

Istanbul Visitor Center

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for the degree of

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in
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abstract

Istanbul Visitor Center

The purpose of the thesis study is to design a visitor center in Istanbul which will be used by tourists who are visiting the city and as well as by the people who live in the city. The visitor center will function as a city center in the middle of the most important tourist attraction location of Istanbul. Besides functioning as a city center, project will analyze the most important architecture element of the 21st century, the curtain wall.

Gulten Cakar

To my mother...

table of contents

Project Narrative **1**

Site **2**

Design Process **5**

Curtain Wall Research **19**

Curtain Wall Element of the Project **25**

Views from the Project **30**

References **44**

Project Narrative

Istanbul is the only city in the world located in two continents, Europe and Asia. Also, Istanbul was the capitol city of the Ottoman Empire and Byzantium Empire, which has created Istanbul's distinctive diversity.

Istanbul had almost 3 million visitors in 2010 and according to statistics, this number has increased tremendously in the last 5 years. This thesis' goal is to provide a design for a center for visitors, so they can find all necessary information under one roof.

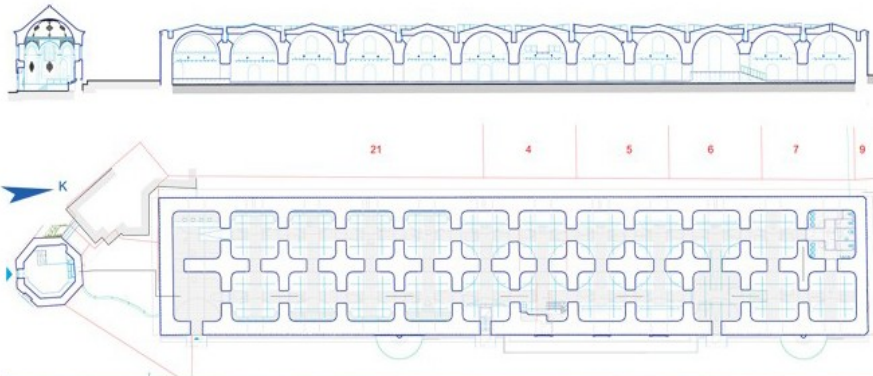
Site



The project site is located on the European side of Istanbul and in the municipality called Taksim. Taksim Square is an important part of the city's social life. The project site is located in the back side of the big plaza behind the Water Storage Building that was built in 1876 during Ottoman Empire to provide water to the city. Because it is a water distribution center, site was raised and there is a 9 feet tall retaining wall.

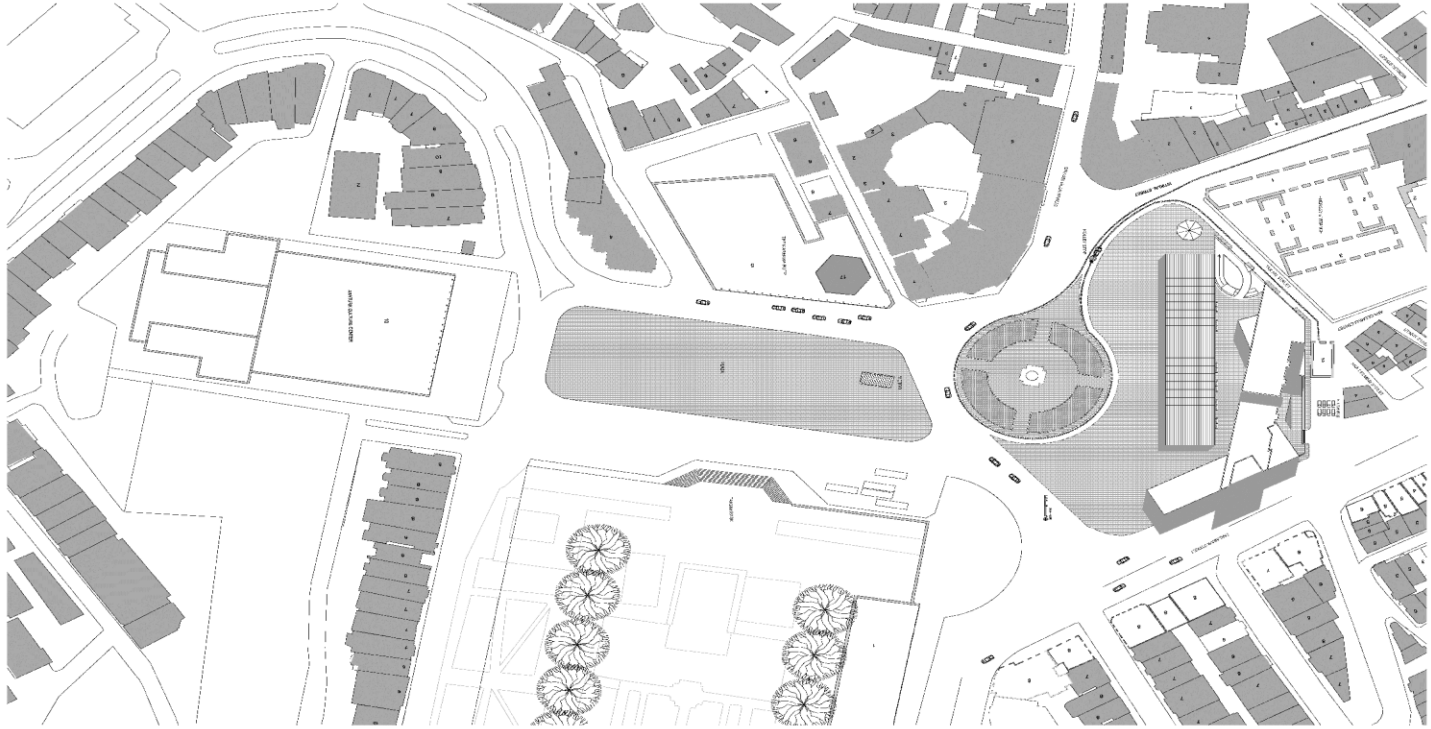
The thesis design solution had to find a way for the proposed building to collaborate with historic art gallery.

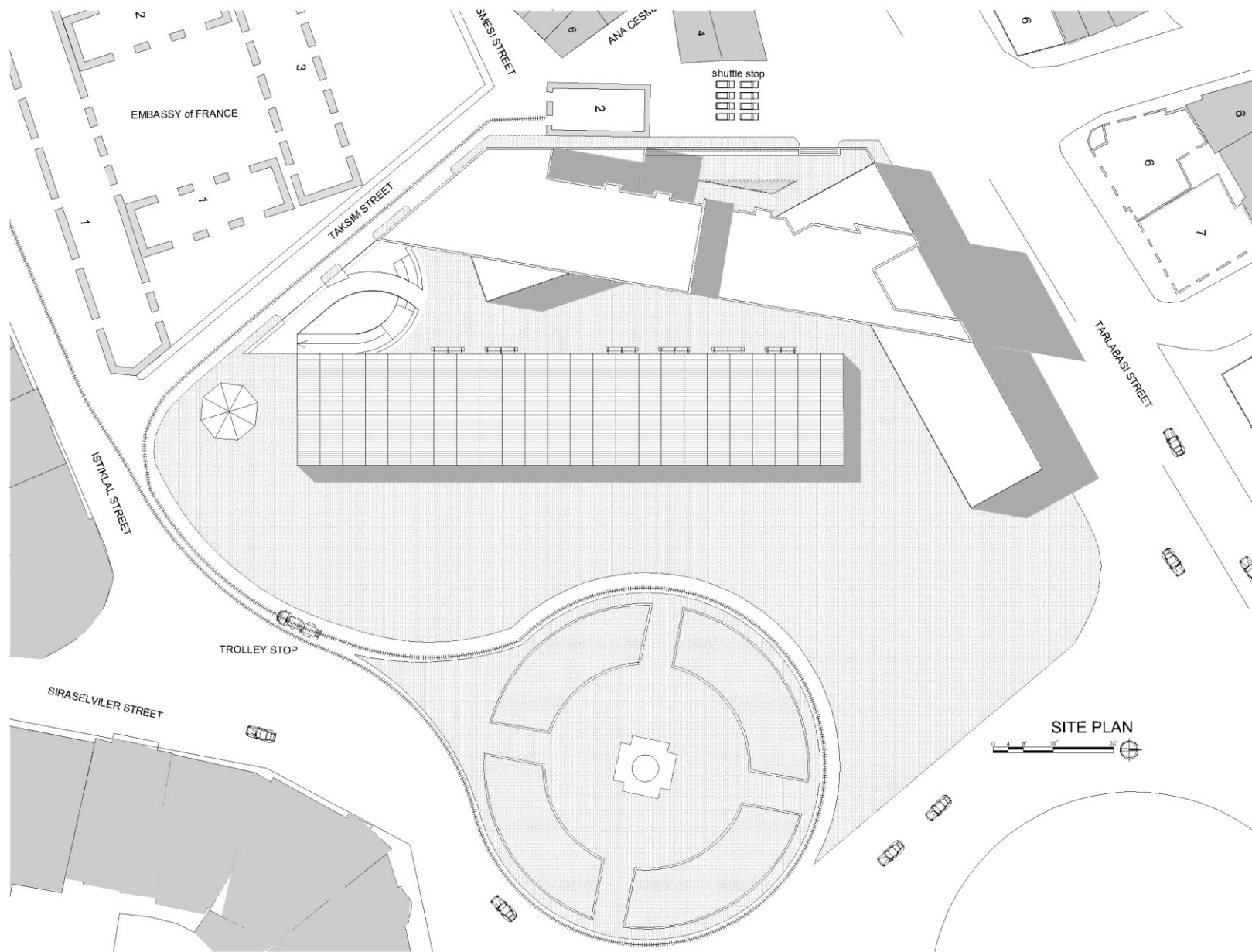
Existing Historic Water Storage Building



The Water Storage Building was designed in 1876 for water distribution in the center of the city. It is 50 feet by 300 feet in the plan and almost 50 feet in height. After years of resting in the middle of the city, city planners reopened it as an art gallery to serve the cultural needs of the city. During my thesis study, I would have to share my site with the gallery, therefore the building, the materials and the design were important considerations.

