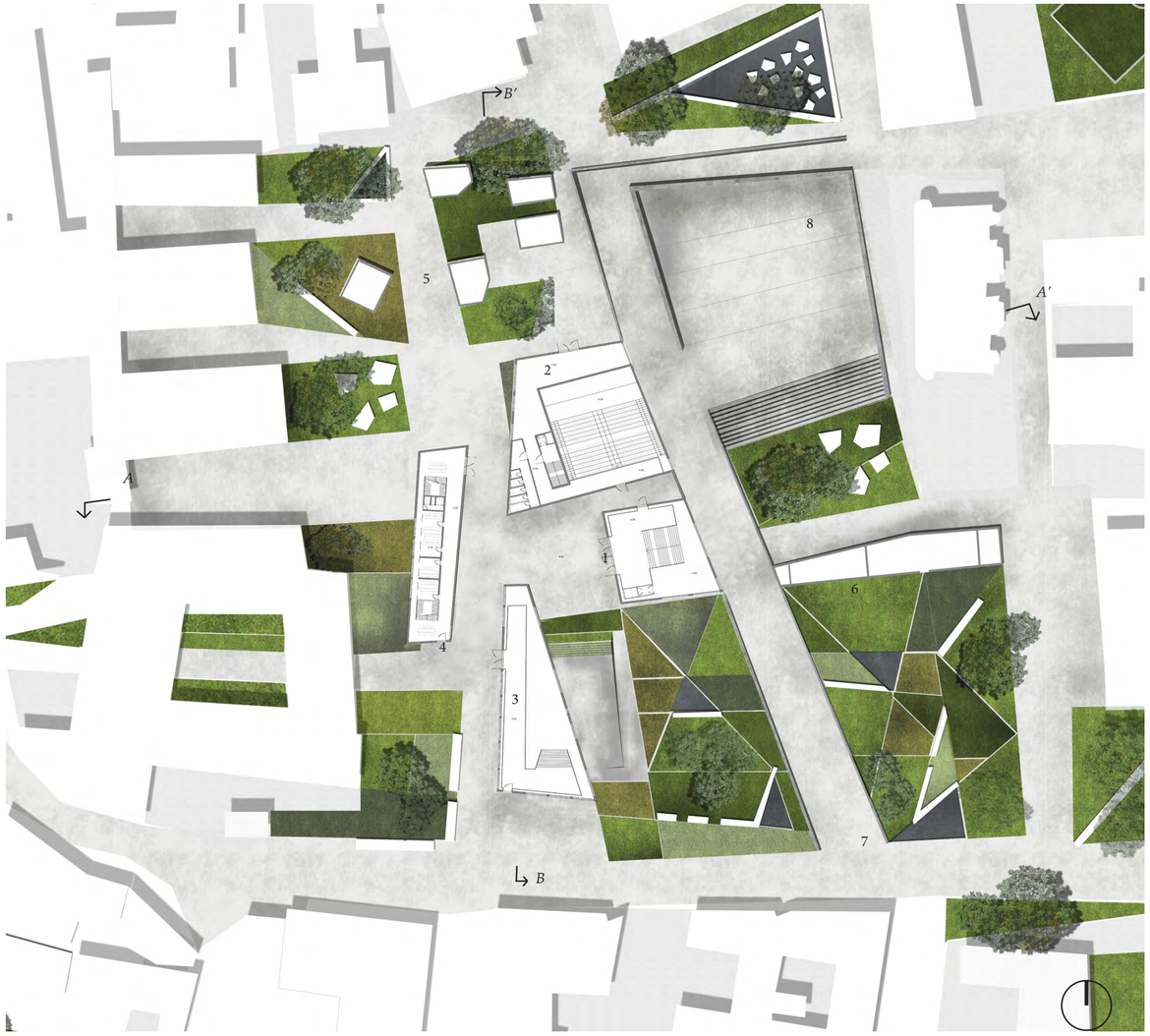
3. Formation of the new fragments

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m



FRAGMENTS OF FRATTAMINORE

There is a geo-environmental risk associated with the artificial cavities built in the last century for the extraction of tuff.



DESIGN STRATEGY

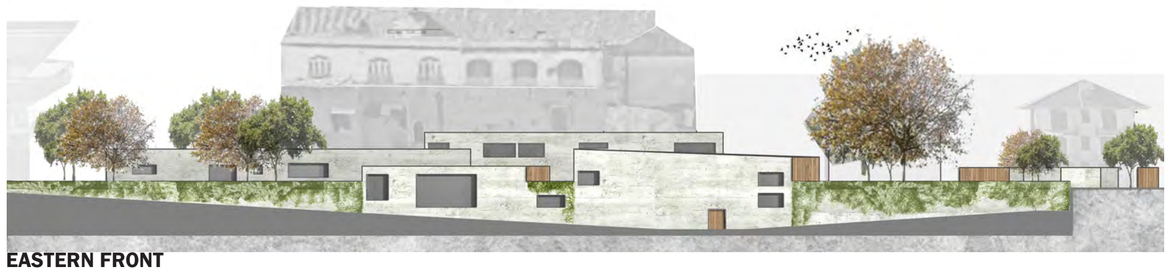
SECTION A-A’

SECTION B-B’

1. Foyer
2. Auditorium
3. Exhibition hall
4. Center for art and crafts
5. School workshops
6. Coffe/ restaurant
7. Park
8. Cinema outdoor

PUBLIC SPACE

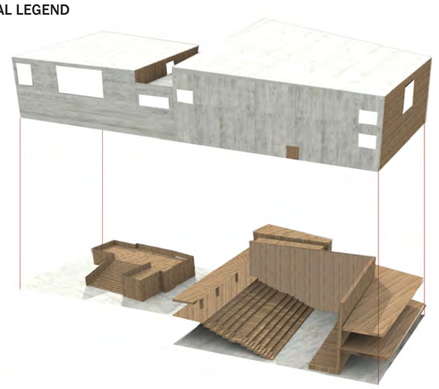
FOYER AND AUDITORIUM



EASTERN FRONT

SOUTHERN FRONT

MATERIAL LEGEND



External cladding type AQUAPANEL® Cement Board Outdoor, s=1.25 cm

Internal wood lining type TOPAKUSTIK type 14/2 M, s=3.6 cm

Low emissivity glass

Steel

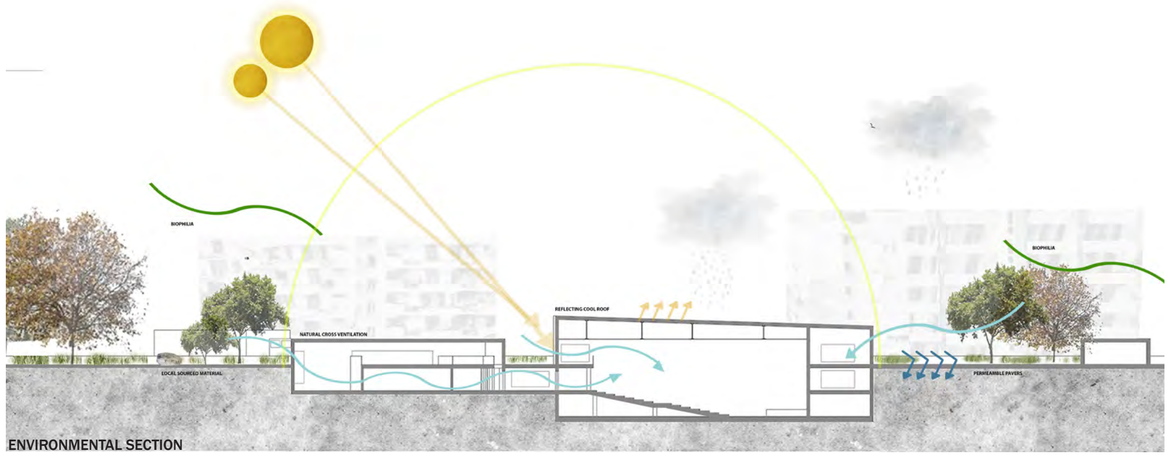
CALCULATION OF TRANSMITTANCES

SOLAIO DI COPERTURA	Spessore (m)	Densità (Kg/m^3)	Conducibilità (W/mk)	Resistenza s/λ (m^2k/W)
Resistenza esterna	-	-	-	0,04
AQUAPANEL® Cement Board Outdoor	0,0125	1150	0,35	0,036
Guaina impermeabilizzante	0,004		0,2	0,02
massetto di allettamento	0,05	1000	0,251	0,20
Isolante minerale in lana di roccia Acoustic plus 225, s=10 cm	0,1	70	0,033	3,0
intercapedine d'aria	0,02	-	-	0,2
Tessuto non tessuto	0,002	30	0,037	0,05
calcestruzzo	0,08	2200	1,6	0,05
lamiera grecata	0,004	7850	0,0037	-
Resistenza interna	-	-	-	0,13
Rtot				3,759
Trasmittanza 1/Rtot				**0,3**

PARETE	Spessore (m)	Densità (Kg/m^3)	Conducibilità (W/mk)	Resistenza s/λ (m^2k/W)
Resistenza esterna	-	-	-	0,04
AQUAPANEL® Cement Board Outdoor	0,0125	1150	0,35	0,036
AQUAPANEL® Water-Resistive Barrier	0,004	-	-	-
Isolante minerale in lana di vetro tipo ULTRACOUSTIC P	0,1	17	0,05	2,0
Isolante minerale in lana di roccia Acoustic plus 225, s=10 cm	0,1	70	0,033	3,0
Pannello cartongesso Knauf	0,0125	15	0,2	0,0625
intercapedine d'aria	0,02	-	-	0,2
TOPAKUSTIK type 14/2 M	0,036	680	0,17	0,21
Resistenza interna	-	-	-	0,13
Rtot	-	-	-	5,7
Trasmittanza 1/Rtot				**0,18**

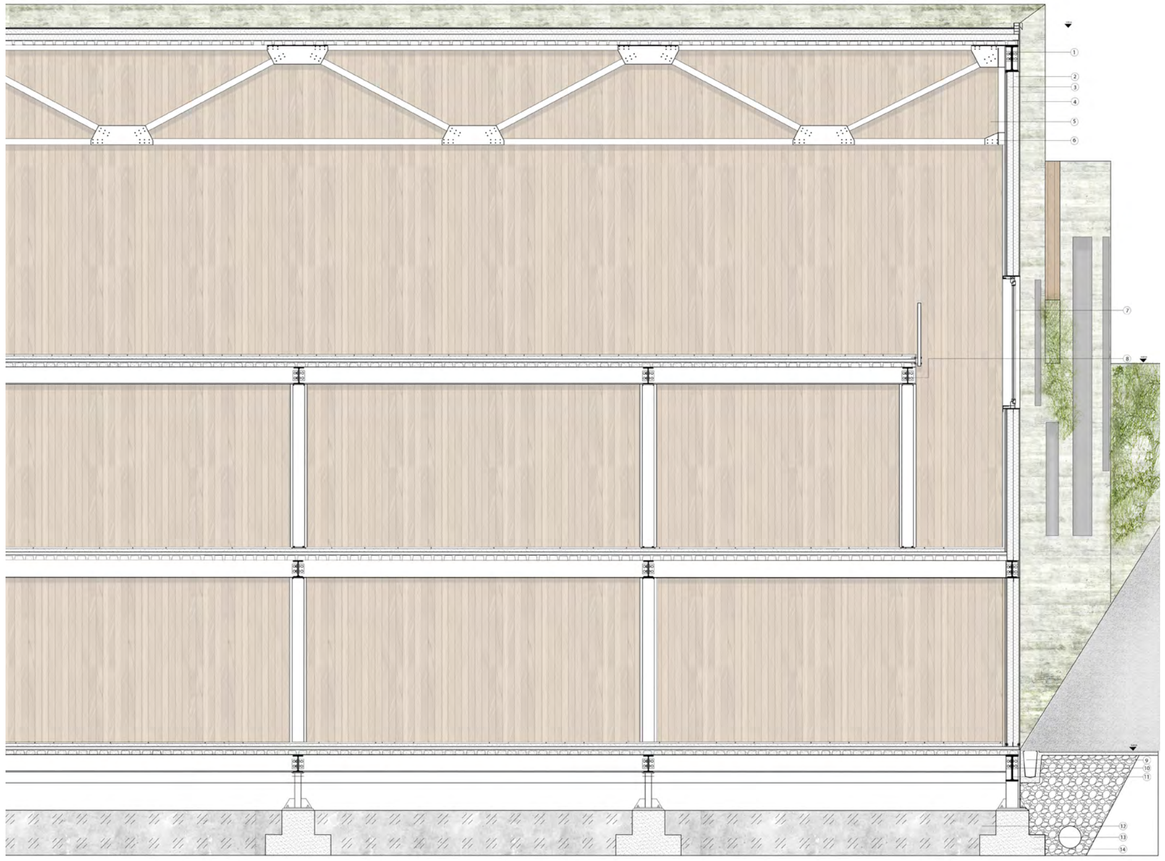
EXHIBITION HALL VIEW

CENTER OF ART AND CRAFTS VIEW



ENVIRONMENTAL SECTION

AUDITORIUM SECTION 1:50



1. Main beam IPE 400
2. Mineral insulation in glasswool
3. Mineral insulation in rockwool
4. External cladding effect concrete
5. Internal wood lining
6. Tuss beam
7. Window with wooden frames
8. Beam IPE 270
9. Water grill
10. Fixing plate
11. Beam IPE 400
12. Compacted soil
13. Drainage pipe
14. Foundation plinth
15. Pillar HEA 300

AUDITORIUM PLAN 1:50

INDOOR/OUTDOOR RELATION SCALE 1:50

FRATTAMINORE ADVANCED DESIGN STUDIO

FRANCESCO IULIANO - URBAN SPORT FARMING PARK

AGRO-CULTURAL INFILTRATION IN FRATTAMINORE

The idea started from the observation of the historical center of the city. Threatened by havy reconstruction, decay and flooding, the heart of the city is not a lively place as it used to be the past when the historical courtyards were populated by farmers and their families. The agricultural activity has been expelled from the center to the municipality limits and the city surface has been saturated; only a few open public spaces remains.

The strategy aims to infiltrate the agricultural landscape back to the city center from the two agricultural areas by using large green surfaces already there as a support.

Beside the realization of urban gardens in the historical courtyards located along via Roma and via Viggiano, a social center next to Palazzo baronale Pomigliano D'Atella takes care of the retirees and children of the city with healing and recreational gardens; a productive center relives the former Mulino as a meeting place for the population in the working age and an urban park behind Palazzo De Rosa/Carafa gives the opportunity to the inhabitants to live Frattaminore in their free time.

Here is presented the last urban action in detail. The urban sport and farming park is located in an uncultivated area behind an historical building in piazza F. Crispi between the historical center and the new expansion area.

Program

Urban park, sport facilities, wellness center, cultural center.

Covered area	**2200m²**
Outdoor area	**26000m²**
Above-ground floors	**1**
Built volume	**13850m³**
Estimated cost	**17.471.304,09 €**

The 44% of population is in working age and about 29% is occupied. Most of the people works outside of the city so the project of this public space aims to give to the workers the opportunity to spend their free time in the municipality and live the city to overcome Frattamonore dormitory-city current nature.

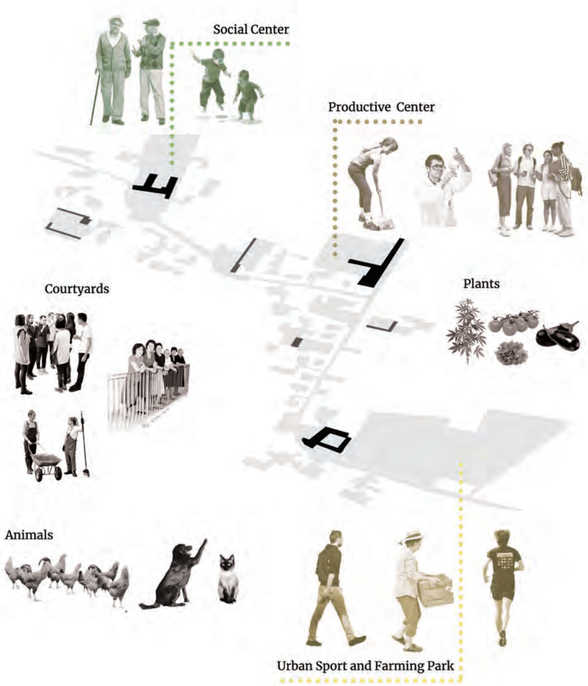
The program combines the sport destination defined by Frattaminore's PUC and the main strategy realizing a park where agricultural landscape became the scene for open air sport activities and provides resources for a healthy nutrition.

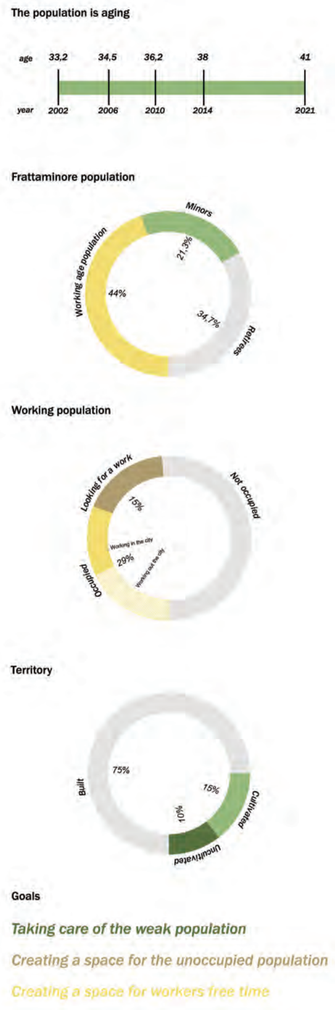
The urban park is structured starting from an athletic track and a playground joined by a strip that redesign the residential enclosures and connects the lots. Along the strip a series of public structures are located in relation to the existing urban elements as park entrances.

A wellness and food center is connected to the Palazzo Carafa by restoring the southern wing ground floor. Greenhouses give space for aromatic plants cultivation and winter sport activity.

The main building is a sport facility developed under the ground to use the roof as a public plaza. Full-height spaces connects the two levels.

An auditorium enriches the cultural offer of the park and functionally connects the area with the public library lot.





Goals

Taking care of the weak population

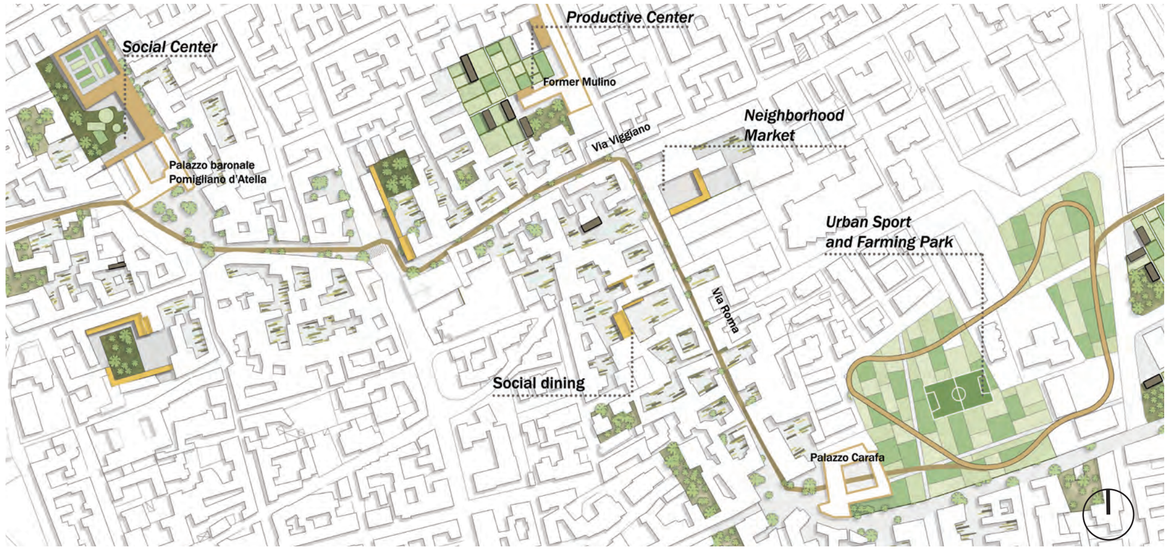
Creating a space for the unoccupied population

Creating a space for workers free time

- Project spaces
- Exixting buildings
- New volumes
- Social center users
- Productive center users
- Urban park users

USERS MAPPING

The historical center is going to be revitalised with the infiltrations of plants and cultivations and by new users besides the existing ones. Here some Frattaminore population data to understand the strategy and functions. The data are from the PUC studies and ISTAT.

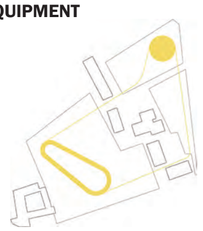


FRATTAMINORE GENERAL FRAMEWORK & URBAN STRATEGY

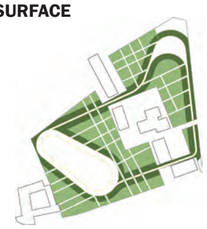
0 100 250 500m

- New Volumes
- Cycle-pedestrian Path
- Healing garden
- Recreational garden
- Urban garden
- Multifunctional Greenhouse

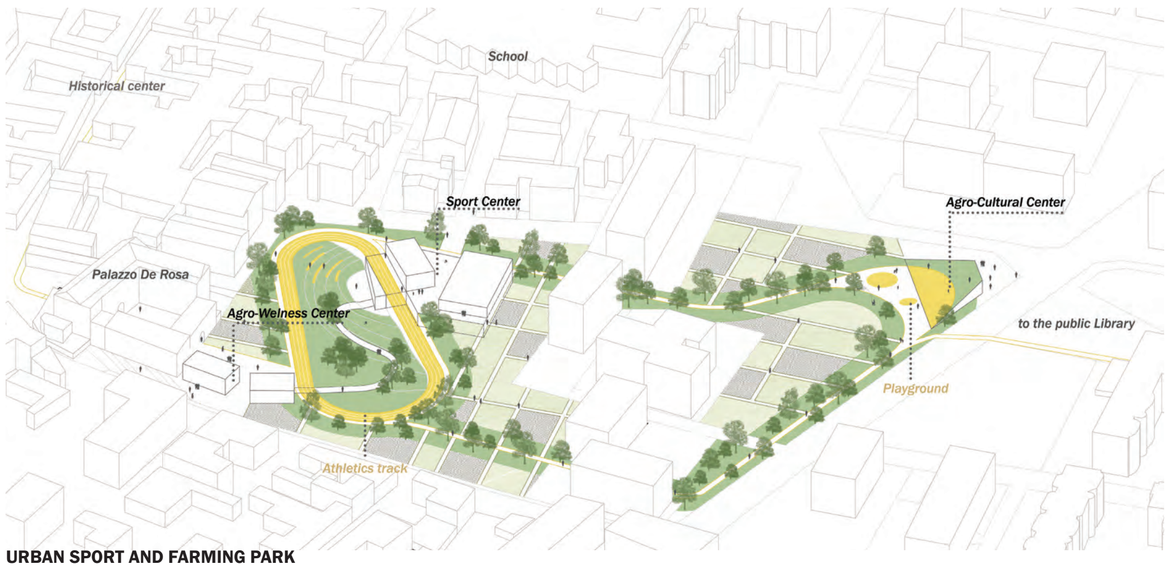
SPORT EQUIPMENT



GREEN SURFACE



NEW PUBLIC STRUCTURES



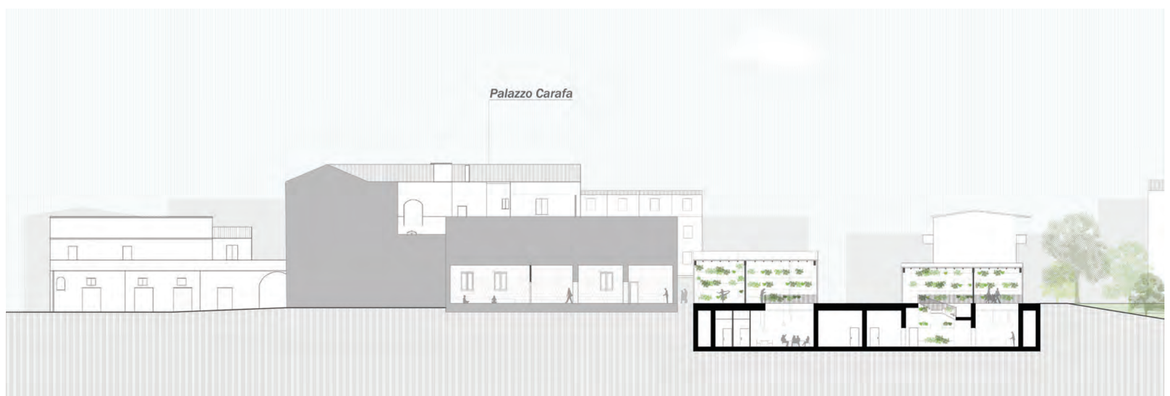
URBAN SPORT AND FARMING PARK

The sport facilities modify the ground of the lot. An excavacion inside the athletics track gives access to the sport center ground floor and creates a green area for sport and relax. The playground raises in order to create the cultural center volume. It gives the opportunity to enjoy the sight of the agricoltural eastern areas.

Athletics Track
Sports and leisure green space
Vegetable gardens
Paved surface
Entrance
Stairs

GROUND FLOOR PLAN

1. Entrance
2. Lobby
3. Service
4. Indoor basket field
5. Aerial Acrobatic space
6. Gym greenhouse
7. Yoga class
8. Gastronomic laboratory
9. Aromatic palnts greenhouse
10. Infirmery
11. Changing room
12. Storage

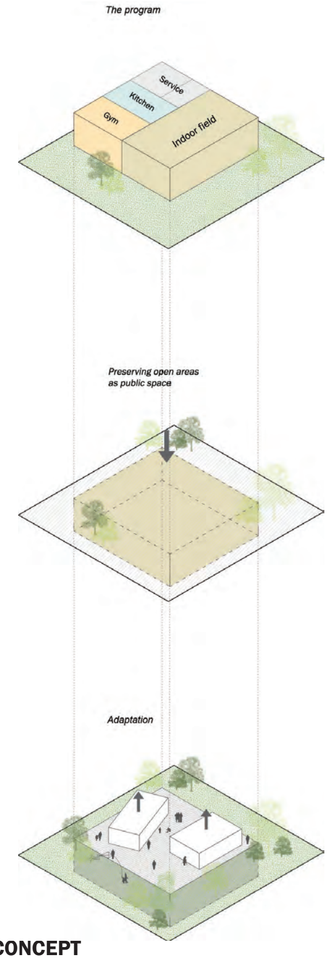


SECTION A - *Wellness Center*

0 4 10 20m

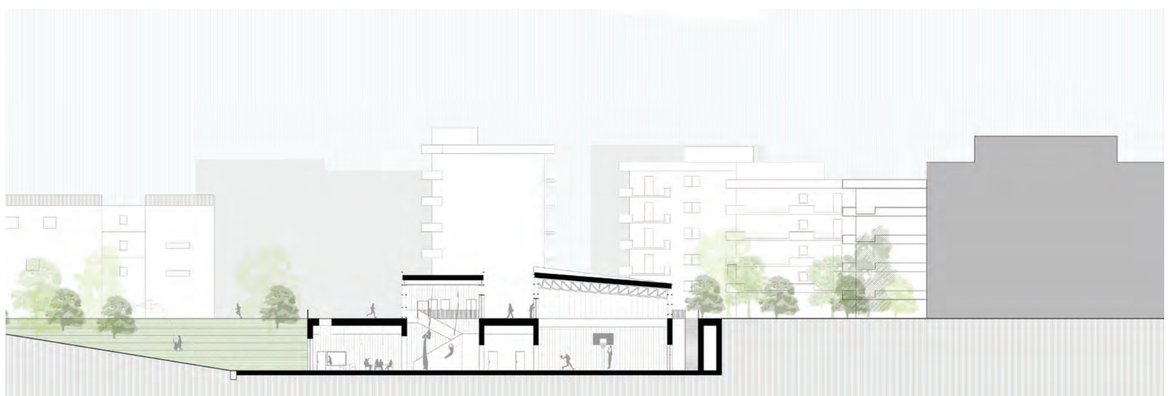
SOUTHERN FRONT

0 4 10 20m

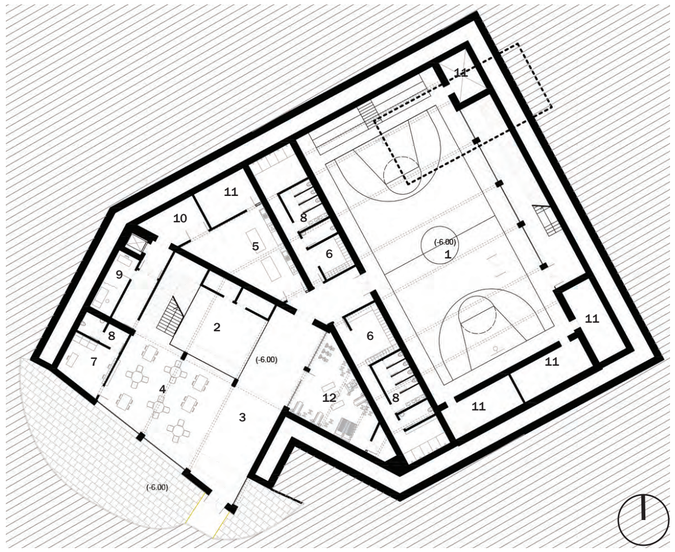


CONCEPT

INDOOR BASKET FIELD



SECTION A - *Sport Center*



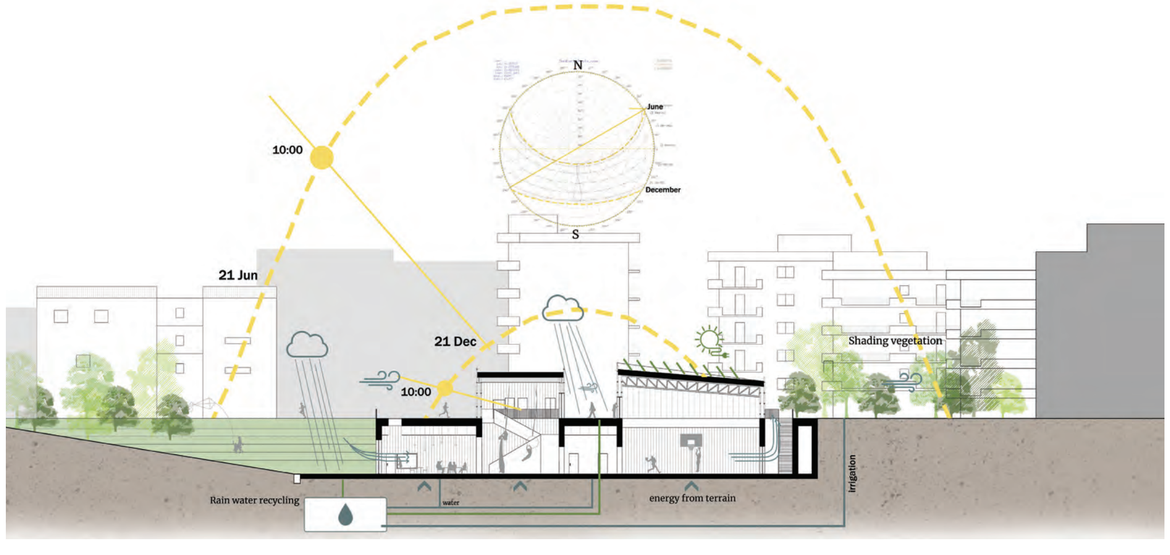
The sport center volume is characterized by a translucent double skin façade that connects indoor and outdoor spaces visually, while illuminates with natural light the underground floor. A series of windows let the park users in the plaza to have a sight of the sport activity inside. Wood finishing creates a sustainable indoor surface.

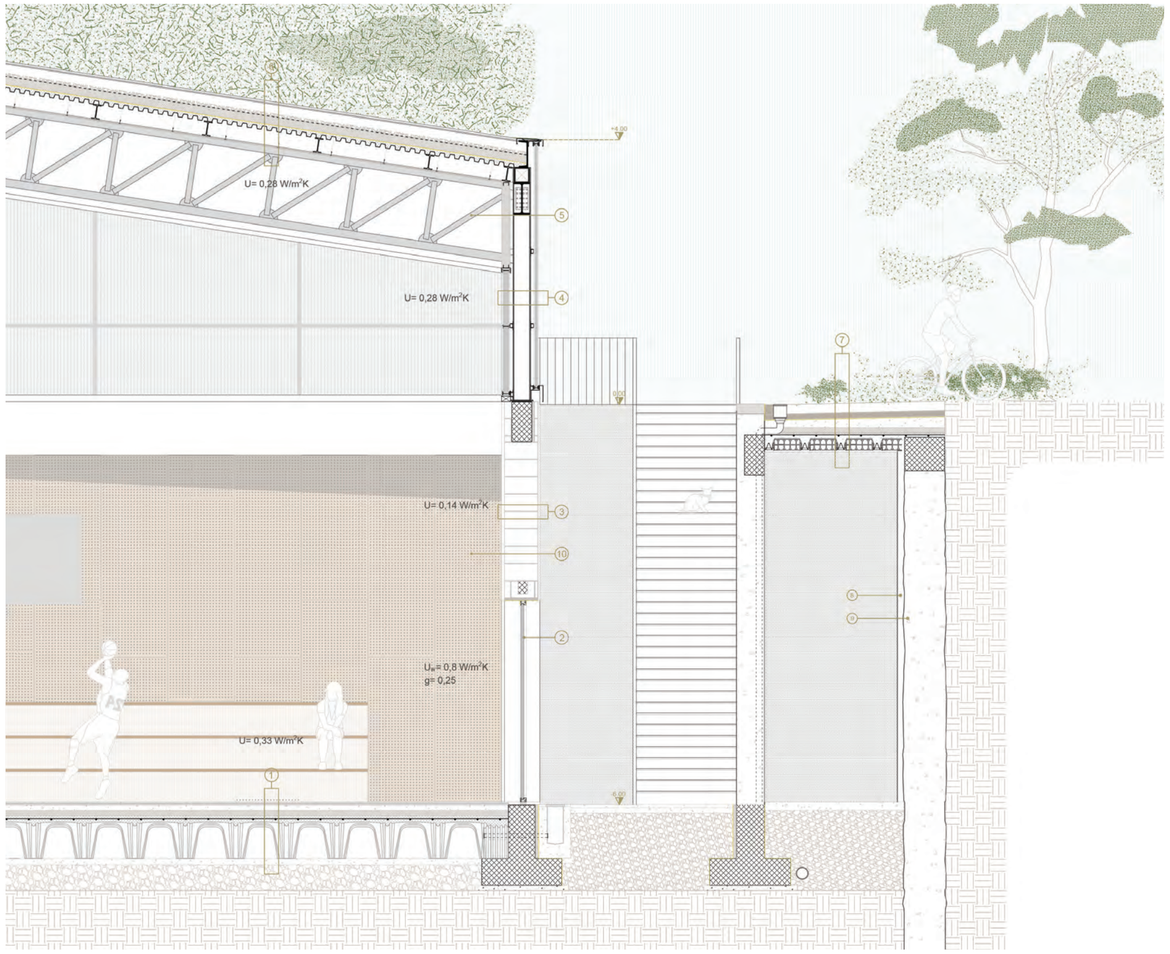
PLAN (-6.00)

1. Indoor field
2. Aerial acrobatic space
3. Hall
4. Foyer
5. Kitchen
6. Changing room
7. Staff room
8. Service
9. Infirmery
10. Cold room
11. Storage
12. Gym

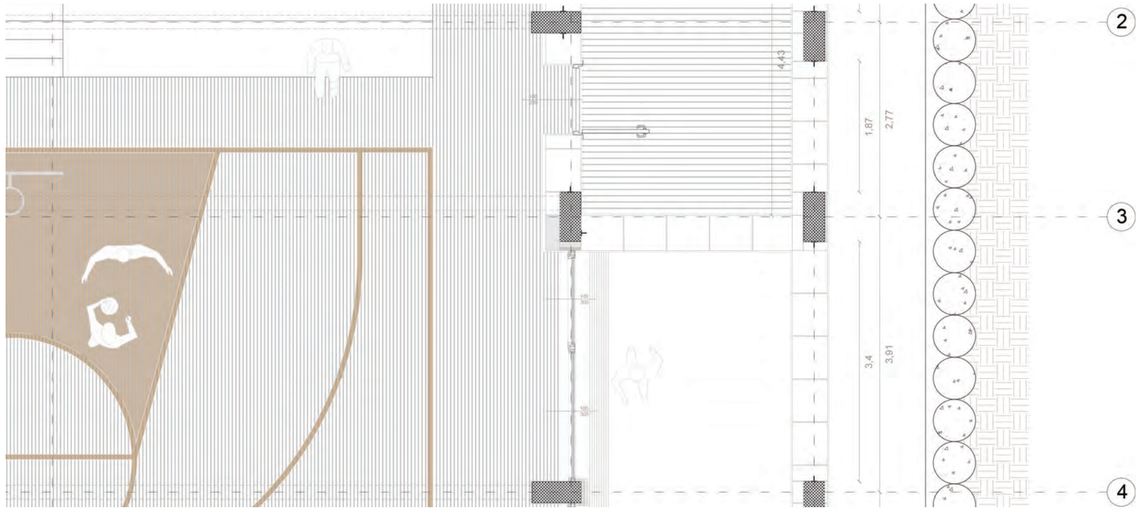
0 | 10 | 25 | 50m

View from traversa Località Carrara





1. Aerated floor with EPS insulation
2. Shuco AW90SI+ window
3. Aerated concrete blocks wall
4. Polycarbonate double skin facade
5. Reticular beam
6. Trapezoidal roof
7. Green roof
8. Concrete wall
9. Concrete bulkhead
10. Wood sound insulated panel



INDOOR/OUTDOOR RELATION SCALE 1:50

The first impression you can get when arriving in Frattaminore is that of a city polluted, not only by the exhaust fumes of the cars, but also by the building itself.

The countless unfinished works and large residential buildings saturate the area giving the impression that it itself is struggling to breathe.

For these reasons the main lines of this project are oriented towards zero impact architecture; a concept that can be declined both from an environmental and a territorial point of view.

On a city scale, the intervention in fact involves the installation of a new type of soft mobility, the enhancement of public transport and greening of the soil. This type of reflections then condense on an area that is located at the center of these reflections or at the corner of Via Giuseppe Di Vittorio and Via Palermo to integrate the public space next to the Palazzo di Città.

The passage of scale, therefore, does not change the characteristics of the project but makes it stronger and more concrete by confirming the issues discussed.

The building looks like a large multifunctional center in which various activities alternate inside. The media library, the bar, the conference room, the study rooms all have a close link with the open space that is proposed again with permeable floors, ponds and important movements of earth, which positively affect the reduction of the impact from flooding and from heat waves.

Program

Polifunctional center for culture

and facilities

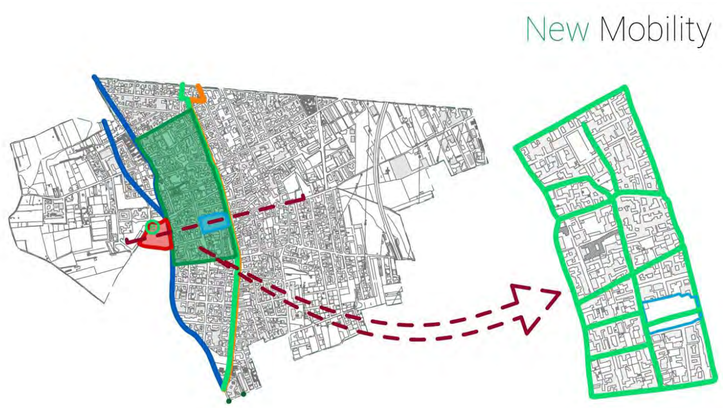
Covered area	**2235m²**
Outdoor area	**8520m²**
Above-ground floors	**3**
Built volume	**8500m³**
Estimated cost	**€2.220.000**

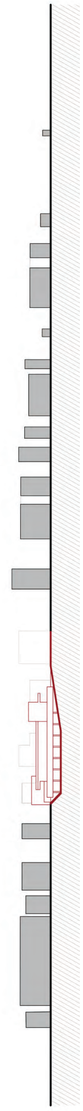
The multifunctional center has an implicit but fundamental function. The use of special photovoltaic panels allow the collection of large amounts of energy that can be distributed to the city, strengthening its positive impact on the entire community. Photovoltaics, in this project, take on a compositional value.

The open spaces, distributed on two levels, host permanent installations; this is the case of open-air cinema, whose structure is dictated by the desire to maximize the contribution of solar energy to the roof panels. Given its individuality, it was thought to be made as a first work, a manifesto for the population of a construction site that must be set in motion.

The lower square communicates with the city in two ways: to the North-East it connects to the upper open space thanks to a large ramp, the inclination of which allows 360 ° access to the handicapped; to the South-West instead through a wide staircase which at night is illuminated by LEDs powered by the energy collected during the day. This large staircase does not have the only fiction of allowing the connection between the two levels but is designed to host the nightlife, when the treads of the steps become seats for the local community.

The Frattaminore Green-Park has both day and night life and makes continuity (both spatial and temporal) its trademark.





Fast mobility

Cycle mobility

Limited traffic area

Parking area

Public transport

MOBILITY

Mobility on a city scale changes. The consolidation of the outermost road axes makes it possible to relocate the traffic that does not decide to stop in Frattaminore but is passing through. The establishment of a limited traffic area in which one moves through soft mobility systems leads to an improvement in the quality of city life. From the meeting between the two speed systems, a large functional parking area is located for access to the ZTL.

TERRITORIAL SECTION

With the proposed intervention we want to move the land line which, as can be seen from the section on the side, is flat. Going to insert itself on this change of altitude, the building has a low environmental impact by keeping below the height of the roofs of the buildings that surround it, and at the same time the inclination of the land allows to direct the flow of water towards the suitably prepared channels.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

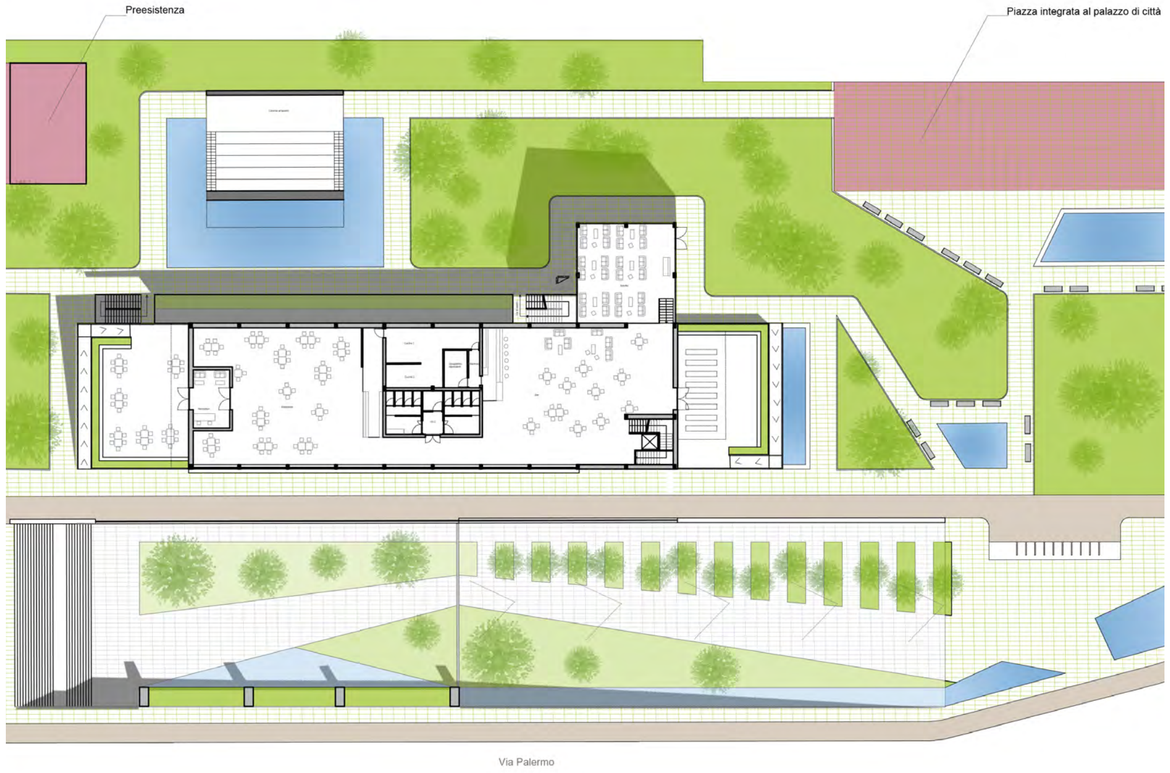
0 20 50 100m

VIEW

The use of water fountains for summer cooling and for acoustic insulation.

VIEW ON THE LEFT

Mapping of electricity collectors, collection and distribution.



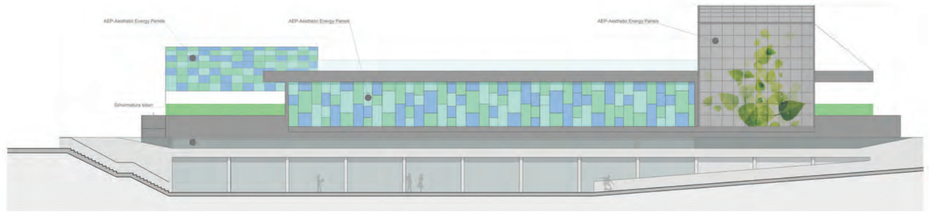
DESIGN STRATEGY

0 10 25 50m

SECTION A

0 4 10 20m

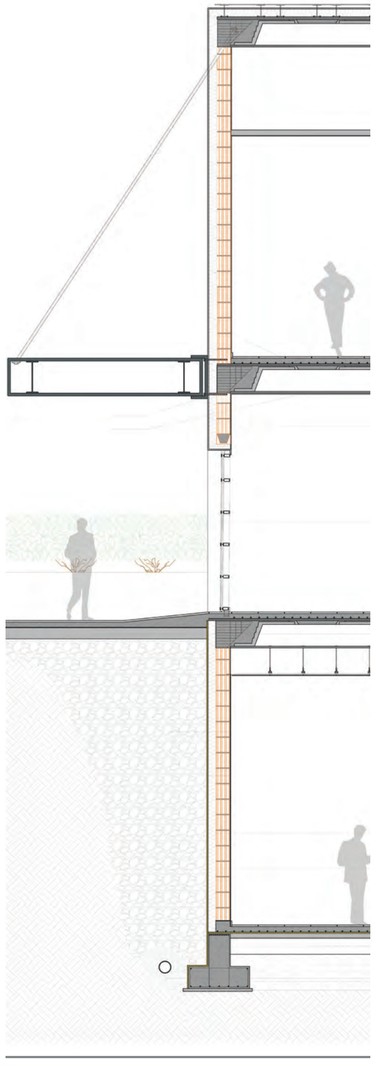
1. Entrance
2. Bar
3. Restaurant
4. Services
5. Space for study
6. Spce for conference
7. Library
8. Auditorium
9. Roof garden



SOUTHERN FRONT

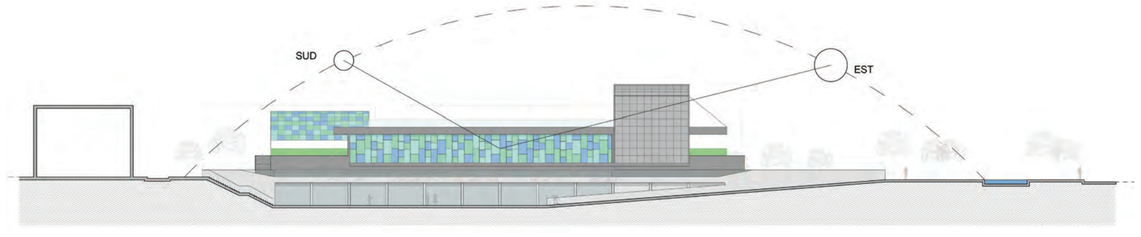
WESTERN FRONT

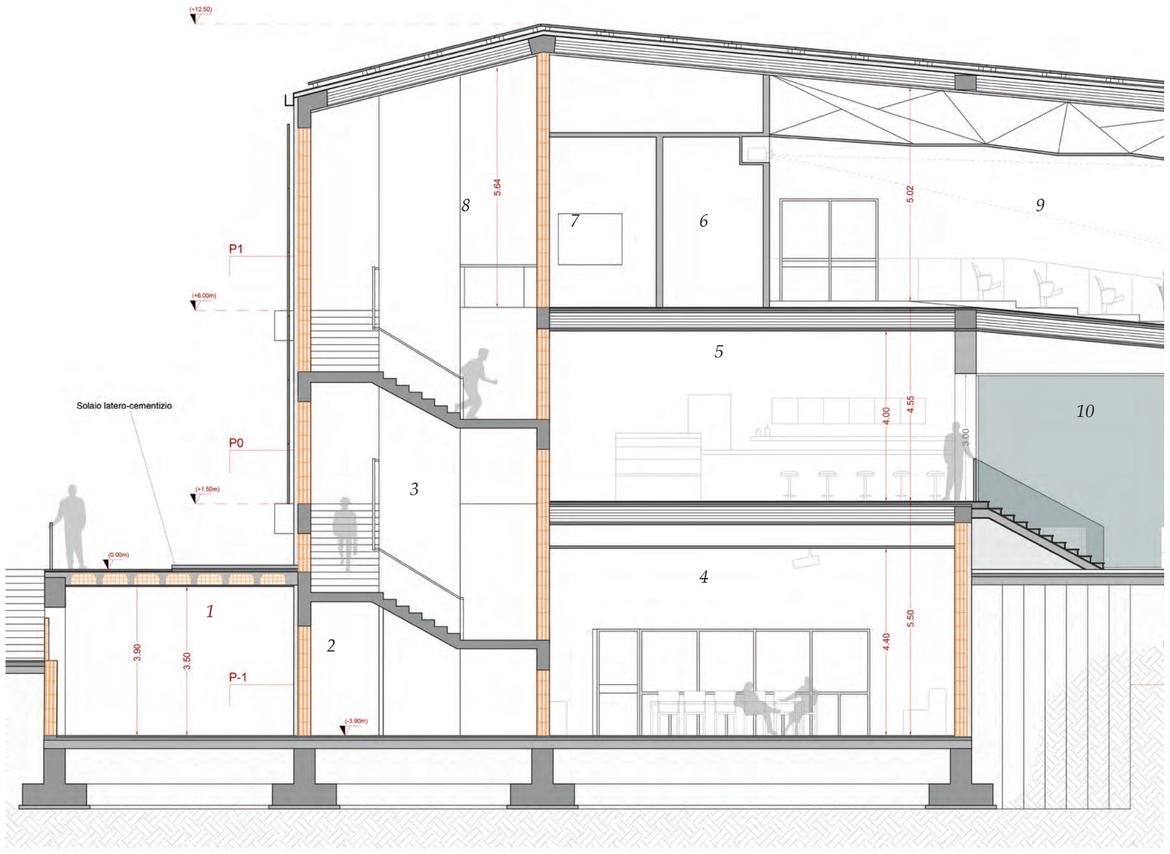
0 10 25 50m



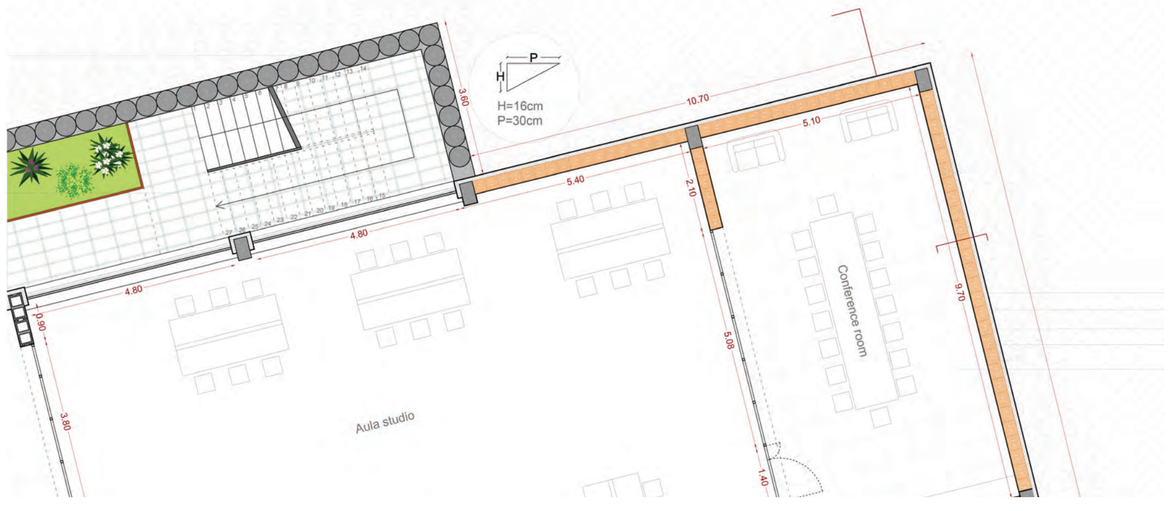
CONSTRUCTIVE DETAIL

CYCLE AND PEDESTRIAN PATH





1. Covered walk
2. Control room
3. Stairwell
4. Conference room
5. Bar
6. Projection room
7. Ticket office
8. Foyer
9. Auditorium
10. Bar



INDOOR/OUTDOOR RELATION SCALE 1:50

The project area is situated in the eastern part of Frattaminore. It is caracterised by a lot of inused green areas or vegetable gardens, and by a significant infrastructure: the elevated viaduct, SS87.

This area results interesting because of the respect band surrounding it: even if we can't build in there, it doesn't mean that the area can't be projected at all. And that was the curiosity in the research.

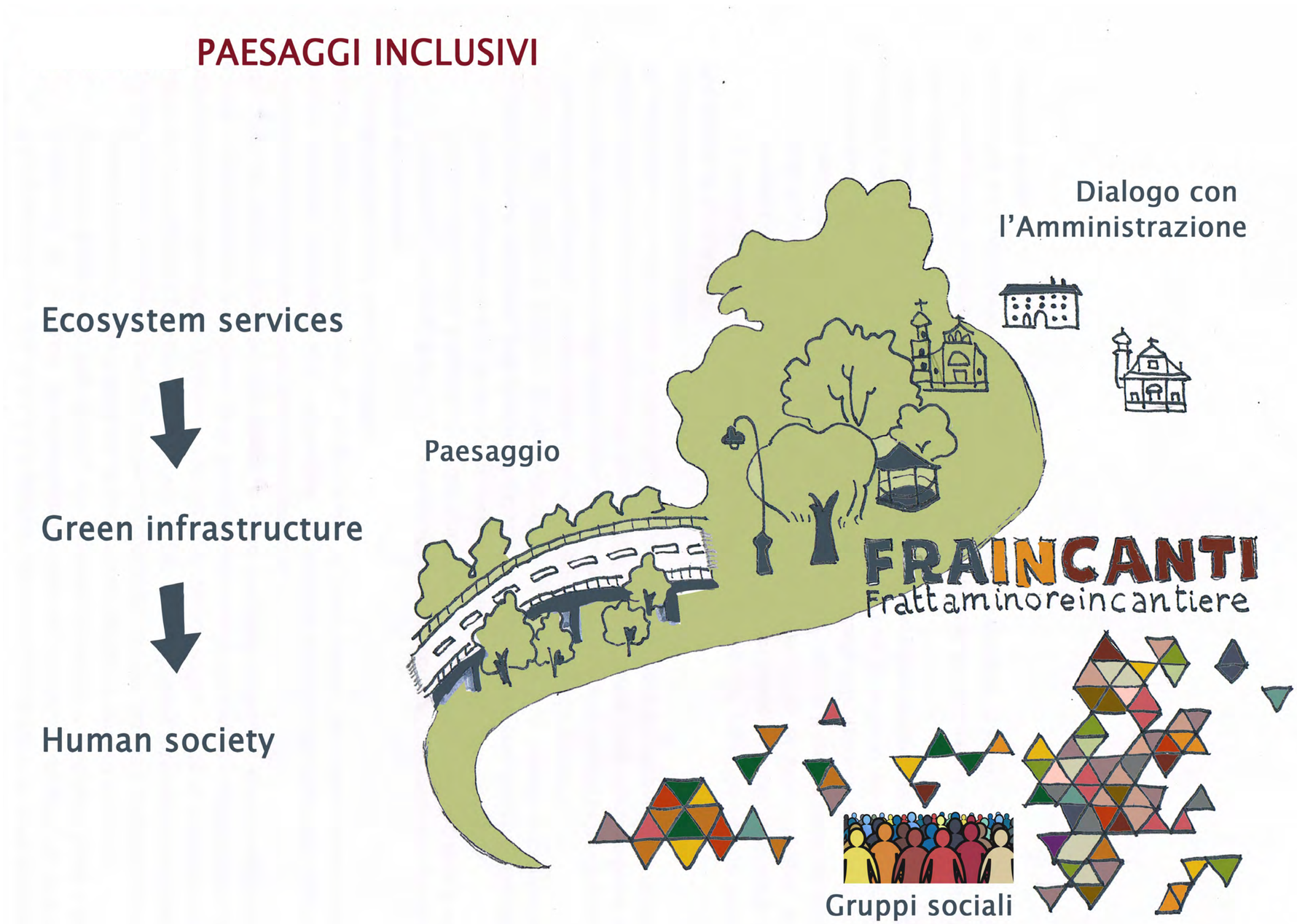
On the other hand there are some constructions already existing in this band, also interesting to study some spontaneous mots happening in our cities.

For all these reasons it has been thought to realise some green infrastructures, in order to balance the negative consequence of the rapide vehicle traffic: the aim of the project is to save exisisting greenery, and in addiction to improve it, giving it collective uses. So the function chosen for the urban scale is that of a urban park.

Another thought inspired by the infrastructure is about the three dimensions caracterising it: we are in the area known as "piana campana", the soil is flat. So the big viaduct imposes itself on the rest of the territory. From that derived the idea of a new elevated footbridge, but for sustainable mobility (linked with the idea to balance fluxes).

Program: cultural, agricultural, sport and healing garden system constitutes a big scale park

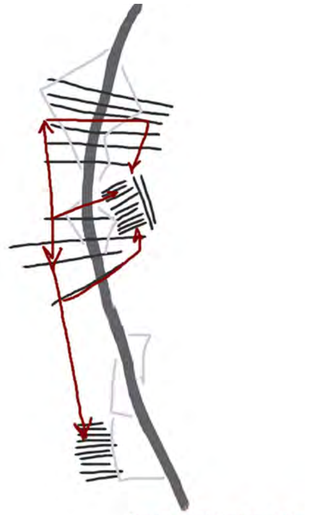
Covered area	**2437m²**
Outdoor area	**176041,52m²**
Above-ground floors	**4**
Built volume	**53128m³**
Estimated cost	**€1383060,99**



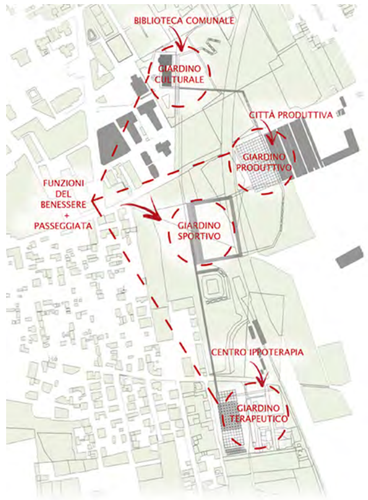
The strategy of a big urban park has been linked to that of the footbridge. together they inspired the research of wellness, both individual and environmental. So, to activate the area, the exisisting functiones have been connected with the idea of wellness. In consequence of that, the big park, has been divided considering the prevalent functions. For these reasons we have four gardens: cultural (inspired by the existing library and social center), productive (from the prevalent destination of the city "beyond the viaduct"), sporting (linked to the entire idea of wellness and safe fluxes) and healing garden.

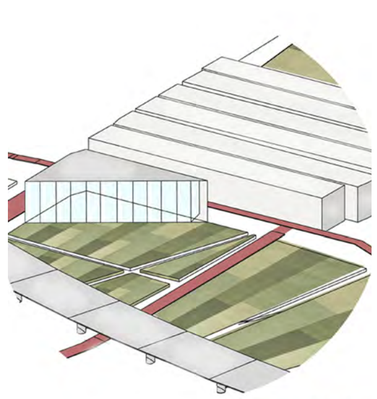
The last is a sort of head station in the system, because of the morfological shape that realize. The building is submitted to the park and tries to not invade it. On the contrary we see the nature breaking the regularity of the building with its unespected shapes. The structure is very light, and perforated, in order to let direct sunlight feeding the grass. So, when it is possible, also the footway are thought as simple grids, for the balance and the coexistence of all beings (flora and fauna).

Finally another strategic point: realize a partnership between public and private. investitors, in order to guarantee the functioning of the system. So the park has been thought as a public urban park; but the functional blocks hosts private functions, such as the wellness center: it is the top of the research on the theme, but also a certain control for the visitors of the structure.

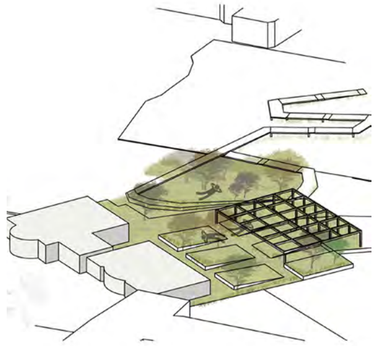


Concept: connections and poles





Productive garden



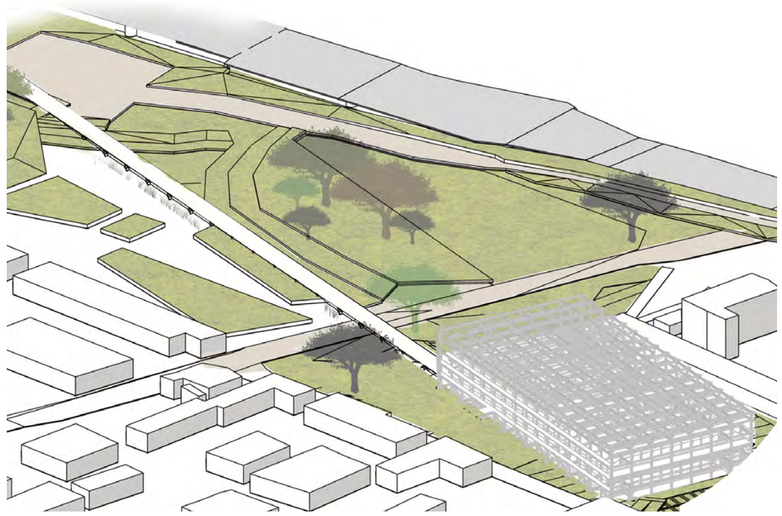
CULTURAL GARDEN

This is the other "head station" of the system, cultural garden is an external green extension of the exisisting library

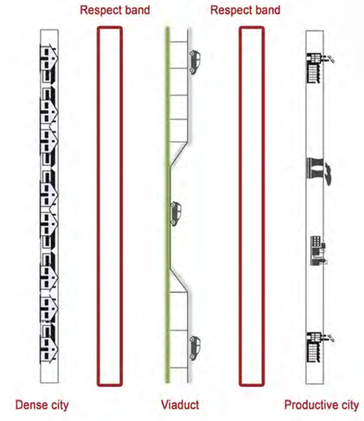
Masterplan surface: eastern area

1. Frattaminore library and community center
2. Vegetable gardens
3. Farm and horse riding therapy

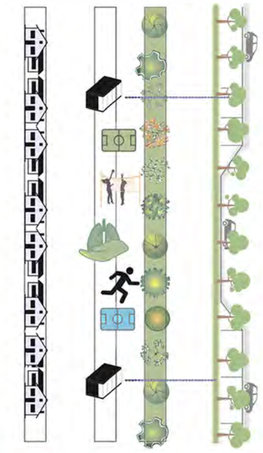
SS87: poilutant fluxes to counterbalance



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

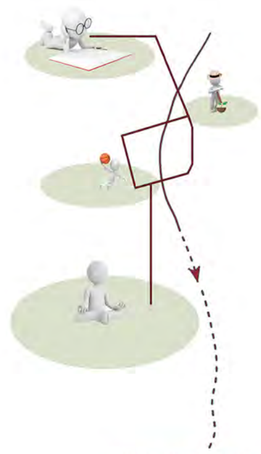


SS87: pollutant fluxes to counterbalance



Dense city

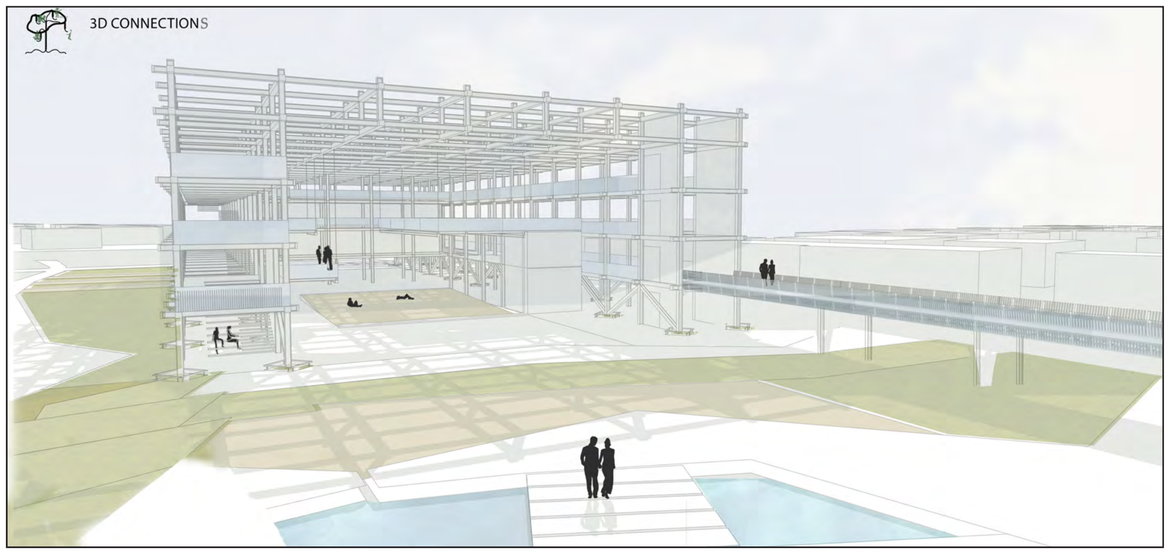
Project strategy

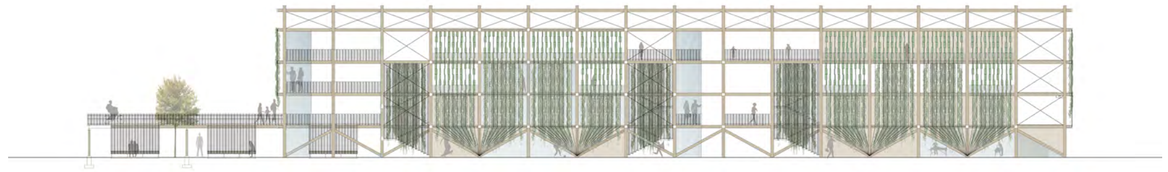


Connect important existing places and improve their destinations

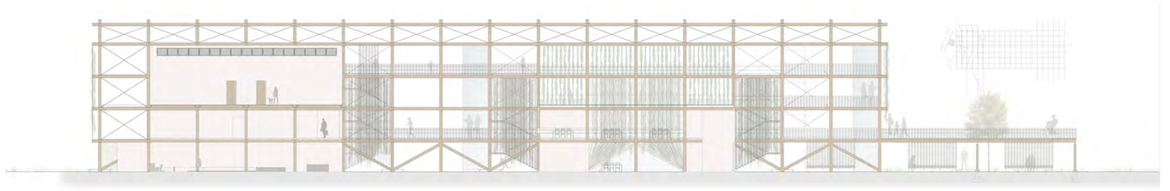
DESIGN STRATEGY

0 10 25 50m



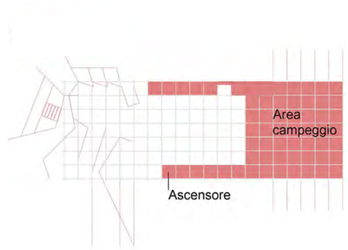


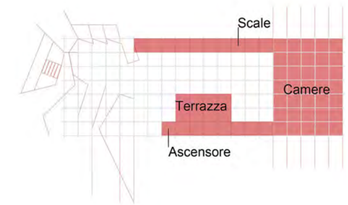
EASTHERN FRONT

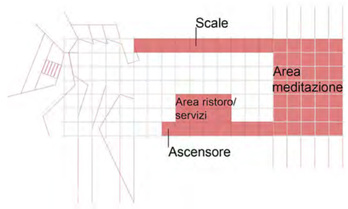


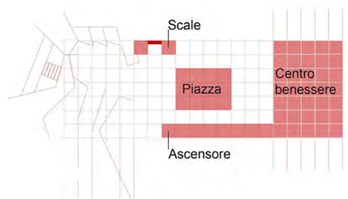
SECTION

0 10 25 50m

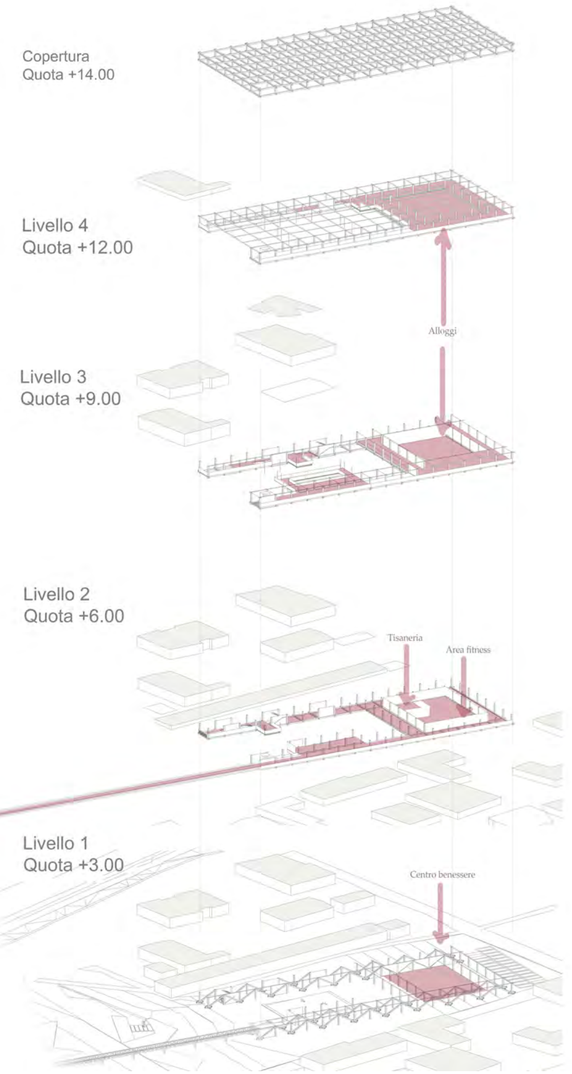




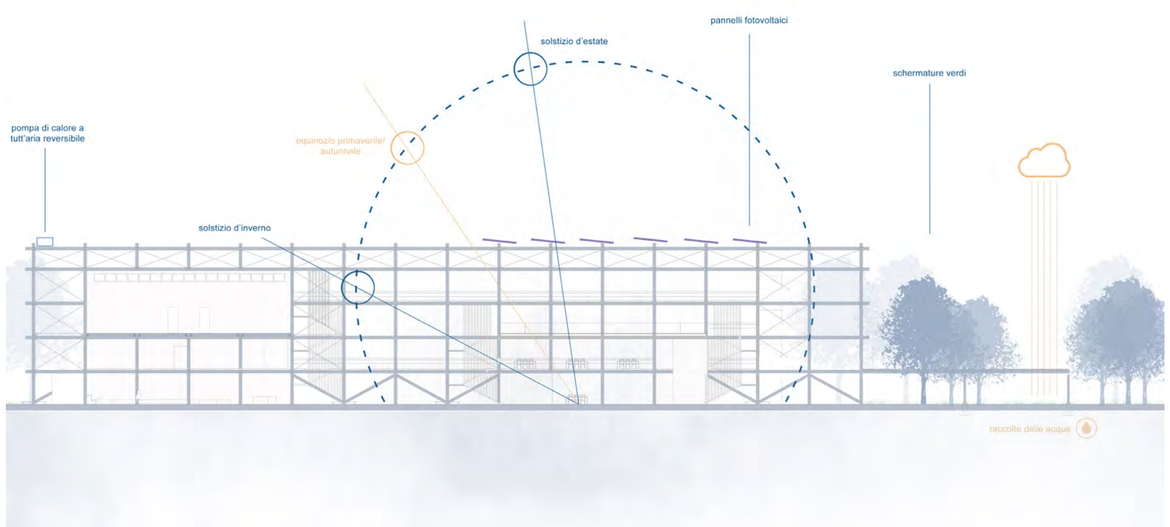


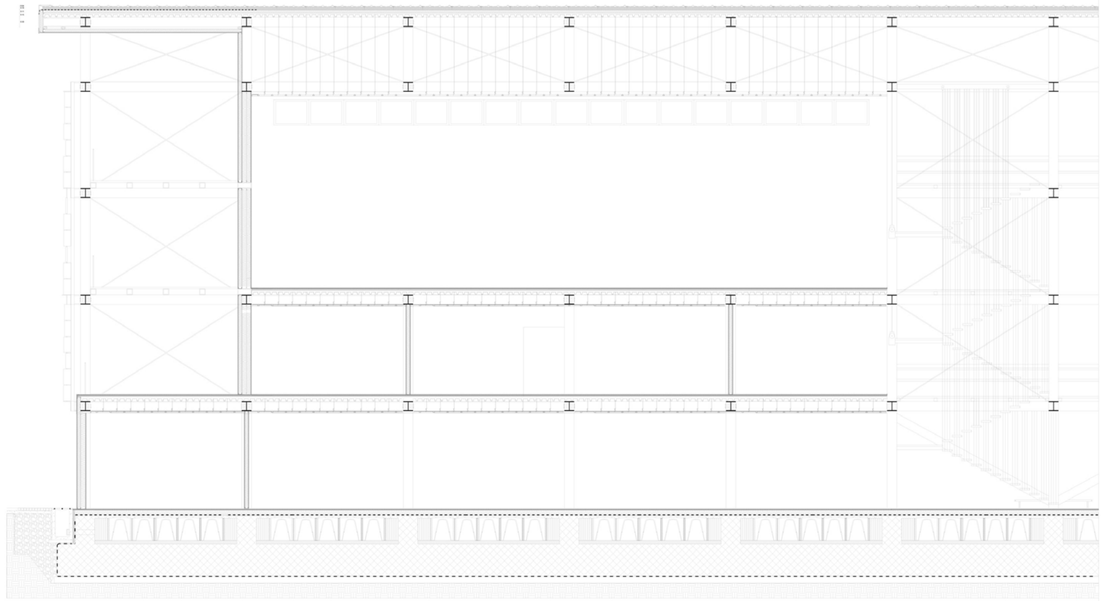


FUNCTIONS

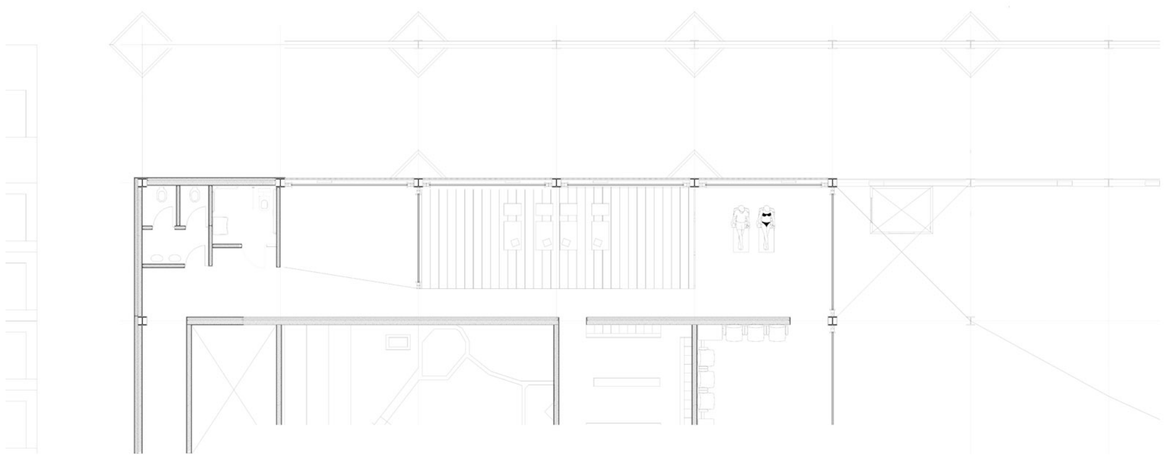


AXONOMETRY





1. Floor on air cavity: natural soil, compact soil, weak concrete, slab foundation, screed, iglù, slab in reinforced concrete, vapour air membrane, EPS insulating panels, screed, dry subfloor, floor (larch panels)
2. Intermediate floor: false ceiling, HE300 beams, corrugated metal sheet, insulating panels, screed on radiant floor, dry subfloor, floor
3. Roof slab: cladding panels, insulating panels, HE300 beams, corrugated metal sheet, vapor barrier, roof panels, metal flashing
4. Wall: plaster layer, plasterboard panel, mineral wood insulation, plasterboard panel.



INDOOR/OUTDOOR RELATION SCALE 1:50

Connecting detached areas, adjusting their borders, optimizing facilities already available on site: these are only a part of the topics the project is posed to deal with. Since the very first visit to the town of Frattaminore, it was clear there is a strong difference between the old town, with its dense urban fabric, and the wide roads and open fields characterizing the Eastern areas of Frattaminore, subject to PEEP projects.

The aim of this intervention is to establish a connection between the old and the new town, setting up a space harmoniously integrated with both, so as to create a single identity for these two areas, currently markedly divided.

One of the goals of this project is to bring the local inhabitants closer to the sensibility transmitted by Art and Archeological evidence dating back to the ancient Orta di Atella in the territory of modern Frattaminore, as shown by the famous “Maschere Atellane” and the findings at the border with the town of Crispano.

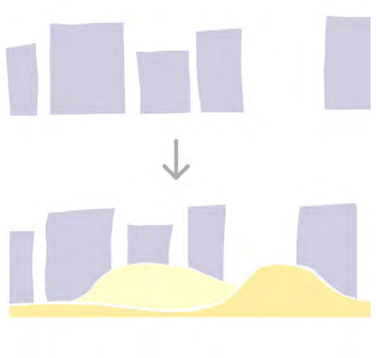
The realization of a single and wide exhibiting space allows to give full value to this long forgotten artistic background. Temporary exhibits set up in this space will be enriched by compositions resulting from educational activities carried out in the laboratories placed in the other planned building nearby.

Program

pedestrian cycle path, urban park, buildings for didactic, art and social purposes

Covered area	**2235m²**
Outdoor area	**8520m²**
Above-ground floors	**2**
Built volume	**00m³**
Estimated cost	**€6.129.723,18**

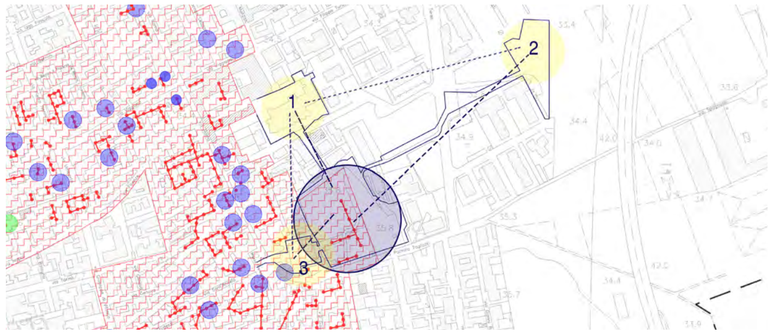
Aiming at reconnecting the urban fabric of the historic centre of Frattaminore with the new urban settlement "località Viggiano" located East of the town, near tothe ** highspeed road, the project is composed of an urban park including two buildings, contribuiting to the development of public services available to the citizens.



The idea behind the project sets out from the study of three points of interest located in the territory of Frattaminore: the "Istituto Comprensivo Colombo", the "Palazzo Baronale", and the town library. The services provided by these three buildings are thus reinforced by two new buildings placed at the edge of the planned Urban Park, which includes low hills, seats and barrier-free routes.

The first building, North-East of the park, is planned for primarily recreational purposes, such as educational laboratory, reading room, conference hall, social spaces. The second building, located South-East, is earmarked for exhibiting spaces.

The small size of the roads and driveways make the Frattaminore area not easily accessible to all people, especially those suffering from a disability. The intent of the project is to create an accessible place for everyone, both inside the buildings, with very large spaces and classrooms, and outside, with an urban park designed for the needs of all citizens.



Collapses of caves

Cavity in the tuff bank

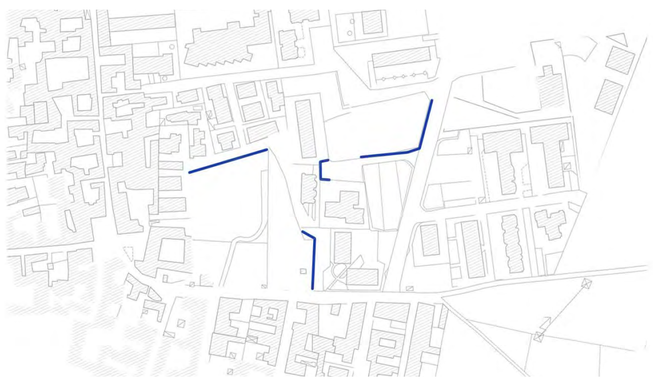
Collapses caves in the last year

Area with the presence of caves in the subsoil

Project strategy

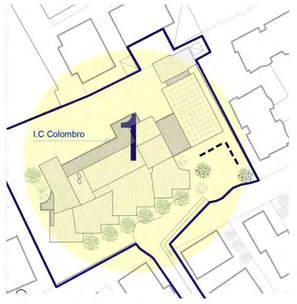
SOIL AND CAVITY

The aim of the project is to create a connection between the dense mesh of the historic center and the new urban settlement called the Viggiano area. The project was born as a support to pre-existing urban equipmen

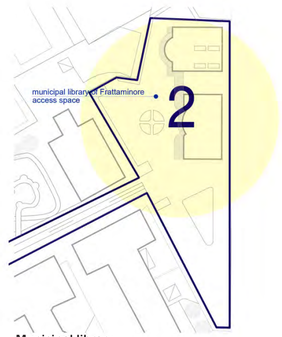


MARGINS

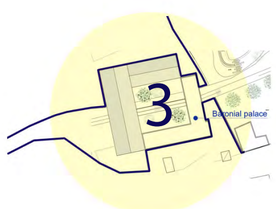
The analysis of the abandoned green areas behind Palazzo Barona made it possible to identify concrete margins on which to set the design work.



The school

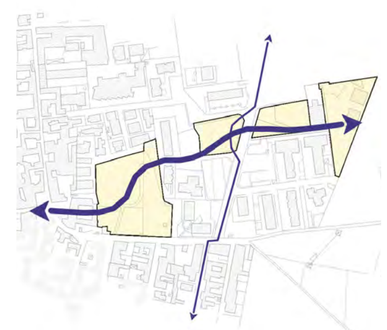


Municipal library



Palazzo Baronale

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m



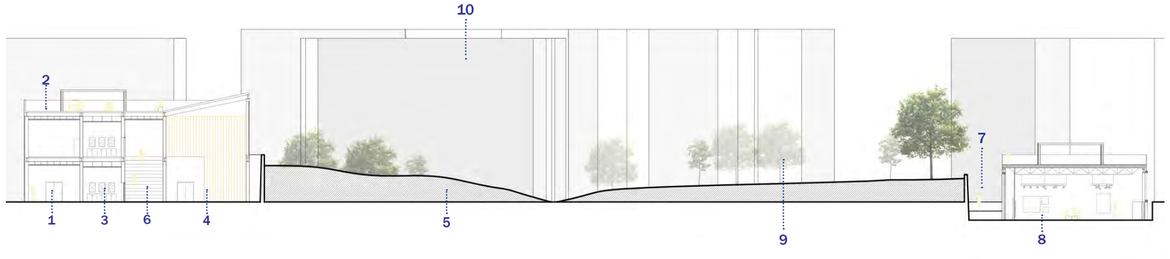
CONCEPT

New linking path between the Palazzo Ducale and the municipal library of Frattaminore

Project colored floor
Urban Park
Existing trees
Existing buildings
Cycle path

DESIGN STRATEGY

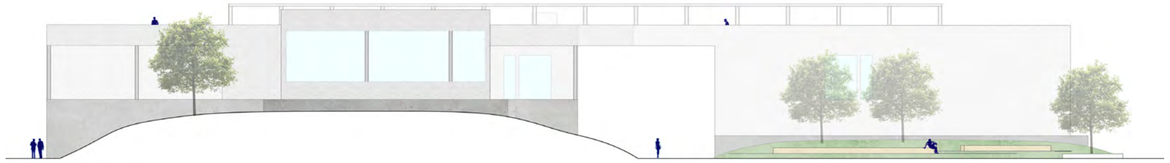
0 10 25 50m



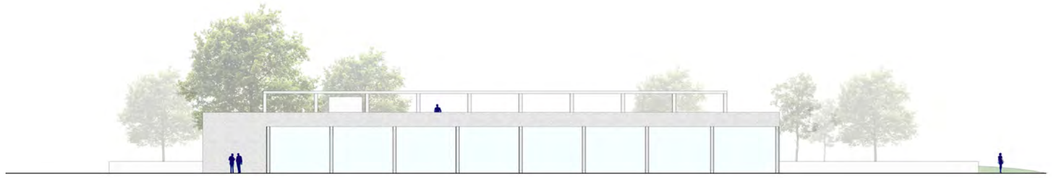
SECTION A

0 4 10 20m

1. Emergency exit
2. Roof with cover
3. Services
4. Workshops
5. Project land
6. Wooden steps
7. Access ramp
8. Exhibiting space
9. Project trees
10. Existi buildings

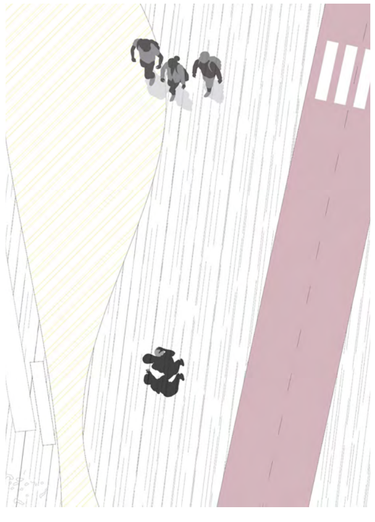


NORTHERN FRONT



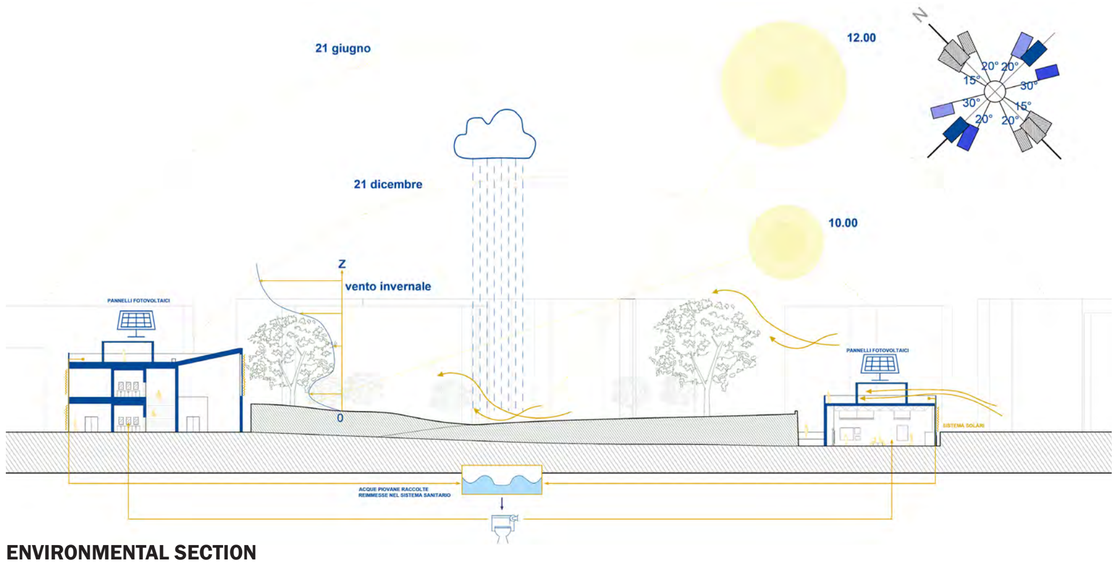
EASTERN FRONT

0 4 10 20m



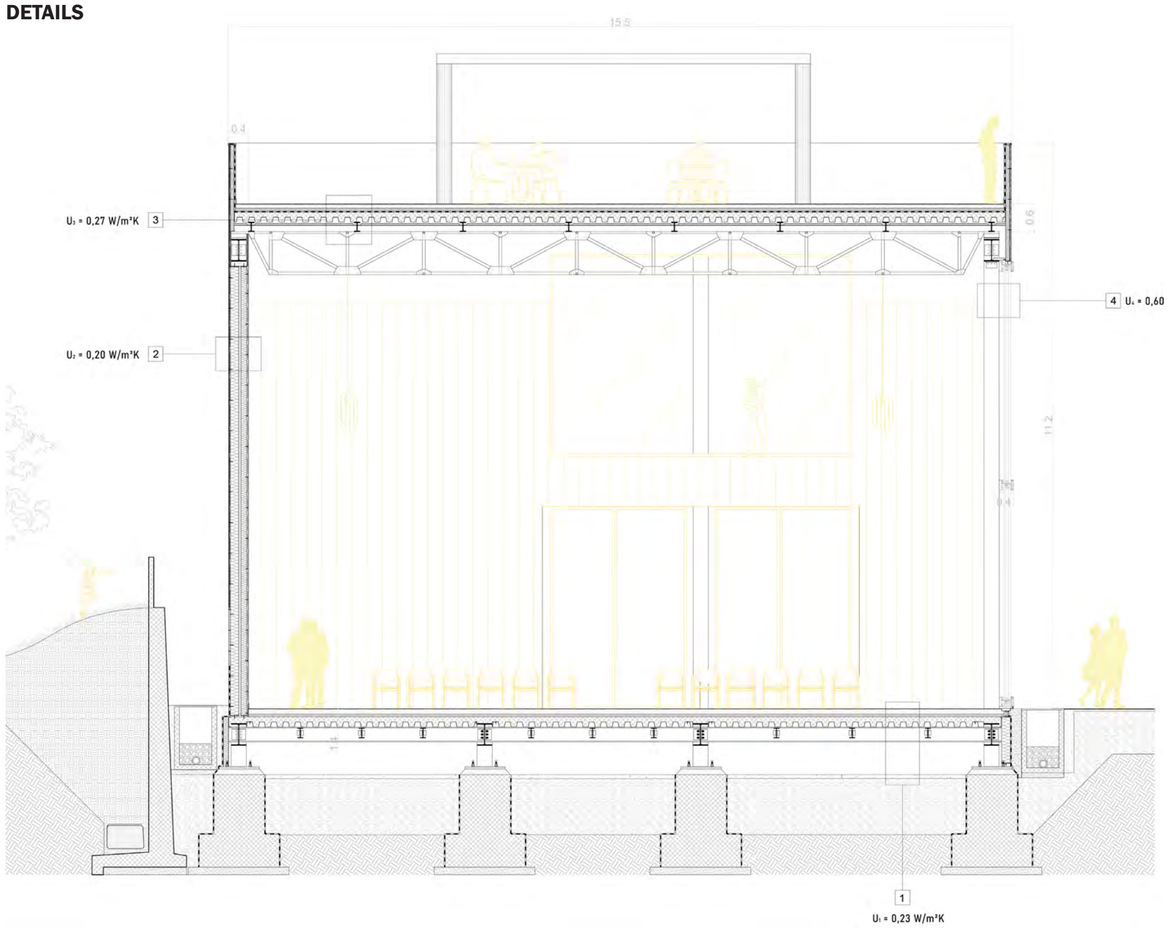
EXPOSITIVE SPACE

CONFERENCE ROOM



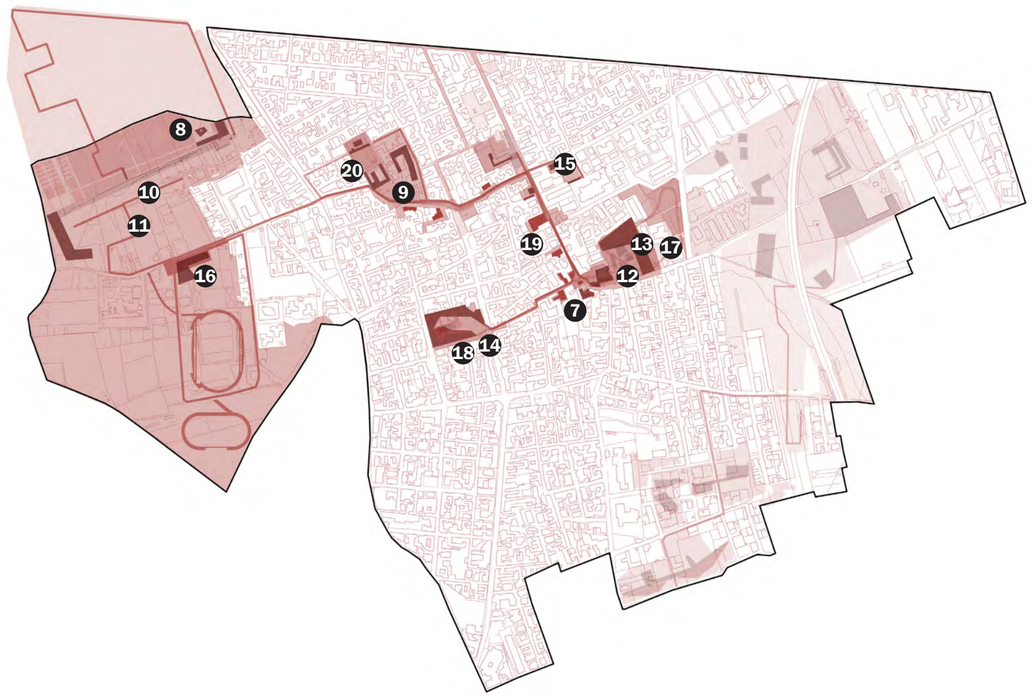
ENVIRONMENTAL SECTION

DETAILS



1. porcelain stoneware floor tiles, mortar bed, concrete slab, STYRODUR thermal insulator , reinforced concrete casting, corrugated steel panel, IPE stainless steel profile, air chamber, concrete casting
2. finishing plaster layer, AQUAPANEL plasterboard, U channels, KNAUF insulator, air chamber, U channel, KNAUF thermal insulation roll, KNAUF plasterboard, external finishing plaster laye
3. finishing plaster layer, AQUAPANEL plasterboard, U channels, KNAUF insulator, air chamber, U channel, KNAUF thermal insulation roll, KNAUF plasterboard, external finishing plaster layer
4. trussed beam, steel hanging hooks for plasterboard, support joists, corrugated steel panel, reinforced concrete casting, bitumen waterproofing membranes, STYRODUR thermal insulator, concrete slab, mortar bed, outdoor flooring

INDOOR/OUTDOOR RELATION SCALE 1:50



HISTORICAL CENTER AND ARCHAEOLOGICAL AREA
CENTRO STORICO E AREA ARCHEOLOGICA

7. The other side Federica Alba
8. Restart Atella Gabriele Cimmino
9. Re-creo - Spaces of abandonment Francesca Marano
10. Not in ruin but in progress Beatrice Mariosa
11. Mobility/archaeology Giuseppe Maria Marra
12. The terraces of Frattaminore Gabriella Masucci
13. Across the heritage Anna Nastelli
14. Every floor a new world Laura Pagano
15. Re-imagining Frattaminore Silvia Paparo
16. Archaeology - Agriculture Valeria Parracino
17. A connective path Rosario Clemente Perrotta
18. Inhabited edges Benedetta Ruggiero
19. The promenade Claudia Sorrentino
20. Across the city Giovanna Vitelli

REFERENCES

1. L. Altarelli, *L'immaginario delle rovine*, LetteraVentidue, Siracusa 2022.

2. R. Capozzi, F. Costanzo, F. Defilippis, F. Visconti (eds.), *Patrimonio e progetto di Architettura*, Quodlibet, Macerata 2021.

3. P. Miano, G. Aquilar, "Urban Spaces and the Levels of the Historic City", in *Architecture, Education and Society, International Workshop Coac-Etsab*, Barcelona 2014, pp. 1-12.

4. P. Miano, F. Coppolino, "The Incurables Hospital complex in the Ancient Center of Naples: a project between layers", in R. Amoeda, S. Lira, C. Pinheiro (eds.), *Rehab 2015 2nd International Conference on Preservation, Maintenance and Rehabilitation of Historical Buildings and Structures*, Green Lines Institute, Braga 2017, pp. 342-354;

5. F. Purini, "Il nuovo e tre forme dell'antico", in S. Bigiotti, E. Corvino (eds.), *La modernità delle rovine. Temi e figure dell'architettura contemporanea*, Prospettive Edizioni, Roma 2015, p. 77.

6. O.M. Ungers, S. Vieths, "La città dialettica", Skira editore, Milano 1997.

Next page

D. Bramante, Stratificazioni urbane, (2014)

V. Guarini, Stratificazione, (2020)

Pagina seguente

D. Bramante, Urban stratifications, (2014)

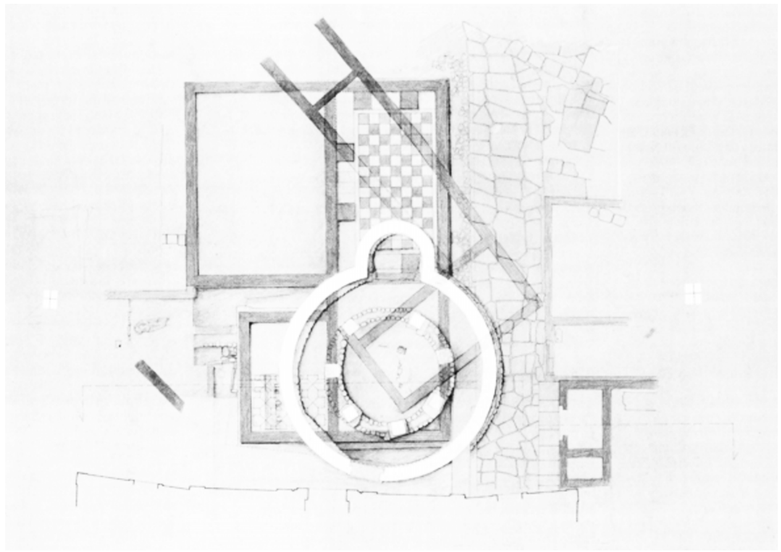
V. Guarini, Stratification, (2020)

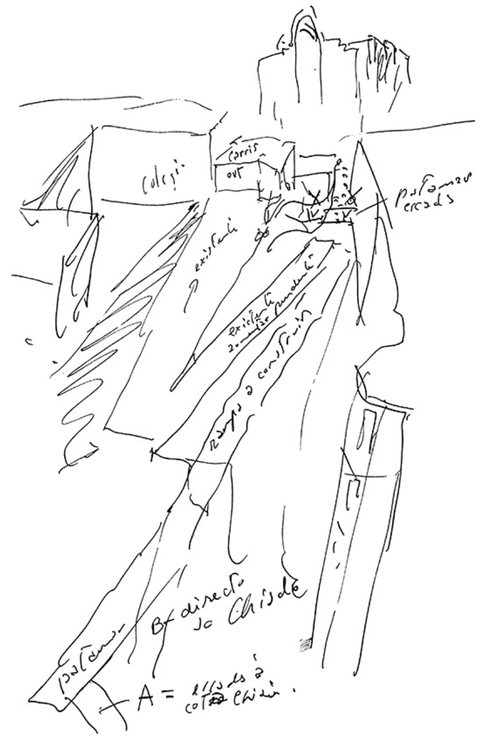
«The landscape, the city and the buildings as a whole constitute an infinite text made of overlapping, intersections, contiguous or distant textures that exchange themselves differences or analogies in a multiple game of similarities and dissonances. It is defined a complex narrativ in the coexistence of contents and values, each of which is witness to a particular moment in the history of a landscape or a city» (Purini, 2015, p.77). The stratification reveals the action of time in the city, which acts through the accumulation of signs and writings or, conversely, through the unveiling of previously hidden elements through excavation.
As Davide Bramante's pictures show, the city of our time is therefore not just one place, but many places (Ungers, 1997), taking the form of a complex, draped, multi-level product where multiple events, memories and expectations are integrated in a complementary way. The municipality of Frattaminore represents a case of great interest in relation to these arguments. Located in the heart of the so called "frattese area", in the north of Naples, the territory of Frattaminore constitutes the extreme northern edge of the metropolitan city, bordering the province of Caserta.
The municipality was born, after the union of Italy, from the fusion of two parts: Pomigliano d'Atella, built on the ancient Atellan city, of Oscan origin from the 1st century BC, that is one of the oldest in Campania and the more recent Fratta Piccola, built in 1282 around the palace belonged to the Count of Fratta Piccola. Two centuries later, the community of Frattaminore still retains the different origins and traditions rooted in the two urban parts. It is therefore a highly stratified territory made up of pieces of different nature that make up an articulated whole.
In the current situation, the northern part of the municipality is characterized by the presence of the remains of the ancient city of Atella, within a predominantly rural landscape, while the historical center is characterized by a building heritage in partial abandonment, as well as, by empty urban areas and large unexplored cavities in the underground and, finally, the south-eastern part is made up of areas of residential and productive expansion, discontinuous and spread within the agricultural landscape.
The territory of Frattaminore is therefore rich in heritages of different ages and nature, mostly unknown and not adequately valorized or in a state of abandonment, incorporated within a succession of urban strata: the underground layer, with cavities and archaeological remains in the subsoil; the layer of open spaces, with archaeological traces scattered in the agricultural landscape and ancient squares that characterize the street space; the layer of the built, with partially disused ancient artifacts, such as for example the baronial palaces, articulated on several levels, and with more recent abandoned buildings.
In this framework, today, in order to allow citizens to be able to "inhabit" the historical and archaeological heritage, whose valorization can constitute a significant resource and opportunity for cultural and social territorial development, also involving wider urban transformations, the need to act on these hidden or abandoned artifacts and remains emerges, with the aim of promoting knowledge of them, but also,

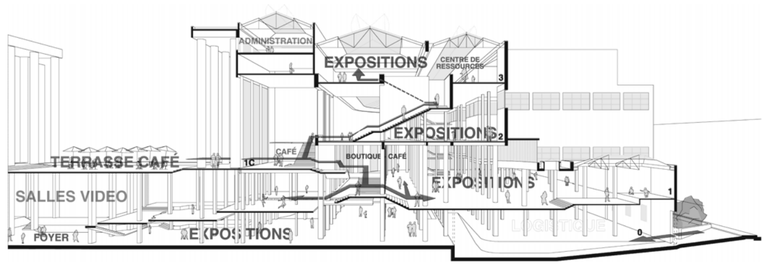
«Il paesaggio, la città e gli edifici nel loro insieme costituiscono un testo infinito fatto di sovrapposizioni, di intersezioni, di tessiture contigue o distanti che si scambiano differenze o analogie in un gioco molteplice di assonanze e dissonanze. Si viene a definire un racconto complesso risolto nella compresenza di contenuti e di valori, ciascuno dei quali testimonia un particolare momento della storia di un paesaggio o di una città» (Purini, 2015, p.77). La stratificazione rivela l'azione del tempo nella città, che agisce per accumulazione di segni e scritture oppure, al contrario, per svelamento, attraverso lo scavo, di elementi precedentemente nascosti.
Come mostrano le fotografie di Davide Bramante, la città del nostro tempo non è dunque un solo luogo, ma molti luoghi (Ungers, 1997), configurandosi come un prodotto complesso, sovrapposto, a più livelli, dove si integrano in maniera complementare molteplici accadimenti, ricordi, aspettative. Il comune di Frattaminore rappresenta un caso di grande interesse in relazione a queste argomentazioni. Localizzato in piena "area frattese", nella conurbazione a nord di Napoli, il territorio di Frattaminore costituisce l'estremo bordo settentrionale della città metropolitana, a confine con la provincia di Caserta. Il comune è nato, dopo l'unione d'Italia, dalla fusione di due frazioni: Pomigliano d'Atella, sorta sull'antica città atellana, di origine osca del I secolo a.C., una delle più antiche della Campania e la più recente Fratta Piccola, sorta intorno al palazzo che fu del Conte di Fratta Piccola nel 1282. A distanza di due secoli, la comunità di Frattaminore conserva ancora le diverse origini e tradizioni radicate nelle due parti urbane. Si tratta dunque di un territorio altamente stratificato e costituito da pezzi di diversa natura che compongono un insieme articolato. Allo stato attuale, la parte a nord del comune è caratterizzata dalla presenza di resti dell'antica città di Atella, all'interno di un paesaggio dal carattere prevalentemente rurale, mentre il centro storico risulta caratterizzato da un patrimonio edilizio in parziale abbandono, da vuoti urbani in disuso e da grandi cavità inesplorate nel sottosuolo e, infine, la parte sud-orientale è composta da aree di espansione residenziale e produttive, discontinue e diffuse all'interno del paesaggio agricolo.
Il territorio di Frattaminore è dunque ricco di patrimoni di diversa epoca e di diversa natura, perlopiù sconosciuti e non adeguatamente valorizzati o in uno stato di abbandono, inglobati all'interno di un susseguirsi di strati urbani: lo strato ipogeo, con cavità e resti archeologici presenti nel sottosuolo; lo strato degli spazi aperti, con tracce archeologiche disseminate nel paesaggio agricolo e antiche piazze e slarghi che caratterizzano lo spazio della strada; lo strato del costruito, con antichi manufatti parzialmente disuso, come ad esempio i palazzi baronali, articolati su più livelli, e con edifici più recenti in abbandono.
In questo quadro, per consentire oggi ai cittadini di poter "abitare" il patrimonio storico e archeologico, la cui valorizzazione può costituire una rilevante risorsa e occasione di sviluppo culturale e sociale per il territorio, coinvolgendo anche più ampie trasformazioni urbane, emerge la necessità di agire su tali manufatti e resti nascosti o abbandonati, con l'obiettivo di favorirne la conoscenza, ma anche, soprattutto, di

above all, of reusing them as new places for the community and for urban life, capable of activating an articulated system of relationships.
This goal can be achieved through a design approach aimed at unveiling the heritage between the urban strata (Miano e Coppolino, 2017), which is based, on the one hand, on the storytelling of the heritage, helping to read it, understand it and enhance it, through precise actions aimed at "reviving" the ancient. On the other hand, it is based on the functional and spatial relation of these specific elements through the definition of multiple connections between the various urban levels. This connection system can be realized through the insertion of new paths, held together by multilevel architectural signs and grafts that create a dialogue with the ancient and with the urban layers, defining a sort of museum itinerary spread throughout the historic center and it also connected to the archaeological areas of Atella.
In this direction, the arguments expressed by Franco Purini are of great relevance: «inserting a new sign in the stratification is a fundamental operation of architecture. It can range from a simple note to a text, to the change of meaning of a sentence of the text up to a rewriting of entire passages of the text itself. But not only this. It is really a new intervention on the built that detects it in its structure including its stratification» (Purini, 2015, pp. 78-79). In other words, the new architecture can represent an unveiling of the times, memories and absences of the place, capable of instilling new life and a new cultural depth into the various material remains. Therefore, designing between the layers means inserting new contemporary layers that can define a new network that holds together different levels, elements and memories, establishing new relationships. Layers that, if on the one hand reveal what has been, on the other allow the insertion of a new text, a new story.
An example is Carlo Scarpa's project for the roofing of the archaeological excavations of Piazza Duomo in the historic center of Feltre (1973-78), which uses the opportunity of the urban void defined by the archaeological excavation to think of an overall reactivation of the whole urban area, defining a solution for the protection of the findings which actually becomes a narrative and connecting device between the urban strata.
Another example is the project by Àlvaro Siza, completed in 2015, for the edge area of the do Carmo complex in the historic center of Lisbon, in which a new pedestrian path is defined which, integrating with the delicate context and acting along the edge, it connects what remains of the evocative ancient medieval complex to the underlying and homonymous road, defining a real multilevel path on the urban scale which becomes an urban space with new-concept traversable terraces. A final example is the project for the abandoned building of the Palais de Tokyo in the center of Paris realized by Anne Lacaton and Jean Philippe Vassal (2001-12). In this case, a large pavilion in abandonment, built for the universal exhibition of 1937, is recovered as a sort of ruin, which is secured in the necessary equipment for reuse as an exhibition site, becoming a new place of urban attraction, a real node that triggers a new network of relationships on an urban scale between material and immaterial.
Starting from these considerations and these

riutilizzarli come nuovi luoghi per la collettività e per la vita urbana, capaci di attivare un articolato sistema di relazioni.
Questo obiettivo può essere raggiunto attraverso un approccio progettuale teso al disvelamento dei patrimoni tra gli strati urbani (Miano e Coppolino, 2017), che si basa, da un lato, sul racconto del patrimonio, aiutando a leggerlo, a comprenderlo e a valorizzarlo, attraverso azioni puntuali volte a "rianimare" l'antico, dall'altro sulla messa in relazione sia funzionale che spaziale di questi elementi puntuali attraverso la definizione di connessioni multiple tra i vari livelli urbani. Tale sistema di connessione può essere realizzato attraverso l'inserimento di nuove trame di percorsi, tenute insieme da segni e innesti architettonici multilivello che dialogano con l'antico e con gli strati urbani, definendo una sorta di itinerario museale diffuso nel centro storico e che si collega anche alle aree archeologiche di Atella.
In questa direzione, di grande rilevanza risultano le argomentazioni espresse da Franco Purini quando sostiene che: «inserire un nuovo segno nella stratificazione è un'operazione fondamentale dell'architettura. Essa può oscillare da una semplice nota a un testo, al cambiamento di senso di una frase del testo fino a una riscrittura di interi brani del testo stesso. Ma non solo. È proprio un nuovo intervento sul costruito che lo rileva nella sua struttura compresa la sua stratificazione» (Purini, 2015, pp. 78-79).
In altri termini, la nuova architettura può rappresentare un disvelamento dei tempi, delle memorie e delle assenze del luogo, in grado di infondere ai diversi resti materici nuova vita e un nuovo spessore culturale.
Progettare tra gli strati significa allora inserire nuovi strati contemporanei che possano definire una trama inedita che tiene insieme diversi livelli, elementi e memorie, instaurando nuove relazioni. Strati che se da un lato disvelano ciò che è stato, dall'altro consentono di inserire un nuovo testo, un nuovo racconto.
Si pensi ad esempio al progetto di Carlo Scarpa per la copertura degli scavi archeologici di piazza Duomo nel centro storico di Feltre (1973-78), che coglie l'opportunità del vuoto urbano definito dallo scavo archeologico per pensare ad una riattivazione complessiva di quell'area urbana, definendo una soluzione di protezione dei reperti che in realtà diviene un dispositivo narrativo e connettivo tra gli strati urbani. Oppure si pensi al progetto di Àlvaro Siza, concluso nel 2015, per l'area di bordo del complesso do Carmo nel centro storico di Lisbona, in cui è definito un nuovo percorso pedonale che, integrandosi con il delicato contesto e agendo lungo il bordo, collega ciò che resta del suggestivo antico complesso medioevale alla sottostante e omonima, strada, definendo un vero e proprio percorso multilivello alla scala urbana che diviene uno spazio urbano a terrazzamenti attraversabili di nuova concezione. Un ultimo esempio è il progetto per l'edificio abbandonato del Palais de Tokio nel centro di Parigi realizzato da Anne Lacaton e Jean Philippe Vassal (2001-12). In questo caso, un grande padiglione in rovina, costruito per l'esposizione universale del 1937, viene recuperato come una sorta di reperto, che viene messo in sicurezza nelle dotazioni necessarie al riuso come luogo espositivo, divenendo un nuovo luogo di attrazione urbana, un vero e proprio nodo







Next page

C. Scarpa, Progetto della copertura degli scavi archeologici di piazza Duomo a Feltre, schizzo di rilievo dei reperti (1973-78)

À. Siza, Progetto di configurazione dell'area di bordo del complesso do Carmo a Lisbona, schizzo di progetto (2015)

A. Lacaton e J. P. Vassal, Progetto di recupero di Palais de Tokio a Parigi, sezione di progetto (2001-12)

Pagina seguente

C. Scarpa, Project for the roof of the archaeological excavations of Piazza Duomo in Feltre, sketch of the findings, (1973-78).

À. Siza, Project for the reconfiguration of the border area of the Carmo complex in Lisbon, project sketch (2015)

A. Lacaton and J. P. Vassal, Recovery project of the Palais de Tokio in Paris, project section (2001-12)

examples, in the case of Frattaminore, design strategies based on the topic of unveiling the multiples heritages present here have been implemented, with the aim of activating new relationships between the layers of the historic center and the archeological area.
In particular, three declinations of the topic of unveiling have emerged: the unveiling of the underground through the redefinition of the upside-down relationship; the unveiling of archaeological traces through the definition of widespread net in the landscape and the unveiling of abandoned places through the reuse and redefinition of the internal-external relationship.
The unveiling of the underground, as shown for example by the projects “The other side” and “Across the city”, has tried to focus attention on some little-known places, such as the ancient cavities present below the urban fabric. Here the work considered an upside-down connection, grafting new vertical connection elements between the street level and the underground level and defining a new system of multi-level relationships between the underground space, the open space of the street and the space of the historic buildings, located in connection with the cavities, which become new urban crossing spaces or new underground gardens for urban health.
The unveiling of archaeological traces, such as showing the projects “Not in ruin but in progress”, “Mobility/archaeology” and “Archaeology – Agriculture”, took into consideration the archaeological area of the ancient city of Atella. In this case, the work was done on improving urban accessibility to the site and on redefining internal usability, through the insertion of new accesses, located in strategic points in relation to the urban fabric and neighboring municipalities and new internal connection routes. At the same time, the inclusion of new functions was proposed, capable of combining the site’s musealization needs with needs related to daily urban life, defining different variations of an archaeological and agricultural park, a contemporary park, which welcomes multiple uses and public spaces, despite the desire to enhance and narrate the ruins in situ.
The unveiling of abandonment, as shown by the projects “Re-creo. Spaces of abandonment”, “Through the heritage” and “A connective path” concerned the partially or totally abandoned historic buildings in the historic center or even urban spaces and voids in disuse following collapses or demolition operations. In this case, the work was done on the reconfiguration of the ancient structure artifacts, in a punctual manner, through contemporary additions and connective elements between the various levels, with the aim of being able to give new urban roles to the historical elements. In the same way, the work was done on the redefinition of abandoned open spaces, placed in close spatial and functional relationship with the buildings or placed in sequence in a network of widespread open spaces, defining a hybrid combination between inside and outside.
Through unveiling heritages it is therefore possible to activate new relationships between the strata and give a new life to the historic center of Frattaminore and to the archaeological area, thus integrated within a complex and articulated system, open to new configurations and which can grow over time.

che innesca una nuova una rete di relazioni alla scala urbana tra materiale e immateriale.
A partire da queste considerazioni e da questi esempi, nel caso di Frattaminore, sono state messe in campo strategie progettuali basate sul tema del disvelamento dei diversi patrimoni qui presenti, con l’obiettivo di attivare nuove relazioni tra gli strati del centro storico e dell’area archeologica.
In particolare, sono emerse tre declinazioni del tema del disvelamento: il disvelamento del sottosuolo attraverso la ridefinizione del rapporto sotto-sopra; il disvelamento delle tracce archeologiche attraverso la definizione di trame diffuse nel paesaggio e il disvelamento dei luoghi dell’abbandono attraverso il riuso e la ridefinizione del rapporto interno-esterno. Il disvelamento del sottosuolo, come mostrano ad esempio i progetti “The other side” e “Across the city”, ha provato a porre l’attenzione su alcuni luoghi pochi noti, quali le antiche cavità presenti al di sotto del tessuto urbano. Qui si è lavorato sulla connessione sotto-sopra, innestando nuovi elementi di collegamento verticale tra la quota stradale e la quota ipogea e definendo un nuovo sistema di relazioni multilivello tra lo spazio ipogeo, lo spazio aperto della strada e lo spazio degli edifici storici, posti in connessione con le cavità, che divengono nuovi spazi di attraversamento urbano o nuovi giardini nel sottosuolo per la salute urbana.
Il disvelamento delle tracce archeologiche, come mostrano i progetti “Not in ruin but in progress”, “Mobility/archaeology” e “Archaeology – Agriculture”, ha preso in considerazione l’area archeologica dell’antica città di Atella. In questo caso, si è lavorato sul miglioramento dell’accessibilità urbana al sito e sulla ridefinizione della fruibilità interna, attraverso l’inserimento di nuovi accessi, posti in punti strategici in relazione al tessuto urbano e ai comuni limitrofi e di nuovi percorsi di connessione interna. Allo stesso tempo, si è proposto l’inserimento di nuove funzioni, in grado di combinare esigenze di musealizzazione del sito con esigenze legate alla vita urbana quotidiana, definendo diverse variazioni di parco archeologico e agricolo, un parco contemporaneo, che accoglie usi molteplici e spazi pubblici, pur nella volontà di valorizzare e narrare le rovine in situ.
Il disvelamento dell’abbandono, come mostrano i progetti “Re-creo. Spaces of abandonment”, “Across the heritage” e “A connective path” ha riguardato gli edifici storici parzialmente o totalmente abbandonati nel centro storico o anche spazi e vuoti urbani in disuso in seguito a crolli o a operazioni di demolizione. In questo caso, si è lavorato da un lato sul riuso dei manufatti di antico impianto, in maniera puntuale, attraverso aggiunte contemporanee ed elementi di connessione tra i vari livelli, con l’obiettivo di poter conferire nuovi ruoli urbani agli elementi storici, dall’altro sulla ridefinizione degli spazi aperti in abbandono, posti in stretta relazione spaziale e funzionale con gli edifici oppure posti in sequenza in una rete di spazi aperti diffusi, definendo una combinazione ibrida tra interno e sterno.
Attraverso il disvelamento dei patrimoni è dunque possibile attivare nuove relazioni tra gli strati e conferire una nuova vita al centro storico di Frattaminore e all’area archeologica, integrati in tal modo all’interno di un sistema complesso e articolato, aperto a nuove configurazioni e che può crescere nel tempo.

Next page

Desgin strategy, Team 2, drawing by Chiara Barone e Francesco Caliendo

Pagina seguente

Disegno strategico, gruppo 2, disegno elaborato da Chiara Barone e Francesco Caliendo

FEDERICA ALBA - THE OTHER SIDE

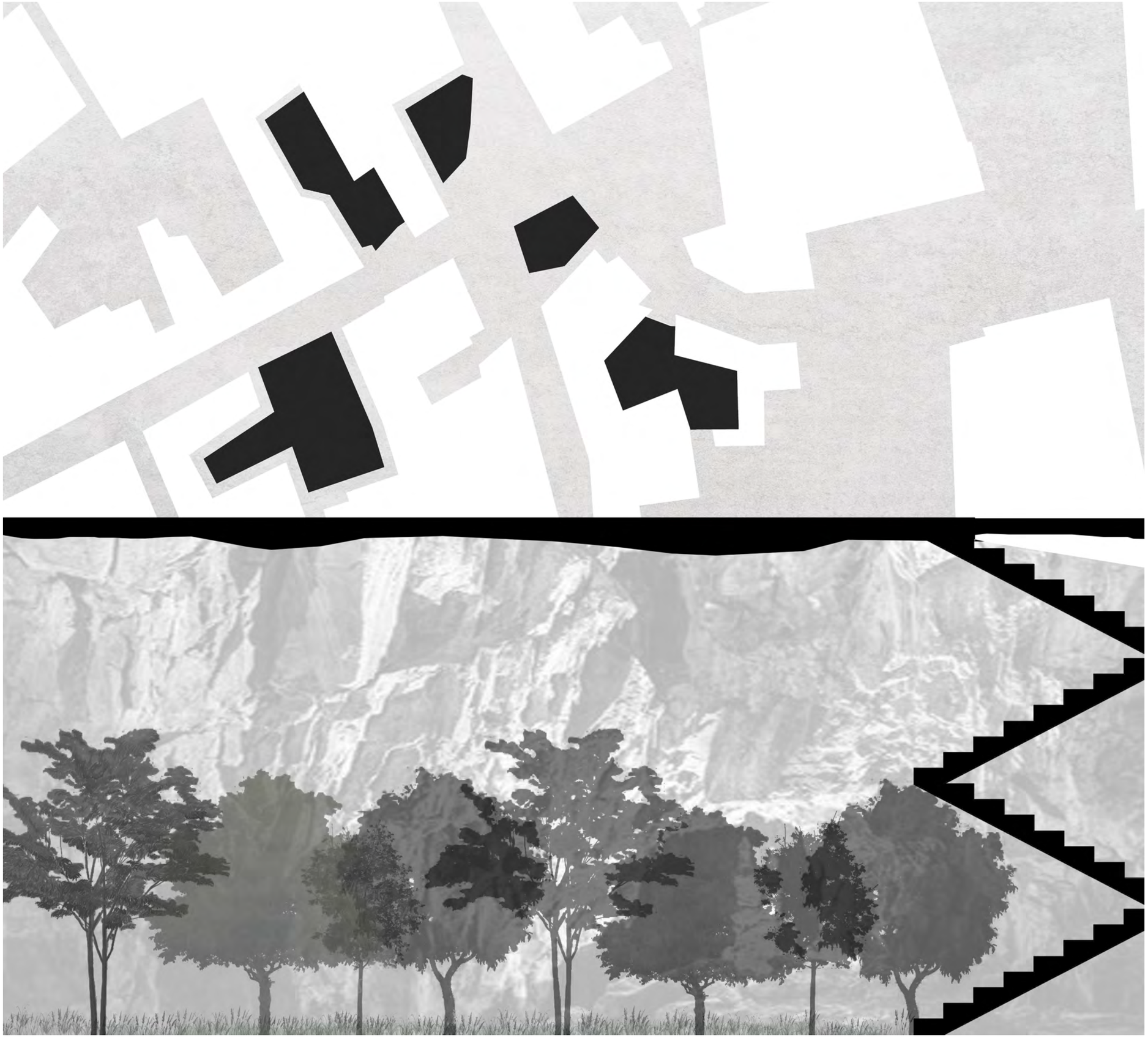
THE HIDDEN NATURE VERTICAL LINES

The historic center of Frattaminore is characterized by a strong presence of natural and artificial voids.
The project proposal interventions to consolidate the cavities, transforming them into therapeutic gardens open to the service of the entire population.
In correspondence with the areas affected by the collapses, are proposed squares at a lower level than the level of Piazza Crispi.
This area was chosen for the development of this idea because here there is a high density of collapses and cavities that have allowed that realization.
A fundamental role is played by vertical connection systems, such elevator and stairs, which allow a continuous connection between different layers of the project: road, squares, underground gardens.
The two sistems are considerate in a different way: one more urban and invasive ending in one of the squares of the project, the other proposes the exit inside the museum that tells the story of the cavities.
Anyway, with the first proposal, from an undergraund area you get in a open space architecturally designed, the second proposes the ascent inside an architectural structure.
Finally, the building that becomes a museum of cavities is valued with the addition of a graft on the terrace that marks the intervention made from the outside.

Program

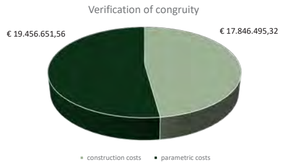
urban park, museum,therapeutic gardens

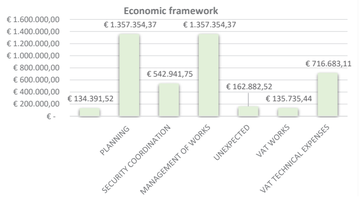
Covered area	**257,56m²**
Outdoor area	**3160m²**
Above-ground floors	**2**
Built volume	**2060m³**
Estimated cost	**€ 19.456.651,56**



You compare our nature, in relation to education and lack of education, to a condition of this type. Imagine, therefore, men in an underground cave-like dwelling, with an entrance thrown open to the light and as wide as the entire cave

Platone - Cave myth

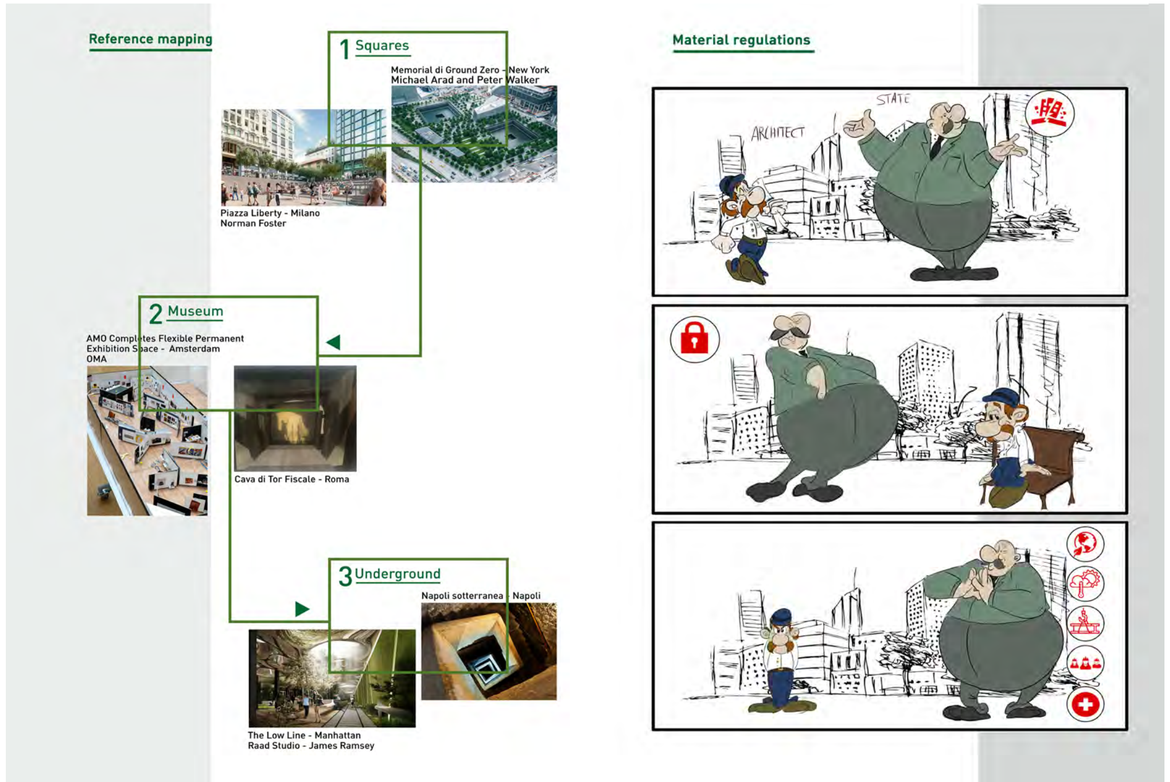


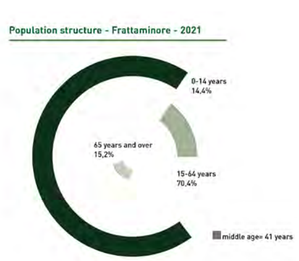


The squares are connected to each other by a pavement of concrete slabs, which form a net that holds everything together. Reusing abandoned areas has allowed to give a new identity to the historic center of Frattaminoe. The opportunity emerges to transform these places into spaces of life and urban service for sociality and culture.

In the same way, the underground space becomes a new opportunity for the creativity, a new architectural space is made available that is able to satisfy, better than others, the correspondence between form and architecture. The fact that the space is designed by subtraction, rather than by addition, the self-supporting structure and direct connection between the building and the ground and this poses different conditions from the usual.

You think of a project that put structure and nature on the same level where no further space is taken off the surface, but it uses a totally unknown and abandoned area.



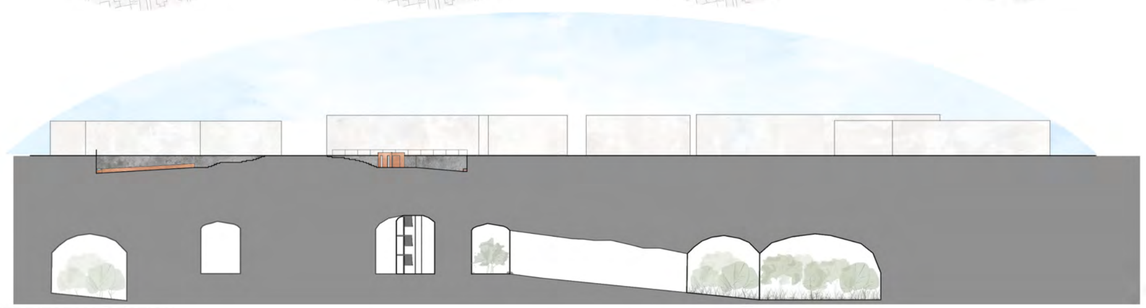


THE STAKEHOLDERS AND THE PLANNING STRATEGIES

The stakeholders mapping want to demonstrate the users of the project and the other side that all have the same importance within the project. The planning strategies define the layer of the project.

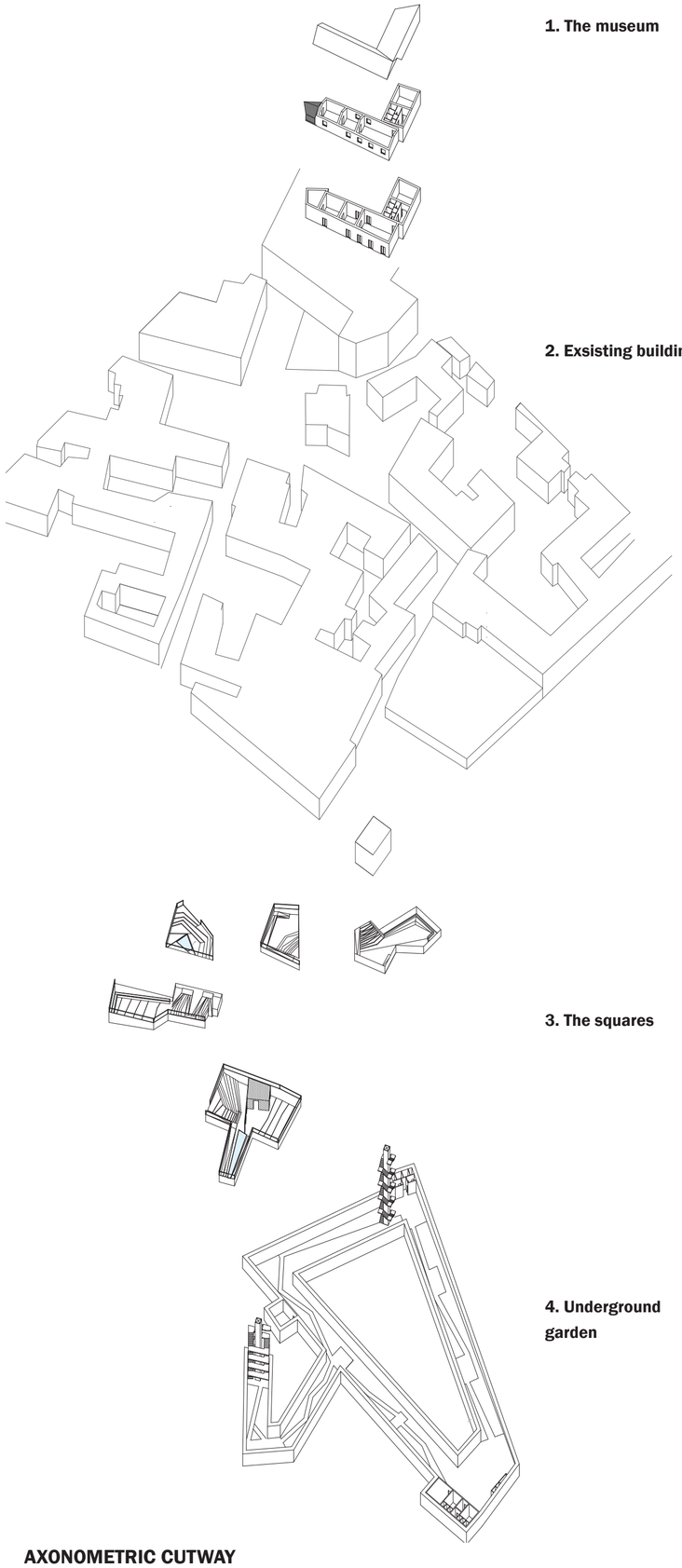
FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m



TERRITORIAL SECTION

The section represents the quotas of the ground and its modeling.



