

# **Building an Urban Image**

by Andrew J. Russin B.A. Washington University St. Louis, Missouri

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Submitted to the Department of Architecture on 8 May 1992 in partial fulfillment of the requirements for the degree of Master of Architecture.

#### Abstract

This design project explores the principles of "urban legibility" and "shared space". The readability, or imageability (in Kevin Lynch's term) of a city results from the recognition of larger urban patterns, organizations, and elements. One such pattern, the "city edge", is identified and explored through the design. A "shared space" is one which can be experienced (to some degree) from both inside and outside of the enclosure of a building.

The site is on the Boston waterfront. The program is a 70 room hotel with comercial space on ground level.

Thesis advisor: William Hubbard jr.

Title: Associate Professor

## Contents

Abstract	3
Introduction	5
Urban Legibility	
Shared Space	/
The Site.	9
The design	15
Credits	69
Bibliography	69

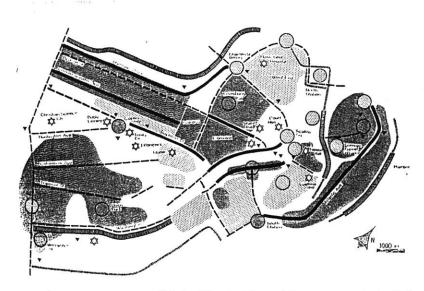


FIG. 3. The visual form of Boston as seen in the field

#### Introduction

The following work is a design project generated primarily by two intentions: to establish an "urban legibility" and to explore the idea of "shared space". Both are briefly defined below.

### Urban Legibility

Kevin Lynch, in *The Image of the City* argues that legibility is an essential quality of any urban environment and that it "heightens the potential depth and intensity of human experience"1. In Boston the continuous brick walls of Beacon Hill, the regular directional grid of the Back Bay, and the land marking nature of the Prudential Tower all present clear comprehensible urban images which make Boston navigable, accessible, and enduring. Lynch categorizes the city into five primary patterns: path, edge, node, district, landmark. Most of Lynches examples are retrospective; that is, their effects were not necessarily preconceived or planned, but Lynch's as the "high and tall building spine through the heart of the city suggest an active reordering of the city, not determined by existing local urban patterns but by an opportunity and desire to create a new, clear, imageable reading of the city.

In Lynch's examples legibility requires a certain clarity and simplicity at the urban scale. The clarity of the urban form is not intended to predicate simplicity in its building nor human size forms. On the contrary, because of a larger clear organization, the elements within may, and should, be differentiated, contrasted, opened, closed, according to the needs of habitation without becoming unreadable.

Urban legibility as defined above is not derived from a careful reading of the immediate local area or neighborhood. It requires inspection and manipulation of districts, and multiple block zones at the larger city size.

## **Shared Space**

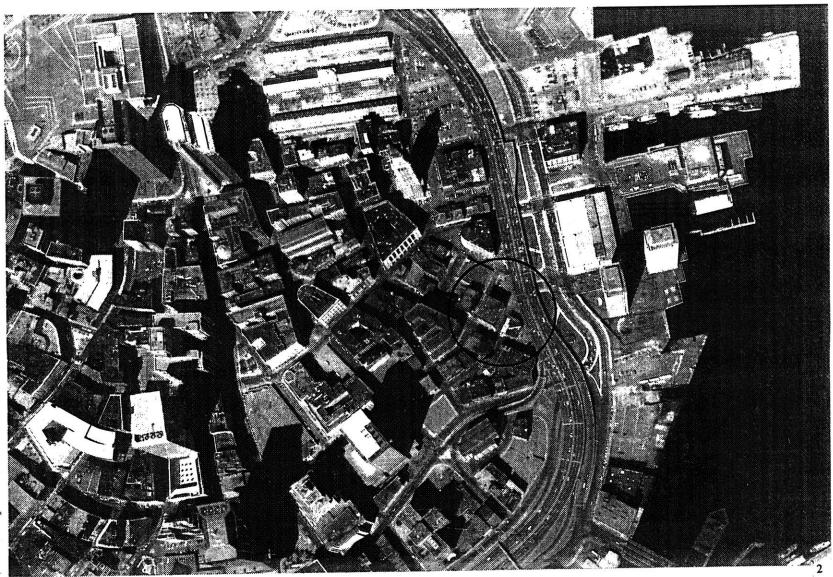
Late twentieth century urban western society spends most of its time indoors. This is particularly true in moderate and northern climates. The fabric of these cities is generally still a figure to ground system. Building edges are either a continuous surface with small openings or, in newer districts, continuous glass surfaces with few opaque surfaces. In either case there is a distinct dividing plane between what is inside and what is out.

This leaves the outside space as simply a zone between buildings, (streets) a zone which is connected to the interior only through a particular surface treatment. Streets therefore become primarily simply accessways with limited volumetric variant ions.

The idea of "shared space" consists in opening the interior space and the life within to the outside in order to create a physical exchange with the life outdoors and invite a mutual awareness on both sides (not just the inside looking out).

This can be achieved through the use of transparency (glass and frames) and also through volumetric shifts in both plan and section which interlock with the street. Transparency must be balanced against some opaque surfaces in order for the void to read as void, otherwise there is the risk that an entire single volume of glass will read as a solid. Transparency also provides an abundance of daylight which (especially in northern climates) is generally essential for humane living.

The idea of "shared space" comes directly from early modern Architectural notions about open interior to exterior space which breaks away from the figure ground bearing wall system.



EXISTING SITE

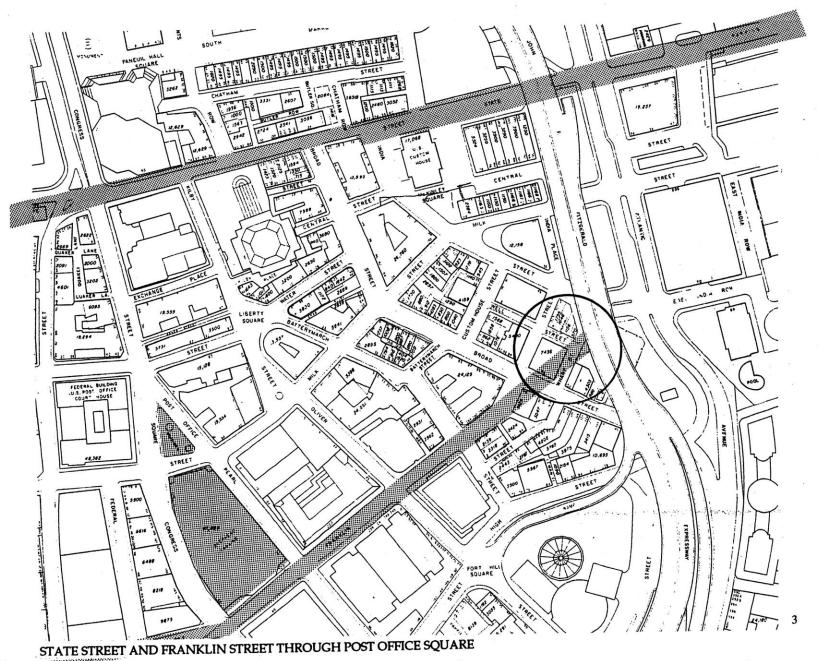
#### The Site.

The project site is a small area along the Boston waterfront. The present plan to depress the existing highway artery and create open space along a new surface road presents an opportunity to define an urban image for the Boston waterfront. With the highway removed, there is the possibility of imagining the buildings of downtown being brought to form an "edge" (in Lynch's terms) at the edge of the new waterfront boulevard. Lynch's notion of city "edge" as a legible order serves as the main urban design guideline.

A second organizing condition is the opportunity to extend Franklin Street through to the waterfront, providing a direct visual connection and pedestrian access from nearby Post Office Square, the heart of the business district. This would offer a second through street to the water (State Street connects the city to the waterfront a few blocks away) making orientation and navigation through the existing medieval street pattern markedly easier.

