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ALIENATION AND ARCHITECTURE OF COUNTERACTION

by
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Submitted in partial fulfillment of the requirements
for the degree of Master of Architecture (First Professional)

at
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DEDICATION

I would like to dedicate this thesis to all the men and women in the history of mankind who understood the importance of social issues and contributed in realization of this importance.

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ABSTRACT

This thesis explores social aspects of architecture in relation to issues surrounding lifestyles of the elderly and how architecture can address these issues and provide solutions to some problematic areas. It examines the problem of isolation and alienation, which deeply concerns the lifestyle of the elderly.

The site is located in downtown Halifax, Nova Scotia, Canada. It is located in an area of the city that provides a maximum level of amenities and activities.

The program of this building includes mixed elderly and public housing, adjacent to the public/commercial sector. Commercial levels accommodate restaurants, pubs and shops, as well as a theatre. The elderly housing is designed to particularly suit those with active lifestyles. The program as a whole is intended as a social condenser in the city.

There are several characteristics that the design uses to enrich its architectural qualities including: inside-outside relationships, urban design considerations, urban massing, building structure, interior spaces, and building materials.

ACKNOWLEDGEMENTS

An architectural thesis is usually the result of intellectual exchange of ideas between students and professors, based on preceding frameworks created by other students and professionals. This thesis was the result of such intellectual exchange and frameworks and for that I would like to thank my supervisor Dr. Terrance Galvin for his extensive contributions in this thesis and my advisor Professor Christine Macy for her fabulous criticism. I would also like to thank Professor Stephen Parcell for his contributions in this report.

As well, there are numerous friends and colleagues whom I would like to thank, especially Albert Chan, Man Kin Wong and Terry Kim.

INTRODUCTION

Alienation

The real problem of life, both for men and societies, is to keep the organism and the environment, the inner world and the outer, the personality and its creative sources, in the state of tension wherein growth and renewal may continually take place.¹

Alienation in all its forms and manifestations is an undesirable state of being. It is a condition which opposes freedom and harmony. The eighteenth century philosopher Jean-Jacques Rousseau believed that man in a state of natural existence is a “noble savage” and that so-called civilized society discourages his natural desires to a point where his genuine feelings and desires are replaced by artificial thinking imposed on him by society. Therefore a civilized man is one who is alienated from his genuine self. As a result he believed that “civilization is the corrupter and destroyer of true values.”¹ Rousseau’s ideology on alienation is expressed in his well-known quotation: “Man was born free, and everywhere he is in chains.”²

The term “alienation” was first used by nineteenth century German philosopher Georg Wilhelm Friedrich Hegel. In order to understand Hegel’s definition of alienation one must first absorb his theory of “change.” Hegel believed that every event is the outcome of a process, and to understand the process one must understand “change.” He defined change as a logical process. Every situation includes “conflicting elements” and because of the conflict no situation is stable. “Conflicting elements” have to work their way out to an outcome. The outcome or resolution is a new situation, which itself contains new conflicting elements; therefore, every situation is in a constant state of change. He referred to this process as a “dialectical process” and collapsed it into three stages: the initial stage as “thesis,” the conflicting stage as “antithesis,” and the outcome or resolution as “synthesis.”

Therefore, change is a continuous process that dominates every facet of individual and social life. In the process of change individuals have no control mechanism; consequently, they are caught in this process. Furthermore, this process is a function of time. For example, a Romanesque architectural style is not an acceptable style of architecture for the present-day society, no matter how masterfully it is designed. That is to say, we cannot escape the historical development or dialectical process.

But is there no end to this process? Hegel believed that the only thing capable of stopping this process is freedom. It is only when man gets his freedom and society is free of any conflict that the process of change stops. In such a state there is no need for further conflict or change. Such society, as described by Hegel, is an organic society, it is a society in which a part or an individual functions in harmony with the whole. This is a state of being where there is no alienation. Everything that is part of an individual is with him and he is part of a great totality without any conflicts.³ Consequently, removing alienation is an act of liberation, union, and harmonization.

Now that there is a fundamental understanding of alienation, we shall see how the idea of alienation and organic relate to architecture and urban planning. For this I refer to the twentieth century American social and architectural critic Lewis Mumford. Mumford greatly criticized technological culture and argued that it is a source of alienation and dehumanization. He believed ethics, emotions, and sensitivity should find themselves in the heart of civilization and be the main guideline for social discourse. Mumford's idea of organic architecture is reflected in his article entitled "The Year: 1918":

In discussing the forms of architecture which integrate both the practical and the ideal elements in modern civilization, I prefer Mr. Wright's term, "organic," to the more current adjectives, "modern" or "international"; and this organic architecture is not merely a matter of using new materials and techniques or of conceiving new forms for their effective employment: it is a matter of relating air, sunlight, space, gardens, outlook, social intercourse, economic activity, in such a fashion as to form a concrete whole.⁵

Therefore, an organic architecture is an architecture that does not alienate, an architecture that is part of a greater whole. A totality is created by all facets of our existence, including architecture along with all its parts and elements. Everything works in harmony, both internally and externally. As noted in the above quotation, Mumford refers to Frank Lloyd Wright, the great twentieth century American architect. Mumford and Wright were friends, both in search of an organic architecture. They influenced one another in developing the idea of organic architecture.

In 1930, in an article for the magazine *Architecture*, Mumford clarifies his position further by arguing that “architecture is building; and building is an organic expression of social life. The architect who understands his society, though inferior in imagination and design, may have more to contribute to modern architecture than the brilliant artist who misinterprets his functions and relationships.”⁶

Four years later Wright put his ideas of organic architecture into his masterpiece, Fallingwater, a house designed for Edgar J. Kaufmann in Pennsylvania. Kaufmann describes the house:

When Wright came to the site he appreciated the powerful sound of the falls, the vitality of the young forest, the dramatic rock ledges and boulders; these were elements to be interwoven with the serenely soaring spaces of his structure. But Wright's insight penetrated more deeply. He understood that people were creatures of nature, hence an architecture which conformed to nature would conform to what was basic in people. For example, although all of Fallingwater is opened by broad bands of windows, people inside are sheltered as in a deep cave, secure in the sense of the hill behind them. Their attention is directed toward the outside by low ceilings; no lordly hall sets the tone but, instead the luminous textures of the woodland rhythmically enframed. The materials of the structure blend with the colorings of the rocks and trees ... The paths within the house, stairs and passages, meander without formality or urgency ... Sociability and privacy are both available, as are the comforts of home and the adventures of the seasons. So people are cosseted into relaxing, into exploring the enjoyment of life refreshed in nature.⁷

Both Mumford and Wright made significant contributions to the formulation of organic architecture as well as clarifying the role of architecture in the social realm, but the problem of alienation remains an escalating trend in North American societies. The core of the problem is governmental policies, both at the city and federal levels. Generally in North America, cities and government employ the New Right economic model to

formulate their policies. Consequently, these policies are focused to enhance economic well-being of the city or the country as opposed to enhancing the quality of social life and the welfare of their citizens. In other words, cities aim to maintain their local economic health. To do so they must maintain local efficiency rather than equality, which leaves little scope for egalitarian concerns. Efficiency is a state in which no person can be made better off without some other person being made worse off.⁸ The consequences are substantial: reductionist zoning policies that aim to divide societies into exclusive social groups have destroyed the complexity of the cities, alienated people from their communities, and compromised social welfare.

In summation, alienation is far from being over, or even reaching a synthesis. However, social duty calls to take as large a step as we can to address the problem through a socially conscious approach to the built environment. Following from Wright and Mumford, this approach leads to organic architecture.



Thesis Question

How can architecture counteract alienation of the elderly?

The premise of this thesis is to look for ways to remove alienation of the elderly. How can urban and architectural strategies address alienation? What is the role of various architectural characteristics such as inside-outside relationships, form, building structure, program, interior spaces, and building materials in exploring the thesis question? Furthermore, what is the role of urban life in countering alienation and integration?

Area of Study

The area of study concentrates on the social aspects of architecture in relation to issues surrounding the lifestyles of the elderly and how architecture can address these issues and provide solutions to some problematic areas. For a more focused discussion, this thesis examines the problem of isolation and alienation, which deeply concerns the lifestyles of the elderly, and the role of the building program, as well as the configuration of the residential units and integration of public-private, inside-outside.

Urban studies include site location and surrounding buildings, movement and traffic both around and through the site, and integration of the building with surroundings as an organic form aiming to increase social intercourse.

It is often said that the value and meaning of a civilization can be determined from the record it leaves in the form of architecture, and that the true measure of the compassion and civility of a society lies in how well it treats its frail older people.⁹

Historical / Theoretical Background

There have been many research studies done by various professionals on immediate issues of housing for the elderly. Without fail, they suggest critical problems that need to be tackled. One of the main issues in North America is the segregation of elderly housing by zoning criteria. In many cases nearby services, public interaction, and retail accessibility are not thought necessary. Recent studies done by Victor Regnier suggest:

Older people should stay in their own home as long as they want to, with the aid and support of family members and home health care personnel. Once their needs outpace the ability of home care to serve them and the capacity of the family to provide informal support, they should be able to move to a group living arrangement where they or their family can maintain as much control as possible over their life. This setting should be designed to foster emotional support, social engagement, intellectual stimulation, and independence within a residential context. Furthermore, it should contain private dwelling units with access to physical and occupational therapy.¹⁰

Some of the other suggestions by Regnier are:

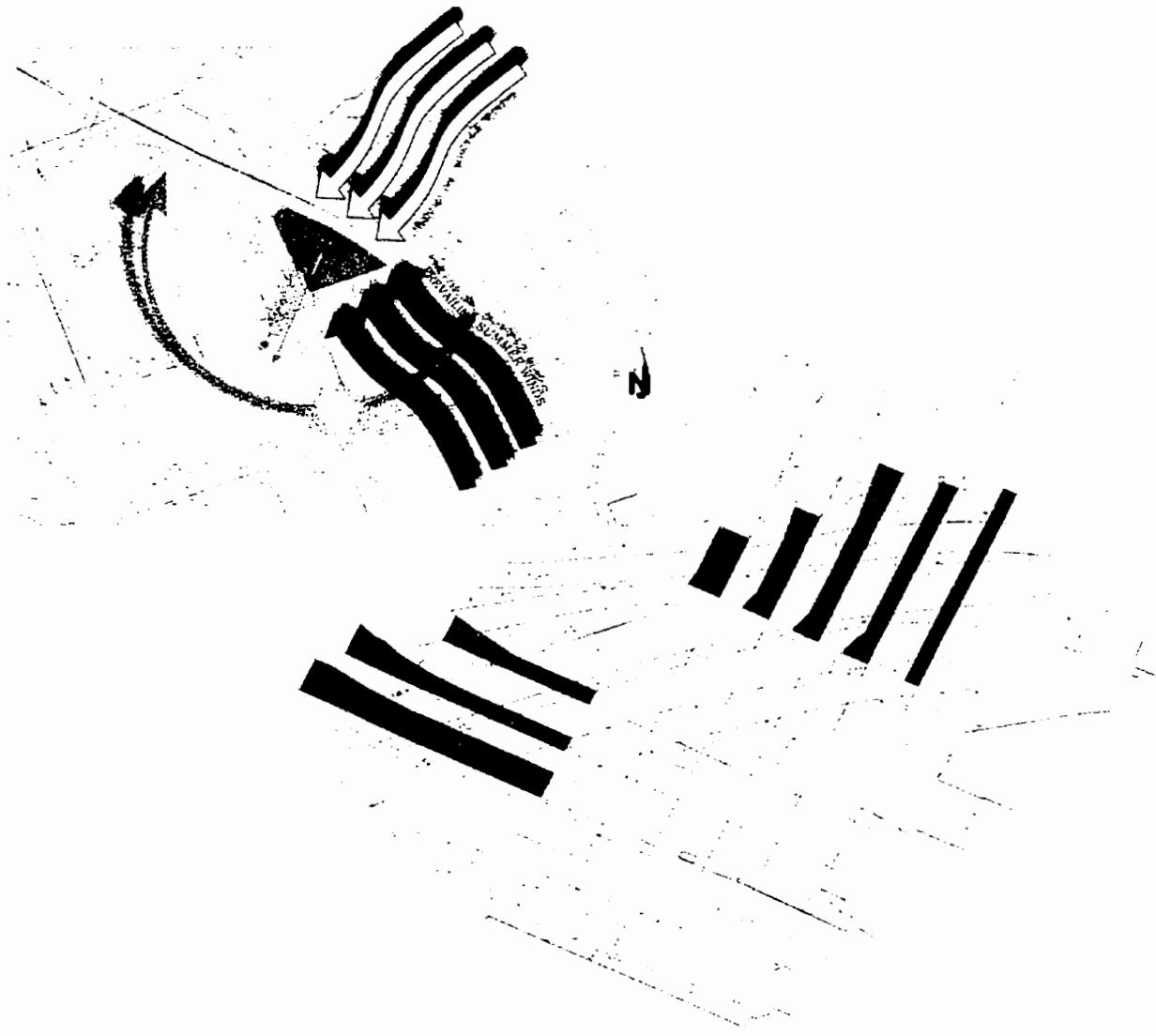
1. Commitment to maintain the older person in a residential rather than institutional environment until death.
2. High-quality housing standards of privacy and completeness.
3. Mixed-use and urban design solutions that relate and connect housing to the surrounding context.
4. Project concepts that challenge conventional assumptions and existing models.
5. Self-maintaining philosophies that encourage resident independence and autonomy.
6. Occupational and physical therapy designed to keep the elderly active.
7. Participatory models of governance involving residents in decision making.¹¹

Noverre Musson and Helen Heusinkveld, in their book *Buildings For The Elderly*, raise four crucial factors: security, independence, involvement, and privacy. With respect to independence and involvement here is what they suggest:

Independence - To help him retain his dignity and self-respect, he needs the maximum leeway for coming and going and doing as he pleases ...

Involvement - He needs acceptance for himself by people with whom he can find intellectual rapport. He needs involvement in the life about him so that he will be encouraged to give of himself. This can prevent the unfortunate tendency to withdrawal, so common in elderly people. He needs adventure, a spark, something to look forward to, something to make tomorrow different from today. Anticipation helps to keep people young.¹²

Musson and Heusinkveld suggest that location of the site is crucial in providing a good psychological state of mind. They suggest that the site should have a busy life around it with a view of traffic, people, rivers, lakes, and a playground; as well, it should be protected from alarms of the street but not isolated.¹³



Site and Location Map

The selected site is located in downtown Halifax at the end of Granville Street, at the intersection of Barrington Street and Hollis Street, at the north end of an axis which begins at the MT&T Building further south. It announces the entrance to downtown Halifax. It has a triangular shape and can be viewed easily from the surrounding area. However, buildings ranging from 5 to 23 metres in height mostly obscure the site's view from and to the harbour. This area of Halifax is alive with harbourfront views, public wharves, a casino, museums, shops, boutiques, and a never-ending parade of festivals and events along the boardwalk. However, the site, which is currently a parking lot, requires a serious architectural and urban intervention to improve its condition and use.

