

Eastern Seaport Master Plan

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of:

Master of Architecture
in architecture

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May 4, 2011
Blacksburg, VA

keywords: master plan, city, urban design, Boston

Eastern Seaport Master Plan

Michael George Wendt

[abstract]

The "Eastern Seaport Master Plan" is the design of a mixed-use neighborhood in South Boston, a site that has an enormous amount of potential to be the pinnacle of the Boston waterfront. Located in the city's Seaport District, the master plan addresses the site's deterioration as industry has declined. By reducing the impact of the necessity of the car through its incorporation into the urban fabric, making use of the road's infrastructure, creating a clear distinction between the functions of long-term and short-term parking, capitalizing on the opportunity to be the city's hub for water transit, and designing a street front for the mixed-use city blocks that encourages street life in Boston's harsh climate, the master plan will create a dynamic urban neighborhood that functions as its own entity but ties back to Boston as part of the city's call to reclaim the waterfront.

"Make no little plans; they have no magic to stir men's blood and probably will themselves not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will not die."

- Daniel H. Burnham

[acknowledgements]

To all my studio mates, the last six years at Wentworth and Virginia Tech have been an amazing journey. I could not have stayed sane without you. John and Lauren, three ball for life.

To my professors, whose tireless dedication taught me *how* to think not *what* to think. My success over the last six years would not have been possible without your wisdom and knowledge. A special thanks to my committee, Scott, Hans, Frank and Steve, for challenging my logic and pushing me to make my thesis better, even though at times I thought I had it all figured out.

To John Jaskiewicz, for always being there when I needed a roundtable. I never thought I would meet someone who enjoyed 2am OC sodes as much as I did. I hope one day we watch them all again. See you in the suburbs.

To Nick, thank you for your guidance and willingness to help in any way possible. Over the last five years you have taught me more than you know.

To my family, who always believes in me. I thank God everyday for your love and unending support and encouragement. Thank you for teaching me the importance of hard work and for exemplifying the honor in doing the right thing.

And to Meg. Even with 700 miles between us, thank you for being by my side every step of the way.

Thank You

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[introduction]

The "Eastern Seaport Master Plan" is the design of a mixed-use neighborhood in South Boston. Located along the city's southern waterfront in the Seaport District, the master plan addresses the site's deterioration as industry has declined. While Boston has begun to develop this new length of waterfront, the particular site has remained untouched and is an undesirable section of the waterfront. To enliven the site and encourage development, the master plan confronts key issues that hinder the renovation of the area.

The master plan is comprised of eight city blocks, buildings along the waterfront and a glass-covered piazza enclosed by a set of buildings that act as the transportation hub for the site. Additionally, an elevated roadway, a new series of surface roads, adjustments to an existing concert pavilion, and a vision for the expansion of the neighborhood over time further enhance the master plan. Design elements such as a large public park, an extension of the Harbor Walk along the water edge, and a pier that extends out into the harbor are also integrated. Likewise, design concepts for the street wall and its relationship to the inside and outside, street lighting, and signage are also major components of the plan that strengthen the potential life of the street. While most master plans for urban development focus on zoning and traffic conditions, the Eastern Seaport Master Plan addresses space making and design driven planning to enhance the beauty and livability of the neighborhood.

A system of elevated roads (referred to as the Upper Road Network) begins along Seaport Boulevard before the World Trade Center to the west of the site and brings cars directly to the neighborhood. The Upper Road Network gets cars in and out fast and provides access to long-term parking that exists within entire city blocks. The surface roads of the site accommodate only short-term, leisure, local traffic and are of the same stone paver material as the sidewalks; part of an effort to deregulate traffic and integrate the car into the city fabric along the street. The Upper Road Network is utilized as both a building and infrastructure, allowing architecture and space making to drive the design of the master plan, not vehicular traffic. The structure will support the elevated roadway, but will similarly provide space for private apartments and additional needs of the city. The Eastern Seaport Master Plan is designed to acknowledge the car as a primary source of transportation, incorporating it into the pattern of the urban fabric rather than allowing the car to dictate the life of the street.

The parking incorporated into the city blocks establishes a clear distinction between the intended functions above and below the cars. While the three floors at street level below the parking provide space for restaurants and retail, the space above is for offices and residences that utilize the parking for long-term use. At the street, a double glass wall system provides a closed arcade during the winter, but at the same time is designed to allow the outer glass wall to rotate up and provide open air cover for outdoor dining and shopping during warmer months. Streetlights are incorporated into the design of the outer glass walls so at night, when the walls are up, the streets are lit and more likely to remain active. This design element frees the street from freestanding light posts to accommodate changes in street conditions. There is no distinction in material between the arcade, sidewalk, and street as 8"x8" stone pavers are used for the entire surface between blocks. At night, lighting from underneath shines up from below the spacing between the pavers to clearly define car lanes, sidewalks, and on-street parking. These lights can be turned on and off depending on the circumstances to allow the streets to accommodate a variety of conditions.

With no feasible connection to one of Boston's subway transit lines available, the master plan embraces the water and becomes a hub for water transport through the introduction of a large public ferry terminal as part of the covered piazza buildings, a stop for the city's commuter boat service, a marina for private boats, and a link to an existing cruise terminal. By providing public transportation options that bring a significant number of pedestrians to the site directly from Logan Airport, the site can begin to act as an introduction to Boston rather than an unutilized end of the city.

The Eastern Seaport Master Plan is a design for a site that has an enormous amount of potential to be the pinnacle of the Boston waterfront. By reducing the impact of the necessity of the car through its incorporation into the urban fabric, making use of the road's infrastructure, creating a clear distinction between the functions of long-term and short-term parking, capitalizing on the opportunity to be the city's hub for water transit, and designing a street front for the mixed-use city blocks that encourages street life in Boston's harsh climate, the master plan will create a dynamic urban neighborhood that functions as its own entity but ties back to Boston as part of the city's call to reclaim the waterfront.



existing site from across Boston Harbor (top left) [fair use]



existing boston site plan [fair use]



existing water edge



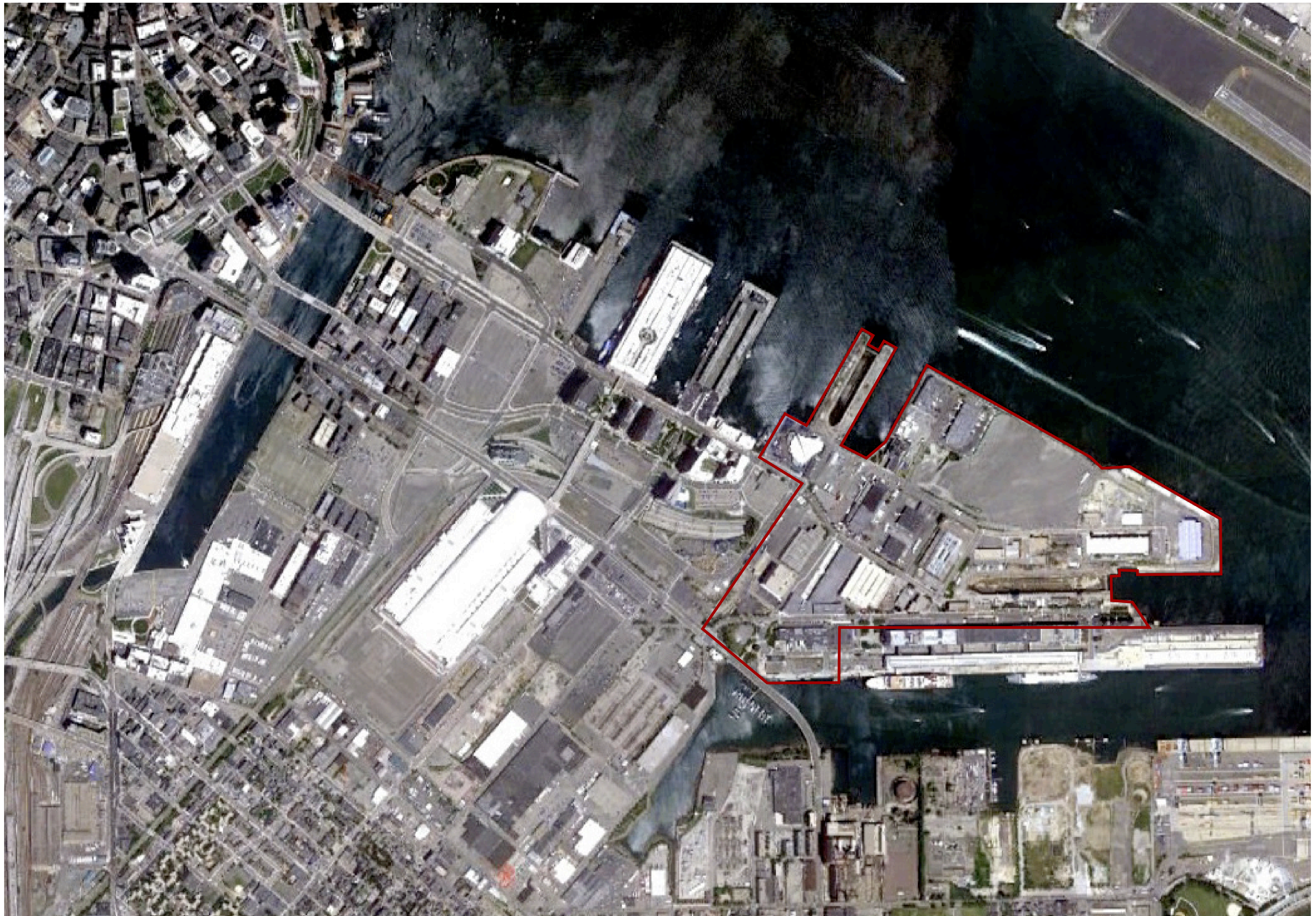
existing pier



existing water edge



existing site



existing seaport district site plan [fair use]



concert pavilion across seaport boulevard



concert pavilion at entry gate



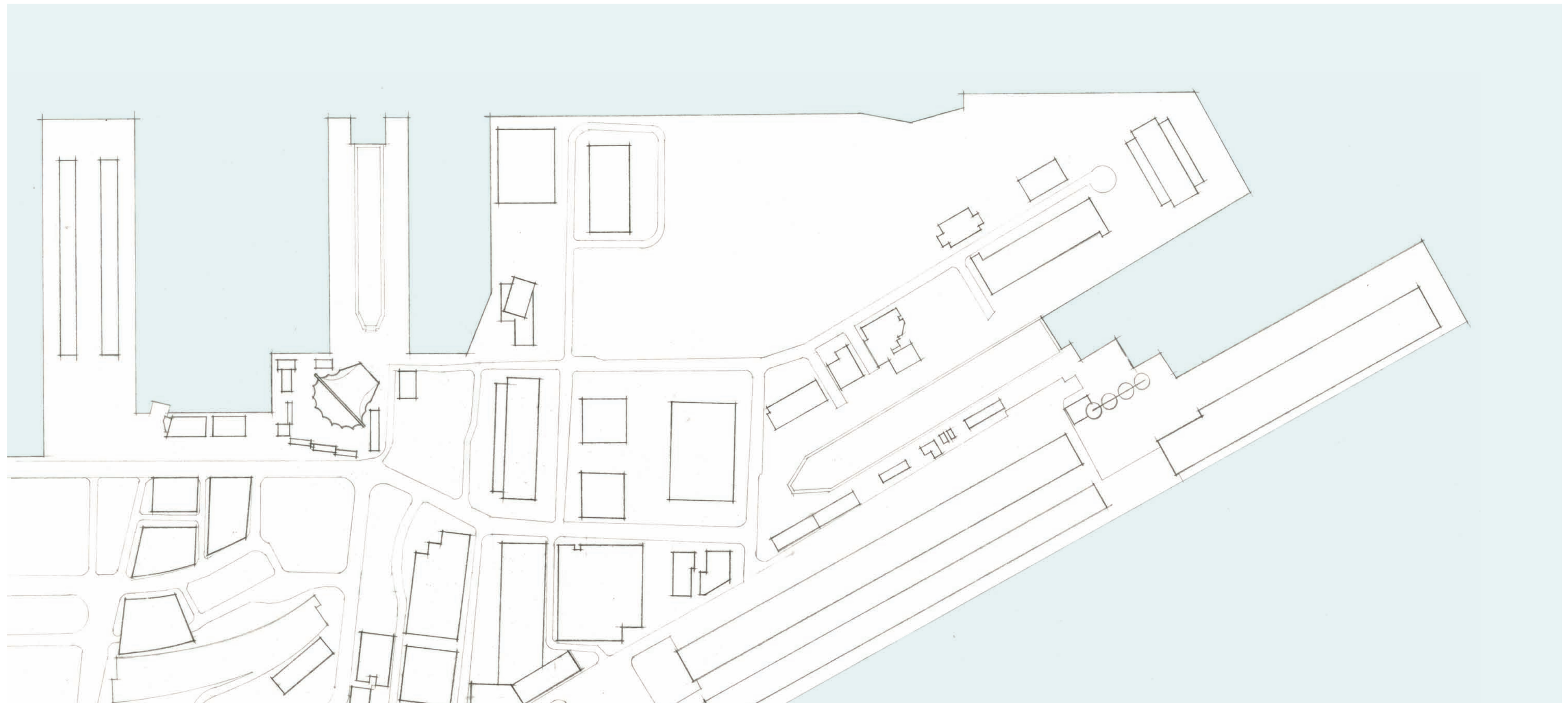
concert pavilion at water edge



concert pavilion at entry gate

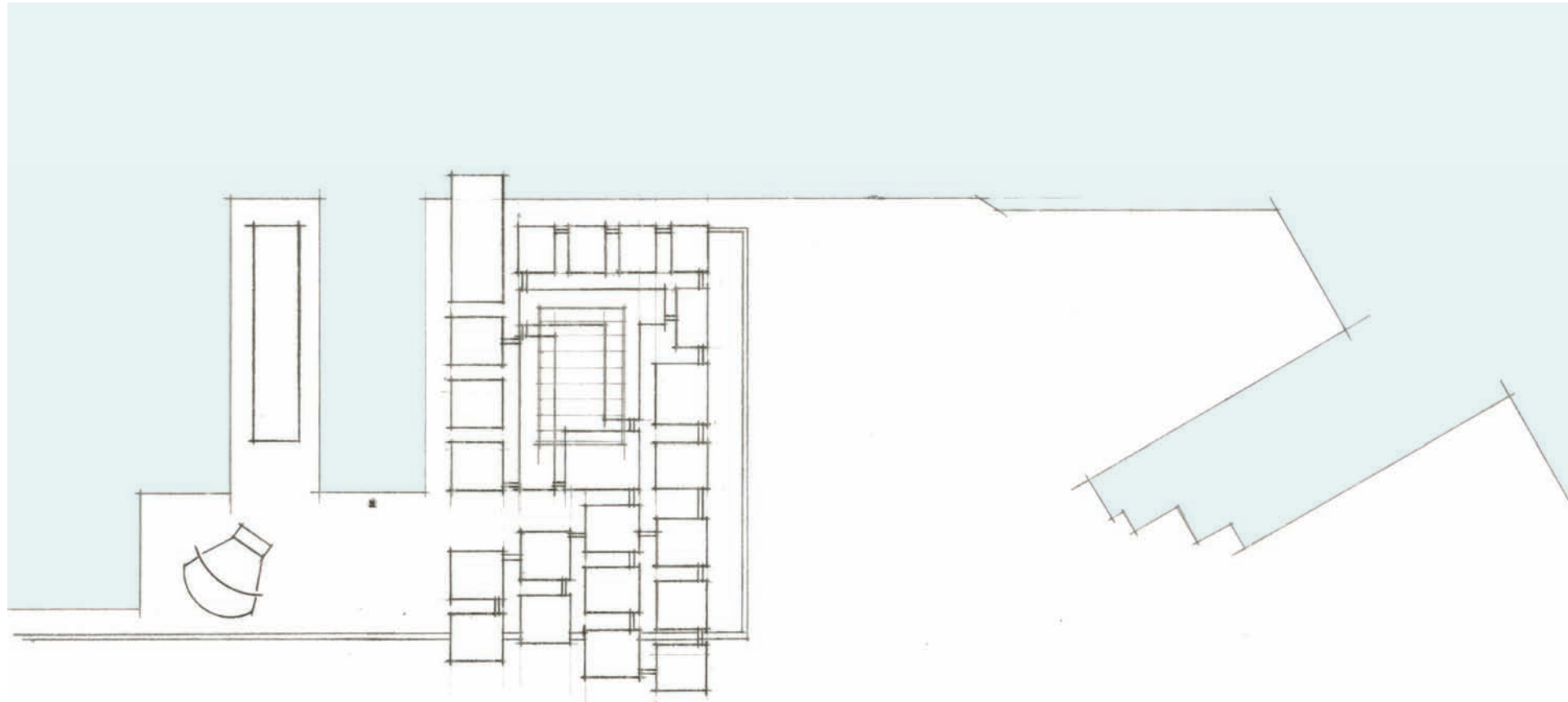


existing eastern seaport site plan [fair use]