1. The museum

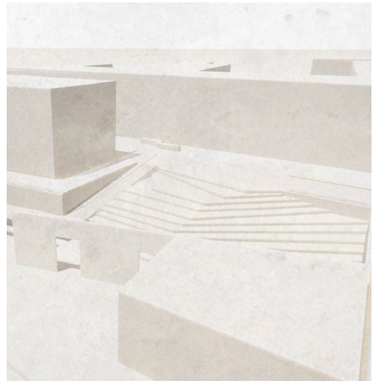
2. Exsisting buildings

3. The squares

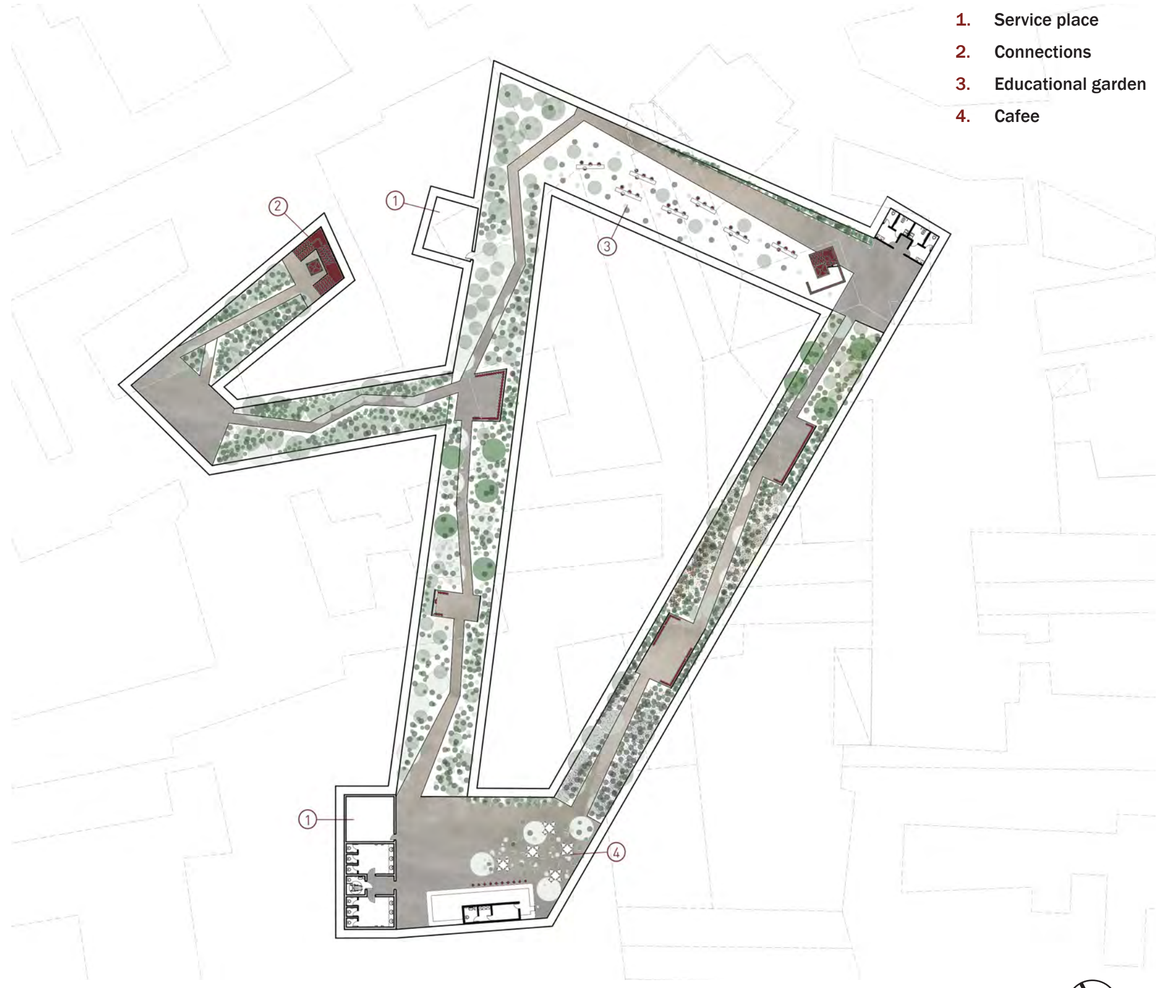
4. Underground garden

AXONOMETRIC CUTWAY

CAVITIES MAP AND COLLAPSE MAP

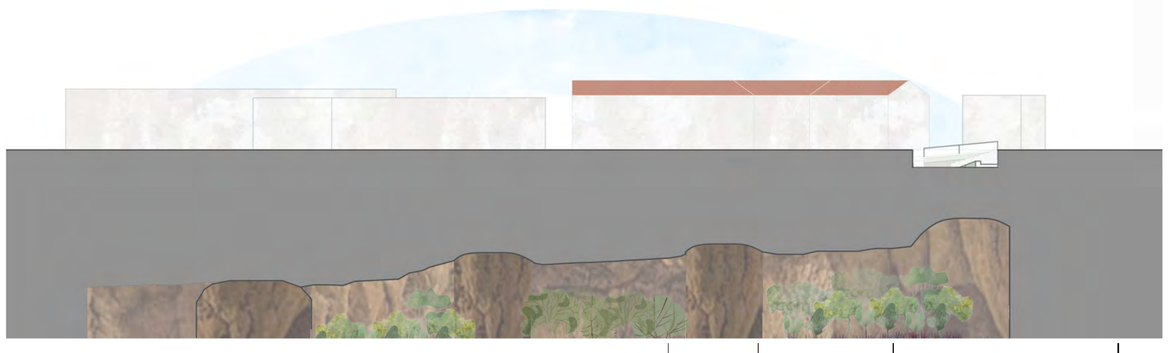


1. Service place
2. Connections
3. Educational garden
4. Cafee



UNDERGROUND GARDENS PLAN

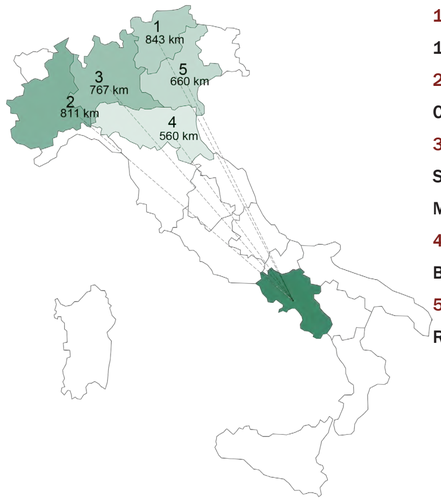
0 10 25 50m



TERRITORIAL SECTION

0 4 10 20m

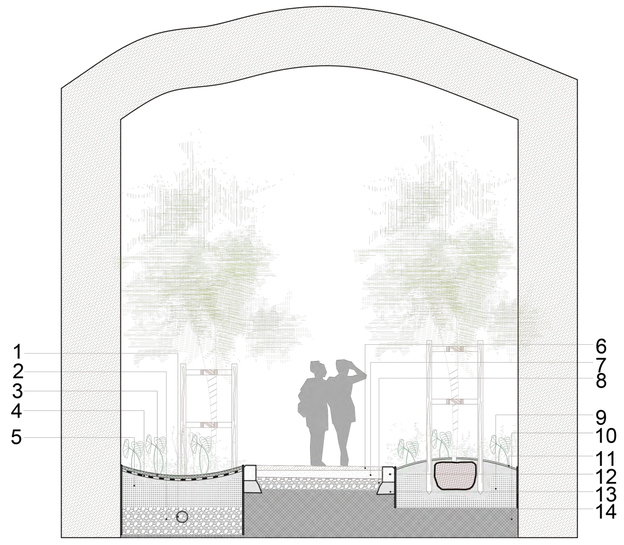
1. Dryopteris Erythrosora
2. Heuchera
3. Hakonechloa macra aureola
4. Asarum
5. Alchemila
6. Ceanothus
7. Chionanthus virginicus
8. Arbutus unedo
9. Lagarstroemia indica



MATERIALS

1. Windows - Finstral SpAVia Gasters 139054 Auna diSotto/Renon (BZ)
2. OSB - Bonzano - S.P. 31 Bis Regione Cavallino, 8 15030 Coniolo (AL)
3. Rock wool panel - ROCKWOOL Italia S.p.A., Via Antonio Canova, 12, 20145 Milano MI
4. XPS - Rovago Building Solutions SA - Bologna
5. Heat pump - Aermec S.p.A. - Via Roma,996 - 37040 Bevilacqua (VR) - Italia

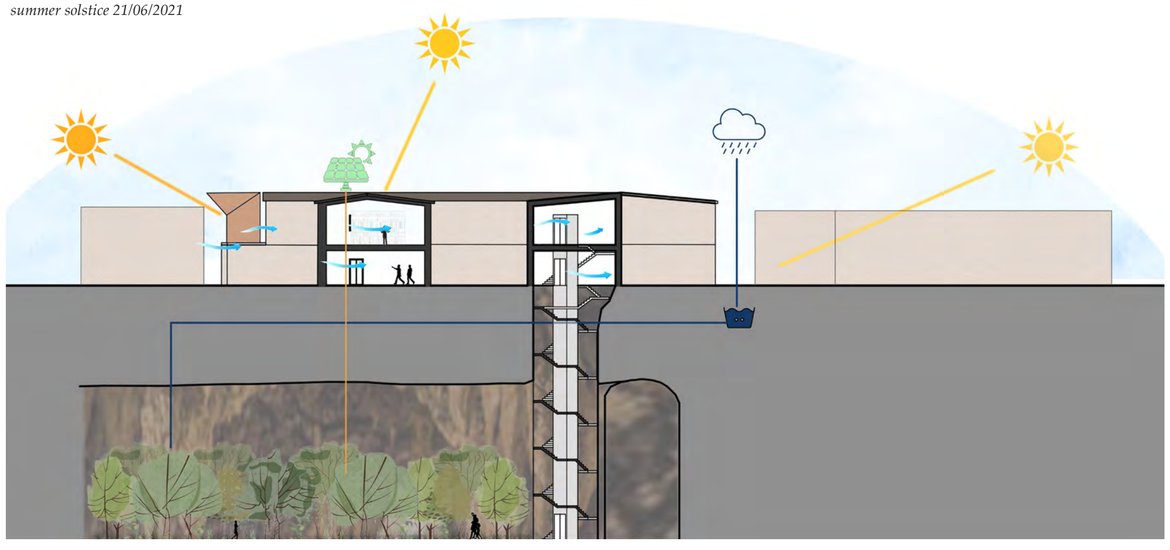
View of the underground gardens

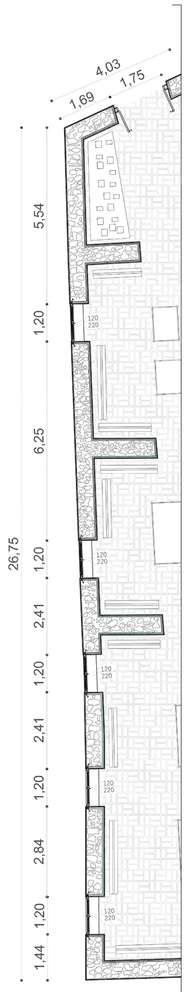


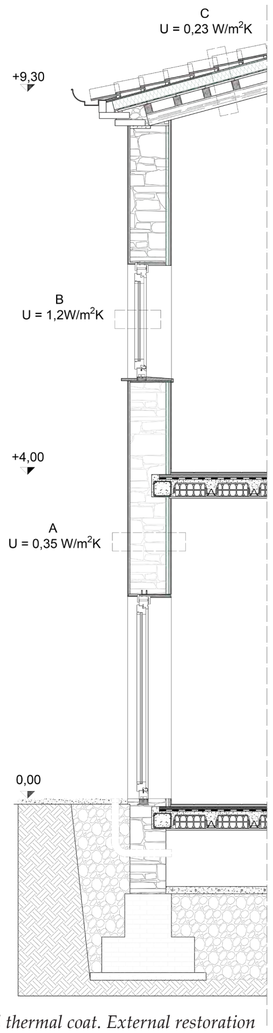
1. Drine tube - 160 mm
2. Gravel sp. 20 cm
3. Gravel sp. 5 cm
4. Cloth of coltivation
5. Substrate of coltivation (50 cm)
6. Substrate of coltivation
7. Pluvial sand
8. Mixed grain-volumetric substrate
9. Agricultural ground
10. Compact existing ground
11. Slope 15-20%
12. Curb in c.a.12x25 cm
13. Lean
14. Waterproofing steel bulkhead

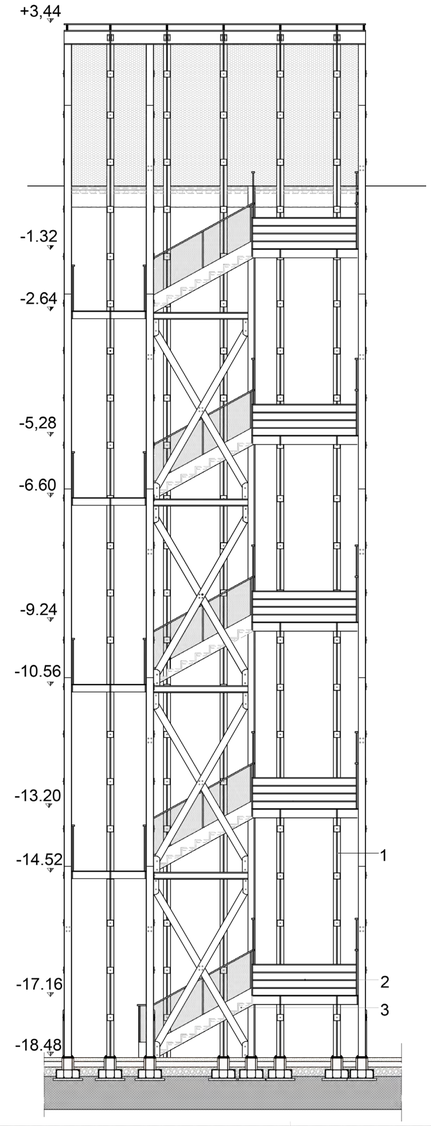
Section of the underground gardens

summer solstice 21/06/2021

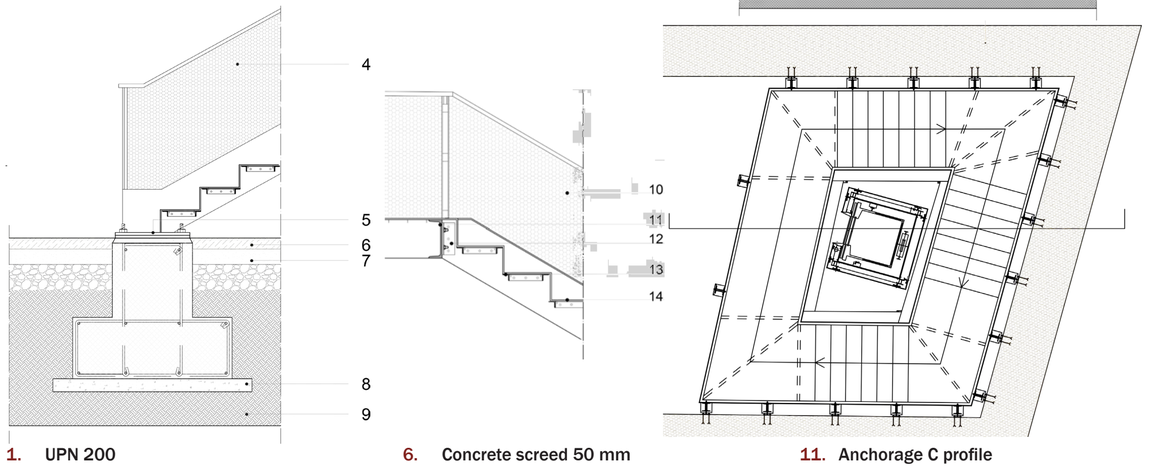








Replacement of windows, addition of internal thermal coat. External restoration of the building



1. UPN 200
2. Step in expanded metal 12-24-12 x 220
3. Double stringer in steel
4. Parapet in expanded metal.
5. Anchor plate
6. Concrete screed 50 mm
7. Gravel
8. Lean 100 mm
9. Ground
10. Parapet in expanded metal.
11. Anchorage C profile
12. Anchor plate
13. Bolted corner
14. Step in expanded metal

R E L A T I O N ”

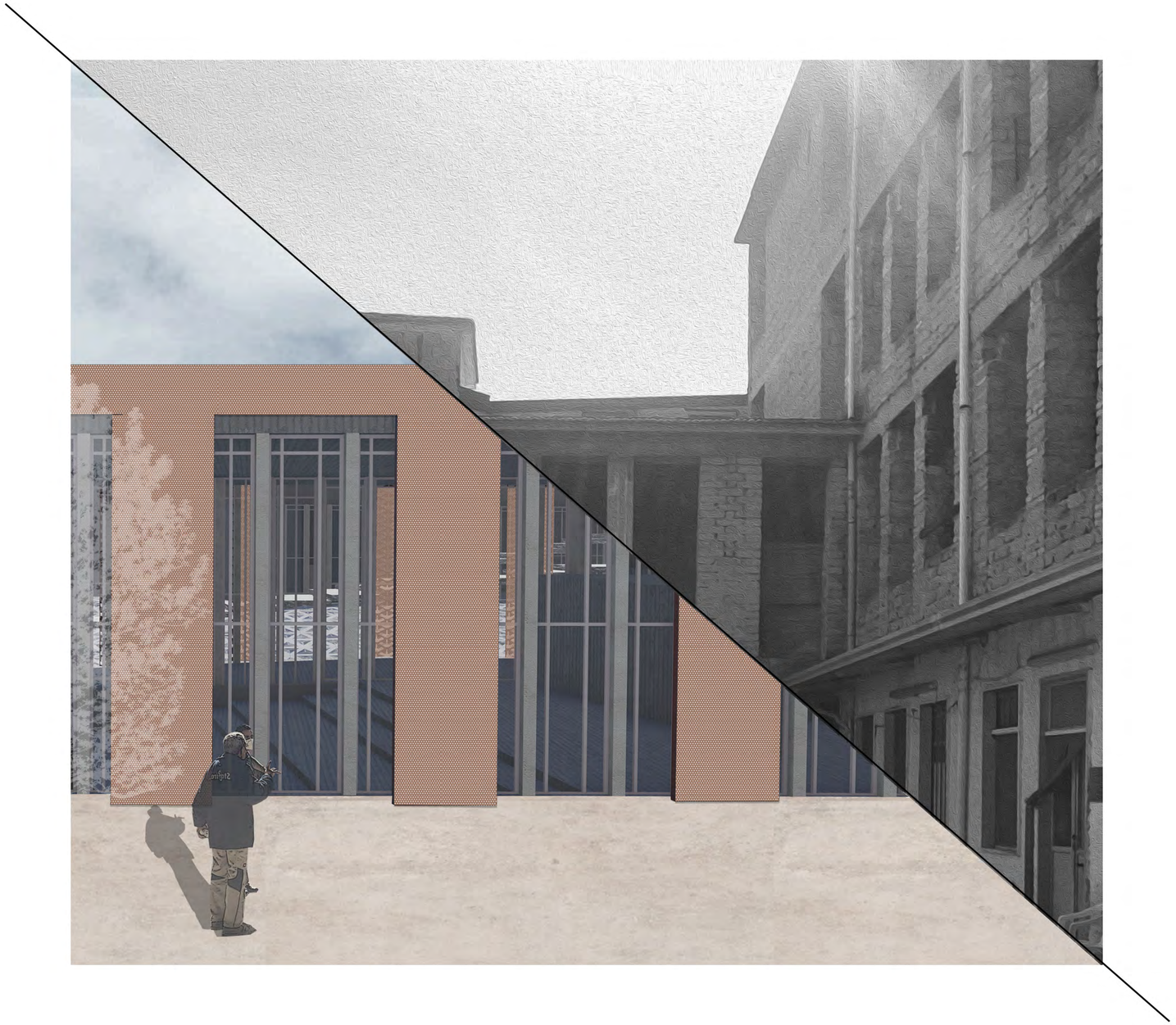
“Restart Atella” was born from the idea of recovering the current archaeological area of Atella, an ancient urban nucleus from the Roman era founded in 218 BC. Frattaminore, a municipality located north of Naples, an area on the edge of the dense urban agglomeration that makes up the Metropolitan City of Naples, was born in the area of ancient Atella. In contemporary times, the archaeological area that falls within the municipality of Frattaminore, Sant’Arpino and Orta di Atella appears as a large enclosed urban void and totally closed off from the city, the result of years of abandonment and degradation.

The aim of the project is to recover the archaeological area, placing the connection between the archaeological area and the neighboring municipalities, including Frattaminore, as a fundamental step. This work aims to investigate not only the persistence of places and artefacts that belonged to Atella, but also aims to integrate the archaeological area with the surrounding municipalities, which with the continuous territorial expansions have forced the area into an impenetrable perimeter. Therefore the objective of the project is to create a connection network between the archaeological area and the whole surrounding area including the municipality of Frattaminore, through a system of centrality, highlighting the main points of the territory. In this system of centrality, the concept of margin or periphery no longer exists, but a large system of connections.

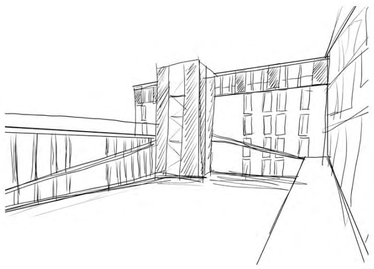
Program

Urban regeneration, public facilities, services, green spaces, infrastructures.

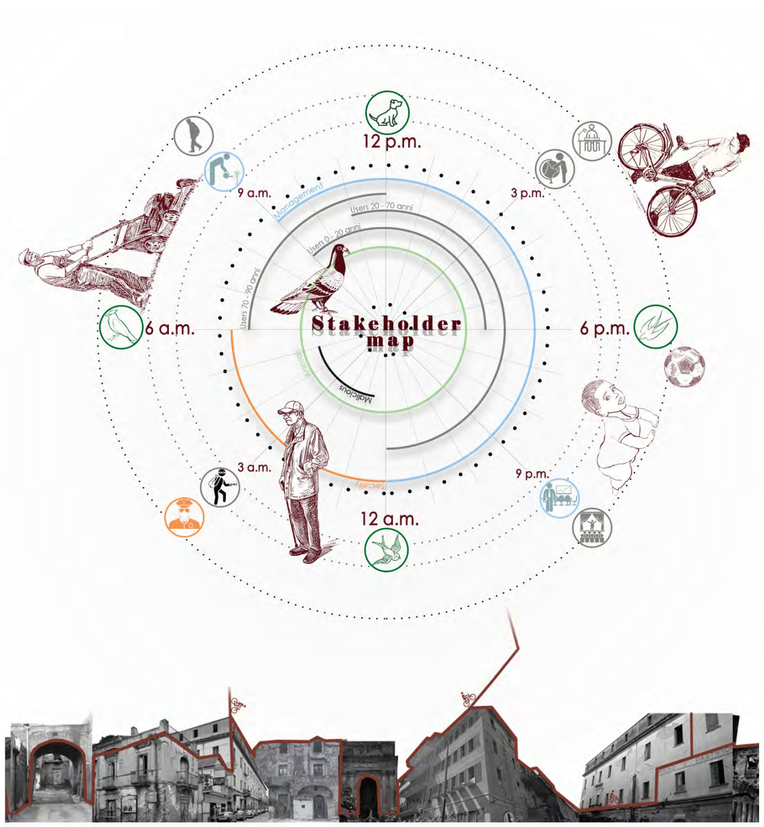
Covered area	**3265 m²**
Outdoor area	**5896 m²**
Above-ground floors	**3**
Built volume	**5768 m³**
Estimated cost	**€ 2.124.367**

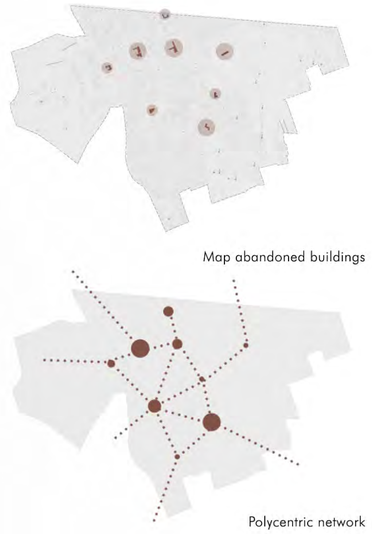


The city is sometimes a place of memories and memories of the past, it is our job to reconnect the memories with the places.



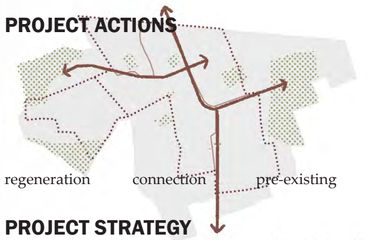
The project moves from a geographical scale and reasoning to an architectural scale with particular regard to the building of the ex retirement home, located in Via Sant'Anna, a few steps from the historic centre of Frattaminore. The aim of the multi-scalar approach is to map the abandoned areas of the municipal territory, keeping them connected and related through the mobility network, a tourist-cycling route which, by integrating itself with the one already provided for by the municipal urban plan, aims to keep the places strongly connected, designing in each of them social places for public use, integrating, moreover, the several private courtyards present on the site. The result is a polycentric network that creates a circularity of paths allowing access to the different buildings of the urban regeneration space system.



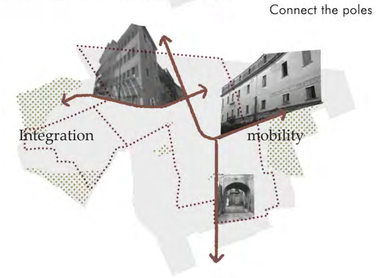


Map abandoned buildings

Polycentric network



Connect the poles

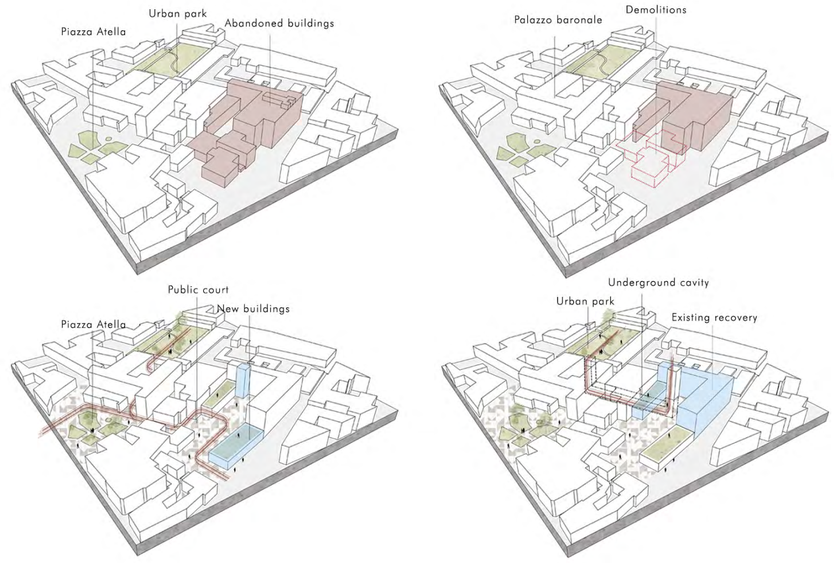


Recovery map

The building in question is located in a strategic position, a close to the archaeological park of Atella. It was underlined strong relationship between building and park putting in first plan their connection by an axis of link. The first action design has as its theme founding connection with the park across a long axis of reference; the building is the initial point of the axis that gives direction to the same following the ancient locations of the territory. The second action the design has as its founding theme the internal square considered as a place urban open to the city and closely related to the road.

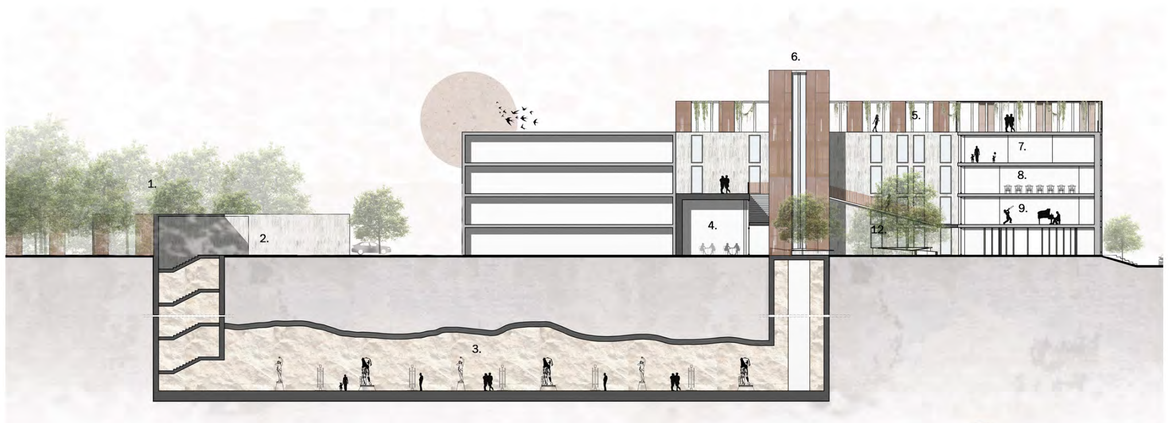
FRATTAMINORE THE PROJECT IN THE URBAN CONTEXT

0 20 50 100m



GROUND FLOOR PLAN +1.5

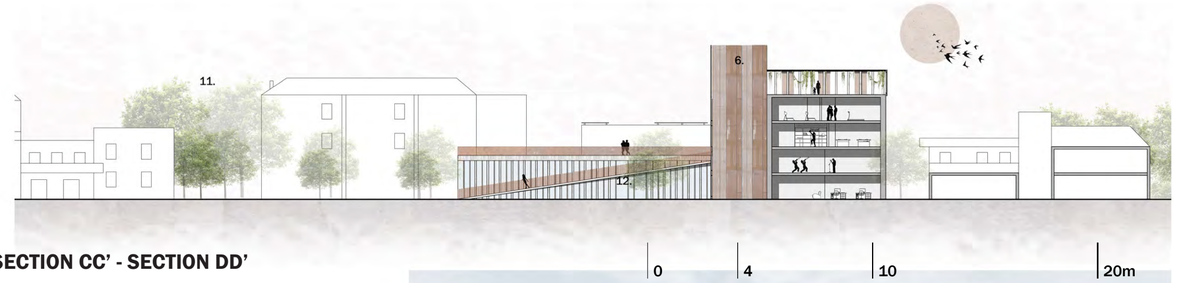
0 10 25 50m



SECTION S.1'

0 4 10 20m

SECTION BB



SECTION CC' - SECTION DD'

0 4 10 20m

Court view

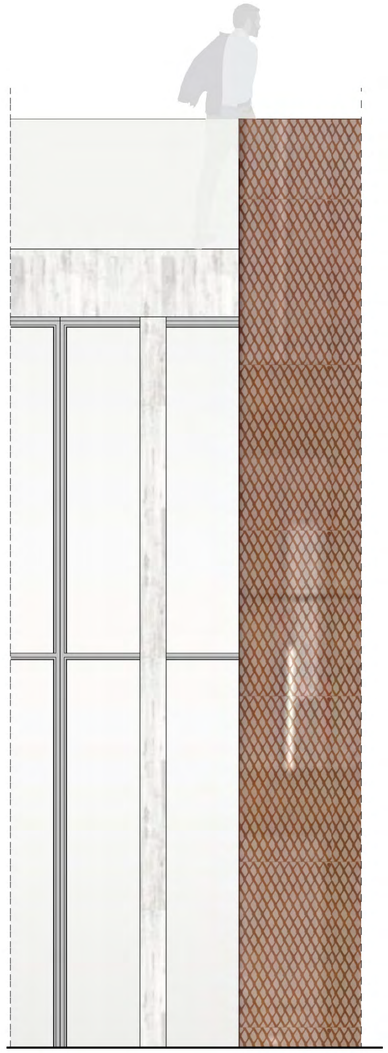
Museum view

Tower view

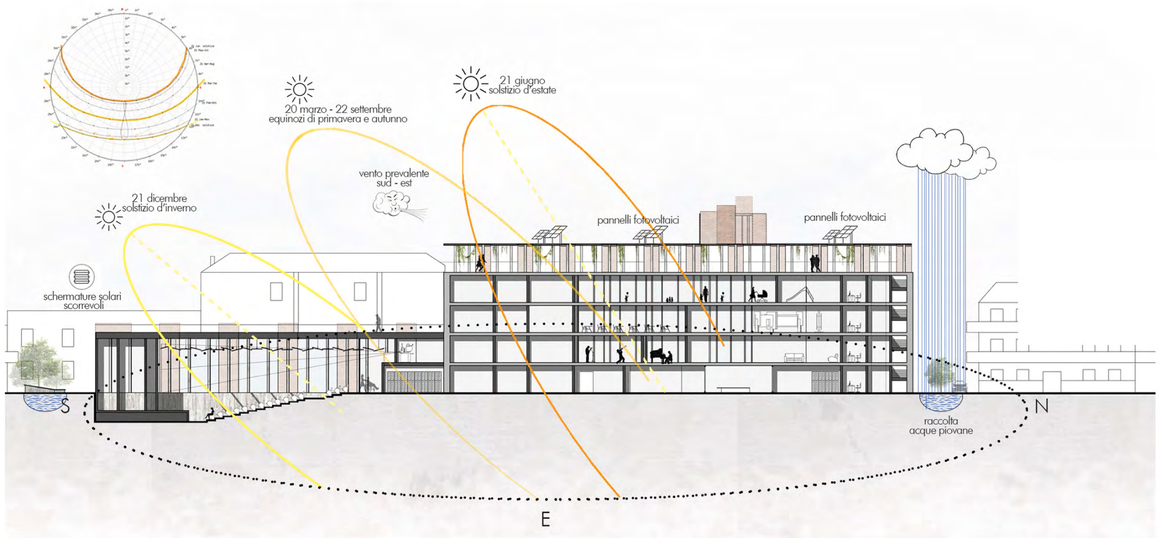
AXONOMETRY

GALLERY VIEW

COURT VIEW



DETAIL SCALE 1:20



ENVIRONMENTAL SECTION

A. lightened concrete panels, completion casting, waterproofing membrane, rock wool insulation, waterproofing membrane, lightened concrete screed, perforated brick, prestressed joists, plaster, plasterboard panels

U = 0.24 W / m2K

B. lightened concrete screed, crawl space ventilated by means of an igloo, concrete completion casting, rock wool insulation, waterproofing membrane, coated aluminum foil, half floor heating, PVC flooring.

U = 0.36 W / m2K

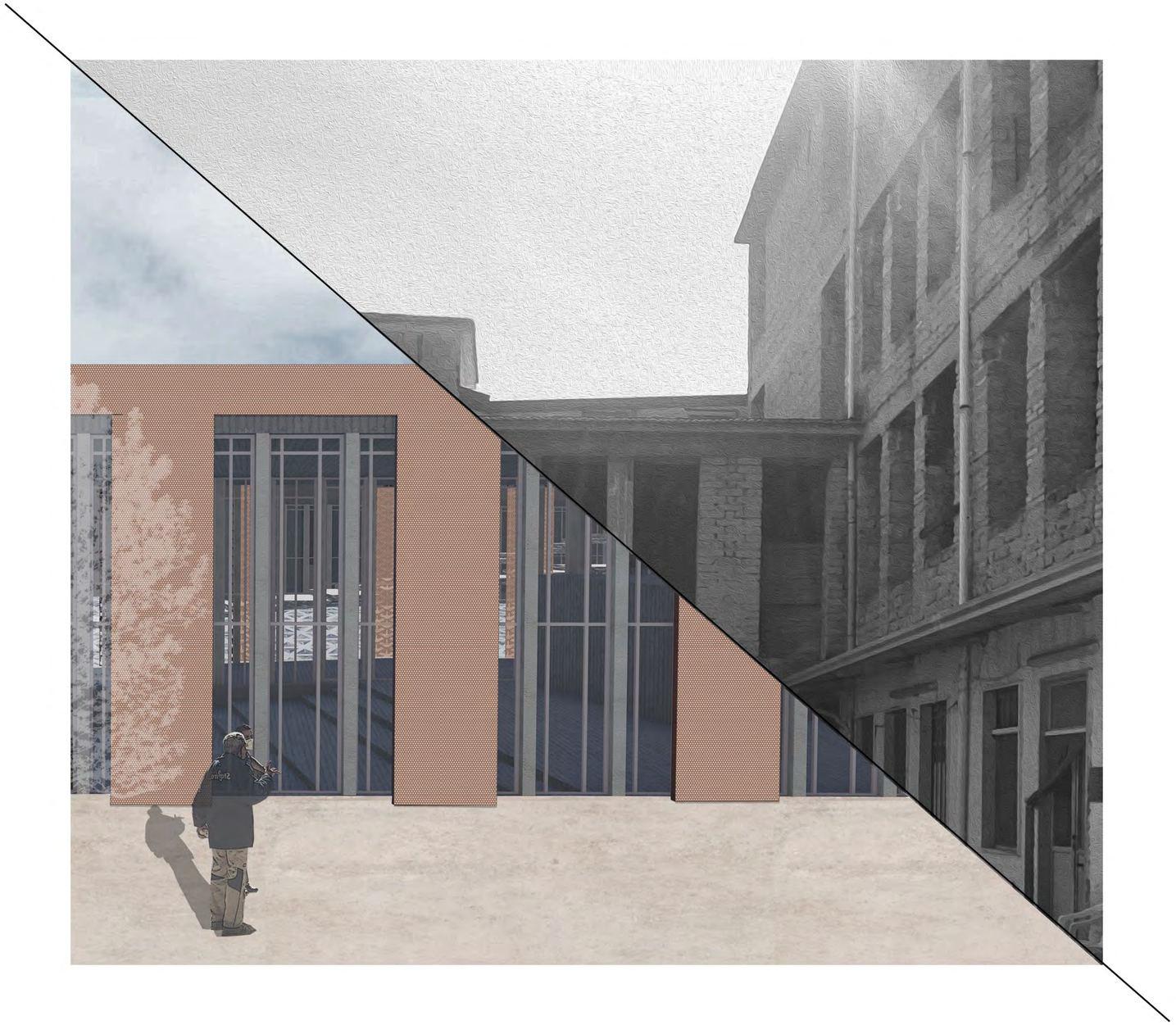
C. sidersen polycarbonate panel

U = 1.30 W / m2K

D. lightened concrete panel, perforated brick, rock wool insulation, against plaster walls, plaster U = 0.18 W / m2K

PLAN AND SECTION MUSEUM SCALE 1:50

"Re-creo" comes from the idea of proposing innovative projects for the recovery of existing abandoned spaces. Frattaminore, a municipality located in the north of Naples, an area on the edge of the dense urban agglomeration that constitutes the Metropolitan City of Naples, was founded in the area of ancient Atella. The historical origins of the municipality are still felt by its inhabitants, so much so that they remark the presence of two historical centres: Pomigliano d'Atella and Frattapiccola. And it is precisely in the historical centre of the municipality that there are many buildings, now ruins, in a state of complete abandonment. The image that emerges is, therefore, a town that continues to expand like wildfire, with new buildings close to the few existing countryside areas, and a displacement of the historic nuclei. The aim of the project is to rehabilitate the existing buildings without consuming land; to work on places, transforming residual spaces into public spaces of proximity, recalling the need and urgency to provide the city, especially the marginal areas, with a number of significant places for the community, accessible and usable by all. Furthermore, it was very important to listen to the people who live there, quoting Henri Lefebvre's words - "the possibility for everyone to benefit from the goods constituted by the urban organisation of the territory, and the equal possibility for everyone to participate in decisions on transformations".

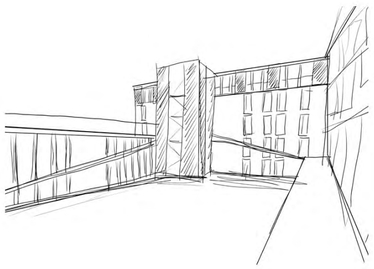


Program

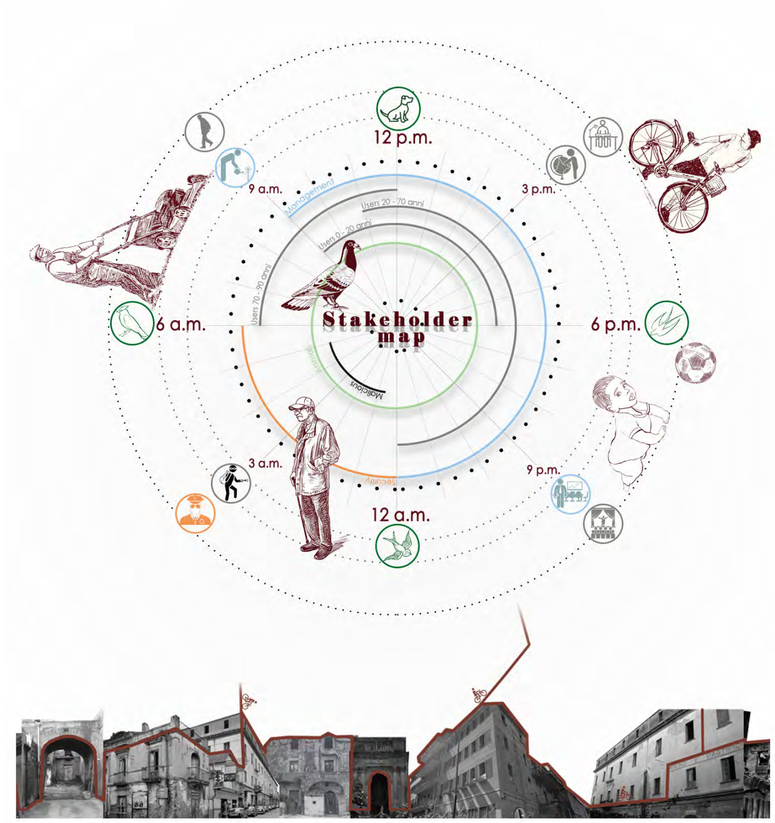
generation of brownfield sites, public facilities, amenities, green spaces, city community centre

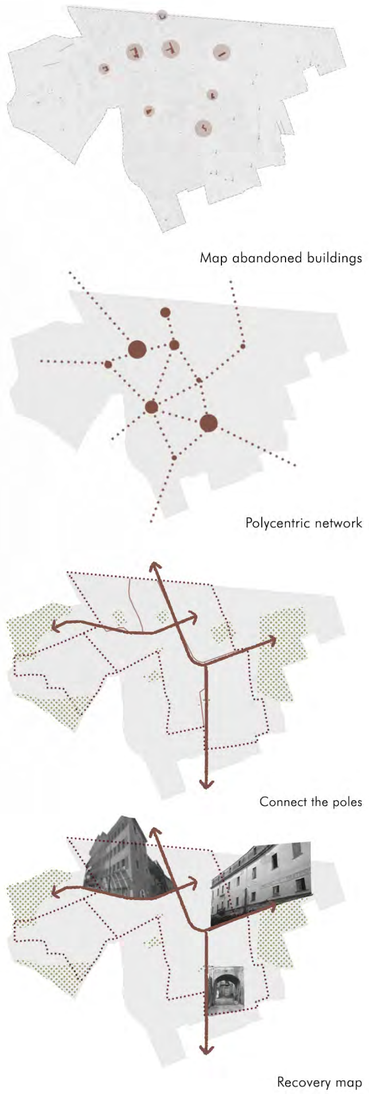
Covered area	2230 m²
Outdoor area	4896 m²
Above-ground floors	5
Built volume	5768 m³
Estimated cost	€ 2.312.388

“ Thinking that in the city there are spaces and places of public use but not necessarily of public property is a perspective that should be explored”.



The project moves from a geographical scale and reasoning to an architectural scale with particular regard to the building of the ex retirement home, located in Via Sant’Anna, a few steps from the historic centre of Frattaminore. The aim of the multi-scalar approach is to map the abandoned areas of the municipal territory, keeping them connected and related through the mobility network, a tourist-cycling route which, by integrating itself with the one already provided for by the municipal urban plan, aims to keep the places strongly connected, designing in each of them social places for public use, integrating, moreover, the several private courtyards present on the site. The result is a polycentric network that creates a circularity of paths allowing access to the different buildings of the urban regeneration space system.

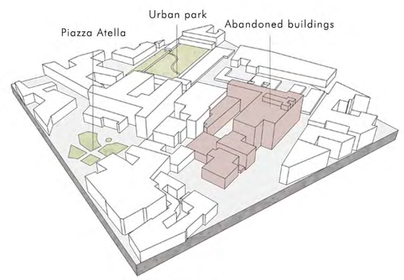


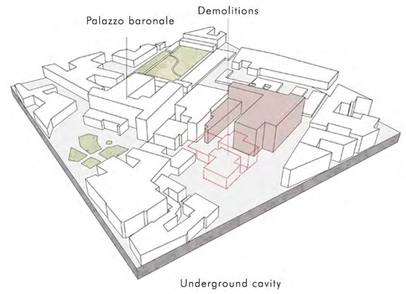


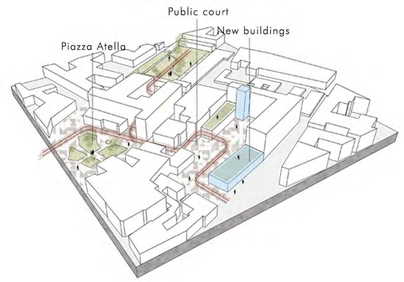
The building in question is located in a strategic position, close to Piazza Atella and the Publio Virgilio Marone urban park. The strong relationship between these elements has been emphasised by highlighting their connections. By means of small punctual demolitions of ruins, the inner courtyard of the building is made into a unicum with the urban square. The second project concerns the regeneration of one of the many historical underground cavities in the municipal area. It is projected as an exhibition gallery and allows a direct connection with the urban park, bypassing the row of buildings that make the park inaccessible from Via Sant’Anna.

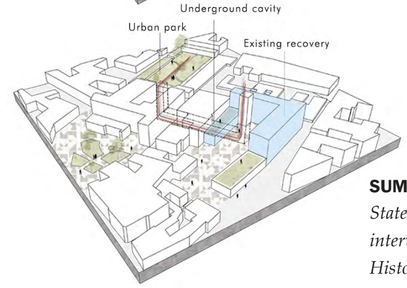
FRATTAMINORE THE PROJECT IN THE URBAN CONTEXT

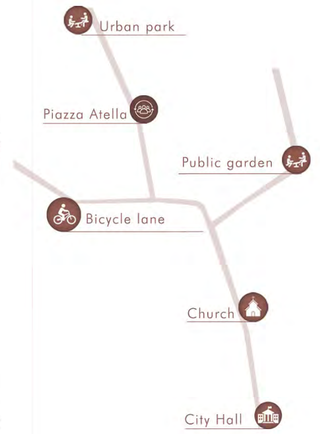
0 20 50 100m











SUMMARY OF THE PROJECT ACTIONS

State of the place; Punctual demolition interventions; Connection with the urban square; Historic hypogeum recovery

1. Urban park “Publio Virgilio Marone”

2. Park service

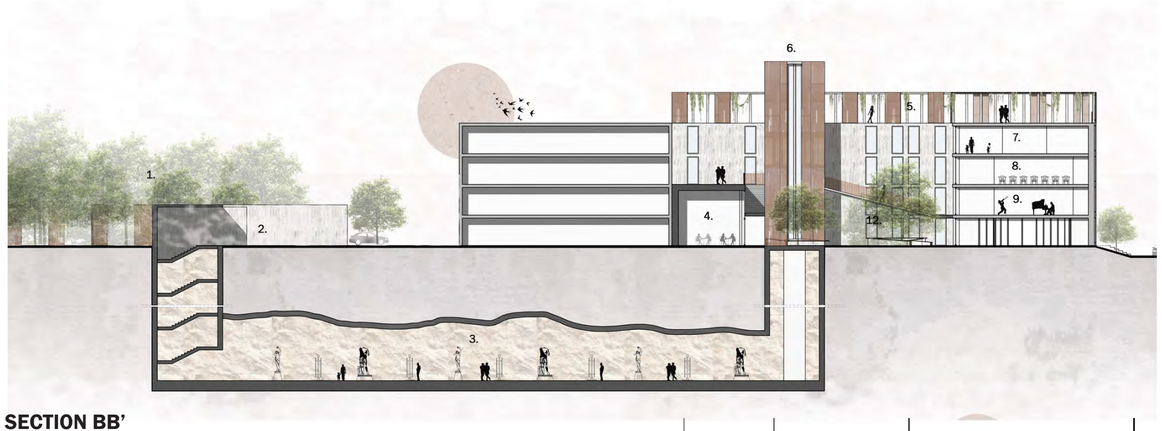
3. Parking area

4. Public internal court

5. Entrance from piazza Atella

6. Entrance frome via Sant’Anna

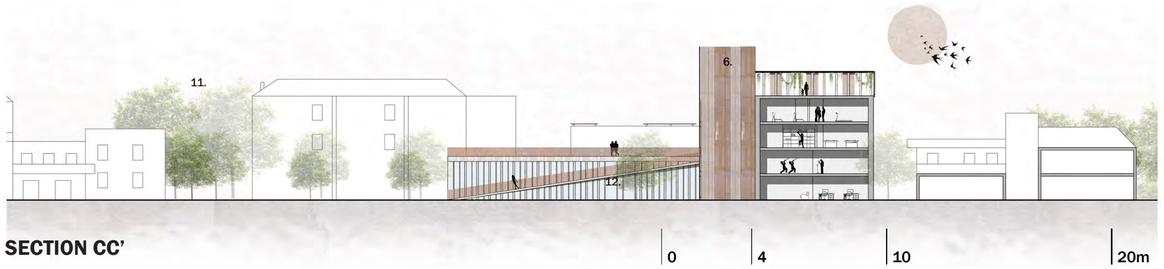
GROUND FLOOR PLAN +34.5



SECTION BB’

1. Urban park
2. services
3. Underground cave
4. Snack bar
5. Terrace
6. Vertical connection
7. Library
8. Free-WI-FI space
9. Musical workshop
10. Entrance from Sant’Anna street
11. Atella place
12. Public court

EASTERN FRONT



SECTION CC’

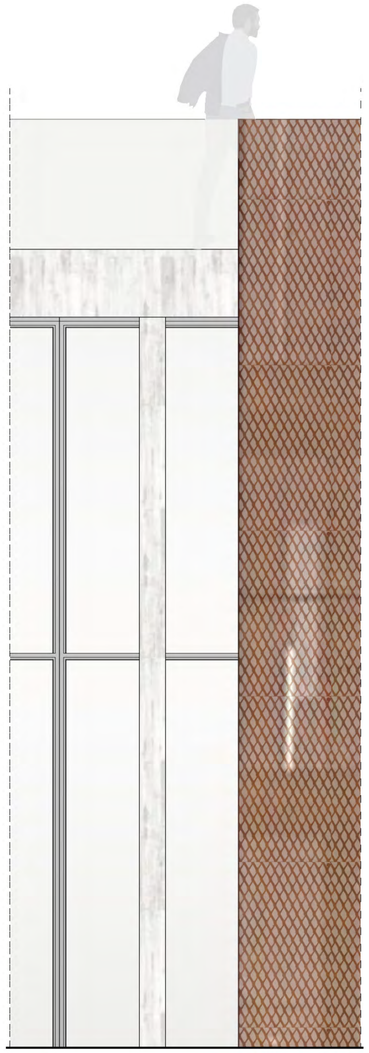
State of the place

Volumetric subtraction

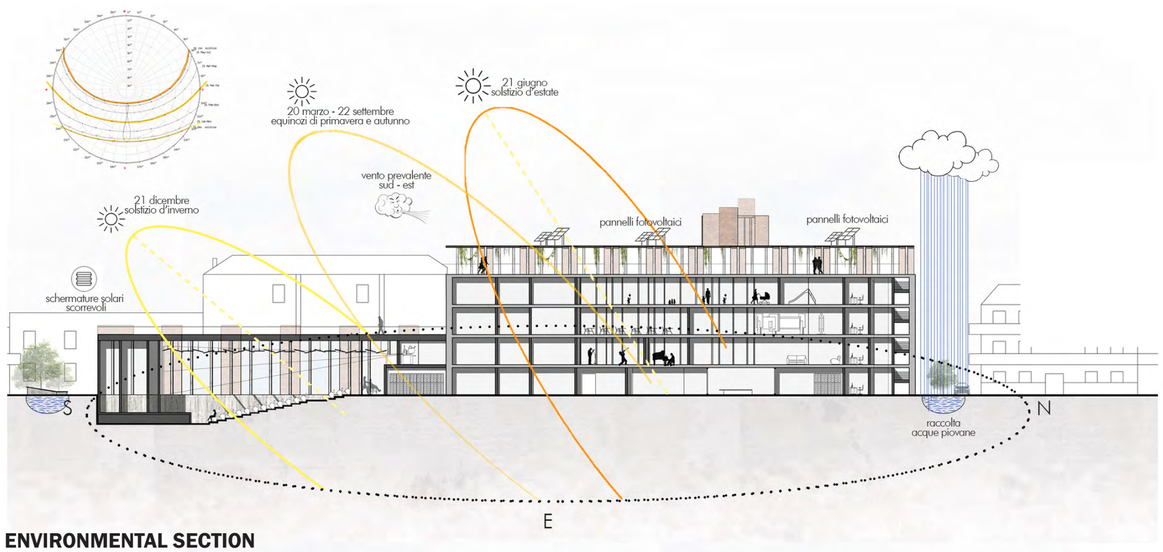
Volumetric additions

PUBLIC INTERNAL COURT VIEW

PANORAMIC TERRACE



DETAIL SCALE 1:20



ENVIRONMENTAL SECTION

A. Horizontal cover package with green elements consisting of: fabric acoustic panels, collaborating corrugated sheet, expanded clay screed, thermal-acoustic insulation in XPS and “Floradrain” drainage system in self-locking concrete blocks.

U = 0.33 W / m2K

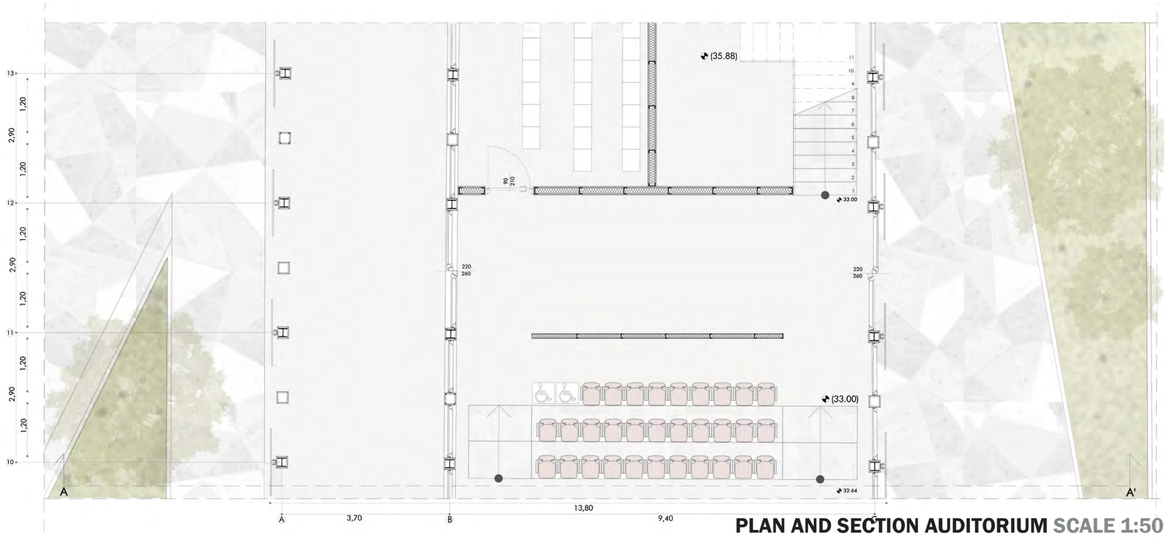
B. Lower horizontal closing package consisting of: corrugated sheet with concrete casting, XPS thermal - acoustic insulation panels covered with a concrete screed.

U = 0.31 W / m2K

C. Vertical transparent enclosure consisting of: “Pilkington Solar - E” type structural glazing and sliding sun screens.

U = 1 W / m2K

Fs G = 32%



PLAN AND SECTION AUDITORIUM SCALE 1:50

BEATRICE MARIOSA - NOT IN RUIN BUT IN PROGRESS

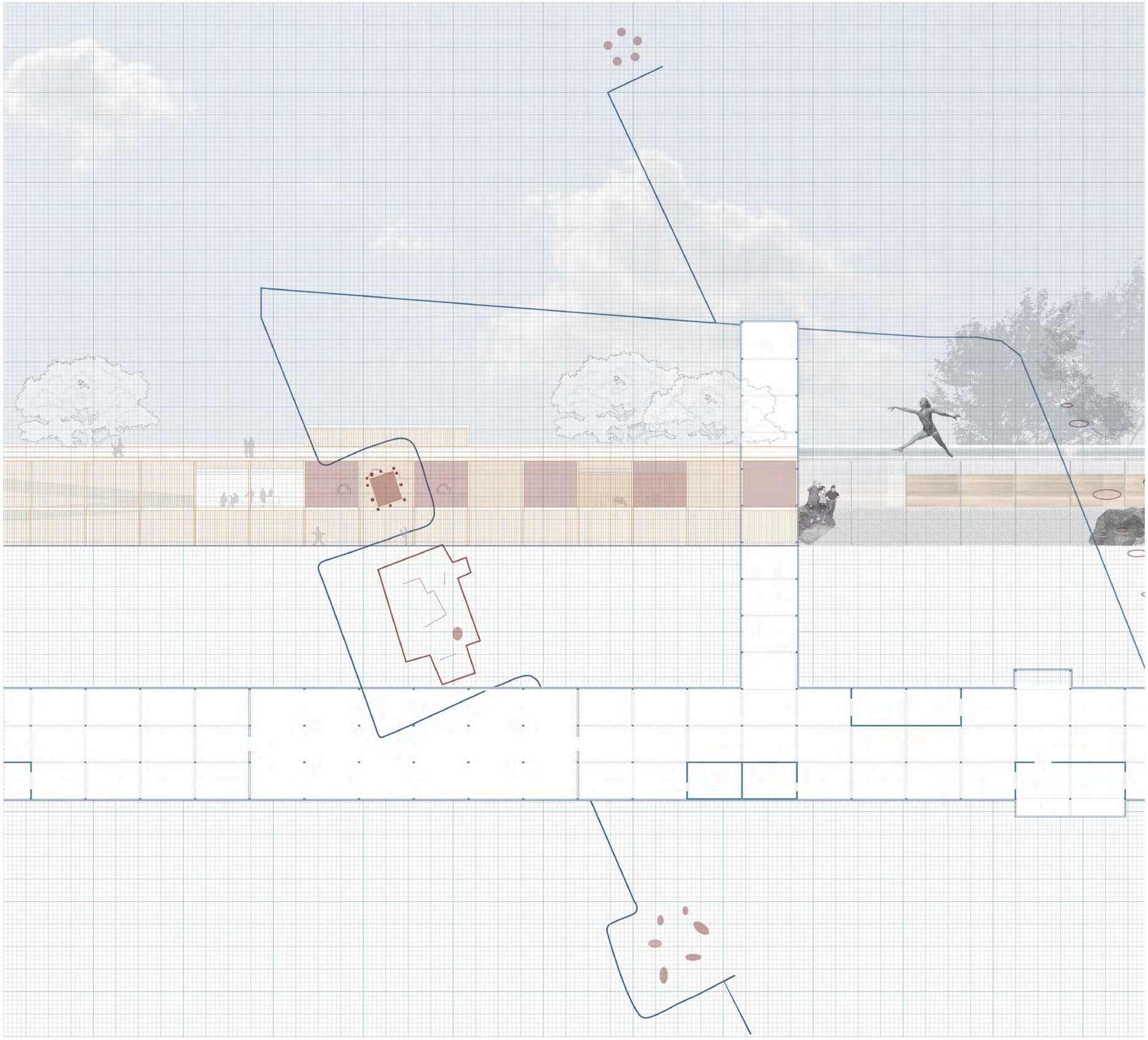
ARCHAEOLOGICAL SITE IN THE EDGE OF FRATTAMINORE AS AN OPEN AIR MUSEUM

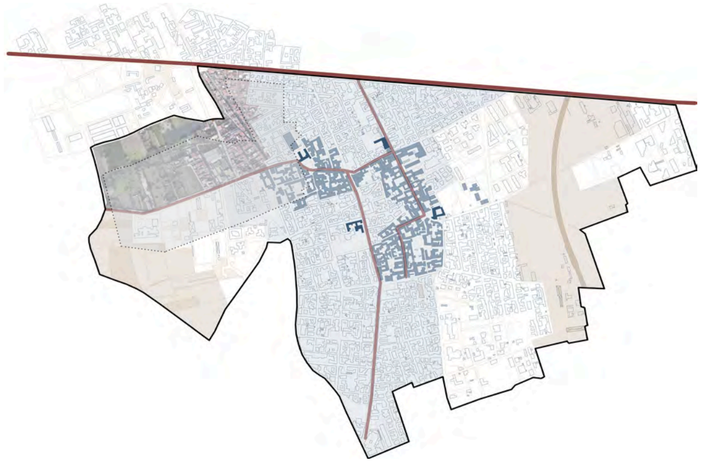
Not in ruin but in progress was born from the idea of grafting a new concept of archaeological park into the territory of Frattaminore, a real construction site in progress as an open air museum.
The project starts from the study of the archaeological area, bound according to the PUC, located in the northwestern area of municipality of Frattaminore, on the border with Sant'Apino, with the aim of enhancing the archaeological fabric present on the territory and what potentially be there.
The archaeological site is a key space within the project, it causes two pieces of the puzzle of the Atellano scenario come together, that is the border between Frattaminore and Sant'Arpino which becomes a porous edge. . Thanks to a mapping of the archaeological essays made starting from the 1960s, it is foreseen which excavations will take place in the park and which will be placed, all in a double declination of the area seen as an open air archeological museum in progress and as an agricultural park.
Deepening the historical maps it was possible to intercept the trace of the ancient walls of the ancient walls, hence the desire to graft a building into the territory that could evoke this and to make it the cornerstone of this new museum pole, but also a connection among the other two buildings, a museum and research center.
The three buildings are grafted into the territory and have the purpose of being filter between the future archaeological condition, the agricultural vocation and historical fabric on the eastern edge of the perimeter of project. These three buildings do not want to be a further fragment affixed to the territory, but a sistem that restitch and connect existing date. in an open-air museum center.

Program

archeological site, research center, walkway wall, museum

Covered area	**9631 m²**
Outdoor area	**197.953 m²**
Above-ground floors	**2**
Built volume	**87045 m³**
Estimated cost	**43.756.940 €**



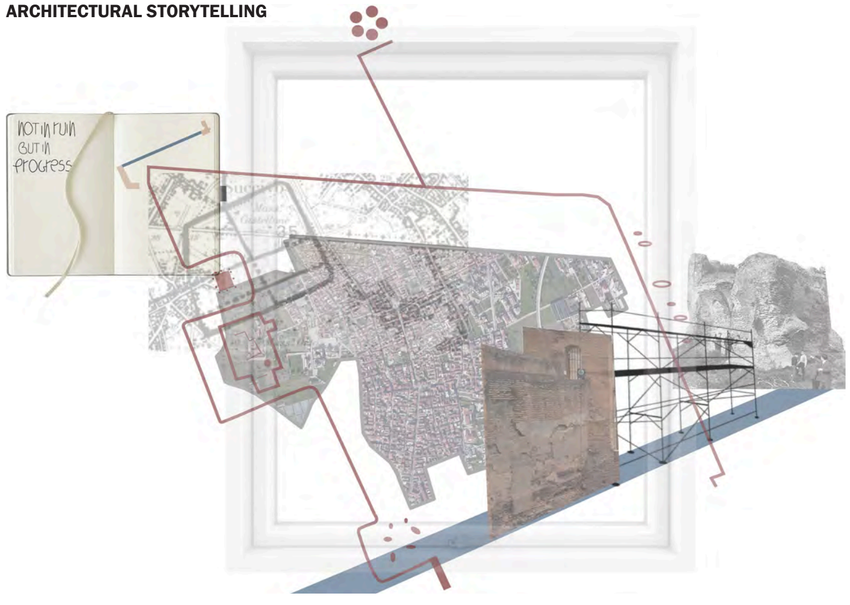


PLANNING REGULATION

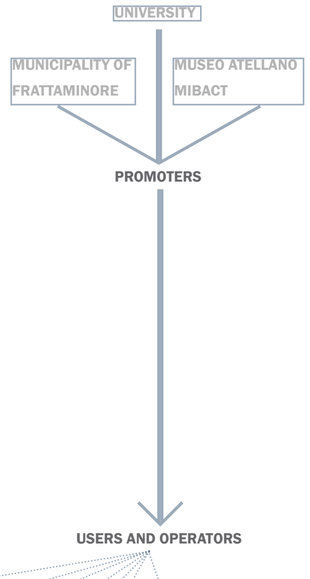
- Archaeological constraint
- Municipal borders
- Historical traces
- Suburban road SS87, ancient road
- City in formation
- Estabilished city
- Historical buildings
- Rural and productive landscape

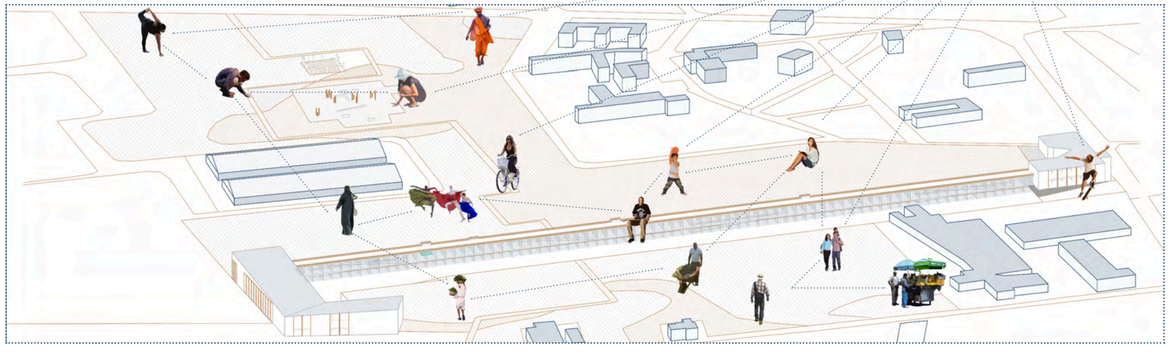
REFERENCE MAPPING

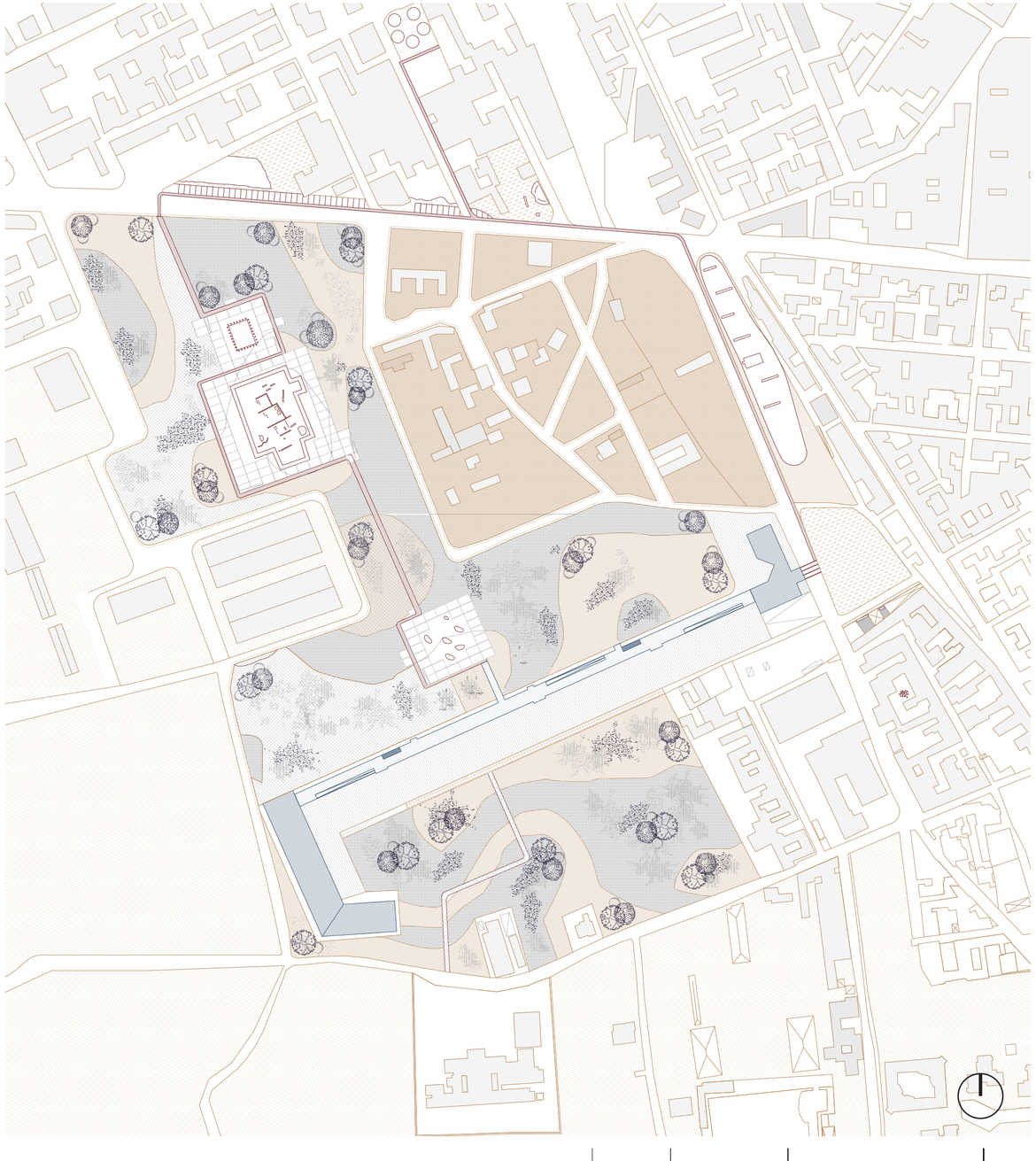
ARCHITECTURAL STORYTELLING



STAKEHOLDERS

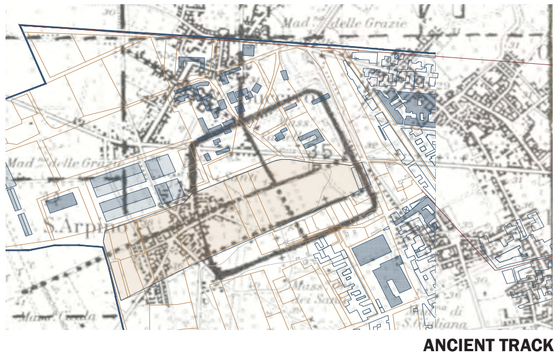




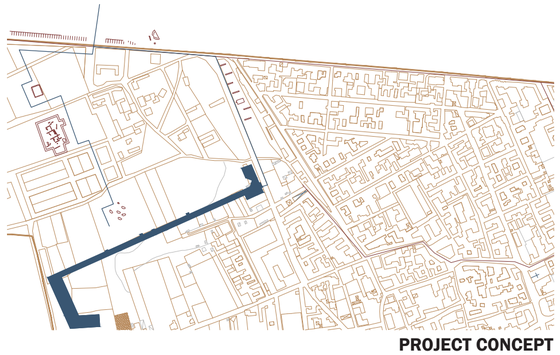


MASTERPLAN ARCHAEOLOGICAL AREA

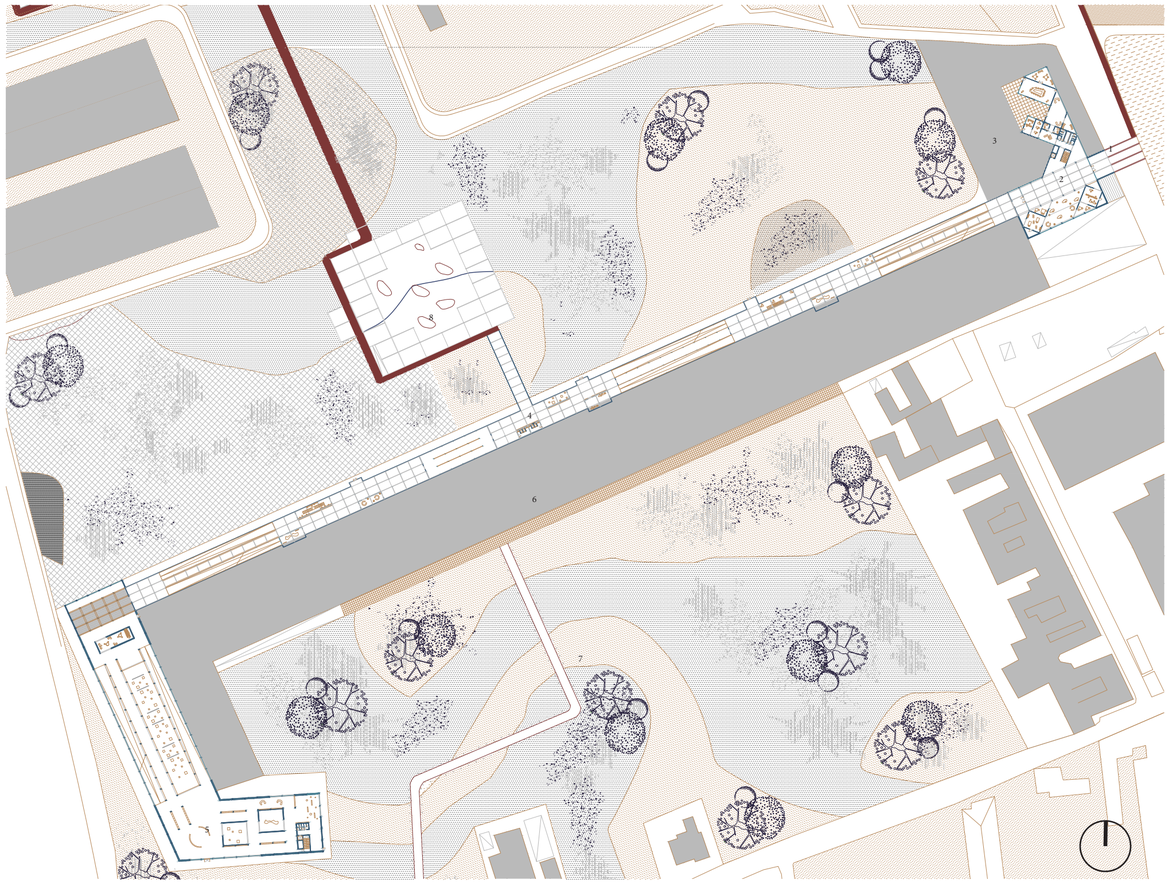
0 20 50 100m



ANCIENT TRACK



PROJECT CONCEPT

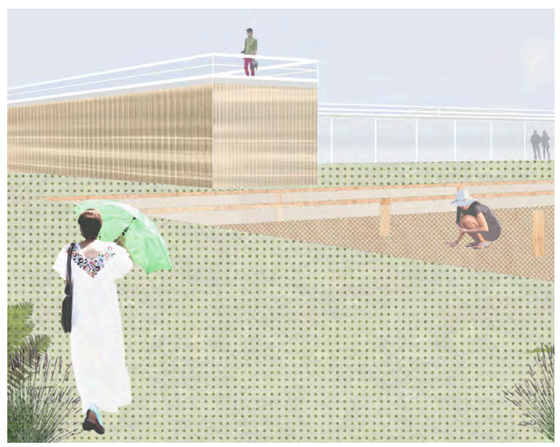


PROJECT MASTERPLAN

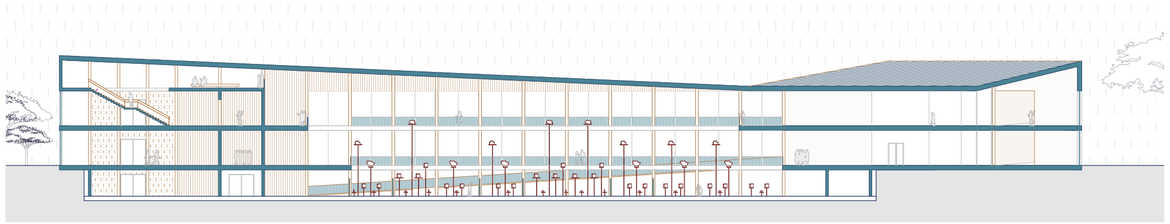
0 10 25 50m

1. Access by Frattaminore
2. Research center
3. Square
4. Evocation of the wall
5. Contemporary antiquarium
6. Underground walkaway
7. Agricultural park
8. Archeological site

EVOCATION OF THE WALL

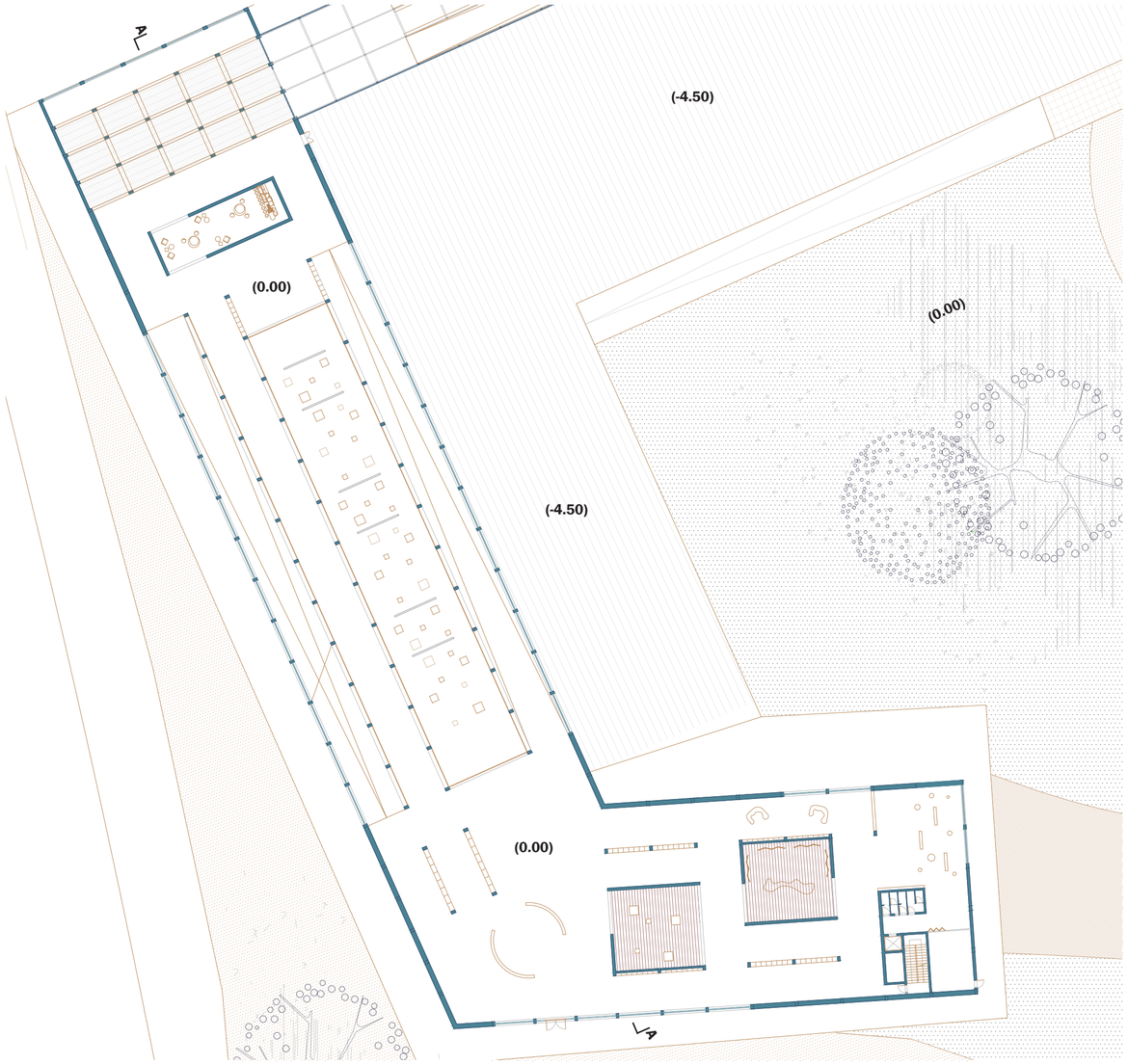


ARCHAEOLOGICAL SITE IN PROGRESS



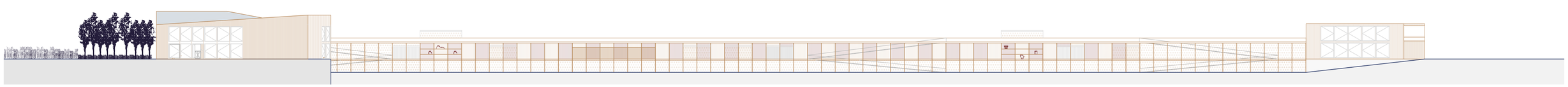
SECTION A-A

0 10 25 50m



PLAN

0 10 25 50m



TERRITORIAL SECTION

0 4 10 20m

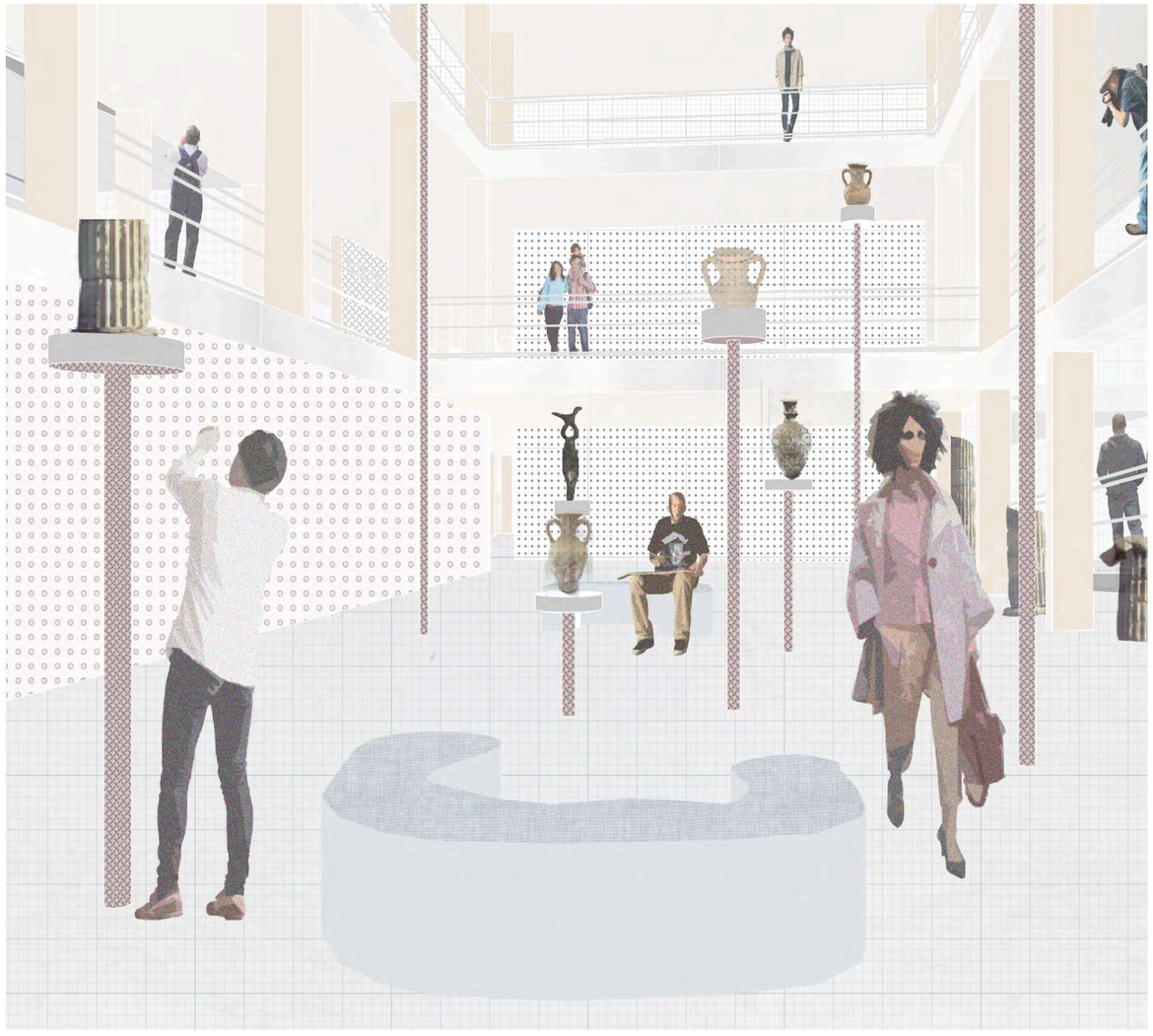
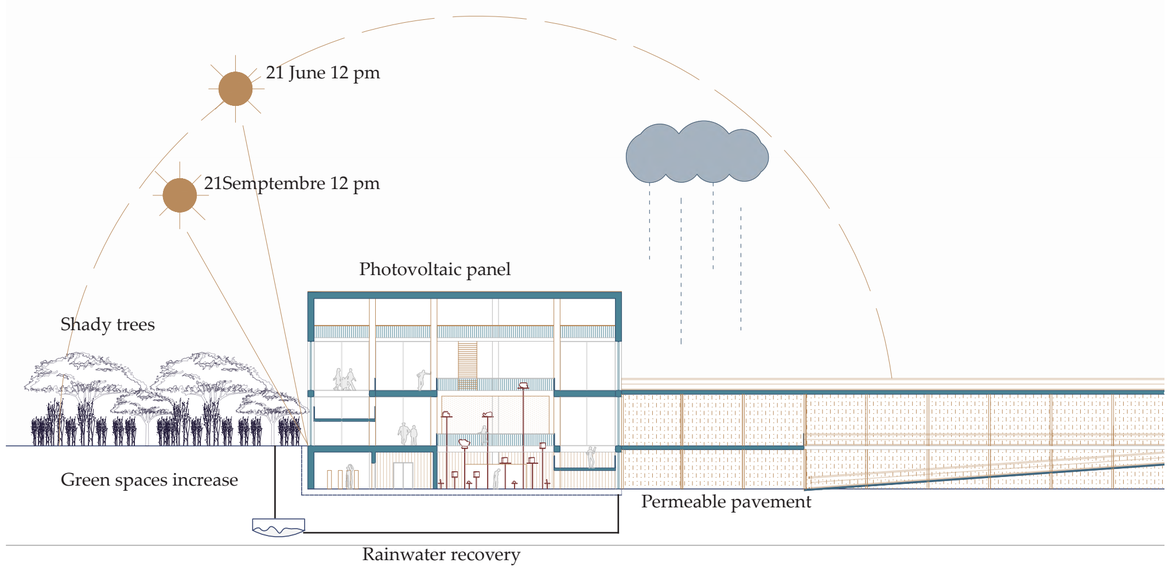


EXHIBIT OF ATELLAN REMAINS



ENVIRONMENTAL SECTION

EXTERNAL ROOF

Stretch ceiling, IPE 200 beam, corrugated sheet, insulation, sloping screed, bituminous sheath, pebbles.

U=0,31 W/mqk

INTERNAL ROOF

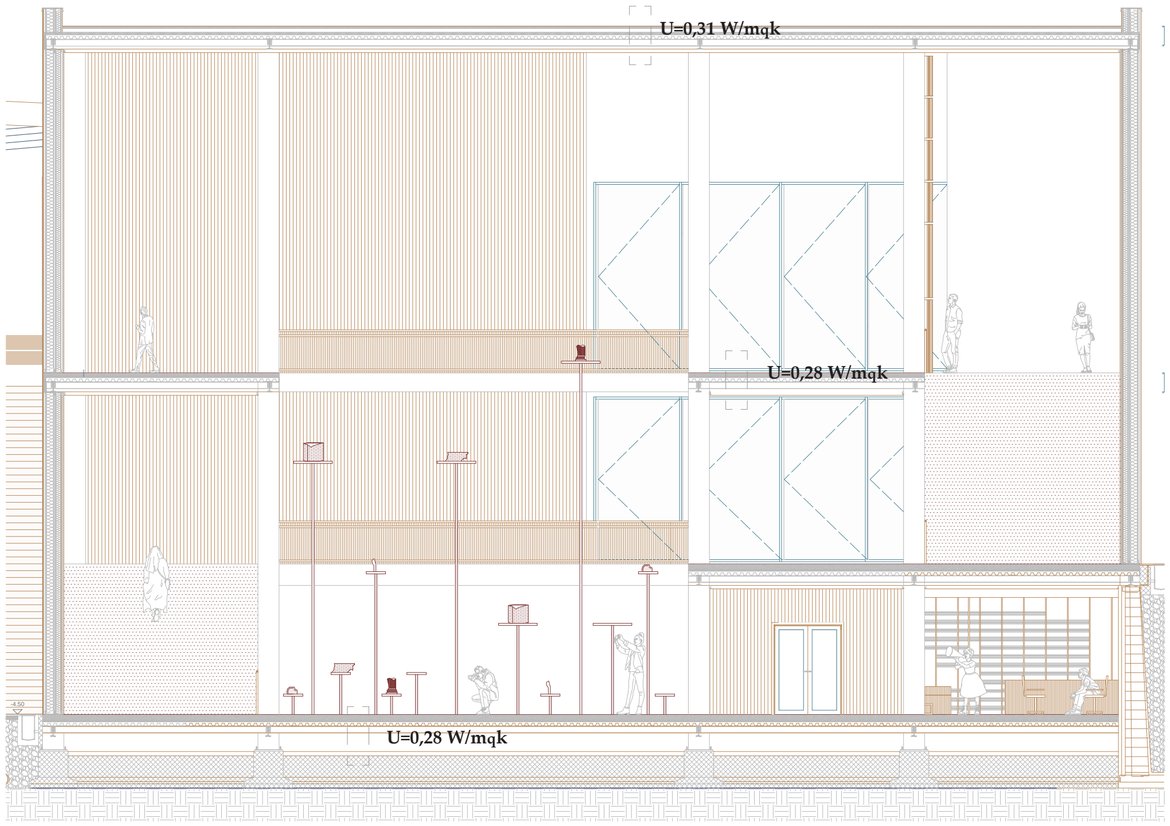
Stretch ceiling, IPE 200 beam, corrugated sheet, insulation, resin floor..

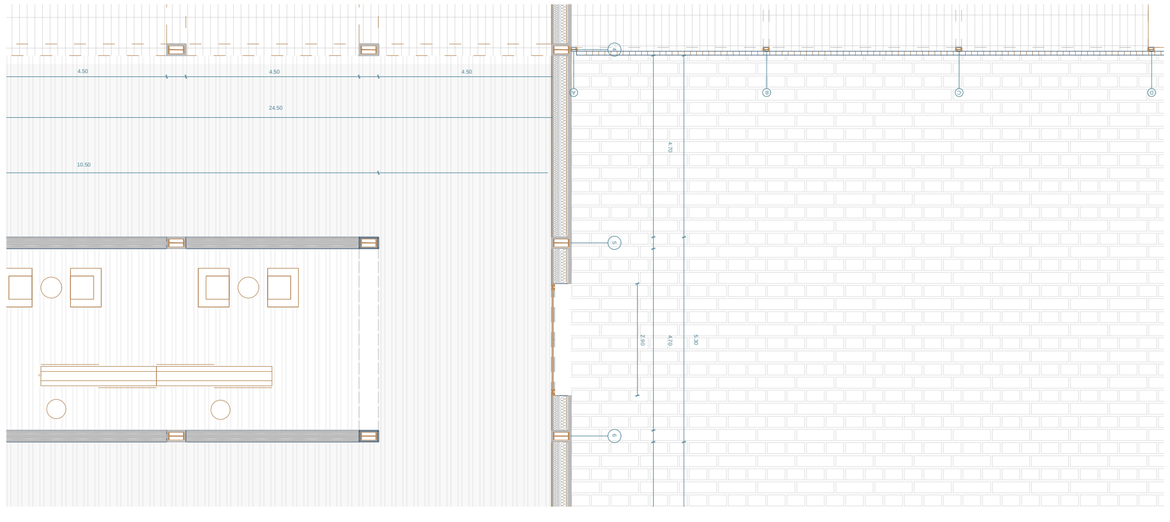
U=0,28 W/mqk

FOUNDATION ROOF

Ground, bed concrete, air chamber, anchor plate, Hea 500 pillar, IPE 200 beam, corrugated sheet, insulation, resin floor..

U=0,28 W/mqk





INDOOR/OUTDOOR RELATION SCALE 1:100

FRATTAMINORE ADVANCED DESIGN STUDIO

GIUSEPPE MARIA MARRA-HOUSING/MOBILITY /ARCHEOLOGY

A NEW POLE FOR FRATTAMINORE

Everything starts with a little tour of the city, focused in my case on the fields around the archeological area. The enviroment is flat,barren, and without reference points. Reaching the archeological area is such a venture and almost all the dirt roads around it are, at a certain point closed or impassable. The project idea starts with that awarness. In particoular it started retraining and reconnecting the old links with new ones. The second goal to reach was to undertake a functional program that could fit with the city's enviroment and economy. The choiche made was first to create strctures supporting the new links of sustainable mobility , absorbed into a big plaza , close to the ancestral sign of the old wall of Atella, then assist it with a mixed use block (housing/commercial), that connects with the built city. Last but not least the facilities consisting of a restaurant, an info point and the program supporting the archeological area, made of a small museum composed of two sharp and glazed blocks. In order to melt all these functions was previded some public walks and areas inside the mixed use block, supported by big ramps , made to reach the first floor and the piazza ground floor, and also a walk under a cantilever roof that passes trough all the piazza's buildings. Above and beyond the old and consolidated notion of Archeological Area, the purpose is to create an inclusive, functional and feasible blob for the city of Frattaminore, strictly linked with the old Atella.

Program

Mixed use building, mobility and archeological facilities, urban gardens

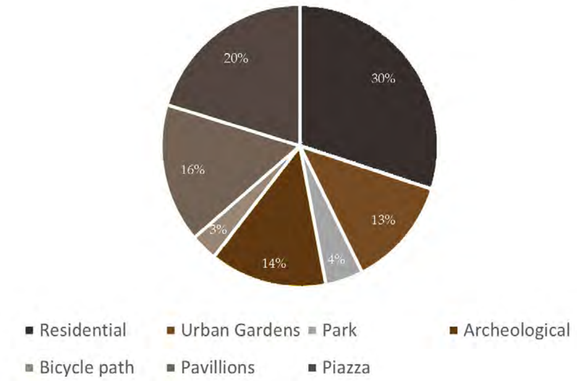
Covered area	**7322m²**
Outdoor area	**125998m²**
Above-ground floors	**1**
Built volume	**36328m³**
Estimated cost	**14.275.723€**

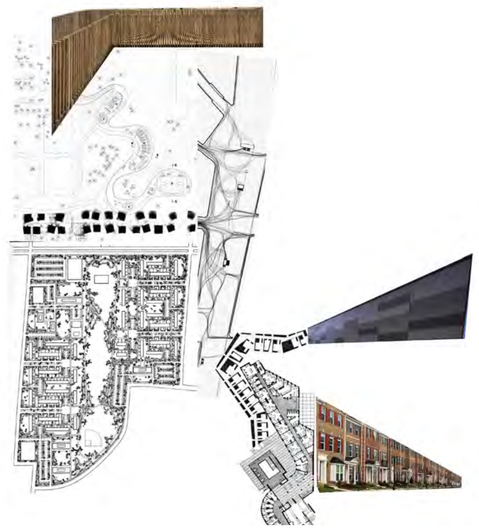
Strategy: observ the urbanistic plan of Frattaminore for the mixed use block and disregard it in part to insert inside the foreseen park are new buildings in order to pursue a wide open strategy, not enslaved by the plan.

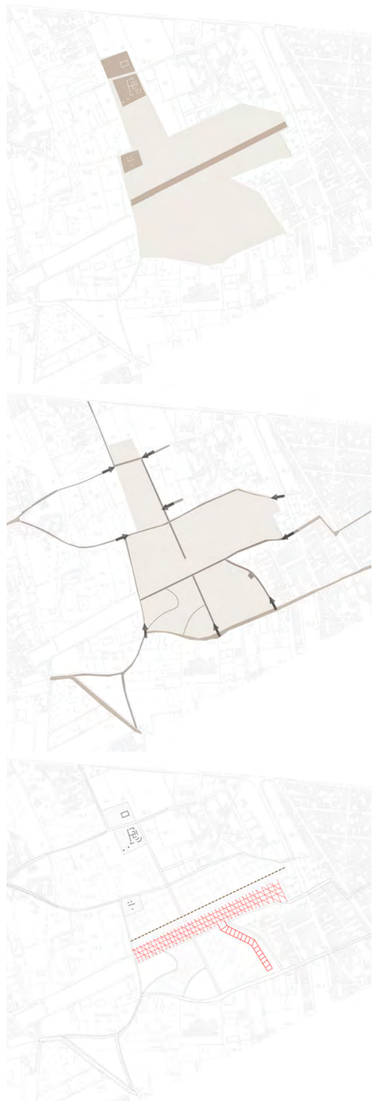
All architects have to deal with urban regulations and plans. We did it but playing with it and taking some permits. The project area had from scratch some abstract and concrete borders and these were involved in the discourse taken. We remind the abstract borders of the plan and respect bands and concrete ones of the old wall of Atella and the boundaries of the built enviroment. Also we had to deal with routes, as we said before. All these elements convey to the form and the function of the project. Pragmactically the flow was done this way:

- Border the area
- Evaluating the Urban plan
- Retrain existing paths
- Creating new paths
- Adding a new volume in continuity with the existence
- Multiplicate and fragmentate the new volumes

ECONOMIC VALUE OF THE INVESTMENT (%)



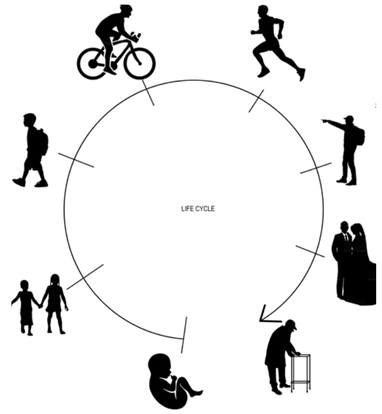




REFERENCE MAPPING

A collage of the references used to compose the project, reassembled in order to re-design a conceptual urban plan.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m

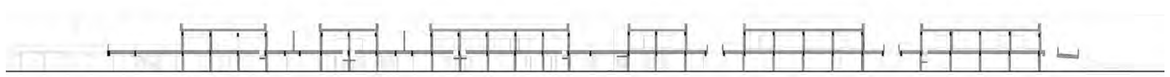


STAKEHOLDERS(UP) - LOGO (LEFT)

A circular way of seeing the stakeholders(up).The picture that became the logo rapresents the whole project in one picture:-path-buildings-park(left)

DESIGN STRATEGY

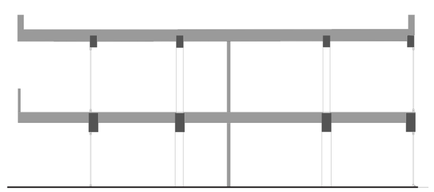
0 10 25 50m



SECTION A

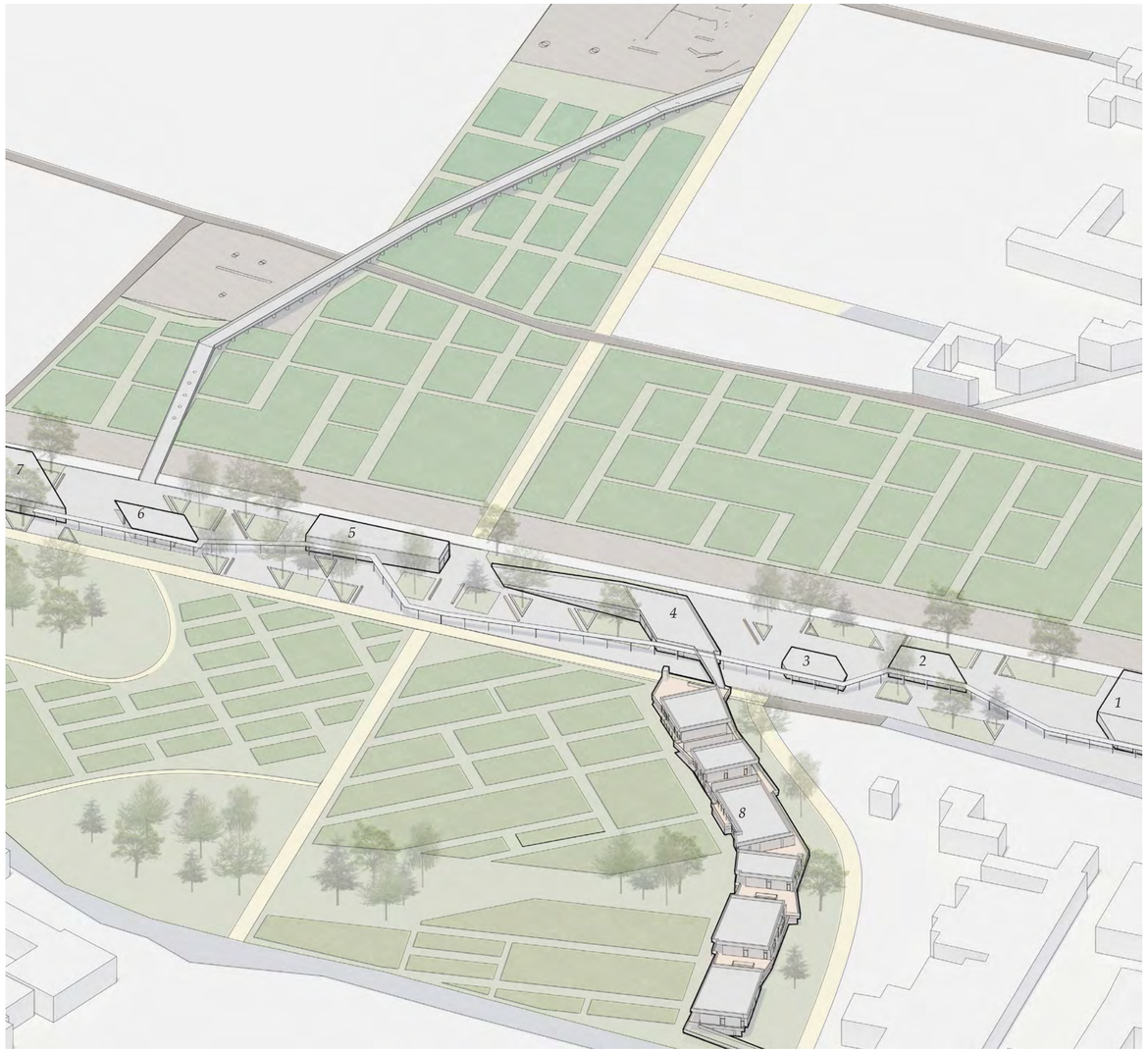
0 10 25 50m

FRONT (ENTRANCE)



SECTION B

0 4 10 20m



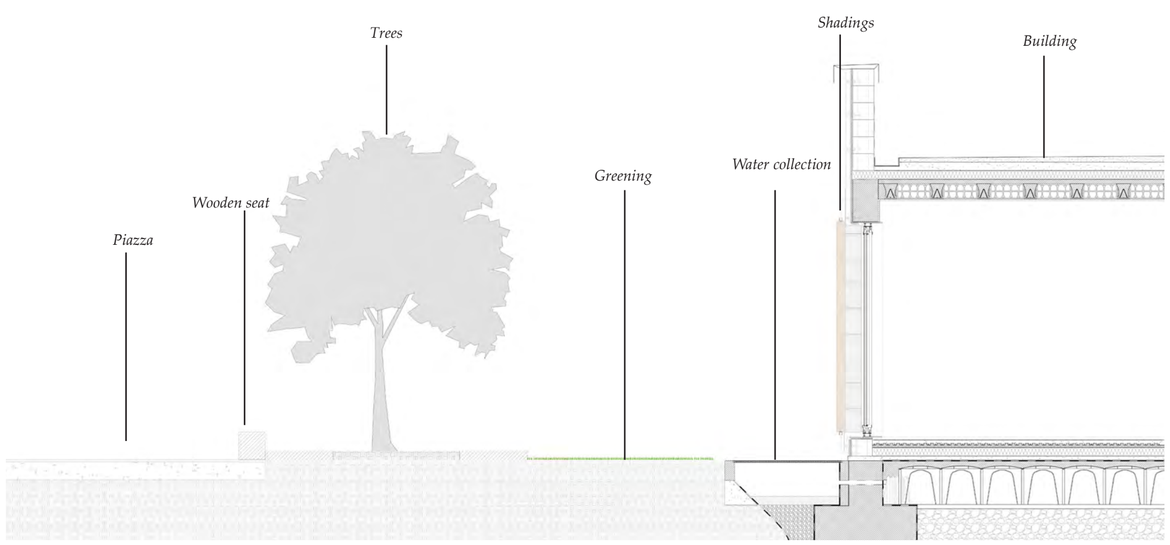
ORTHOGONAL VIEW

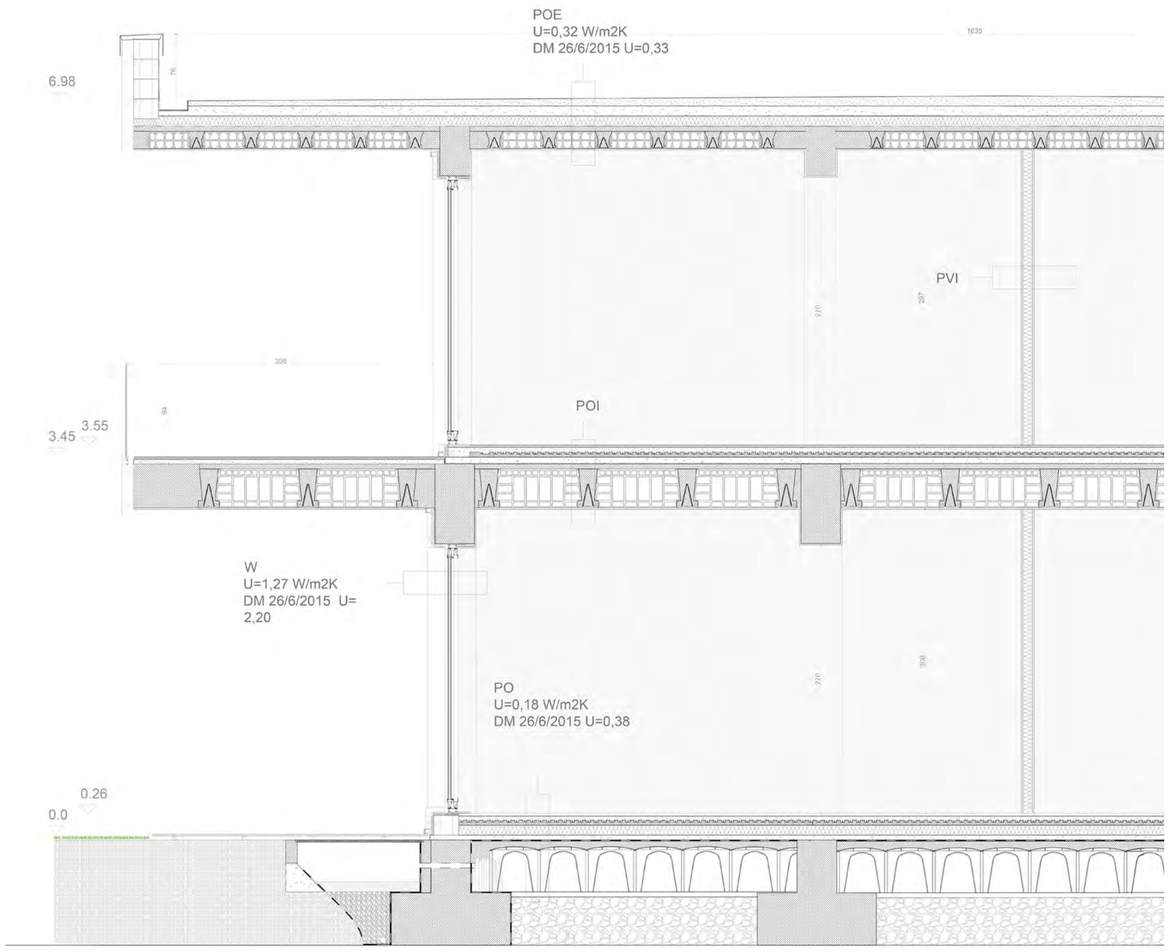
1. Info point
2. Bicycle renting point
3. Bicycle warehouse
4. Restaurant
5. Archeological building
6. Bicycle warehouse
7. Archeological building
8. Mixed use building (Housing + Commercial)

SOUTHWEST FRONT

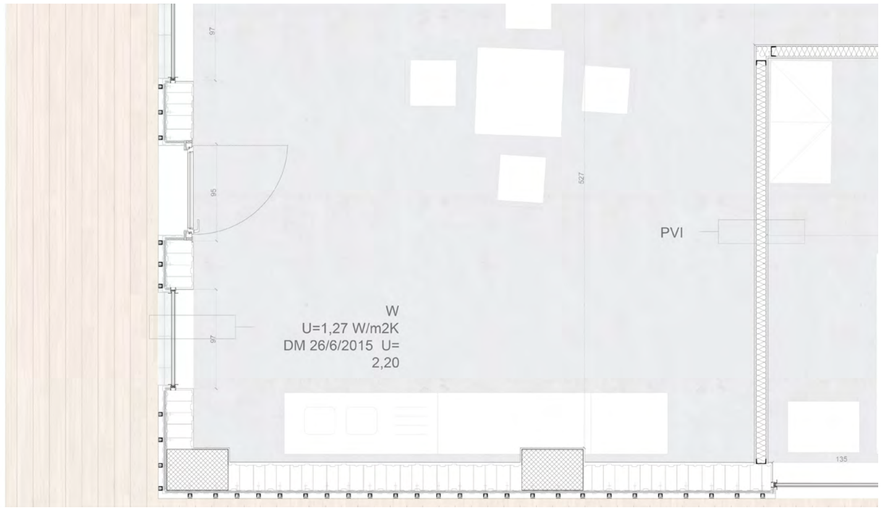
SOUTHEAST FRONT

0 10 25 50m





1. POE : Plaster 1,5 cm -concrete and bricks attic 24 cm - wood fiber insulation 10 cm - membrane 0,2 cm - mat with expanded clay 10 cm - finiture mat variable depth
2. POI: Plaster 1,5 cm, concrete and bricks attic 49 cm - mat 5 cm - radiant mat 8 cm - concrete floor 3 cm
3. PO: Igloo 50 cm - mat 8 cm -sheat 0,4 cm - mat 5 cm- wood fiber insulation 10 cm - radiant mat 8 cm -concrete floor 3 cm
4. PVE: Plaster 1,5 cm - insulated porized blocks 25 cm - wood fiber insulation 4 cm - air chamber 4 cm - metal coating 0,25 cm
5. PVI: Drywall 1,5 cm - Wood fiber insulation 8 cm



INDOOR/OUTDOOR RELATION SCALE 1:50

GABRIELLA ANDREA MASUCCI / FRATTAMINORE ADVANCED DESIGN STUDIO

THE TERRACES OF FRATTAMINORE

LE TERRAZZE DI FRATTAMINORE

Frattaminore area presents an old town with relevant houses density and the absence of facilities for its community.
The project is developed in the area next to the town hall and then through the street Via Sant'Angelo that goes through the historic center of the old town reaching the second area of this project, on the back of the Baronial Palace facing Piazza Crispi.
Today, these two areas are abandoned with wild vegetation.
The project retrain these areas through soil modeling and two basements projects.
This solution avoid to add volume to the city.
The project concerns the town western area, on the back of the Baronial Palace where has been realized a city park through soil modeling.
Two ramps lead to an elevated terrace. Below the terrace there is a three floor building, two of them underground. This building own a gym according to PUC forecasts.
At this level of the building the gymnasium hold a good connection with Colombo institute.
The building own two glass walls both on the north and the south side.
The entrance to the building is located on the north glass wall side.
At the entrance the building possess a secretariat and a view on the lower floor and the gym, located two floors below so that visitors can see the game since the entrance.
On the right side there are stairs and elevators to the first floor underground, located at -3m below the entrance.

Program

sport fafcilities, urban park, square

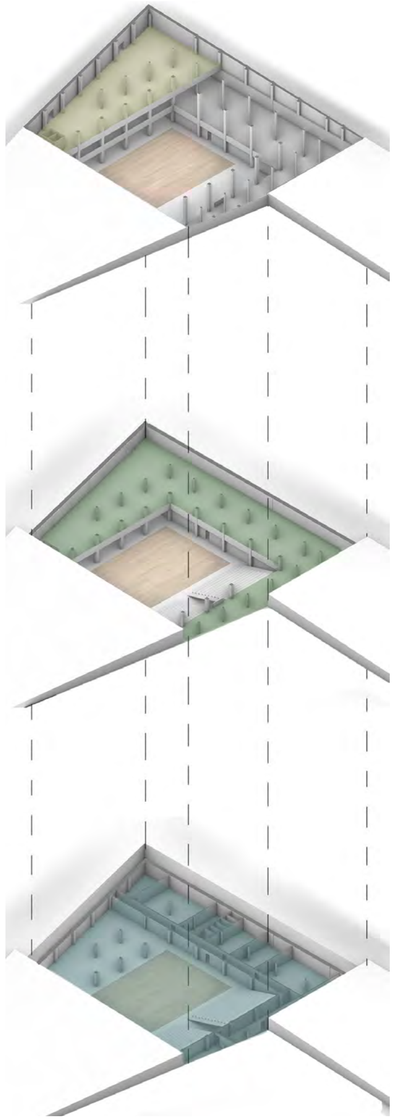
Covered area	**2.110m²**
Outdoor area	**38.020m²**
Above-ground floors	**3**
Built volume	**18.990m³**
Estimated cost	**5.408.748€**

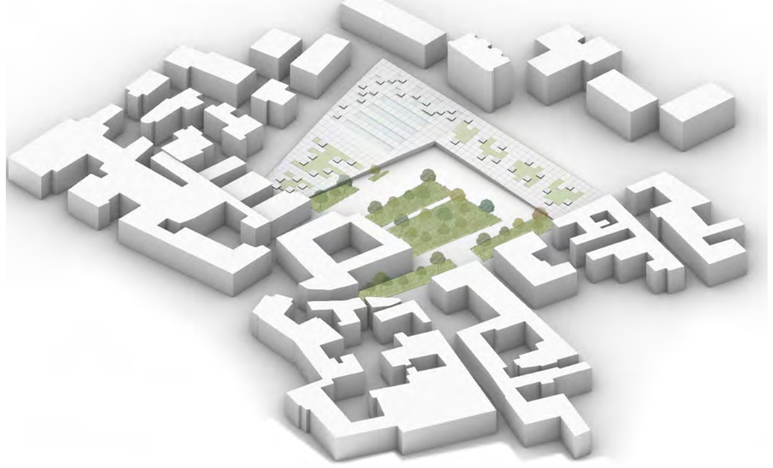
The references for the realization of this project were two: the BIG: Gammel Hellerup Gymnasium an artificial hill, which functions as a public square on the outside. The other project is the National Museum in Szczecin Dialogue Center Przelomy consisting of a sloping square where on one side you can enter the museum below.

This floor develops with a C-shaped path. On the right side we overlook the gym. At the beginning of the path we find a refreshment area with a glass structure with an opens space kitchen and tables all around. Continuing the path we reach an area with seatings and then, finally, the last part of the path and the way down to the second basement, at -6m, through bleachers.

On this floor is located the gym available to play futsal, basketball, handball, volleyball etc. To the east side of the building there are two differents changing rooms with showers and bathrooms, at the center of them the infirmary. The path leading to the changing rooms and the infirmary has windows to show players' crossing. Finally, behind the stands on the north side of the building there are spectators restrooms, a storage room and a service room. This project could be a place for children to relax and take walks in Frattaminore, moreover, a place to play and watch games. A place where both Frattaminore inhabitants and sporty people could enjoy sports events.

This floor develops with a C-shaped path. On the right side we overlook the gym. At the beginning of the path we find a refreshment area with a glass structure with an opens space kitchen and tables all around. Continuing the path we reach an area with seatings and then, finally, the last part of the path and the way down to the second basement, at -6m, through bleachers . On this floor is located the gym available to futsal, basketball, handball, volleyball etc. To the east side of the building there are two differents changing rooms with showers and bathrooms, at the center of them the infirmary. The path leading to the changing rooms and the infirmary has windows to show players' crossing. Finally, behind the stands on the north side of the building there are spectators restrooms, a storage room and a service room.

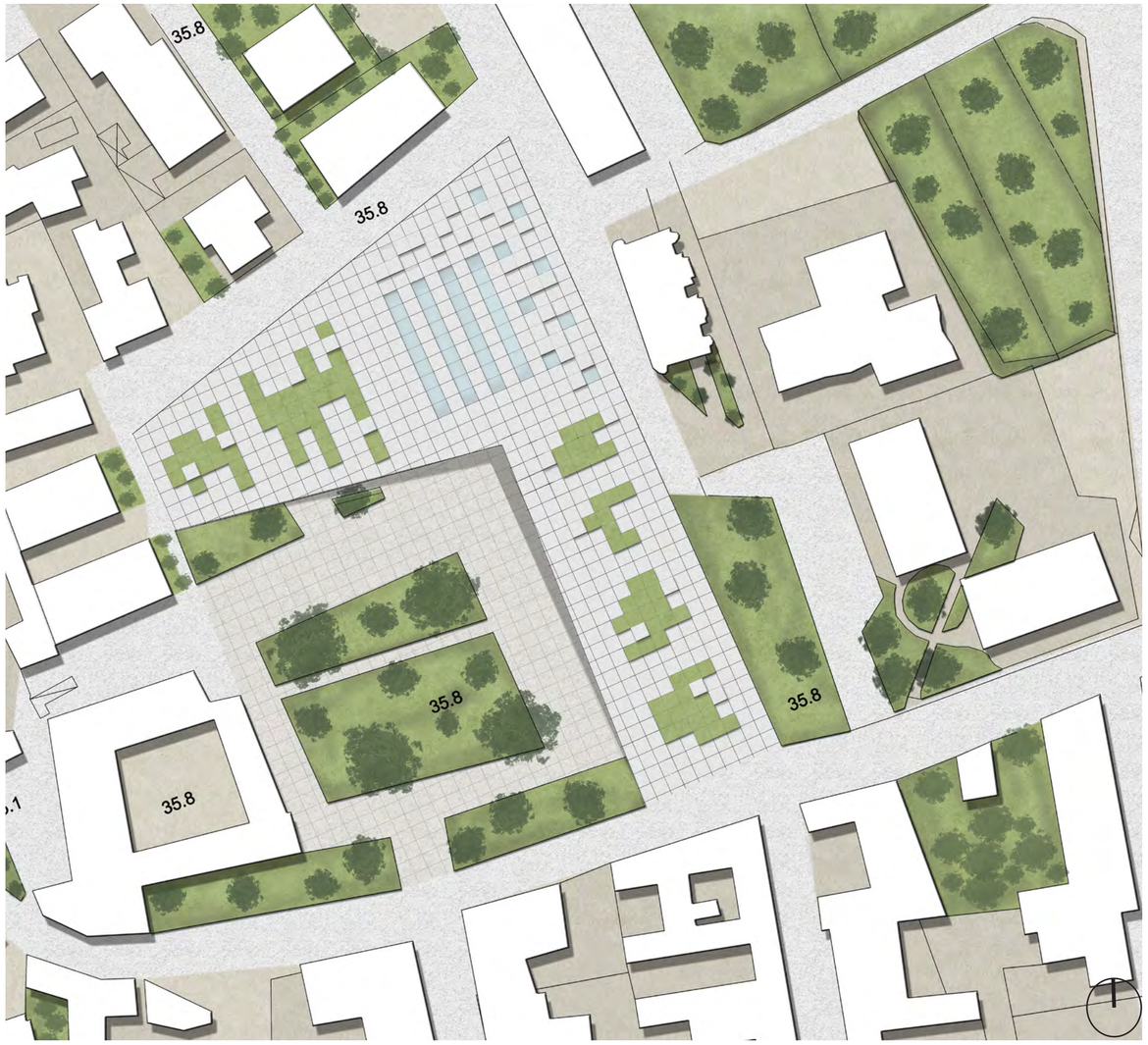


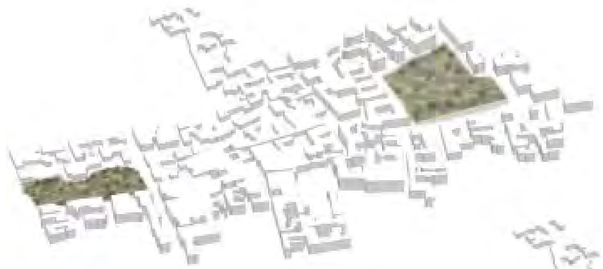


Reception

Refreshments

Gym, loker room, restrooms





Attual condition

Project vision

DESIGN STRATEGY

0 10 25 50m

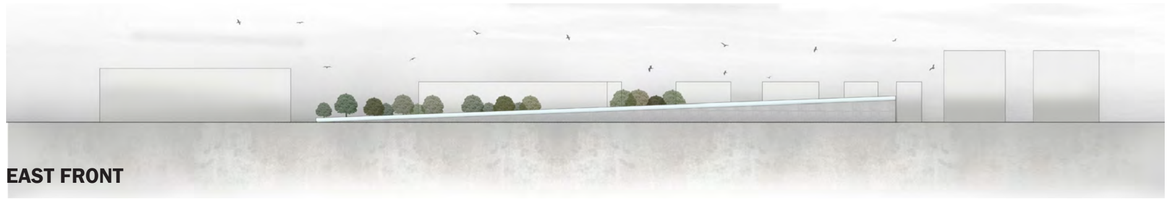
SECTION

0 4 10 20m

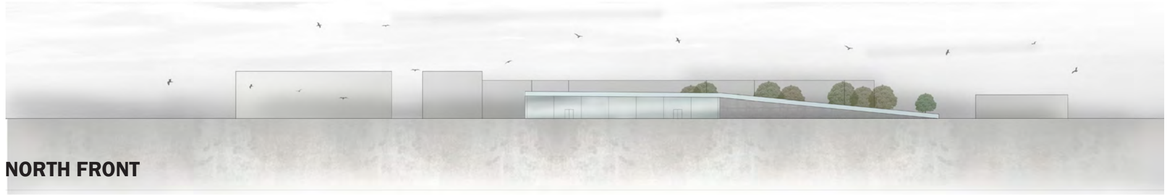
1. Gym
2. Bleachers
3. Tecnical rooms
4. First locker room
5. Infirmary
6. Second locker room
7. Toillet

WEST FRONT

SOUTH FRONT



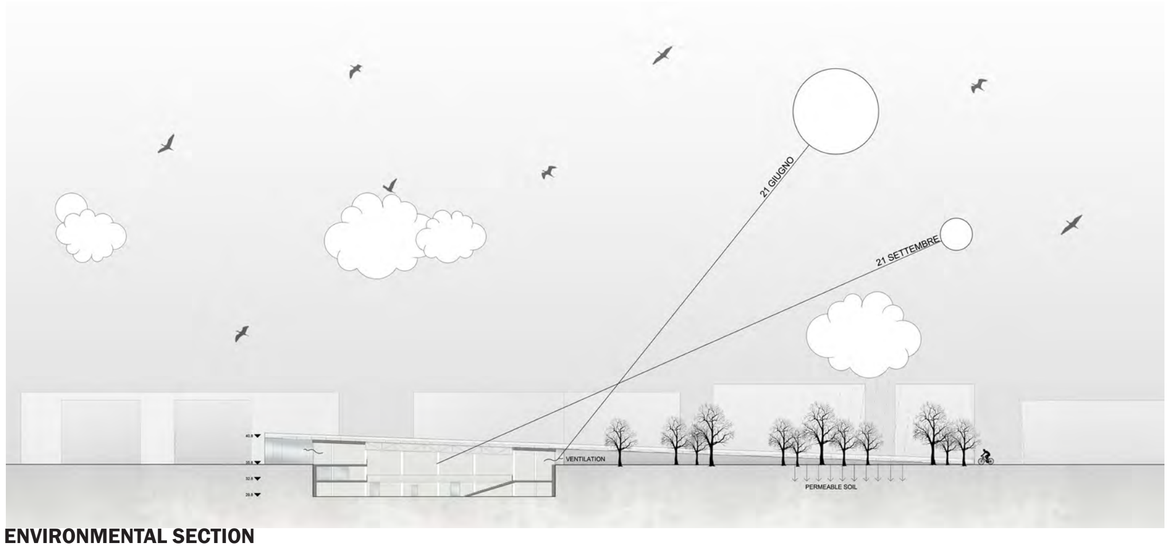
EAST FRONT



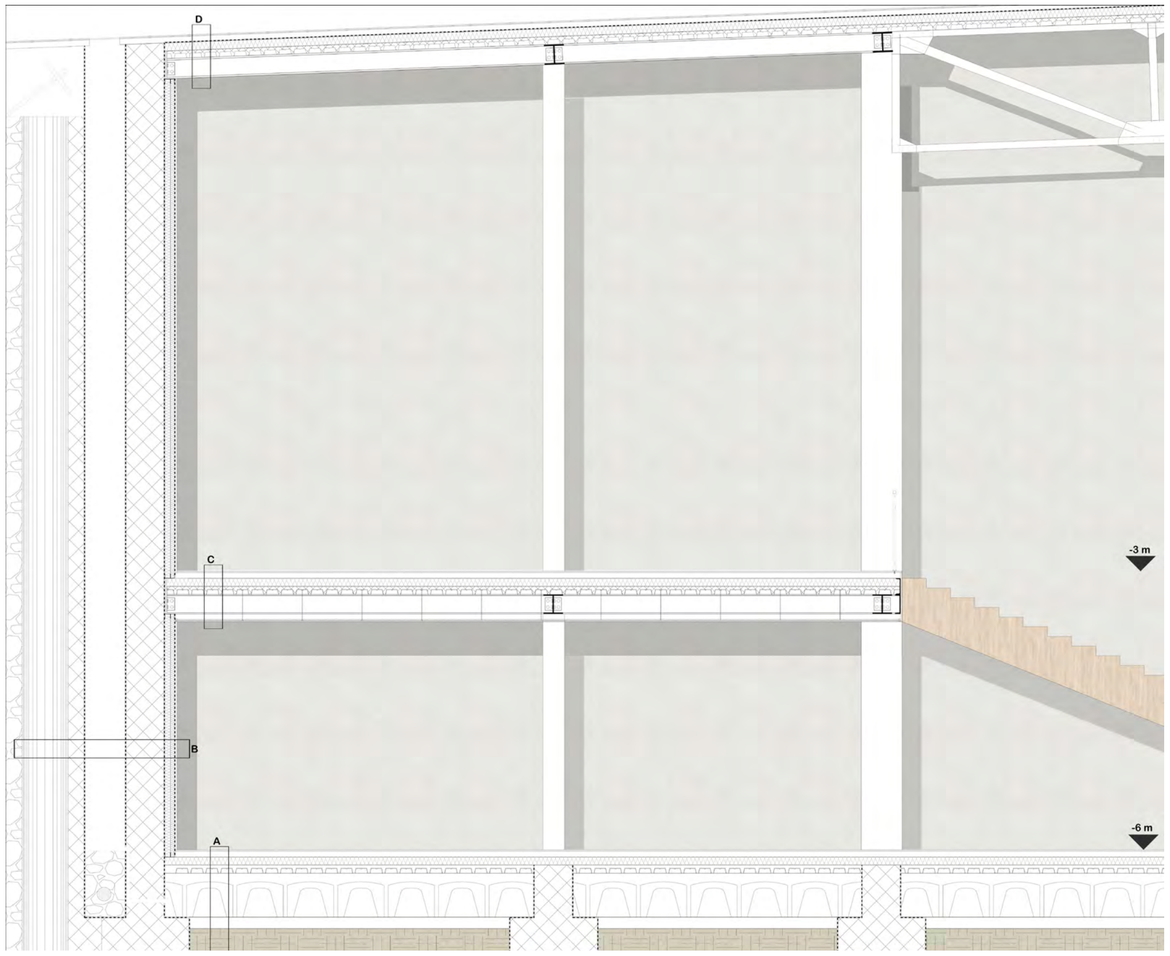
NORTH FRONT

0 10 25 50m

OUTDOOR VIEW



ENVIRONMENTAL SECTION

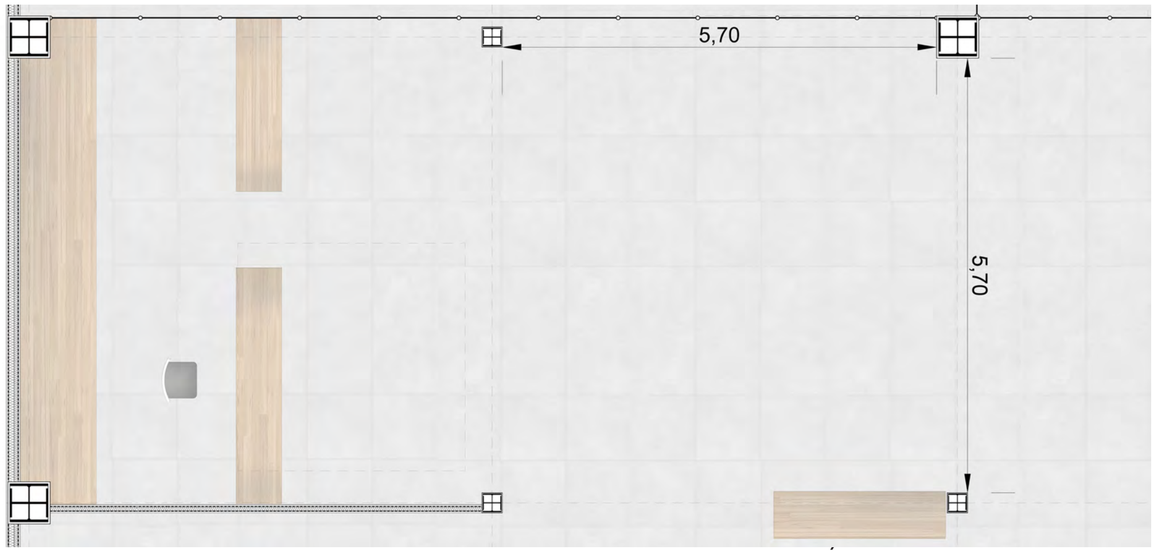


A
flooring
rock wool insulation
corrugated sheet
crswl space ventilation

B
bulkhead
reinforced
rock wool insulation
coating

C
countertop
ipe beam
corrugated sheet
flooring

D
outdoor flooring
waterproofing membrane
rock wool insulation
web / web counterbrace



FRATTAMINORE ADVANCED DESIGN STUDIO

ANNA NASTELLI - ACROSS THE HERITAGE

A NEW STRATEGY TO REVIVE THE OLD

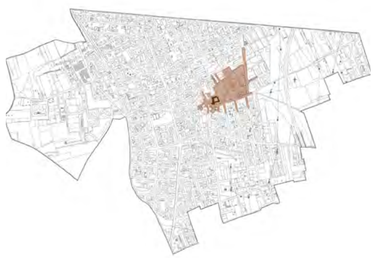
This project fits perfectly into the title “across the heritage”, as it aims to bring together two completely opposite urban habitats through the power of history. The current state of Frattaminore is divided into two autonomous poles: one almost completely saturated and in need of green spaces, the other totally abandoned to itself, devoid of unity but full of potential. Both need the other to be complete and to be considered cities; and it is precisely here that the Baronial palace in Piazza Crispi comes into play. A palace that dates back to the sixteenth century, in Neapolitan yellow tuff, which is currently only the private property of some citizens; devoid of its extrinsic value but full of memories.It often happens, especially in the Campania territories, that we do not see or underestimate the traces that time leaves on the territory and that despite everything, are there in front of our eyes. For this reason, the project starts from the idea of reconnecting fragments of cities that currently do not interact. To do this, he uses the baronial palace as a filter between one dimension and the other, thus also making it possible to revalue the building itself.How? First of all, making the building for public use, then taking advantage of the vast green area behind it through a large sports center that can attract all the local and neighboring population. The sports center is designed to be experienced by the whole town because it includes sports related to all ages. In fact, in this sense, sport is not intended only as a physical activity but also as a psychological one, in order to allow anyone to feel part of this.

Program

sport center, urban park, public service, public facilities

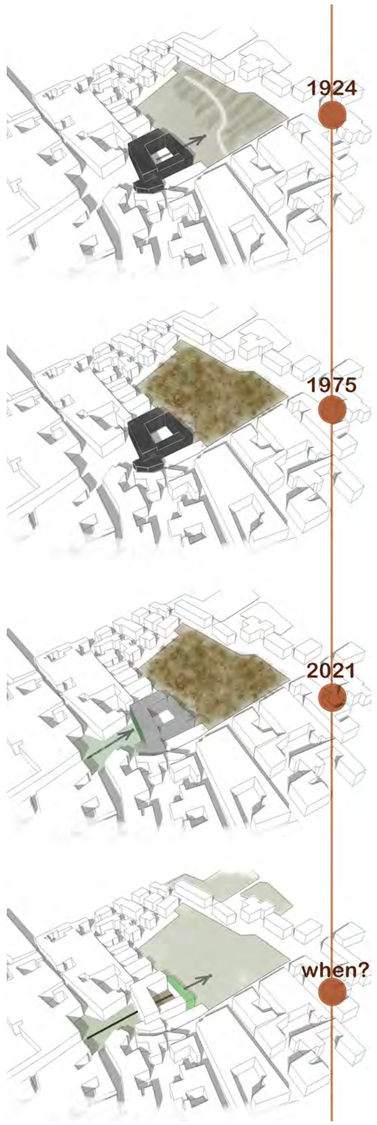
Covered area	**1750 m²**
Outdoor area	**21250 m³**
Above-ground floors	**2**
Built volume	**14000 m³**
Estimated cost	**10063981€**

The red thread that connects all the interventions is clearly the memory of the baronial palace which, however, is re-evaluated in a public key to make it the cornerstone of the municipality. moreover, it also allows the regeneration of the park behind it, becoming a reference point for the neighboring suburbs.



