



THOUGHT GROUP

THOUGHT, INTEGRAL INFRASTRUCTURE AND URBAN PLANNING SOLUTIONS



Preliminary Project Presentation
MEMORIAL FOR CIVILIAN VICTIMS

Massacre in Irpin and Bucha

Process of development of 4 architectural projects for the City of Irpin
Irpin City Reconstruction Plan

Thought Group Work Team

August 2022

EXPLANATORY MEMORY

MEMORIAL PROJECT FOR THE CIVIL VICTIMS MASSACRE IN IRPIN AND BUCHA, UKRAINE

I. Ordering

As a result of the experiences and conclusions obtained from this mission, the Mayor of the City of Irpin and his technical teams requested our consultant, with his team of Thought Consulting and with the financial support of the Fintech Kamaleont, the architectural development of four specific projects.

Among them is, first of all, the development of the architectural project for a **Memorial for the Civilian Victims of the Irpin Massacre**, given the special sensitivity of this consultant to issues related to landscapes and spaces of death.

This commission has been a great honor and a tremendous responsibility for our entire team.

The commission from the Irpin authorities was very clear: **the Memorial must be an artistic, modern, sensitive work that allows the construction of a space for remembrance and memory**, gathering relevant aspects of the Irpin community and landscape.



II. The project's location.

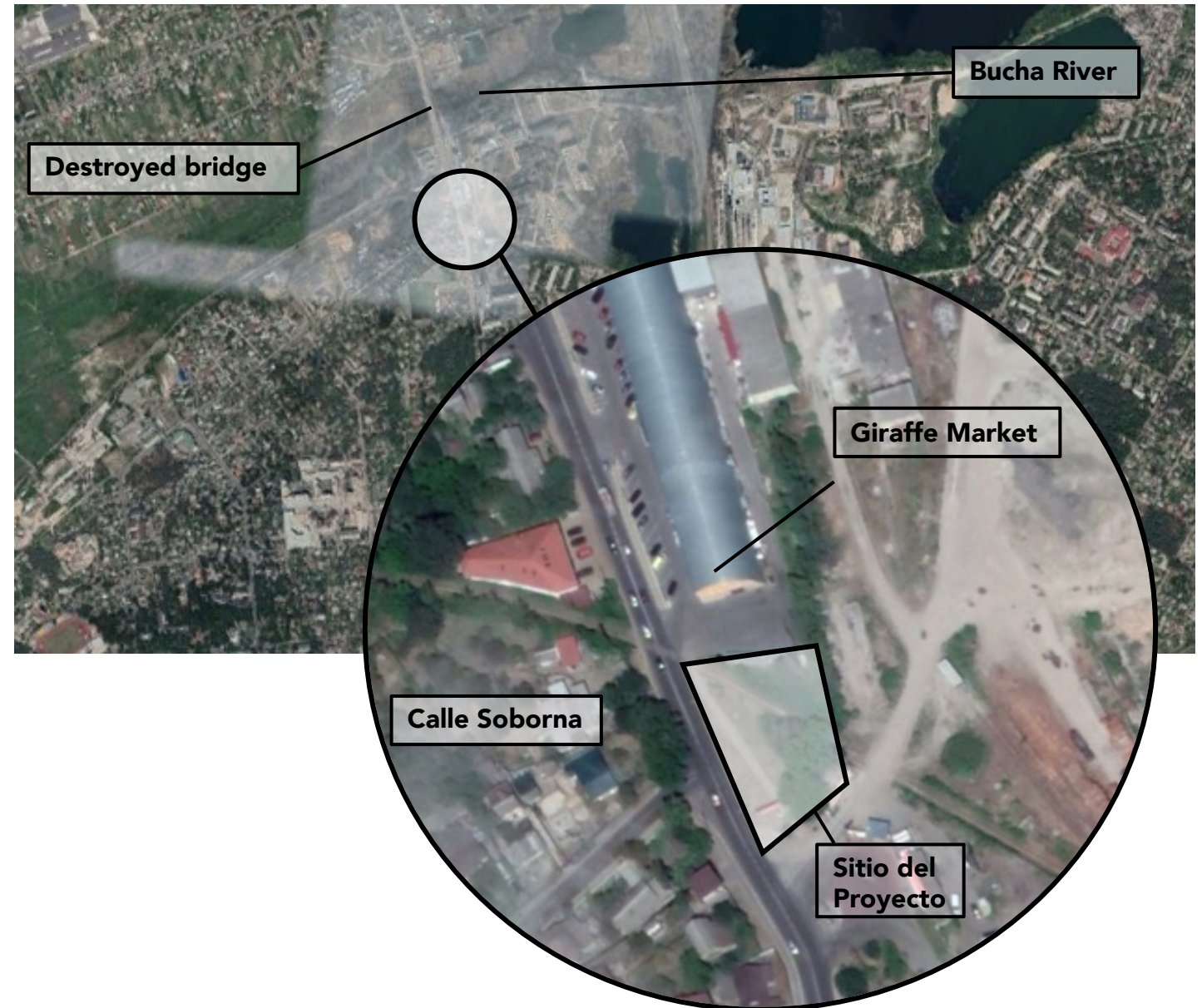
The site for the development of this project was chosen by the authorities of the City of Irpin, behind of the Giraffe Market Area.

Due to its great symbolic significance, an available fiscal land was defined, which is located on the west side of Soborna Street, a few meters away from the Bucha Bridge, **practically in the exact place where the massacre of the 279 civilians took place.**

This land has a total area of **1.675 m²**, and is made up of two areas that are divided by the passage of an old railway line that is currently abandoned and in disuse.

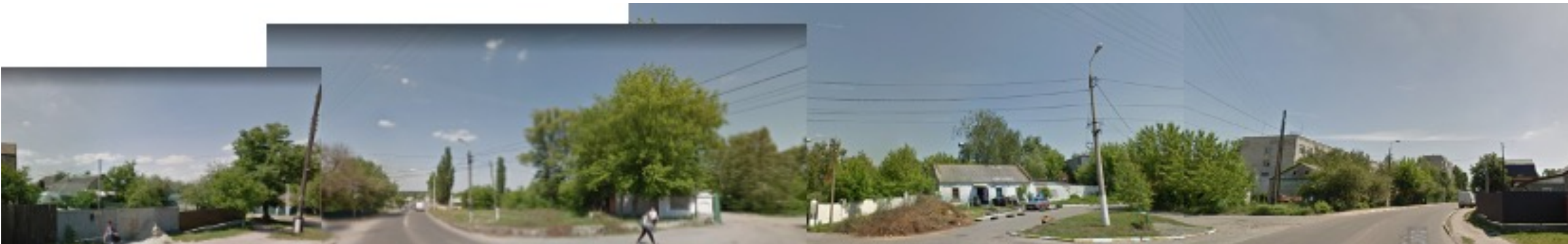
Although this proposed site meets the singular condition of being located on the site of the tragedy, it is an area adjusted to accommodate the project's program and is immediately located very close to the street.

This implies the **constant presence of noise** generated by the high traffic of pedestrians and vehicles, and adjacent to residential, commercial and industrial buildings, complicating the possibility of becoming a place for reflection, prayer and spiritual contemplation.



III. Site for the project

These panoramic photomontages show the small plot of land for the project, which is **located behind the so-called Jirafa Commercial Area**, a commercial building that was completely destroyed by the invading forces, in a mixed residential area with some commercial, industrial and agricultural equipment programs.

