Virginia Polytechnic Institute and State University

Collage as a design process

Prepared by

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In partial fulfillment of the requirements for the degree of

Master of Architecture

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Defense: Friday, April9, 2004 Washington Alexandria Architecture Center

Collage as a design process by **Alejandro Santos**

Invented by Max Ernst.
This is a creative process based on quotation.
Here I quote architects and buildings that I admire.
The intention is to compose a project while finding my own syntax and working proceedure.
Collage.

I would like to thank professors: Susan Piedmont-Palladino, Paul Emmons, Marco Frascari and Jaan Holt for sharing their knowledge, time and views about architecture with me, they made me feel that they really enjoy teaching. I know that I really enjoyed learning with them.

I especially thank Jaan Holt for making it possible for me to be here, I can not express how grateful I am.

Thank you to all the people that helped me along the way, especially in those last moments, they made me feel at home. I will always remember that.
Carolina, thank you for those sleeples nights helping me, for putting your things aside for me.

To my mother and father, who always believed in me and gave me the strength and confidence to make me feel capable of accomplishing any goal.

I love all of you.

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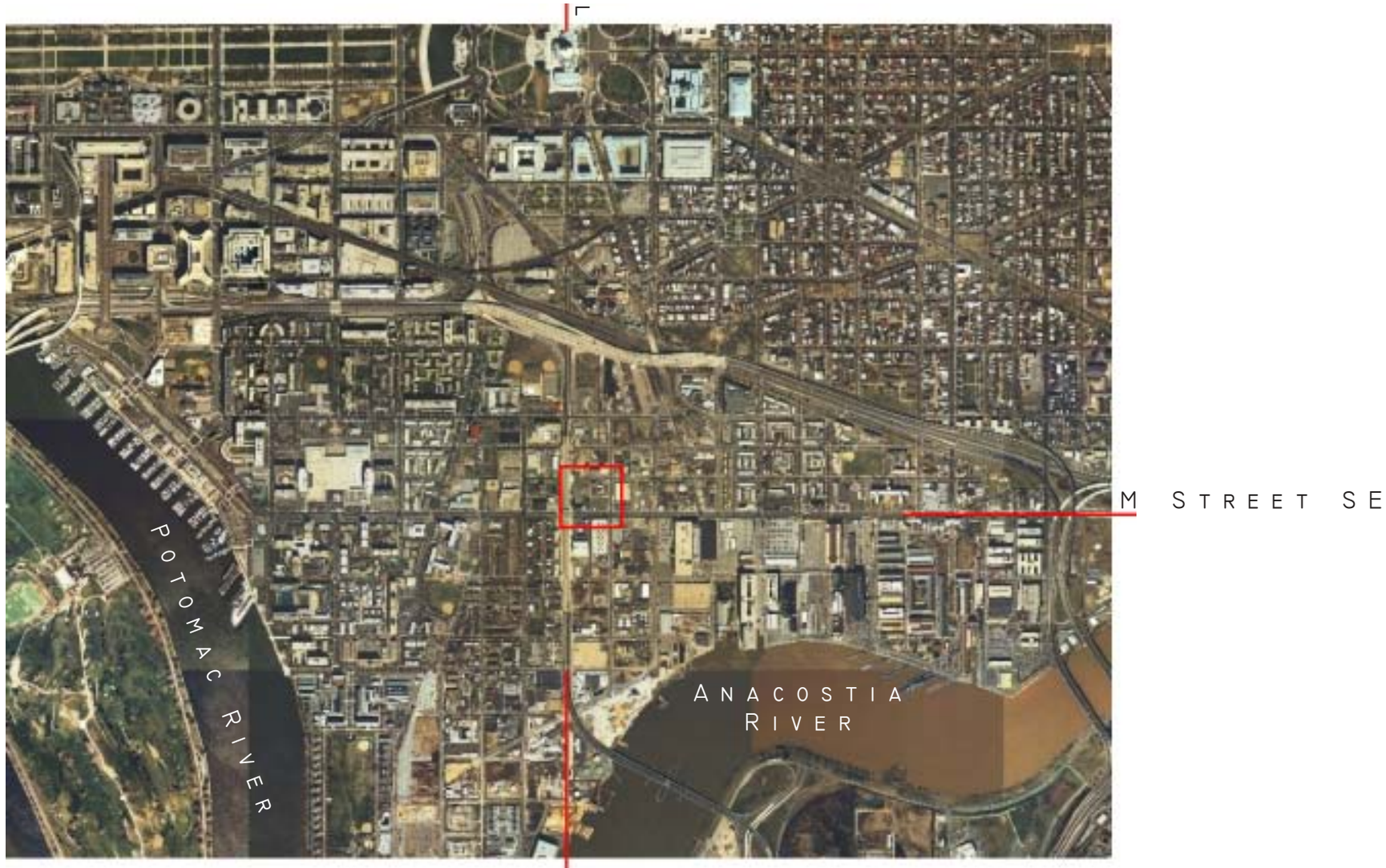
SITE LOCATION + PICTURES + EARLY SITE PLAN



AERIAL VIEW OF SOUTH WASHINGTON

THE SITE IS LOCATED AT THE INTERSECTION OF SOUTH CAPITOL STREET AND M STREET SE, THE TWO MAJOR ARTERIES OF THIS PART OF THE CITY.

THE AREA IS CURRENTLY IN NEED OF A MAJOR REDEVELOPMENT. THE INFRASTRUCTURE OF THE AREA IS IN A VERY POOR CONDITION AND ITS HOUSING IS SUBSTANDARD.

SOUTH CAPITOL STREET IS PLANNED AS THE NEW SOUTHERN GATEWAY TO CENTRAL WASHINGTON.

ITS REDEVELOPMENT WOULD AFFECT THE CONDITIONS OF THE WHOLE AREA. BRINGING NOT ONLY HOUSING AND OFFICES, BUT ALL THE LEVELS OF COMMERCIAL ACTIVITY NEEDED FOR ITS RENEWAL.

The site consists of the whole block surrounded by South Capitol street, M St. SE, L St. SE and half St, SE.

It is practically empty, except for an existing church, one or two buildings of no real value and the rest are parking lots.

In the project the church is the only part of the existing site that is incorporated.

Diagonally across the corner of the site, at the intesection of half and M Streets is the Navy Yard metro station. This is one of the key factors in the redevelopment of the area.

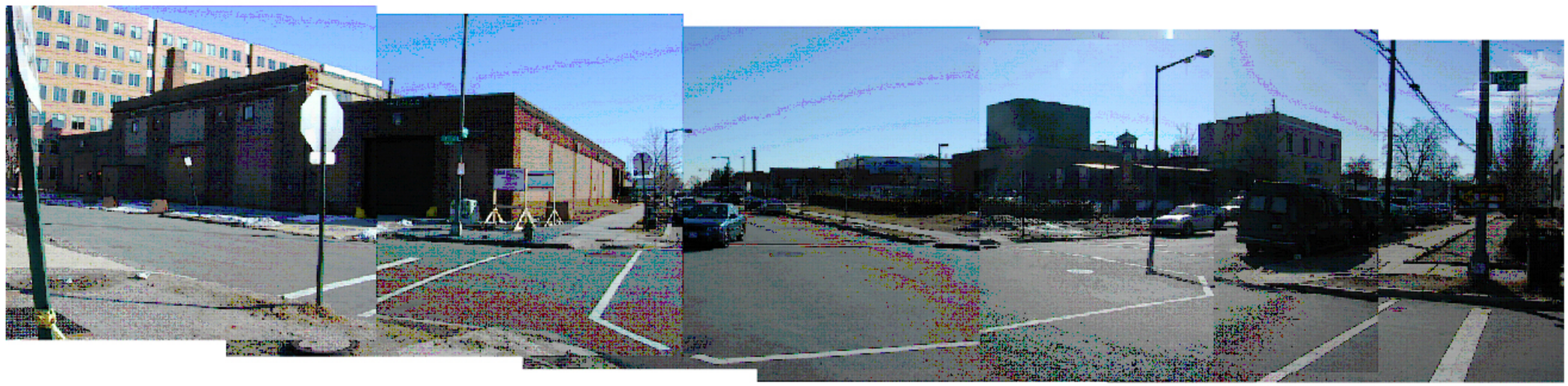
Existing church

Aerial view of the neighborhood

Early site plan

View of the site from the intersection of South Capitol St. and M St. SE
(The existing church has its main entrance facing South Capitol St.)

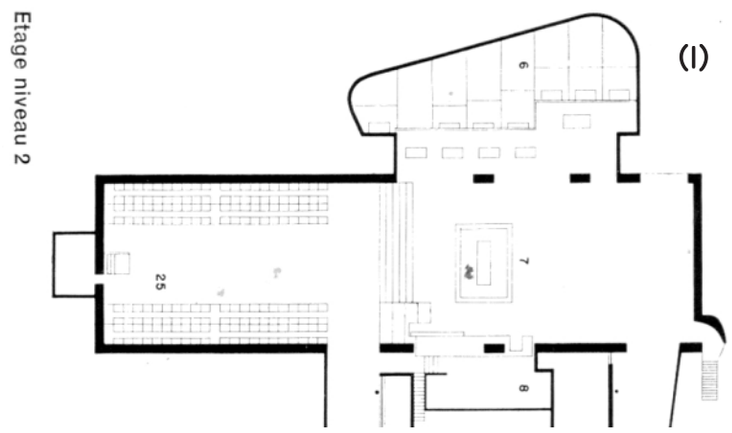
View of the site from the Navy Yard metro station.

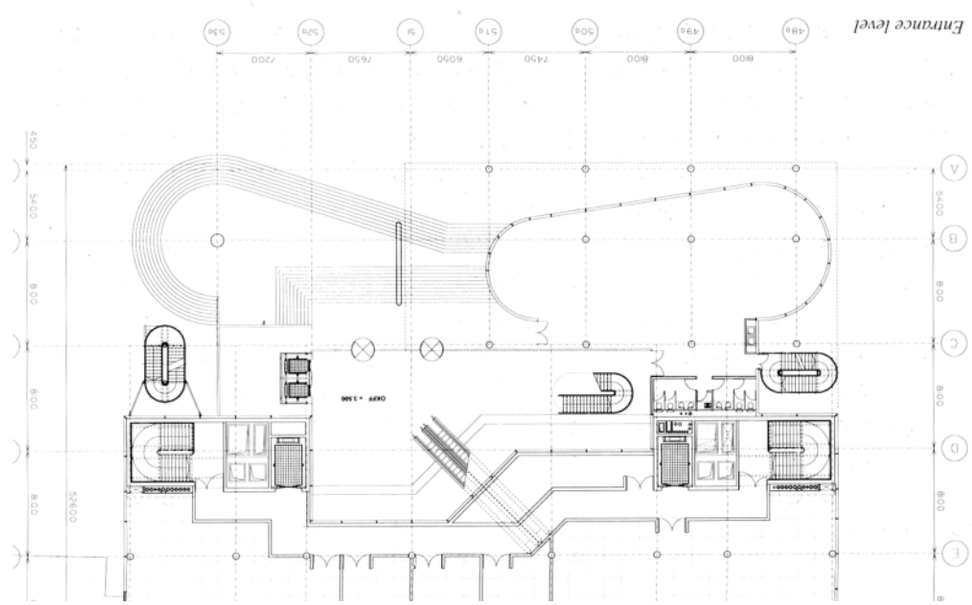


To the right of the picture, the site viewed from the corner of L St. SE and Half St.