The project aims to enhance the baronial palace through a new intended use that houses a sports center. It is then supported by the reopening of the green space behind it which makes it possible to implement the space available for different types of indoor and outdoor sports. Along the entire southern edge of the park there is the entrance to the park through a portico consisting of a sloping pitched roof that follows the contour of the buildings. Below, three volumes emerge in a more explicit way that characterize the equipment and services for the park itself.

The heart of the project, however, appears to be the eastern arm of the baronial palace. In fact, while all the rest of the existing building is not modified in the structure, the elevation to the east is partially modified to allow the change between the new and the old to be grasped from the outside. In fact, the new façade integrates with the park equipment which is displayed freely and transparently within the park and in a more reserved way facing the street.



URBAN STRATEGY

The baronial palace is the filter through which the main strategic axis develops, on one side with the pedestrianized square, on the other the new sports park. Thanks to the opening of the park it will be possible to open new axes that did not exist before.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m

LITTLE PARK SQUARE

the small squares of the park are free to allow any activity inside because the idea of sport in polo is conceived in a free way.

ARCHITECTURAL PLAN

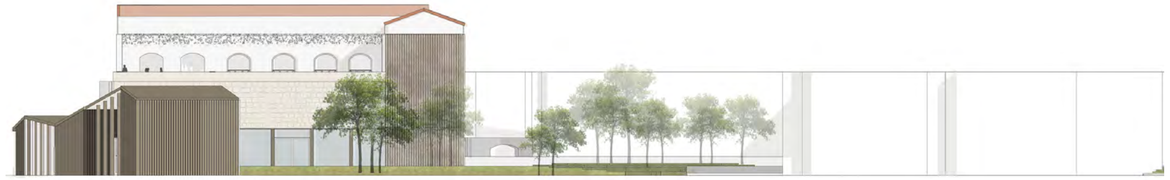
0 4 10 20m

SECTION A

0 4 10 20m

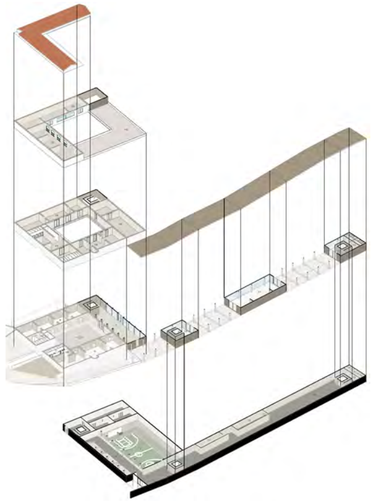
The section presents the juxtaposition between ancient and new intervention: it is defined as a complementary contrast as the new intentionally presents characteristics of lightness and fragmentation compared to the pre-existing one which is instead monolithic and heavy due to its structural conformation. The new intervention itself becomes the entrance to the park, below which there are three facilities at the service of the new sports center.

WESTERN FRONT



EASTERN FRONT

0 10 25 50m



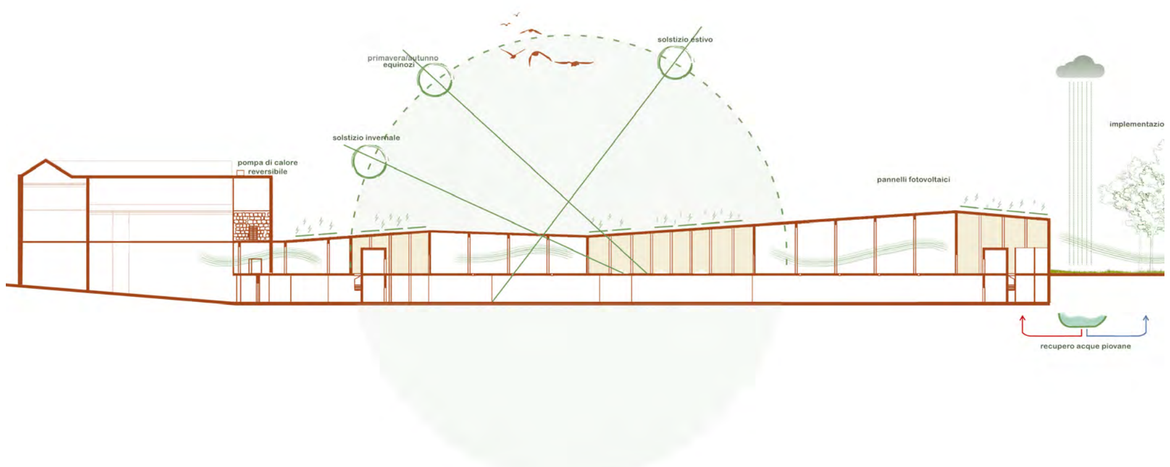
AXONOMETRIC EXPLODED VIEW

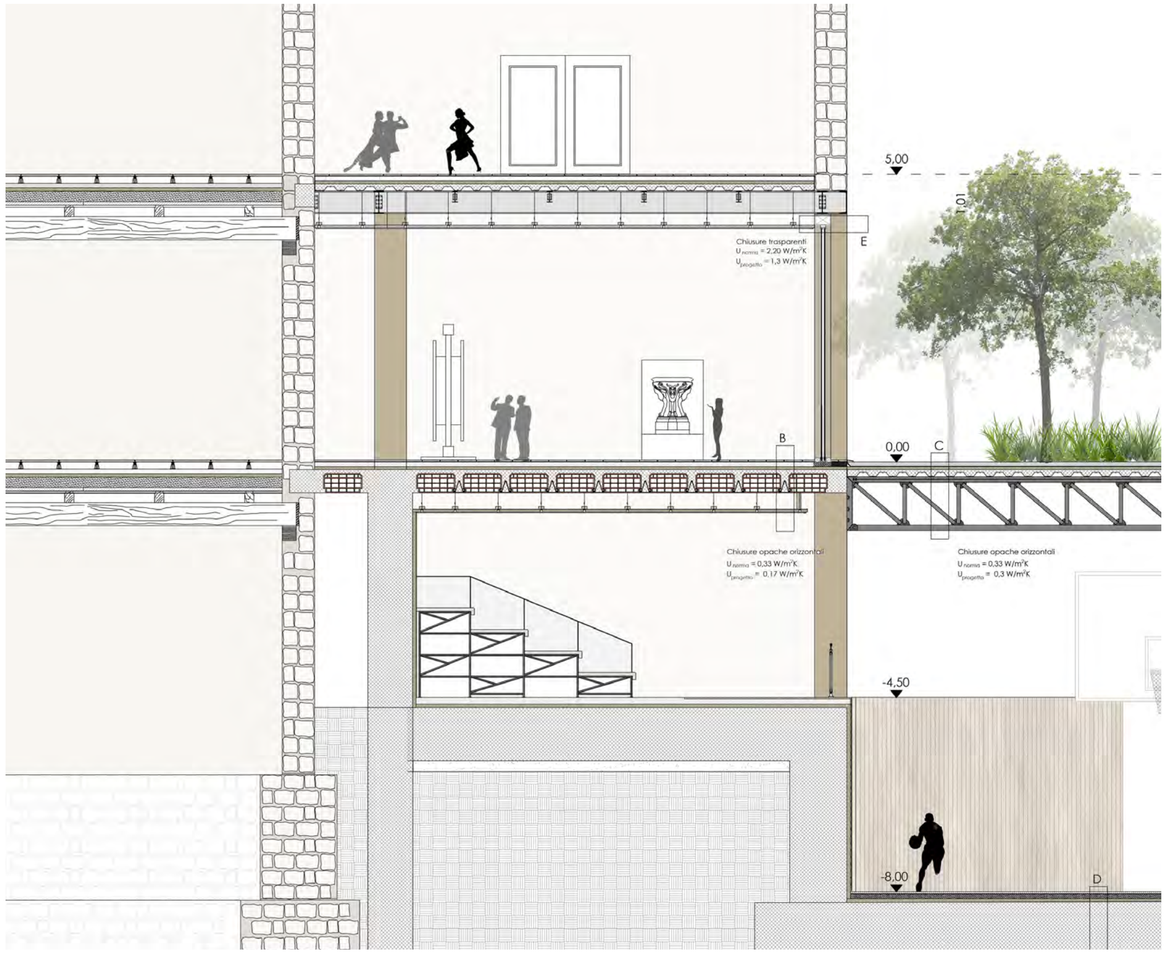
VIEW IN THE HISTORICAL SQUARE

INTERNAL COURTYARD VIEW

VIEW IN THE URBAN SPORT PARK

indoor visions



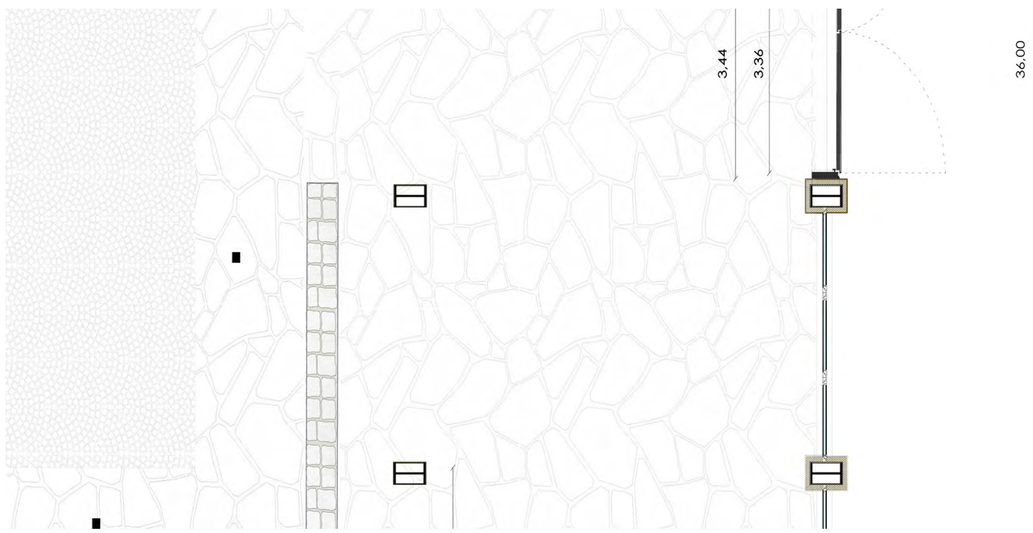


B. false ceiling cover panel; rockwool insulations; cast in reinforced concrete; steel joist; pinata; concrete casting; rock wool insulator; leveling screed; mortar layer; floor

C. truss type Pratt h 1.00 m; concrete casting; corrugated sheet; rock wool insulation; waterproofing; topsoil; turf

D. compacted soil; lean concrete; reinforced concrete slab; rock wool insulation; leveling screed; Malta; rubber floor; wooden slats

E. thermo-acoustic insulating glass; frame frame; HEA steel column



INDOOR/OUTDOOR RELATION SCALE 1:50

LAURA PAGANO - EVERY FLOOR A NEW WORLD

NEW PERSPECTIVES FOR THE HISTORIC CENTRE OF FRATTAMINORE

The process of development of the project starts from: reflections about the conformation of the selected study area and reflections about the organization of the city considered in its entirety. The project has been developed in the abandoned area of Via Giuseppe Di Vittorio, an huge landfill entirely walled along its entire perimeter. Despite this, the study area is extremely interesting due to its closeness to the historic center and its direct connection with the Town Hall of Frattaminore.

Additionally, the historic centre of Frattaminore presents many functional and spatial problems. The historic centre has a prevalence of buildings for residential use: there are very few public spaces suitable for carrying out diversified activities; those few spaces that still exist to promote diversified uses are poorly organized and small compared to the extension of the private constructions.

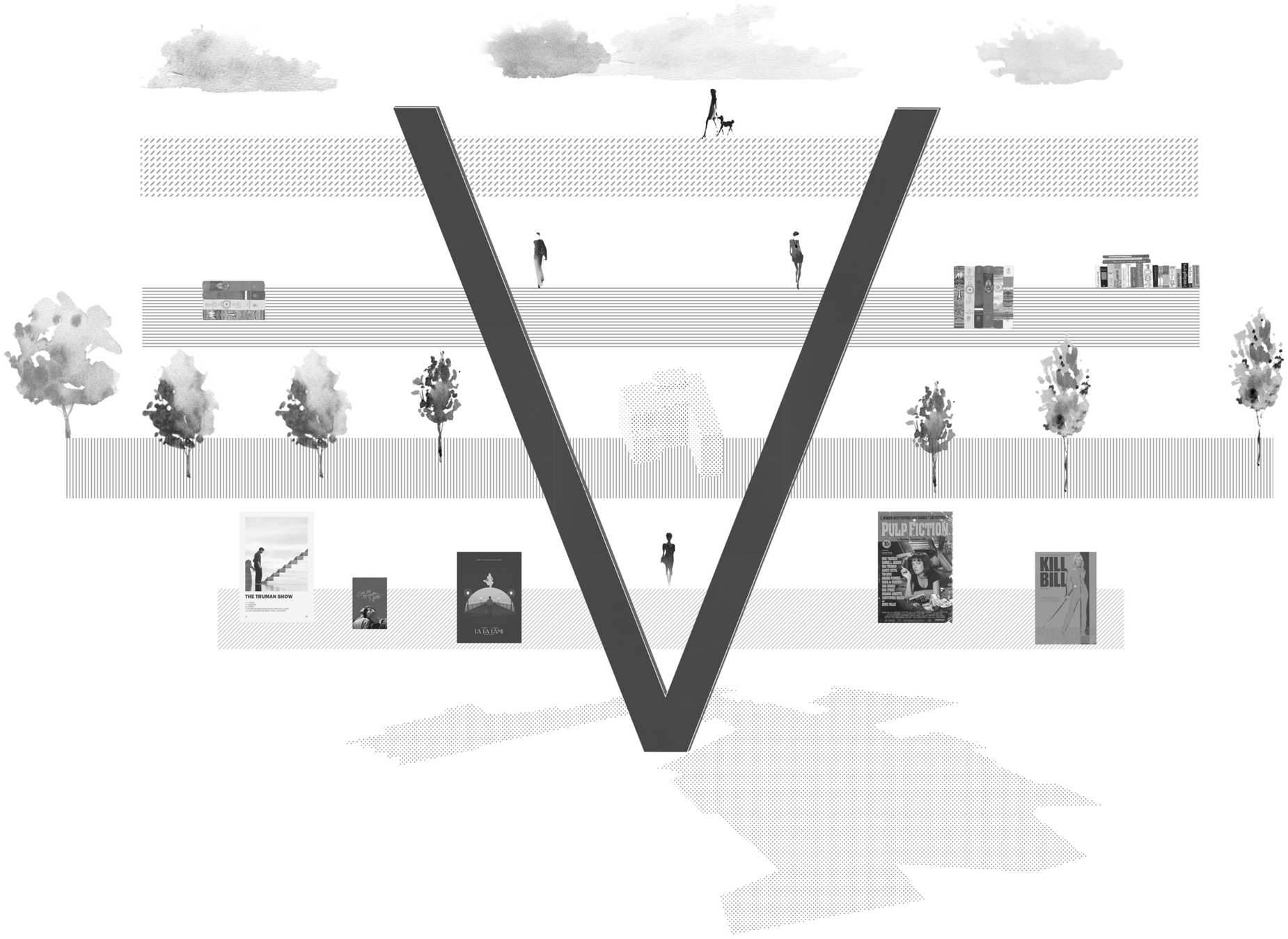
The aim of the project is to answer to all the gaps of the historic center. The strategy consists on giving back to the community an huge public space opened to the city that provides a large diversification of activities. Moreover the project wants to give to the Frattaminore's Town Hall an adequate space within the city and a stronger connection with the other parts of the city itself.

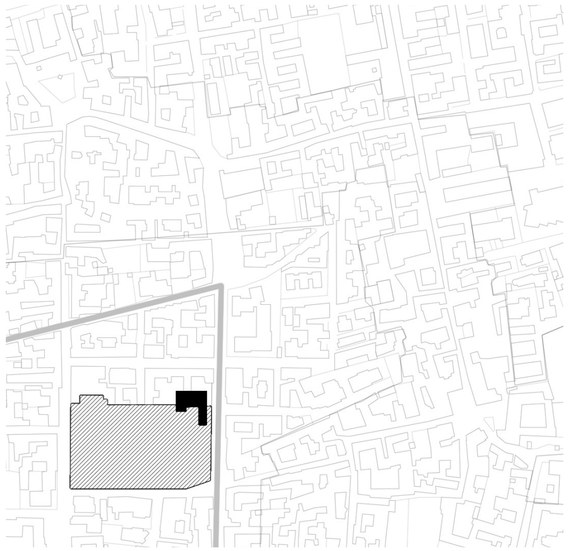
The project consists of 4 main horizontal blocks that are completely different from each other structurally and functionally. Each floor could be studied in its relationship with the rest of the building and with the city or as an element in its own right that has its own relation with the city.

Program

cinema, covered urban square, urban garden, ibrary, urban rooftop

Covered area	**2250m²**
Outdoor area	**6269m²**
Above-ground floors	**2**
Built volume	**13500m³**
Estimated partial cost	**€3.431.553**



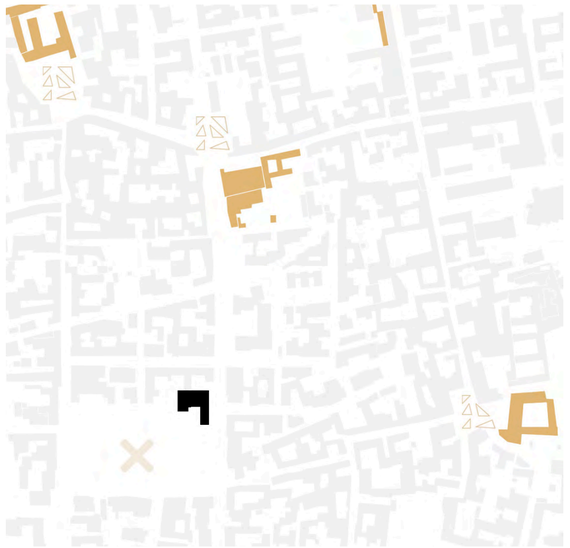


PLANNING REGULATIONS

equipment / urban standard
school in Via di Vittorio - to restore Toen Hall

*equipment/ urban standard public cinema *it's possibile to finance it by private organizations*

mobility
bicicle path



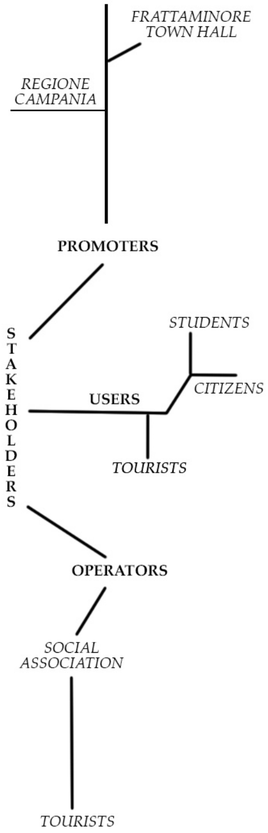
INTERPRETING THE SITE

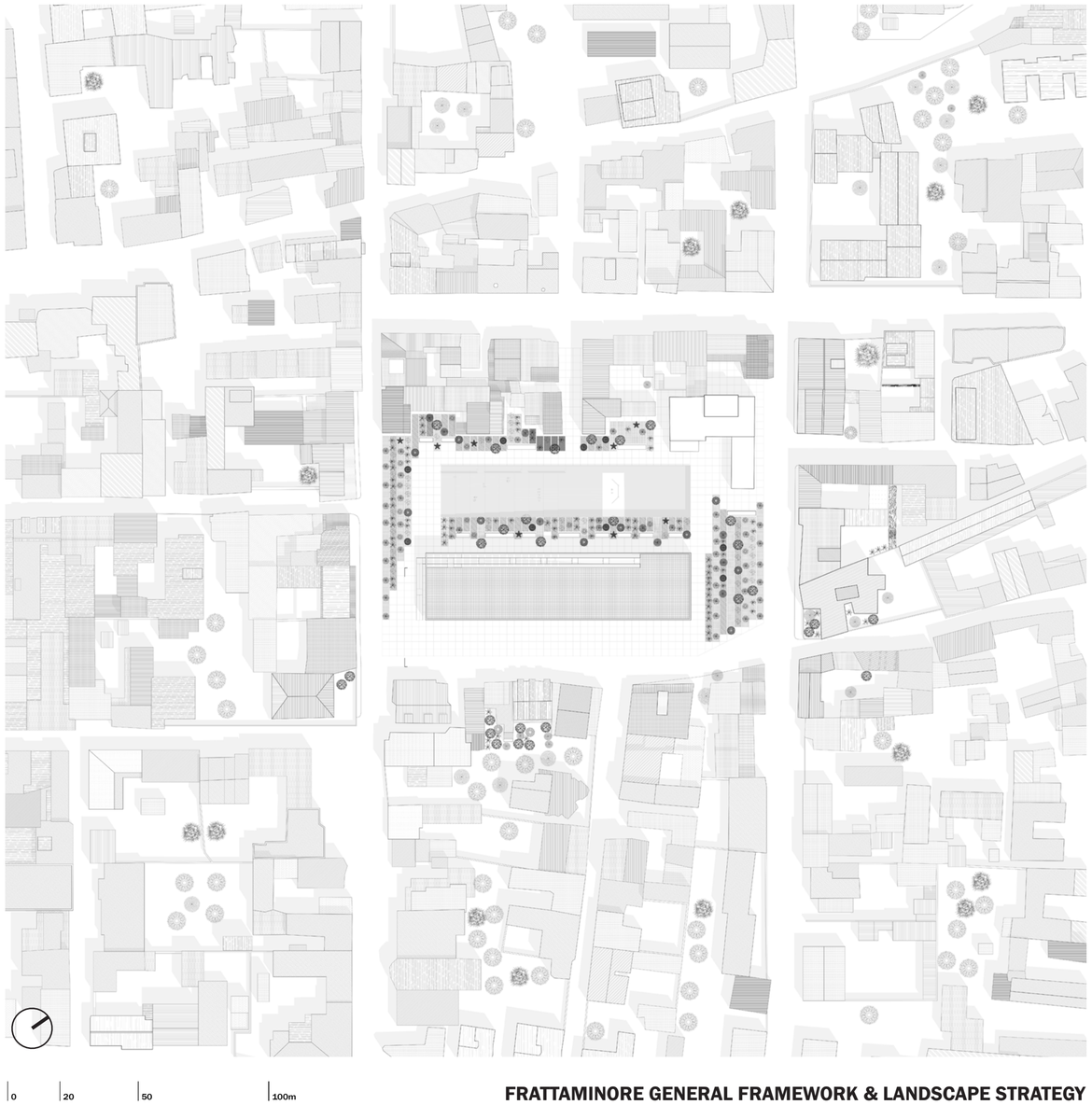
residential buildings
important building used as residence
empty urban space
not satisfing public spacaes

WAY OF ACTING

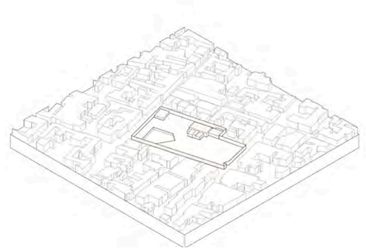
project site
bicicle path

the aim of the project is also to remain an attractive public spaces for the majorty of the hours in a day. That goal is satisfied thanks to many different function. Different functions, different people:



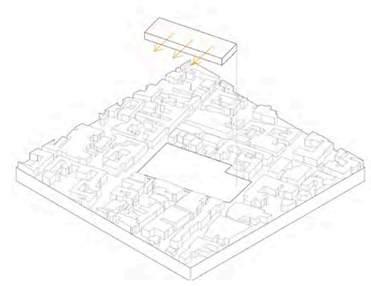


FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY



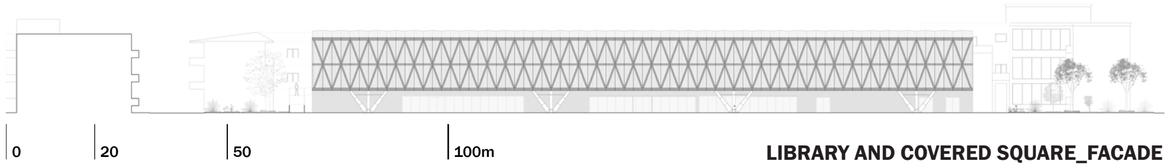
demolitions

connection site - city - Town Hall



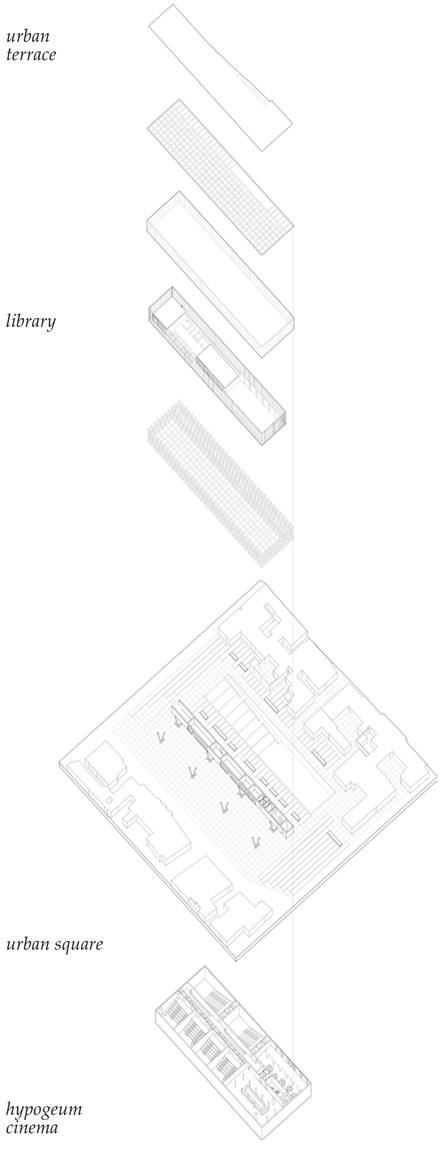
opening to the city

DESIGN PROCESS



LIBRARY AND COVERED SQUARE_FACADE

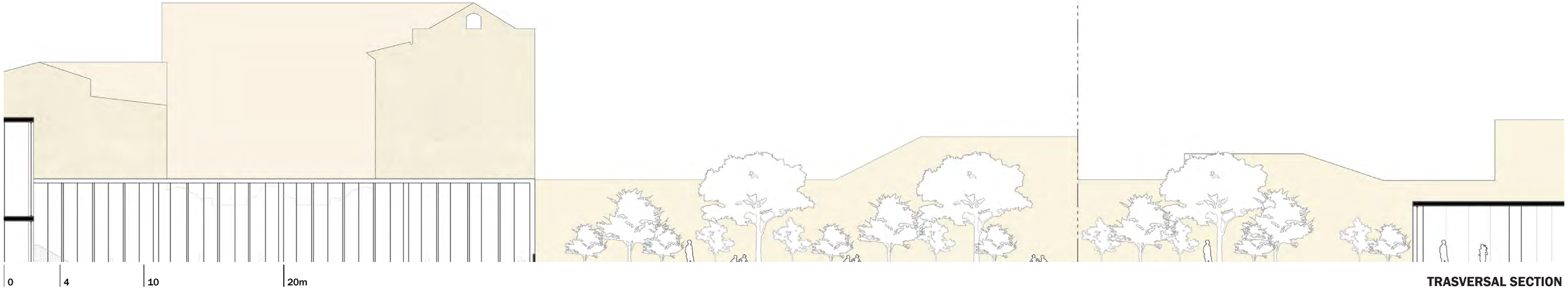
LIBRARY_PLAN



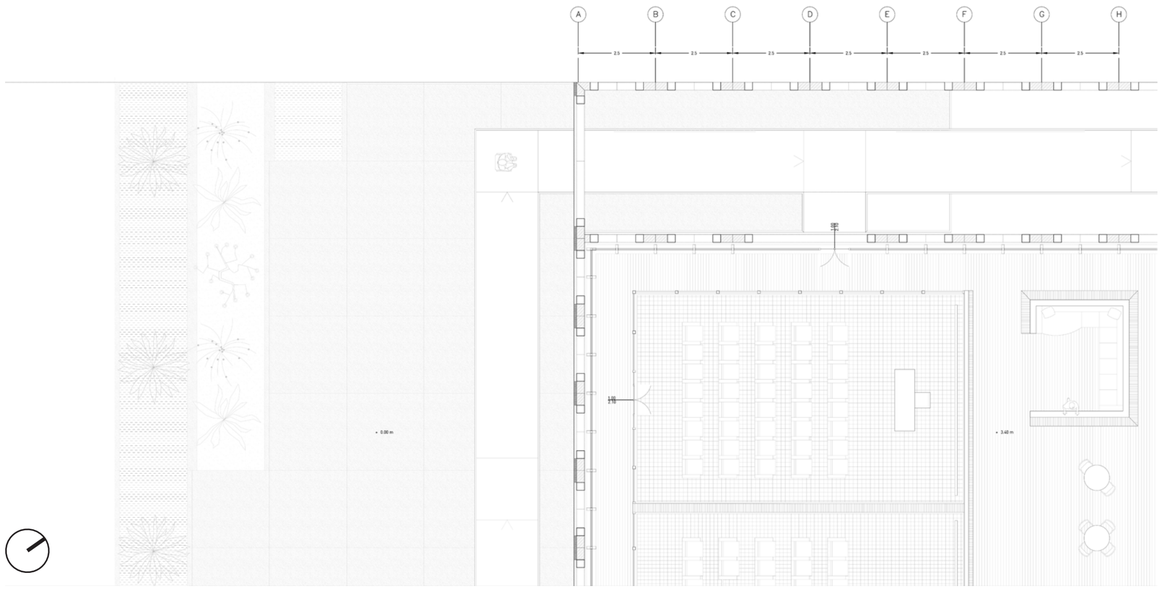
DESIGN STRATEGY

waliking inside the library_*relation from the inside with the city*

waliking aound the urban square_*relation from the outisde with the Town - Hall*

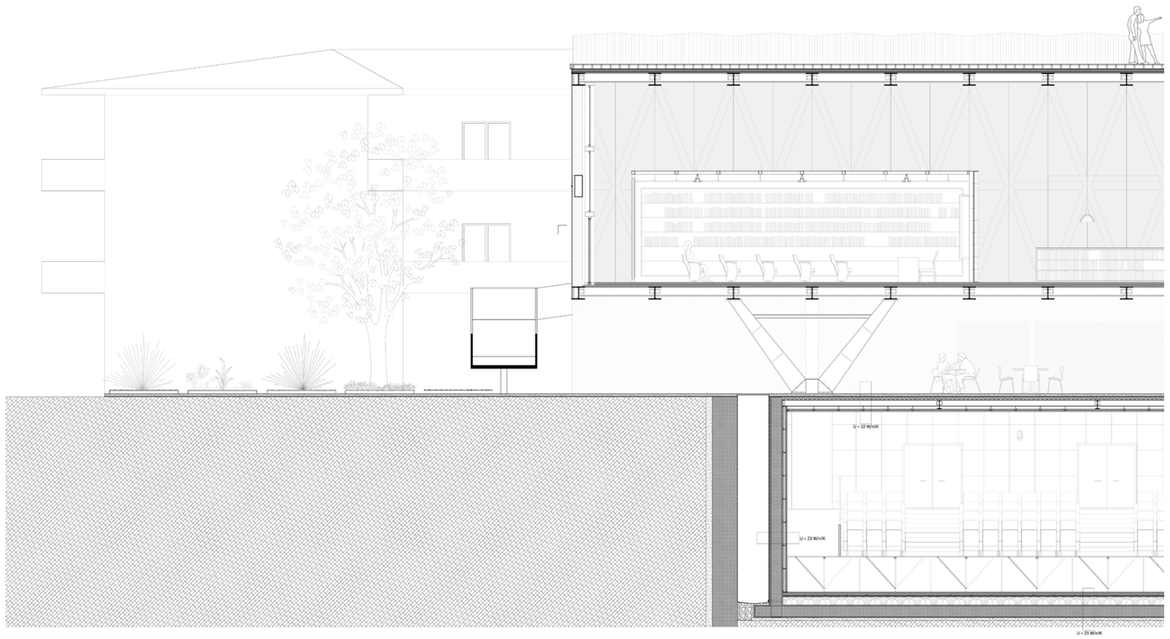


TRASVERSAL SECTION



0 1 2.5 5m

INDOOR/OUTDOOR RELATION_PLAN DETAIL



0 1 2.5 5m

INDOOR/OUTDOOR RELATION_SECTION DETAIL

library key line_section detail

vertical closure

double pane window, steel bracing, honeycomb polycarbonate (Akrapan type)

covering roof

beam HEB, vapor barrier (OSB), waterproofing, insulating, waterproofing, OSB, floating floor

floor slab

beam, vapor barrier (OSB), insulation, stiffening panel, underfloor heating piping, floor

cinema key line_section detail

wall against the ground

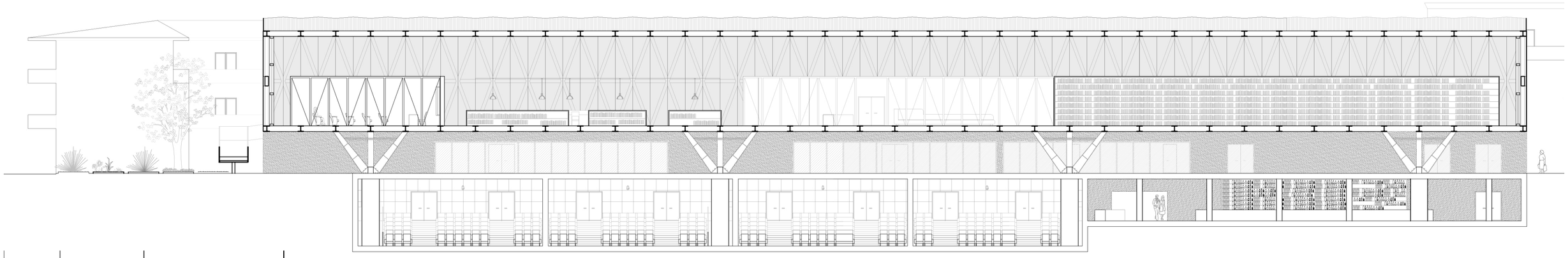
a acoustic insulation, rock wool, reinforced concrete diaphragm, insulating, waterproofing, retaining wall, cavity, counter-wall

floor against the ground

floor, acoustic insulation + rock wool, fir wood joists + u - boats, concrete slab, air chamber, concrete foundation slab

floor slab

a acoustic insulation, rock wool, reinforced concrete diaphragm, insulating, waterproofing, retaining wall, cavity, counter-wall



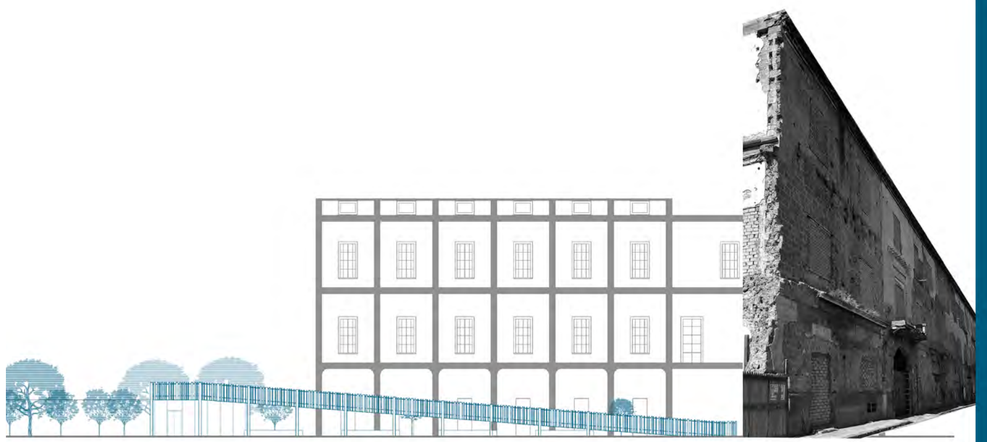
0 4 10 20m

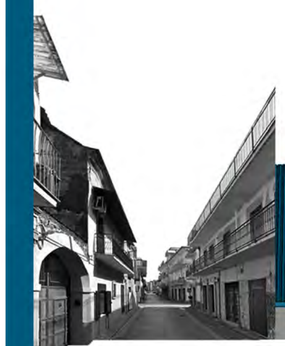
LONGITUDINAL SECTION

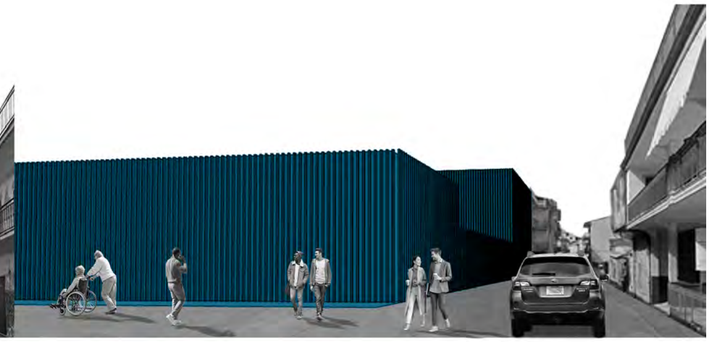
SILVIA PAPARO - RE-IMAGINING FRATTAMINORE

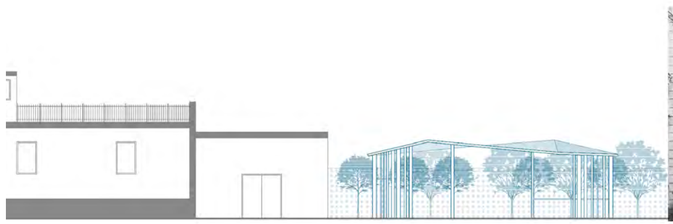
INNESTI DIFFUSI

Re-imagining Frattaminore is a project that tries to give a new identity to the historic centre of Frattaminore: it proposes to fill the gaps in the urban landscape with a network of public spaces - a backdrop for entertainment, education and leisure.
The chosen area of intervention is via Roma: a trace of the centuriation and an axis of organisation of the historical fabric that is present in a position almost central to the entire municipality. Moreover, Via Roma meets three different systems that characterise its route: the provincial road, Via Viggiano (historical axis) and Piazza Crispi (terminal widening with the ducal palace in the background).
By making the most of the position and the areas that are now 'urban voids', an axis characterised by a multiplicity of public grafts is created.
Thus, the presence of vegetation radically changes the perception and comfort of the landscape, the spaces equipped with structures that can host different activities transform the area into a place of civic engagement and the elements for playing transform the space into an adventure for children and adults.







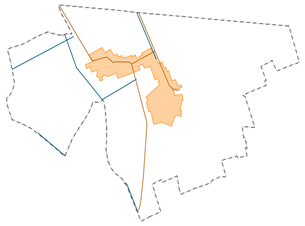


Program

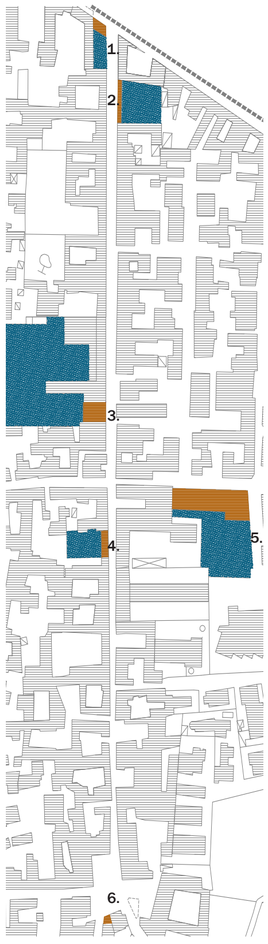
urban park, conference room, apartments, playground and library.

Covered area	**2132m²**
Outdoor area	**5340m²**
Above-ground floors	**2**
Built volume	**14200m³**
Estimated partial cost	**€2.870.240**

The project, being located in Via Roma, is partly in the historical city and partly in the consolidated city: this division is delineated by the intersection with Via Viggiano. For this reason, the project strategy is based on the recovery and enhancement of the place in order to make it an identifiable and recognisable urban element.



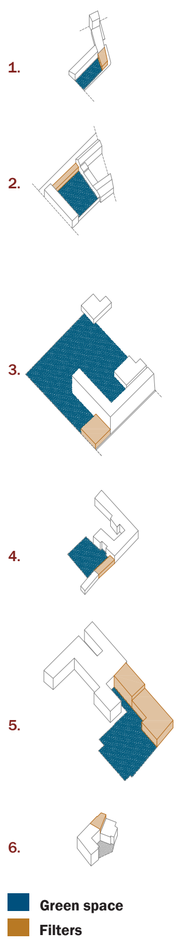
Re-imagining Frattaminore takes its cue from the idea of redevelopment expressed in the report of the Municipal Urban Plan, in which a number of interventions to enhance the place are selected. The municipality, in fact, presents itself with a low parameter of equipment of common interest as services supporting social and cultural activities are completely lacking.
Another critical situation concerns green space, as there are no large public areas but only small green spaces near the main squares.
Thus, after a careful analysis, six abandoned areas were chosen for the construction of facilities.
The ultimate goal of the project is the development of a system of connected public spaces where people can live Frattaminore trying to disconnect from fast life and reconnect to themselves.



MASTERPLAN

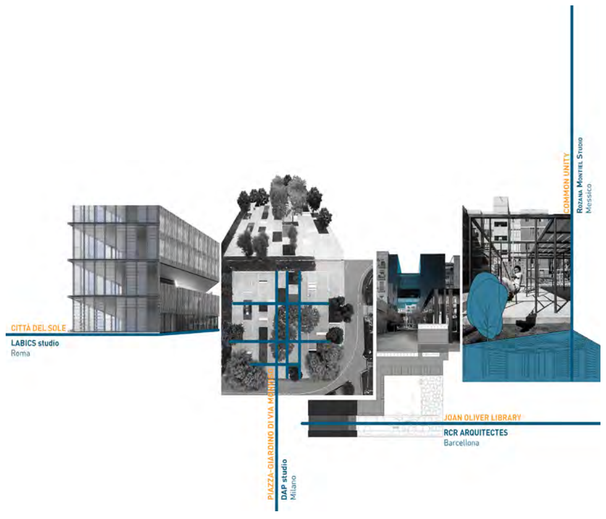
1. Green space 313mq
2. Green space 890mq
3. Public garden 4765 mq and space equipped 2042 mq - (RQ2)

P.U.C.



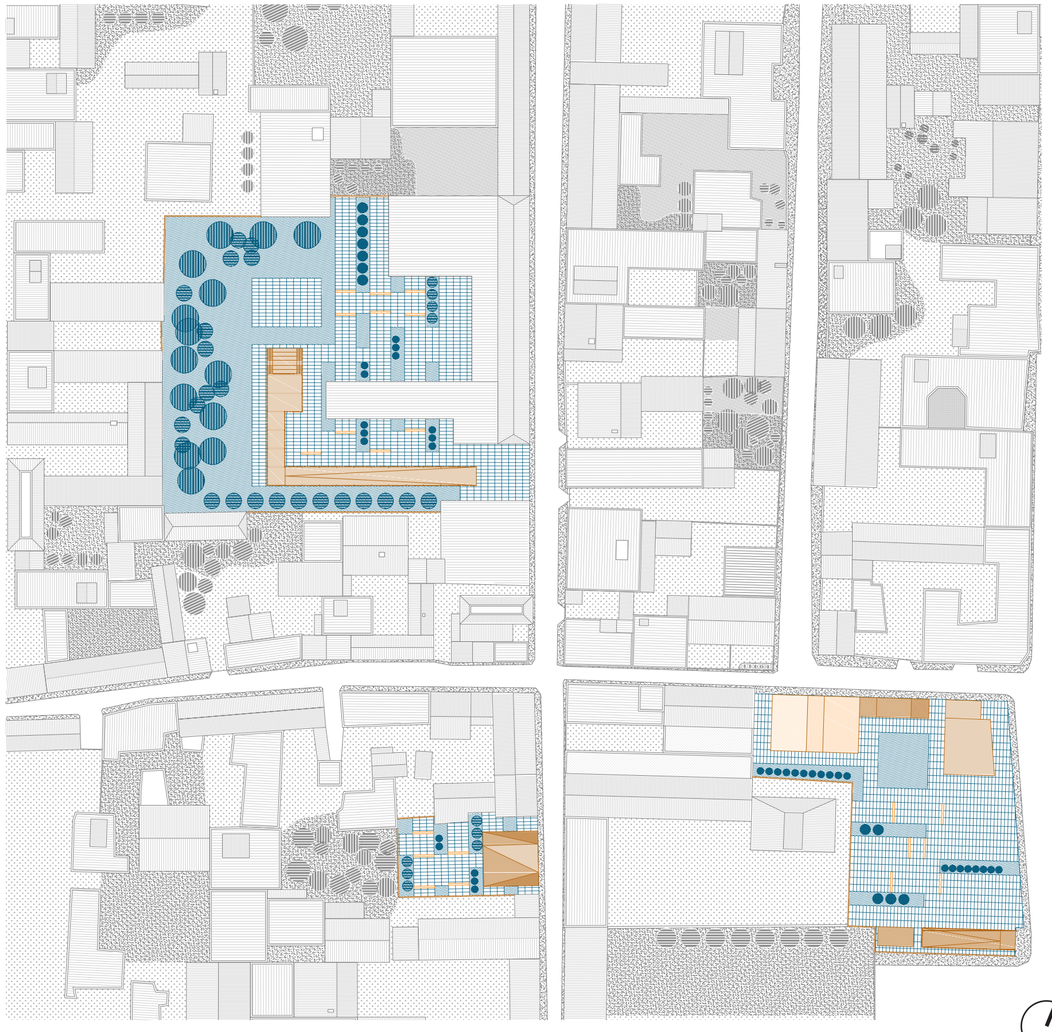
URBAN STRATEGY

4. Parking area 730mq
5. Green space and new building 1700mq - (RQ1)
6. Architectural renovation



REFERENCE MAP

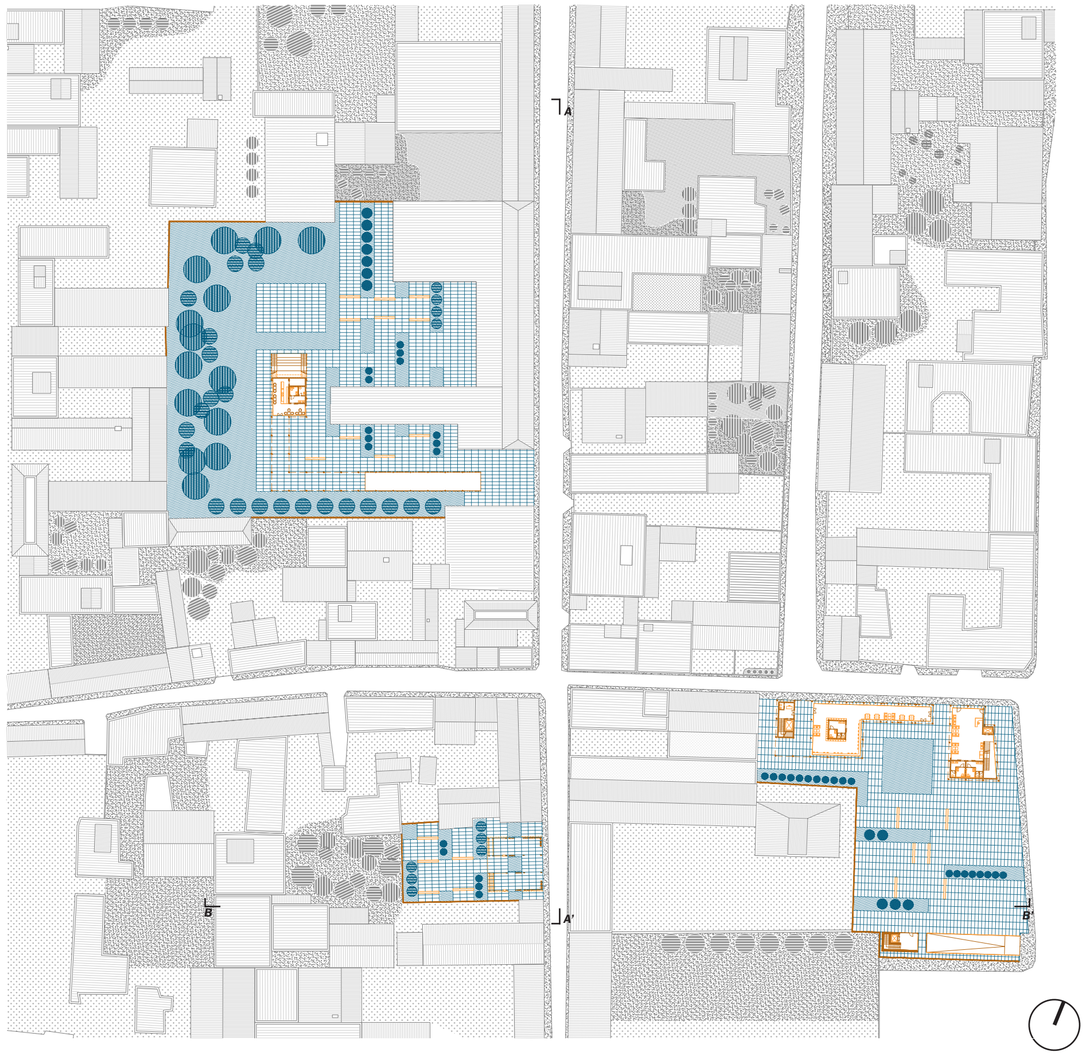
STAKEOLDER MAP



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

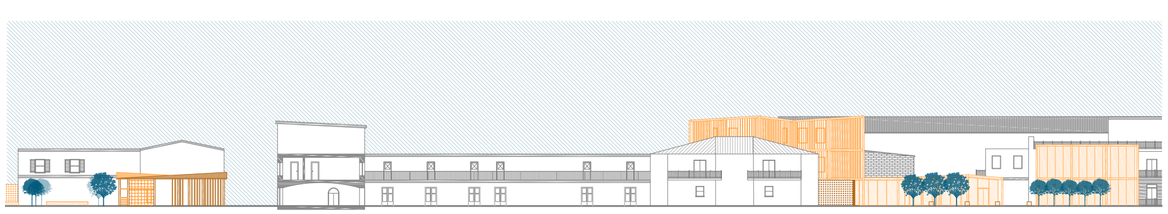
URBAN STRATEGY



FRATTAMINORE GENERAL FRAMEWORK

0 20 50 100m

SECTION AA'

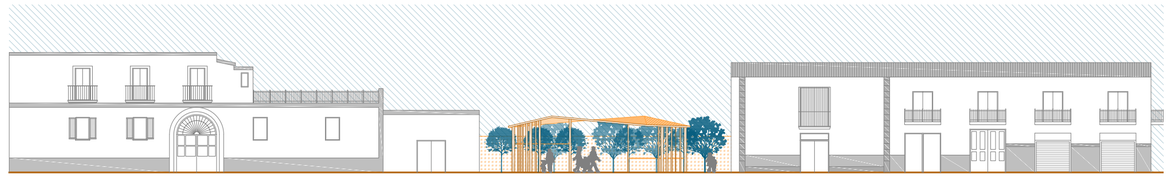


SECTION BB'

0 10 25 50m

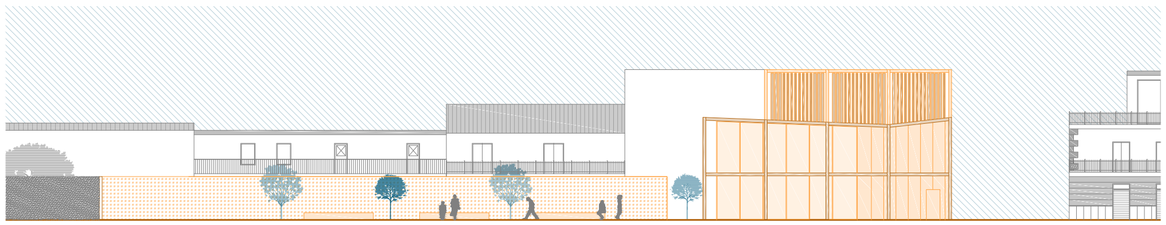
EX MULINO

0 4 10 20m



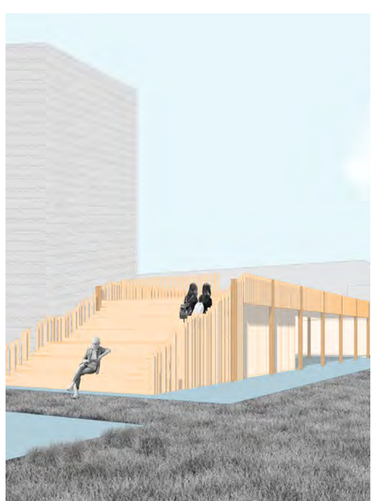
PLAYGROUND

0 4 10 20m



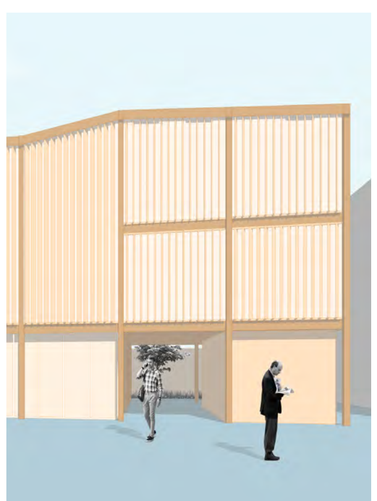
MULTI-FUNCTIONAL BUILDING

0 4 10 20m

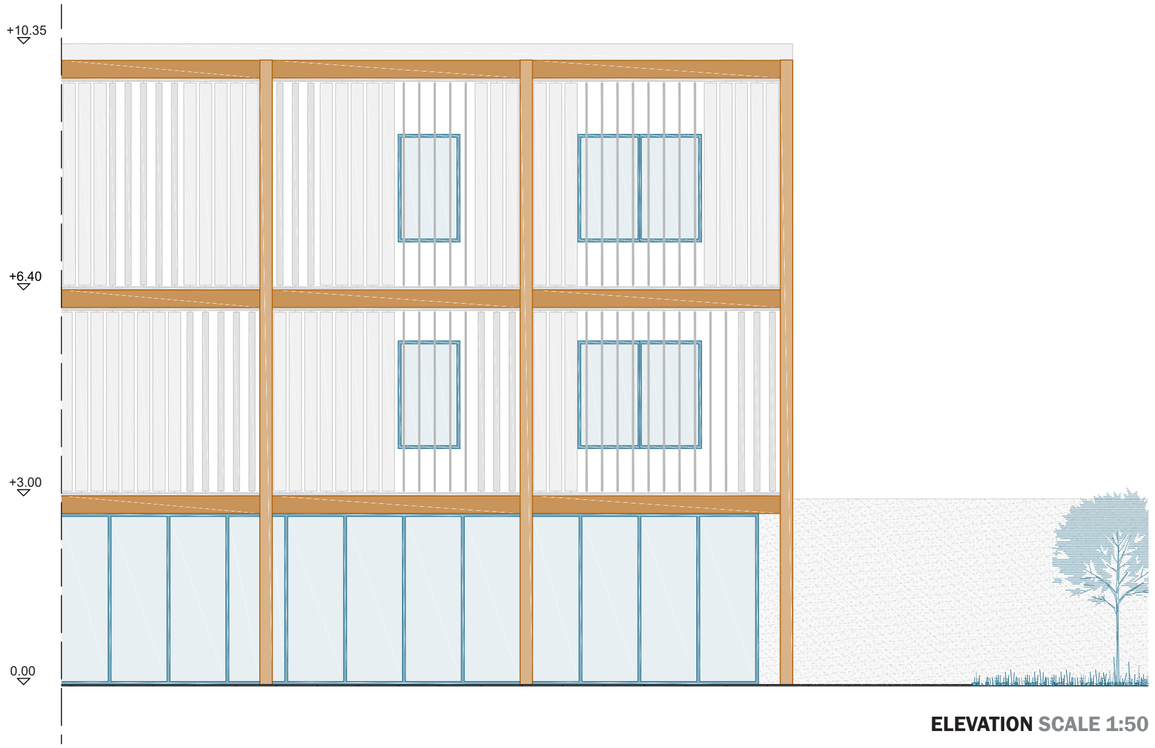


ANCIENT MILL

PLAYGROUND



MULTI-FUNCTIONAL BUILDING



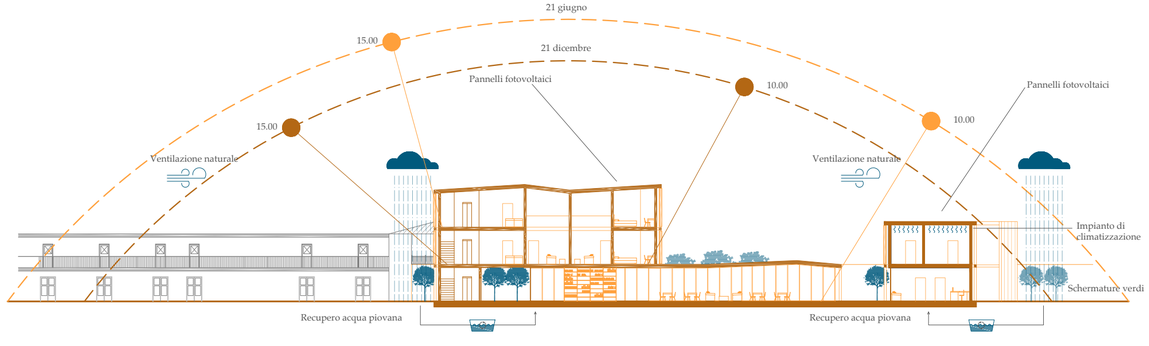
ELEVATION SCALE 1:50

CHIUSURA SUPERIORE	s [m]	λ [W/mK]	R [m2K/W]
liminare interno			0,13
cartongesso	0,01	0,21	0,05
isolante	0,02	0,033	0,61
cls	0,05	1,15	0,04
barriera al vapore	0,004	0,17	0,02
isolante	0,1	0,036	2,78
isolante	0,04	0,035	1,14
liminare esterno			0,05
R [m2K/W] totale			4,82
U [W/m2K]			0,21

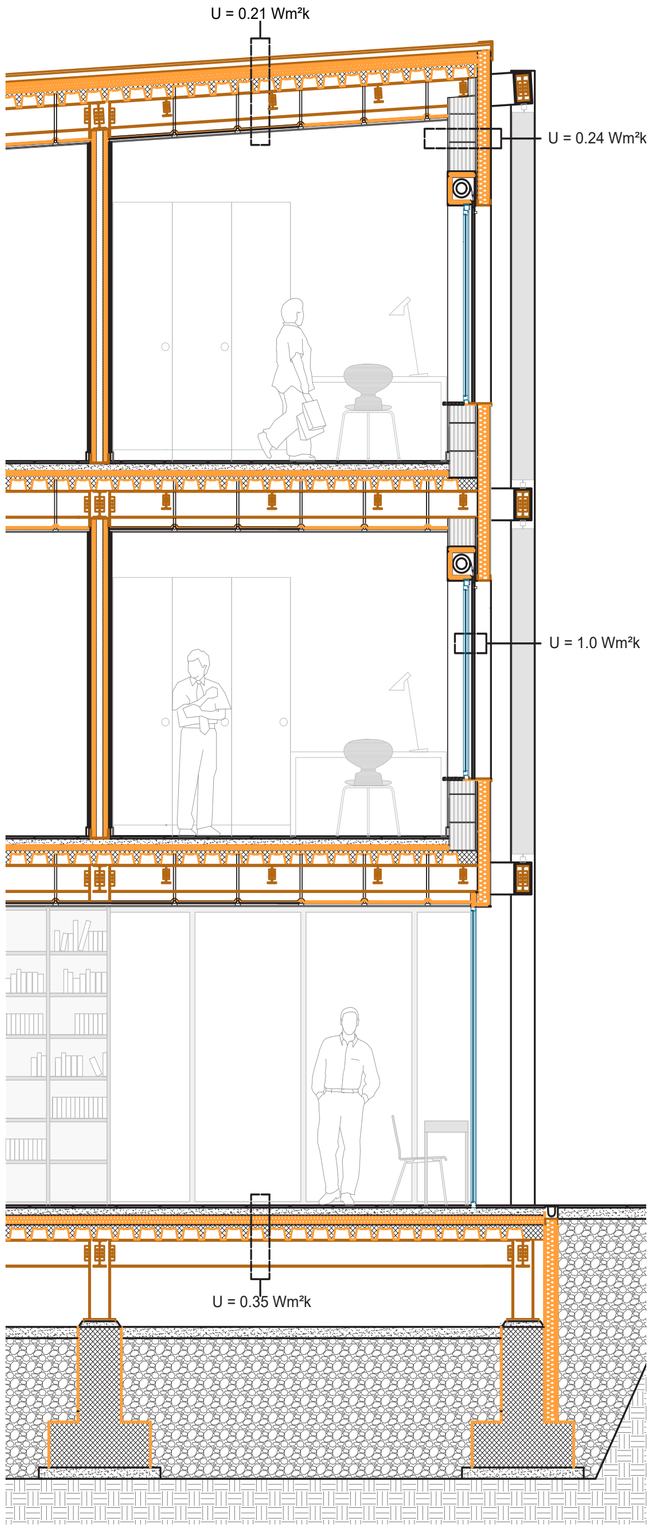
CHIUSURA VERTICALE	s [m]	λ [W/mK]	R [m2K/W]
liminare interno			0,13
intonaco	0,015	0,7	0,02
blocco in laterizio	0,25	0,46	0,54
intonaco	0,015	0,7	0,02
isolante	0,12	0,035	3,43
liminare esterno			0,05
R [m2K/W] totale			4,19
U [W/m2K]			0,24

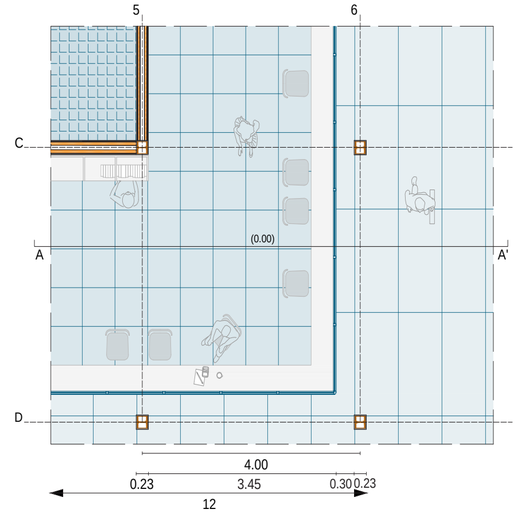
CHIUSURA INFERIORE	s [m]	λ [W/mK]	R [m2K/W
liminare interno			0,13
pavimento	0,02	1	0,020
massetto di allettamento	0,07	1,6	0,04
isolante termoacustico	0,09	0,035	2,57
cls	0,12	1,6	0,075
liminare esterno			0,05
R [m2K/W] totale			2,89
U [W/m2K]			0,35

THERMAL TRANSMITTANCE



BIOCLIMATIC SECTION





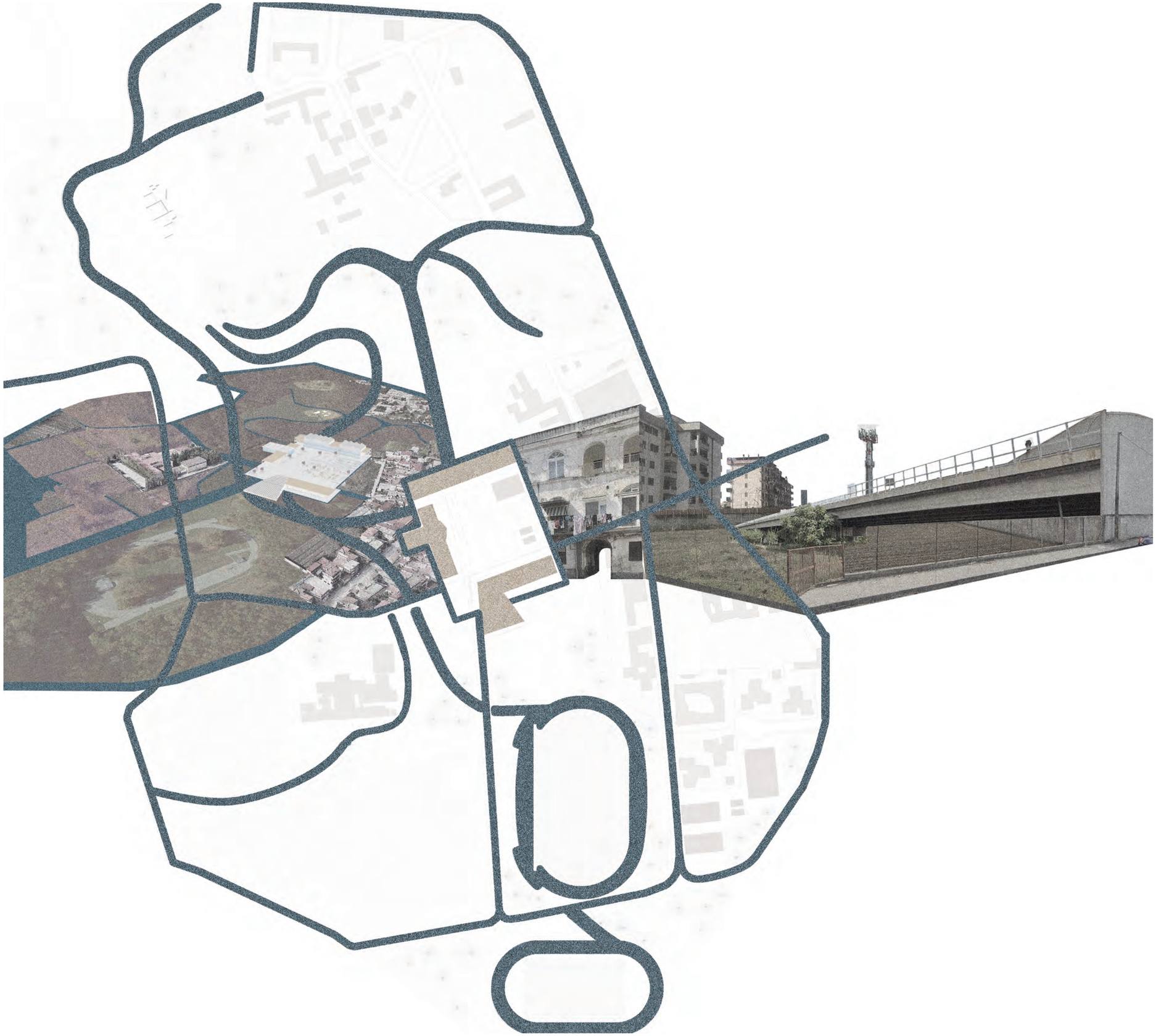
1. Upper horizontal closure: metal plates, Rockwool 211 type rock wool panel, Rockwool Durock Energy type rock wool panel, vapor barrier, corrugated sheet with concrete casting.
2. External vertical closure: finishing layer, skim coat with reinforcing mesh, Rockwool Frontrock Max Plus type rock wool rigid panel, plaster, porous brick blocks; plaster.
3. Lower horizontal closure: stoneware floor; mat; Rockwool 211 type rock wool semi-rigid panel; corrugated sheet with concrete casting.

PLAN AND SECTION OF THE BUILDING AND THE OUTDOOR SPACE SCALE 1:50

VALERIA PARRACINO - URBAN PARK

ARCHEOOGY - AGRICULTURE - SPORT

The study and analysis of the Frattaminore area brought to light different conditions within the municipal area, almost all full and tending to saturation. The consolidated city gives way to the east to an area in process of expansion, bordering the median axis that marks a limit with the part of the industrial city.
It was immediately clear the need to go and work on the areas on the edge of the municipal area, thus generating links both with the adjacent municipalities, but also generating new relationships within Frattaminore itself.
The analysis of the place also revealed an almost total absence of places intended for cultural spaces, for aggregation and intended for the community.
So wanting to put all these conditions into a system, the design choice fell on the peri-urban area to the west of the territory of Frattaminore, characterized by the presence of archaeological remains, the agricultural area and the municipal stadium, all elements currently underdeveloped, but subject to study in the field of planning tools.
The Urban Park therefore tries to hold together the different specific aspects of the peri-urban area and declines them according to a strategy based on the design of different paths and paces, relating to the conditions that the park encounters.
At the same time, connections are created with the rest of the territory through a cycle path.

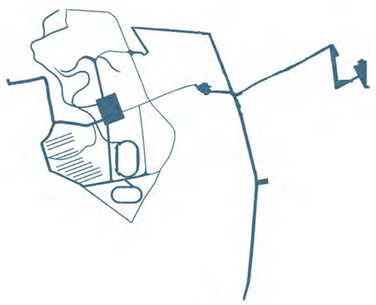


Program

urban park, archaeological park, sport facilities, workshop and exhibition spaces, covered market and greenhouse, covered playing field.

Covered area	**5957m²**
Outdoor area	**245.846m²**
Above-ground floors	**1**
Built volume	**44.809m³**
Estimated cost	**43.159.194€**

The archaeological remains of the ancient Atella, the municipal stadium, the Novio Atellano middle school and the presence of the agricultural area are all cornerstones within the project and used as a starting point for the grafting of the park. The different conditions hybridized by the park are then held together by the buildings.



The different conditions hybridized by the park are then held together by the buildings.

The buildings act as a graft within the park and introduce spaces for the community at the service of the entire municipal area.

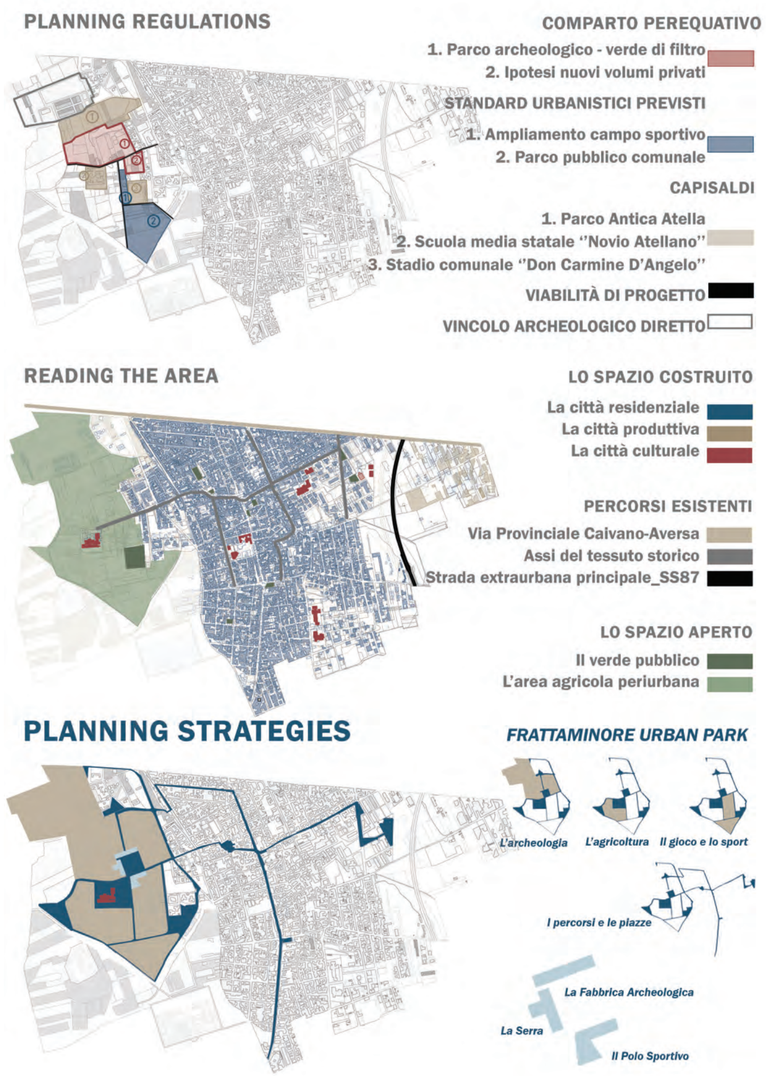
These decline the characteristics of the place and respond to the needs of the park.

We therefore have the Archaeological Factory, the Greenhouse, and the Sports Center.

The logic of the graft is also declined within the architectures themselves where by grafting we mean the structure and roof of the building that characterizes it and makes it consistent with the entire system in which it is inserted.

The pool of users to which the project aims is very wide and varied, thanks also to the different but compatible functions.

In fact, we have a space for exhibiting and studying archeology, a space for a covered market and also for working on the products sold within it and finally a space for sports.



STANDARDS

Artwork that summarizes the wide set of standards that comes in when the project comes to life and it settles in the area.

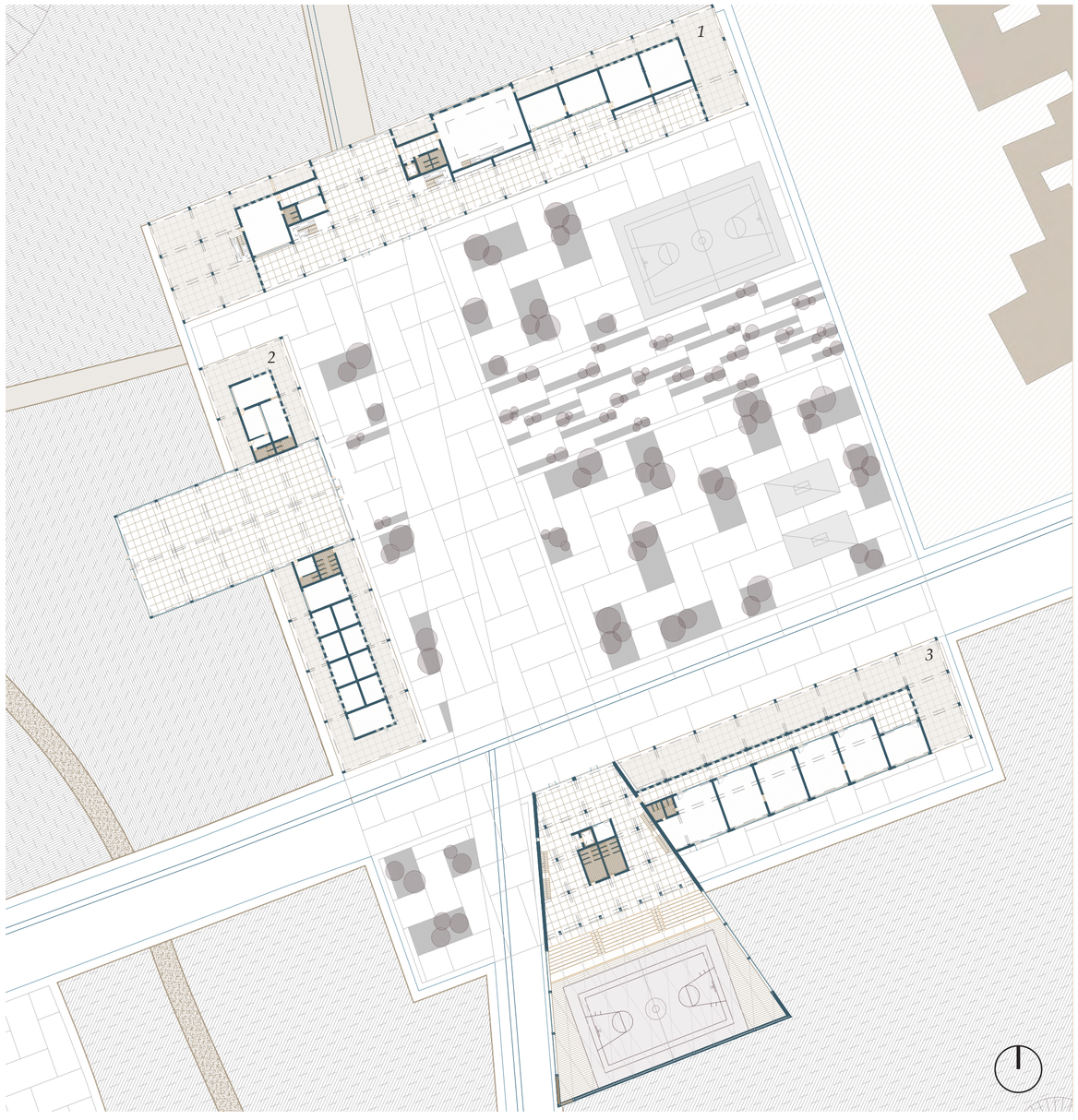
STAKEHOLDERS

The different functions introduced by the Urban Park in Frattaminore mean that the user base is wide and well differentiated by interests and by age.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

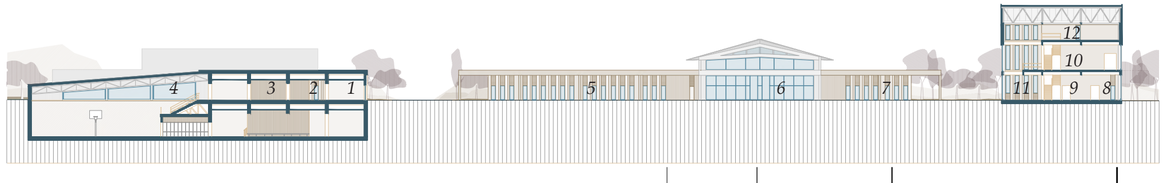
0 50 100 200m

1. The Archaeological Factory
2. The Greenhouse
3. The Sports Center



DESIGN STRATEGY

0 10 25 50m



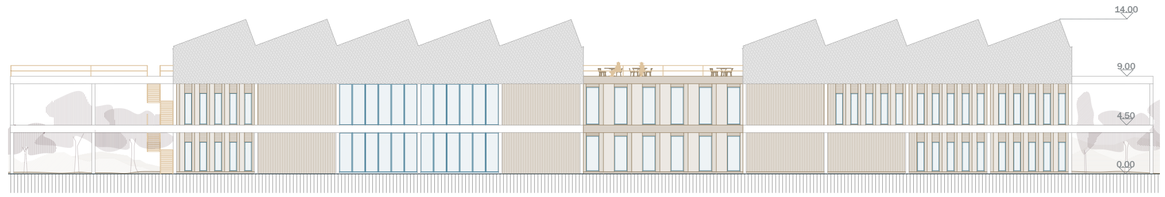
CROSS SECTION

0 4 10 20m

1. Entrance
2. Reception
3. Services
4. Indoor court
5. Covered market
6. Greenhouse
7. Refreshment area
8. Entrance
9. Lobby
10. Exhibition hall
11. Glazed corridor
12. Covered terrace

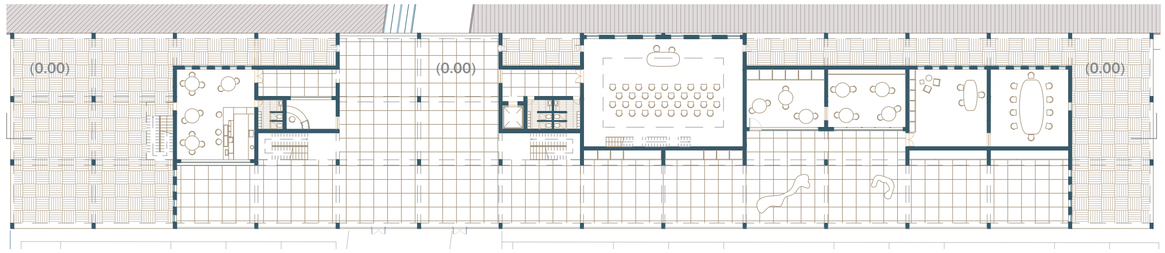
Focus on The Archaeological Factory

Corrugated metal sheet
Wooden panel
Exterior concrete floor
Interior concrete floor
Resin floor
Steel structure



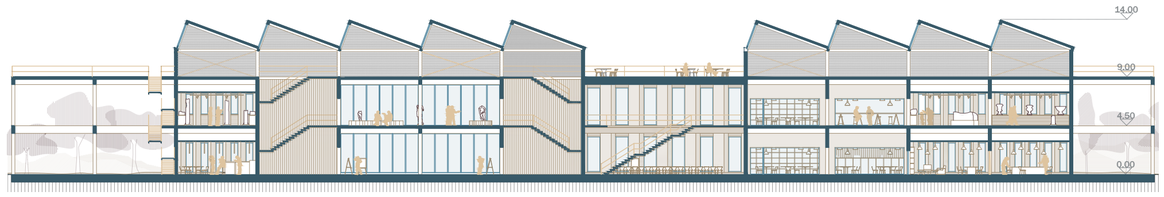
NORTHERN FRONT

0 4 10 20m



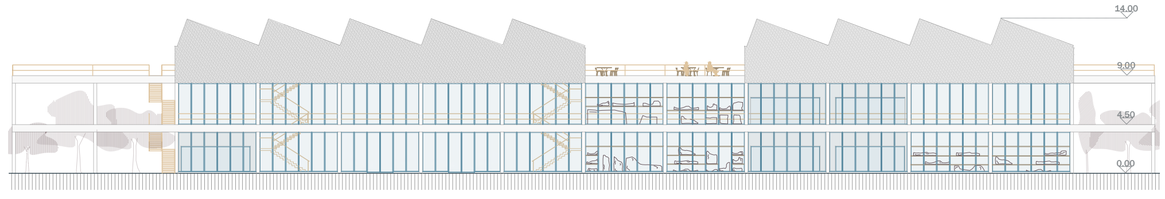
GROUND FLOOR PLAN

0 4 10 20m



SECTION A-A'

0 4 10 20m



SOUTHERN FRONT

0 4 10 20m

THE ARCHAEOLOGICAL PARK

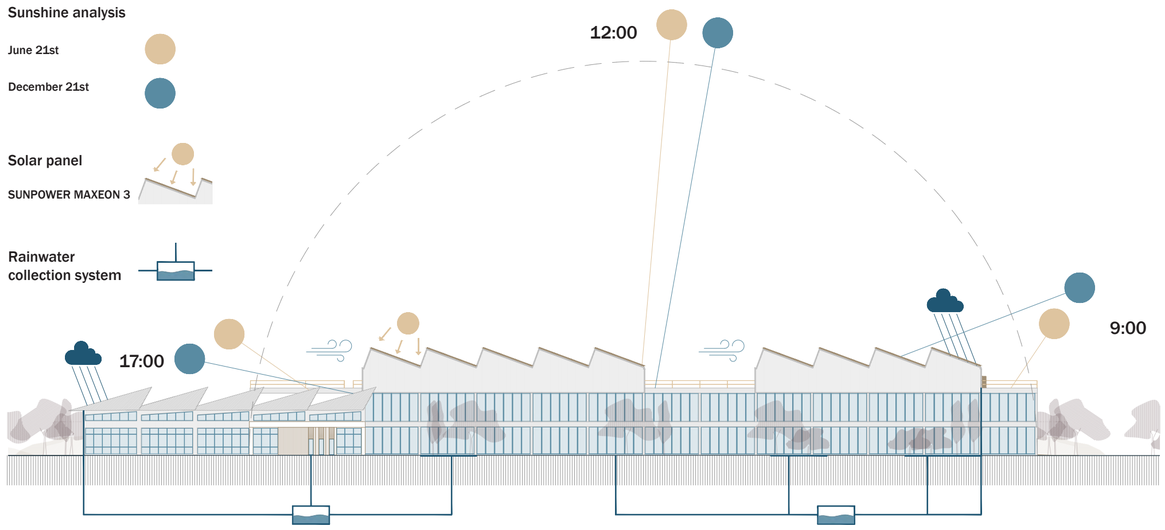
THE SQUARE

THE SPORTS PARK

VIEW FROM THE SQUARE

EXHIBITION HALLWAY

WORKSHOP & EXHIBITION ROOM



ENVIRONMENTAL SECTION

LOWER CLOSURE

Layer	Sp. (m)	λ (W/mK)	R (m²K/W)	U (W/m²K)
Inner liminal layer			0.13	
Corrugated sheet	0.003	0.04	0.08	
Casting of concrete	0.12	0.58	0.21	
Insulating	0.08	0.03	2.67	
Bedding screed	0.12	0.58	0.21	
Resin floor	0.015	0.58	0.03	
Outer liminal layer			0.04	
		Rtot	3.36	0.30

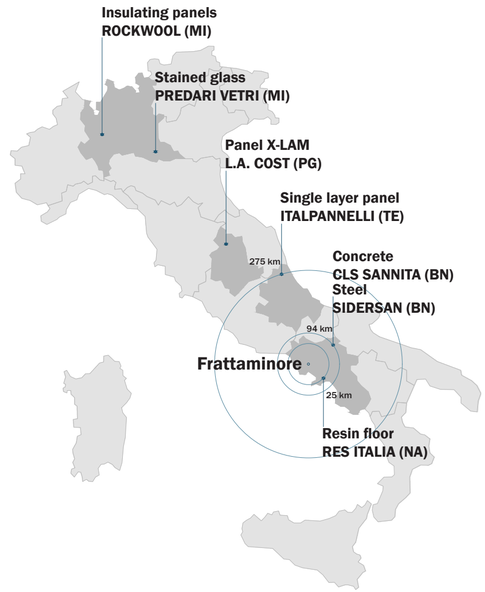
VERTICAL CLOSURE

Layer	Sp. (m)	λ (W/mK)	R (m²K/W)	U (W/m²K)
Inner liminal layer			0.13	
Drywall	0.01	0.21	0.06	
Gypsum fiber	0.01	0.36	0.04	
ROCKWOOL ACOUSTIC	0.05	0.03	1.52	
CLT panel	0.10	0.13	0.73	
ROCKWOOL FRONTROCK	0.16	0.04	4.44	
Lime plaster	0.01	0.68	0.01	
Outer liminal layer			0.04	
		Rtot	6.97	0.14

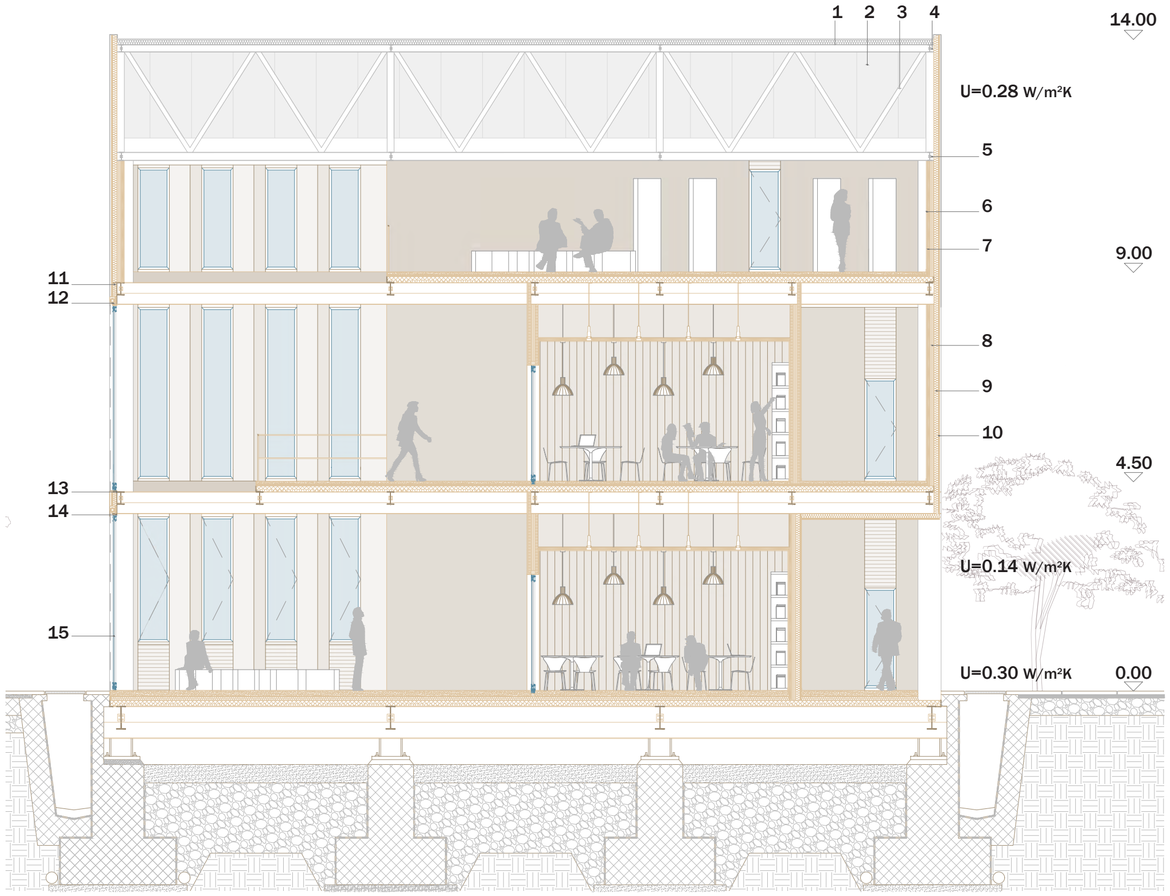
FIXTURE

Uw (W/m²K)	Uf (W/m²K)	Ug (W/m²K)	g	ggl + sh
0.8	0.8	0.7	0.25	0.2

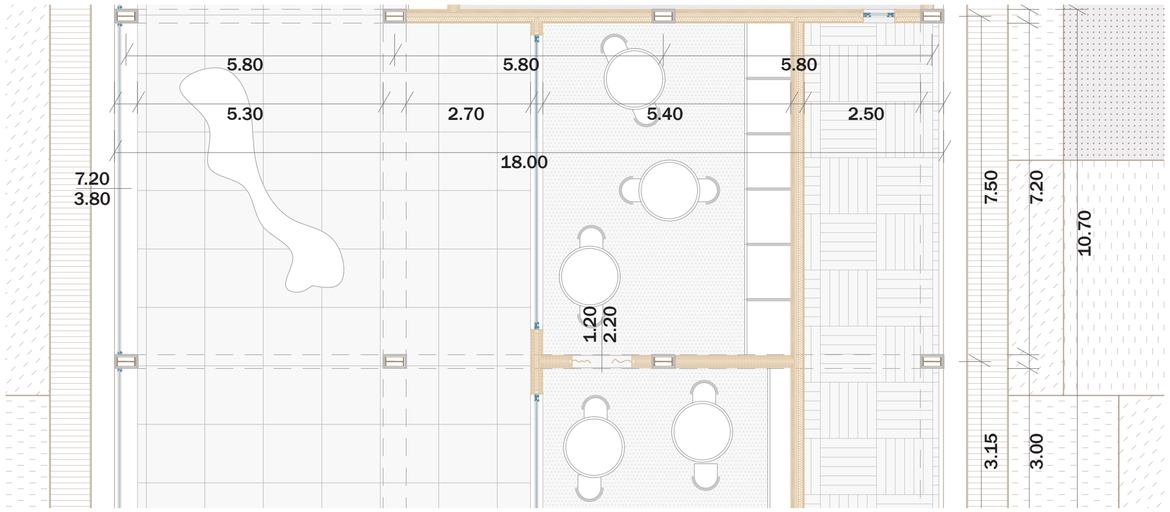
THERMOPHYSICAL DEFINITION OF THE SHELL



BUILDING MATERIALS PLACE OF PROVENANCE



1. Sandwich panel (thickness 20 cm)
2. Polycarbonate panels and aluminum uprights
3. Truss beam with rolled metal sections
4. IPE 160 beam
5. IPE 180 beam
6. Double plasterboard sheet (thickness 1.25 cm)
7. ROCKWOOL ACOUSTIC panel (thickness 6 cm)
8. Supporting panel in XLAM (thickness 9.5 cm)
9. ROCKWOOL FRONTROCK panel (1.2 cm)
10. External coat finish
11. ROCKWOOL FRONTROCK panel (1.2 cm)
12. Internal blackout blind recessed in niche
13. C-shaped metal profile (thickness 1 cm)
14. Metal counterframe
15. Selective low emissivity double glazing



INDOOR/OUTDOOR RELATION SCALE 1:100

FRATTAMINORE ADVANCED DESIGN STUDIO

ROSARIO CLEMENTE PERROTTA - A CONNECTIVE PATH

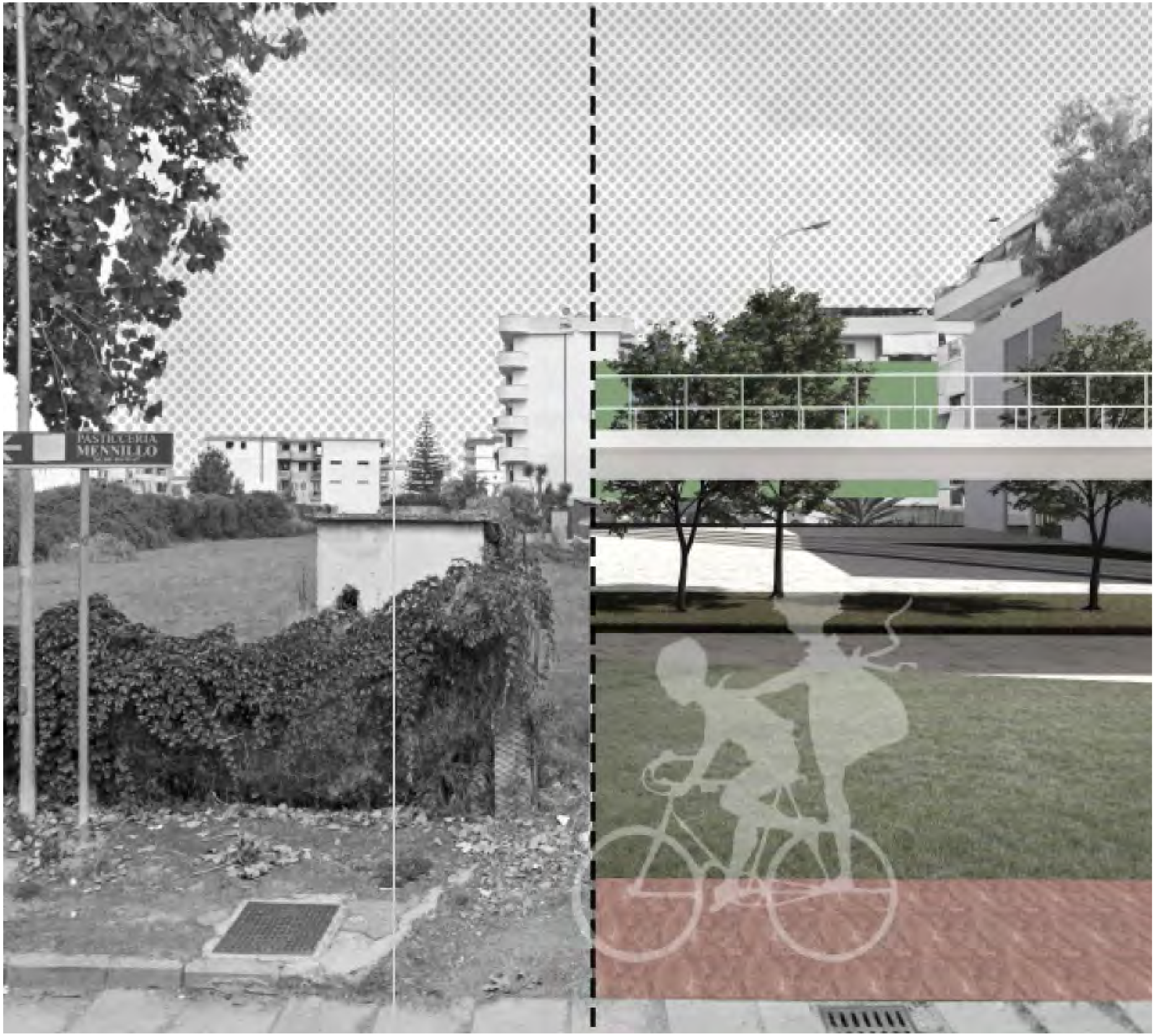
BETWEEN THE TWO PARTS OF THE CITY

The main theme of the project is the connection between the expansion area east of Frattaminore, specifically the area P.E.E.P. locality Viggiano, with the historical part of the city itself. The project is located, therefore, near the Baronial Palace behind this. Today this area is totally uncultivated and abandoned, a waste of city born from the urban action that aims to expand residential areas. The consolidated central area of Frattaminore, in fact, is saturated with housing, a condition that is the result of uncontrolled building abuse of the twentieth century.
Certain urban planning choices have aggravated even giving vent to exclusions between adjacent places, in the specific case historical city and new city, uncontrolled and dangerous suburbs, lack of unity of the city plant.
The idea of city, in fact, is totally opposite to the current condition of Frattaminore. It turns out to be porous at the edges, untied and fragmented. The aim of the project is therefore to mend the places, guaranteeing the citizens airy spaces and green areas, still missing or poorly cared for. The concrete project involves an elevated walkway that connects the heart of Frattaminore or Piazza Crispi and the Baronial Palace with the area behind the residential buildings, touching uncultivated and abandoned places restoring them to have a collective function inherent to the indications of the P.U.C. in adoption.

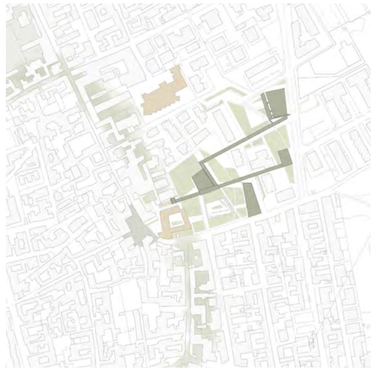
Program

sport, urban park,
social and culture center, cinema theater

Covered area	**28495m²**
Outdoor area	**22361m²**
Built volume	**35809m³**
Estimated cost	**24.793.274 €**



***A connective path* is the keyword that identifies the concrete project action. A sensitive intervention that aims to fill the gaps of the city, transforming Frattaminore in an inclusive and unitary place, bringing all those marginal areas closer to the consolidated and historical center.**



The urban strategy is to bring those fragmented and porous spaces and places closer to the consolidated city core in order to ensure global inclusiveness and thus reduce the unhealthy conditions of the suburbs.

In particular, the locality Viggiano is an area with great potential for strategy, as it can not only ensure a continuity of places but can become the focus to interrelate the area to the east of Frattaminore and the consolidated historic center.

The project area is very interesting as it not only affects the Palace and the Square, but is also located adjacent to the Colombo Institute. This condition was favorable to begin an awareness of the students and young people to the territory and culture of Frattaminore steeped in history.

The buildings of the project, such as the cinema theatre and the cultural hub exhibition, in fact, were conceived as a support to the teaching of the Institute and put at the service of the children.

URBAN STRATEGY

Starting from the definition of historic streets and urban suburbs, the strategic aim is to give unity to the city, to 'bring' marginal places to the consolidated historic center. In the graph, the path is the element that connects concretely Piazza Crispi and the Baronial Palace, with the locality Viggiano.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m

FUNCTIONAL MASTERPLAN

In this graph the different functions of the new buildings from the multifunctional project are highlighted.

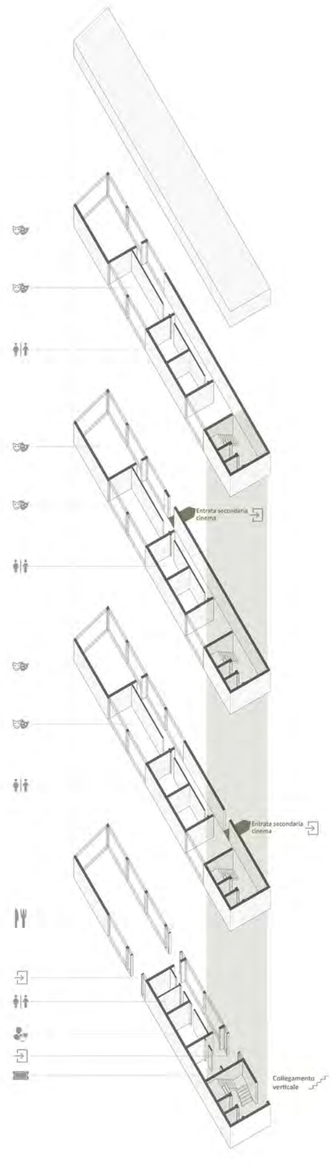
DESIGN STRATEGY

SOUTHERN FRONT

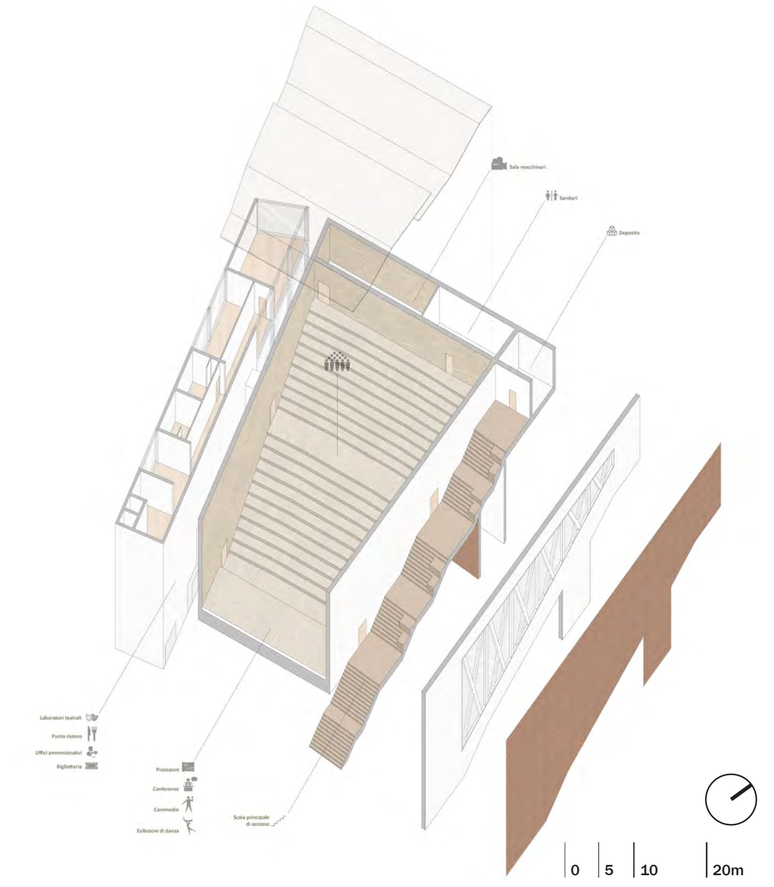
EASTERN FRONT

1. Palazzo Baronale
2. Gym - sportive area
3. Cultural hub - exposition
4. Entrance - Info Point
5. Cinema theater
6. Path

SECTION

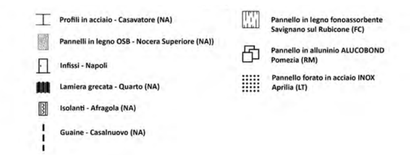


EXPLODED DIAGRAM - SERVICES

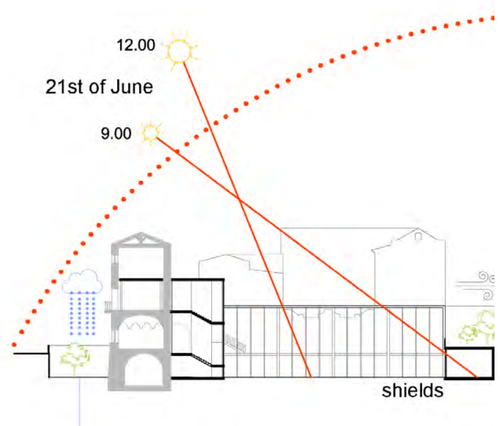


EXPLODED DIAGRAM - SECTION - CINEMA THEATER

ORIGIN OF MATERIALS



SOLAIO DI COPERTURA	s	ρ	λ	R	m
Strato	[m]	[kg/m³]	[W/mK]	[m²K/W]	[kg/m²]
Ghiaia	0,1	1000	0,5	0,2	100
Guaina impermeabilizzante	0,008	220	0,23	0,034	1,76
Isolante fibra di legno	0,06	210	0,038	1,57	12,6
Granulare livellante	0,038	400	0,09	0,42	15,2
Pannello OSB	0,018	650	0,12	0,15	11,7
Lamiera grecata	0,003	7800	52	0,000057	23,4
Isolante fibra di legno	0,1	210	0,038	2,63	21
Pannello abete fonoassorbente	0,02	450	0,14	0,14	9
Rsi				0,13	
Rse				0,04	
TOTALE	**0,347**			**5,314057**	194,66
TRASMITTANZA TERMICA [W/mK]	**0,188180142**				
CHIUSURA OPACA VERTICALE	**s**	**ρ**	**λ**	**R**	**m**
Strato	[m]	[kg/m³]	[W/mK]	[m²K/W]	[kg/m²]
Pannello in acciaio forato	0,005	7850	70	7,142866-05	39,25
Guaina impermeabilizzante	0,008	220	0,23	0,034	1,76
Isolante fibra di legno	0,12	210	0,038	3,157894737	25,2
Isolante fibra di legno	0,12	210	0,038	3,157894737	25,2
Pannello legno fonoassorbente	0,02	450	0,14	0,142857143	9
Resistenza termica superficiale esterna				0,04	
Resistenza termica superficiale interna				0,13	
TOTALE	**0,26**			6,662718045	100,41
TRASMITTANZA TERMICA [W/mK]	**0,150088897**				
SOLAIO INTERMEDIO	**s**	**ρ**	**λ**	**R**	**m**
Strato	[m]	[kg/m³]	[W/mK]	[m²K/W]	[kg/m²]
Pannello in acciaio forato	0,005	7850	70	7,142866-05	39,25
Isolante in fibra di legno	0,07	210	0,038	1,842105263	14,7
Guaina impermeabilizzante	0,008	220	0,23	0,034	1,76
Lamiera grecata	0,003	7800	52	5,76923E-05	23,4
Pannello in legno OSB	0,015	650	0,12	0,125	9,75
Isolante in fibra di legno	0,07	210	0,038	1,842105263	14,7
Livellante granulare	0,03	400	0,09	0,333333333	12
Lastra gessofibra per sottofondi	0,05	1150	0,32	0,15625	57,5
Pavimento legno	0,01	450	0,14	0,071428571	4,5
TOTALE	**0,261**			4,404355552	177,60
TRASMITTANZA TERMICA [W/mK]	**0,227048179**				



1. ROOF
Plaster ceiling
Insulation in wood fibre
Reticular beam
Corrugated sheet
Wooden panel OSB
Granular leveling
Insulation in wood fibre
Waterproofing sheath
Gravel

2. INTERMEDIATE FLOOR
Plaster ceiling
Insulation in wood fibre
Beam IPE 300
Corrugated sheet
Wooden panel OSB
Insulation in wood fibre
Granular leveling
Double gypsum panel
Parquet

3. GROUND FLOOR
Beam IPE 300
Corrugated sheet
Wooden panel OSB
Granular leveling
Insulation wood wool mineralized
Radiant floor
Plaster slab
Parquet

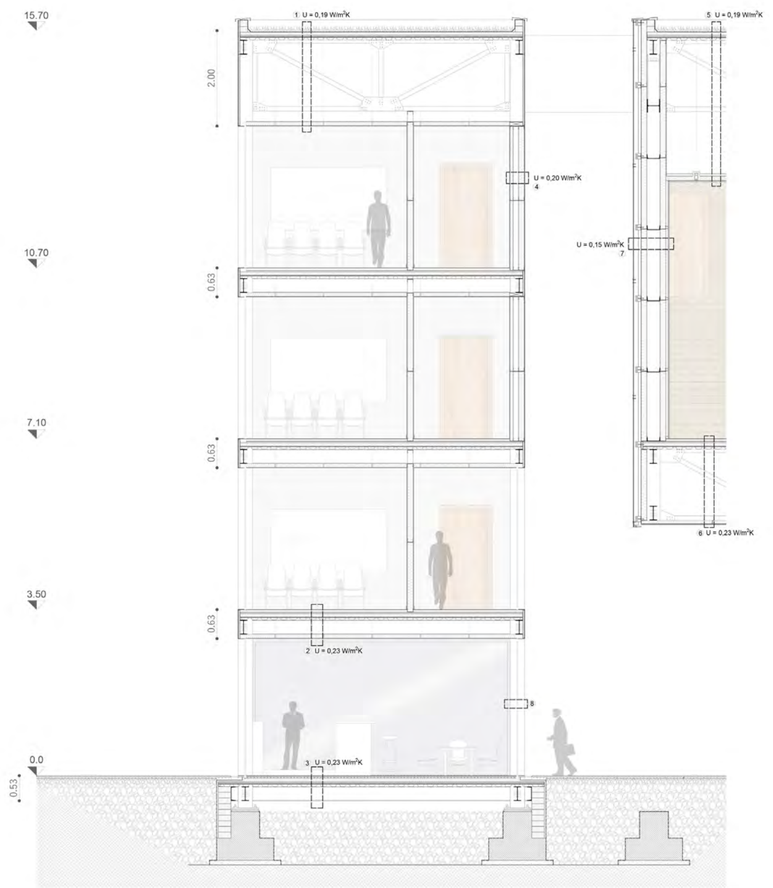
4. OPAQUE VERTICAL STRUCTURE
Plaster slab
Insulation in wood fibre
Steel substructure
Insulation in wood fibre
Aluminium panel

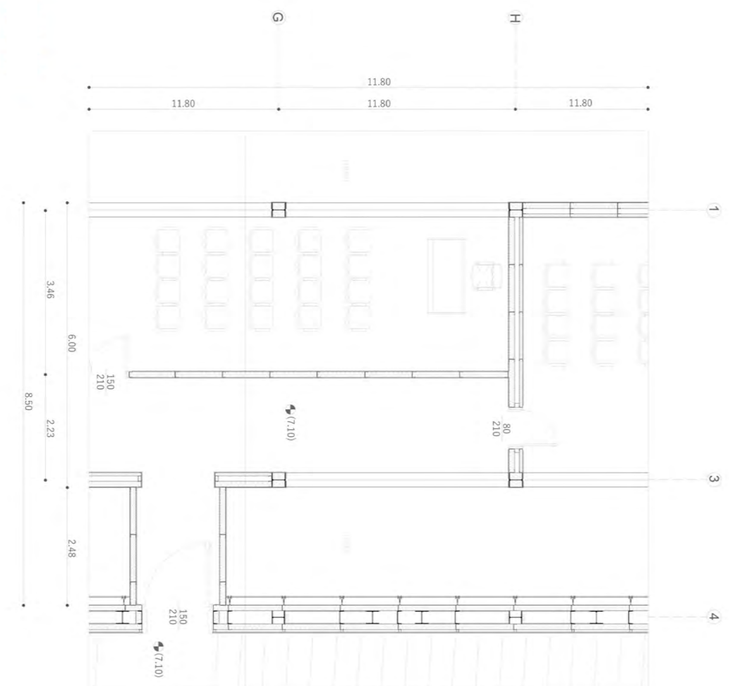
5. ROOF
Ceiling in sound-absorbing wood
Insulation in wood fibre
Reticular beam
Corrugated sheet
Wooden panel OSB
Granular leveling
Insulation in wood fibre
Waterproofing sheath
Gravel

6. INTERMEDIATE FLOOR
Perforated steel panel
Waterproofing sheath
Insulation in wood fibre
Reticular beam
Corrugated sheet
Wooden panel OSB
Insulation in wood fibre
Granular leveling
Double gypsum panel
Parquet

7. OPAQUE VERTICAL STRUCTURE
Panel in sound-absorbing wood
Insulation in wood fibre
Reticular structure
Insulation in wood fibre
Waterproofing sheath
Steel substructure
Perforated steel panel

8. TRANSPARENT VERTICAL STRUCTURE



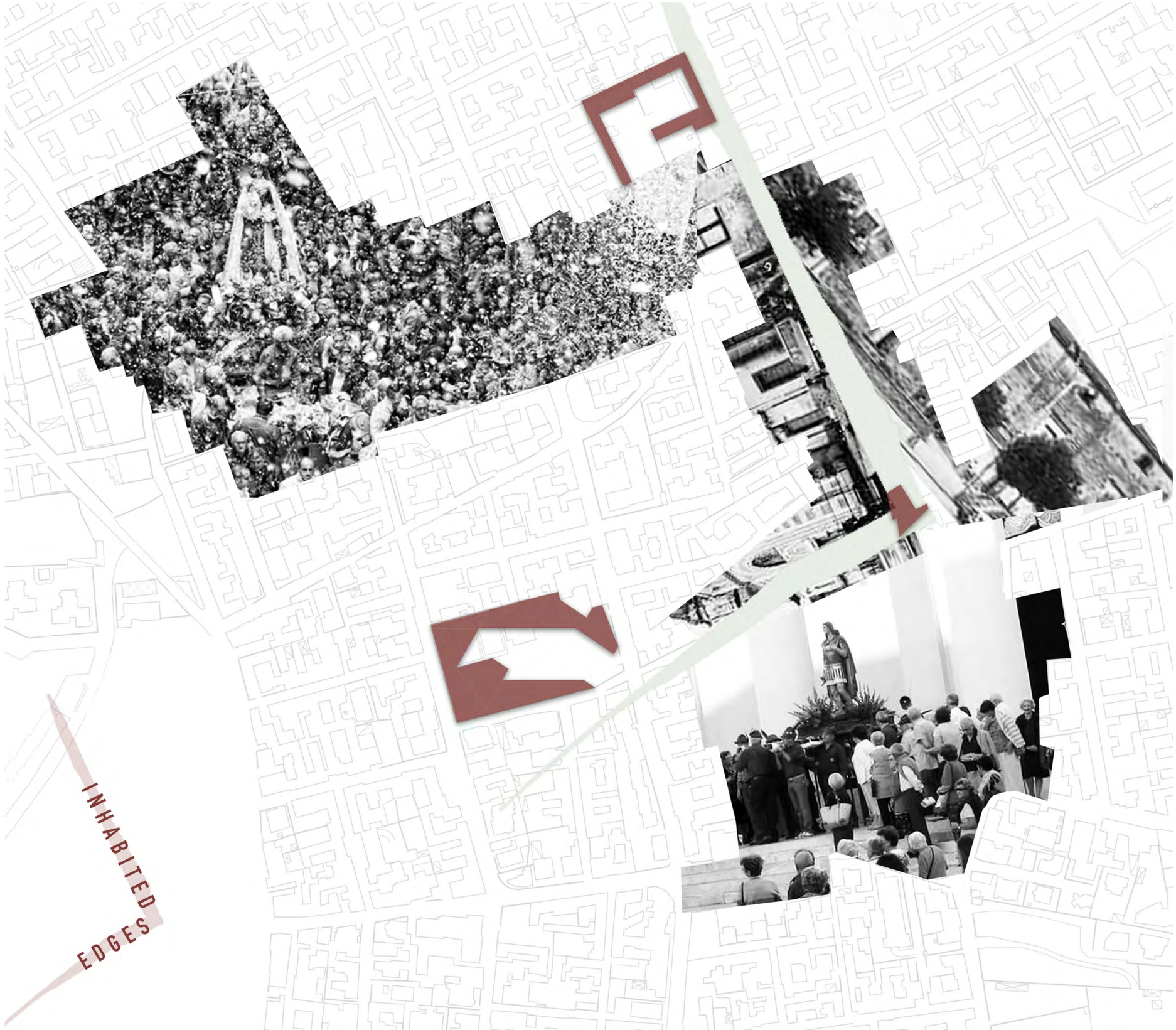


INDOOR/OUTDOOR RELATION SCALE 1:50

BENEDETTA RUGGIERO - INHABITED EDGES

CURARE I MARGINI | MARGINI SOCIALI

The project idea was born from a study about the origins of the city of Frattaminore, founded , following the unification of Italy, by the union of two hamlets: Pomigliano d'Atella and Fratta Piccola.
After two centuries, the community of Frattaminore is still affected by a social distance, which keeps different origins and traditions rooted, generating a real social edge.
The project therefore starts from this edge, which physically translates into what was once the border between the two hamlets, setting the target of transform it into an 'inhabited edge': a border area that becomes, through the project, center and connection to bring the two communities together.
The conceiving operation, starting from a territorial scale and a reasoning, arrives to an architectural scale always maintaining the idea of a strong connection and relationship with the context, with the pre-existing and what will be the permanences in the project.
At the heart of this is the union concept, there's the will to establish relations between people.



Program

contemporary library, connection spaces, entertainment a, leisure hub

Covered area	**5.500m²**
Outdoor area	**10.042m²**
Above-ground floors	**2**
Built volume	**67.100m³**
Estimated cost	**5.618.927,23 €**

The road that runs along the edge crosses the historic center of the city of Frattaminore, starting from Via Roma up to Via Palermo passing through Vico Studenti. This axis intercepts three poles of fundamental importance: the former Mill, Piazza Crispi and the Former Abandoned School Complex; through the project, the theme of “curing the margin” translates into the redefinition of these poles through a game of volumes and heights that make it, precisely, an inhabited edge.

What used to be a dividing border now becomes the backbone of the project: a cycling pedestrian road characterized by the presence of the gutters that define the public space, allowing also to manage the rainwater.

The identified poles now have a great potential for social catalysts; the former abandoned school complex is the main entrance of the new road-poles system.

The building develops from precise directionality around a centralizing element, represented by the school ‘s foundations left unfinished; this results in two main volumes developed on three levels, held together on the road level by a system of open and covered squares, and internally connected trough the basement.

In this system of spaces, fundamental is the role of the roof, which creates continuity between the volumes themselves and between the volumes and the building of the adjacent pre-existing town hall, with which the new building enters into relationship.

Locating the historic centre of the city

Reconstruction of the borders of Pomigliano d’Atella and Fratta Piccola

Definition of a road-poles system along the border

VIII secolo a.C

1400-1500

1974

REFERENCE MAPPING

The central element defined by the foundations of the former schools has many temporal references, from the Roman Domus, to the Renaissance palaces, up to the patio house.

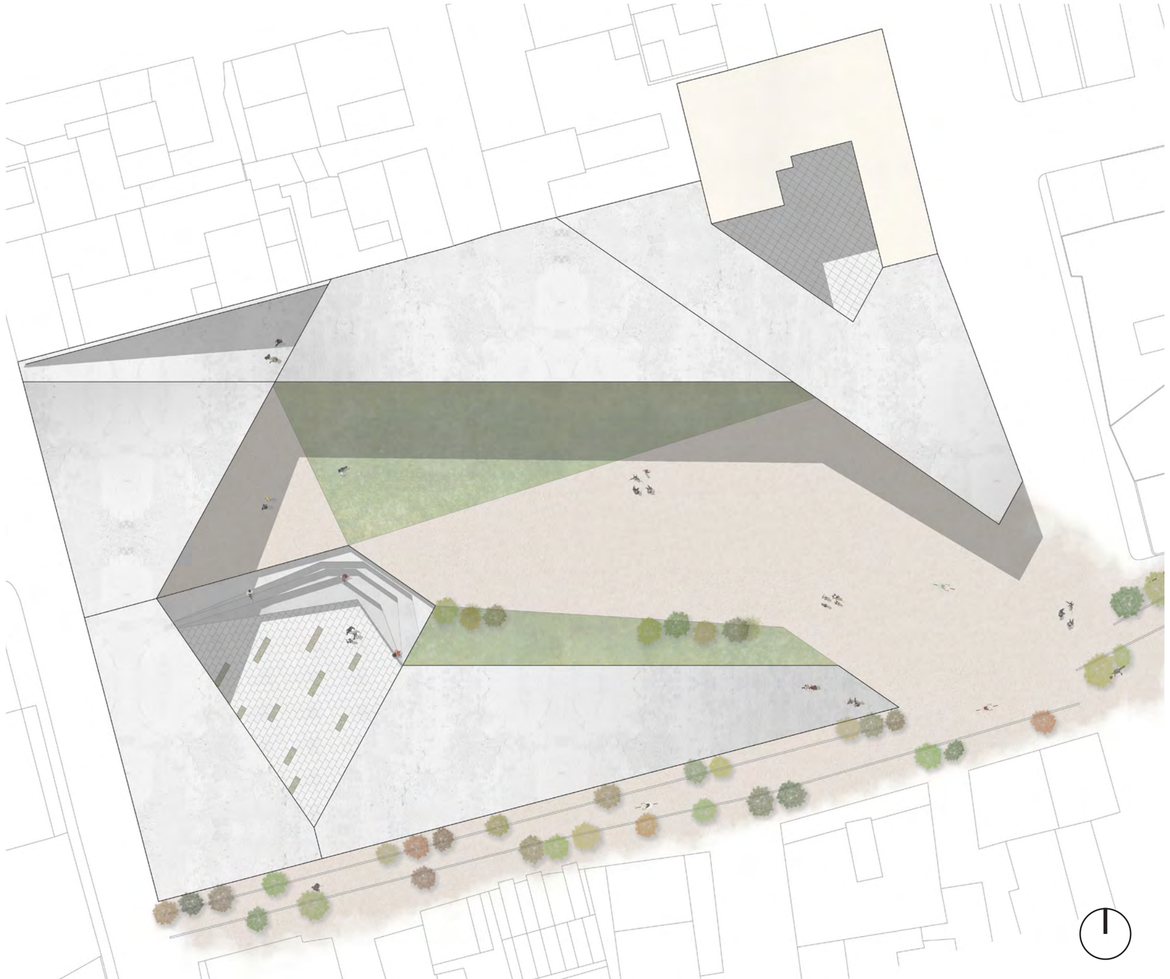
ACROSS

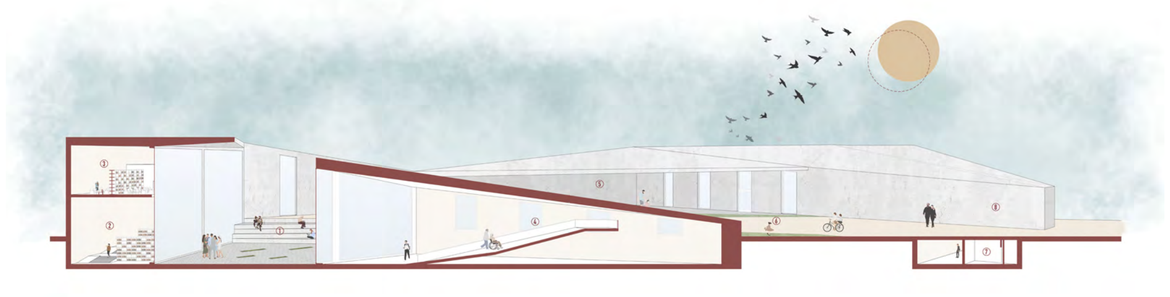
FRATTAMINORE

DESIGN CONCEPT

COLLAGE

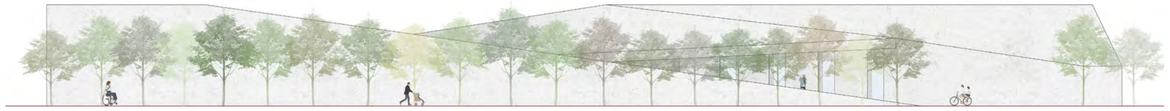
FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY



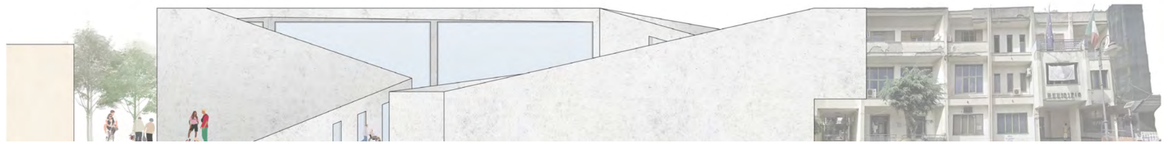


SECTION A

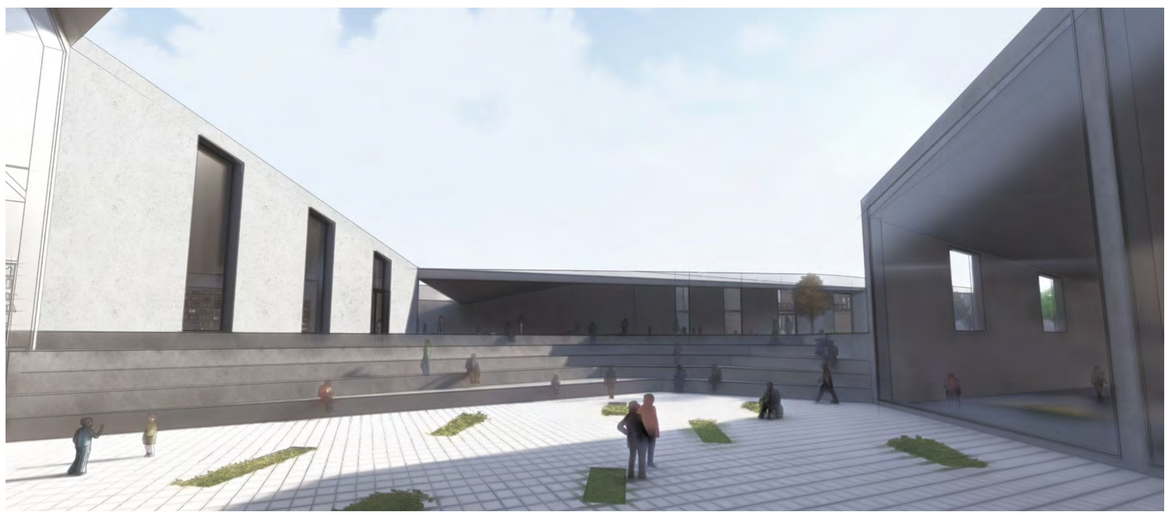
1. Lowered square
2. Study rooms
3. Literary cafe
4. Projection rooms
5. Covered square
6. Inner courtyard
7. Book depository
8. Auditorium



SOUTH FRONT

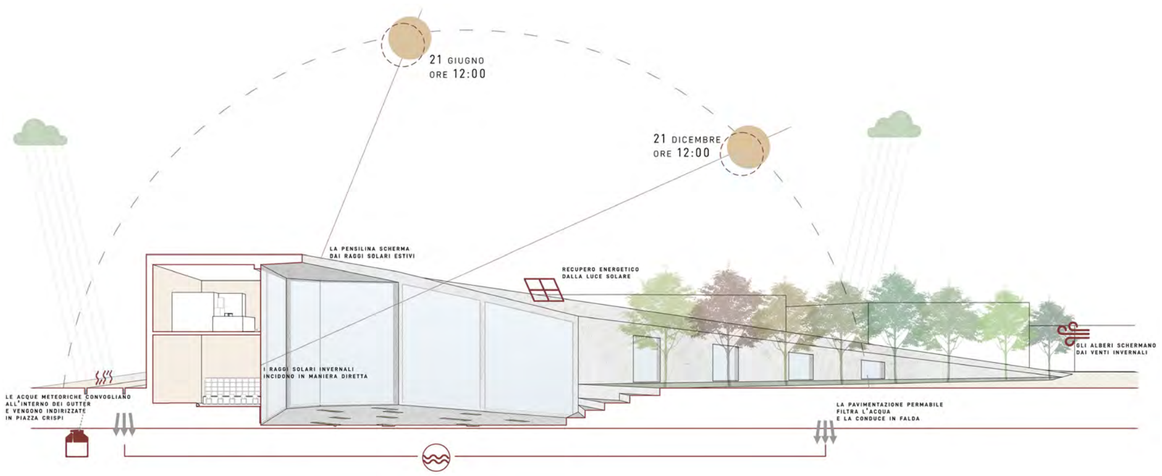


EASTERN FRONT

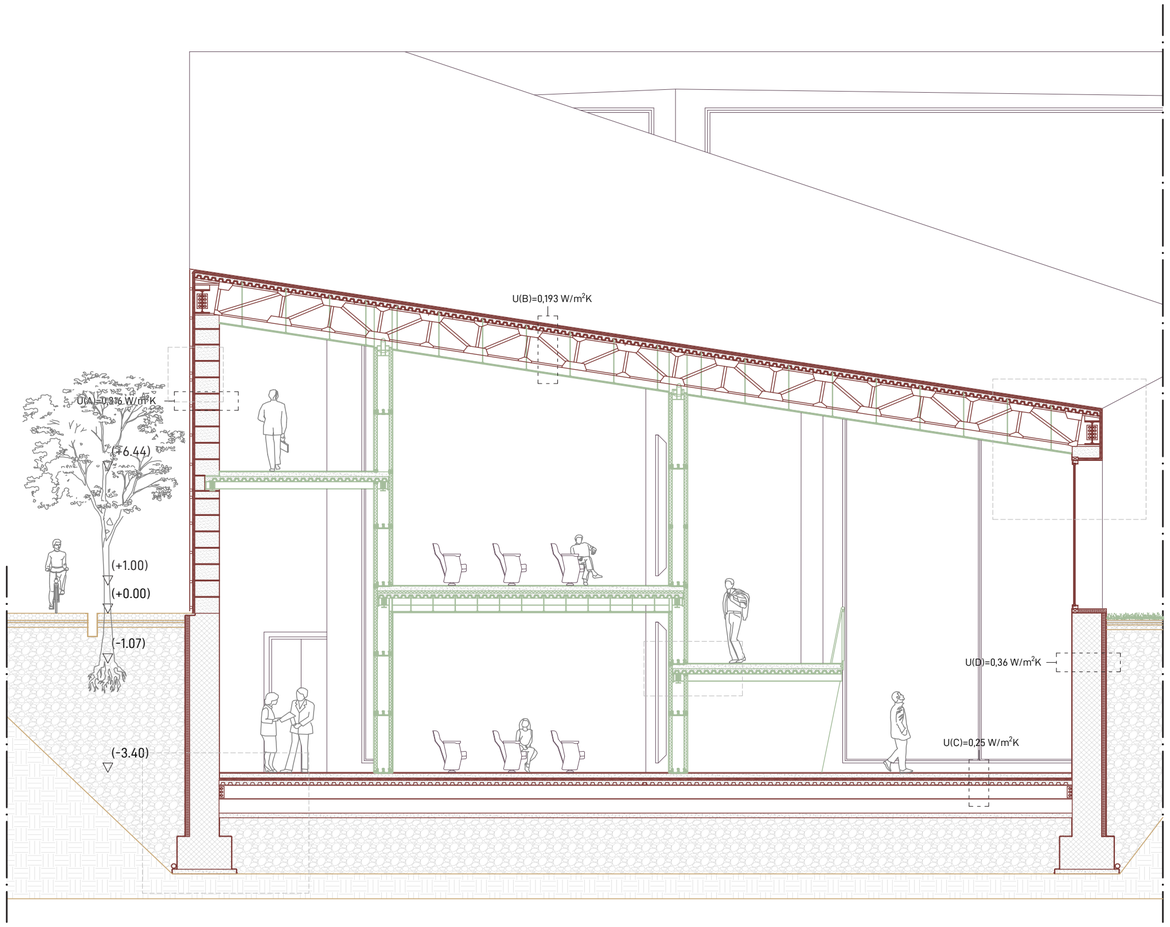


LOWERED SQUARES

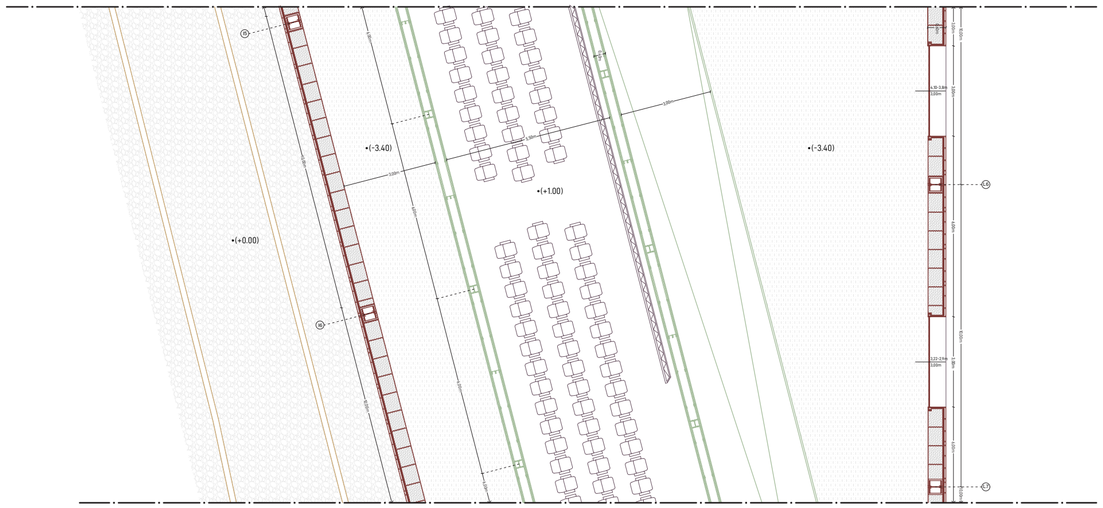
STUDY ROOMS



BIOCLIMATIC SECTION



A- vertical closure with fiber cement cladding panels, air gap, thermal insulation layer, cellular concrete blocks and internal plaster layer;
B- horizontal closure of the roof with fiber cement cladding panels, waterproofing sheath, thermal insulation and vapor barrier; reticular beam, dry floor with corrugated sheet and completion casting; false ceiling in plasterboard panels with acoustic insulation;
C- horizontal closure against the ground with a dry floor with corrugated sheet and completion casting, thermal insulation layer, concrete screed, layer of mortar and epoxy resin floor;
D- vertical earth retaining closure with waterproofing sheath, vapor barrier, rigid thermal insulation panel and earth retaining wall in reinforced concrete

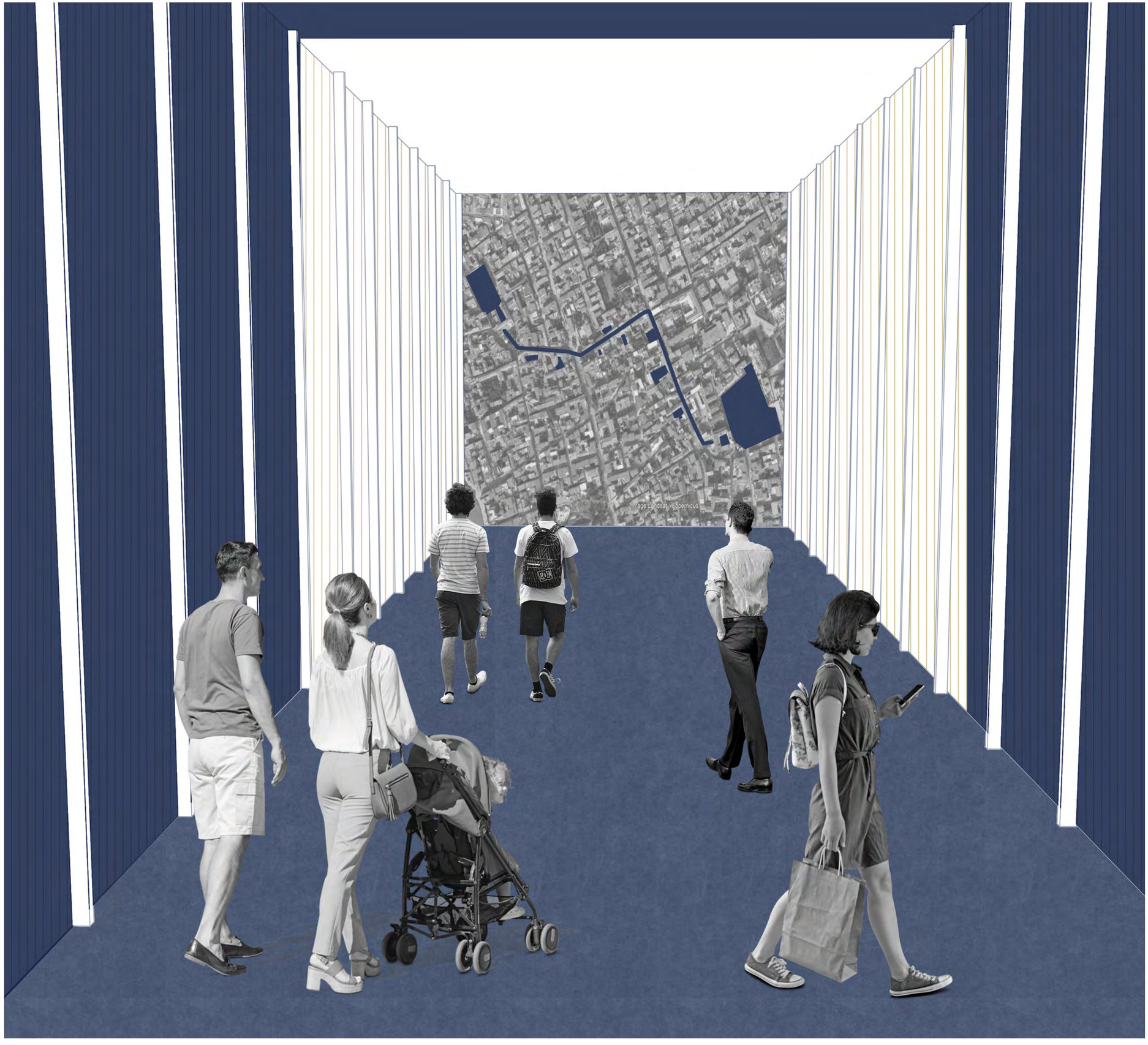


INDOOR/OUTDOOR RELATION SCALE 1:50

CLAUDIA SORRENTINO - THE PROMENADE

REVITALIZATION OF THE HISTORIC CENTER

The urge for the design of The Promenade arose from the necessity of connecting public spaces within the historic centre of Frattaminore.
The city, in the province of Naples, developed starting from the XIIIth century from the merging of the previous rural towns of Frattapiccola and Pomigliano d'Atella.
With the subsequent expansion ensued throughout the 1700s and 1800s, buildings with central courtyards became the prevalent structural feature characterizing the inner city.
Eventually, the local inhabitants employed the courtyards within such architectural framework in order to make way to nonpublic spaces of daily living, such as gardens or, more recently, parking slots.
Such privatization phenomenon drove the evolution of the historic centre throughout following decades towards the establishment of a strictly residential area, as nowadays witnessed by the lack of commercial or social activities.