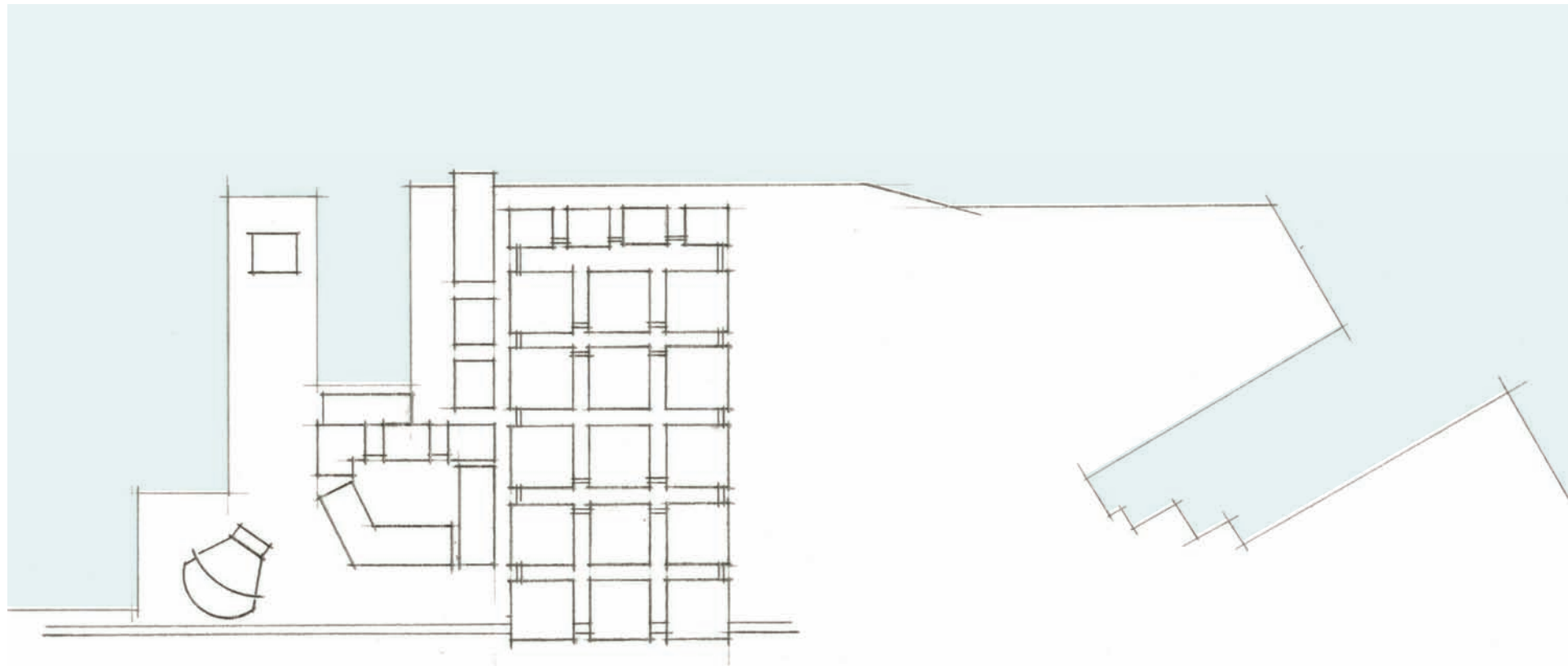
existing seaport district site plan

1



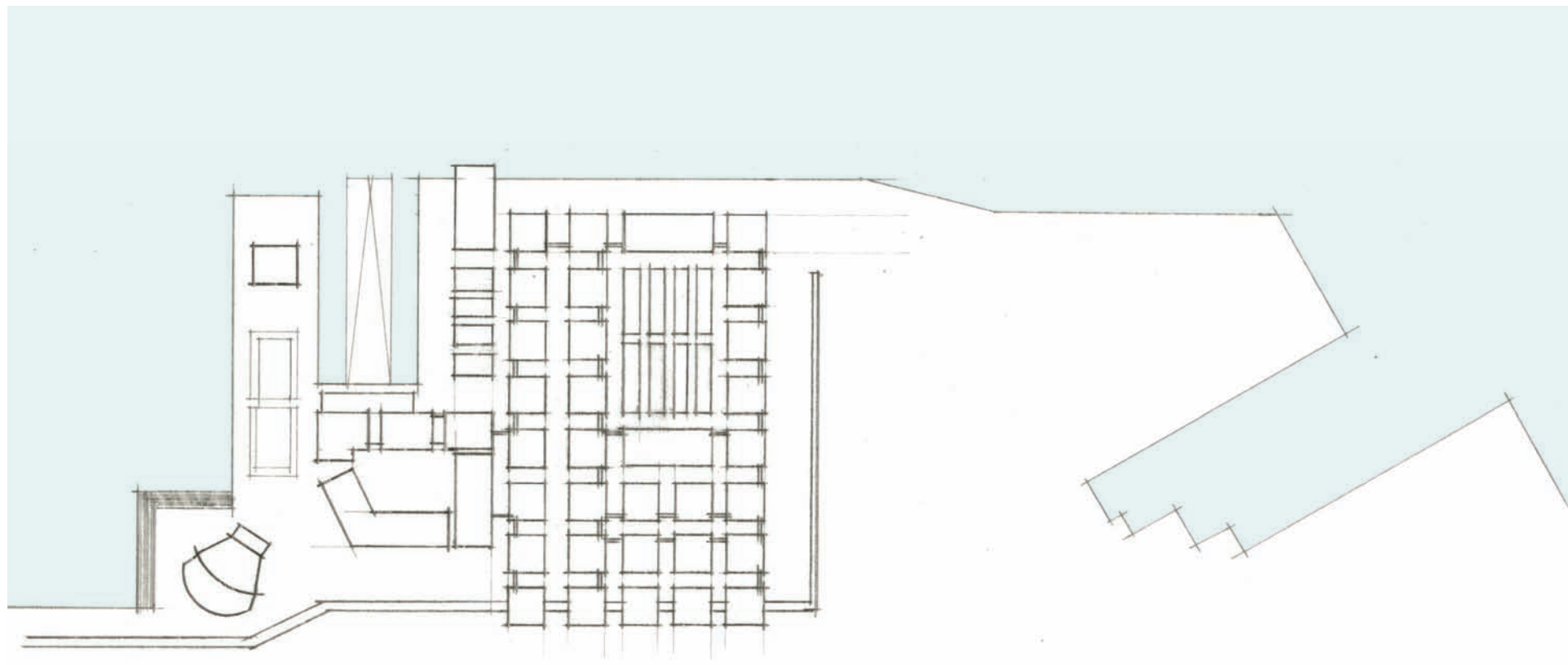
The initial design of the master plan was composed of small city blocks of individual buildings. These city blocks were shifted off center to prevent long boulevards in an attempt to create more intimate streets. The upper road network was connected to each individual building, including the buildings that form the centralized covered piazza. Apartments were also designed for the pier adjacent to the existing concert pavilion.

2



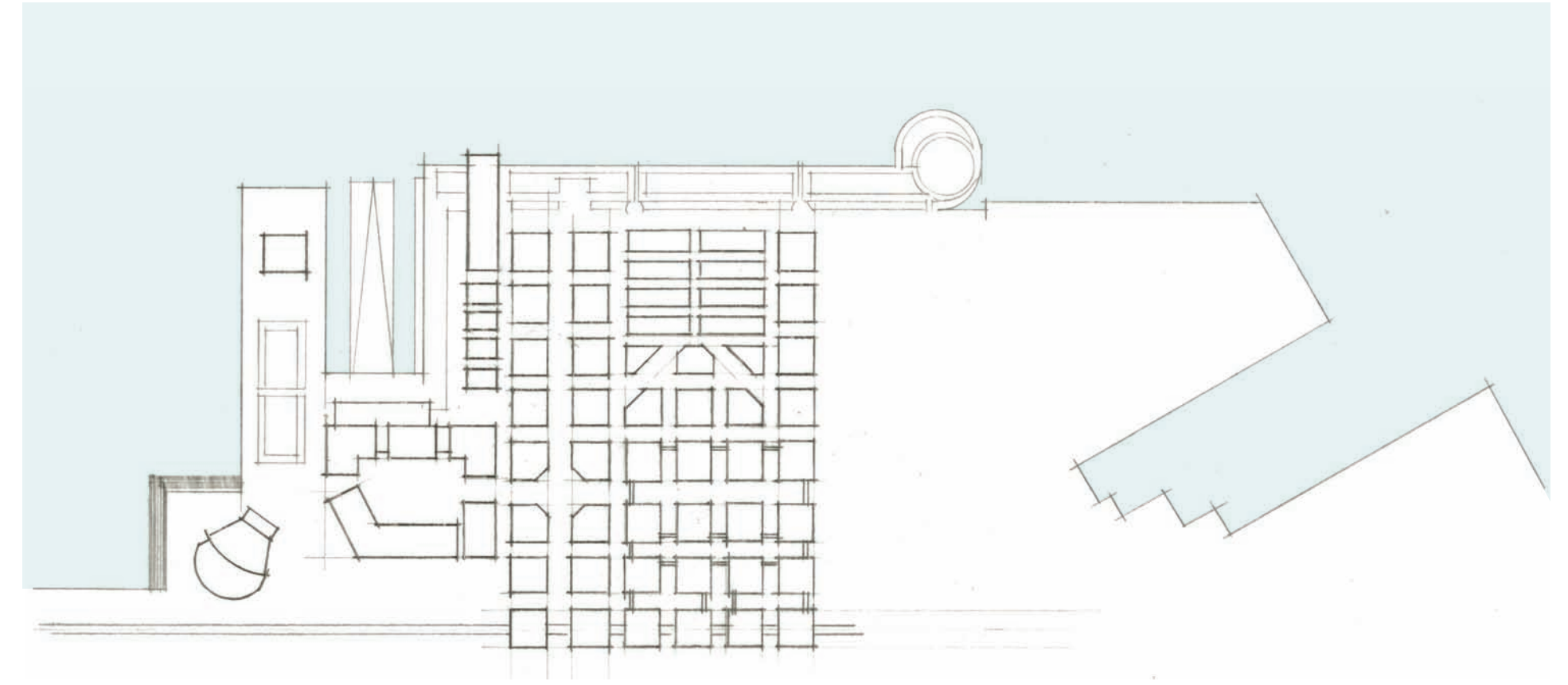
In the next phase of the master plan, the covered piazza was moved to a site adjacent to the pier along the water edge. The small blocks of individual buildings were made slightly larger and organized on a grid. A ferry terminal was placed at the end of the pier for water transit and additional buildings were designed for the water edge to break from the primary street grid. The upper road network remained connected to most of the buildings.

3



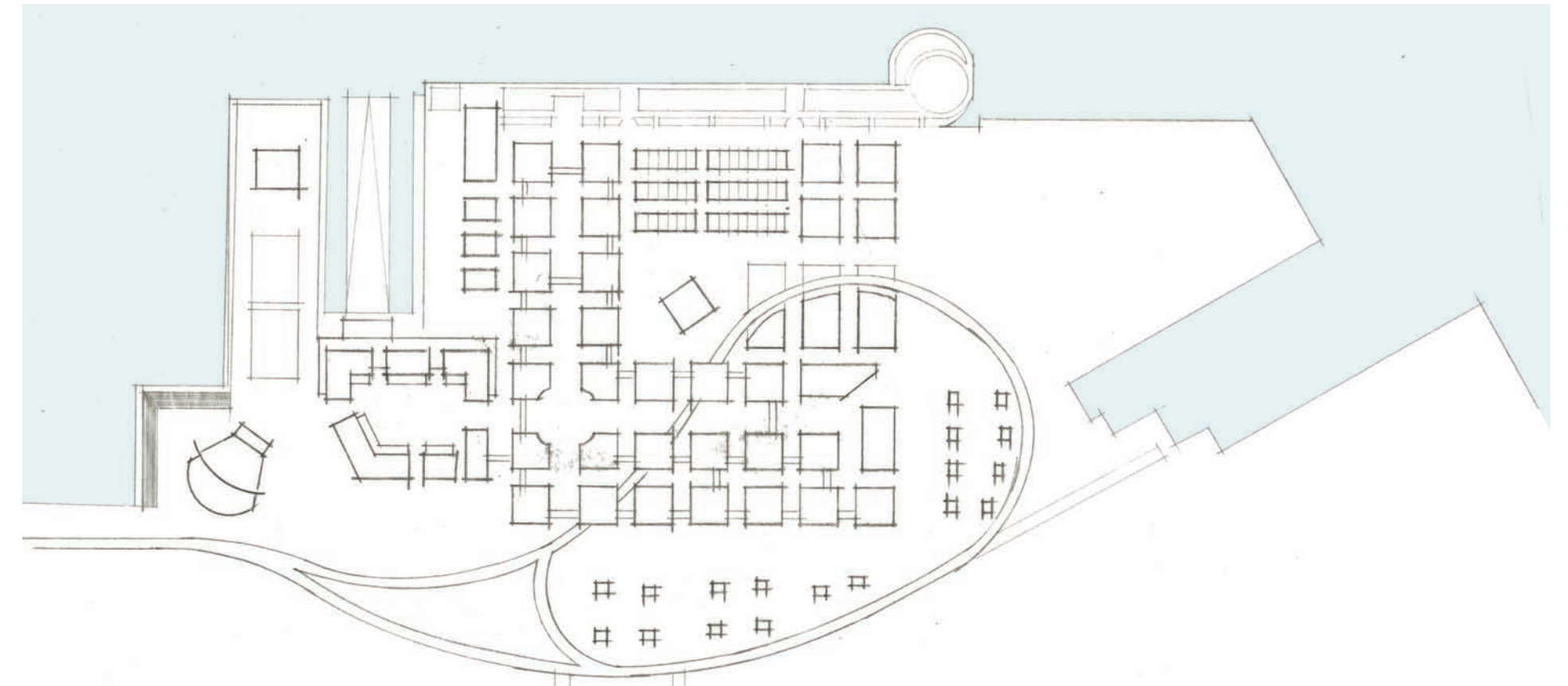
In the third phase of design, the site was expanded to five rows of city blocks, which were reduced back down in scale from phase two. The upper road network still connects all of the buildings, but the approach to the site on the elevated roadway was shifted at the existing concert pavilion. Rows of apartments were located within the city grid to create a more intimate, livable center for the neighborhood.