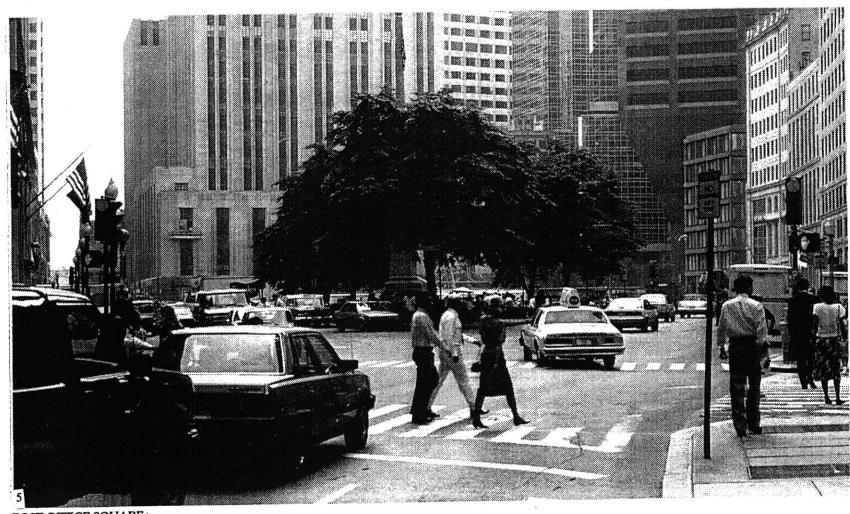
The program is a 70-room hotel with meeting room facilities, 100 seat restaurant, and commercial space on the street level. This seemed to be appropriate to the site location and represents a relatively conventional program, thus allowing the design to focus on general city form issues rather than specialized building program.

The size of the site is relatively small. This helps make more manageable the resolution of the design, but more importantly it serves as a test to see if a modest intervention can participate in a larger urban system.



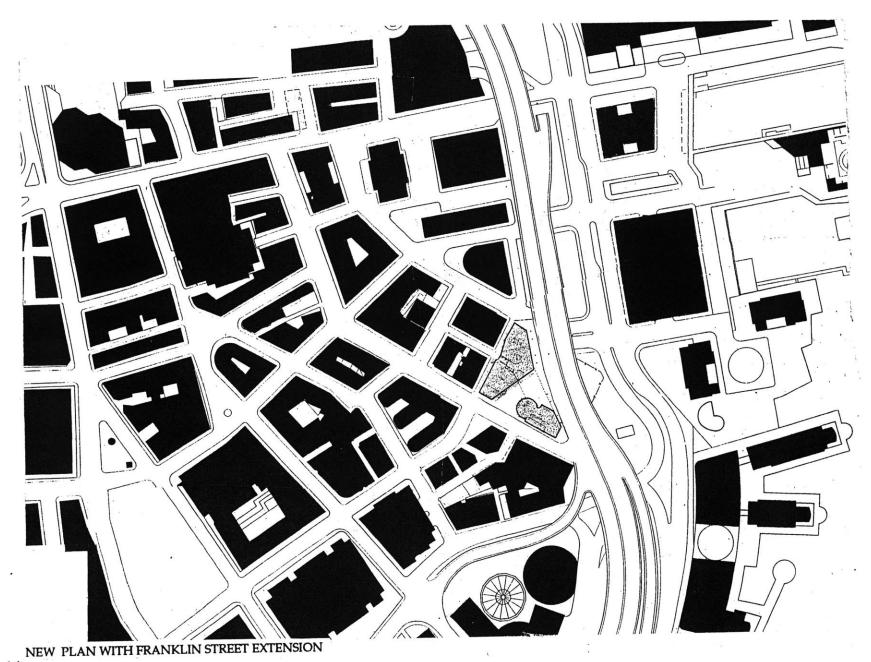


EXISTING SITE ALONG THE WATERFRONT



POST OFFICE SQUARE

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## The design

A structure spanning over the Franklin Street extension serves to both reinforce the city edge and unify the project into a larger horizontal organization rather than two smaller vertical buildings. This seemed to be desirable in terms of the horizontal relationship with the waterfront and also provides a land-marking of the city edge visible from Post Office Square. This bridge element is seen as an "urban room" which along with the two story main level serves as a "shared space". Here the outside world can see in and understand directly the purpose of this building and thus be invited to explore it. The main central space is intended to be a public atrium open at all hours providing both an outlook to the sea and a view back into the heart of the city. This space is tall, narrow, and un-obstructed by solid forms in order to provide maximum transparency, keeping the view of the waterfront from the city as clear as possible. It is raised 30 feet above street level allowing the Franklin Street pedestrian extension to pass underneath with enough vertical dimension to feel public, airy, and open to sunlight.

The bed rooms are oriented towards the longest views, either out to the waterfront or down Broad Street. They form the hardest, most opaque boarders which reinforce both the water front boundary and the Franklin street line.

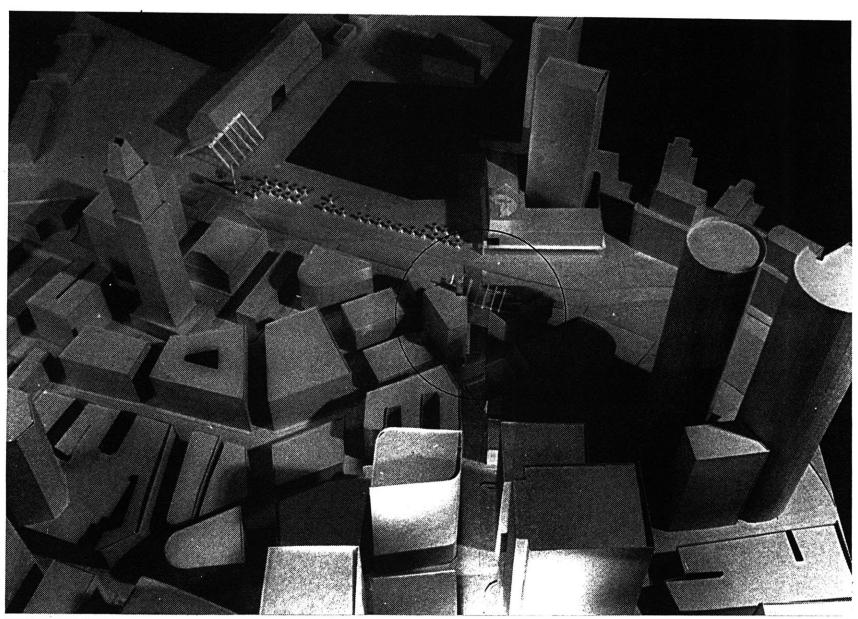
The north side reaches 13 stories forming a thin and vertical shape on the Broad Street front and a wide and horizontal shape on the Franklin Street extension side. This creates a tall edge condition which links with the existing tall buildings along Franklin Street producing a continuous spine running from downtown to the waterfront.

#### Credits

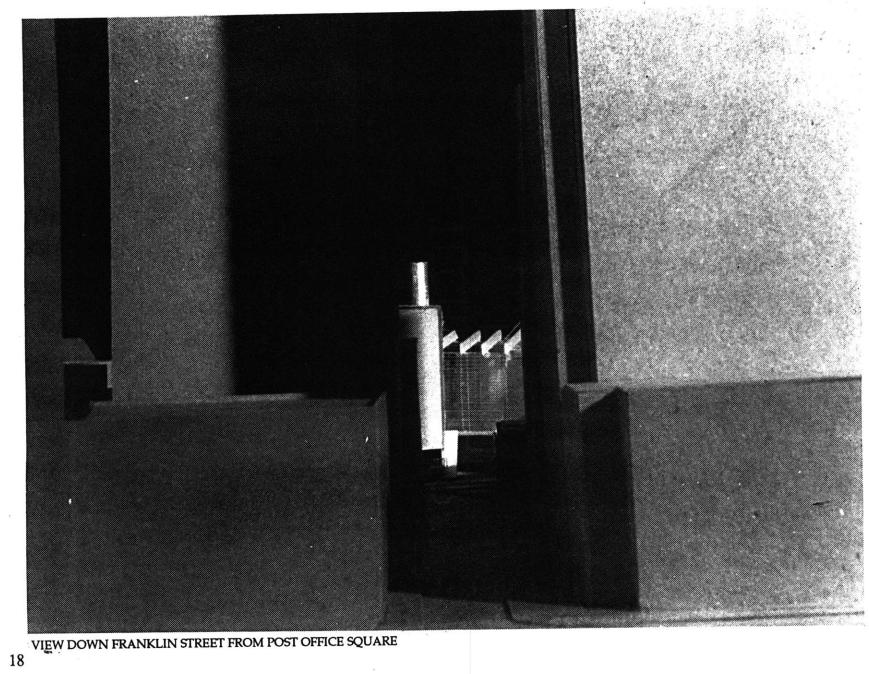
1 Lynch, The Image of the City, Fig 1. Lynch, The Image of the city pg 21. Fig 2.Boston Redevelopment Authority map. Fig 3 ibid. Fig 4. Process Architecture 97 pg.19 Fig 5. ibid.