Program

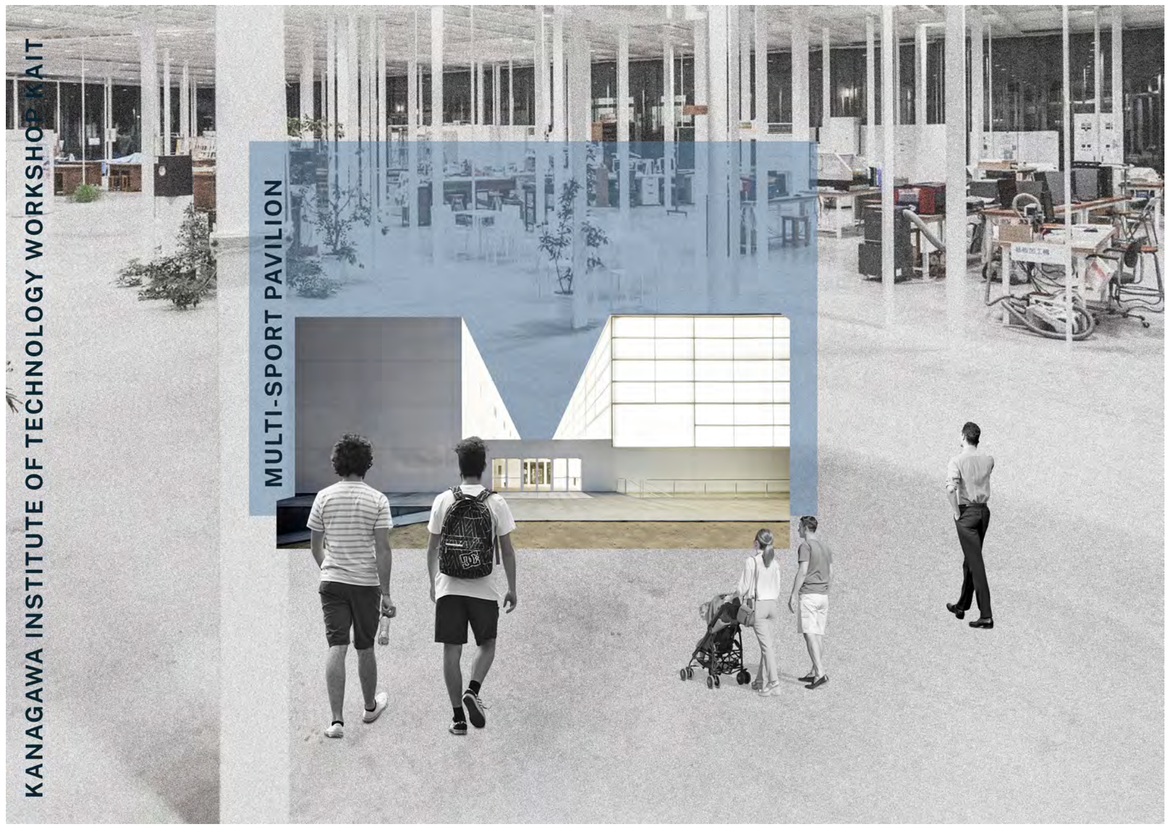
urban park, sport hall, walkway,courtyards

Covered area	**25420m²**
Outdoor area	**20563m²**
Built volume	**29570m³**
Estimated cost	**19.760.320 €**

The Promenade project was conceived in light of such shortcoming, by repurposing the current urban spaces without modifying their appearance.

Specifically, the renovation proposal focuses on Frattaminore's major avenues of Via Viggiano and Via Roma (last remnants of the ancient Roman grid), with the aim of creating a long-awaited pathway allowing any citizen to stroll along newly accessible sites at the verge between private and public life. Indeed, the intent is to offer novel urban scenarios by exploiting the topical characteristics of previously unavailable locations. The walkway would serve as connection between two landmarks, corresponding respectively to the Parco Urbano, at the background of Piazza Atella, and the unattended meadow near Piazza Crispi. The Promenade would unfold along the courtyards that compose its course, redeeming these areas to civil service . In addition, the newly available public spacesat the ground level would allow the bloom of pre-existing businesses or foster the growth of novel ventures, further juxtaposing private and public life.

The urban park named after Publio Virgilio Marone would be directly connected to the Palazzo Ducale and, consequently, providing access to the current road system. Within the boundaries of the park, an open market would replace the pre-existing "sports hall" which, in turn, could be moved in close proximity to the Palazzo Baronale. Such newly devisedsports area would comprise both open fields and a complex serving as gym, designed as a polycarbonate structure laying on slender steel pillars.



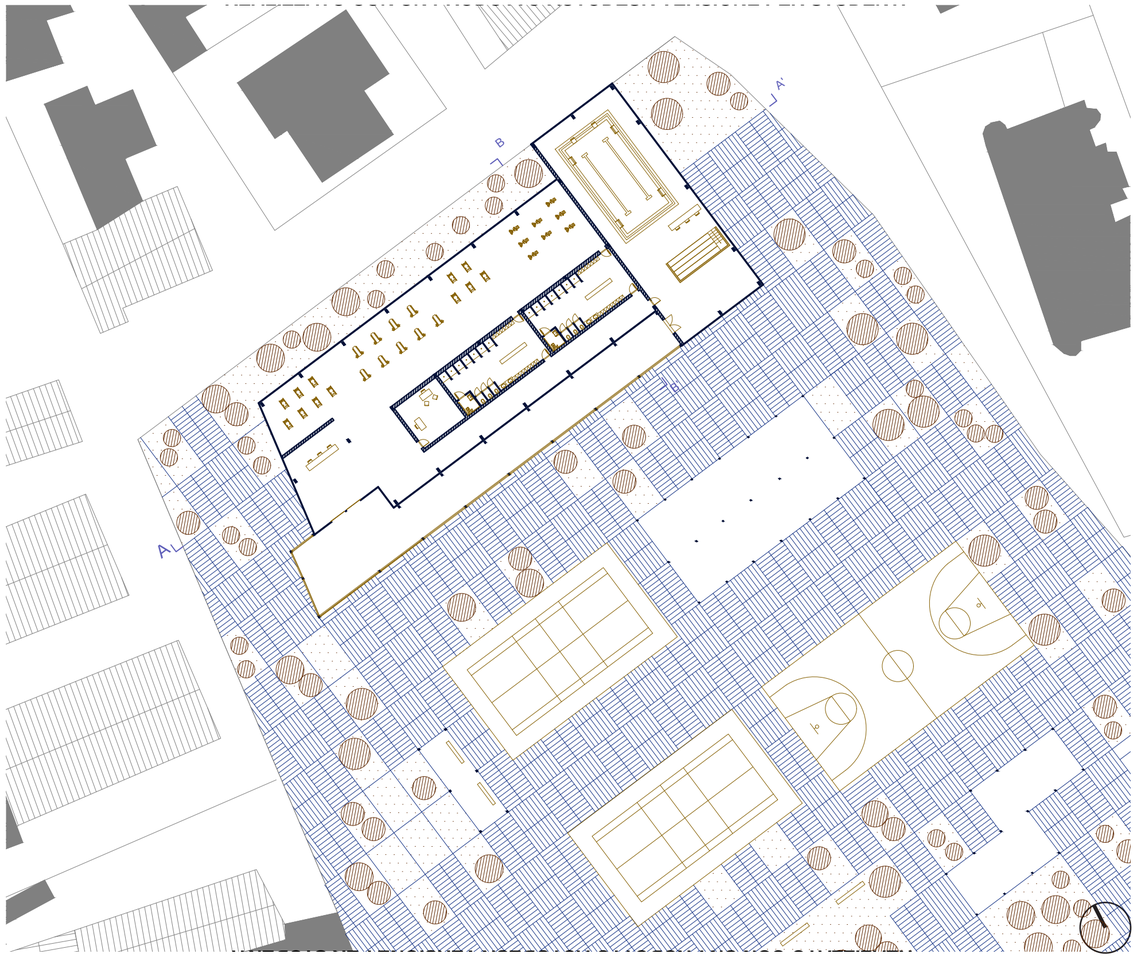
MAP REFERENCE

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

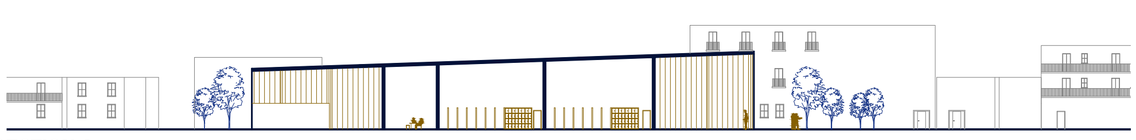
THE PROMENADE

Le corti compongono la promenade dandole forza, costruendo un percorso, che collega i due nuovi spazi d' aggregazione: un mercato e un parco sportivo

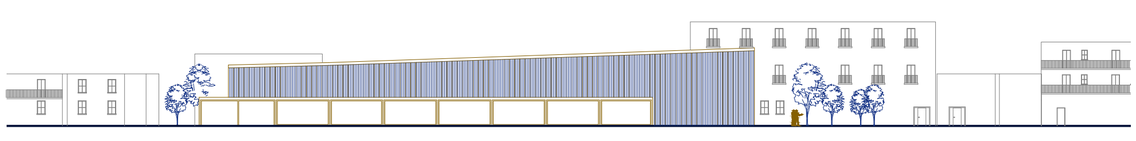


DESIGN STRATEGY

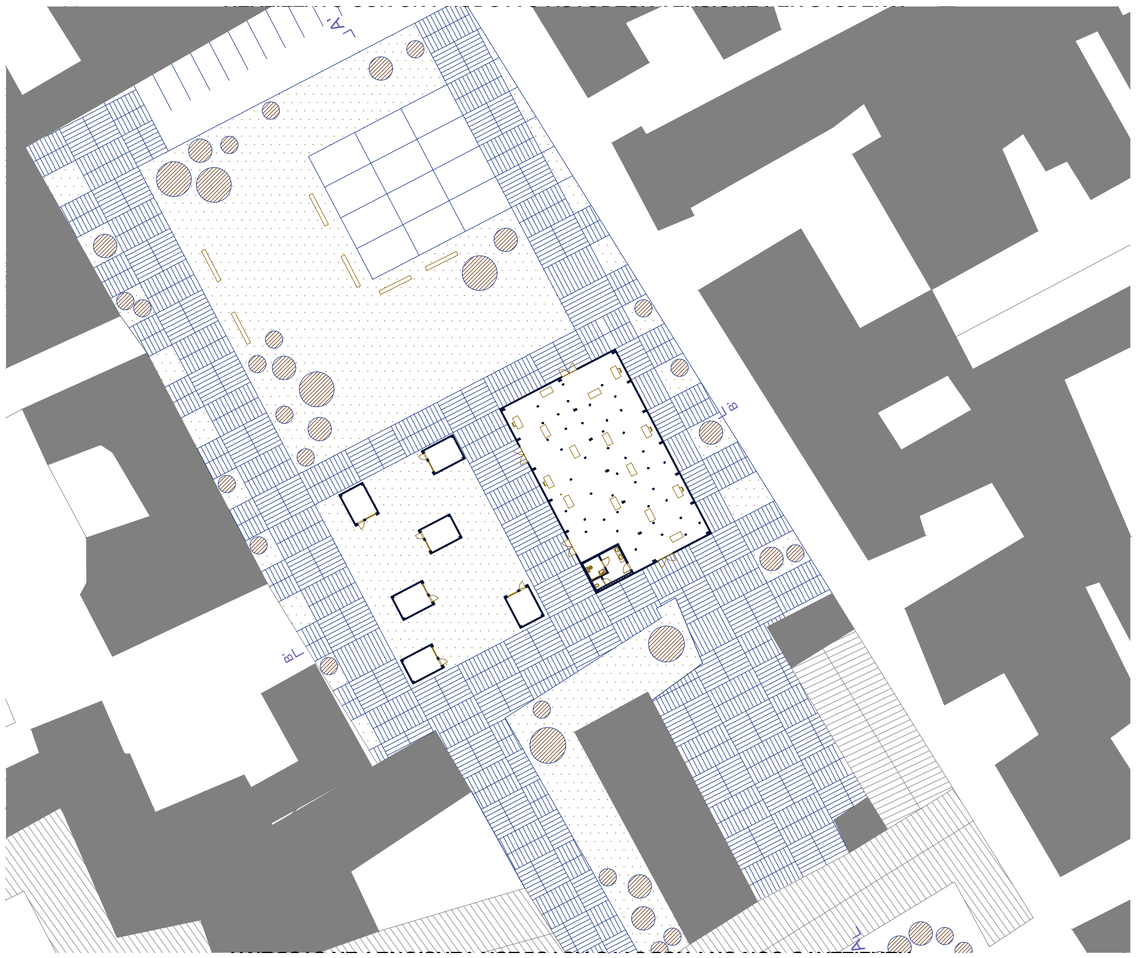
0 10 25 50m



SECTION A

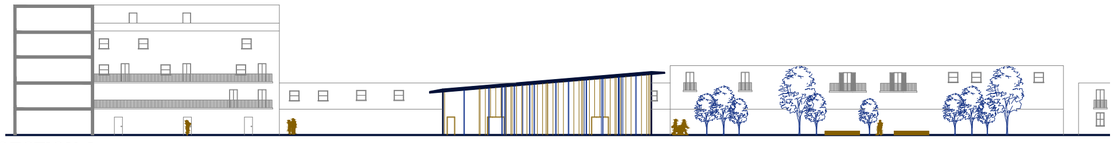


ELEVATION

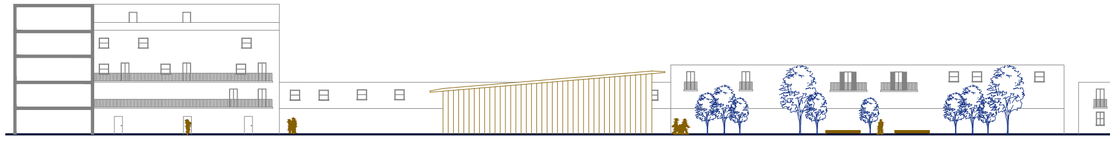


DESIGN STRATEGY

0 10 25 50m



SECTION A



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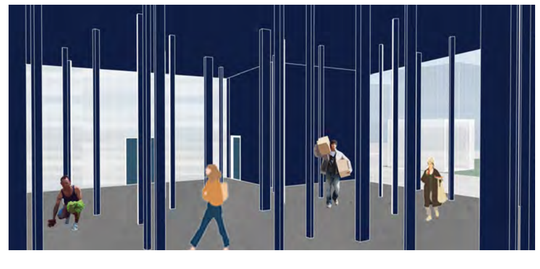
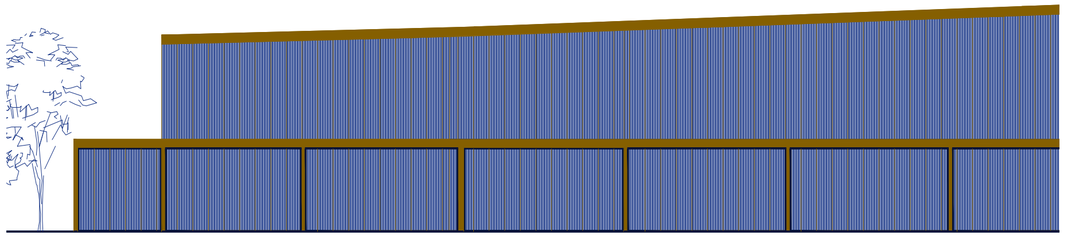
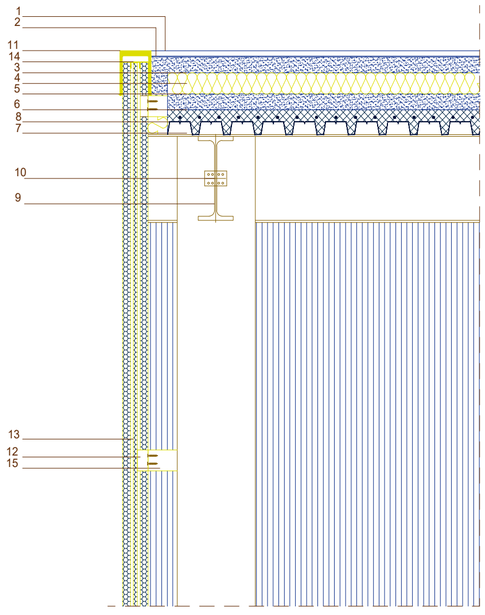






1 2cm waterproof outdoor flooring

2 Layer of mortar

3 Lightweight concrete substrate

4 rockwool insulation panel durock energy plus 10cm

5 vapor barrier

6 5% slope screed

7 Corrugated sheet 200x100x2mm

8 Completion cast in reinforced concrete

9 IPE 400 steel beam

10 Beam anchor bolted plate

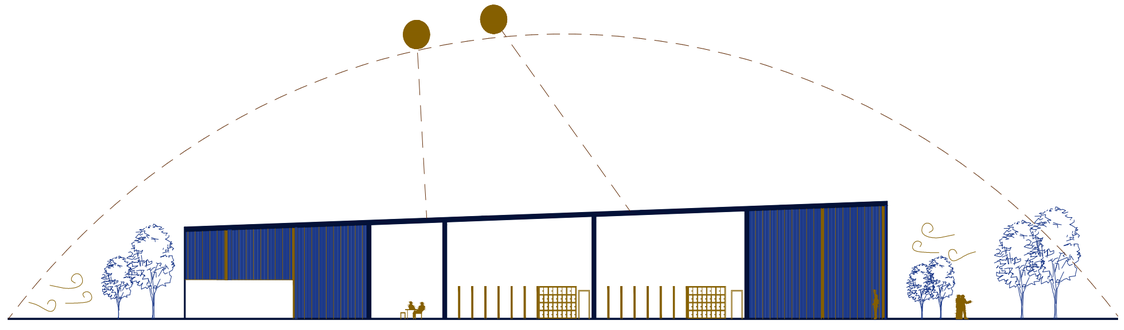
11 Perimeter profile in aluminum with thermal break

12 Aluminum bracket for attachment

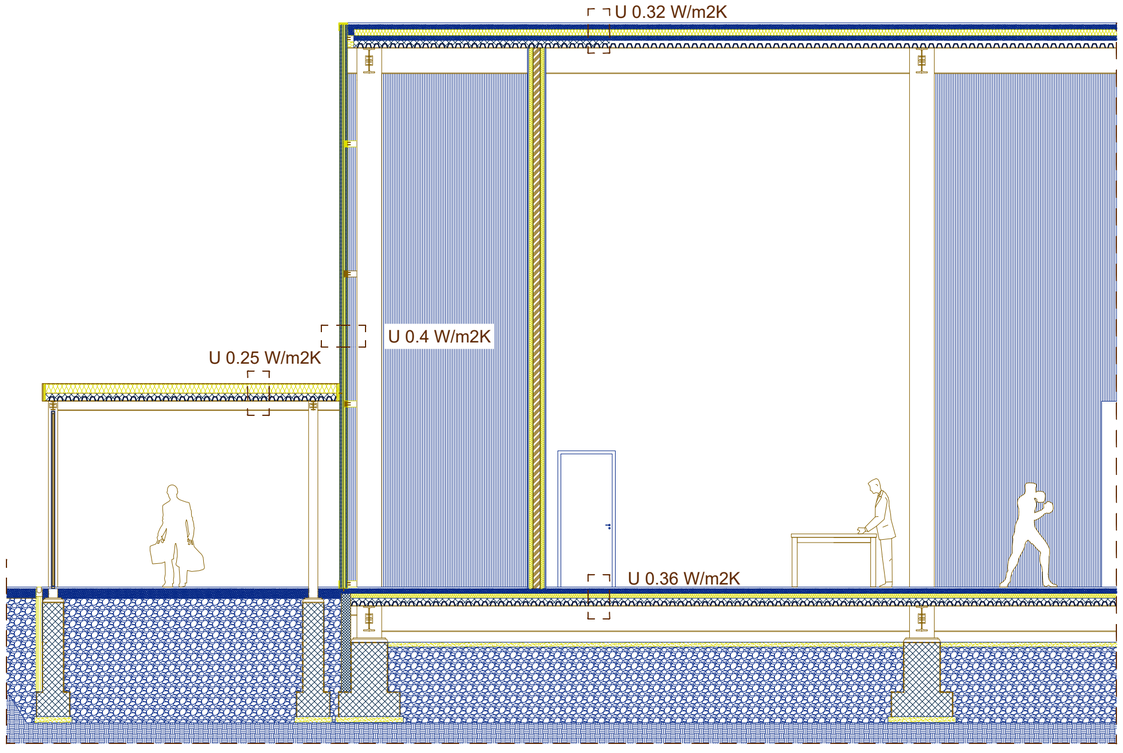
13 Profiles in polycarbonate for starting, terminal and double connector for the connection between internal and external wall panels 0.4mm

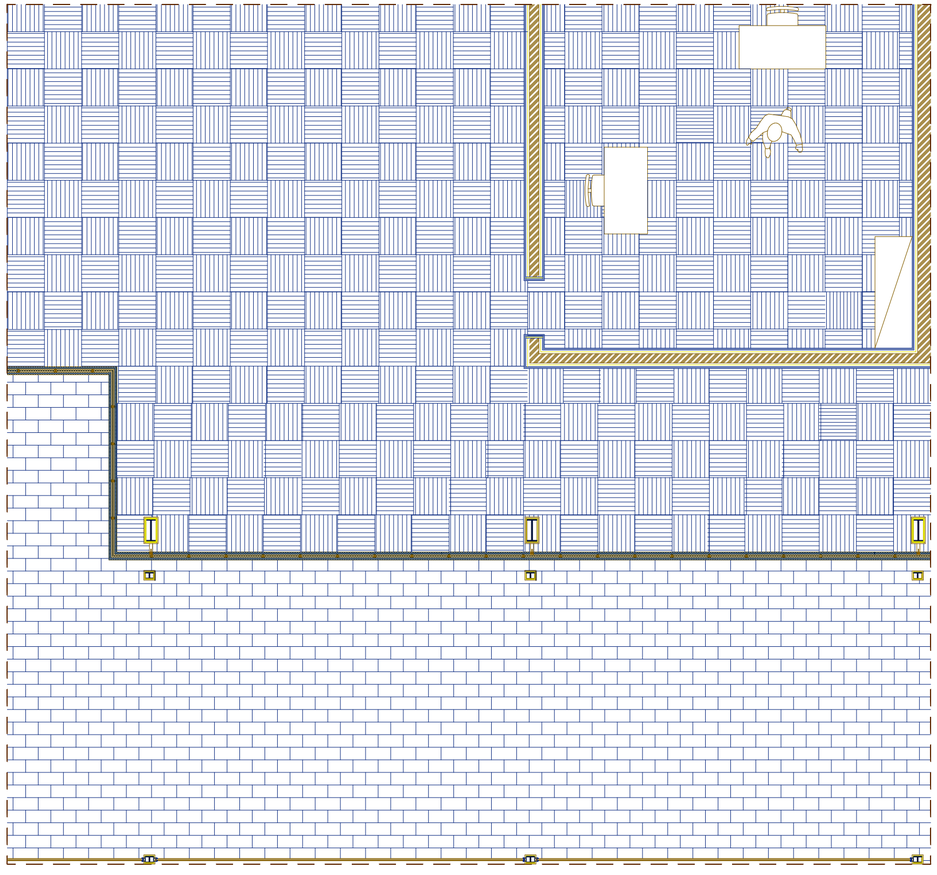
14 Closure with tapes

15 Under support structure



ENVIRONMENTAL SECTION





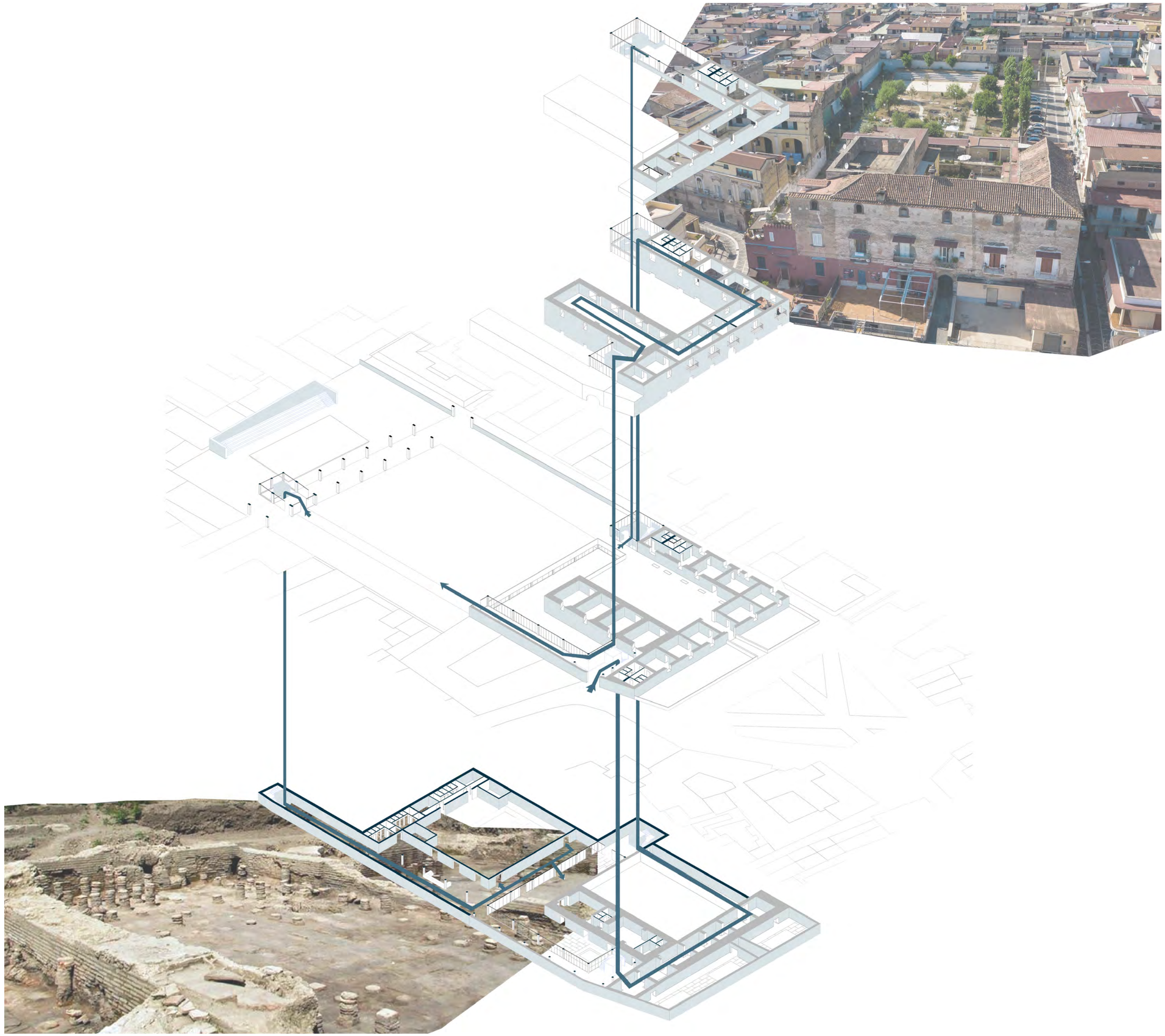
INDOOR/OUTDOOR RELATION SCALE 1:50

The strategy of the project is to exploit the call and the history, not only of a city, but also of a entire territory. In fact Frattaminore is part of a millenary and history, that is made by long silences in which the memory has been lost. So intent was to give a new voice to an urban, architectural and cultural tradition, who found her roots in the ancient city of Atella.

The project wants to throw to the future this historical patrimony, putting in Ambrosino palace, set free by all his superfetations, a museum for the archeological park that is being formed and a system of laboratories for the restoration of manufacts. Moreover it will be realized an auditorium of 365 places in which will make alive the spirit of “maschere atellane”, origin of latin Neapolitan theater.

These functional choices took their expression in a new architectonical and space organization, which respects the existing values and relations, on one side recovering Ambrosino palace and on the other side realizing the auditorium through a hypogeum solution. But at the same time there are new volumes, that, with their accentuated transparency, are an example of meeting between old and new.

The functional architectonical program is completed by the connective tissues of the moat, the park and his covered walk which diagonally marks the green space.



Program

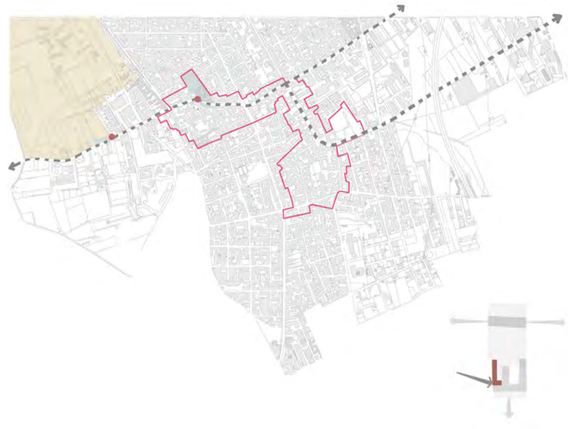
archeolocical museum, auditorium, laboratories, bar and restaurant, green park anda theatre

Covered area	**1.177m²**
Outdoor area	**4.072m²**
Above-ground floors	**4**
Built volume	**5.225,5m³**
Estimated cost	**16.082.564€**

A peculiar feature of the project is the enhancement and articulation of connections, intended both on a territorial and urban scale and on an architectural scale. Through a system of cycle and pedestrian paths, the project intends to connect the archaeological park with the museum in the rooms of Ambrosino palace, for which a specific recovery and restoration project is expected. Another horizontal connection on an urban scale is represented by the covered colonnade that cuts diagonally across the park and creates an urban crossing between the city center and its outer edges.

Three new vertical connections ensure continuity to museum visits and to the relationships between the various functions and the various parts of the project. Architecturally and spatially qualifying element is the new connecting body between the entrance to the new museum and the stairway from the underground level to that of the park which, with its double height, is a modern stoà that opens up to urban pedestrian flows.

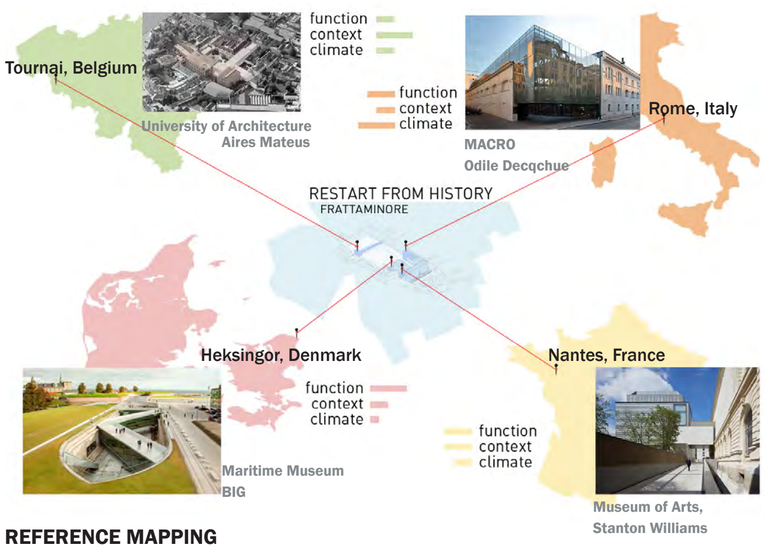
Finally, the architectural complex of the project represents a new physical and relational “door” to the city.



THE DOOR Territorial System

- Archeological Area
- Entrance
- Historical city bound
- Link with the archeological park

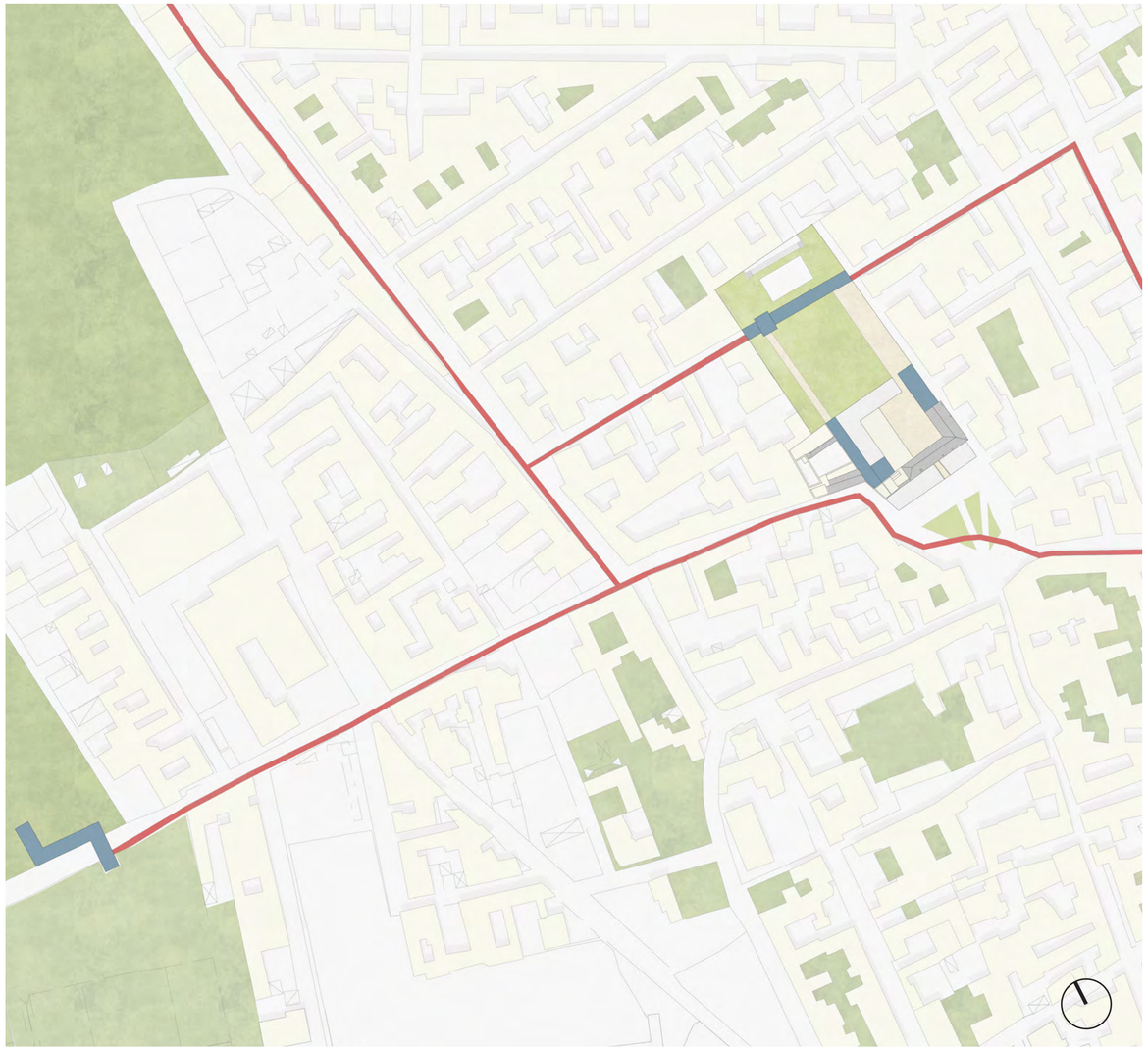
STUDY SKETCH



REFERENCE MAPPING

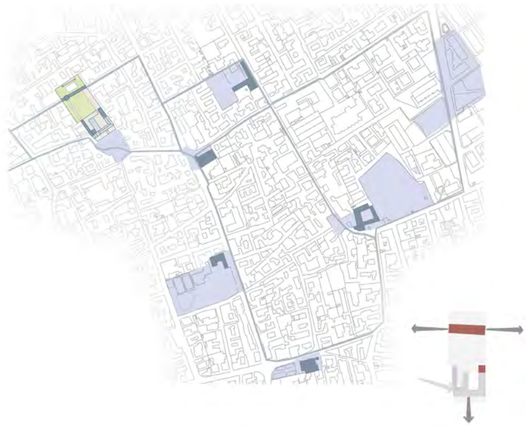
- Dgls 81 del 2008 sicurezza sul lavoro
- Contratto collettivo nazionale del lavoro per i diritti dei lavoratori
- DPR 380 DEL 2001 testo unico dell’edilizia
- Dlgs 42 del 2004 codice dei Beni Culturali e del Paesaggio
- NTC 2018 per le strutture e il collaudo
- Dlgs 37 del 2008 dichiarazione di comformità impianti
- DM 26 giugno 2015 decreto requisiti minimi
- Dlgs 50 del 2016 codice degli appalti pubblici
- DM 11 ottobre 2017 Criteri ambientali minimi

MATERIAL REGULATIONS



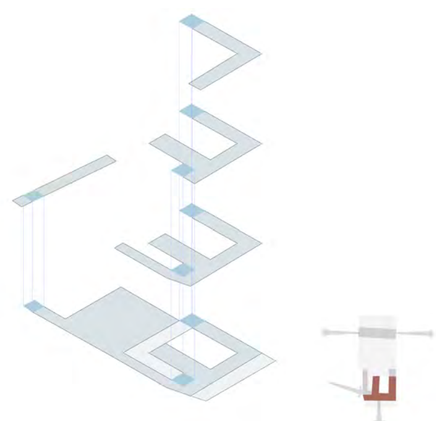
FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m



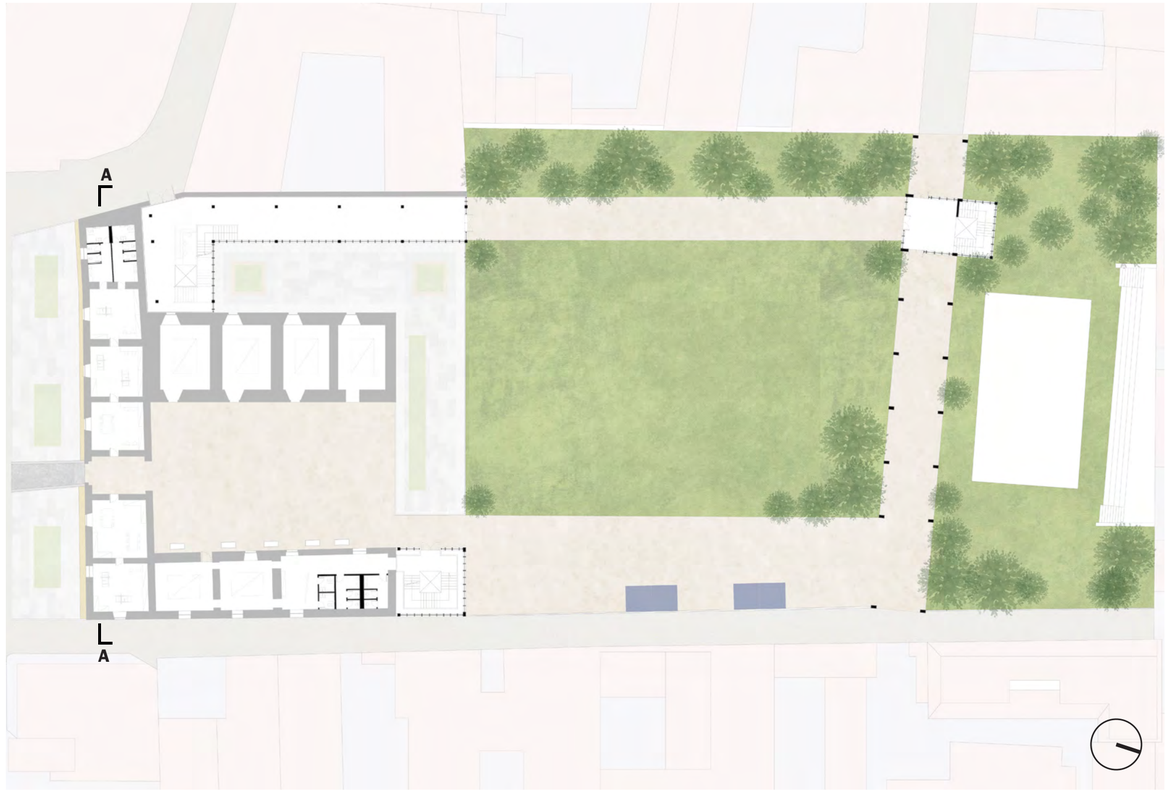
LINKS Urban System

- Graftings
- Cycle anche pedestrian path
- Attraction points
- Ambrosino building



MUSEUM Building System

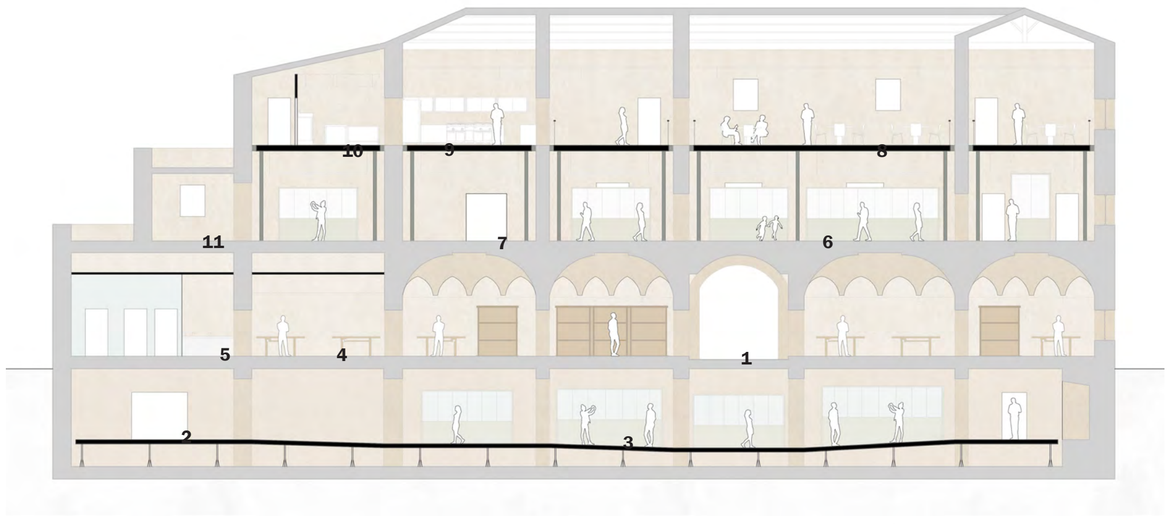
- Vertical connections
- Buildings
- Moat



GROUND FLOOR

0 10 25 50m

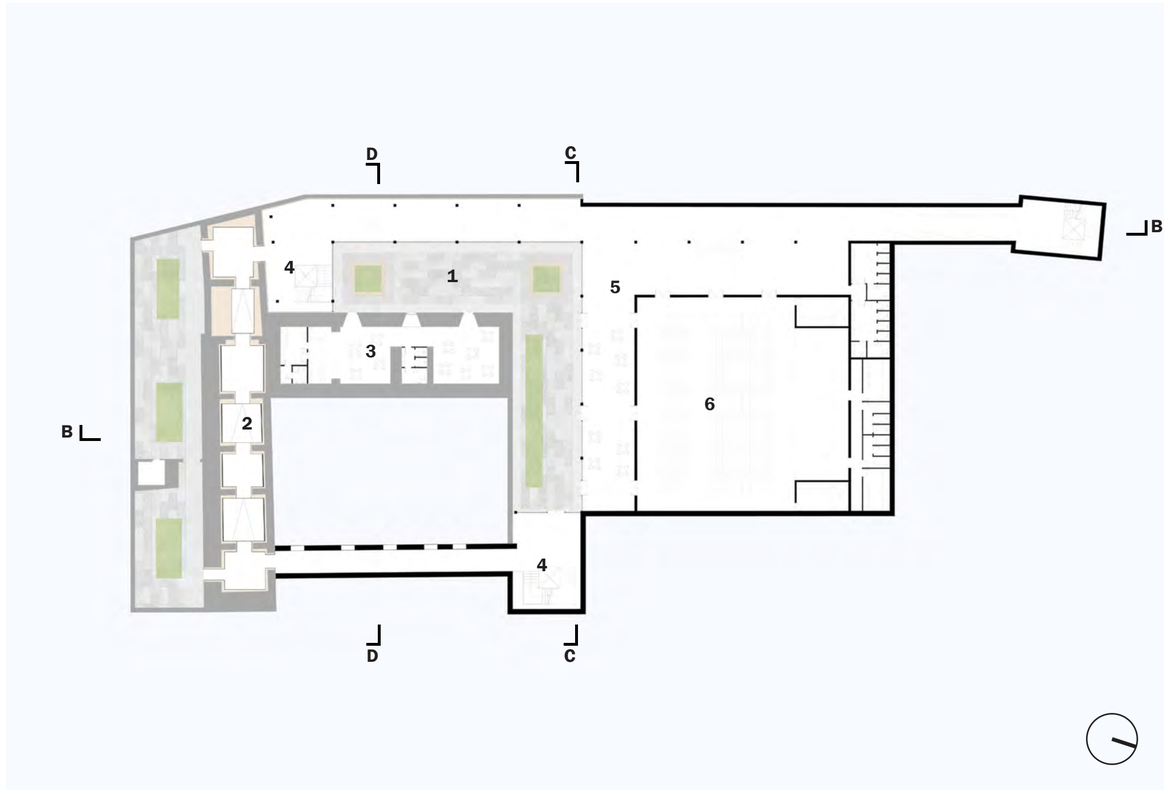
- Existent building
- New building
- Photovoltaic shelters
- Pedestrian path
- Green park
- Driveway path



SECTION A

0 4 10 20m

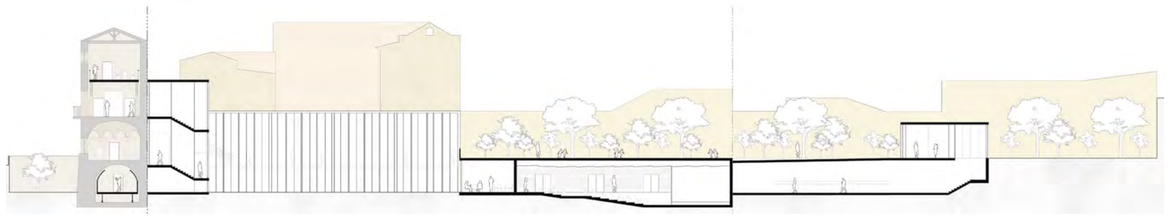
1. Entrance
2. Start of museum
3. Room of finds
4. Laboratories
5. Services
6. Exhibition rooms
7. Bookshop
8. Restaurant rooms
9. Kitchen
10. Employees room
11. Storage area



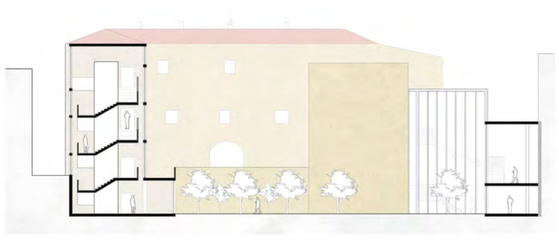
UNDERGROUND FLOOR

0 4 10 20m

1. Moat
2. Walkway
3. Coffee bar
4. Vertical connection
5. Foyer
6. Auditorium



SECTION B

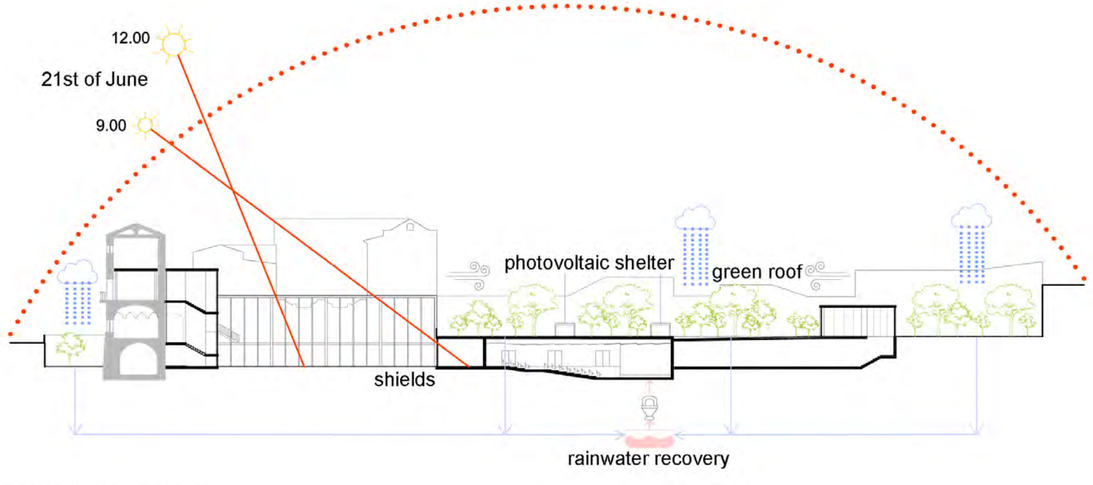


SECTION C

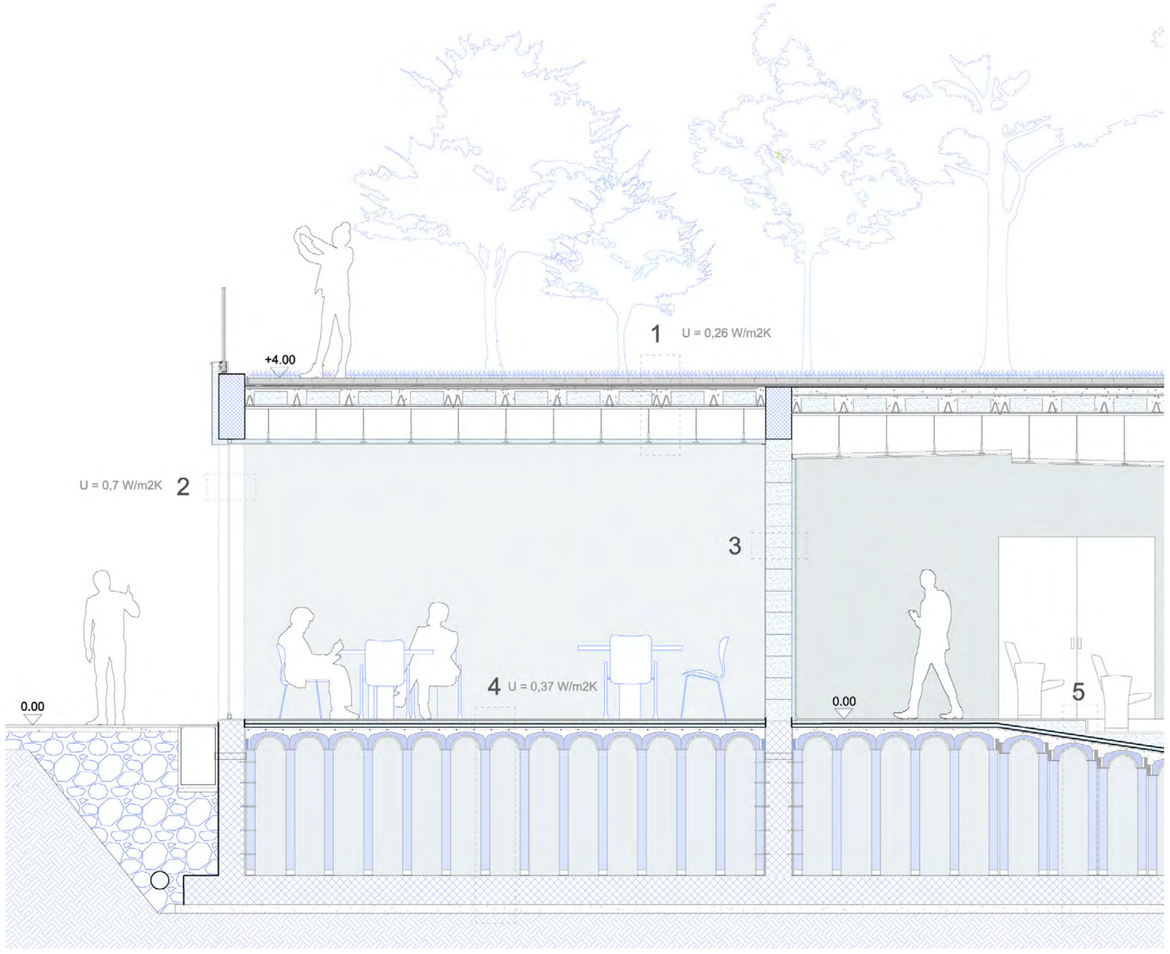
SECTION D

0 10 25 50m

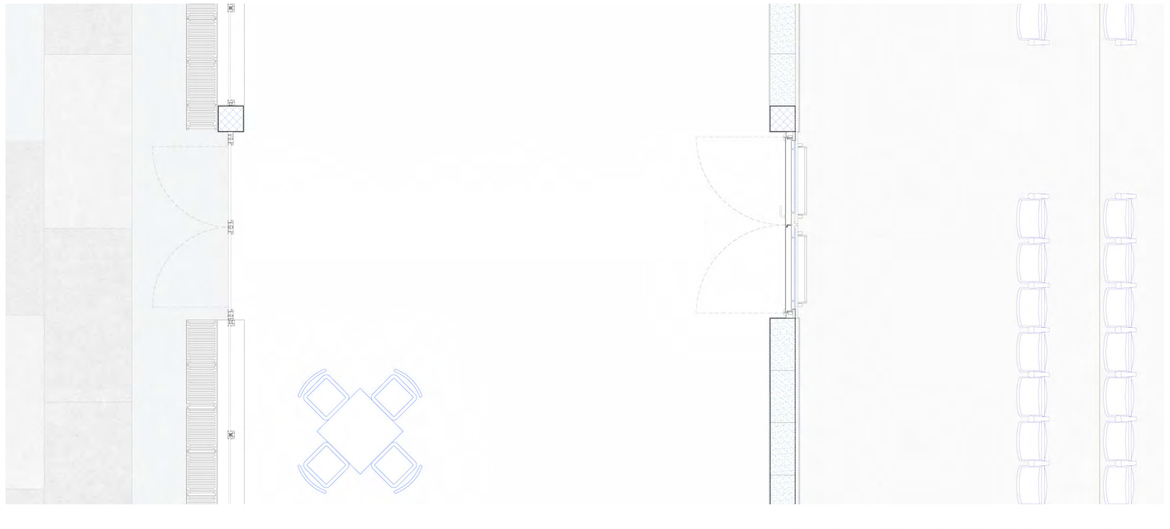
INSIDE VIEW



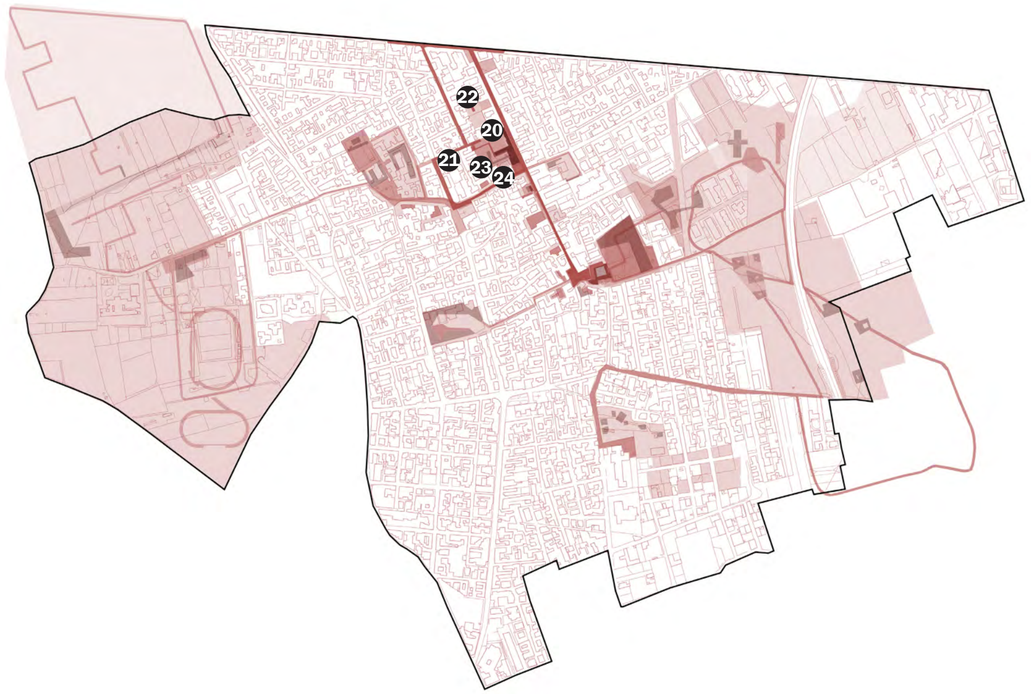
ENVIRONMENTAL SECTION



1. Countertop on the internal side, ceiling in prefabricated slabs of the predalles type, mat of the slopes, insulating panel in wood fibers, waterproofing sheath and green roof system of the “Saint Gobain” type”
2. Low-emission insulating glass with two cavities of “PredariVetri”
3. Plaster, Gasbeton blocks and sound-absorbing panel covered in fabric
4. Stalls foundation, ventilated crawl space, reinforced completion slab, rock wool insulation and stoneware floor
5. Floor inclined against the ground with concrete steps, sound-absorbing panel and resin floor



INDOOR/OUTDOOR RELATION SCALE 1:50



INDUSTRIAL ARCHAEOLOGY - THE CASE OF THE EX FORMER MILL
ARCHEOLOGIA INDUSTRIALE - IL CASO DELL'EX-MULINO

21. The productive garden Alfonso Maria Annunziata
22. Another brick in the mill Giuseppe De Vita
23. Archiculture Andrea Martino
24. Re-mark the land Marta Parente
25. Open arches Roberta Vanacore

REFERENCES

1. F. De Matteis, *Architettura in trasformazione*, FrancoAngeli, Milano 2009.

2. H. Bergson, *L'evolution créatrice*, Félix Alcan, Paris 1914, trad.it. *L'evoluzione creatrice*, BUR Rizzoli, Milano 2012.

3. V. Gregotti, *Tempo e progetto*, Skira, Milano 2020.

4. M. Manieri Elia, "La mancanza e il progetto", in *La mancanza*, numero monografico di "Topos e Progetto", Gangemi, Roma 2006, p. 9.

5. L. Franciosini, "L'eredità del passato. Quali suggerimenti possiamo trarre dal tempo trascorso? Cosa ci può insegnare la storia?", in R. Capozzi, F. Costanzo, F. Defilippis, F. Visconti (eds.) *Patrimonio e progetto di architettura*, Quodlibet, Macerata 2021, pp. 198-206.

6. F. Purini, "Il nuovo e tre forme dell'antico", in S. Bigiotti, E. Corvino (eds.), *La modernità delle rovine*, Prospettive edizioni, Roma 2015, p. 78.

7. R. Bocchi, "Il futuro delle città: fra rigenerazione, rammendo, innesto e riciclo", in M. Carta, B. Lino (eds.), *Urban Hyper-metabolism*, Quaderno n.15 Recycle Italy, Aracne 2015, Roma, pp. 7-10.

8. C. Andriani (ed.), *Il patrimonio e l'abitare*, Donzelli Editore, Roma 2008.

9. M. Raitano, *La città storica un tempo era nuova. Cinque considerazioni*, LetteraVentidue, Siracusa 2020.

Next page

Collage *Urban Archaeology* by Chiara Barone, photografies by Stephan Couturier

Pagina seguente

Collage *Archeologie urbane* di Chiara Barone con le fotografie di Stephan Couturier

Stephan Couturier, with his photo cycle *Urban Archaeology* (1995 - 2010) photographs urban archaeology in Berlin, Paris, Seoul, Moscow, Havana and other cities, highlighting, within each single frame, the temporal turbulence of metropolitan areas, where demolitions, buildings, archaeological sites and ruined bodies belonging to very different realities over time are co-present.
Whether they are construction sites, ruined buildings or industrial establishments, Stéphane Couturier's photographs, taken at a moment between disappearance and appearance, with a singular attention to composition and colour, reveal a world in transformation.
What the photographer intends to capture is the suspended time of the city, a space in which reflections tend to polarize between the image of the past and the visionary future projections.
Like an archaeologist, Courier researched multi-layered cities, built by successive demolition and construction processes, starting that places exist between the past and the future: «Some parts are ending their life cycle, others are flourishing and growing. I look at the city as an evolving organism».
In this sense, the city of Frattaminore is an emblematic case study: the dense stratification and the rich architectural heritage of the historic center, currently in a state of total abandonment, open to various metamorphic possibilities, to transform ruined bodies (De Matteis, 2009) by reintroducing them into the present time.
The term "evolving organism" used by Couturier seems particularly appropriate to delineate the inherent ability of these artefacts to adapt to the current time, presenting characteristics such as to favour cyclical renewal, in becoming, which modifies the body itself and also the context it inhabits.
The project is configured as a transformative device to move forward in the mobile reality and always relocate in it (Bergson, 1914), a tool that guarantees the incessant renewal of the abandoned heritage, through the variation of ancient matter.
Through a design gaze, and therefore a modifier of the existing, architecture cannot interrupt its life cycle, but passes from one state to another, renewing itself from time to time.
Consequently, the suspended time coincides with the time of the project (Gregotti, 2020), the time in which the architect, starting from the condition of absence and lack, is pushed to new readings and interpretations, urging the imagination to elaborate alternative scenarios for the ruined heritage.

«The lack has a history: it is produced by subtraction from a previous completeness and comes from a loss [...] it is the awareness of the lack that puts the discomfort into production and opens the way to the project» (Manieri Elia, 2006, p.9).
In a dense and stratified historical centre, such as that of the city of Frattaminore, whose identity, historical and architectural features are obscured by the overpowering contemporary, chaotic and disorderly reality, the theme of the reactivation of industrial archaeology is a fundamental issue to be investigated through design.
For this reason, one of the design explorations of the Advanced Studio Design addressed the topic of the reuse of ruined bodies, focusing specifically on the case of the ancient Mill, an architecturally very relevant building, located in a privileged position of the historic center.
While at the beginning of the 20th century the mill was used exclusively to process wheat for pasta production, it later received multiple uses, such as school building and cinema, and then be completely abandoned and unused, reaching its current state of ruin.

Thus, the emblematic case of the ancient mill makes it possible to start a reflection on the possibility of reusing and reactivating architecture in ruins, implementing the use value of the place, but also its symbolic value.

Stephan Couturier, con il ciclo di foto *Urban Archaeology* (1995 – 2010) fotografa l'archeologia urbana a Berlino, a Parigi, a Seoul, a Mosca, all'Avana e in altre città, mettendo in evidenza, all'interno di ogni singolo fotogramma, la turbolenza temporale delle aree metropolitane, dove demolizioni, costruzioni, siti archeologici e corpi in rovina appartenenti a realtà molto differenti nel tempo risultano compresenti.
Che si tratti di cantieri, di edifici in rovina, o di stabilimenti industriali, le fotografie di Stéphane Couturier, scattate in un momento tra scomparsa e apparenza, con una singolare attenzione alla composizione e al colore, rivelano un mondo in trasformazione.
Ciò che il fotografo intende immortalare è il tempo sospeso della città, spazio in cui le riflessioni tendono a polarizzarsi tra l'immagine del passato e le visionarie proiezioni future.
Come un archeologo, Courier ricercava città multistratificate, costruite da processi successivi di demolizioni e costruzioni, affermando che i luoghi esistono tra il passato e il futuro: «Alcune parti stanno finendo il loro ciclo di vita, altre stanno fiorendo e crescendo. Guardo la città come un organismo in evoluzione».
In questo senso, la città di Frattaminore risulta un caso studio emblematico: la densa stratificazione e il ricco patrimonio architettonico del centro storico, attualmente in uno stato di totale abbandono, aprono a svariate possibilità metamorfiche, per trasformare i corpi in rovina (De Matteis, 2009) reintroducendoli nel tempo presente.
Il termine "evolving organism" utilizzato da Couturier appare particolarmente rispondente per delineare la capacità insita in questi manufatti di adattarsi al tempo attuale, presentando caratteri tali da favorire un rinnovamento ciclico, in divenire, che modifica il corpo stesso e anche il contesto che egli abita.
Il progetto si configura come un dispositivo trasformativo per avanzare nella realtà mobile e sempre ricollocarsi in essa (Bergson, 1914), uno strumento che garantisce l'incessante rinnovamento del patrimonio in abbandono, mediante la variazione della materia antica.
Attraverso uno sguardo progettuale, e quindi modificatore dell'esistente, l'architettura non può interrompere il suo ciclo di vita, bensì transita da uno stato all'altro, rinnovandosi di volta in volta.
Di conseguenza il tempo sospeso coincide con il tempo del progetto (Gregotti, 2020), il tempo in cui l'architetto, a partire dalla condizione di assenza e di mancanza, è spinto a nuove letture e interpretazioni, sollecitando l'immaginazione ad elaborare scenari alternativi per il patrimonio in rovina.
"La mancanza ha una storia: si produce per sottrazione da una pregressa completezza e deriva da una perdita […] è la consapevolezza della mancanza a mettere in produzione il disagio e ad aprire la strada al progetto" (Manieri Elia, 2006, p.9).
In un centro storico denso e stratificato, come quello della città di Frattaminore, i cui tratti identitari, storici e architettonici, risultano oscurati dal sopravvento della realtà contemporanea, caotica e disordinata, il tema della riattivazione dell'archeologia industriale è un nodo fondamentale da indagare attraverso il progetto. Per questo motivo, una delle esplorazioni progettuali del Laboratorio di Sintesi Finale ha affrontato il tema del riuso dei corpi in rovina, soffermandosi specificamente sul caso dell'antico Mulino, un edificio architettonicamente molto rilevante, collocato in una posizione privilegiata del centro storico.
Se agli inizi del '900 il mulino è adibito esclusivamente alla lavorazione del grano per la produzione della pasta, successivamente accoglie molteplici destinazioni d'uso, come edificio scolastico e cinema, per poi essere completamente abbandonato e inutilizzato, raggiungendo l'attuale stato di rovina.
Dunque, il caso emblematico dell'antico mulino consente di avviare una riflessione circa la possibilità di riutilizzare e riattivare le architetture in rovina, implementando il valore

The experimentation makes it possible to outline new possible scenarios for the future city: the project must intervene on the ruined body but also on its interrupted connection with the layers of the city, «avoiding, on the one hand, falling back on commemorations dripping with rhetoric and passivity and, on the other, giving in to free formalistic concepts and stylistic complacency»(Franciosini, 2021, p.198).
From this point of view, as Franco Purini points out, the project is a new sign in the stratification, a sign that «added to others is configured as an interpretation, but also as the creation of a new meaning of the text itself» (Purini, 2015, p.78).
Synthetically then, starting from the awareness of the change caused by a temporal suspension, the need opens up for architecture to intervene on evolving organisms, capable of driving, through the project, a regeneration and renewal of the material itself and of the surrounding urban space.
To an increase in the objects to be reintroduced into new life cycles (Bocchi, 2015), there corresponds multiple design actions and transformative strategies: manipulations, overwriting, grafts, annexations, selections, reconversions, expansions, additions, integrations, hybridisations.

Starting from these considerations, there are three design actions that, due to their specific condition, have been considered particularly useful to evoke new transformative scenarios, ordered in increasing order with respect to the degree of tampering and/or transformation operated on the ancient body (Andriani, 2008): punctual inserts in or on the ruined body, crossings between the layers of the ancient building and between the layers of the city, and extensions in the external space of the court.
The first declination concerns the theme of punctual inserts, that is, the grafting of architectural prostheses that punctually intervene to reintroduce urban archaeology into a new life cycle. These inserts can be only internal, almost imperceptible from the outside, or also external, where the architectural graft fills an existing void or configures annexed spaces that guarantee a better functioning of the ancient in the contemporary city.
An example of this is the OMA studio project for the Prado National Museum in Madrid in 2016. The design proposal, entitled “History in Motion”, does not intervene by modifying the stratified historical palimpsest of the urban context in which the museum is located, but rather identifies more or less punctual areas of intervention, which respond precisely to the programmatic needs dictated by the contemporary, to establish a subtle but dynamic relationship with history.
The project moves from the desire to redefine the internal organisation of the spaces and transform the south wing, for which it proposes the annexation of a system of large manoeuvrable windows that make it a soft border, to allow different museum uses, public activities and a renewed relationship with the rest of the Prado.
Punctual and targeted actions that not only guarantee a renovation of the ancient body, but rather open up new relations with the context, with the surrounding open space, also letting us imagine possible design evolutions for the changing city.
The second design declination deepens the topic of crossings, focusing more on the density of the layers that constitute the identity of the building, but also of the historic city.
The project plays a fundamental role in reactivating not only the ancient building in ruin, but also the surrounding urban context, which is inevitably paralyzed by the temporal suspension of heritage.
An example of this is Toni Gironès’ project for the enhancement and activation of the *Illa De La Pietat* as a continuous public space in the city of Vic, near Barcelona (2017-2020).
Illa De La Pietat is an agglomeration of buildings

d’uso del luogo, ma anche il suo valore simbolico. La sperimentazione permette di delineare nuovi possibili scenari per la città futura: il progetto deve intervenire sul corpo in rovina ma anche sulla sua connessione oramai interrotta con gli strati della città, «evitando da un lato di ricadere in commemorazioni grondanti di retoriche e passatismi e dall’altro cedere in libere concezioni formalistiche e compiacimenti stilistici» (Franciosini, 2021, p. 198) . In questa ottica, come sottolinea Franco Purini, il progetto è un nuovo segno nella stratificazione, un segno che «aggiunto ad altri si configura come un’interpretazione, ma anche come la creazione di un nuovo senso del testo stesso» (Purini, 2015, p.78) . Sinteticamente quindi, a partire dalla consapevolezza del cambiamento provocato da una sospensione temporale, si apre per l’architettura la necessità di intervenire sugli organismi in evoluzione, in grado di trainare, attraverso il progetto una rigenerazione e un rinnovamento della materia stessa e dello spazio urbano limitrofo.
Ad un incremento degli oggetti da reimmettere in nuovi cicli di vita (Bocchi, 2015) , corrispondono molteplici azioni di progetto e strategie trasformative: manipolazioni, sovrascritture, innesti, annessioni, selezioni, riconversioni, ampliamenti, addizioni, integrazioni, ibridazioni.

A partire da queste considerazioni, tre sono le azioni di progetto che, per la condizione specifica, sono state considerate particolarmente utili ad evocare nuovi scenari trasformativi, ordinati in maniera crescente rispetto al grado di manomissione e/o trasformazione operata sul corpo antico (Andriani, 2008): inserti puntuali nel o sul corpo in rovina, attraversamenti tra gli strati del manufatto antico e tra gli strati della città e estensioni nello spazio esterno della corte.
La prima declinazione riguarda il tema degli inserti puntuali, ovvero l’innesto di protesi architettoniche che puntualmente intervengono per reimmettere l’archeologia urbana in un nuovo ciclo di vita. Tali inserti possono essere solo interni, quasi impercettibili da fuori, o anche esterni, lì dove l’innesto architettonico colma un vuoto esistente o configura spazi annessi che garantiscono un migliore funzionamento dell’antico nella città contemporanea.
Ne è un esempio il progetto dello studio OMA per il Museo Nazionale del Prado, a Madrid, del 2016. La proposta progettuale, dal titolo “Storia in movimento”, non interviene modificando il palinsesto storico stratificato del contesto urbano in cui il museo è collocato, quanto piuttosto individua degli ambiti di intervento più o meno puntuali, che rispondono precisamente alle esigenze programmatiche dettate dalla contemporaneità, per stabilire un rapporto sottile ma dinamico con la storia.
Il progetto muove dalla volontà di ridefinire l’organizzazione interna degli spazi e trasformare l’ala sud, per la quale si propone l’annessione di un sistema di grandi vetrate manovrabili che ne fanno un bordo morbido, per consentire diversi usi museali, attività pubbliche e un rinnovato rapporto con il resto del Prado.
Azioni puntuali e mirate che non soltanto garantiscono un rinnovamento del corpo antico, quando piuttosto che aprano a nuove relazioni con il contesto, con lo spazio aperto circostante, lasciando immaginare anche possibili evoluzioni progettuali per la città in divenire.
La seconda declinazione progettuale approfondisce il tema degli attraversamenti, focalizzando maggiormente l’attenzione sulla densità degli strati che costituiscono l’identità del manufatto, ma anche della città storica.
Il progetto gioca un ruolo fondamentale, per riattivare non soltanto il manufatto antico in rovina, ma anche il contesto urbano limitrofo che risulta inevitabilmente paralizzato dalla sospensione temporale del patrimonio.
Ne è un esempio il progetto di Toni Gironès per la valorizzazione e l’attivazione della *Illa De La Pietat* come spazio pubblico continuo della città

Next page

Punctual inserts, urban crossings and outdoor extensions: projects for the architecture in ruins. Collage by Chiara Barone, projects: OMA, National Museum of Prado, 2016; Toni Gironès, Ilha De La Pietat, 2017-2020; Barozzi Veiga architects, Regenhouse, Brunico, 2018; Linazasoro & Sanchez, Extension of Mali Museum, Lima, 2016.

Pagina seguente

Inserti puntuali, attraversamenti urbani e espansioni esterne: progetti per l’architettura in rovina. Collage di Chiara Barone, progetti: OMA, Museo Nazionale del Prado, 2016; Toni Gironès, Ilha De La Pietat, 2017-2020; Barozzi Veiga architects, Scuola di Musica Regenhouse, Brunico, 2018; Linazasoro & Sanchez, Ampliamento del Museo Mali, Lima, 2016.

in the dense and compact centre of the city of Vic, consisting of ancient buildings, some of which are located above the Roman temple and the remains of the Roman castle of Montcada, and Baroque churches and chapels.
The project proposes a transversal vision, to facilitate the experience of the whole, denouncing and enhancing the different times of the ancient, activating them in continuity with the urban context.
Various intermediate spaces, internal and external, are placed in sequence through the project, reconnected to generate narrative itineraries and multiple paths that guide the visitor in understanding the place.
The project constructs new perceptions of the ancient body, crossing several sections and highlighting the spatial and constructive qualities of the different eras and uses that have followed one another up to the present time.
The third declination analyzes project extensions, that is possible expansions that approach the ruined architecture to accommodate new contemporary uses.
In the case of the ancient mill, there have been several experiments that have worked on the extension of the original volume, to cross, occupy, and redefine the edge of the large ancient court, that is currently a large green enclosure in the centre of the city.
A first interesting example is the project by Barozzi Veiga architects for the Regenhaus Music School in Brunico, completed in 2018. Here, next to the ancient Villa Ragen, the architects propose a contemporary extension by occupying the land behind, which was the old garden.
Starting from the study of the typology of the building and the urban layout characterising the block, consisting of introverted lots, closed within an opaque perimeter, the school becomes the wall enclosing the garden, an inhabited border that on the one hand gives continuity to the existing urban fabric, completing the urban layout to be preserved, and on the other emphasises the presence of Villa Ragen, which continues to be the introverted and silent, yet central protagonist in the contemporary project.
If Barozzi Veiga's project occupies the pre-existing open space in a totally introverted way, proposing an inhabited border, Linazaroso & Sanchez propose an alternative solution in the competition for the expansion of the Mali Museum in Lima, in 2016, in which similar circumstances arise.
The project proposal, contrary to the previous one, moves from the desire to open up to the context, in order to achieve greater integration between museum space and urban public space.
The grafting of an access plate, slightly under the street level, acts simultaneously as a public square and entrance to the new museum wing, totally excavated below: art gallery, library, multi-purpose hall and public square are the project spaces that follow one another from bottom to top, in visual relationship with each other and with the surrounding spaces of the city.

These declinations show how inserts, crossings and extensions can be considered valid design approaches to reactivate the abandoned heritage of the ancient mill in the city of Frattaminore, giving it new meanings and starting transformative processes open to accommodate further future possibilities, to respond to the changing needs arising from the contemporary city. The ancient matter becomes the active matter of the present time, because the historic city is an asset that is handed over to us from the past and that we must ferry into the future.
«At the same time, it is nevertheless an inhabited organism in the present. Therefore, in certain respects, the historic city is always new, it is today as it was in the past. It is both heritage and progeny, because in another form it will be delivered by us to the future» (Raitano, 2020, p.128).

di Vic, nei pressi di Barcellona (2017-2020). Illa De La Pietat è un agglomerato di edifici nel centro denso e compatto della città di Vic, costituito da edifici antichi, alcuni dei quali collocati al di sopra del tempio romano e dei resti del castello romano di Montcada e da chiese e cappelle barocche. Il progetto propone una visione trasversale, per facilitare l'esperienza dell'insieme, denunciando e valorizzando i diversi tempi dell'antico, attivandoli in continuità con il contesto urbano.
Diversi sono gli spazi intermedi, interni ed esterni, posti in sequenza attraverso il progetto, riconnessi tra loro per generare itinerari narrativi e percorsi multipli che guidano il visitatore nella comprensione del luogo. Il progetto costruisce nuove percezioni del corpo antico, attraversando più sezioni e mettendo in evidenza le qualità spaziali e costruttive delle diverse epoche e dei diversi usi che si sono susseguiti sino al tempo presente.
La terza declinazione analizza le estensioni di progetto, ovvero possibili espansioni che si accostano all'architettura in rovina per accogliere nuovi usi contemporanei.
Nel caso dell'antico mulino, diverse sono state le sperimentazioni che hanno lavorato sull'estensione del volume originario, per attraversare, occupare, ridefinire il bordo della grande corte antica che attualmente risulta un grande recinto verde al centro della città.
Un primo esempio interessante è il progetto ad opera di Barozzi Veiga architetti, per la Scuola di Musica Regenhaus, a Brunico, completata nel 2018. Qui, accanto all'antica Villa Ragen, gli architetti propongono un ampliamento contemporaneo occupando il terreno retrostante, che costituiva il giardino antico.
A partire dallo studio della tipologia dell'edificio e dall'assetto urbano caratterizzante l'isolato, costituito da lotti introversi, chiusi entro un perimetro opaco, la scuola diviene il muro che racchiude il giardino, un confine abitato che da un lato da continuità al tessuto urbano esistente, completando l'impianto urbano da preservare, dall'altro enfatizza la presenza della Villa Ragen, che continua ad essere il protagonista introverso e silenzioso, ma centrale nel progetto contemporaneo.
Se il progetto di Barozzi Veiga occupa lo spazio aperto preesistente in maniera totalmente introversa, proponendo un confine abitato, Linazaroso & Sanchez, propongono una soluzione alternativa nel concorso per l'espansione del Museo Mali a Lima, nel 2016, in cui si presentano circostanze analoghe.
La proposta di progetto, contrariamente alla precedente, muove dalla volontà di aprirsi rispetto al contesto, per ottenere una maggiore integrazione tra spazio museale e spazio pubblico urbano. L'innesto di una piastra di accesso, leggermente sottoposta rispetto alla quota stradale, funge contemporaneamente da piazza pubblica e ingresso alla nuova ala museale, totalmente scavata al di sotto: galleria d'arte, biblioteca, sala polivalente e piazza pubblica sono gli spazi di progetto che si susseguono dal basso verso l'alto, in relazione visiva tra loro e con gli spazi limitrofi della città.

Queste declinazioni evidenziano come inserti, attraversamenti ed estensioni possano considerarsi dei validi approcci progettuali per riattivare il patrimonio in abbandono dell'antico mulino della città di Frattaminore, conferendo nuovi significati e avviando processi trasformativi aperti ad accogliere ulteriori possibilità future, per rispondere alle mutate necessità derivanti dalla città contemporanea.
La materia antica diviene materia attiva del tempo presente, perché la città storica è un bene che ci viene consegnato dal passato e che dobbiamo traghettare nel futuro. «Allo stesso tempo, essa è comunque un organismo abitato nel presente. Pertanto, sotto certi aspetti, la città storica è sempre nuova, lo è oggi come lo è stata in passato. Essa è al tempo stesso patrimonio e progenie, perché in altra forma sarà da noi consegnata al futuro» (Raitano, 2020, p.128).

Next page

Architectural explorations for the ancient Mill of Frattaminore, team 3, drawing by Chiara Barone

Pagina seguente

Esplorazioni architettoniche per l'antico Mulino di Frattaminore, gruppo 3, disegno di Chiara Barone

FRATTAMINORE ADVANCED DESIGN STUDIO

ALFONSO MARIA ANNUNZIATA - THE PRODUCTIVE GARDEN

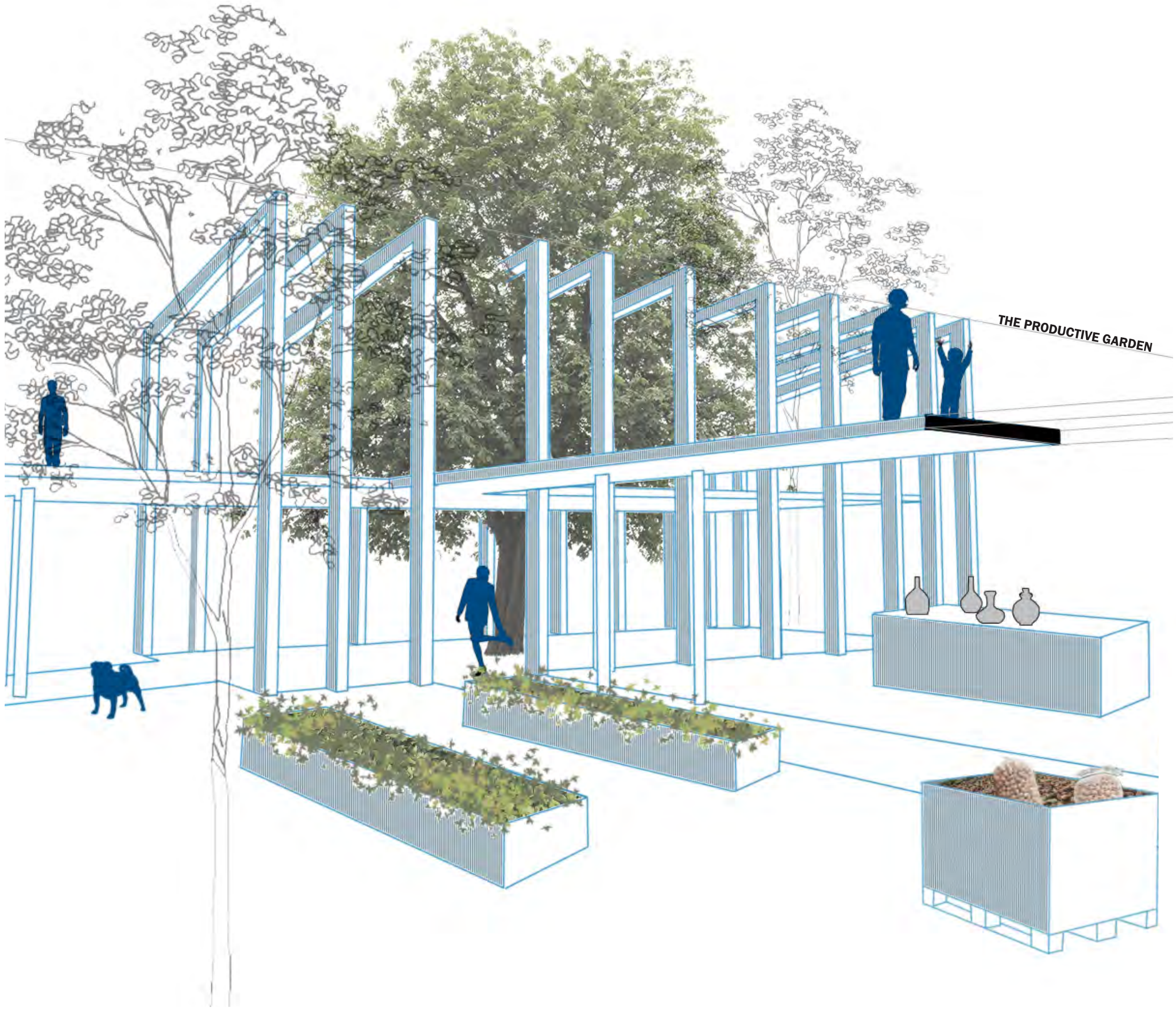
FROM THE SUGGESTIONS OF THE MILL TO THE PRODUCTION OF NOCILLO

This plan has been conceived to reappraise the whole Frattaminore area through new socialization sistems, services and chances to the community. Since in this small town there aren't many places enjoyable by citizens and few green areas, the analysis has been focused on the search of areas useful to the community daylife.
After a first recognition of this area and the planning of a cycle lane, the attention has been moved on the building that, in the past, was used as a mill. Nowadays, it is in very bad conditions.
This plan provides the demolition of the not safe areas and the consolidation of the other ones.
This plan intends to restore, in this buildind, the production of "nocillo" liqueur that represents the ancient essence of this place.
The entire unit is made of an authentic productive area, various multilevel greenhouses provided with research areas, teaching areas and refreshment ones, millstone museum, a "nocillo" shopping area, studing rooms and a flight system that connects all the new elements of the building .
Outside, the various areas are divided in city vegetable gardens and one productive garden in which nut trees (for "nocillo" production") are planted.
In the basement area, "nocillo" 's seasoning is made.
Here, the is also the public parking area and the charge and discharge area of the firm.

Program

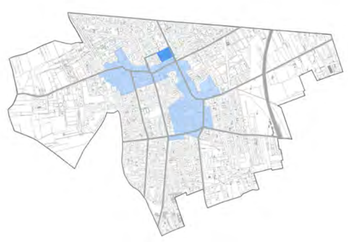
productive area, multilevel greenhouses, teaching areas and refreshment ones, millstone museum, a "nocillo" shopping area, studing rooms.

Covered area	**1.720 m²**
Outdoor area	**5.652 m²**
Above-ground floors	**3**
Built volume	**18.264 m³**
Estimated cost	**11.978.714,14 €**



Walnut and walnut husks.

The first part of this analysis is focused on the research of places that are identified wiith the ex millstone. It is placed in the ancient area of the town and it is easily reachable because it is placed in via roma that represents the centre as regards the geographical context and in relationship with the productive areas of the town, that are placed at its east and west.this plan means to join these two sections building a new one. That represents the hub of the town from an economic and social point of view. It has been made an analysis of all the productive green areas that are placed near the town borders and it implies that in the more crowded areas there are no grren spaces. This plan in conceived to create “nut parks” in these very crowded areas, in order to satisfy, at the same time and in the same contest, the production needs and the public green areas ones.



Ancient Town

Former Mill

Connections

Production Area

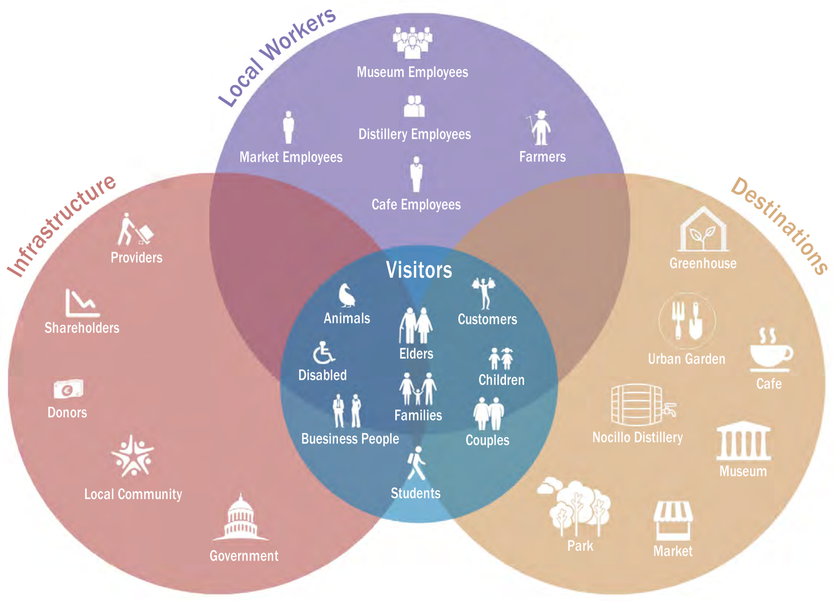
New Production Area (Nocillo)

Connections

Existing Orchards

Productive Garden (Nut Trees)

Cycle Lane



STAKEHOLDERS

This graphic takes in consideration all the shakeholders of this plan :

• Productive aspect ; • Museum aspect; • Recreational aspect; • Didactic and instructive aspect

In order to create an adequate balance between public and private demands in the name of environmental sustainability

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 40 100 200m

Ancient Volumes

New Volumes

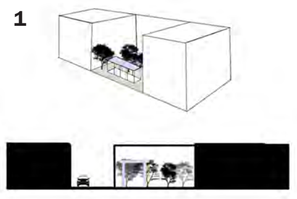
Shelter

Cycle Lane

Productive Garden

Urban Garden

1



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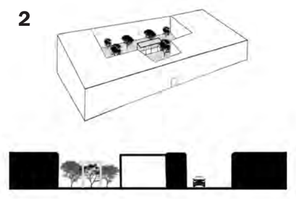

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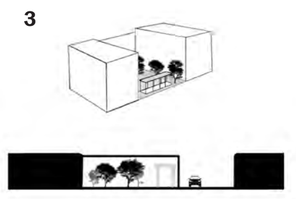
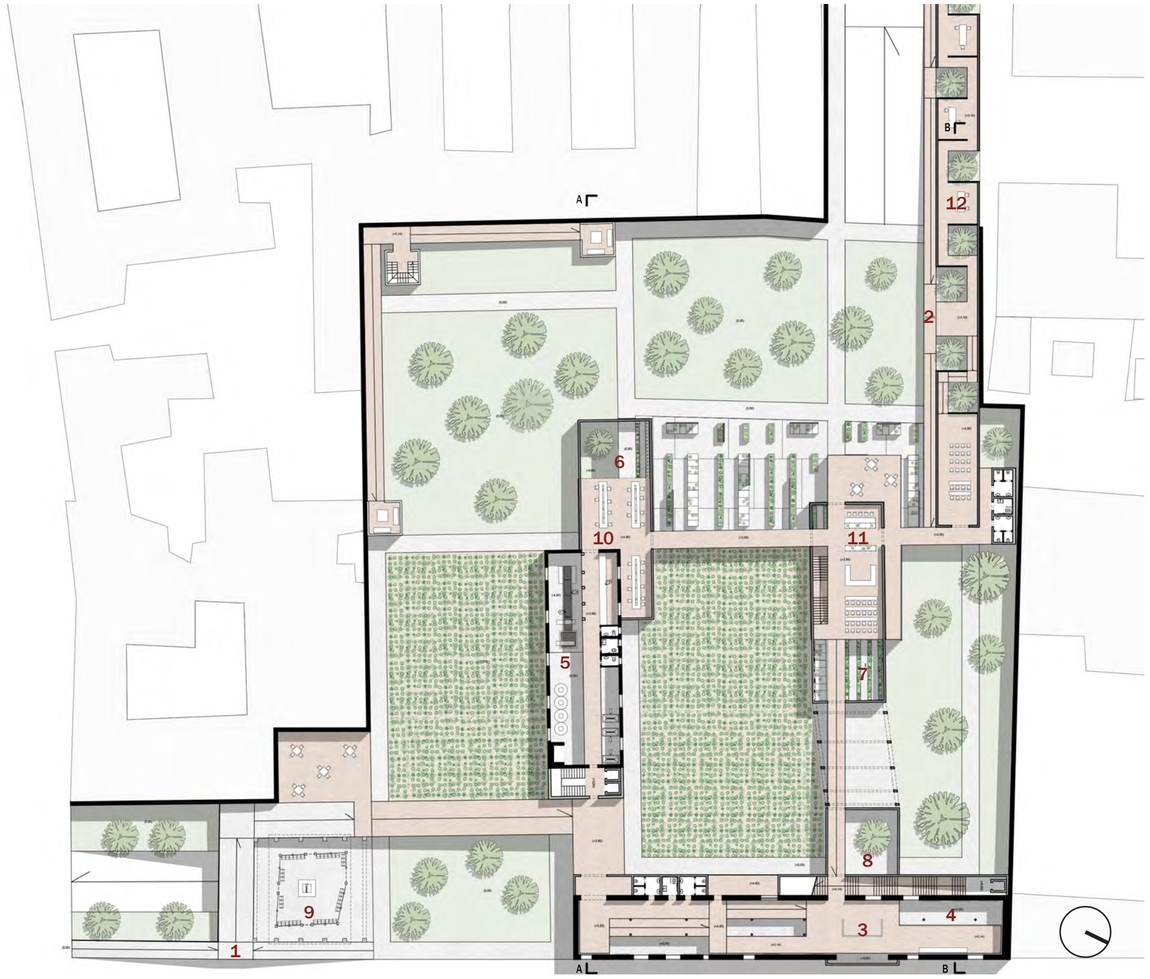


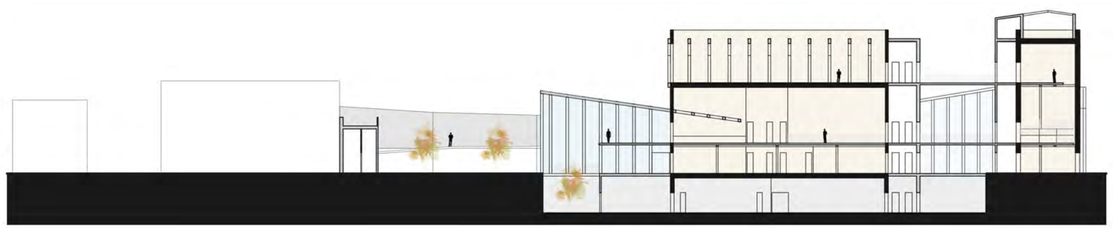
VIA ROMA SECTION

Urban Garden
Productive Garden
Wooden Flooring
Concrete Flooring
Nut Trees

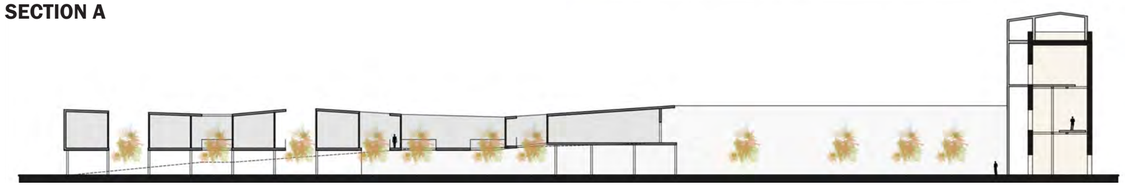


DESIGN STRATEGY

1. Ramp 1
2. Ramp 2
3. Museum
4. Market
5. Production
6. Greenhouse 1
7. Greenhouse 2
8. Greenhouse 3
9. Shop
10. Cafe
11. Masterclass
12. Study rooms

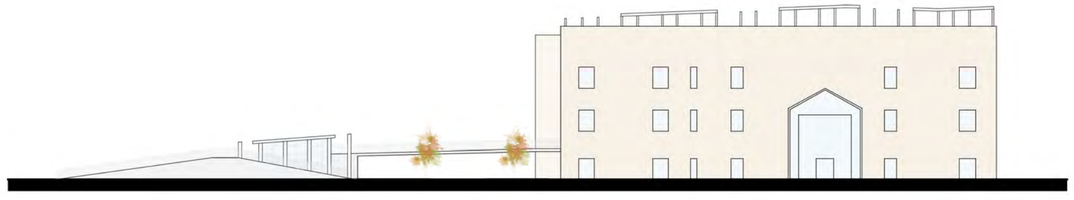


SECTION A



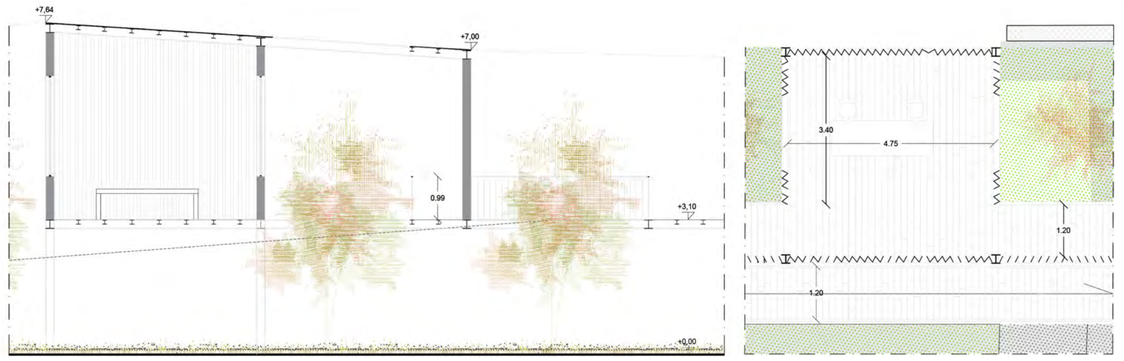
SECTION B

WESTERN FRONT



EASTERN FRONT

0
10
25
50m

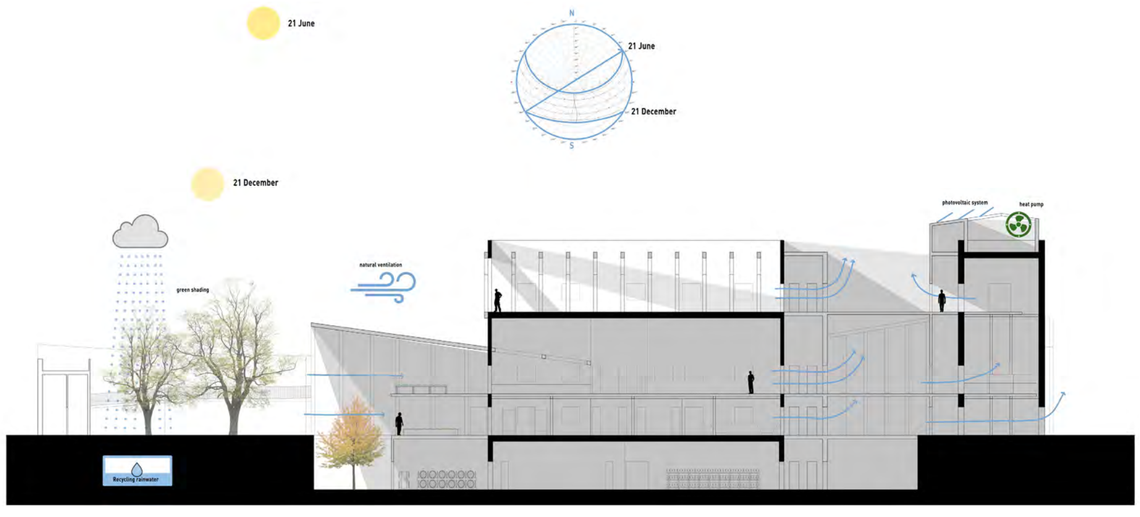


DETAIL SECTION

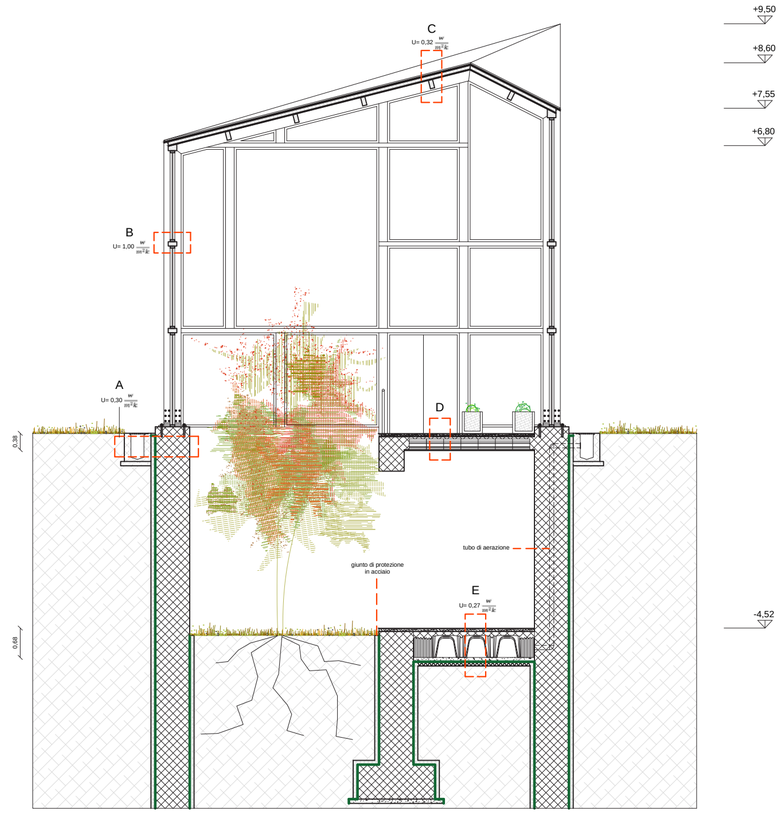
EXTERNAL VIEW

FRONT

0 2 5 10m



ENVIRONMENTAL SECTION



SECTION

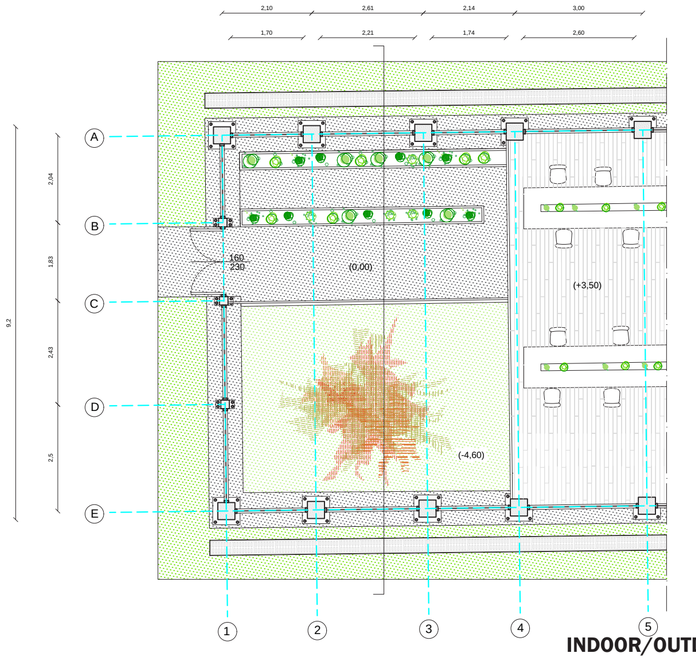
A. Drain, Insulation, TNT Waterproofing, Reinforced Concrete.

B. Glulam Columns, Glulam Joist, Window Wall.

C. Glulam Beam, Multi-layer Insulation Board, Glulam Joist.

D. Flooring, Glue, Subfloor, Reinforced Concrete, Light Brick, Plaster.

E. Flooring, Glue, Subfloor, Reinforced Concrete, Iglu, Formwork, Concrete, TNT Waterproofing, Insulation.



PLAN

INDOOR/OUTDOOR RELATION SCALE 1:50

0 2 5 10m

GIUSEPPE DE VITA - ANOTHER BRICK IN THE MILL

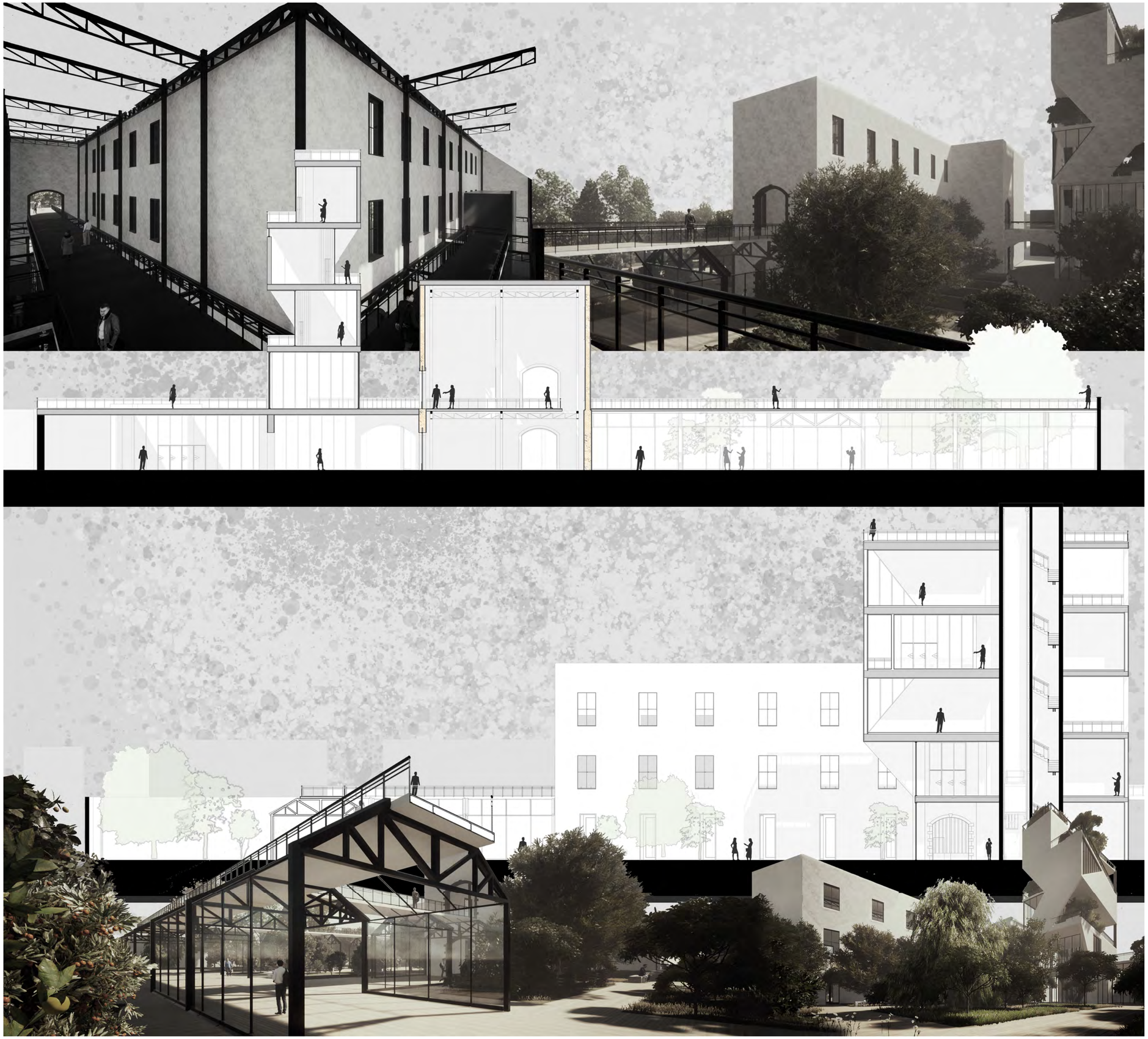
A WHOLE NEW LIFE TO THE HISTORICAL FRATTAMINORE'S MILL

How important is the value given to the past?
This question full of nostalgia makes it possible to undertake a reflection on the complexity of the "testimonial" value and on the importance of the memory of the past. The cities thrive on testimonies; the mill of Frattaminore is a testimony of work, history and culture in the province. Another brick in the mill takes on an important meaning, namely the idea of adding a new 'brick' to what history has transmitted to us. Respect the past allows to establish a dialogue with it and grafts it into modernity, through the use of new technologies and techniques that help to reflect the different uses of spaces over time: this was the approach that guided the architectural studio design for the ancient mill of Frattaminore. Another 'brick' is also the one of temporary, the idea of transitional use of space, just like the famous Lego bricks, approaching the project phases in a playful way. Spaces can change over time, change by introducing new functions and by enduring the challenges of time.
The idea of modernity, however, must not obscure 'what has been'. The mill of Frattaminore is an evidence of industrial architecture, and precisely, for this reason, this use must not be forgotten, but grafted into contemporary interpretation, through a tower made entirely of steel: in this way the old and the new dialogue with each other. The entire work has sought to respect these objectives through the study of the context and the city, making clear the importance of Landmarks, another feature that the mill can boast, ,however, exactly like this text everything arose from a simple question:
How important is the value given to the past?

Program

museum tower, exhibition hall, 0 km market

Covered area	**3240 m²**
Outdoor area	**15420 m²**
Above-ground floors	**3**
Built volume	**17.530 m³**
Estimated cost	**15.760.320 €**



Frattaminore: The old town

In the old town of Frattaminore, where the mill is located, there is an important building density, characterized by almost total compositional homogeneity.

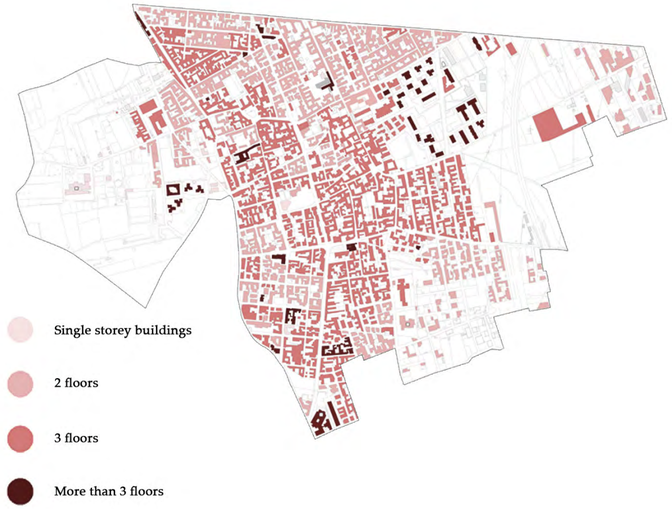
The buildings in the old town are all low-rise, mainly single-storey or on two levels, with the exception of the mill. The former mill, despite today experiencing a state of ruin, is able to immediately attract the attention of those who take Via Roma. This aspect, that is why the mill is considered an urban Landkmark, was the focal point for the project activities that took place.

Another important aspect that interests Frattaminore is its relationship with green spaces: in fact, the municipality can boast several parks and different 'breathing' areas from dense construction, however the old town is in fact the most devoid of greenery, or at least , the space where public greenery is scarce; it follows that the mill has one of the largest and unedited courtyards in the entire historic center. This represents a great potential for the city and for the mill itself, a ruined mill, ready to became something else in the future.

URBAN ANALYSIS

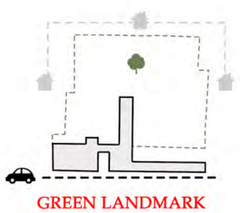
First studies interested in the urban composition of Frattaminore

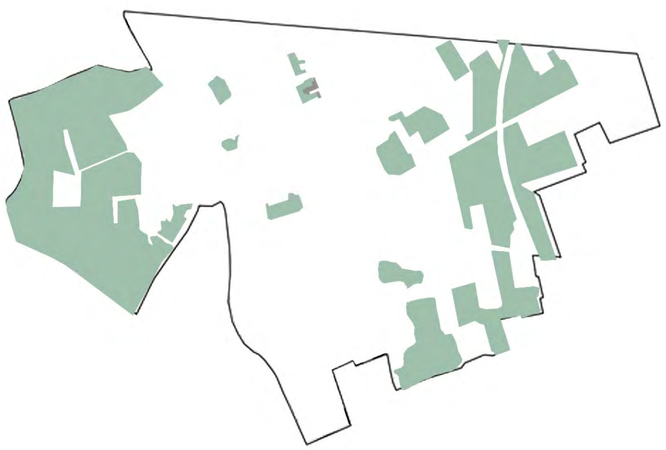
FRATTAMINORE
Construction density



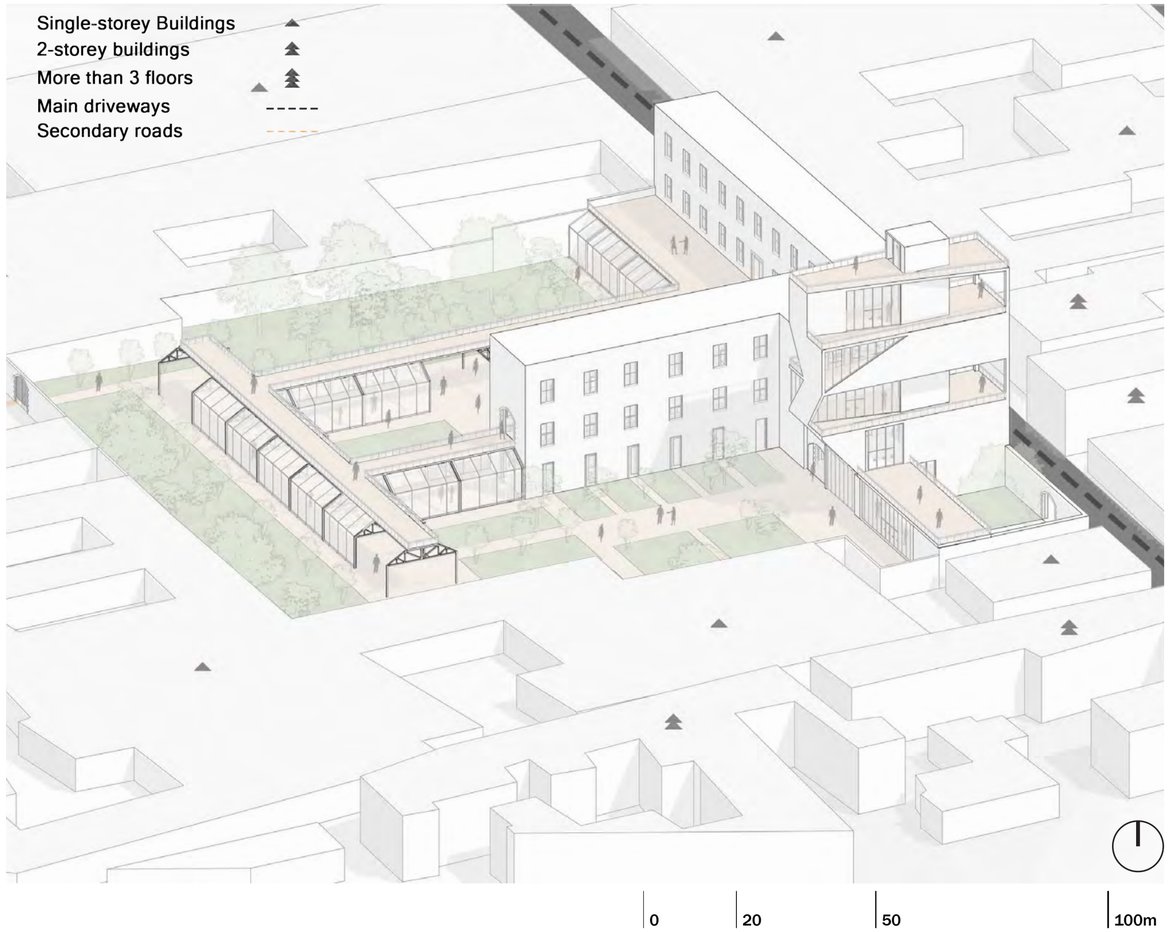
Altimetry

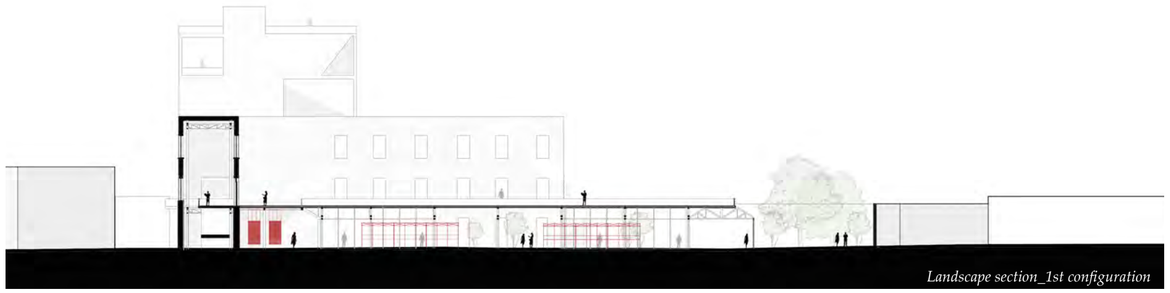
Former Mill as



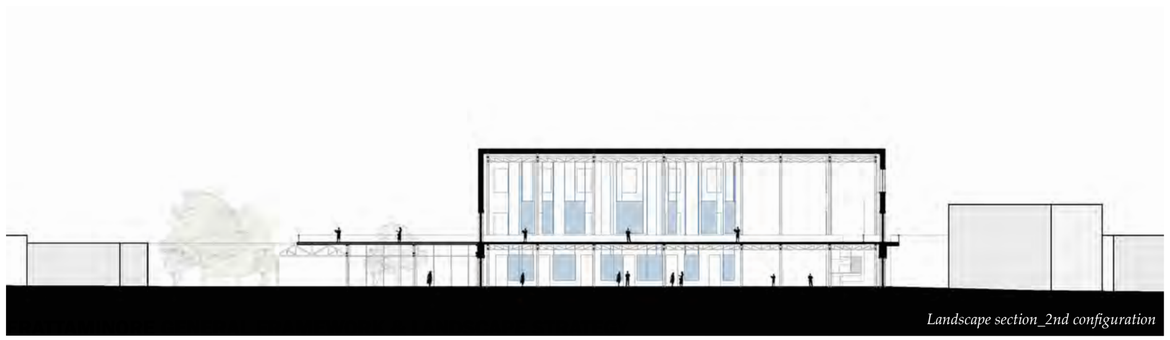


Green analysis

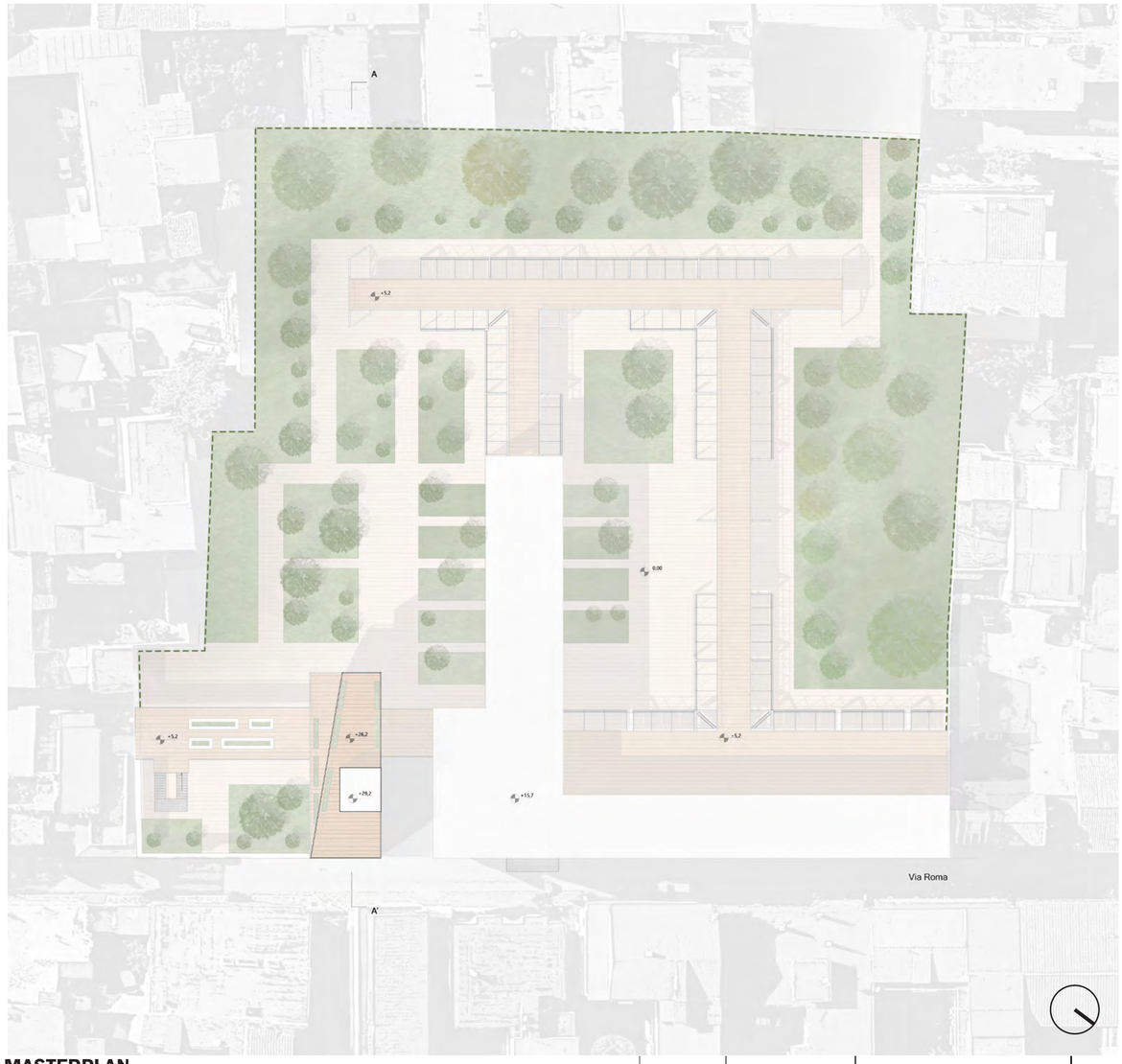




Landscape section_1st configuration

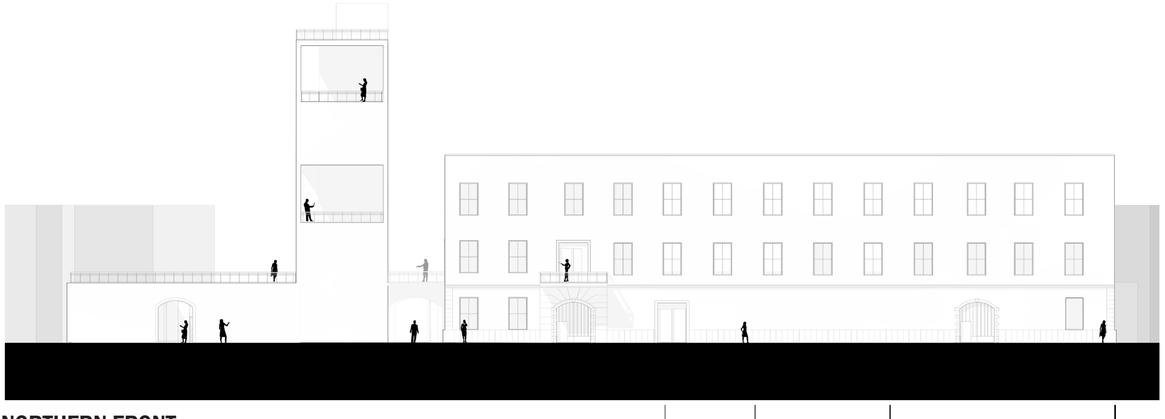


Landscape section_2nd configuration



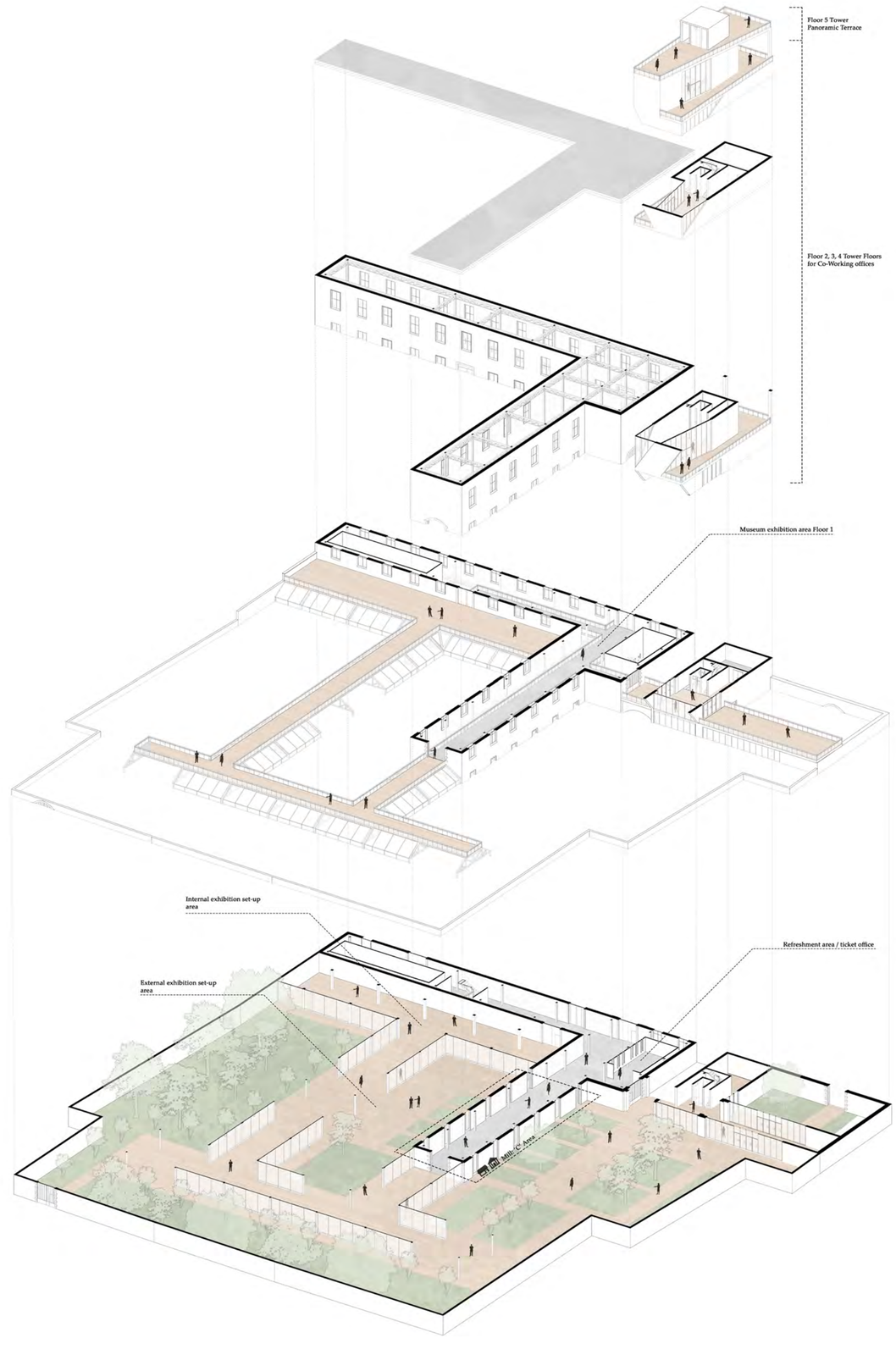
MASTERPLAN

0 10 25 50m



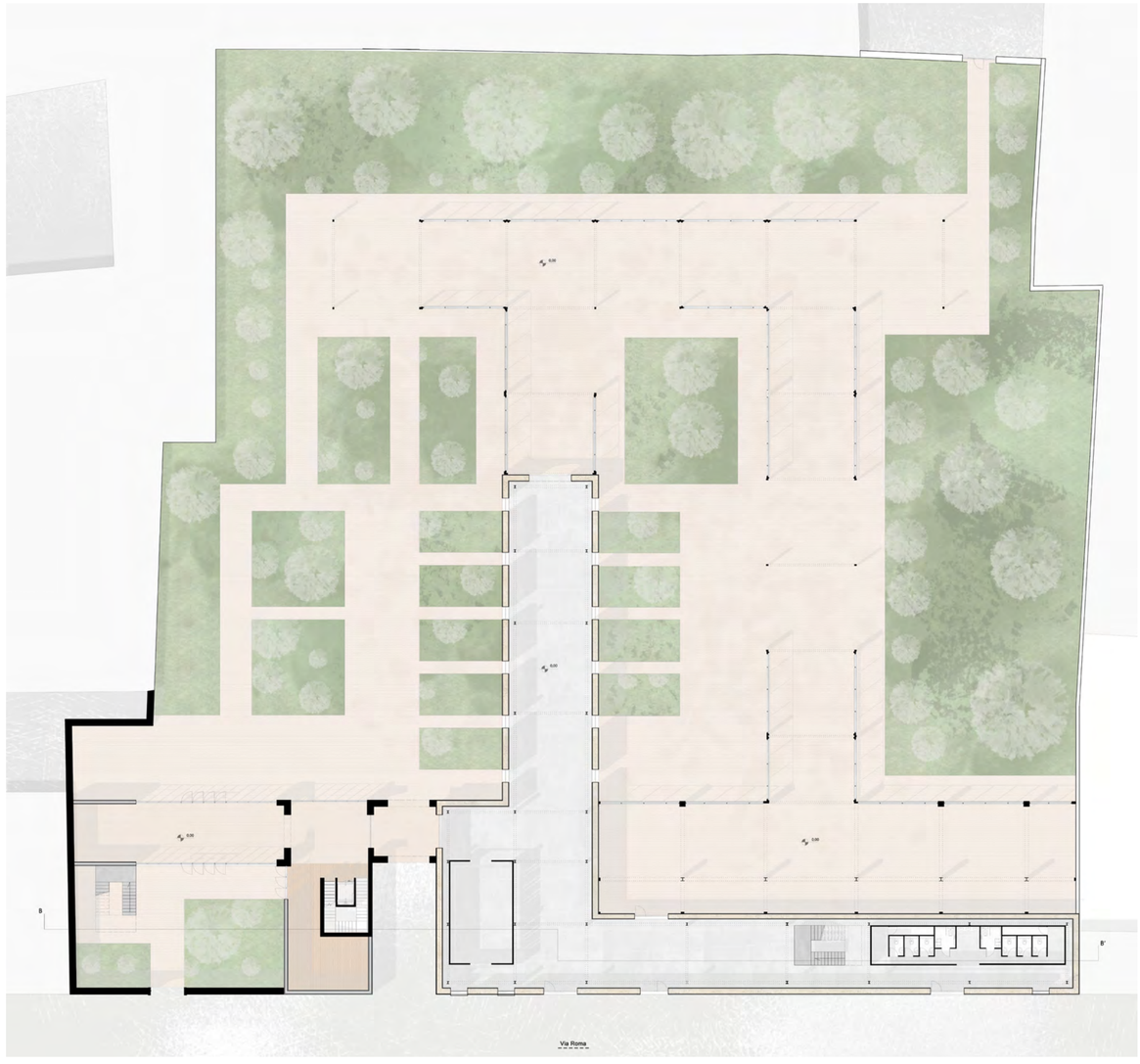
NORTHERN FRONT

0 10 25 50m

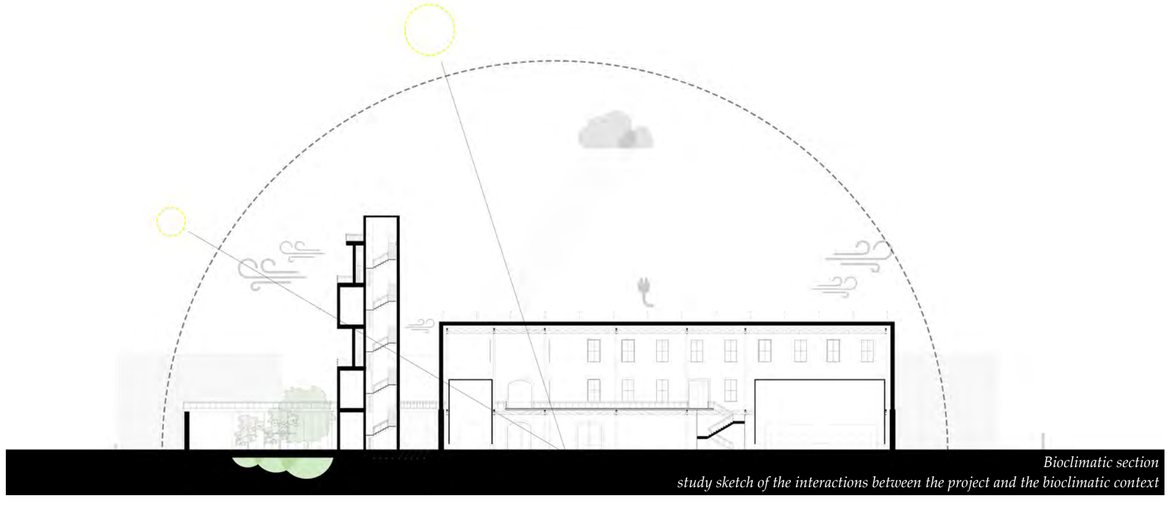


ISOMETRIC EXPLODED VIEW

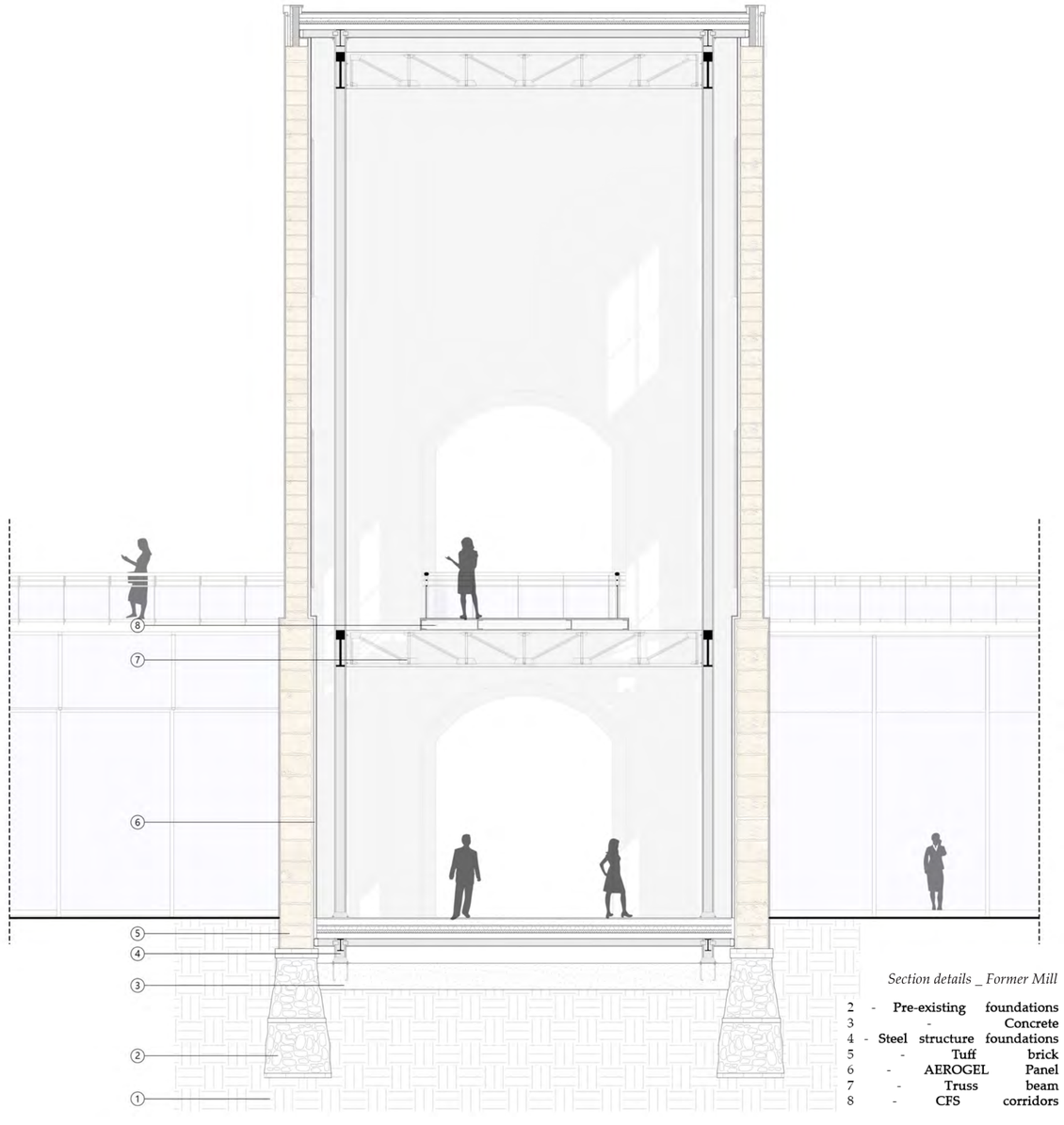
0 10 25 50m



Plan _ Ground Floor



Bioclimatic section
study sketch of the interactions between the project and the bioclimatic context



Section details _ Former Mill

2	-	Pre-existing	foundations
3		-	Concrete
4	-	Steel structure	foundations
5		- Tuff	brick
6		- AEROGEL	Panel
7		- Truss	beam
8		- CFS	corridors

INDOOR/OUTDOOR RELATION SCALE 1:50

ANDREA MARTINO - ARCHICULTURE

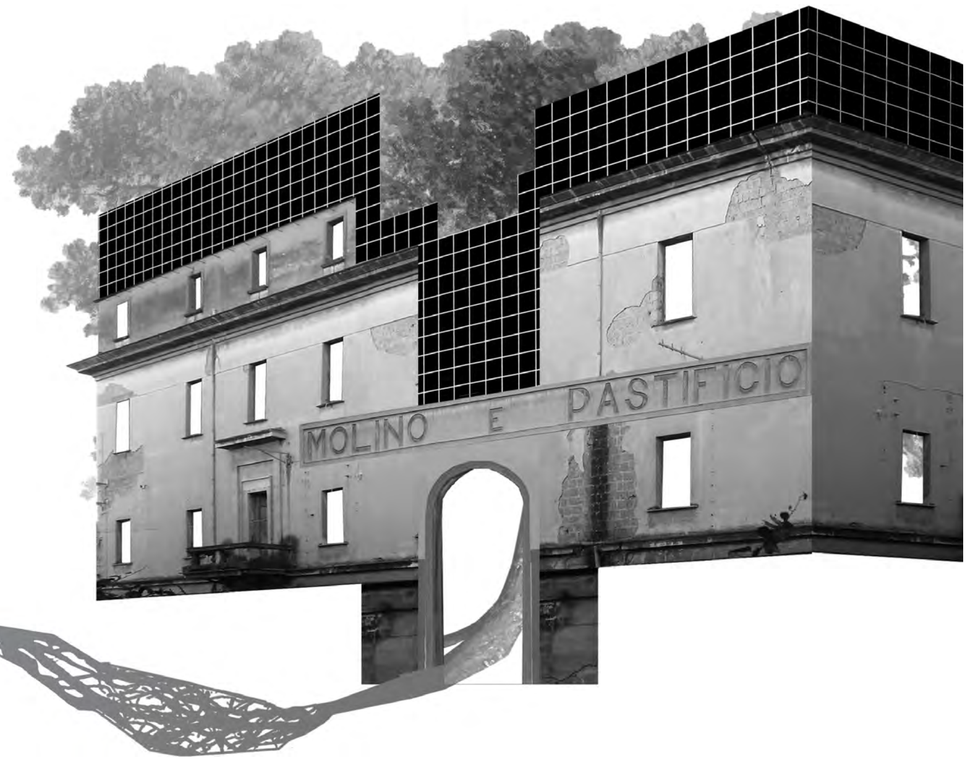
A CULTURAL CENTER FOR FRATTAMINORE

The ancient mill dates back to the early 1900s and is a typical example of industrial archaeology. At the beginning we worked the wheat to produce the pasta in various formats. Inside we find a large courtyard with gardens. On the ground floor there was initially a school but in the ‘60s a cinema was also built, very limited due to the limited space. Probably the transformation from mill to school took place because of the consequences of World War II. The building is currently abandoned. The project proposal is to have a cultural center that becomes a place of sharing and that sees people no longer as users but as active subjects of urban regeneration. No longer like the space that “exports”, but that becomes an envelope of activities “imported” by the community. A meeting place for the interests of the different actors, who can exchange customs, passions, ideas, generating new relationships and culture that then return to the outside world to enhance the internal community and its territory. Cultural recovery and destination represent a concrete opportunity to apply new modes of remedial intervention, fruition, interaction, in the theme of urban regeneration. The strategy aims to increase cultural spaces and to create an attractive hub. The actions implemented are the establishment of a link between the two gardens and the construction of public spaces. The project involves the creation of a new volume that revisits the characteristics of the demolished building, green areas and the redevelopment of part of the old mill. It also provides for the creation of a flexible space, a underground path, where you can host new activities and install temporary works.