4



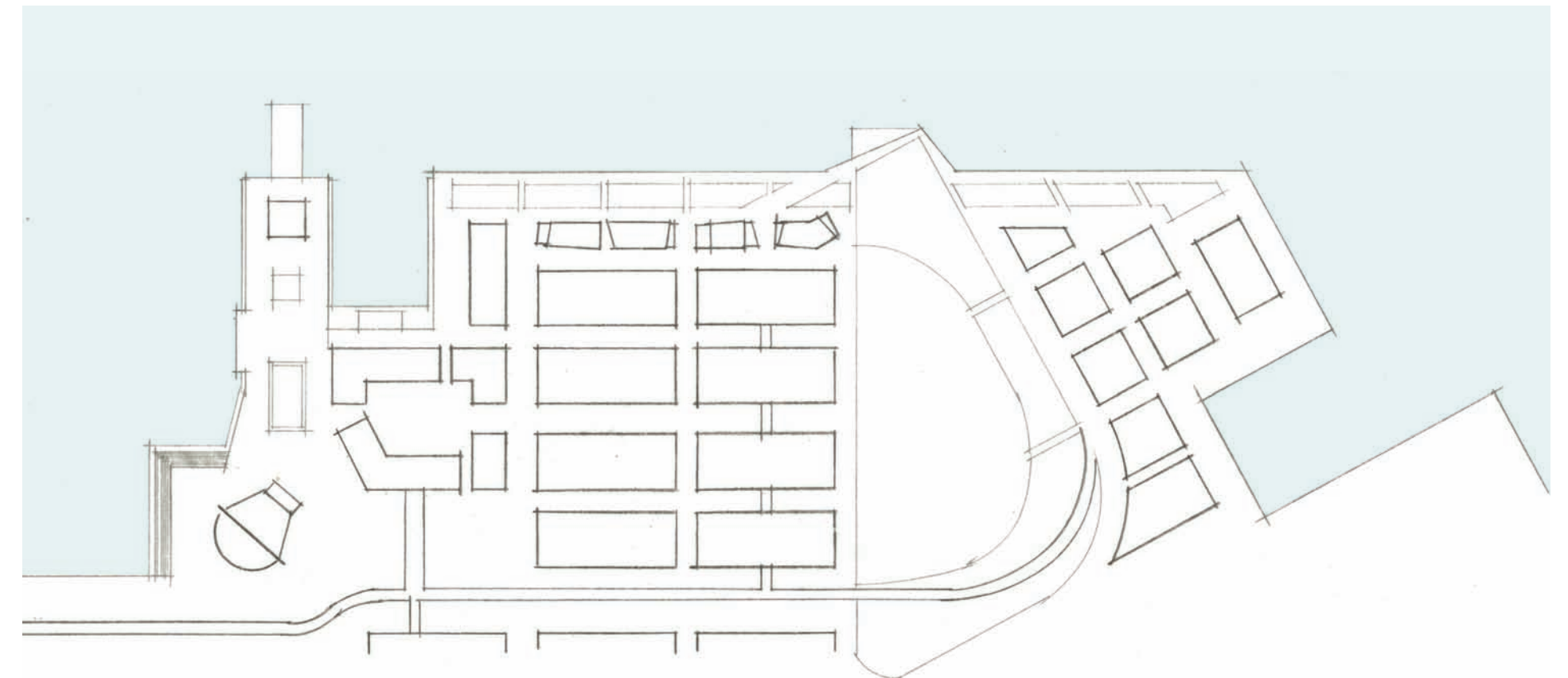
For the fourth phase of design, a sixth row of city blocks was added as a way to internalize the apartments, which were rotated to face the water. The upper road network was reduced in scope to connect only 16 blocks. Additionally, a park was designed to be located along the water edge at the end of the site to act as a terminus for the neighborhood and to provide a datum for future expansion.

5

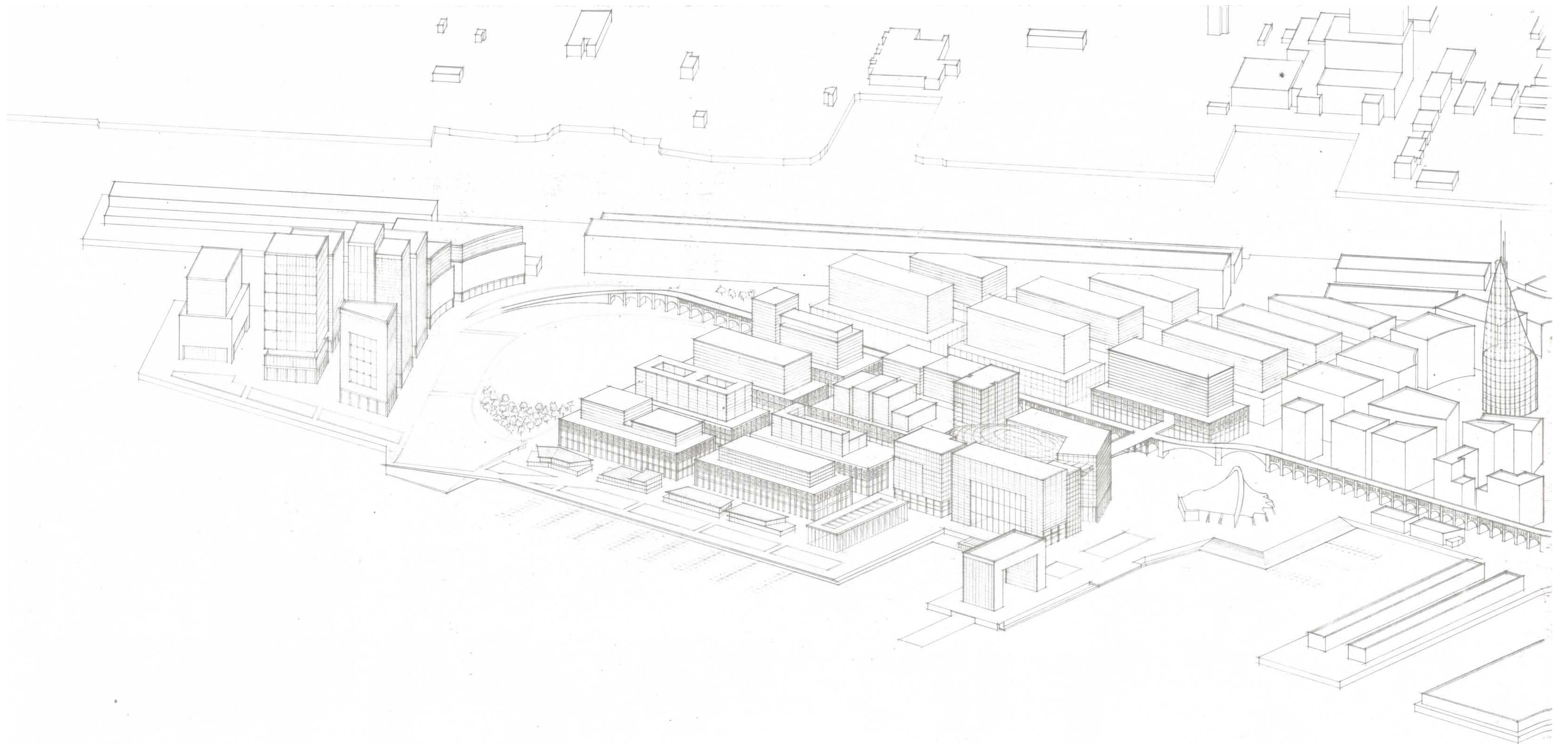


As a way to emphasize the upper road network as a design element and to more strongly choreograph the journey down into the city, the elevated roadway was expanded and circled the site before connecting to the city blocks. In this phase, the grid was broken to accommodate the upper road network and the two streets along the main axis were widened.

6



In the final phase, the size of the blocks was enlarged significantly and complimentary buildings were designed to address the waterfront. Additionally, a large park was placed alongside the 8 city blocks. The upper road network was again reduced in scope to connect to four of the 8 city blocks as well as one of the covered piazza buildings (the new location for the ferry terminal), and would lower down into the site along the edge of the park.



master plan axonometric



proposed master plan

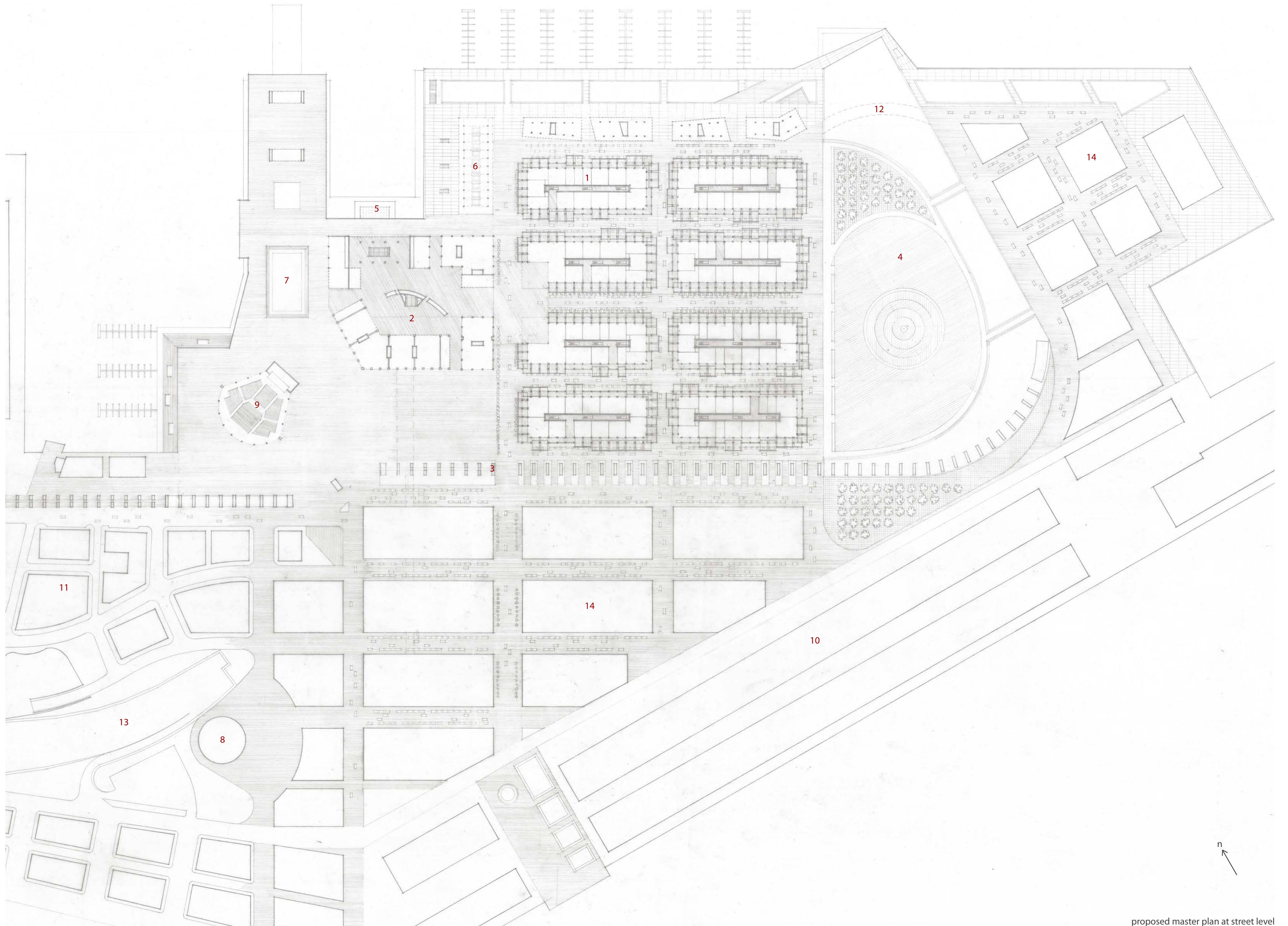
[key]

- 01. typical city block
- 02. covered piazza
- 03. upper road network
- 04. public plaza
- 05. ferry terminal
- 06. market building
- 07. pool/ice rink at pier
- 08. communication tower
- 09. existing concert pavilion
- 10. existing cruise terminal
- 11. existing seaport district buildings
- 12. tunnel under public plaza to site
- 13. on-ramp to massachusetts turnpike
- 14. suggested expansions

