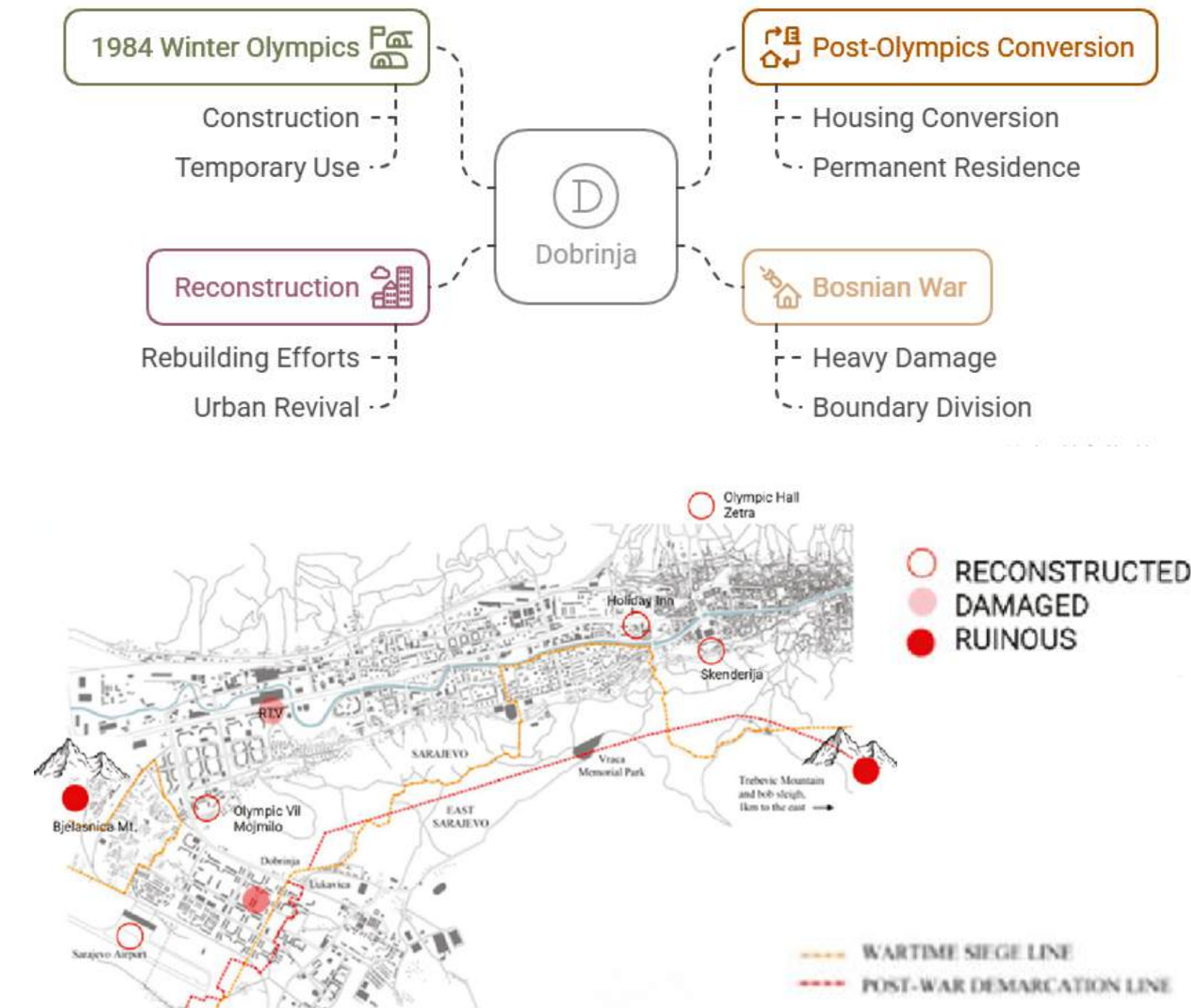


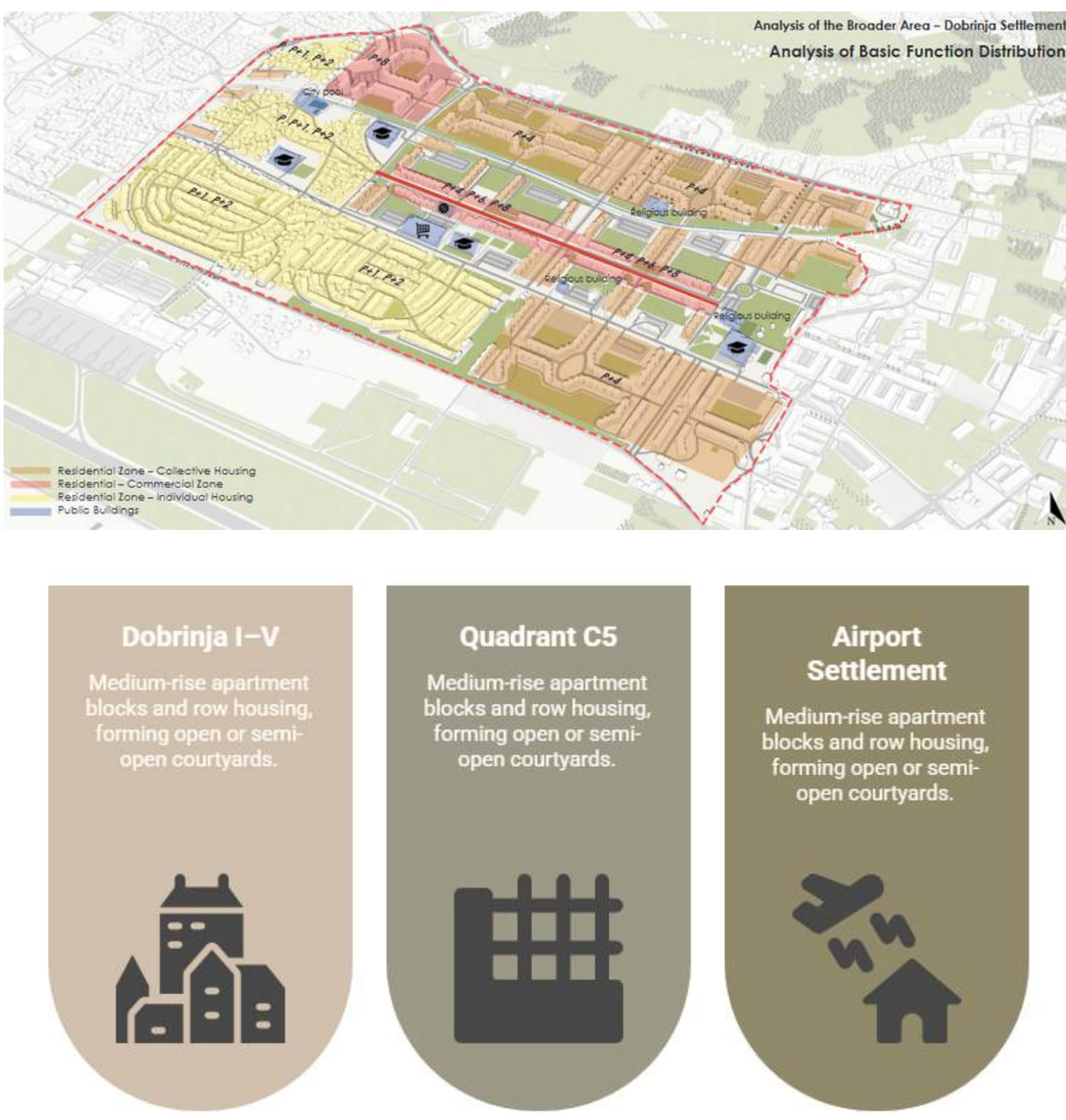
# ANALYSIS

## HISTORY

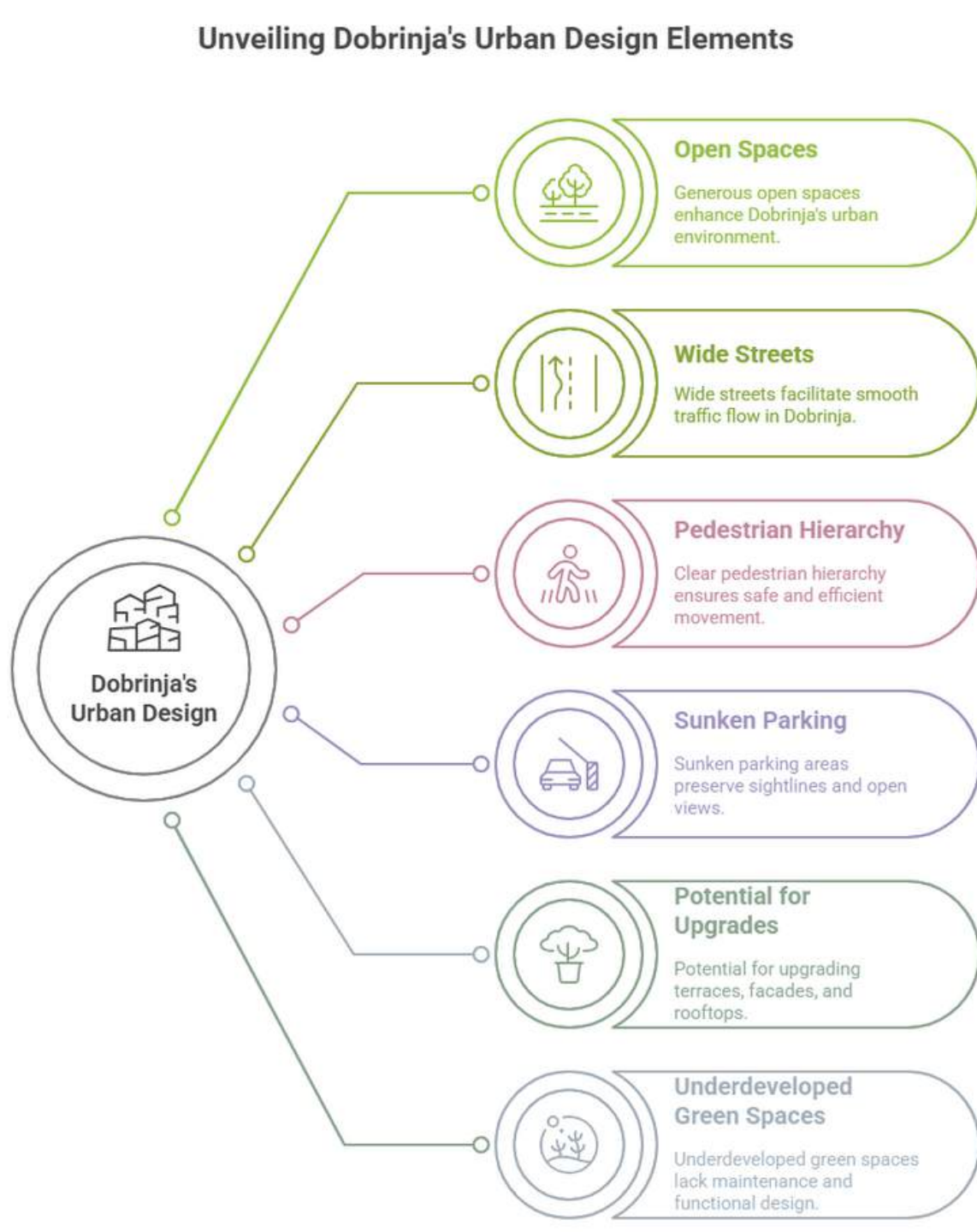
Dobrinja: A neighborhoods's transformation