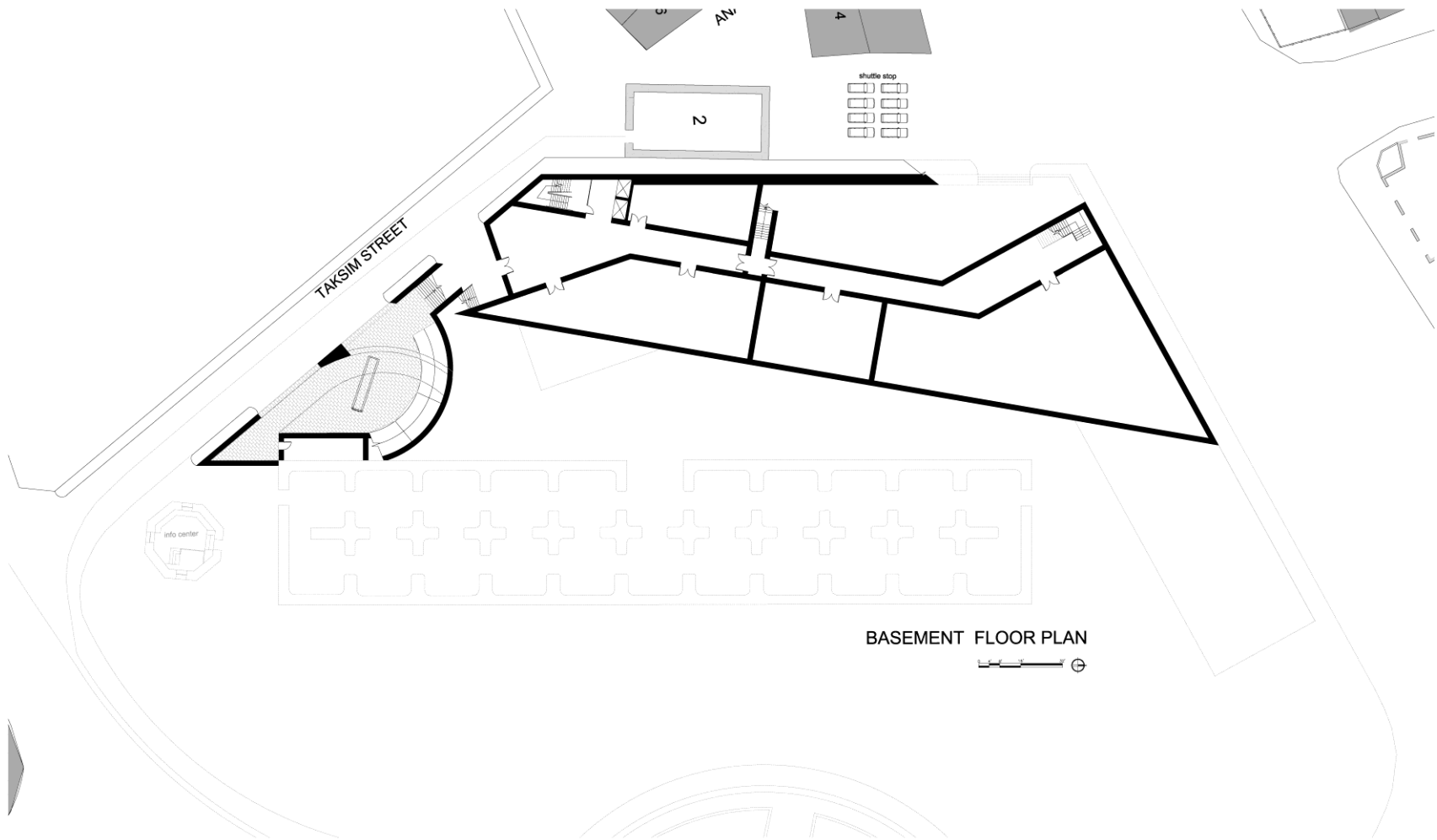
Design Process



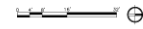


The first challenge of the project was how to enter the site. In front of the site from the large is the plaza 300- feet long, historic art gallery building that only allows one to enter from the left or the right. Also I have decided to create a minor plaza between the two buildings.

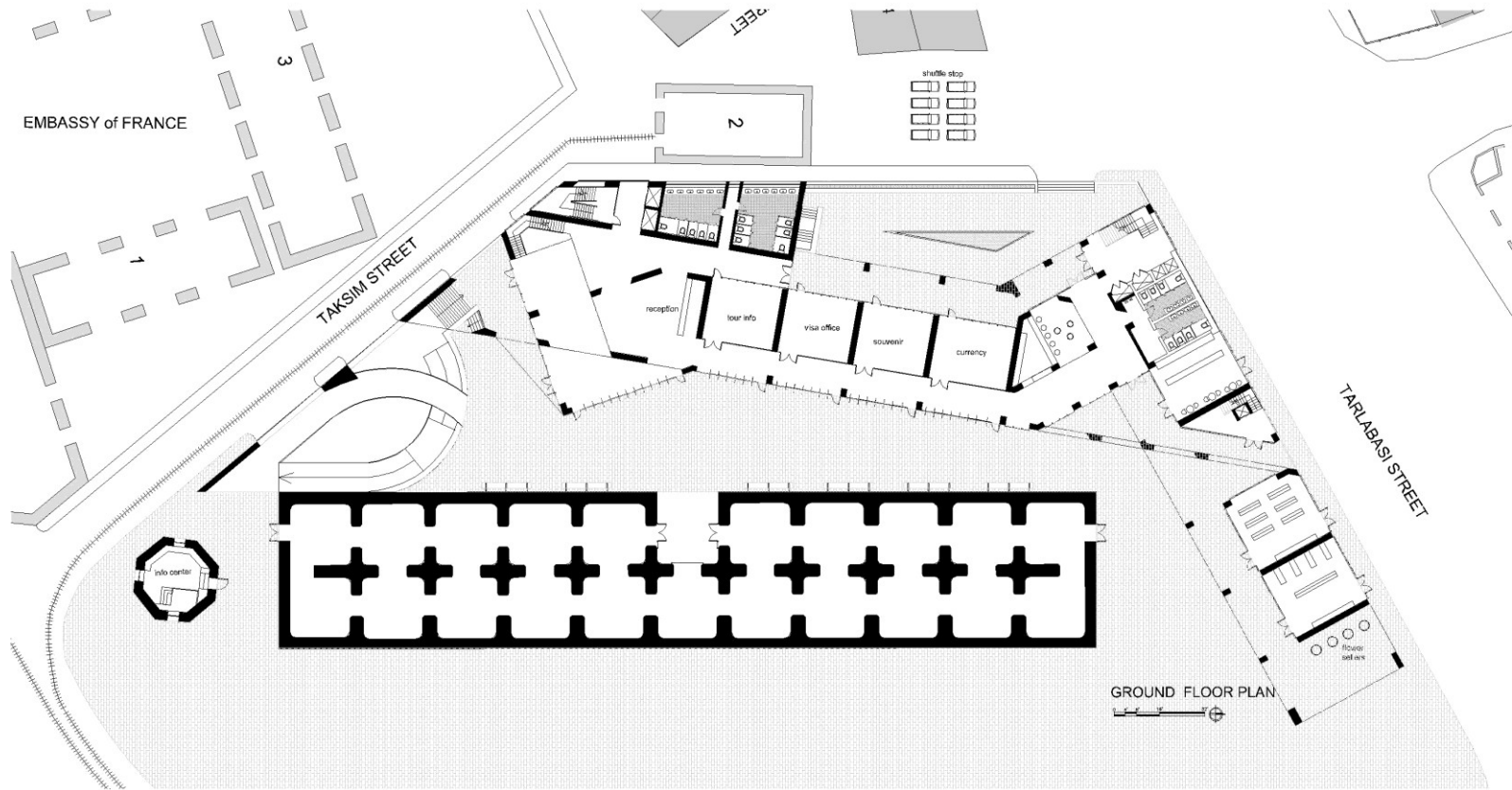
However this very tight entrance was a challenge for the project and it has been possible to take out the partial retaining wall and the soil to create a tourist bus entrance at the basement level. This connects to an upper entrance with a ramp and also helps create a very tight but interesting entrance element such as a bridge. This bridge and ramp solution for the left entrance helped me to decide the project's relationship with the historic art gallery building. I have decided to create a minor plaza between two buildings with the right entrance being from the plaza.