Specific Site Characteristics

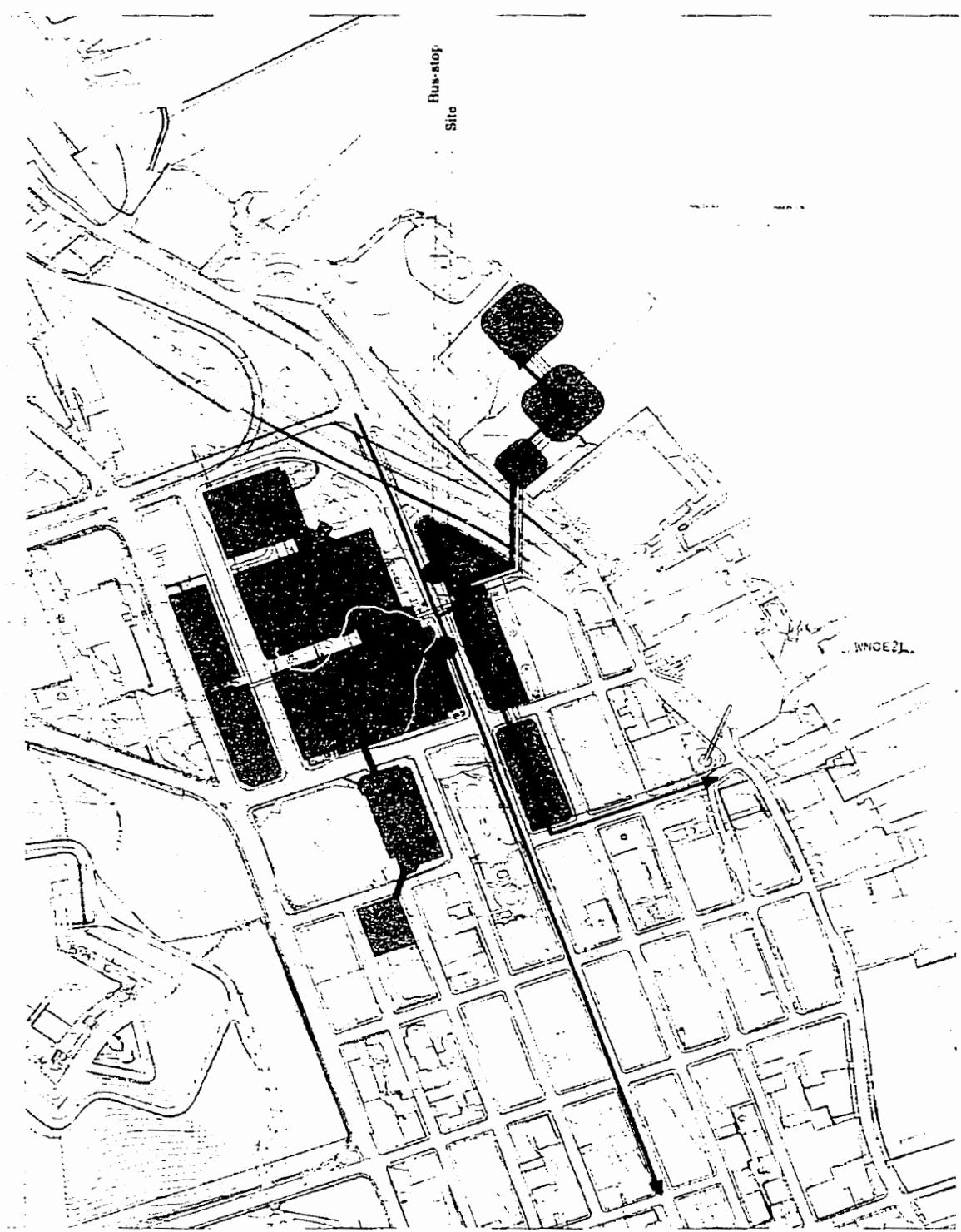
One of the main difficulties of the site is its topographical condition. There is a 5 meter elevation difference between the top of the site and Barrington Street. On Barrington Street, there is a major bus stop. On the north side of the site, where Barrington Street intersects Hollis Street, there is an interchange. The interchange isolates the site from the northern part of the city, even though it is possible to cross the interchange by foot. Furthermore, the site accommodates an overhead bridge, which is part of a chain of bridge connections.



Existing condition of site



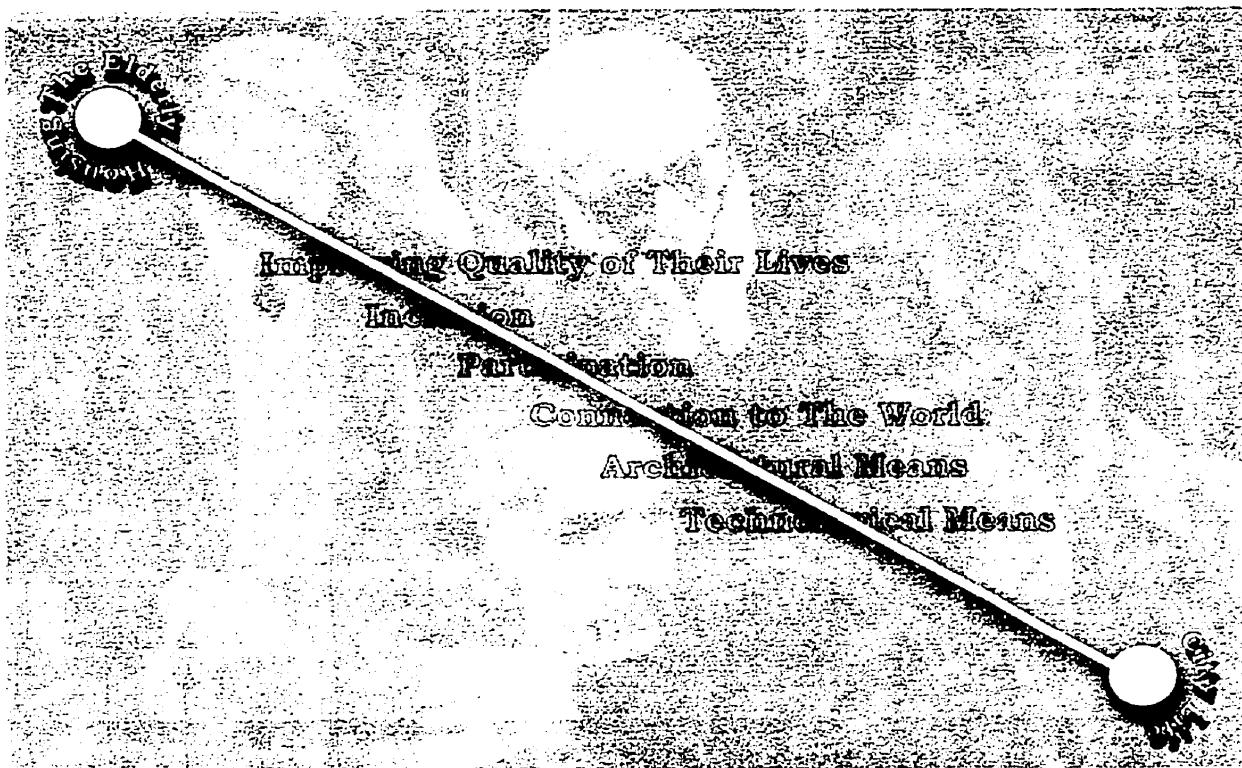
Existing overhead bridge



Movement and bridge connections (map of Halifax from Nova Scotia Department of Lands and Forests Map Library)



Other site photos showing Purdy's Wharf Buildings, elevated walkways over Barrington Street and Hollis Street, and the entrance to Historic Properties.

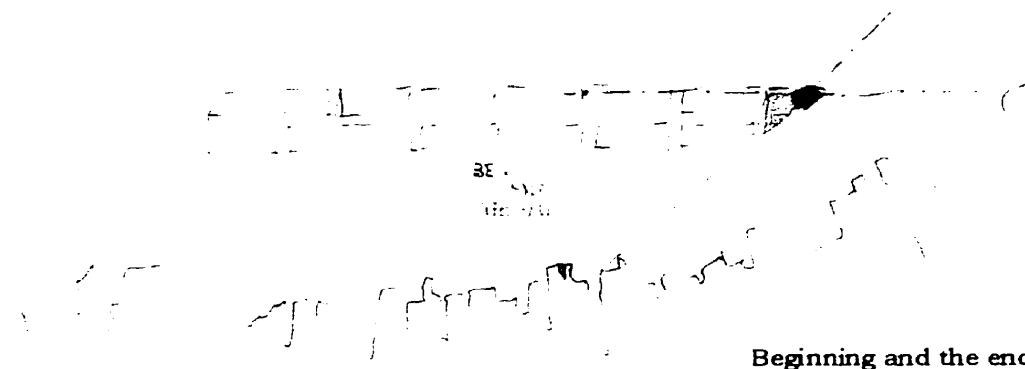


Program

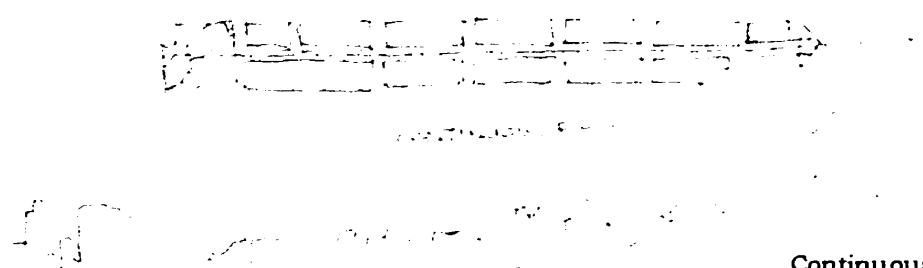
The program of this building includes mixed elderly and public housing, adjacent to the public/commercial sector. The commercial sector is envisaged as free public access to facilities and the design encourages a sense of availability and free-flowing continuation of Granville Street. The commercial levels accommodate restaurants, pubs and shops, as well as a theatre. The elderly housing is designed to particularly suit those with active lifestyles; however, it will not discriminate against others. The program as a whole encourages social activities, and acts as a social condenser in the city.

Urban Design Strategies

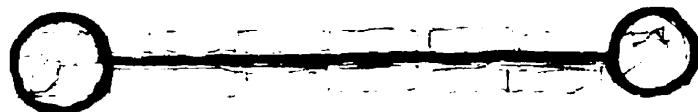
The following sketches indicate several possible urban strategies:



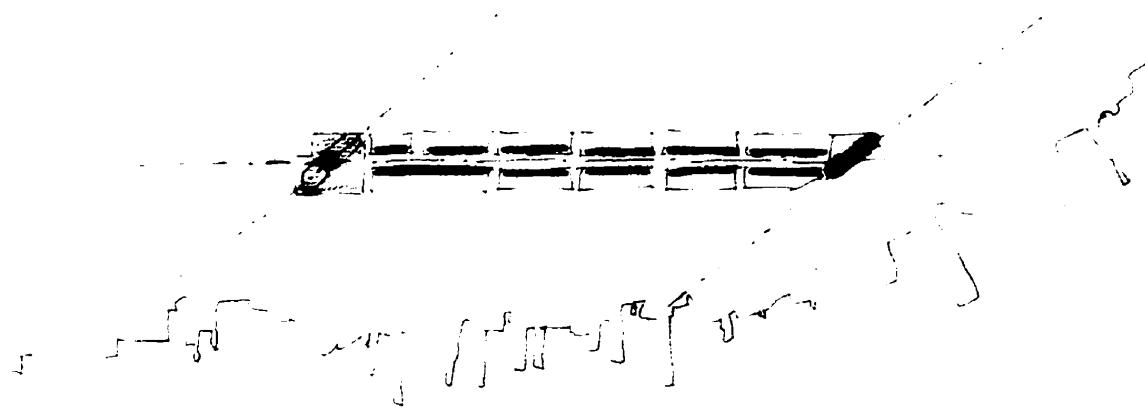
Beginning and the end



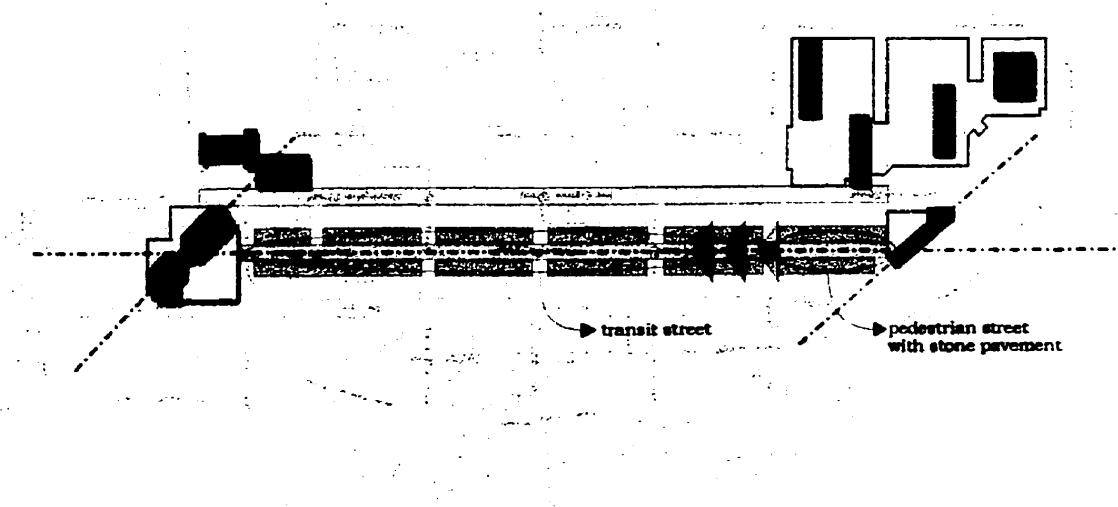
Continuous flow



Bounding strategy



The drawing below indicates the project's urban planning strategy. It shows how the new building relates to the existing setting, and how it suggests and anticipates a future urban renewal. The premise is to develop the street that is bounded by the existing MT&T Building and the proposed building, by extending the existing fabric of Granville Street toward the MT&T Building. This strategy will improve the livelihood of the downtown area. In addition, the drawing below shows the large-scale buildings that bound Barrington on both ends, and how the new building follows the existing patterns by matching the scale of the surrounding buildings.