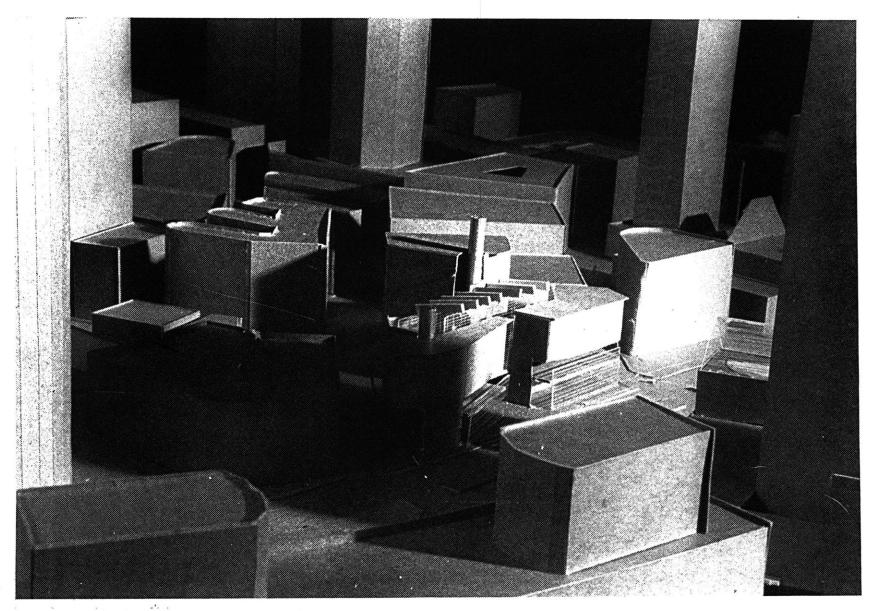
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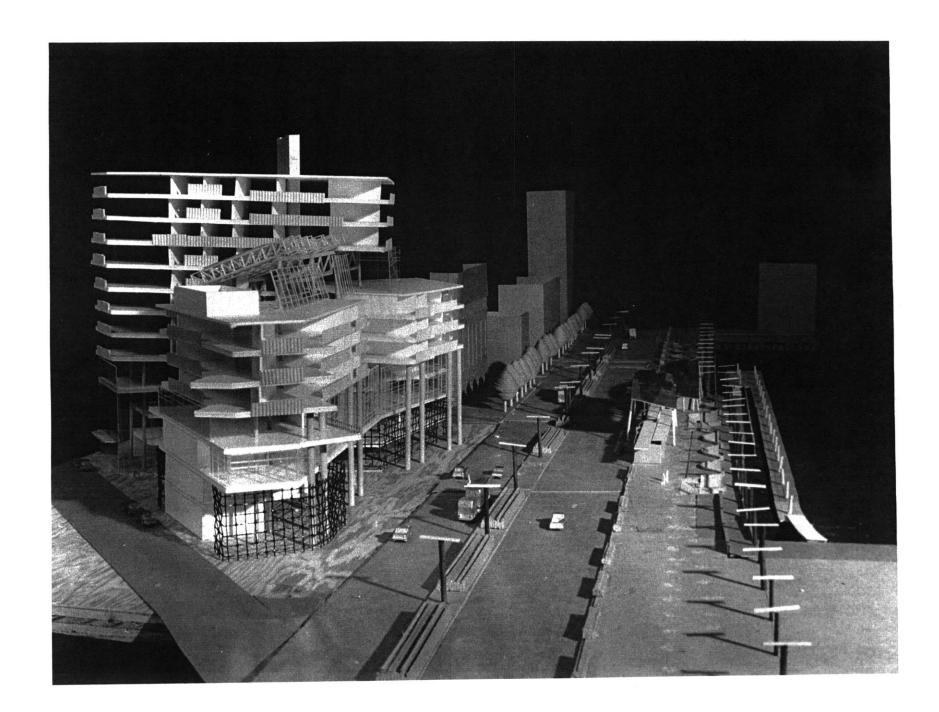
FROM POST OFFICE SQUARE TO THE WATERFRONT



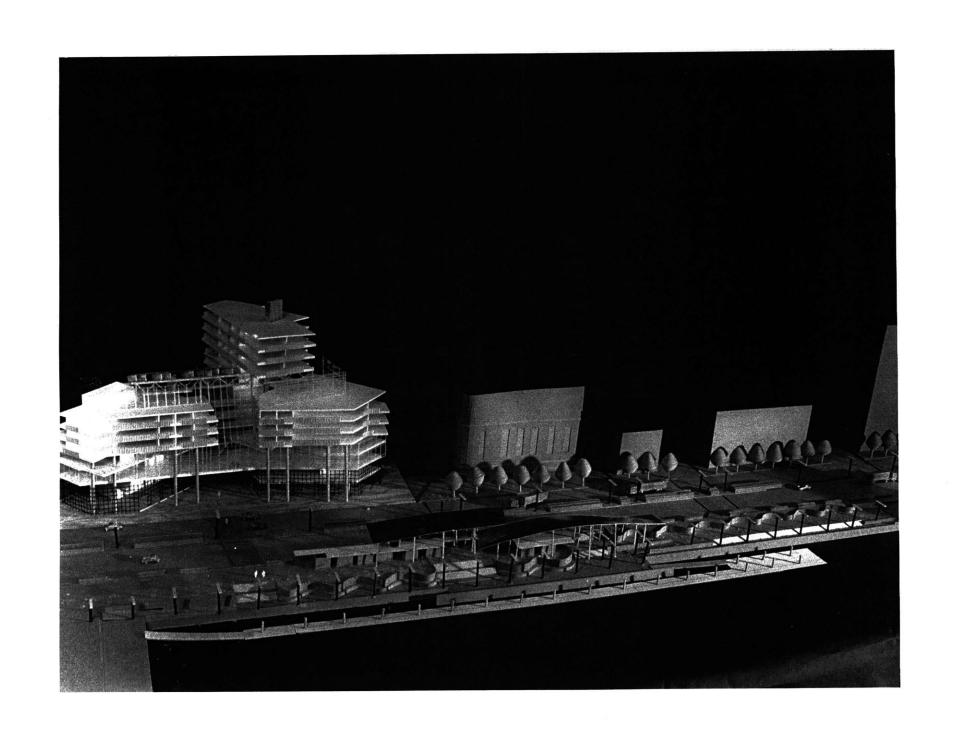


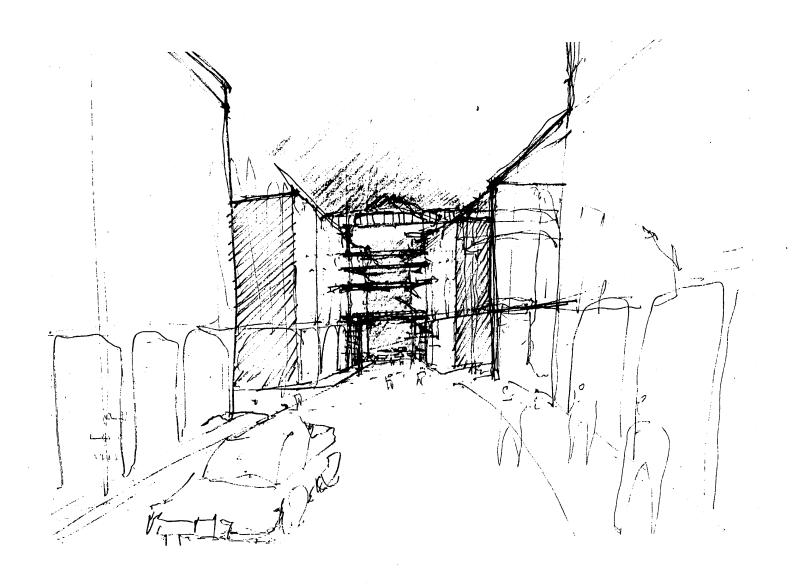
THE "WATERFRONT EDGE"