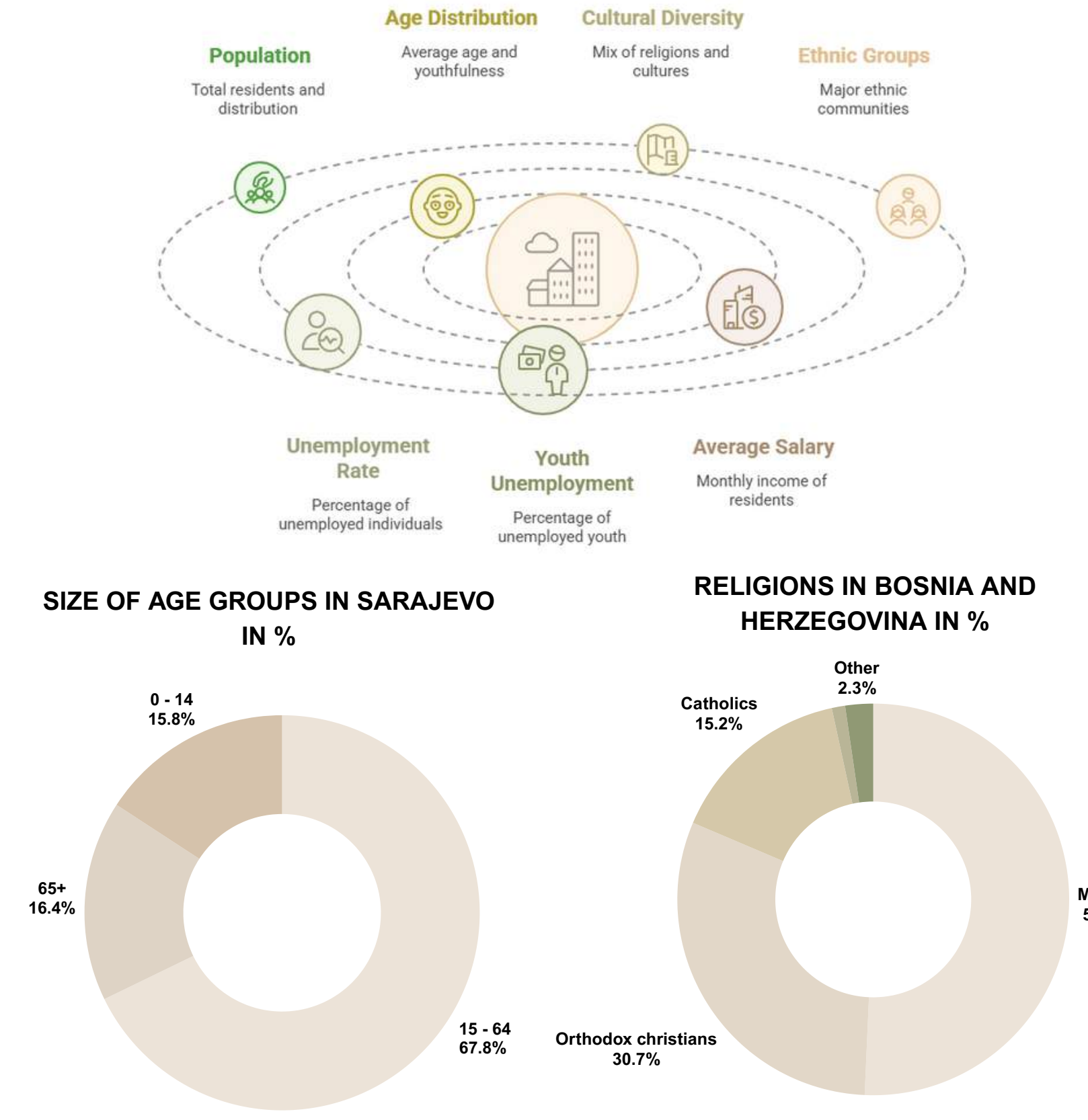
## NEIGHBORHOOD STRUCTURE



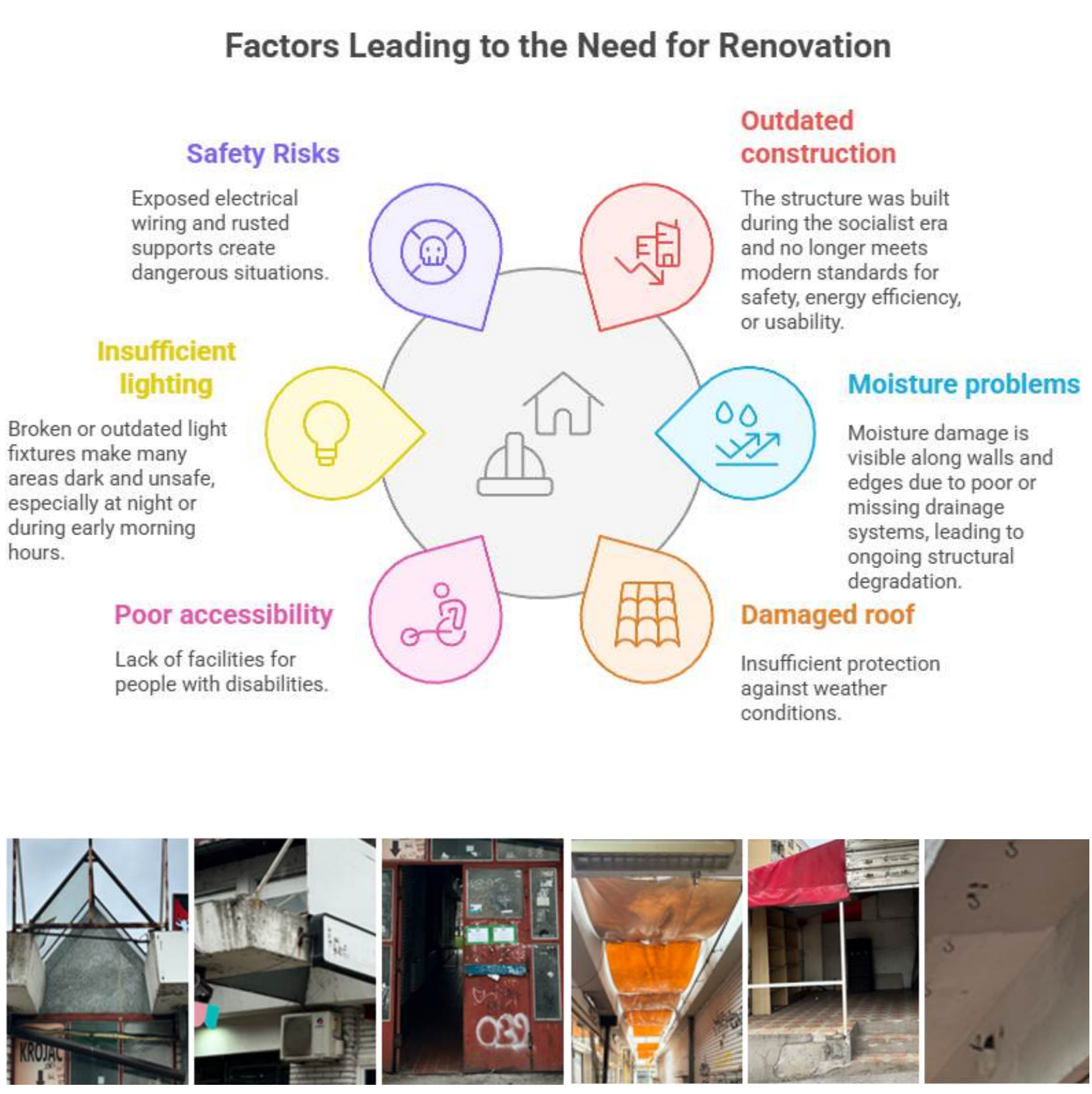
## SPATIAL ANALYSIS



## DEMOGRAPHIC PROFILE



## CURRENT BUILDING

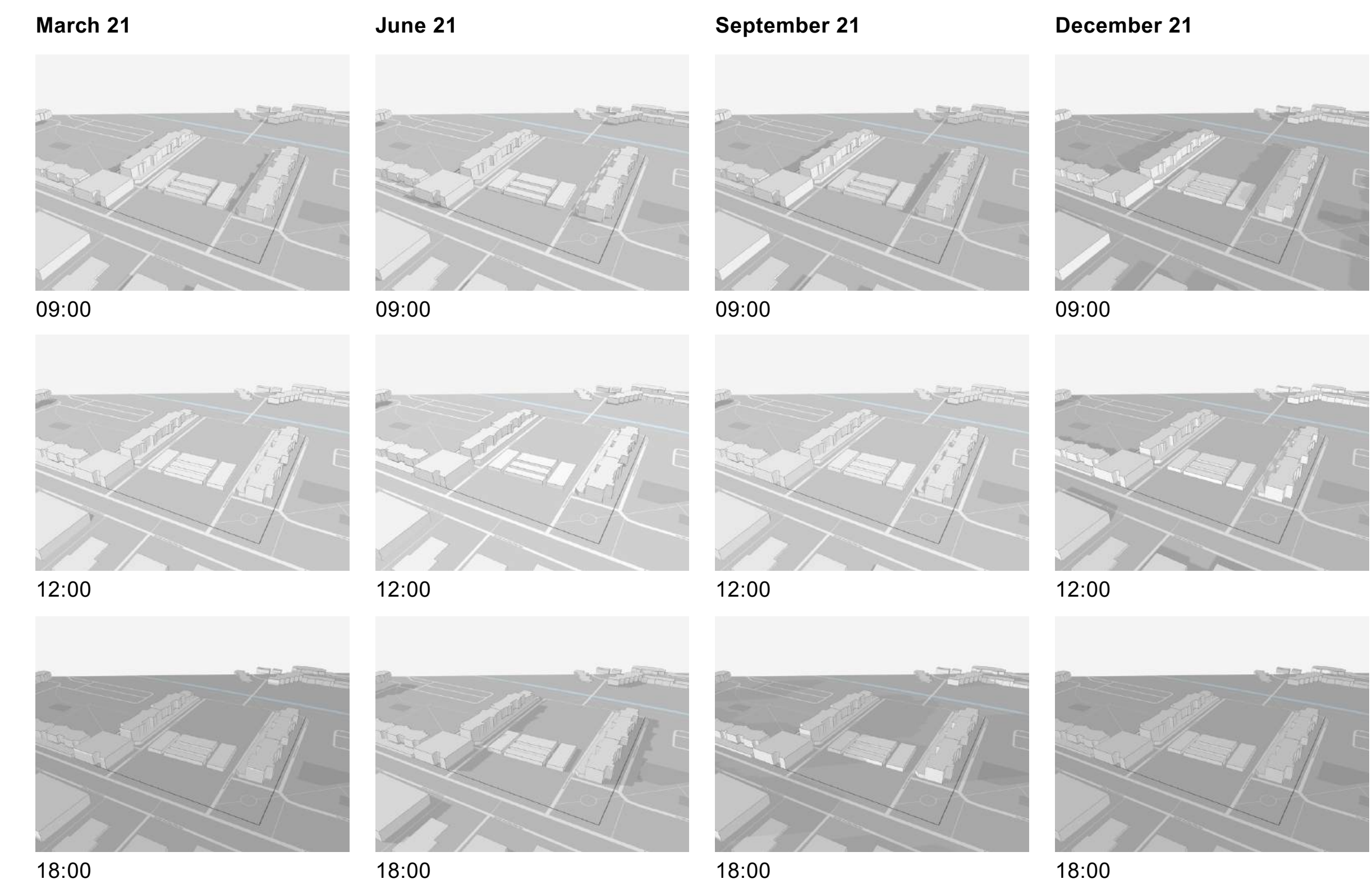


## LOCATION

Situated in the southwest of Sarajevo, right next to the international airport, Dobrinja is well-connected yet slightly removed from the city center. It's served by several main roads and public transportation, including trolleybuses and buses. This makes it easily accessible while retaining a somewhat self-contained feel; residents have many services close by, reducing the need to travel far.



