A STUDY OF URBAN AESTHETICS

by

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B. Arch., University of Miami, Florida, 1970

9589

A MASTER'S THESIS

submitted in partial fulfillment of the
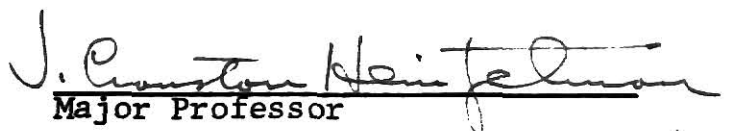
requirements for the degree

MASTER OF ARCHITECTURE

Department of Architecture

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1972

Approved by:

Major Professor

ACKNOWLEDGMENT

The author wishes to express his sincere appreciation for the counsel given by his major advisor, Professor J. Cranston Heintzelman. His sensitivity of design and understanding of the designer's objectives, gave valuable inspiration and assistance towards the realization of this thesis.

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PREMISE

There is an increasing and disturbing tendency in our society for life to become routine, regimented and monotonous. Certain advances in some areas have lead to minimize the creative potential and expressive diversities of mankind. Technology, economics and a transient society have created standardized forms and methods in architecture. Building projects based upon rigid dimensions and formal assumptions leave no room for creativity. The solutions produced for contemporary buildings result in a depressing uniformity, anonymity and monotony.

It is assumed that man is interdependent with his environment. Without its support, at least, his existance would be terminated. Similarly, as man modifies the environment, the environment in turn influences man. It shapes, to varying degrees, the behavior of the people exposed to it. Architects, (along with many others) have the responsibility of constructing and modifying parts of the environment and therefore influence the behavioral and emotional patterns of the inhabitants.

If we define architecture as being the spatial expression of human conduct, then the architects medium is space. Through the moulding of space and the interrelated patterns of spatial design, he constructs for the needs of man.

In this technological age, the approach towards organizing human space tends to become purely rational and solves for only the physical demands, while neglecting the spiritual qualities. The

designer should be responsive to the extraordinary variety of elements of which the human being contains. "The rational approach to organizing space must thus include all those elements which lead to balance and harmony between the human being and his environment, even if those elements turn out to be irrational under the microscope of purely logical analysis. We must also be aware that what is logical is not necessarily irrational, and that what is rational does not necessarily have to be logical."[1]

While architecture produces very tangible solutions, its forms fundamentally do not differ from that of other creative activities: that is to express the essence of existance. A building, like any other man-made form, can make those who experience its mass and volume more intelligible. An architect who designs with this awareness will construct the elements of the building not only as efficient components of functions, but also as visual symbols. He develops a language of space, mass, line and colour. It is through this language that man experiences architecture and the images become accessible to the human spirit.

The sense of vision is the most acute (we are able to differentiate more with our vision than with the other senses) and dominates our perception of the environment. Significant perceptual images must be invented by the designer for all physical characteristics and their relationships. Architecture will then become accessible to the human spirit by the stimulation of one's senses.

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[1] Henryk Skolimowski, "Human Space in the Technological Age," Architectural Association Quarterly, (July 1969) p. 83.

The aesthetic value of a building thus becomes of great importance. Aesthetics are difficult to define, but there are elements which are undesirable by any measure; such as monotony and chaos. Such negative responses can help to formulate goals which would seek to increase the spiritual quality of the environment. To define these goals in advance, would lead to a purely sculptural and isolated solution which would only be a testament to the architects expressive skills. The architect must approach the design process with sensitivity and have the intellect to go beyond just enclosing space. He must strive to meet the broader implications of relating to the environment and the effects his structures will have physically, visually and emotionally upon man. It should be possible to set reasonable, constructive limits of design, which would limit total anarchy in design and also the dull conformity of regimentation, but allow for a wide scope in creativity and originality.[2]

The artists visual analysis of space and movement gives life to forms which would otherwise result only from objective and measurable facts. His works are invigorated by a contact with reality and enhanced by his imagination. This is the substance of a creative expression. It seeks symbols which are opposed to merely just an interpretation of current aesthetic fads or bland functional considerations alone. The symbols should be universal in character and reflect a variety of phenomena, picking out the deepest meaning and reflecting it in an exciting manner.