Urban strategy

DESIGN

In search of an organic architecture, my design process sensitively searched various social, architectural, and urban factors of this location of Halifax. The main intention was to create harmony between the building and the surrounding factors and elements. As part of this approach, the design created indoor and outdoor shelters for people who wait for a bus on Barrington Street. As well, it continued the language, fabric, and special volume of Granville Street inside the building. The prime goal was to create a building which could act as a node as well as a passage. The node is intended to attract the general public inside the building, creating interaction between the public and the elderly. For this purpose, various shops, restaurants and cafes are accommodated in the first and the second levels of the building, but more importantly a theatre is located at the end of the street, which becomes the centre stage of the public part of the design. The theatre is freely accessible from the ground level and has an open roof, which allows public viewing from above.

The building provides a passage from both Granville Street and Barrington Street. As well, it becomes part of the chain of the existing bridge connections, providing a refreshing volumetric experience for people entering the building from the connecting bridges.

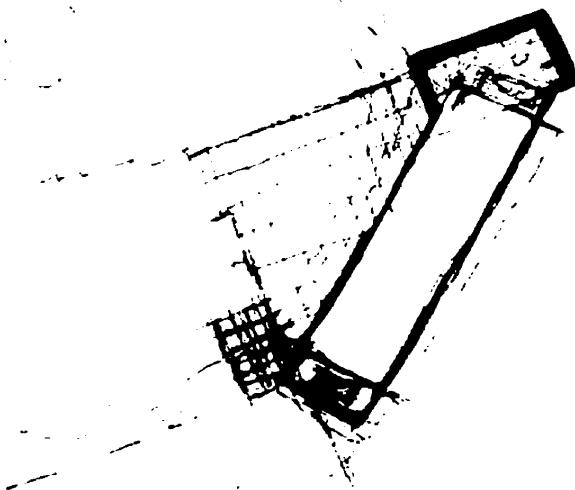
The third level of building accommodates a game room, a library, a greenhouse, and an outdoor roof garden for the elderly. Furthermore, this level accommodates a daycare with the intention of creating contact between the elderly and children.

Above the public levels there are three residential towers. The three towers share two sets of staircases and elevators. Each tower contains six levels and every two levels share a corridor, where the lower levels are intended for elderly housing, avoiding stairs. The upper levels are accessible by staircases and are intended for public housing. The intention for shared public and elderly housing is to further integrate the elderly in society and provide them with a sense of dignity and belonging. The units are designed to provide easy movement for wheelchairs. For this purpose, services are arranged on one side of the unit, creating an open area around the living room and bedroom. This arrangement allows a wheelchair to circle the unit without having to turn around.

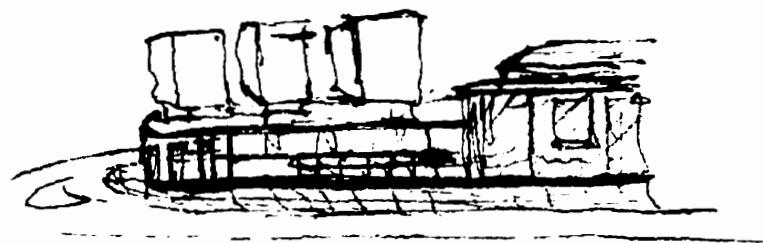
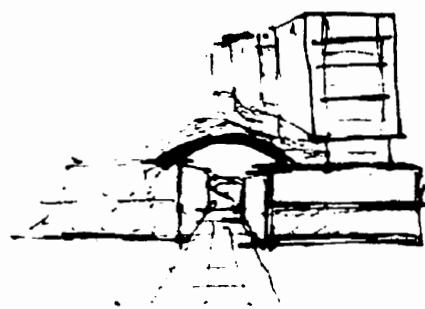
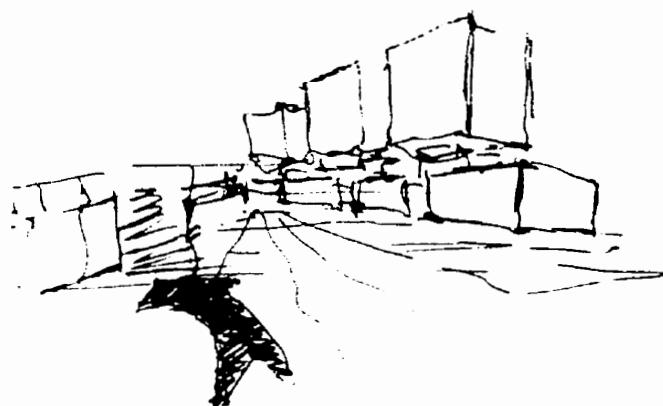
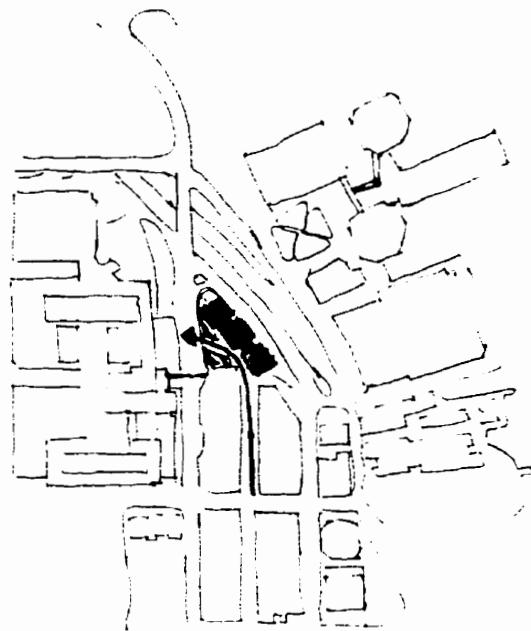
The residents are provided with a variety of places inviting different levels of

privacy and public contact. The low-rise towers are wrapped in glass envelopes creating a microclimate, which makes the spaces outside the units functional throughout the year. This system of envelope creates a very energy efficient building.

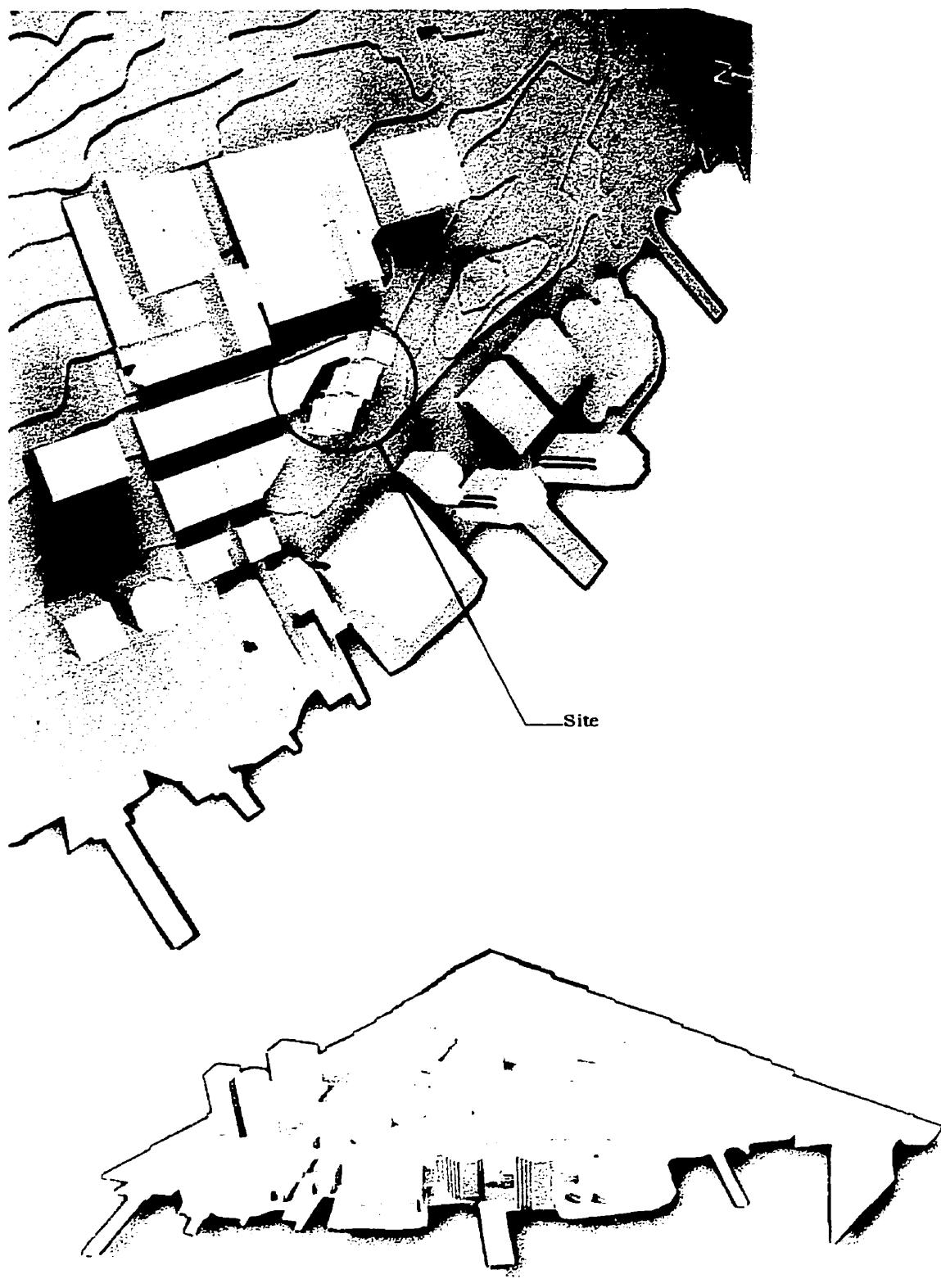
For the purpose of natural ventilation, the special volume between the units and the envelope is pressurized by fresh air. The pressurized fresh air has no way to escape except through the units to the chimneys leading to the tower above the roof. In this system the air pressure is maintained at a constant level by a computer that measures the pressure and controls the air intake louvers and fans. Furthermore, heat exchangers would retrieve the heat from the air leaving the building.