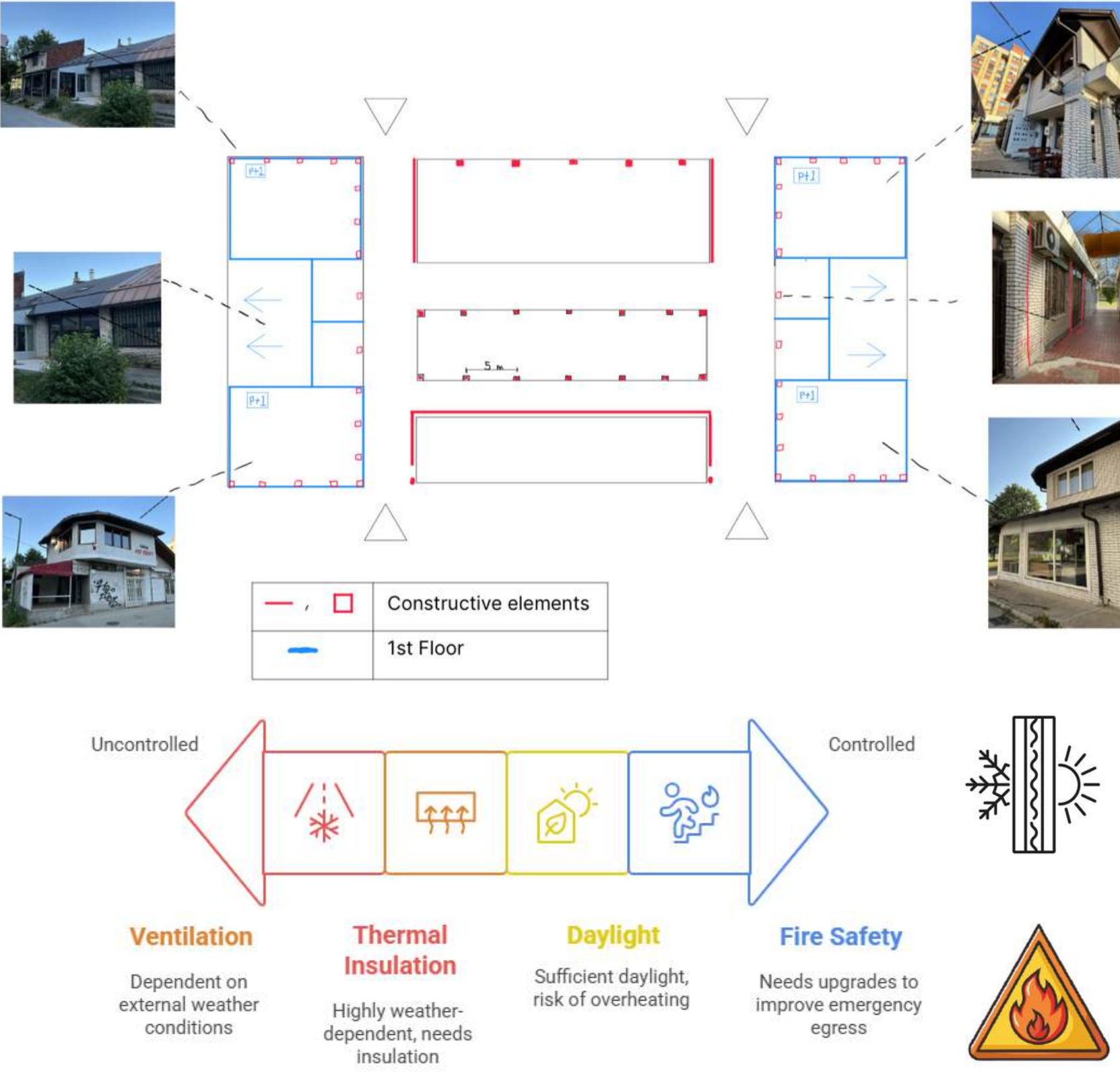
## SOLAR STUDY



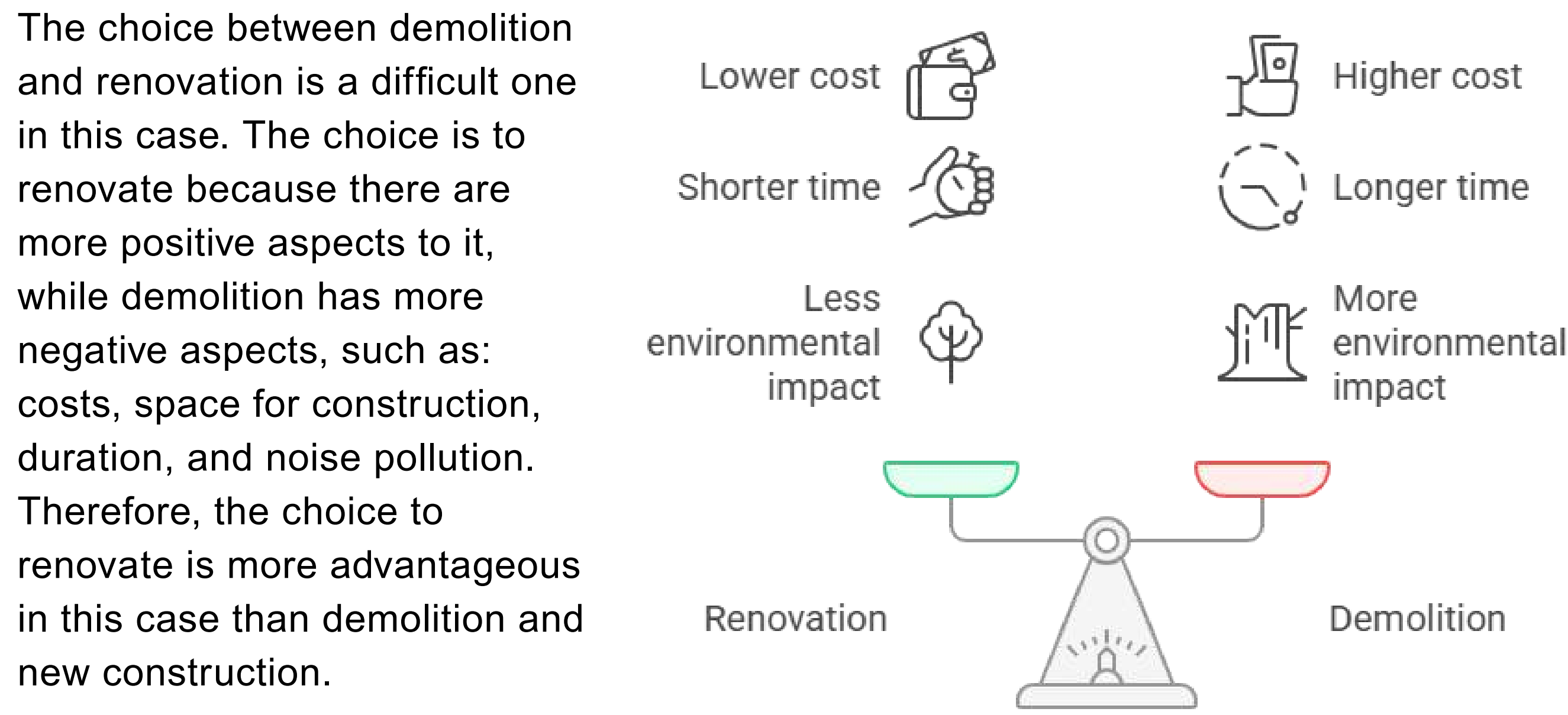
## CURRENT ENVIRONMENT



## CURRENT CONSTRUCTION

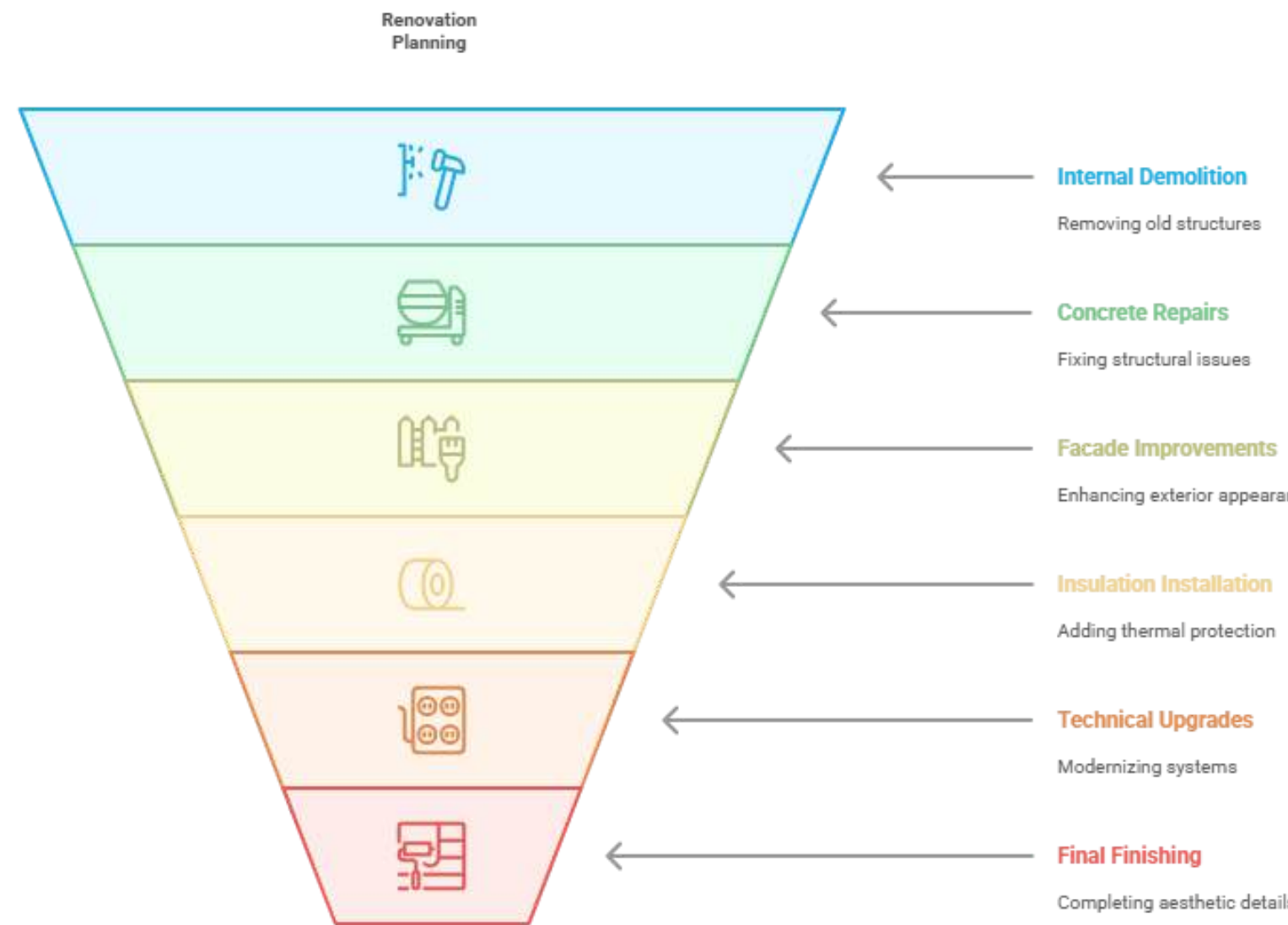


## DEMOLITION OR RENOVATION?



## RENOVATION

The renovation will follow a phased execution plan, starting with internal demolition and concrete repairs, followed by facade improvements, new insulation, and upgraded installations. Safety barriers and signage will be used during construction.



## CONCLUSION

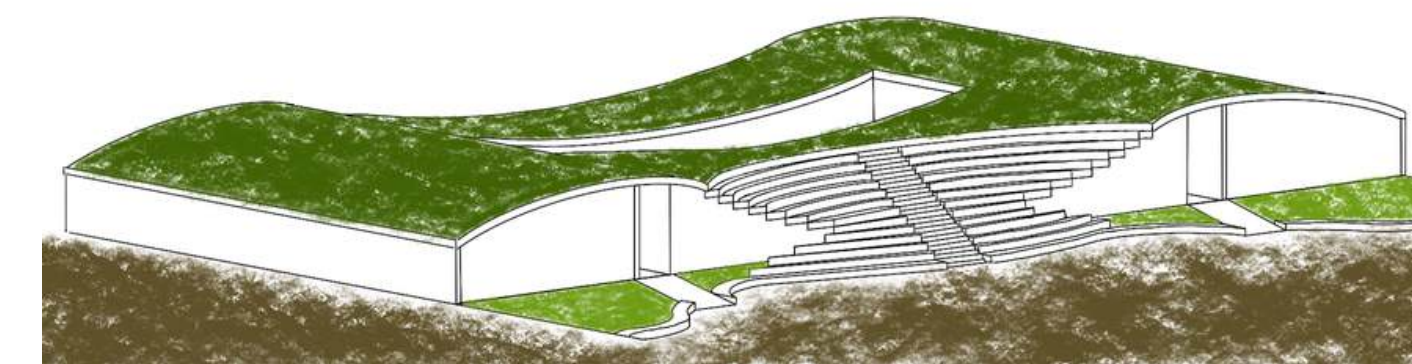
Dobrinja's transformation from an Olympic village to a resilient urban neighborhood reflects its enduring spirit and historical significance. While the market complex currently stands as a symbol of neglect, the decision to renovate rather than demolish offers a sustainable and community-centered solution. Through careful planning and phased improvements, the market will be restored to meet modern standards of safety, accessibility, and energy efficiency. This renovation not only preserves the neighborhood's structural heritage but also enhances its public spaces, reinforcing Dobrinja's role as a vibrant and livable district in Sarajevo.

## SOURCES

Bosnië en Herzegovina in cijfers en grafieken (wekelijks bijgewerkt) | AlleCijfers.nl (2025, June 16). AlleCijfers.nl. <https://allecijfers.nl/land/bosnie-en-herzegovina/> • City of Sarajevo. (n.d.). Dobrinja. • City of Sarajevo. (n.d.). Dobrinja. • Het klimaat van Sarajevo - klimaatinfo Sarajevo. (n.d.). <https://klimaatinfo.nl/klimaat/bosnie-en-herzegovina/sarajevo/> • Lampe, R. J., Pickering, Paula, Malcolm, & R. N. (2025, June 