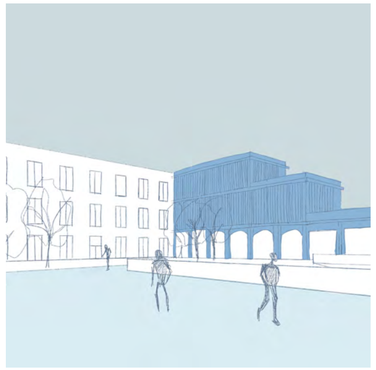
Program

urban park,
social and culture center

Covered area	**2192m²**
Outdoor area	**4355m²**
Above-ground floors	**5**
Built volume	**22.796 m³**
Estimated cost	**9.505.755,50 €**



Insertion of the project within the urban context as a tool of reconnection between the garden and the city, reconnecting the front entrance of the former mill with the inner courtyard, and creation of green areas of public use for an enlarged user



The inclusion of the project in the urban space is implemented through a strategy based on the re-connection of elements in plan and elevation. Dominant settlement is the relationship between the garden and the city. In fact, following the numerous collapses that hit the mill, the large courtyard remained hidden from the eyes of the citizens, defining a real “urban room”, intended for a few. This definition is maintained, not by opening the inner courtyard at ground level, but by working in section with underground passages. The garden constituted a shear. The project identifies the latent and virtual link between the court of the former mill and the courts of Via Roma, explained through the prefiguration of underground paths. The project is implemented on two levels, in plan and section. In plan, it is built through the margins through a link that from the historic building moves towards the new. In section, through the excavation, a gentle slope is built that accompanies the transition. It also creates a circularity of routes that allows access to the different parts of the system from multiple heights.

Ancient mill

School system

Schools

Libraries

Working system

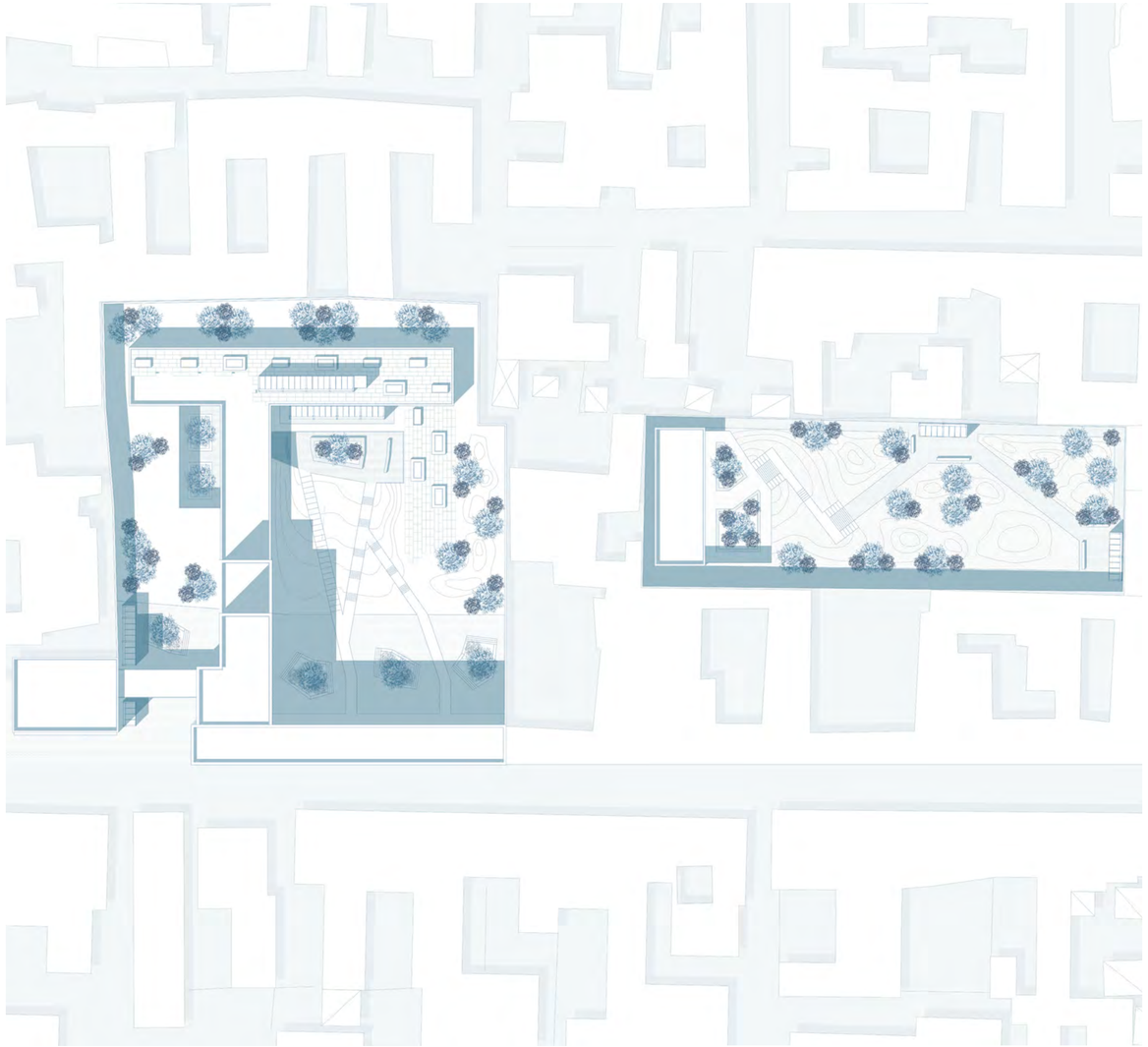
City hall

Workshops

Public spaces system

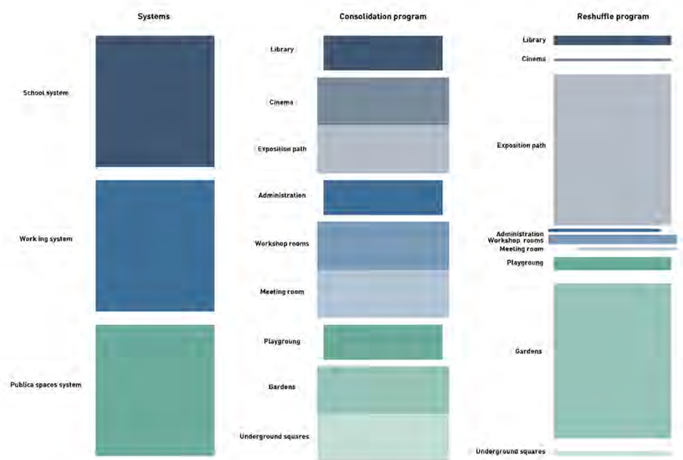
Equipped green area

Squares



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 25 50 75 m

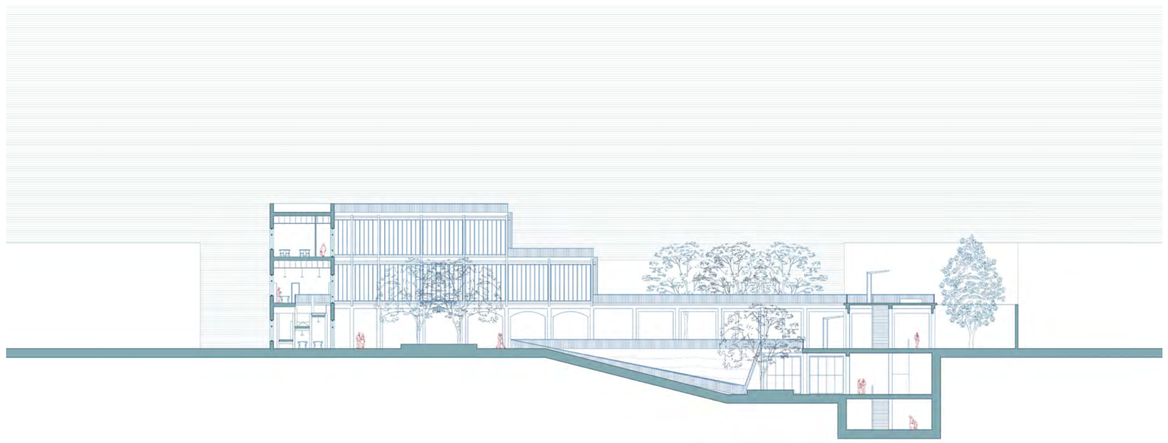


ORGANIGRAM

STAKEHOLDERS MAPPING

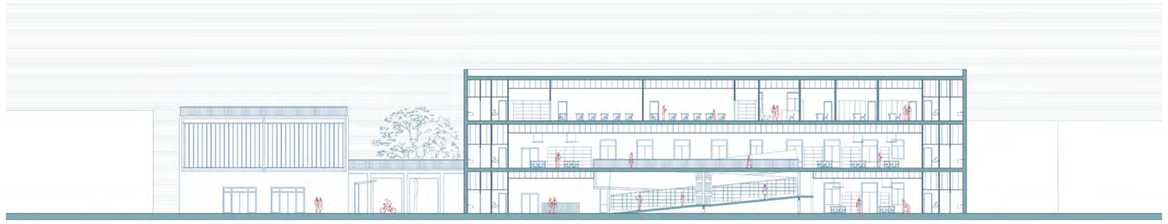
DESIGN STRATEGY

0 10 25 50m



SECTION B

0 10 25 50m



SECTION B

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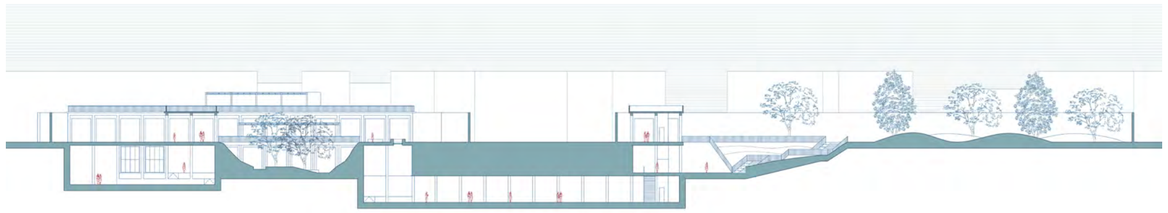
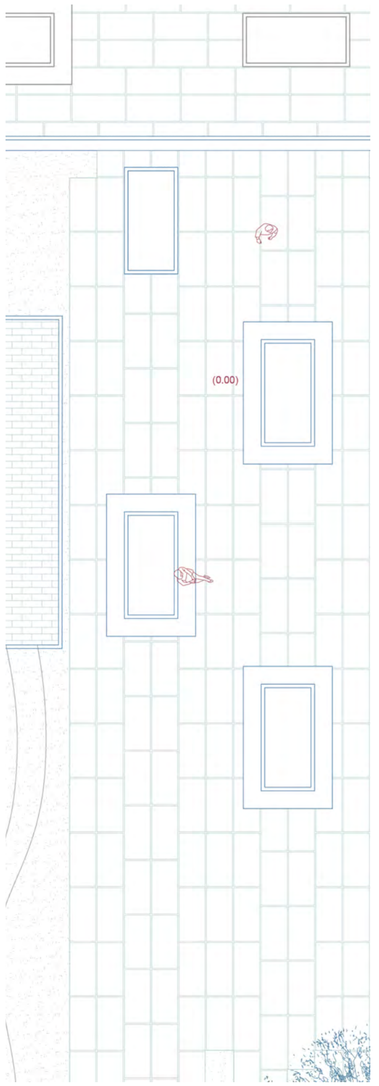


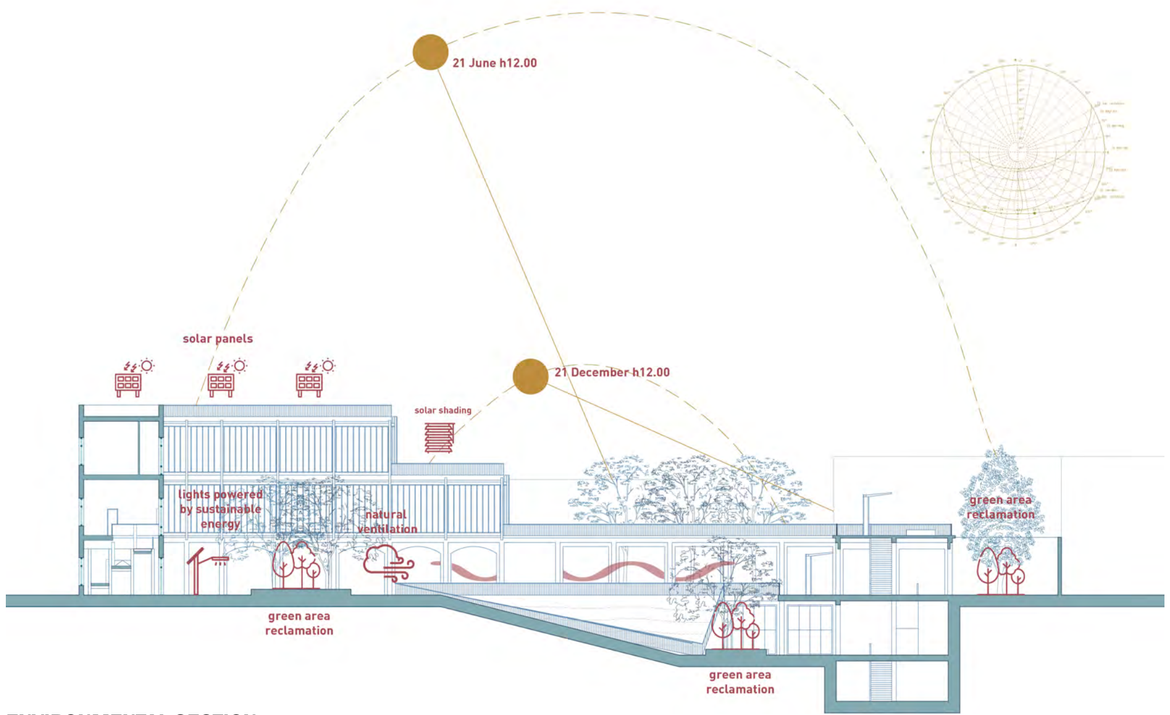
SECTION C

0 25 50 75 m

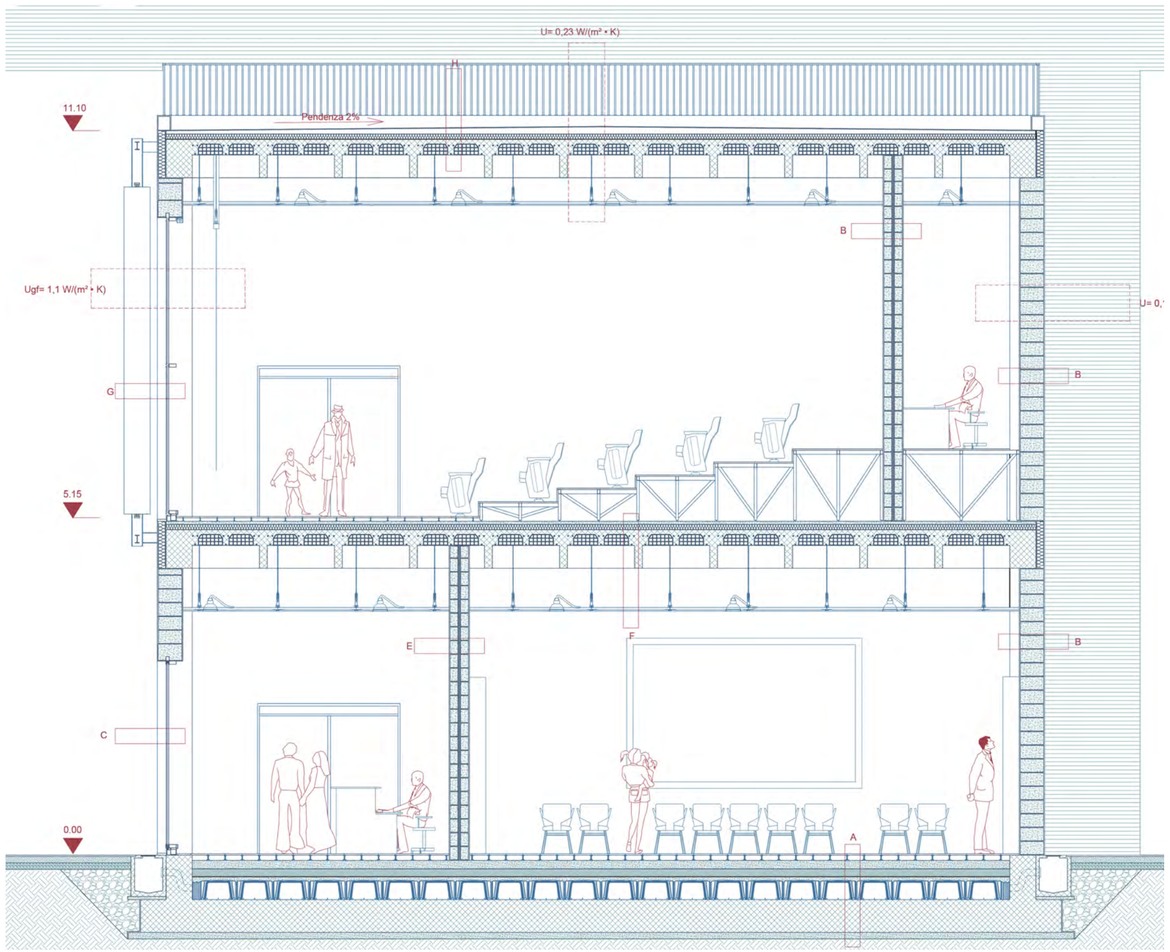


ZOOM EXTERNAL AREA

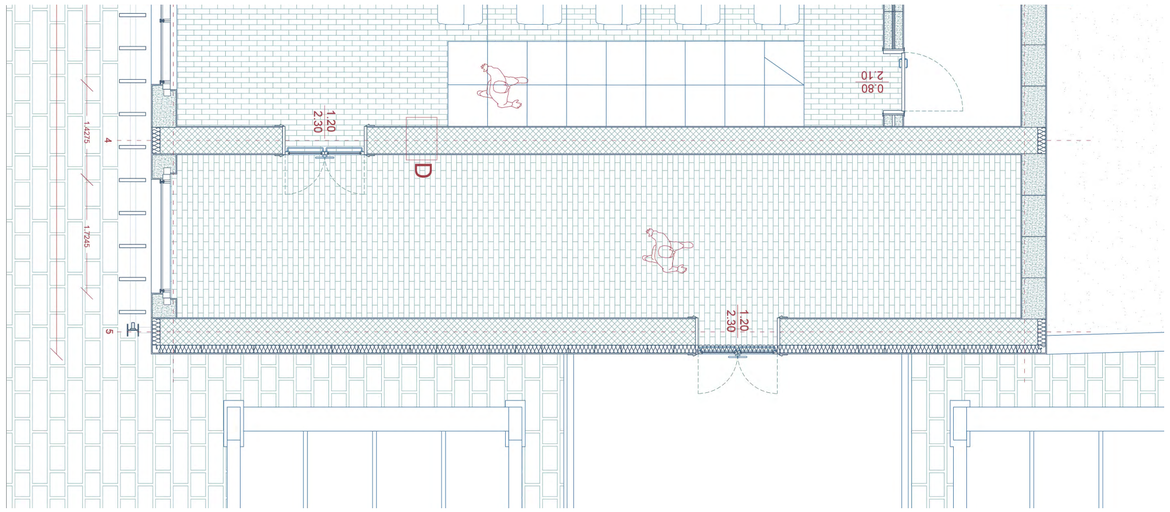
EXTERNAL VIEW



ENVIRONMENTAL SECTION



1. Foundation mat
2. Facade with blocks in cellular concrete
3. Curtain wall
4. load-bearing septum coat
5. Partition with Ytong ACU system
6. Concrete and brick slab
7. Curtain wall with sunshades
8. Concrete and brick roof covering



INDOOR/OUTDOOR RELATION SCALE 1:50

MARTA PARENTE - RE-MARK THE LAND

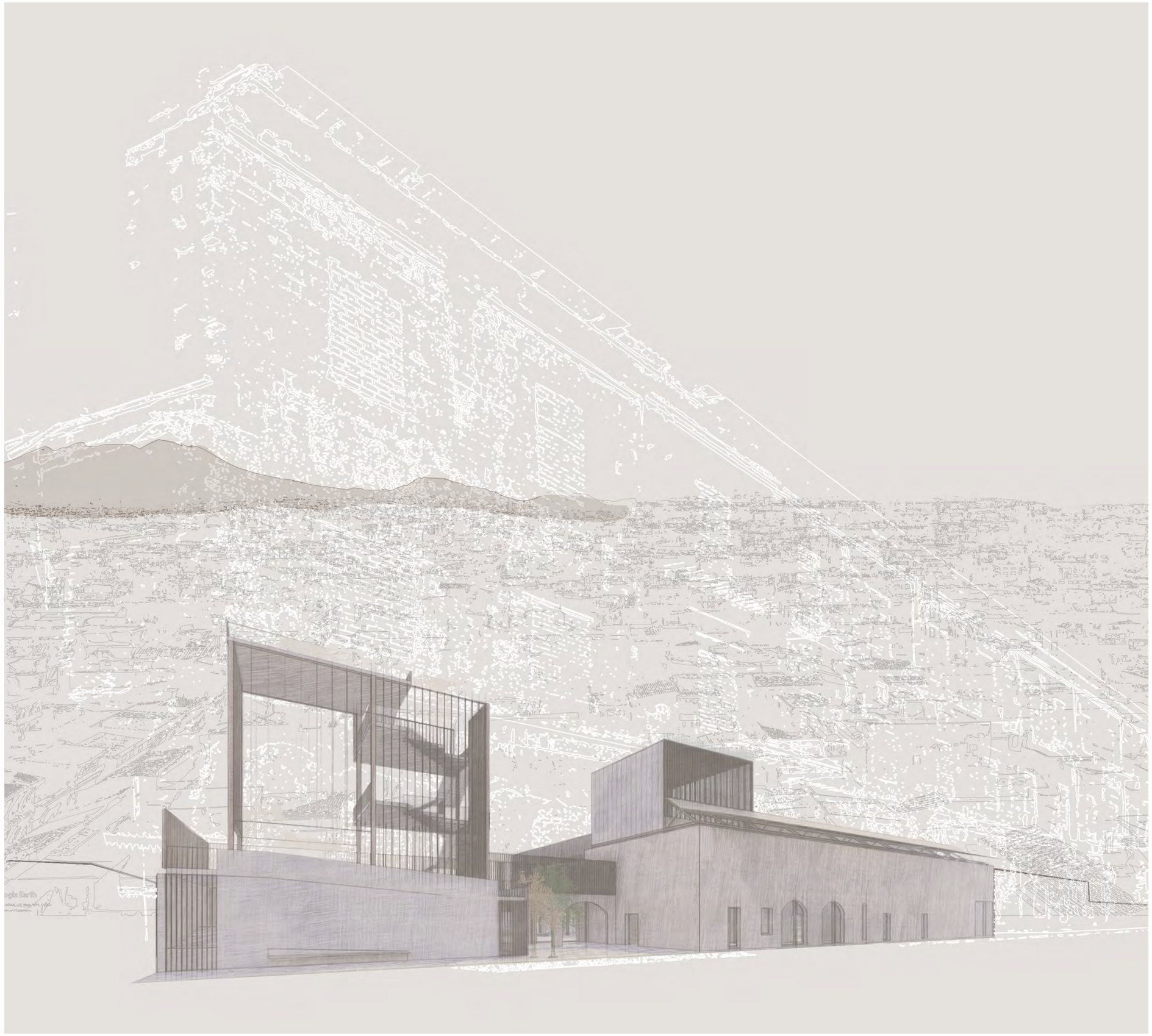
NUOVO LANDMARK PER LA CITTA' DI FRATTAMINORE L'EX-MULINO: UN

Dealing with a pre-existing architecture is never easy, you must be careful to act ensuring the correct balance between the new interventions and the original artifact. The project consists of targeted interventions that support the pre-existing architecture of the Ex-Mulino, both from a structural point of view and by giving a second life to a building that currently stands into a state of ruin.The large tuff building occupies a very large area on the edge of the historic center, which corresponds to part of the block between Via Roma, the historic road axis, and Via Bernini. Today it is an abandoned area, and due to its large size it is perceived as a real barrier. Through the multiplication of accesses, the project aims to re-establish a currently non-existent connection between the two roads. In this way the court of the Ex-Mulino, becomes a real square, filling the lack of public space on the territory. The two entrance points are marked by the presence of landmark buildings that are characterized by a great height and by the same architectural language: transparency and the use of burnished steel, which is the iconic material of the project. These two elements are linked to the main building by aerial connections that appear to be the extension of those existing outside the project area. The result is a harmonious architecture, characterized by the use of shapes and materials that enrich it.

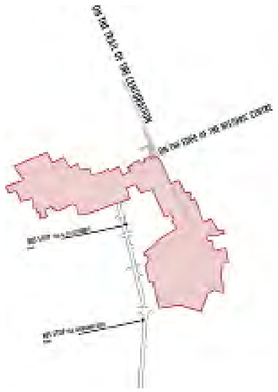
Program

bike point, info point, internet point, shopping gallery, exibition gallery, public library, rooftop bar, urban park

Covered area	**1210m²**
Outdoor area	**4900m²**
Above-ground floors	**3**
Built volume	**18.150m³**
Estimated cost	**€**



Behind the development of the project there is a careful analysis of the territory of Frattaminore. The final product is the synthesis of the reasoning made on a large scale and applied within the area of intervention, that of the Ex-Mulino.



The difficulty of moving within the territory and towards the neighboring municipalities, as well as the lack of public space, are just some of the problems faced. Due to the lack of public transportation and the absence of alternative mobility, the territory remained partially isolated from the context. The project, starting from the issues raised, seeks to provide a solution through a widespread intervention. First of all, the increase in the number of bus stops that, at present, do not cover the entire territory, so that some places can be reached only by car. In particular, in correspondence of the Ex-Mulino, the project includes a stop for the bus coming from the high speed intercity lines station of Afragola , with the aim of increasing connections with the outside. These interventions are complemented by the project of a bicycle path that winds between the historic center and its majestic baronial palaces, up to touch the areas of new expansion to the east. Finally, the park of the Ex-Mulino, is the solution offered by the project to solve the lack of public space.

most relevant roads

Parking area

Existing bus stops

Cycle path project

Ancient mill

New bus stops and bike sharing

URBAN STRATEGY

This plot, by combining the analysis of the site with the project hypotheses, illustrates the solution proposed to the problems evidenced by the study.

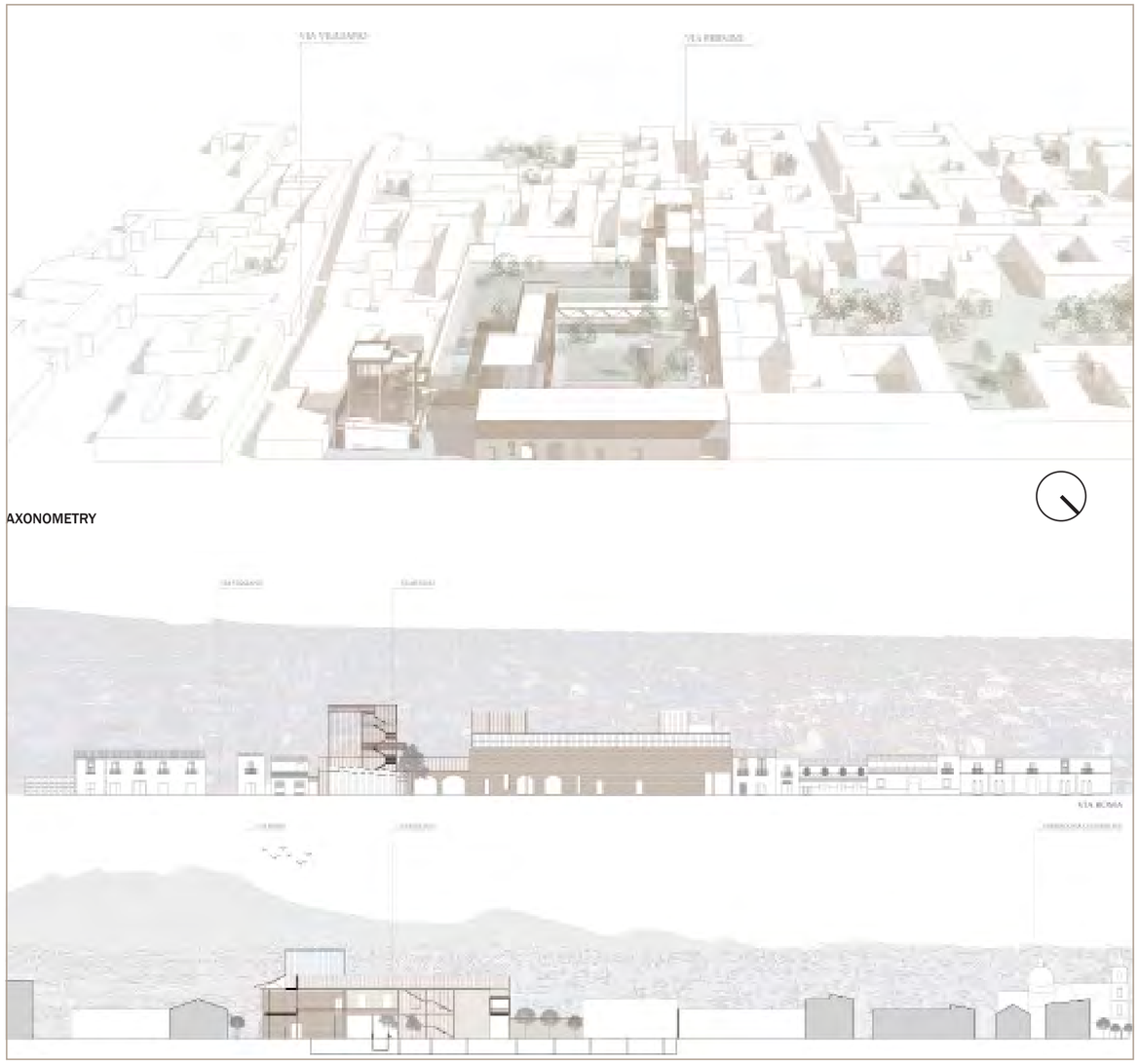
BERNINI STREET

ROMA STREET

TURATI STREET

SANT'ARPINO STREET

0 4 10 20m



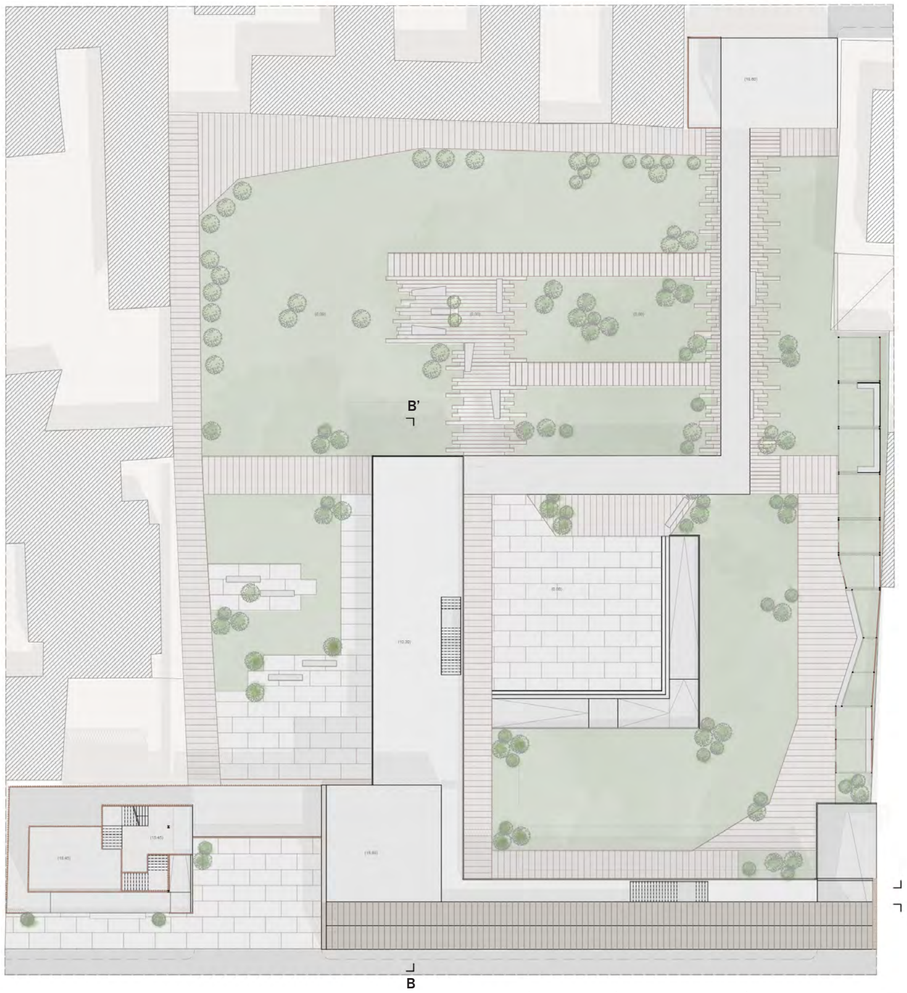
AXONOMETRY

FRATTAMINORE THE PROJECT IN ITS CONTEXT

USERS AND STAKEHOLDERS

TIME AND MATERIAL DIAGRAM

The diagram illustrates the project workplan and the main materials used.



0 10 25 50m

ROOF PLAN

0 10 20 40m

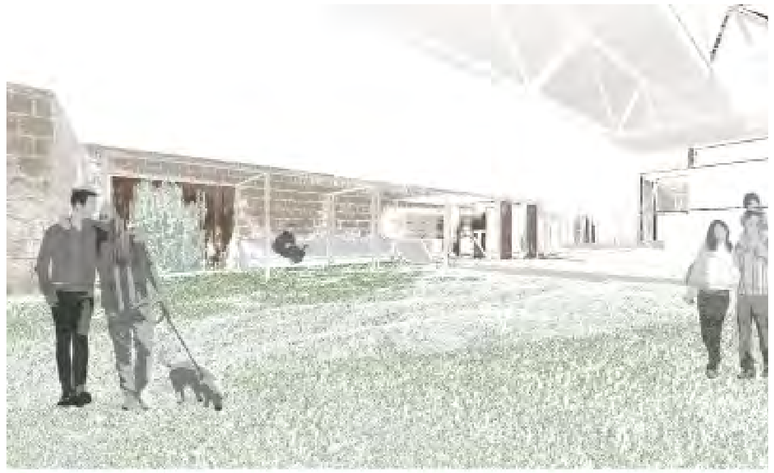
SECTION AA'

1. Entrance
2. Bike point
3. Terrace
4. Connections
5. Hall
6. Shops
7. Museum
8. Toilette
9. Rooftop bar
10. Parking

SECTION BB'

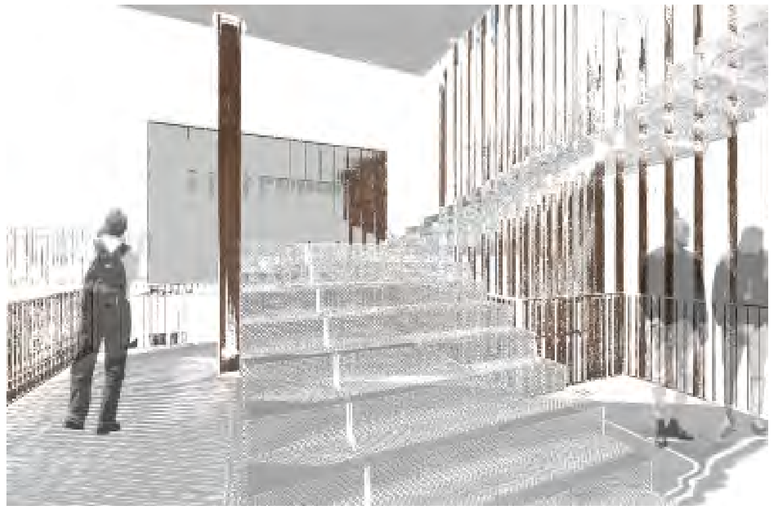
0 10 20 40m

SECTION CC'



THE PARK

THE CONNECTIONS

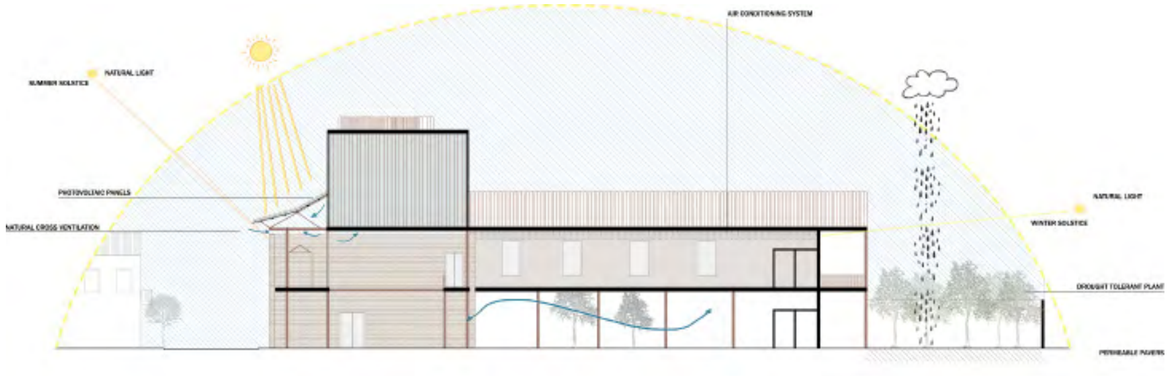


THE TERRACE

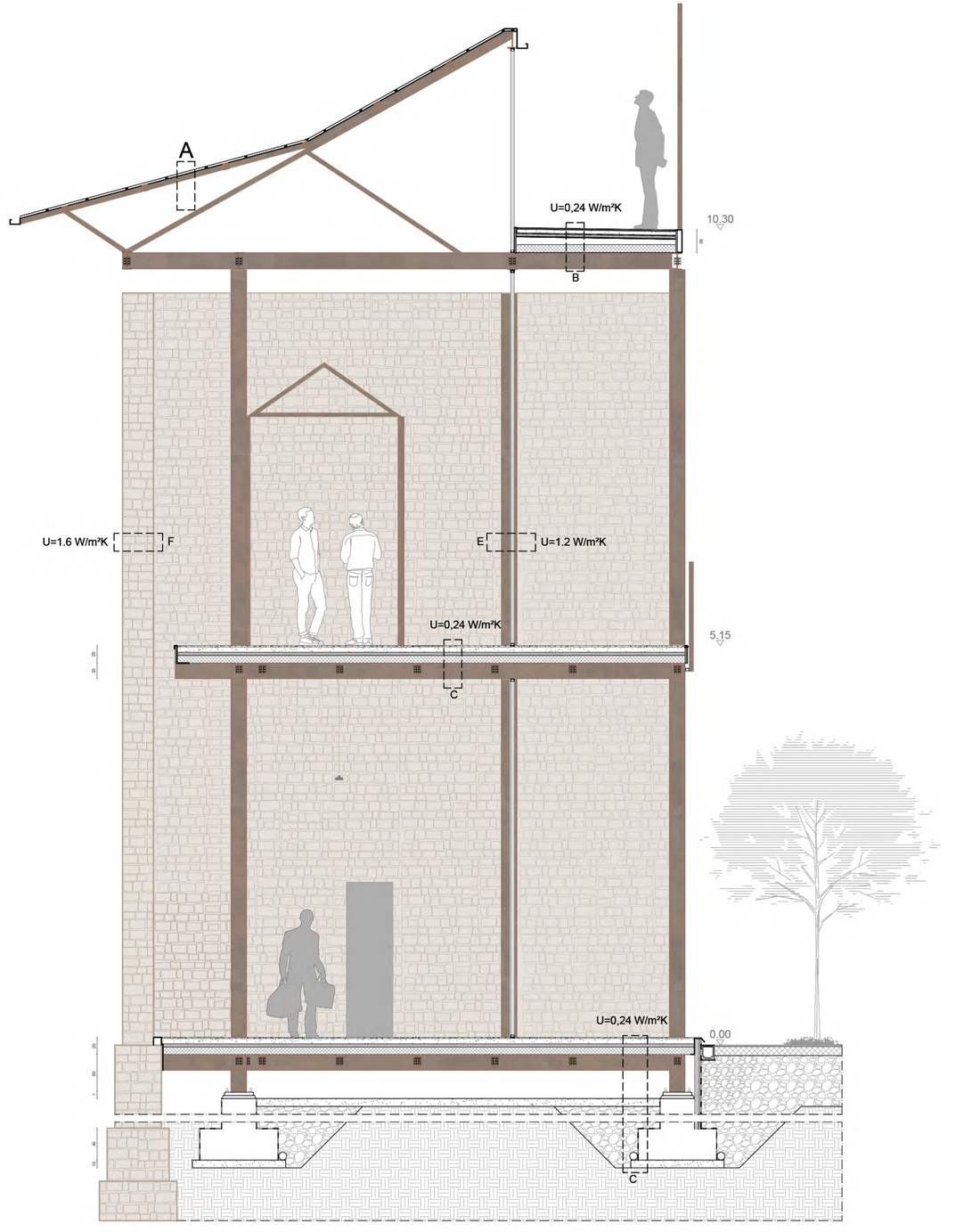
SHOPPING GALLERY

PUBLIC LIBRARY

EXIBITION GALLERY



BIOCLIMATIC SECTION



A.Seamed aluminum plates,stainless steel fixed staples,steel beam.

B. Stone paving, mortar layer, lightened concrete substrate, waterproofing sheath, rock wool insulation, vapor barrier, slope screed, corrugated sheet metal with concrete casting.

C. Concrete casting flooring, concrete screed, rock wool insulation, corrugated sheet with concrete casting, IPE200 beam, IPE160 joists.

D. Concrete casting, concrete screed, rock wool insulation, corrugated sheet metal with concrete casting, IPE200 beam, reinforced concrete foundation plinth, lightened lean concrete, waterproofing membrane, gravel, compacted soil.

E. PILKINGTON PROFILIT “one in 2” U-glass partition.

F. Tuff wall

SECTION OF THE BUILDING SCALE 1:50

The development of the project was guided by a basic concept, that is collectivity and connections. These are characters lacking in the territory of Frattaminore which, however, has strong potential.

From an urban point of view, the project proposes the connection of various areas, the most characteristic of Frattaminore, among which it is possible to recognize Piazza Francesco Crispi, Piazza Atella, the near urban park and the site of the ex mill.

The choice of the project area fell on this last site because I considered it essential to reopen and return to the community an area with a strong social value.

Following the study of the PUC, which provides indications with which to act in the most right way for the entire city of Frattaminore, it was considered right to insert a private character, guaranteed by the presence of residences, and a public character with the choice of covered market function.

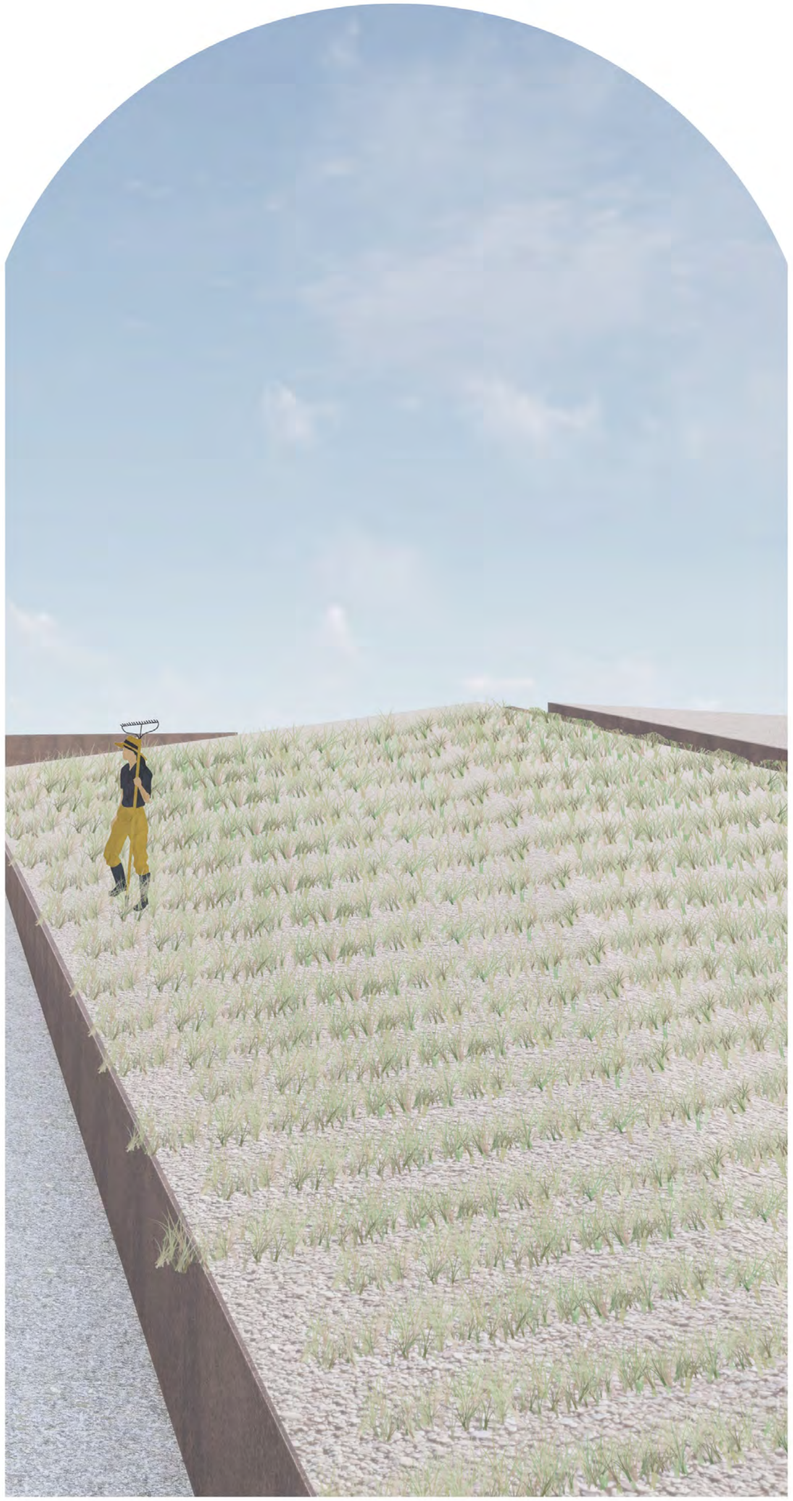
The theme of connections also returns in this case, given the decision to reserve the residences for farmers who will allow the development of the covered market. This is ensured by suitable spaces for the storage and processing of products within the housing block.

The activity of the covered market is also supported by the park which has areas for the cultivation of products, becoming a real urban garden. Furthermore, the park has a dynamic character due to the small squares placed at different heights and reachable through ramps.

Program

Covered market, urban garden, residences.

Covered area	1214 m²
Outdoor area	4900 m²
Above-ground floors	3
Built volume	19910 m³
Estimated cost	1736619,65 €

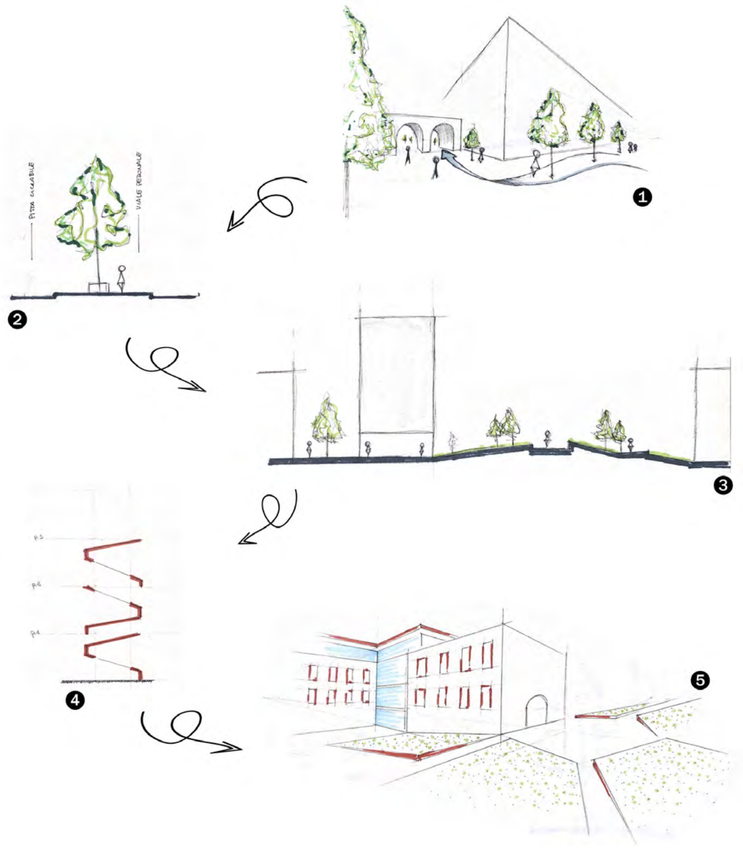


The project developed following various phases and ideas. At first there was a strong desire to preserve and reopen the pre-existing building, for this reason the two arches are characteristic of the recovery and allow the user to pass from the road to nature.

The road (via Roma), which is now suitable for vehicles, is made completely by the cycle and pedestrian project and connects all the areas of greatest interest in Frattaminore.

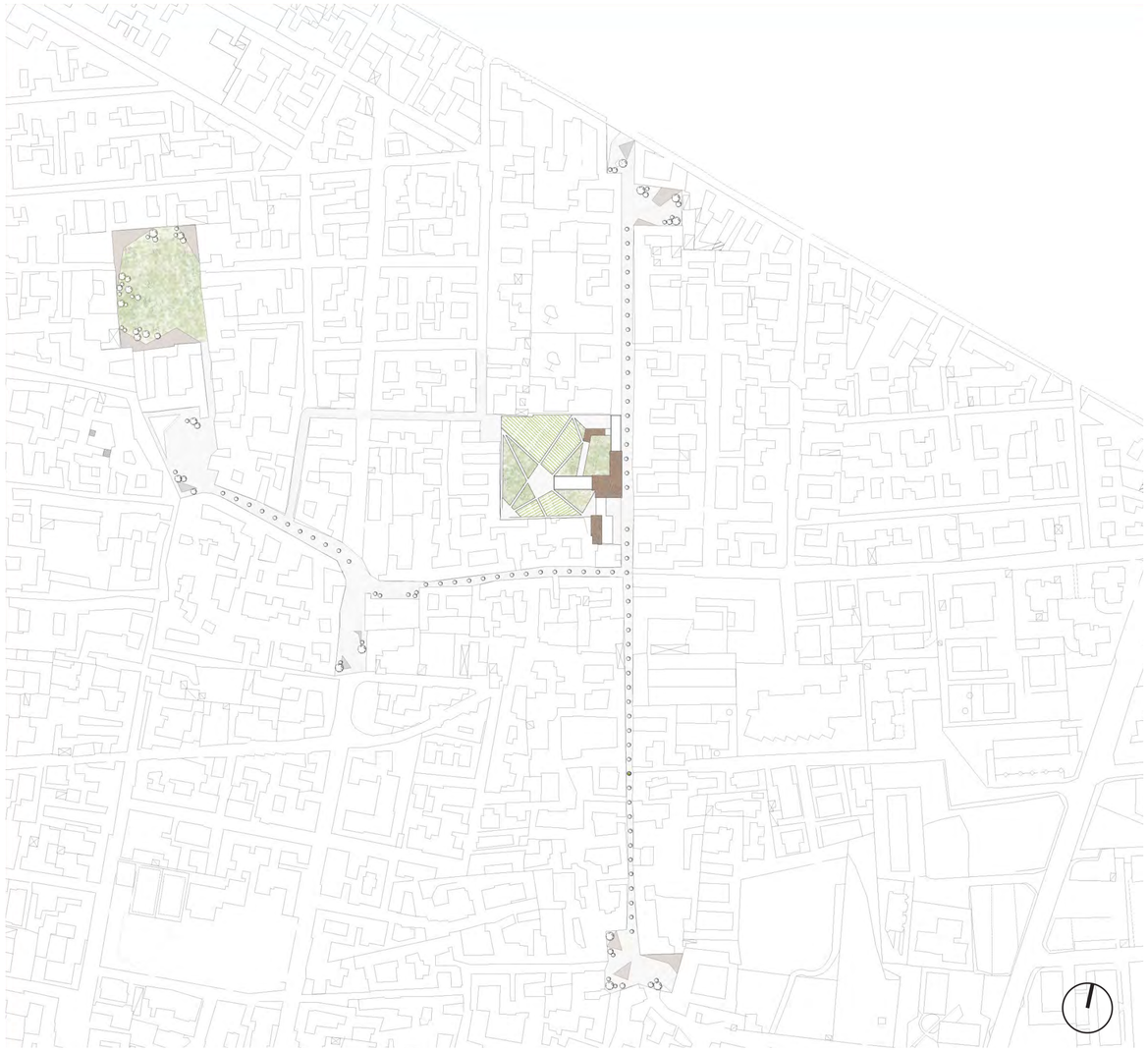
The park within the site is characterized by a movement of the ground that differentiates it from the surrounding context and which allows the insertion of a parking at an altitude of 0.00.

As for the interventions on the building, this has mostly been preserved and the addition of a glazed graft allows you to enjoy the building again and recognize the intervention carried out. Characteristic of the project is the tape staircase that connects functionally and visually the various levels of the covered market. The entire structure is closed by a dynamic roof that recalls the particular movement of the park.



1_Court as an open space
2_Cycle-pedestrian path
3_ Urban park
4_Vertical connection
5_Project graft

The diagram on the right shows the urban intervention modality. It is possible to notice how the road becomes entirely cycle-pedestrian, the park of the mill becomes the center of the project while the bike-sharing service is supported by the inclusion of small structures placed in the squares.



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

DESIGN STRATEGY

0 10 25 50m

SECTION A-A'

0 10 25 50m

1 _ Cycle/pedestrian path

2_ Room for the processing of agricultural products

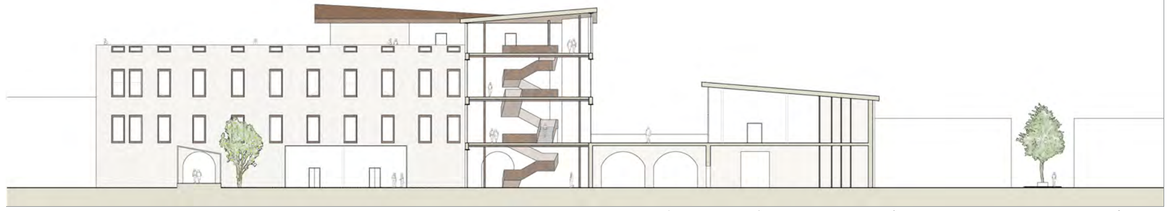
3 _ Duplex apartments

4 _ Terrace

5 _ Garden

6 _ Parking

PROSPECTUS _ VIA ROMA

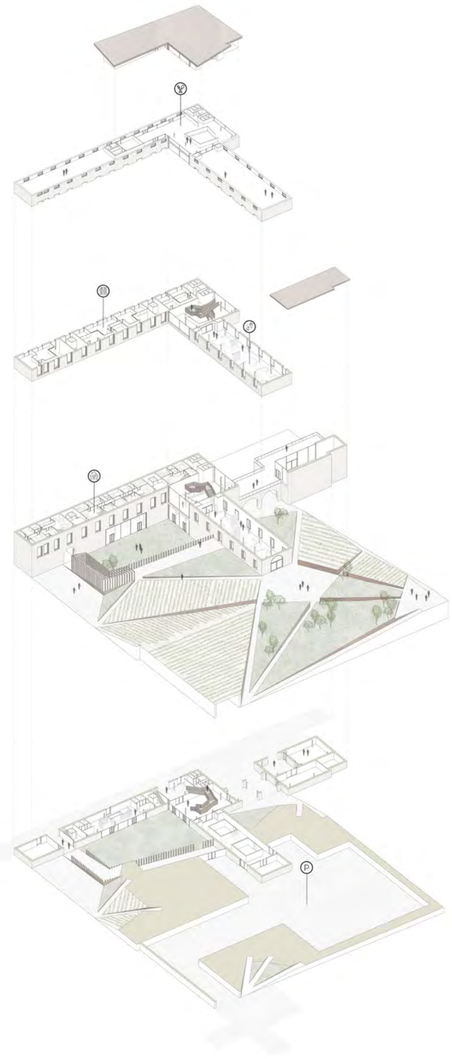


SECTION B-B'

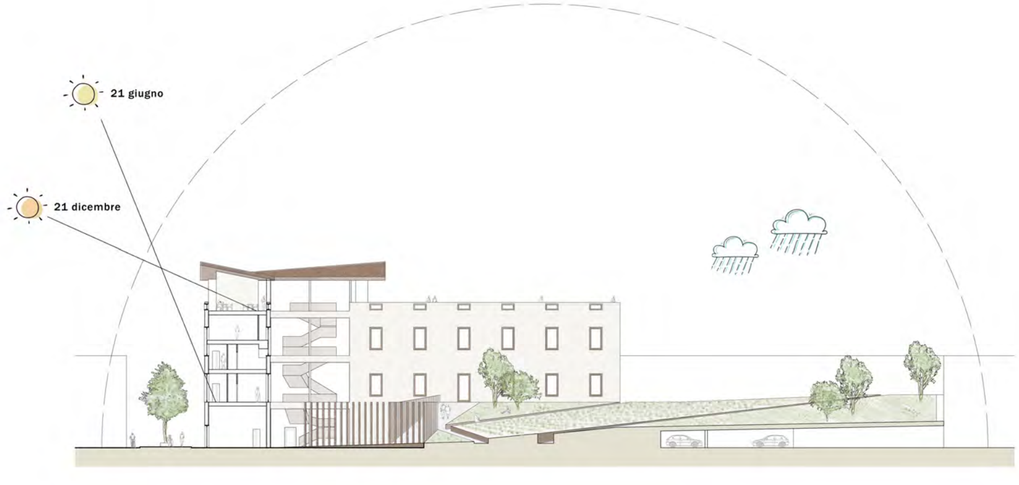
0 10 25 50m

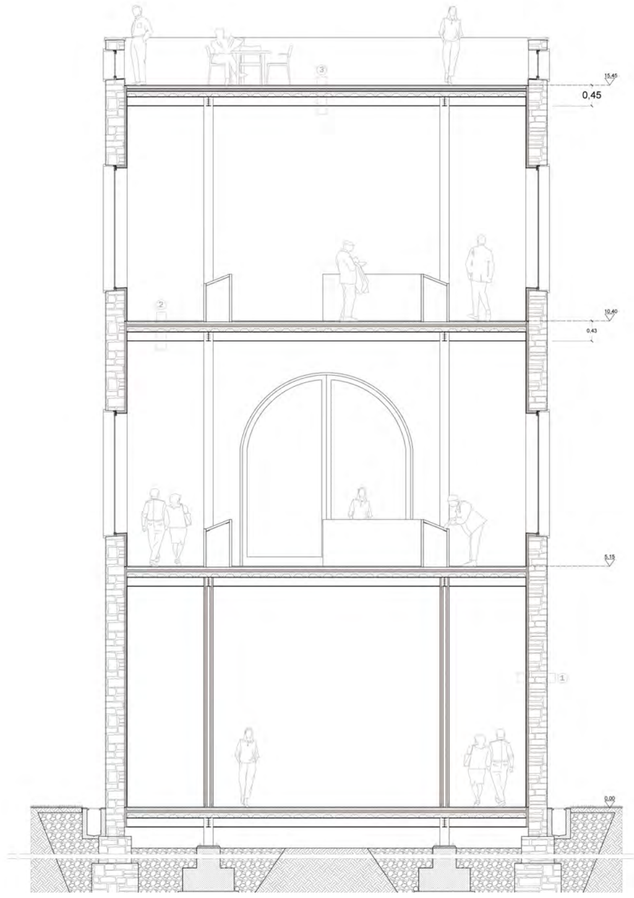
VIEW_INDOOR COVERED MARKET

VIEW_BETWEEN THE PATHS



AXONOMETRIC EXPLOSION

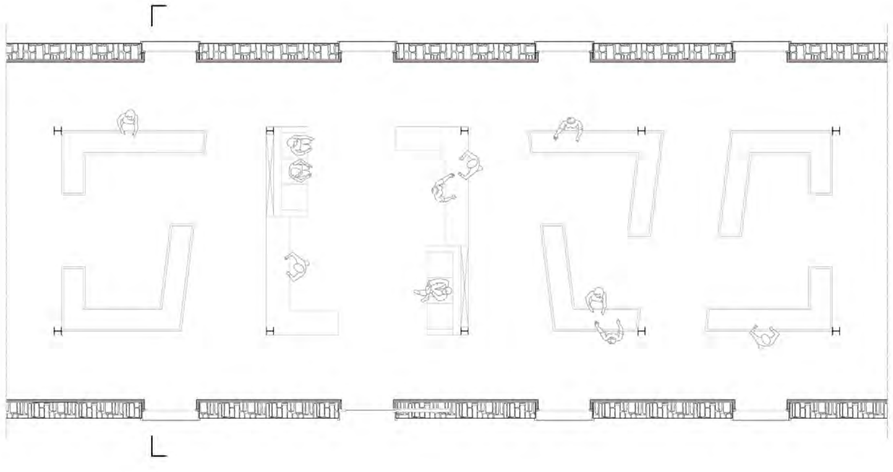


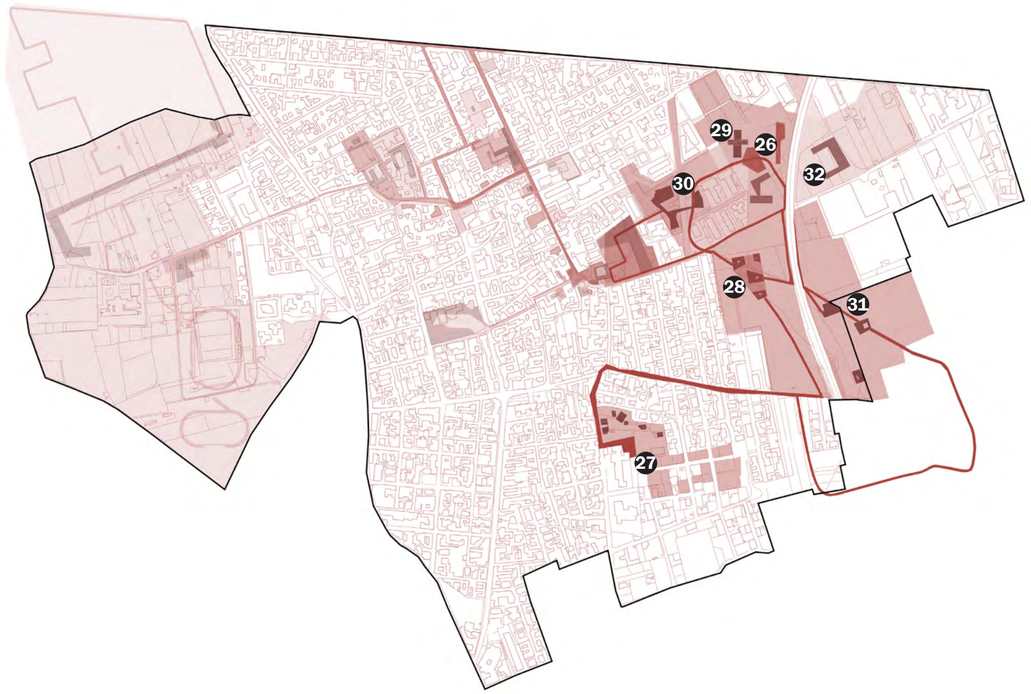


1 _ VERTICAL WALL
Plaster
Vapor barrier
Thermal insulation in hemp fiber
Pre-existing masonry in tuff blocks
Transparent water-repellent protective varnish

2_ INTERMEDIATE FLOOR
IPE 200 beam
Corrugated sheet
Reinforced concrete casting
Thermal insulation in hemp fiber
Concrete screed
Flooring

3_ ROOF SLAB
IPE 200 beam
Corrugated sheet
Reinforced concrete casting
Thermal insulation in hemp fiber
Slope screed
Flooring





SUBURBS AND INDUSTRIAL AREA
PERIFERIE E AREE INDUSTRIALI

26. Go through Gabriele Abbate
27. Peripheral areas Luca Battipaglia
28. Hemp - Orium Carmela Bottone
29. The basement square Andrea Cimmino
30. Fraincanti Claudia Giordano
31. Agri - cultural park Ilaria Domenica Iazzetta
32. Take care of limits Carmela Napolitano

REFERENCES

1. J. M. Gómez Acosta, "Attraverso la muraglia, attraverso il tempo", in *Journal Architettura di pietra*, 2010.

2. M. Pesare, "Le periferie come 'spazi altri'. Psicopedagogia delle eterotopie in Michel Foucault", in *MeTis*, n. 2, 2013.

3. G. Perec, *Specie di spazi*, Bollati Boringhieri, Torino 1989.

4. R. Piano, "Il rammendo delle periferie", in *Il SOle 24 ore*, 2014.

5. R. Sennett, *Costruire e abitare: Etica per la città*, Feltrinelli, Milano 2018.

6. P. Zannini, *Significati del confine*, B. Mondadori, Milano 2000.

«I wish there were places that were stable, immobile, intangible, never touched and almost untouchable, unchanging, rooted; places that would be points of reference and departure (...). Such places do not exist, and it is because they do not exist that space becomes problematic, ceases to be evidence, incorporated or appropriate. Space is a doubt: I must continually identify it, designate it» (Perec, 1989).
The continuous conquest of a space of doubt, to use George Perec's words, in the case of the suburbs is even more evident in the contrast to the consolidated urban centrality of the city, which represents an entity better defined by historical conditions, cultural factors, architectural structures and long-lasting economic and organizational processes.
The translation from the Greek of the word "suburb", in the concept of "moving, bringing around", allows us to think about a moving space, also as expression of a vitality that continuously modifies the presence of people in the space itself.
If what happens in the course of time changes this space, we have to contemplate its constitutive condition of transition and instability.
Considering that about 80-90% of the population in most cities lives in the suburbs and that the idea of its possible extension would be unsustainable, the big issue becomes how to "mend" broken, compromised, and cemented spaces, often characterized by what in English are called brownfields, i.e. disused railway, military and industrial areas.
This investigation intends to deepen how to build by completing, how to intensify living places by creating new forms of urbanity, sharing, comfort, and no longer dormitory or mono-functional places, or by designing places of transition, where mutation of balances or relationships happens.
The architectural and landscape design of the suburbs, in this sense, becomes a necessary device in discovering their hidden features, but also a device of transformation and valorization of the cities' liminal areas, adopting an inclusive approach both in relation to the center and to the countryside. In fact, the suburbs often hold the last extension of an urban vitality that tends to radically fade away, generating ambiguities that do not allows to define neither an urban space nor a rural space or, in any case, a non-urban space.
According to the advanced design studio on the municipality of Frattaminore, the suburb, intended as a product of a sprawling expansion of the consolidated city, has been read as an opportunity to get closer to nature. New green spaces has been infiltrated from the outside inwards, into the trapped voids of the city, bringing back to the center of the debate the theme of the land's care, intensifying a wider, cross-cutting system of public spaces and functions, where people interact, share values and activities of their daily living.
In the case of the Frattaminore's suburb, the design action of "mending" new forms of urbanity has developed two main actions. The first one, the "diagnosing", is related to the learning aim of the project and allows to recognize the state of crisis but also of value of the territory under examination, comparing the complex issues closely linked to the hydro-geological context or decontamination.

«Vorrei che esistessero luoghi stabili, immobili, intangibili, mai toccati e quasi intoccabili, immutabili, radicati; luoghi che sarebbero punti di riferimento e di partenza (...). Tali luoghi non esistono, ed è perché non esistono che lo spazio diventa problematico, cessa di essere evidenza, cessa di essere incorporato, cessa di essere appropriato. Lo spazio è un dubbio: devo continuamente individuarlo, designarlo» (Perec, 1989).
La continua conquista di uno spazio del dubbio, per usare le parole di George Perec, nel caso delle periferie risulta ancora più evidente nella contrapposizione alla centralità consolidata della città, che rappresenta un'entità meglio definita da condizioni storiche, da fattori culturali, da strutture architettoniche e da processi di ordine economico e organizzativo di lunga durata. La traduzione dal greco della parola "periferia", nel concetto di "muovere, portare intorno", consente di ragionare su uno spazio del movimento, espressione anche di una vitalità che modifica di continuo la presenza del soggetto nello spazio stesso; ma se quest'ultimo cambia, modificandosi a seconda di quanto accada nel corso del tempo, non possiamo non considerare la sua costitutiva condizione di transitorietà e di instabilità.
Considerando che circa l'80-90% della popolazione, nella maggior parte delle città, vive in periferia e che l'idea di una possibile estensione della stessa risulterebbe insostenibile, il grande tema diventa come "rammendare" spazi disgregati, compromessi, cementificati, spesso caratterizzati da quelli che in inglese prendono il nome di brownfields, ovvero aree ferroviarie, militari e industriali dismesse. Si intende indagare come costruire completando, come intensificare i luoghi di vita creando nuove forme di urbanità, di condivisione, di comfort e non più luoghi dormitorio o monofunzionali, oppure luoghi della transizione, della mutazione di equilibri o di rapporti e non più solo luoghi di transito.
Il progetto di architettura e di paesaggio delle periferie, in questo senso, diventa un indispensabile dispositivo di conoscenza delle peculiarità celate, ma anche di trasformazione e valorizzazione delle aree liminali di una città, adottando un approccio inclusivo tanto in rapporto al centro che alla campagna. Infatti, le periferie detengono, spesso, l'ultimo lascito di una vitalità urbana che dal polo irradiatore tende ad affievolirsi radicalmente, generando ambiguità tali da non poter più definire né uno spazio urbano né uno spazio rurale o comunque non urbano.
Nell'ambito del laboratorio di sintesi finale, la periferia, che è il prodotto di un'espansione a macchia d'olio della città consolidata, è stata letta come un'occasione di riavvicinamento alla natura e di infiltrazione a ritroso, dall'esterno verso l'interno, nei vuoti intrappolati delle città, di nuovi spazi verdi che riportassero al centro il tema del paesaggio e della cura del territorio, intensificando un sistema incrociato e più ampio di spazi e funzioni pubbliche, dove le persone interagiscono, condividono valori e dove si riversano le attività del vivere quotidiano.
Nel caso della periferia del comune di Frattaminore, l'azione progettuale del "rammendare" nuove forme di urbanità ha previsto due azioni significative: la prima afferente al ruolo conoscitivo del progetto, del "diagnosticare", ovvero del riconoscere la

Next page

Notes

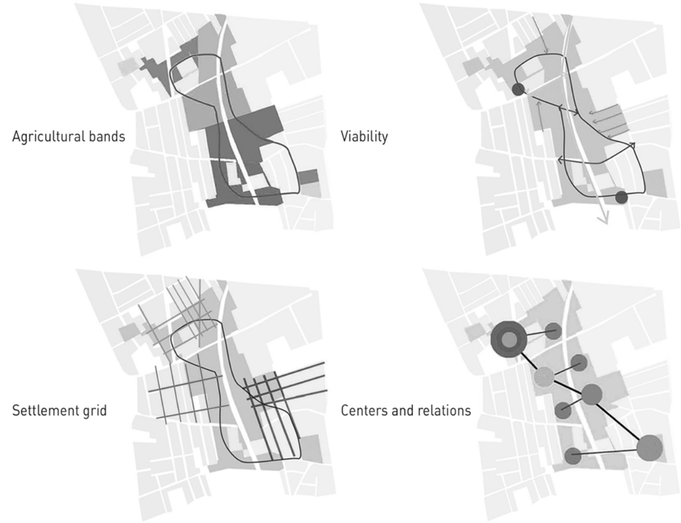
The interconnection levels of Frattaminore suburb (drawing by Marilena Bosone and Ilaria Domenica Iazzetta).

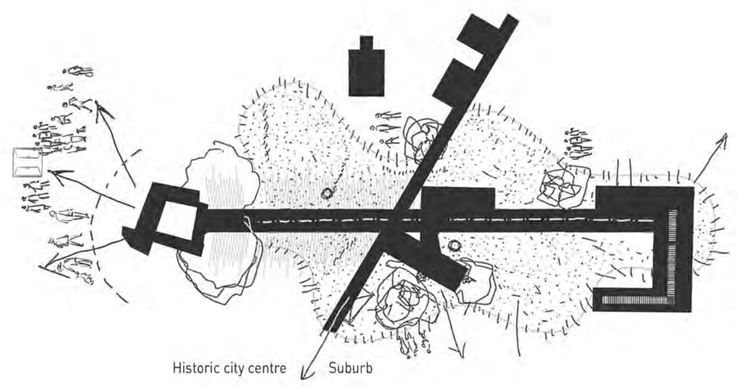
New forms of urbanity in the "intermezzo" of the suburb between city and countryside (drawing by Carmela Napolitano).

Pagina seguente

I livelli di interconnessione della periferia di Frattaminore (disegno di Marilena Bosone e Domenica Iazzetta).

Nuove forme di urbanità nell'intermezzo della periferia tra città-campagna (disegno di Carmela Napolitano).





With the second operation, instead, related to the transformative aim of the project, the purpose is to build an interconnection among different parts of the city. In this regard, the suburbs are a way of imagining the relationship with space: a non-central, non-centred way (Pesare, 2013), but a multifunctional system in evolution.
In fact, t is conceived as deeply integrated with a changing landscape that needs to be crossed at different speeds and heights, observed from its several horizons.
The two actions declines also the theme of defining innovative and diffuse learning spaces, extending the concept of the public building from the scale of the city to that of the suburbs.
This establishes a new system of poles of references, of cultural and social interrelation, projected towards a new relationship among city, nature and culture, new forms of accessibility, of mobility, open and closed spaces.
The sociologist Richard Sennett criticizes closed, sealed cities, frozen systems, over-determined in their uses and functions, and proposes incomplete, incoherent, dynamic, ambiguous cities that allow us to exercise the social competence of being together.
The first steps, therefore, start from what is already there and gives it a new meaning. Walking, searching and creating passages, replacing porous membranes to closed borders, spaces of permeability to enclosures.
In this regard, the Nazarí Wall project in the Alto Albaicín by Antonio Jiménez Torrecillas is very interesting; it is a landscape close and bound to the city and in turn natural and wild, but converted into a residual, almost marginal space, where debris and waste of all kinds accumulate.
It is also a transitional space towards the new city, a city of leaning houses that, in its disordered design, comes close to the incomplete and discontinuous remains of the Nazari Wall.
The project has preserved this landscape, needed for the understanding of the city in the mountainous structure defining it, and it has included a conceptual and physical clean-up of its surroundings. As a result, the accumulation of waste was replaced by groups of agaves and prickly pears, the façade of the Ermita de San Miguel Alto was also restored and the communication routes connecting it to the city were improved.
This meant restoring the stone pavement in those places where there was one and providing a soft compacted soil path for those areas with no paving and using stone steps for the stretches with the most difference in level. (Gómez Acosta, 2010).
The suburb of Frattaminore, while not presenting the same orographic peculiarities as the previous example, shows a similarity in reference to the border space between town and country. This portion of territory is brutally delimited and split by anthropic signs, such as the imposing viaduct on which the State Road 87 runs and, for this reason, it needs a project of “mending” with the urban space that reveals unprecedented glimpses of the surrounding landscape.
In this regard, the projects for the northeastern suburbs of Frattaminore develop the central theme of the entrance to the dense city, coming from the neighboring districts. The theme of “crossing”, however, aimed at creating a landscape continuity, new

condizione di crisi ma anche di valore del territorio in esame, confrontando i temi complessi strettamente legati al contesto idro-geologico oppure della bonifica; con la seconda operazione, invece, afferente al ruolo trasformativo del progetto, si intende costruire un’interconnessione tra le diverse parti della città. A tal proposito, le periferie sono innanzitutto un modo di immaginare il rapporto con lo spazio: un modo non centrale, non centrato (Pesare, 2013), ma un sistema multifunzionale in evoluzione, poiché pensato profondamente integrato con un paesaggio mutevole e che, per essere compreso, necessita di essere attraversato a velocità e quote differenti, osservato dai suoi innumerevoli orizzonti. In più, le due azioni sono state declinate attraverso il tema della definizione di spazi dell’apprendimento innovativi e diffusi, ampliando il concetto dell’edificio pubblico per eccellenza, quello scolastico, dalla scala della città fino a quella della periferia, stabilendo, così, un nuovo sistema di poli di riferimento, di interrelazione culturale e sociale, proiettati verso un nuovo rapporto tra città, natura e cultura, tra nuove forme di accessibilità, di mobilità, tra spazi aperti e chiusi.
Il sociologo Richard Sennett critica le città edificate come sistemi chiusi, sigillati, congelati, sovradeterminati negli usi e nelle funzioni e propone città incomplete, incoerenti, dinamiche, ambigue, che ci permettano di esercitare la competenza sociale dello stare insieme. Si parte, quindi, da ciò che già c’è e gli si attribuisce un nuovo significato. Camminando, cercando e creando passaggi, sostituendo membrane porose ai confini chiusi, spazi di permeabilità ai recinti.
A tal proposito, molto interessante risulta il progetto della Muraglia Nazarí nell’Alto Albaicín di Antonio Jiménez Torrecillas; si tratta di un paesaggio prossimo e vincolato alla città e a sua volta naturale e selvaggio, però convertito in uno spazio residuale, quasi marginale, in cui si accumulavano detriti e rifiuti d’ogni genere. È anche uno spazio di transizione verso la città nuova, una città fatta di case addossate che, nel suo disegno disordinato, arriva a sfiorare i resti incompleti e discontinui della Muraglia Nazarì. Il progetto conserva questo paesaggio necessario per la comprensione della città nella struttura montagnosa che l’ha determinata, apportando una pulizia concettuale e fisica del contesto: si elimina l’ammasso di rifiuti sostituendolo con agavi e fichi d’india; si restaura la facciata dell’Eremo di San Miguel Alto e si migliora la connessione con la città, restaurando le pavimentazioni esistenti di ciottoli, impiegando terra battuta nelle porzioni prive di pavimentazione e superando i dislivelli di maggiore pendenza con nuove scalinate di pietra (Gómez Acosta, 2010).
La periferia di Frattaminore, pur non presentando le stesse peculiarità orografiche dell’esempio precedente, mostra una similitudine in riferimento allo spazio di confine tra città e campagna. Questa porzione di territorio è brutalmente delimitata e fagliata dai segni antropici della portata, ad esempio, di un imponente viadotto sul quale corre la Strada Statale 87, denunciando la necessità di un progetto di “rammendo” con lo spazio urbano che sveli scorci inediti sul paesaggio circostante. A tal proposito, i progetti per la periferia nord-est di Frattaminore consentono di sviluppare il

Next page

Notes

The void of San Miguel Hill between the new city and the old city (drawing by Marilena Bosone).

The two sides of the Nazarì Wall in Antonio Jiménez Torrecillas' project with the new passages connecting the city and the suburb (drawing by Marilena Bosone).

The new stone staircase designed by Antonio Jiménez Torrecillas to overcome the steepest slopes of the San Miguel Hill (drawing by Antonio Jiménez Torrecillas).

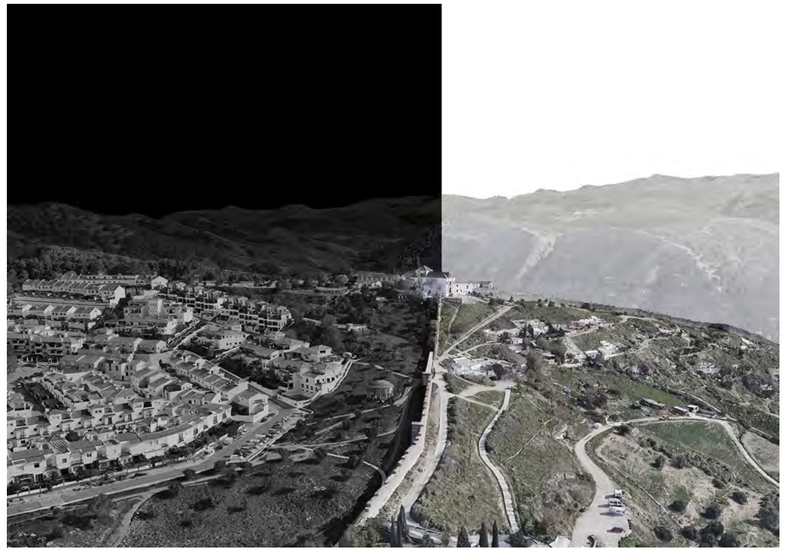
Pagina seguente

Note

Il vuoto della Collina di San Miguel tra la città nuova e la città antica (disegno di Marilena Bosone).

Le due facce della Muraglia Nazarì nel progetto di Antonio Jiménez Torrecillas con i nuovi varchi di connessione tra città e periferia (disegno di Marilena Bosone).

La nuova scalinata in pietra progettata da Antonio Jiménez Torrecillas per il superamento dei dislivelli di maggiore pendenza della Collina di San Miguel (disegno di Antonio Jiménez Torrecillas).



opportunities for exchange and bridging deep gaps between physical and visual barriers, is translated into the architectural theme of a new attraction pole, acting as a node-hinge between the dense city and the park, the historical and environmental heritage.
In particular, the projects Go through, The basement square and Agri - cultural park experiment new declinations of the material "soil".
In the first case, part of the soil of a new park in contact with the countryside becomes the roof of a cultural building, creating a physical and perceptive continuity among different parts of the territory and new forms of accessibility and use of public spaces on the border of the city. In the second case, the soil is excavated to obtain hypogeal squares that decline the Campania Valley in a new dynamic system of heights and articulations of cultural functions with, at the lowest level, a basement that creates a point of contact among a library, an auditorium and an exhibition pavilion.
In the third case, the soil of the Campania Valley on the outskirts of the city re-emerges in a depressed space in the urban fabric, evoking the permeability of a fertile and productive agricultural land.
The Hemp - Orium and Peripheral areas projects work on the greenfield of the eastern and southern suburbs of Frattaminore, starting from the brownfield that is grafted into this natural filigree.
In the first design hypothesis, the brownfield of the space on the edge of the road viaduct, immersed in the bucolic scenery of extensive cultivated fields, becomes the occasion for enhancing the ancient local hemp cultivation, converted, from a contemporary point of view, into a bio-architecture that counterbalances the presence of the huge concrete infrastructure.
The second project hypothesis, instead, deals with another declination of the brownfield of the Campania Valley, a large area of abandoned spaces that, through the diffused project of an interstitial urban park, equipped with four access landmarks, reconnects Frattaminore to the neighboring municipalities of Frattamaggiore and Crispano.
The last two projects Take care of limits and Fraincanti work on the indirect reactivation of the peripheral fabric, through a multifunctional project of connection between the urban fabric and the open space. Take care of limits project is based on a multifunctional aggregation center developed within two strong extremities: an auditorium, conformed according to the main traces present in the urban fabric, and a sports hall that fits in between the pre-existing agricultural fields, proposing an unconventional peri-urban declination.
In Fraincanti, finally, the multi-functionality is the result of a temporal evolution of the project, conceived in phases and distinguished into permanent and temporary functions.
It deals with a flexible space for the community, capable of adapting to different needs, activities and age groups; a "building site" project that, like a second skin, shapes a space to be discovered, a temporary work area that creates processes destined to last in time.

delicato tema dell'ingresso alla città densa, provenendo dai quartieri limitrofi; il tema dell'"attraversare" , finalizzato, però, alla creazione di una continuità paesaggistica, di nuove opportunità di scambio e al colmare vuoti profondi tra barriere fisiche e visive, è tradotto nel tema architettonico di un nuovo polo attrattore, che funga da nodo-cerniera tra città densa e parco, tra permanenze storiche e patrimonio ambientale. In particolare, i progetti Go through, The basement square e Agri - cultural park sperimentano nuove declinazioni della materia "suolo". Nel primo caso, parte del suolo di un nuovo parco a contatto con la campagna diventa la copertura di un edificio culturale, creando una continuità fisica e percettiva tra le diverse parti del territorio e nuove forme di accessibilità e di fruizione degli spazi pubblici al confine con la città. Nel secondo caso, il suolo viene scavato per ottenere delle piazze ipogee che declinano la pianura campana in un nuovo gioco dinamico di quote e articolazioni delle funzioni culturali e, alla quota più bassa, un vero e proprio basamento costituisce un punto di contatto tra biblioteca, auditorium e padiglione espositivo. Nel terzo caso, il suolo della pianura campana alle porte della città riemerge in uno spazio depresso del tessuto urbano, rievocando la permeabilità di un terreno agricolo fertile e produttivo.
I progetti Hemp – Orium e Peripheral areas lavorano sui greenfields della periferia orientale e meridionale di Frattaminore, partendo dai brownfields che si innestano in questa filigrana naturale. Nella prima ipotesi progettuale, il brownfield dello spazio al margine del viadotto stradale, immerso nello scenario bucolico di estesi campi coltivati, diventa l'occasione di un progetto di valorizzazione dell'antica coltura locale della canapa, convertita, in ottica contemporanea, in materiale da costruzione per una bioarchitettura che controbilanci la presenza della grande infrastruttura in calcestruzzo armato. La seconda ipotesi progettuale si misura, invece, con un'altra declinazione dei brownfields della pianura campana, ovvero un'estesa area di spazi abbandonati che, attraverso l'idea del progetto diffuso di un parco urbano interstiziale, provvisto di quattro landmark di accesso, riconnetta Frattaminore ai comuni limitrofi di Frattamaggiore e Crispano.
Gli ultimi due progetti Take care of limits e Fraincanti lavorano sulla riattivazione indiretta del tessuto periferico, mediante un progetto multifunzionale di connessione tra il tessuto urbano e lo spazio aperto; in Take care of limits si ragiona su un centro di aggregazione multifunzionale contenuto tra due forti estremità: un auditorium, conformato secondo le principali direttrici presenti nel tessuto urbano, da un lato, e, dall'altro, un palazzetto dello sport che si inserisce tra i campi agricoli preesistenti, proponendone declinazione periurbana non convenzionale. In Fraincanti, infine, la multifunzionalità è frutto di un'evoluzione temporale del progetto, pensato per fasi e distinto in funzioni permanenti e funzioni temporanee; uno spazio flessibile per la comunità, in grado di adattarsi a diverse esigenze, attività e fasce d'età; un progetto "cantiere" che, come una seconda pelle, plasma uno spazio tutto da scoprire, un'area di lavoro temporanea che costruisce processi destinati a durare nel tempo.

Next page

Design strategy, Team 4, drawing by Chiara Barone and Francesco Caliendo

Pagina seguente

Disegno strategico, gruppo 4, disegno di Chiara Barone e Francesco Caliendo

FRATTAMINORE ADVANCED DESIGN STUDIO

GABRIELE ABBATE - GO THROUGH

CROSSING, RUNNING AND CONNETTING MARGINAL AREA

"Go Through" is a project centered on the concept of crossing, running and connecting a certain space, in this specific case it tries to enhance a marginal area of the municipality of Frattaminore and to compose a new landscape continuity.

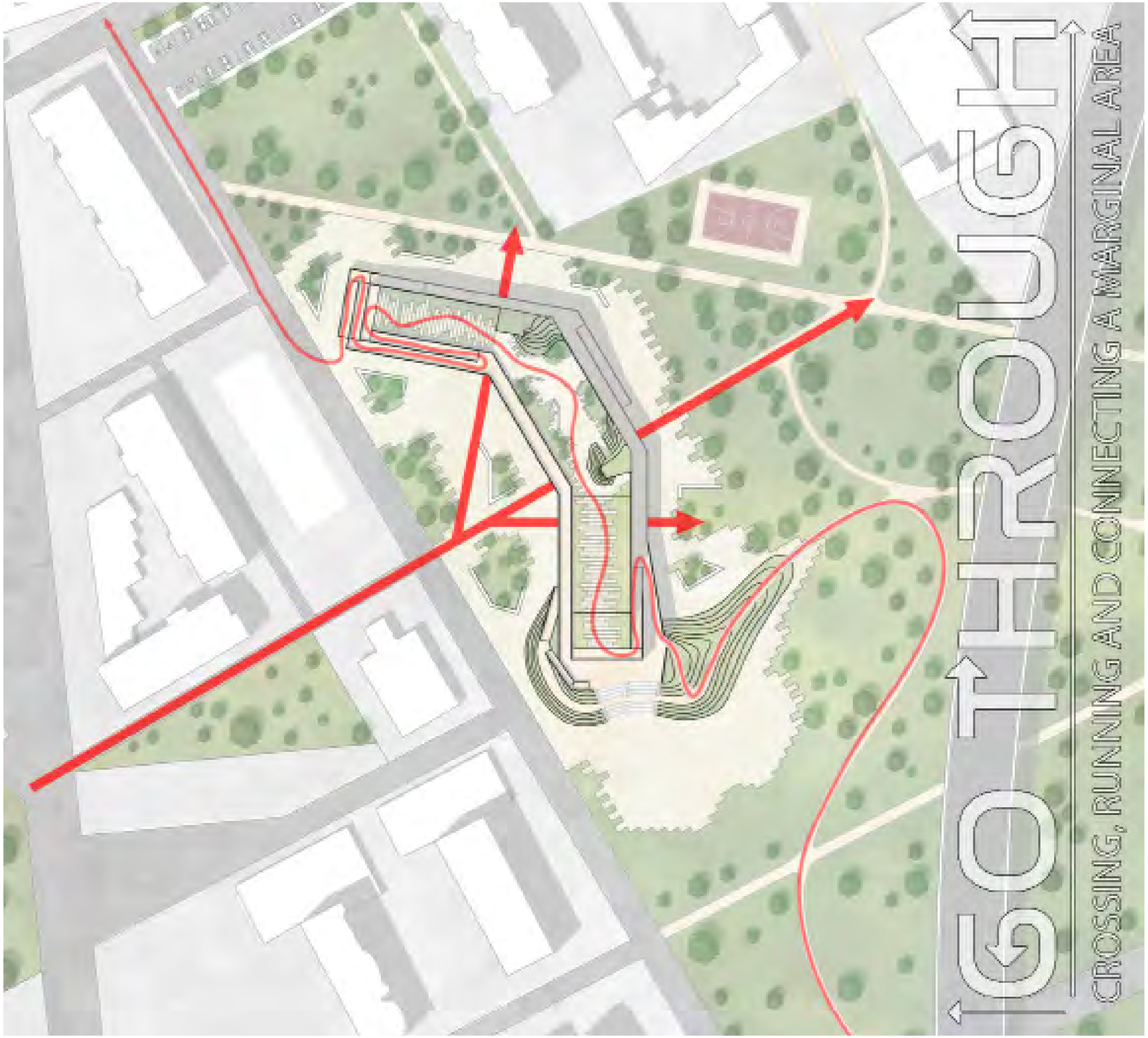
The main objective is to give life to new spaces of aggregation, leisure, work and culture through the creation of a building that acts as a hinge between the dense town and the new park that will be created. This is achieved through a system of connection paths between the different levels and ensuring the total enjoyment of the structure. The entire building will be an integral part of the new park ensuring minimal environmental impact.

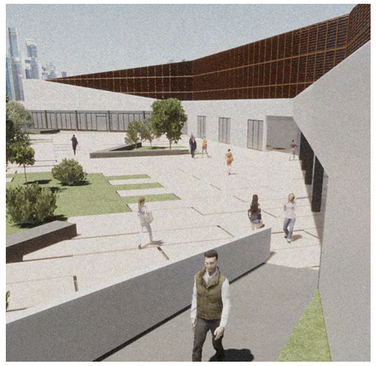
The perceptive relationship between the new building and the context leads to a more humanized landscape and in tune with the new environment. We get to this solution by going to work on the different heights, with a system of ramps that rise above the cover giving the user different points of view and perception of the new environment. The auditorium will be the fulcrum of the new building and will dialogue with the remaining parts with various types of path, each designed to offer a new experience; in fact, inside the building there will be a large exhibition space, a restaurant, a bar, a library on two levels and commercial offices. At the base there is the concept of union, walkability and easy and open access to all.

Program

Urban park,
social and culture center

Covered area	**2235m²**
Outdoor area	**8520m²**
Above-ground floors	**3**
Built volume	**8500m³**
Estimated cost	**24.847.350 €**





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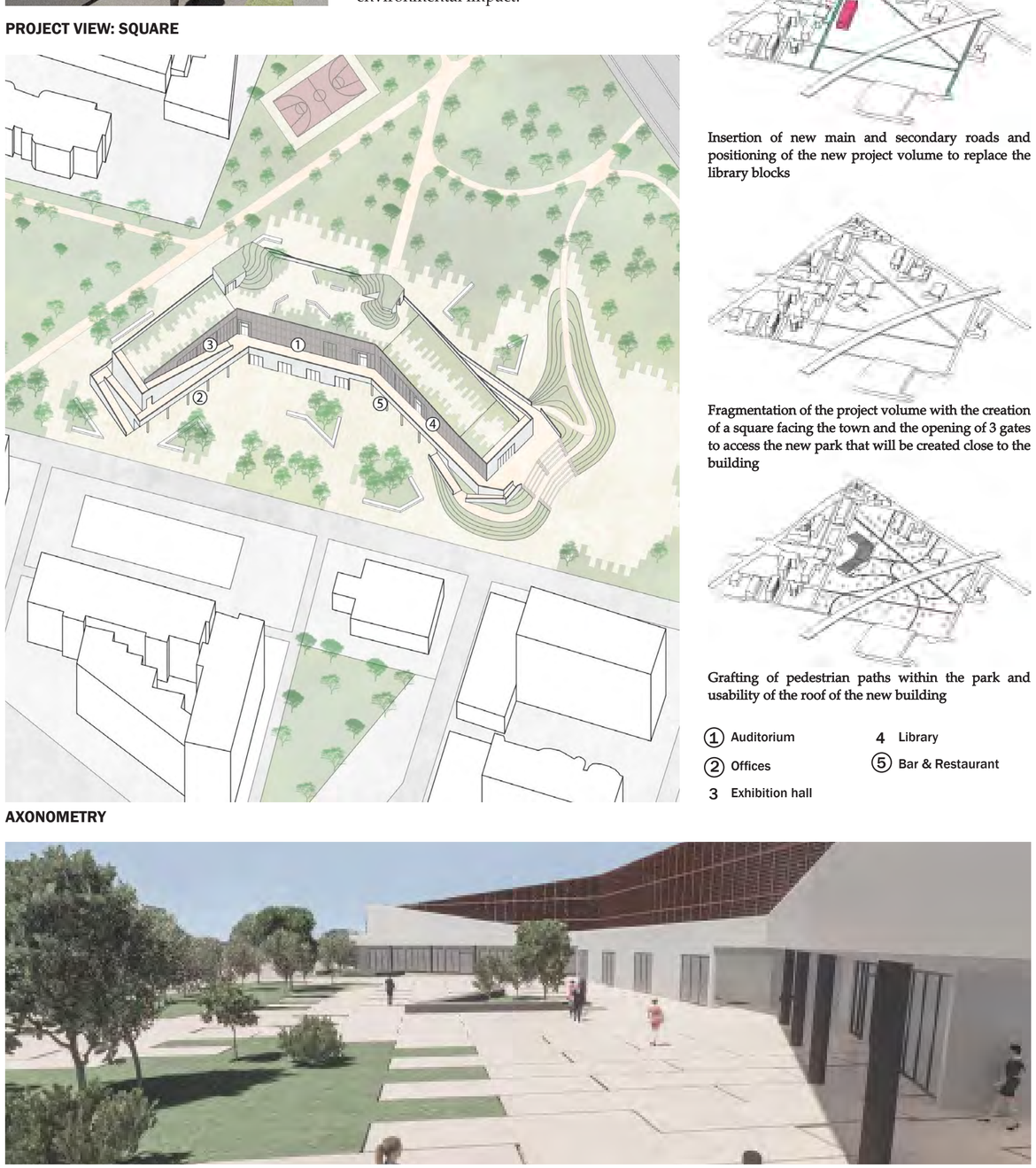
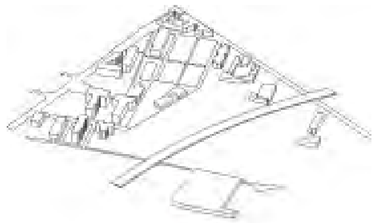
PROJECT VIEW: SQUARE

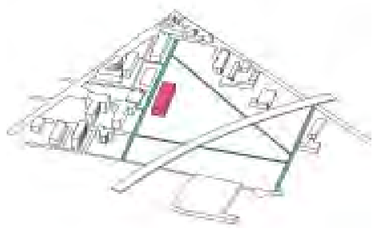
AXONOMETRY



PROJET VIEW: SQUARE



Marginal area to the east of the Municipality of Frattaminore - State of affairs

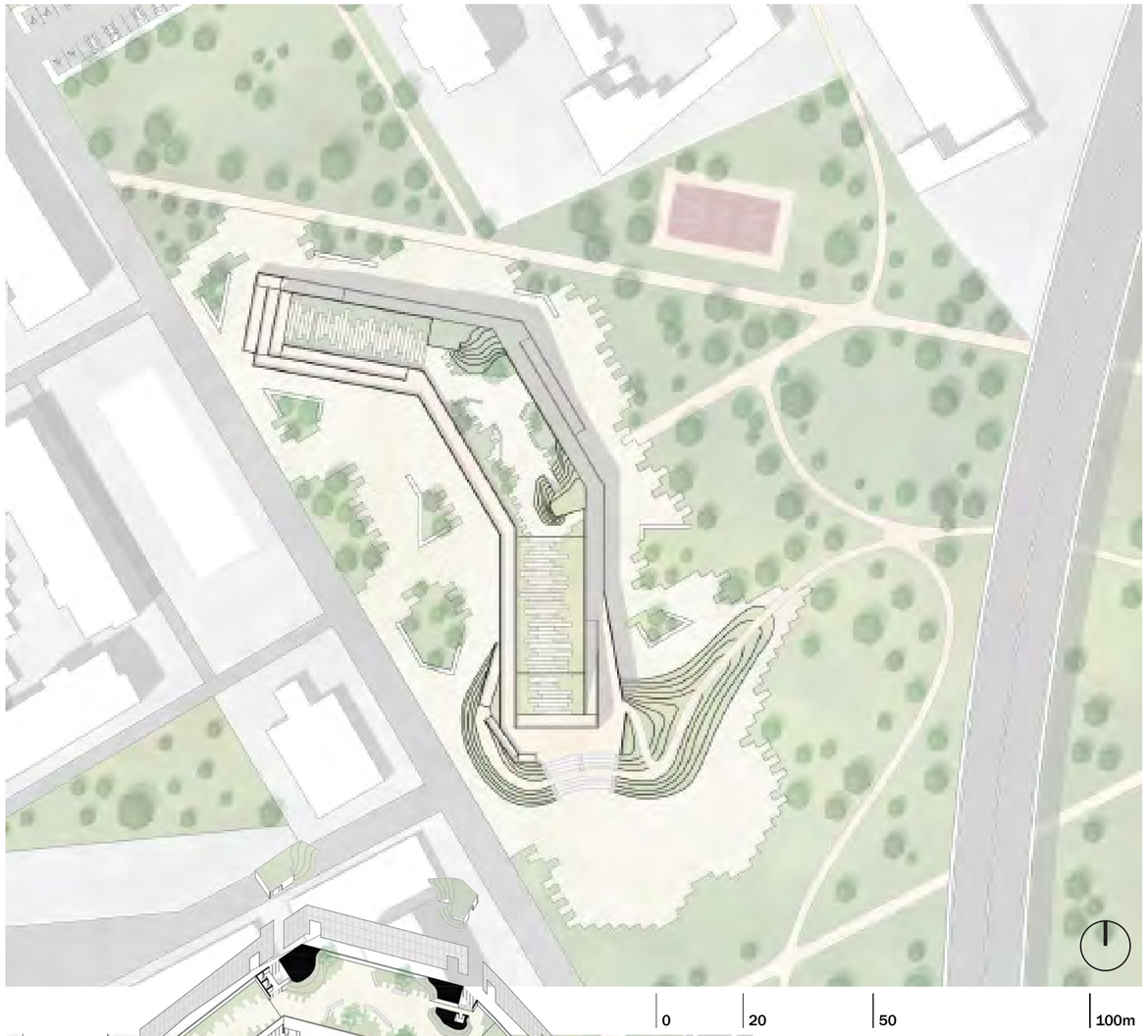


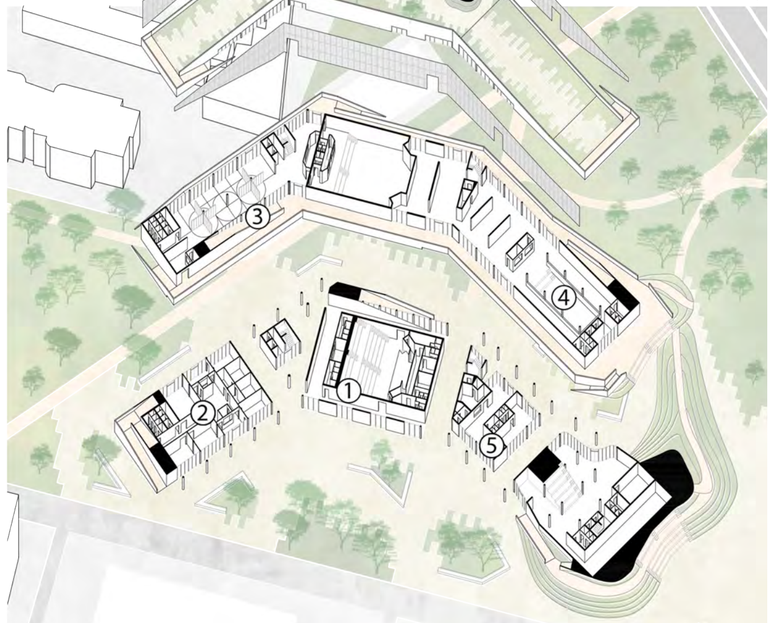
Insertion of new main and secondary roads and positioning of the new project volume to replace the library blocks

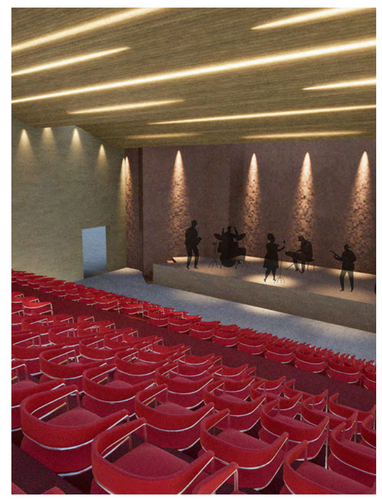
Fragmentation of the project volume with the creation of a square facing the town and the opening of 3 gates to access the new park that will be created close to the building

Grafting of pedestrian paths within the park and usability of the roof of the new building

1 Auditorium
2 Offices
3 Exhibition hall
4 Library
5 Bar & Restaurant







PROJECT VIEW : AUDITORIUM

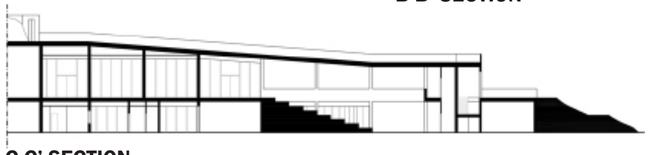
1 Auditorium
2 Offices
3 Exhibition hall
4 Library
5 Bar & Restaurant

GROUND FLOOR PLAN

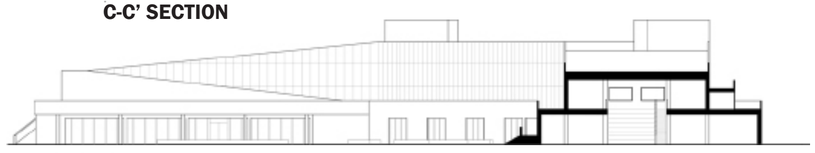
0 10 25 50m

A-A' SECTION

B-B' SECTION

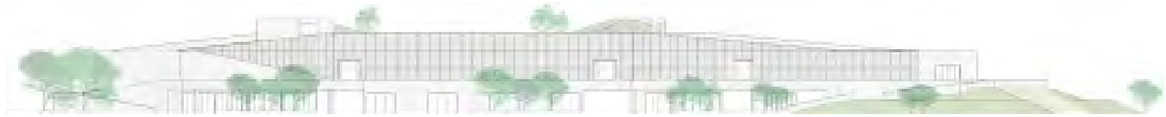


C-C' SECTION



D-D' SECTION

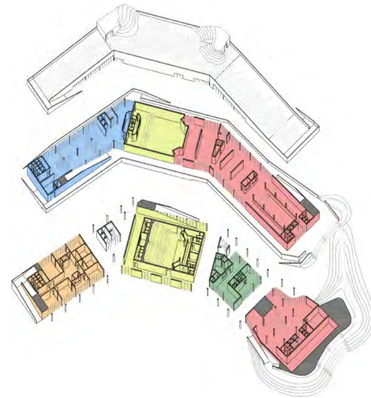
0 10 25 50m



WESTERN FRONT

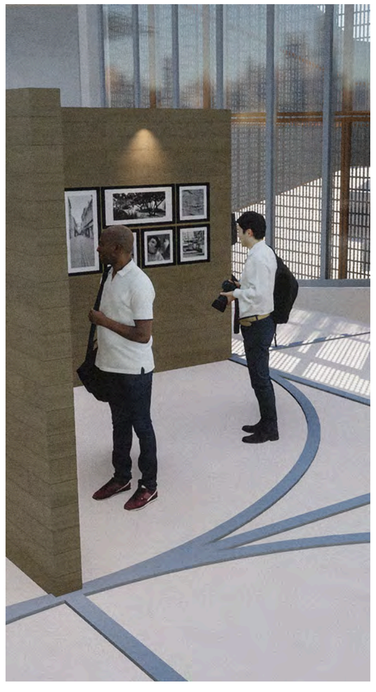
EASTERN FRONT

PROJECT VIEW: OFFICE



FUNCIONAL DIAGRAM

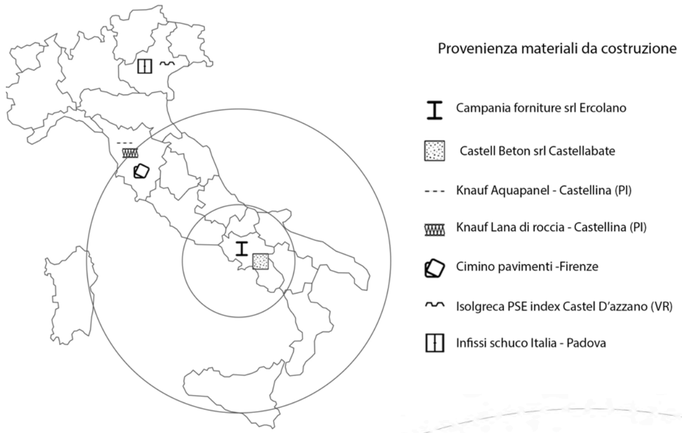
- Auditorium
- Offices
- Library
- Exhibition hall
- Bar & Restaurant



PROJECT VIEW: EXHIBITION HALL

PROJECT VIEW: BAR

PROJECT VIEW : LIBRARY



VERTICAL OPAQUE ENCLOSURE

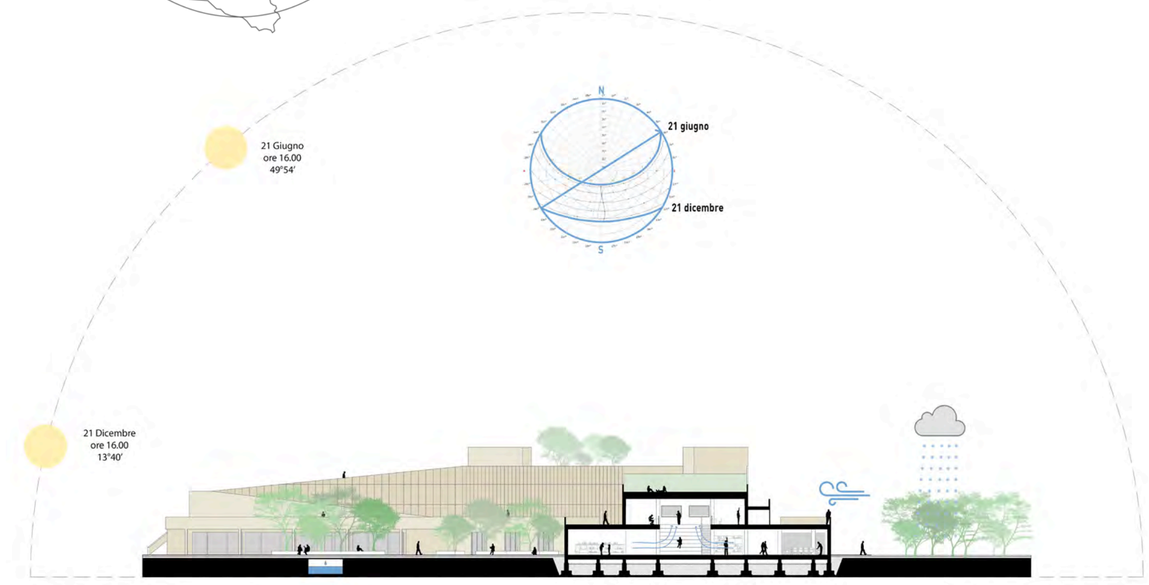
Strato	s [m]	λ [W/mK]	R [m²K/W]
Strato liminare interno			
Malta Cementizia	0.015	1.4	0.01
Lastra cemento rinforzato	0.0125	0.24	0.05
Isolante lana minerale	0.050	0.032	1.56
Isolante lana minerale	0.050	0.032	1.56
Lastra cemento rinforzato	0.0125	0.24	0.05
Malta cementizia	0.015	1.4	0.01
Strato liminare esterno			
R totale [m²K/W]		3.24	
U totale [W/m²K]		0.28	

HORIZONTAL OPAQUE ENCLOSURE

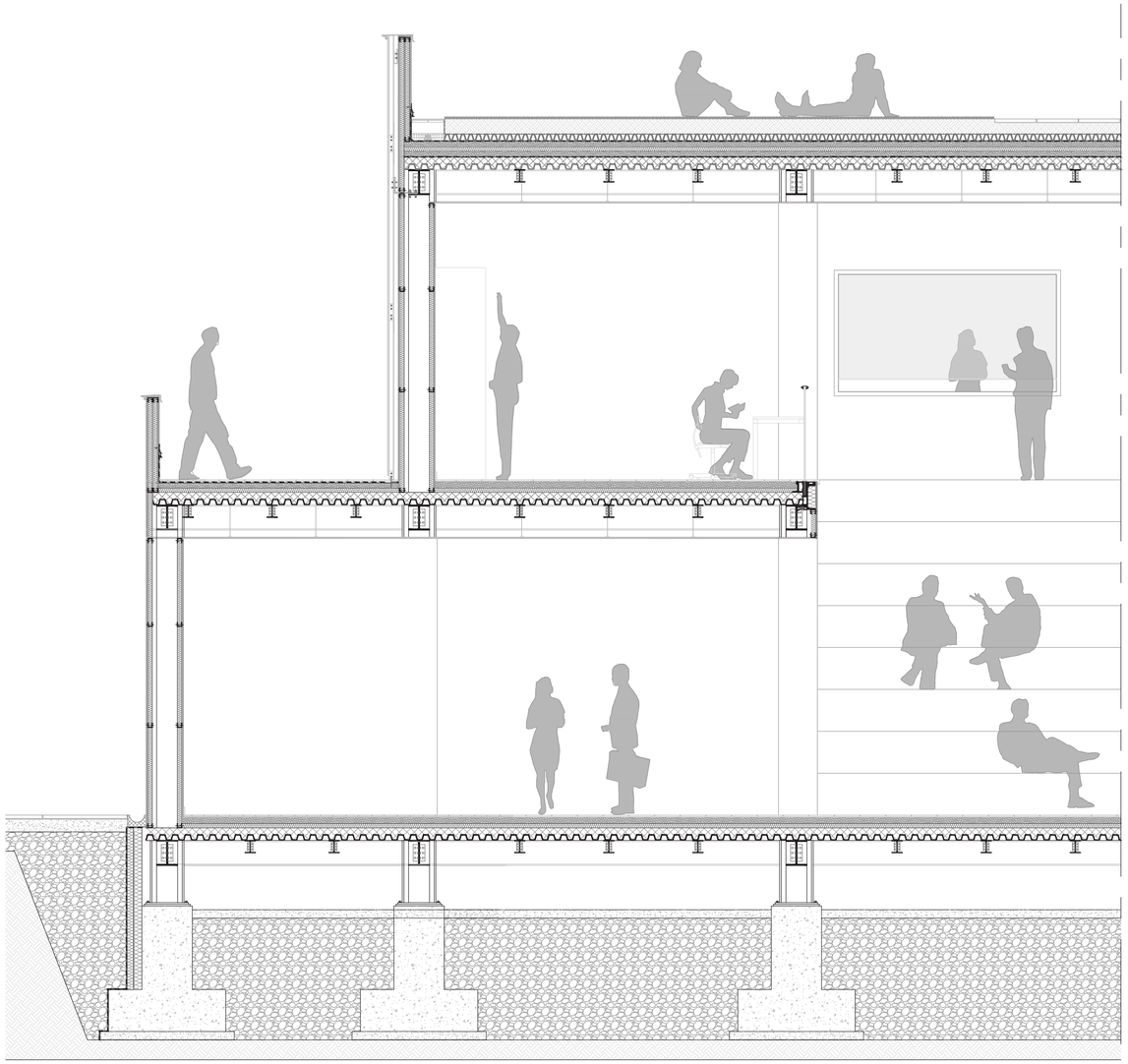
Strato	s [m]	λ [W/mK]	R [m²K/W]
Strato liminare interno			
Strato intonaco	0.010	0.9	0.01
Lamiera grecata	0.007	0.035	0.20
Strato cemento	0.100	0.58	0.17
Strato isolante	0.070	0.026	2.69
Barriera al vapore	0.010	0.17	0.06
Massetto	0.050	0.58	0.09
Malta cementizia	0.010	1.4	0.01
Pavimento	0.020	2	0.01
Intercapedine			0.34
R totale [m²K/W]		3.58	
U totale [W/m²K]		0.28	

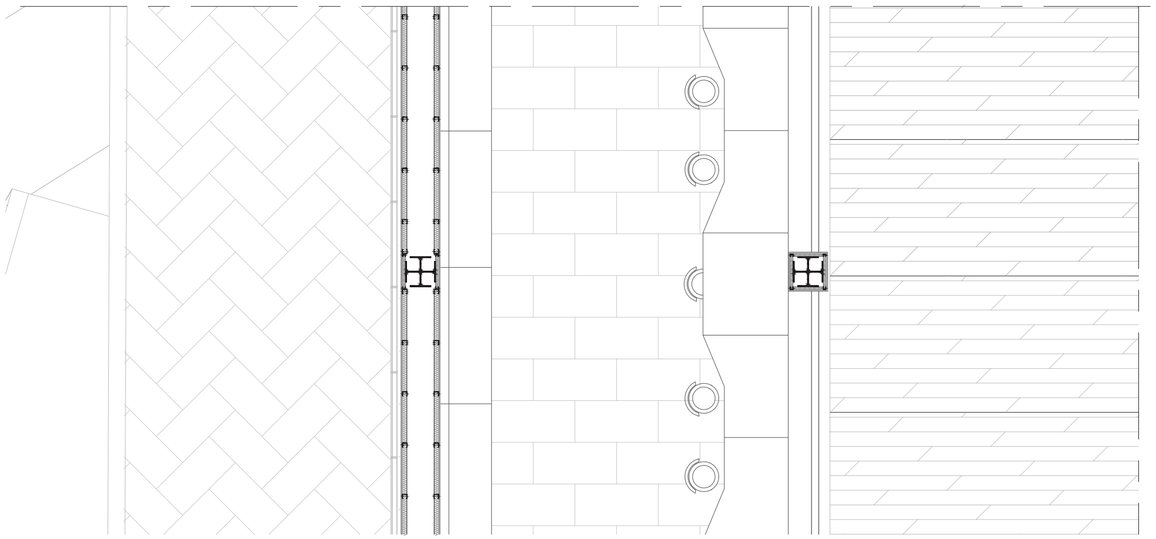
HORIZONTAL OPAQUE COVER

Strato	s [m]	λ [W/mK]	R [m²K/W]
Strato liminare interno			
Strato Intonaco	0.010	0.9	0.01
Lamiera grecata	0.007	0.035	0.02
Strato cemento	0.030	0.58	0.05
Strato isolante	0.060	0.026	2.31
Barriera al vapore	0.010	0.17	0.06
Massetto	0.100	0.58	0.17
Barriera al vapore	0.010	0.17	0.06
Terreno	0.200	0.142	1.41
Intercapedine			0.34
R totale [m²K/W]		4.43	
U totale [W/m²K]		0.22	



ENVIRONMENTAL SECTION





INDOOR/OUTDOOR RELATION SCALE 1:50

The first impression of a visitor to Frattaminore is that of disorientation dictated by a place that is not a place, that is, devoid of its own identity that takes the form of narrow walkable streets and vast abandoned areas. However, these are the real strength of the city, a characterizing and qualifying element if well interpreted.

From these analyzes it was decided to deepen the study on the most peripheral areas of the city which are in close contact with the neighboring municipalities of Crispano and Frattamaggiore by proposing a project that can reconnect and reconnect the three cities and at the same time give a wider breath to the narrow streets of the territory.

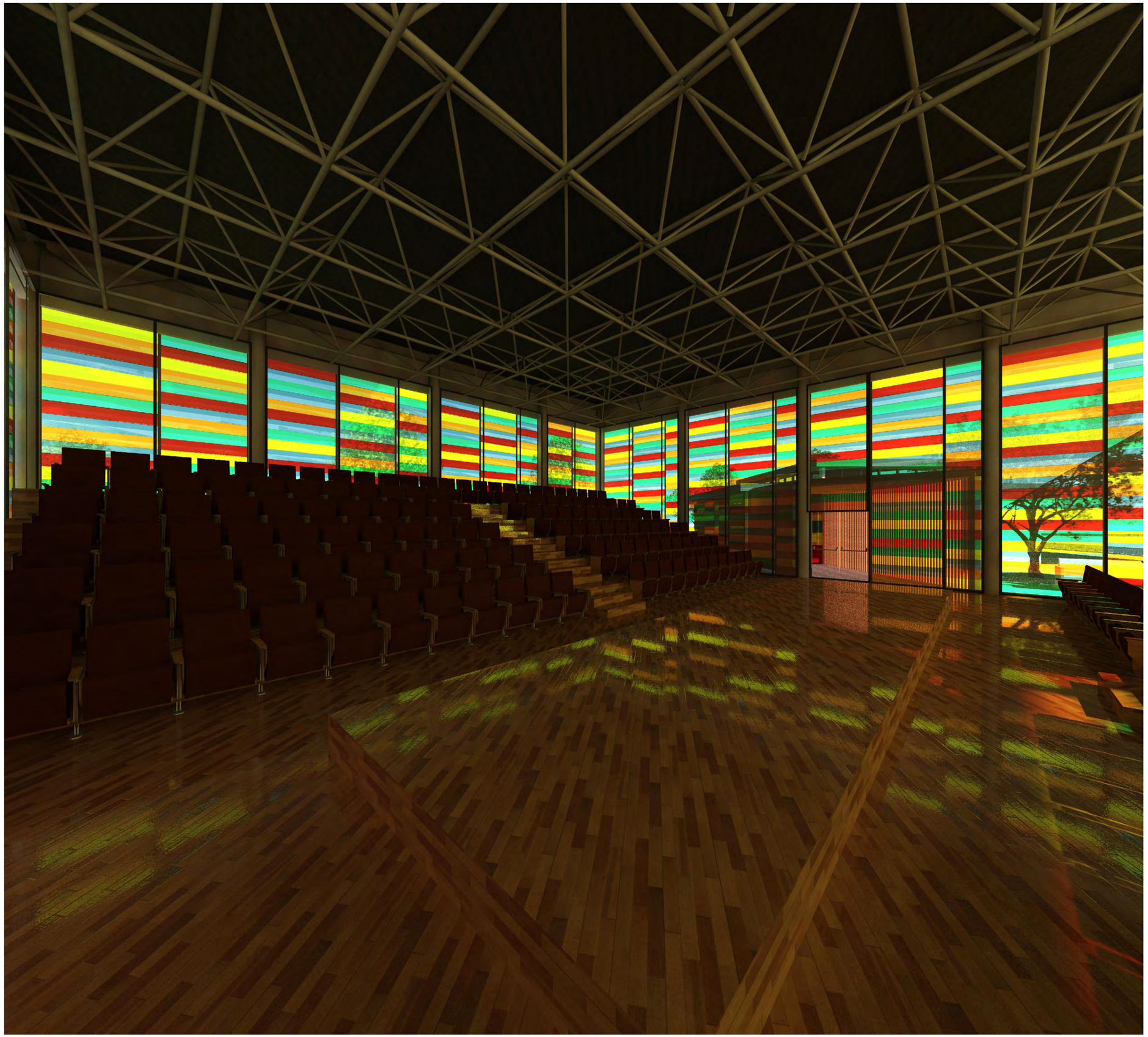
The project provides for an urban redevelopment of the southern areas in which there is a great vastness of abandoned areas, redeveloping them as an interstitial urban park with an area used as urban gardens, all of which will be projected outside the areas only, coming to include a park agri-food in the agricultural expansion areas provided for by the PUC. The park will then continue in the neighboring areas of Frattamaggiore and Crispano in order to reconnect the area. In the entrance areas, four doors to the park will be built: two towards Frattaminore, one towards Crispano and one towards Frattamaggiore.

The doors will have various public and social sharing functions as well as a landmark function for the park area.