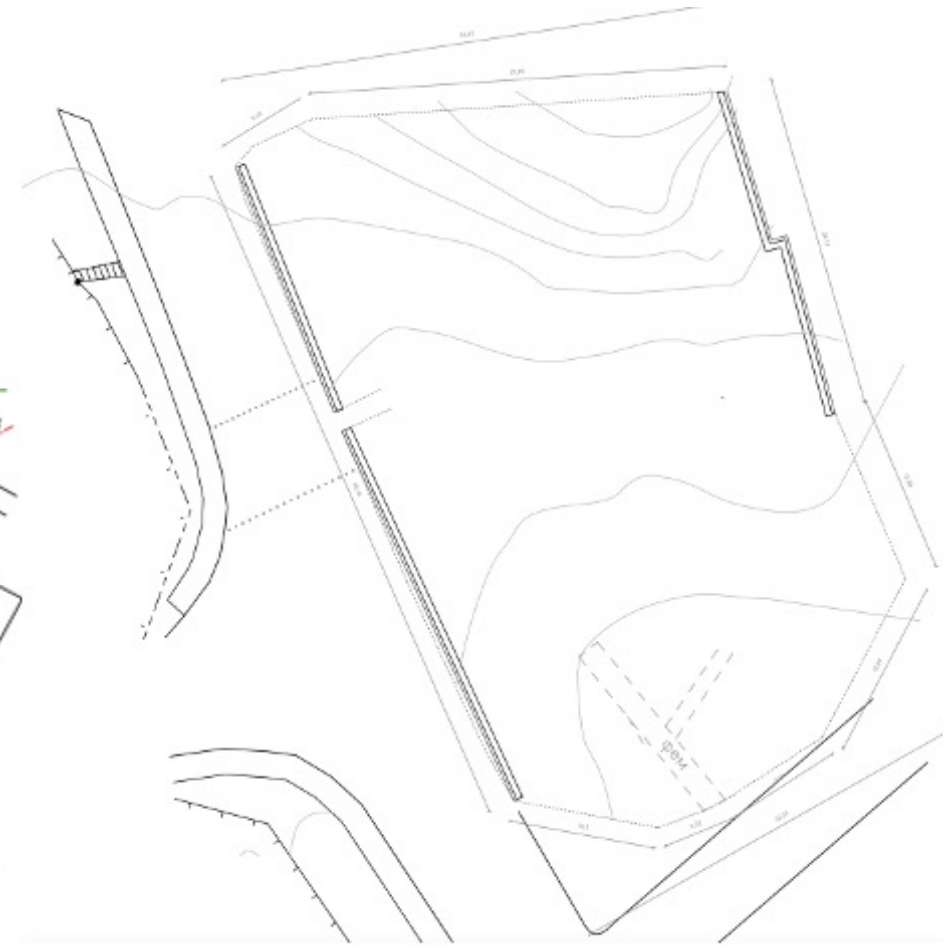
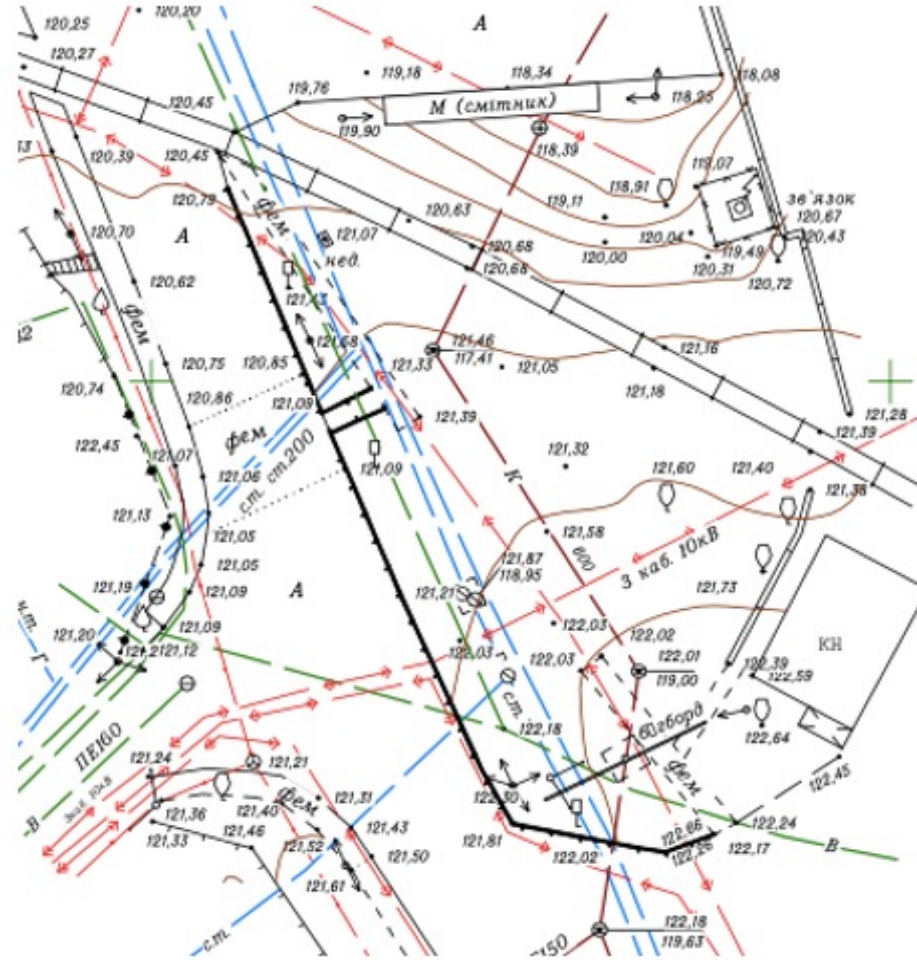


Planimetry of the project site

The planimetry on the right corresponds to the topographic plan of the site, where you can see the passage of a very old and disused railway line to be demolished and the passage of Soborna Street.

The plan on the right shows the project site cleaned and ready to be worked on.

This plan also shows the **complex challenge of constructing a spatial buffer strip for the project to avoid noise and physical pollution from street** and city traffic.



IV. Project images

1. Life and Nature

One of the omnipresent elements in all the landscapes surrounding the City of Irpin, is the presence of forests of trees with thin trunks, very straight, tall and leafy crown only at the top.

They are real sticks that build the forest landscape. In the rapid expansion of the Irpin Cemetery, as a result of the slaughter, space had to be taken up from the forest massif, leaving the horizon of these natural sticks as the surrounding landscape.

Each of these tall and slender trees stand everywhere as a sign of life and nature.

The Irpin and Bucha rivers, which contain the city, form and feed small lagoons and lakes in their courses, which in a complementary way form a natural landscape characteristic of this area.

This is a first image of the project, from life and nature: **a forest, a multitude of trees; a space to inhabit the memory and remembrance of life and nature.**



IV. Project images

2. Death and Violence

A second element, which is relevant to account for any strategy, is the image of the physical damage produced by the mortar bombs and their **shock wave of incandescent metal shrapnel, which has left its mark of destruction and death** in the vast majority of buildings and infrastructure that was damaged and destroyed, but especially the power to generate death that it had in the massacre of civilians in Irpin and Bucha.

Every wall, every house, every building, every street, every bridge, poles, furniture and trees in public and private space, sadly testify to its impact.

This is the second image of the project, from violence and death: the physical scene of the damage caused by a mortar shell, a crater and its shock wave of deadly shrapnel; **an indelible space to inhabit the memory of violence and death.**

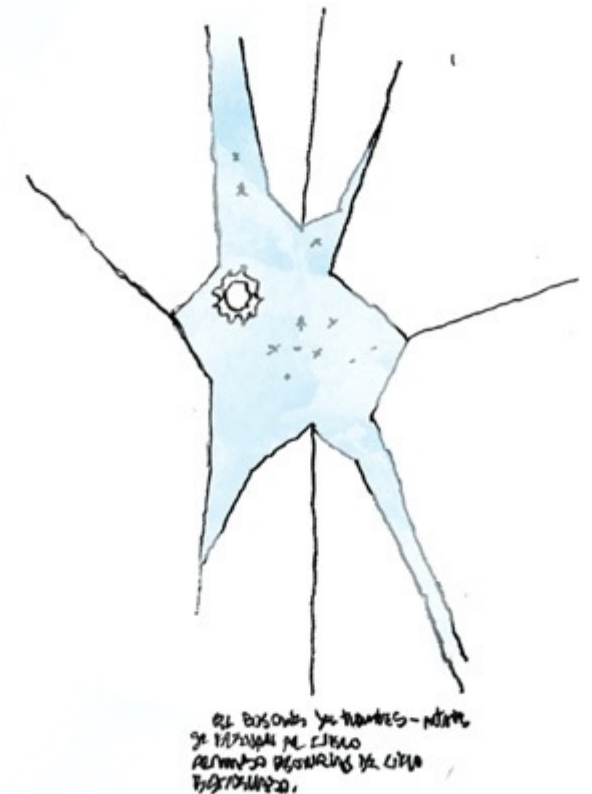
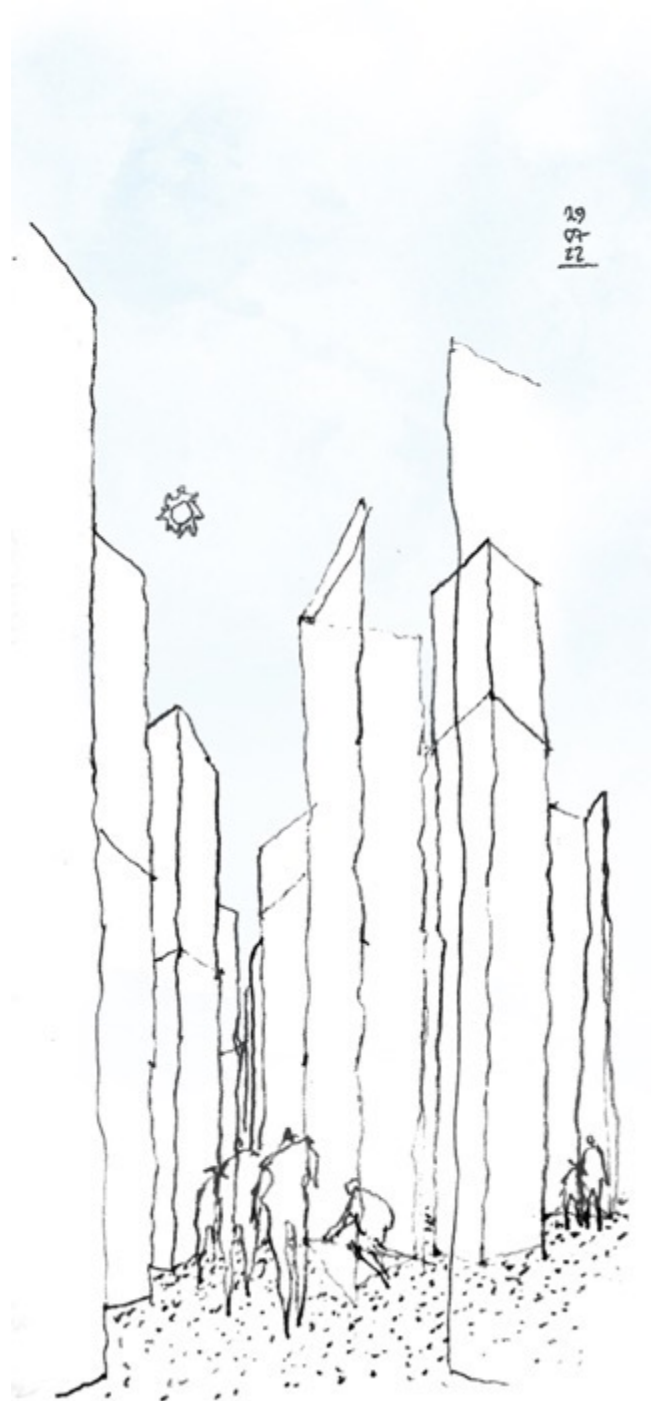


V. Architecture proposal

1. A forest of tree-shards to host 279 altars

Our architectural project proposes, for this Memorial space, the construction of a new landscape that dialogues and is part of the natural landscape of Irpin: on the one hand and from an elevation perspective, we propose **the generation of a forest of 279 trees-wooden- vertical-structures** that, in their capacity as a sign and symbol of this fusion between nature/life.