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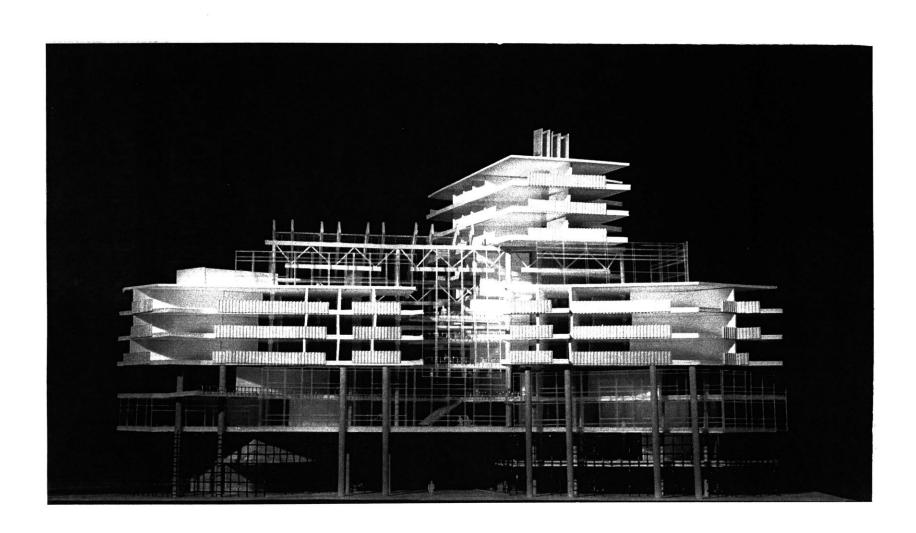




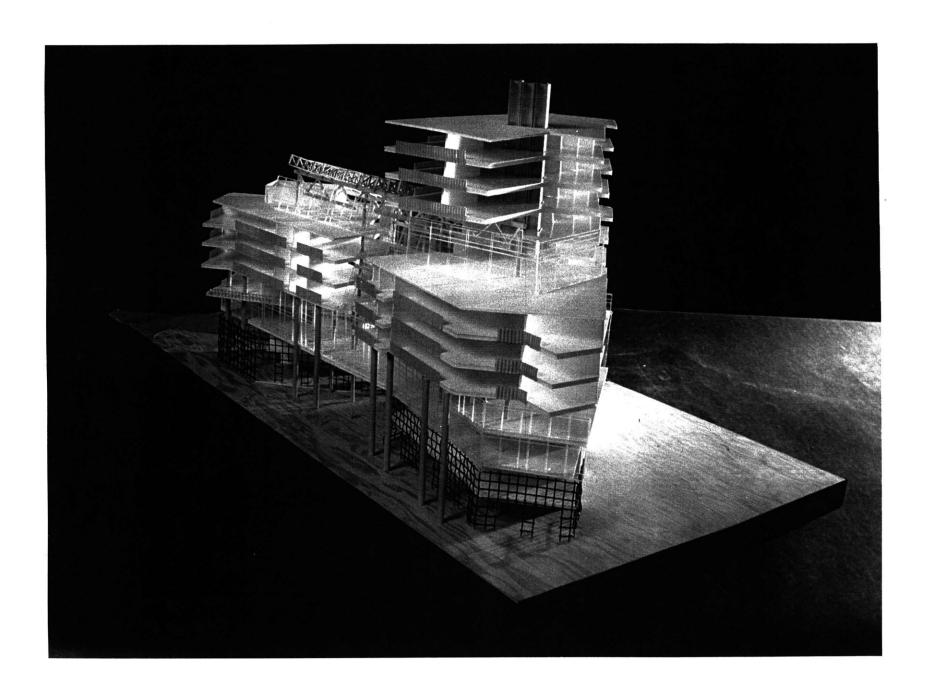


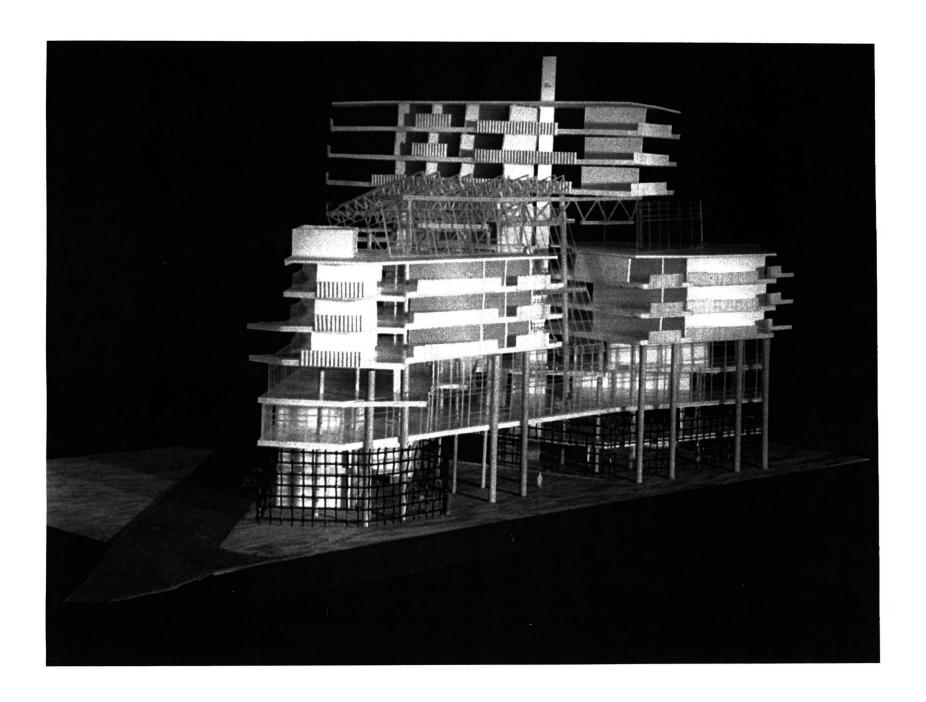


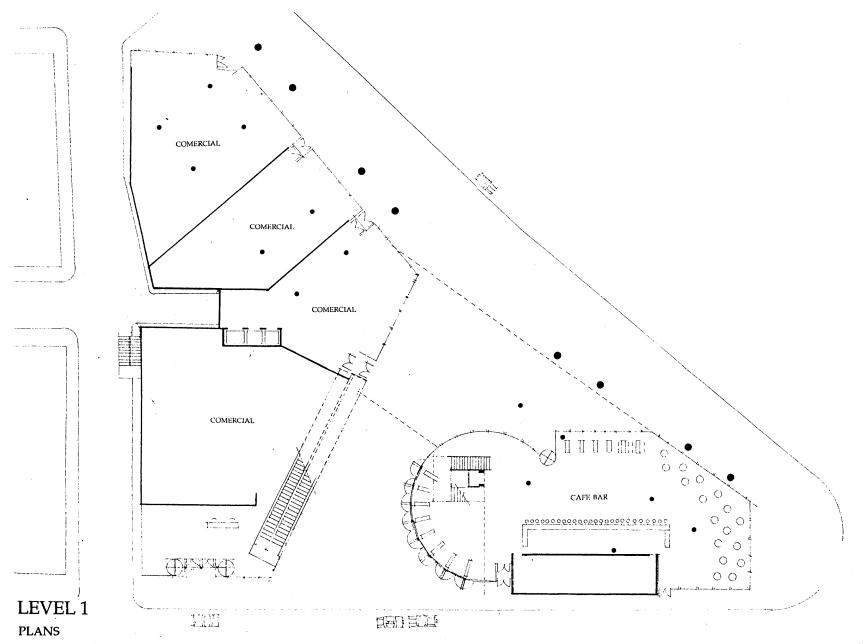
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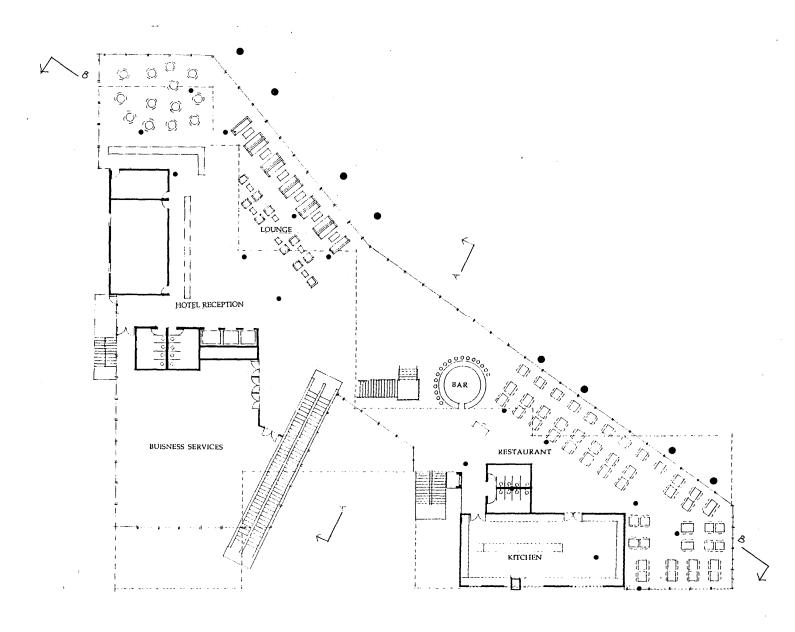