Program

urban park,
social and culture center

Covered area	**12770m²**
Outdoor area	**11314m²**
Above-ground floors	**1**
Built volume	**1456m³**
Estimated cost	**4400577€**

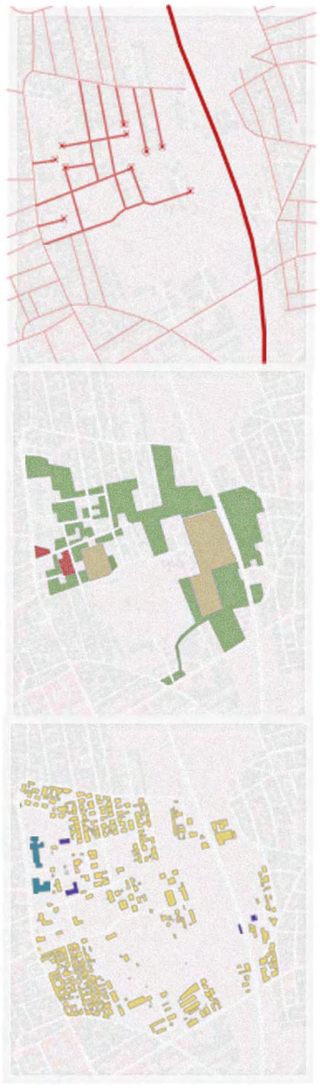


The area presents itself to the observer as an area without identity and with a strong sense of alienation from the context. It therefore becomes a zone of alienation that does not interact in any way in the area in which it is placed. The strong unauthorized use and the large uncultivated and abandoned areas create a fragmented territory.

But it is precisely its fragmentation and its conformation, at the moment dispersive, the characteristic that makes the area a great opportunity for redevelopment and urban centrality not feasible in other densely urbanized and congested areas.

The area affected by the project is subject to a strong phenomenon of unauthorized use, in this perspective the PUC plans to put a stop to this advance without however affecting the possibility of inserting other housing elements in order to create controlled growth that does not it borders inside the park.

The proposed project is based on the elements described by the PUC, but expanding its vision and extension by also inserting the areas of the adjacent municipalities affected by the same phenomenon in such a way as to create a space that is both a break and a union of the margins. forming an area no longer forbidden but central in the redevelopment of this peripheral reality and which reconnects and strengthens the historical ties of the three municipalities.



Public equipped parks

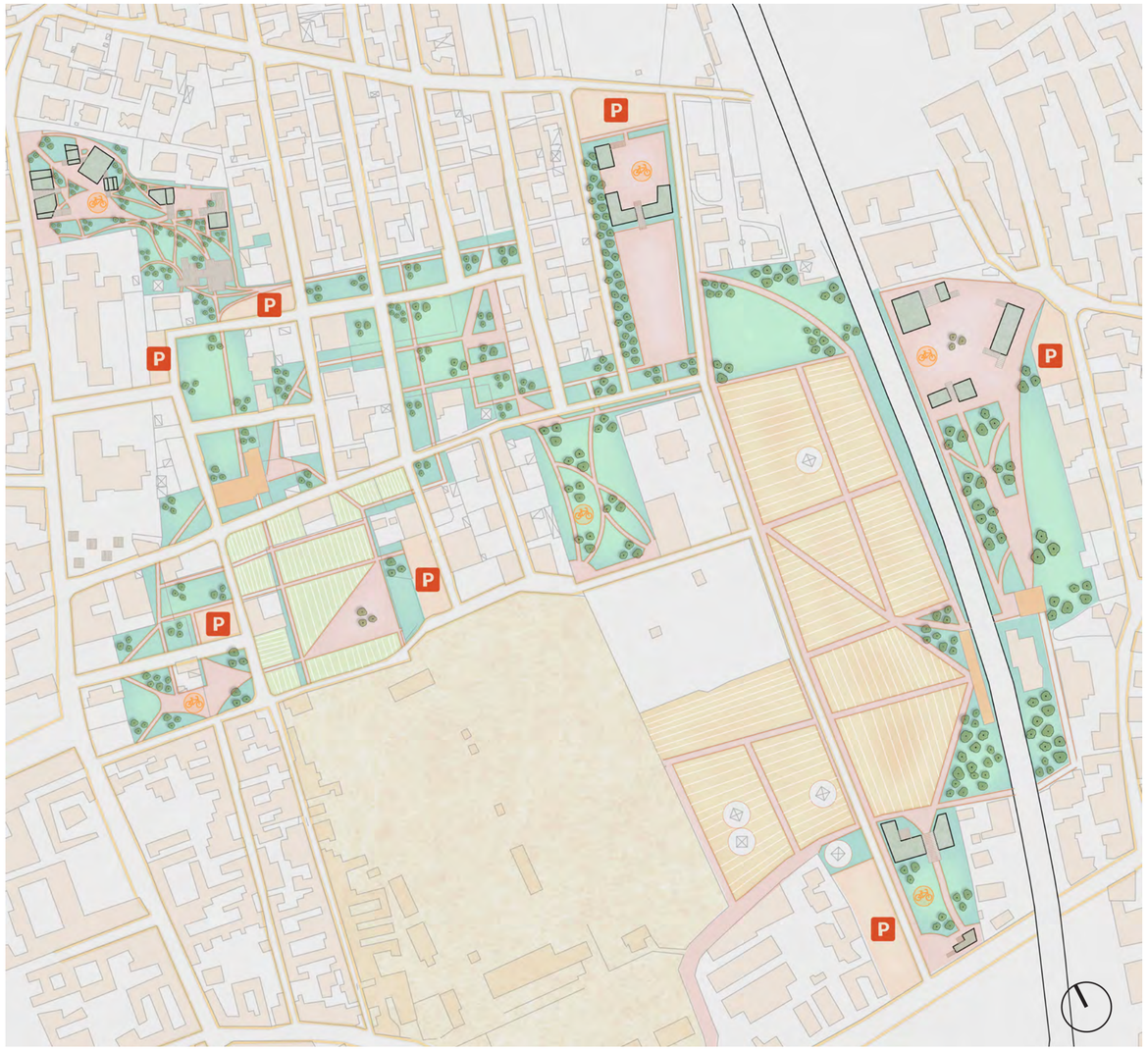
New public buildings

New private buildings

Parking areas

URBAN ANALYSIS

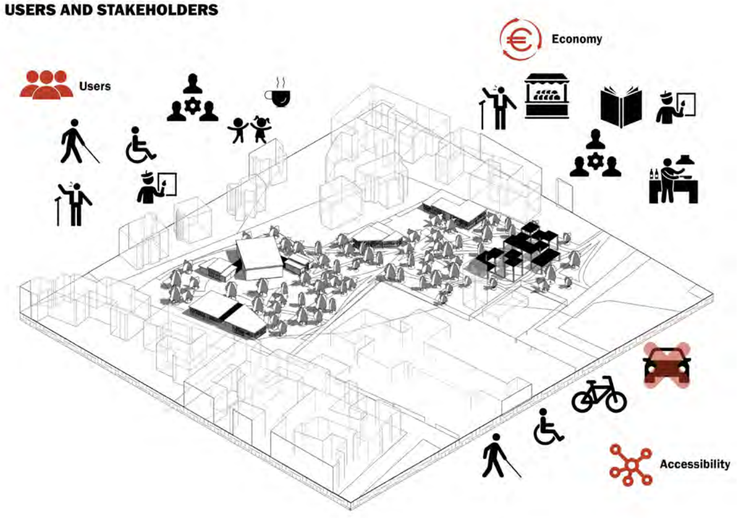
From the territorial analyzes it appears that the urban road connection is interrupted in various points, all the abandoned areas of the area are highlighted and all the buildings in the area are listed



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

USERS AND STAKEHOLDERS



USERS AND STAKEHOLDERS

The possible users and the activities present that generate a self-productive economic circle are summarized.production are summarized.

Auditorium

library-coffee

Coworking laboratory

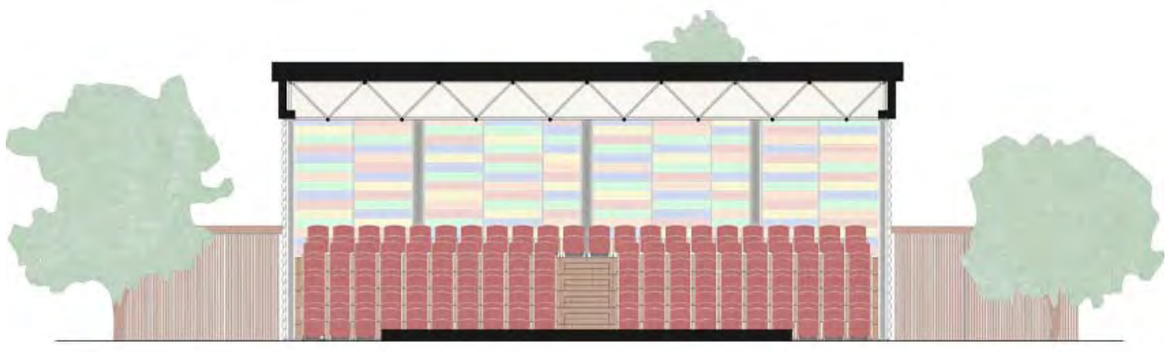
Exhibition hall

Covered market

Parking lots

DESIGN STRATEGY

0 10 25 50m



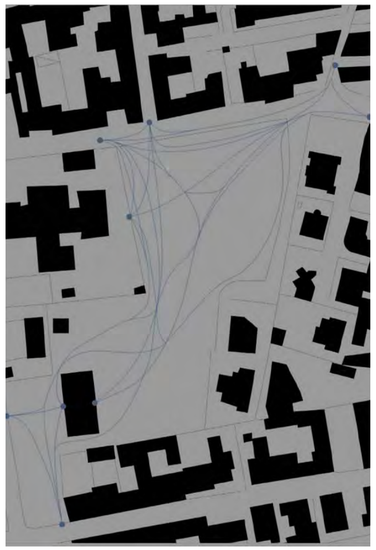
AUDITORIUM DETAIL SECTION

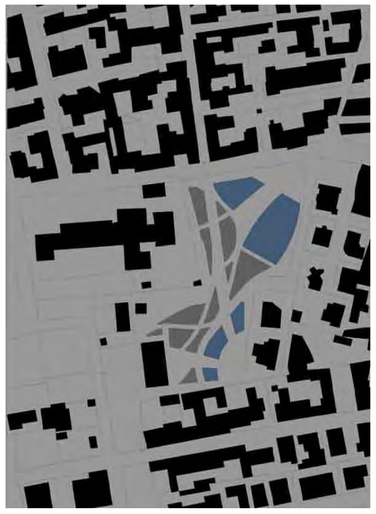
0 4 10 20m

SOUTHERN FRONT

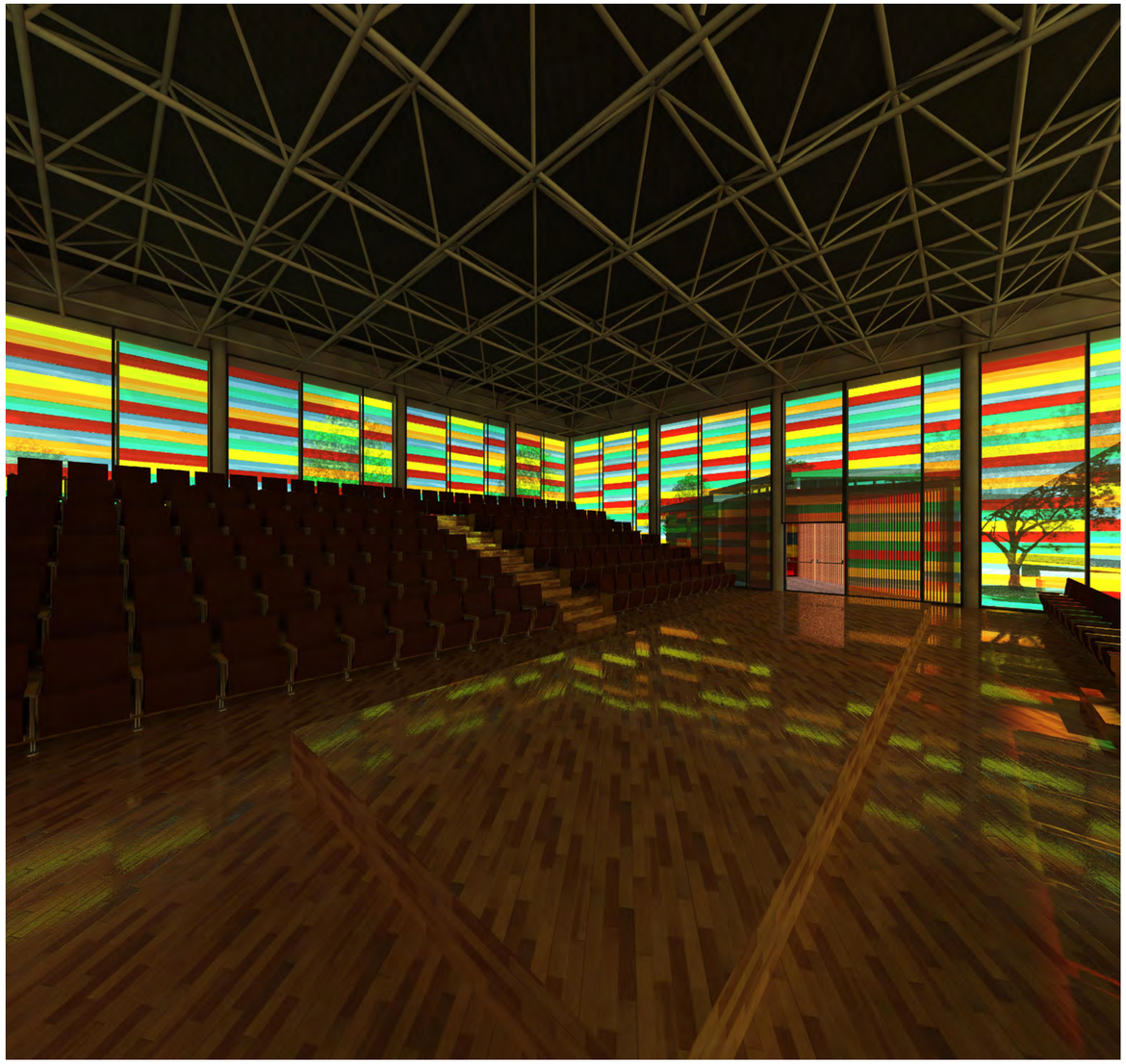
ROAD SECTION

0 10 25 50m

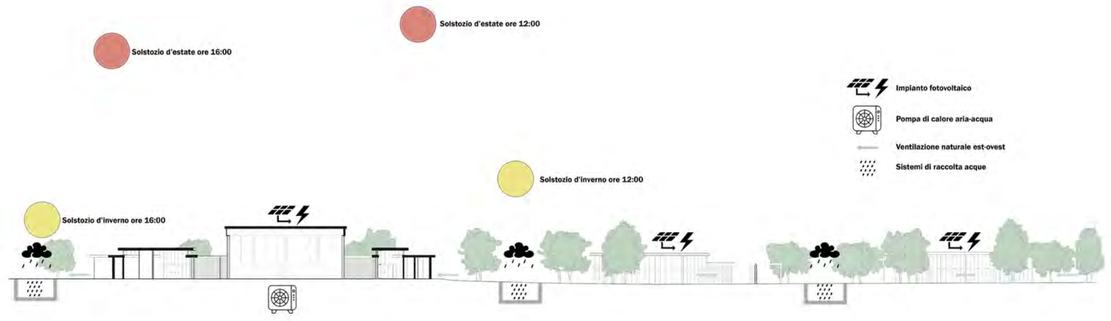




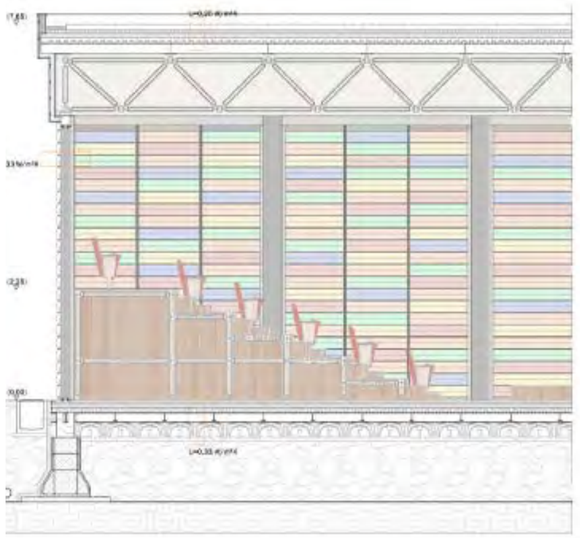
CONCEPT

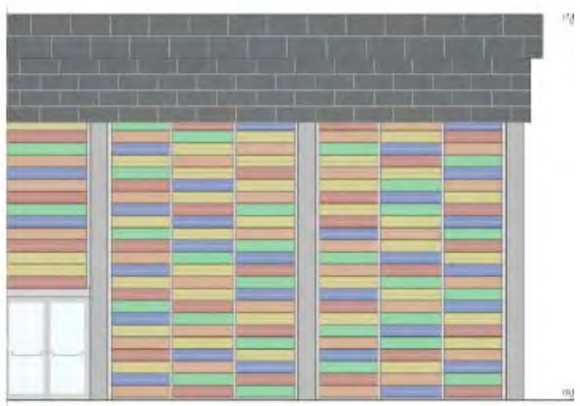


VIEW



ENVIRONMENTAL SECTION





ROOF SLAB

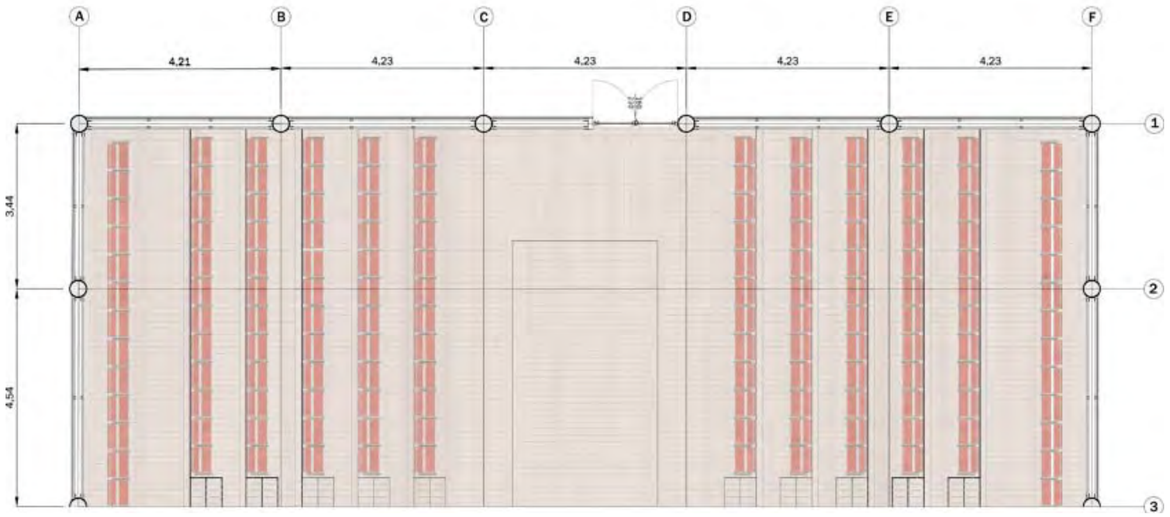
Greening + substrate mix
Polypropylene filter fabric
Draining layer
Waterproof PVC membrane
Polyurethane panel
Concrete casting
Corrugated sheet

EXTERNAL VERTICAL PARTITION

Polycarbonate panel
Air cavity
Polycarbonate panel
Waterproof PVC membrane
Corrugated panel in alveolar polycarbonate

GROUND FLOOR SLAB

Birch plywood panel
Adhesive mortar
Mat
Sheath
EPS panel
Concrete casting
Horizontal_flow gap
Mat



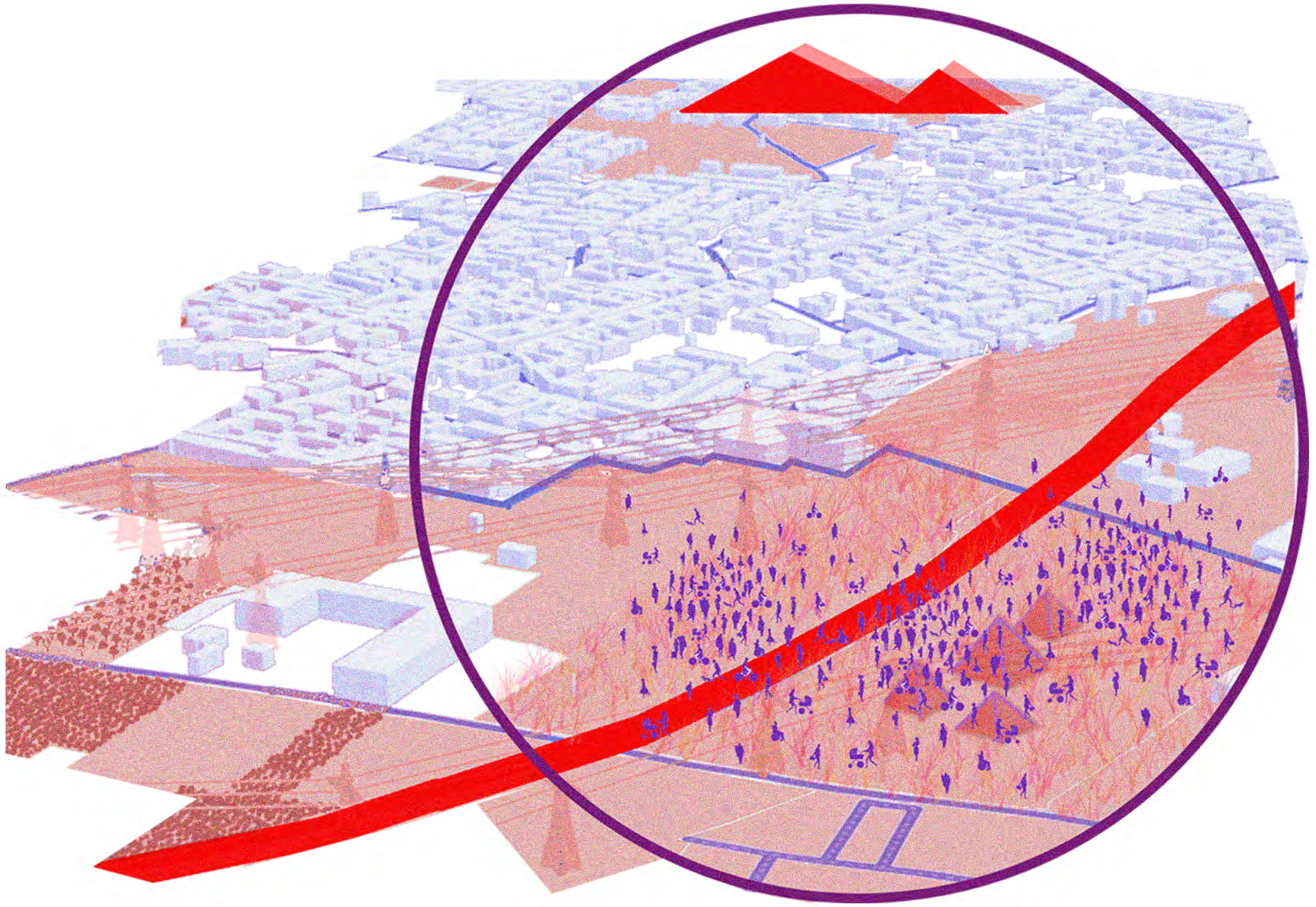
INDOOR/RELATION SCALE 1:50

A- Cca ce songo 'e fotografie e quanno facevano o' ccannelo.
Apprima 'o facive pur tu 'o 'ccanelo?
B- Eccome!
A-Apprimma se faceva assai. A Fratta se faceva assai 'o ccanelo?
B- A Fratta lavoravan 'o ccannelo già maciuliato, facevano 'e ffuni, lo pettivano, [...]
s'o accattavano e co cannelo facevano tutte 'e lavorazioni, 'o vennevano, pecchè cu 'o cannelo se facev pure 'a stoffa.
A- A stoffa pe' panni ?
B- Ma chella custava mai tanto 'a stoffa 'e cannelo.
A- E a Fratta tenevano sti fabbriche e stoffa?
B- A Fratta hanno sempre tenuto 'e fabbriche d'a lavorazione d'o cannelo, i canapifici.
[...]
A- A primma ca nascivi tu già 'o facevano?
B- Uh, ma secondo me tutt' e generazioni primma d'a mia.
Me ricordo, l'ultima volta nuje che amma mis o cannelo, aggia semmenato ie o' 67.
Tenevemo tre muoi e' terra a una parte e ce steva 'a vasca arinto, chella era grossa pure. Chella vasca a' adoperavano a stagione pe bagni. 'O mese 'e giugno ce mettevemo l'acqua arinto, apprimma ce steveno e fravecaturi pe fa 'a manutenzione. A fine luglio s'avviava a macerazione, e po' se jeva annanzi. Era profonda 1,30/1,40 m. A' lunghezza 70/80 m di lunghezza e te rico ie 30m di larghezza.
Se semmenava verso la metà di marzo, a San Giuseppe. E primma abbiavano a semmenà a Fratt, semmenavano 'co 'a zappa!
Antonio della Gatta, 84y/o_neapolitan farmer

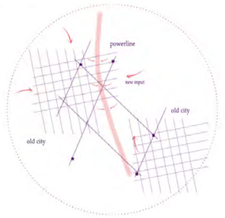
Program

industrial area, urban park, workshop space, exhibition space

Covered area	3000m²
Outdoor area	90000m²
Above-ground floors	1
Built volume	8000m³
Estimated cost	720000€/ed

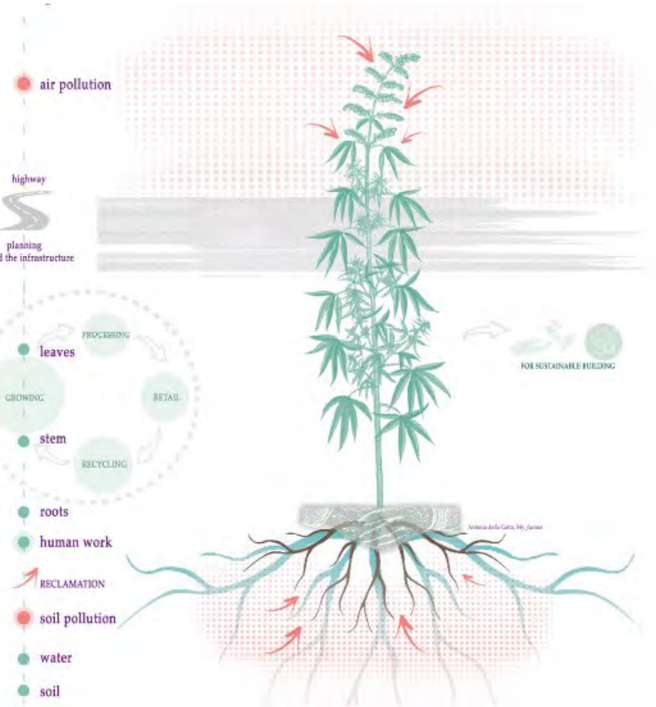


About the concept of margin, we could say a lot, we could say that it is a caesura, a rupture, but the margin is also a threshold, an entrance, an exit, it directs flows, and these are certainly the terms with which we approach the project.



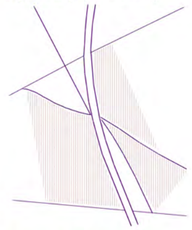
In this case, the first approach to the city of Frattaminore and the identification of the margin, made use of its more canonical meaning, identifying as the area of interest that close to the Asse Mediano highway, between the municipalities of Frattaminore and Crispano. wThis is why the project aims to reintroduce an ancient local crop, hemp, and all its transformative process, in order to promote products for bio-architecture. It is from the intent of the ''kilometre zero' between production and processing of the raw material in question, together with other national examples, that the title of the project takes shape.

The entire project program expands to a territorial scale, so that thanks to the introduction of alternative mobility and reference hooks placed in the nerve centers of the city of Frattaminore today, the flows can be diversified and directed also in the areas. The architectures that settle there, try to integrate with the landscape and the development of the vegetation through the choice of materials.

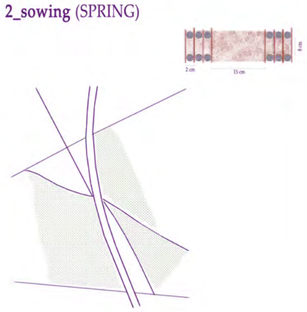


HEMP VEGETATIVE CYCLE

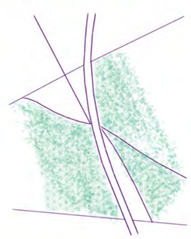
1_plowing (AUTUMN)



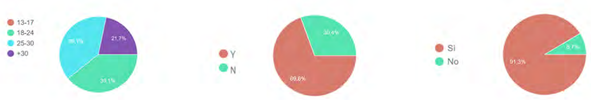
2_sowing (SPRING)



3_growing (SUMMER)



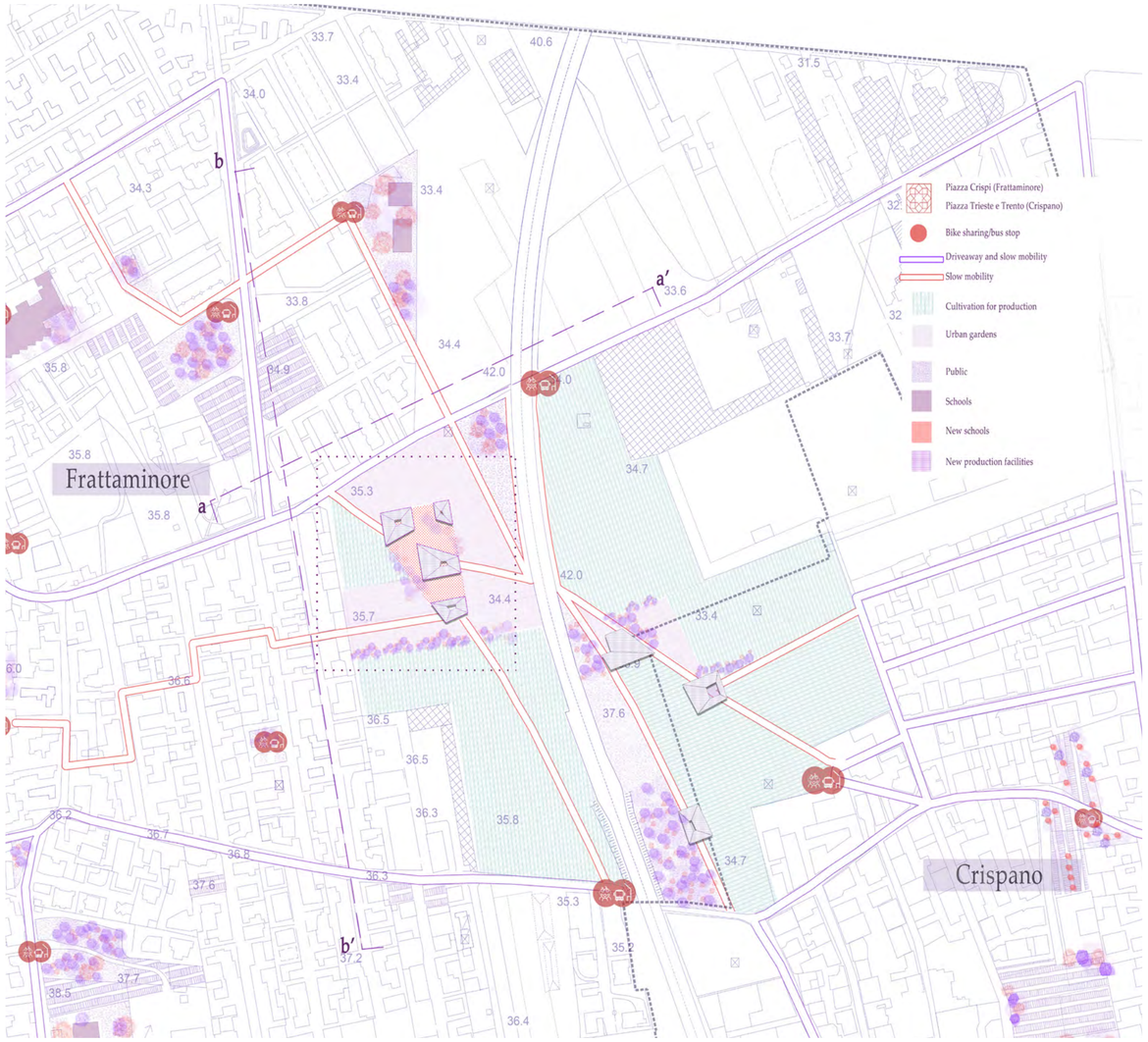
PROJECT APPROVAL SURVEY



1_age?;2_would you continue your studies in your city?;3_would you help renewing the local tradition of hemp agricolture?

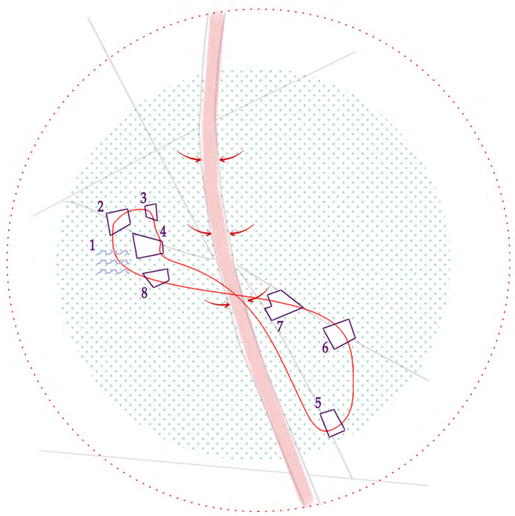
Graphs refer about a preliminary study on the social, urban and naturalistic topic.

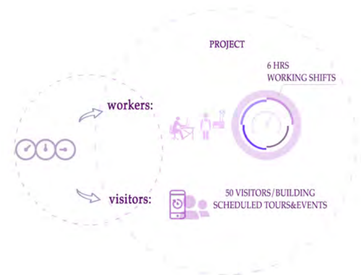
The results of the survey tell of a common desire to redevelop a today non-place.



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 10 50 100m





_WORKFLOW/FUNCTIONAL PROGRAM

1_maceration; 2_crop storage; 3_protect cultivation; 4_ decortication; 5_to building material; 6_to texile material; 7_to oils and paints; 8_storage, recycling, sale.

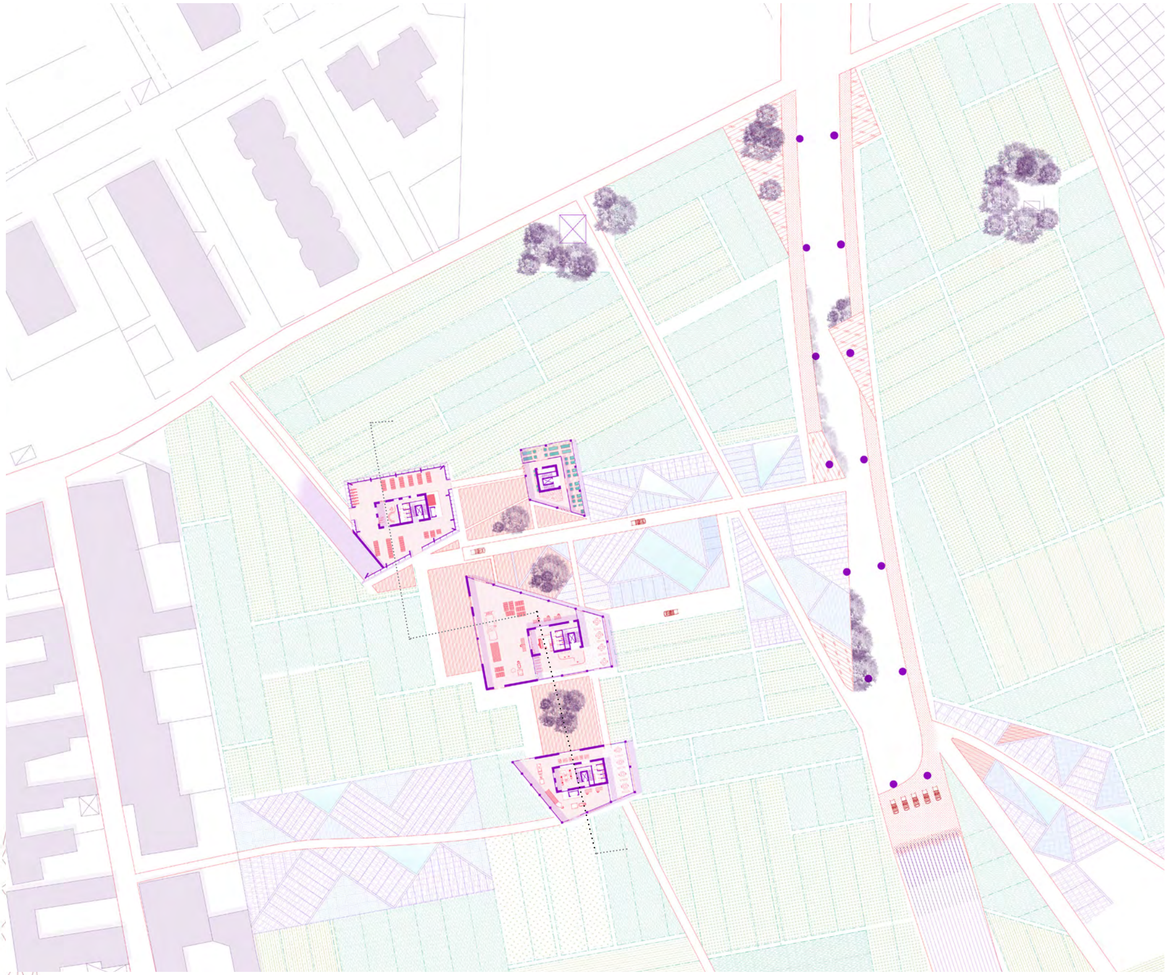
Female hemp seed

Male hemp seed

Urban gardens

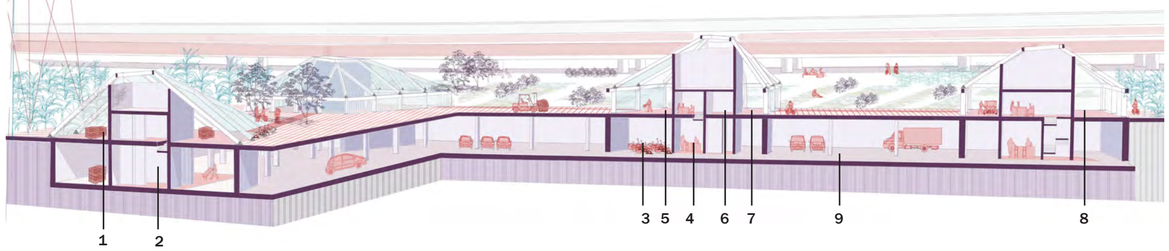
Garden in boxes

Tank



DESIGN STRATEGY

0 10 25 50m



SECTION A

0 4 10 20m

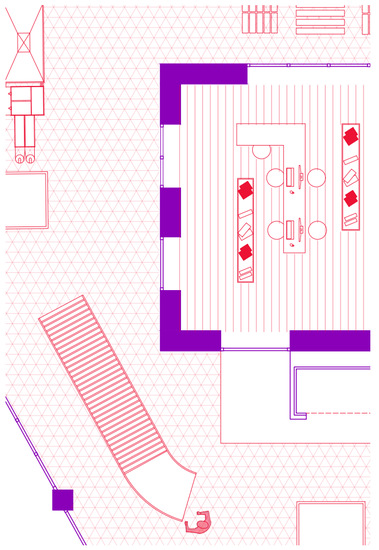
1. Storage
2. Office
3. Bike sharing
4. Changing room
5. Production
6. Cafeteria
7. Exhibhition area
8. Sales area
9. Parking

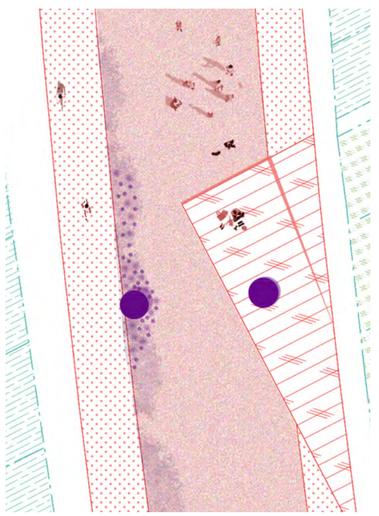
NORTHERN FRONT

0 20 50 100m

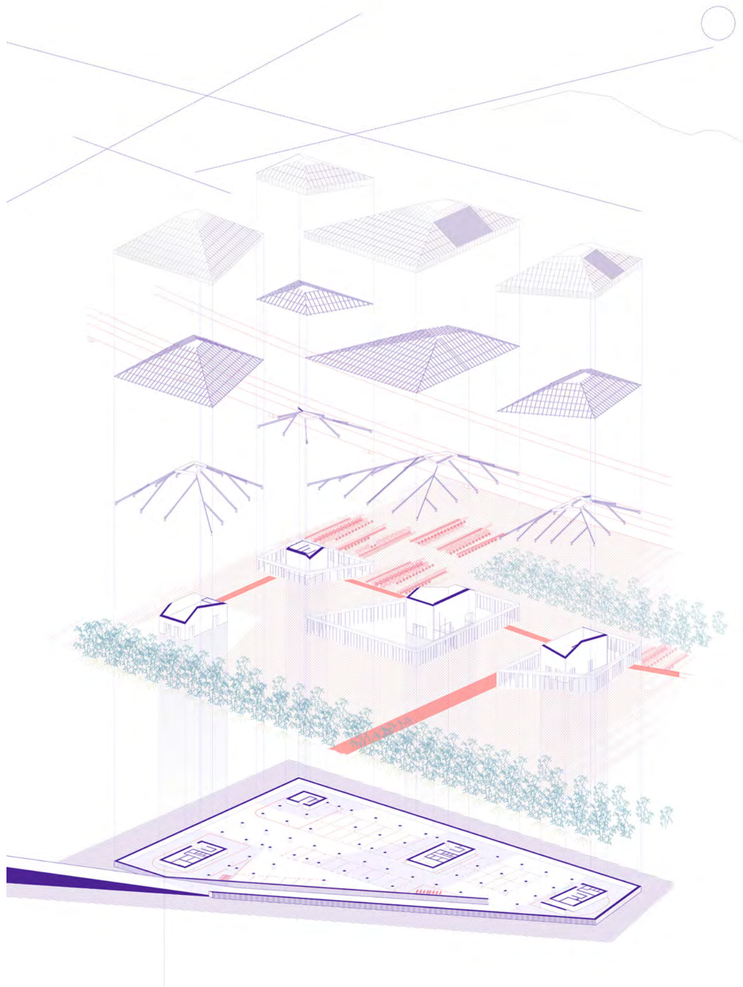
WESTERN FRONT

0 10 25 50m

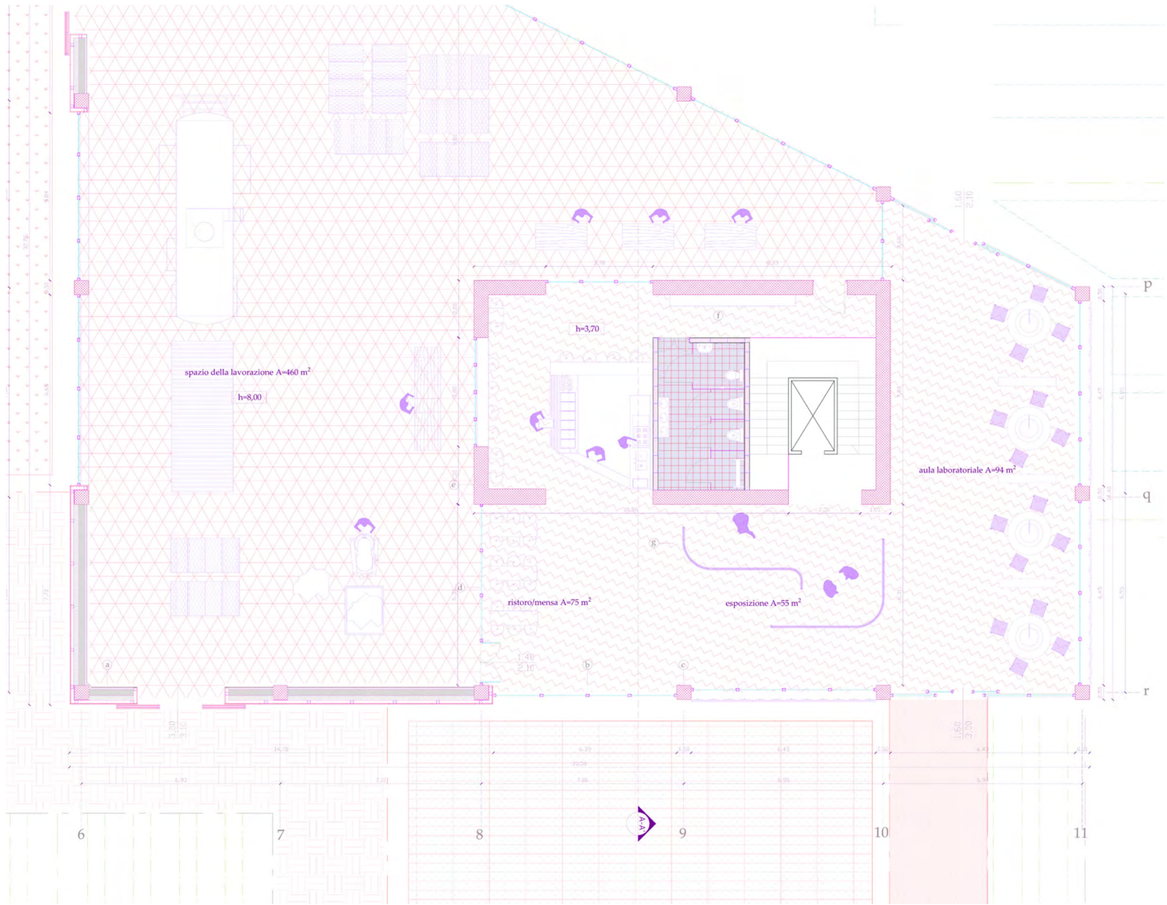




UNDER THE BRIDGE

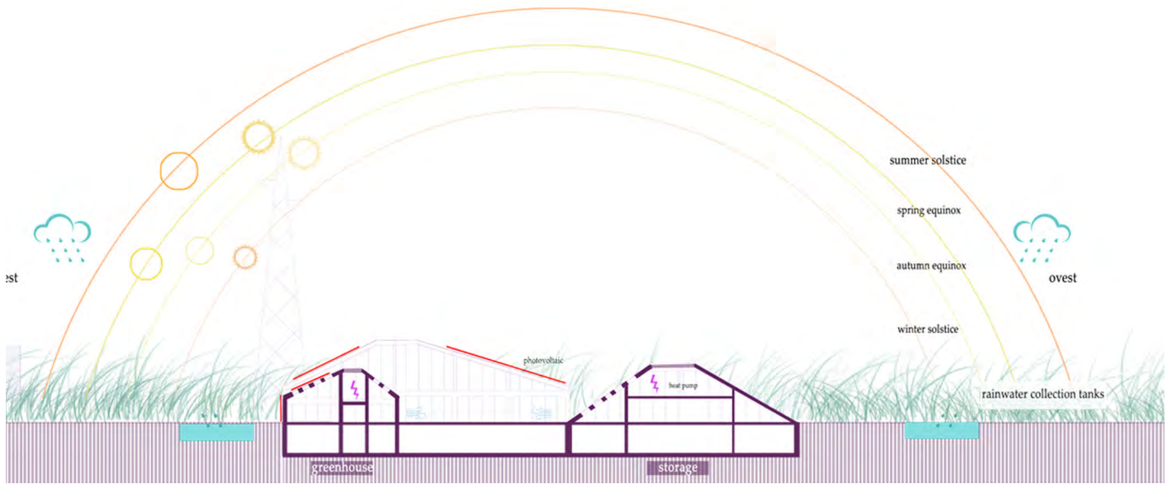


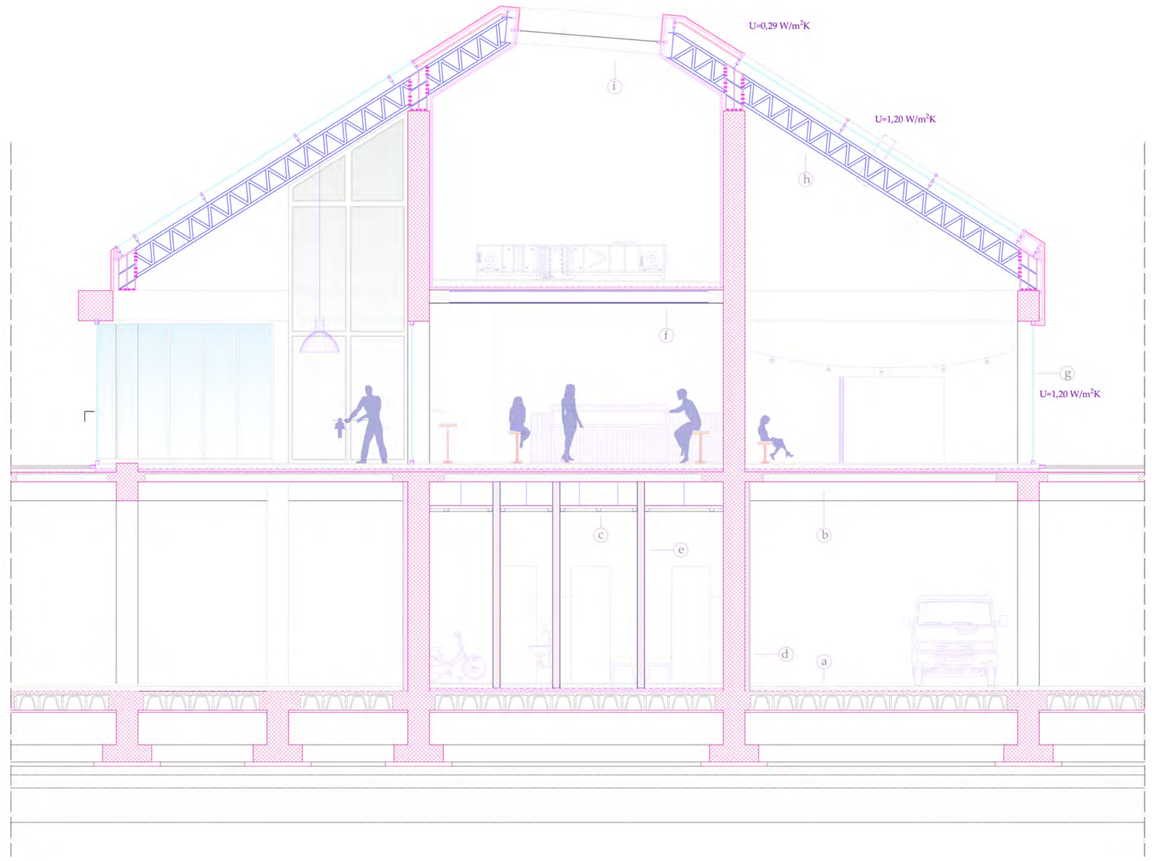
LAYERS



PLAN

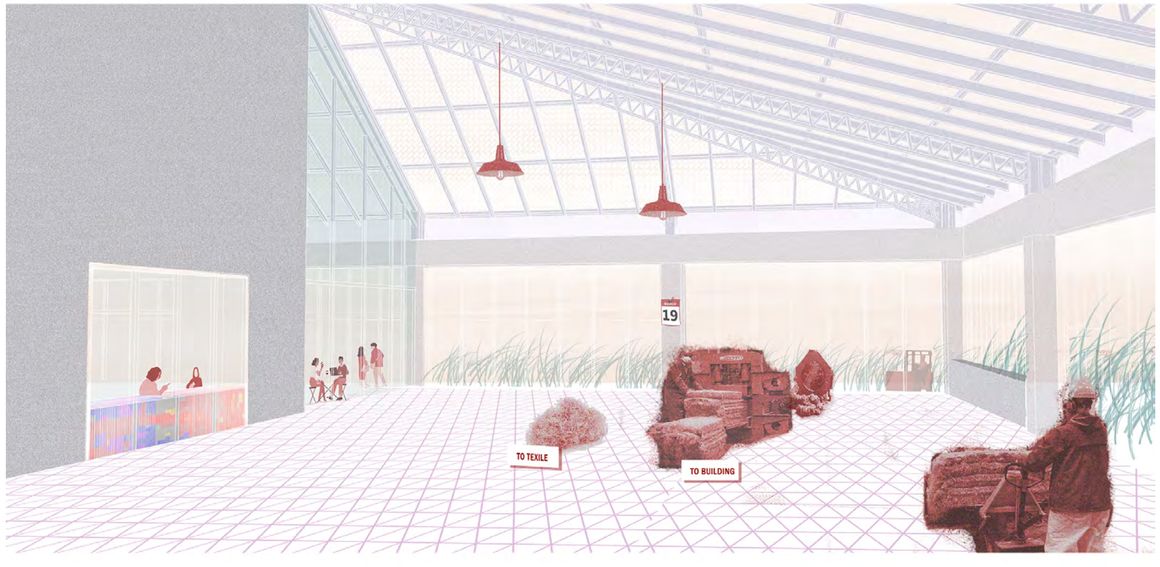
a. Ventilated facade with pre-assembled formwork blocks
b. Photovoltaic double-glazed façade
c. Exposed concrete surface exposed concrete surface
d. Vertical double-glazed façade partition
e. Reinforced concrete partition
f. Vertical plasterboard partition
g. Modular furnishing elements





SECTION

a. Foundation slab
b. Brick slab
c. External insulation
d. Plasterboard false ceiling
e. Vertical plasterboard partition
f. Predalles slab
g. Continuous glazing
h. Sunshades in aluminium
i. Closing sunshades



INDOOR/OUTDOOR RELATION SCALE 1:50

FRATTAMINORE ADVANCED DESIGN STUDIO

ANDREA CIMMINO - THE BASEMENT SQUARE

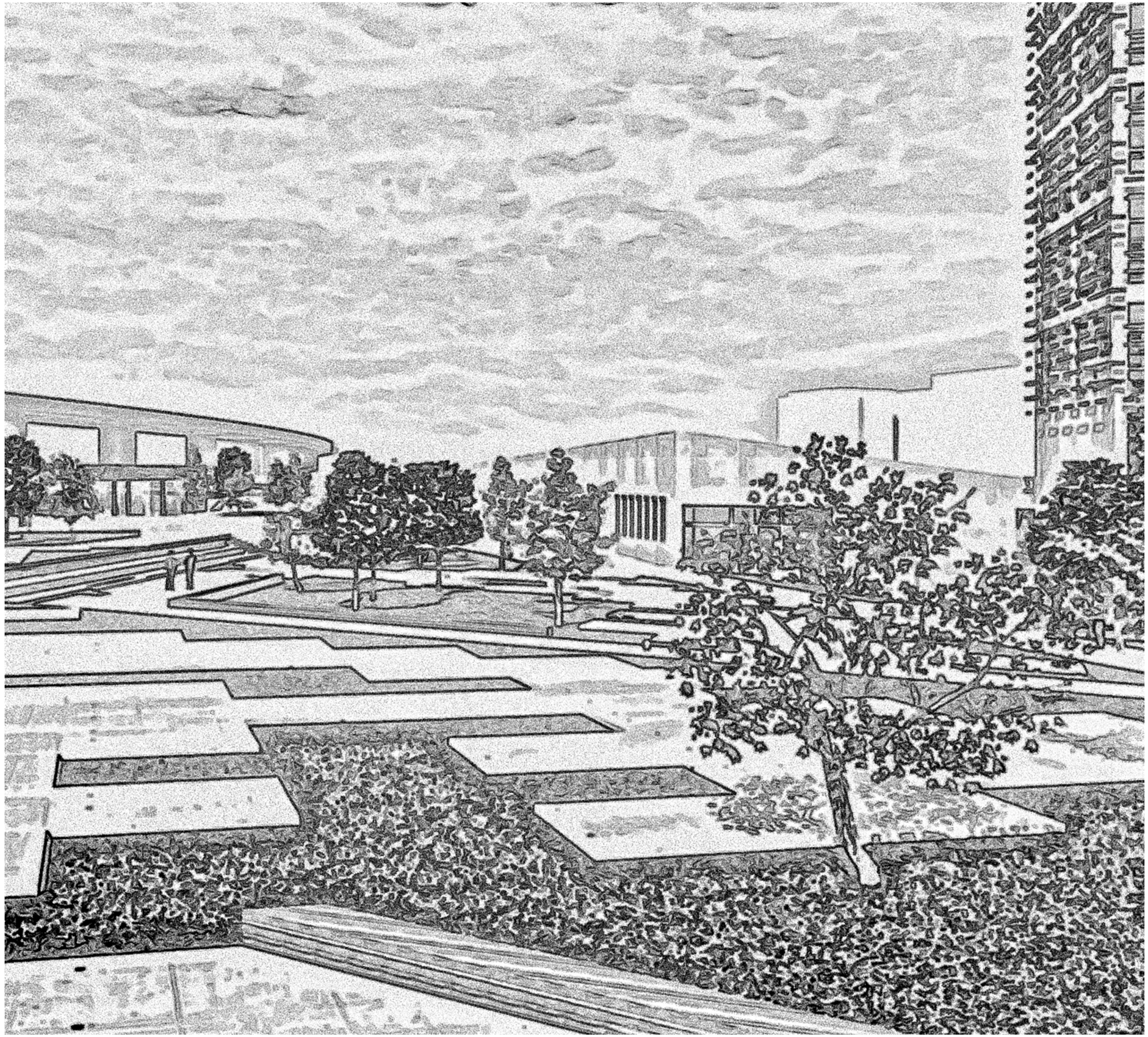
STAND-SPOT-CROSS PLANNING OF THE NEW CULTURAL POLE OF FRATTAMINORE

The project Piazza basamentale concerns an extended area situated on the eastern side of the town of Frattaminore.Precisely, it is the very first district you can go through arriving to Frattaminore from the close highway called Asse mediano. The analyses and the inspections resulted in an isolated and deserted zone.Apart from some trees and bushes surrounding an old abandoned library, nothing populates this part of the town, and this is a challenging potentiality rather than a flaw to the eyes of an architect. However, the most favourable characteristic of this area is its position.As a matter of fact, if correctly modified, it is likely to become the main intersection between Frattaminore and the neighbouring towns, representing a new opportunity of exchange. This is why the project aims to transform the entire area, considering the exigencies of both car drivers and walkers.These last have to be gifted of a meeting place that the library cannot create by itself. For this reason, it has been fundamental to observe and study carefully the places and the pre-existences, to choose the permanences, and to imagine the architectural project saving and promoting the existing environmental asset. The resulting proposal is an urban park, hosting the new cultural pole of the town. The first part of the project focuses on the accessible-to-cars roads. They are going to be demolished, except for the two main ones. They are going to be demolished, except for the two main ones.

Program

social and culture center, urban park

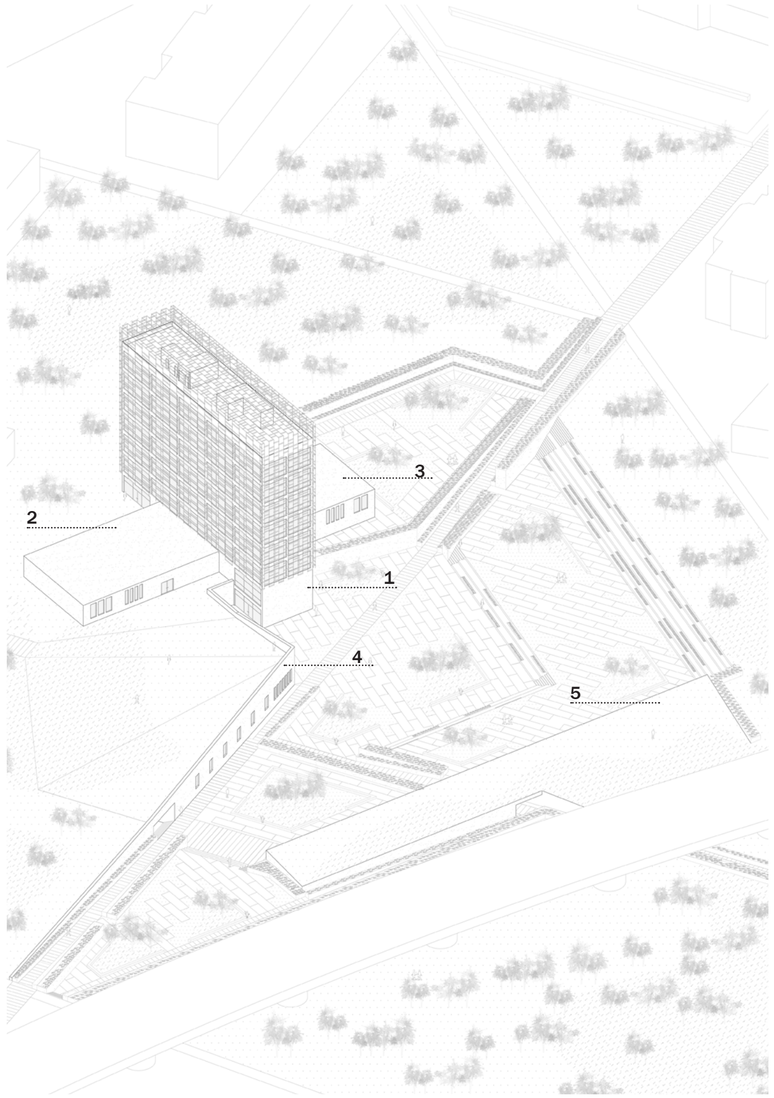
Covered area	**4268m²**
Outdoor area	**73467m²**
Above-ground floors	**7**
Built volume	**157546m³**
Estimated cost	**47.067.551 €**



These last are going to be extended until crossing each other, becoming the two main boulevards of the park, and connecting the furthest points of the town. Moreover, the two paths are going to give access to four hypogeum squares composing the park. The second part of the project consists of the realisation of a net of boulevards crossing the main ones, and allowing visitors to walk through the park. This intersection gives birth to four hypogeum squares, which are progressively dug in the ground in order to turn the monotony of the area into a joyful dynamism. The function of the squares is crucial: apart from the aesthetic role (they are going to be decorated by green areas), they are the base of the new buildings hosted in the park, that are the library, the auditorium, and the exhibition pavilion. To conclude, this resulting dialogue is stressed by the shape of the pavilion. Its base is curiously cut and crossed by one of the main boulevards. The message is clear: every single piece communicates with the others, even with the Asse mediano, whose presence is not claustrophobic anymore.

DESIGN PHASES

- Pre-existences
- Accesses
- Main Axes
- Secondary axes
- New volumes
- Transformation of the pre-existing buildings



AXONOMETRIC VIEW

1 Library

2 Playroom

3 Offices

4 Auditorium

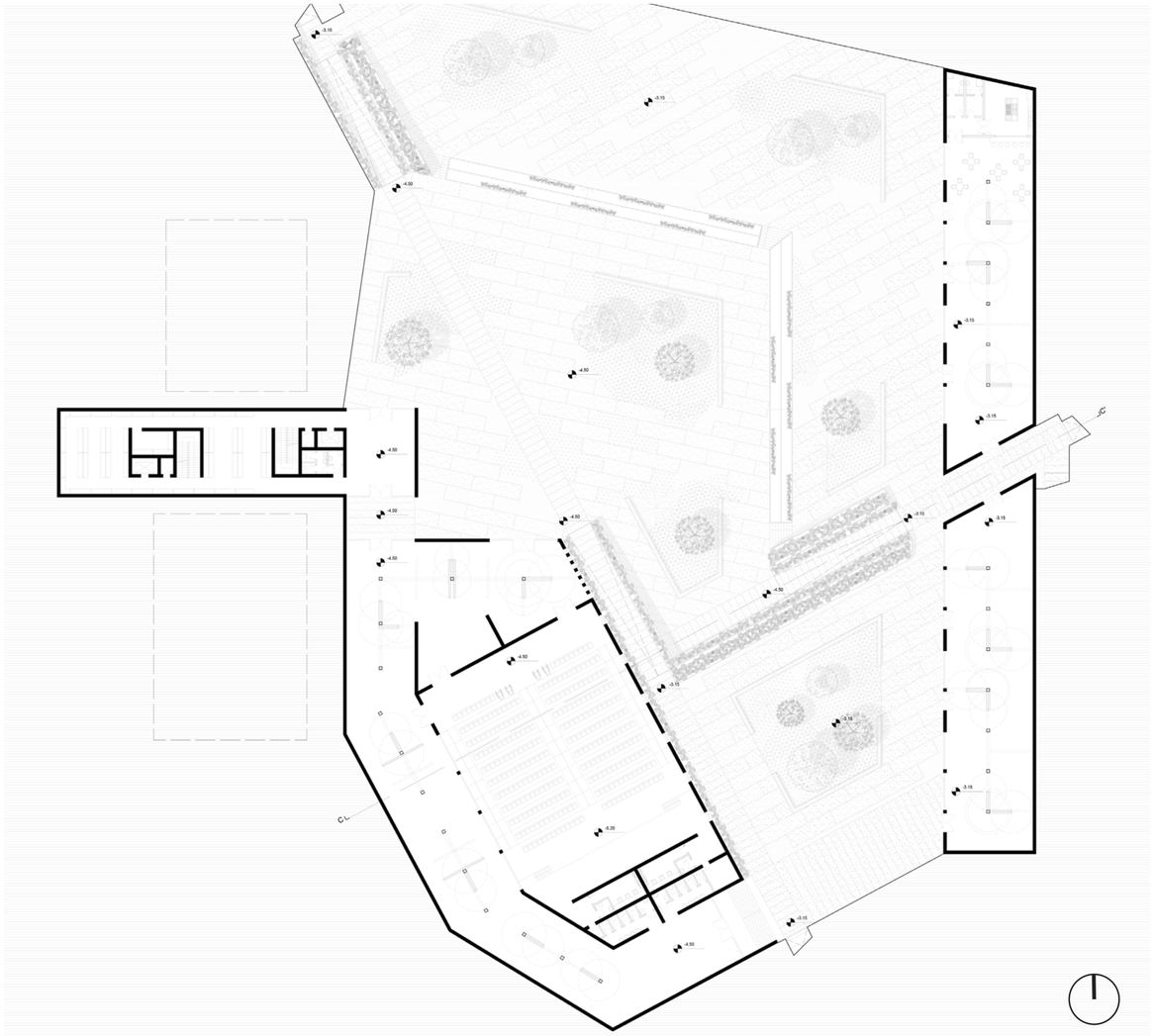
5 Exhibition pavillon

The genesis of the project: the analysis of the existing roads and of the boulevards giving access to the library. First part: the demolishment of the existing roads, and the redesign of two of them. These are lengthened until crossing each other, and are transformed into the main axes of the project, connecting Frattaminore to the Asse mediano and to the town of Crispano. Second part: the addition of a net of secondary axes, favouring the access to the area.Third part: the realisation of four hypogeum squares, giving dynamism to the ground. The access is allowed by the two main axes, playing a double function. Fourth part: the realisation of three new buildings.

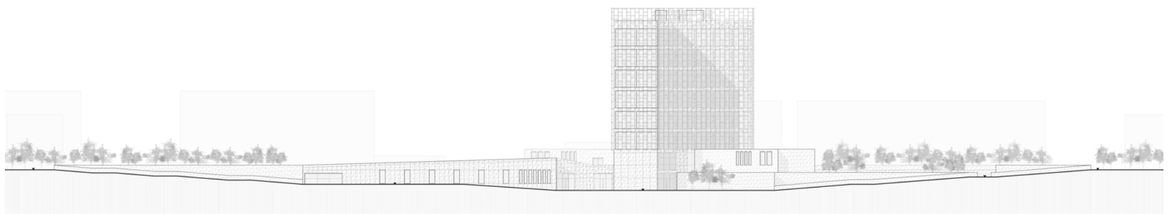
MASTERPLAN

0 20 50 150m

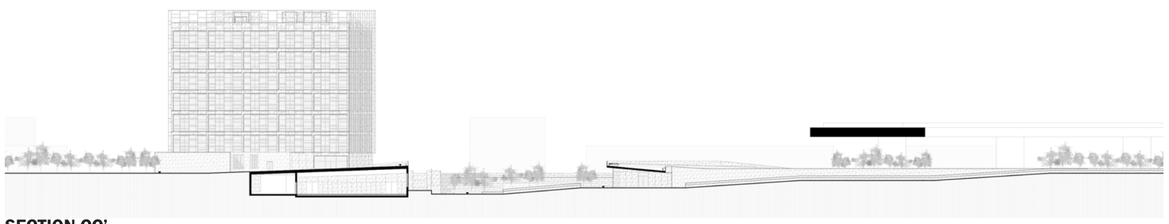
The 1000-focused master plan shows clearly the transformation of the area, and especially of the Asse mediano. It is crossed by the new axes, and turns from the protagonist of the area into a relevant but harmonious part of the project.



PLAN - LEVEL (-3.15)

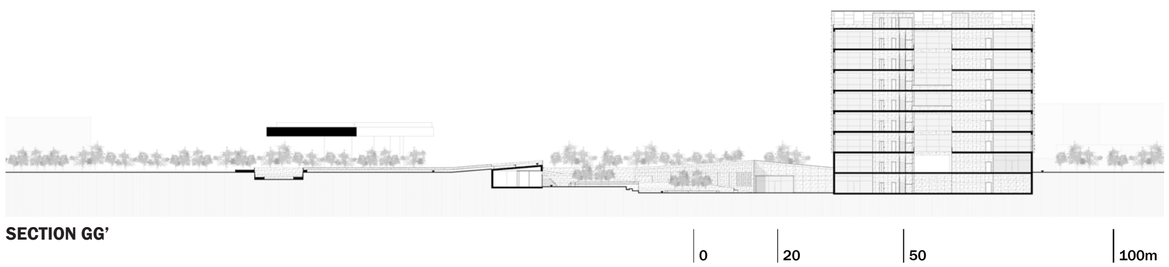


SECTION AA'



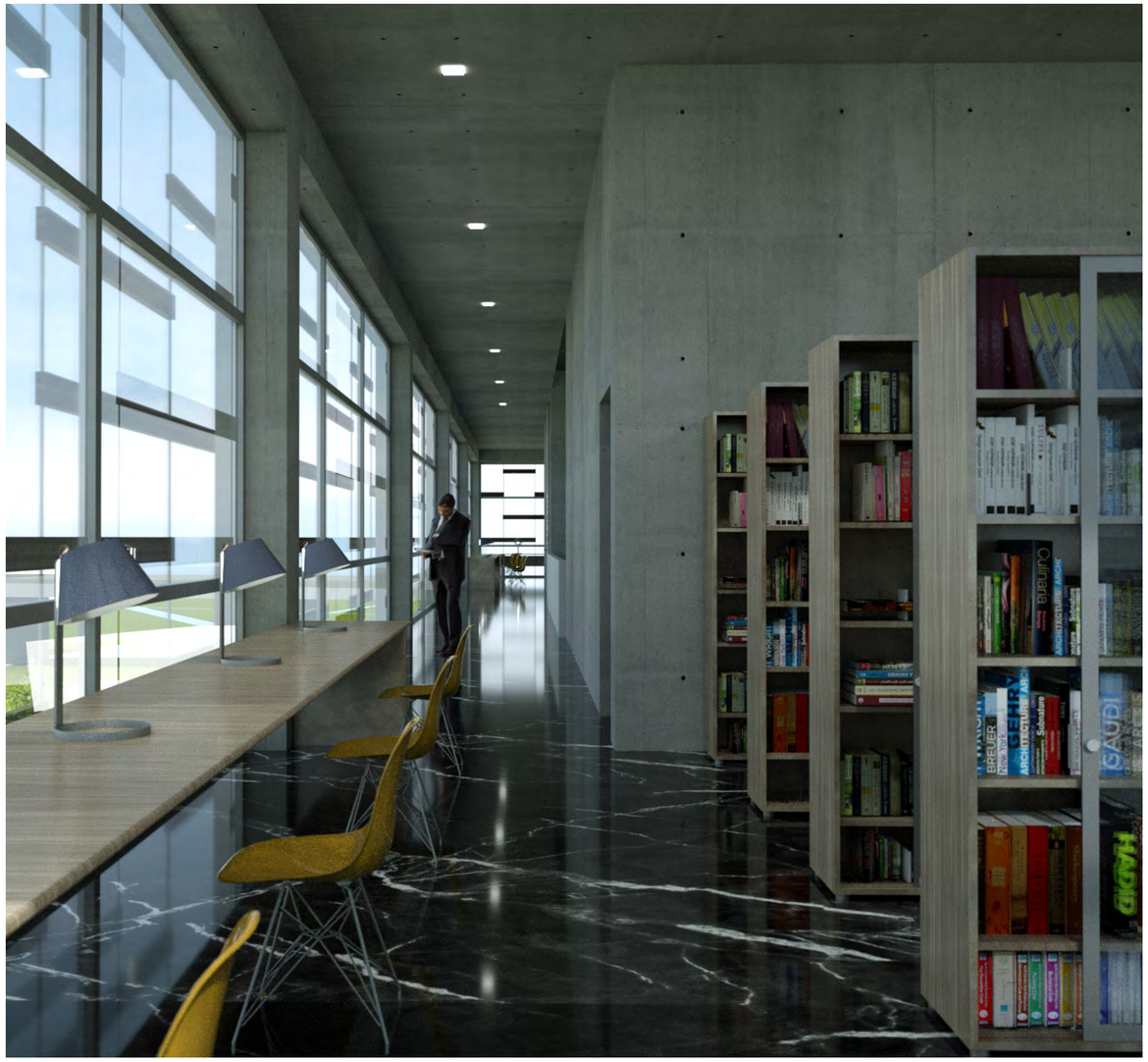
SECTION CC'

This view illustrates the interaction between the Asse mediano and the new buildings, from the 1.57-metre-deep hypogeum square.

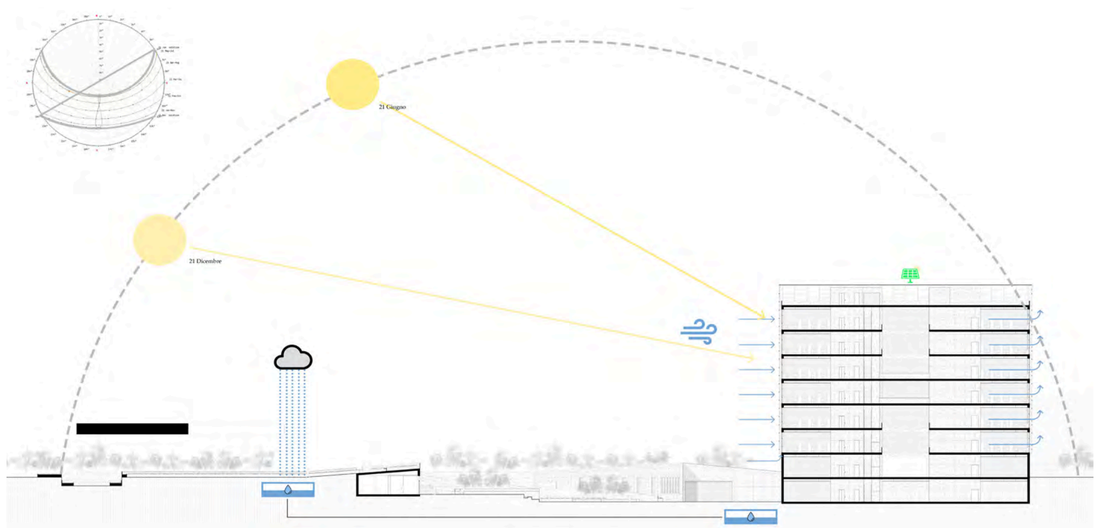


SECTION GG'

The sections highlight how the realisation of the squares changes the shape of the ground, and how the tower, the auditorium and the exhibition pavilion merge with the squares themselves. The sections give the idea of the dynamism the ground acquires thanks to the construction of the squares. These become in turn the base of the new buildings.

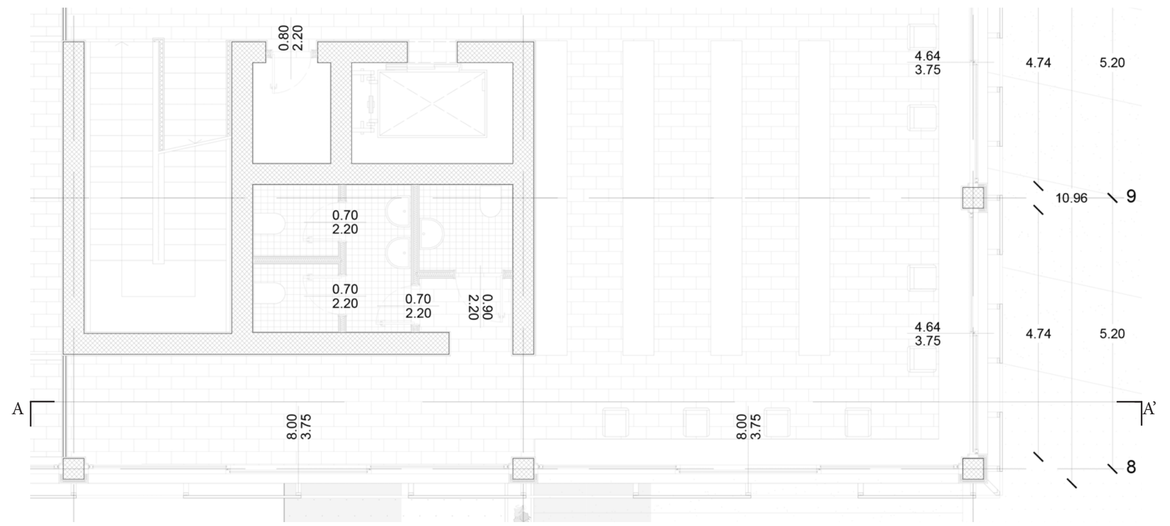


THE INSIDE OF THE NEW LIBRARY



ENVIRONMENTAL SECTION

1. Opaque horizontal covering with floating floor, vapor barrier, screed, waterproofing insulation, masonry slab, plaster for interiors
2. Vertical transparent casing with schuco thermal break aluminum frame
3. Vertical opaque casing with exposed concrete panel, cement mortar, polyurethane insulation xps, c.c.a. partitions, cement mortar, exposed concrete panel
4. Opaque horizontal walking surface with floor, cement mortar, screed, vapor barrier, polyurethane insulation xps, masonry slab, plaster for interiors



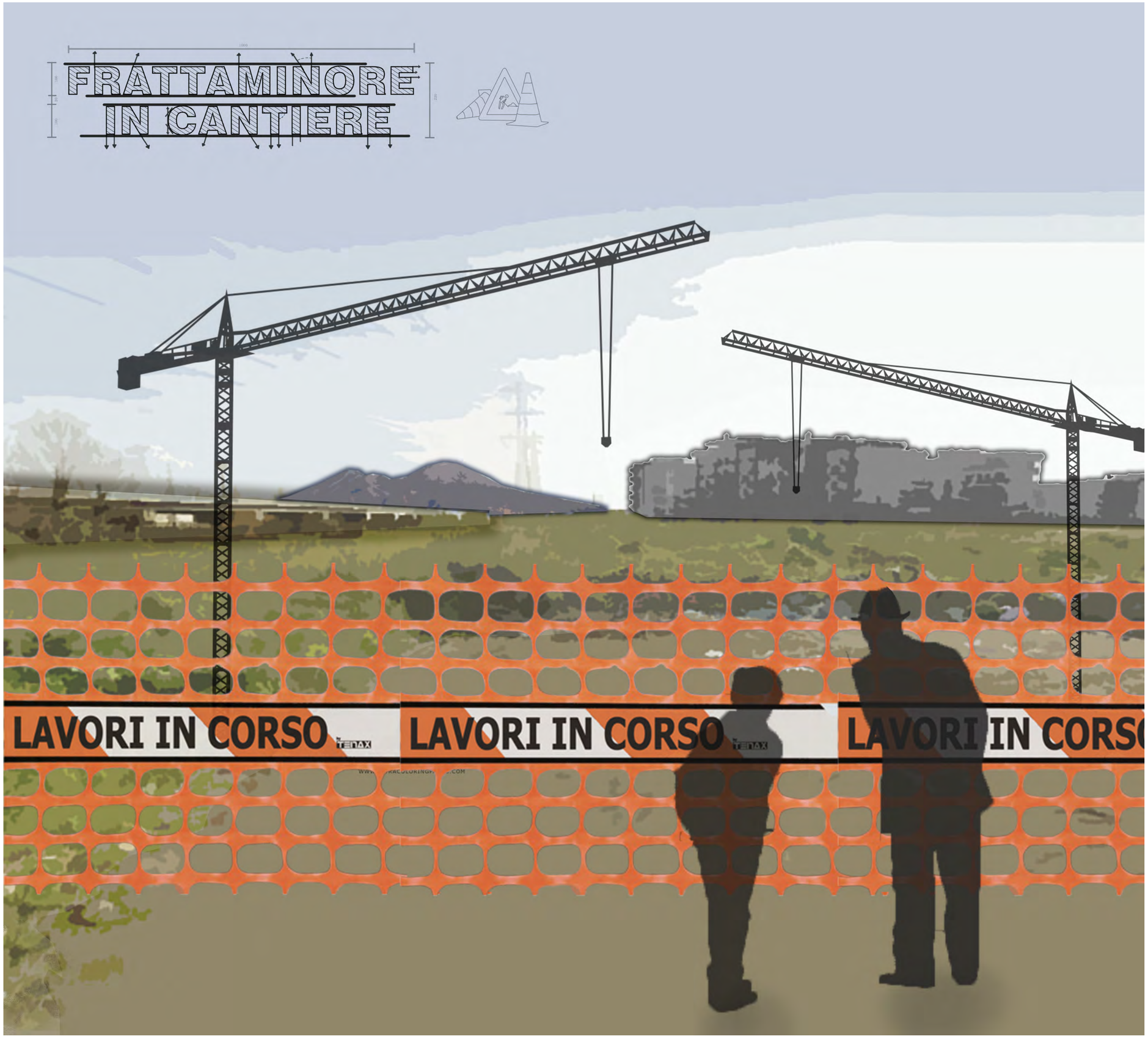
INDOOR/OUTDOOR RELATION SCALE 1:50

"Frattaminore as a buildingsite" is a project centered on the desire to have a flexible city in continuous construction, capable of satisfying the needs of who live in, during the time.
The project stems from the desire to unite fragmented and abandoned pieces of the city and transform them into a single system, considering the pre-existence and directionality that emerge from the analysis of the territory. The strategy is to divide the project into phases, distinguishing permanent functions and temporary functions, destined to change. Small pieces of the city are activated over time, they are made available to the population who can occupy them as they wish, through tactical urban planning interventions, waiting for funds for a definitive project that will be the result of a co-planning between citizens and local authorities.
The choice was to place a cultural center in the central area with a multifunctional auditorium, refreshment area, exhibition hall and workshops. The idea was born after a dialogue with the third sector that operates actively in the area, in which the need emerged for a flexible space for the community, capable of adapting to different needs, activities and age groups.
The "construction site" is intended as a continuously evolving project, as a second skin, as a space to be discovered, as a temporary work area that builds processes destined to last over time.

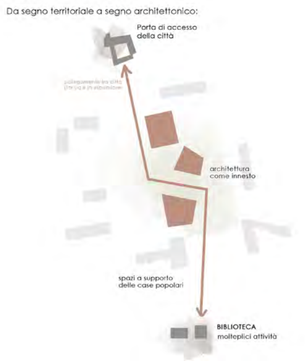
Program

cultural center, auditorium, exhibitions, urban park

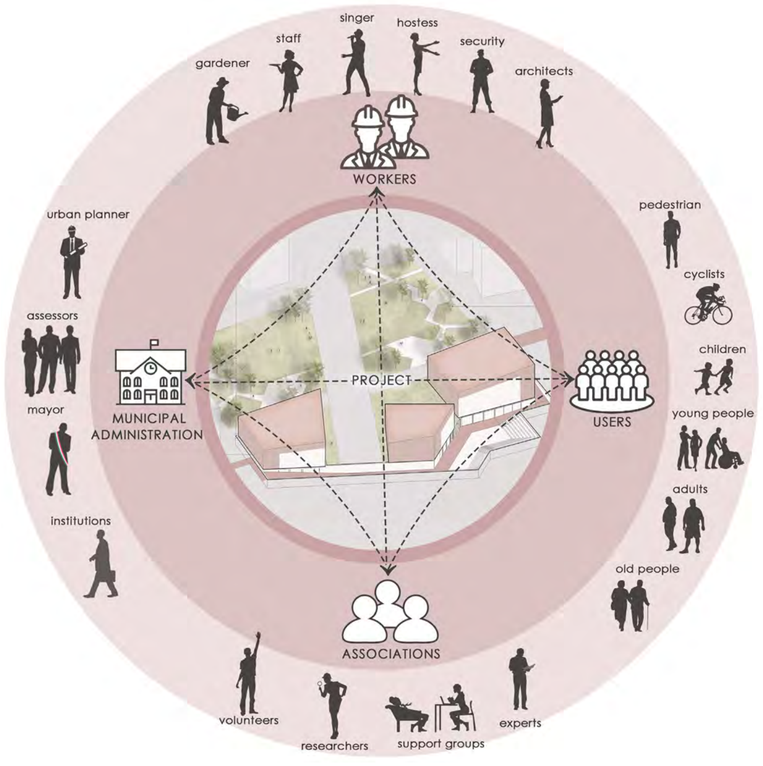
Covered area	**1290m²**
Outdoor area	**8170m²**
Above-ground floors	**1**
Built volume	**12900³**
Estimated cost	**6.580.400 €**



The expanding city of Frattaminore saw the construction of public housing and major roads, a structure completely different from the historic city. These interventions have led to the formation of isolated and abandoned spaces, in which people do not recognize themselves.



The territorial strategy is to link all existing and new public facilities with a cycle-pedestrian path, leading to the new architecture, a cultural hub that links the separate places with the redevelopment of the area. From the municipal plan, that area is intended as a municipal cinema, but after consulting the administrations and associations operating in the area, it was decided to build a cultural center, including a multifunctional auditorium, capable of adapting to various activities that can be done by users. Furthermore, the project includes the construction of open spaces, intended for urban parks, outdoor study areas, sports park, recovery of the disused viaduct with recycled materials, and the local market. The common feature of these spaces is permeable green. The functions are not permanent unlike the cultural center, but small punctual architectures persist, multifunctional wooden pavilions, at the service of citizens. The type of destination was chosen after a careful study of the territory and dialogue with the citizens and stakeholders, these are all equipment that Frattaminore needs.



Urban park view, crossed by the pedestrian and bicycle path.

Wooden pavilions are punctual architectures of the territory.

Recovery of the viaduct with urban vegetable gardens.

INTERVIEW RESULTS:

INTERLOCUTORS
- citizens
- associations
-municipalities

DISCUSSION WITH STAKEHOLDERS

The project in its construction activates regulations and relationships between different users. The different types of users have been identified and the relationships between them have been studied with interviews

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

SEZIONE A-A'

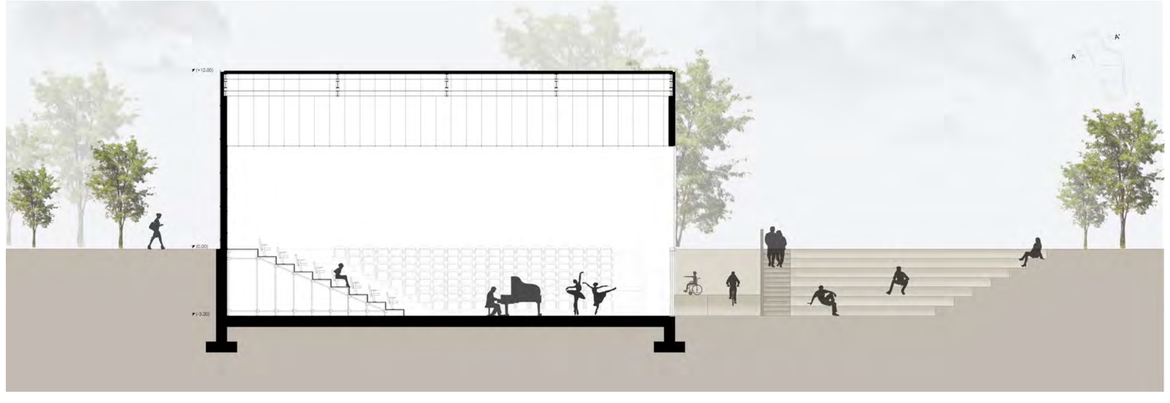
PROJECT PHASES

We pass from the de facto state to the project state, with the temporary opening of spaces. A gradual redevelopment of abandoned and disused spaces persists.

1. auditorium
2. open-air theater
3. services
4. fitting rooms
5. exhibition hall
6. workshops area

DESIGN STRATEGY

0 10 25 50m



SECTION A

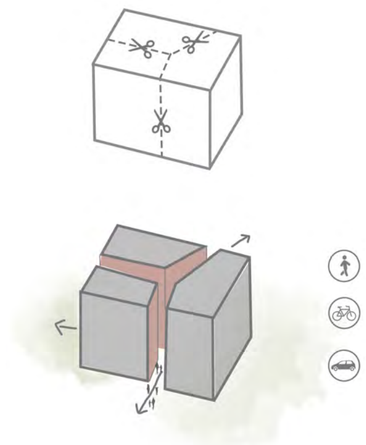
0 4 10 20m

The territorial sign is transformed into the architectural sign. Strong is the relationship between internal and external space. The possibility of opening the sliding glass door of the auditorium gives the opportunity to have a single space between inside and outside, to host concerts and theatrical performances open to a large number of people.

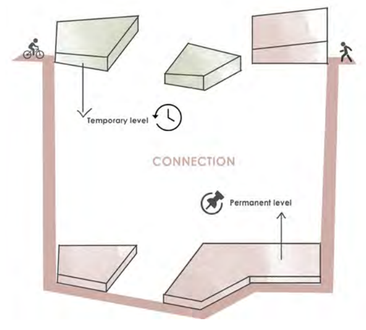
NORTHERN FRONT

EASTERN FRONT

0 10 25 50m

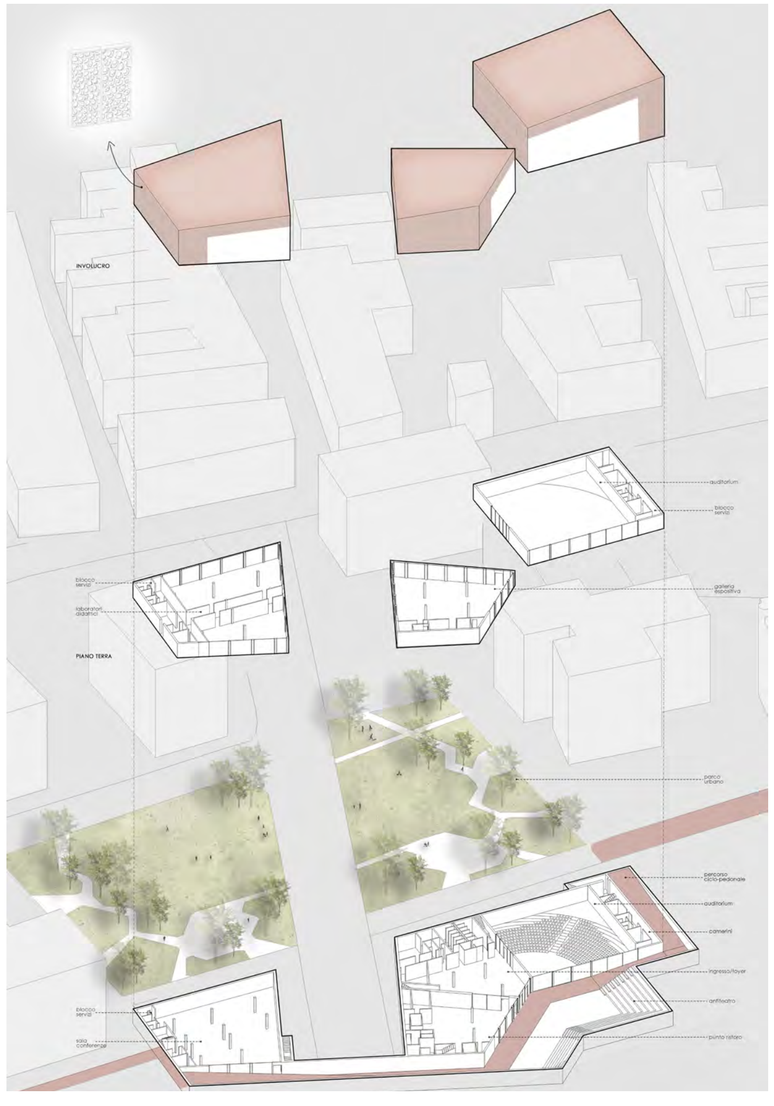


The building fragments within the lots, the street becomes an architectural corridor, crossed by pedestrians, cyclists and cars.



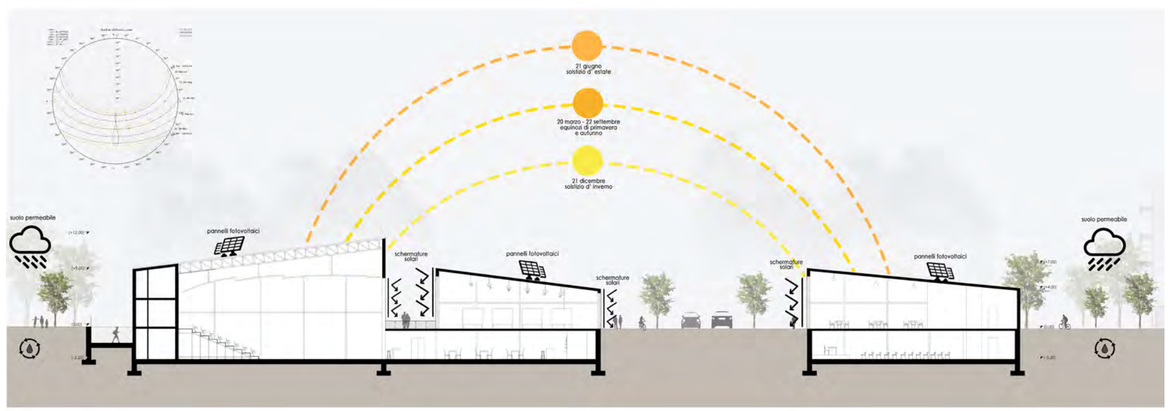
The levels are divided into permanent and temporary, the element that connects them is a cycle and pedestrian path. There are constant references to the construction site.

CONCEPT

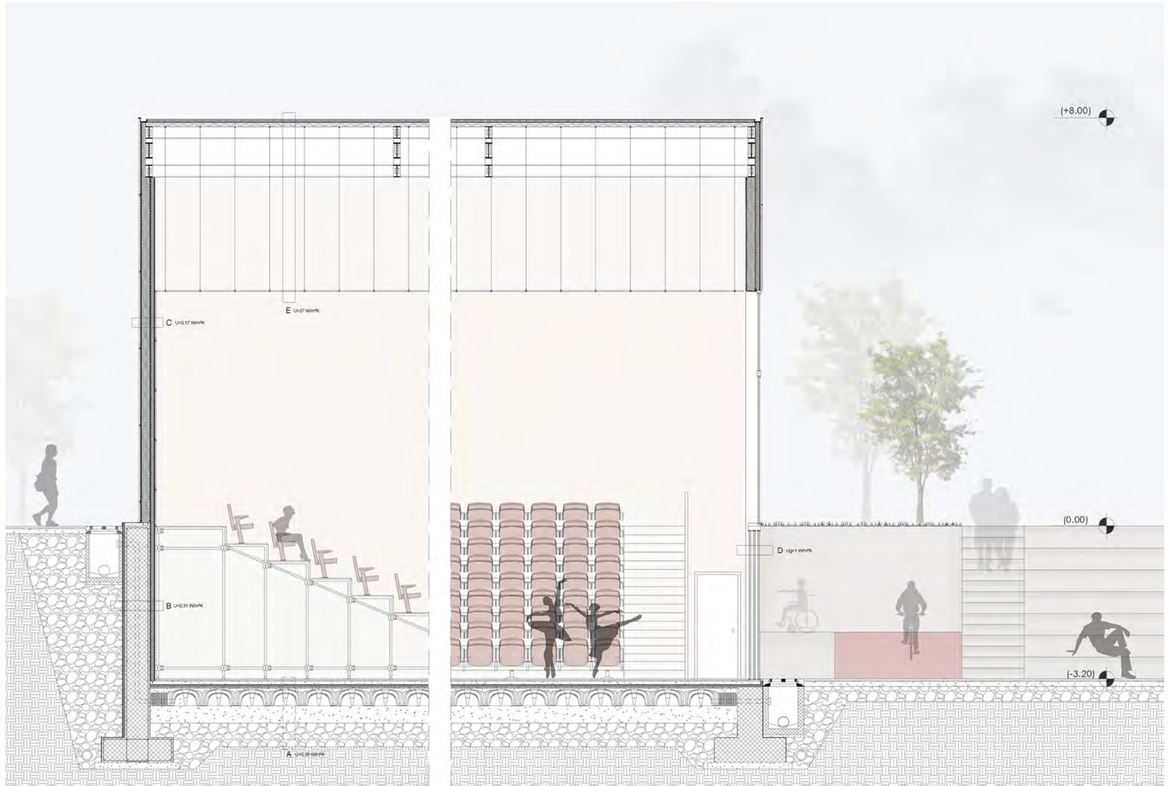


AXONOMETRIC EXPLODED VIEW

VISION/ RELATIONSHIP BETWEEN INSIDE AND OUTSIDE



ENVIRONMENTAL SECTION



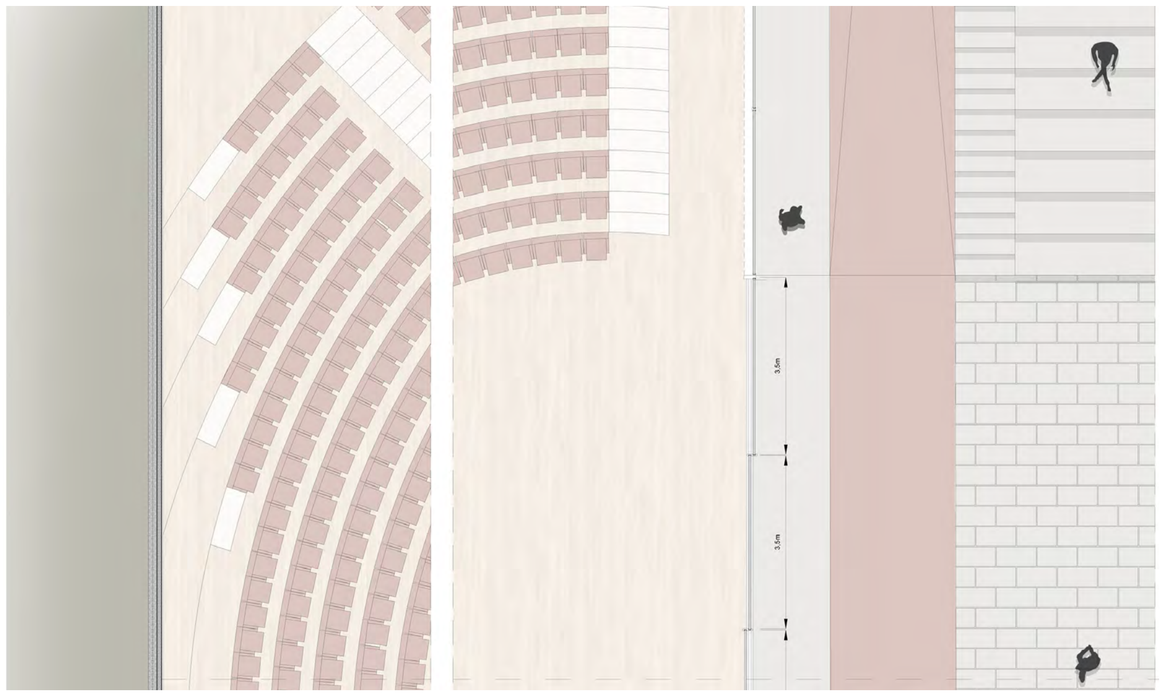
A - compact soil, crushed stone, concrete cast, ventilated crawl space, reinforced concrete, sheath, insulating, mat, lime internal flooring

B - stone, sheath, insulating, containment wall , breather pipe , insulating

C - perforated corten steel, double warping external wall, sound-absorbing wood panels

D - sheet metal, sheath, insulation, vapor barrier, concrete slab, corrugated sheet, truss beam, wooden panels

E - *glass door with sliding system*



INDOOR/OUTDOOR RELATION SCALE 1:50

IA DOMENICA IAZZETTA - THE AGRI-CULTURAL PARK

ENHANCE RESOURCES

A huge void between two dense cities. This is how the vast permeable area, mostly uncultivated, located between the borders of the cities of Frattaminore and Crispano appears in the eyes of those who see it.Above it ,the long route of the State Road 87 develops with arrogance which, if on the one hand allows the motorway connection with the surrounding municipalities, on the other it creates a barrier effect both physical and visual.

Nevertheless we are dealing with a space that is still safe from the building densification, which instead copied above all Frattaminore, with the nearby locality Viggiano affected by the PEEP plan, of which at present the great majority of the equipment and public services remain unfinished. The new PUC took care of them, which defined additional areas to be allocated to urban planning standards, but did not comment on the area on the border.

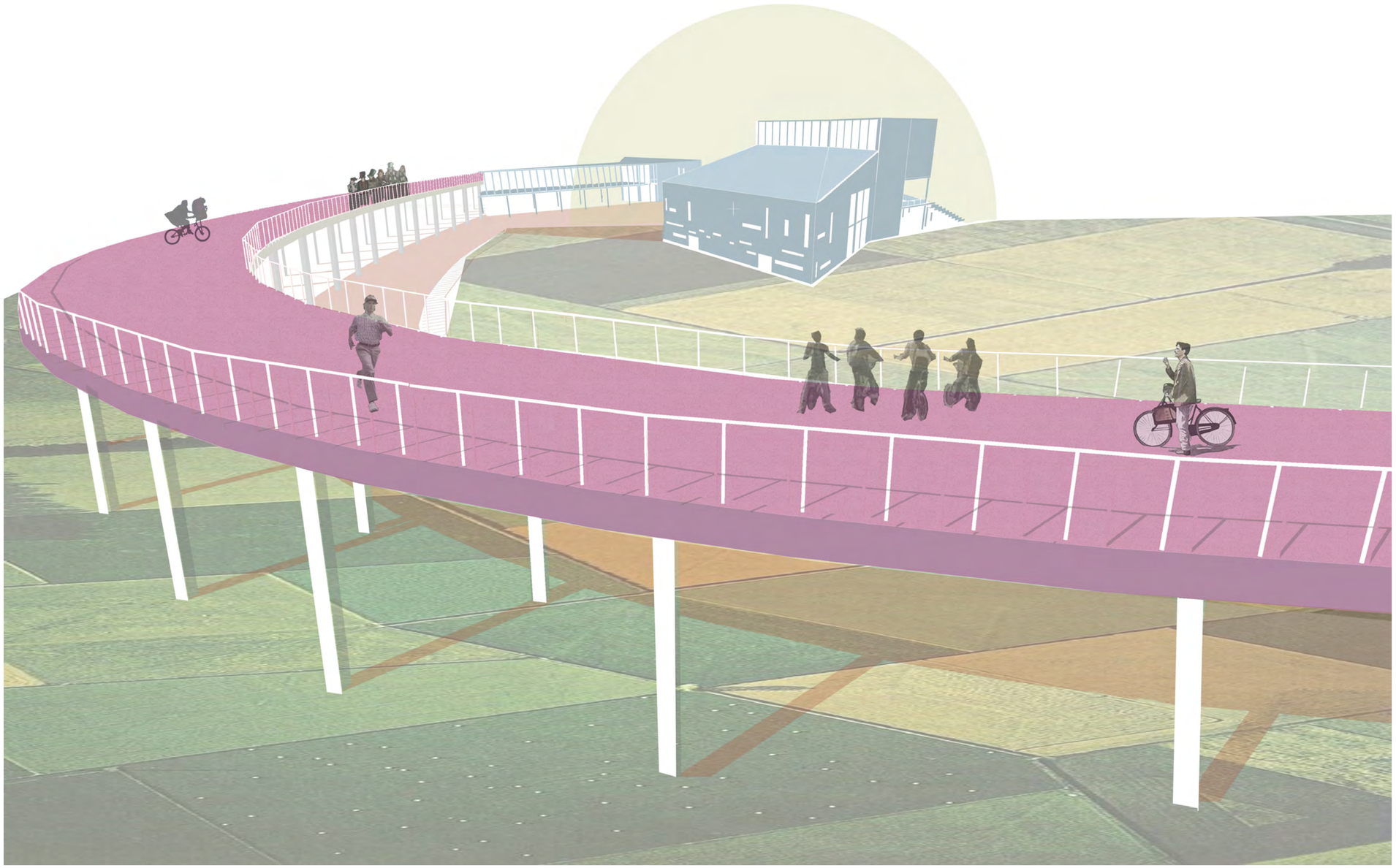
It was therefore decided to try to respond to these critical issues, intervening with an action of mending both the spaces and the paths, which would not deprive the area of permeability but rather bring it back to its original vocation, that is of fertile and productive agricultural land.

With respect to it, the volumes of the equipment are grafted, with functions partially requested, but then integrated with further uses that allow a multifunctionality and flexibility of both internal and external spaces.

Program

Agricultural and urban park, cultural center, alternative mobility loop

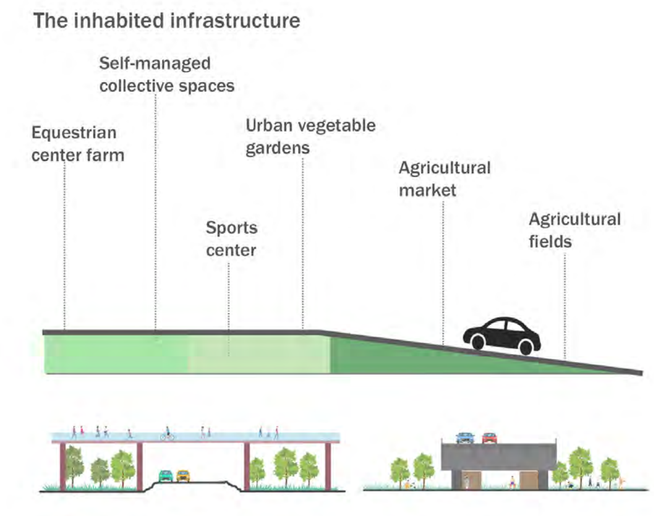
Covered area	**3767m²**
Outdoor area	**16930m²**
Above-ground floors	**4**
Built volume	**33903m³**
Estimated cost	**€2005584**



Where it seems that there are physical barriers, it is there that it is possible to intervene to re-establish contact. The project aims to enhance the large pre-existing permeable spaces by re-proposing a piece of re-emerged Campana plain.

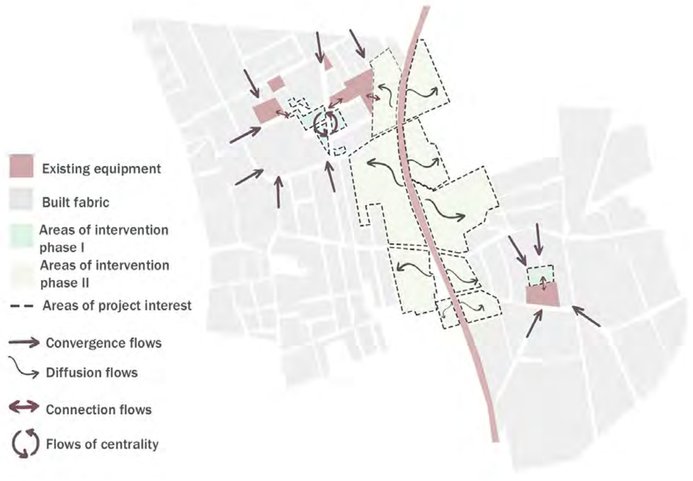
It was decided to graft an Agri-Cultural park between the municipalities of Frattaminore and Crispano, in which agriculture and cultural activities have the task of becoming attractive elements that push the inhabitants of the municipalities concerned, but also those outside of they, to repopulate the territory and regenerate it by promoting social, economic and educational activities. An alternative mobility system is being built that acts as a link between the various equipment grafted. Agriculture is the heart of the system, differentiated according to the type of user. Cultural activities, on the other hand, act as magnets placed on the borders of urban centers to encourage people to enter the park.

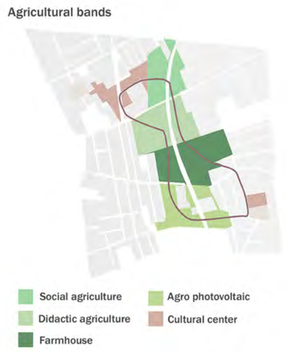
Once the general system has been defined, the project is specified in one of the hypothesized attractive poles. It was decided to investigate the area located on the border of Frattaminore, which serves as a gateway to the Park. The grafted volumes are designed to form a single system in continuous relationship with the surrounding open spaces.

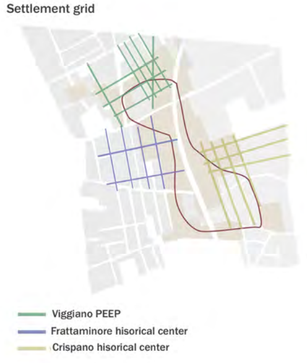


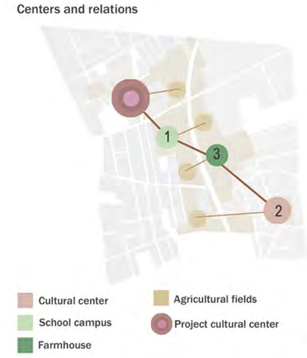
The goal is not only to produce goods, but also to ensure the protection and enhancement of the landscape and the territory by involving users.

Project strategy









FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

DESIGN STRATEGY

0 10 25 50m

SECTION A

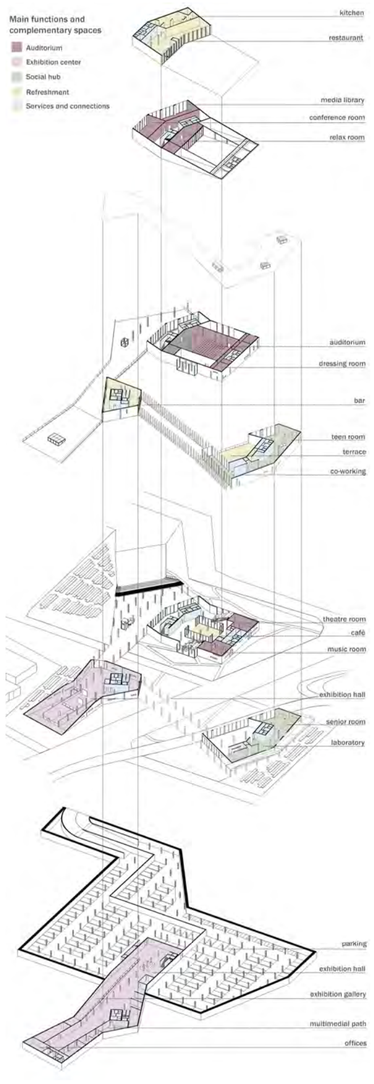
SECTION B

0 10 25 50m

SOUTHERN FRONT

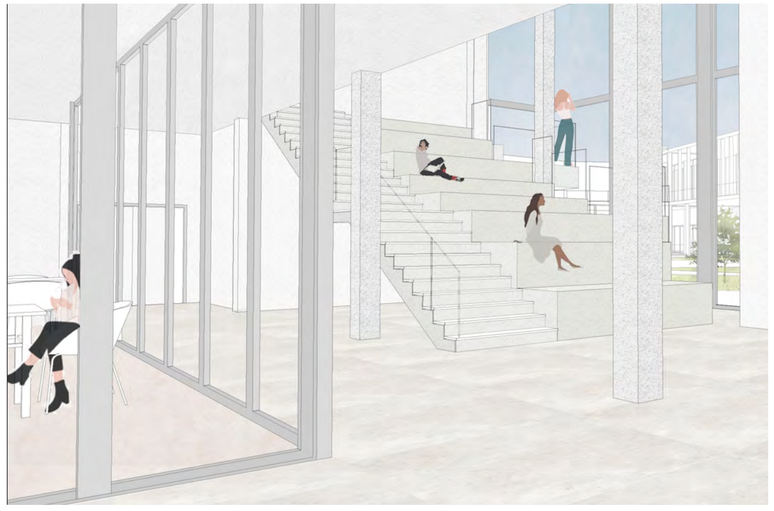
EASTERN FRONT

0 10 25 50m

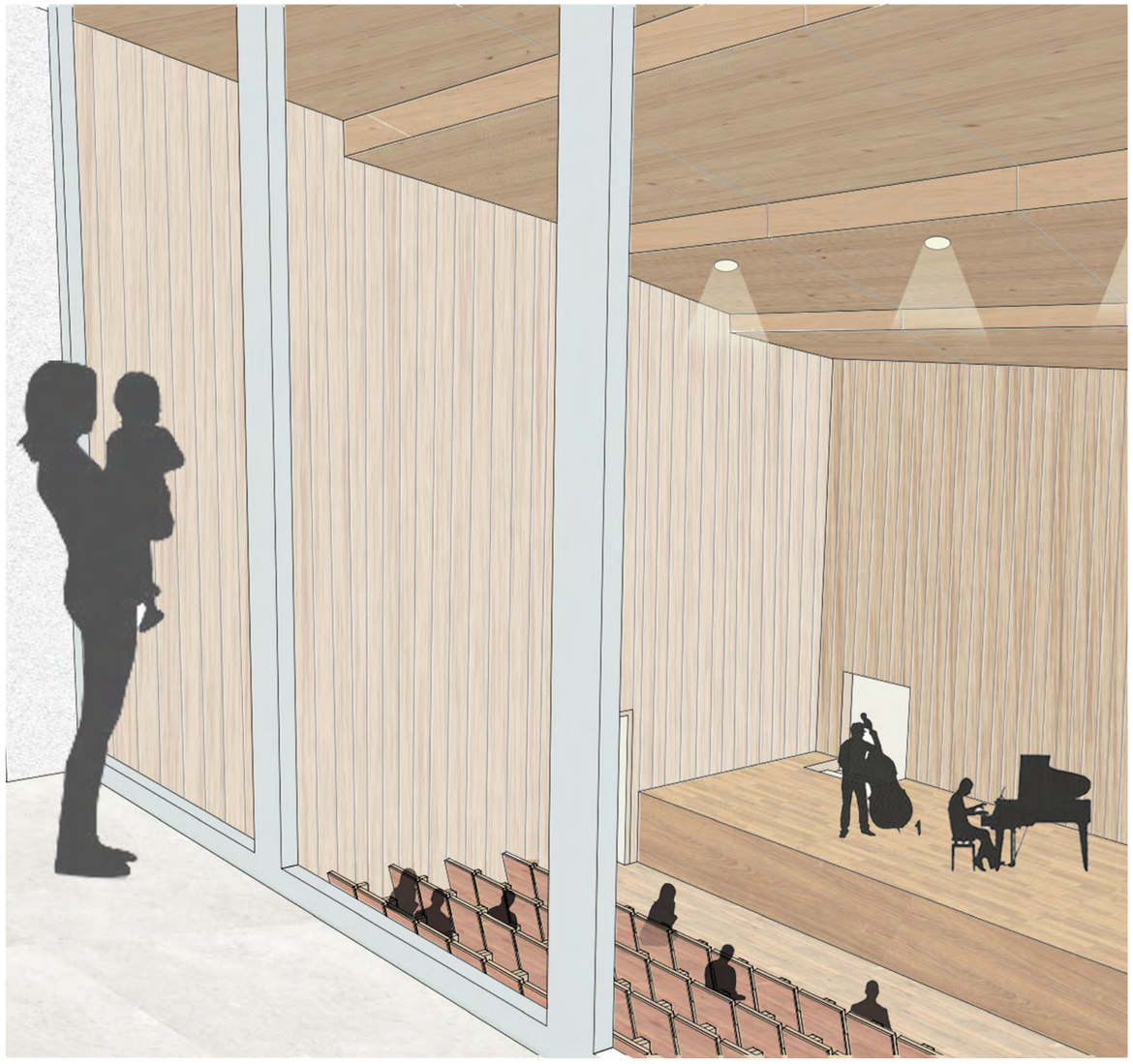


FUNCTIONS DISTRIBUTIONS

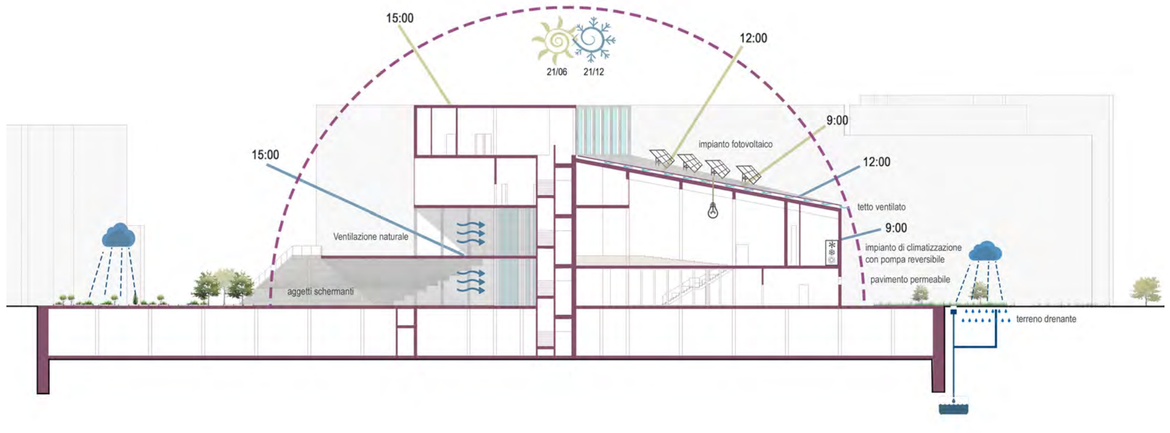
VIEW OF THE GARDENS AND WALKWAY



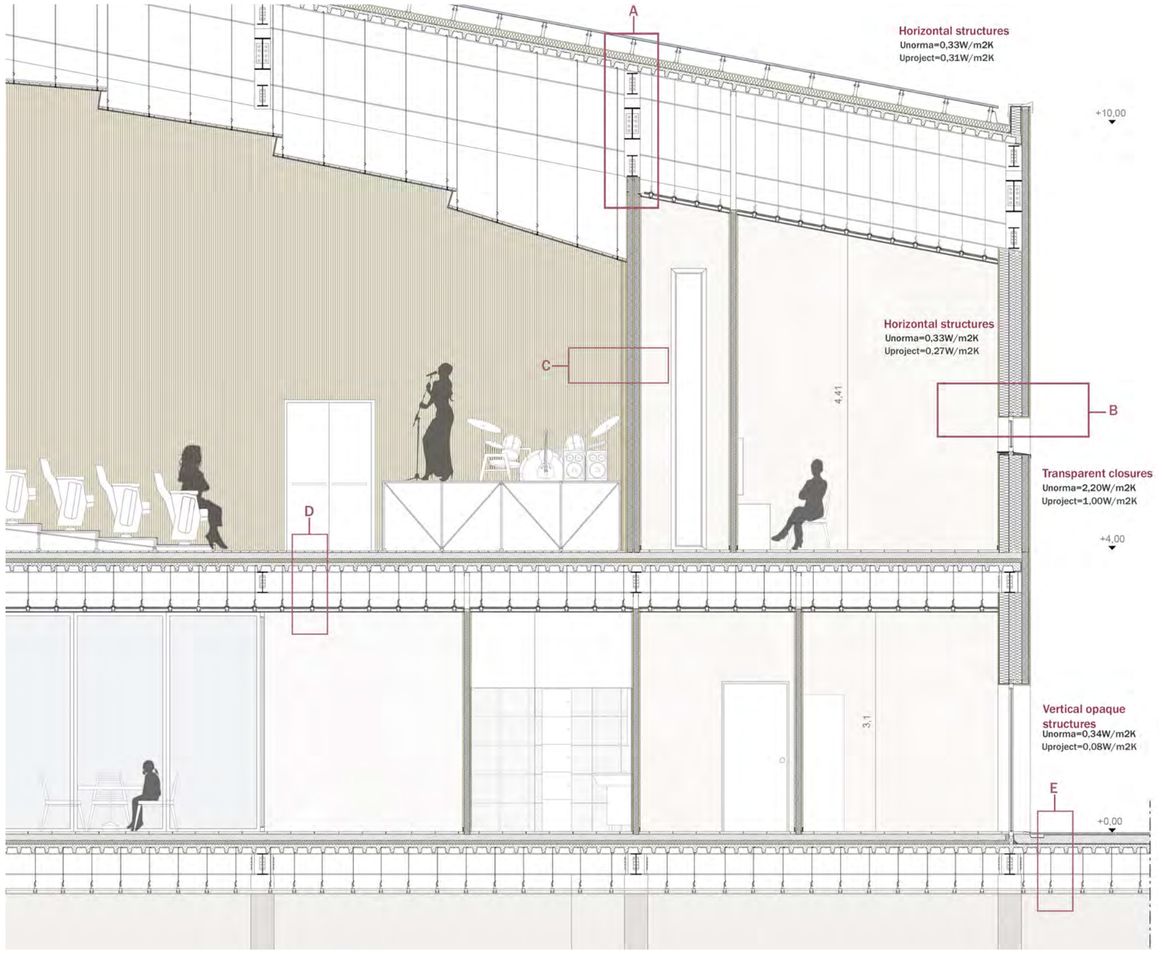
VIEW OF THE GROUND FLOOR OF THE AUDITORIUM



VIEW OF THE AUDITORIUM



ENVIRONMENTAL SECTION



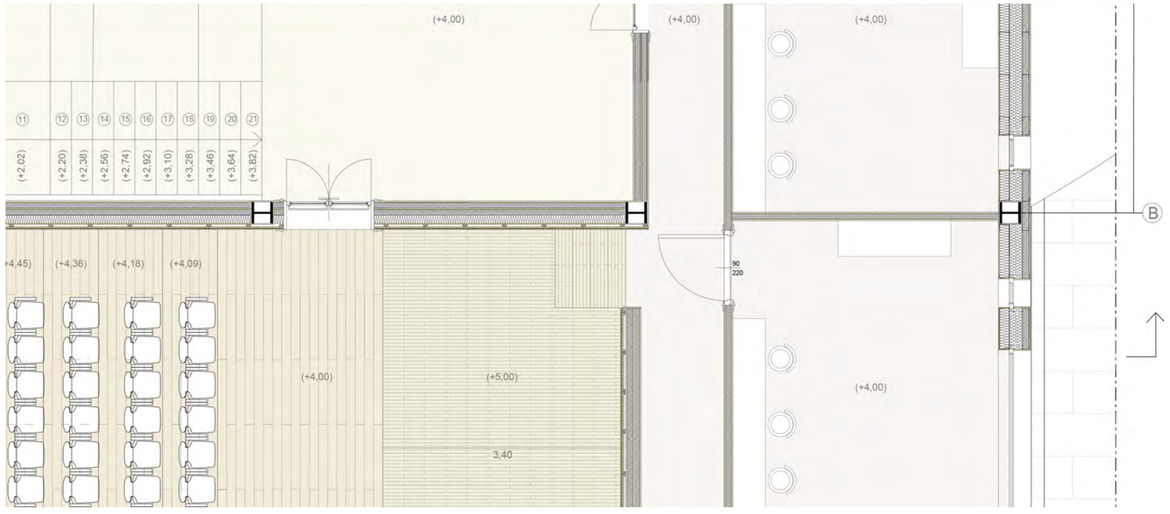
A. False ceiling with metal structure and sound-absorbing wood panels, IPE360 / IPE400 / IPE360 composite reticular beam, cast concrete with corrugated sheet, vapor barrier, thermal-acoustic insulation, ventilation system with vertical supports and steel profiles, steel plate.

B. Aluminum frame, plaster, plasterboard panel, double warping of metal profiles, rock wool insulating layers, plasterboard panel, cement resin sheet, plaster and painting.

C. Cladding in sound-absorbing wooden slats, plasterboard sheet, double warping of metal profiles, rock wool insulating layers, plasterboard sheet, plaster and painting

D. Sound-absorbing wood flooring, mortar layer, expanded clay substrate, rock wool insulation, concrete casting with corrugated sheet, IPE300 beam, false ceiling.

E. False ceiling with high fire resistance panels, IPE300 beam, concrete casting with corrugated sheet, waterproofing layer, draining geocomposite layer, sand layer, slot channel, self-locking concrete block.



INDOOR/OUTDOOR RELATION SCALE 1:50

CARMELA NAPOLITANO - TAKE CARE OF LIMITS

A C.A.M FOR FRATTAMINORE

The intention is to create an urban-agricultural park that connects the area of new residential expansion of Frattaminore with the industrial area that lies behind the project area.
The park provides, in addition to a set of functions of urban nature, the exploitation of land according to their agricultural vocation.
This operation allows to have a direct connection between the elements mentioned above. At same time it guarantees a second connection between the upper part of the residential area and the agricultural park.
Inside the agricultural park a function has been inserted that better connects to the polarities inserted in the context, the C.A.M.
The C.AM. project was born from the need to insert, within Frattaminore, a place of meeting and sociality. This project tries, in addition, to establish continuity between the agricultural fields and the urban fabric.
The green penetrates into the latter becoming an integral part of it and reconstructing the history of the city.
The C.A. consists of two main buildings: the auditorium that is strategically placed at the center of the axis of connection of the elements in relation to the project.
The head building is instead the Palazzetto dello sport, a function that best relates to the existing agricultural fabric.

Program

sport facilities, urban park,
social and culture center

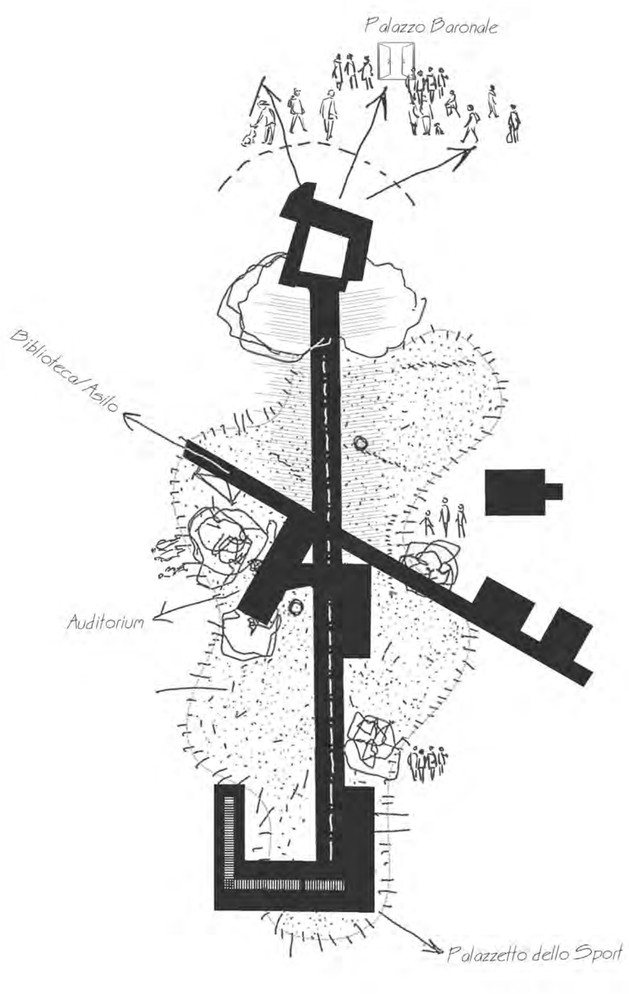
Covered area	**3567m²**
Outdoor area	**135241,52m²**
Above-ground floors	**3**
Built volume	**24571m³**
Estimated cost	**€1142500,98**

In view of a reconnection between the area of new urban expansion and the industrial area, the project proposes the realization of an urban-agricultural park that exploits the presence of existing agricultural fields and that extends to the urban fabric.

The main objective was then to insert within this agricultural park a function that would ensure the reactivation not only of the existing abandoned spaces but also of the functions already present in the area. This function has been identified in the multifunctional aggregation center. The latter, however, does not end within a single building, but consists of several spaces and buildings that together constitute the C.A.M.

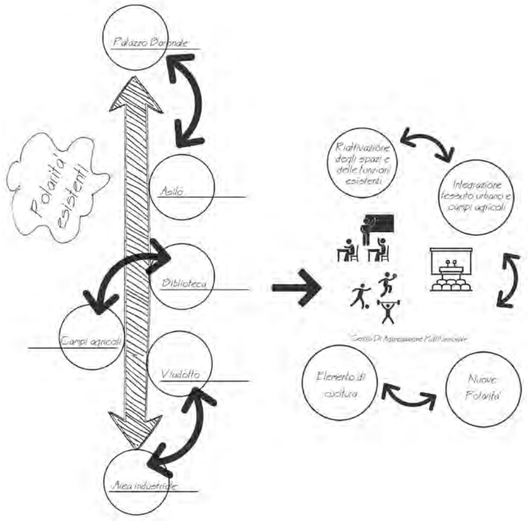
Specifically, we proceeded with the insertion of an auditorium that takes up with its form the main directions present within the urban fabric relating to it and a sports hall that fits between the agricultural fields becoming part integrande of them.

The multifunctional aggregation center gives life to outdoor spaces that in turn generate additional links between the elements previously described and especially collective spaces that can be used by all citizens and not of Frattaminore.



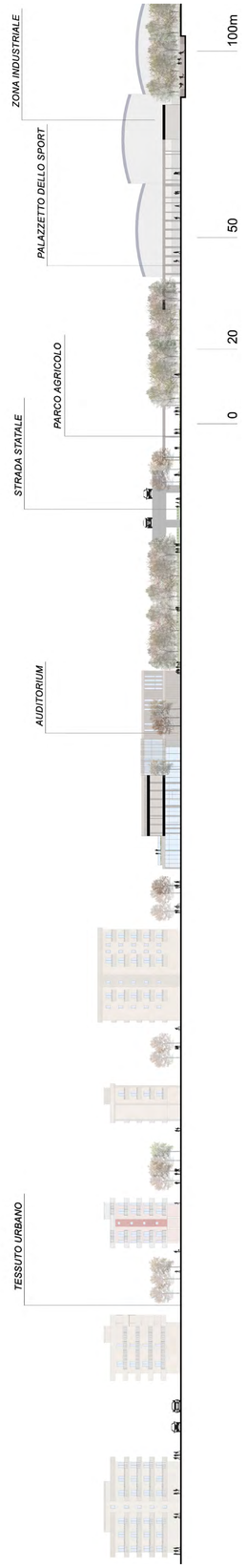
STRATEGY

The project aims to connect the polarities identified within the reference area and those of the project, through two main axes. The first, starting from the Palazzo Baronale and arriving at the sports hall, and the second that connects the library and the kindergarten with the Auditorium and part of the agricult agricultural park.



PROJECT AREA

MASTERPLAN



MASTERPLAN

0 10 25 50m

SECTION A

0 4 10 20m

1. Entrance
2. Lobby
3. Guardian
4. Services
5. Meeting room
6. Cinema room
7. Services
8. Workshops
9. Auditorium
10. Offices
11. Deposits
12. Connections

NORTHERN FRONT

EASTERN FRONT

0 10 25 50m

VIEW

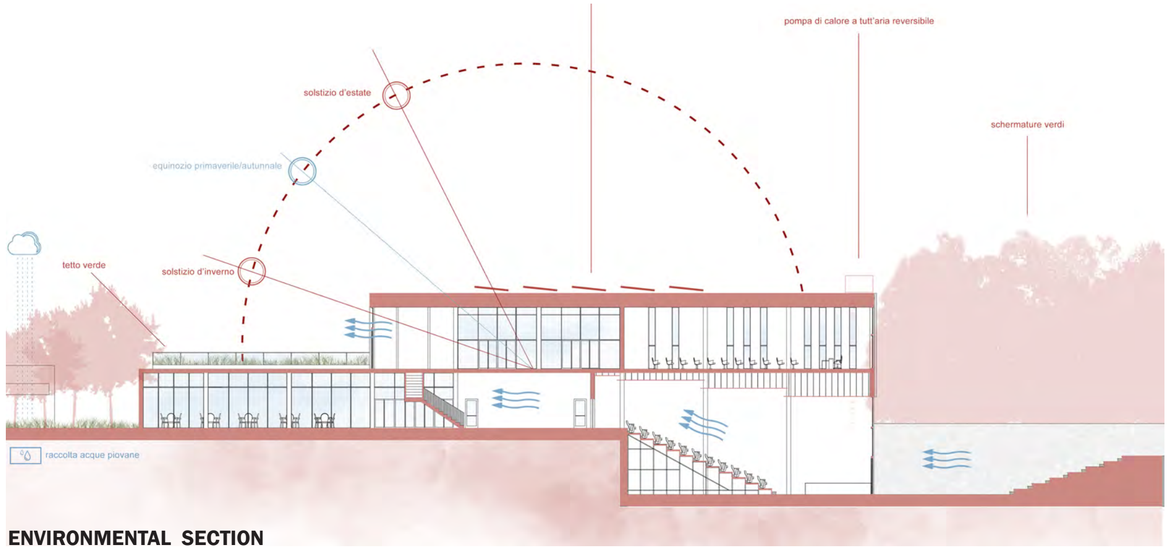
1. HORIZONTAL CLOSURE
Counter-ground floor on aerated crawl space, by means of igloo, vapor barrier and EPS panel, screed, dry subfloor and spruce panel flooring.

2. TRASPARENT VERTICAL CLOSURE
Glazing with frame type “Reynaers CS 59Pa” and with solar control glass “Pilkington Suncool Q”.