And on the other hand, the violence/death, is expressed in plant as these trees outline the contour of a mortar bomb that assume the idea of the shard, and between which small spaces and random paths are generated, **enabling a special space of commemoration, bringing to presence the absence, to celebrate the memory and the remembrance of the 279 victims** killed by the Russian army in its attempted assault on Irpin and Bucha: **the construction of a Forest of Trees-Shrapnels.**

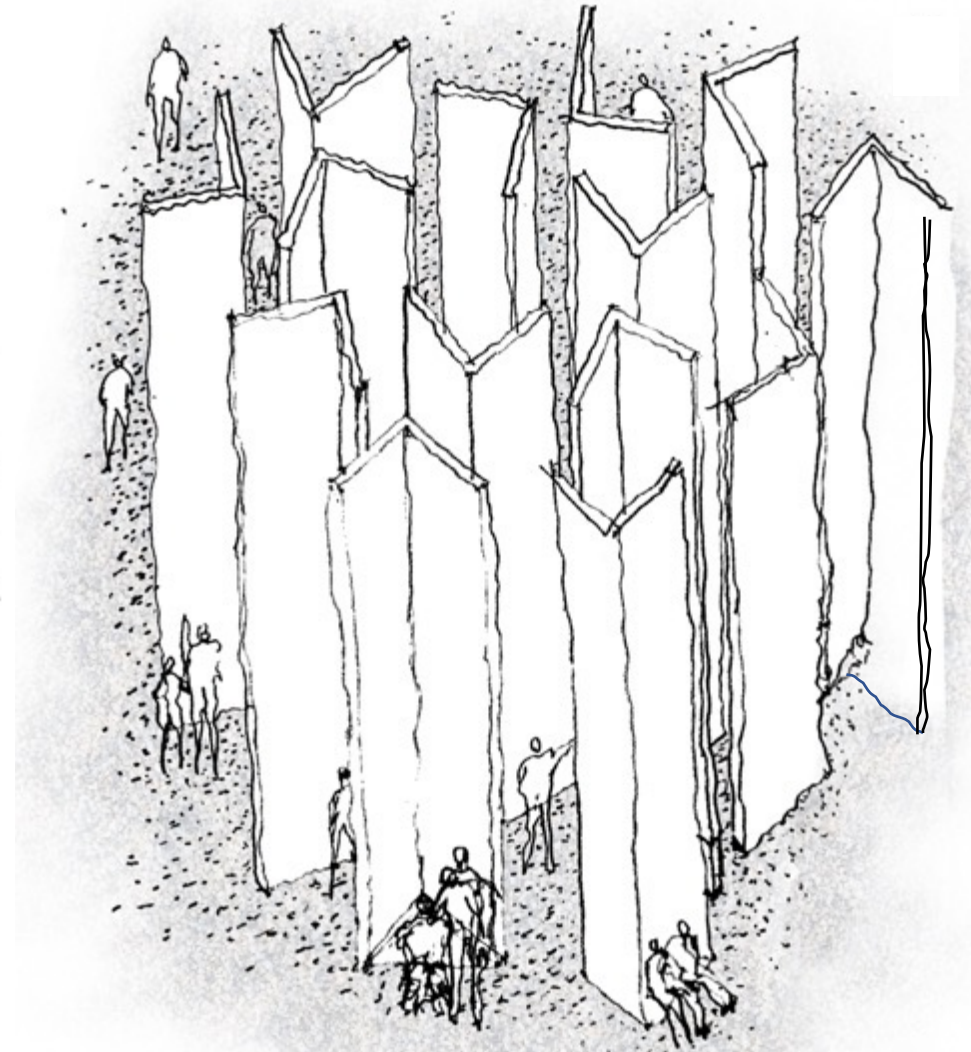


V. Architecture proposal.

Each one of them will be built through tall and slender self-supporting laminated wooden beams of different heights ranging between **4 and 6 meters**, to signify that in this massacre were killed children, young people, adults and the elderly.

In the corners of intersection and meeting of each of the structures of the Trees-Shrapnel, will be constituted the **Individual Altars**, which will allow relatives and friends to celebrate the memory and remembrance of each of the victims of the massacre.

The floor of this **Forest of Trees-Shrapnel** will be made of crushed quarry stone gravel, which will allow to mark, through sound, subtly the step when walking, producing an immediately perceptible difference between exterior and interior, when entering the space of the Memorial, intending a change of rhythm, attitude and disposition of the visitor at the moment of his entrance.





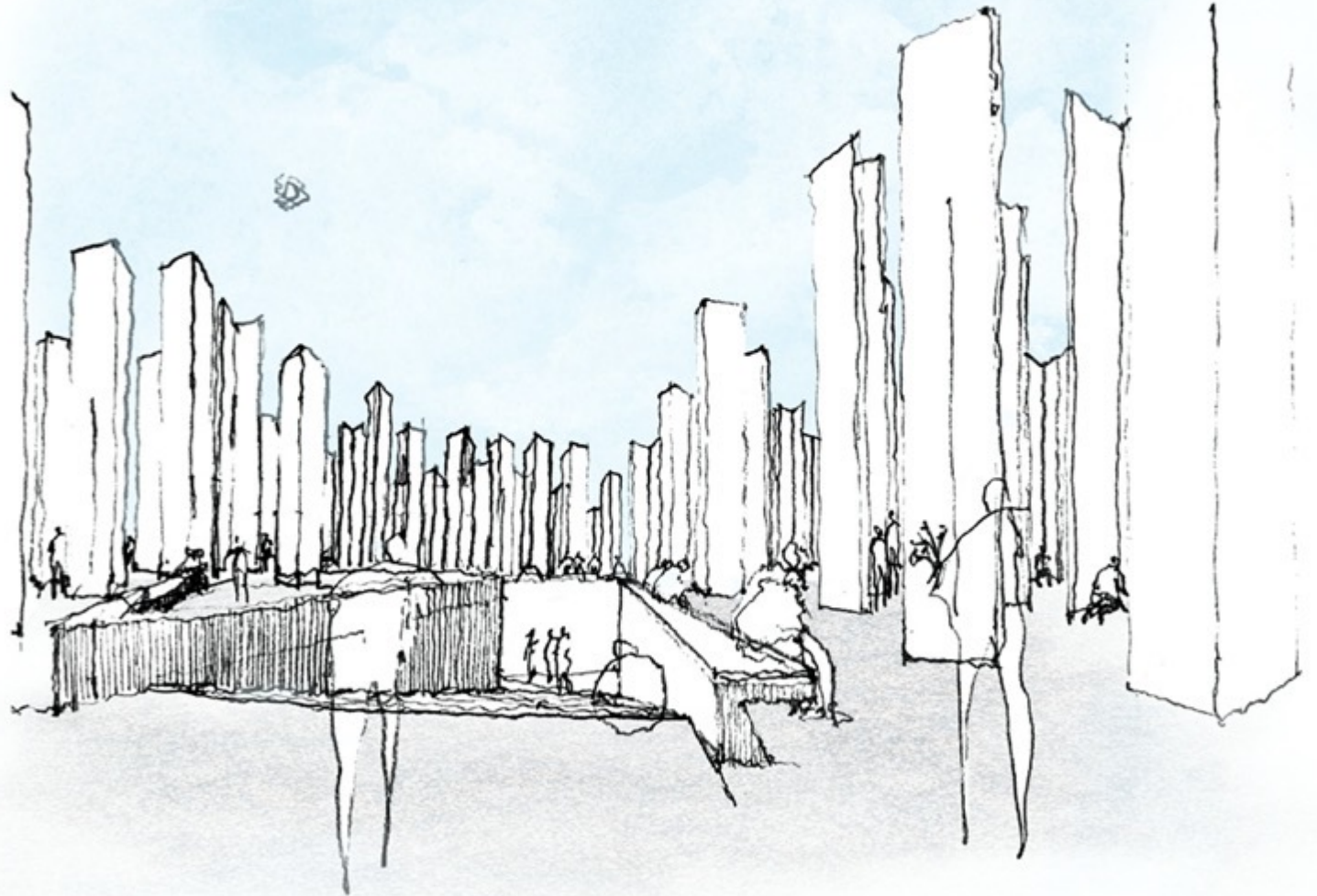
1. A void clearing in the forest for the Refuge of Memory.

Each one of these tree-shards will form in the centers of their structures, individual and intimate altars of remembrance, reflection and prayer for each one of these victims.

These trees/shards will be arranged randomly, building a shockwave from an empty central space, the **Memory Square**, where, through a staircase/access gallery, it builds a wound in the earth, recalling the crater of the explosion of the mortar ammunition and, at the same time, the ditch of an open mass grave, which shows the world the content of death that they wanted to hide.

It is thus the project reveals and tells the history of its city, taking charge of the wound it bears by means of a trace that represents pain, permanence, but at the same time, healing and hope.

Through this opening in the land, the **Refuge of Memory** is accessed; a small museum space for the exhibition of graphic material and information about its victims and what happened in this tragedy, to prevent its oblivion and create awareness so that it never happens again.