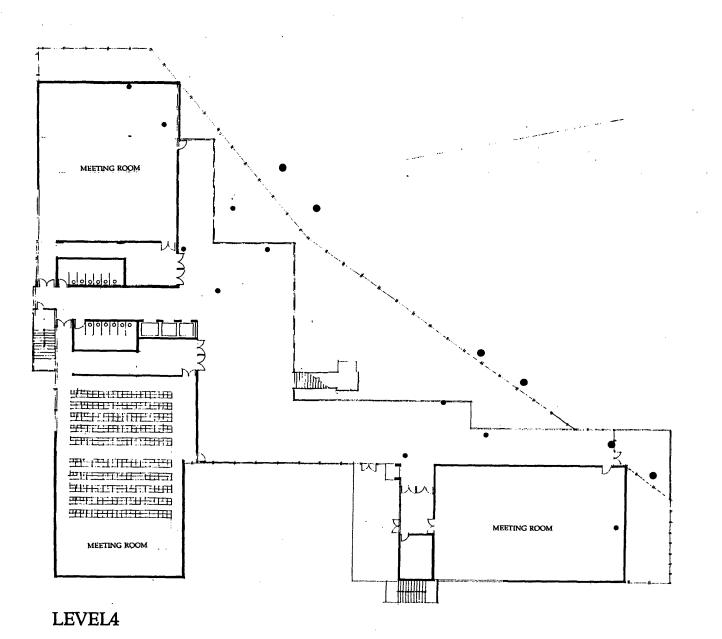


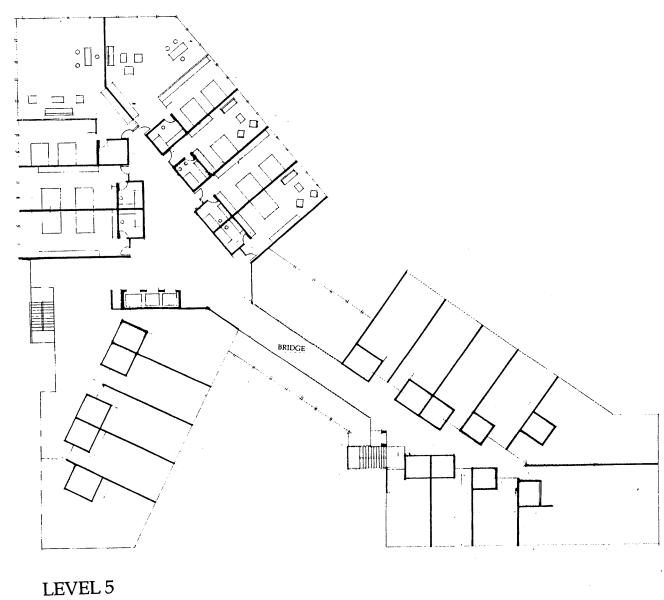


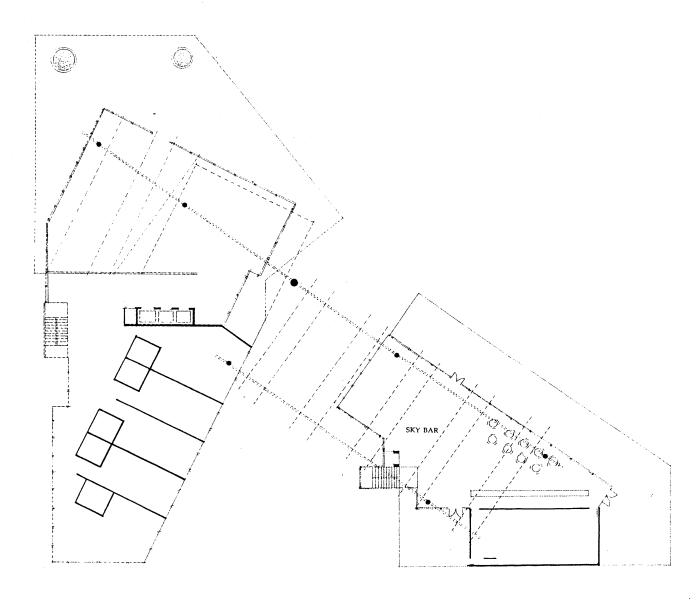




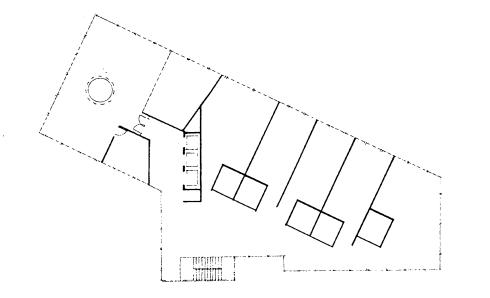
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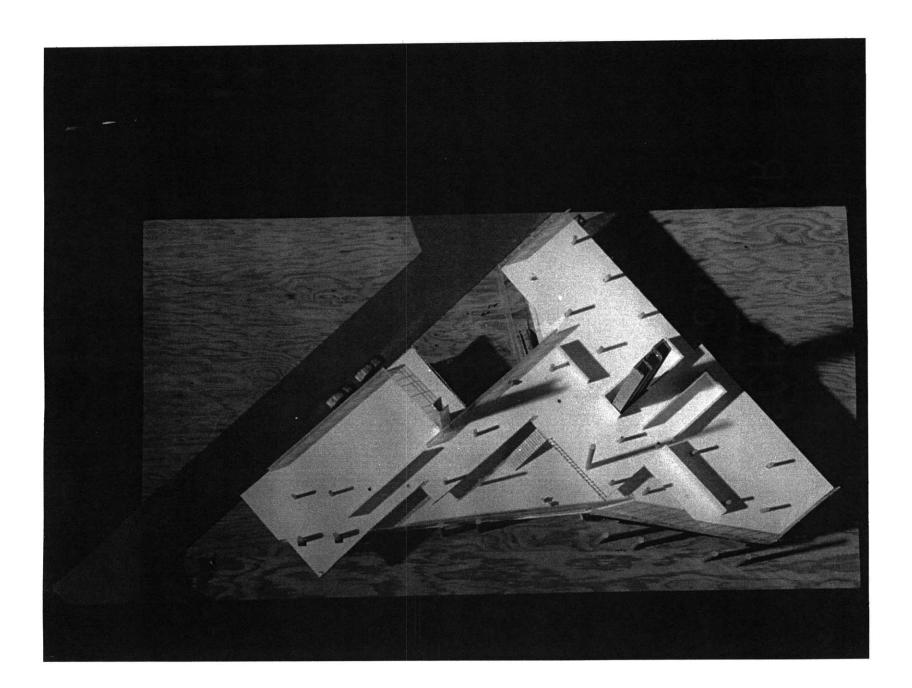