17). Bosnia and Herzegovina | Facts, Geography, History, & Maps. Encyclopedia Britannica. <https://www.britannica.com/place/Bosnia-and-Herzegovina/People> • Largest cities by population 2025. (n.d.). <https://worldpopulationreview.com/cities/> • Net als sociale cohesie, zou innovatie in de kern moeten gaan over ontmoeting, uitwisseling en wederzijds begrip. (n.d.). TU Delft. <https://www.tudelft.nl/innovatie-impact/pioneering-tech/articles/net-als-sociale-cohesie-zou-innovatie-in-de-kern-moeten-gaan-over-ontmoeting-uitwisseling-en-wederzijds-begrip> • Turkušić Jurić, E., Lizde, A., & Univerzitet u Sarajevu, Arhitektonski fakultet Univerziteta u Sarajevu, Katedra za arhitektonsko projektovanje. (2025). Regeneracija stanovanja XX stoljeća. • UNEP-WCMC & European Commission. (2020). BOSNIA AND HERZEGOVINA COUNTRY OVERVIEW TO AID IMPLEMENTATION OF THE EUTR. • Versus. (n.d.). Sarajevo | 136 feiten en hoogtepunten. VERSUS. <https://versus.com/nl/sarajevo> • Wikipedia contributors. (2024a, June 23). Dobrinja. Wikipedia. <https://en.wikipedia.org/wiki/Dobrinja> • Wikipedia contributors. (2025a, March 23). Sarajevo Canton. Wikipedia. [https://en.wikipedia.org/wiki/Sarajevo\\_Canton](https://en.wikipedia.org/wiki/Sarajevo_Canton) • Wikipedia contributors. (2025b, June 22). Sarajevo - Wikipedia. <https://en.wikipedia.org/wiki/Sarajevo> • --text=Environment-Geography.middle%20of%20the%20Dinaric%20Alps.



The Flame of Dobrinja refers to the Olympic flame, a symbol of hope and unity.

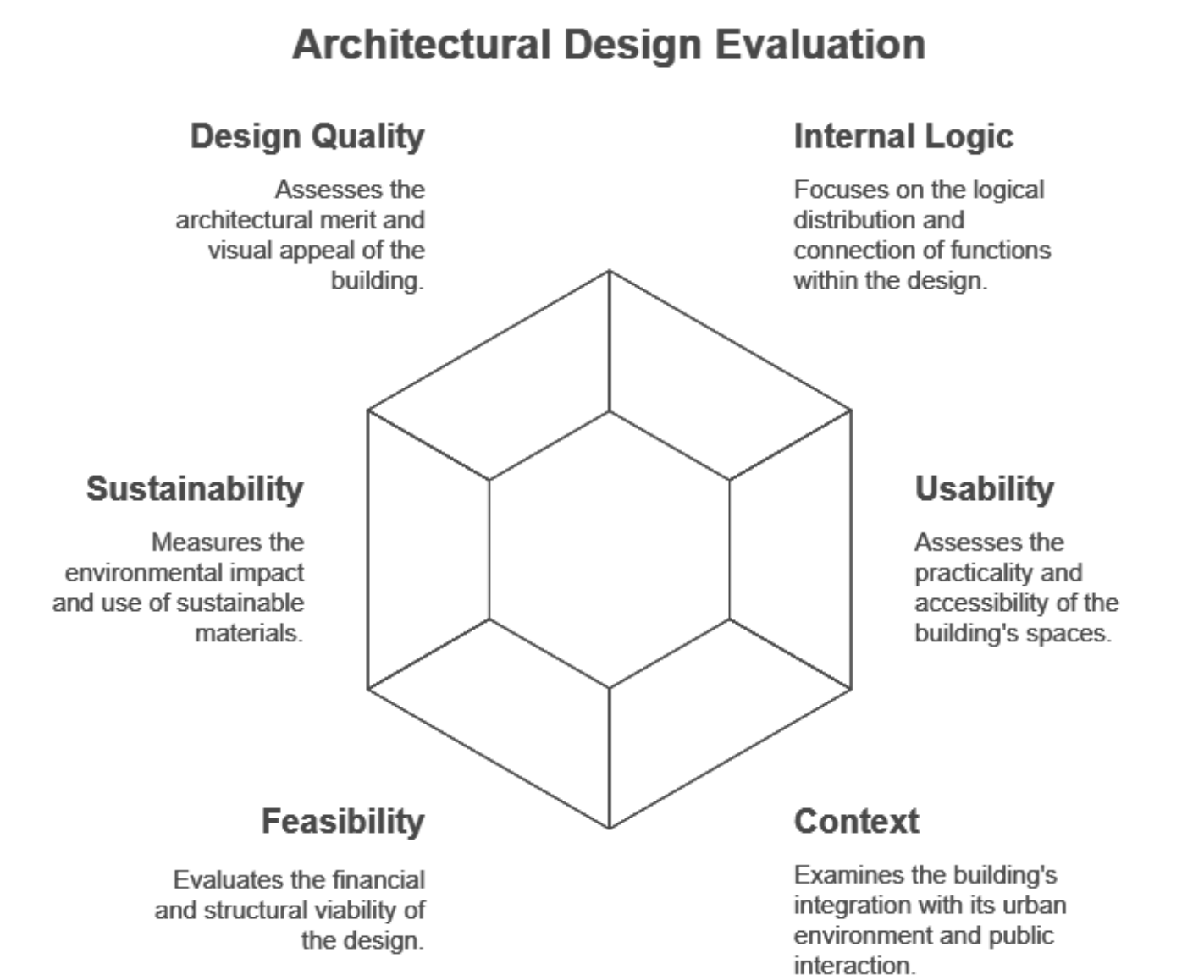



The Market of Opportunities represents a place where potential is realized and growth is fostered.