Beginnings + Process + Evolution

Discovering that architects, would not only be inspired, but would actually take parts of buildings from masters like Le Corbusier, transform and re-use them, not only amused me, but made me want to experiment and investigate the posibilities of reusing and combining parts of buildings done by other architects as part of a design process of collage.



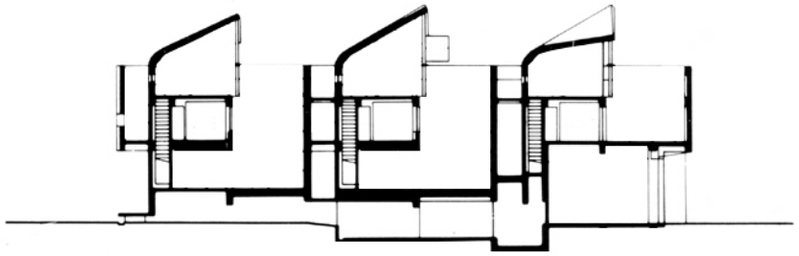


-La Tourette monastery

-Le Corbusier

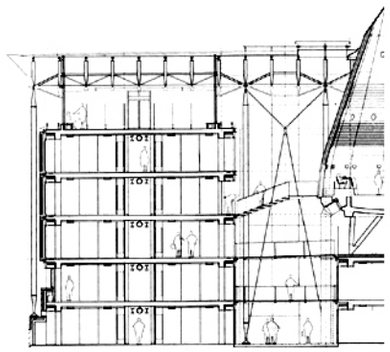
Daimler Benz offices and housing

Richard Rogers



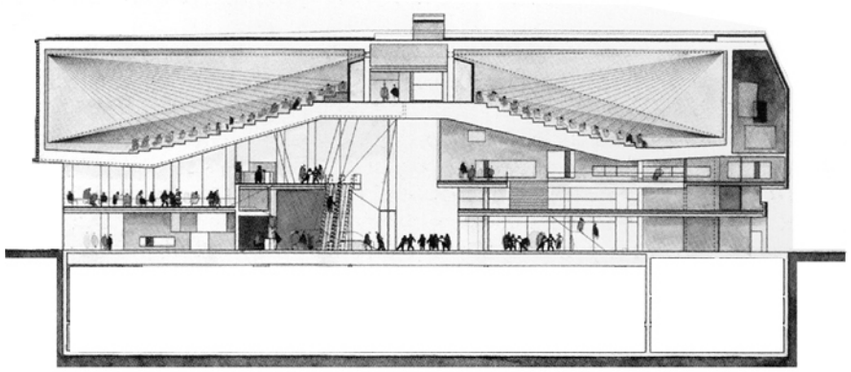
-Rem Koolhaas

Nexus world



-Richard Rogers

Bordeaux Cite Judiciare



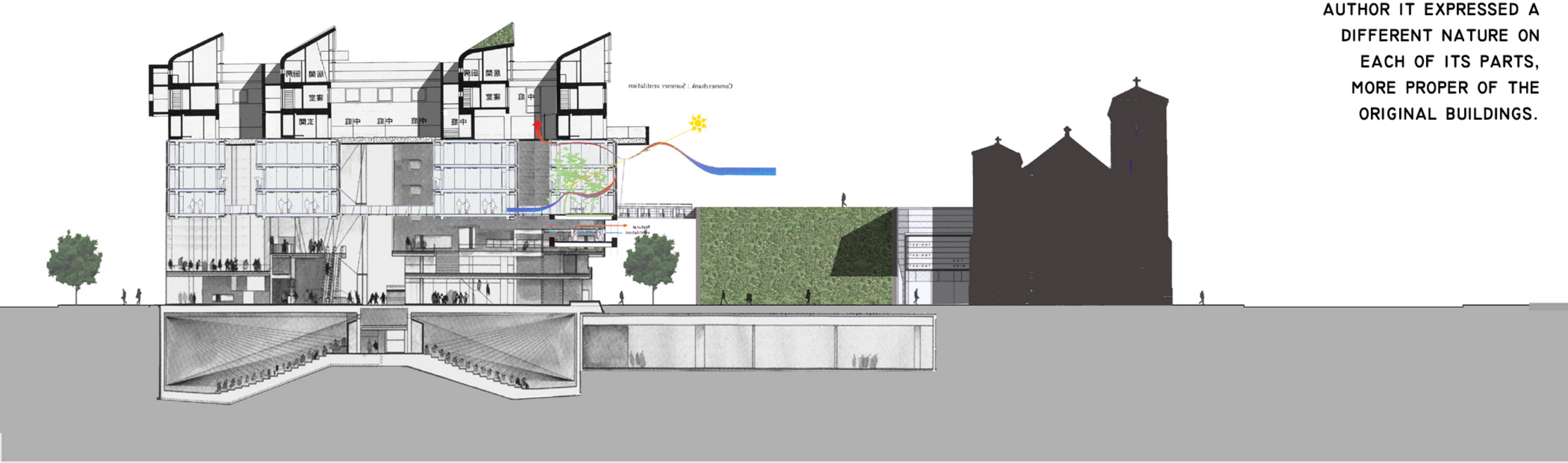
-Bolles Wilson

Raaks Cinema Centre

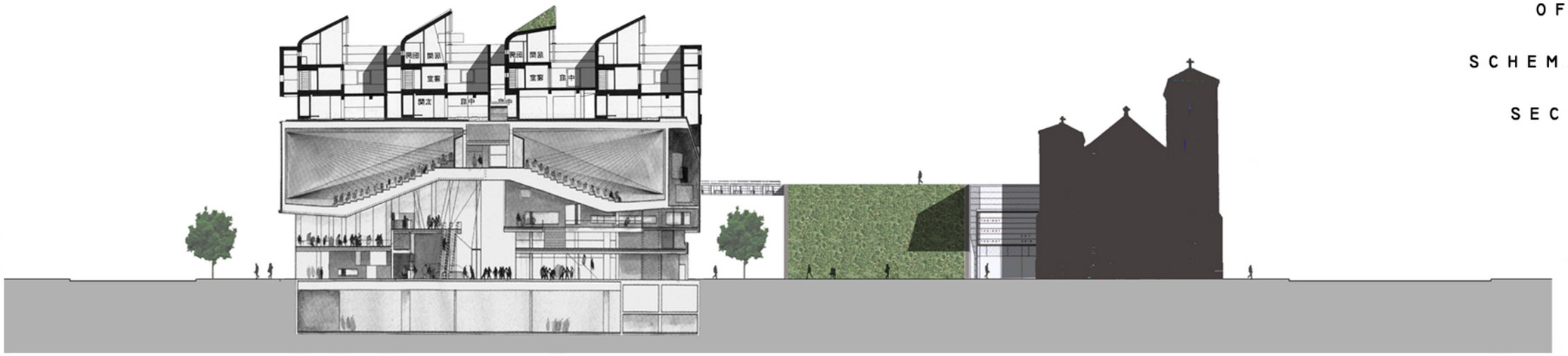
The initial idea was to develop a building that contained a mixed use program.

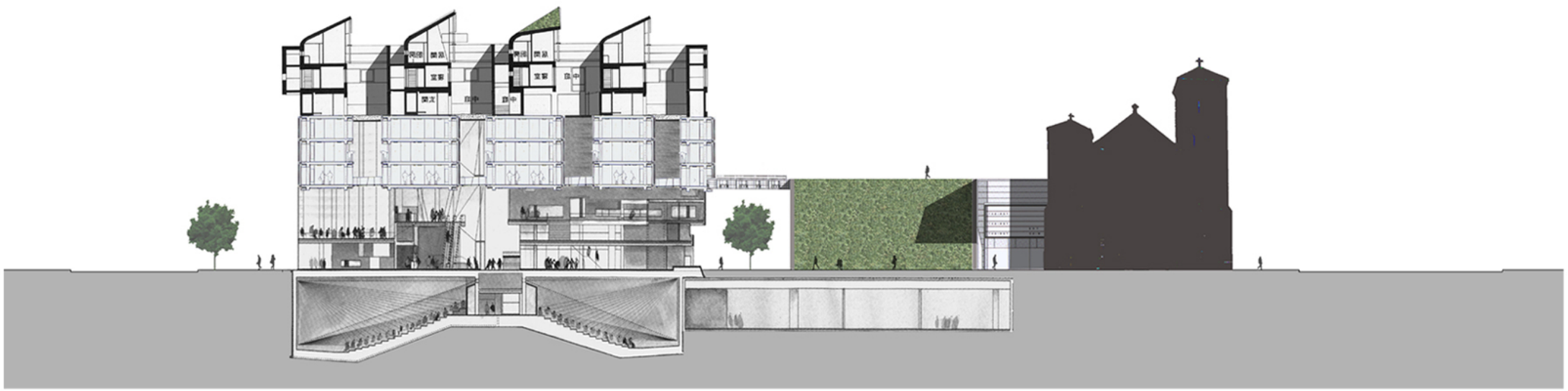
I selected three buildings that combined would contain the programs I was thinking of using.
The buildings were not only selected because of the program, but also for qualities such as spatiality, materiality and scale.

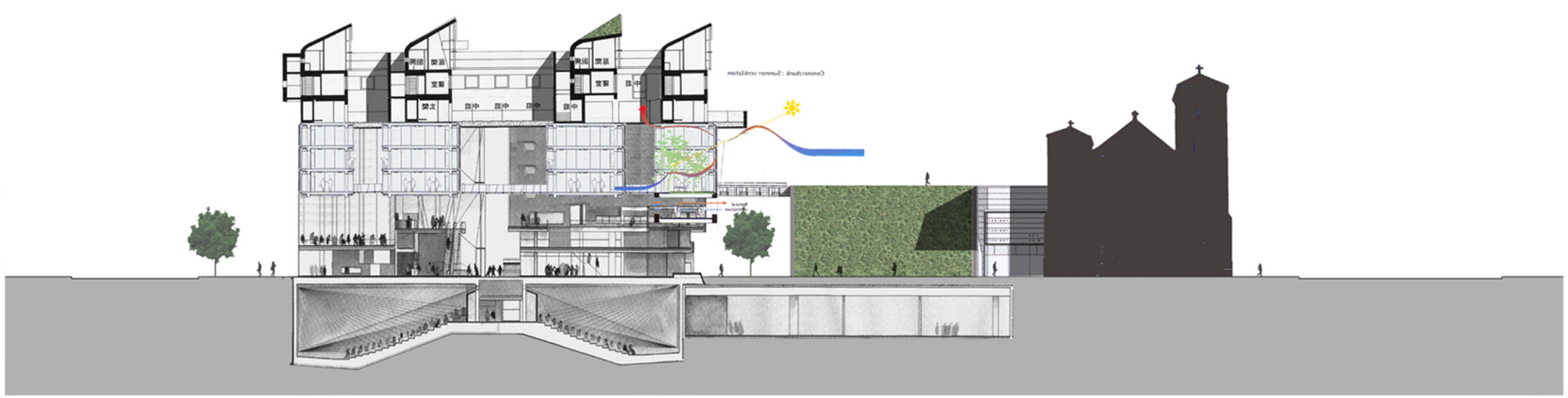
By combining, collaging and adapting the sections of these buildings to an early scheme, I came up with a section that interested me, especially because of its spatiality. Since I was using the original drawings from each author it expressed a different nature on each of its parts, more proper of the original buildings.