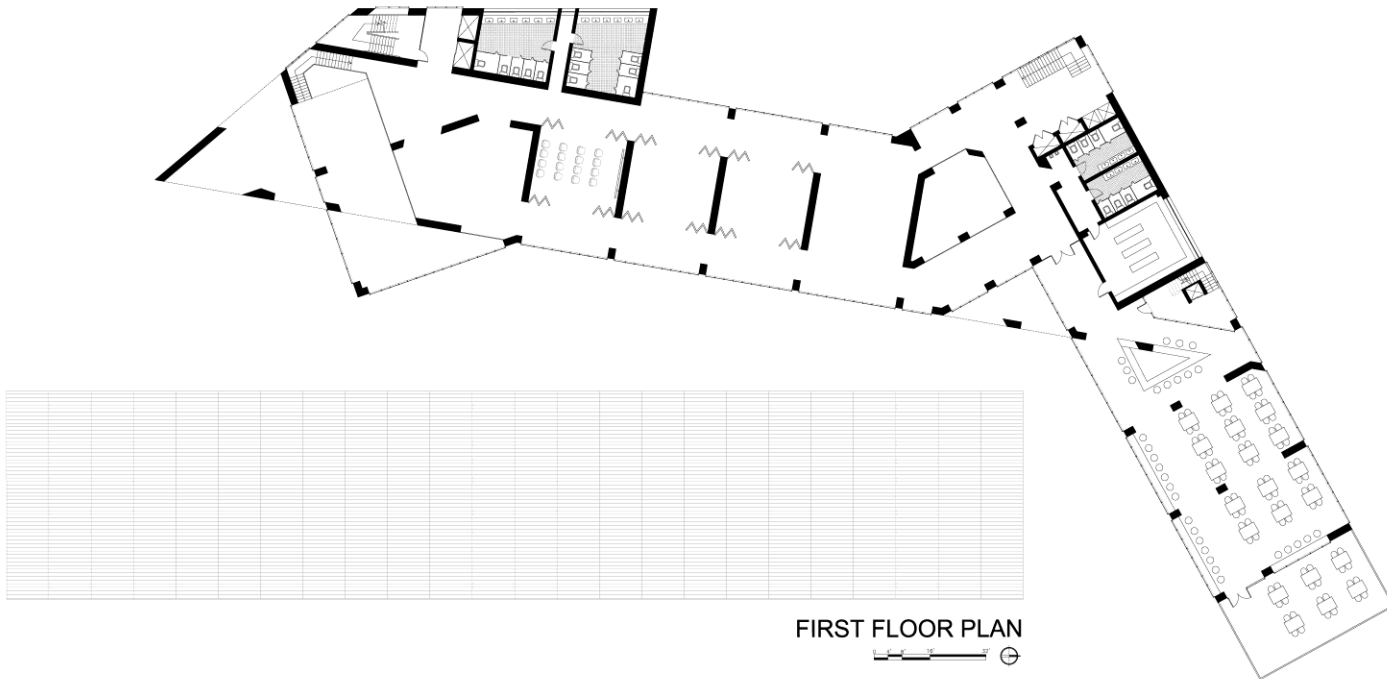
BASEMENT FLOOR PLAN



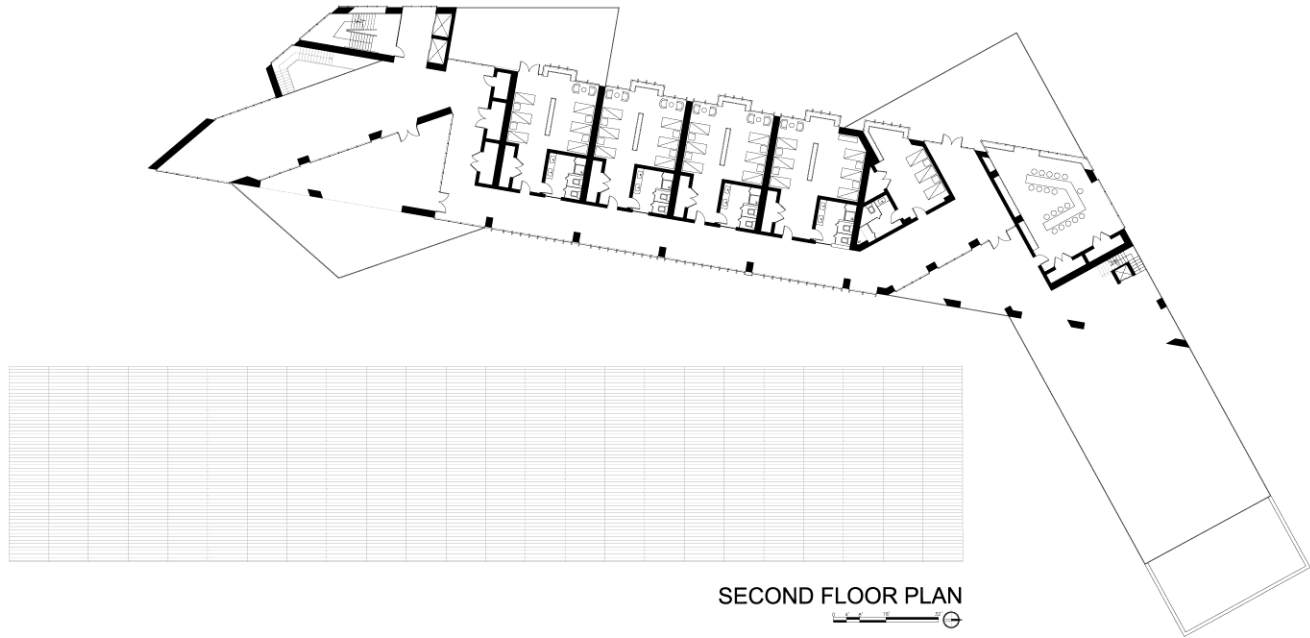
At the basement floor plan level the service entrance and tour bus entrance are located. Storage places are designed to be flexible so in the future these can be transformed to a parking garage if needed.

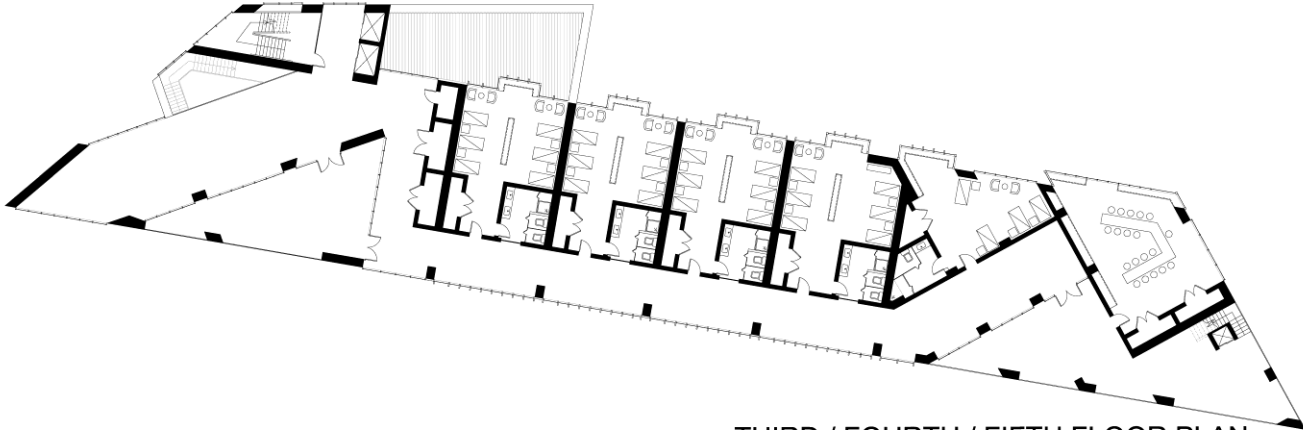


The ground floor plan opens up to the minor plaza with a folding door system, so the stores inside can function both inside and outside at the same time. Ground floor plan mainly contains stores and restaurants. On the right entrance of the building, a corner has been designed for the flower sellers historically located there.

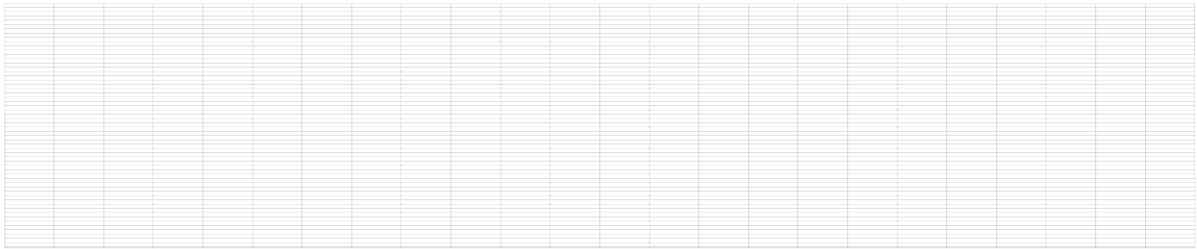


The first floor plan provides multi-purpose spaces between structural walls for the tourist group activities, such as seminars, movies, and exhibitions. On the right wing, a restaurant with multiple entrances has been designed.



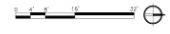


THIRD / FOURTH / FIFTH FLOOR PLAN





SIXTH FLOOR PLAN



On the second floor to the fifth floor, hostel rooms and workshop centers are located. Hospitality is one of the most important cultural values in Turkey and although this building is designed mostly for the visitors, adding hostel rooms was a challenge. Hostel culture is not common in Turkey so the design achievement was to create the environment of hotel comfort with the hostel mentality. The middle of the building is closed with a custom-designed curtain wall while the side lounge areas are kept open with large balconies as a gathering space.

Workshop rooms are located on each floor and have different entrances. As the part of the Visitor Center Building, workshops will provide education for the arts and crafts of Turkish culture.

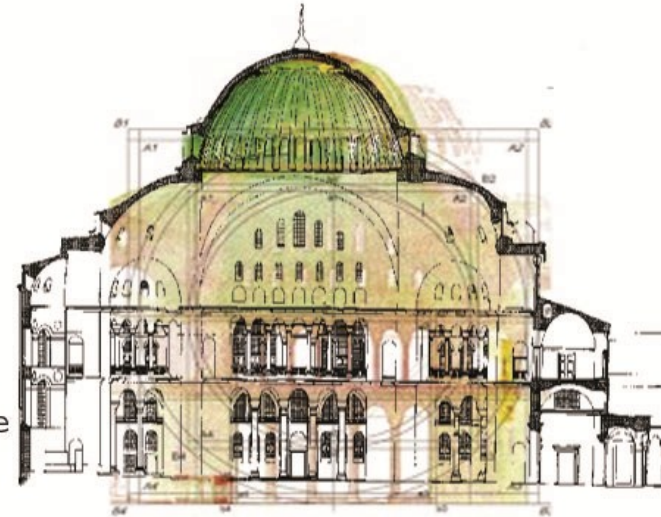
Also the sixth floor has a restaurant and an upper plaza. The restaurant is designed to be a significant rooftop attraction for the city. The rooftop plaza will be used to hold special cultural events such as dance shows, concerts ,etc.

Curtain Wall Research

CURTAIN WALL

HAGIA SOPHIA

Hagia Sophia represents the innovative tendency of early Byzantine architecture moving from dependence on wall support to point support—loads concentrated on 12 major piers, rather than thick masonry walls, distributed around the building. As a result thin curtain walls fill the space between the supporting piers.



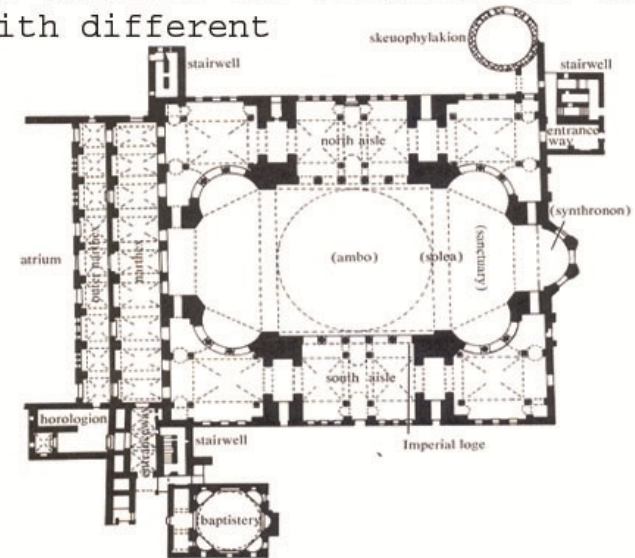
A curtain wall is a type of architecture wall encloses the structure of the building. It is light and can be decorated with different ornaments.



mosaic cover



marble cover



WALL USES



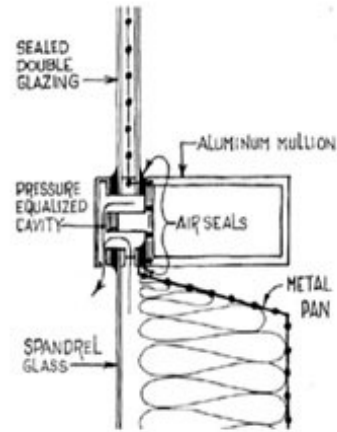
defence political power border life



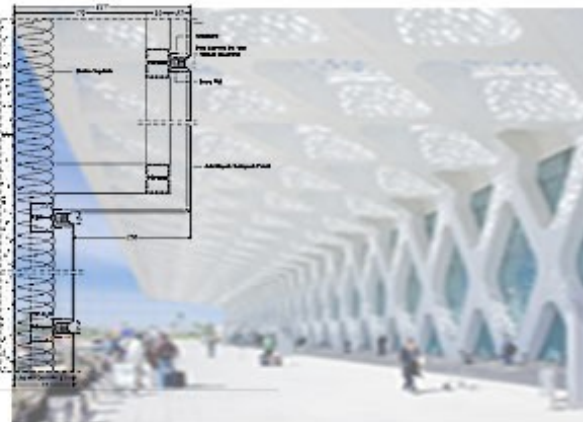
high-rise transparant stone shadow digital