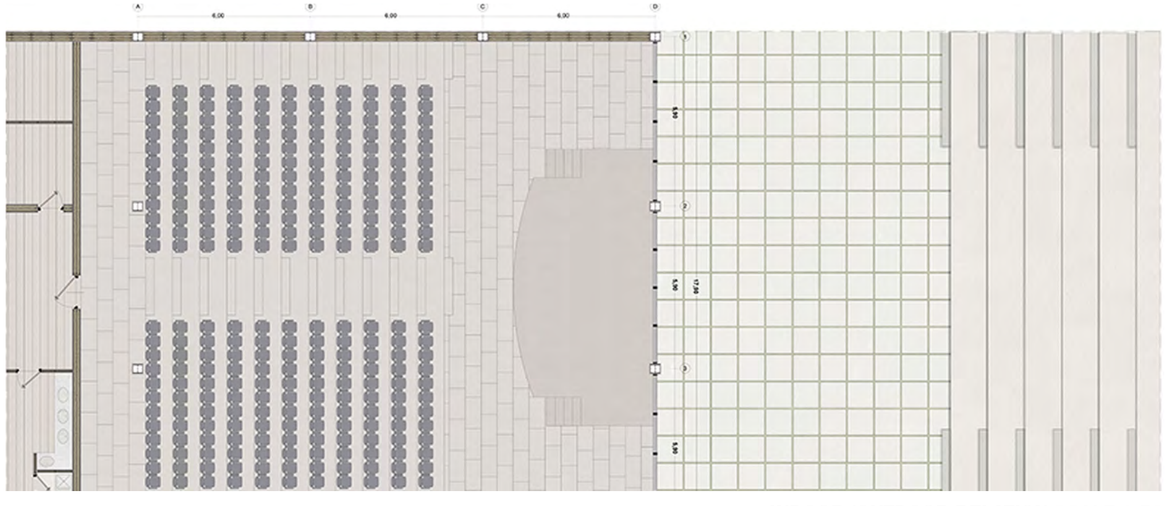
3. FRAME
Glazing with 2-track sliding system with “Reynaers HI-FINITY” type frame and “Pilkington Suncool Q” solar control glass.

4. OPAQUE VERTICAL CLOSURE
Vertical closure composed, from the inside to the outside, of spruce panels, two gypsum boards, 2 layers of rockwool panels, 2 gypsum boards and a spruce panel.

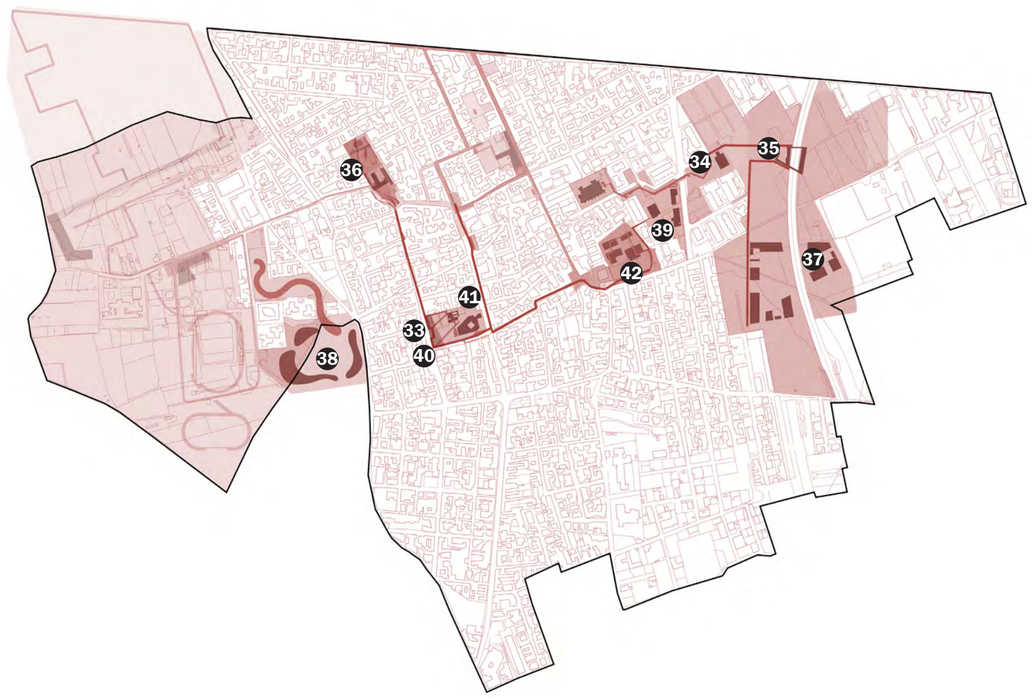
5. HORIZONTAL COVER CLOSURE
Horizontal roof closure made, from the inside to the outside, by panels, dry substrate, screed, EPS panel, corrugated sheet, truss beam, ceiling type “Topakustik Z-Grid” with sound absorbing panels.



ENVIRONMENTAL SECTION



INDOOR/OUTDOOR RELATION SCALE 1:50



PUBLIC EQUIPMENT
ATTREZZATURE DI CARATTERE PUBBLICO

33. Fratta Middle School Francesco Caliendo
34. Take care of the margins Maria Alessandra Desiderio
35. Landmark at the border Caterina Fiscina
36. Linear park Sara Liguori
37. Under the bridge Marta Matarese
38. The city's snake Umberto Molaro
39. Viggiano Multitasking Pasquale Notariello
40. The red wire Imma Perna
41. The red wire Ferdinando Romano
42. Connectiong the opposites Maria Russo

REFERENCES

1. A. Bernieri, P. Miano (eds.), *#CuraCittà Napoli. Salubrità e natura nella città collinare*, Quodlibet, Macerata 2020.

2. C. Bianchetti, *Spazi che contano. Il progetto urbanistico in epoca neo-liberale*, Donzelli, Roma 2016.

3. E. Coccia, *Metamorfosi. Siamo un'unica, sola vita*, Einaudi, Torino 2022, ed. or. *Métamorphoses*, Payot & Rivages, Paris 2020.

4. R. Koolhaas, *Cos'è successo all'urbanistica?*, in Id., OMA, B. Mau, *S,M,L,XL*, The Monacelli Press, New York 1995, ora in Id., *Testi sulla (non più) città*, M. Orazi (ed.), Quodlibet, Macerata 2021.

5. R. Koolhaas, *Junkspace. Per un ripensamento radicale dello spazio urbano*, G. Mastrigli (ed.), Quodlibet, Macerata 2006.

6. R. Koolhaas, "Understanding the new urban condition: the project of the city", in Harvard GDS News, 1996.

7. P. Miano, *L'architettura come cura: i nodi di salubrità nella costruzione dello spazio pubblico contemporaneo*, in id. (ed.), *Healthscape. Nodi di salubrità, attrattori urbani, architetture per la cura*, Quodlibet, Macerata 2021, pp. 23 - 41.

8. P. Miano, "*Vomero, Storkterrein e altri luoghi. Il progetto didattico come ricerca*", Clean, Napoli 2011.

9. T. Morton, *Iperoggetti. Filosofia ed ecologia dopo la fine del mondo*, Nero, Roma 2018, ed. or. *Hyperobjects*, University of Minnesota Press, Minneapolis 2013.

10. G. Pasqui, *La città, i saperi, le pratiche*, Donzelli, Roma 2018.

11. M. Tafuri, *Ludovico Quaroni e lo sviluppo dell'architettura moderna in Italia*, Edizioni di Comunità, Milano 1964.

Next page

Diller Scofidio + Renfro, Roy and Diana Vagelos Education Center, project model (2016)

Pagina seguente

Diller Scofidio + Renfro, Roy and Diana Vagelos Education Center, plastico di progetto (2016)

Teaching experiments have consolidated over time a very important role for the culture of design. One of the main reasons is related to the fact that particularly favorable conditions are established in the design laboratories for trying to converge speculative theories and operational practices. In other words, the conditions are being outlined, as Rem Koolhaas underlined in an issue of *Harvard GDS News*, to try to circumscribe that field in which research and design are «like two things almost linked or laminated together», which, moreover, is increasingly necessary in a general context «in such rapid evolution that, without continuous cross-references, architecture becomes an increasingly inappropriate activity» (Koolhass, 1996).
A research hypothesis supported on several occasions by Pasquale Miano, who found fertile ground for experimentation precisely in the design laboratories, is that of trying to outline an urban transformation scenario as a "derivation" of individual architectural projects. Miano refers, in extreme synthesis, to the possibility of fielding «the *experimental* application of a design technique, aimed at understanding the modifiability of a context starting from the variation of a point», proposing a «*chronological* inversion», in which first works «on the compositional setting, based on an inductive approach», to then verify «the solutions on an urban scale, continuously modifying and interacting with the initial solutions» (Miano, 2011, pp. 32-33). This hypothesis is not only supported by a hoped-for and indispensable advancement of theoretical reflections, but above all by the critical observation of the transformation dynamics of the contemporary city: «in recent decades, at least in Italy, we have had to deal with the ineffectiveness of large urban projects, of which only one piece is created, often too insignificant, but also with the inconsistency of projects incapable of inducing a processuality» (Miano, 2011, p. 24).
The working hypothesis put forward by Miano has proved to be particularly effective and strategic in an area such as that of Frattaminore and, in particular, when one finds oneself having to face, as in the case of the group of projects that will follow, the design problem of the so-called equipment of common interest, within a general identity crisis that the disciplinary notion of public space is going through (Bianchetti, 2016). The reasons for the effectiveness can be found in at least two issues. The first is the impossibility of being able to hypothesize a system of continuous and isotropic public spaces and equipment within a territory in which it is very difficult, using the canonical categories of urban planning, to distinguish between parts of urban, peri-urban and agricultural cities, parts of the consolidated and newly formed city, the public from the private, settlement systems and building typologies. An approach that starts from the particular to reach the general allows, however, to read the territory in its specificity and complexity, rejecting a pre-established and a priori determined holistic and synoptic approach, but above all to start from the infinite contradictions that characterize it, using the latter as valuable project material. In this regard, the reflections of a young Manfredo Tafuri still resonate extremely topical, as he strove to underline the importance of «recognizing the *reality of contradiction*, of the meaning and value of every contradictory situation. Taking upon oneself the contradiction, which is of the world and of society, […] essentially means committing oneself to an ever-living awareness of the present, it means not allowing oneself any idealization in action as in thought», since it is possible «to use that situation contradictory without falling into the pockets of a sterile idealism, discovering, bringing to light the positive traits, the valid aspects that are hidden, by definition, in every contradiction, to find at the same time the tools that will allow us to leverage them and transform them

Le sperimentazioni di natura didattica hanno consolidato nel tempo un ruolo di grande rilievo per la cultura del progetto. Uno dei motivi principali è relativo al fatto che nei laboratori di progettazione si determinano delle condizioni particolarmente favorevoli per provare a far convergere teorie speculative e prassi operative. Si delineano cioè le condizioni, come sottolineava Rem Koolhaas in un numero di *Harvard GDS News*, per provare a circoscrivere quel campo in cui ricerca e progetto sono «come due cose quasi legate o laminate assieme», cosa, peraltro, sempre più necessaria in un contesto generale «talmente in rapida evoluzione che, senza continui riferimenti incrociati, l'architettura diviene un attività sempre più inappropriata» (Koolhass, 1996).
Un'ipotesi di ricerca sostenuta a più riprese da Pasquale Miano, che ha trovato proprio nei laboratori di progettazione terreno fertile di sperimentazione, è quella di provare a delineare uno scenario di trasformazione urbana come "derivazione" di singoli progetti architettonici. Miano fa riferimento, in estrema sintesi, alla possibilità di mettere in campo «l'applicazione *sperimentale* di una tecnica del progetto, finalizzata a comprendere la modificabilità di un contesto a partire dalla variazione di un punto», proponendo una «inversione *cronologica*», in cui prima si lavora «all'impostazione compositiva, basata su un approccio induttivo», per poi verificare «le soluzioni a scala urbana, modificando e interagendo continuamente con le soluzioni iniziali» (Miano, 2011, pp. 32-33). Tale ipotesi non è solo sostenuta da un auspicato quanto indispensabile avanzamento delle riflessioni teoriche, ma soprattutto dall'osservazione critica delle dinamiche di trasformazione della città contemporanea: «negli ultimi decenni, almeno in Italia, si è dovuto fare i conti con l'inefficacia dei grandi progetti urbani, di cui si realizza un solo pezzo, spesso troppo poco significativo, ma anche con l'inconsistenza di progetti incapaci di indurre una processualità» (Miano, 2011, p. 24).
L'ipotesi di lavoro avanzata da Miano si è dimostrata particolarmente efficace e strategica in un territorio come quello di Frattaminore e, in particolare, quando ci si trova a dover affrontare, come nel caso del gruppo di progetti che seguirà, il problema progettuale delle cosiddette attrezzature di interesse comune, all'interno di una generale crisi di identità che sta attraversando la nozione disciplinare di spazio pubblico (Bianchetti, 2016). I motivi dell'efficacia sono da rintracciare in almeno due questioni. La prima è l'impossibilità di poter ipotizzare un sistema di attrezzature e spazi pubblici continui e isotropi all'interno di un territorio in cui è molto difficile, utilizzando le canoniche categorie dell'urbanistica, distinguere tra parti di città urbane, periurbane e agricole, parti di città consolidata e di nuova formazione, il pubblico dal privato, i sistemi insediativi e le tipologie edilizie. Un approccio che parte dal particolare per giungere al generale consente, invece, di leggere il territorio nella sua specificità e complessità, rifiutando un approccio olistico e sinottico precostituito e aprioristicamente determinato, ma soprattutto di partire dalle infinite contraddizioni che lo caratterizzano, utilizzando queste ultime come prezioso materiale di progetto. A tal proposito risuonano ancora estremamente attuali le riflessioni di un giovane Manfredo Tafuri, il quale si sforzava di sottolineare l'importanza del «riconoscimento della *realtà della contraddizione*, del senso e del valore di ogni situazione contraddittoria. Assumere su di sé la contraddizione, che è del mondo e della società, […] significa in sostanza obbligarsi ad una coscienza sempre viva del presente, significa non permettersi nessuna idealizzazione nell'azione come nel pensiero», giacché è possibile «usare quella situazione contraddittoria senza cadere nelle sacche di uno sterile idealismo, scoprendo, portando alla luce i tratti positivi, gli aspetti validi che si nascondono, per definizione, in ogni contraddizione, per

into positivity what was offered by reality as negative» (Tafuri, 1964, p. 13). The second aspect that makes the hypothesis of the urban project as an architectural derivation valid, in my opinion, is related to the interscalar process that such an approach implicitly triggers and to the general dimension of openness and "controlled indeterminacy" of the punctual architectural solution adopted.
This dimension gives the project greater resilience and the ability to adapt to the sudden changes it is subjected to, putting it in a position to deal with the major issues that the present confronts us with: the urgency to rethink our relationship with the environment through the overcoming of the conventional idea of "nature" (Morton, 2018) and possible new forms of cohabitation between species (Coccia, 2022); alternative mappings of a public space increasingly understood as a mobile and dynamic support of plural practices that continuously reshape its characters and meaning (Pasqui, 2018); the questioning of the functionalist idea of an infrastructural network necessary to experiment with the possibilities opened up by the new forms of movement, connection and crossing that are affecting and rewriting the street landscape (Bernieri, Miano, 2020).
The ten projects of this group, operating with the general principles described up to now, acted by grafting themselves into the disjointed and uneven network of public facilities existing in the Frattaminore area, through circumscribed and perimetered project areas as a result of observation and reading, which configure the first project actions, processes and dynamics taking place in the area. Starting from existing facilities, such as schools, urban parks, existing squares, or from waste areas, residual spaces and third landscape spaces, this field of action, this area initially identified was understood as if it were a "node" (Miano, 2021) with a high energy charge and high transformative potential. This node is in fact affected by a double and simultaneous dynamic of *expansion and contraction*: on the one hand it operates as a sort of urban condenser in which different functional programs and possibilities of use converge, spaces open and permeable to the event, in which movement flows and different urban systems; on the other it tries to reverberate its effect by tending to open outwards, through multiple levels of material and immaterial connections, thus triggering a wider and progressively expanding transformative process.
Projects now assimilated by architectural culture such as *Le Fresnoy Art Center* by Bernard Tschumi, the *Seattle Central Library* by OMA, the *City of Culture of Galicia* by Peter Eisenman, are examples of large public buildings which, naturally in very different ways, work using the dual device expansion-contraction. Slightly more recent examples are the *Diana Vagelos Education Center* by Diller Scofidio + Renfro, the project for the *Ciudad del flamenco* by SANAA and the *11th Street Bridge Park* by OMA. In the first example, an urban crossing device is integrated into the functional program of a 14-storey tower intended to house the academic activities of four medical faculties. The continuous ribbon with vertical development, called *Study Cascade*, "hooks" to the classrooms and laboratories, determining a thick threshold with a variable section triggered by the directional thrusts of the multiple movement vectors which seem to converge towards the tower and then reopen towards the city on the basement floor. A large number of collective micro spaces created in the vertical connective tissue add up to the multiple functions related to teaching and research, ideally and physically projecting the building into the city and vice versa.
In the project for the *Ciudad del flamenco* by the SANAA studio, the architecture does not limit itself to spatializing the program, but "induced" it, favoring a further proliferation of the same. The functional program, already complex in

trovare contemporaneamente gli strumenti che permetteranno di far leva su di essi e di trasformare in positività ciò che veniva offerto dalla realtà come negativo» (Tafuri, 1964, p. 13). Il secondo aspetto che renda valida, a mio avviso, l'ipotesi del progetto urbano come derivazione architettonica, è relativo al processo interscalare che un tale approccio implicitamente innesca e alla generale dimensione di apertura e di "indeterminatezza controllata" della soluzione architettonica puntuale adottata.
Tale dimensione conferisce al progetto una maggiore resilienza e capacità di adattamento ai cambiamenti repentini a cui è sottoposto, mettendolo in condizione di confrontarsi con i grandi temi che il presente ci pone di fronte: l'urgenza di ripensare la nostra relazione con l'ambiente attraverso il superamento dell'idea convenzionale di "natura" (Morton, 2018) e possibili nuove forme di coabitazione tra specie (Coccia, 2022); mappature alternative di uno spazio pubblico sempre più inteso come supporto mobile e dinamico di pratiche plurali che ne riplasmano continuamente caratteri e significato (Pasqui, 2018); la messa in questione dell'idea funzionalista di rete infrastrutturale necessarie per sperimentare le possibilità aperte dalle nuove forme di movimento, connessione e attraversamento che stanno interessando e riscrivendo il paesaggio della strada (Bernieri, Miano, 2020).
I dieci progetti di questo gruppo, operando con i principi generali sin qui descritti, hanno agito innestandosi nella disarticolata e disomogenea rete di attrezzature pubbliche esistente nel territorio di Frattaminore, attraverso aree progetto circoscritte e perimetrate a seguito dell'osservazione e della lettura, che di fatto configurano le prime azioni di progetto, dei processi e delle dinamiche in atto sul territorio. Partendo da attrezzature esistenti, come scuole, parchi urbani, piazze esistenti, oppure da aree di scarto, spazi residuali e di terzo paesaggio, questo campo d'azione, questa zona inizialmente individuata è stata intesa come fosse un "nodo" (Miano, 2021) con un'elevata carica energetica e ad elevato potenziale trasformativo. Tale nodo è infatti interessato da una dinamica doppia e simultanea di *espansione e contrazione*: da un lato opera come una sorta di condensatore urbano in cui convergono differenti programmi funzionali e possibilità d'uso, spazi aperti e permeabili all'evento, in cui si incrociano flussi di movimento e differenti sistemi urbani; dall'altro cerca di riverberare il suo effetto tendendo ad aprirsi, attraverso molteplici livelli di connessioni materiali e immateriali, verso l'esterno, innescando in tal modo un processo trasformativo più ampio e in progressiva espansione.
Progetti ormai assimilati dalla cultura architettonica come *Le Fresnoy Art Center* di Bernard Tschumi, la *Seattle Central Library* di OMA, la *City of Culture of Galicia* di Peter Eisenman, sono esempi di grandi edifici pubblici che, naturalmente con modalità molto diverse, lavorano adoperando il dispositivo duale espansione-contrazione. Esempi un po' più recenti sono invece il *Diana Vagelos Education Center* di Diller Scofidio + Renfro, il progetto per la *Ciudad del flamenco* di SANAA e l'*11th Street Bridge Park* di OMA. Nel primo esempio un dispositivo di attraversamento urbano viene integrato al programma funzionale di una torre di 14 piani destinata ad accogliere le attività accademiche di 4 facoltà di area medica. Il nastro continuo a sviluppo verticale, denominato *Study Cascade*, si "aggancia" alle aule e ai laboratori, determinando una spessa soglia a sezione variabile innescata dalle spinte direzionali dei molteplici vettori movimento che sembrano convergere verso la torre, per poi riaprirsi verso la città al piano basamentale. Alle molteplici funzioni legate alla didattica e alla ricerca si sommano un elevato numero di micro-spazi collettivi ricavati nel tessuto connettivo verticale, proiettando idealmente e fisicamente l'edificio nella città e viceversa.
Nel progetto per la *Ciudad del flamenco* dello

Next page

OMA, 11th Street Bridge Park, project drawing (2014)

SANAA, Ciudad del flamenco, project diagram (2003)

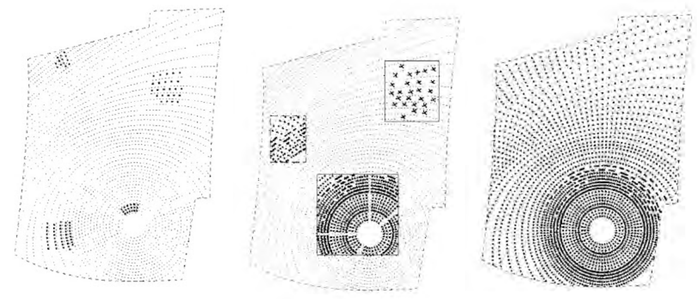
SANAA, Ciudad del flamenco, project model (2003)

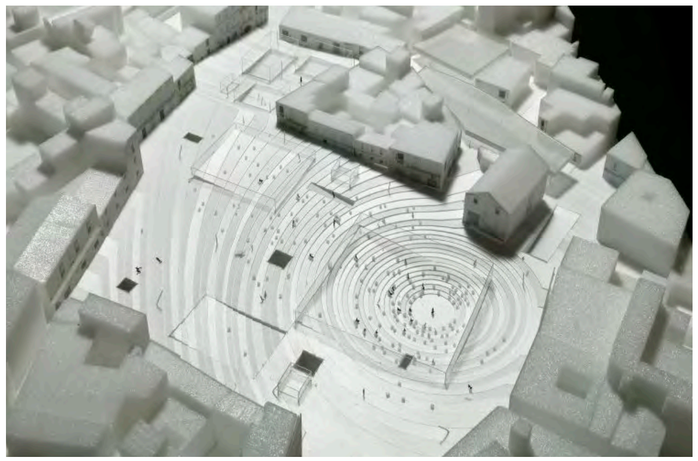
Pagina seguente

OMA, 11th Street Bridge Park, disegno di progetto (2014)

SANAA, Ciudad del flamenco, diagramma di progetto (2003)

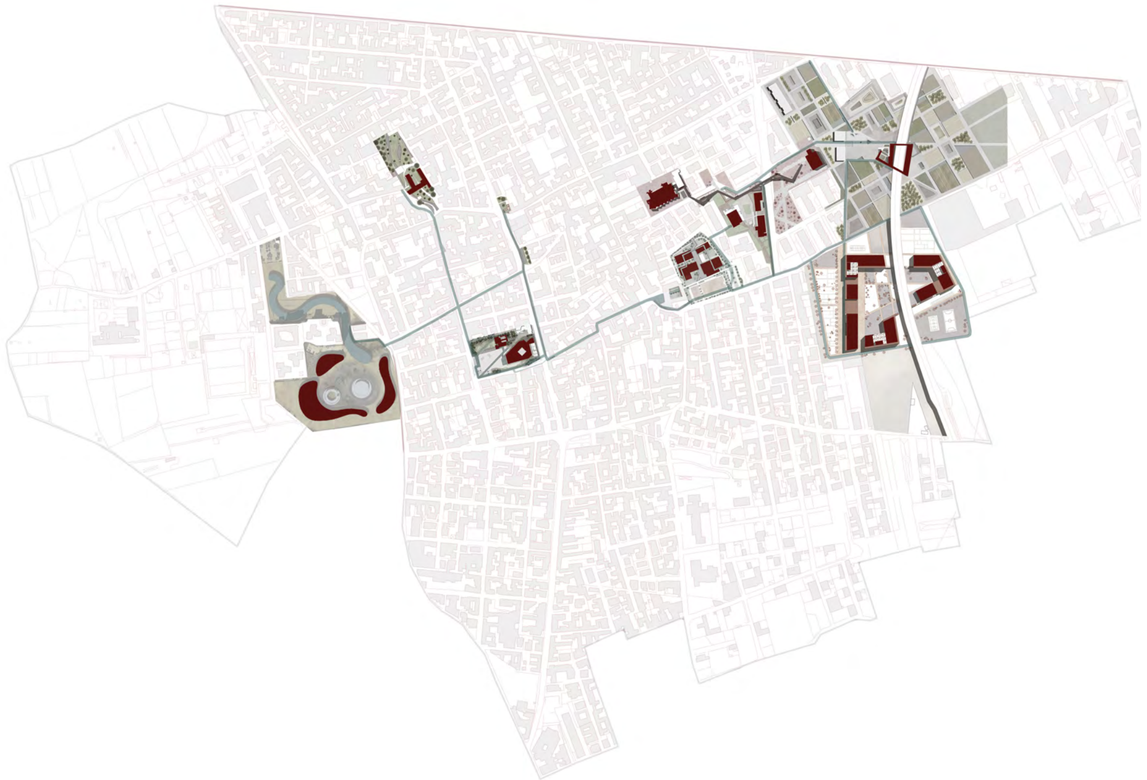
SANAA, Ciudad del flamenco, plastico di progetto (2003)





itself (ballrooms, theatres, workshops, dance school, auditoriums, research centers and a museum), is imagined as something that can further grow with unforeseen uses. However, SANAA's strategy does not focus on creating a full space inside the project reservoir, but, as Sejima and Nishizawa point out, "activating the existing void", that is proposing again, in fact, a space "open". The hypothesis of the large container in which to condense the functional program is excluded and the decision is made to redevelop a wider area than initially envisaged, displacing the program in the open space and distributing the required activities, as well as in new added volumes, even in existing unused buildings.
In the third example, the design problem to be faced by the OMA studio is that of imagining an infrastructure that is at the same time a large multifunctional public space. The challenge then becomes to completely dissolve the distinction between the connective system (movement) and functional program (stasis), between serving spaces and served spaces, arriving at obtaining a space with a high urban density. According to Koolhaas it is possible «to accommodate a heterogeneous proliferation of events in a single container», by developing «a strategy to organize both their independence and their interdependence within a larger entity [...]. Through contamination rather than through purity [the function is freed] from its defensive armor allowing a sort of liquefaction: elements of the program react with each other to create new events» (Koolhass, 2006, p. 21). The intersection of two inclined plates proposed as a solution to the compositional problem for the *11th Street Bridge Park*, then configures precisely an architectural action aimed at the possibility of combining programmatic complexity and free movement together, configuring a scenario in change in which it is not possible to clearly separate the infrastructure from the public space.
Expansion and contraction, as these examples show, can, ultimately, be understood as two possible design operators of a dual nature to implement the hypothesis of urban design as an architectural derivation, in short, to try to take charge of new possible declinations of the same. Because as Koolhaas always wrote in the mid-nineties, if an urban dimension of design still exists, «it will not be based on the twin fantasies of order and omnipotence, but will consist of a scenario of uncertainty. His task will no longer concern the arrangement of more or less permanent objects, but will be to bring water to areas rich in potential. It will no longer aim at stable configurations, but at the creation of fields that are capable of accommodating processes that refuse to be crystallized in definitive forms. It will no longer be a question of detailed definitions, of imposed limits, but of expanding concepts, rejecting boundaries, and not of separating and identifying entities, but of discovering unmentionable hybrids. His only obsession will no longer be the city, but the manipulation of infrastructure with a view to continuous intensification and diversification, shortcuts and redistribution – the reinvention of a psychological space. […] Being out of control, the urban is about to become the most important vector of imagination. [...] We used to build sand castles, now we swim in the sea that swept them away» (Koolhaas, 2021, pp. 66-67). Perhaps today, as the projects developed by the students for Frattaminore show, we can think of ourselves as a little more ready to explore, with awareness and without nostalgia for a past now behind us, the impervious waters of this sea and try to glimpse new, perhaps unforeseen horizons and completely unexpected.

studio SANAA, l'architettura non si limita a spazializzare il programma, ma lo "induce", favorendo una ulteriore proliferazione dello stesso. Il programma funzionale, già di per sé complesso (sale da ballo, teatri, laboratori, scuola di danza, auditorium, centri di ricerca e un museo), viene immaginato come qualcosa che può ulteriormente accrescersi con usi imprevisti. La strategia di SANAA non si concentra però sulla creazione di un pieno all'interno dell'invaso di progetto, ma, come precisano Sejima e Nishizawa, "attivando il vuoto esistente", ovvero proponendo ancora, di fatto, uno spazio "aperto". Viene esclusa l'ipotesi del grande contenitore in cui far condensare il programma funzionale e viene scelto di riqualificare una zona più ampia di quella prevista inizialmente, dislocando il programma nello spazio aperto e distribuendo le attività richieste, oltre che in nuovi volumi aggiunti, anche in edifici esistenti inutilizzati.
Nel terzo esempio il problema progettuale da affrontare per lo studio OMA è quello di immaginare un'infrastruttura che sia allo stesso tempo un grande spazio pubblico polifunzionale. La sfida allora diventa dissolvere completamente la distinzione tra sistema connettivo (movimento) e programma funzionale (stasi), tra spazi serventi e spazi serviti, arrivando ad ottenere uno spazio ad elevata densità urbana. Secondo Koolhaas è possibile «accogliere una proliferazione eterogenea di eventi in un unico contenitore», sviluppando «una strategia per organizzare sia la loro indipendenza che la loro interdipendenza all'interno di un'entità più vasta […]. Attraverso la contaminazione piuttosto che attraverso la purezza [si libera] la funzione dalla sua armatura difensiva permettendo una sorta di liquefazione: elementi del programma reagiscono uno con l'altro per creare nuovi eventi» (Koolhass, 2006, p. 21). L'intersezione di due piastre inclinate proposta come risoluzione del problema compositivo per l'*11th Street Bridge Park*, configura allora proprio un'azione architettonica rivolta alla possibilità di combinare insieme complessità programmatica e libero movimento, configurando un scenario in mutamento in cui non è possibile scindere chiaramente l'infrastruttura dallo spazio pubblico. Espansione e contrazione, come mostrano questi esempi, possono essere in definitiva intese come due possibili operatori progettuale di natura duale per mettere in atto l'ipotesi del progetto urbano come derivazione architettonico, per provare insomma a farsi carico di nuove possibili declinazioni dello stesso. Perché come scriveva sempre Koolhaas a metà anni novanta, se una dimensione urbana del progetto ancora esisterà, «non sarà basata sulle fantasie gemelle di ordine e onnipotenza, ma consisterà in uno scenario di incertezza. Il suo compito non riguarderà più la sistemazione di oggetti più o meno permanenti, ma sarà di portare acqua a territori ricchi di potenzialità. Non mirerà più a configurazioni stabili, ma alla creazione di campi che siano capaci di accogliere processi che rifiutano di essere cristallizzati in forme definitive. Non sarà più questione di minuziose definizioni, di limiti imposti, ma di espandere concetti, respingere confini, e non di separare e identificare delle entità, ma di scoprire gli ibridi innominabili. La sua unica ossessione non sarà più la città, bensì la manipolazione di infrastrutture in vista di continue intensificazioni e diversificazioni, scorciatoie e ridistribuzioni – la reinvenzione di uno spazio psicologico. […] Essendo fuori controllo, l'urbano sta per diventare il più importante vettore di immaginazione. […] Facevamo castelli di sabbia, ora nuotiamo nel mare che li ha spazzati via» (Koolhaas, 2021, pp. 66-67). Forse oggi, come mostrano i progetti elaborati dagli studenti per Frattaminore, possiamo pensarci un po' più pronti a esplorare, con consapevolezza e senza nostalgia per un passato ormai alle spalle, le impervie acque di questo mare e provare a scorgere nuovi orizzonti, magari imprevisti e del tutto inattesi.



Next page

Design Strategy, Team 5, drawing by Chiara Barone and Francesco Caliendo

Pagina seguente

Strategia di progetto, Gruppo 5, disegno di Chiara Barone e Francesco Caliendo

FRATTAMINORE ADVANCED DESIGN STUDIO

FRANCESCO CALIENDO - FRATTA MIDDLE SCHOOL

A GIVE BACK OF SPACE TO THE CITY

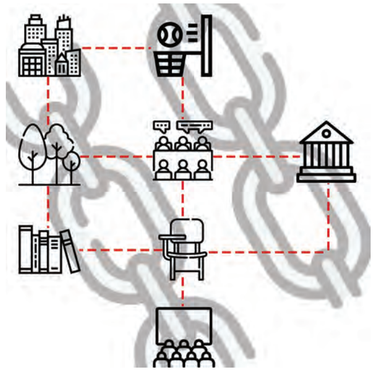
The project is based on the recovery of an area adjacent to the municipality of Frattaminore, in Via Di Vittorio. This area once housed one of the city's most important schools, given its central location, but is now in a state of decay and abandonment: the area is now occupied by a building site for the dismantling of the old school, completely overgrown with uncultivated plants and tall trees. The only distinguishable elements are the gymnasium with outdoor concrete fields and a basement of the school. These will be the main matrix of the project concept.
The aim of the project is therefore the reopening and restitution of this area to the town, through the grafting of a system of hypogeal squares on three levels (street level and two levels in the hypogeal) that follow the conformation of the state of the area, thus also maintaining a historical memory. Furthermore, the construction of two buildings is foreseen: the first building is a high school, including an auditorium, library and extracurricular laboratories; the second is a gymnasium with a regulation basketball court, which can be used not only by the students, but also by people from outside the educational environment, located at a height of -8m from the road level and covered by an extensive green roof, which can give continuity to the park above. The la st point is the recovery of the "former gymnasium" building, which is reconfigured as the town hall's council chamber and connected to the other buildings by a bridge that acts as the "backbone" of the system.

Program

school, gym and council chamber of the municipality

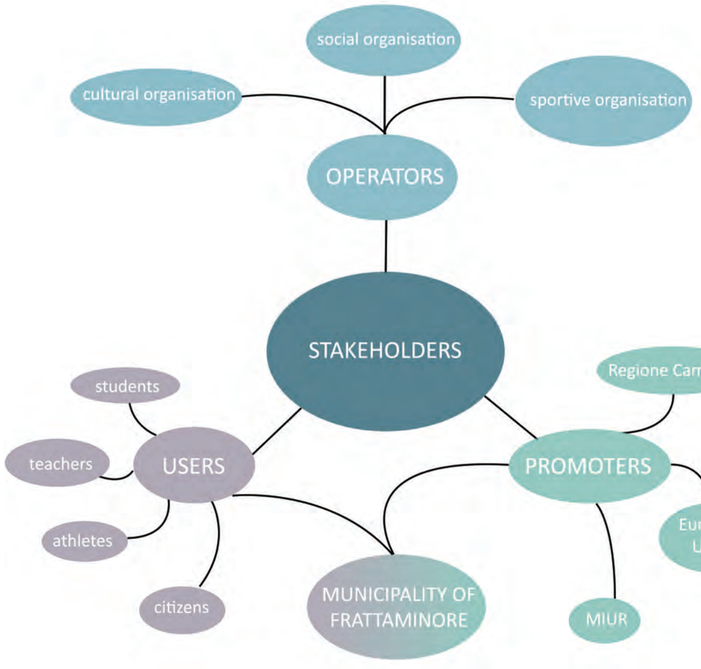
Covered area	**3746 m²**
Outdoor area	**6737m²**
Above-ground floors	**4**
Built volume	**49496 m³**
Estimated cost	**€ 11.082.074,54**

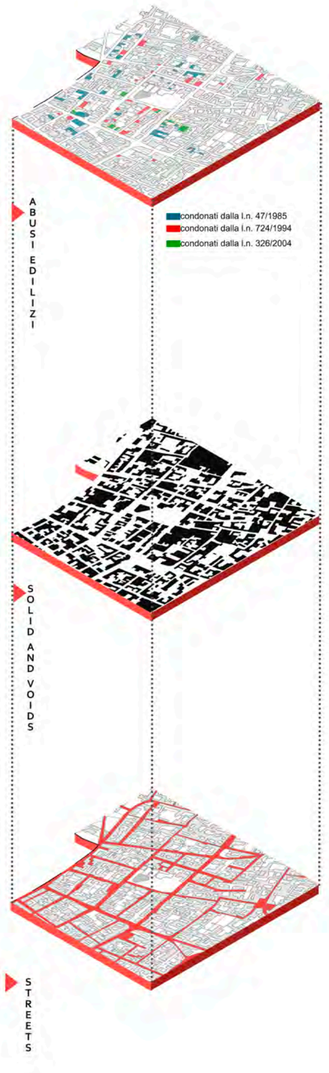
Insertion of the project within the urban context as a tool for recovery and functional reconnection, opening up to the city, connecting with the municipal house creating a system of interconnections, green areas and space for public use.



The theme of connections is a theme that develops both in plan and in elevation. A strong characterisation is given in the plan by the bridge, which cuts diagonally across the area in question, reopening to the city a part that is no longer appreciable as it is today. Here the bridge has a dual function as a connection and as a crossing of the square below, which develops underground.

The vertical connections, on the other hand, ensure that everyone can use the spaces. The former gymnasium is connected to the new gymnasium in the hypogeum by a system of stairs and lifts; the hypogeum square is in turn accessible by lifts inside the school building. In addition, the theme of the "vertical square" is developed in the school building, through the development of a vertical distribution system around a central atrium, which is distributed at full height.

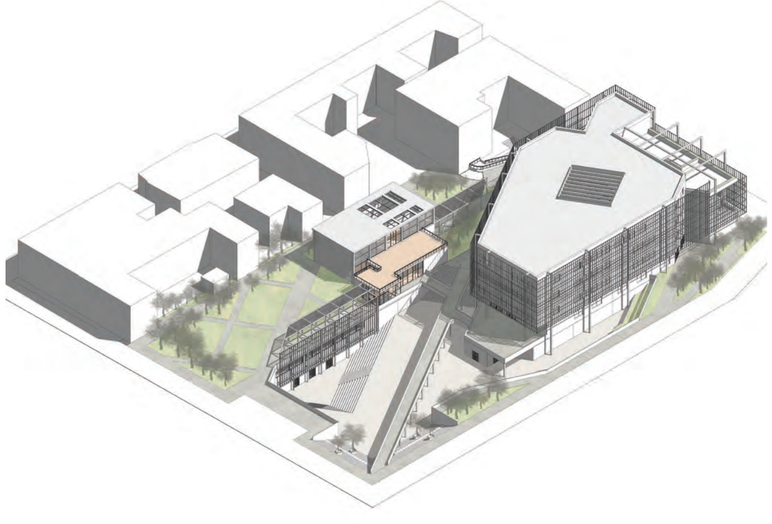




URBAN DIAGRAM

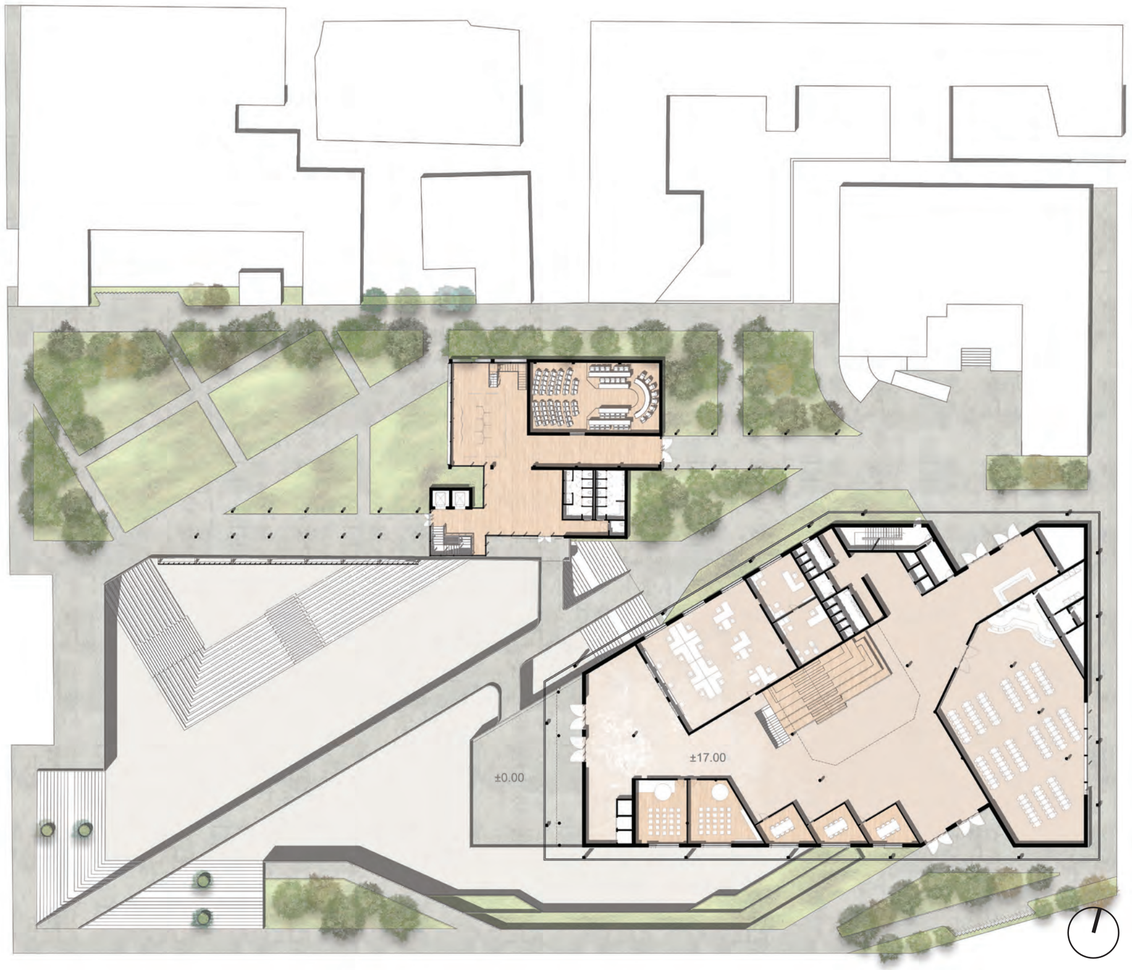
On the top we find the stakeholder diagram, useful to understand the relationships between the project and those who will use it.
From the management point of view, it is therefore envisaged that there will be a part of public management by the Municipality of Frattaminore, the Ministry of Education, Universities and Research and the Campania Region, and a part of private management by local entrepreneurs, theatre and cultural associations.
On the right, instead, we can find an exploded diagram that contains the study of building abuses, solids and voids and roads

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY 0 20 50 100m



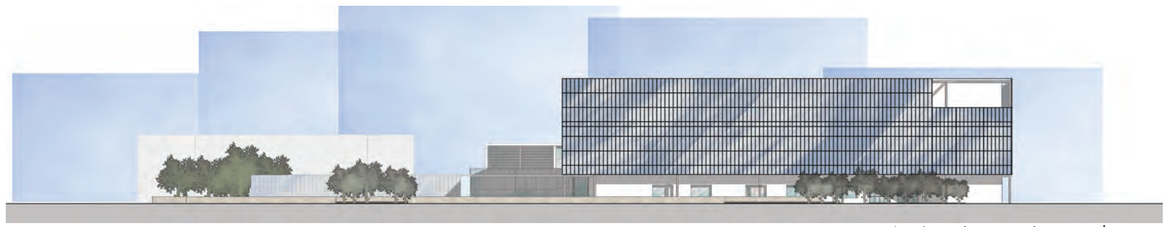
AXONOMETRY

Through this axonometric view on the side it is possible to understand the volumetric development of the project and the relationship between the bridge and the buildings.



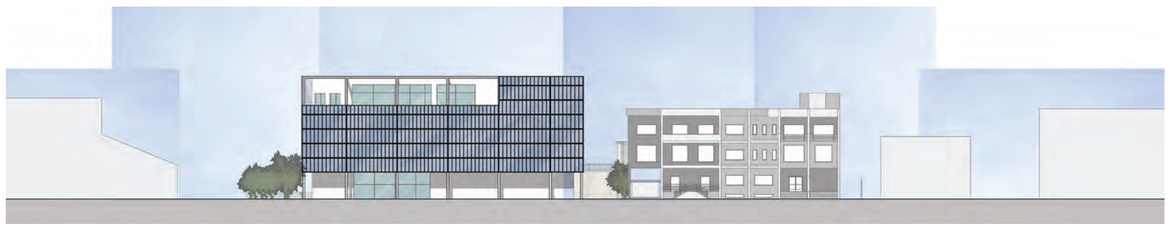
GROUND FLOOR PLAN

0 10 25 50m



SOUTHERN FRONT

0 4 10 20 30m



EASTERN FRONT

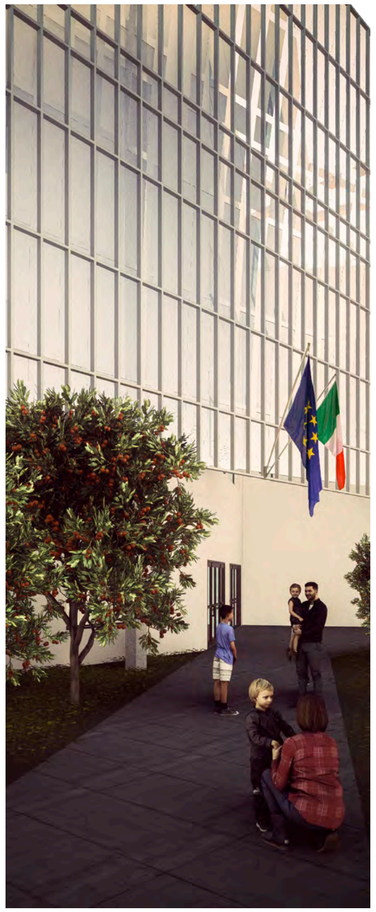
0 4 10 20 30m

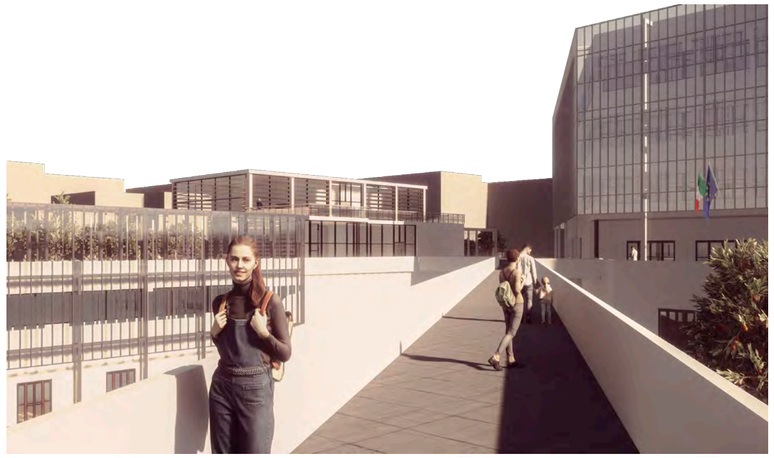
SECTION A-A

0 4 10 20 30m

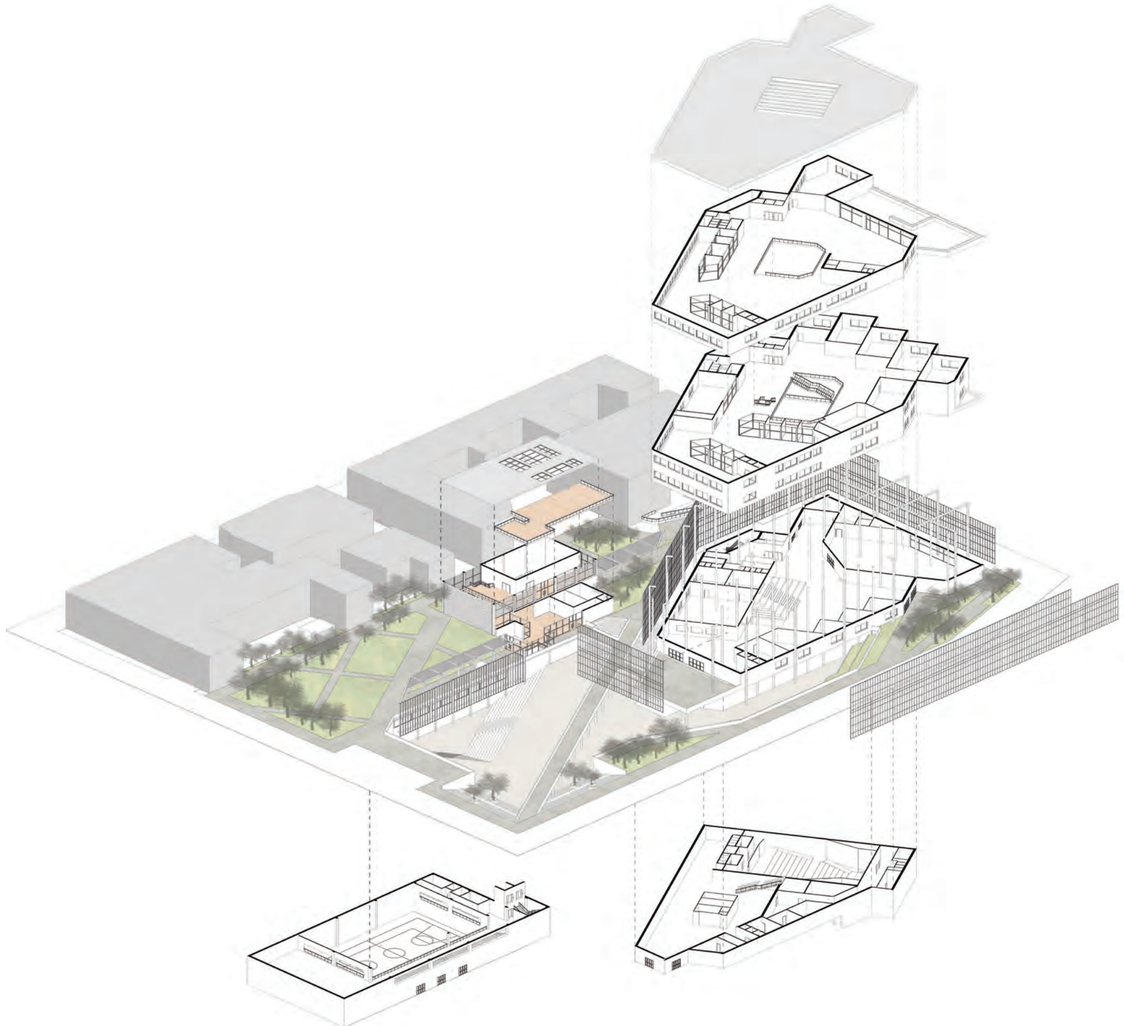
SECTION B-B

0 4 10 20 30m

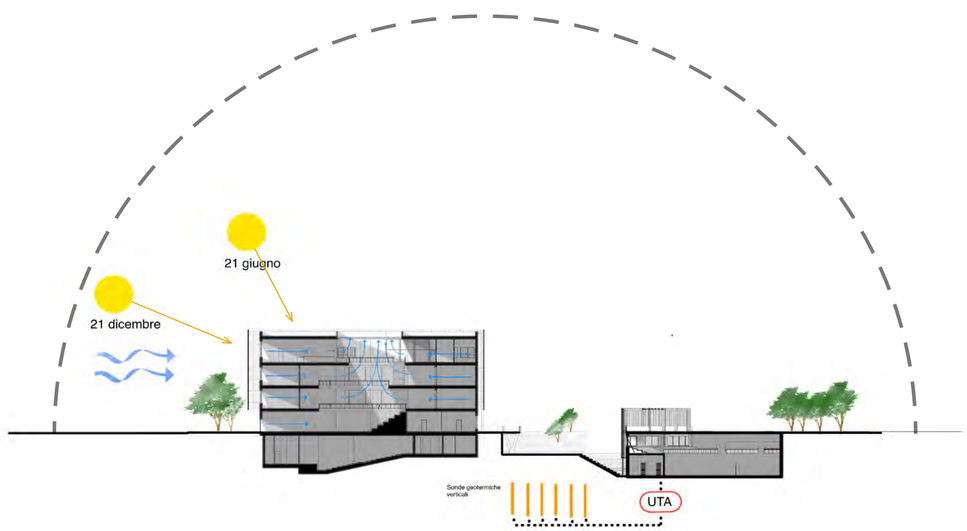




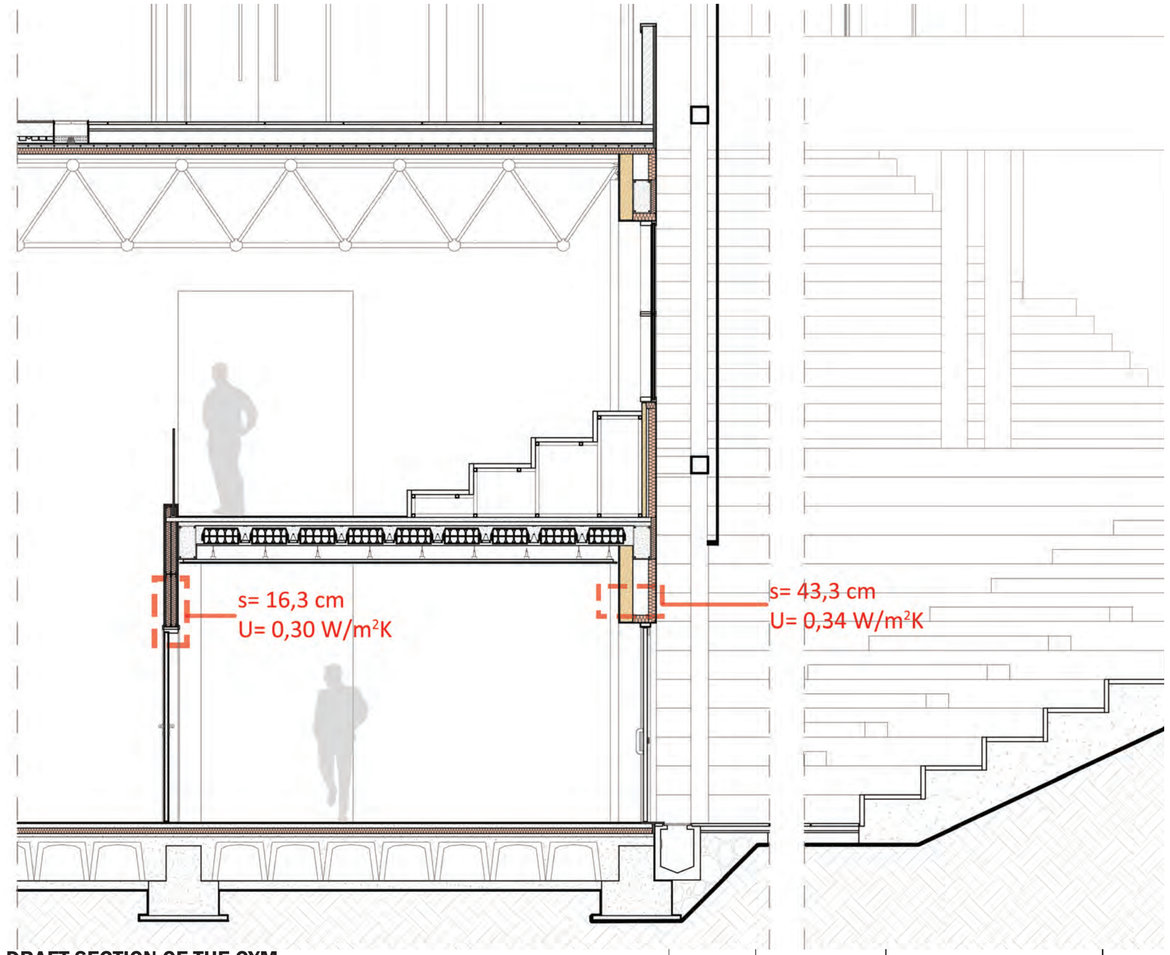
RENDERS



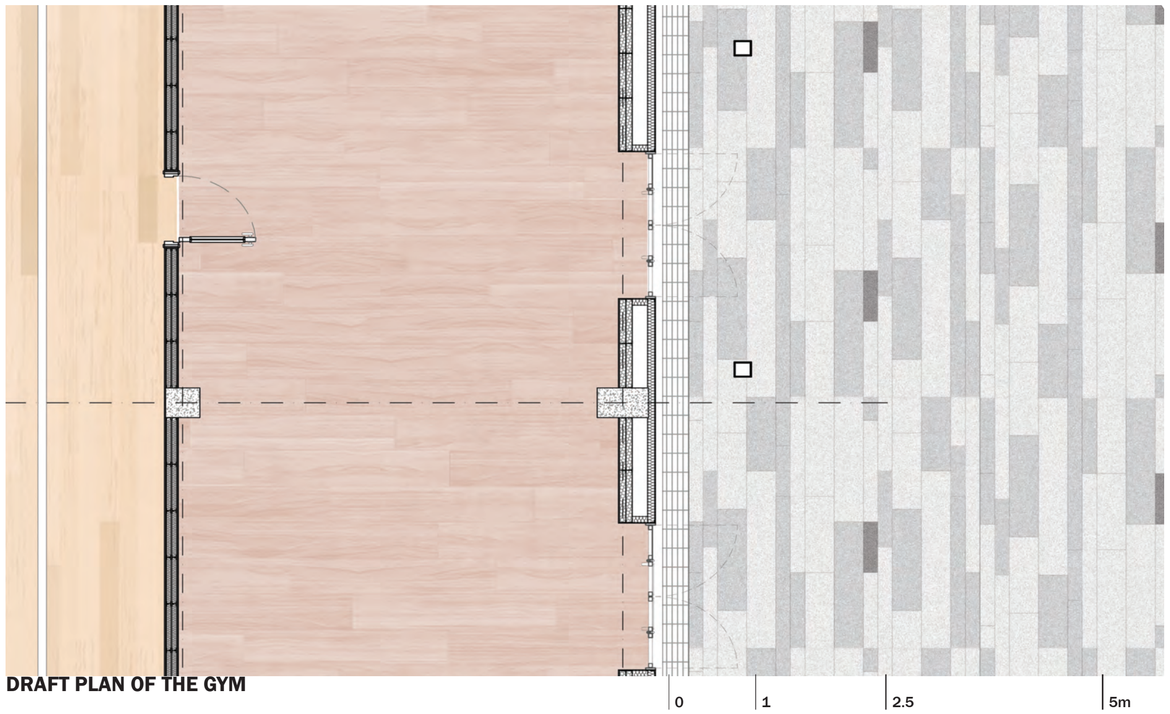
EXPLODED AXONOMETRIC DIAGRAM



ENVIROMENTAL SECT



DRAFT SECTION OF THE GYM



DRAFT PLAN OF THE GYM

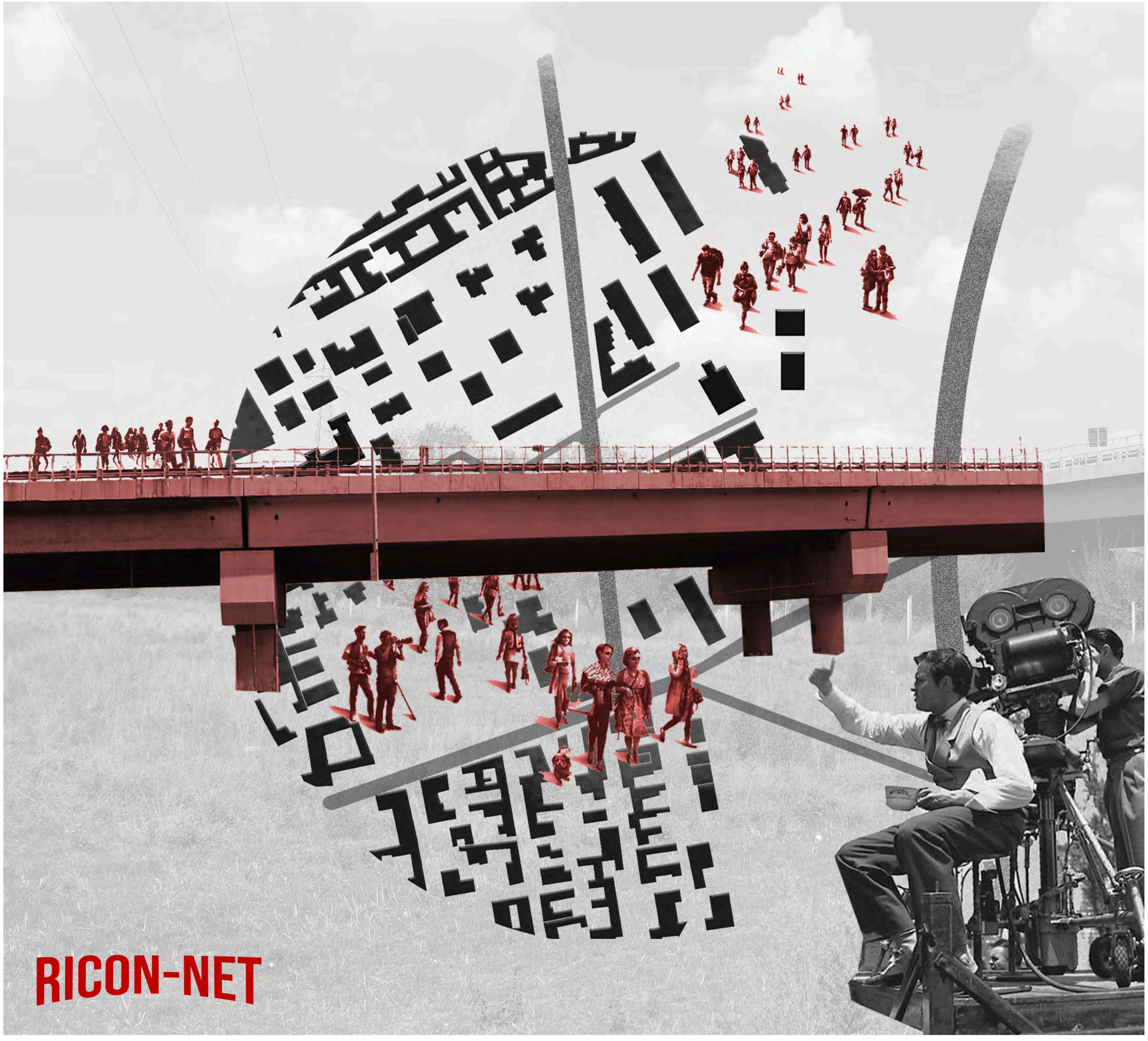
Ricon-NET originates from an accurate analysis of the municipal urban plan, altogether with the sensation felt during the site visit.
The project area focuses on the western side of Frattaminore, at the borders of the town (PEEP in the site of Viggiano). The area is characterized by a complete lack of public spaces and equipped parks for the community; the only green areas are highly degraded and completely abandoned. The first milestone was to find the right place inside the PEEP, which resulted in being an empty urban space, compared to the near highly urbanized context.
In the immediate surroundings, there are the only public spaces of the western side of the town: Istituto Colombo, and the recently built kindergarten.
These educational spaces represent the opposite geographically poles of the empty urban area that is roughly interrupted by the roads of Via Turati. The current state of affairs is also reflected, although amplified, by the fracture the Asse Mediano causes nearby. The themes of the urban emptiness and the fractures created by the roads intersect when fulfilling the community urges.
These considerations lead to the project, whose objective is to realize an urban infrastructure capable of symbolically mend and reconnect spaces, working side to side with the Asse Mediano but fundamentally opposing to it.
The infrastructure rests on already existing plots, generating an urban connection, a pedestrian crossing that turns into a new urban space. The latter is characterized by the development of a new municipal cinema and polyfunctional areas, to ensure the suburban area becomes an urban connector.

Program

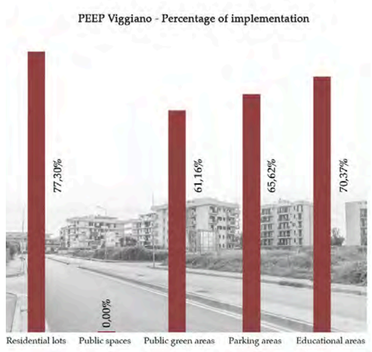
pedestrian infrastructure, urban park

municipal cinema

Covered area	**2146m²**
Outdoor area	**17520m²**
Above-ground floors	**2**
Built volume	**15100m³**
Estimated cost	**6.566.353,00€**



The morphological development of the urban connection is brought as an answer for the complex and chaotic road network and the educational buildings, which are still hardly reachable. The establishment of a pedestrian walkway inside the schools evokes a new concept of education, claiming the essence of public structure with an opening towards the city.



The pedestrian walkway acts as an actual walkway, but, when in some specific points branches out, it also creates pedestrian areas of pause. These, on a lower ground level, becomes urban interiors through is possible to reach the underneat where there is the cinema. The municipal cinema is designed in ipogeo and is caracterized by net cuttings genereted by marked walls in contrast with the portable and versatile textile softwalls, made from recycled materials.

The use of exposed concrete allows to enhancing the materiality of the ipogeo.

The harmonic material contrast between the concrete of the square and the steel of the walkway brings new social opportunities. It becomes an attraction not only for the inhabitants of the city but also for the neighboring municipalities. Thus, the Frattaminore border becomes a renewed urban pole as a reaction to the local community necessities, replacing the former urban emptiness with an appealing equipped park.

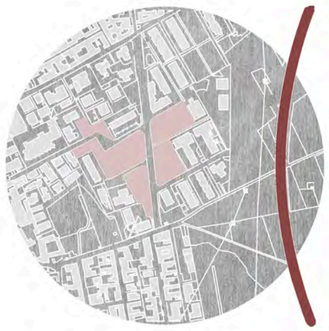
Urban planning provided by the PUC

- Redesign of green areas
- Parking areas
- Public equipped parks
- Municipal cinema

URBAN ANALYSIS

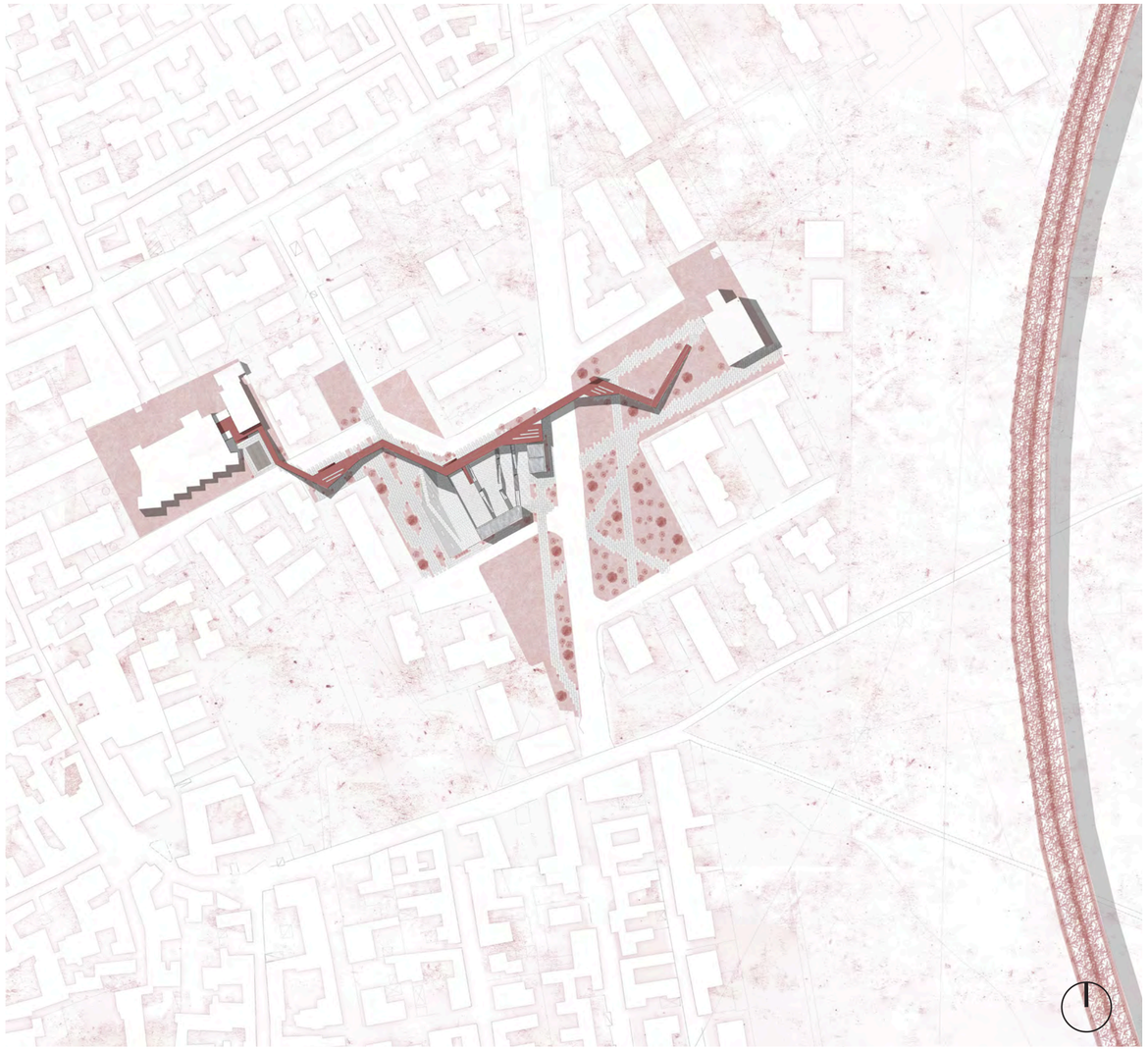
Urban analysis began with a study of empty spaces, infrastructures, public places and plans of the PUC for the area of interest.

PHASE 1



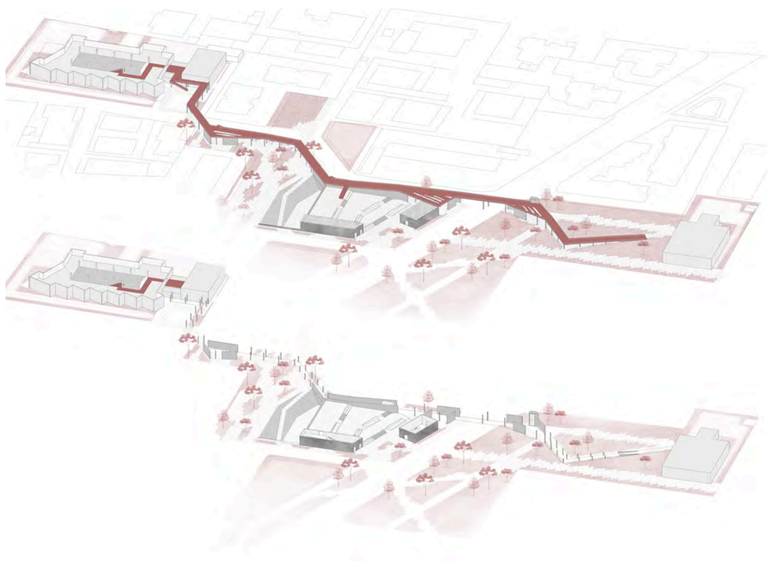
PHASE 2

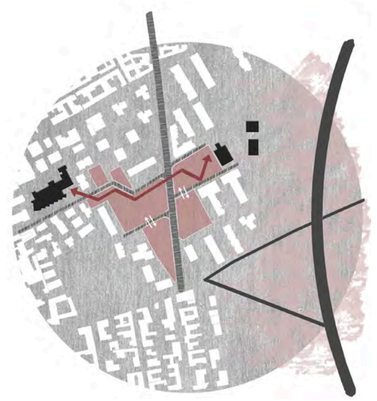
PHASE 3



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m





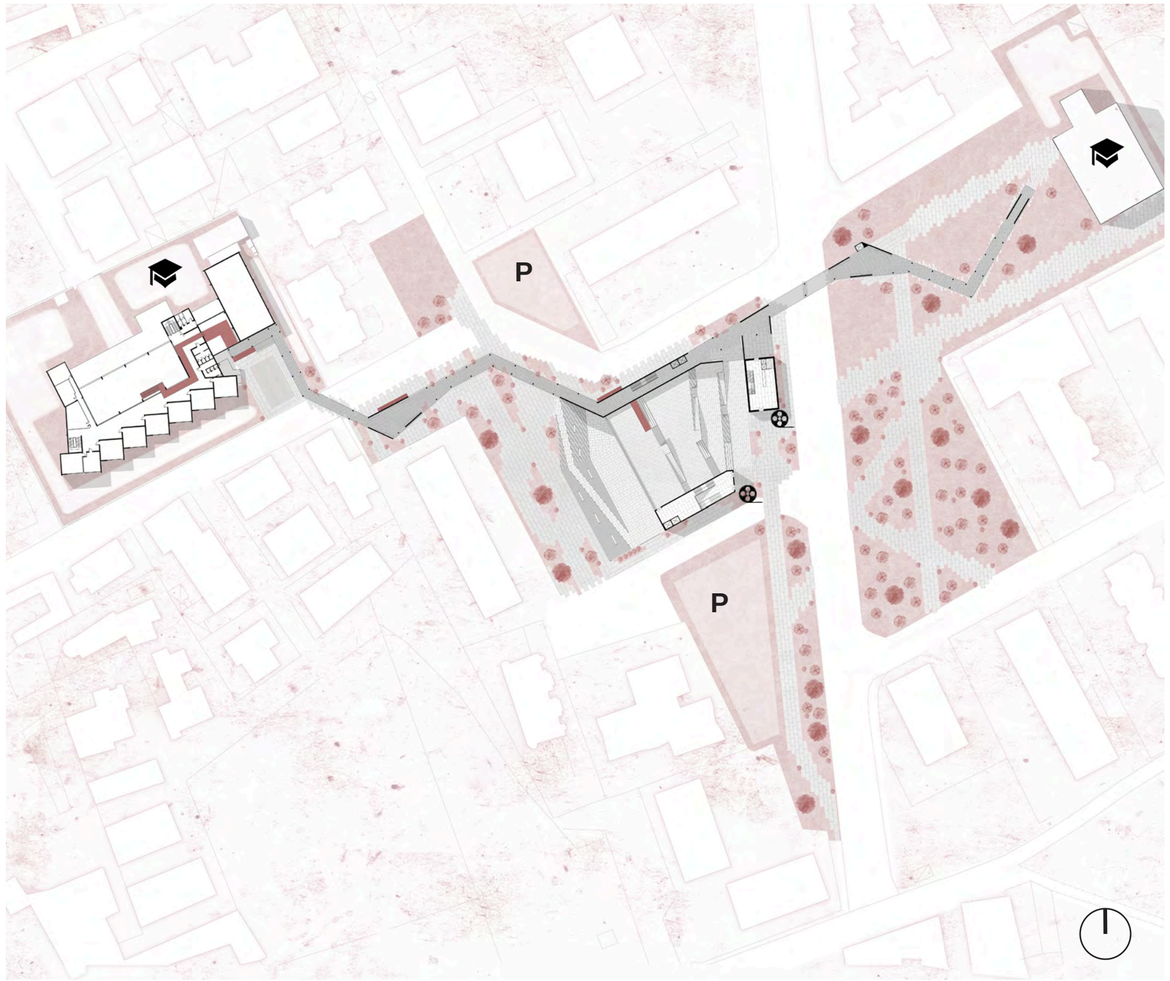
CONNECTION STRATEGY

The sketch explain the project development designed by accurate reflections on major roads and urban empty spaces.

Educational buildings

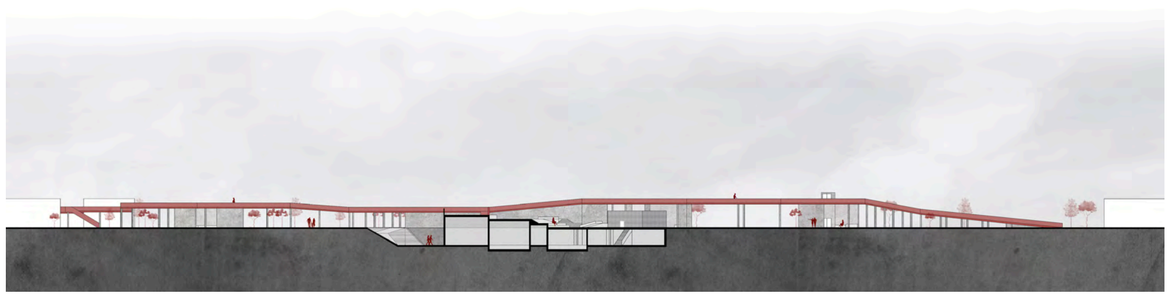
P Parking areas

Cinema entrance



DESIGN STRATEGY

0 10 25 50m

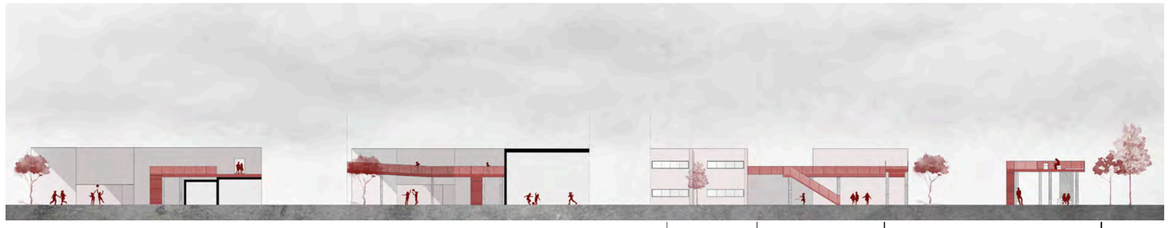


URBAN SECTION

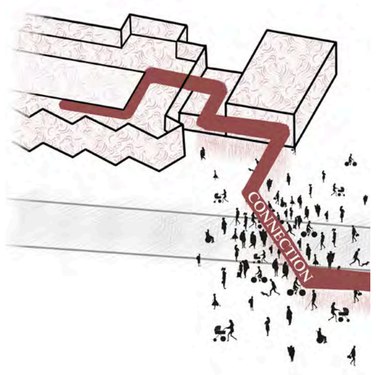
0 10 25 50m

1. Green areas
2. Lab spaces
3. Urban elevator
4. Multi-functional areas
5. Five cinema audiences
6. Versatile interior spaces

SOUTH FRONT



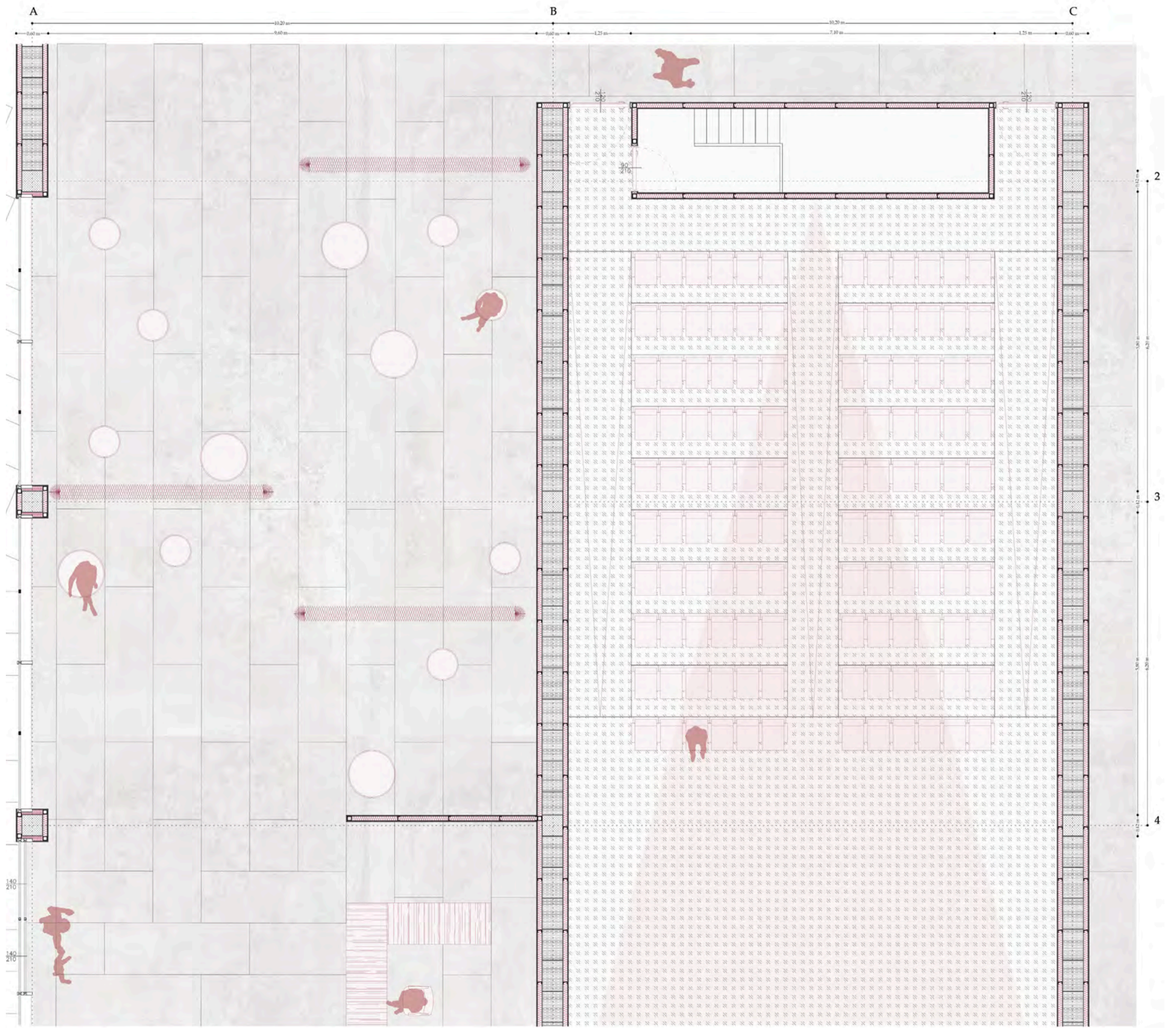
ROAD SECTION



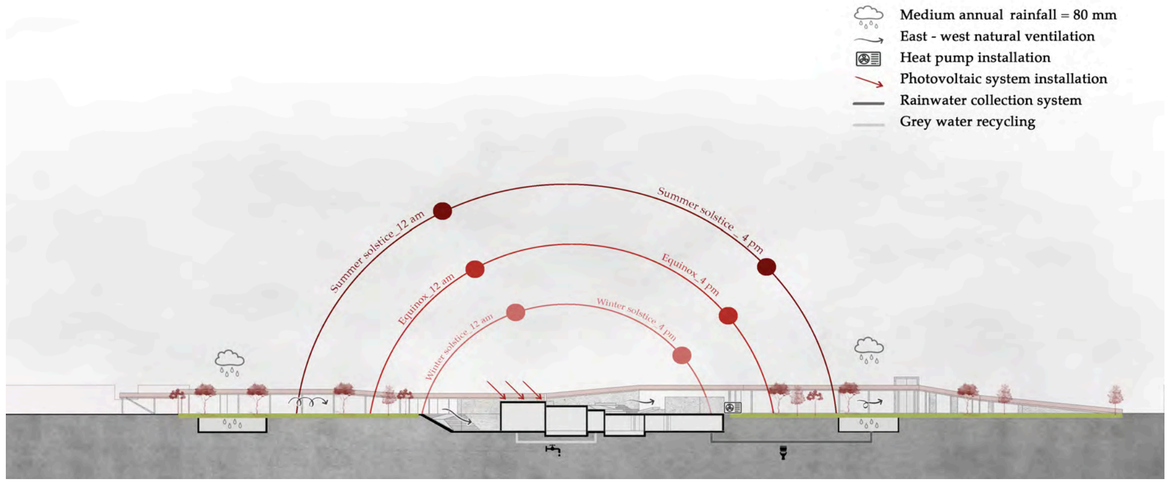
ZOOM

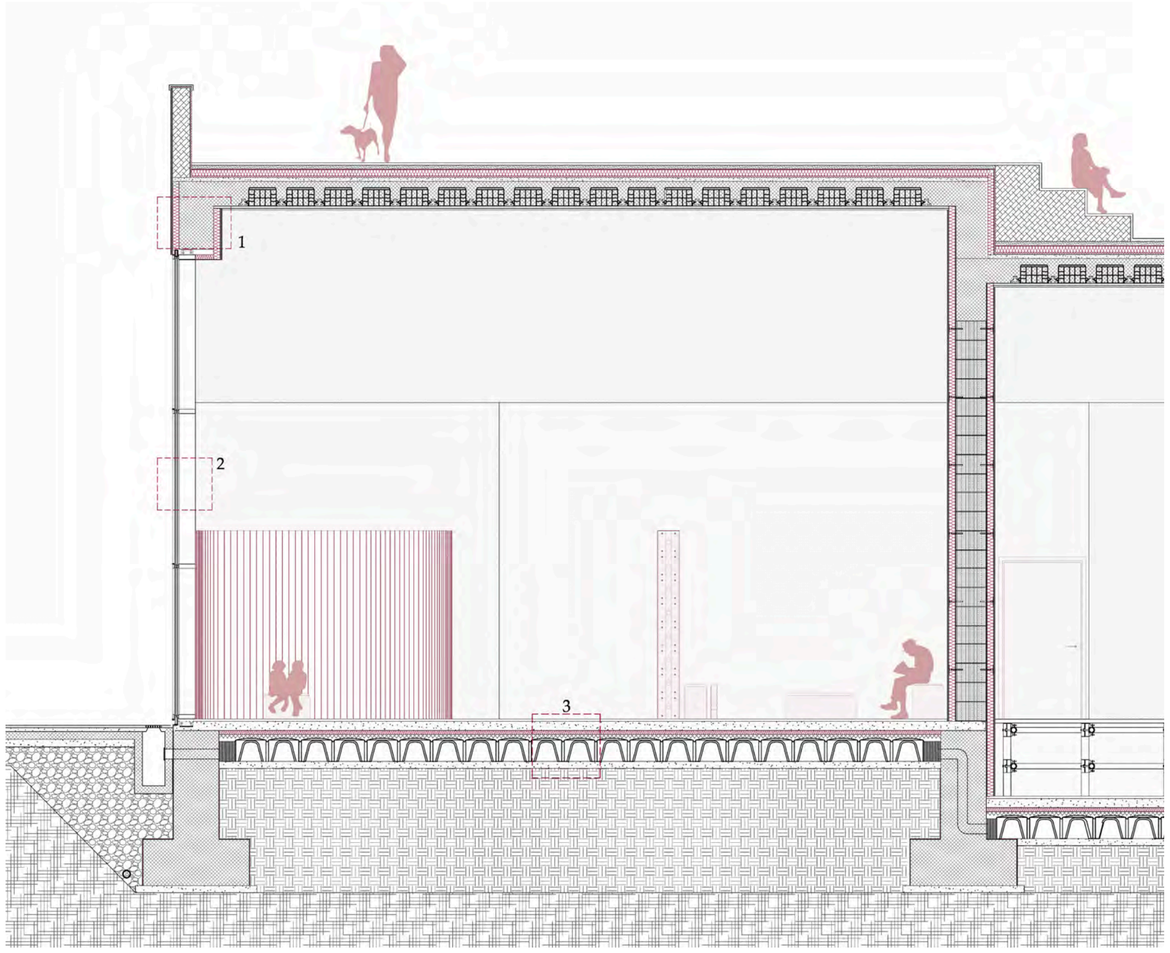
UNDERGROUND FLOOR

0 2 5 10m

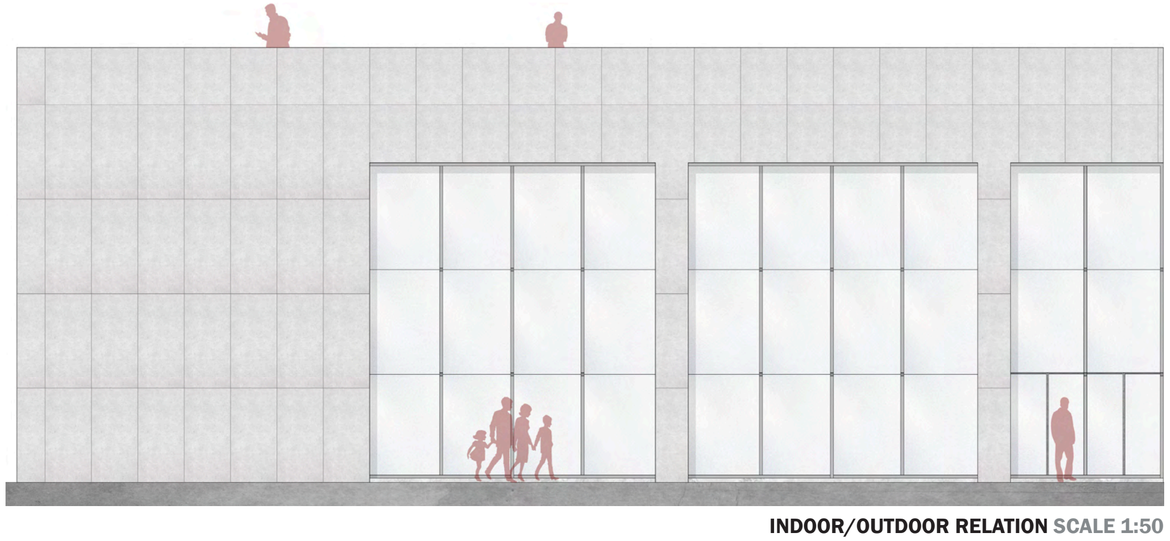


Plan - SCALE 1:50





External vertical partition 1	External vertical partition 2	Foundation slab 3
MDF panel	Selective double glazing	Cement screed
Rock-wool insulation	Steel supporting structure with mullions and transoms	Concrete slab with electro-welded mesh
Aerated concrete blocks		Ventilated crawl space



INDOOR/OUTDOOR RELATION SCALE 1:50

FRATTAMINORE ADVANCED DESIGN STUDIO

CATERINA FISCINA - LANDMARK AT THE BORDER

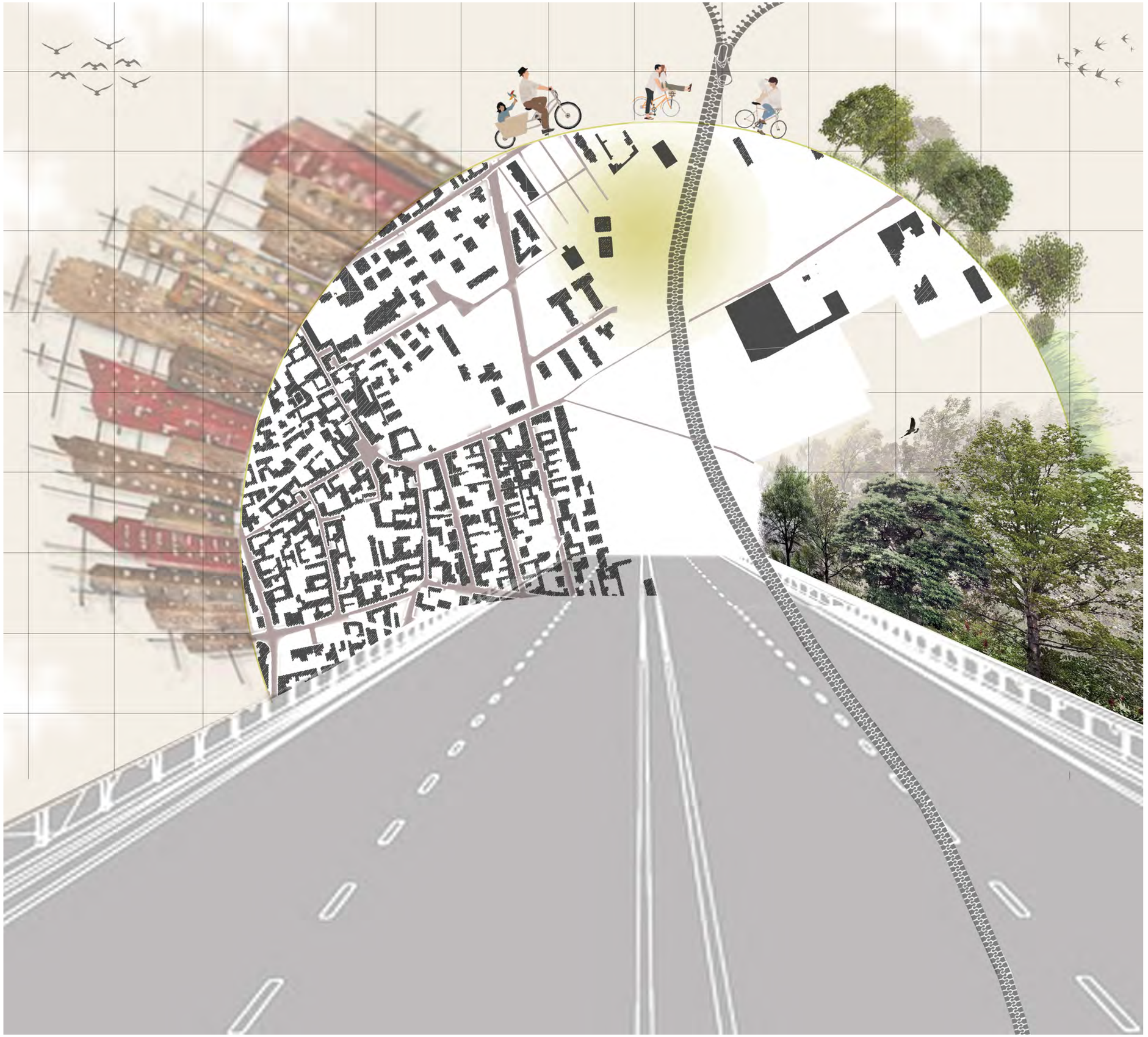
CITY & AGRICULTURE

The area under study is located in the estern area of Frattaminore, on the border between the municipalities of Orta di Atella and Crispano. The area is encircled by via Spagnuolo, via Atellana and via Turati. Taking in account some clearly visible problems on the spot that are the clear distinction between city and coutryside and the anonymous presence of the Viaduct that crosses the area, the goal was to work out these problems thinking about a real urban regeneration of the currently abandoned area. First of all, a study of the area was carried out from which, in addition to the presence of a lot of vegetation, is emerged the interruption of the road system. This has led to the delination of a system of pedestrian and cycle paths that take up the existing ones, extending it and completing the design of the urban fabric and at the same time opening the city to the countryside and viceversa. Starting from this, as envisaged by PUC, the entire area was destined to agriculture and to the cultivation of urban gardens at the service of the inhabitants of the city. To make the area a point of attraction and reference, the building was designed to connect the existing library and to be an extension of the library and other functions. The building incorporates the Asse Mediano which in this case acts as a hinge between the city and the countryside. Therefore, in order to promote sustainable development and gentle mobility, it was designed a cycle lane that starts from the highway junction present further ahead. The cycle lane is placed side by side to the Viaduct for a short distance and then enters the building.

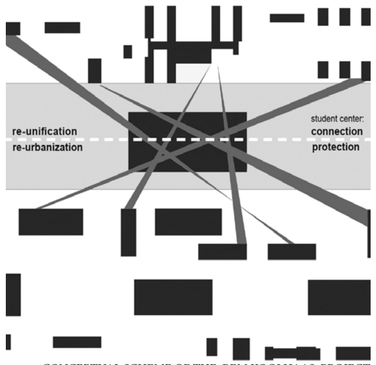
Program

Public spaces, Urban gardens, Workshops, LIbrary center, Conference room, Green terracing , Elevated passage

Covered area	**7.119m²**
Outdoor area	**102.464m²**
Above-ground floors	**2**
Built volume	**49.833m³**
Estimated cost	**79.598.372,84€**

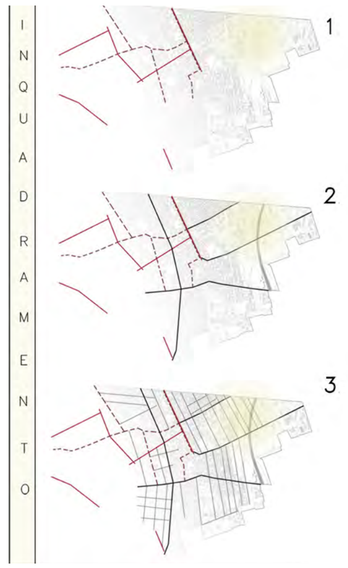


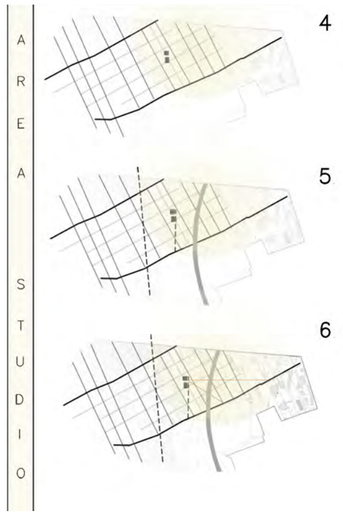
From a conceptual point, one of the references that drove the design idea was the McCormick Tribune Campus Center, Chicago, designed by Rem Koolhaas of OMA. The common keywords are reunion and connection, these have accompanied the project from beginning to end.



CONCEPTUAL SCHEME OF THE REM KOOLHAAS PROJECT

The area is divided into a system of urban gardens, wheat fields and vineyards with reinwater collection tanks and irrigation canals. The system is interspersed with large public spaces identifiable with squares dug into the ground. To cope with the problem of pollution caused by the presence of vehicular traffic, it was decided to introduce small wooded woods that alternate with public spaces and crate real urban oeses. By shifting the focus inside the building, it has been inserted functions strictly related to the external area. The building is divided into a basament and a ground floor where there are: educational laboratories, library center, conference room, a bar/refreshment area, deposits and restrooms. On the ground floor there are two areas with green courtyards where agriculture becomes part of the building. The focal point is the presence of the patios ind in particular of the 3 large central patios that act as a junction for a system of terraces at different heights. This system connects to the elevated passage that only visually breaks the continuity of the Asse Mediano but which actually acts as a sewing element.



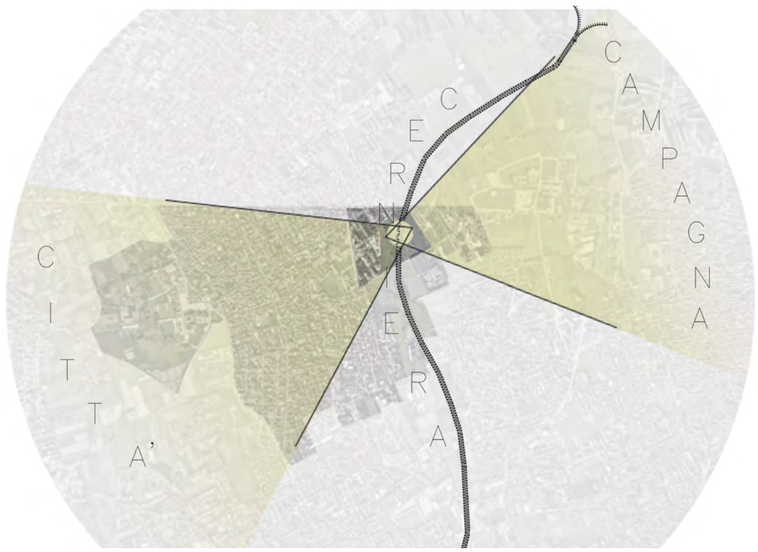


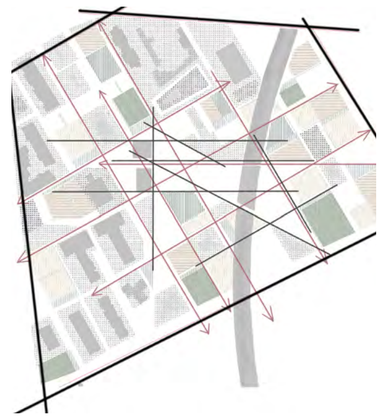
1. GEOMETRIC MATRICES
2. ROAD AXLES CUTTING
3. TRACKS OF THE CITY
4. CIRCUMSCRIBE
5. INTERSECT
6. CONNECT

THE TRACKS OF FRATTAMINORE
The following graphs with the related keywords mark the beginning of the analysis process of the entire area, starting from the study of the geometric layouts of the city as a whole, up to the area under examination.

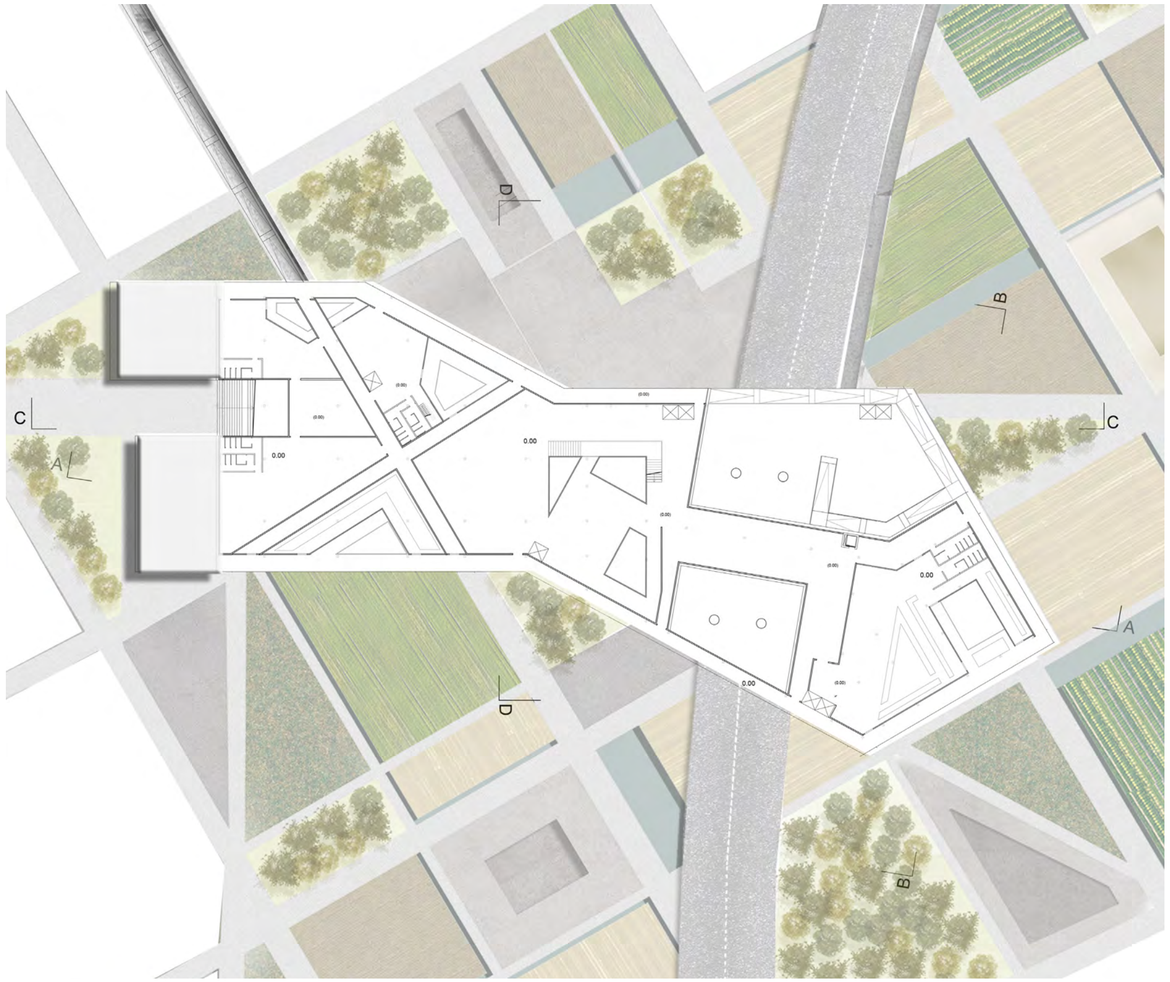
FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m





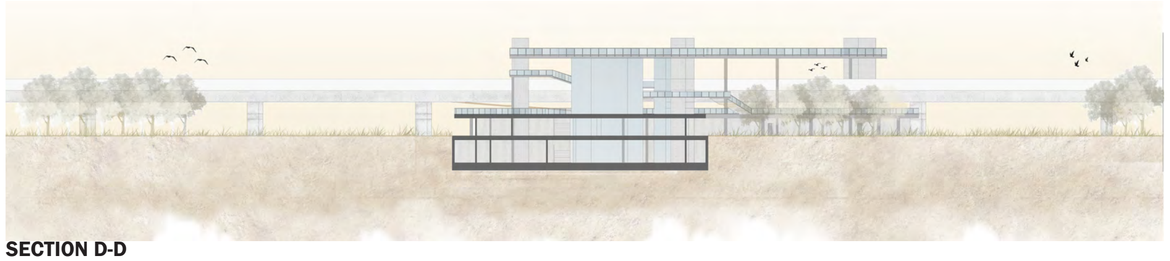
ORDERING PRINCIPLE
The following diagram shows, as a result of the study of the routes, the main axes according to which the design idea was born.



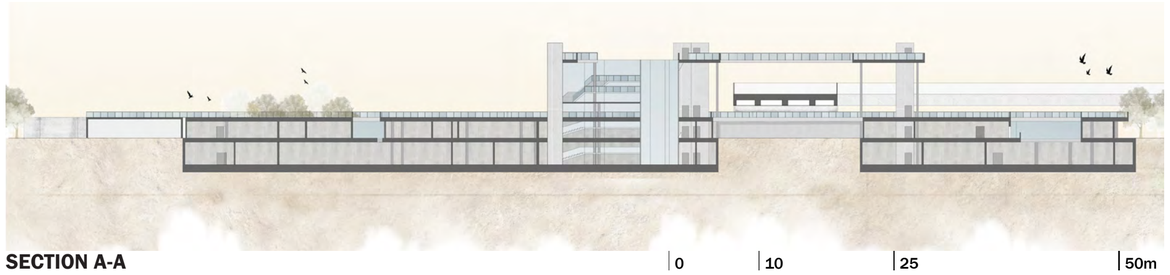
SECTION C-C

0 4 10 20m

1. Library
2. Conference room
3. Refreshment area bar
4. Workshops
5. Bike-sharing
6. Toilet
7. Storage area
8. Green shorts
9. Green terracing
10. Bicycle lane
11. Elevated passage

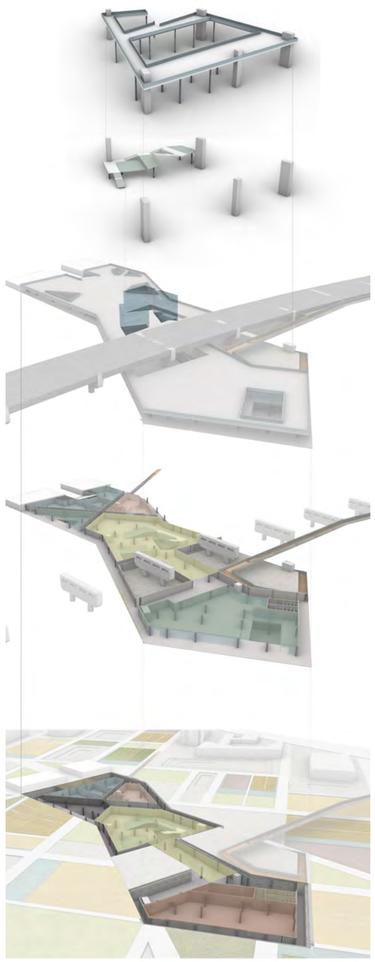


SECTION D-D



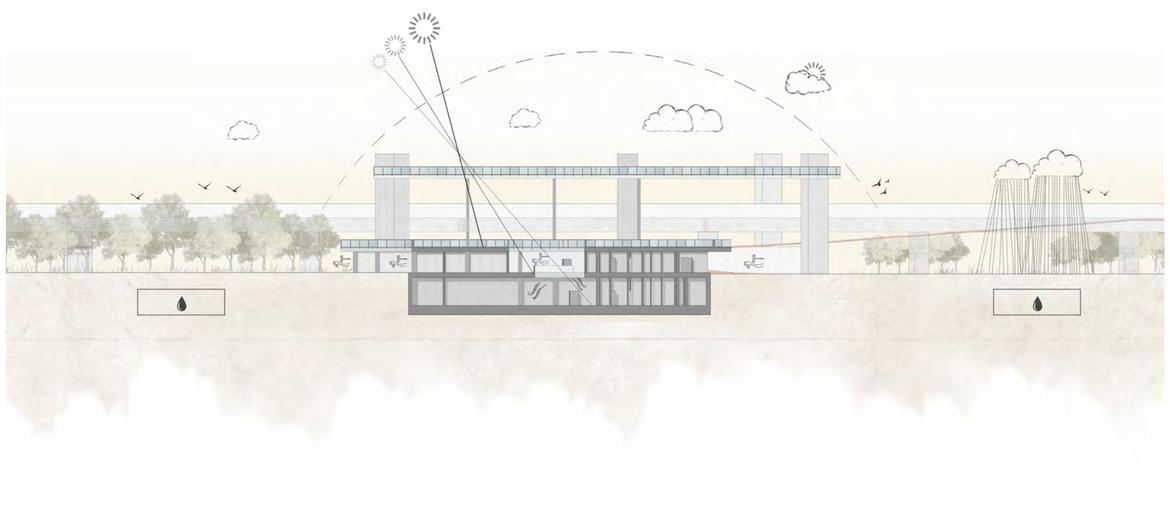
SECTION A-A

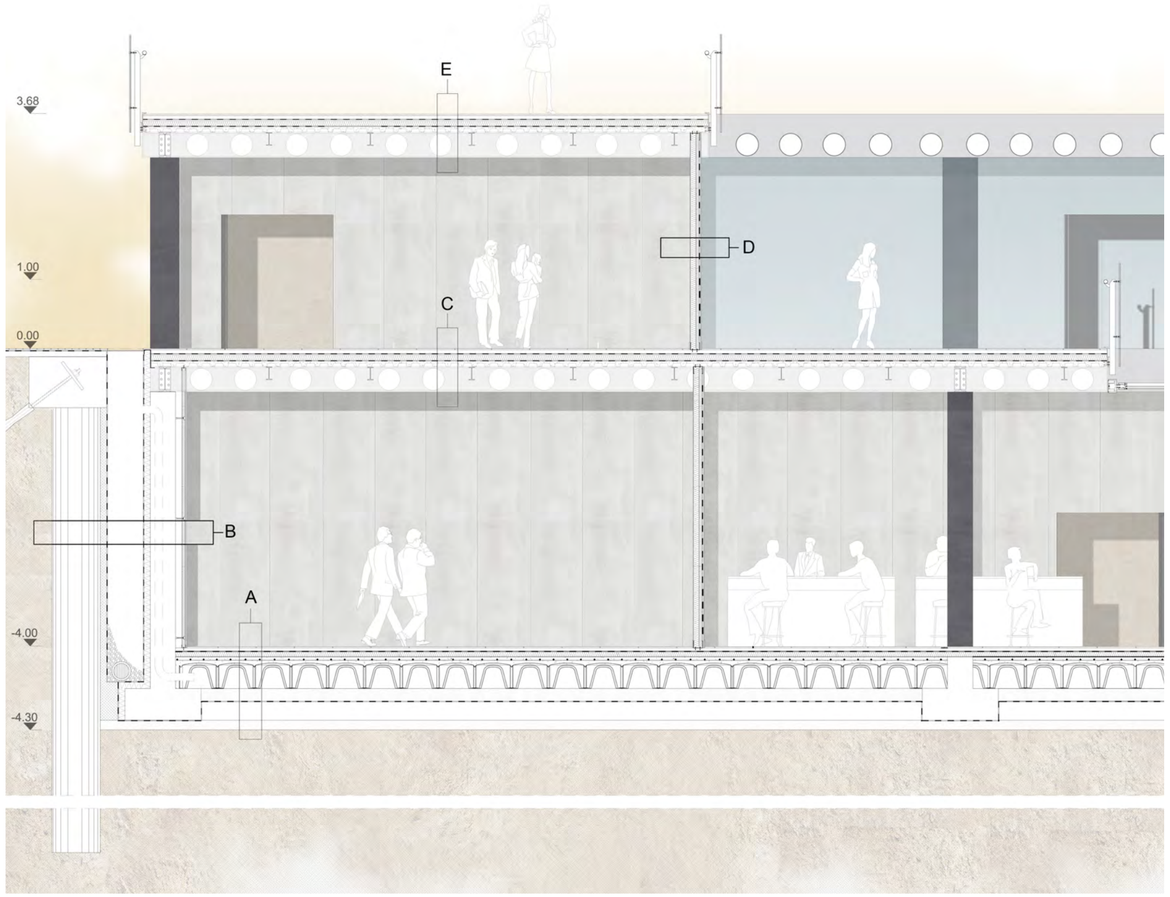
0 10 25 50m



AXONOMETRIC CROSS SECTION

POSSIBLE USE OF THE NORTH-WEST AREA





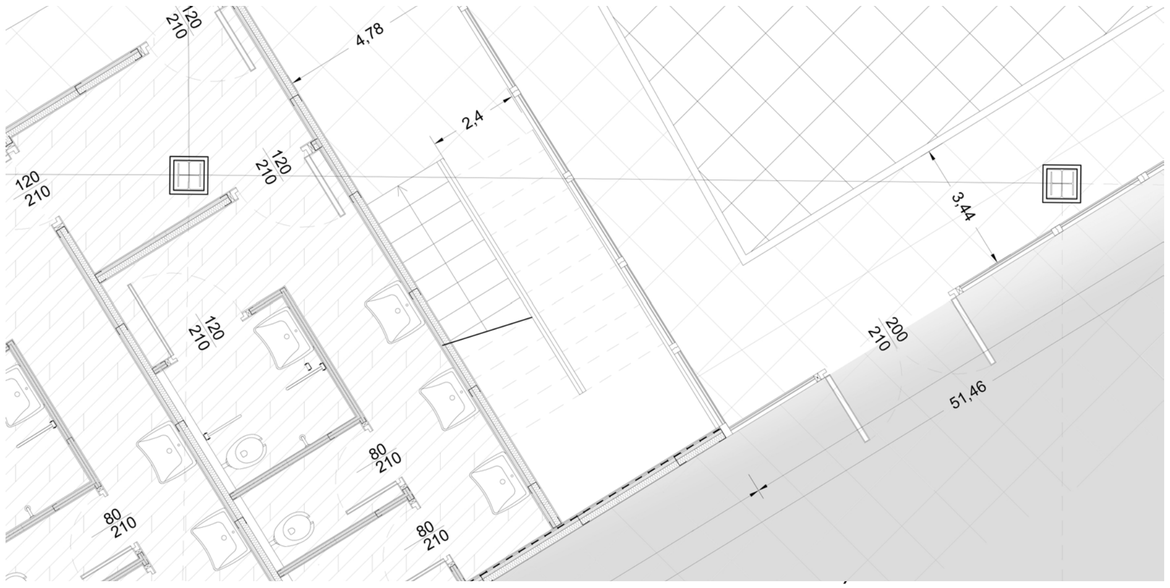
A -
FOUNDATION BEAM
AREA VENTILATED
FLOOR AGAINST GROUND

B -
CONTAINMENT BULKHEAD
AREA VENTILATED
CONCRETE PILLAR
INTERNAL WALL

C -
ALVEOLAR BEAM IPE 400
CORRUGATED SHEET
INSULATING
SLAB FLOORING

D -
EXTERNAL COVERING
INSULATING
INTERNAL COVERING

E -
ALVEOLAR BEAM IPE 400
CORRUGATED SHEET
INSULATING
WROUGHT CONCRETE FLOORING



It all starts here, with a sentence «Although Frattaminore is a single municipality, in ancient times it was split into two separate villages, and today the locals still make distinction between the two old towns».

The two villages were Pomigliano di Atella and Frattapiccola, each one with his own baronial palace, one in Piazza Atella and the other in Piazza Crispi.

This is where the project comes, in the dense and rooted urban surrounding of Frattaminore, with a population of 16.047 inhabitants and no green equipped space for the community.

The will that drives the project is to mend the city, working with interstitial spaces of the urban fabric and the two big green area close to the baronial palaces.

The goal is the construction of public spaces, that taken as a whole, lead to the creation of an authentical linear park that is held together through a multi-level urban walk that fits in the dense historical fabric, creating breaks from the bustling life of the city and a priority lane for soft mobility.

The area on which the focus of the project has been chosen is Piazza Atella, along with the Palace and back garden.

Program

urban park, social center, auditorium, cafè

Covered area	**356m²**
Outdoor area	**6700m²**
Above-ground floors	**2**
Built volume	**1246m³**
Estimated cost	**1.542.081€**

The aim of the project is a total upgrading of the green area, which now incorporates the baronial palace, creating a single complex, this also thanks to the small terrace defined by a part of the very own palace.

All to promote the development of physical and mental health of citizens, not to mention the positive impact of the park on the environment itself.

The park is developed on different heights that distinguish different environments, from the lowest part of the auditorium to the real park in the highest part.

The focal point is definitely this urban promenade, which here becomes a walkway 3.50m high that runs along the entire park and in which the two buildings are grafted like pavilions. In addition, also small spaces that produce a game of terraces, places to stay and rising point to the path.

The buildings go to make up for a territorial lack defined by the different ONLUS existing that however don't have a permanent home. In addition, a café at the service of the city auditorium created by ground's modelling.

Physical health

Mental health

Environmental footprint

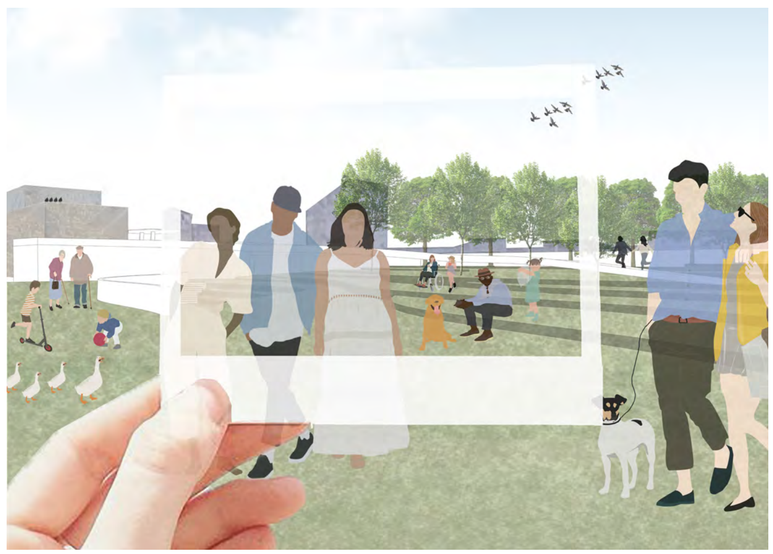
ALBATROS
ASSOCIAZIONE

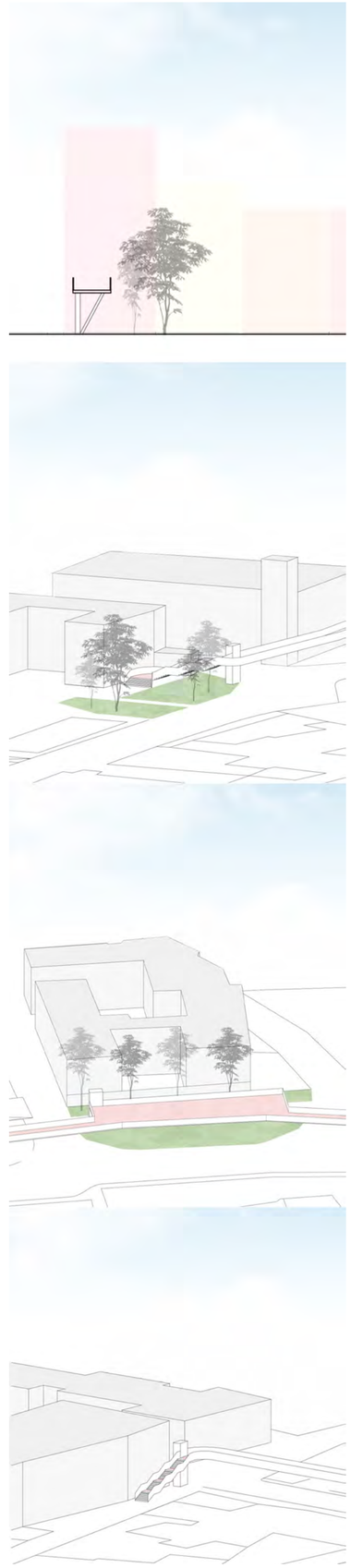
RISVEGLI
ASSOCIAZIONE DI VOLONTARIATO

CIVITAS
SOCIETA' COOPERATIVA SOCIALE

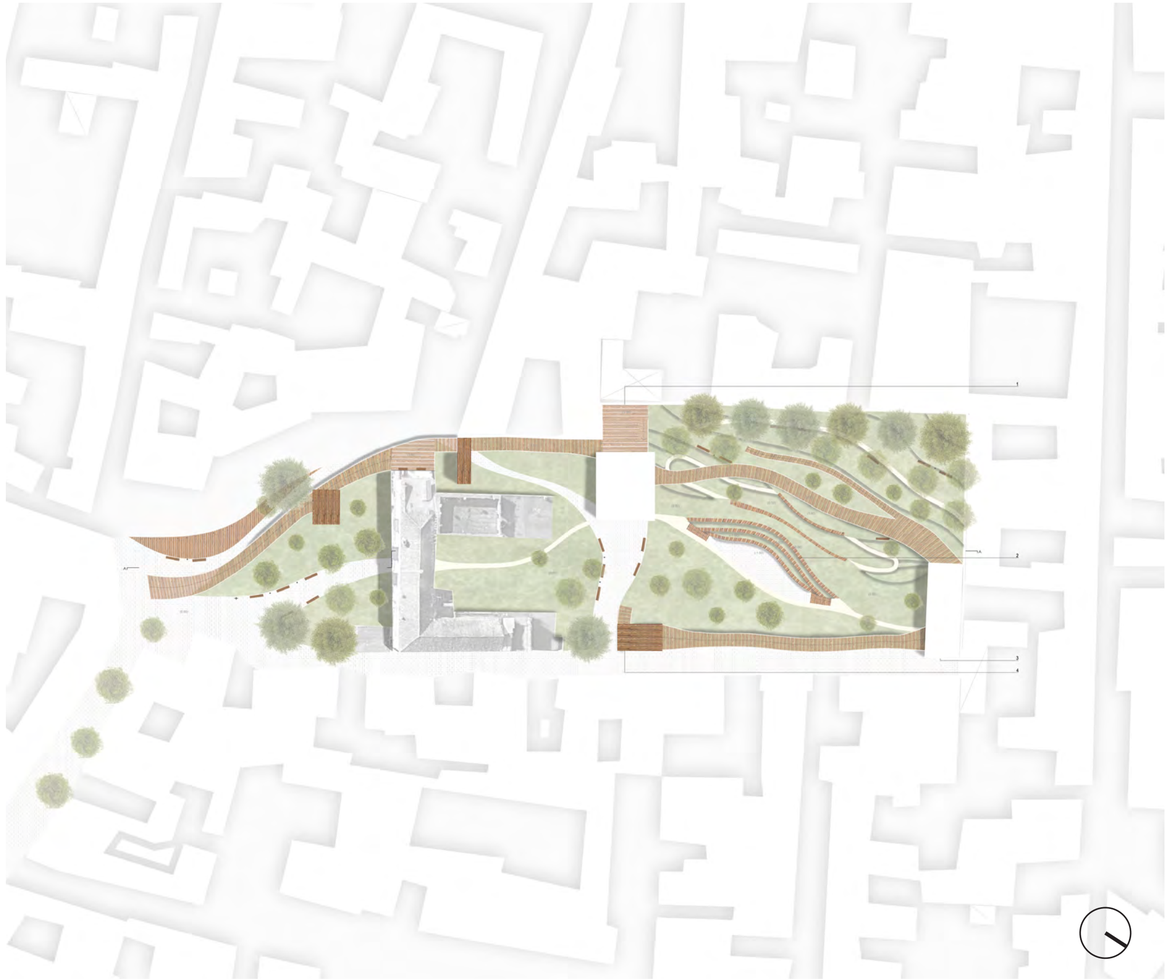
USERS

The whole complex is designed to be accessible in all its parts for all citizens, from every age and any physical health.





FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY



DESIGN STRATEGY

0 10 25 50m

SECTION A

0 10 25 50m

1. Social Center
2. Auditorium
3. Cafè
4. Wooden Pavilions

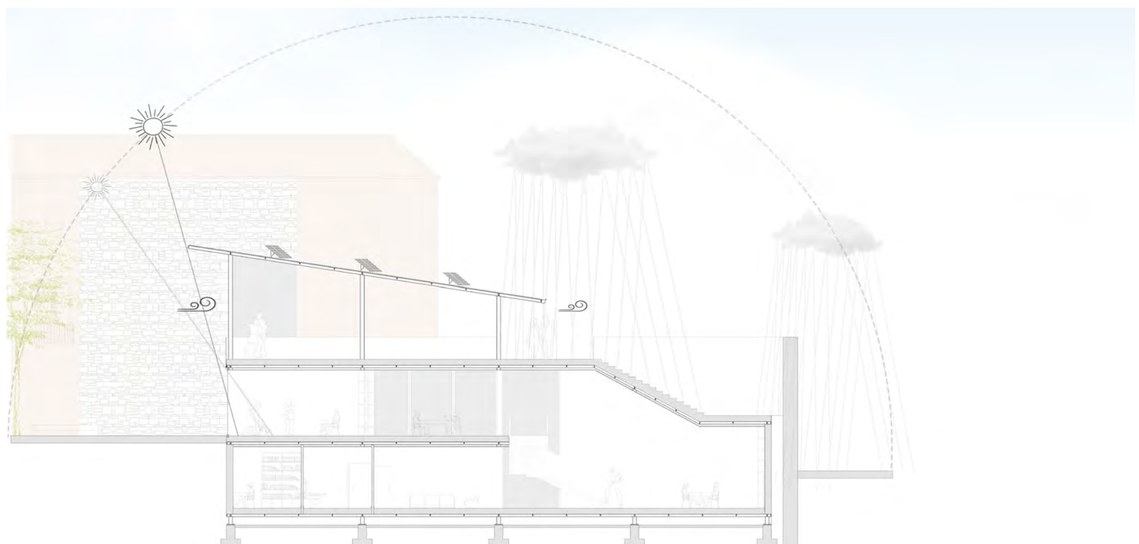
SOUTHERN FRONT

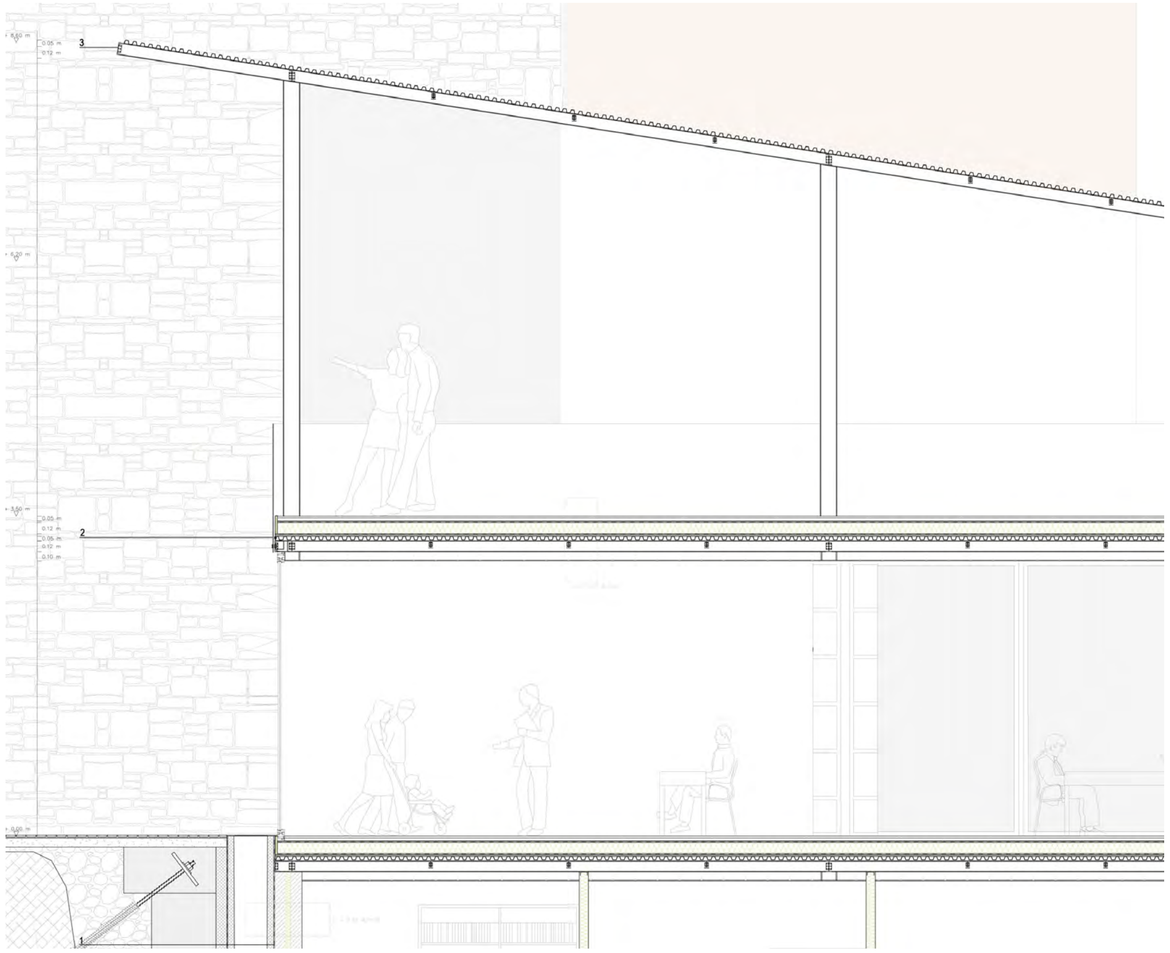
EASTERN FRONT

0 4 10 20m

PAVILIONS ZOOM

VIEW FROM THE AUDITORIUM

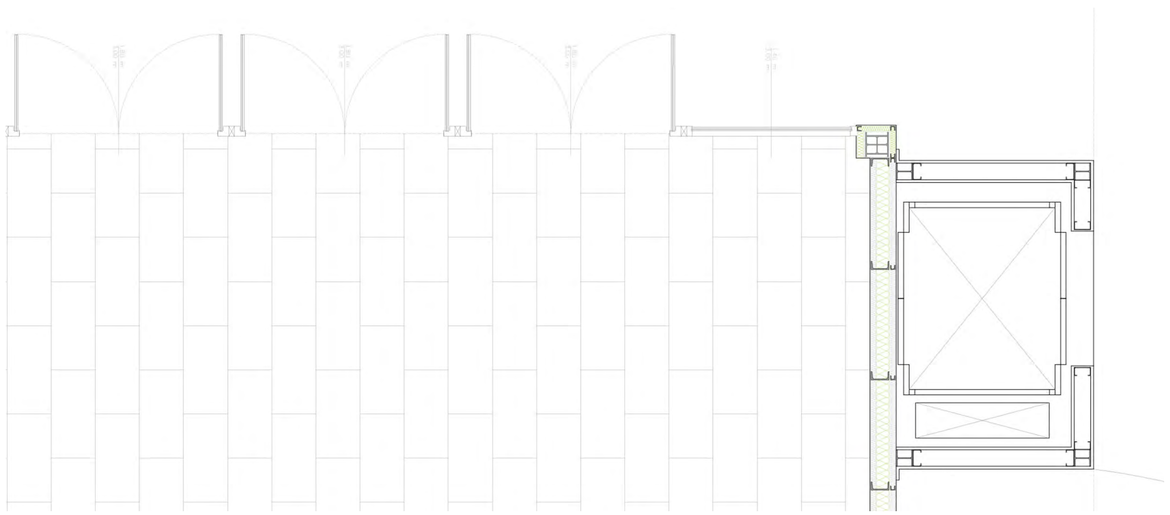




1. UNDERGROUND WALL
plasterboard, brick blocks, thermal insulation in hemp panels, brick blocks, waterproofing layer, air gap,retaining wall

2. FLAT ROOF
floating floor, OSB board, acustic insulation in natural fiber, breathable membrane, thermal insulation in hemp panels, acustic insulation in natural fiber, breathable membrane, OSB board, trapezoidal sheet metal, beam IPE120, false ceiling

3. ROOF
trapezoidal sheet metal, beam IPE120



INDOOR/OUTDOOR RELATION SCALE 1:50

MARTA MATARESE - UNDER THE BRIDGE

AN INNOVATIVE SCHOOL AND CIVIC CENTRE FOR FRATTAMINORE

The object of the analysis is an area located in the east side of Frattaminore. Although it's wide and well connected, with major road Asse Mediano crossing it, it has not been used for any purpose so far. The project idea is to re-think this space to unleash its potential, with a specific focus on sustainability.

The project proposal is a school campus, which is divided in separated architectures connected to each other by an opened and covered path system that crosses the viaduct side by side and makes the school structures communicate with each other.