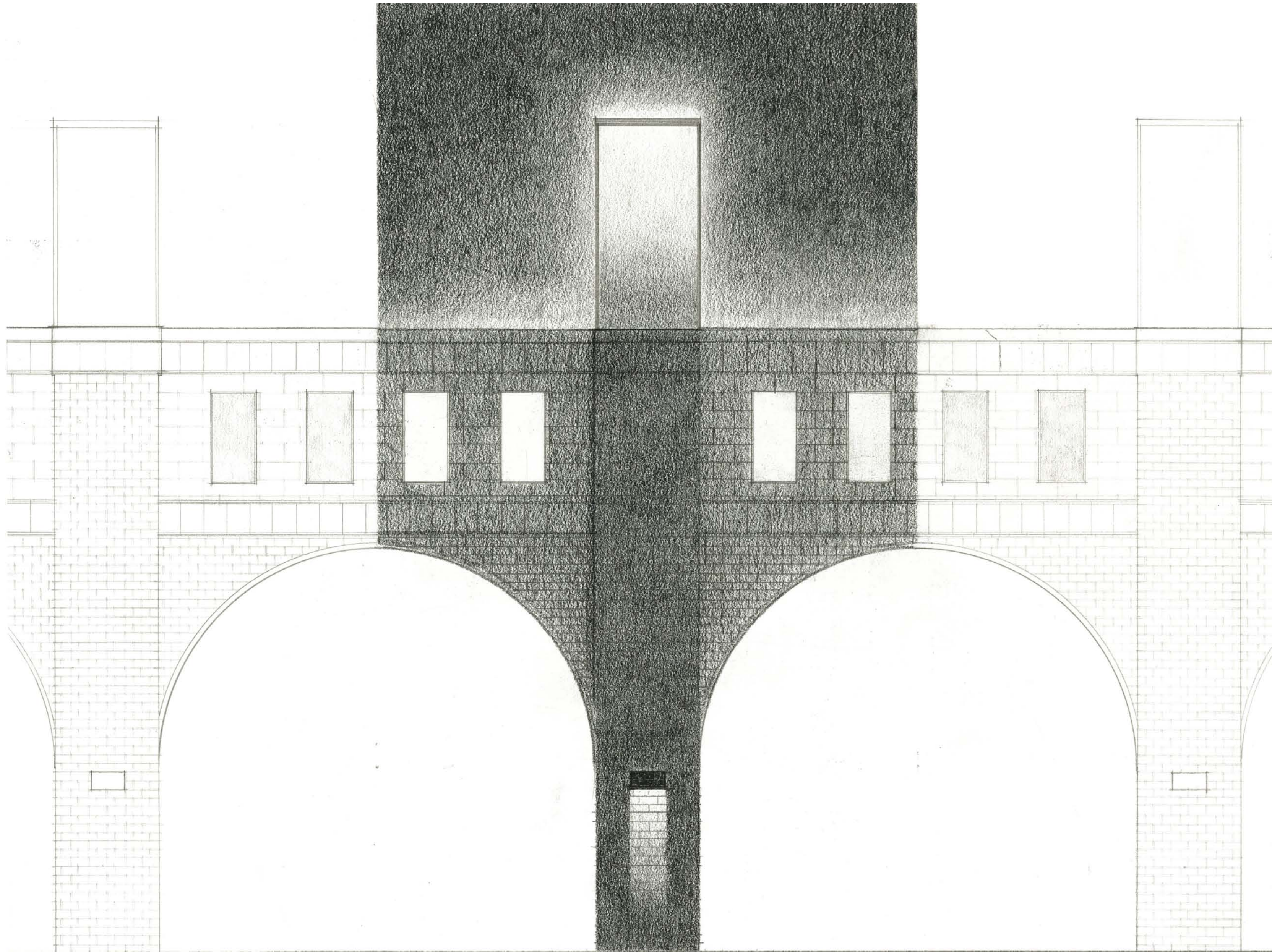


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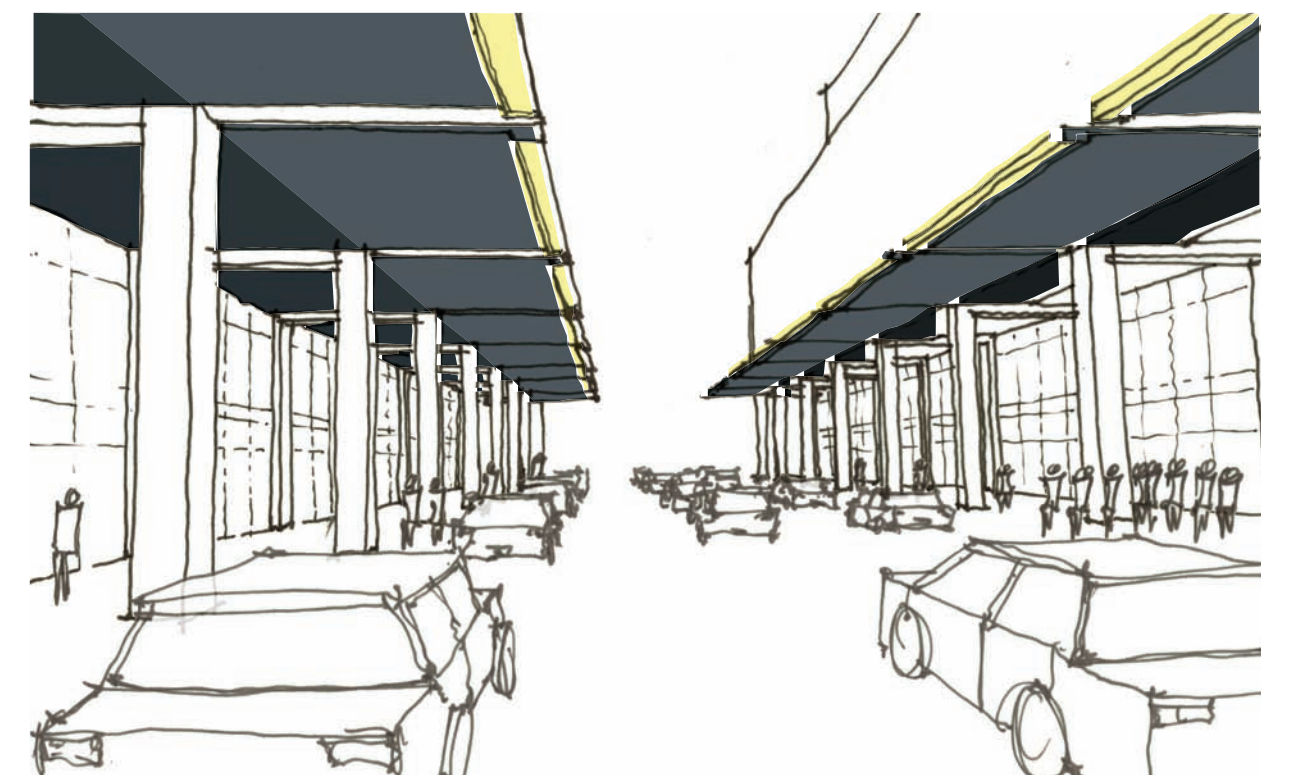
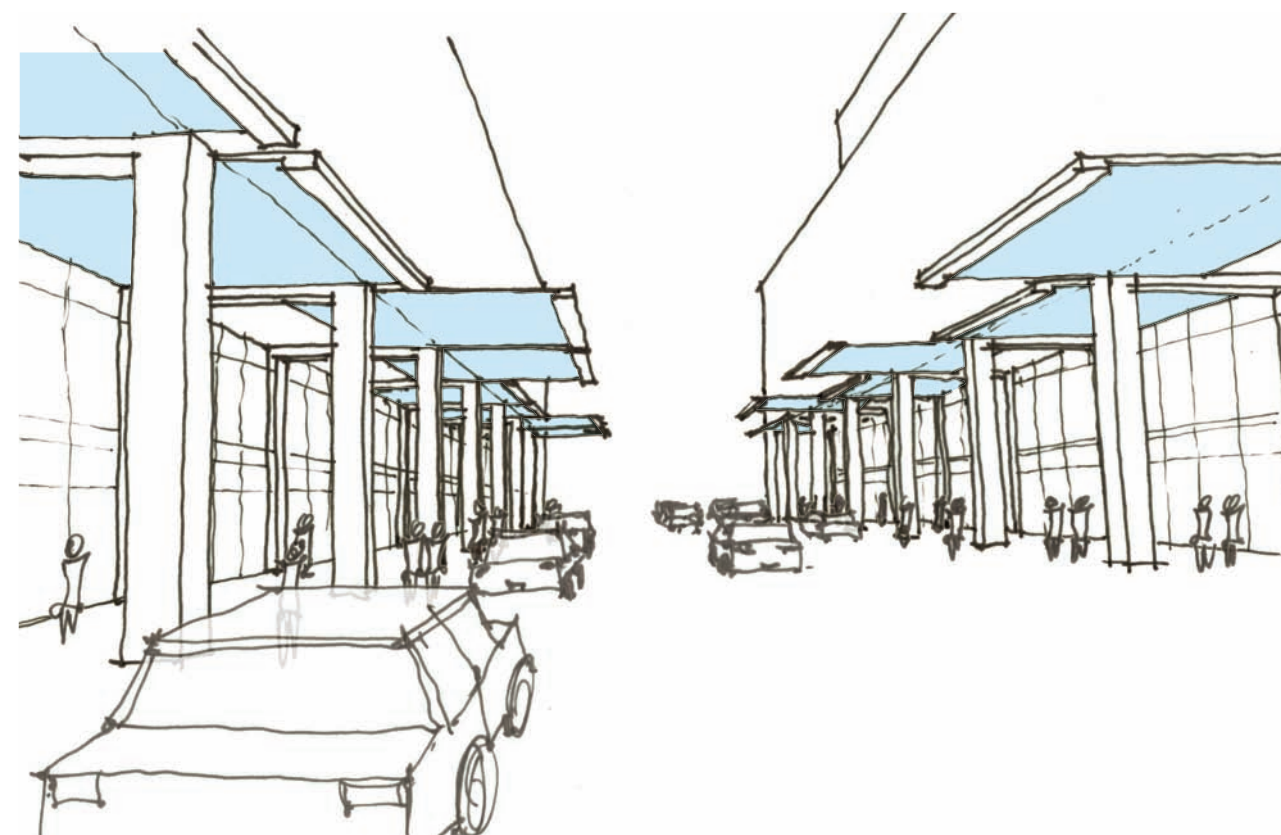
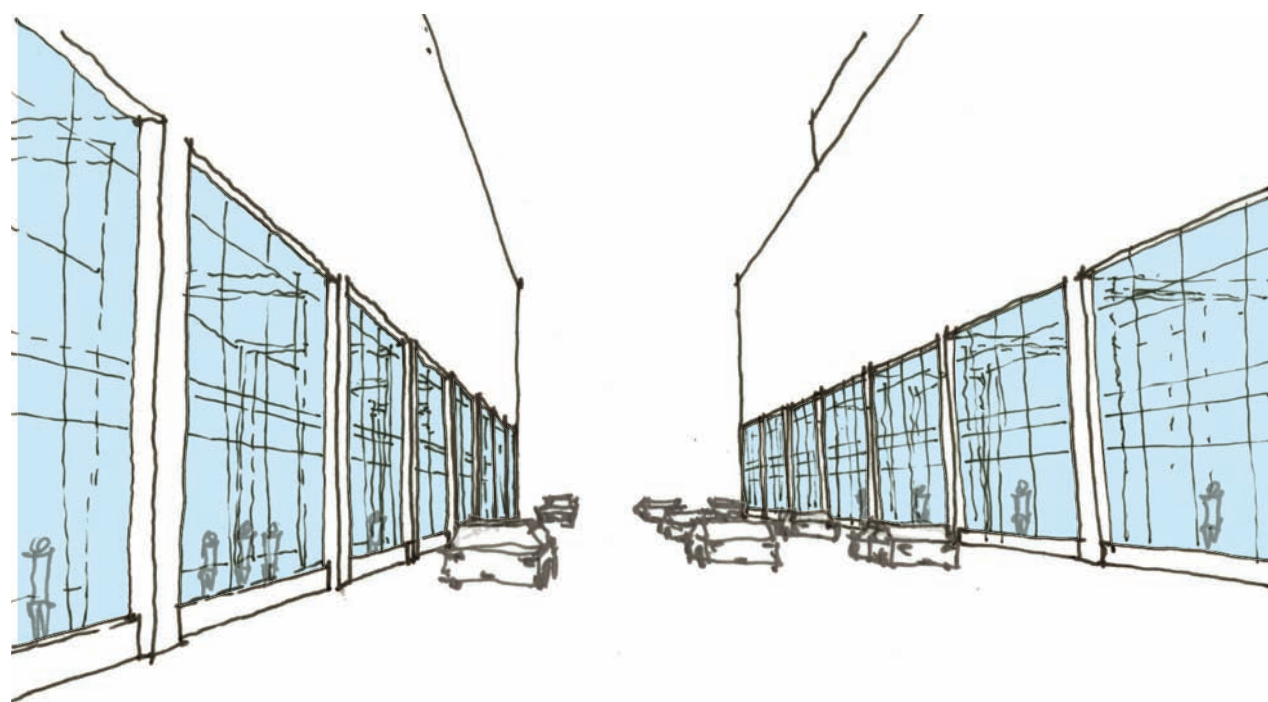
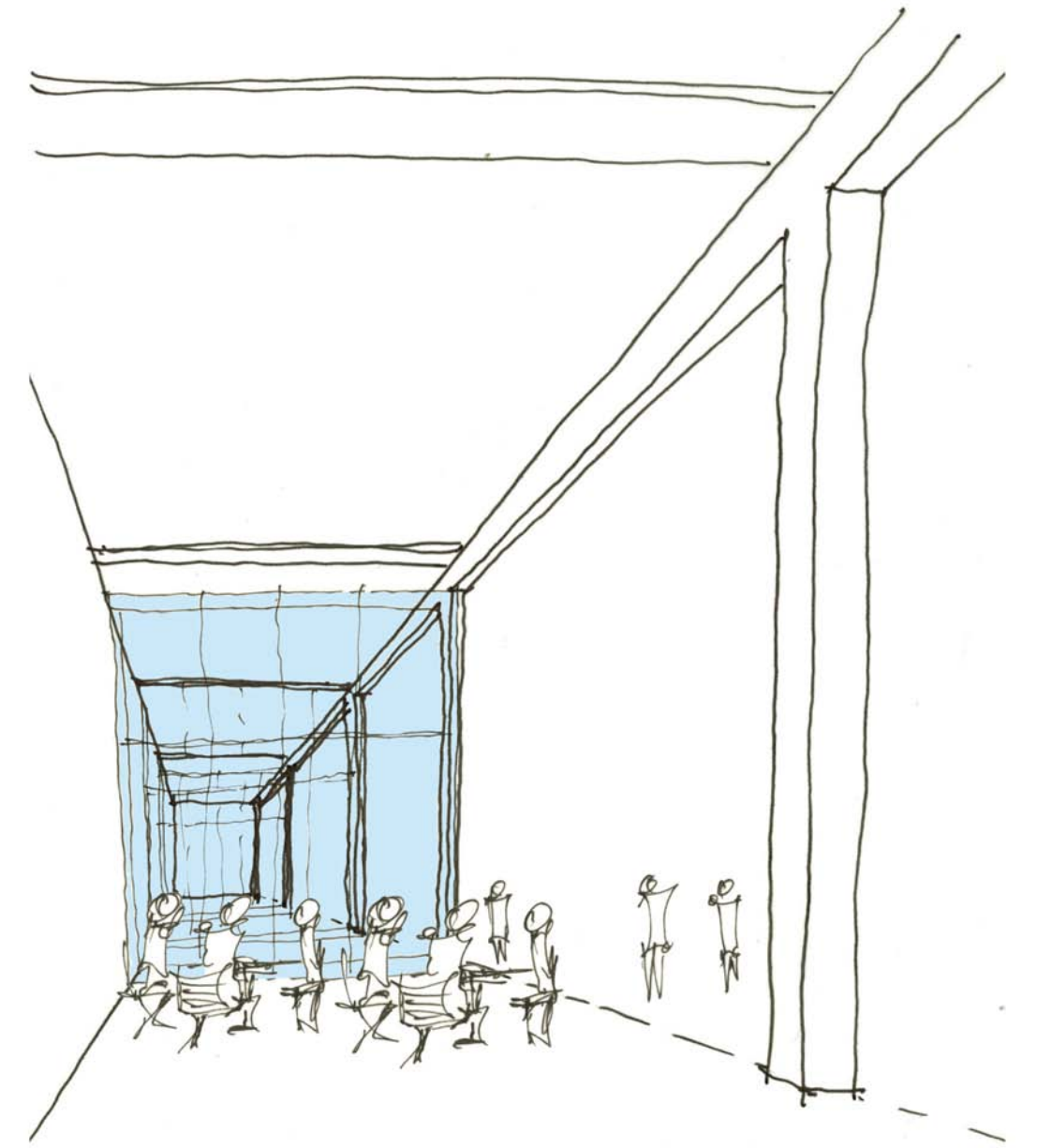
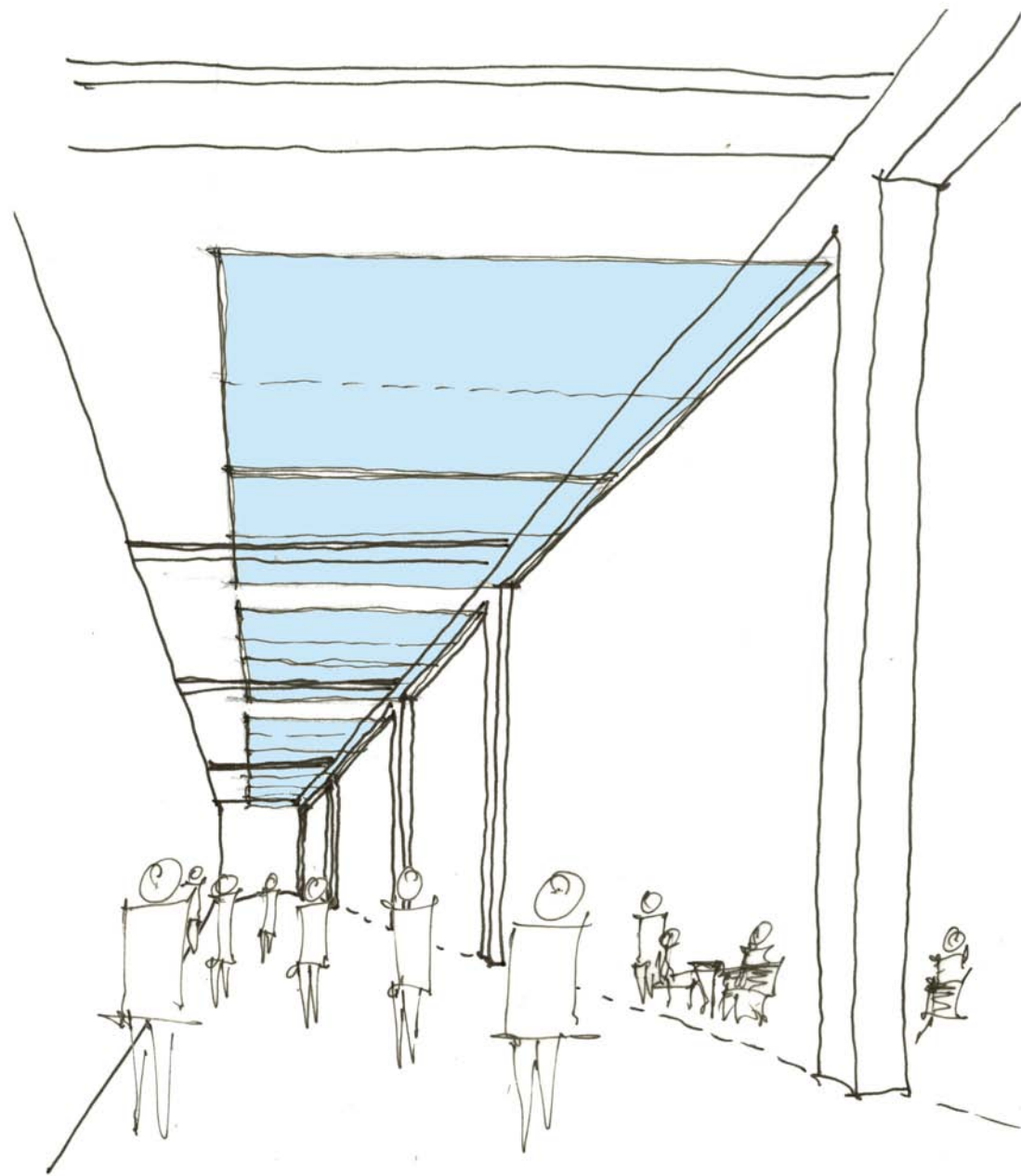