Evolution of the Schematic Section

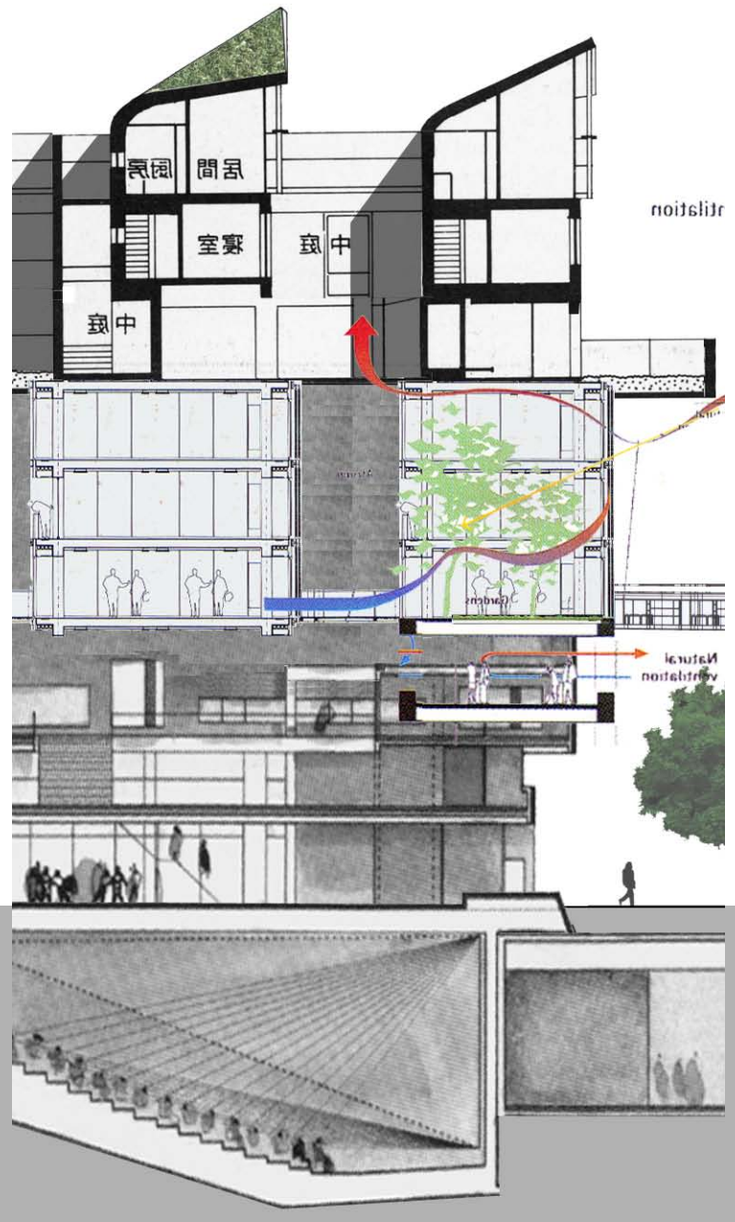






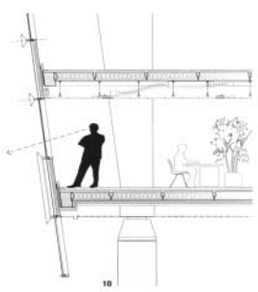
The step from the schematic section to the detailed one using the first as a template overlaying the details on top.

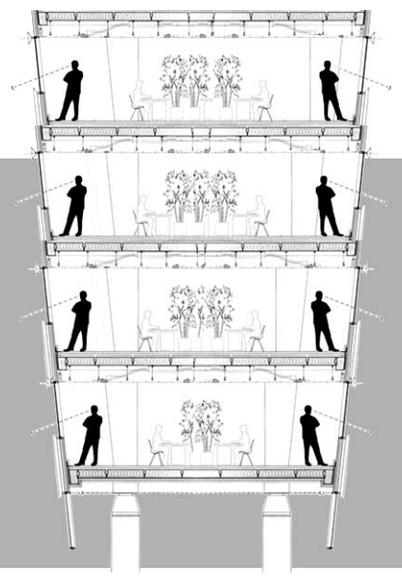
The drawings used are combined, repeated and placed in such a way as to form the section having in mind the connotation they acquire within the conformation of the building and it`s construction.



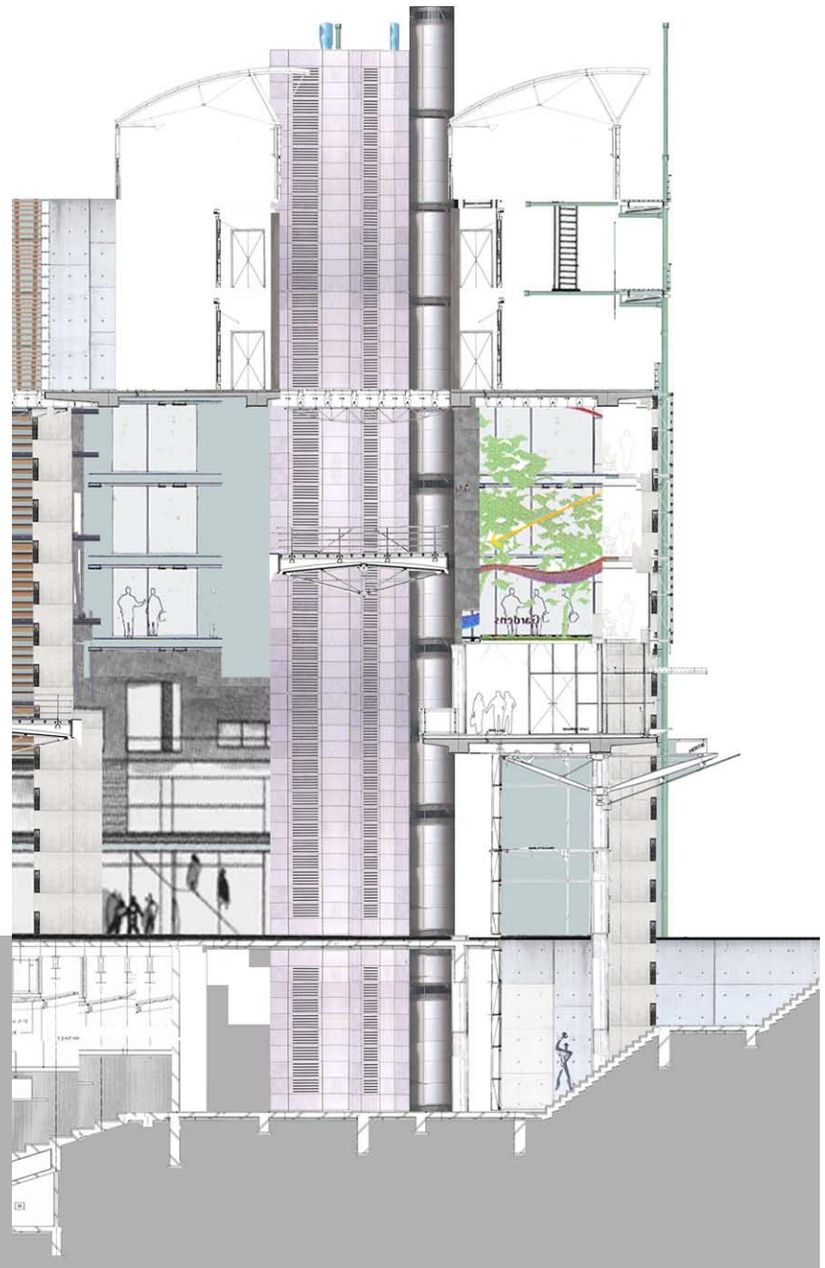
-KPN
Telecom
Tower

-Renzo
Piano





The detail is copied and assembled, forming the portion of the building corresponding to the office floors, and overlayed on the schematic section.