	--	-	+	++
Cohesion				
Usability				
Context				
Feasibility				
Sustainability				
Design Quality				

	--	-	+	++
Cohesion				
Usability				
Context				
Feasibility				
Sustainability				
Design Quality				




- 


### Outdoor Features

Completing garden, theater, and playground
- 

### Furnishing Spaces

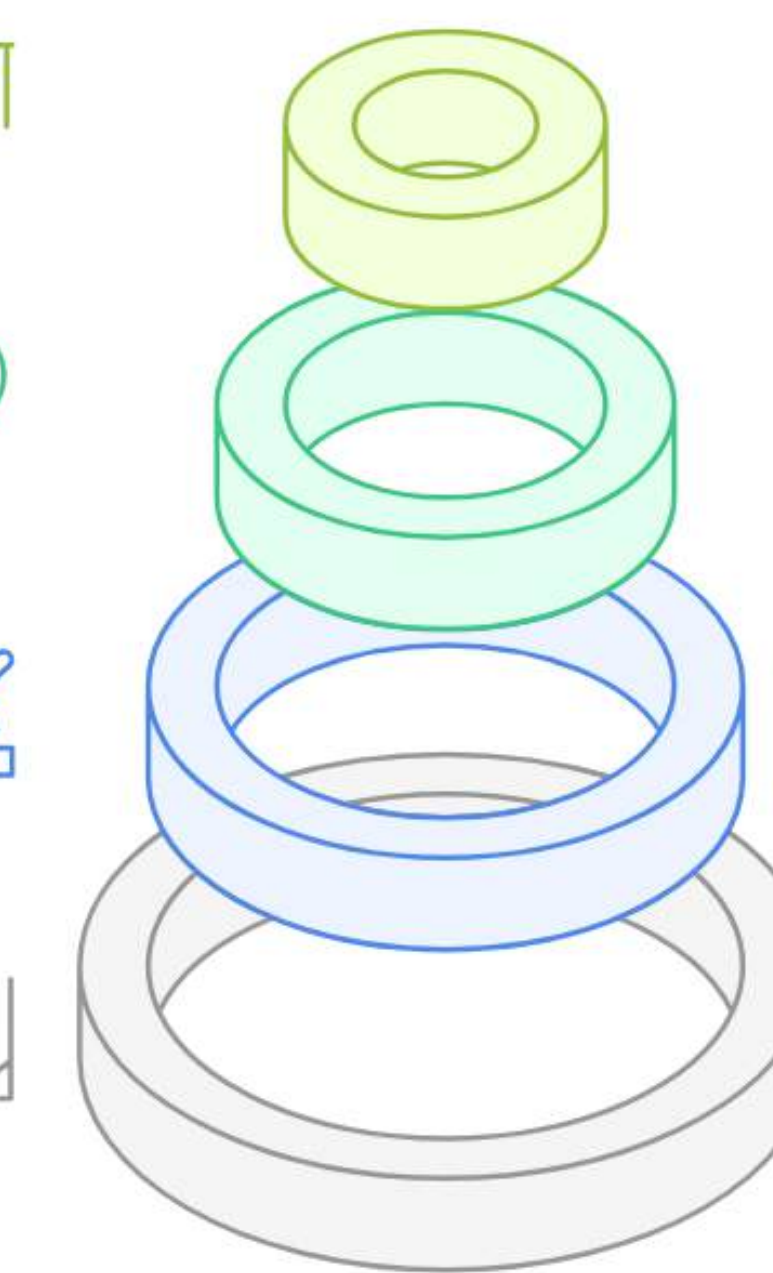
Carpentry work with local materials
- 

### Wall Renovation

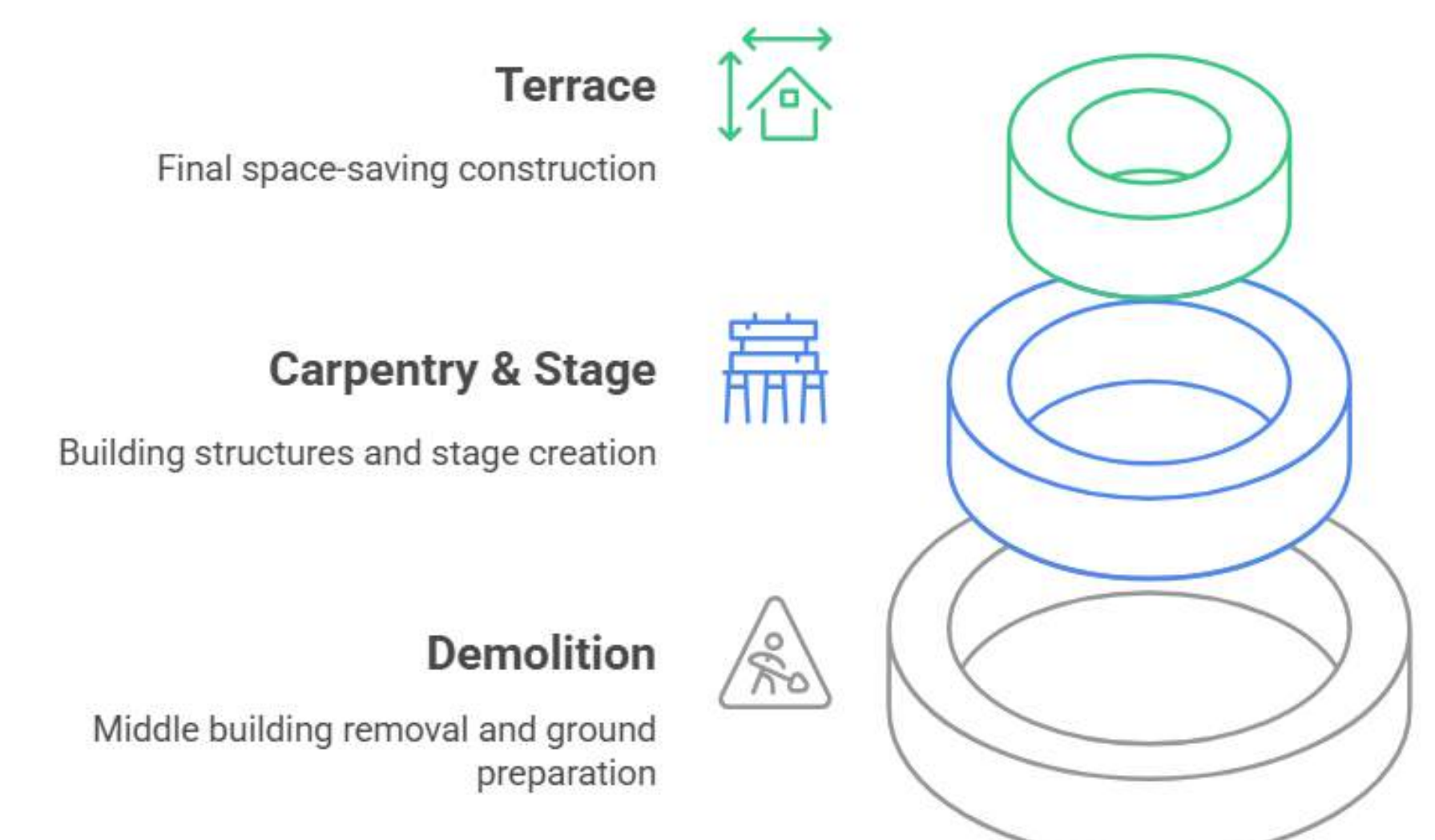
Applying plaster and floor screed
- 

### Building Stripping

Removing old materials and structures



### Inside-Out Construction Process

[illegible]



## THE CHOSEN VARIANT

## LOGISTICS



The diagram consists of three vertical, rounded rectangular panels, each with a different background color and a specific icon representing a delivery route.


- Left Panel (Green):** Titled "Circular route". The text below the title says "The driving route is circular." The icon is a white circle with a dashed line forming a loop around a central location pin.
- Middle Panel (Brown):** Titled "One-way traffic". The text below the title says "The traffic is only in one direction." The icon is a white rectangular sign with a right-pointing arrow.
- Right Panel (Orange):** Titled "Just-in-time delivery". The text below the title says "Delivery of goods happens just in time." The icon is a white line drawing of a truck with a delivery box, moving from left to right.