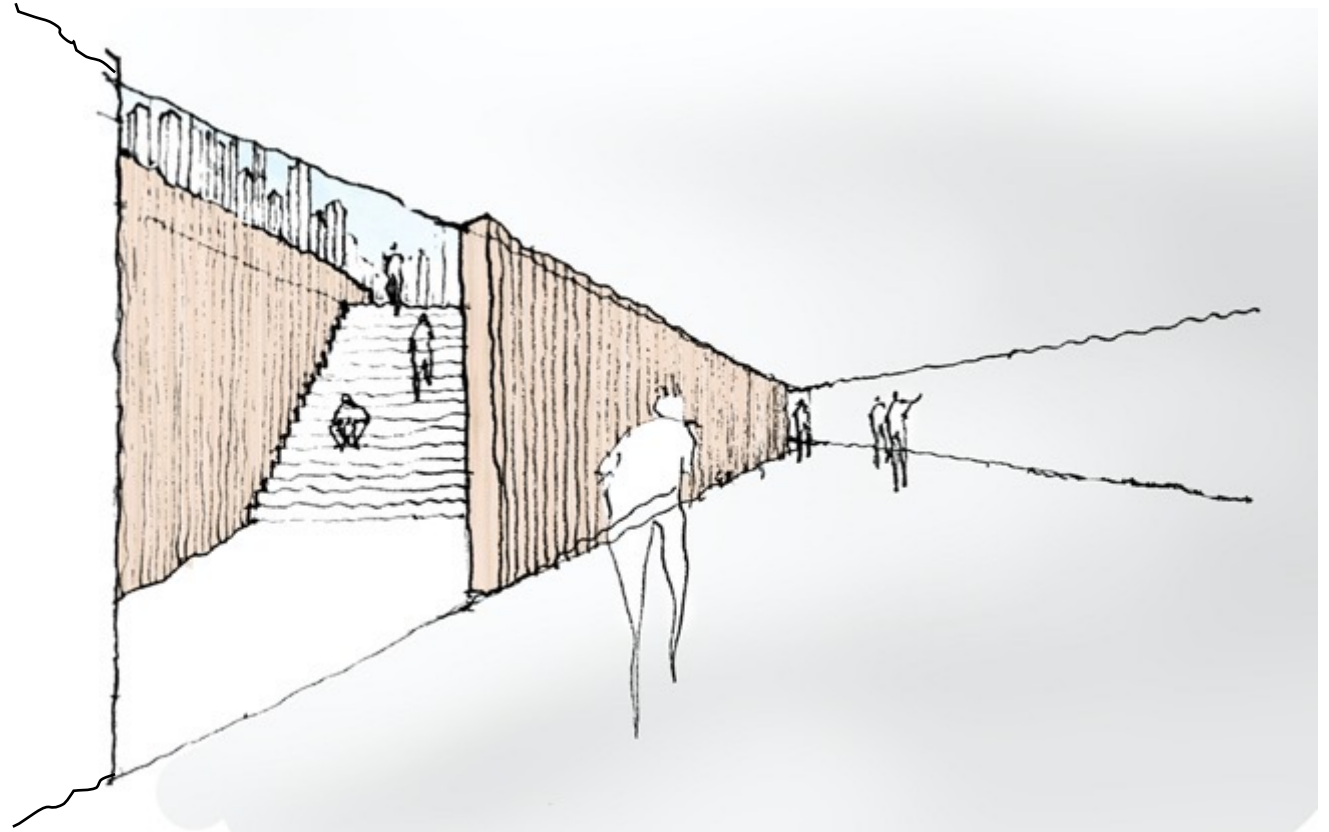
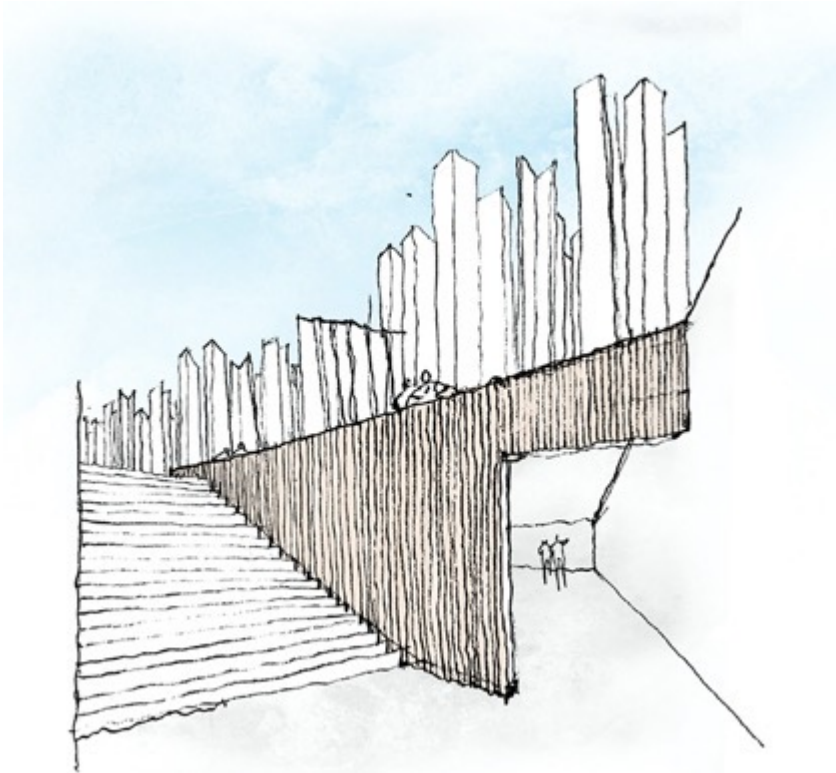


1. A void clearing in the forest for the Refuge of Memory.

From this subway space, there will be access to a projection and conference room, for a better dissemination of the scope of this tragedy.

The subway spaces of the Refuge of Memory will be built with reinforced concrete walls **clad with thin wooden rods**, extracted from the remnants of the laminated wood beams in the construction of the different tree-shafts, to generate continuity between the two levels of the project, through the use of wood as an essential noble material. At the same time, the structural walls that make up the access staircase and the subway room of the Refuge of Memory will be extended to cross the ground level of the Forest of Tree-Shingles, **to form the seating strip of the Plaza of Remembrance.**

Each of these seating strips generates the creation of sores in the floor of the plaza, **allowing natural light to enter** the interior of the Refuge of Memory exhibition hall, bathing its walls with soft sunlight.





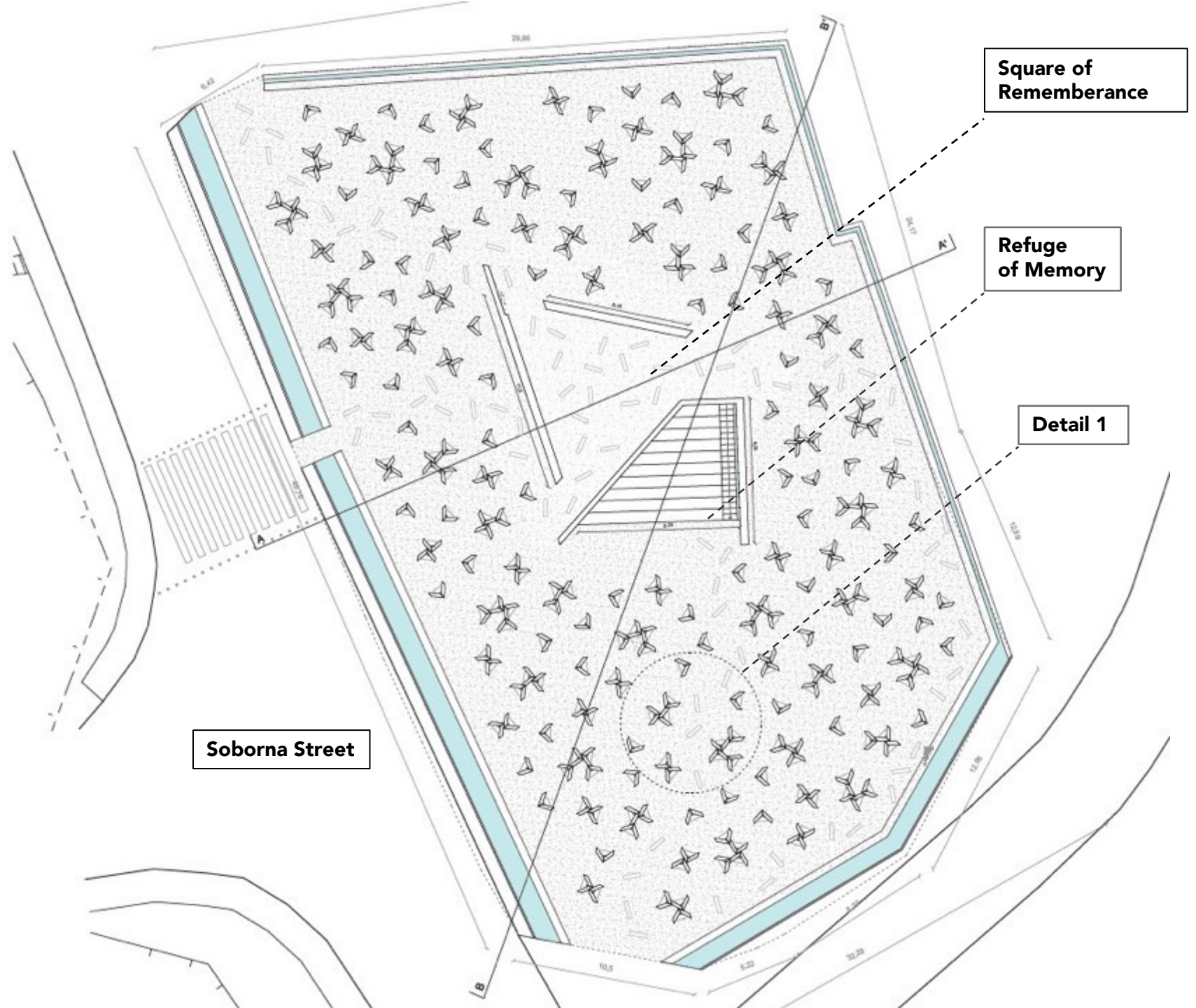
VI. General Plan of the Project.

The plan on the right shows the General Plan of the Project, where you can clearly see the development **of the Forest of Trees-Shrapnel, scattered randomly, like the shock wave of a mortar bomb**, conquering the entire space of the land.

In the center of the Forest of Trees-Shrapnel, there is **a clear void** produced by the presence of the access to the space of **the Square of Remembrance** and the open wound in the ground for the access to the underground space of **the Refuge of Memory**.

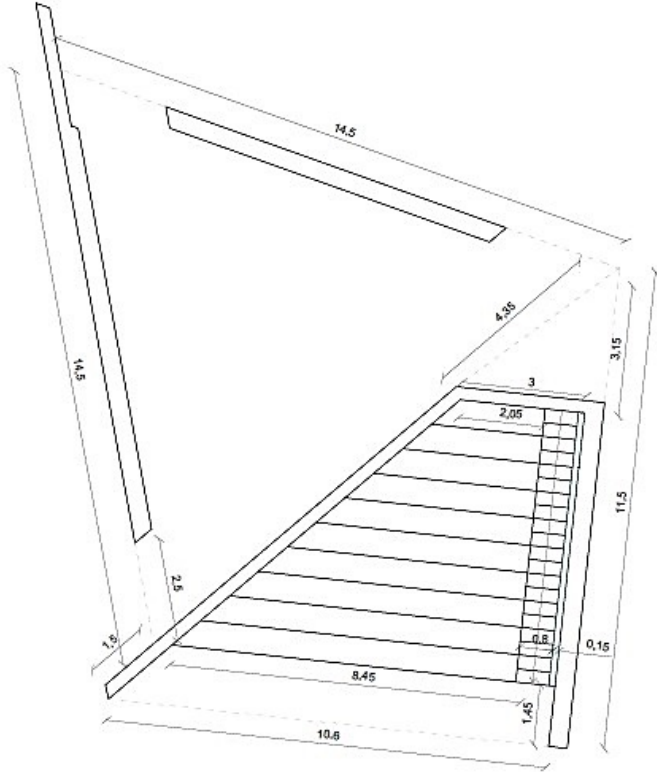
The ground of the project, considers the use of **gravel to mark the sound of the steps** can be appreciated, and the **wooden sleepers** of the old railway line are **traces in this new ground**.