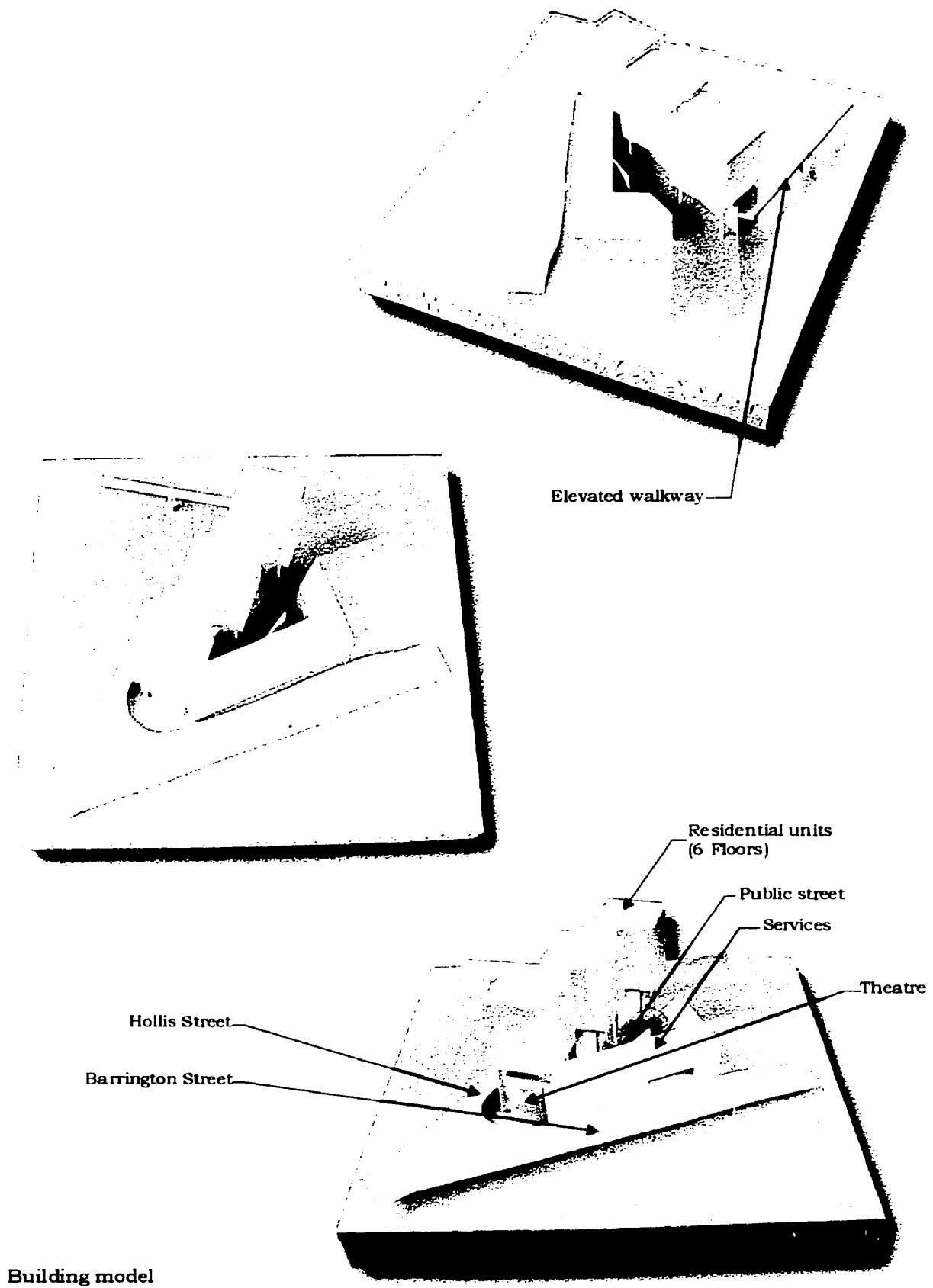
Preliminary Sketches

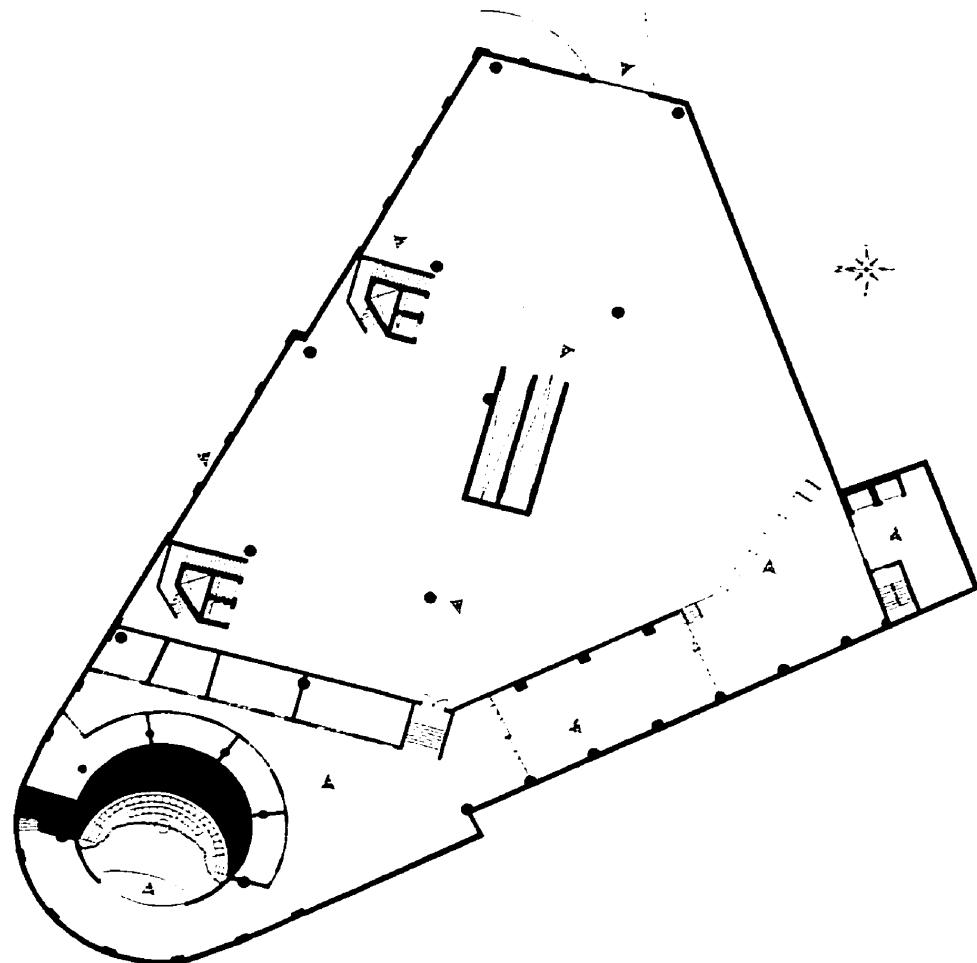
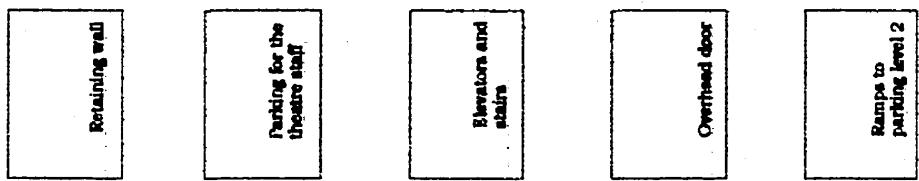


Preliminary Sketches

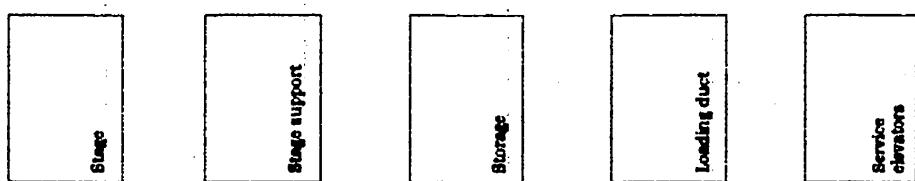


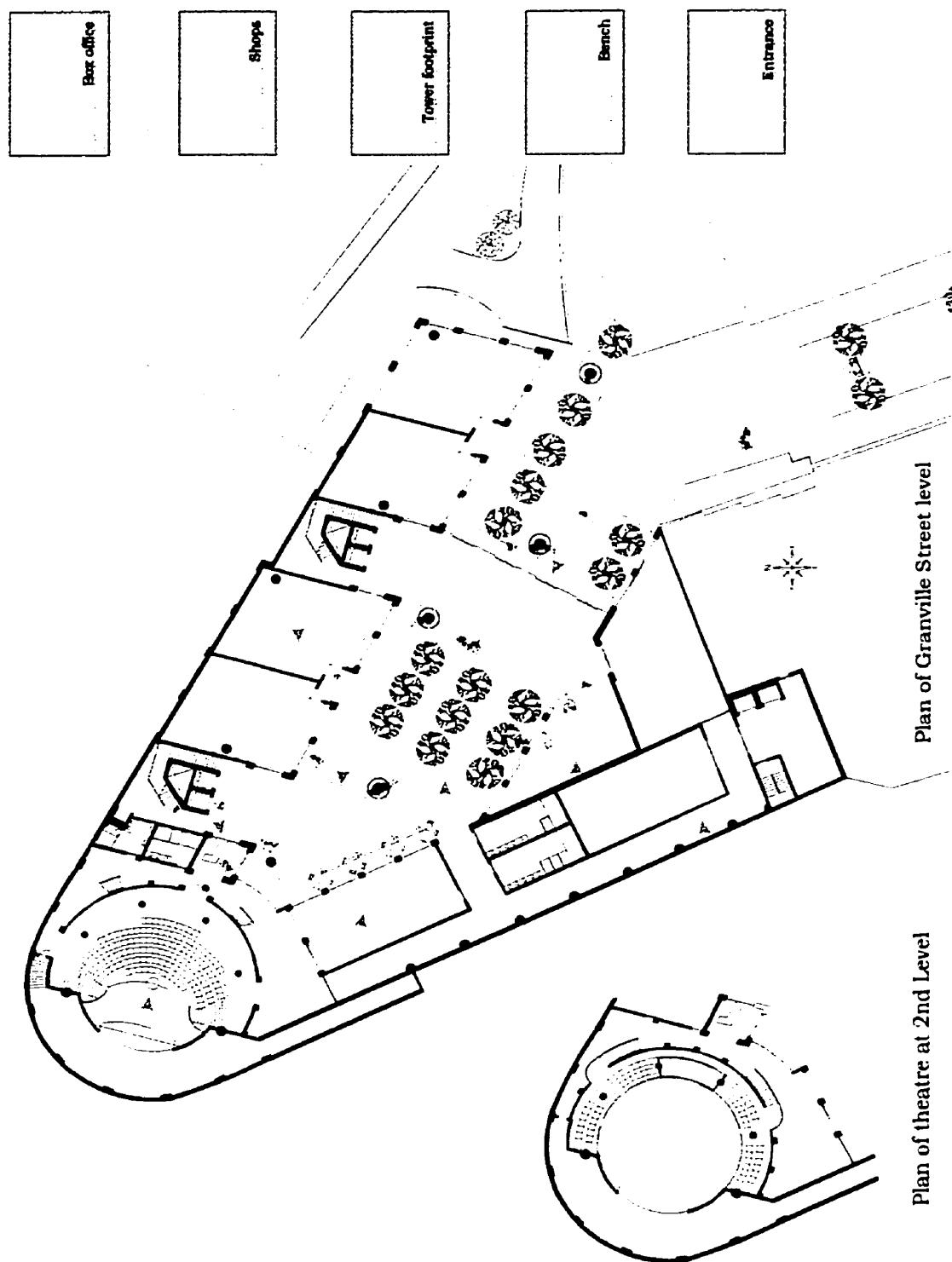
Site model





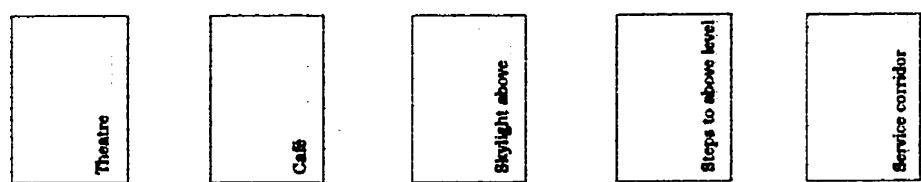
Plan of parking level 1

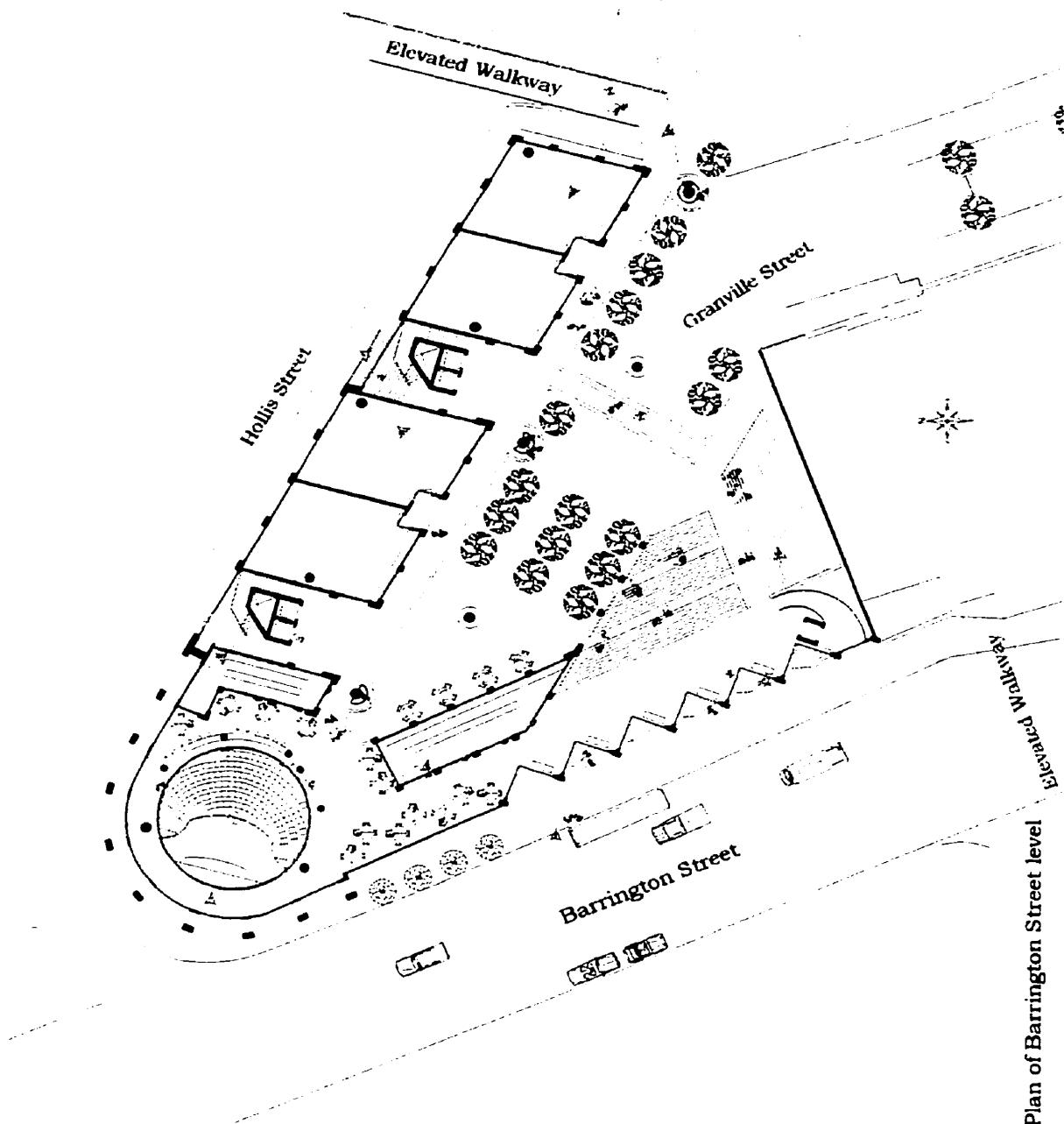
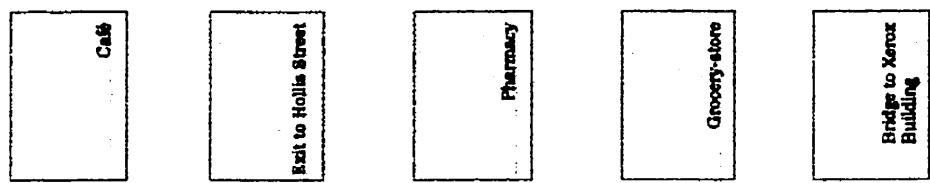