## SITUATION

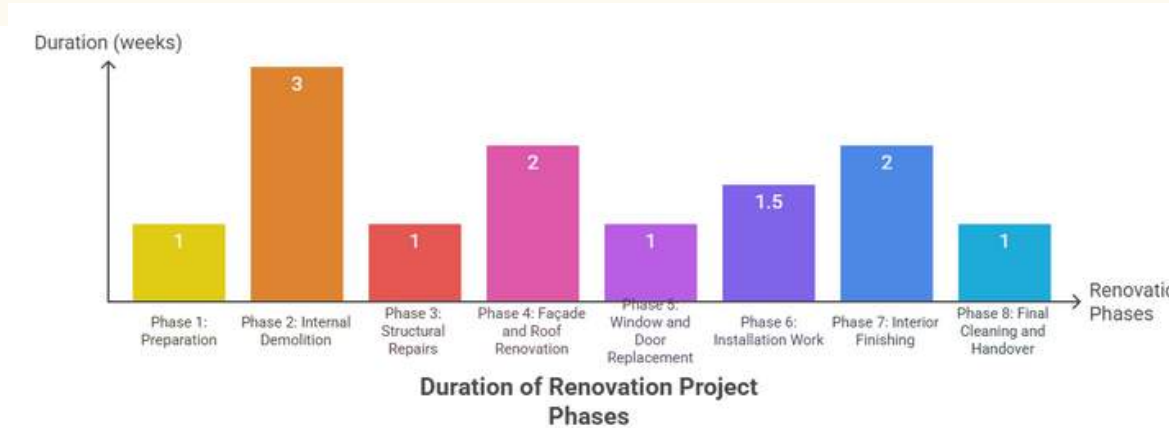


## FINANCIAL OVERVIEW

## General Site cost overview

Cost Category	Amount(€)
 Supervisory and Support Staff	50.560,00
 Welfare Facilities for Site Workers	3.153,48
 Construction Site Setup and Management	17.139,10
 Transport & Logistics	3.642,39
 Temporary Connections	1.848,95
 Use of Small Equipment	1.453,50
 Total	77.797,42

## TIME SCHEDULE

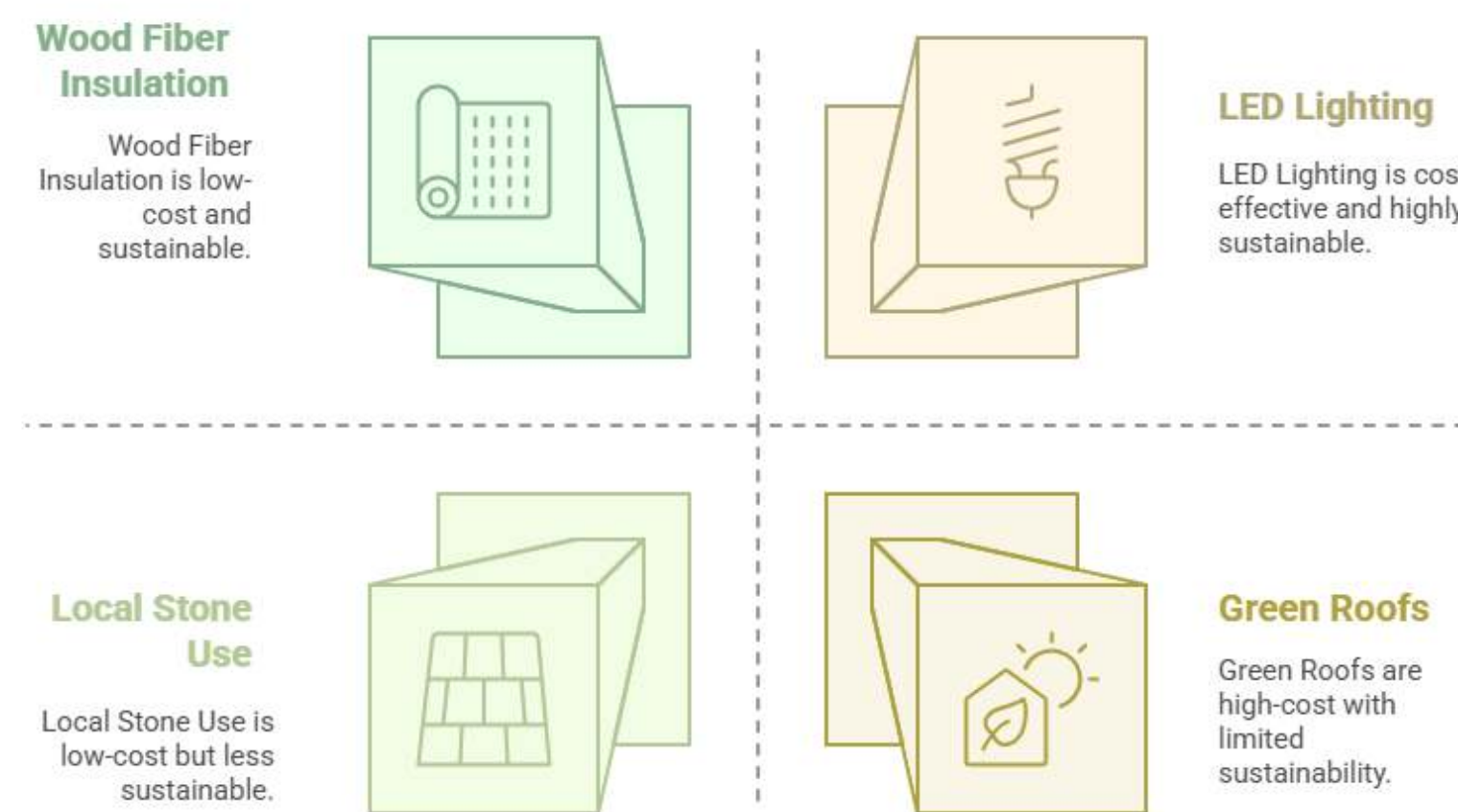


## EXECUTION

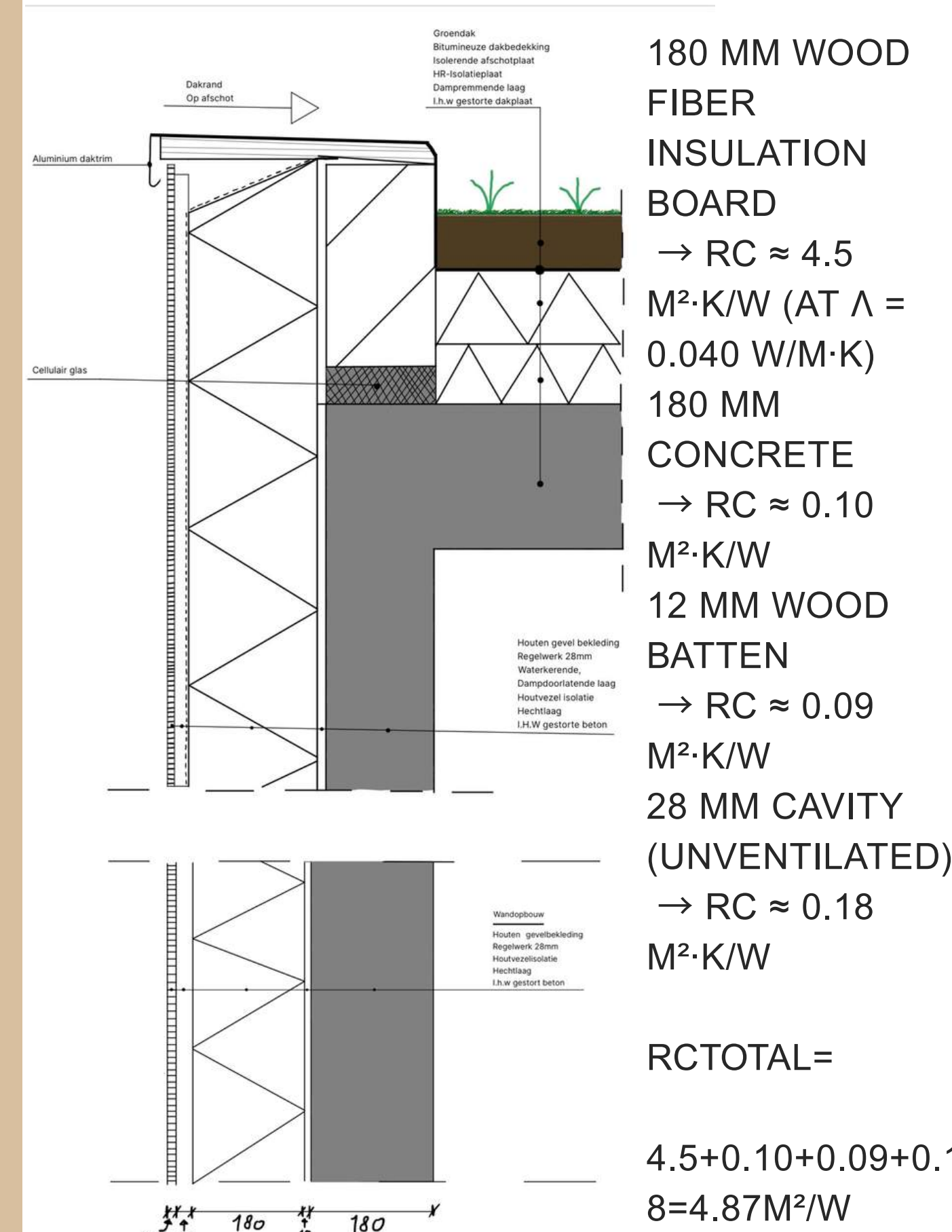
### Construction Site Management Strategies