CURTAIN WALL MATERIALS

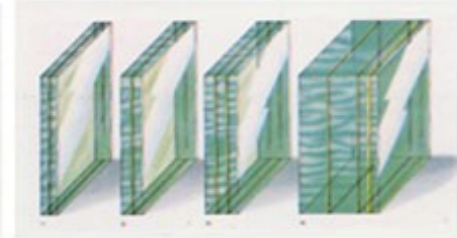
metal-aluminum and steel



solid panels



glass



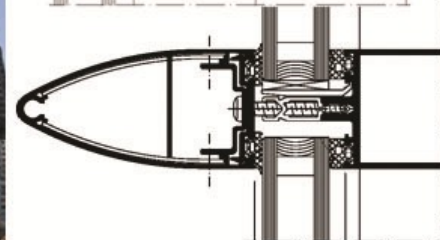
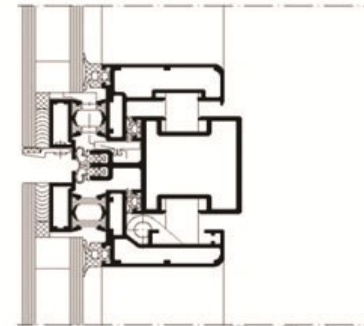
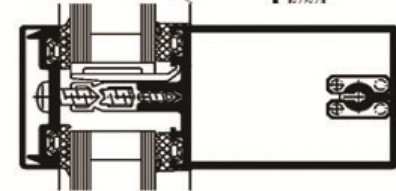
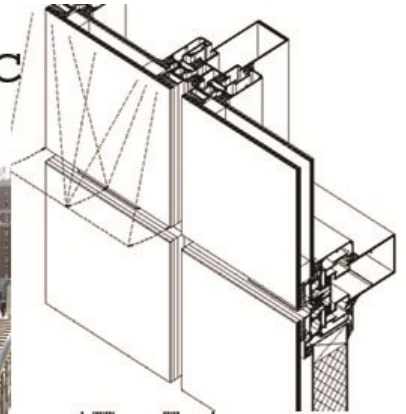
CURTAIN WALL-The Engineered Fabric



LIGHT
VIEW
COLOUR



WIND
REFLECTION
SUN
ENVIRONMENT
RELATIONSHIP
BORDER



First it is necessary to explain what a wall that is one of the most important and essential element of architecture. It is a structure that defines the space and protects it from dynamic and physical conditions. In architecture, walls can be identified as load bearing walls and non-load bearing walls. Throughout the history, wall elements were used for different purposes, such as borders and protection of a city, retaining walls, exterior walls, interior walls, etc. Therefore a wall was a border, a space definer, or a structural element of a building.

The Industrial Revolution, a major turning point in human history, improved the construction field with the invention of new materials. Some of these materials are glass and metal, and with the structural ability of these new materials, new techniques were developed in the construction field. Moreover, with this technical development, the use of new materials and with the need for lighter buildings, curtain wall systems took their place in architecture. New material innovations stimulated investigations in a wide range of architectural products that helped to reshape the materials and quality of architectural space. The propagation of the curtain wall goes back to Gottfried Semper's attempt to explain the origins of architecture through the lens of anthropology in the late 19th century.

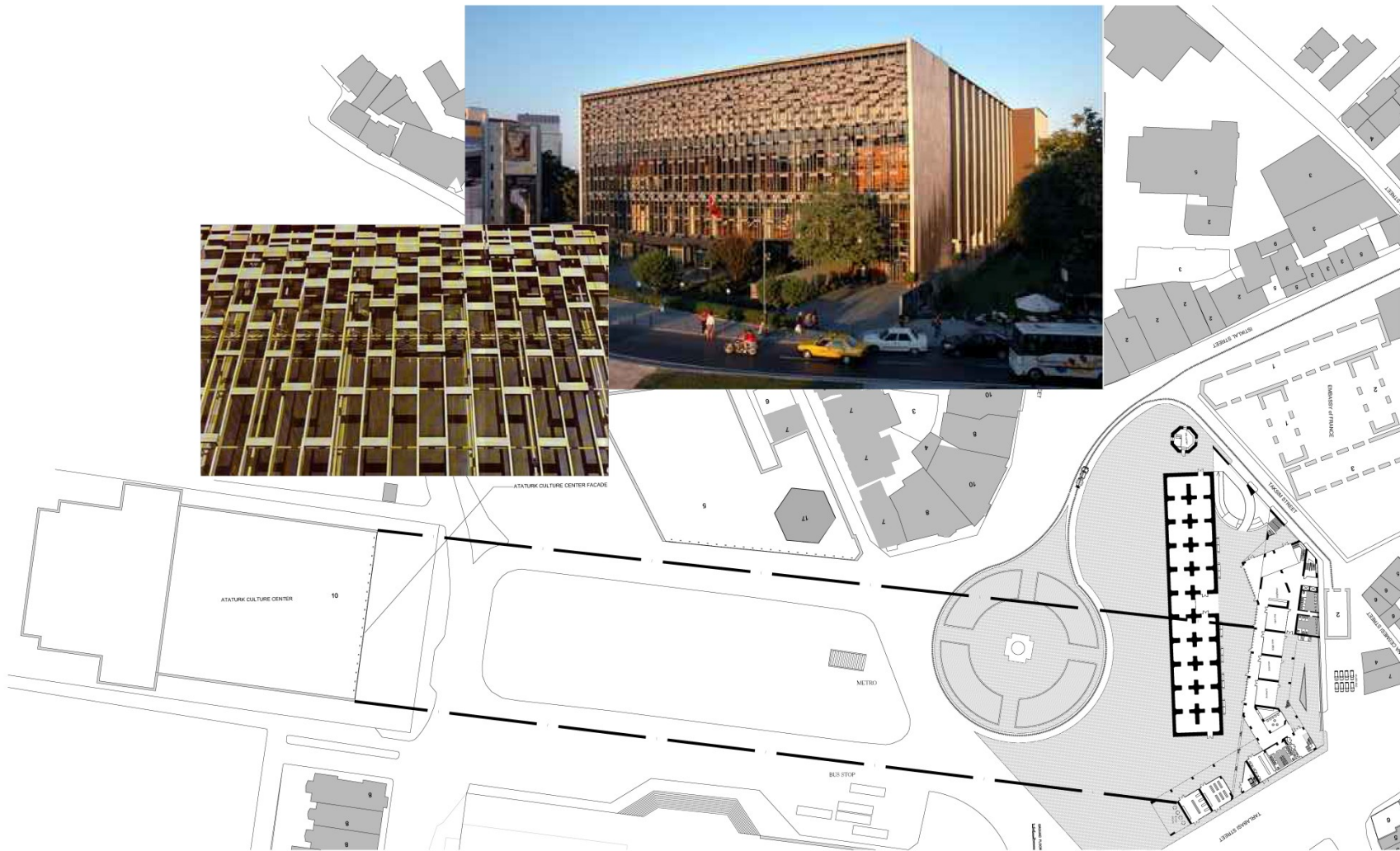
In his book "The Four Elements of Architecture," Semper explains the origin of the wall as a hanging textile, and his thesis about dressing the building built the roots of the curtain wall systems as the symbol of the modern architecture. The formal development of the wall traces itself in reference to the original spatial idea contained in the enclosure and not the tectonic function of load bearing rigidity. By this proposition, Semper shifted the wall from its load-bearing capacity as mauer to that of the wand the partition the screen.

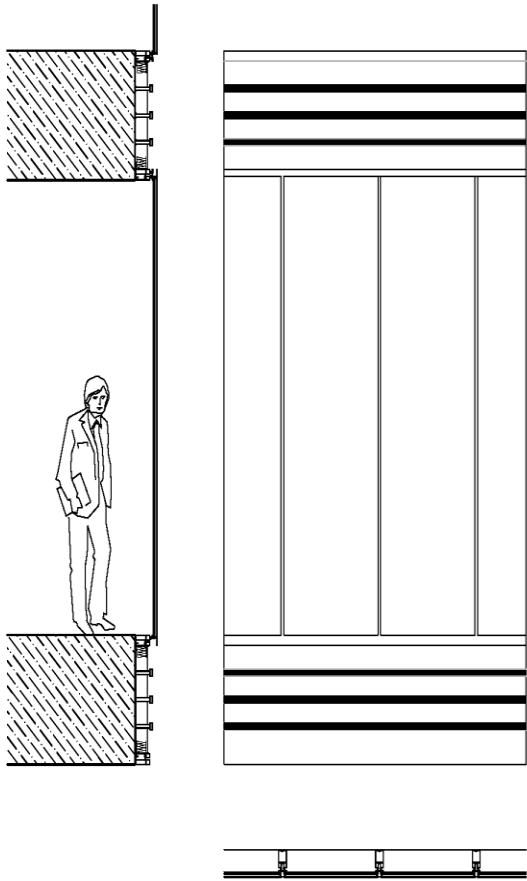
As Semper explains the woven wall in its original iteration was a means of dividing the inner life from the outer life, as a formal construct of the spatial idea. It preceded the simple wall made from stone or other materials. Scaffolds that served to hold, secure or support this spatial enclosure had nothing to do with space or the division of space. These scaffolds were foreign to the architectural idea and were [never from determining elements to start with.

Curtain Wall Element of the Project

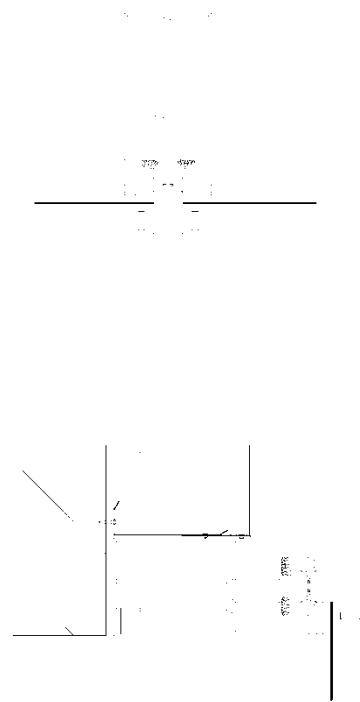
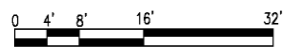
In the project, two different type of curtain walls are used. For the hostel area (curtain wall #2) instead of a large glass piece, small portions of glass divided by large aluminum mullions and transoms are designed. The main purpose on this design is to give the effect of multi-scale existing buildings of Istanbul. On the other areas (curtain wall #1) a plain curtain wall with larger glass pieces and smaller aluminum mullion and transom pieces is designed. The smaller aluminum elements are supported with structural silicone.