This elements on the new ground, **guide the visitor to the encounter with the empty clearing in the middle of the Forest** of Trees-Shrapnel that make up the Plaza of Remembrance and the access to the Refuge of Memory.



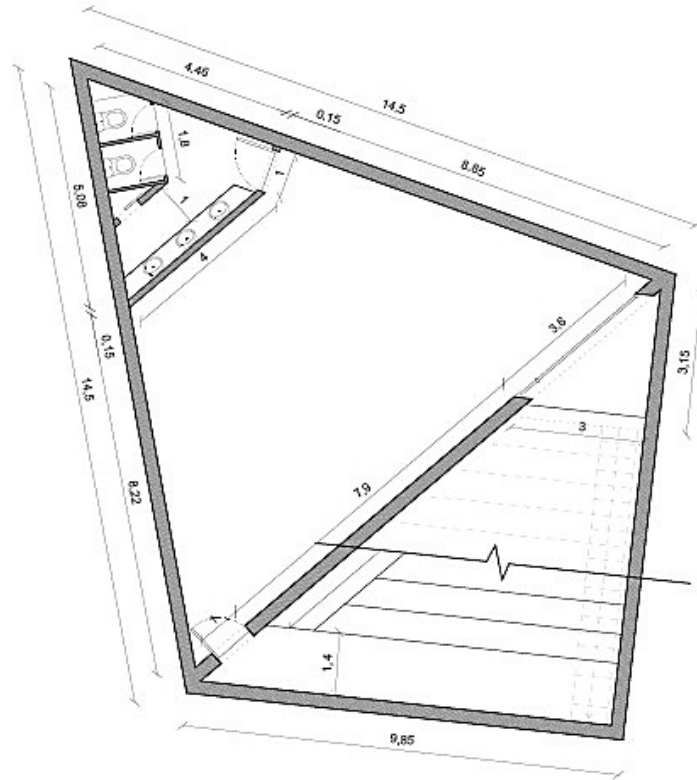
VII. Floor plans of the Plaza del Recuerdo and the Refuge of Memory.

The plan on the left, shows the floor plan of the Square of the Remembrance and the wound in the ground that allows access to the Refuge of Memory, which is located in the underground level just below the Square of the Remembrance. The second floor shows the level of the Exhibition Hall and its service area, from which you can access the Screening Room and Auditorium, which also includes a Foyer and general storage space. The main objective of these underground spaces is to build a shelter to preserve and maintain in time, the memory and the remembrance of the human tragedy produced by the massacre of the invasion in its passage through Bucha and Irpin.



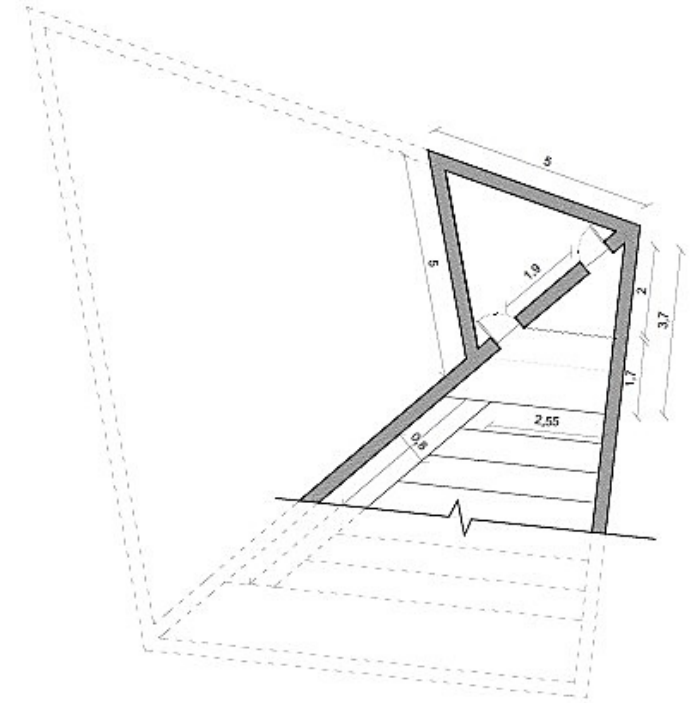
Memory Plaza Floor

Access Refuge of Memory
Level 0.



Floor Central Space Refuge of Memory

Level -1.



Refuge of Memory Floor

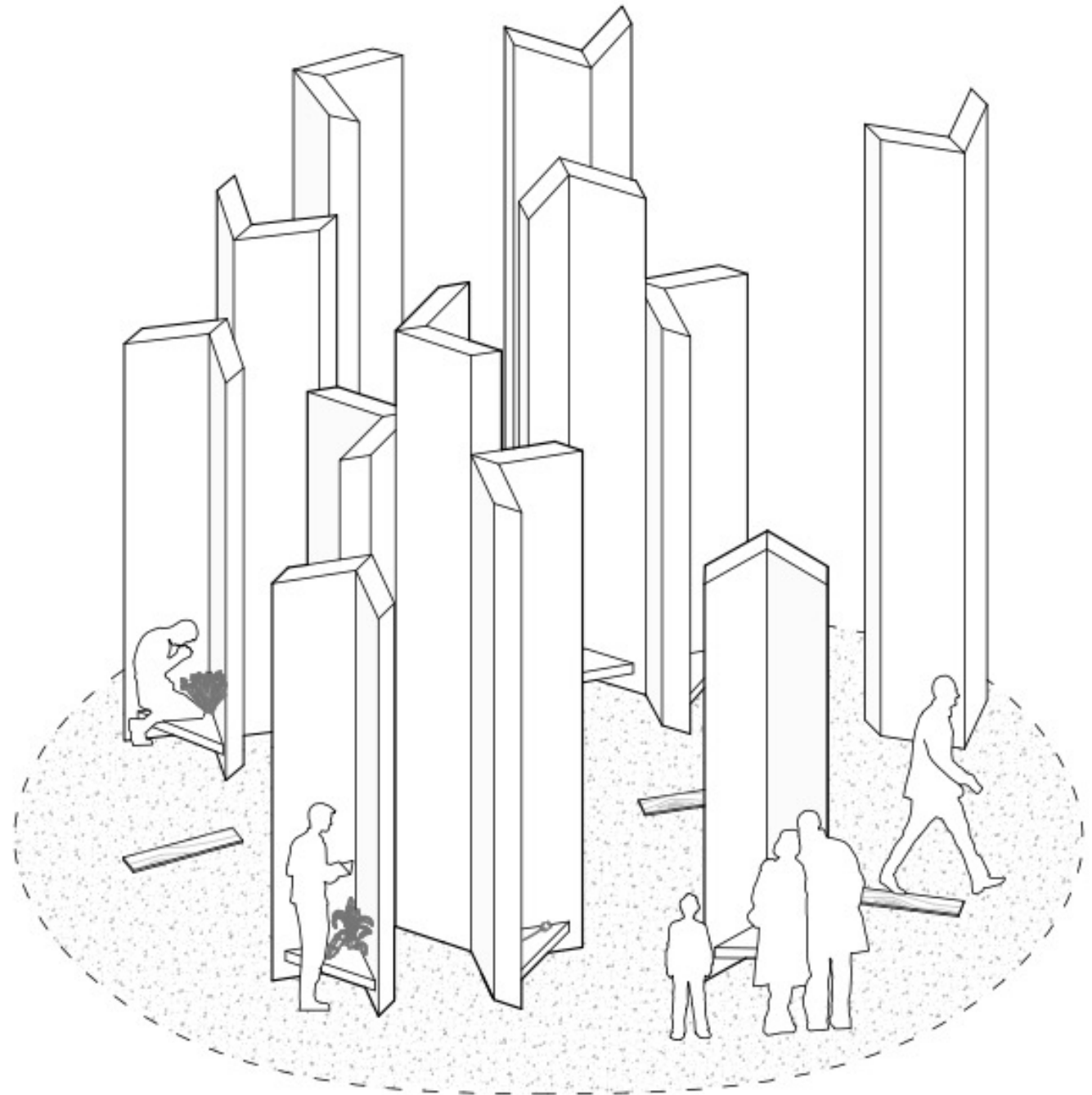
Projection Room and Auditorium
Level -2.