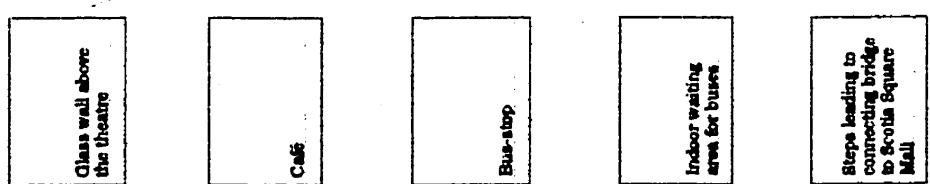
Plan of Granville Street level

Plan of theatre at 2nd Level

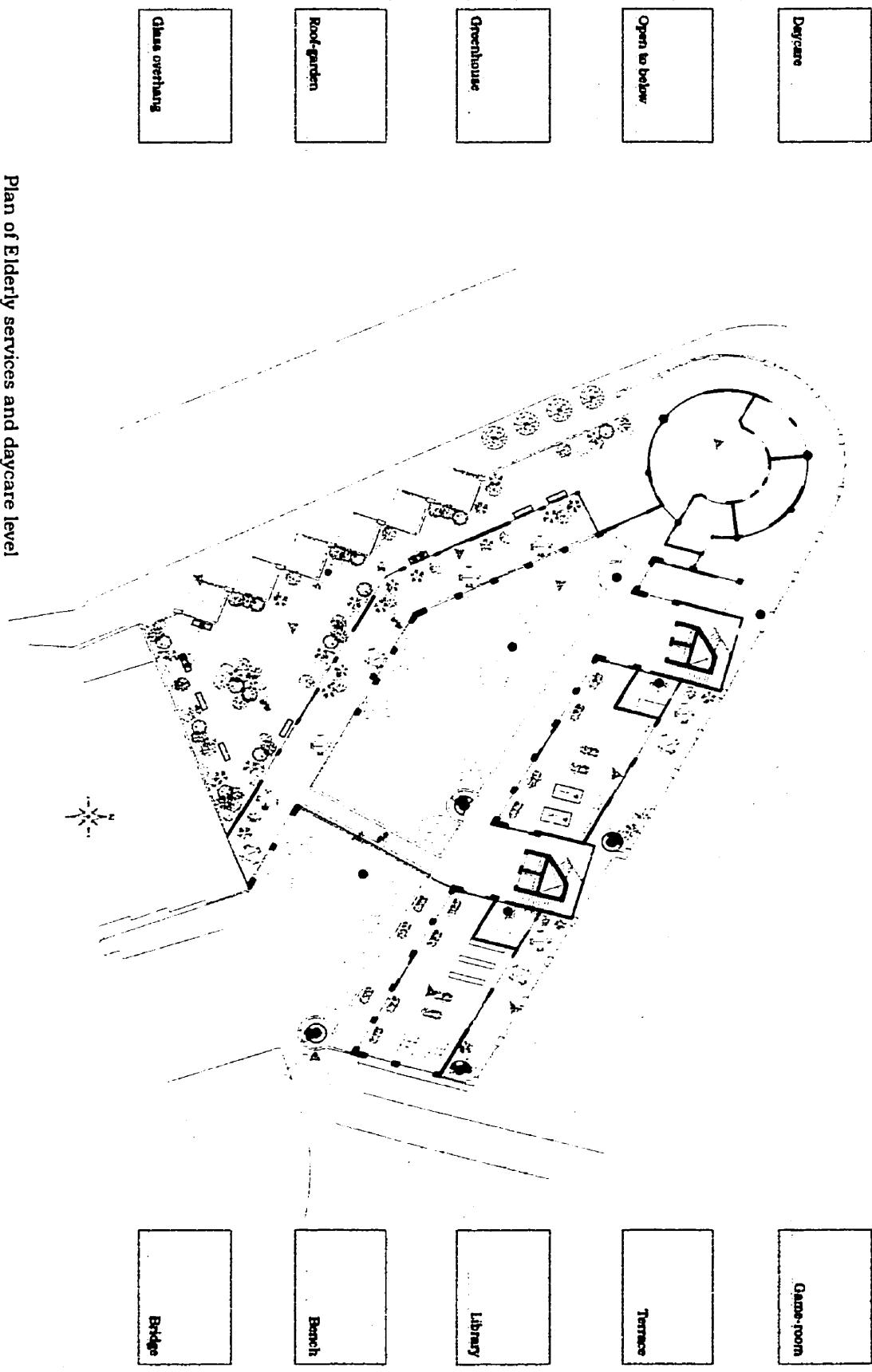


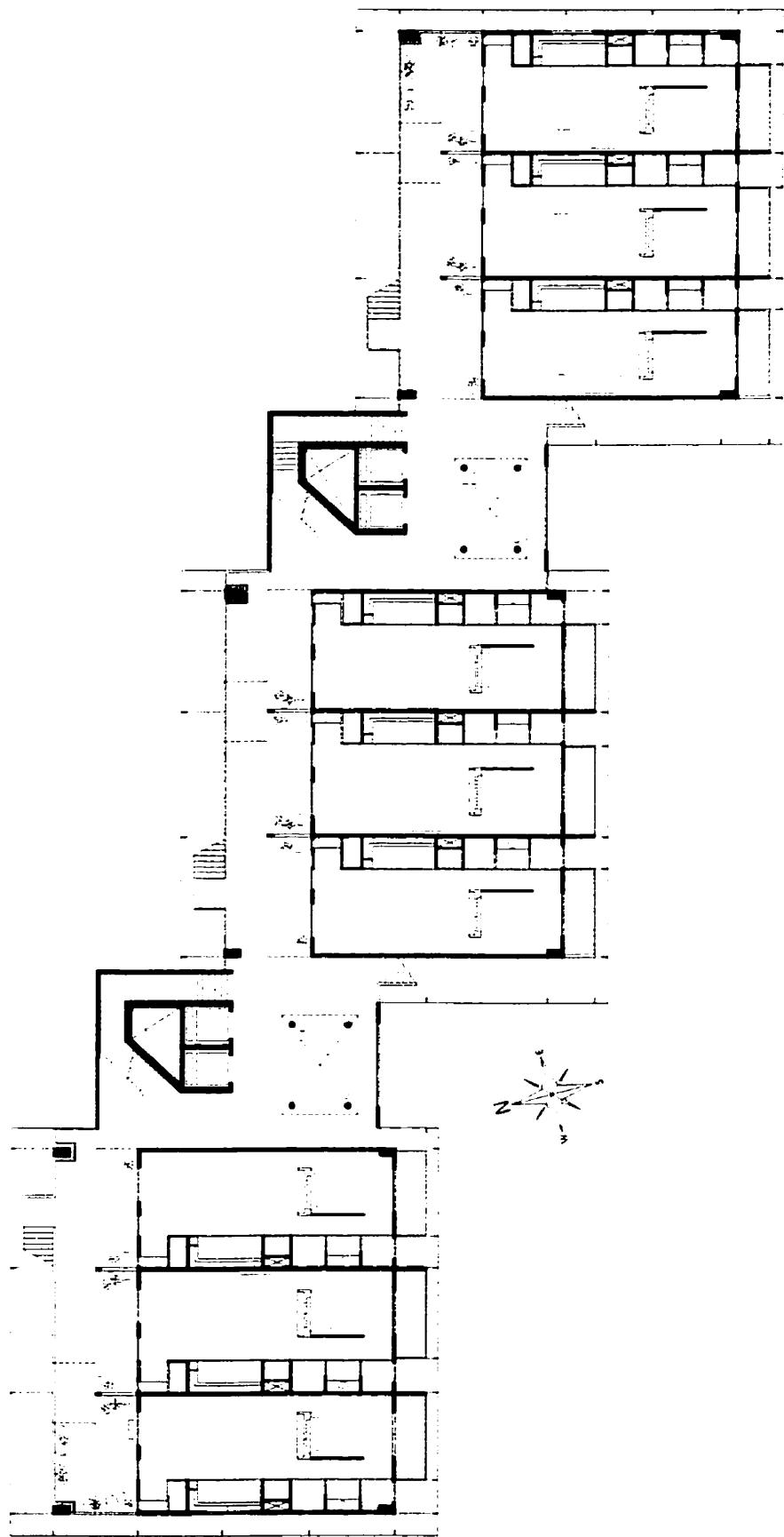


Plan of Barrington Street level

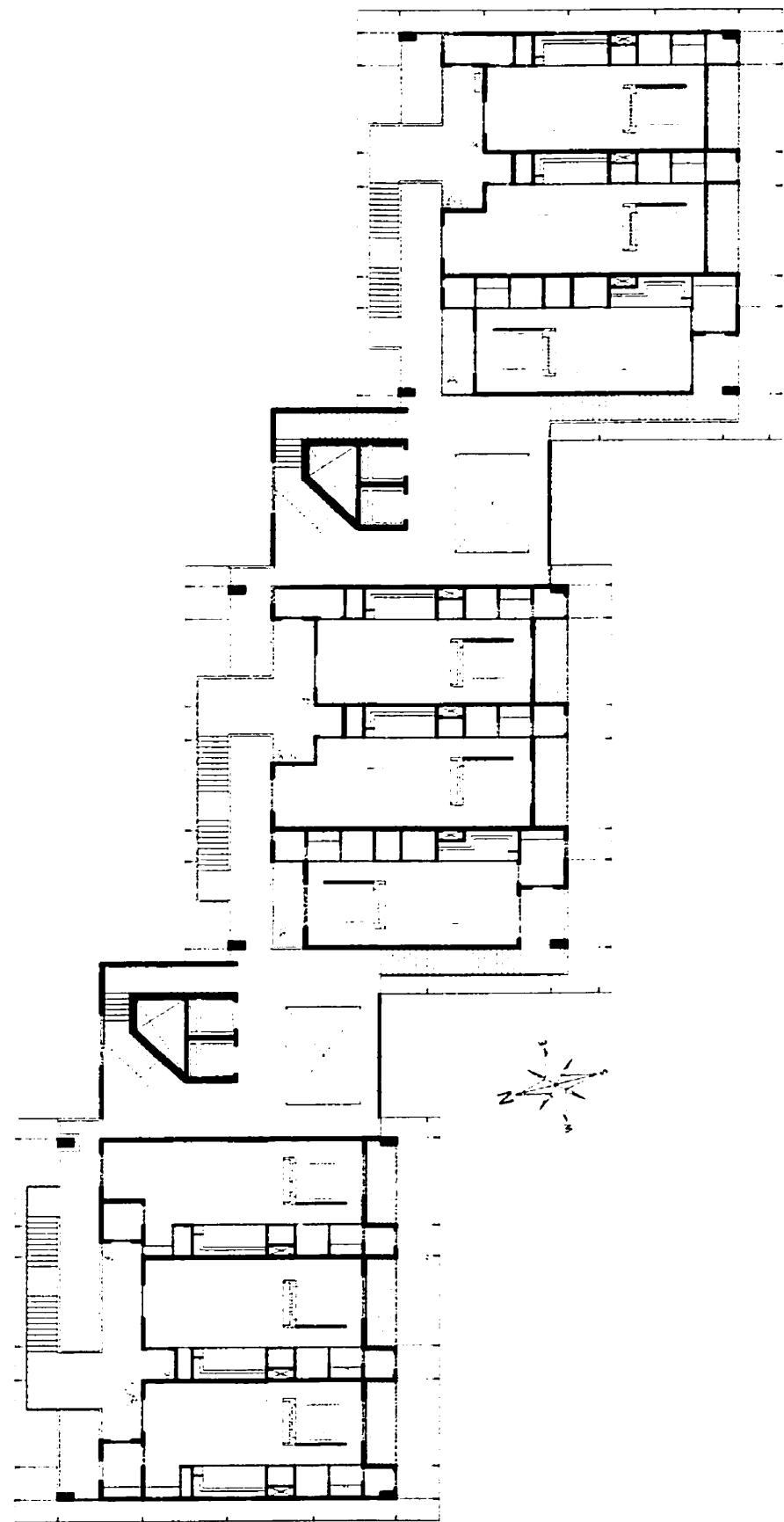


Plan of Elderly services and daycare level

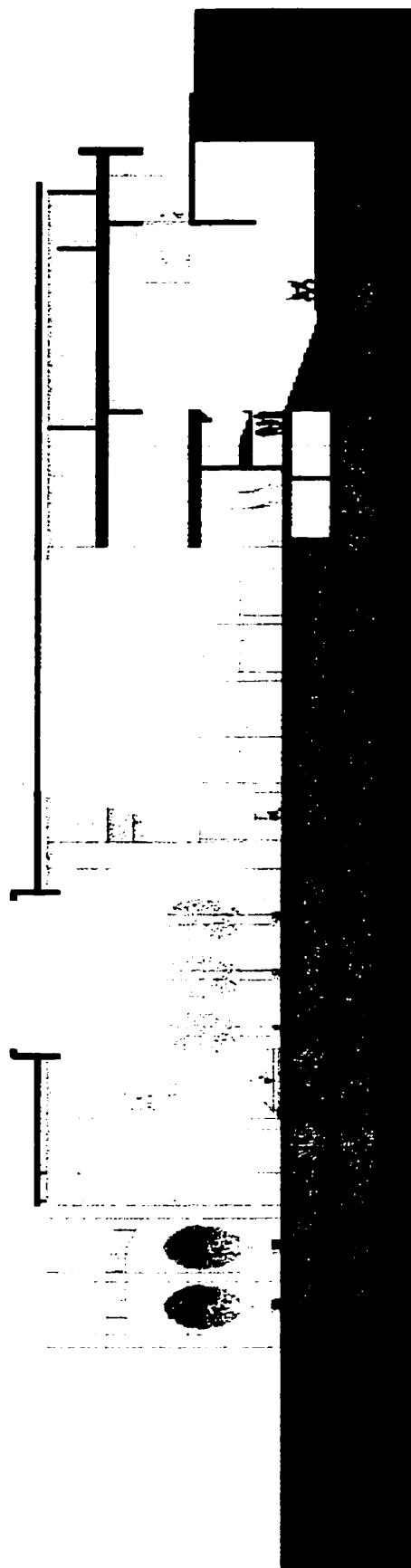




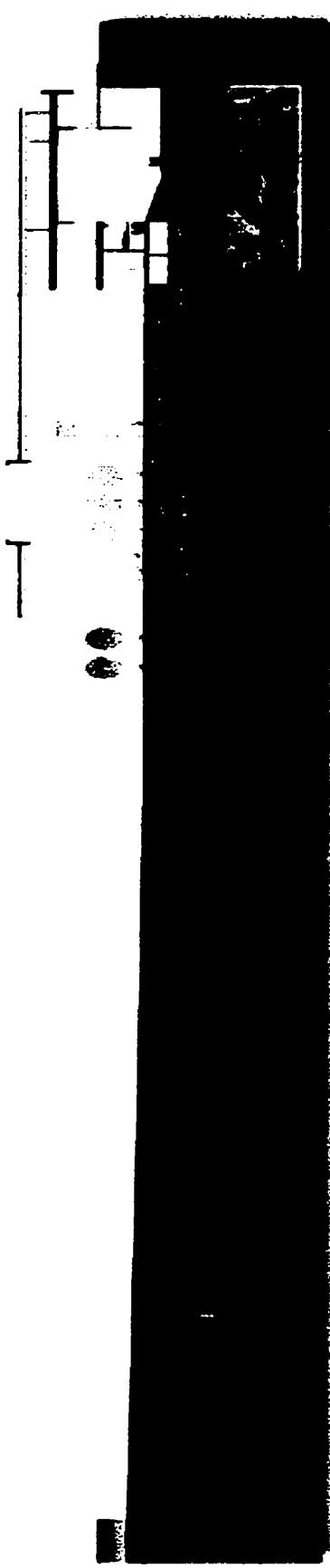
Plan of senior housing unit clusters (3 units per cluster) - lower level