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[2] Anthony Kettaneh, Project Romulus, (Cambridge, Mass.: The M.I.T. Press, 1967), p. 17.

Function, as a criterion for the designing of forms, should not be limited to suitability for physical purposes alone. There is the further need that function should include visual considerations. These help bring about the character of the expression which also derives from the material and physical forces which act upon it. In a more complex sense, our particular civilization shapes the character through traditional preferences, personal needs, diverse goals and value systems, striving for originality, novelty and fashion, lack of cooperation, building trade regulations, and limited information about perceptual experiences. In the urban environment, form is also generated in part, by responding to existing forms. The designer must consider the relationships between districts, buildings, the individual and the total urban entity.

"Form follows function" is too simplistic an approach to contemporary building needs. It implies that for each function there is a form. It ignores the mixed character of functions. Forms are put to multiple tasks and one design cannot serve them all. "Form follows function" suggests form as being a static element. But form has an impact upon our senses and can determine functions. It is possible for form to precede function.

The total form of a building will result from the function of the structure, the needs of the people who use them, the character of the material and what can be done in a given situation towards ordering a composition. Relevant to the situation, the designer should seek the most eloquent expression for each material and design visually exciting forms. A richness of meaning should be his objective, rather

than just clarity of meaning. This is suggestive of the sculptors ability to mould and elaborate, rather than just construct forms.

"Natural shapes (form) is not accounted for wholly or even essentially by function. There are hundreds of ways of being a tree, a fish or a bird and while of course, each organism was formed by a set of determining conditions, there is no way of explaining the difference between an oak and a maple by reference to their present needs or function."[3] Perhaps a better approach would be to follow the axiom "form evokes function", in which forms suggest the limitations of functions that can be achieved.

The architects judgment, in the last resort, is subjective. He shapes the environment with skill and imagination in meeting functional demands and must bring forth an intuitive and artistic awareness which can not be justified by rational means alone.

The need for large numbers of similar elements through prefabrication, and the desire for differentiation, represents a difficult problem for designers. Architects will have to create forms which can withstand repetition. They must also organize those units plastically into a unique whole in which they are interesting and stimulating in themselves, but also form a distinctive pattern. The parts and the whole should have a dynamic response to each other.

In the urban environment, the architect cannot detail every situation with the care shown in more isolated buildings. He can show

[3] Rudolf Arnheim, "From Function to Expression," in _Aesthetic Inquiry_ ed. by Monroe C. Beardsley and Herbert M. Schueller (Belmont, California: Dickerson Publishing Co. Inc., 1967), p. 201.

differentiation due to the specialization of parts and provide a strong order which allows for variations within a theme. Thus, proportionally, geometrically and through interaction in space, the individual elements can participate as a collection, and as parts of other groups. This is analogous to the artists lifelong search for variety in unity. Without this, the architect will continue to produce aesthetic stagnation or chaos.

As individual units are seen as parts of an interrelated whole, so must the design of each building be imagined. Architecture does not function as buildings isolated and independent of each other, relating only to their internal needs and services. Urban design must be seen as a single design problem in which a framework is provided where the specific is well designed, but relates to a larger complex. The whole is dependent upon its parts and is also greater than the sum of its parts. Therefore, buildings must relate to each other in harmonious and functional patterns with movement and spatial relationships providing connections. The general urban scale and the particular internal scale of each structure, should be compatibly and expressively related.

The architect must consider the total organization of space, not only the spaces in a building, but the open spaces between buildings. Space, therefore, will be shaped through both internal and external relationships. This will produce an interplay of defined spaces that are linked sequentially and form an ordered space environment. Contemporary designers have continued to design with a method in which buildings grow from the inside to the outside. They are concerned with just the enclosure of space. The urban environment of existing

complexities and relationships must influence the design with external forces that will help provide a unity with the city as a whole, thus the spatial solution of a building is determined by the internal structure and also the rational composition and spatial unity of the entire urban setting.