VIII. Isometric views of spatial details of the Forest of Trees-Splinters.

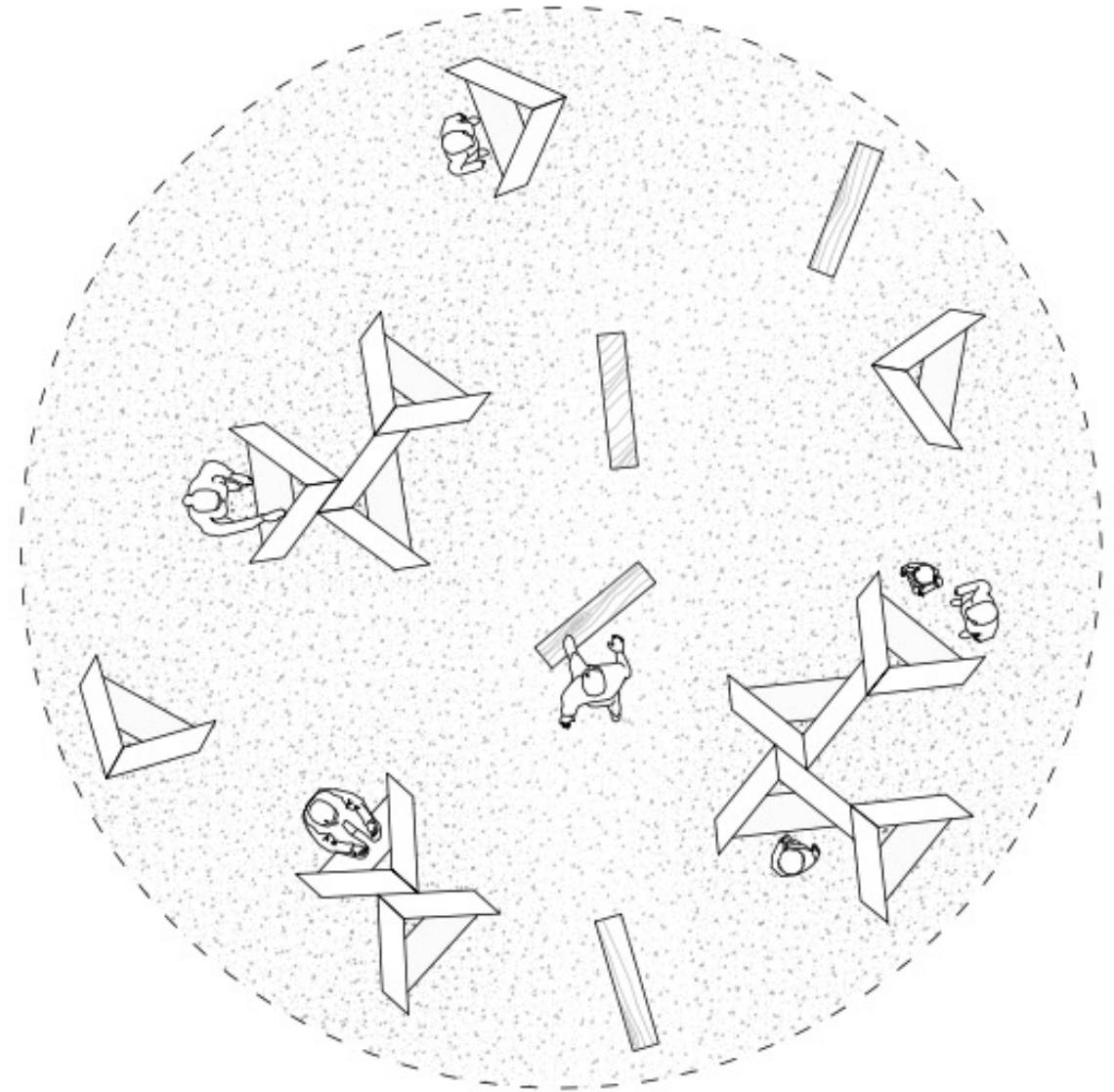
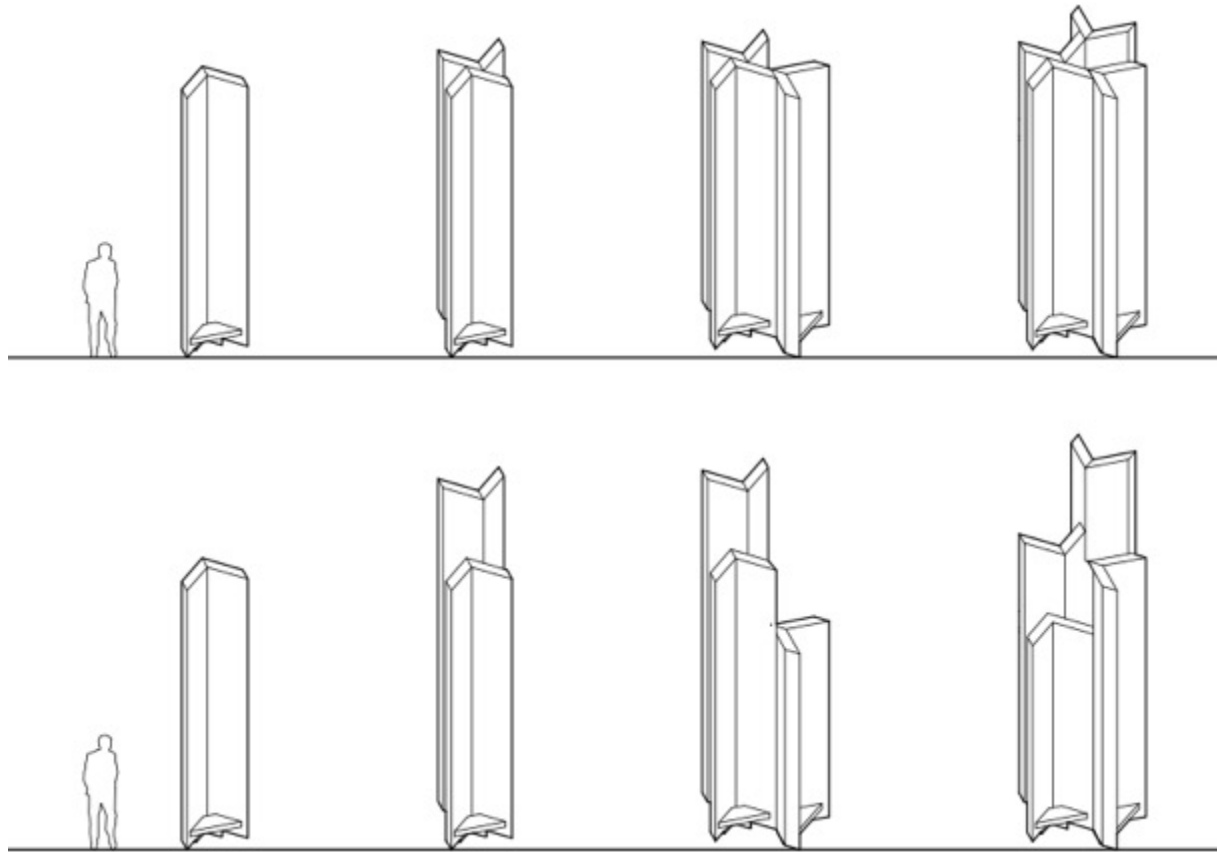
Detail 1

These planimetric images, especially the isometric ones, present the different relationships and spatialities built by each one of the Trees-Shrapnels, the multiple alternatives of association between them, creating group-family, couple and individual structures, where each one of these wooden structures.

All of these structures are built with laminar technology of high hardness and resistance. At the same time, they show the space of intimacy that each one of the Trees-Shrapnels manages to generate, to build individual altars for each one of the 279 civilian victims of the massacre.



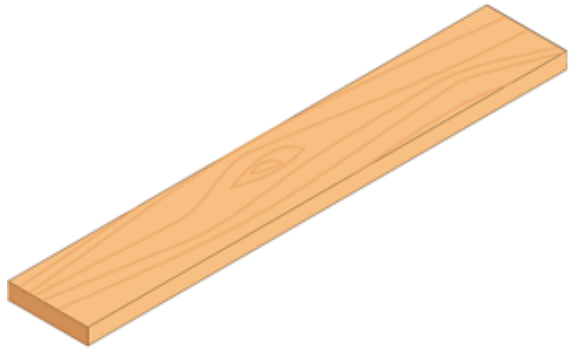
IX. Details of the isometric and plant view of spatial Association and relationship into the Forest of Trees-Shrapnels.



X. Laminated and Counter-laminated Timber Technology

Laminated wood corresponds to a construction system of high capacity and resistance. It consists of the superposition of different layers of wood intercalating the direction of its fibers in perpendicular sense to its axis, engineering that grants **versatility and constructive efficiency**, being possible:

1. Reach **any dimension** in height, width and length.
2. It allows formal and design **freedom**, since it is a light material.
3. It is a material ready for the **prefabrication** of its pieces.



Constructive System



Prefabricated System



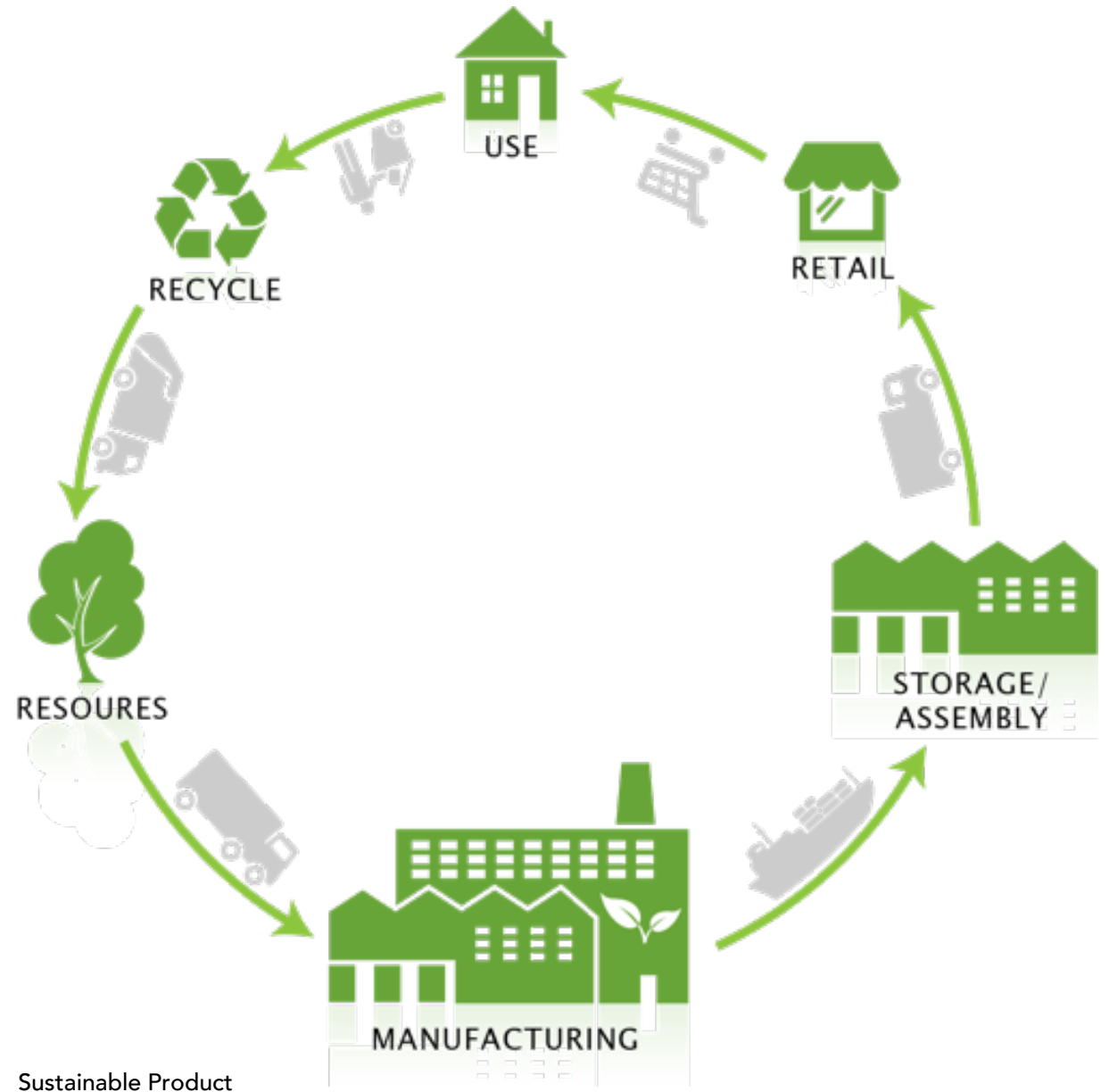
Wood Innovation Design Centre / Michael Green Architecture. Canadá.