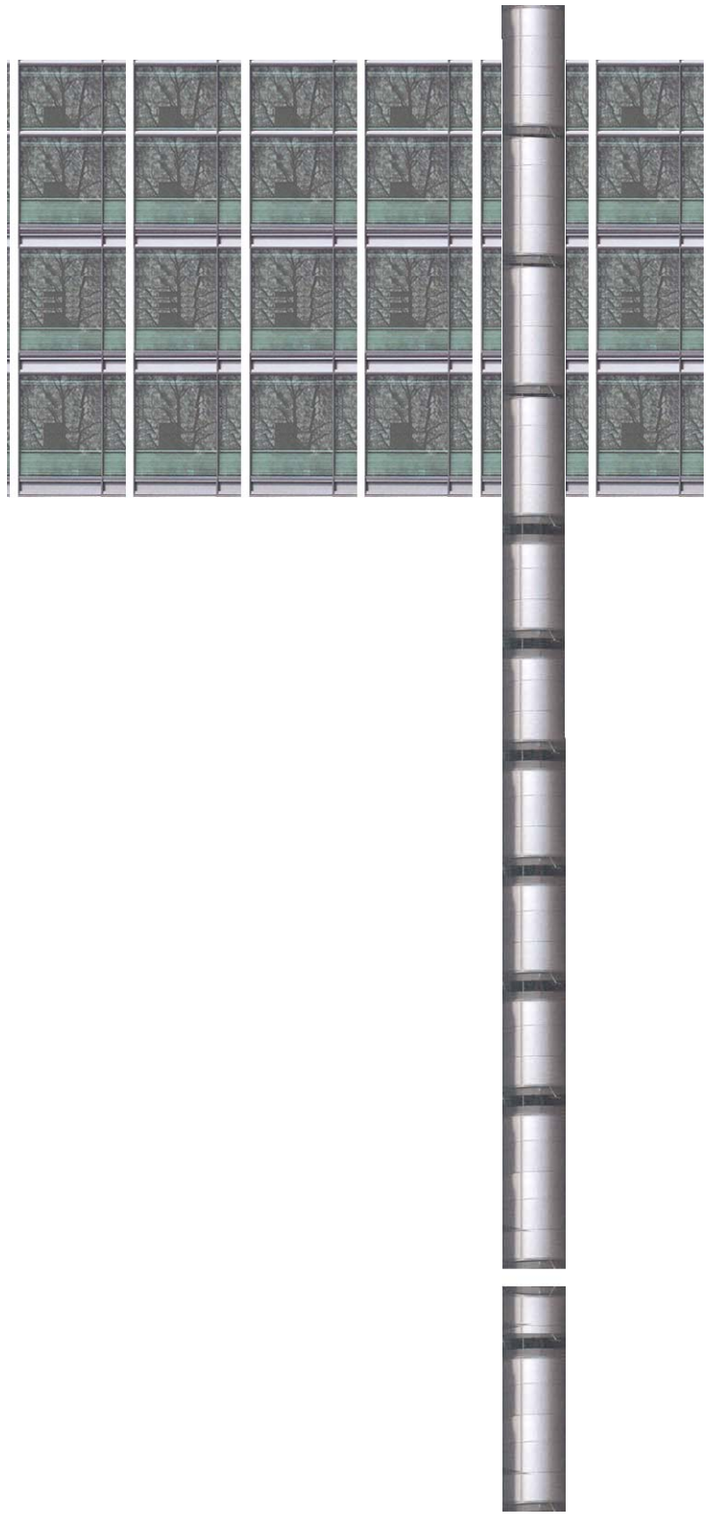
II

Some bits and pieces used to compose the thesis

Parts used to compose the elevations

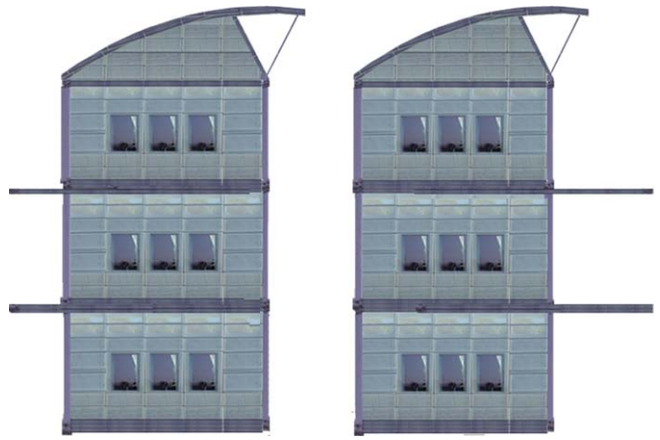
Architect:
Richard Rogers

Building:
Channel 4 headquarters



Architect:
Renzo Piano

Building:
Aurora place

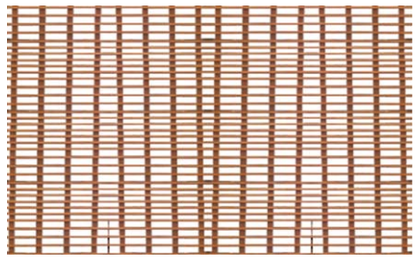


Building:
Banca Popolare
Di Lodi

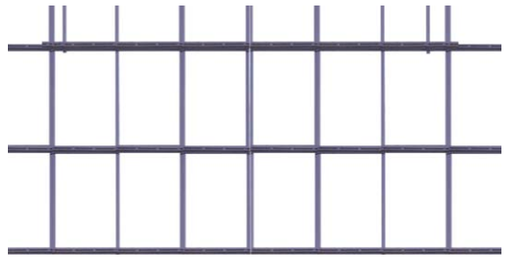
Building:
Credito
Industriale
Sardo

Architect:
Renzo Piano

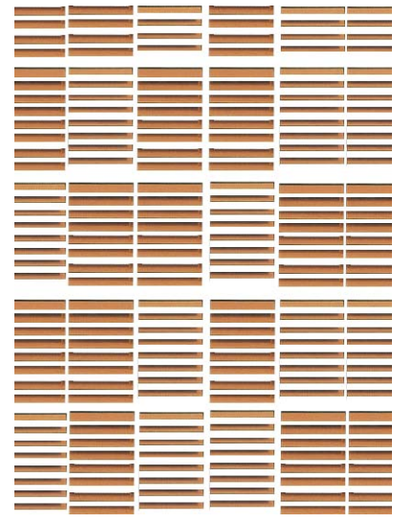
Building:
JM Tjibaou
Cultural Centre



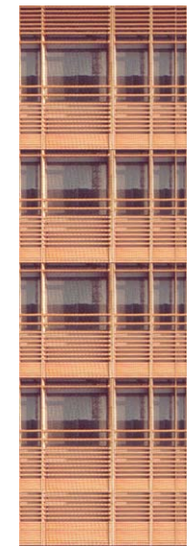
Building:
Kansai Airport



Building:
Lingotto
Factory

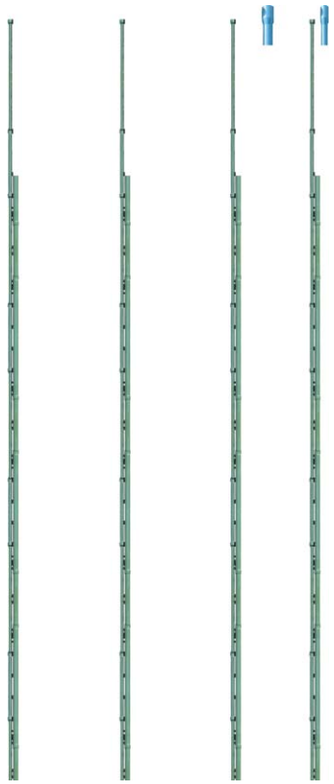