There are no fixed laws in architecture. The architect must make decisions and those subtle evaluations are his principal function. As present conditions in most cities have reached a critical and disturbing level, new systems, techniques, forms and values will have to be developed. The necessary goal for the designer is to produce a comprehensive design which is mechanically and emotionally efficient. Such a solution will have to employ logic, discipline and coherent thinking as well as an artistic sensitivity and the perception of the vast number of interactions occuring between man and his physical environment.[4]

"Great architecture is art, and the art in architecture is an unmeasurable quality. But great architecture is primarily technique, and therefore a building must clearly reflect the order, discipline, and the measurable aspects of its being. The real art in architecture is not arbitrary style or ethereal symbolism, but the extent to which a building can transcend the measurable to the unmeasurable; the extent to which a building can evoke pleasure and profound emotion; the extent

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[4] Robert Venturi, <u>Complexity</u> <u>and</u> <u>Contradiction</u> <u>in</u> <u>Architecture</u>, (New York: The Museum of Modern Art, 1966), p. 46.

to which a building can spiritually uplift and inspire man while simultaneously reflecting the logic of technique."[5]

A final quote might further suggest what has been proposed: "Mies is great but Corbu communicates."

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[5] Paul Heyer, Architects on Architecture, (New York: Walker and Co., 1966), p. 149-150.

PROGRAM FOR PROPOSED CIVIC CENTER IN WICHITA, KANSAS

Site

972 feet by 860 feet
835,920 square feet

Facilities Requirements

Police Department

    11 work rooms
    Lineup room
    Holdover jail
    Jailer's office
    Office--Police Chief
    Office--Assistant Police Chief
    4 offices--Investigators
    2 offices--Vice Squad
    Office--Training Officer
    Internal Security Office
    Personnel Director's Office
    Examination room
    2 offices--Juvenile Officers
    Press room
    Patrol Command Office
    Traffic Command Office
    Tactical Unit Office
    Records Room
    Office--Records Supervisor
    Planning and Research Room
    Office--Auxiliary Services Command
    Office--Fingerprinting and Mugging
    2 offices--Attorneys
    Youth and Women's Command Office
    2 Doctor's Offices and Examination Rooms
    2 Conference Rooms
    Clerical
    Public Counter
    Personnel Lounge
    Washrooms and Showers
    Lockers

Fire Department

Office--Fire Chief
Office--Assistant Fire Chief
Records Room
Office--Records Supervisor
Press Room
Fire Prevention Office
Conference Room
Personnel Director's Office
Examination Room
3 offices--Inspectors
Command Office
Clerical
Public Counter
Personnel Lounge
Office--Training Officer

Department of Civil Defense

4 offices--Directors
Clerical

Planning Department

Office--Chief Engineer
4 offices--Assistants
Drafting Room
Conference Room
Record and Map Room
Printing Room
Clerical
Personnel Lounge
Personnel Lockers
Public Counter

Building and Zoning Department

Office--Chief Engineer
2 offices--Construction Inspectors
Office--Structural Inspector
Office--Electrical Inspector
Office--Heating and Air Conditioning Inspector
4 Work Rooms
2 offices--Permits Officers
Conference Room
Records Room
Clerical
Public Counter
Personnel Lounge

Traffic Department

        Office--Director
        3 offices--Technical Assistants
        Map and Record Room
        Drafting Room
        Clerical
        Public Counter

Real Estate Department

        Office--Director
        4 offices--Assistants
        Clerical
        Public Counter
        Conference Room

Housing Department

        Office--Director
        5 offices--Assistants
        Clerical
        Conference Room
        Public Counter