CFT ARAUCO DUOCUC / GDN Architects. Chile.

Glulam not only brings aesthetic beauty to buildings, but is also considered a material with a high sustainable value, as it is **a renewable material - grown in circular production cycles:**

1. It is a renewable material - grown in circular production cycles -.
2. It is biodegradable.
3. Its production and physiology imply low carbon emissions. Thus the project complies with an environmental sustainability quota (FSC).
4. It has low thermal conductivity, generating a comfortable microclimate in the project.
5. Acoustic, thermal, electrical and magnetic insulation. This allows the project to generate an atmosphere of solemnity, silence and privacy.





High School Mariano Latorre / Macchi - Jeame - Danus & Boza -
Boza - Labbé - Ruiz Risueño. Chile.

HAUT Building / Team V
Architectuur. Holanda.



XI. Cross section B-B' Project

This plan shows the cross section of the project, where it can be clearly appreciated in its left end, the construction of a three-dimensional strip of spatial protection for the project, to avoid the acoustic and physical contamination produced by the traffic of the street and the city, and to protect the space of reflection, contemplation and prayer required by the Memorial.

Likewise, in the plan of this cross section, one can appreciate the clear-empty space produced by the presence of the Plaza of Remembrance, the wound in the earth built with the stairway gallery access to the Refuge of Memory and, under it, the development of the Projection Room and Auditorium. Also, this plan shows the intimate spatial richness, the different associations and relationships of the heights of the different Tree-Sharps that make up the new landscape of this Forest of Memory.



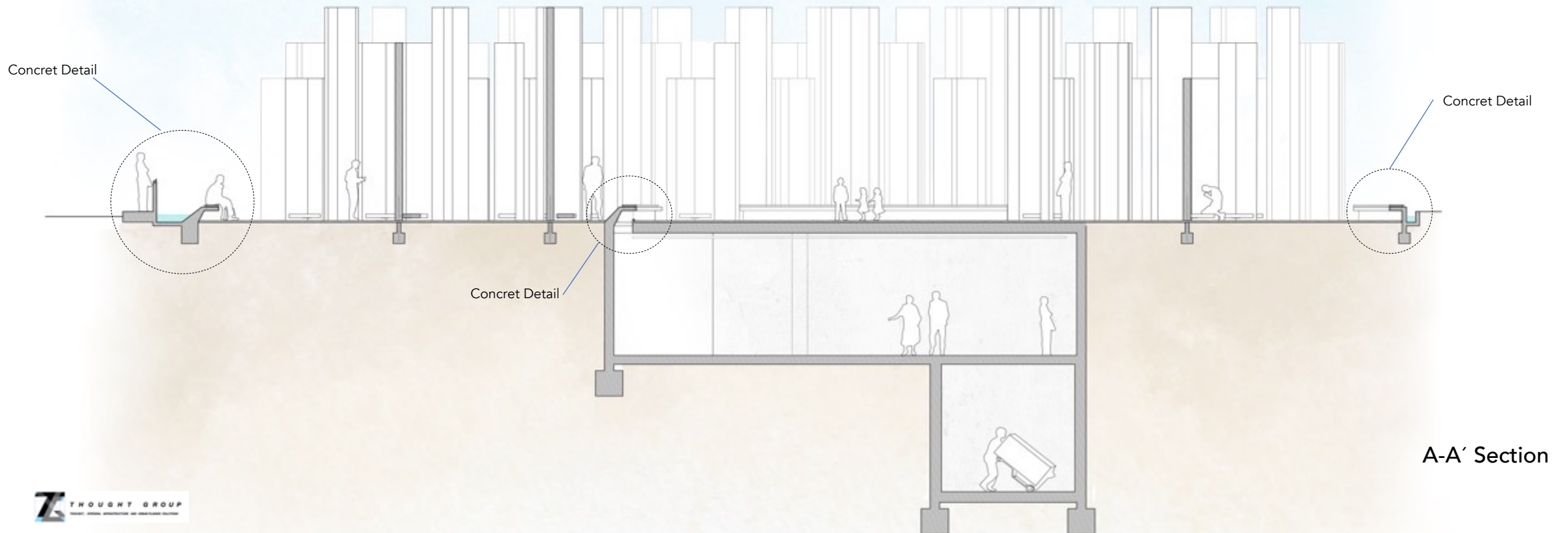
XII. Cross section A-A' Project

This plan shows a second cross section of the project, where it can be clearly seen at its ends, the construction of the **three-dimensional strip of spatial protection for the project, to avoid the acoustic and physical pollution produced by the traffic** of the street and the city, and to protect the space for reflection, contemplation and prayer required by the Memorial.

Likewise, in the plan of this cross section, another view of the clearing-empty space produced by the presence of the **Square of Remembrance**, the underground space that forms the Main Exhibition Hall of the Refuge of Memory and, under it, part of the Foyer of the Projection Hall and Auditorium.

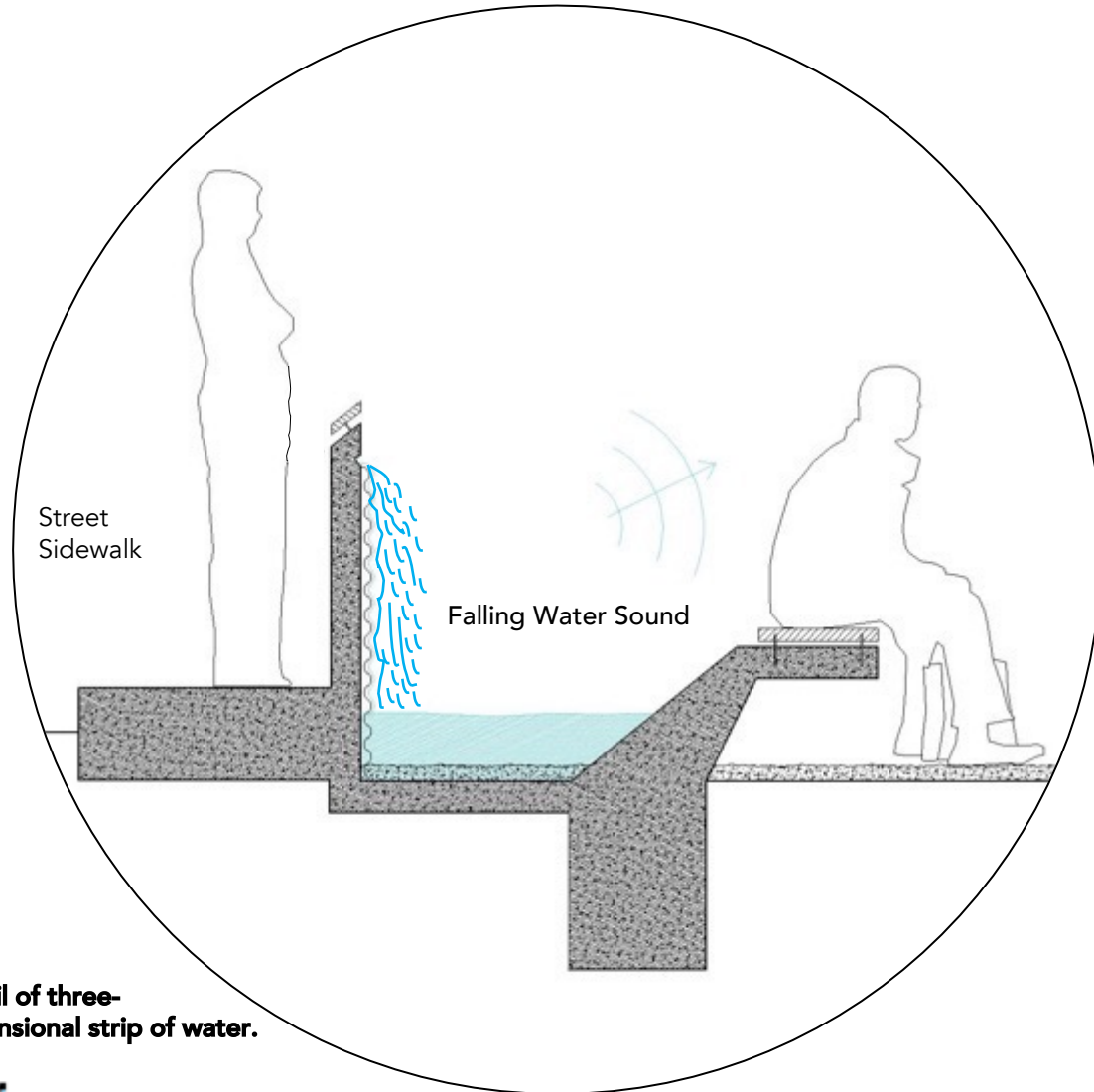
In the central detail, you can see how one of the structural walls of the Exhibition Hall of the **Refuge of Memory**, crosses the ground level of the Square of Remembrance and builds a linear seat for visitors, and through them, allows the entry of natural light into the interior of the subway room.

Also, this plan shows the intimate spatial richness of the **different associations and relationships of the heights (between 4 and 6 meters high)** of the different Trees-Shrapnels that make up the **new landscape of this Forest of Memory**.