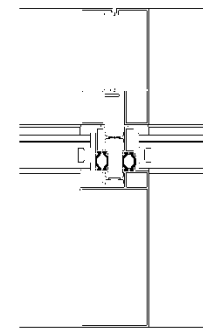
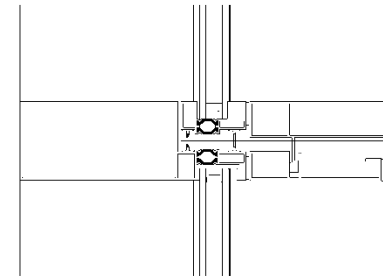
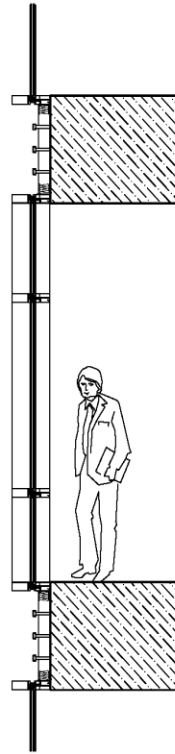
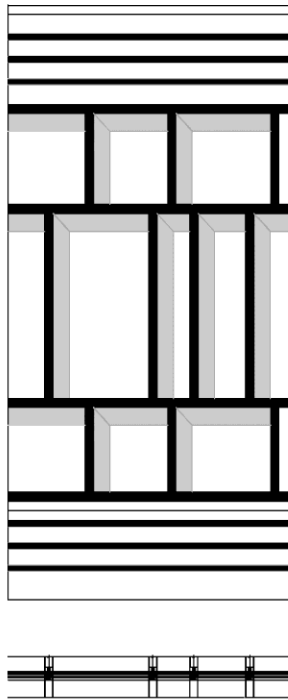
On the slab areas across the site on the other edge of the plaza, the existing Ataturk Culture Center building skin is taken as the reference.





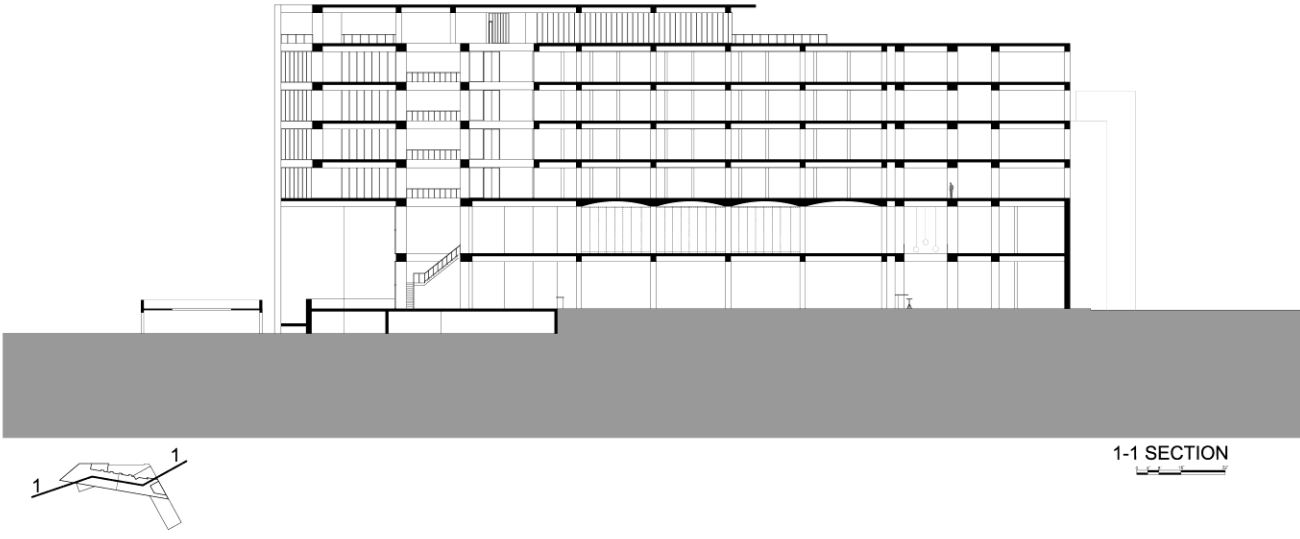
CURTAIN WALL 1

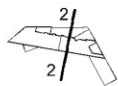
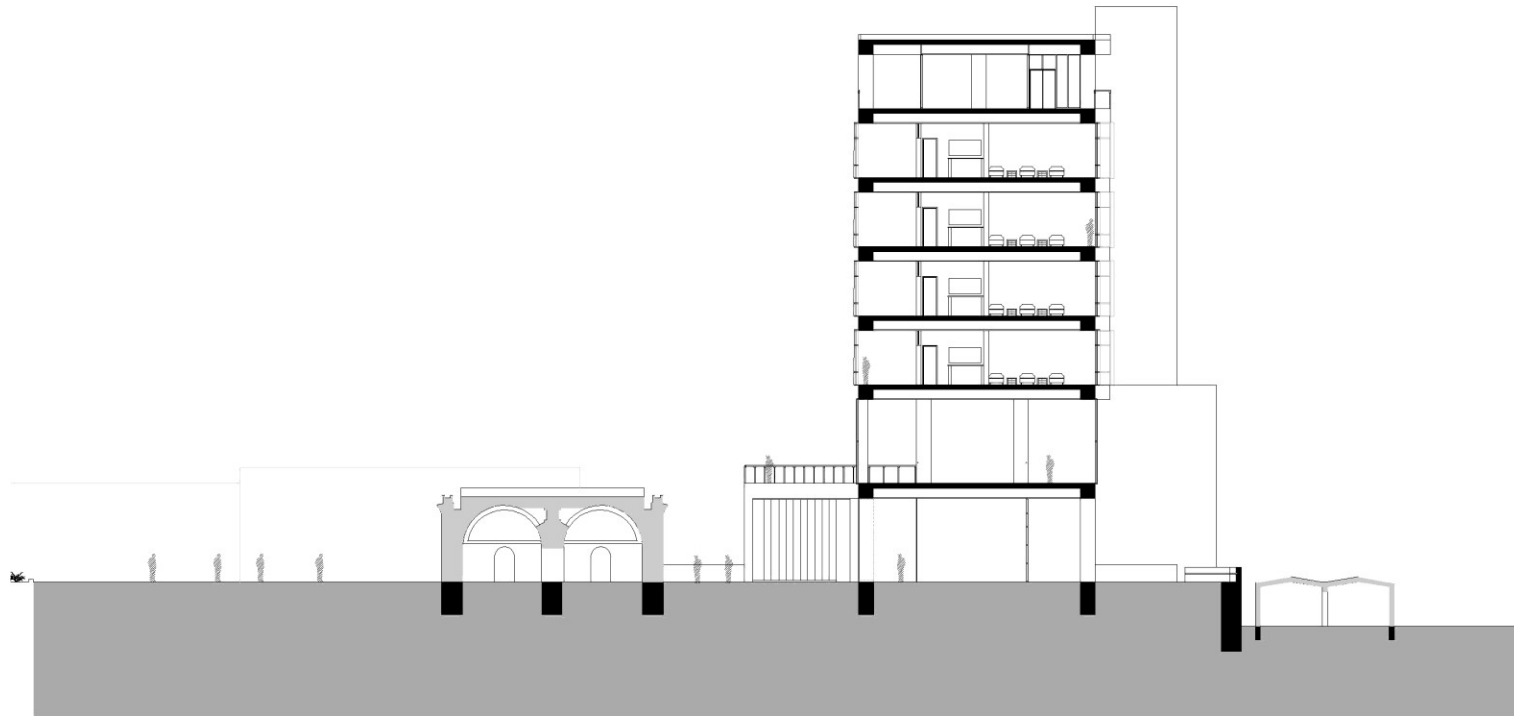




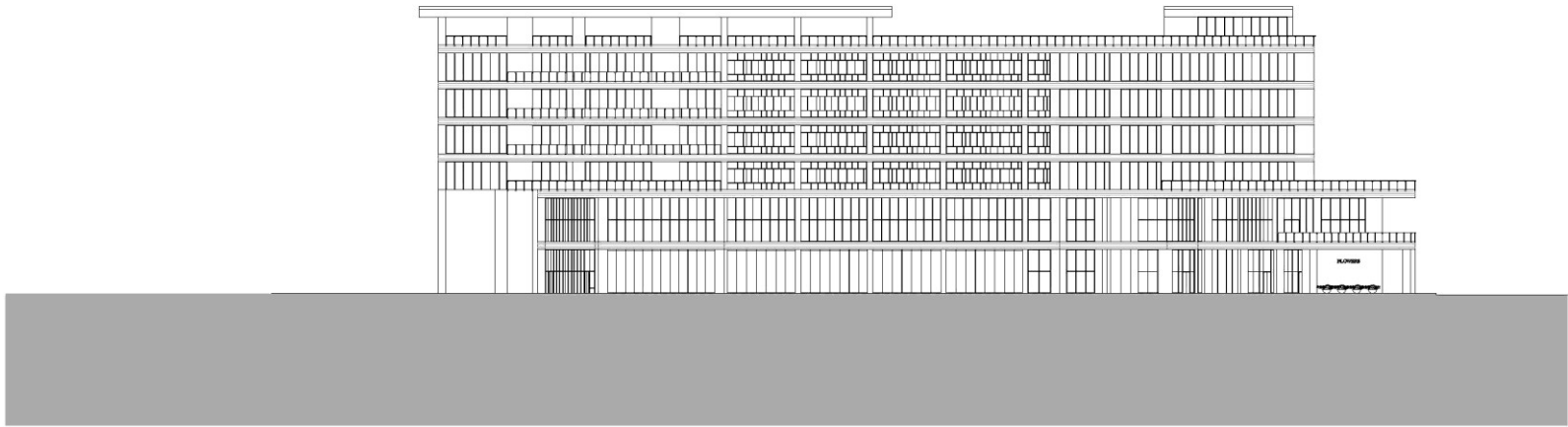
CURTAIN WALL 2
0 4' 8' 16' 32'