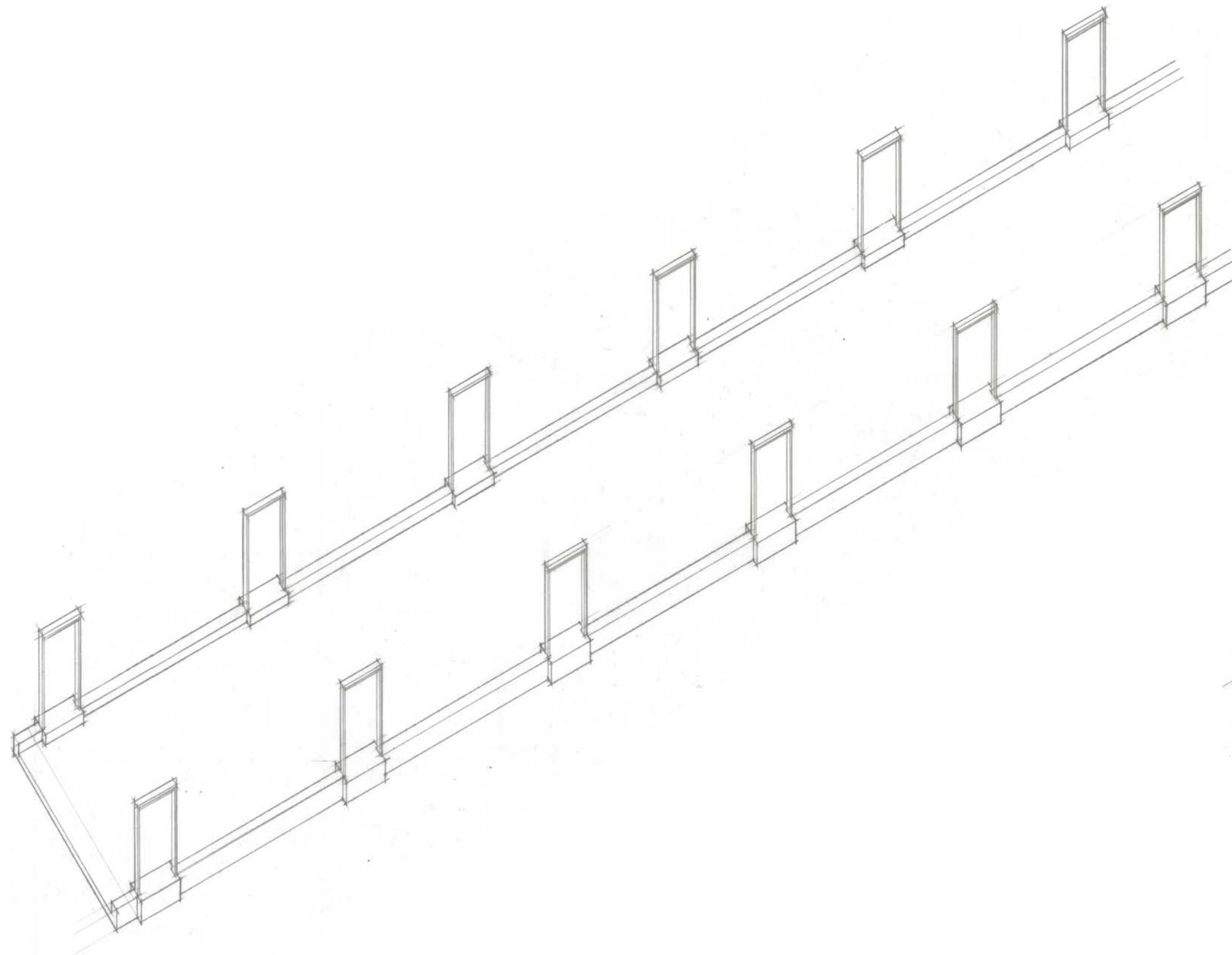
proposed master plan at street level



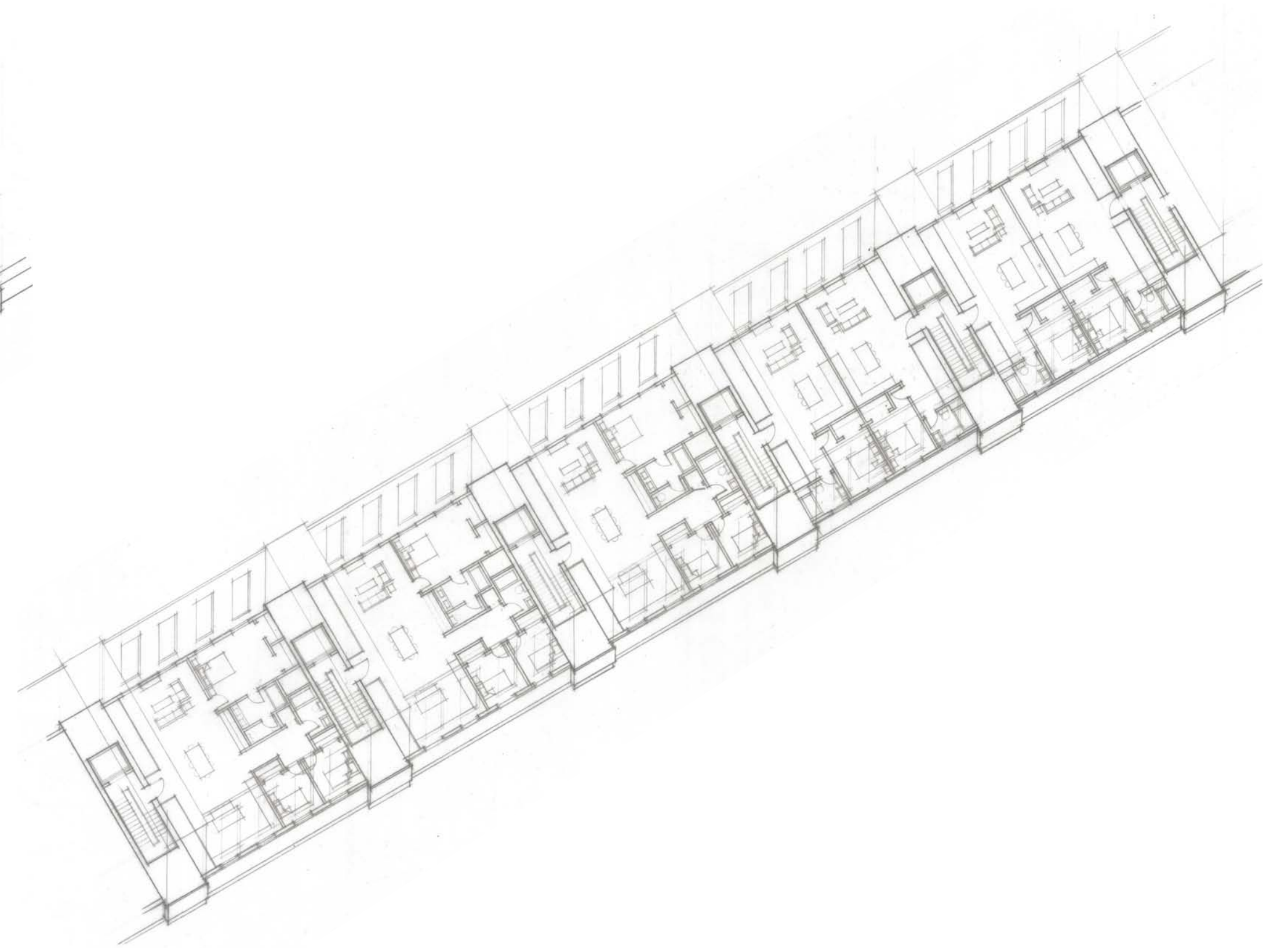
The upper road network (left) is designed to be both infrastructure and structure for the enclosed space within. Space would be provided for apartments, ticket booths and offices for the concert pavilion, and other needs of the city.

Preliminary sketches for the double glass wall system at the typical city block street front (right).

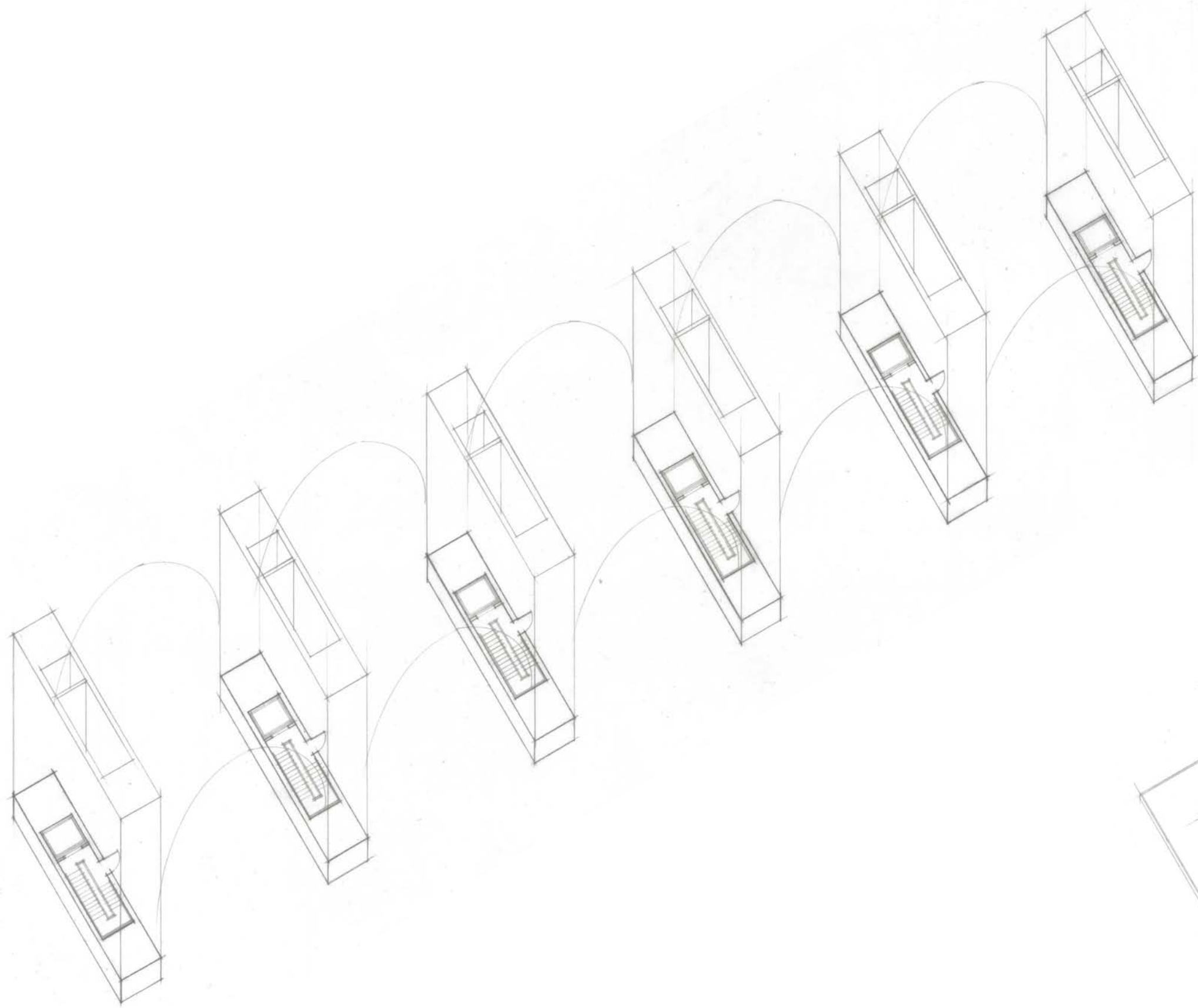




roadway for cars



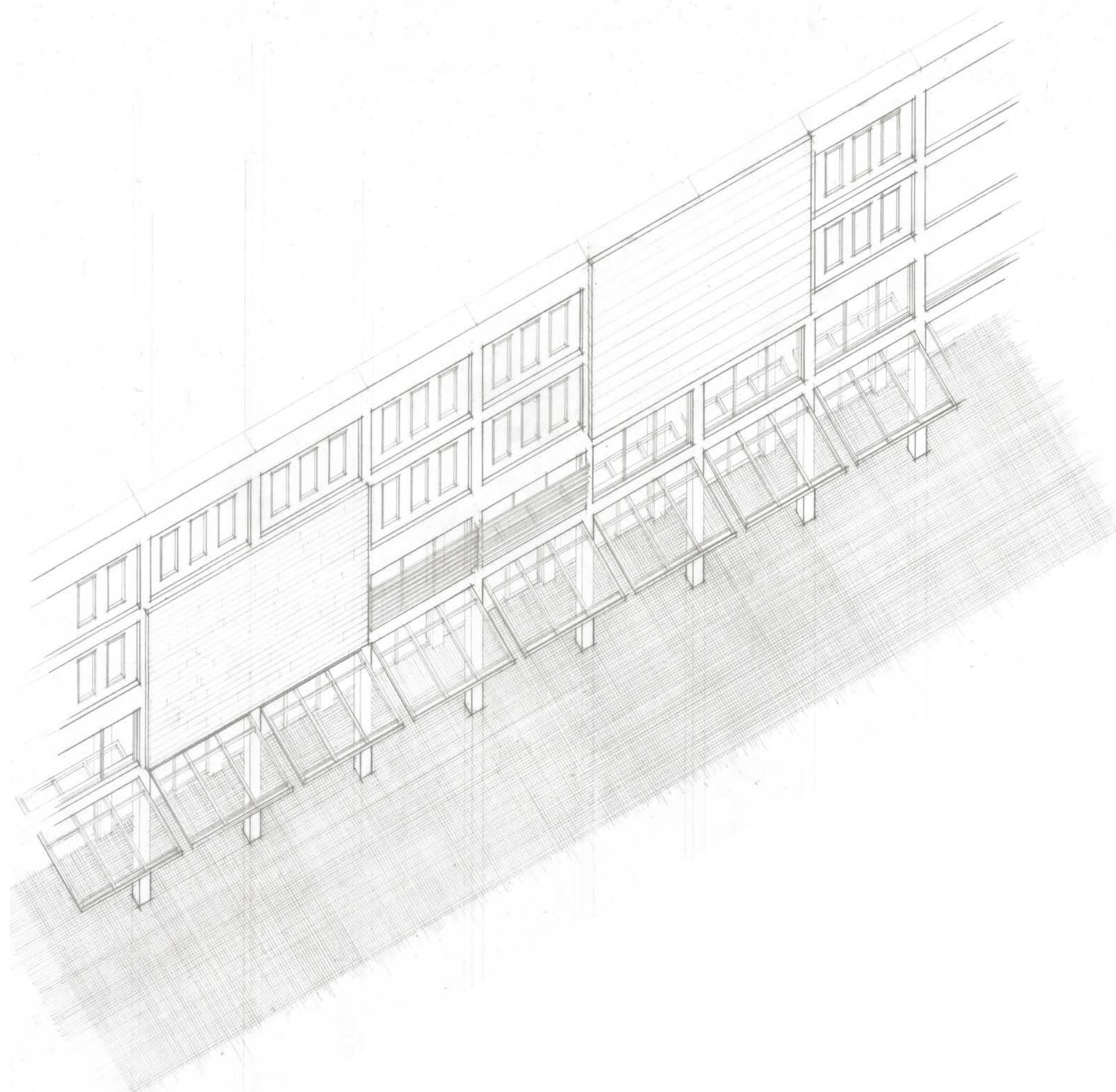
apartments below roadway (3 bedroom and 1 bedroom)