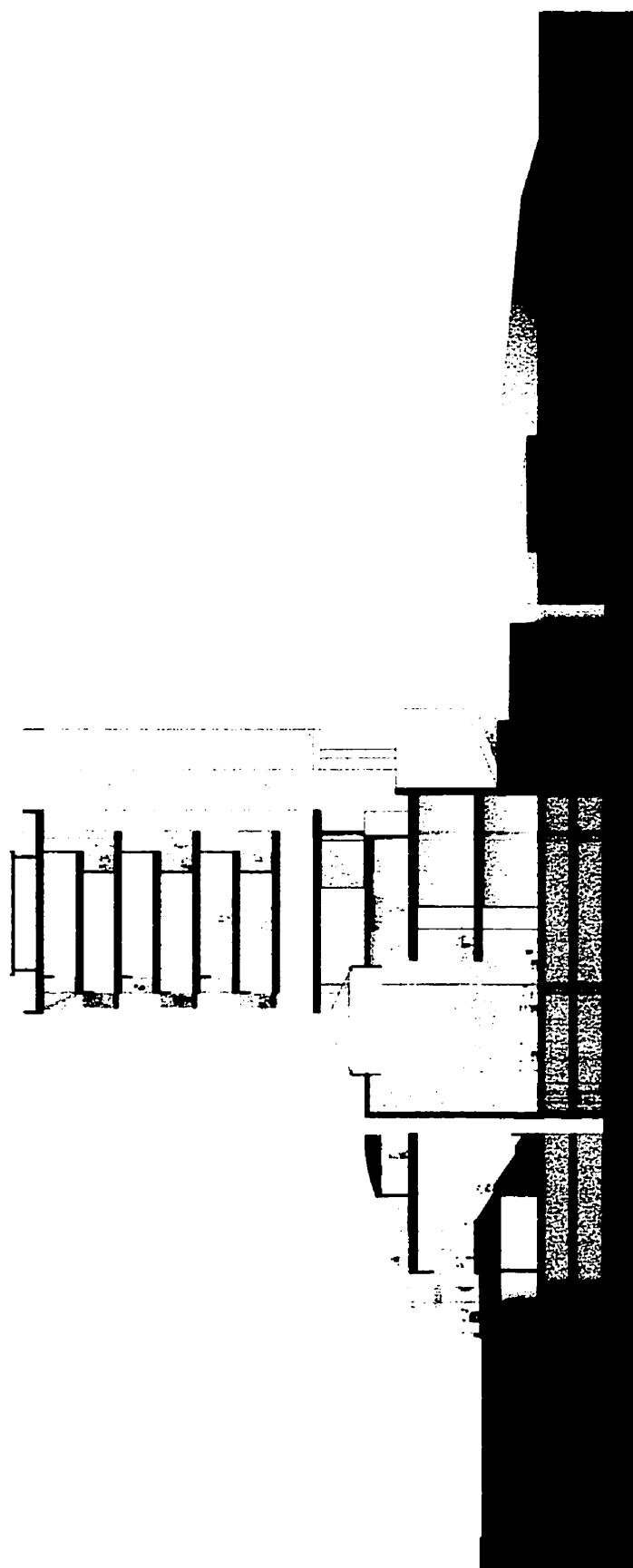
Plan of general housing units - upper level



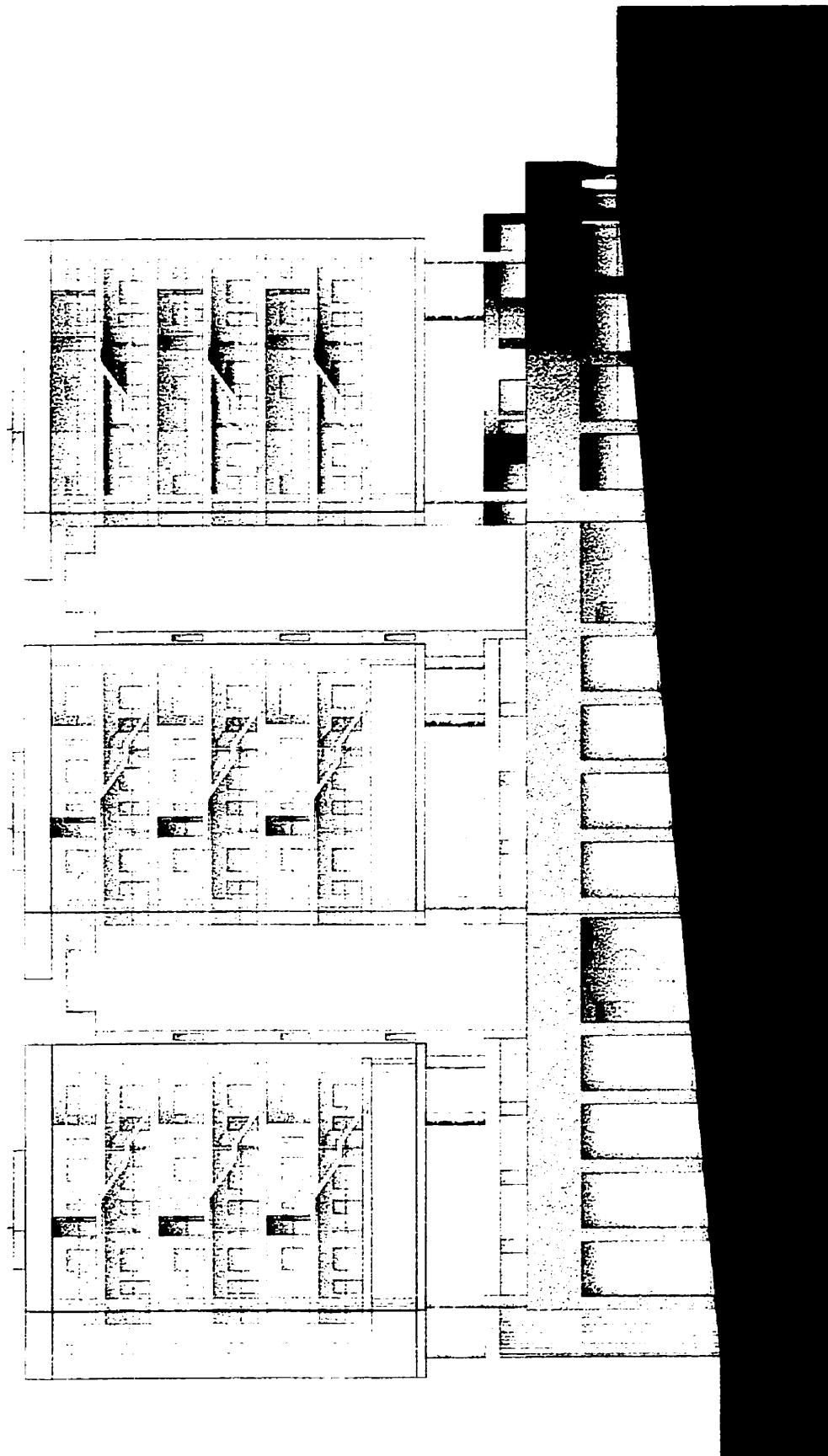
Longitudinal section through "Street" and theatre



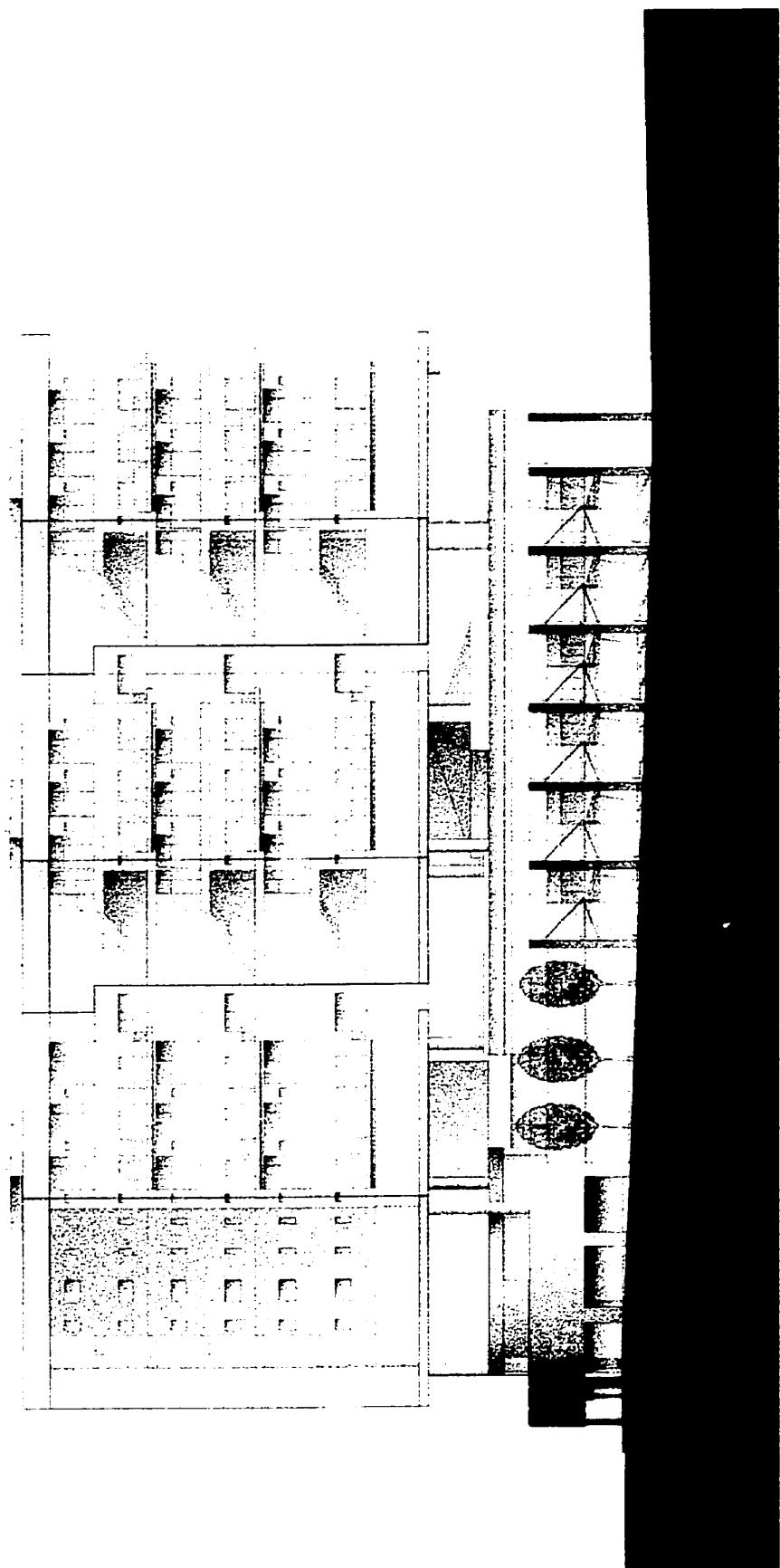
Longitudinal section showing Granville Street pedestrian mall