Views From the Project

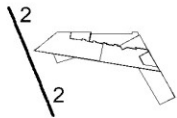
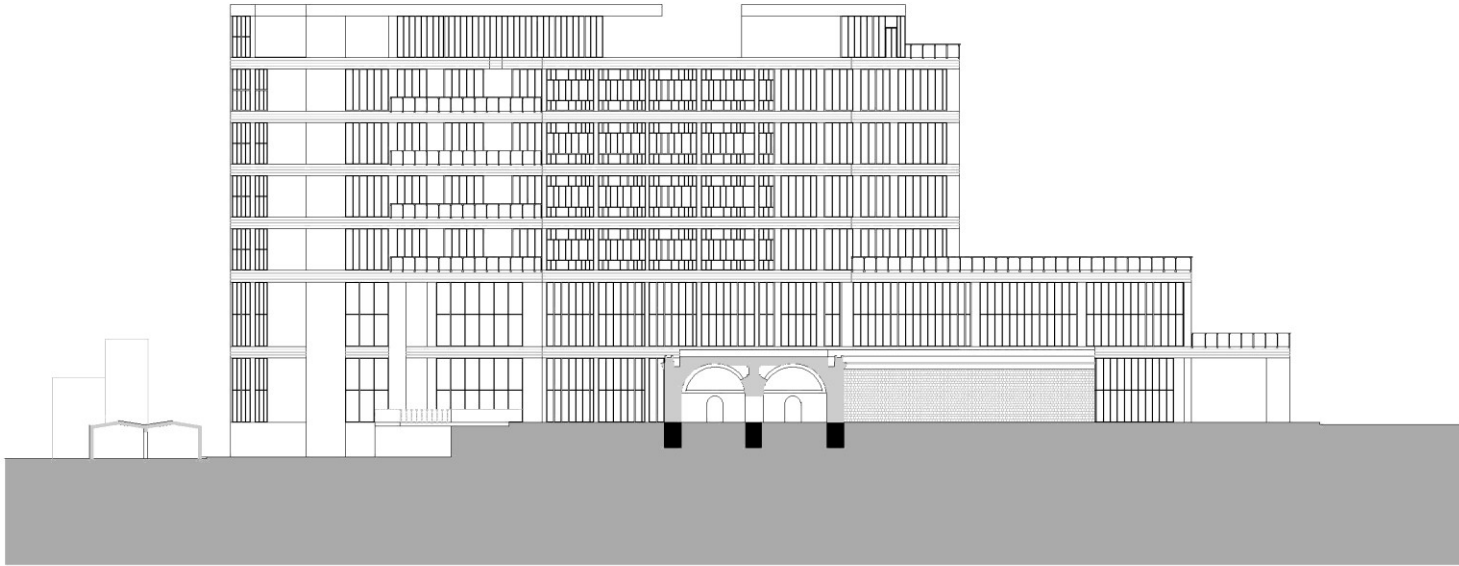




2-2 SECTION

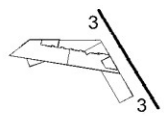
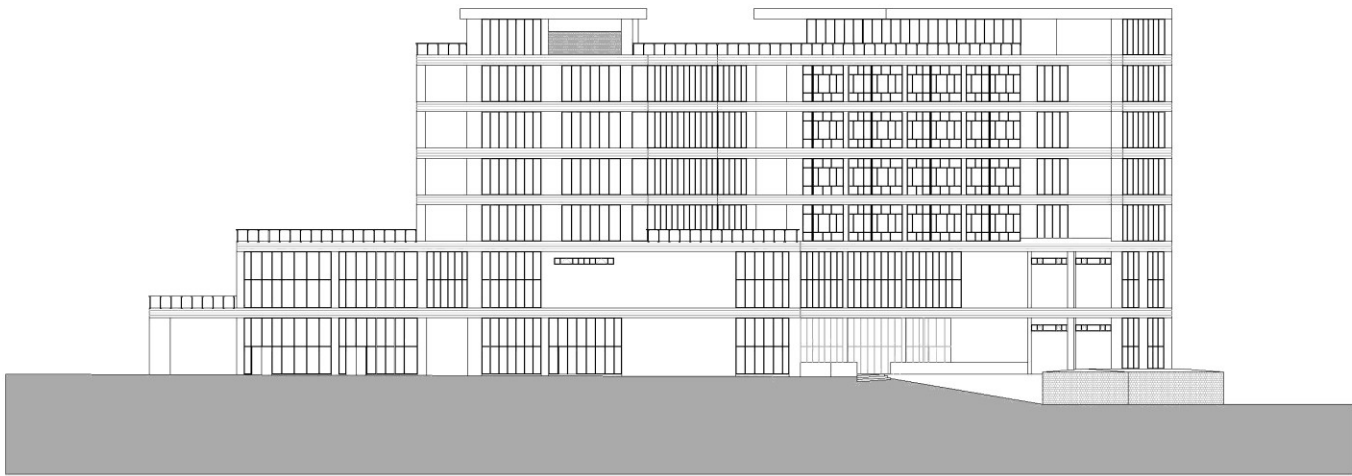