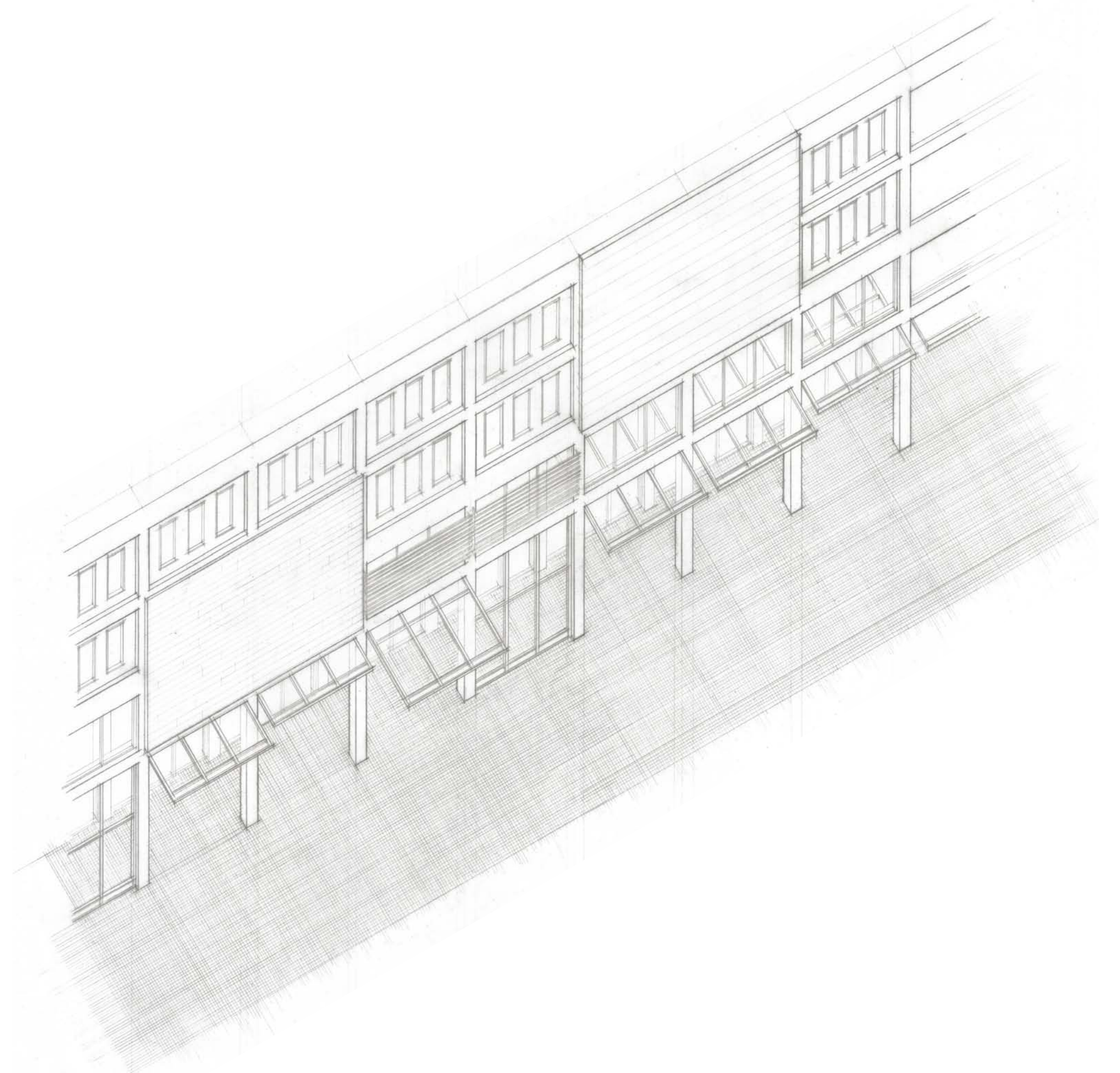
stairs and elevators up to apartments



parking for residents at street level

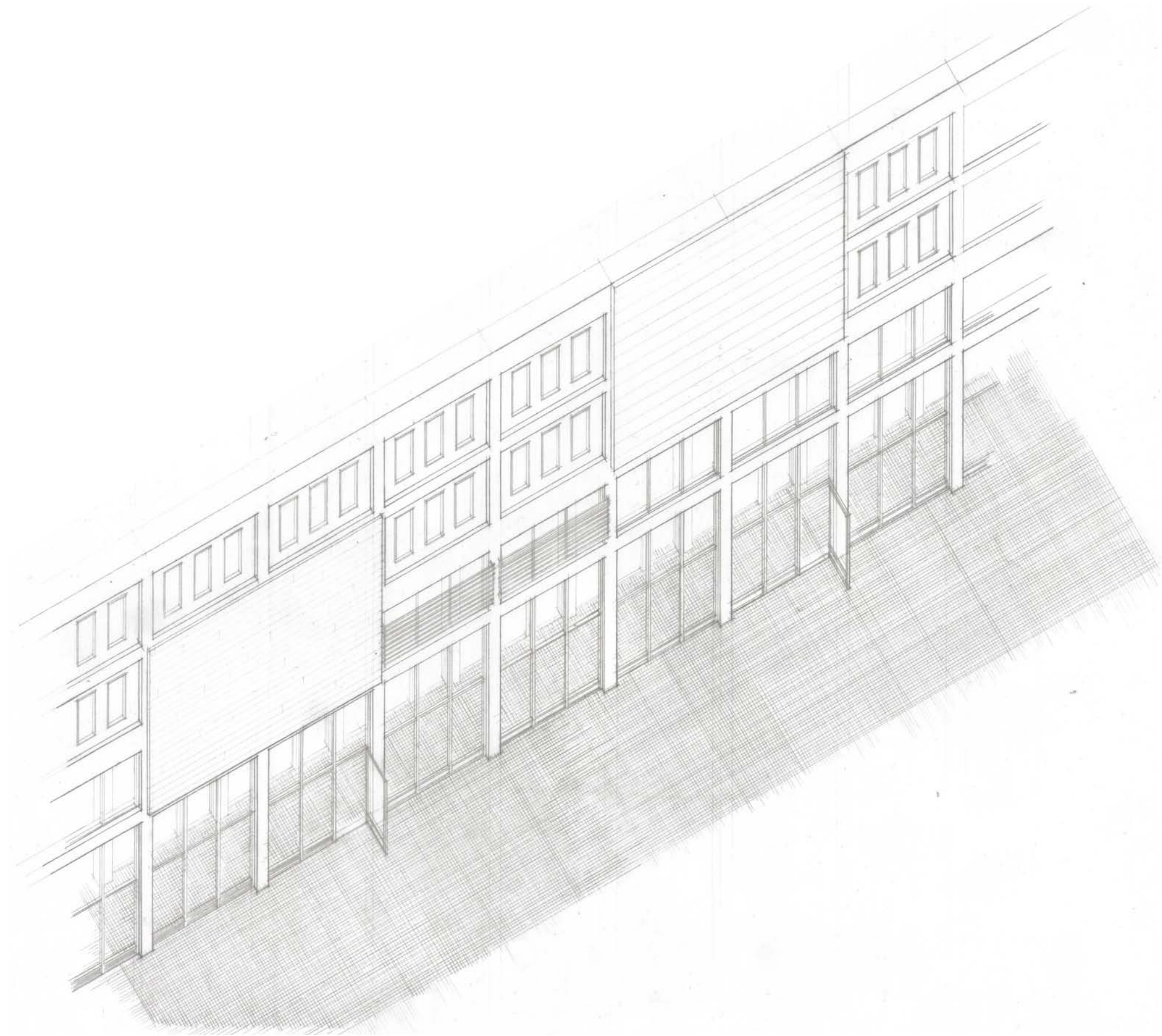


glass wall open in warmer weather with the ability to light the street

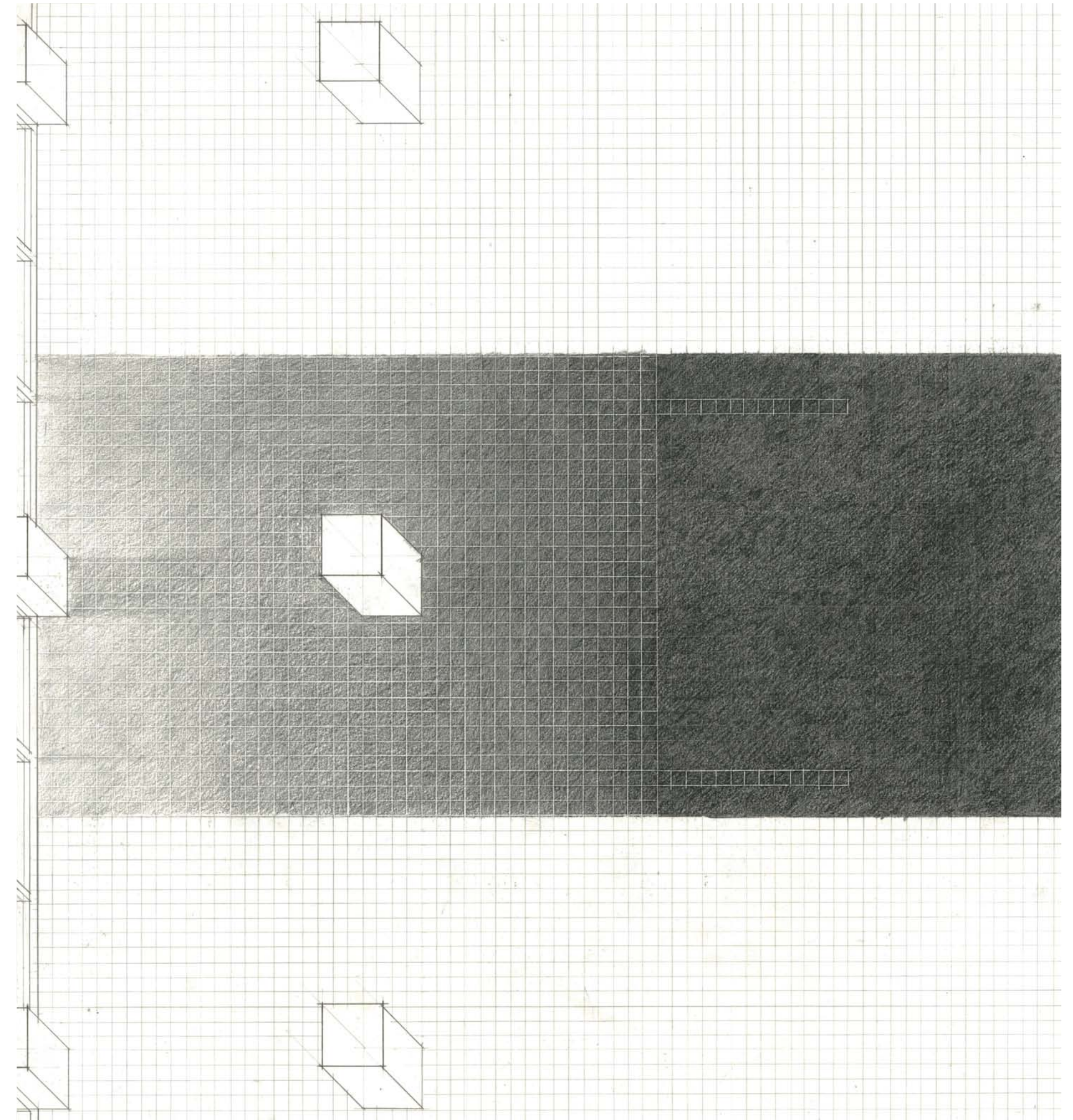


glass wall open or closed at the discretion of the tenant

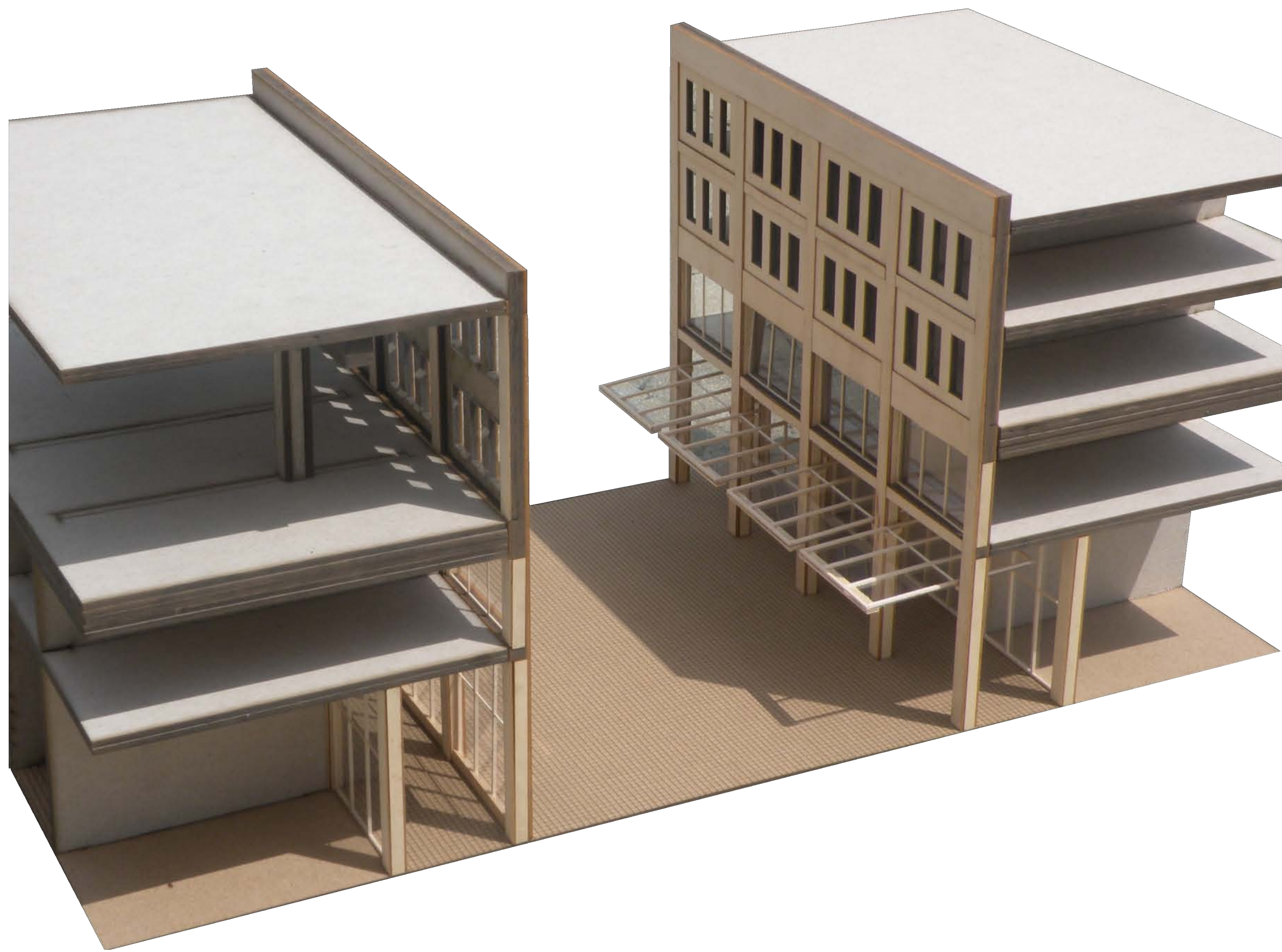
For the restaurants and retail at the street, a double glass wall system provides a closed arcade during the winter but at the same time is designed to allow the outer glass wall to rotate up and provide open air cover for outdoor dining and shopping during warmer months. Streetlights are incorporated into the design of the outer glass walls so at night, when the walls are up, the streets are lit and more likely to remain active. This design element frees the street from freestanding light posts to accommodate changes in street conditions.



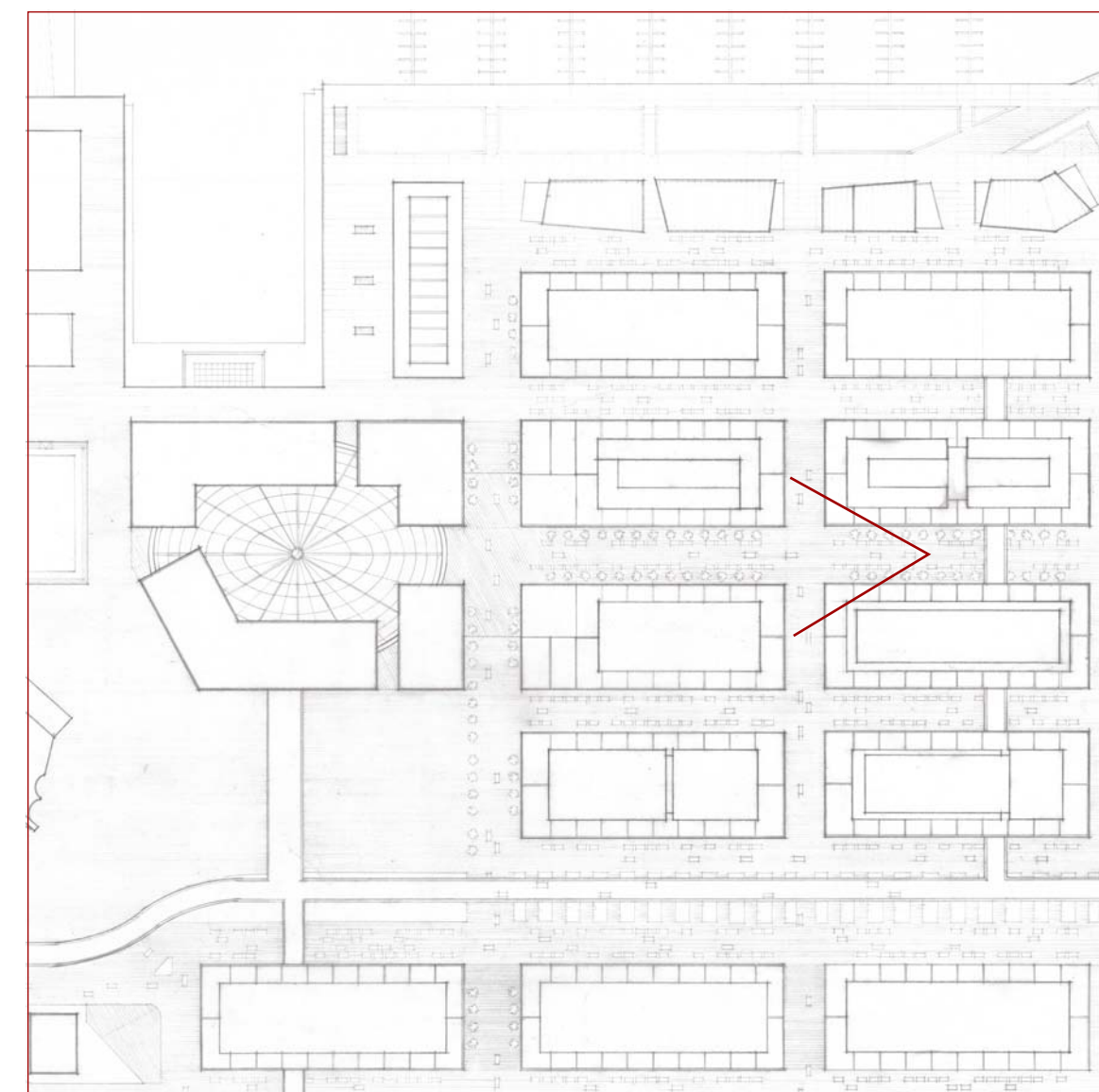
glass wall closed in colder weather to create an interior arcade



There is no distinction in material between the arcade, sidewalk, and street as 8"x8" stone pavers are used for the entire surface between blocks. At night, lighting from underneath shines up from below the spacing between the pavers to clearly define car lanes, sidewalks, and on-street parking. These lights can be turned on and off depending on the circumstances to allow the streets to embrace a variety of conditions.