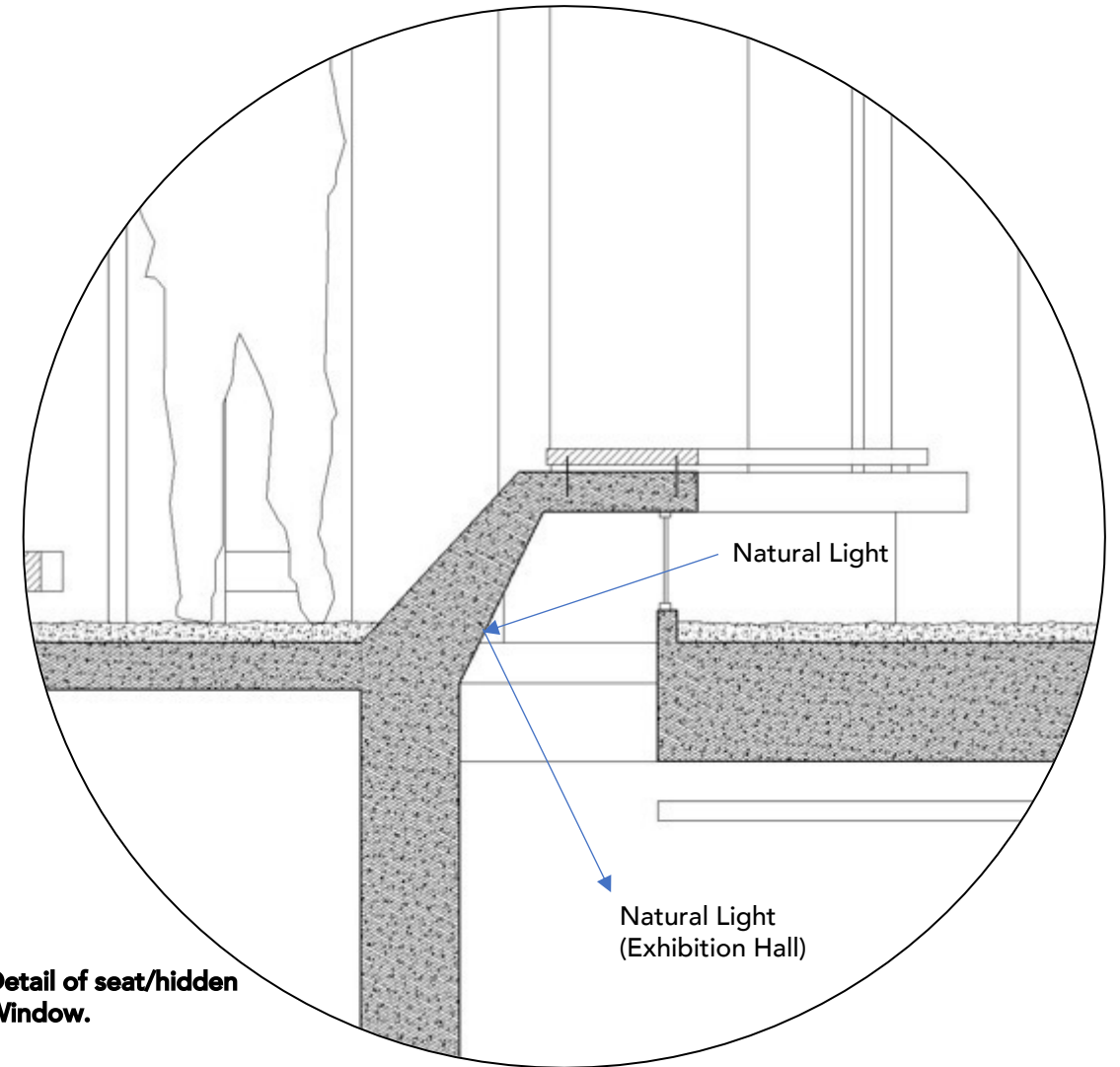


XIII. Design for concret elements.

This three-dimensional strip, **builds a water channel**, as a simile of the agricultural irrigation canals very common in the outskirts of the city, where the wall that acts as a viewpoint railing of the sidewalk of Soborna Street, and from where **water springs and falls through the rough face of the wall, draining sonorously and naturally into a small, gently sloping channel** that, like the Irpin River and the Bucha River does with the City of Irpin, allows the sound of moving water to flood its entire course, protecting the entire perimeter of the project with this invisible barrier.



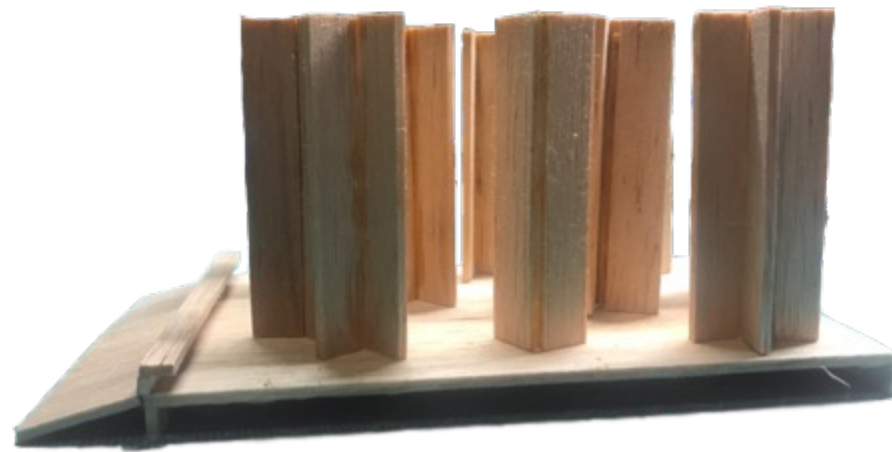
Detail of three-dimensional strip of water.



Detail of seat/hidden Window.

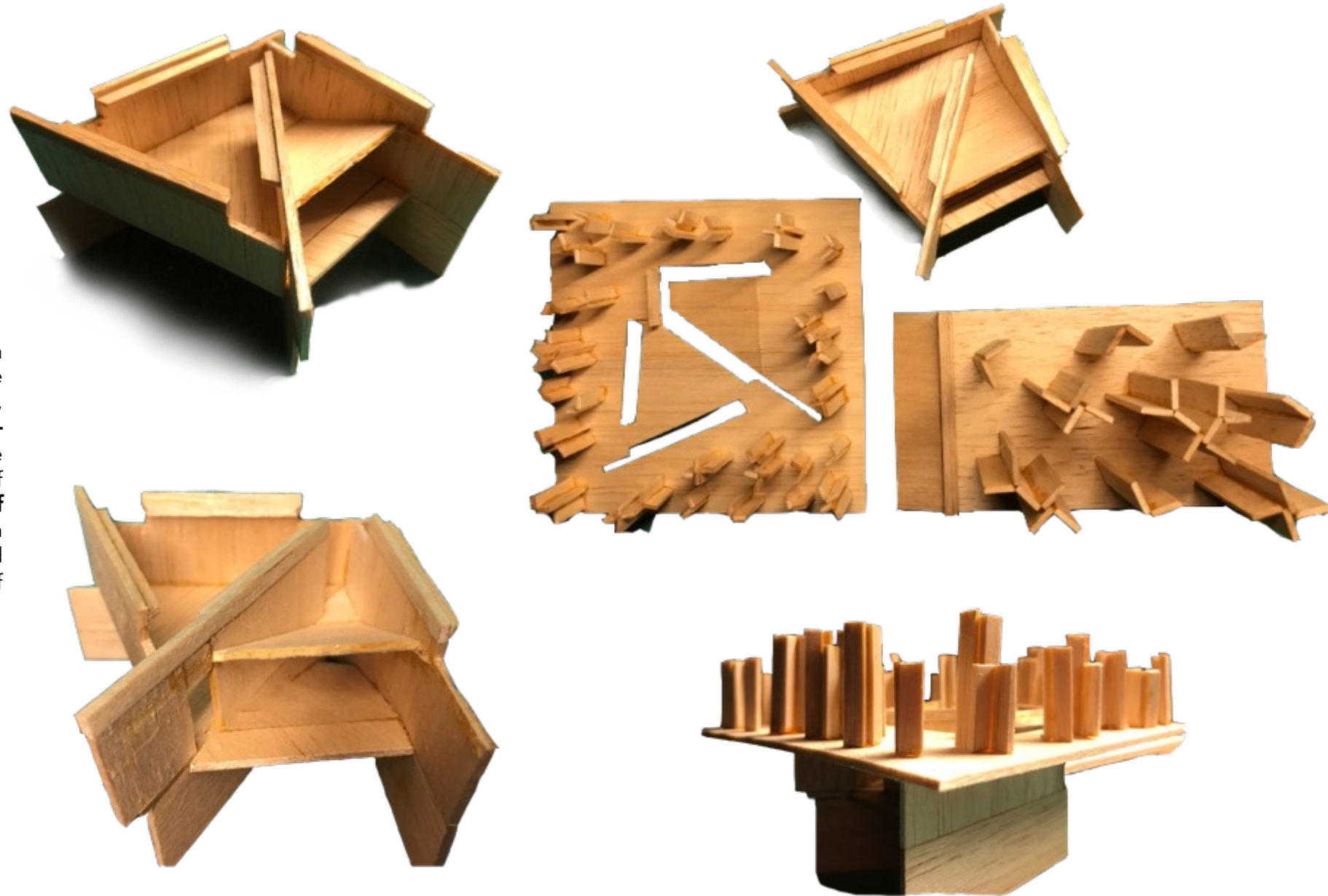
XIV. Trees-Shrapnels Study Model

These study models were made to scale in balsa wood, in order to study **the richness of relationships, associations, paths and spaces produced by these Trees-Shrapnels**, the forest they form, and the diversity of intimate spaces of each of the altars created.



XV. Refuge of Memory Study Model.

These study models are also built in balsa wood and their main objective is to present the spatiality of the **Square of Rememberance**, developed in the empty clearing of the **Trees-Shrapnels Forest**, and its relationship with the underground spaces built under the surface of that square, where the spaces of the **Refuge of Memory** are developed, such as the main exhibition hall and the projection room and auditorium, built under the great staircase of access from the Plaza del Recuerdo.





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