1-1 Elevation

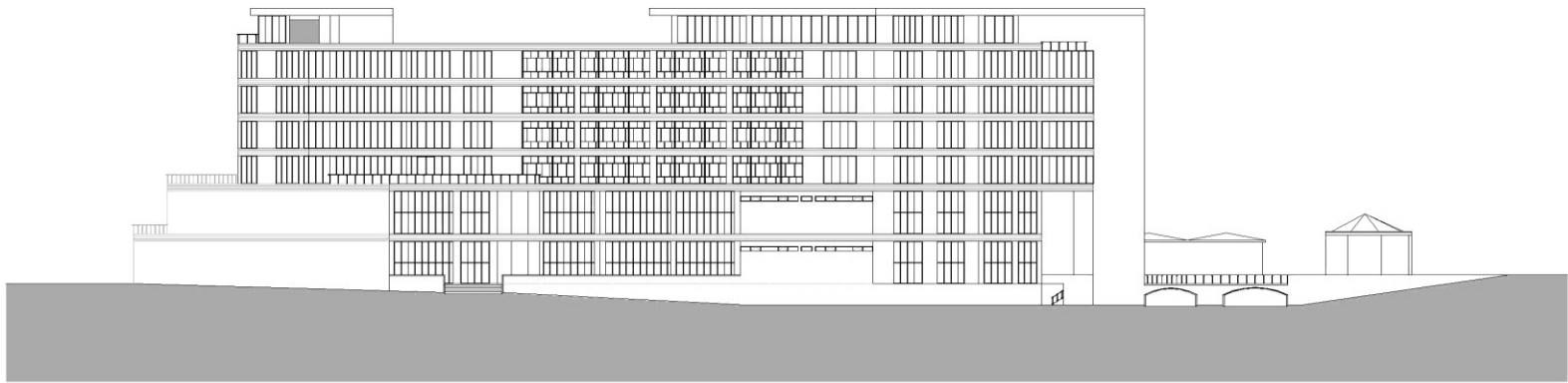


2-2 Elevation

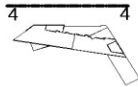


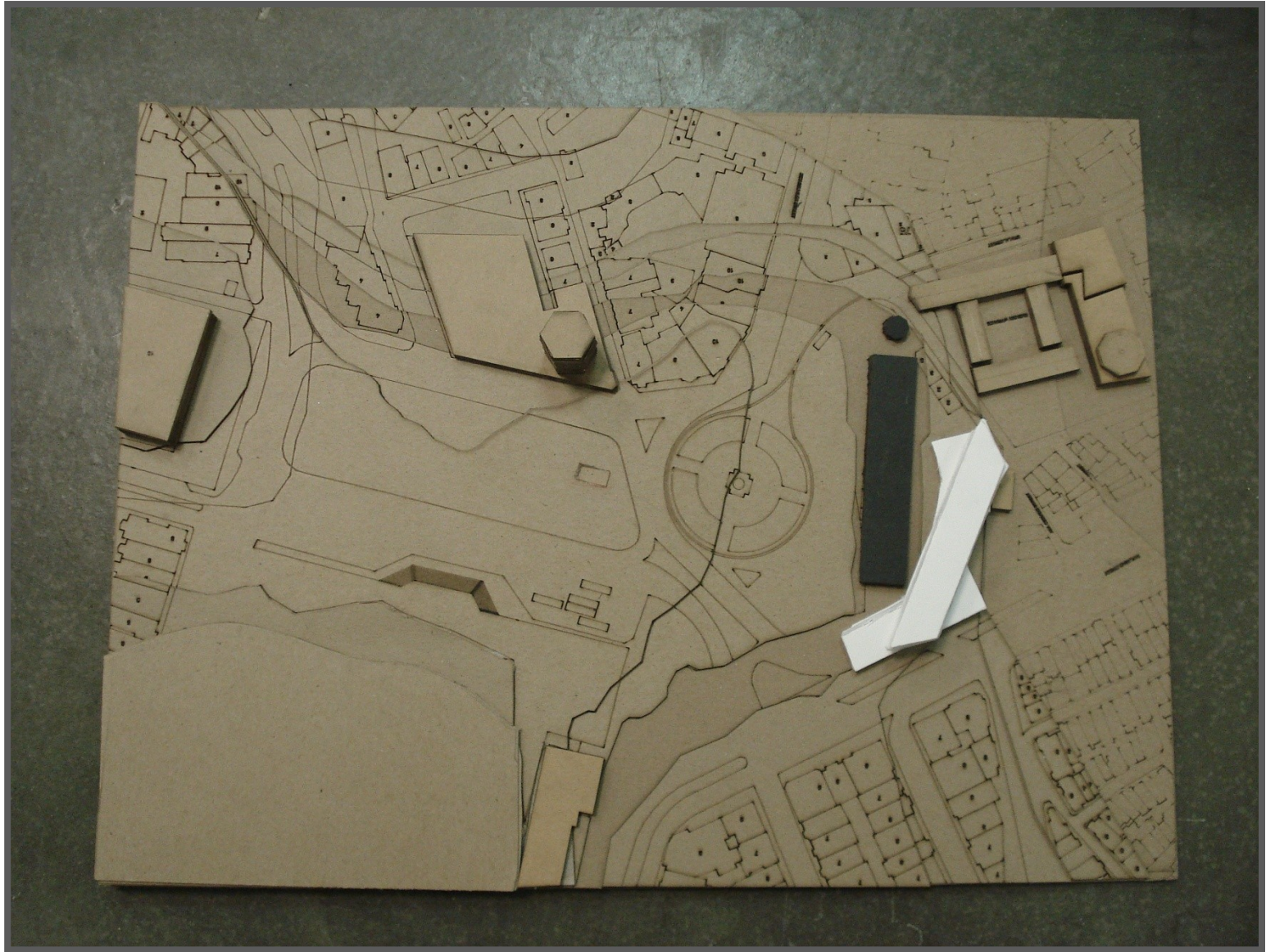


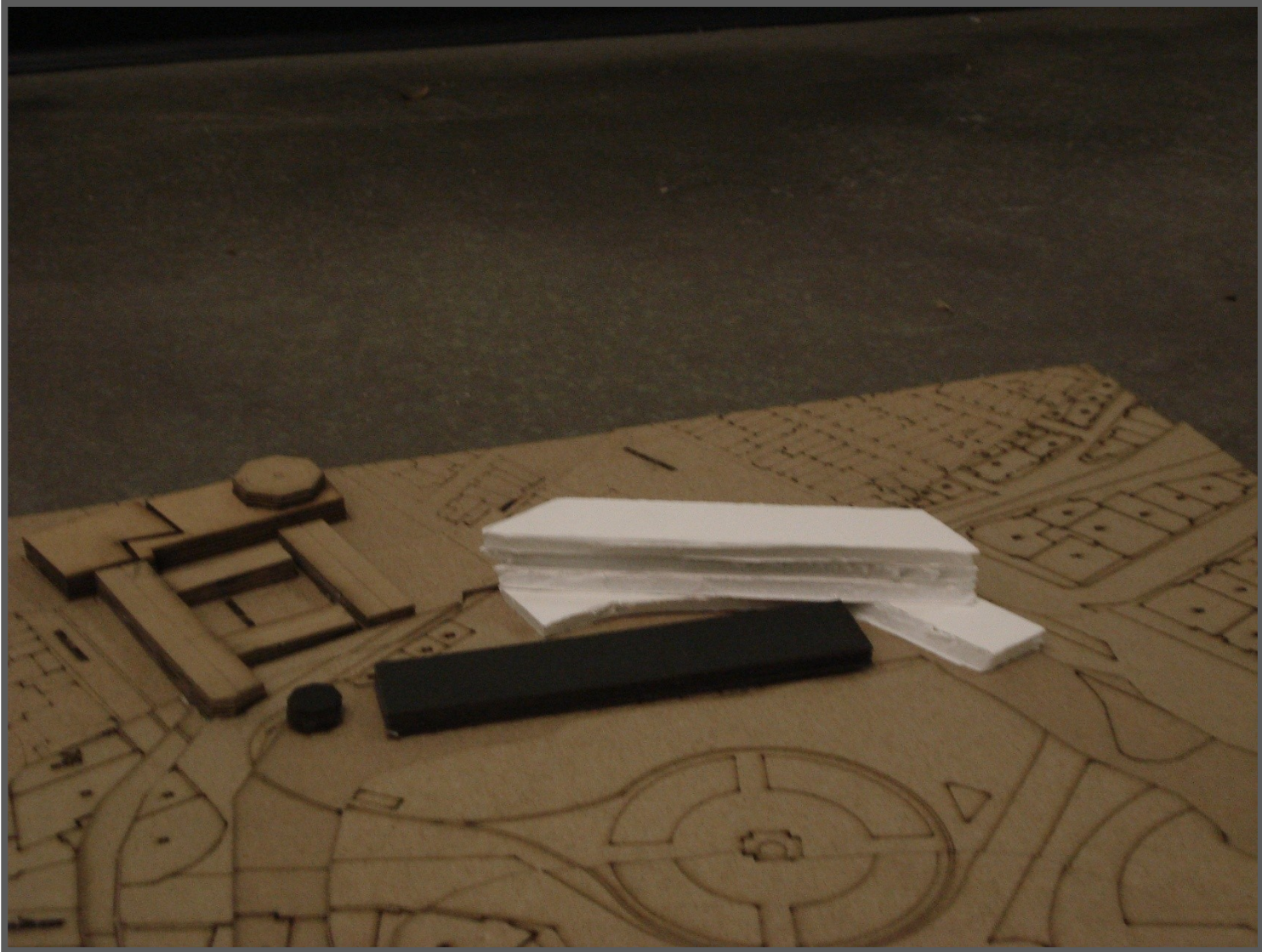
3-3 Elevation

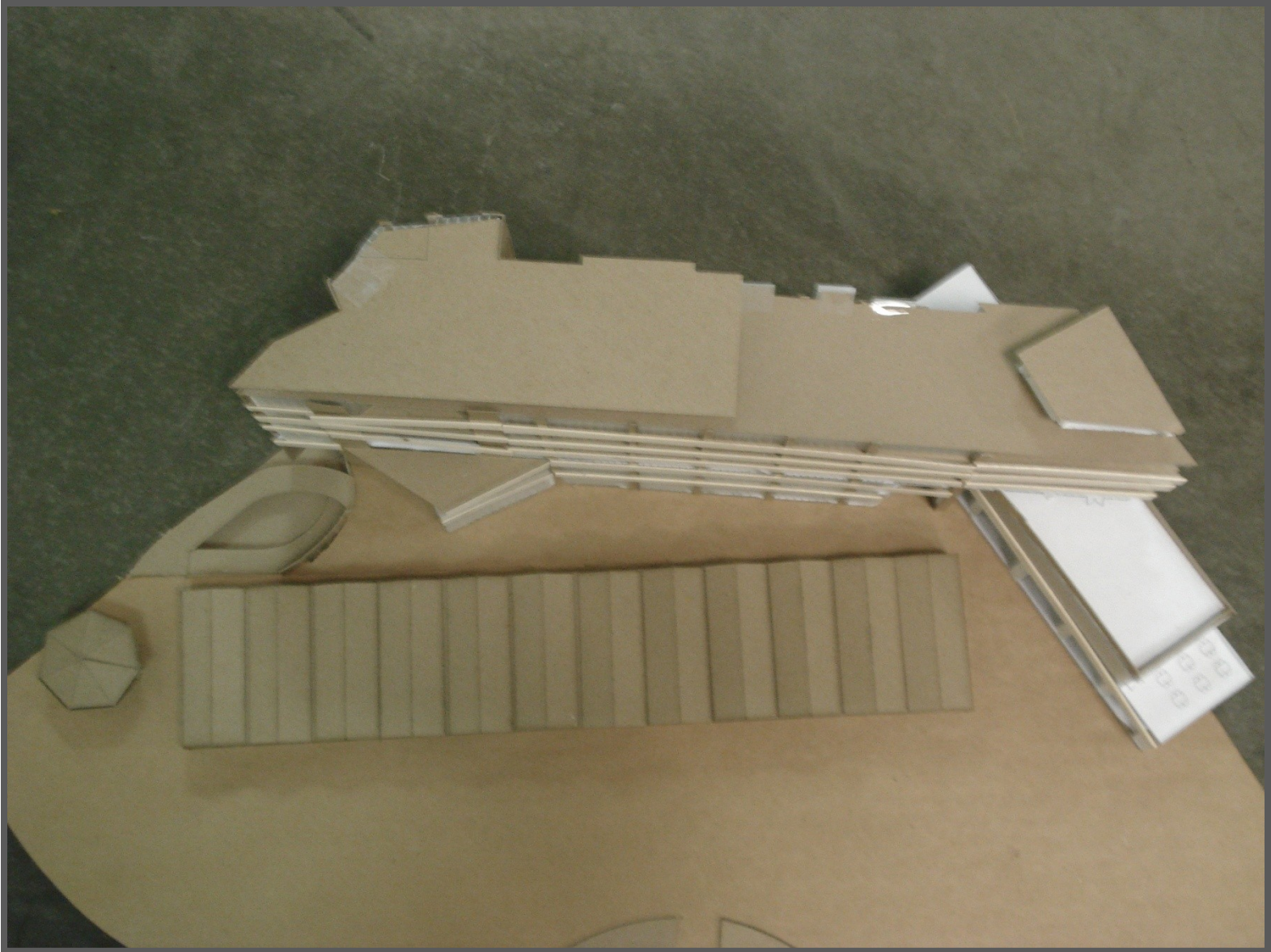