Building:
Potsdamer
Platz



ARCHITECTS:
RENZO PIANO +
RICHARD ROGERS

BUILDING:
POMPIDOU
CENTRE

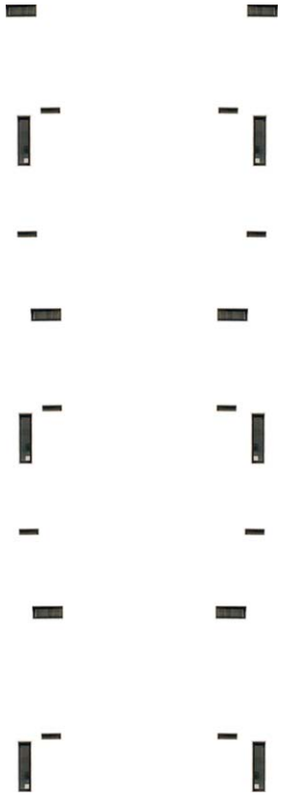


ARCHITECTS:
MVRDV

BUILDING:
DUTCH PAVILION
EXPO 2000

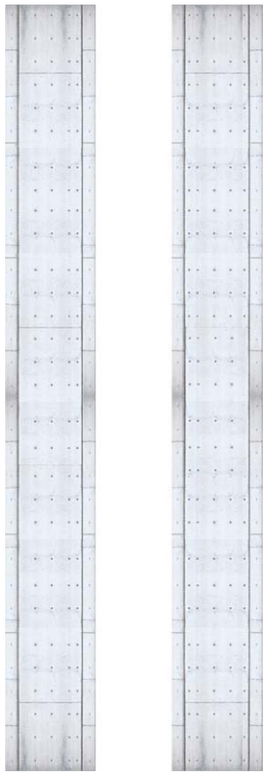
ARCHITECT:
STEVEN HOLL

BUILDING:
HOUSING IN
FUKUOKA



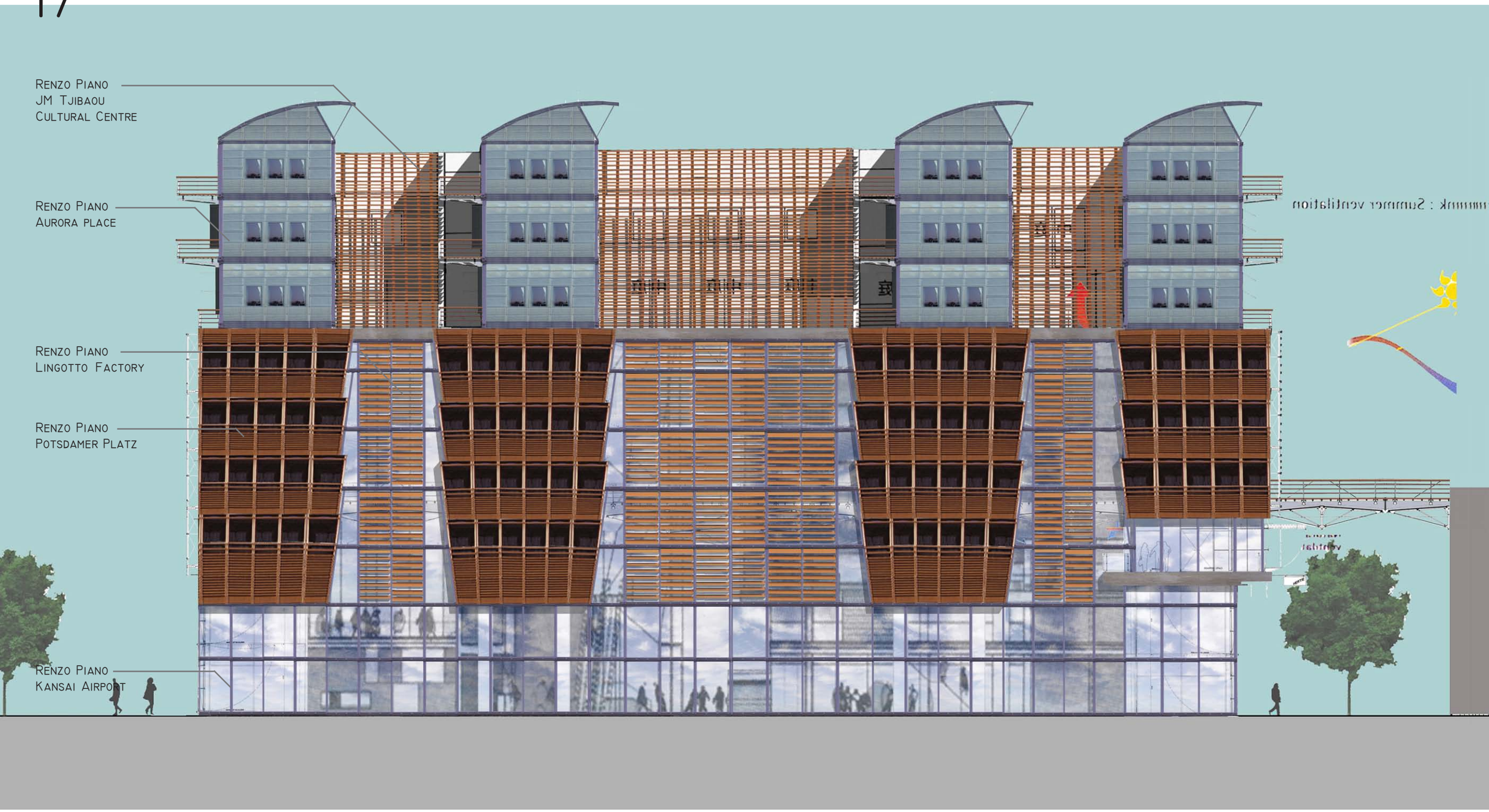
ARCHITECT:
LOUIS KAHN

BUILDING:
SALK INSTITUTE

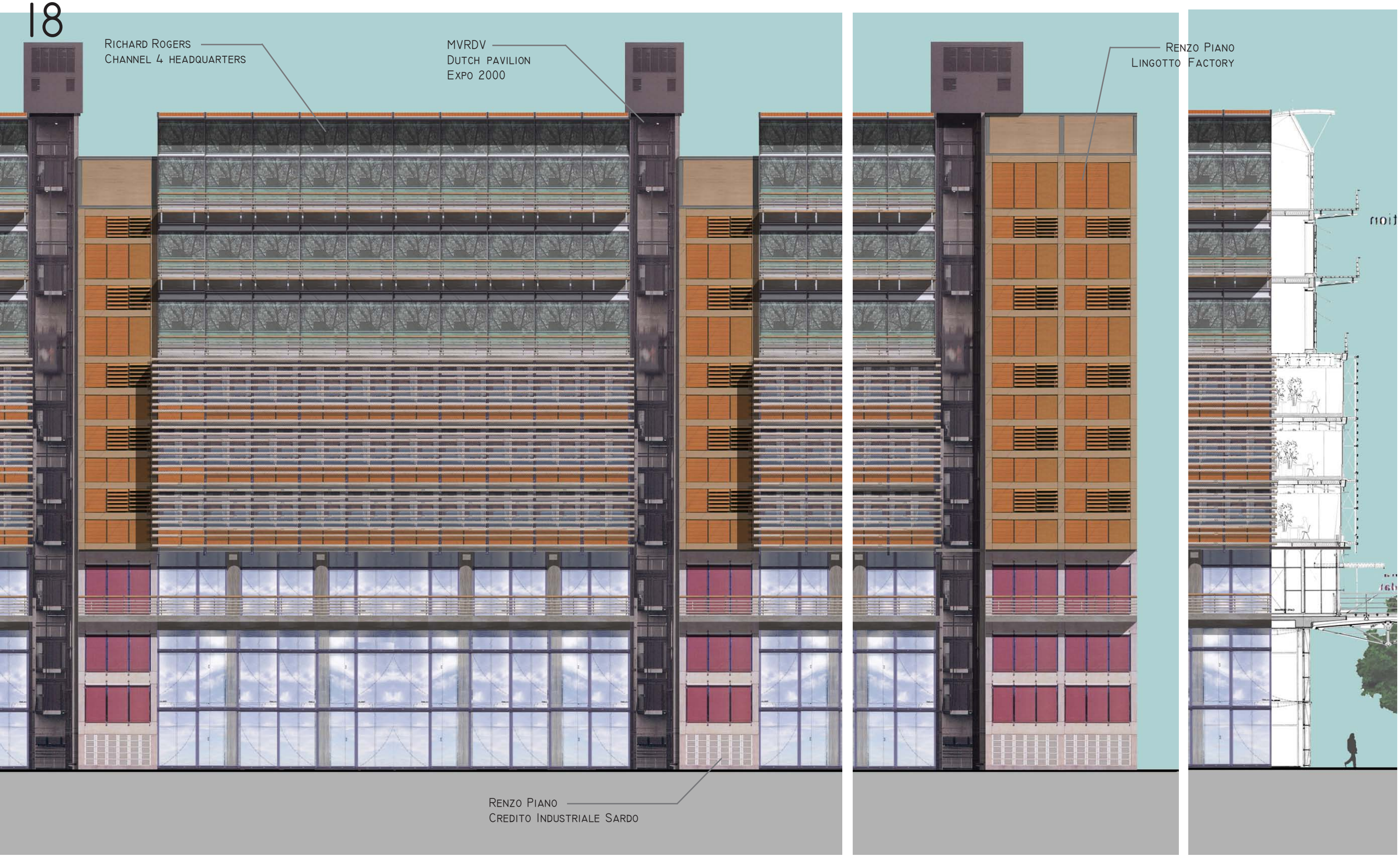


Process drawings

Early stage in the evolution of the section



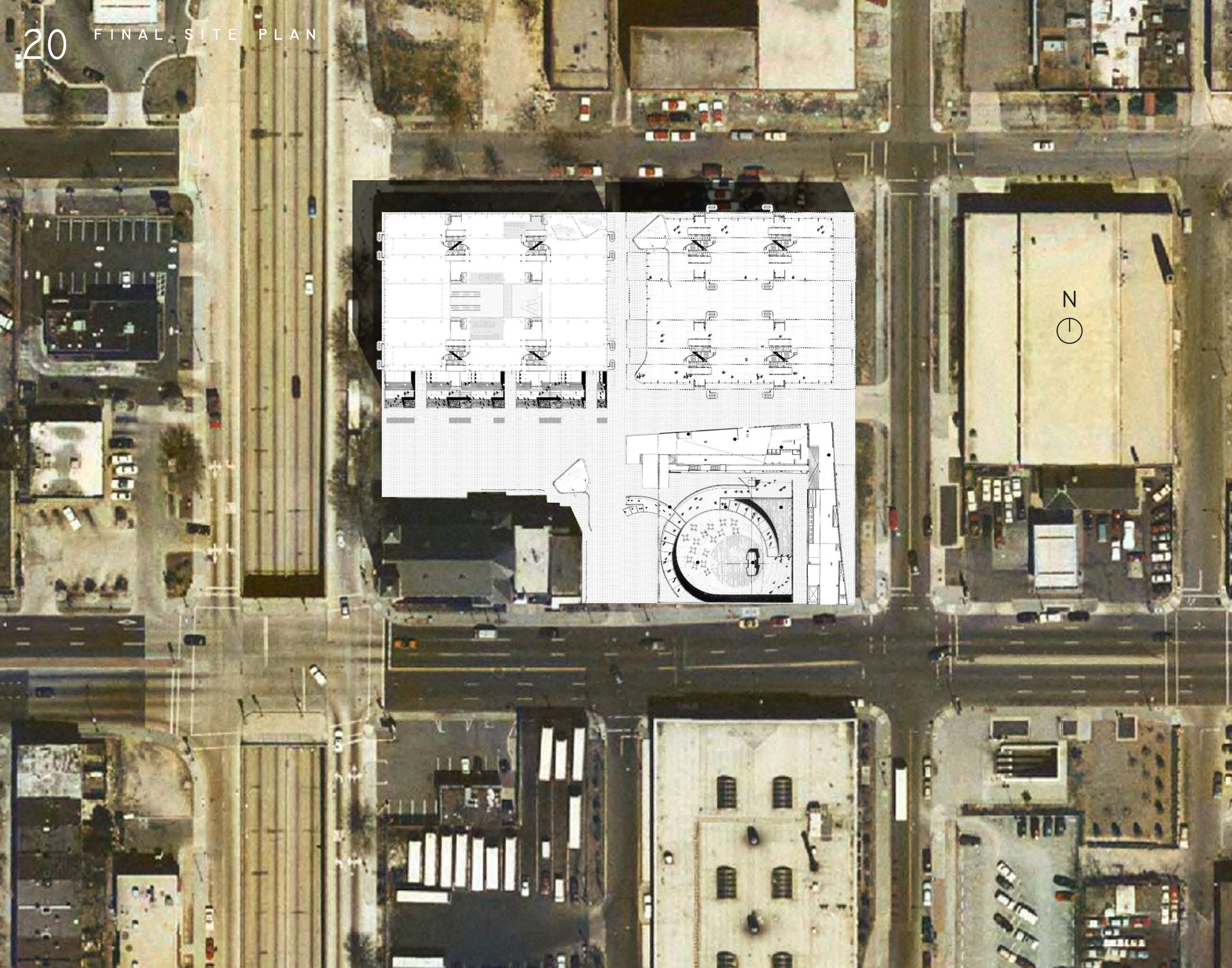
Early stage in the evolution of the South Capitol St. elevation



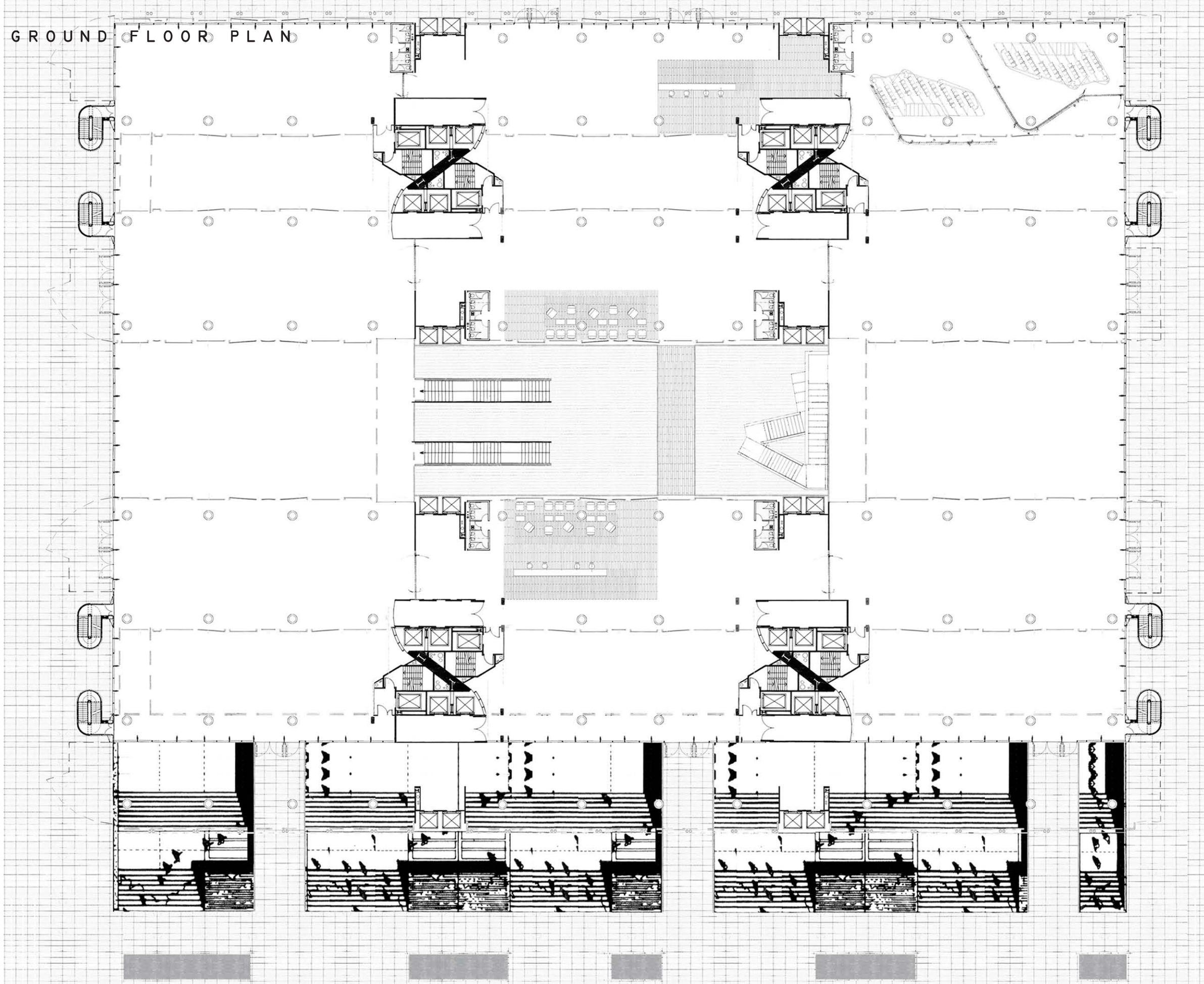
Early stage in the evolution of the South elevation