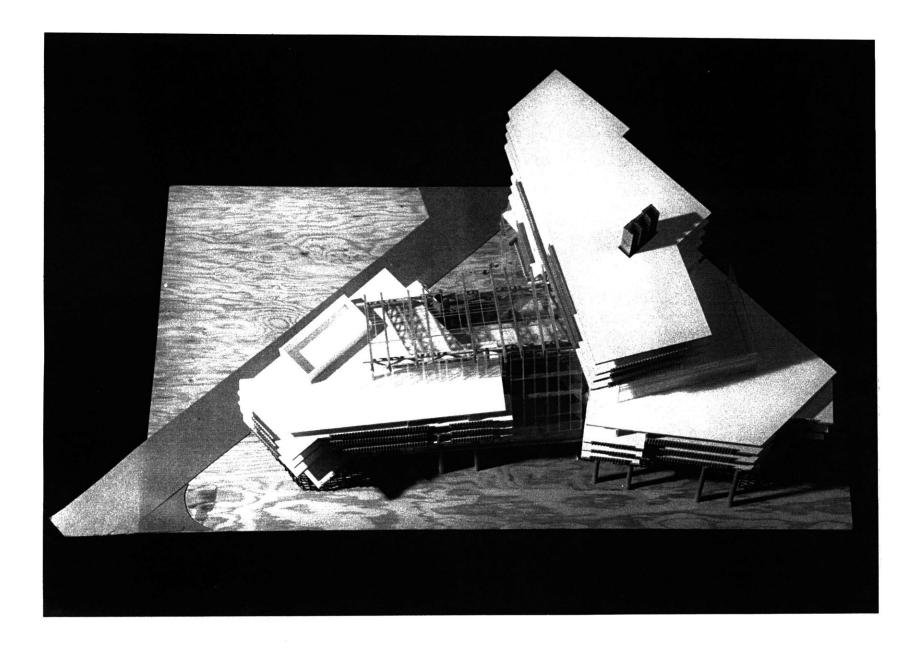


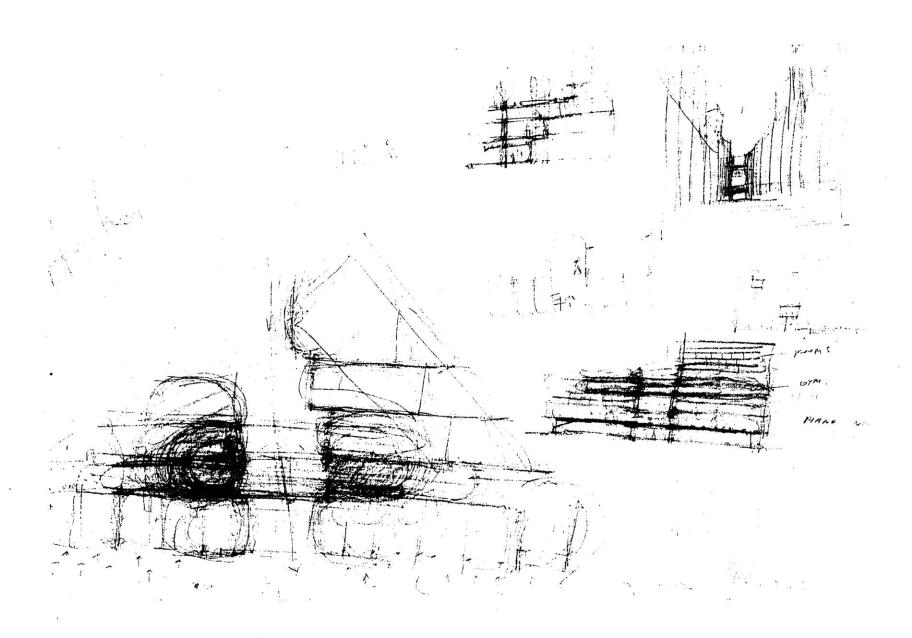


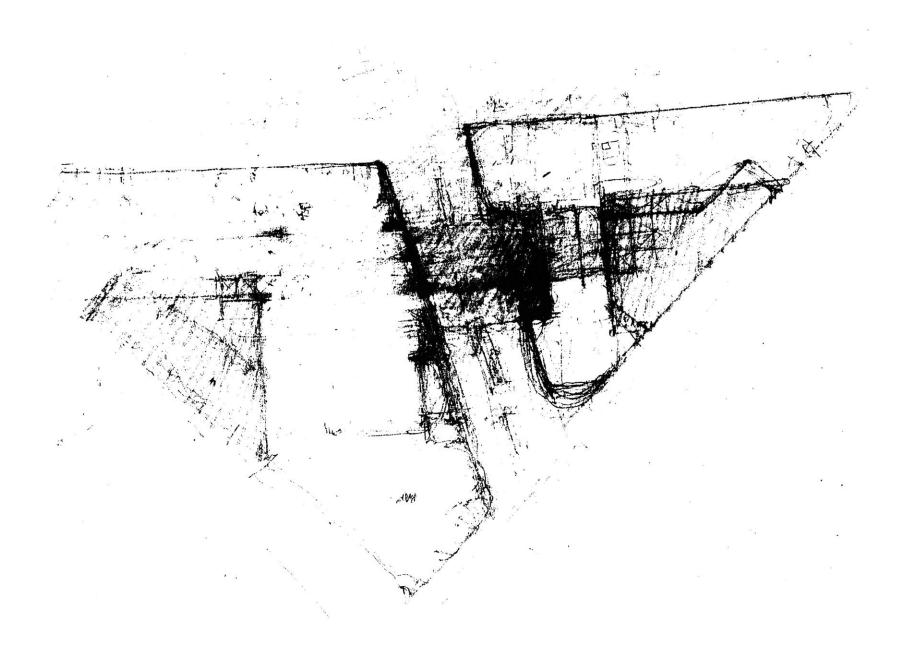
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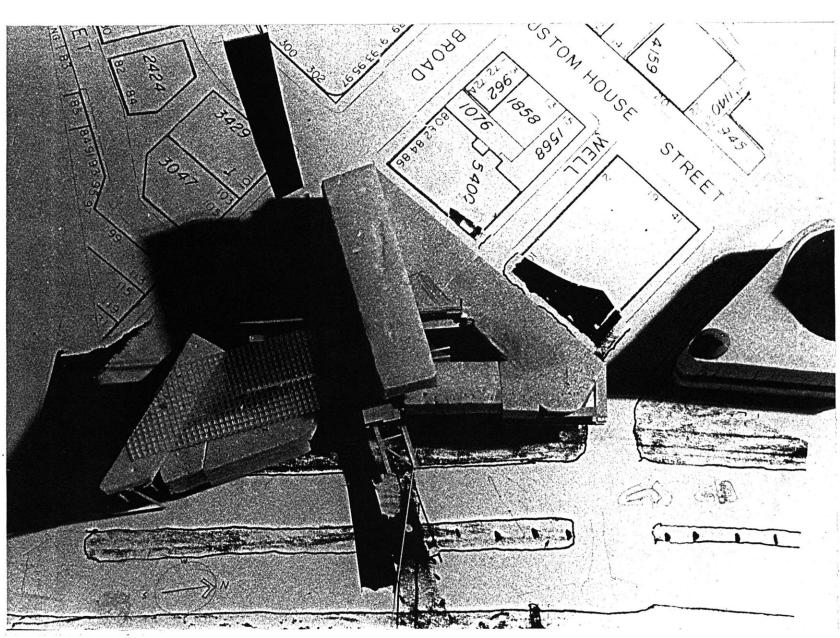