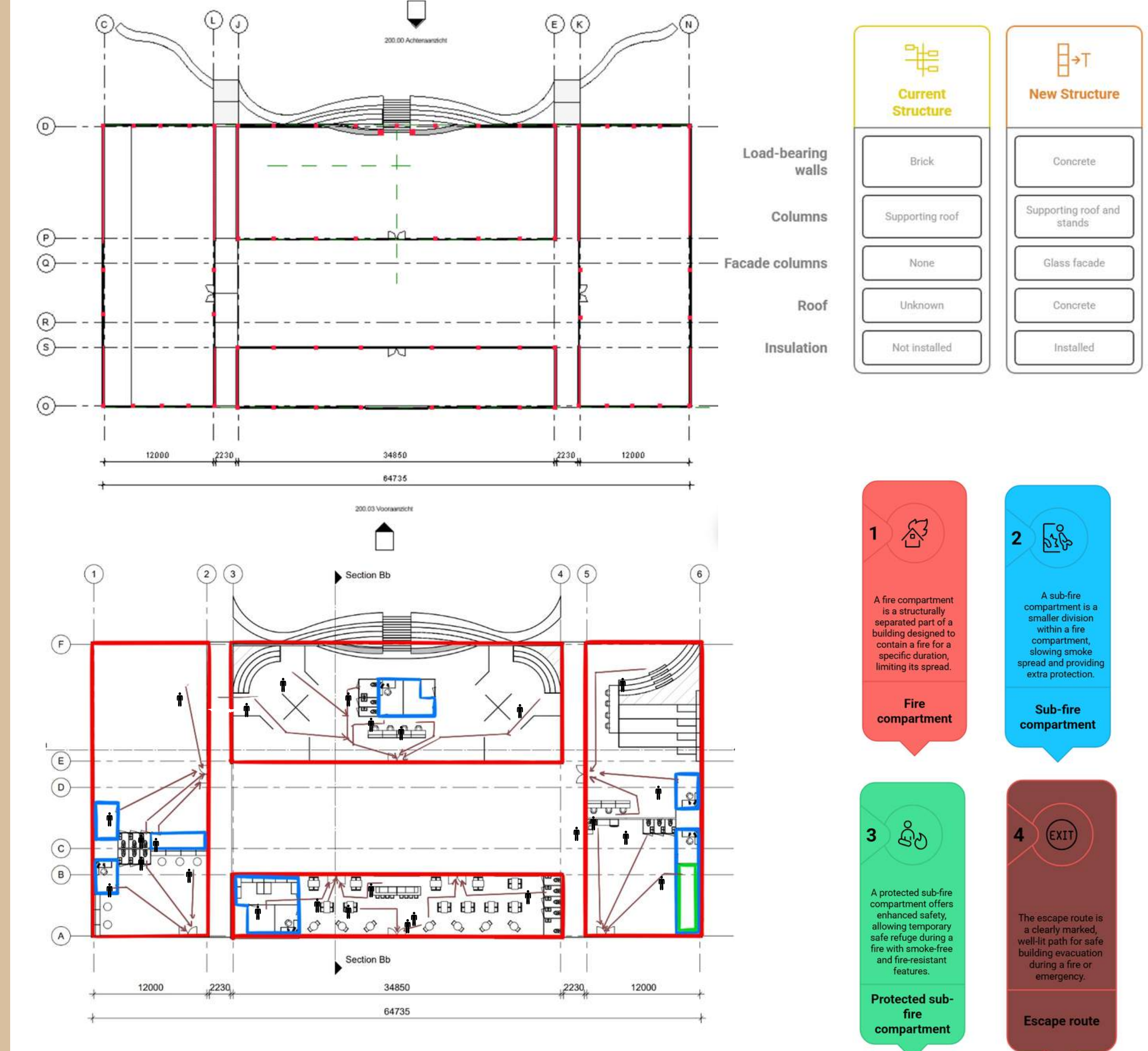
## Sustainable Renovation Strategies



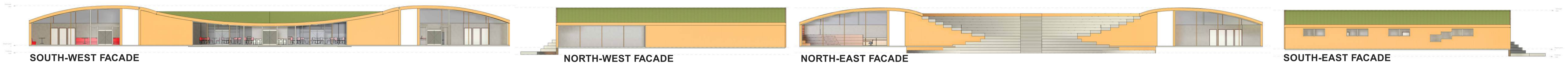
## WALL CONSTRUCTION



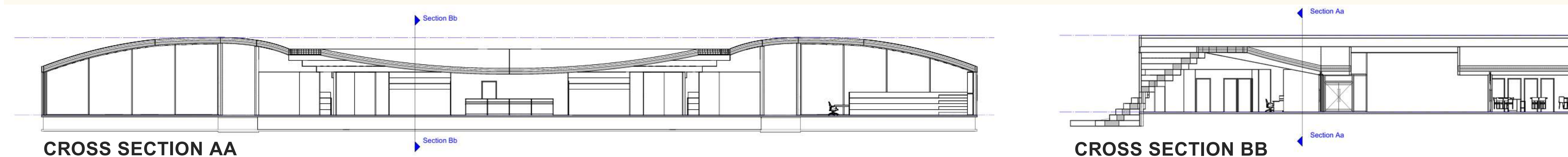
## CONSTRUCTION



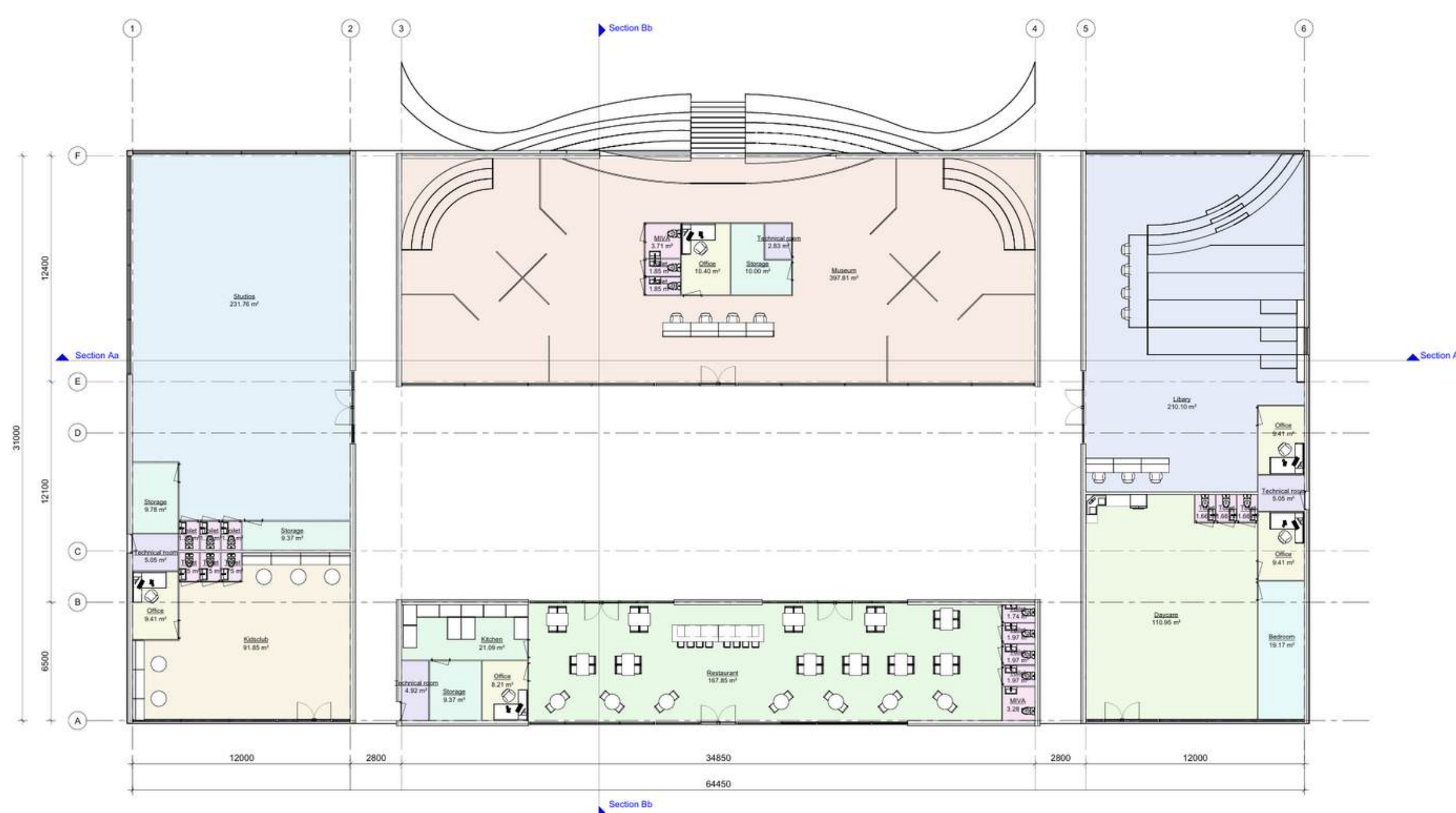
## VIEWS



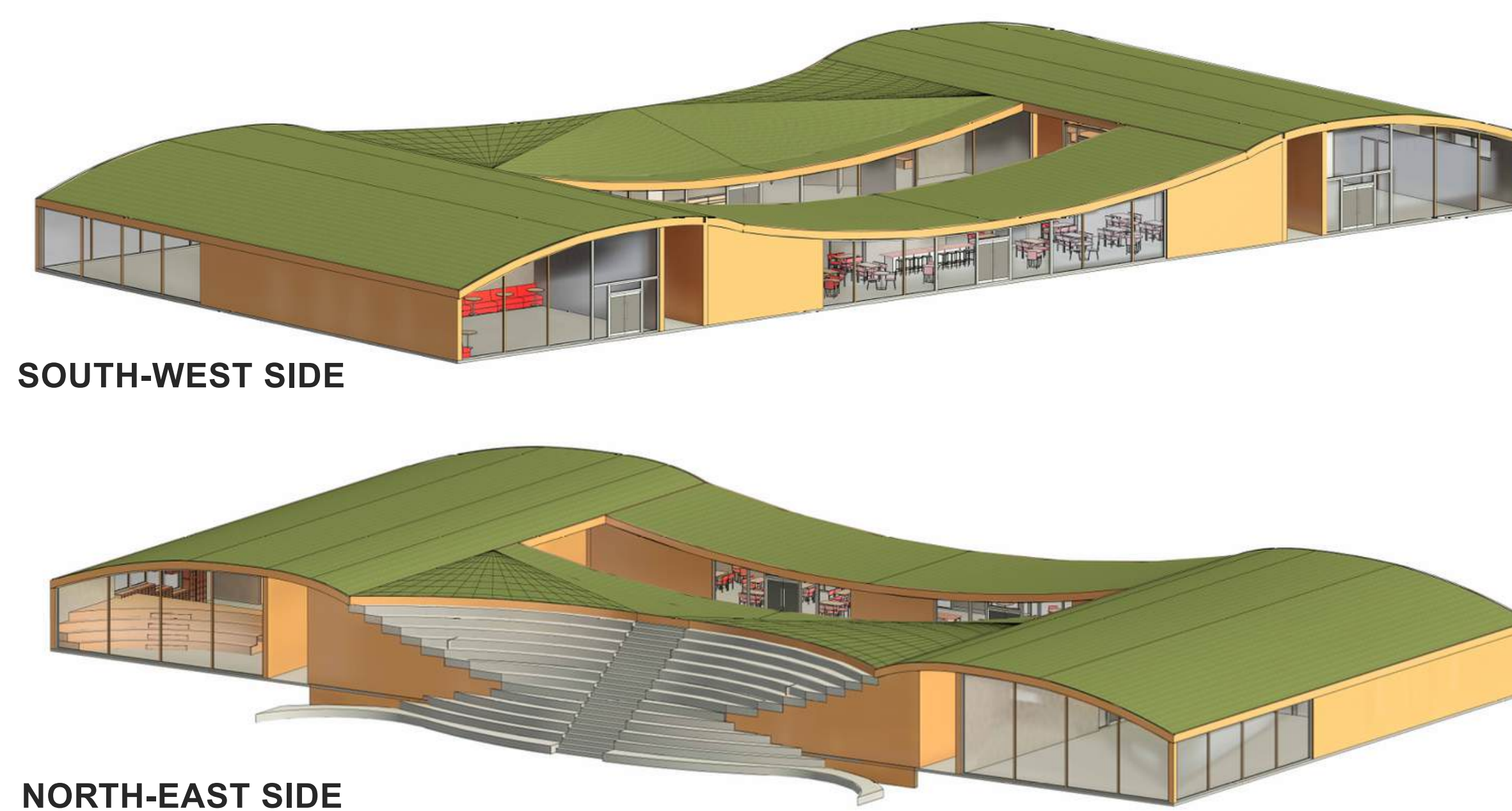
## SECTIONS



## FLOOR PLAN



### 3D VIEW OF THE BUILDING



## RENDERS



## SOURCES



#### Samenwerkingscontract

1. Regels met betrekking tot de onderlinge communicatie, zowel mondeling als schriftelijk en via telefoon en e-mail. Alles wordt gecommuniceerd tijdens de lessen. Wanneer er zich een probleem voordoet of wanneer er iets dringends gemeld moet worden dan kan dat via de app besproken worden.