Final drawings

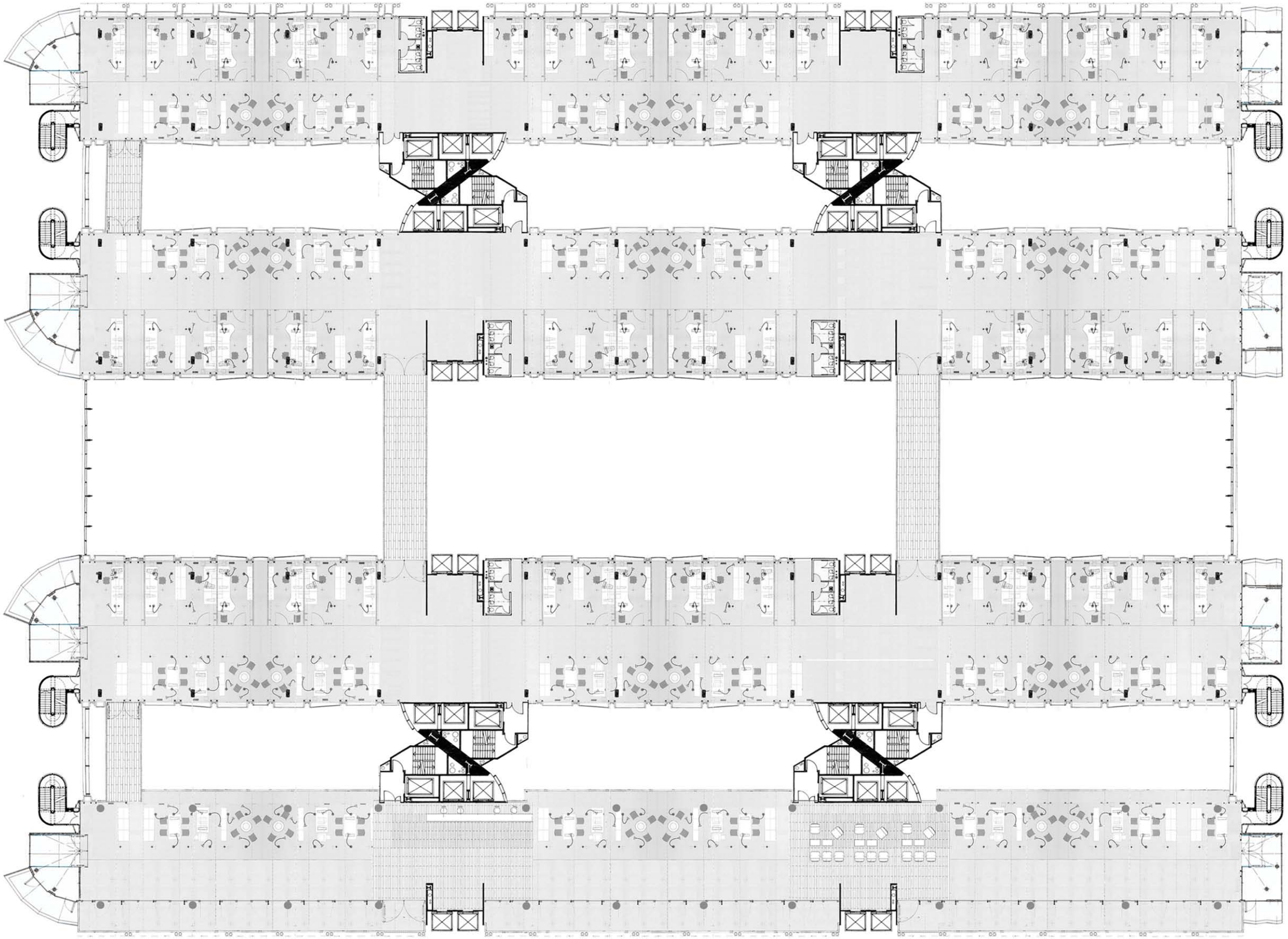
FINAL SITE PLAN



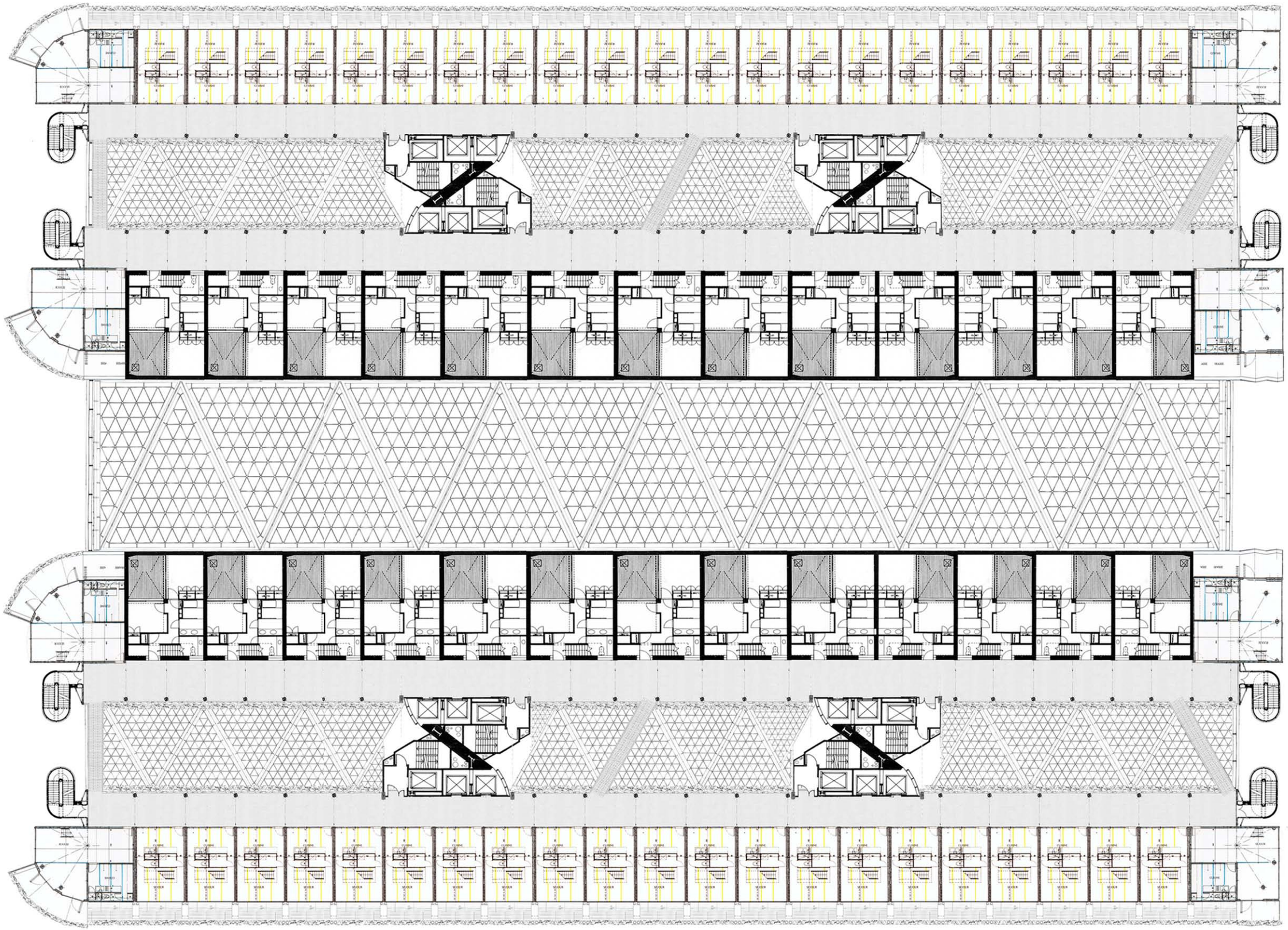
GROUND FLOOR PLAN

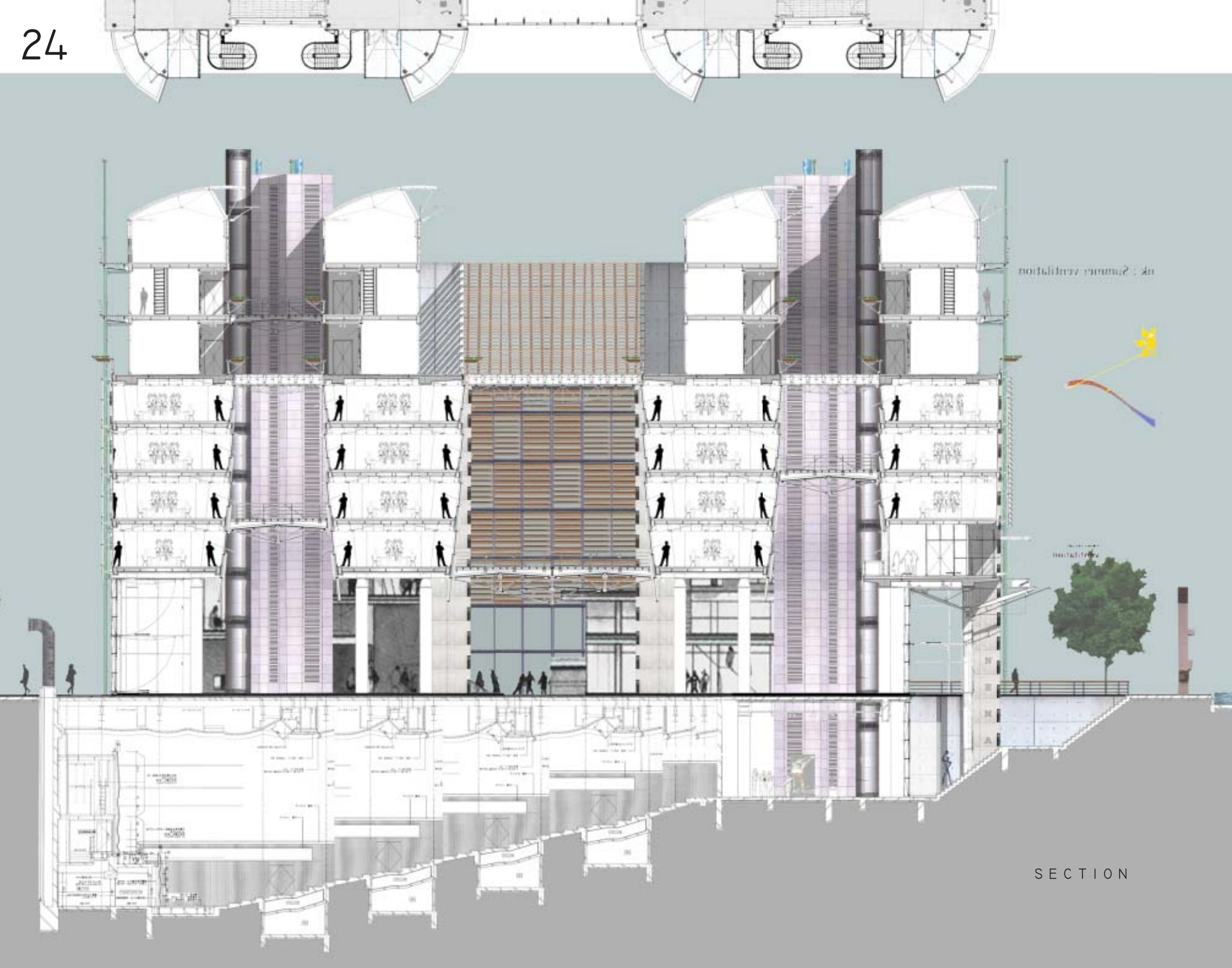


OFFICE LEVEL PLAN



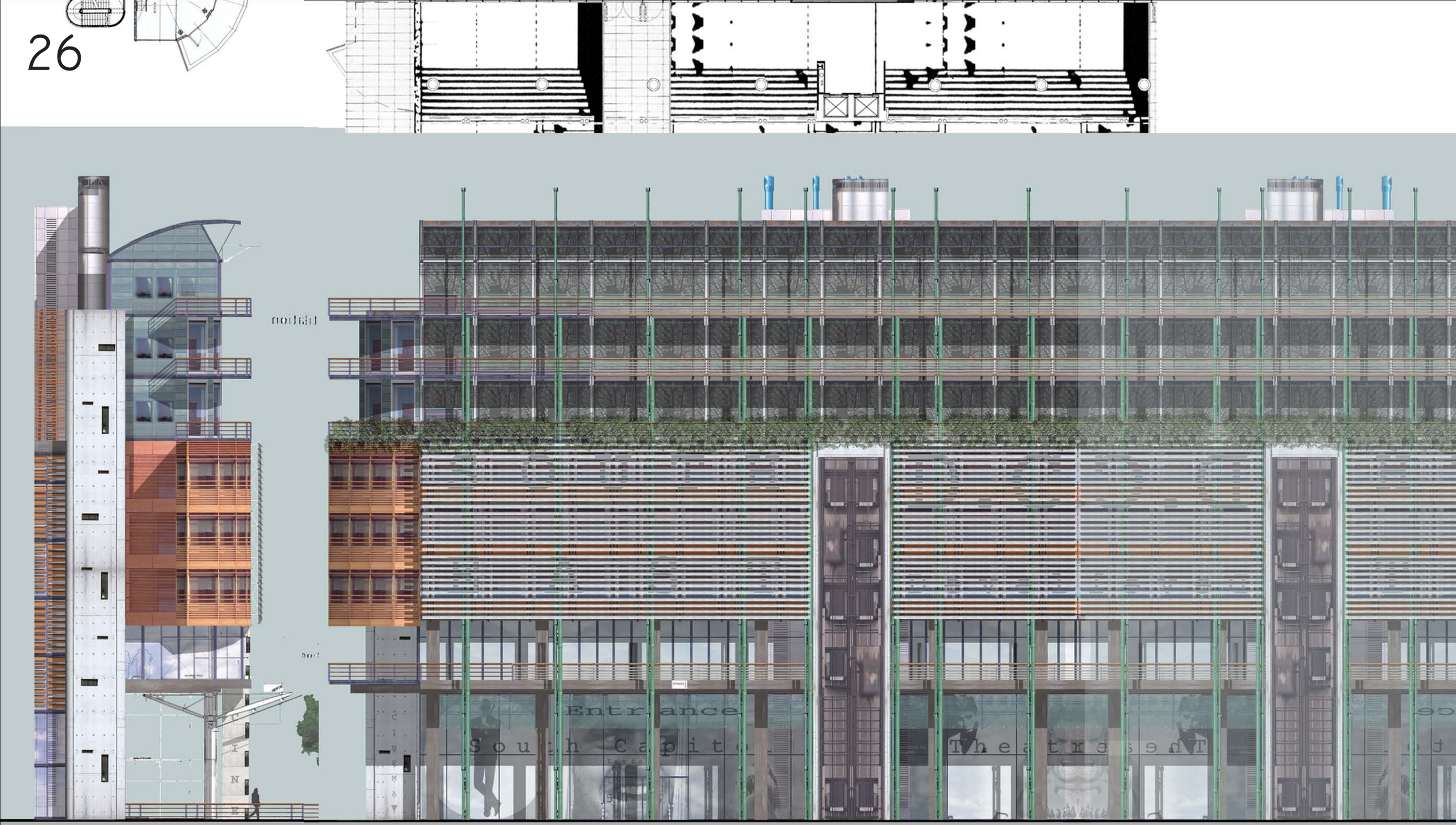
23 HOUSING LEVEL PLAN





SECTION

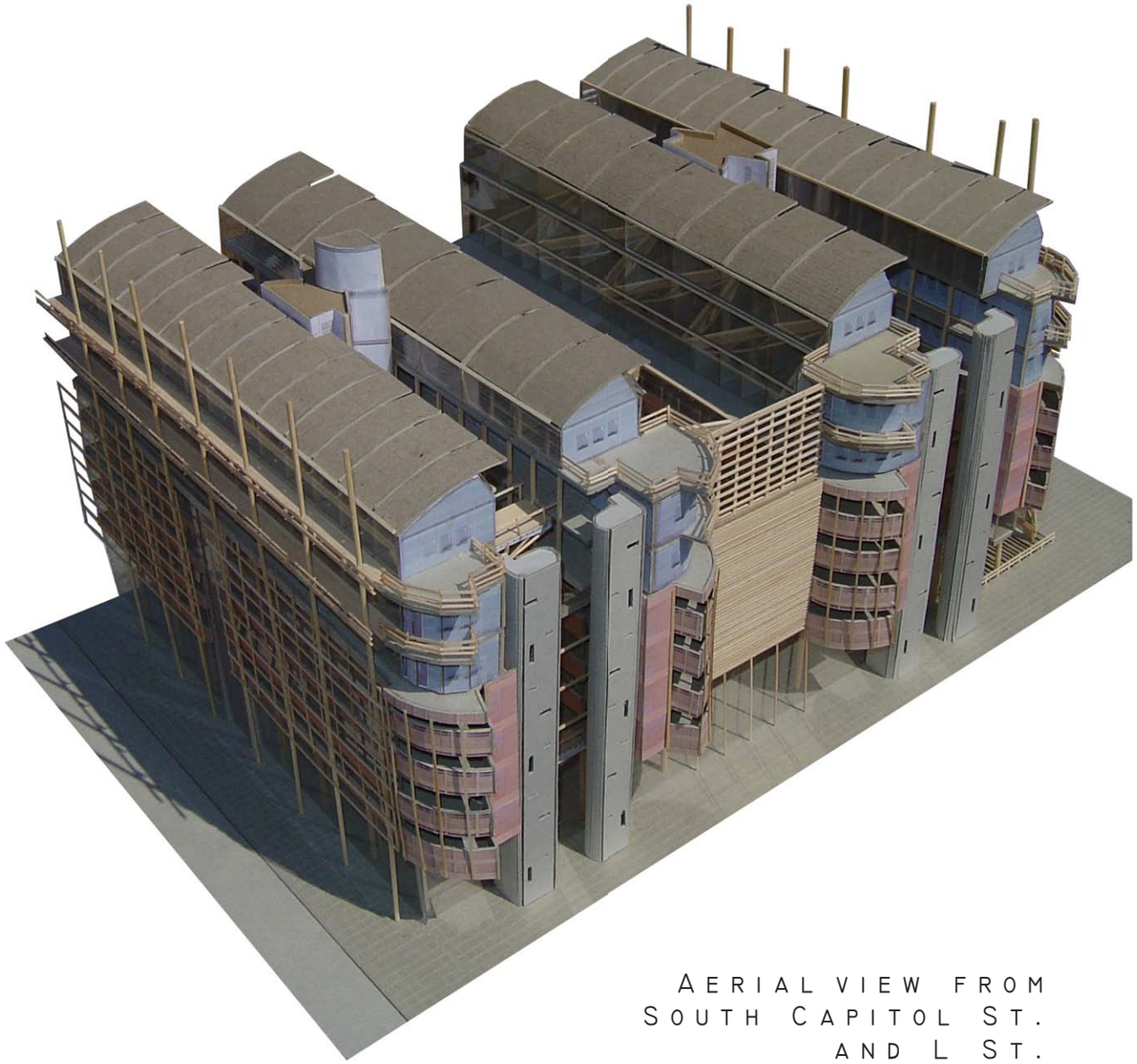
SOUTH CAPITOL ST. ELEVATION



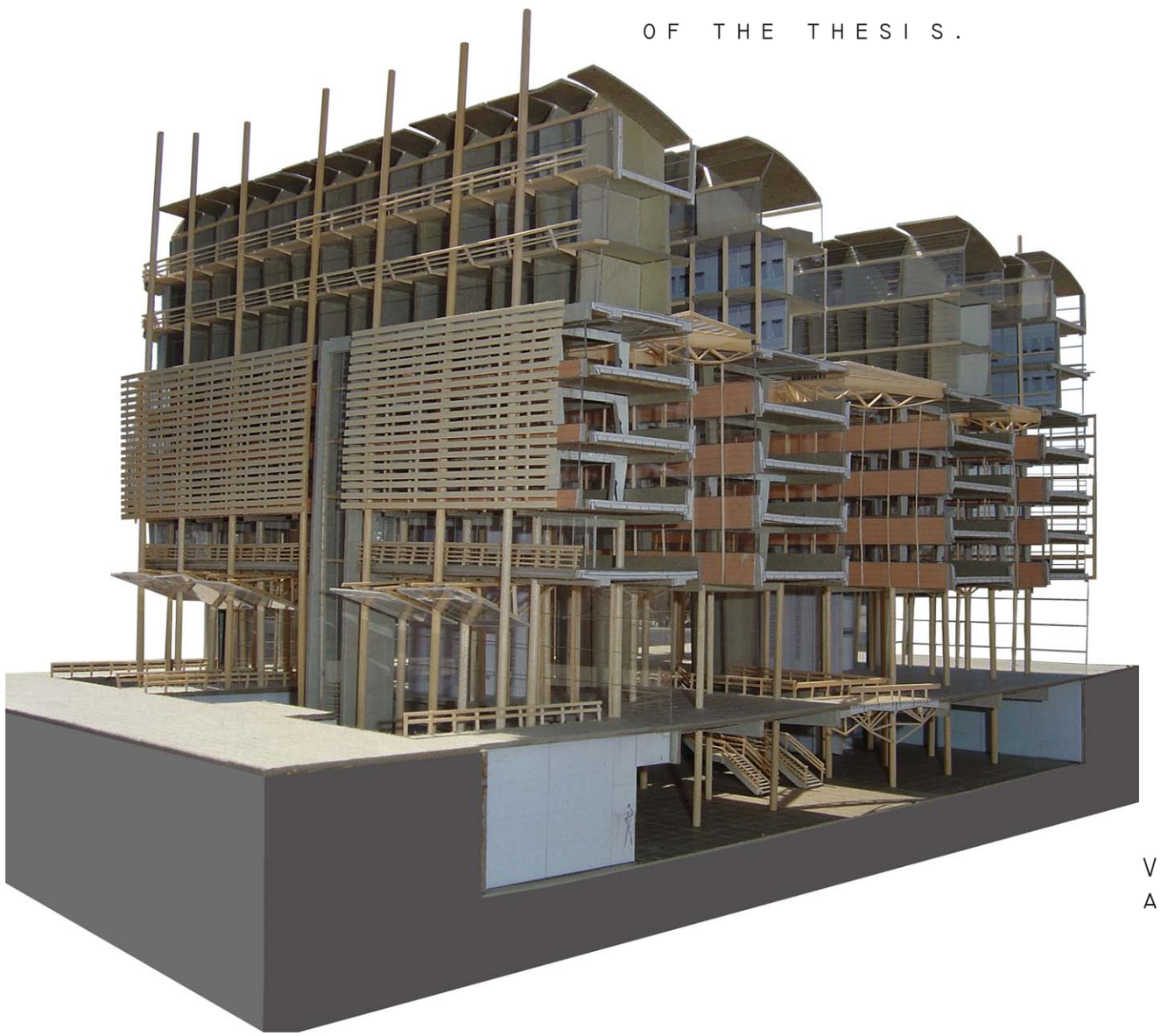
SOUTH ELEVATION – VIEW FROM PLAZA

The model

The model was the last step in the design process, and was not constructed with the sole purpose of showing the spatial qualities of the project. The intention was to demonstrate that the step to the three-dimensional construction is possible with the design process of the collage, confirming the development of the thesis.

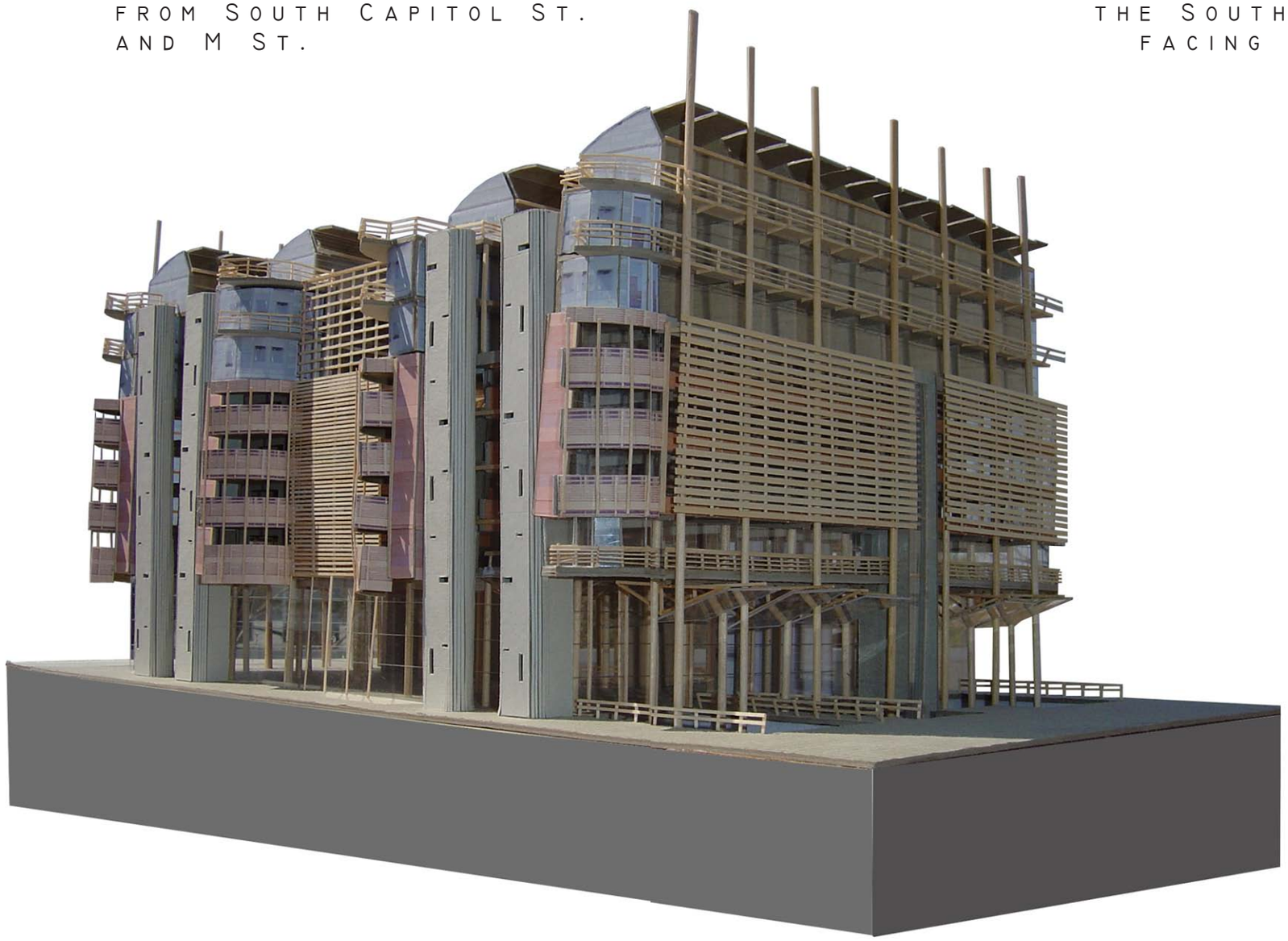


Aerial view from South Capitol St. and L St.