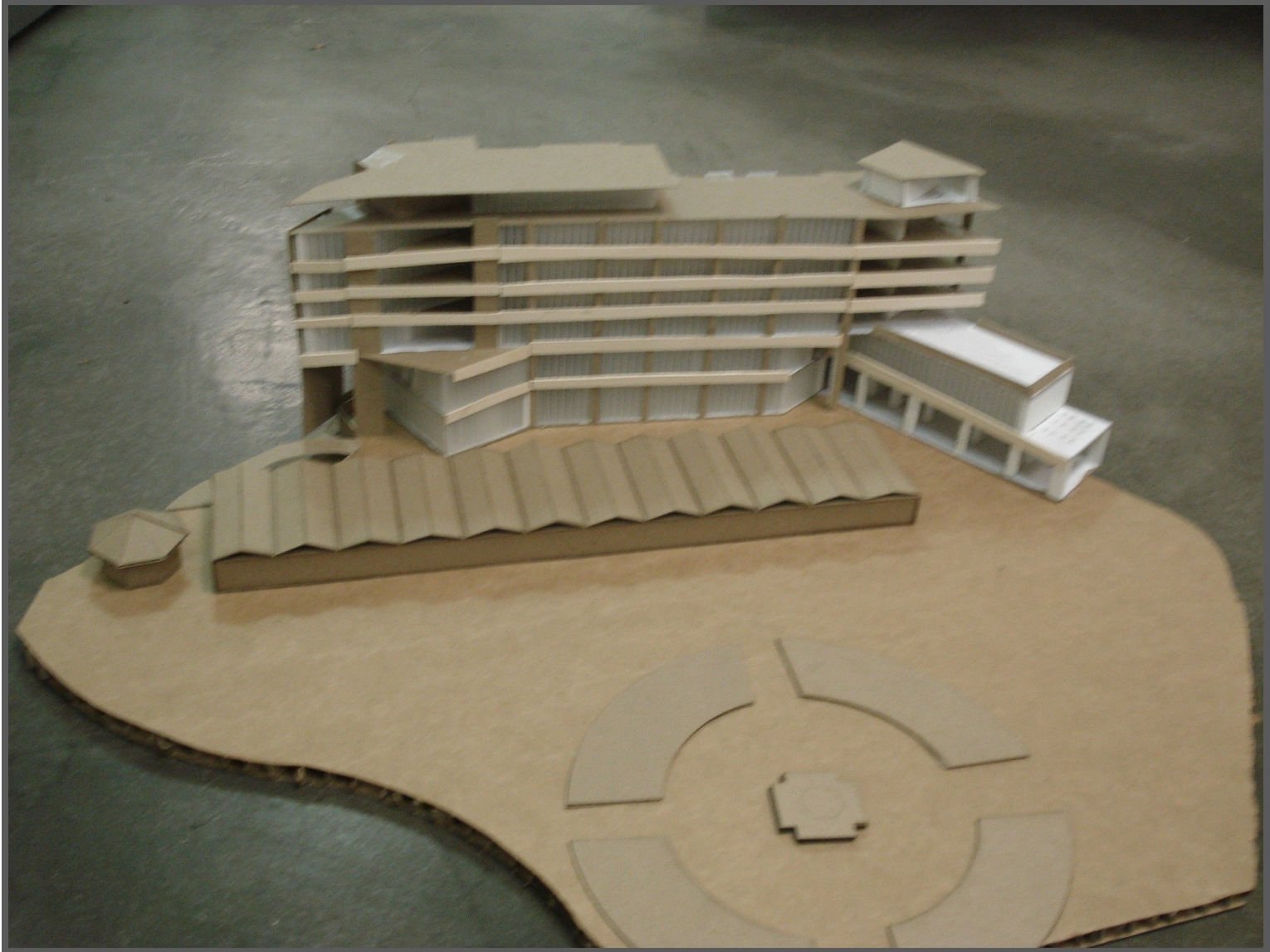
4-4 Elevation

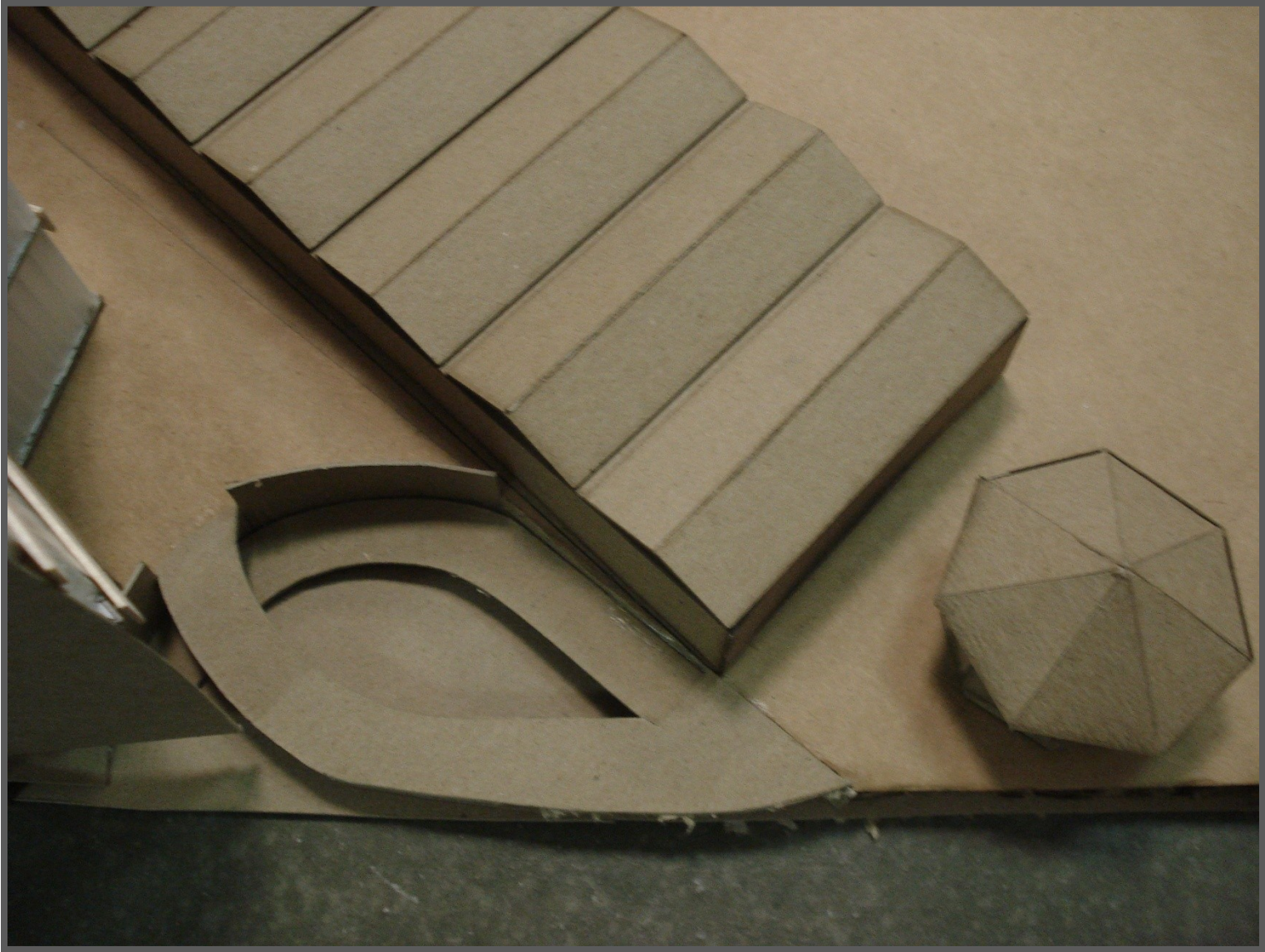


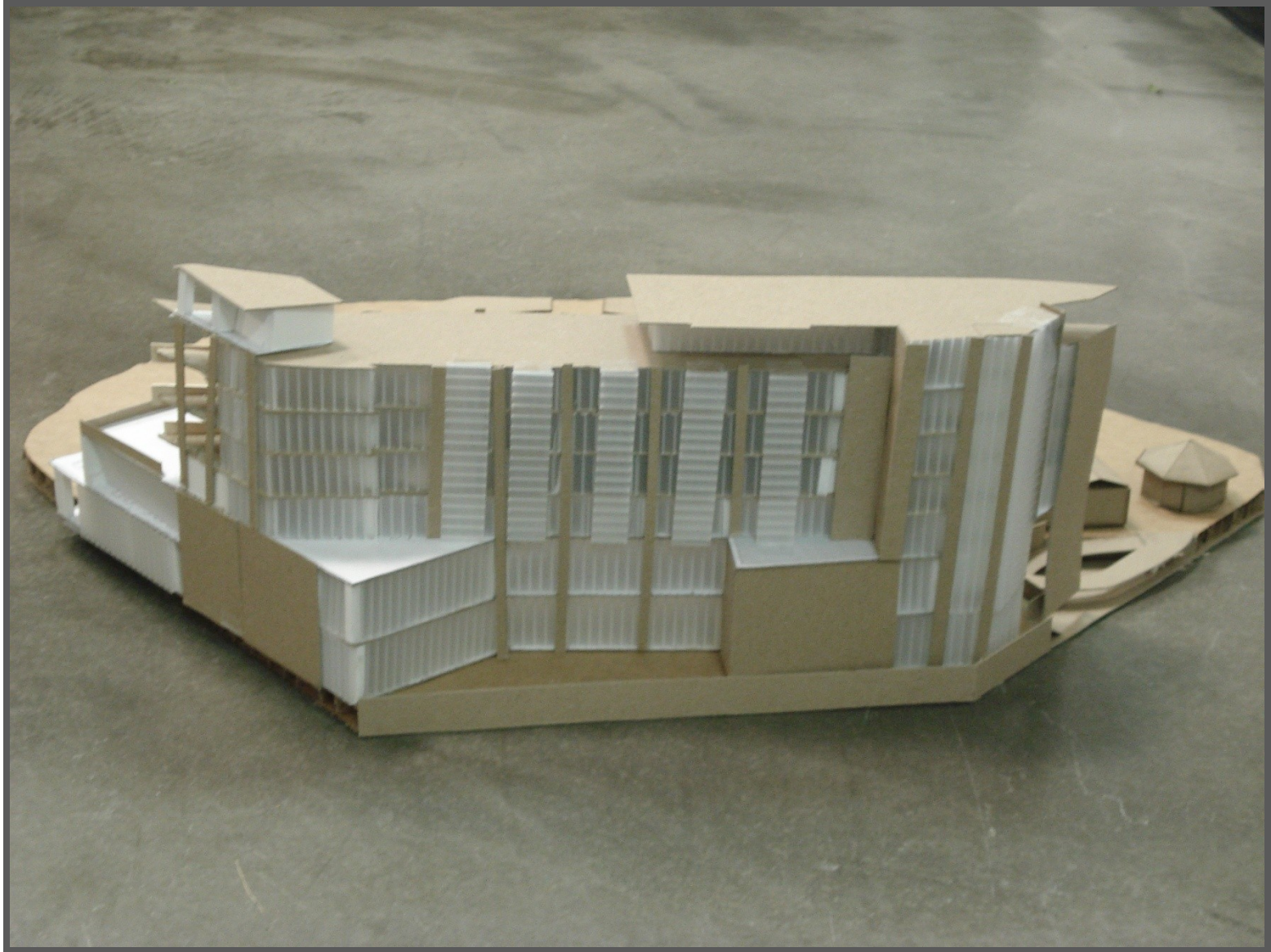


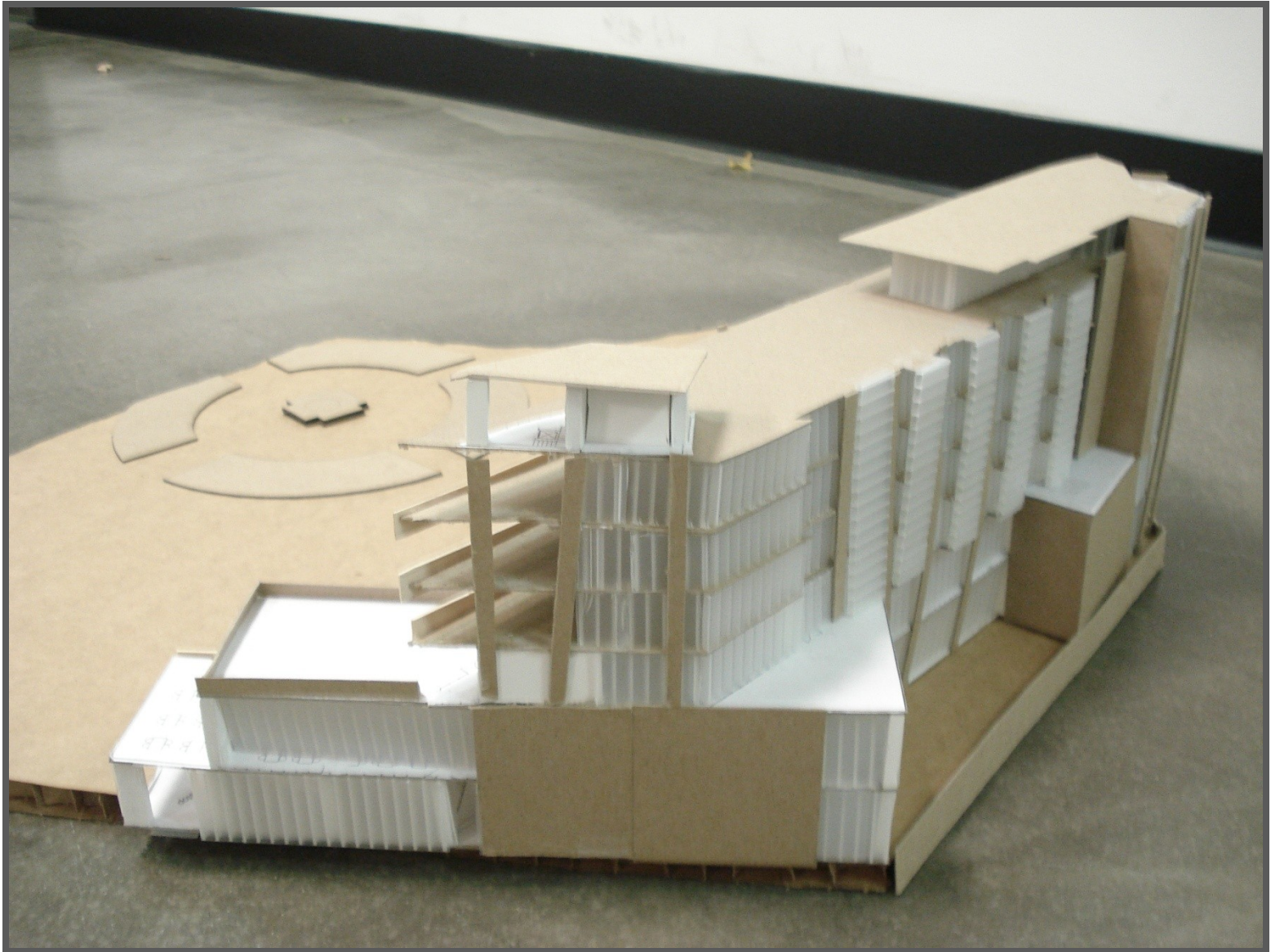












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