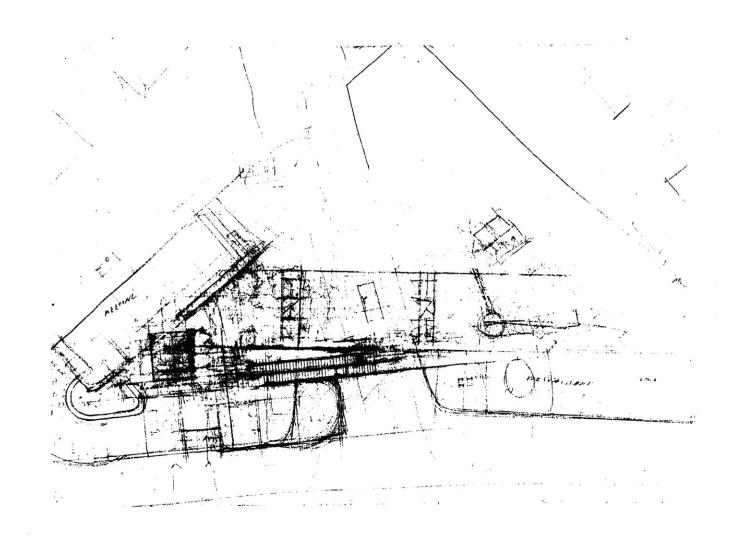


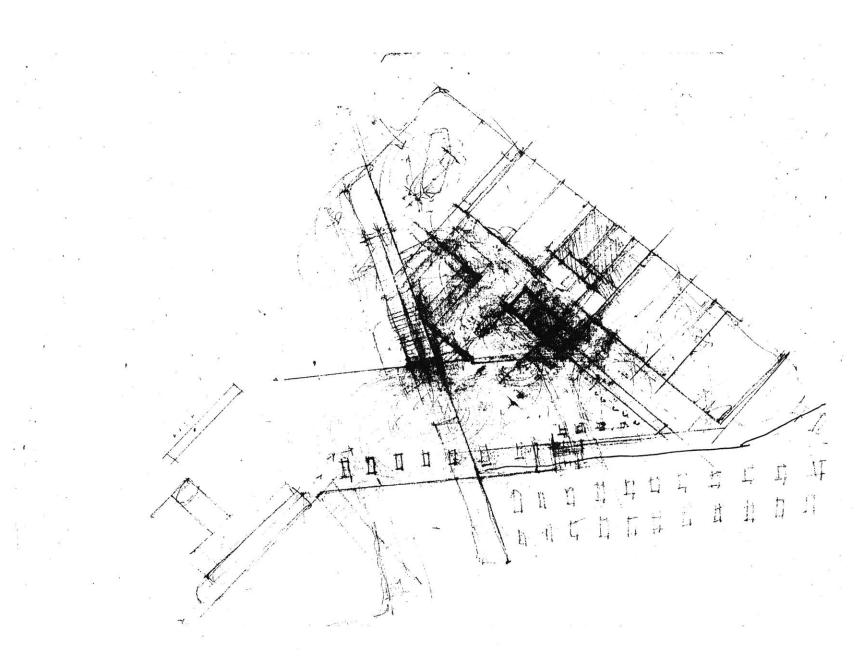


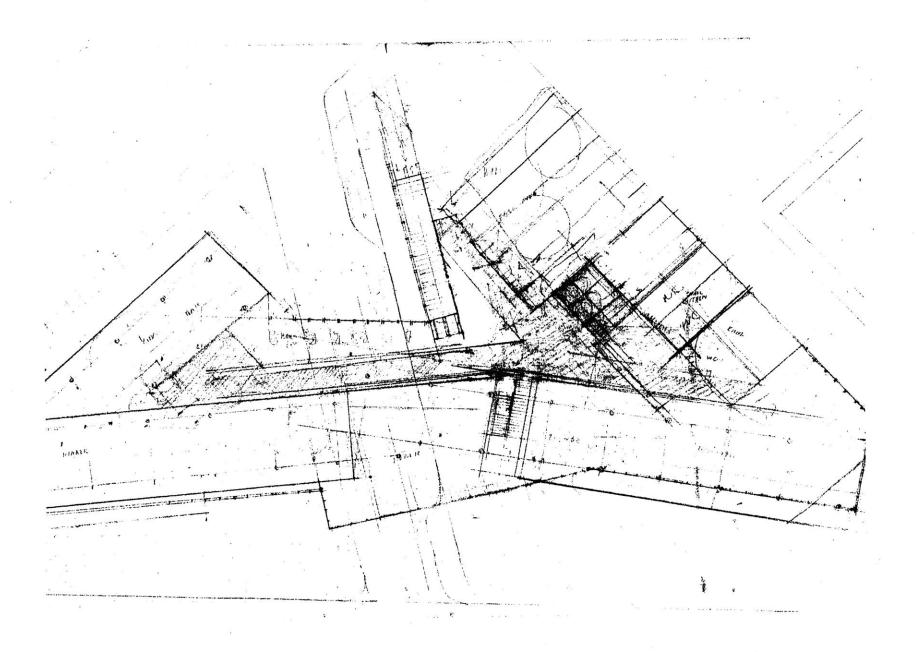


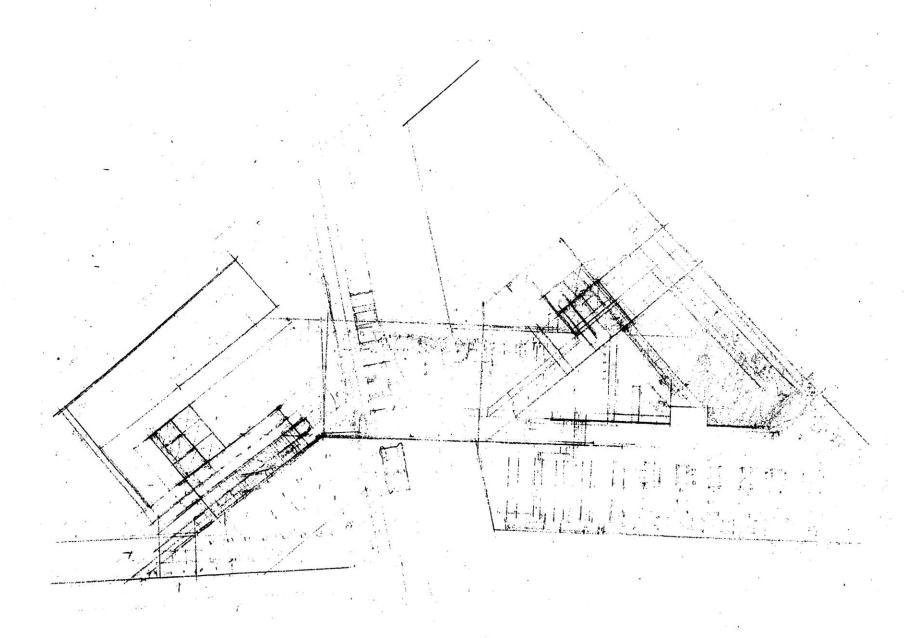


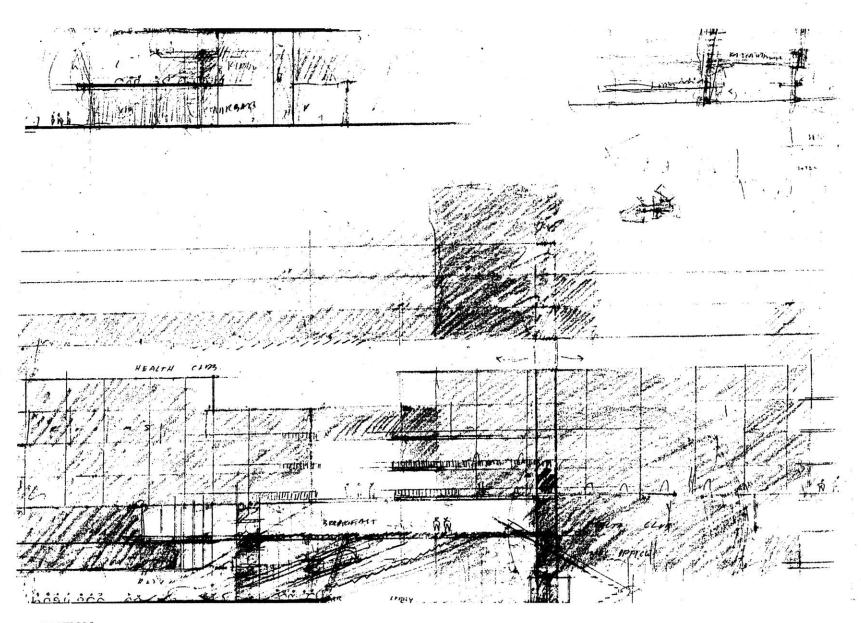
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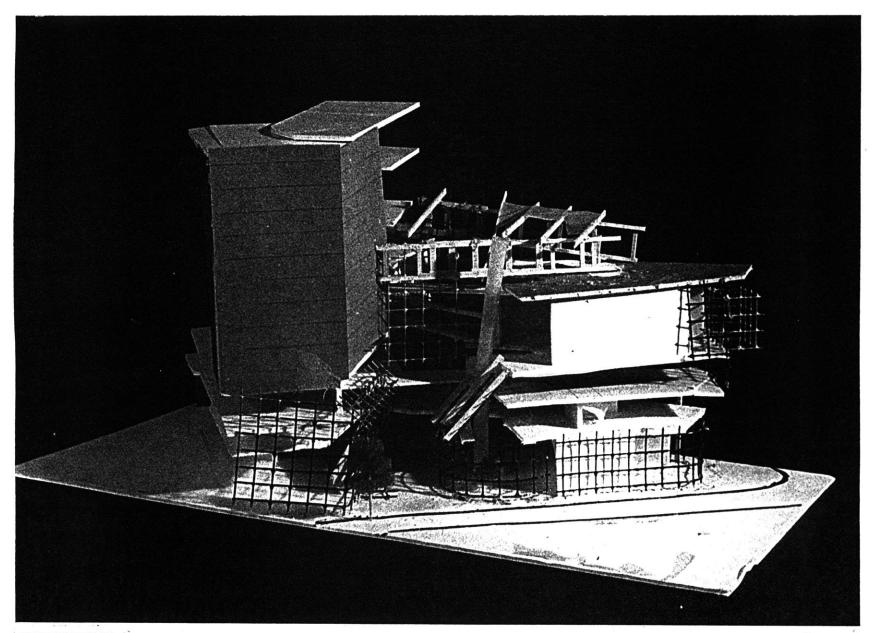