The project idea is to have the collective activities - such as the gym, the library, the dining area and the auditorium – separated from the school in a way that allows maximum utilisation of the open space and promotes students interactions.

The campus constists of a kindergarten, a primary and a middle schools, a gym, a library, a dining area and an auditorium.

Program

School, civic centre and urban park

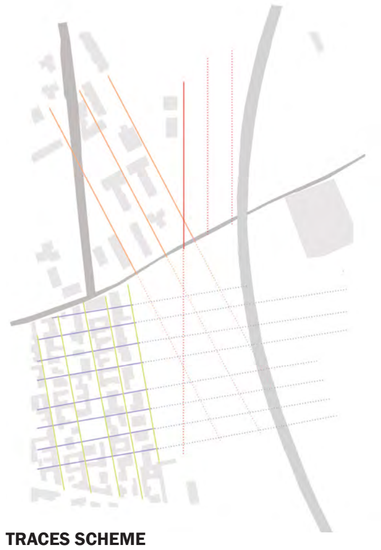
Covered area	**11837m²**
Outdoor area	**97586m²**
Above-ground floors	**3**
Built volume	**114150m³**
Estimated cost	**€ 12740690**

The project idea is to have a unique system of architectures that defines a central space, like a wide courtyard, in which everyone can practice outdoors activities, have social interactions and contact with nature.

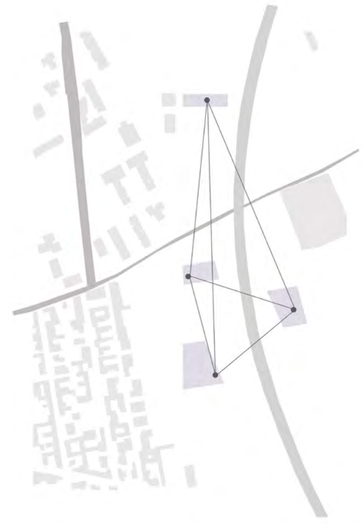
Inside the school there are inspiring spaces that promote the active involvement of the student through formal and informal areas, such as common spaces, laboratories and balconies.

The interior is contaminated by nature too, which gives to the school not only an aesthetic and decorative value, but it becomes a pedagogical tool that bring the student to the discovery of the nature.

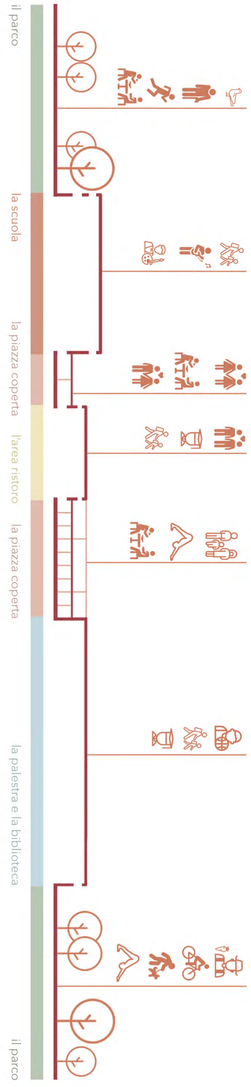
Red concrete and red steel are the main materials of the project because, on one side we have a strong texture with a raw finish, and on the other side we have a lighter and shiny material contrasting it: red concrete is used for the coating of the front, whereas red steel is used for the “parasite” shelters and balconies system.



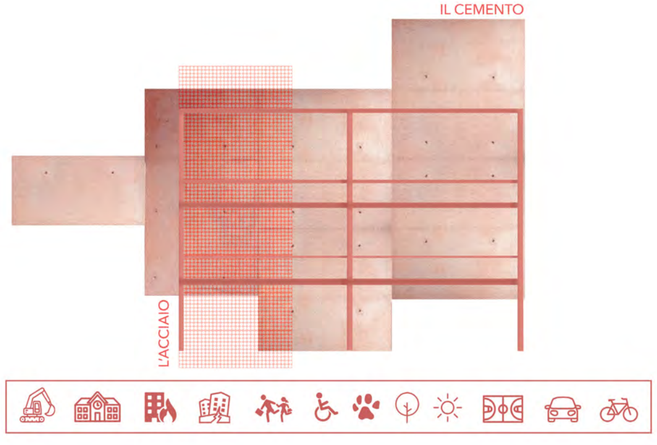
TRACES SCHEME



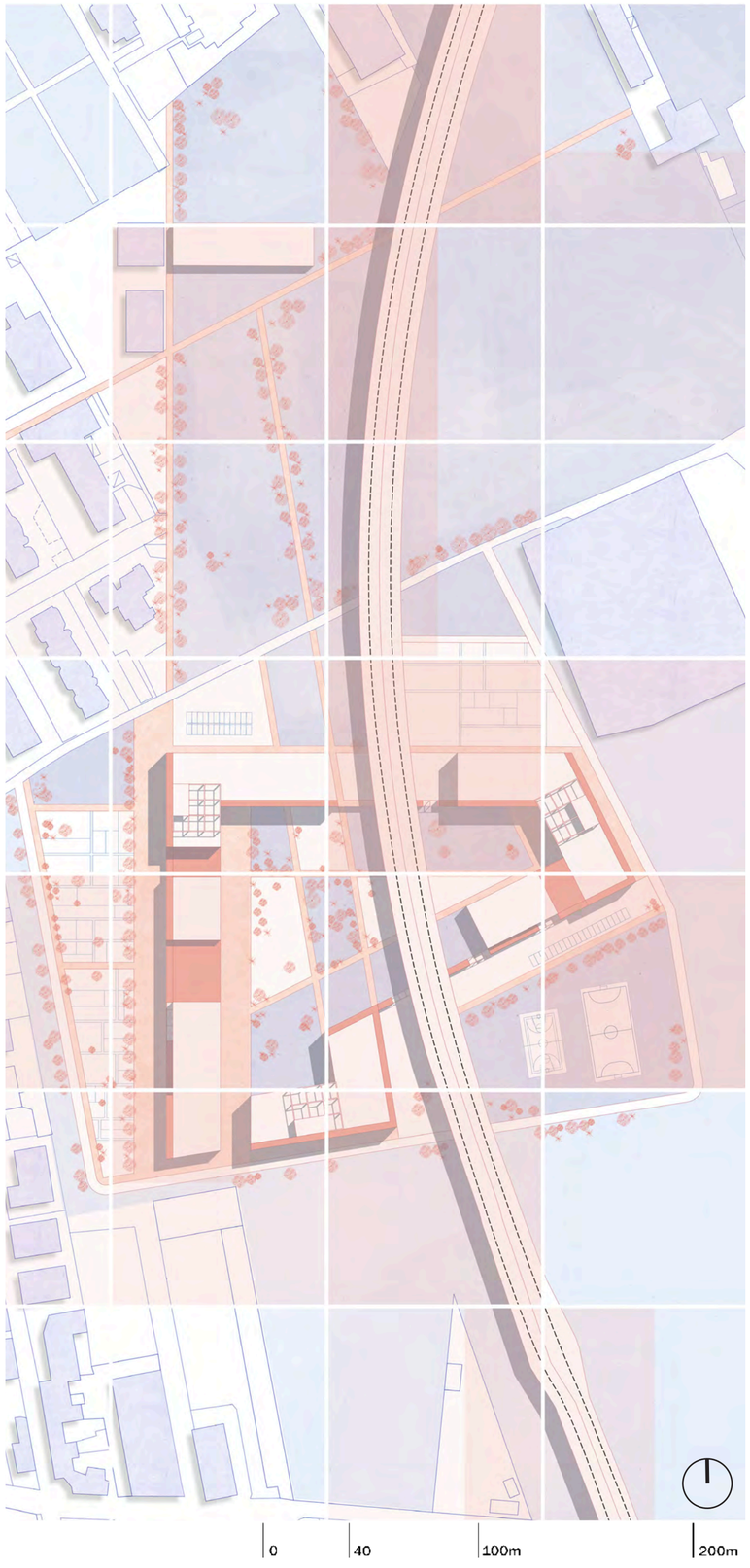
CONNECTIONS SCHEME



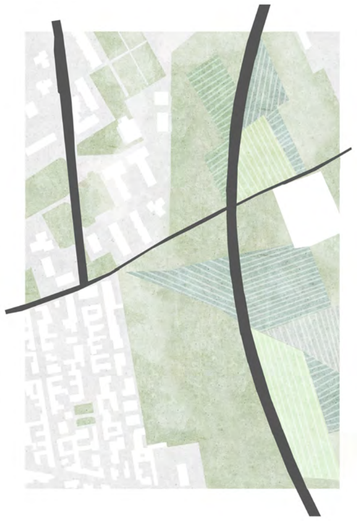
USERS AND STAKEHORDS MAPPING



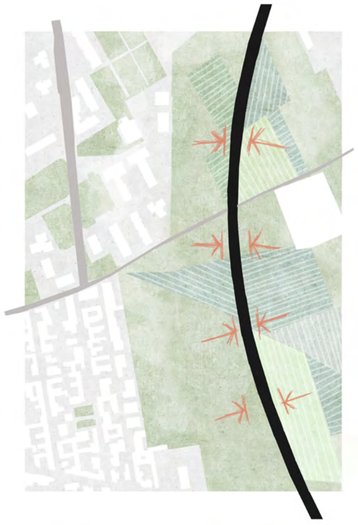
MATERIALITY MAPPING



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

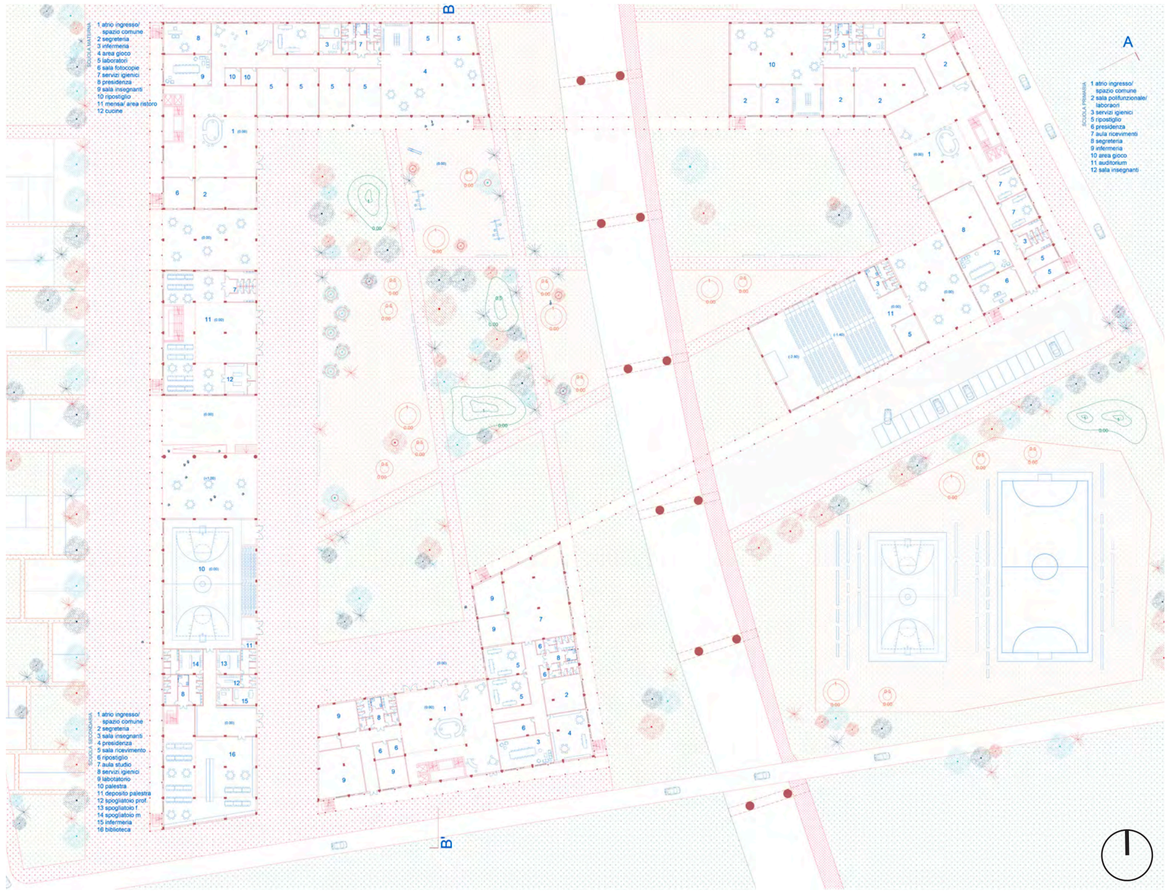


1. Analysis of the current state



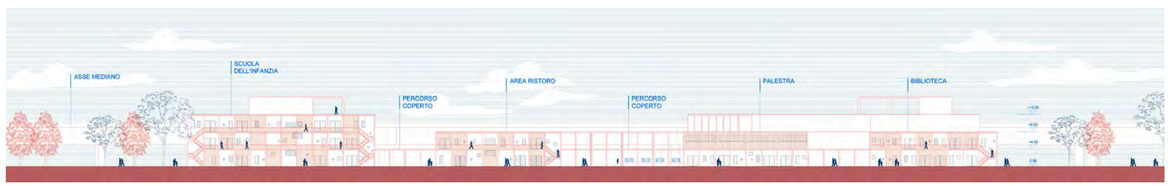
2. Asse Mediano as a barrier

3. Asse Mediano as a project resourse



DESIGN STRATEGY

0 20 50 100m



WESTERN FRONT

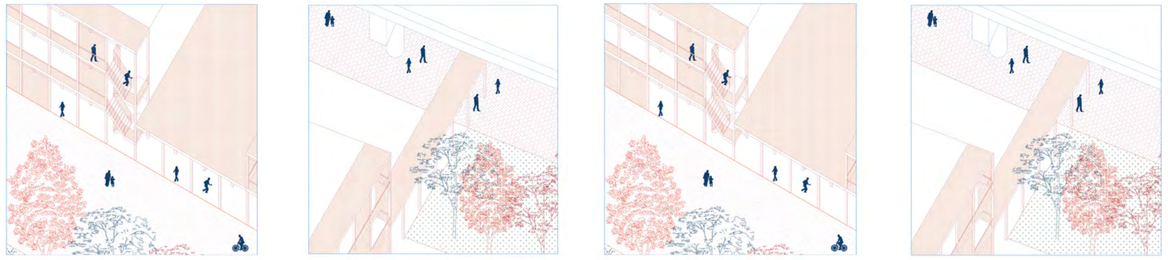
0 20 50 100m

SECTION AA'

0 20 50 100m

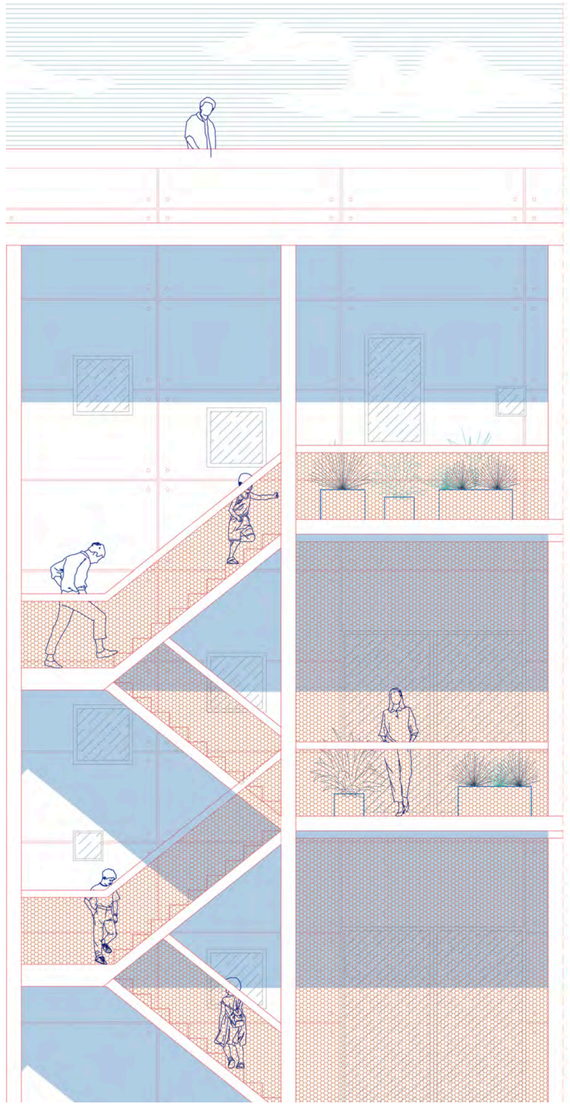
SECTION BB'

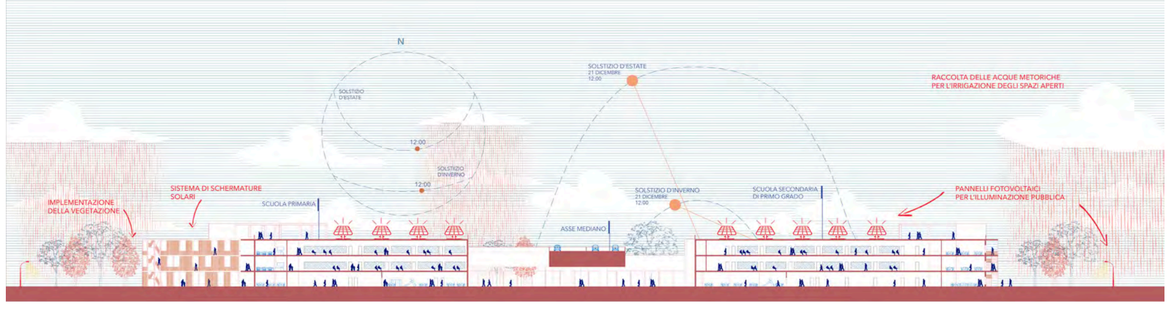
0 20 50 100m



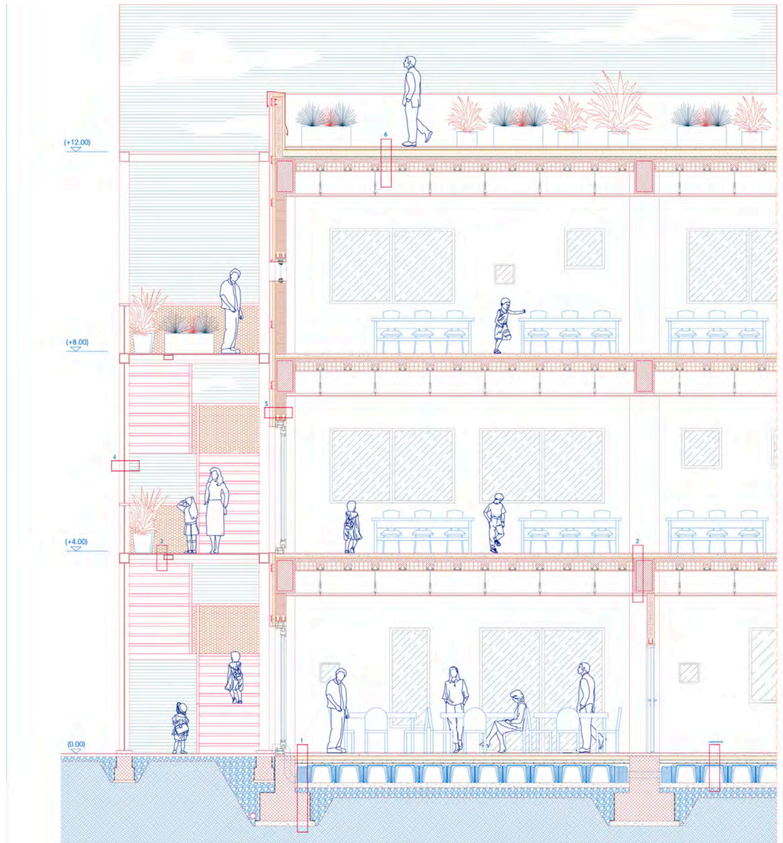
ZOOM

VIEW FROM THE COURTYARD

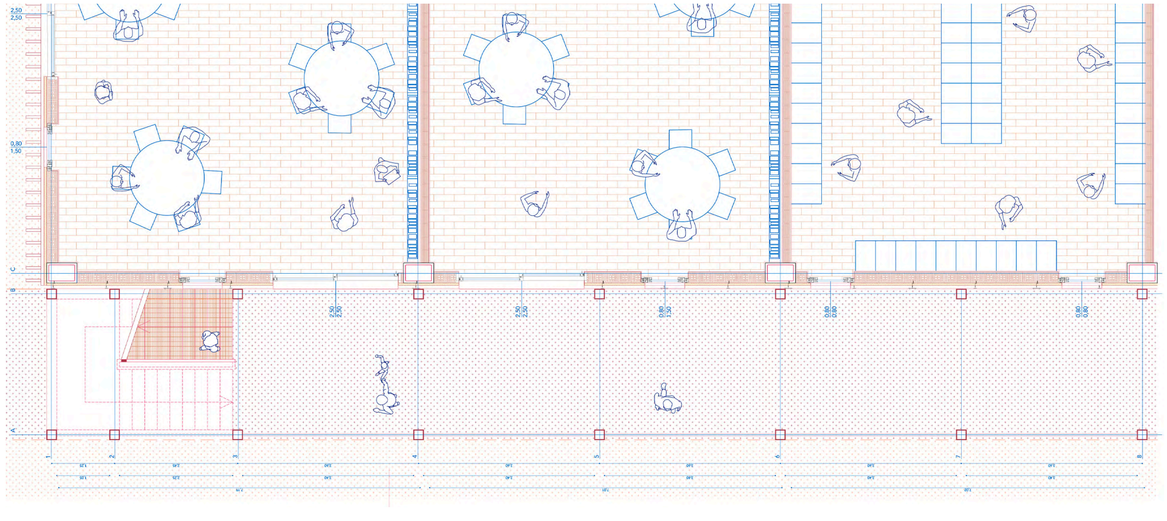




ENVIRONMENTAL SECTION



1. Aerated concrete floor
2. Concrete and brick slab
3. Ventilated facade
4. Concrete and brick roof convering
5. Steel structure



INDOOR/OUTDOOR RELATION SCALE 1:50

FRATTAMINORE ADVANCED DESIGN STUDIO

UMBERTO MOLARO - THE CITY'S SNAKE

A NEW WAY OF LIVING THE LOCAL MARKET

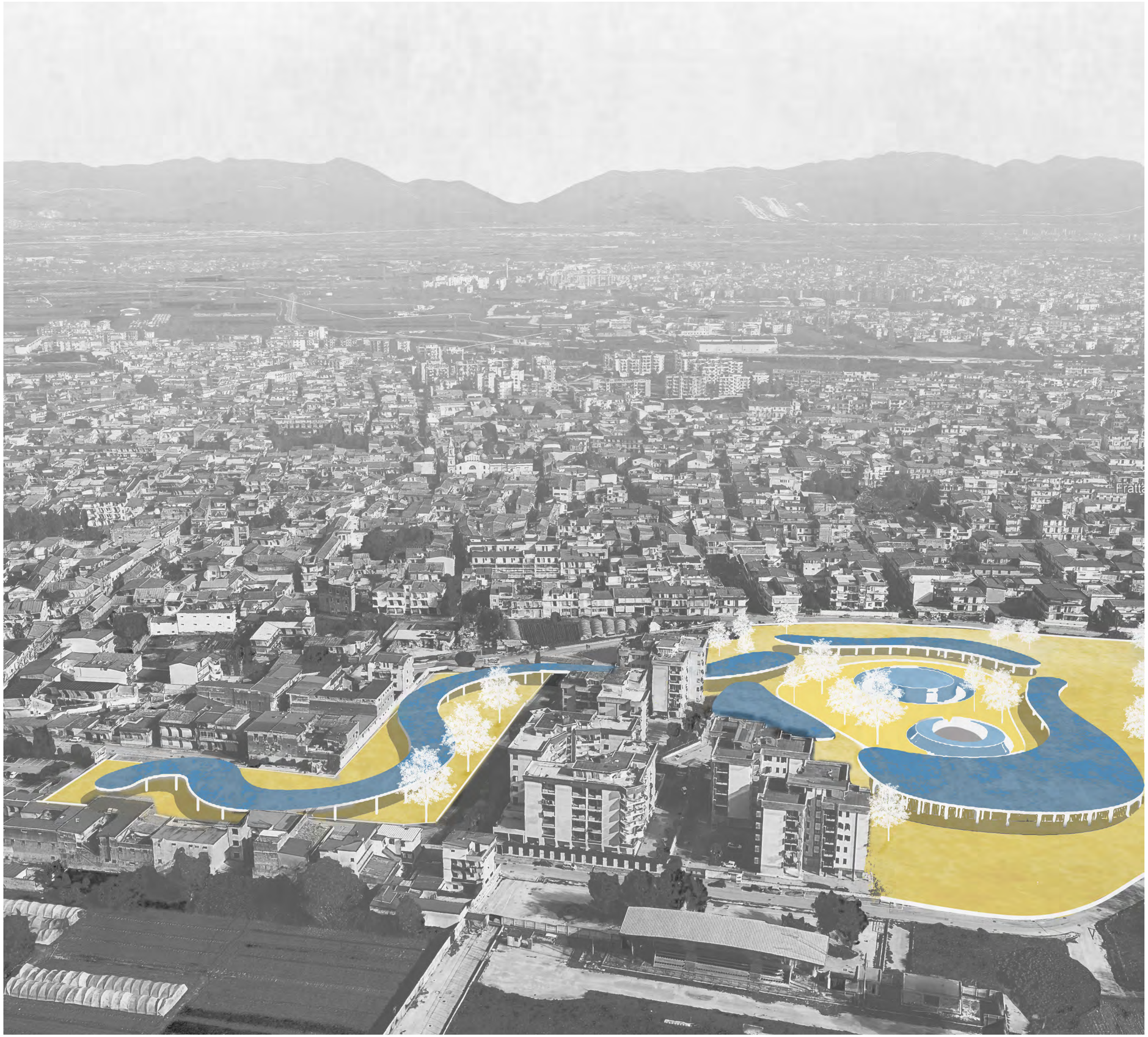
The project aims to build a new public space in the dense urban fabric that characterizes Frattaminore city, while establishing a connection between the city centre and the near agricultural area.

The main aim is the one of amplifying the actual market area exploiting the space that immediately adjoins it, in order to solve the problem linked with saturation.
The fundamental element is the market's cover, that connects the old area with its expansion thanks to its soft and harmonious lines. It squeezes among buildings, gaining the name of "The city's Snake".
The long cover inevitably marks the space and encloses shapes and geometrical volumes in which the new conceived environments are located.
Trying to mitigate the shift from the city to the agricultural framework, from the citizen's point of view, the enveloping shapes behave as an invisible skin in which the new spaces are included.
The "scales" characterizing the front are built upon the combined usage of glass and expanded metal, that allows the volumes to be pure and permeable to eye.

Program

local market, sport facilities, urban park, restaurant, gym centre, stores, relax room.

Covered area	**4.250 m²**
Outdoor area	**28.100 m²**
Above-ground floors	**1**
Built volume	**8500m³**
Estimated cost	**€ 9.977.934,90**



The actual local market covers a 9500m2 surface and results to be opened to the public only once a week, for the durance of the local market activities. The project aims to give this area a new life, allowing citizens to exploit this space for the public ordinary life.

The area taken into account is the western side of Frattaminore, where the local market is located. It takes place in an anonymous space, similar to a car park, without any particular sign of identity
The market also occupies a portion of the adjoining streets that are not destined to its functions.
For this reason, its expansion has become necessary and it has been allowed by the presence of an unedit area located in its south proximity.

The area in interest is located outside the historical centre and in the ending part of the inhabited centre, this position keeps the inner city in contact with the countryside. The entrance of the expansion is located where Via Napoli meets Via Rosario. Walking this path, it is possible to admire several aspects of the territory: the urban city, the designed public space and the agricultural framework. The wideness and the linearity of the project, together with the colours characterizing its material aspect, lead to a new local identity.

THE MULTIFUNCTIONAL CENTER
The choice of this space is strategical, due to its limit position: it is located among what is edited and what it is not (yet). Moreover, it represents a connection point between the rural reality and the urban one.

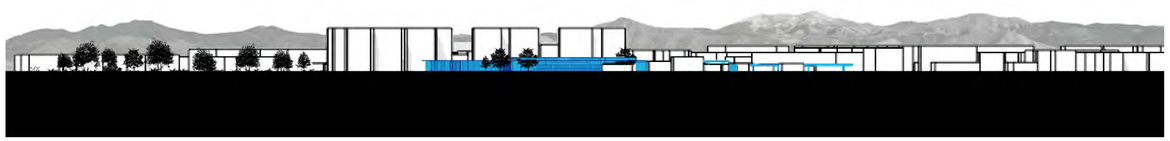
THE SERVICE STRIP
The identified pole is located in the western side of a strip of land in which the majority of the service is concentrated.
The highlighted sections in the picture are respectively the city hall, the library, the public garden, the local market and the city's stadium.

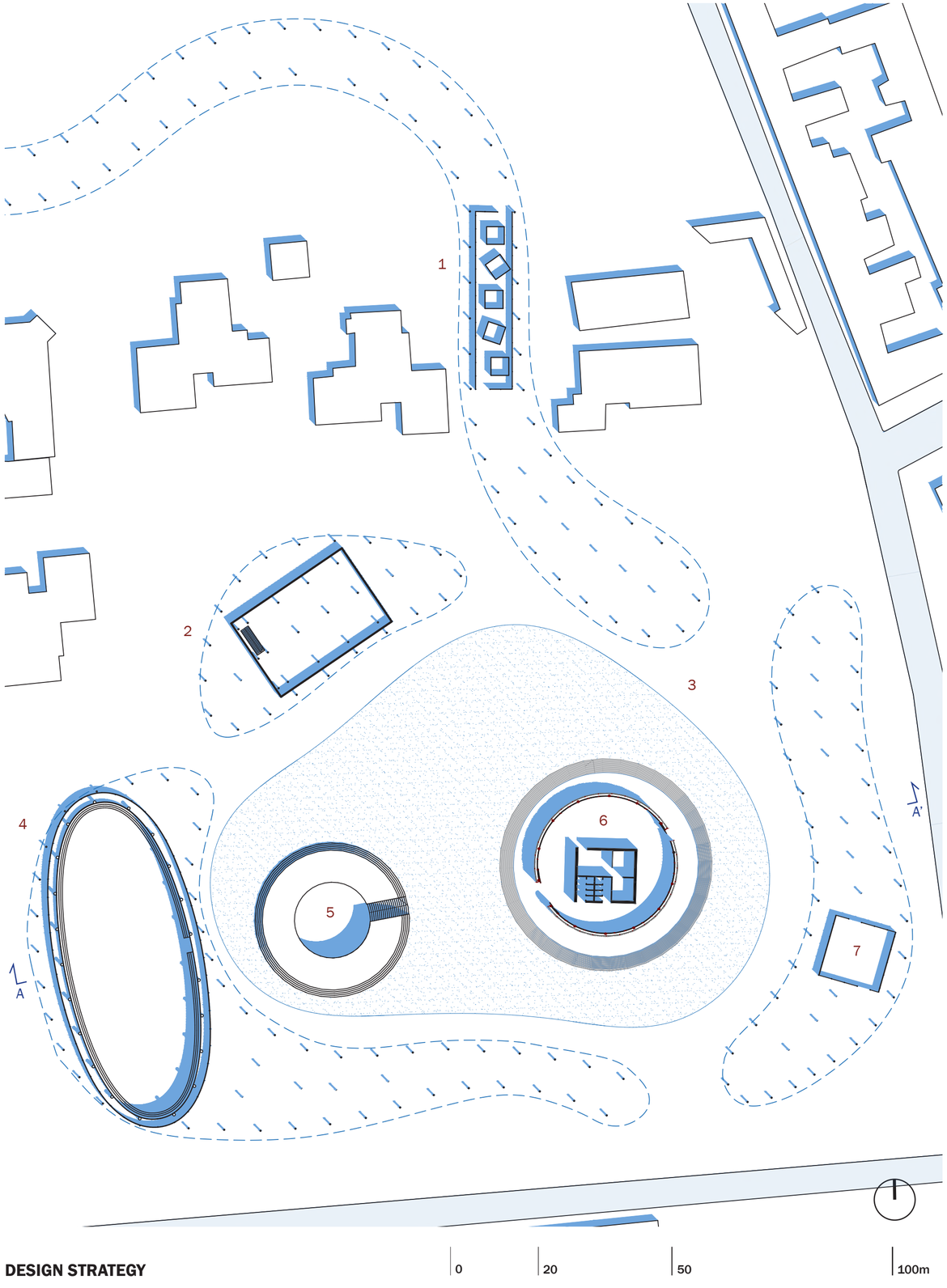
STAKEHOLDERS' MAP
For the realization of a project that deals so much with the public space and ordinary life, analyzing the stakeholders is fundamental. Several entities would be impacted by such an extensive project, starting from citizen, passing by local entrepreneurs, and coming to the tourists.

The structure is born with the aim of being completely sustainable, both from the enviromental and the social point of view. The space itself has a deep meaning for the citizen because it represents a new centre of the public life. The structure has not a strong vertical impact over the already existing buildings belonging to the area in interest. In addition, it could work as an attractor pole for tourists and people belonging to the adjoining areas.

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

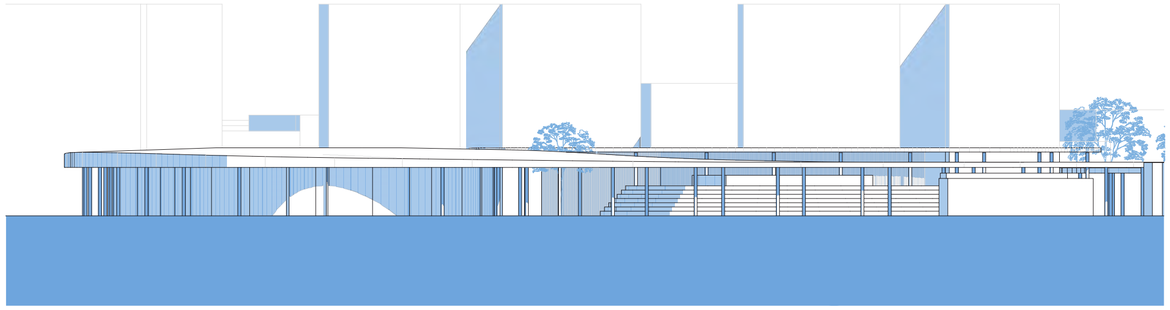
0 50 100 250m



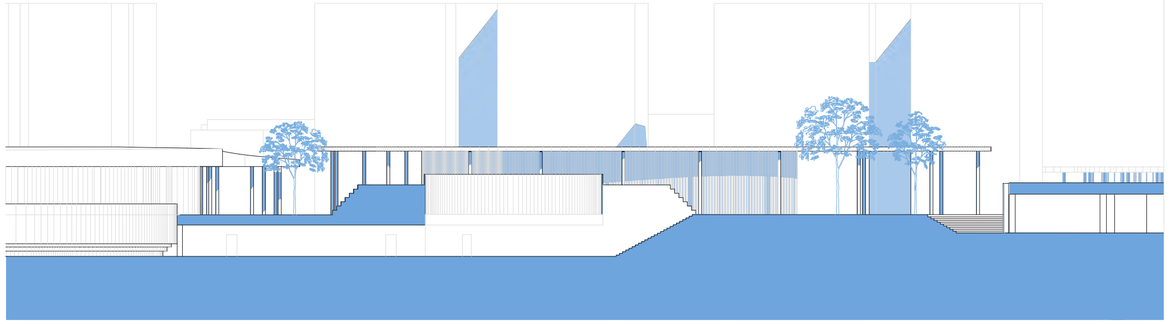


DESIGN STRATEGY

1. store
2. gym
3. park
4. sport facilities
5. sporting centre entrance
6. restaurant
7. relax room

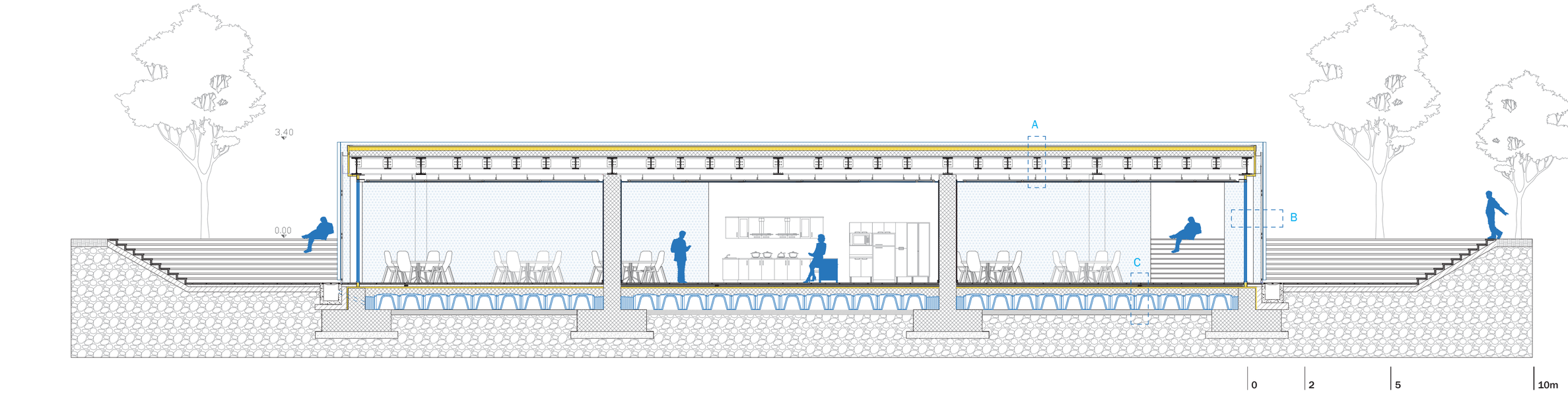


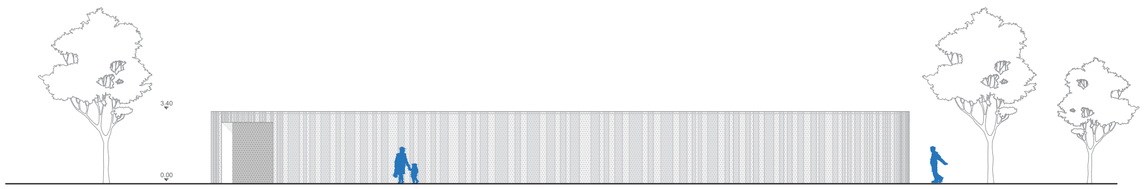
SOUTHERN FRONT



SECTION A

PARK SIGHT

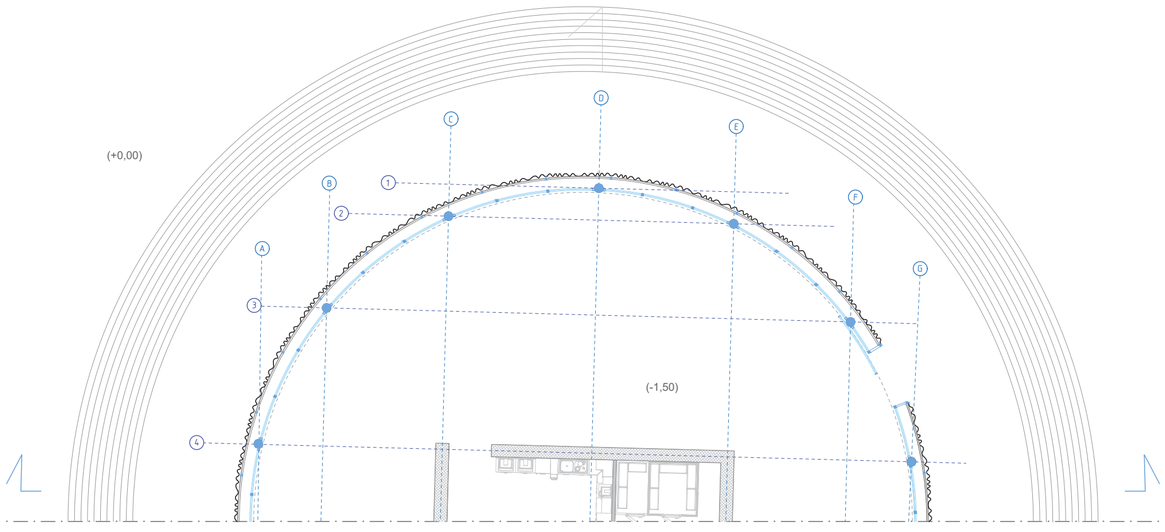




A.
isolated multilayer panel
reinforced concrete
corrugated sheet
beam
cover panel

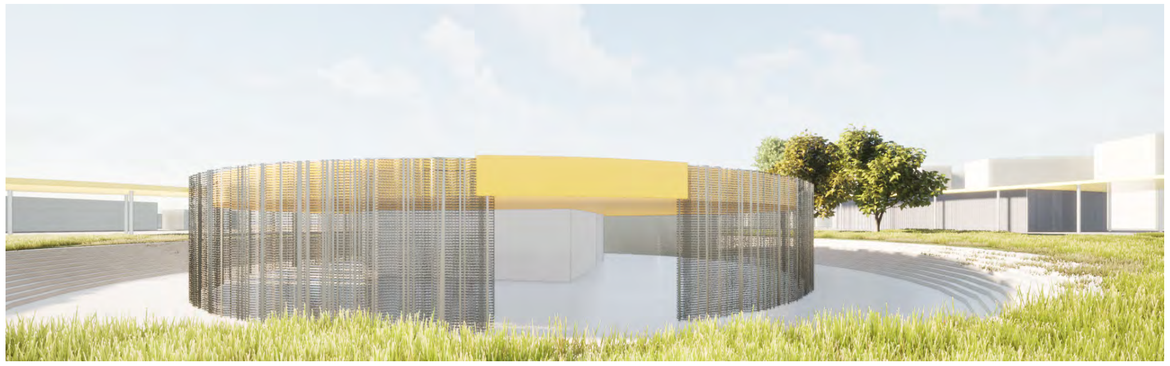
B.
glass window
pillar
metal profile
expanded metal

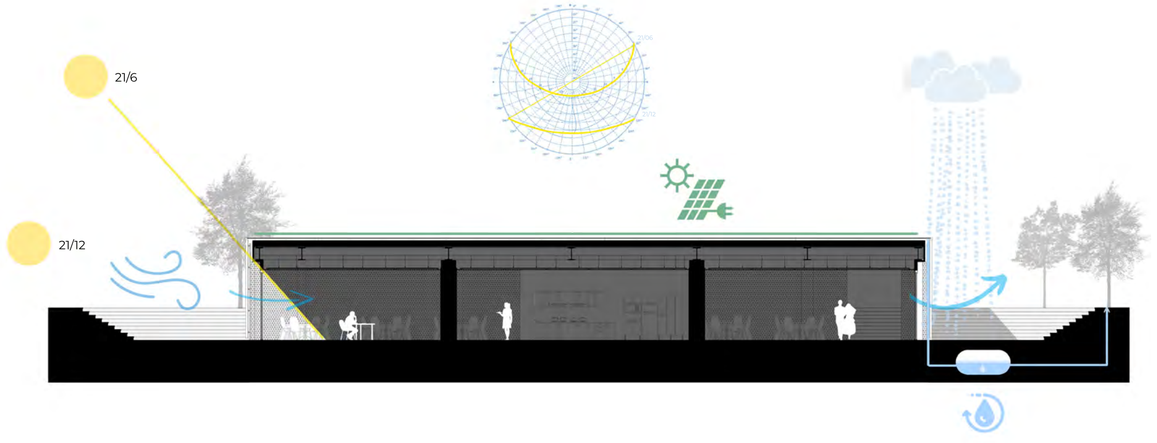
c.
tile
screed
insulation
reinforced concrete
formwork
concrete



0 4 10 20m

0 4 10 20m





INDOOR/OUTDOOR RELATION

PASQUALE NOTARIELLO - VIGGIANO MULTITASKING

A NEW NEIGHBOURHOOD FOR FRATTAMINORE, IN VIGGIANO

The project proposal aims to donate to the municipality of Frattaminore (NA), in the locality of Viggiano (an area delimited by a current P.U.A.) as well as to the neighboring municipalities, new spaces for citizenship, combining public and private places to stay.
The central theme of the project is the new residential units, built on the basis of demographic forecasts derived from ISTAT surveys.

The project involves the construction of two volumes from scratch, grafted into an urban park that aims to be a new centrality for the area and in general for the entire municipality.

Overall, the design proposal has been conceived with the aim of satisfying various needs, highlighted by the current state of the place and then found in the current Municipal Urban Plan.

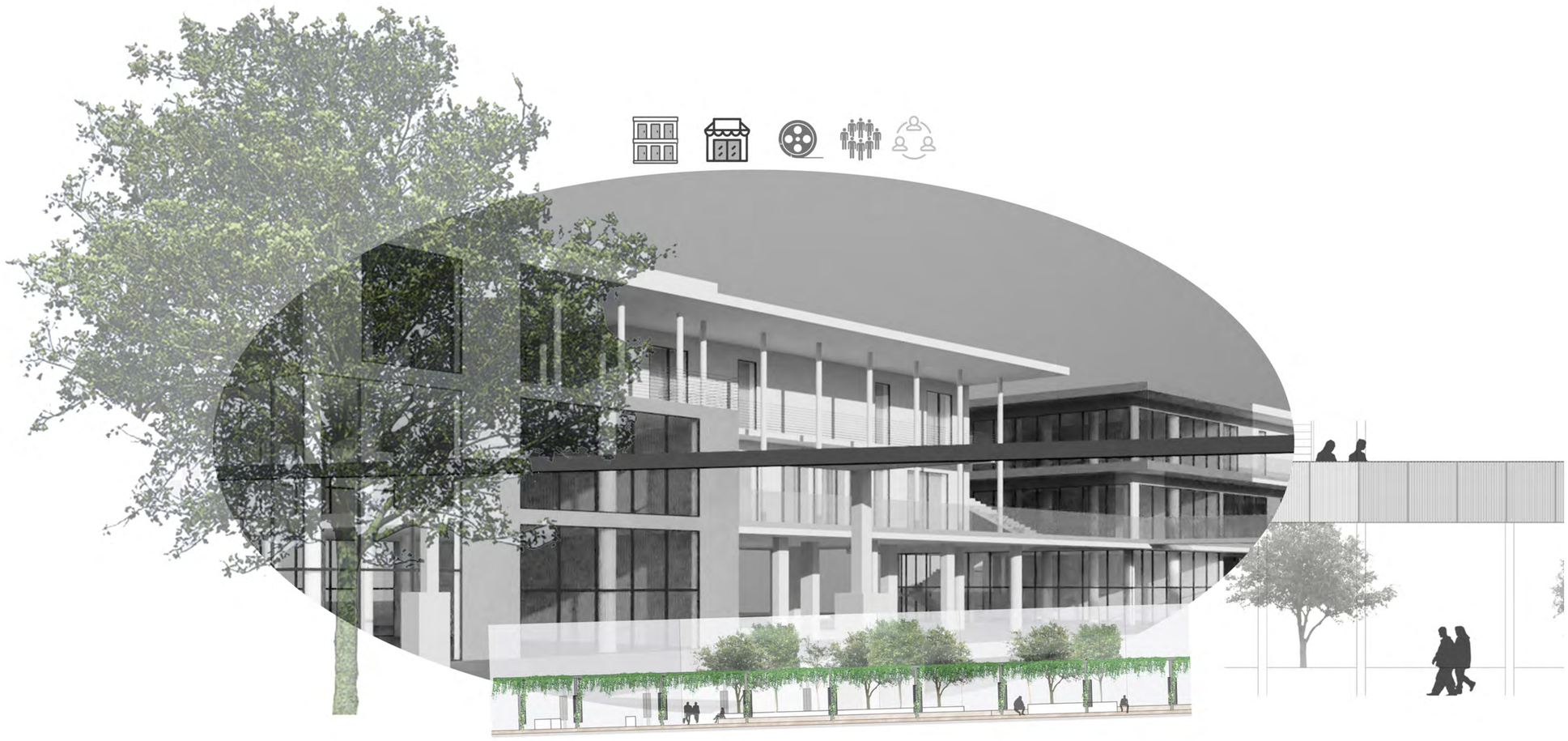
The elements characterizing the project are: the residential completion of the area, a cinema, the creation of parking lots and numerous commercial activities.

The two volumes are the result of the aggregation of different functional units: the townhouses block, parallel to Via Filippo Turati, is made up of residential units, commercial units and spaces for neighborhood services; the complex opposite is made up of the cinema and other residential units below which we find an underground car park.

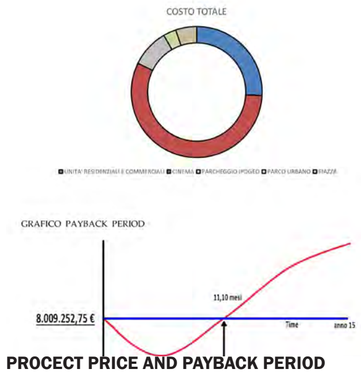
These two areas are joined together by a square, whose generating forms arose from the intersection and from a subsequent study of the main directions of the project.

Program
Residential units, commercial area, cinema, urban playground, parking

Covered area	**820 m²**
Outdoor area	**5528 m²**
Above-ground floors	**4**
Built volume	**13120m³**
Estimated cost	**€ 8089345,00**



The Viggiano neighborhood is a residential area, developed thanks to the laws for economic and popular housing. To date, it appears to be a dormitory area with the main functions far from homes: the project has tried to heal this need of citizenship.

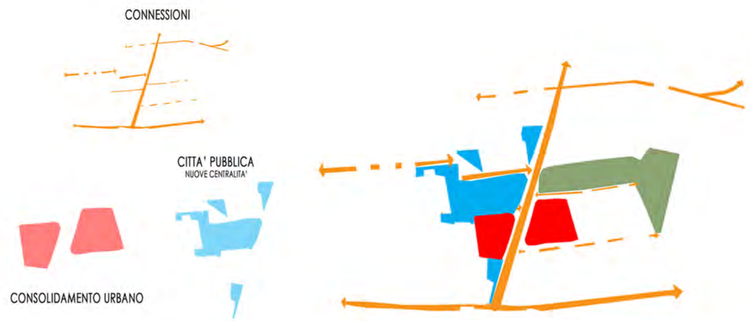


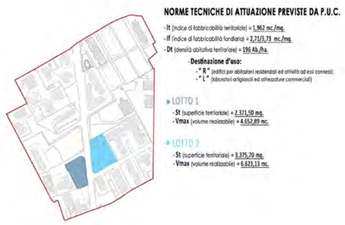
The project proposal, at an urban level, started from the analysis of the place, thanks to the inspection and analysis of the existing urban planning tools. The result was the desire to create mixed functions, combining the public and private spheres.

The public city is once again the fulcrum of the neighborhood, thanks to the redevelopment of the urban and perurban margins; an extension of the open spaces to serve the neighborhood, and consequently the municipality of Frattaminore, was also proposed.

Another central theme was that of connections, trying to give a synergy to the entire area, combining the needs of the new citizens who will settle and those of occasional visitors, redeveloping and strengthening the road network, connecting the historic core of the city and the new neighborhood.

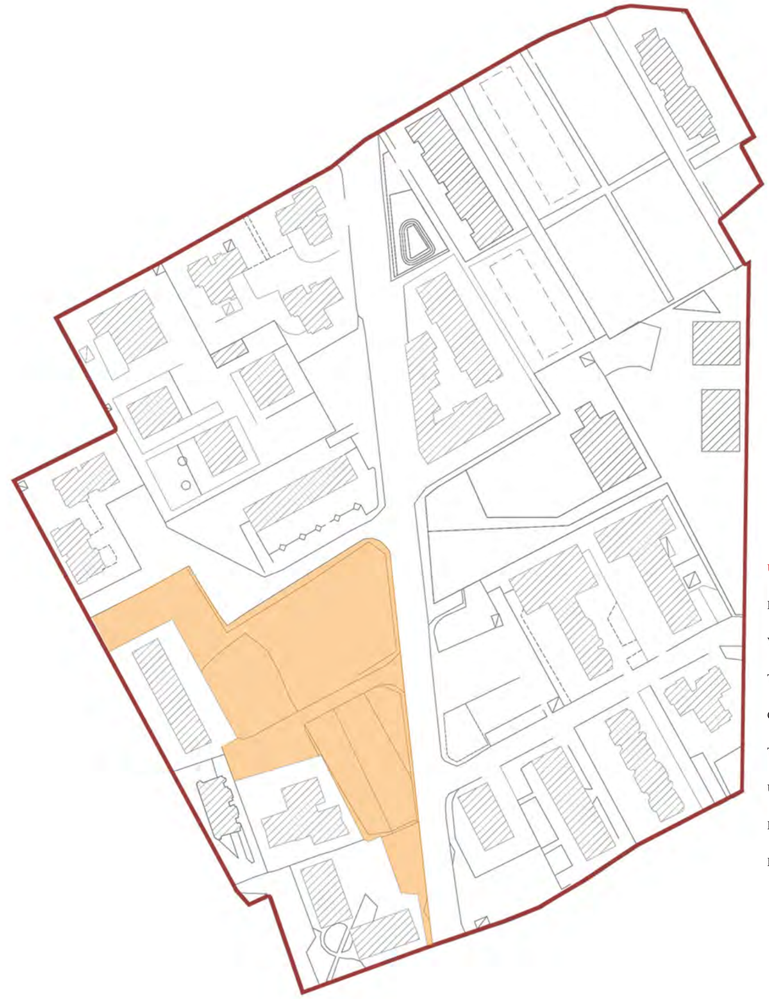
Finally, another project theme is urban consolidation, pursued through the regeneration of the disqualified city following the directives in terms of eco-sustainability and energy efficiency.





CONCEPT URBAN PLANNING

The strategy concerning the urban planning started analysing the area: thanks to a firts analysis I noticed how was necessary to develope new public speces for the citizens of the Viggiano quarter.



URBAN PARAMETERS OF THE PROJECT

Residential and commercial units:

Volume considered: 4652.90 m3

Total volume: 4600 m3

Cinema:

Total area: 6091.20 m2

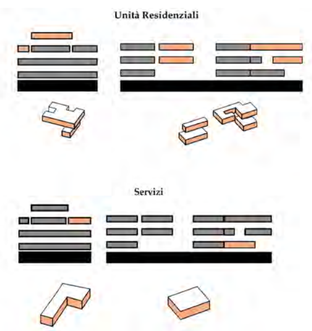
US MAX: 3045.22 m2

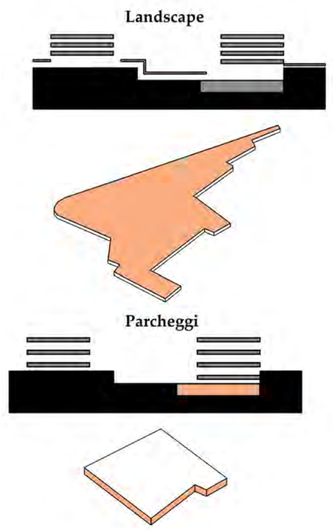
Project area: 1200 m2

Parking: 1200 m2

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m





People flow from cinema

People flow from cinema

Private residences

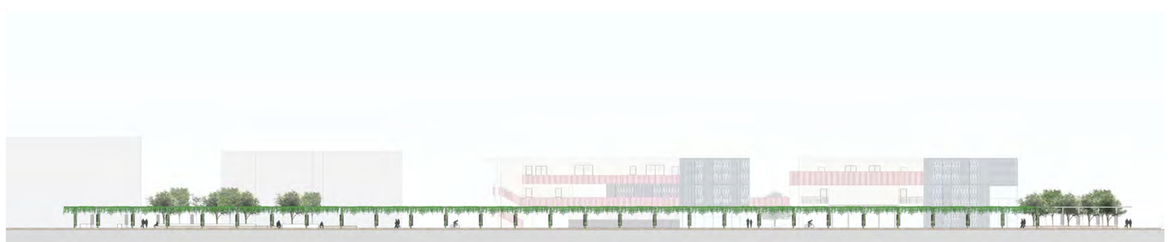
Public square

Public green areas

Municipal cinema

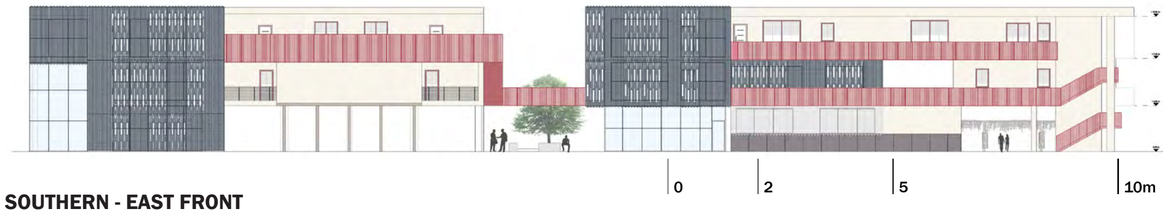
DESIGN STRATEGY

0 10 25 50m



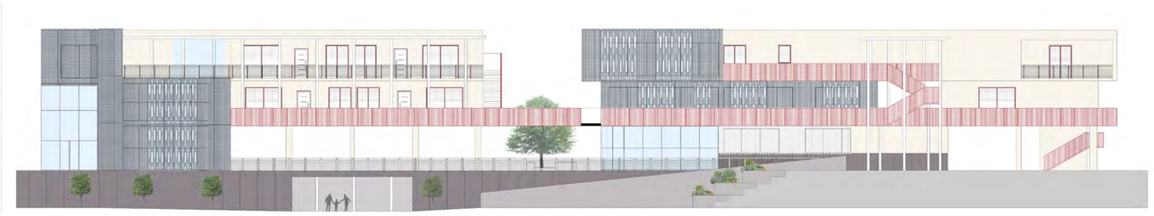
TERRITORIAL SECTION

0 20 50 100m



SOUTHERN - EAST FRONT

0 2 5 10m

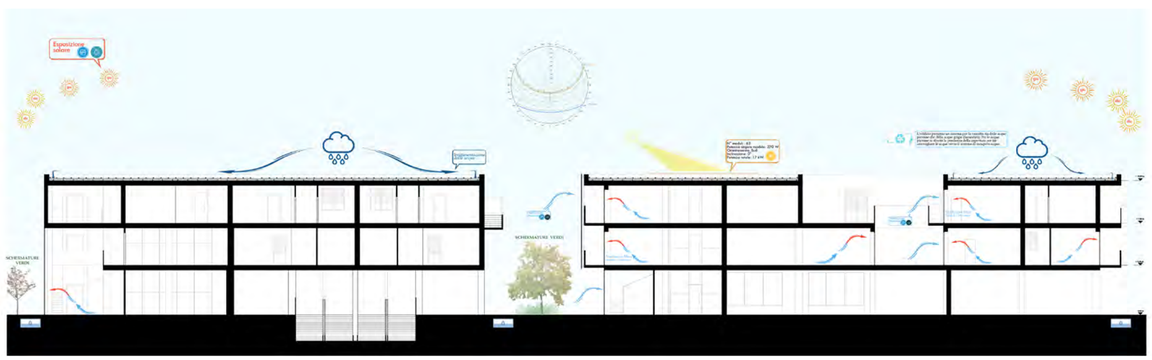


SOUTHERN - WEST FRONT

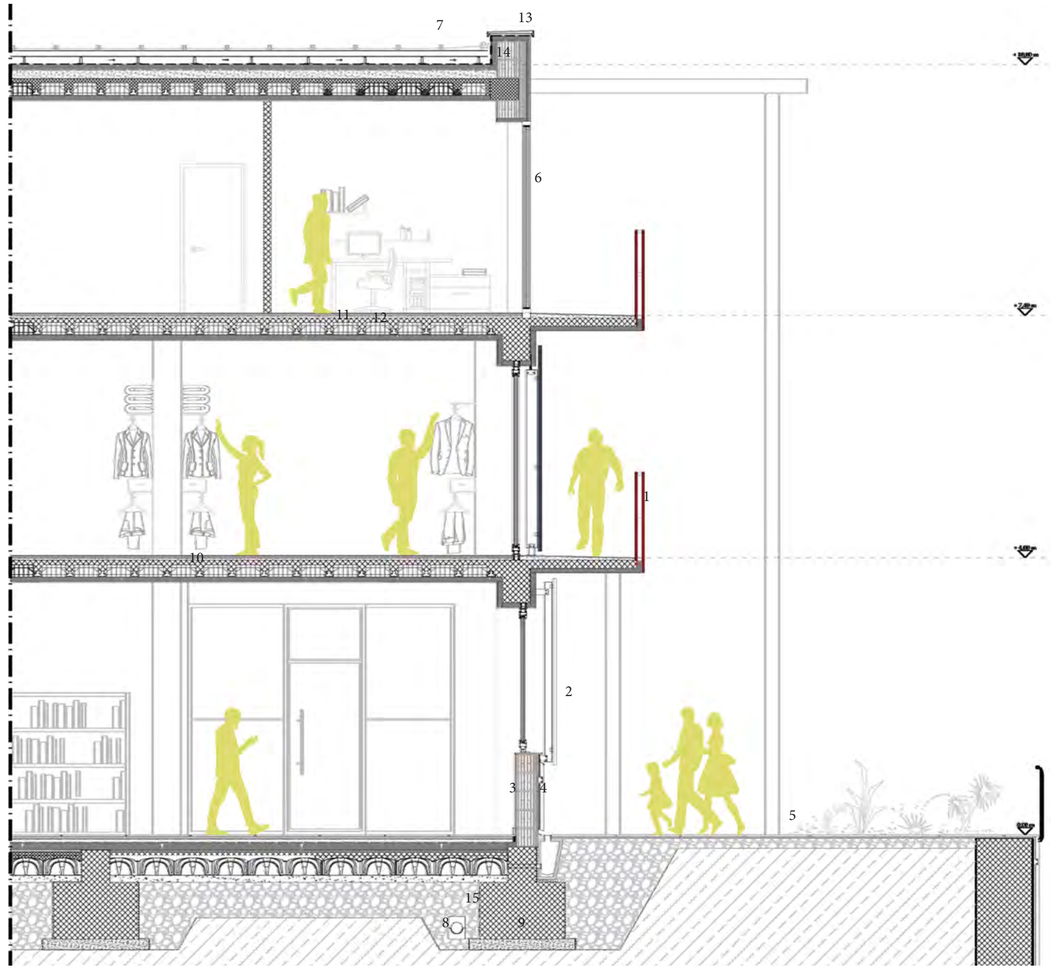
0 2 5 10m

VIEW OF THE MAIN ENTRANCE

RENDER



ENVIRONMENTAL SECTION



1. Corrugated sheet metal type Frequence 14.18
2. Trapezoidal sheet steel
3. Poroterm PLANA + 30 brick
4. Wood - concrete composite panel
5. GEOLOGICAL type floor
6. Stained glass window SCREENGLASS
7. Metal cover type ALUGRAF
8. Porous pipe connected to the sewer
9. Foundation plinth in reinforced concrete
10. Latero - concrete slab
11. Wood fiber thermal and acoustic insulation
12. Casting of cellular concrete
13. Metal closing flashing

INDOOR PLAN SCALE 1:50

To overcome the “cultural boundary” of the two original towns of Pomigliano d’Atella and Fratta Piccola, still inherit by the population nowdays, the best way of acting is by grafting public places in the abandoned ones, improving the areas with their re-activation, modifyign the open spaces and building new multiple connections, creating accessible places.
Focus: The Red Wire whose meaning is to unify. This wire travels in all Frattaminore, touching and going through every abandoned space and creating new green public park. Creating life and colours in a gray neighborhood and distancing the people far from it.
The most important part of my project is built in the area near the Town Hall, where years ago there was the first School built in Frattaminore. The area now is an abandoned construction site with growing weeds and trees.
The new building is made as a portion of landscape, an exceptional part of a public park in a dense urban settlement. A protected public space in which the user can move freely, characterized by functional areas that gradually become one another and whose boundaries are, from time to time, redefined by the number of users who at that time use them, a place for citizens of all ages. The project is accessible, a transit usage, a meeting point, a network between the abandoned places.

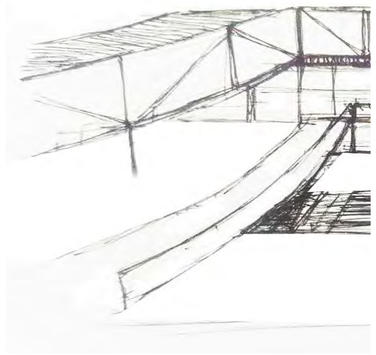
Program

Community center: public library, senior center, multi-functional hysiotherapy centre, auditorium, exhibition spaces

Covered area	**2366m²**
Outdoor area	**7394m²**
Above-ground floors	**3**
Built volume	**14630m³**
Estimated cost	**4966751.35€**

"I wish to think about architecture freely; to expand my perspective on architecture as flexibly, broadly, and subtly as possible, beyond the stereotypes of what architecture is considered to be"

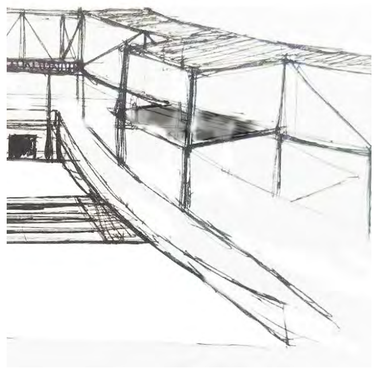
-JUNYA ISHIGAMI

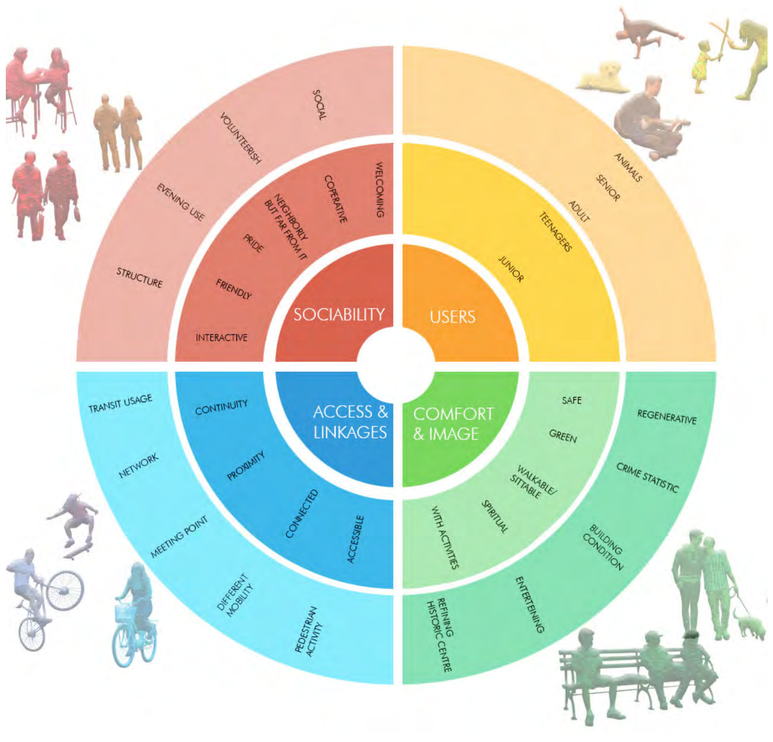


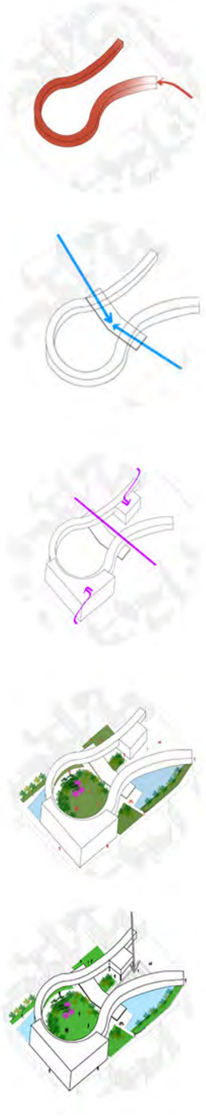
It began from the construction of the closed bridge between the park and the Town Hall. From the creation of a cover from the sunlight, the Community Center and the conference hall we have the built of the part of the buinding underground with the Auditorium and the exhibition room. to the creation of the park.

"As its form blurs, architecture will exist where, like a cloud, the boundary between inside and outside grows ambiguous."

-SOU FUJIMOTO







Community Center

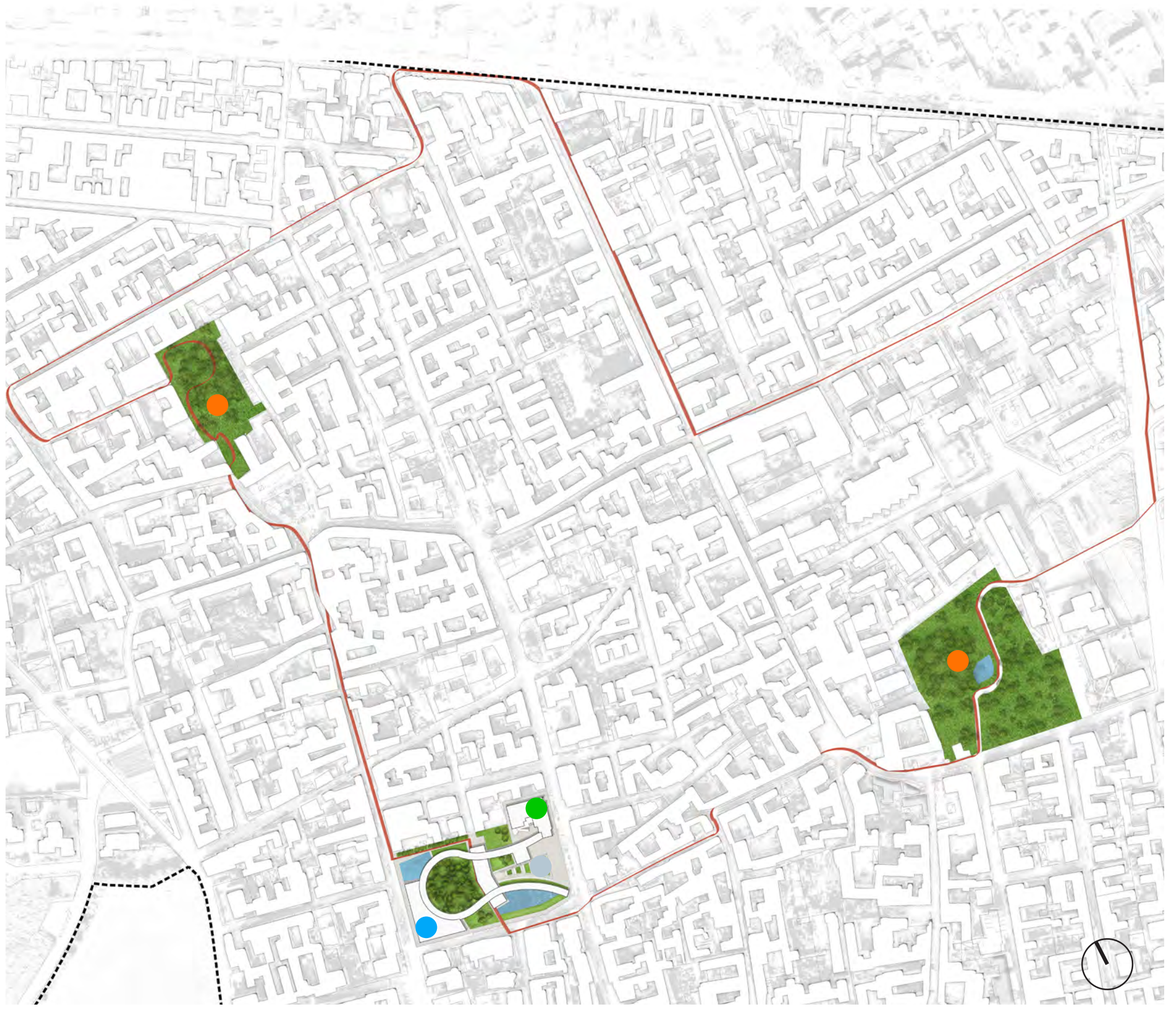
Public Park

Bicycle path

Town Hall

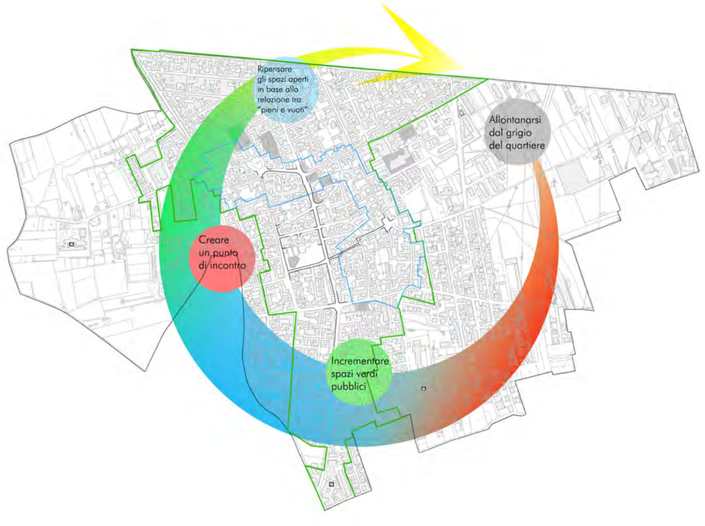
Auditorium entrance

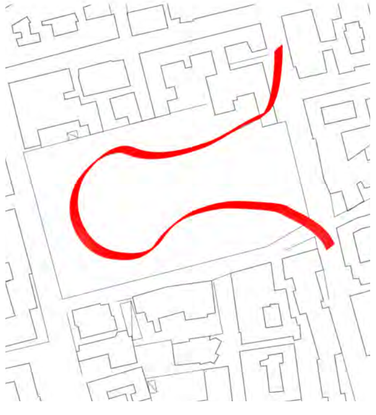
In the image at the right of this caption there is the evolution of the project, from the concept (and the beginning) to the end. From the walkin bridge to the elevation of the Community center.



FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

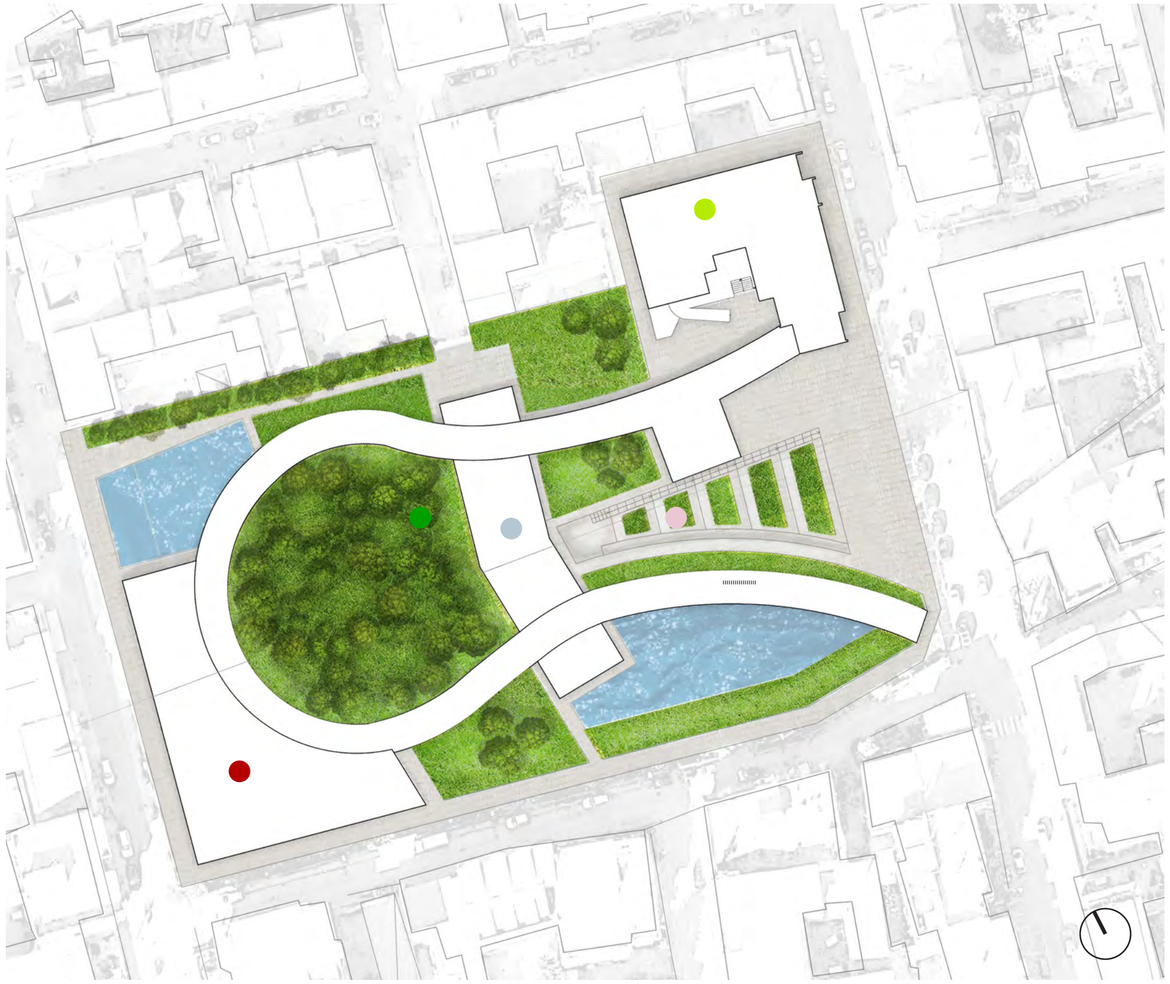




CONCEPT

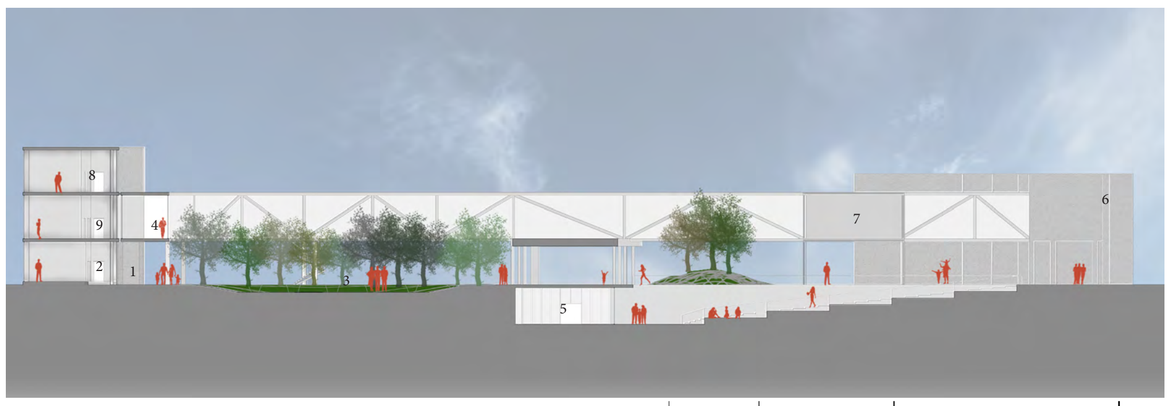
A simple drawing can explain all the ideas that I wanted my project to express, as the Line or "wire" to unify everything.

Municipality
Community Center
Cover
Linking path
Auditorium
Urban park



DESIGN STRATEGY

0 10 25 50m



SECTION A

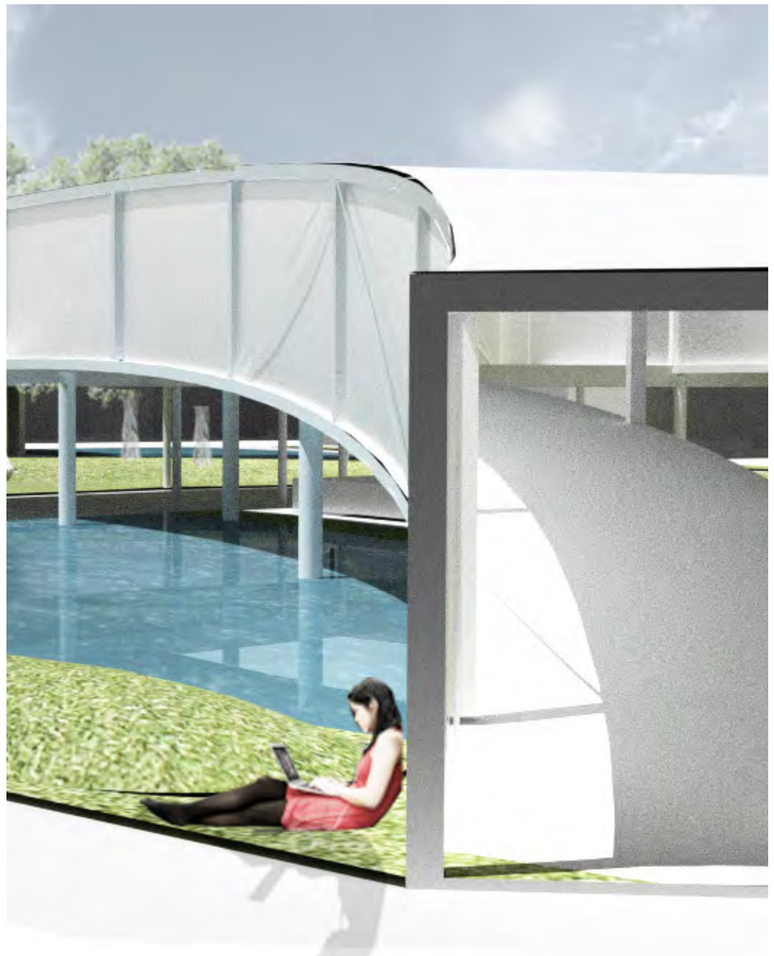
0 4 10 20m

1. Entrance
2. Lobby
3. Urban park
4. Linking path
5. Auditorium
6. Municipality
7. Conference room
8. Medical center
9. Workshops

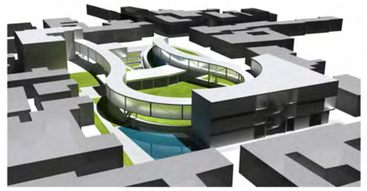
SOUTHERN FRONT

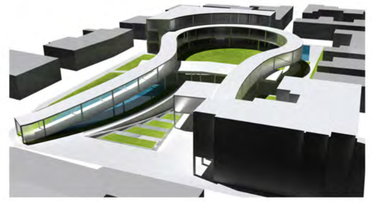
WESTERN FRONT

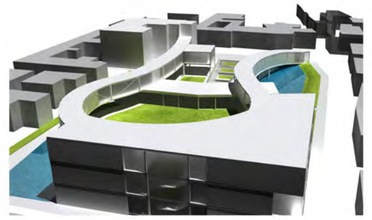
0 10 25 50m

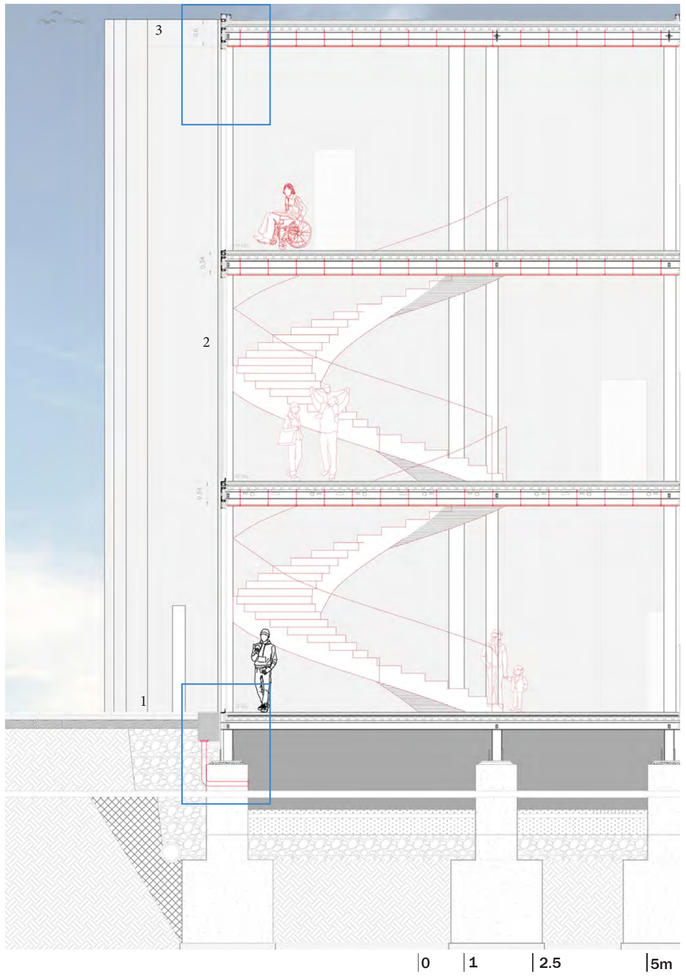


ENTRANCE

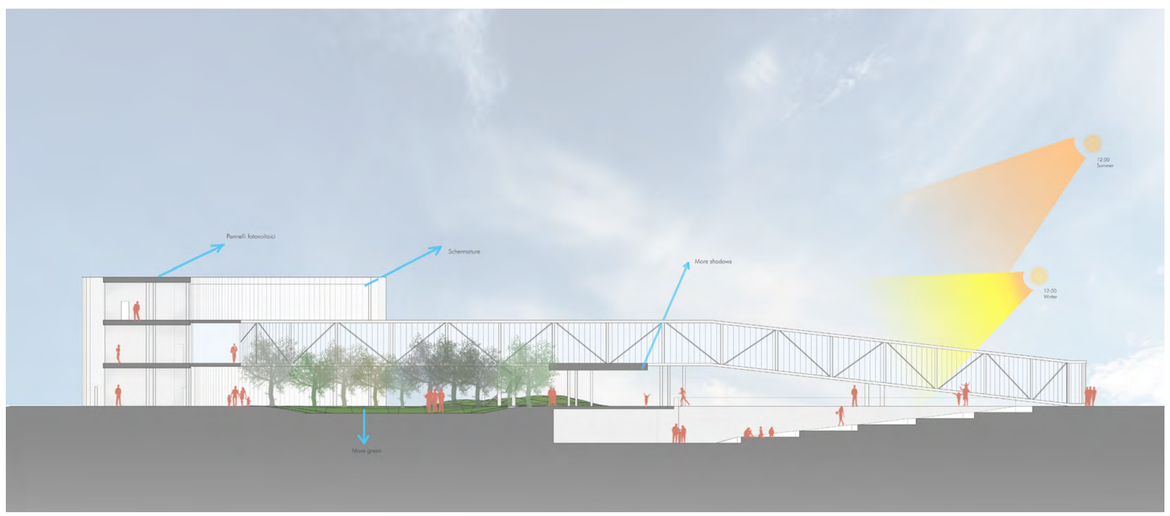


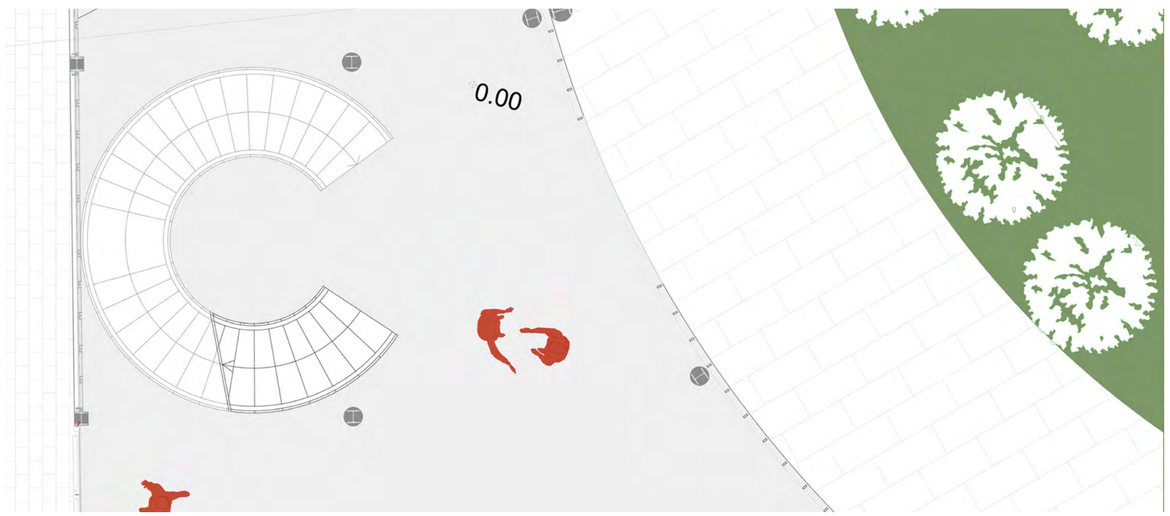






1. Foundation node (ground, lean concrete, waterproofing sheath, inverted beam foundation, substrate based on expanded clay and / or insulating material, barrier against rising damp, gravel, air chamber, IPE200 beam, corrugated sheet, insulation in rock wool, Porcelain stoneware flooring)
2. Vertical transparent partition with double glass
3. Gravel cover node, Waterproofing sheath, Rock wool insulation and vapor barrier, concrete screed, ipe 200 beam, rock wool insulation, false ceiling with plasterboard panels





INDOOR/OUTDOOR RELATION SCALE 1:50

FERDINANDO ROMANO - SCHOOL PARK

THE POWER OF COLOR - NEW GREEN FOR THE CITY

The Park School is designed near the town hall of the Municipality of Frattaminore.
The chosen area is currently uncultivated and presents the excavations of a school under construction, whose works have been stopped for years.
The choice of the school building is indicated by the historical characteristics of the design site as there was already a school of which only a few fragments remain, plus, as already mentioned, the foundations of a `` new school building '' are present .
Therefore, the new construction is conceived as a graft with respect to the project in its phase of being, making sure that the additions to the original choices are immediately recognizable through the construction techniques and materials.
The idea of the park was taken with regard to the narrow and '' suffocating '' urban grid, which presents few opportunities for organized greenery. The intention is therefore to be able to give breath and color to a city that is too gray and '' narrow ''
Finally, a great deal of effort required the union of the two types of projects, apparently opposite and '' distant '', but which actually complement each other by giving the opportunity to use the school throughout the day, placing it at the service of community and not just enrolled students.

Program

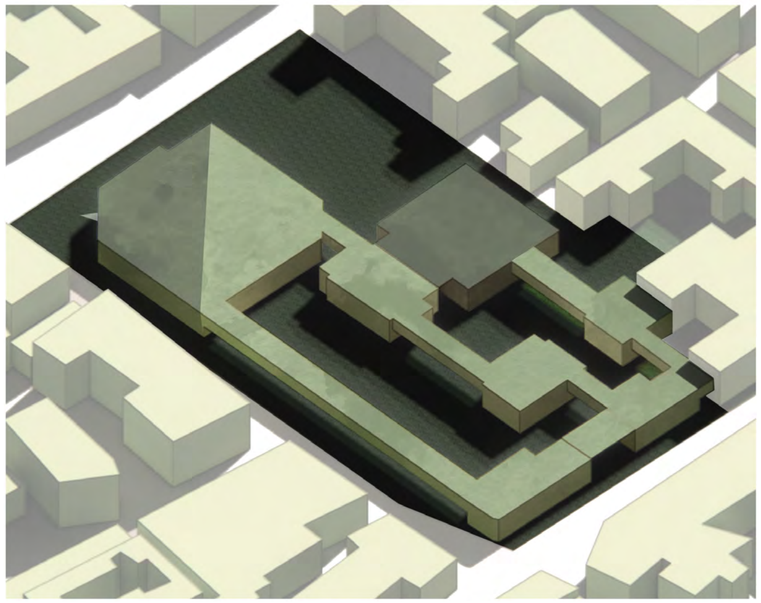
School,Park, Theater, Cinema.

Covered area	**6874m²**
Outdoor area	**5588m²**
Above-ground floors	**1**
Built volume	**7716m³**
Estimated cost	**3572668,75€**

The choice not to demolish the pre-existing structures and to give continuity to the abandoned project derives from the desire to affect as little as possible an already highly urbanized and cemented territory.

The compositional scheme derives from the projections of the lengths of the pre-existing buildings and the context, which intersecting in an uneven grid, give life to the positioning of the new buildings.
The horizontal connections between the bodies are important, they are suspended, supported by pillars, in order to leave the underlying level of the park as free as possible.
The vertical connections, on the other hand, are recognizable bodies with respect to the built buildings, treated almost as elements in their own right.

The park below is made up of a main plot of indoor and suspended paths, and its own subplot of paths, designed for play, mainly outdoors.
Finally, each green area has its own theme, given by the game object that characterizes it.



Edifici preesistenti

Innesti

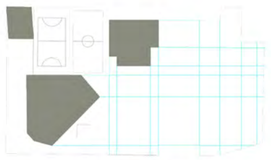
On the right the storyline of the project is explained, starting from the study phases of the presences, up to the addition of the grafts

AIRBRUSHING

DEMOLISHED SCHOOL

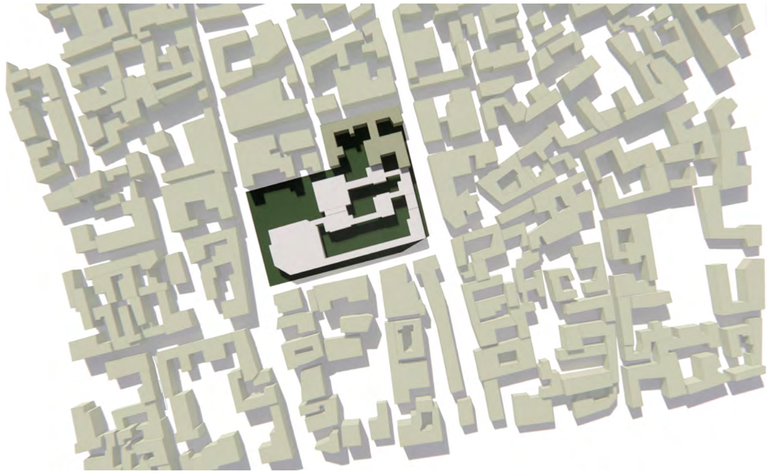
SCHOOL UNDER CONSTRUCTION

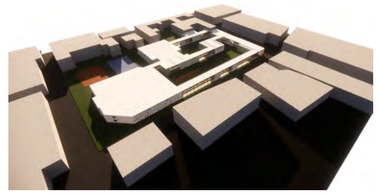
COMPOSITION DIAGRAM



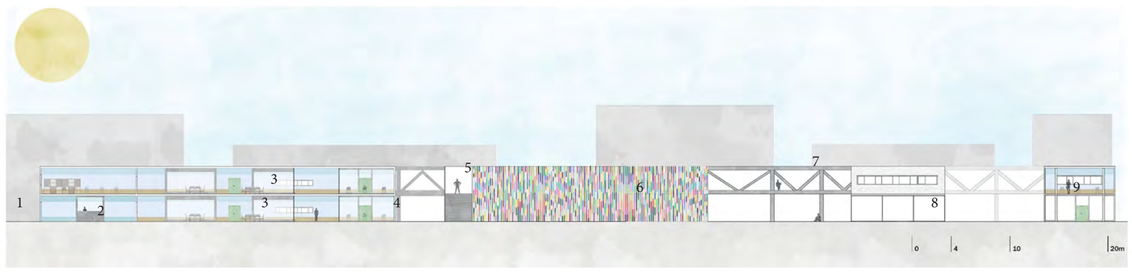
FIRST FUNCTIONAL SCHEME

FRATTAMINORE GENERAL FRAMEWORK & LANDSCAPE STRATEGY



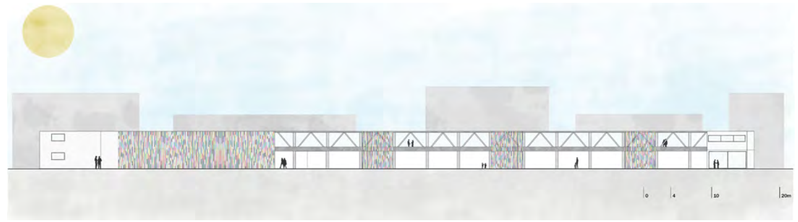


DESIGN STRATEGY

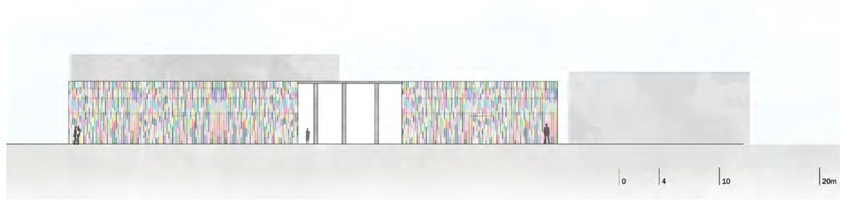


SECTION A

1. Entrace
2. Concierge
3. Central study room
4. Classroom
5. Vertical Connections
6. Colored Facade
7. Suspended Connection
8. Free Facade
9. Laboratory Classroom

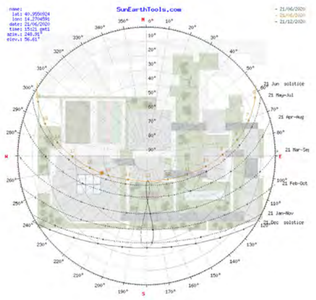


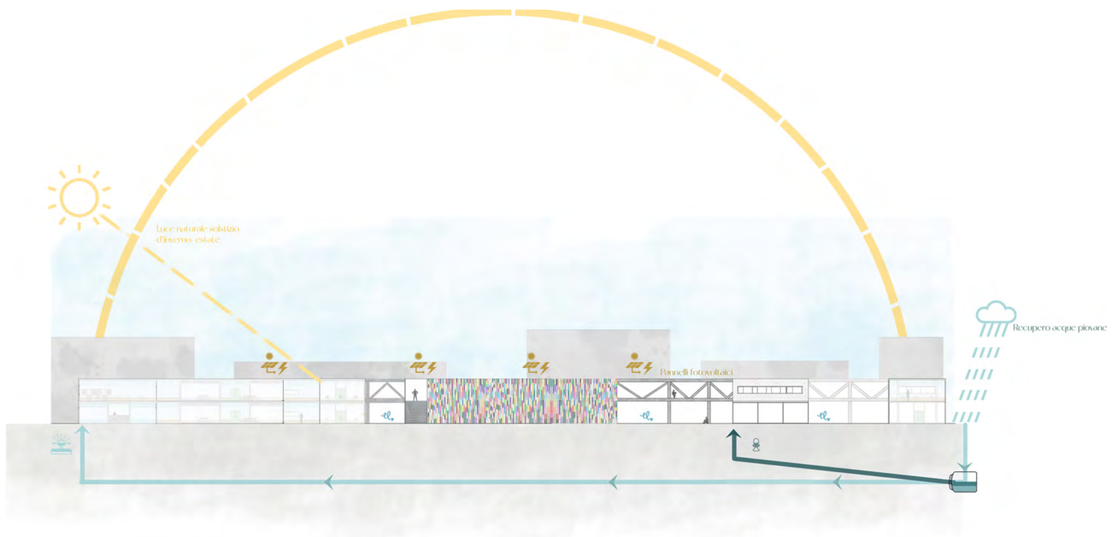
SOUTTHERN FRONT

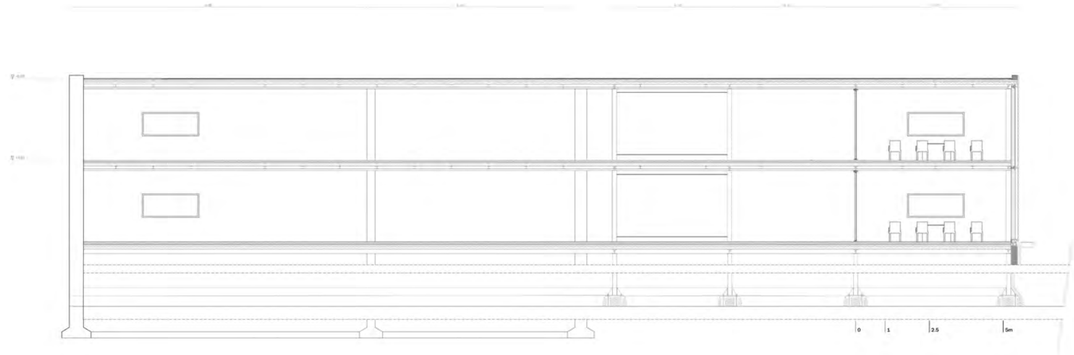


EASTERN FRONT

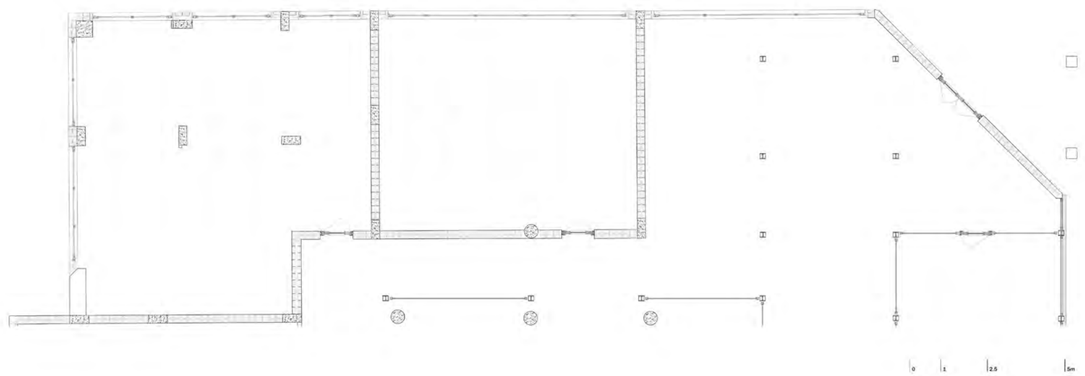
AXONOMETRIC VIEW







1. Granular expanded clay
2. Slope screed on the roof
3. Bituminous waterproofing membrane
4. Cosmos rock wool rigid panel
5. Vapor barrier in polyester
6. Aluminum flashing
7. Ceramic coating system
8. L profile in aluminum
9. Multicolored PVC flooring
10. Inserire elemento
11. Impact sound insulation
12. Corrugated sheet



INDOOR/OUTDOOR RELATION SCALE 1:50

MARIA RUSSO - CONNECTING THE OPPOSITES

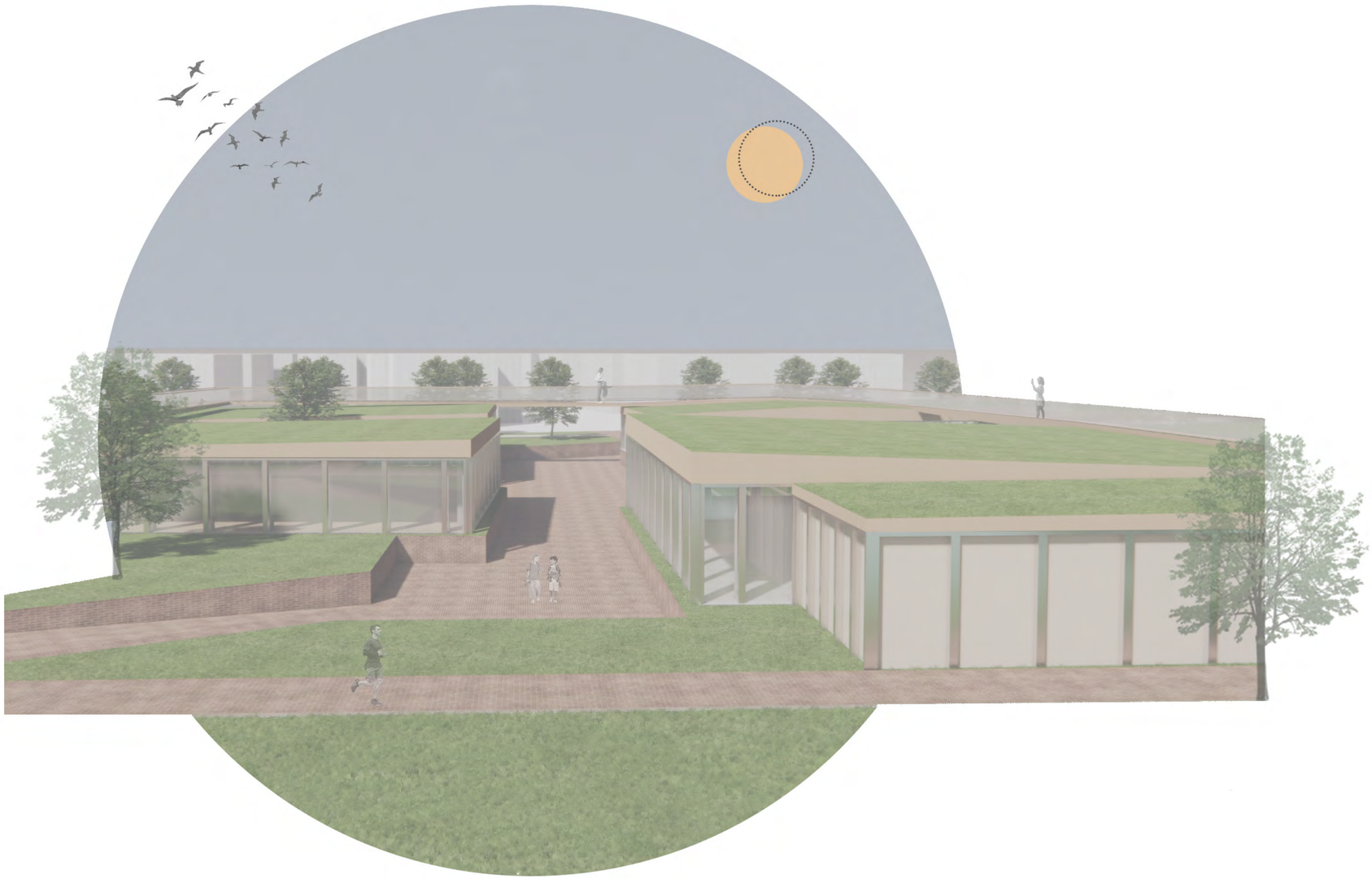
SPORT PARK FOR LOCAL COMMUNITY

ConnectingThe Opposites is a project concerned the link between to different parts of the city.
In a little urban contest as Frattaminore, where citizens moves out of the city for working, there are no places to live and spending free time. There is no sustainable mobility and no public spaces for community.
The necessity to provide a public space and reuse a disused area situated in a center place is the key of project acting.
Starting from analyzings urban regulations, the project consists by using this new space as a place of aggregation and sociality for the Frattaminore community through sport and outdoor activities and connecting the two parts of city by a ciclopedestrian lane.
The area is collocated between the historical building of the City and the urban expansion.
Sport park begins a new landscape element in a fragmented urban contest.
The relationship between the new sport park, the building and the two oppoosite parts of the city is given by the work of the soil and different elevation through paths above the garden roofs.

Program

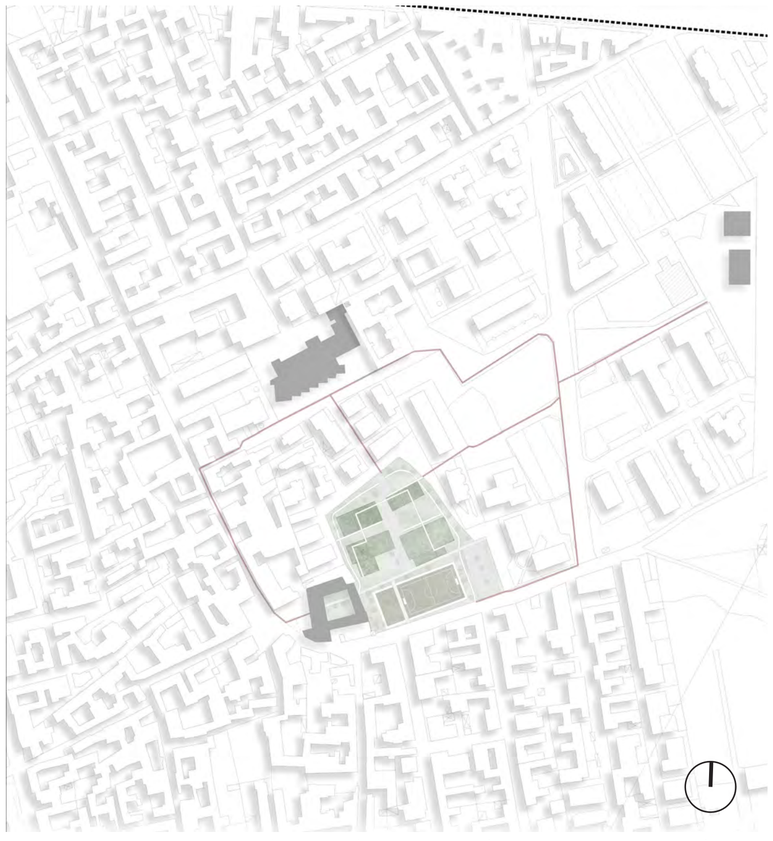
Urban park, byke line, swimming pool, basketball cort, fitness area, cafè

Covered area	**2740m²**
Outdoor area	**11931m²**
Above-ground floors	**1**
Built volume	**9864m³**
Estimated cost	**723029.89€**



Starting from the necessity of reconnecting the old with the new city, opposites parts of the urban contest of Frattaminore, project is a realization of sport park for local community.

The sport park is characterized by many different functions and layers of fruibility. Starting by the bottom, there are the ciclopedestrian path and connect historical builging of Frattaminore, the elementary school and the local library located in the PEEP area. Park also presented outdoor sports spaces, such as basketball and football courts.
The main path of the park from the northen side connects the access to the main four pavillons, that have different functionalities: covered basketball court, fitness area, swimming pool and cafe, each one with own services and access.
The four pavillons are also characterized by green roofs and an elevate path that start from the basketball pavillon and connect the four builging across the roofs. This path provide to give an other layer of fruibility and is also a point of view for the new landscape con sport park. trascorrere del tempo all'aria aperta.



FRATTAMINORE
GENERAL FRAMEWORK & LANDSCAPE STRATEGY

0 20 50 100m

URBAN STUDIES

Preliminar analysis developed starting from lecture of urban plan, studing city zoning, mobility and existing public spaces. t

Inquadramento dell'area di intervento

Aree incolte e spazi abbandonati

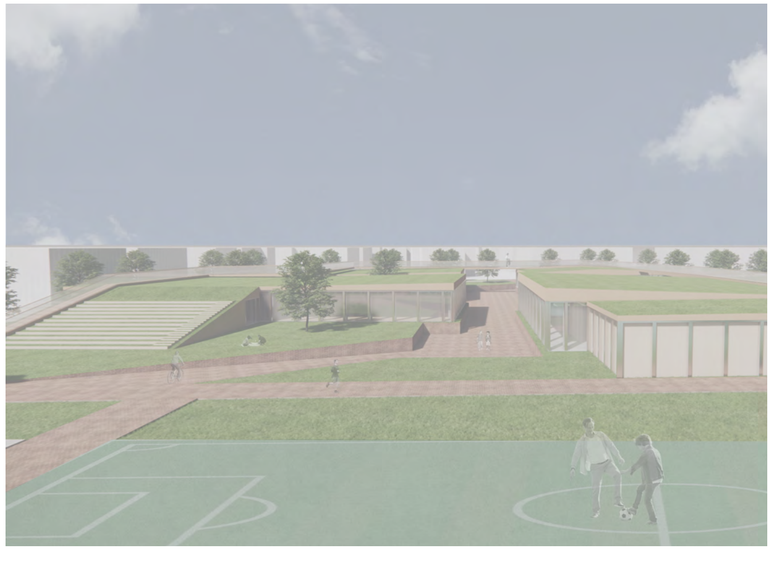
Connessione con i poli principali

Concept di progetto

DESIGN STRATEGY

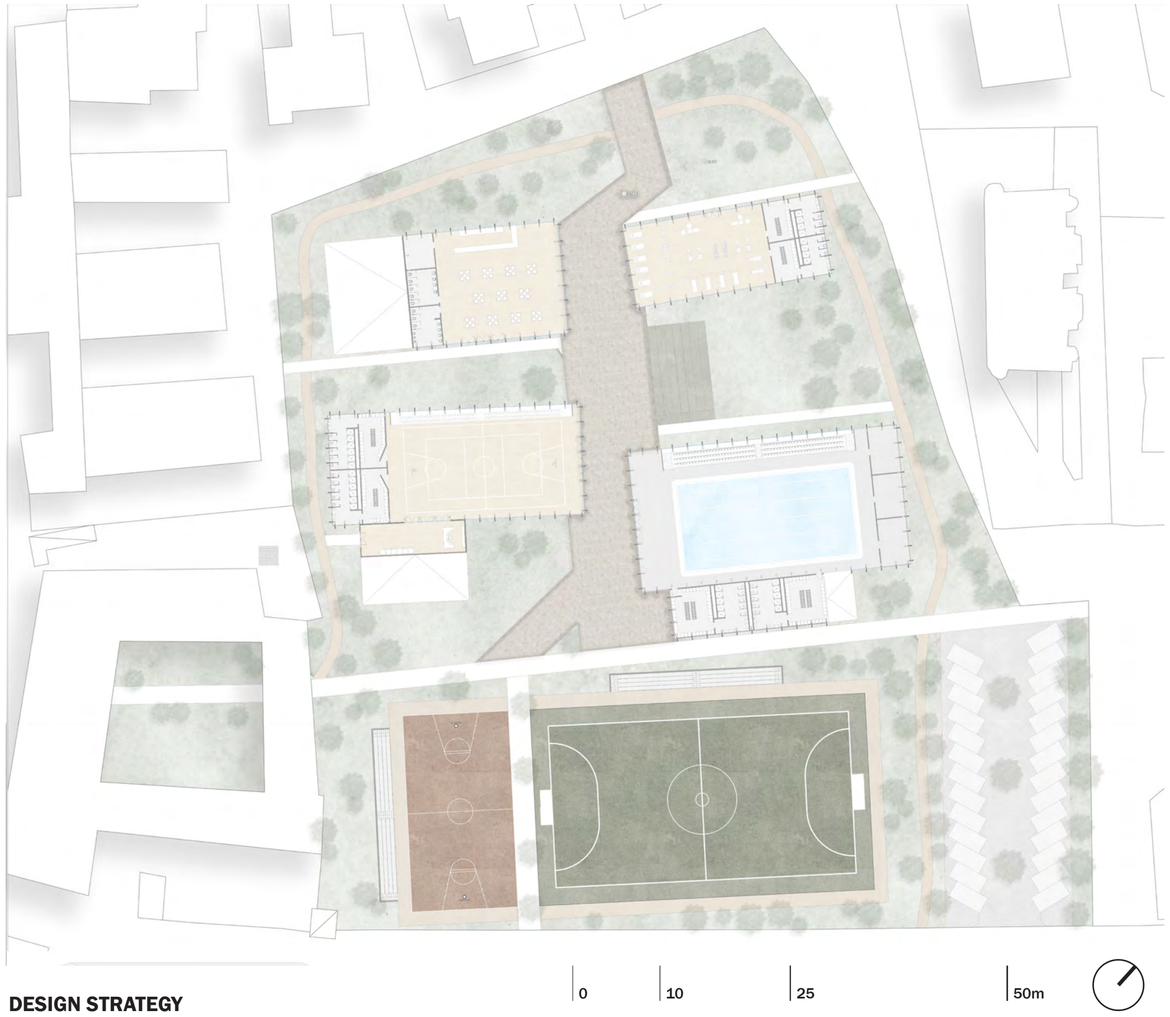
0 10 25 50m

TERRITORIAL SECTION

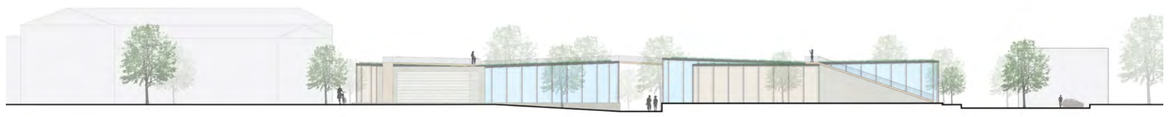


OUTDOOR SPACES

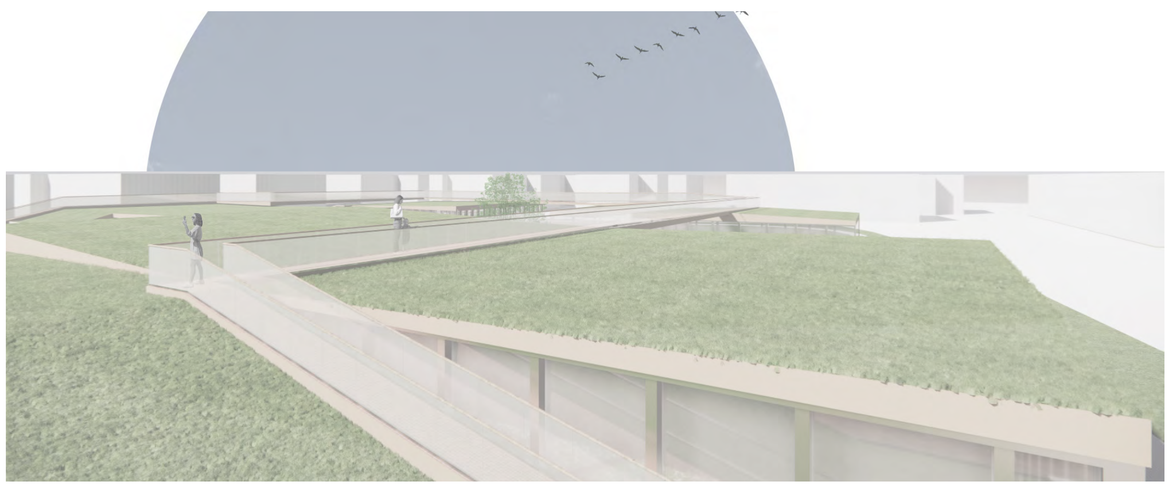
Complex is characterized by the green bike lane around the pavillons and courts for outdoor sports.



DESIGN STRATEGY



SECTION



PATHS ABOVE GREEN ROOFS

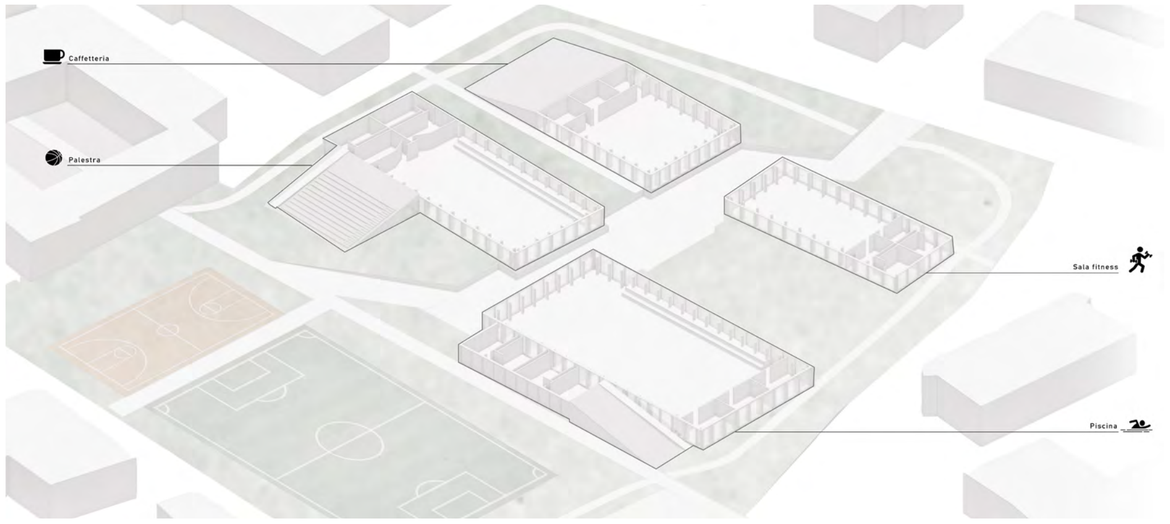
NORTHERN FRONT

EAST FRONT

SECTION A-A'

SECTION B-B'

GYM PLAN

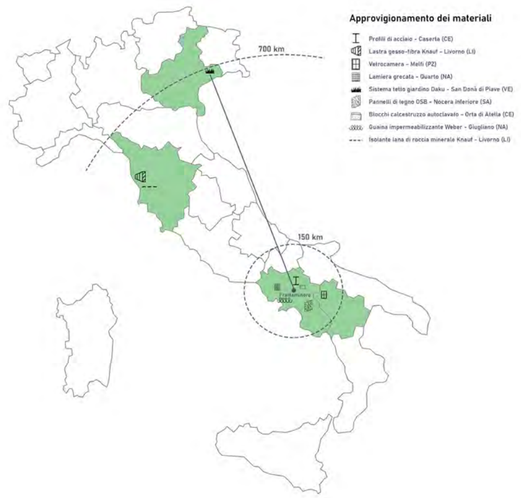


FUNCTIONAL SCHEME

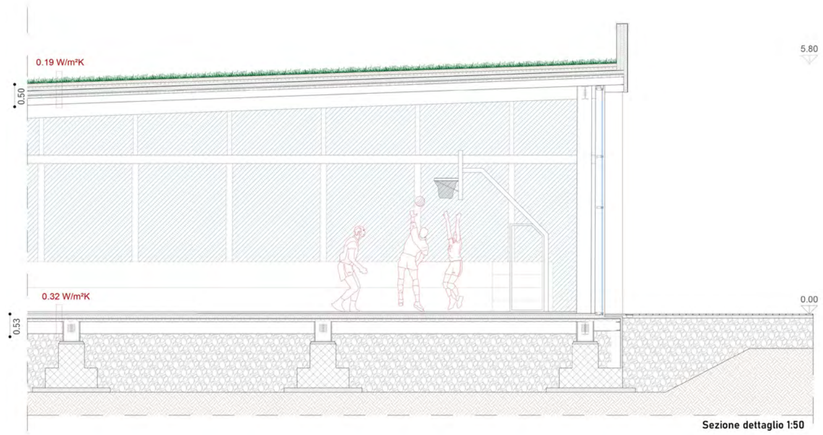
Copertura	s	ρ	λ	R(s/λ)	m
Strato	[m]	[kg/m³]	[W/mK]	[m²K/W]	[kg/m²]
Daku sedum (vegetazione)	0,08				
Soft soil (strato coltura)	0,08				
Daku stabilfilter (elemento filtrante)	0,001				
Daku FSD (elemento drenante)	0,0082				
Manto antiradice	0,02				
Pannello sandwich grecato	0,08	210	0,038	1,57	16,8
Totale pacchetto	**0,29**	**620,7**		**3,4**	**180**
Pannello OSB	0,018	650	0,12	0,15	11,7
Lamiera grecata	0,003	7800	52	5,7E-05	23,4
Rsi				0,13	
Rse				0,04	
TOTALE	**0,5**			**5,34**	**231,9**
TRASMITTANZA TERMICA [W/m²K]	**0,19**				

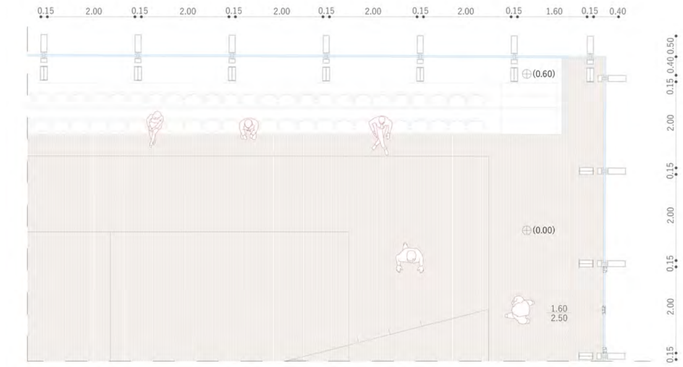
Solaio contro terra	s	ρ	λ	R(s/λ)	m
Strato	[m]	[kg/m³]	[W/mK]	[m²K/W]	[kg/m²]
Lamiera grecata	0,003	7800	52	5,8E-05	2340
Pannello in legno OSB	0,015	650	0,12	0,125	9,75
Isolante in fibra di legno	0,1	400	0,038	2,63158	14
Lastra gessofibra per sottofondi	0,05	1150	0,32	0,15625	28,75
Pavimento legno	0,01	400	0,14	0,07143	10
Trave IPE	0,3	7800	52	0,00577	2340
Rsi				0,13	
TOTALE	**0,478**			**3,12**	**4742,5**
TRASMITTANZA TERMICA [W/m²K]	**0,32**				

Parete Verticale Trasparente	
posizione vetrocamera: 6mm lastra esterna- 16 mm Argon (90%)- 4mm Pilkinton Optifloat C	
g= 0,18	



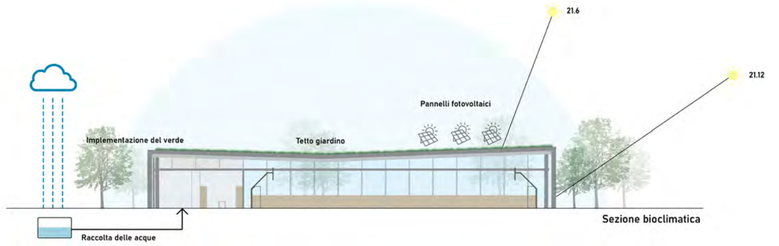
MATERIAL SUPPLYING DISTANCES





Pianta dettaglio 1:50

INDOOR/OUTDOOR RELATION SCALE 1:50



ENVIROMENTAL SECTION

GREEN ROOF

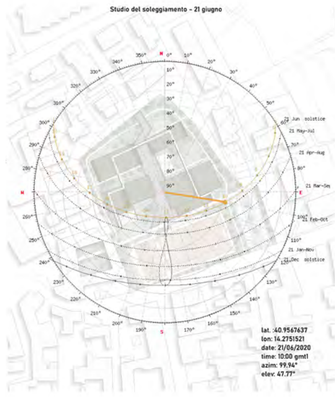
1. Daku Sedum
2. Daku roof land
3. Daku stable filter
4. DakuFSD
5. Anti-root mantle
6. Insulating
7. OSB wood panel
8. Corrugated sheet metal
9. IPE beam

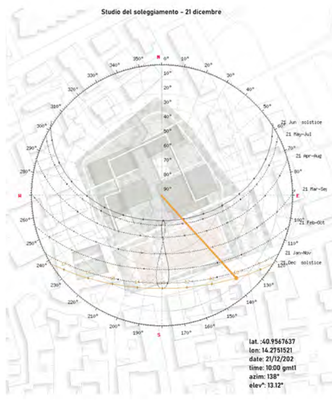
SLAB

10. Wooden floor
11. Gypsum-fibre slab
12. OSB wood panel
13. Corrugated sheet
14. IPE beam
15. Foundation in inverted beams

TRANSPARENT VERTICAL CLOSURE

16. Double glazing
17. Steel profile
18. IPE pillar



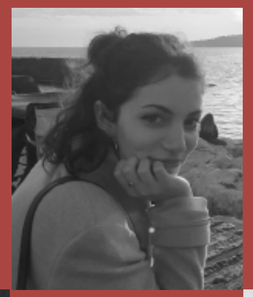


SUN ANALYISIS

Angela Girardo

Rosanna Giuzio

Francesco Iuliano



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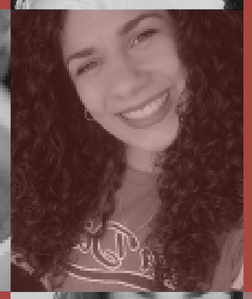

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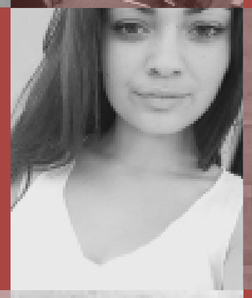

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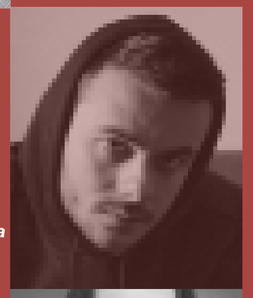
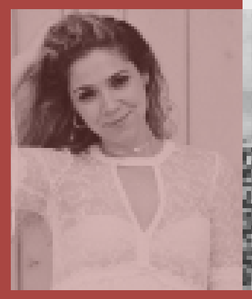
Rosario Clemente Perrotta





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Luca Battipaglia

Carmela Bottone

Andrea Cimmino

Claudia Giordano

Ilaria Domenica Iazzetta

Francesco Caliendo

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Caterina Fiscina

Sara Liguori

Marta Matarese

Umberto Molaro

Marta Parente

Roberta Vanacore

Gabriele Abbate

Pasquale Notariello

Imma Perna

Ferdinando Romano

Maria Russo

URBAN AND ARCHITECTURAL DESIGN

Pasquale Miano

with *con*

Adriana Bernieri

Francesca Coppolino

Chiara Barone

Marilena Bosone

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 Frattaminore, 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 sate 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, such as for example the beach, the pine forest, the neglected vacation homes, the ponds, 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 prospective 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

Laura Lieto

The course of Urban Planning has been focused on urban regeneration strategies in extremely fragmented and segregated contexts and severely compromised natural environments.
To contribute to the overall program of the Design Studio, this class takes empirical research as the back-bone of the planning activity, addressing students' work from an in-depth practical immersion in the study area to further, more theoretical investigation about how design and planning can make a difference in critical places such as Castel Volturno.
The course is based on early-stage fieldwork inspired by transect methodology, in which students are confronted with the complexity of the place and are compelled to progressively build local knowledge using techniques such as sketched interviews, surveys, photography and - most importantly - their own bodily experience in traveling through places.
The main goals of the planning course is developing critical local knowledge to build planning strategies that are context-sensitive and possibly open to incorporate different processes and scales, ranging from local to trans-national processes of urban and social transformation.

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 Castel Volturno, 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, и stata affrontata con gli strumenti del progetto architettonico e urbano, individuando la citta esistente come il materiale base del progetto. Su questo materiale, la spiaggia, la pineta, le case di vacanza in stato di abbandono, i laghetti, si и 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 и trattato di un lavoro ad ampio raggio che, successivamente, si и 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 и 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 и focalizzato sulle strategie di rigenerazione urbana in contesti estremamente frammentati e segregati e in ambienti naturali gravemente compromessi.
Per contribuire al programma generale del Laboratorio di Progettazione, questo corso ha inteso la ricerca empirica come la spina dorsale dell'attivita di progettazione, indirizzando il lavoro degli studenti a partire da un'immersione reale e approfondita nell'area di studio a un'ulteriore indagine рщ teorica su come il progetto e la pianificazione possono fare la differenza in luoghi critici come Castel Volturno.
Il corso si basa su un lavoro sul campo in fase iniziale ispirato alla metodologia del transetto, in cui gli studenti si confrontano con la complessita del luogo e sono costretti a costruire progressivamente la conoscenza locale utilizzando tecniche come interviste disegnate, sondaggi, fotografie e, soprattutto, la propria esperienza corporea nel viaggiare attraverso i luoghi.
Gli obiettivi principali del corso sono lo sviluppo di conoscenze locali critiche nell'ottica di costruire strategie di pianificazione che siano sensibili al contesto e possibilmente aperte a incorporare diversi processi e scale, da quelli locali a quelli transnazionali di trasformazione urbana e sociale.

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 criticita e potenzialita 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, и 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. И stata, pertanto, redatta una relazione di fattibilita 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 и 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

Attilio De Martino

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 Castel Volturno 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.

TECHNICS OF ENVIRONMENTAL CONTROL

Fabrizio Ascione

with *con*

Margherita Mastellone

The modular course of “Technics 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 и stato articolato attraverso tre fasi principali: lezioni frontali, esercitazioni collettive e correzioni.
Nella prima parte del corso и 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 nonchй le normative in funzione delle funzioni e degli usi scelti in fase di progettazione.
Una parte molto importante del programma del corso и stata dedicata alle azioni del vento e del terremoto, alle possibilita 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 Castel Volturno che presenta un sistema idrico di falda molto elevato.
Nella seconda parte, il corso и 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 del vari casi proposti. Questo approccio dimostra che non esiste un’unica soluzione strutturale per una proposta architettonica, ma piuttosto un’ampia gamma di possibilita 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 qualita 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 criticita 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 climalteranti, per un irrinunciabile futuro “low carbon” che investe necessariamente, alla luce dell’enorme impronta ambientale degli edifici, la sostenibilita energetica in architettura.

PROGETTAZIONE ESECUTIVA DELL’ARCHITETTURA

Il corso di Progettazione Esecutiva dell’Architettura ha perseguito l’obiettivo di sviluppare una processualita di fasi ed elaborati nell’ambito della Tecnologica 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 и 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 и 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 citta, quale ad esempio l’aumento delle temperature urbane e sulle strategie di intervento per ridurne l’impatto, mitigarne gli effetti, ed al tempo stesso di attuare azioni di regenerative adptive design.

ESTINTORE

03 FRATTAMINORE ADVANCED DESIGN STUDIO
edited by/*a cura di* Chiara Barone, Vincenzo Valentino

Napoli: FedOAPress, 2022
(ADS - Advanced Design Studio; 3)
434 pp.; 29,7x42 cm
Access to the electronic version
http://www.fedoabooks.unina.it
ISBN: 978-88-6887-157-4
DOI: 10.6093/978-88-6887-157-4

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 contribuiti da affiancare al lavoro degli studenti, la possibilità di mettere in questione e ricalibrare gli strumenti tradizionali del progetto adottando un approccio multiscalare.
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.

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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 2022
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