2. Gedragsregels over het naleven van de afspraken, het bijwonen van de vergaderingen, het uitvoeren van taken. Afspraken worden altijd nageleefd, wordt dat door iemand niet gedaan dan hangen daar consequenties aan (zo sancties). Hetzelfde geldt voor de aanwezigheid bij de groepsvergaderingen die tijdens elke les gehouden worden. Uiteraard wordt er van ieder groepslid verwacht dat die zijn taken uitvoert, wanneer dit niet gebeurt zal er overlegt worden en de opties bekeken worden.

3. Inzet en houding (ambitiesniveau, streven naar beoordeling, houding ten aanzien van kritiek): onze groep streeft naar een 7,5, dit betekent dat iedereen inzet toont en zijn best ervoor doet. Feedback en kritiek moeten op een positieve manier geacht worden en moet met een open houding ontvangen worden. Feedback wordt niet gezien als een negatief punt, maar eerder als leerpunt.

4. Sancties: welke sanctie na hoeveel waarschuwingen: Sanctie 1e waarschuwing: in gesprek tijdens de vergadering en probleem wordt besproken. Hierbij worden opties en oplossingen voorgesteld en gekozen hoe het voorkomen kan worden. Sanctie 2e waarschuwing: wederom in gesprek tijdens de vergadering, hierop wordt duidelijk gemaakt dat dit de laatste waarschuwing is en dat hierna een echte sanctie wordt gebruikt. Sanctie definitief: eventueel uit de groep gezet worden.

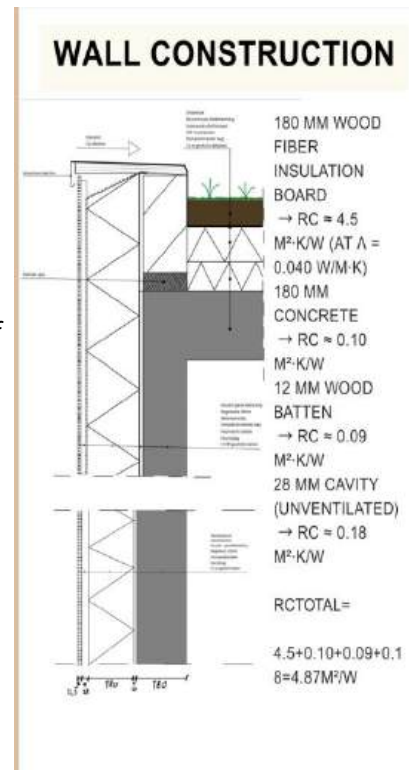
5. Besluitvorming: via consensus of bij meerderheid van stemmen: Onze groep streeft naar een consensus. Wordt dit niet bereikt dan tellen de meeste aantal stemmen.

6. Invulling van het groepsoverleg: Elke les hebben we een vergadering met alle groepsleden, hierin wordt besproken wat er de afgelopen lessen gedaan is door iedereen en wat er voor de komende les van iedereen verwacht wordt.

The first task I completed was drafting a collaboration agreement. This agreement outlined the arrangements we made to ensure the project would proceed in a clear and structured way. It included specific rules regarding absence and failing to meet certain commitments. By creating this agreement, our group immediately had clarity about the expectations and responsibilities within the collaboration.

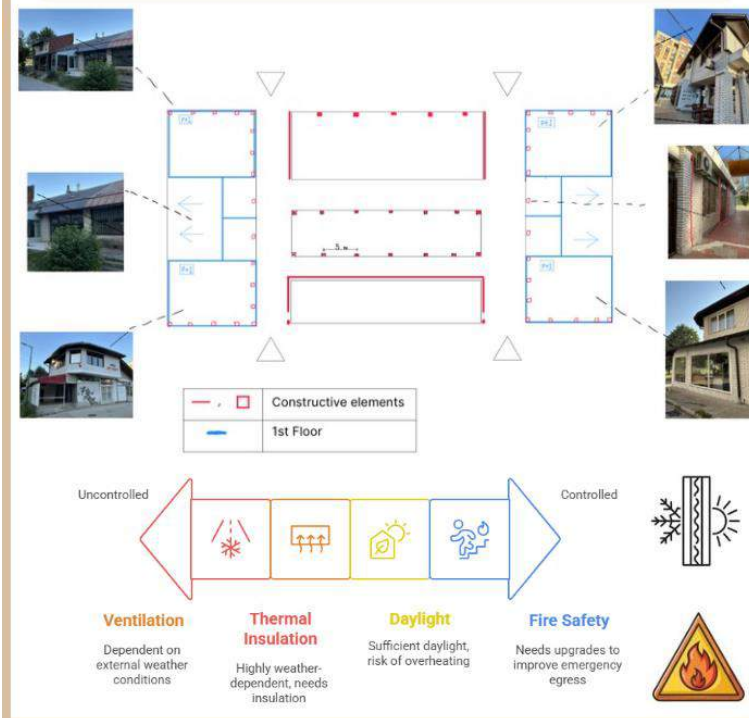


After we had decided as a group to go with renovation, the designers continued and created two different design proposals. I then assessed the feasibility of both options and gave my advice on the final project choice. I recommended *The Flame of Dobrinja* as the better option, mainly because *The Market of Opportunities* included the use of a basement, and since we had no information about the foundation, we couldn't determine whether this was structurally possible. Additionally, Option 1 (The Flame of Dobrinja) was more compatible with the existing structure.



After selecting the preferred design option, I continued by exploring what would be a logical wall structure and a suitable roof structure. In the end, we chose a wall construction consisting of a concrete load-bearing wall. This also made it possible to construct the roof using in-situ cast concrete. Since the roof has a curved shape, this was the most logical solution. Additionally, I performed a simplified thermal resistance ( $R_c$ ) calculation for the wall structure to determine whether it would meet the requirements. For this, I used the Dutch building regulations, which set the minimum  $R_c$ -value at  $4.7 m^2 \cdot K/W$ .

## CURRENT CONSTRUCTION

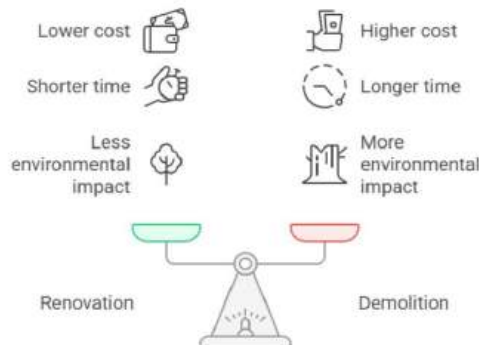


First, I looked into the current situation. Initially, there was little information available, and we didn't know much about the structure. In the second week, we received additional information from Aida about the building, including some details about its current state. After discussing with fellow students and the executors in our group, we came to the following conclusion: the structure consists of a brick construction with brick columns. In some places, an extra floor has been added, and a pavilion-like structure has been built in the center. The pavilion has little impact on the overall structure and is constructed differently from the four other buildings.

I also conducted research into the building's quality, focusing mainly on the building physics aspects. This revealed that the building is significantly outdated and requires major improvements to meet current standards. For example, it needs insulation, a proper ventilation system, and a better way to improve daylight access in the public corridor.

## DEMOLITION OR RENOVATION?

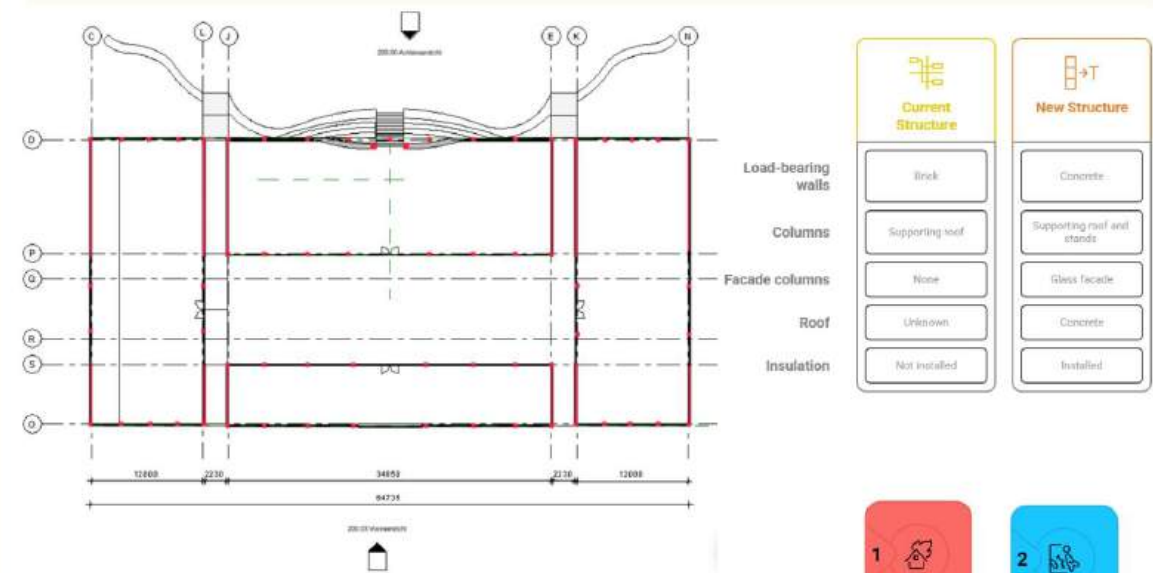
The choice between demolition and renovation is a difficult one in this case. The choice is to renovate because there are more positive aspects to it, while demolition has more negative aspects, such as: costs, space for construction, duration, and noise pollution. Therefore, the choice to renovate is more advantageous in this case than demolition and new construction.



After analyzing the structure, I started looking into the options for the new design. We had two main approaches for addressing the building. The first option was to demolish the existing structure and build an entirely new one. The second option was to renovate the current building, preserving the structural elements while implementing improvements and maintaining the overall layout of the market.

In the end, we decided as a group that renovation was the best option. From a structural perspective, this was also a suitable choice, as the current structure is sufficient to serve as the foundation for a new and improved version of the building.

## CONSTRUCTION



Finally, I examined the structure of the new building, and a few key observations immediately stood out. The first floor of the building was removed, which significantly reduces the load on the supporting structure, meaning it now only has to carry the roof. I concluded the following: the sides of the building consist of load-bearing concrete walls, while a concrete frame between them supports the roof. This design considerably reduces the spans and allows the grandstand to be easily supported. Additionally, the glass facade includes columns that also bear part of the roof load.