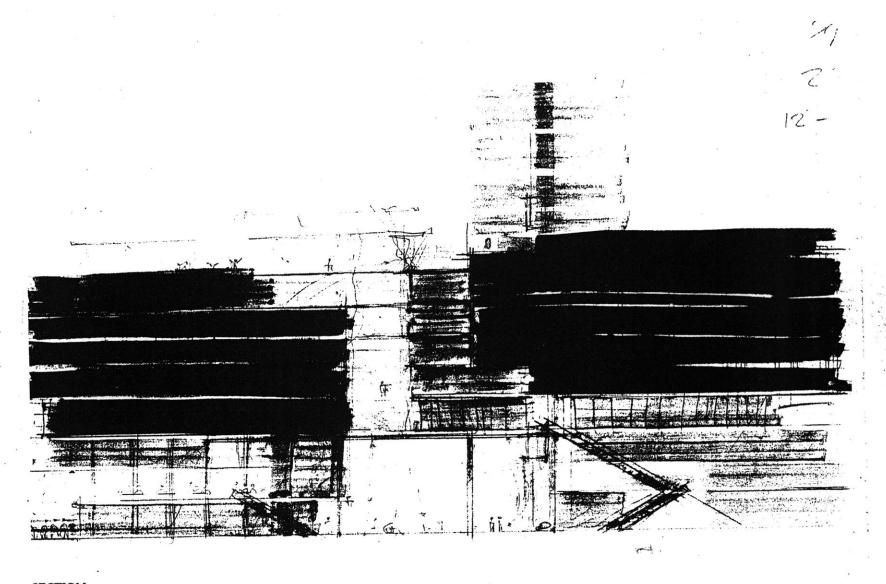




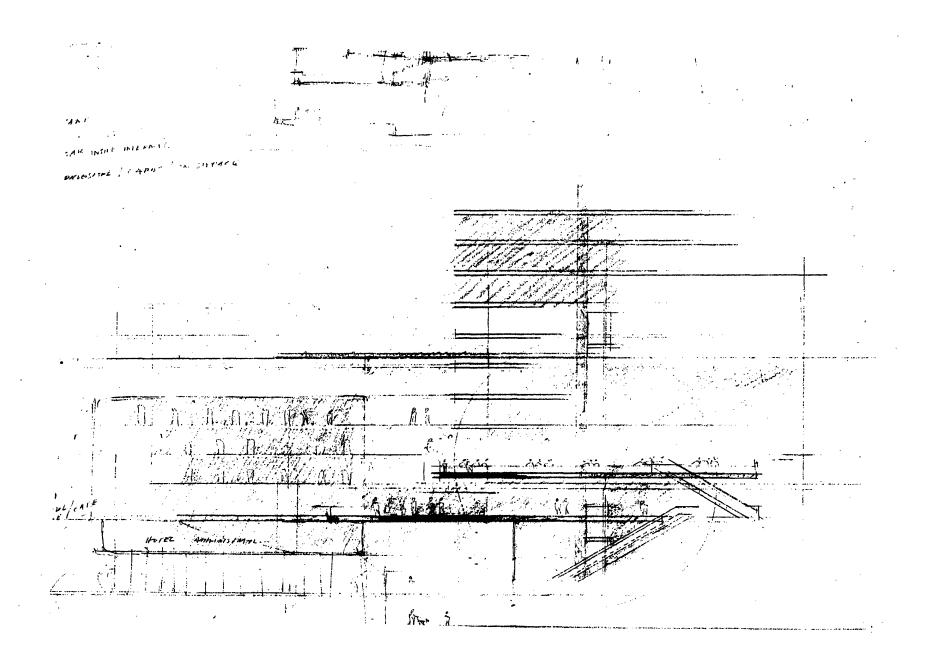
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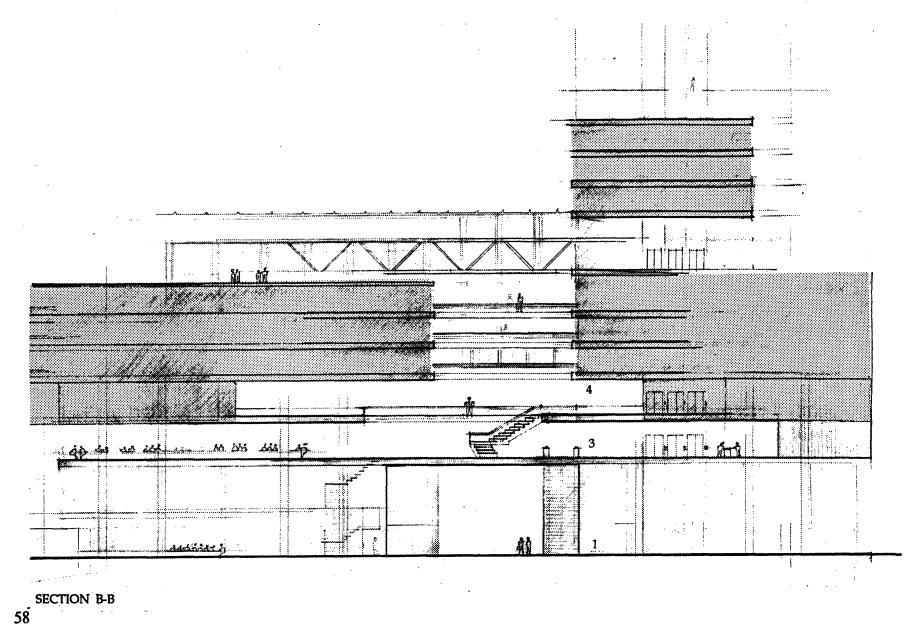


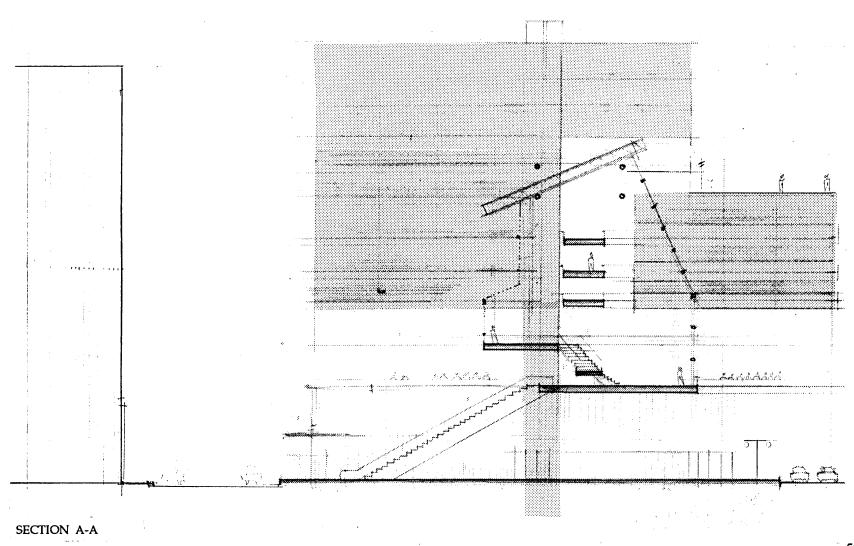
SKETCH MODEL



SECTION ·















## Credits

1 Lynch, The Image of the City,
Fig 1. Lynch, The Image of the city pg 21.
Fig 2.Boston Redevelopment Authority map.
Fig 3 ibid.
Fig 4. Process Architecture 97 pg.19
Fig 5. ibid.
All other images produced by the Author.

## Bibliography

Kevin Lynch, *The Image of the City*, MIT Press, 1960 Behnisch & Partners- Designs 1952-1987 Process Architecture 97, Boston by Design, A City in Development: 1960-1990

## Thank you

To Bill Hubbard, My thesis advisor, for believing in the design (most of the time). To Patrick Donnelly, who shot and developed all the photographs.