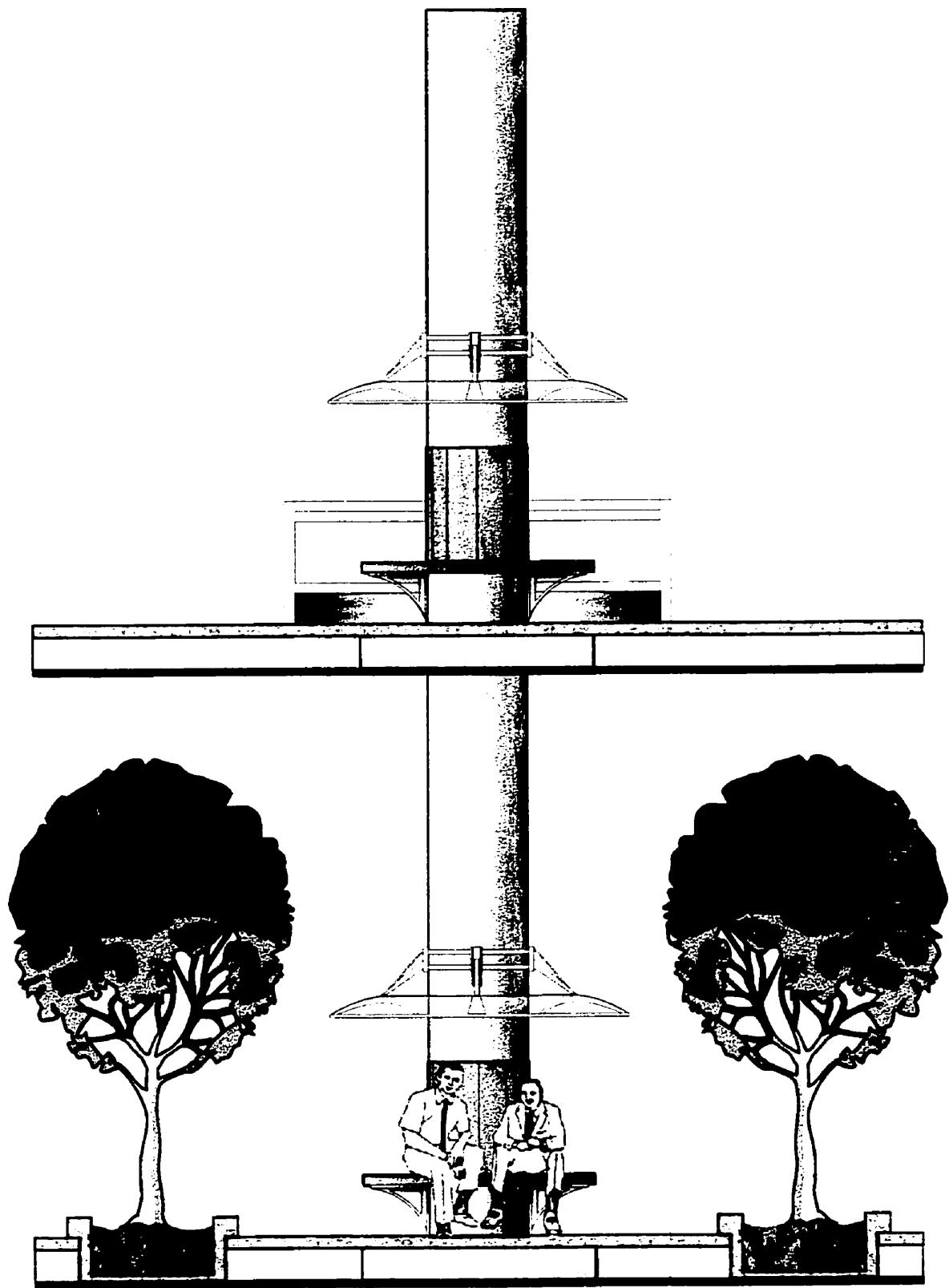
Cross section



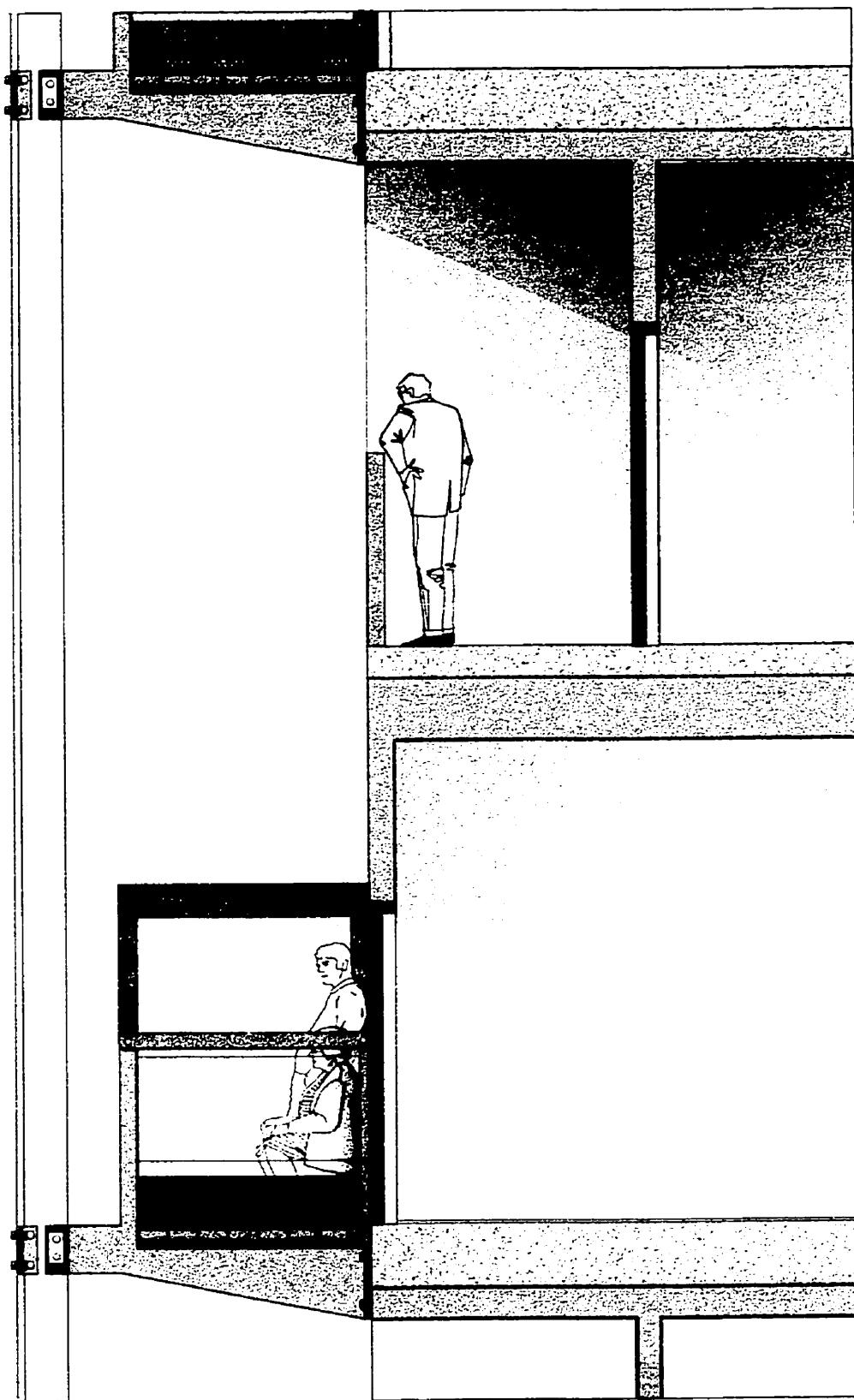
Hollis Street elevation



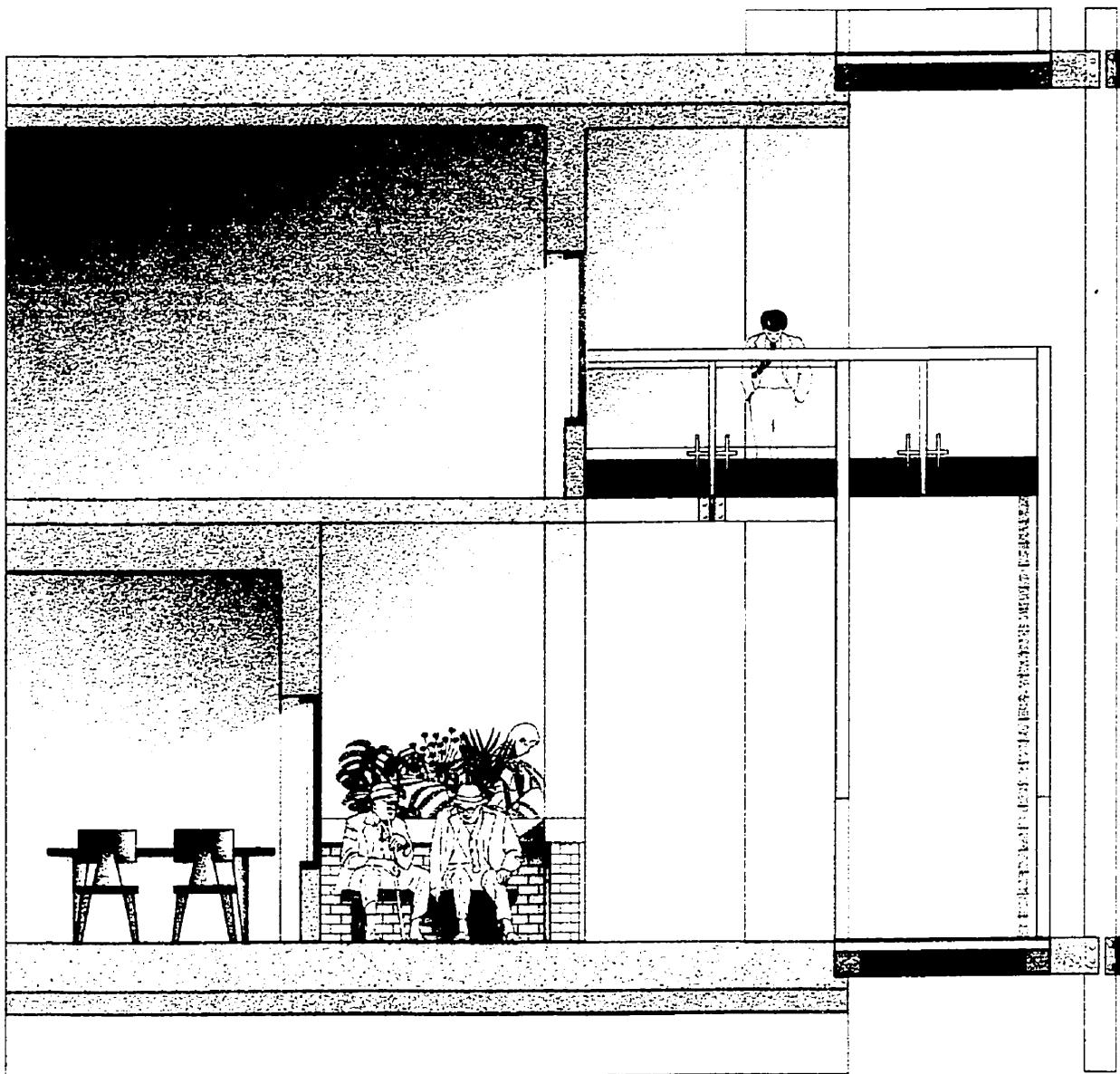
Barrington Street elevation



Detail of street column

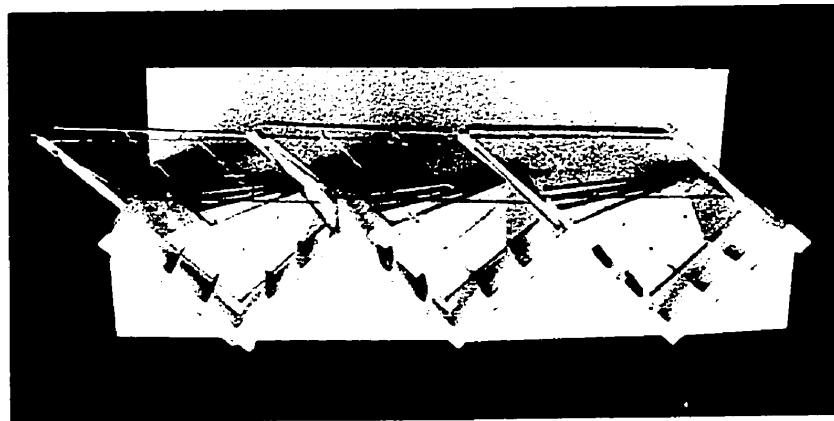
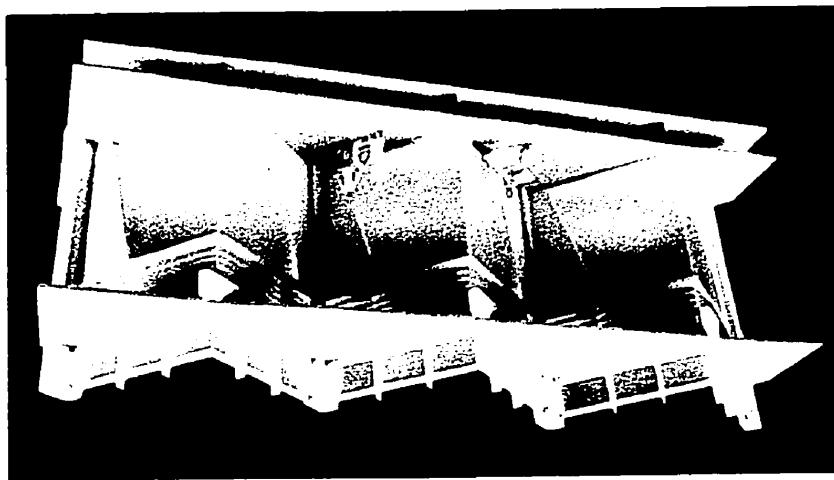