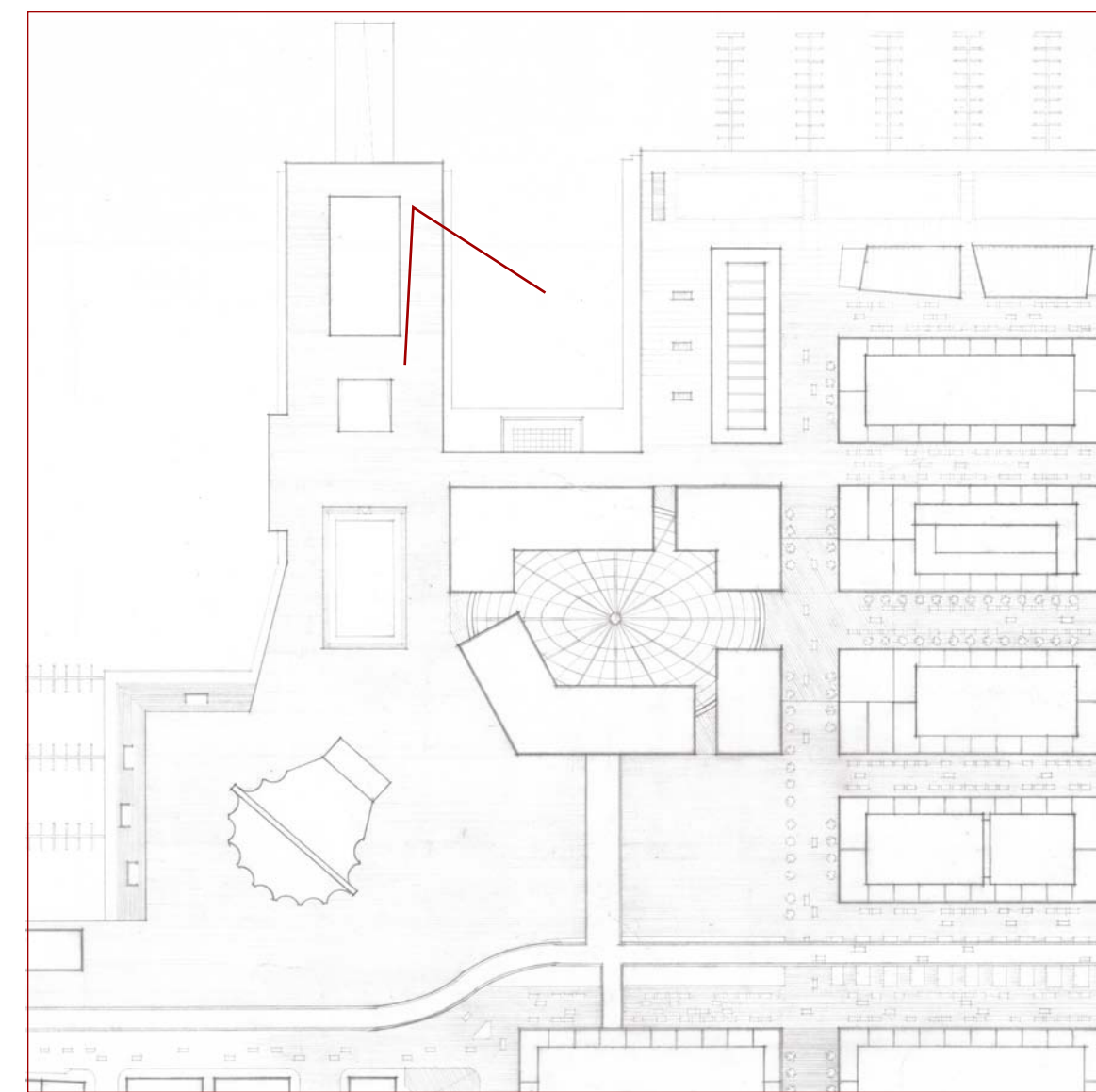




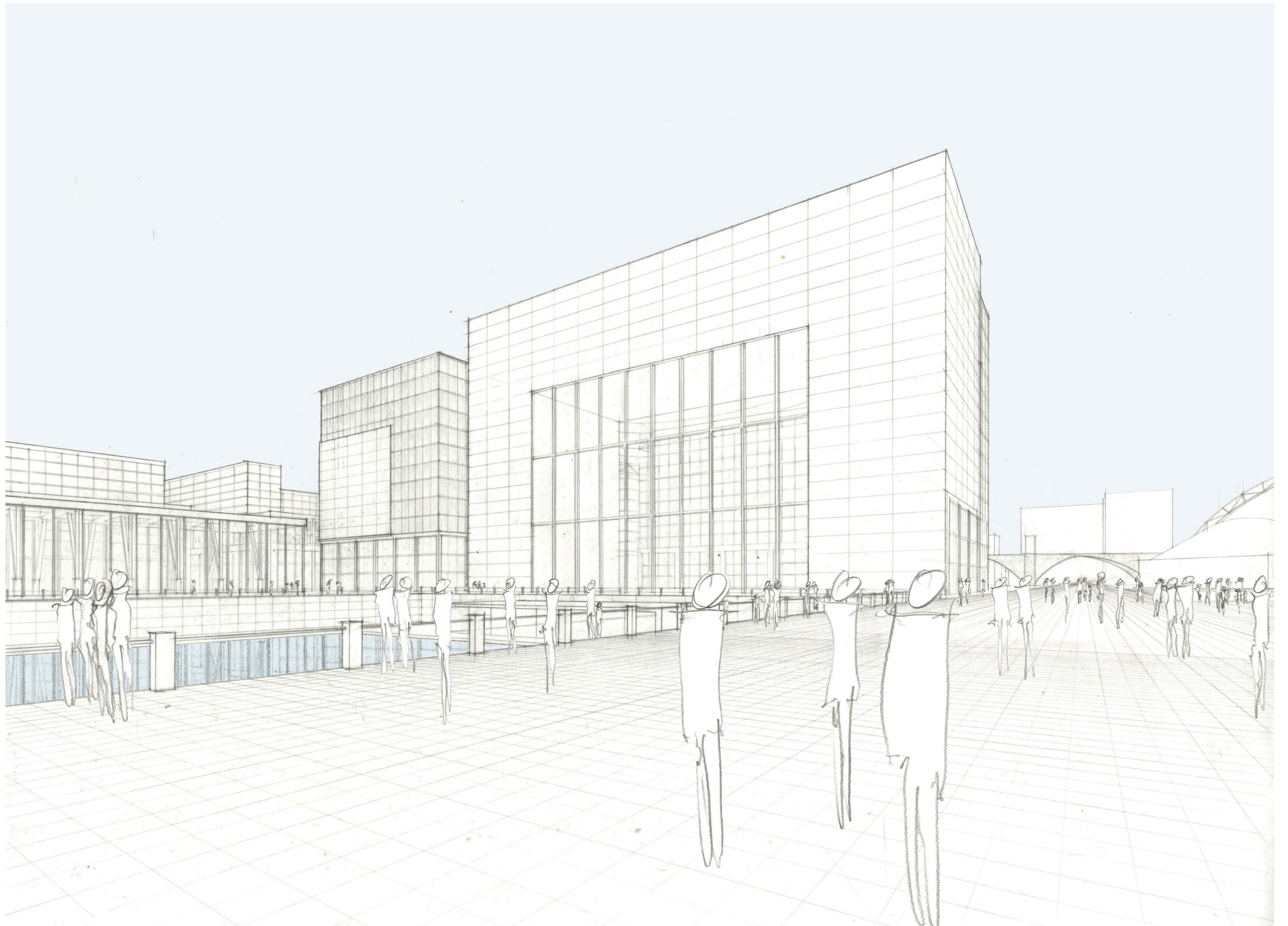


view down the street towards the covered piazza



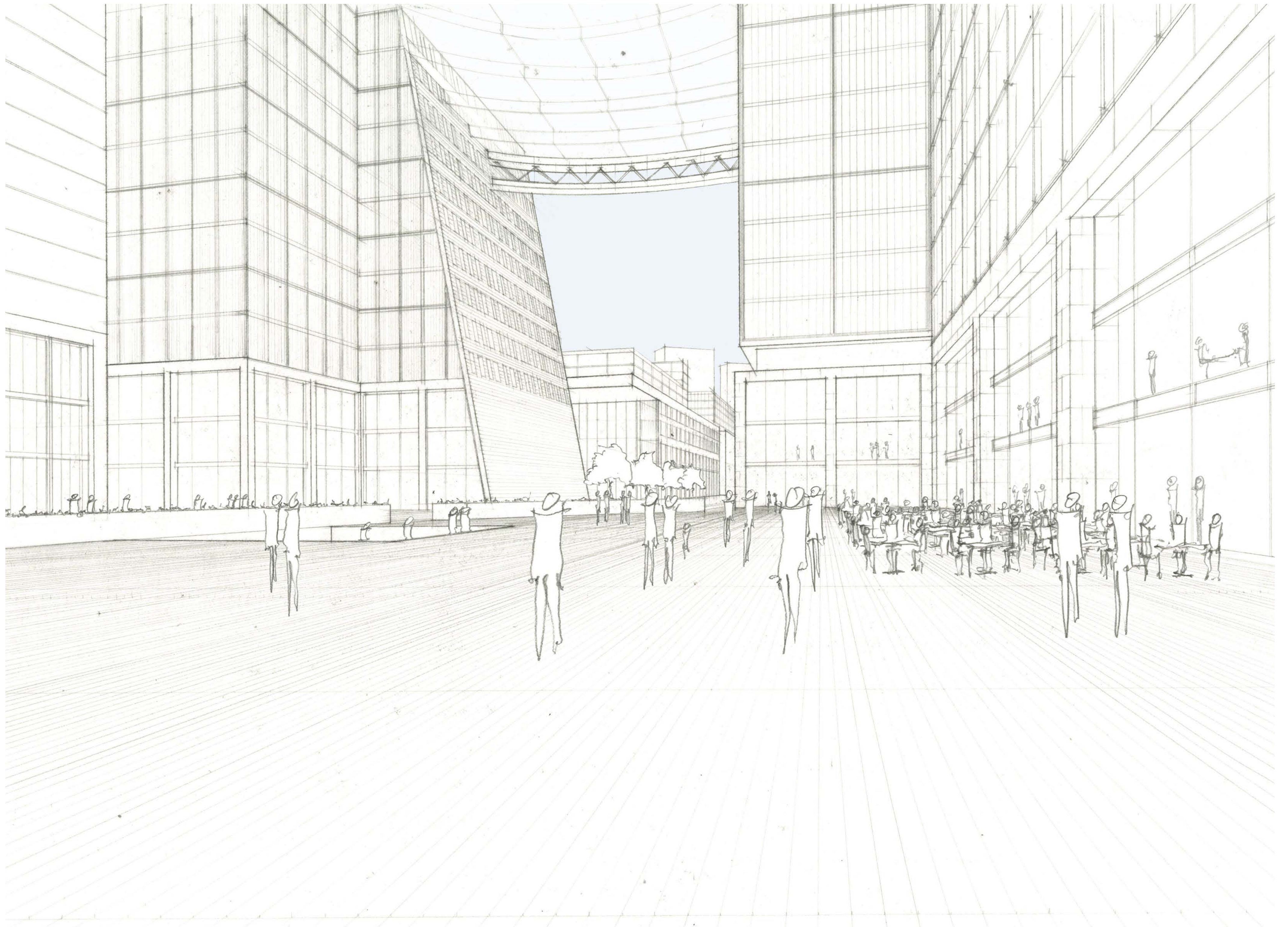


view towards the ferry terminal at the covered piazza



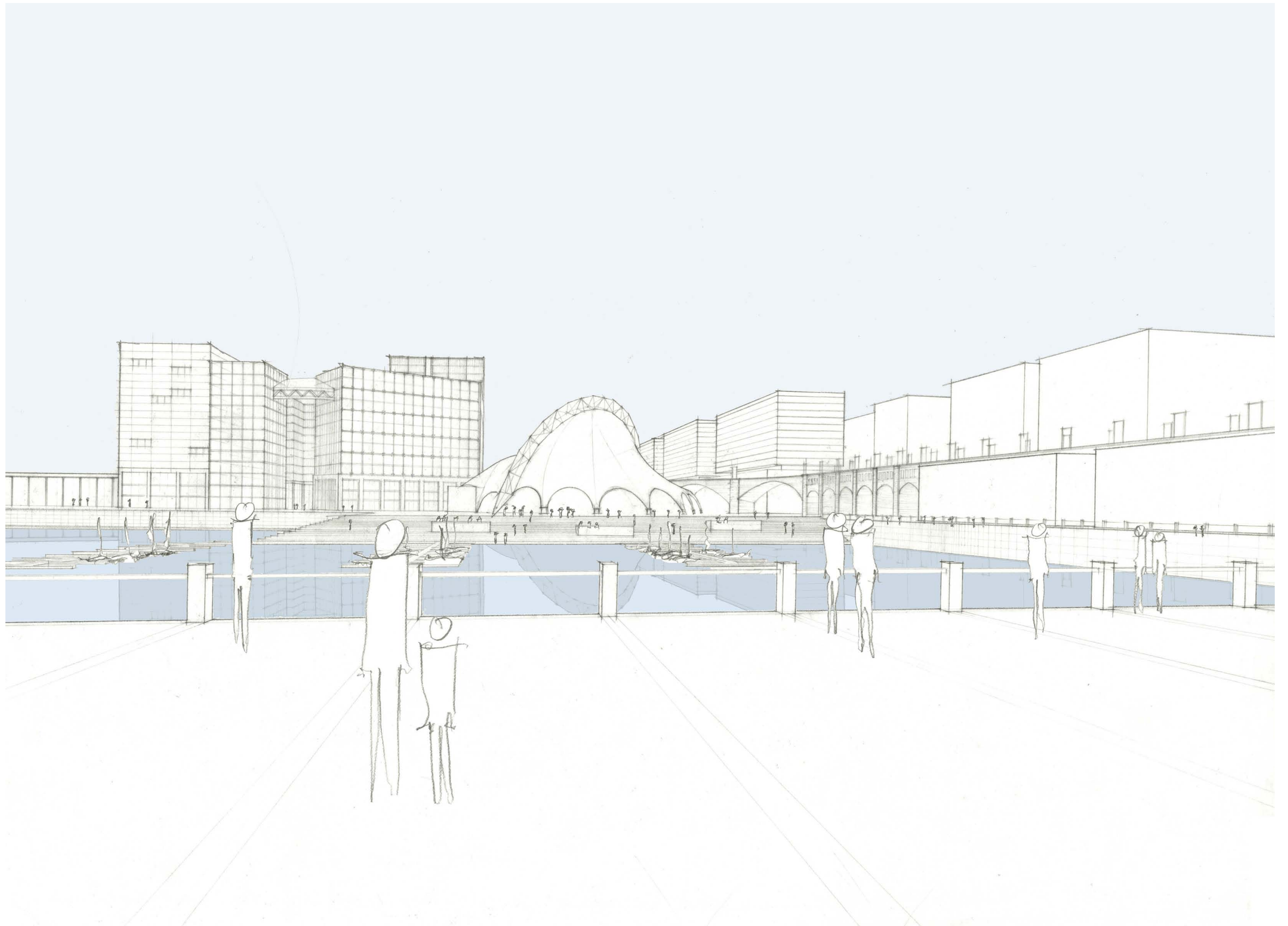


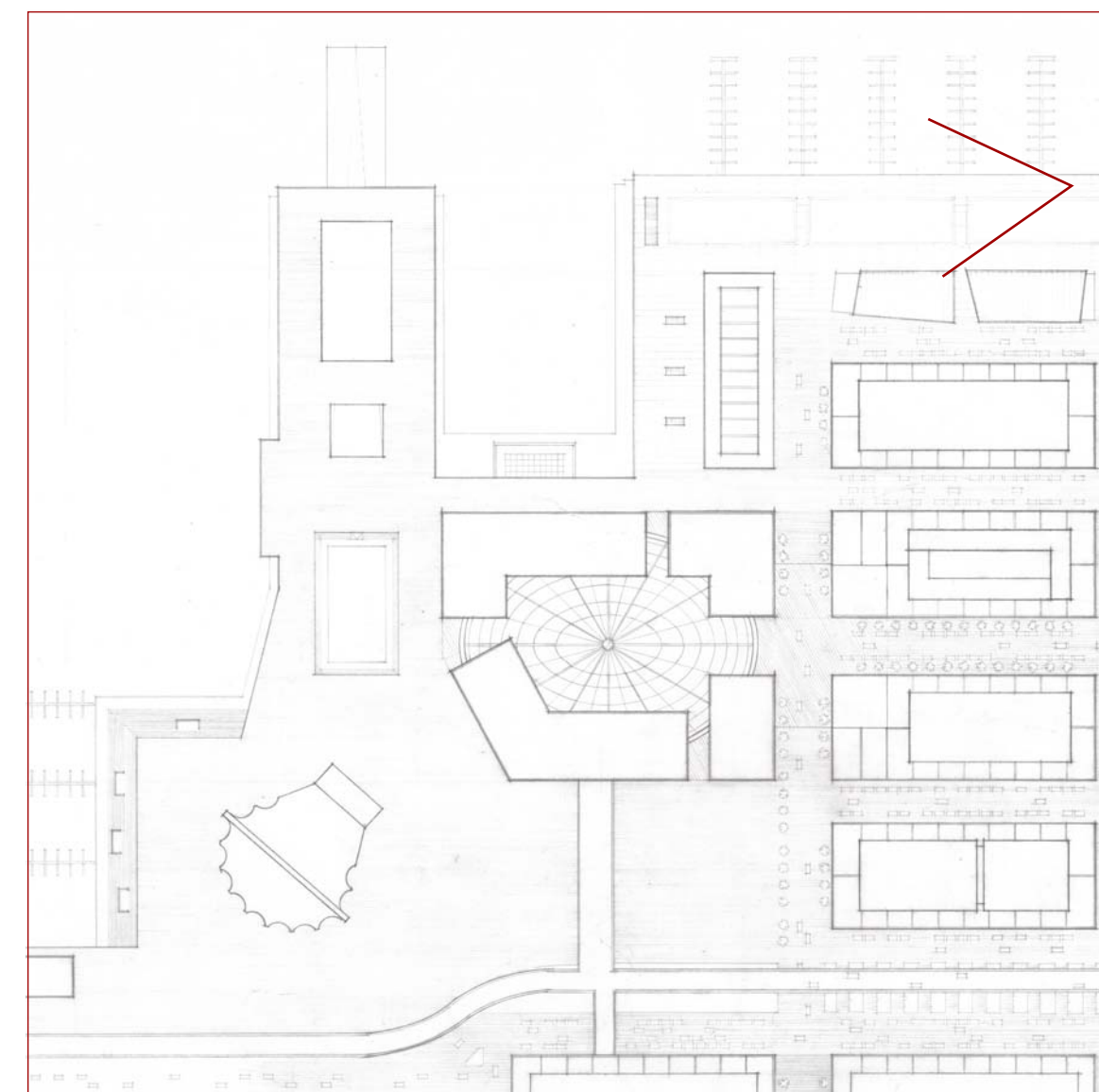
view east from the covered piazza



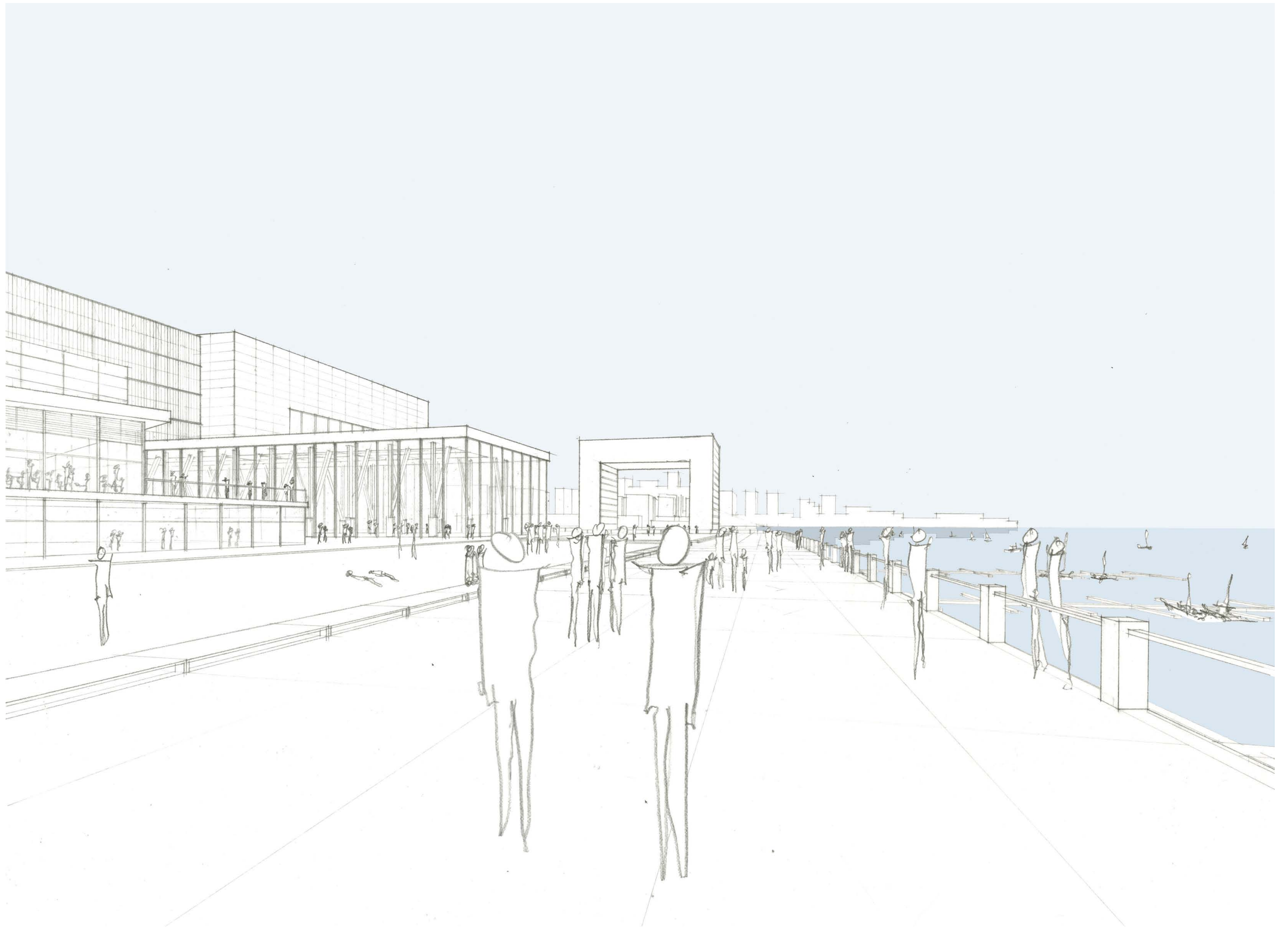


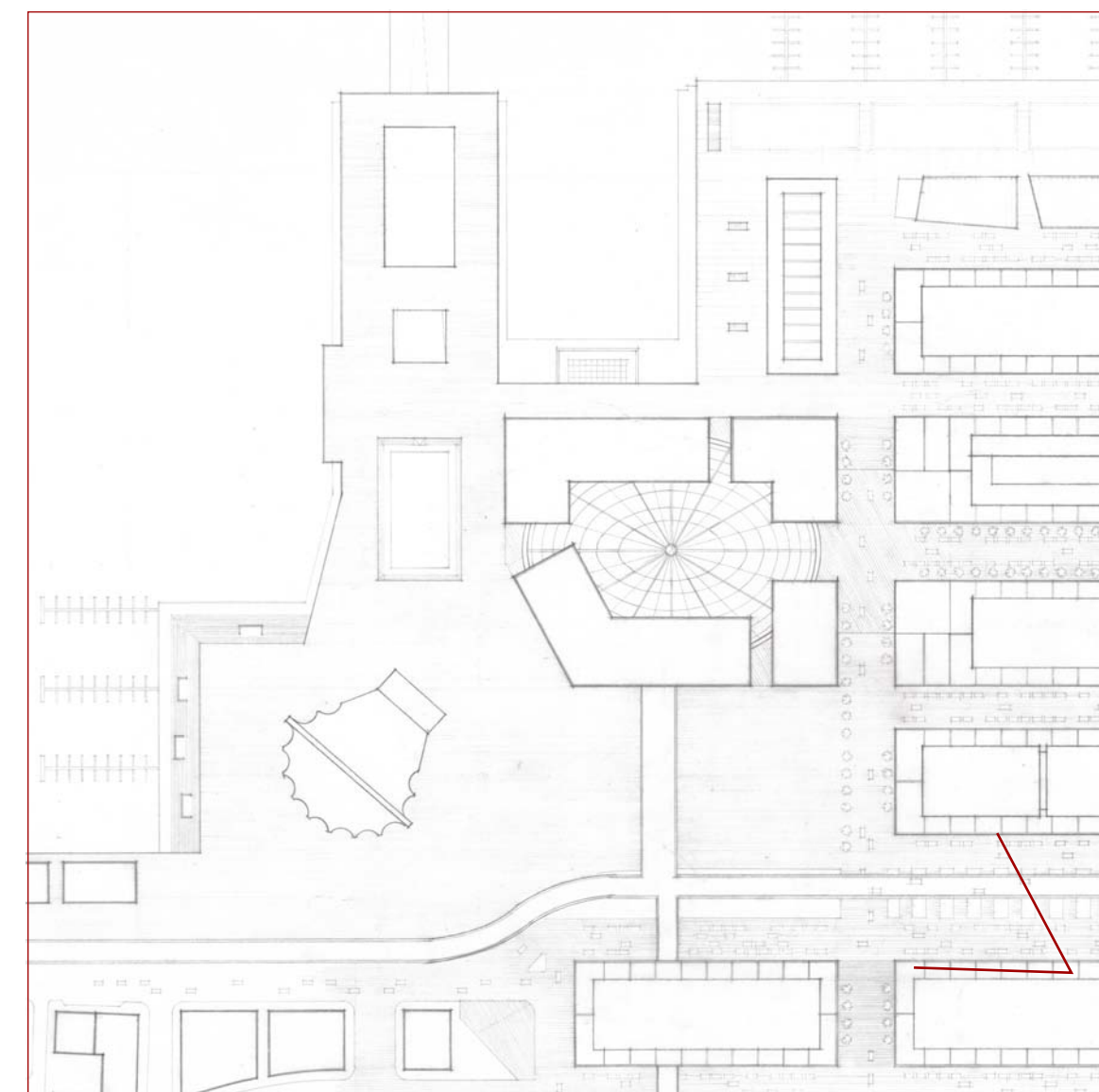
view towards the concert pavilion and the approach by boat



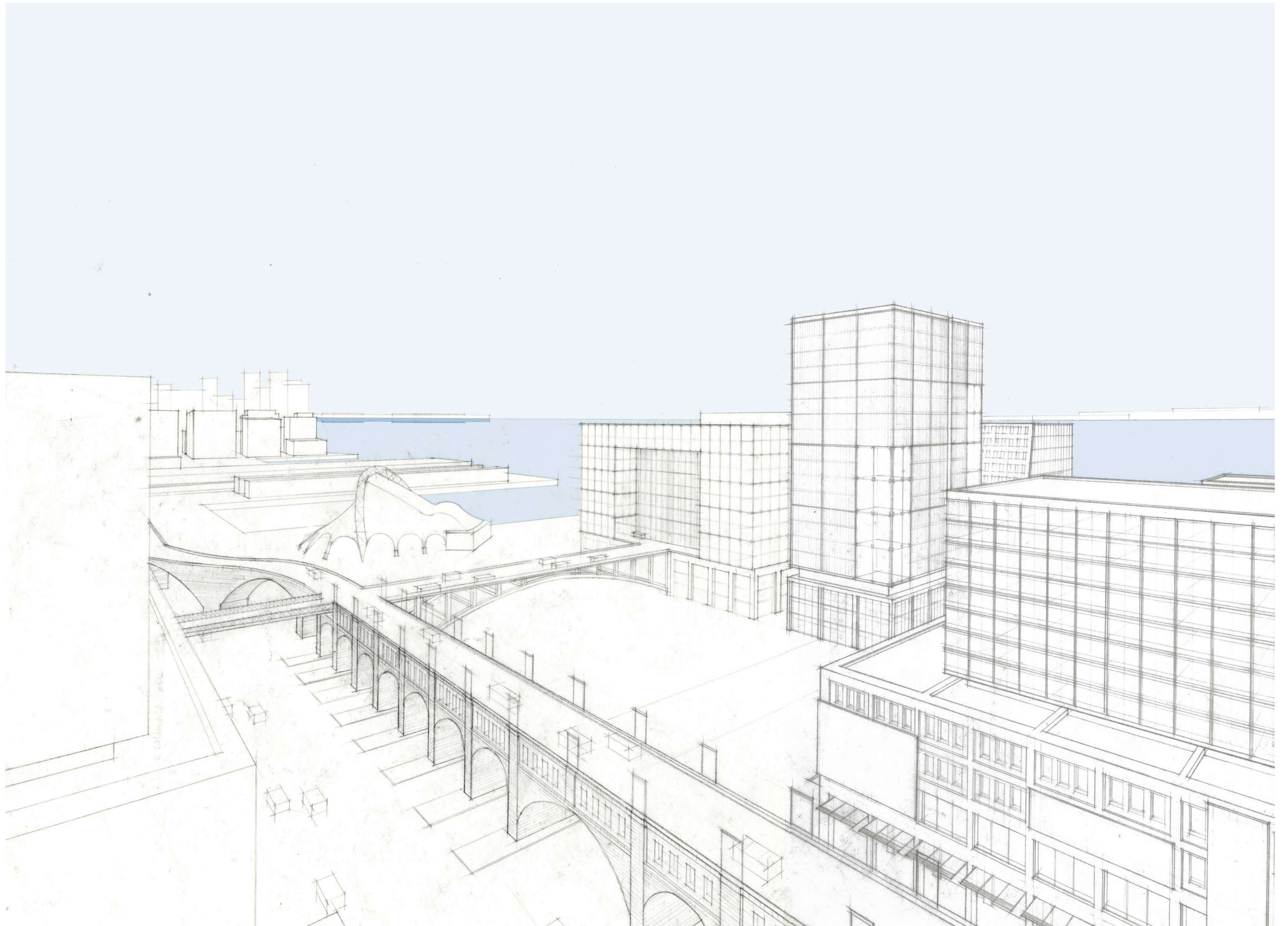


view at the waterfront towards the existing city





view of the covered piazza from across the upper road network



[citations]

Images

Page 1

Source: "Runway at Logan Airport" Photograph.
"Fast Finish." HNTB Designer Number 95-2011: 16.

Page 2

Source: "Boston" 42°20'57.84" N and 71°02'02.17" W. **Google Earth.**
June 18, 2010. May 16, 2011.

Page 4

Source: "Boston" 42°20'48.38" N and 71°02'09.00" W. **Google Earth.**
June 18, 2010. May 16, 2011.

Page 6

Source: "Boston" 42°20'48.97" N and 71°01'48.16" W. **Google Earth.**
June 18, 2010. May 16, 2011.

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[vita]

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