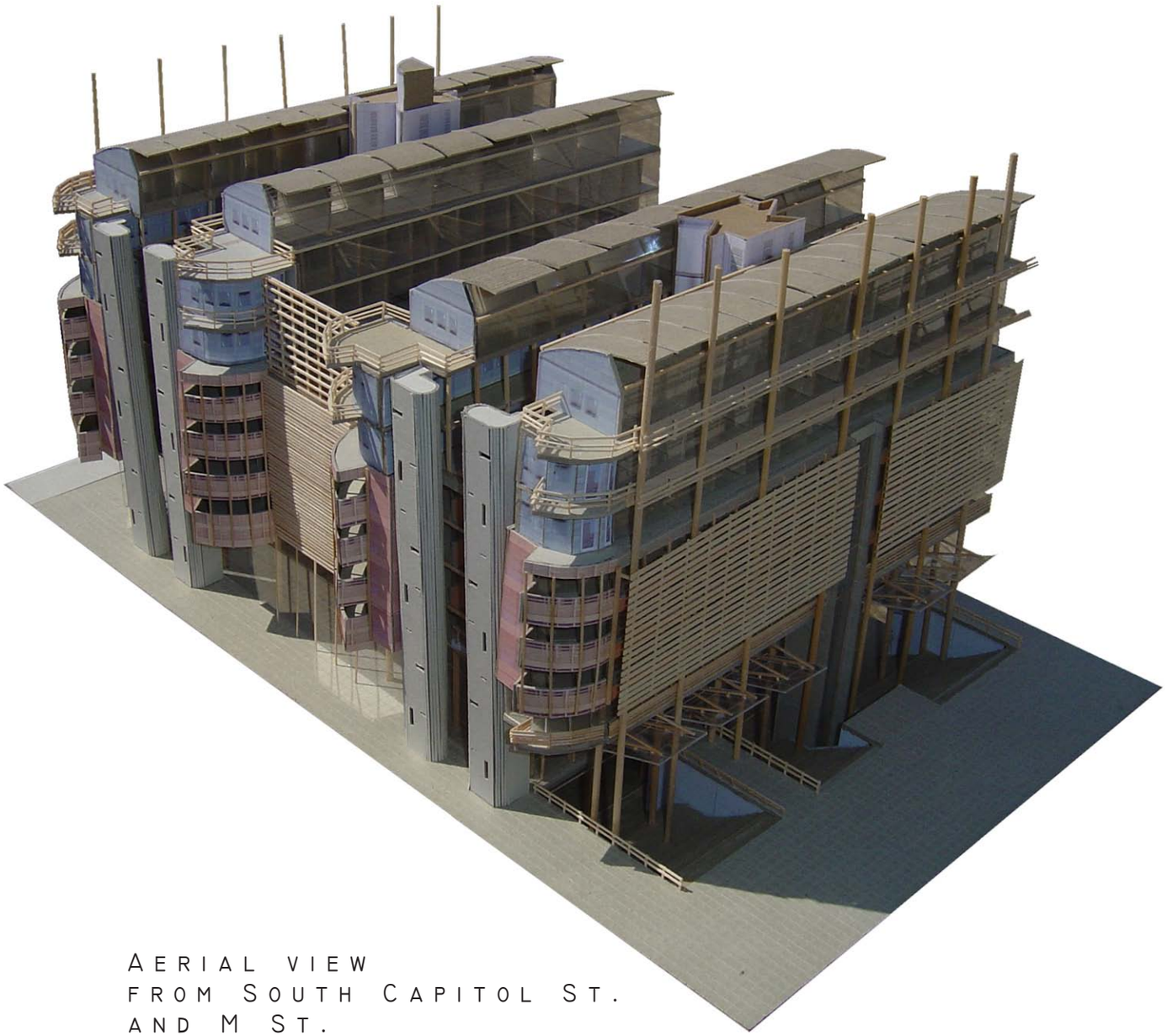
View of Plaza elevation and section of the model.

Pedestrian view
from South Capitol St.
and M St.



Partial view of
the South elevation
facing the plaza.

The model was constructed physically applying the `materials` used on the drawings on to those used to construct it. The result is the expression of the process and its particularities, such as the different origin and nature of the parts that compose the project.



Aerial view
from South Capitol St.
and M St.

View of central atrium
from basement level.

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Publisher: Phaidon Press

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By: Kenneth Frampton
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http://w.w.w.artchive.com/artchive/E/ernst.html

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Education

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Professional experience

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Buenos Aires, Argentina – March 2000 to October 2001.

Alphil system thermomecanic engineering.
Buenos Aires, Argentina – November 1999 to March 2000.

Clatro–Saiz Architects.
Buenos Aires, Argentina – October to December 1999.

Academic experience

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Design and Urbanism of the University of Buenos Aires – August 1999 to May 2002.

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Washington Alexandria Architecture Center – April 2004.

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National prize in Architecture Clarin – Central Society of Architects to the best student