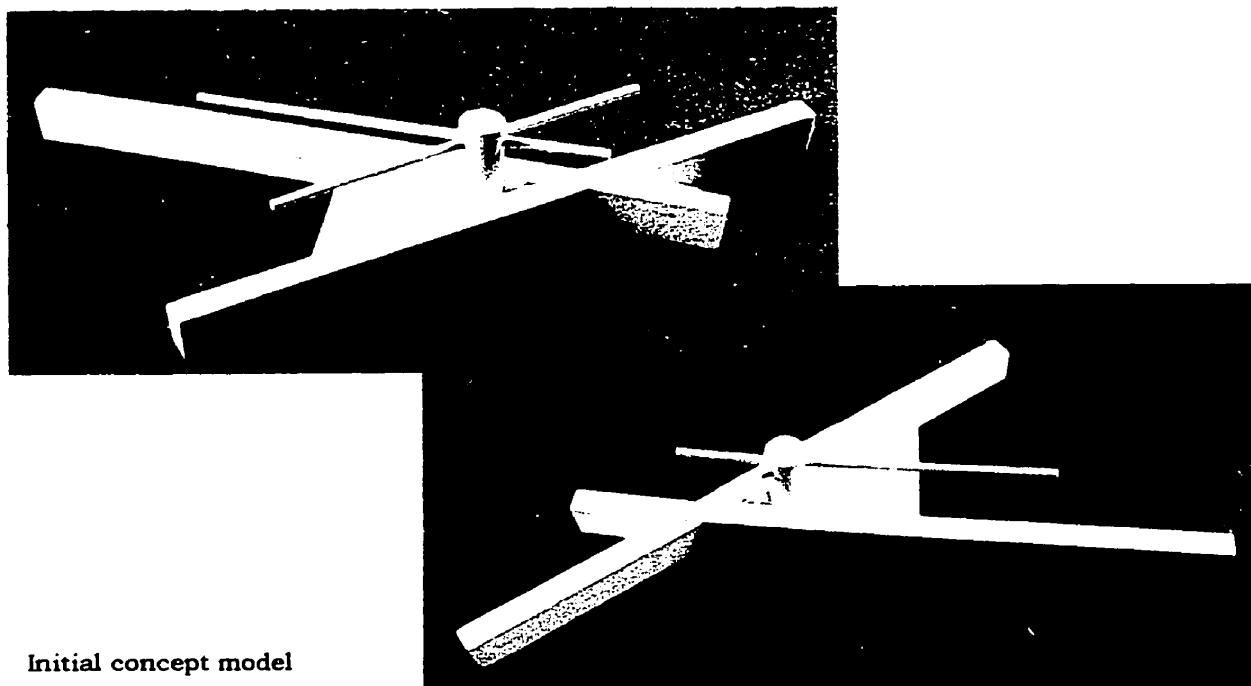
Detail section of unit balconies



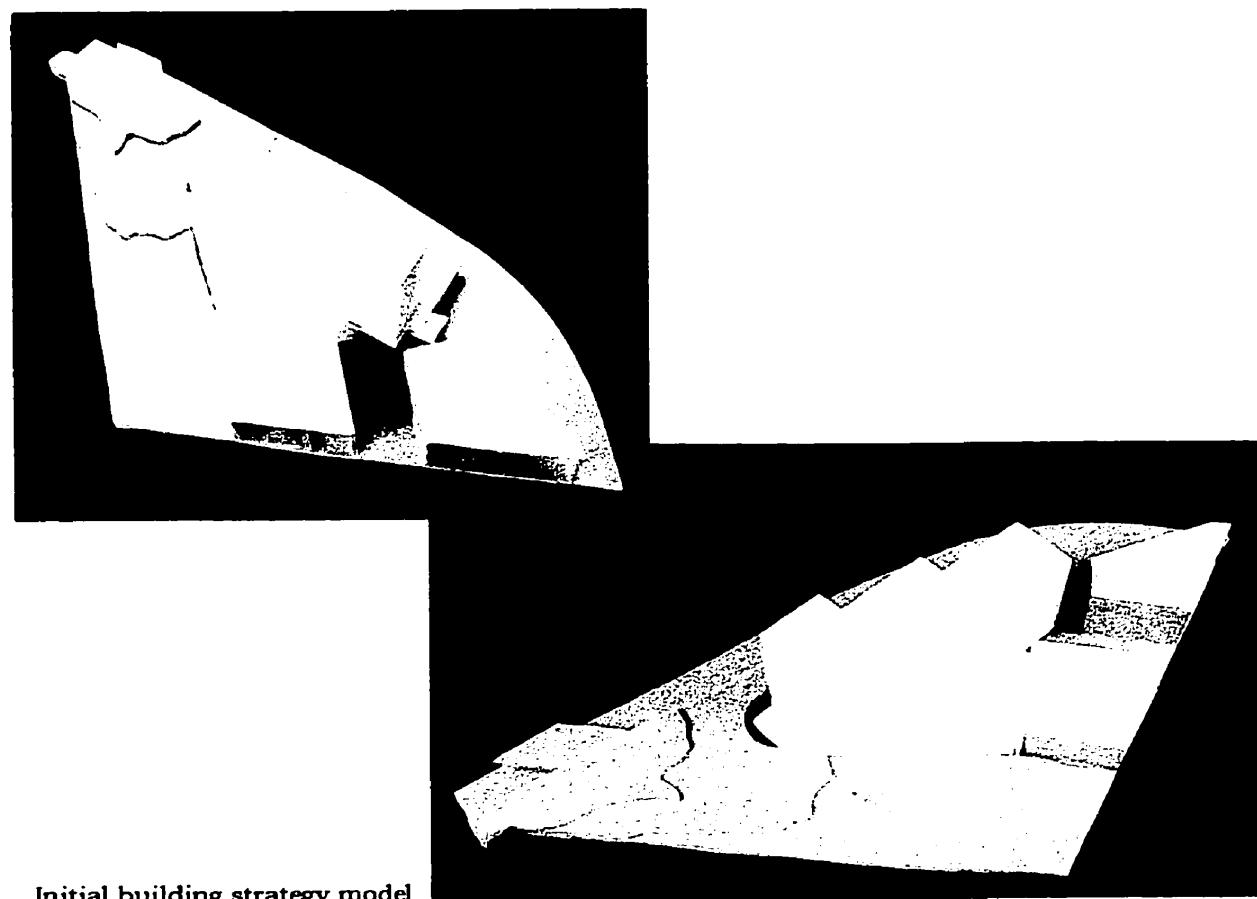
Detail section of units

Model of entrance canopy on Bantington Street

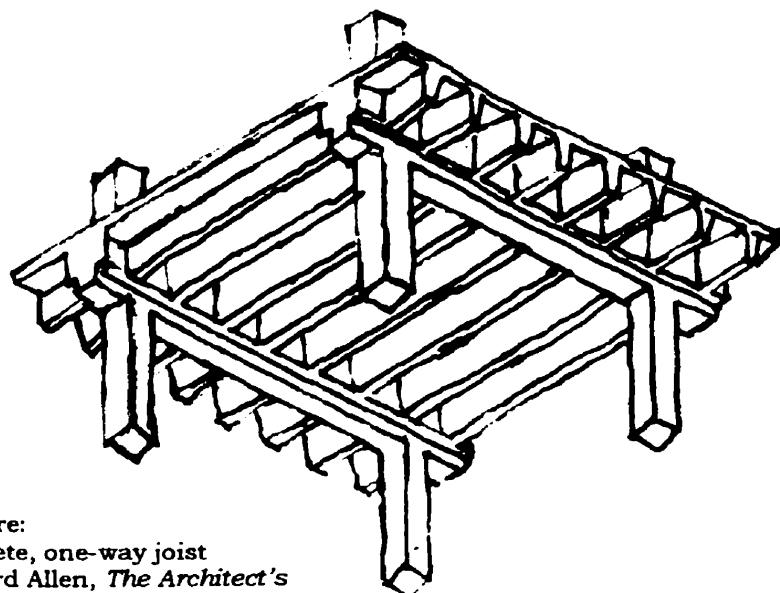




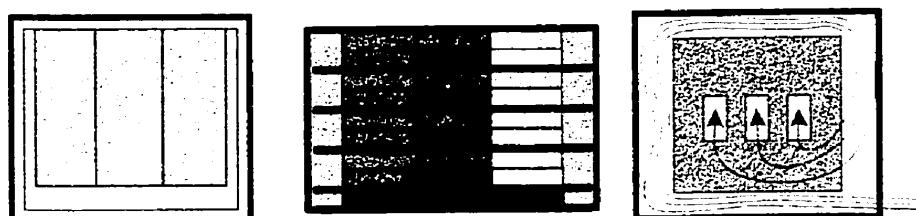
Initial concept model



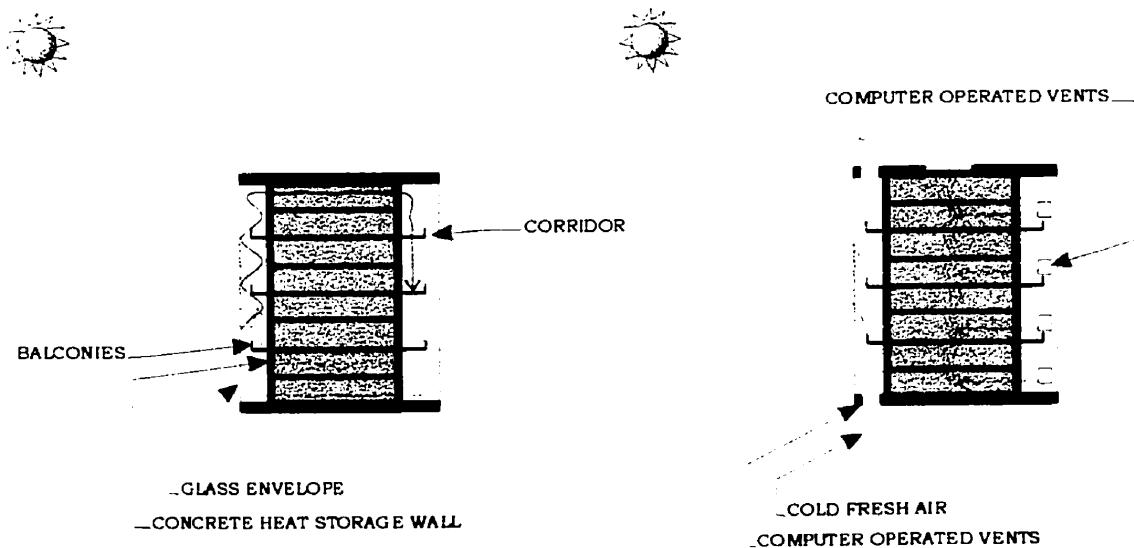
Initial building strategy model



Tower structure:
sitecast concrete, one-way joist
Source: Edward Allen, *The Architect's Studio Companion*

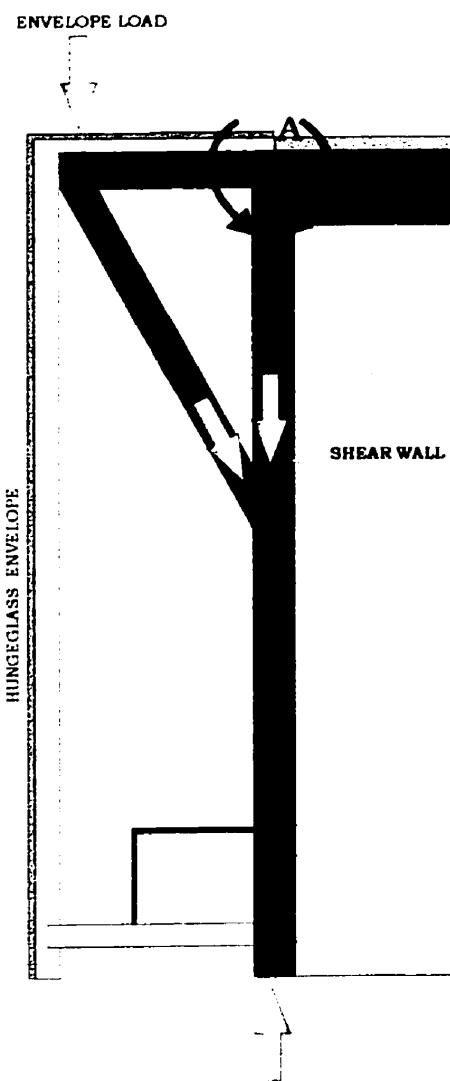
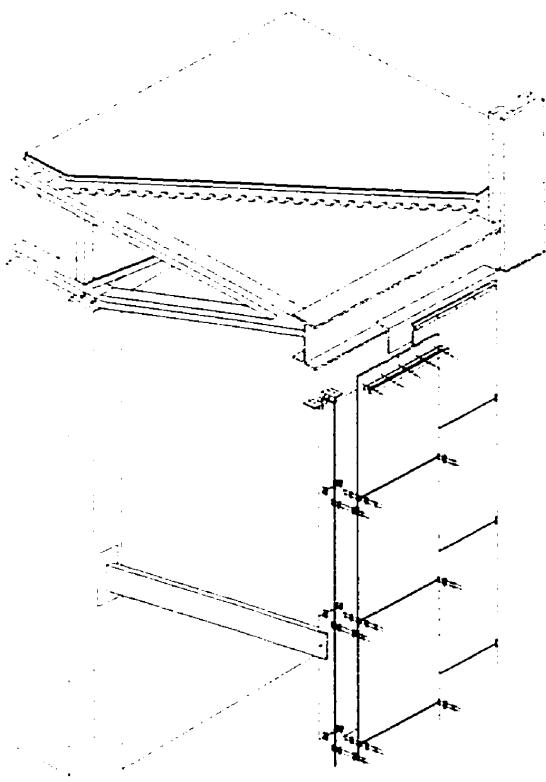


Unit layout and air movement

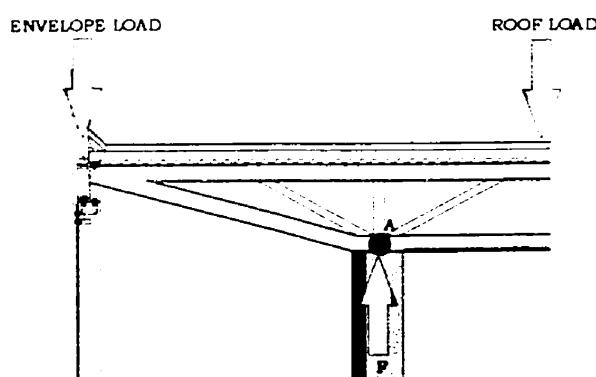


Section:
Winter heating strategy

Section:
Summer cooling strategy



ALTERNATIVE (Better) SYSTEM:
TOTAL CONCRETE STRUCTURE

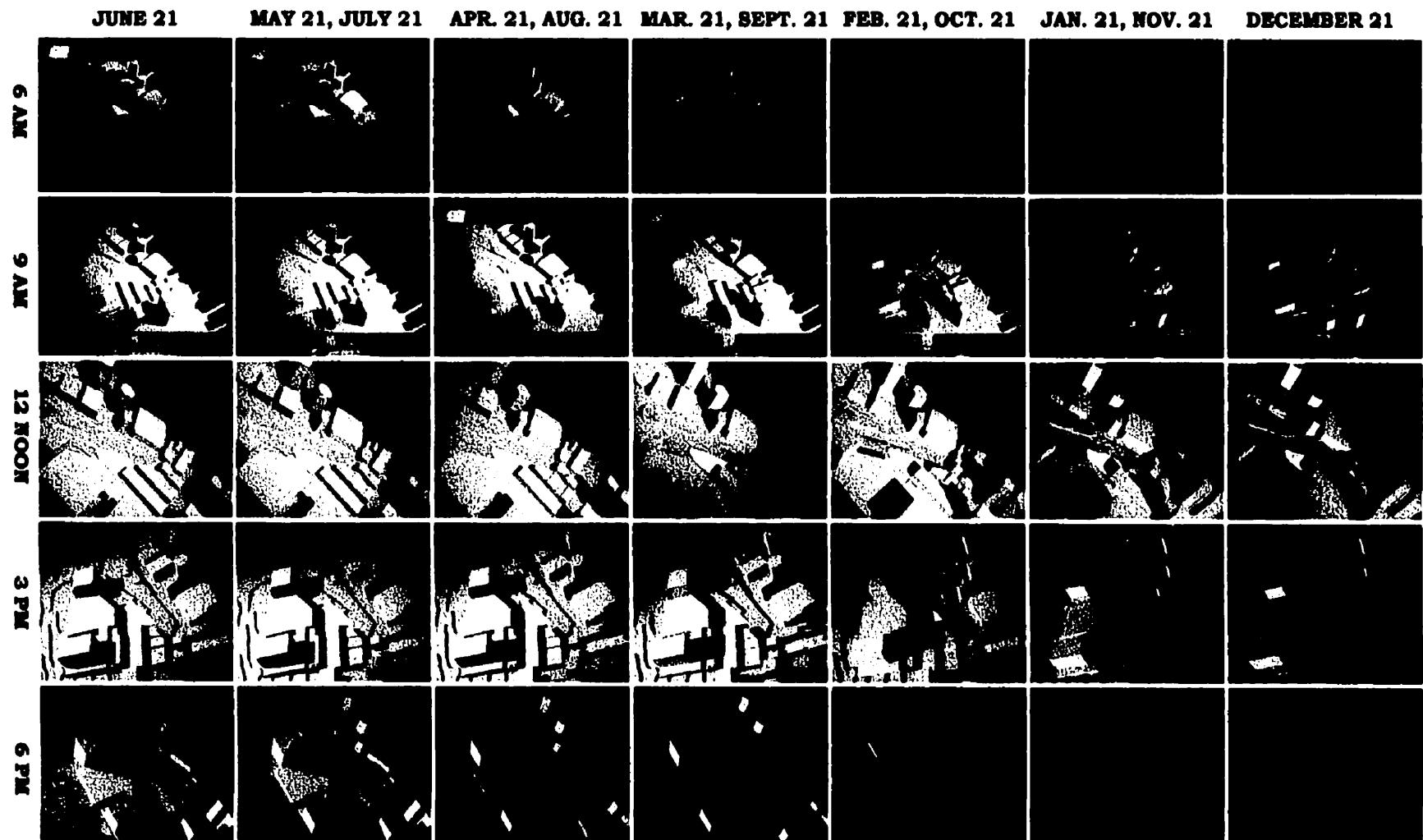


$$P = \text{ENVELOPE LOAD} + \text{ROOF LOAD}$$



$$\text{MOMENT AROUND A} = \text{MEL} - \text{MRL}$$

Envelope options and structural analysis



Heliodon test for natural lighting and building massing

SUMMARY

It is apparent that architects have a major responsibility toward society, but whether or not they choose to take these responsibilities seriously is partly a matter of choice. However, what is important are the responses and the positive encouragements that they receive from the profession. The reality is that one hand does not make a sound; it is when we all recognize and acknowledge the importance of these fundamental social issues that a major step can be taken toward a rich resolution.

During the process of this thesis, I realized various ways that an architect can make meaningful gestures toward socially important issues. Sometimes these gestures can be so meaningful that one wonders if there is an art more powerful than architecture. Architects hold such power, and I believe we would fulfill our obligation toward society, when we use our powers to elevate our societies and ultimately our civilizations.

NOTES

1. Bryan Magee, *The Story of Philosophy* (Montreal: The Reader's Digest Association Ltd., 1998), 127.
2. Ibid., 126.
3. Ibid., 159.
4. Robert Wojtowicz, *Lewis Mumford and American Modernism* (Cambridge: Cambridge University Press, 1998), 89.
5. Ibid., 95.
6. Ibid., 89.
7. William J. R. Curtis, *Modern Architecture Since 1900*, 3rd ed. (Singapore: Phaidon Press Limited, 1996), 312.
8. Paul E. Peterson, *City Limits* (Chicago: The University of Chicago Press, 1981), 63.
9. Victor Regnier, *Assisted Living Housing for the Elderly* (New York: John Wiley & Sons, Inc., 1994), vii.
10. Ibid., 13.
11. Ibid., 181.
12. Noverre Musson and Helen Heusinkveld, *Buildings for the Elderly* (New York: Reinhold Publishing Corporation, 1963), 10.
13. Ibid., 24.

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