Public Works Department

        Office--Director
        2 offices--Clerks
        Office--Cost Accounting
        Office--Administrative Assistance
        Roads Office
        Sewers Office
        Water Office
        Clerical
        Public Counter
        Records Room
        Conference Room

Public Health Department

        Office--Director
        Statistical Office
        4 offices--Clerks
        Laboratory
        Office--Sanitory Supervisor
        Records Room
        2 offices--Specialists

Office--Sanitarium Supervisor
Office--Public Health Nursing Officer
4 Doctors Offices--Including Secretaries office,
   Examination Room, Laboratory and Waiting Room
2 Conference Rooms
Clerical
Personnel Lounge
Records Room
Public Counter

Welfare Department

Office--Directors
5 offices--Assistants
Conference Room
Clerical
Public Counter

Finance Department

Office--Director
Office--Budget Officer
Office--Accounting Officer
Office--Purchasing Officer
Office--City Treasurer
Office--Payroll Officer
Office--Tax Officer
5 offices--Assistant Tax Offices
Computer Room
Records Room
Office--Records Officer
2 offices--Audit and Accounts Officers
4 Interview Rooms
3 offices--Assessing Officers
Printing Room
2 Conference Rooms
Clerical
Public Counter
Vault
Personnel Lounge

Parks and Recreation Department

Office--Recreation Director
3 offices--Recreation Program Supervisors
Office--Parks Director
Clerical
Public Counter
Conference Room

Board of Education Department

    Office--Director
    Office--Assistant Director
    4 offices--Inspectors
    2 offices--Secondary School Inspectors
    2 offices--Public School Inspectors
    Clerical
    Conference Room
    Records Room

Public Building Maintenance Department

    Office--Director
    Office--Assistant Director
    Clerical

City Hall Maintenance Department

    Office--Director
    Office--Assistant Director

Personnel Department

    Office--Director
    2 offices--Assistant Directors
    Examination Room
    Clerical

Public Records Department

    Records Room
    Office--Records Supervisor
    2 offices--Assistant Records Supervisors
    2 Work Rooms
    Duplicating Room

Executive Facilities

    Council Chamber
    Press Room
    Equipment Room
    2 Conference Rooms
    Clerical
    Male Robing Room
    Female Robing Room
    Lounge

Mayor's Office
Office--Mayor's Secretary
6 offices--Councillors
Executive Lounge

Law Courts

6 Court Rooms
Ante Rooms
Waiting Areas
6 offices--Judges Chanbers
4 offices--Clerks
6 Work Rooms
3 offices--Police Officers
3 Interview Rooms
4 offices--Solicitors
Clerical
Public Counter
2 Conference Rooms
Office--City Clerk
Office--Deputy City Clerk
Office--City Attorney
Office--Deputy City Attorney
Office--City Manager
Office--Assistant City Manager

Miscellaneous Facilities

Theater
Restaurant
Cafeteria
Bar
Library
Art Gallery
Public Conference Rooms
Public Lounges
Public Reading Room
Parking
Receiving Area
Supplies Storage
Press Room
Duplicating Room
Reception and Information Station
Mail Room
Mechanical Room
Coat Room
Offices for Private Rental (for future use by munici-
    pal departments)
Restrooms, Waiting Areas, Personnel Lounges, and
    Records and Supply Storage to be provided where
    necessary

PLATES

Photographs of Model and Drawings for

Proposed Civic Center for

Wichita, Kansas

PLATE I

PARTIAL OVERHEAD VIEW LOOKING SOUTH, OF WICHITA,
KANSAS SHOWING CONCEPTUAL FUTURE BUILDING AND
STREET PATTERN AND THEIR RELATIONSHIP TO PROPOSED
CIVIC CENTER. CIVIC CENTER IS IN THE FOREGROUND.
PEDESTRIAN AND SHOPPING MALL IN CENTER. CULTURAL
COMPLEX TOWARDS TOP OF PHOTOGRAPH. RIVER AT THE
RIGHT.

PLATE II

VIEW FROM SOUTH, OF PROPOSED CIVIC CENTER
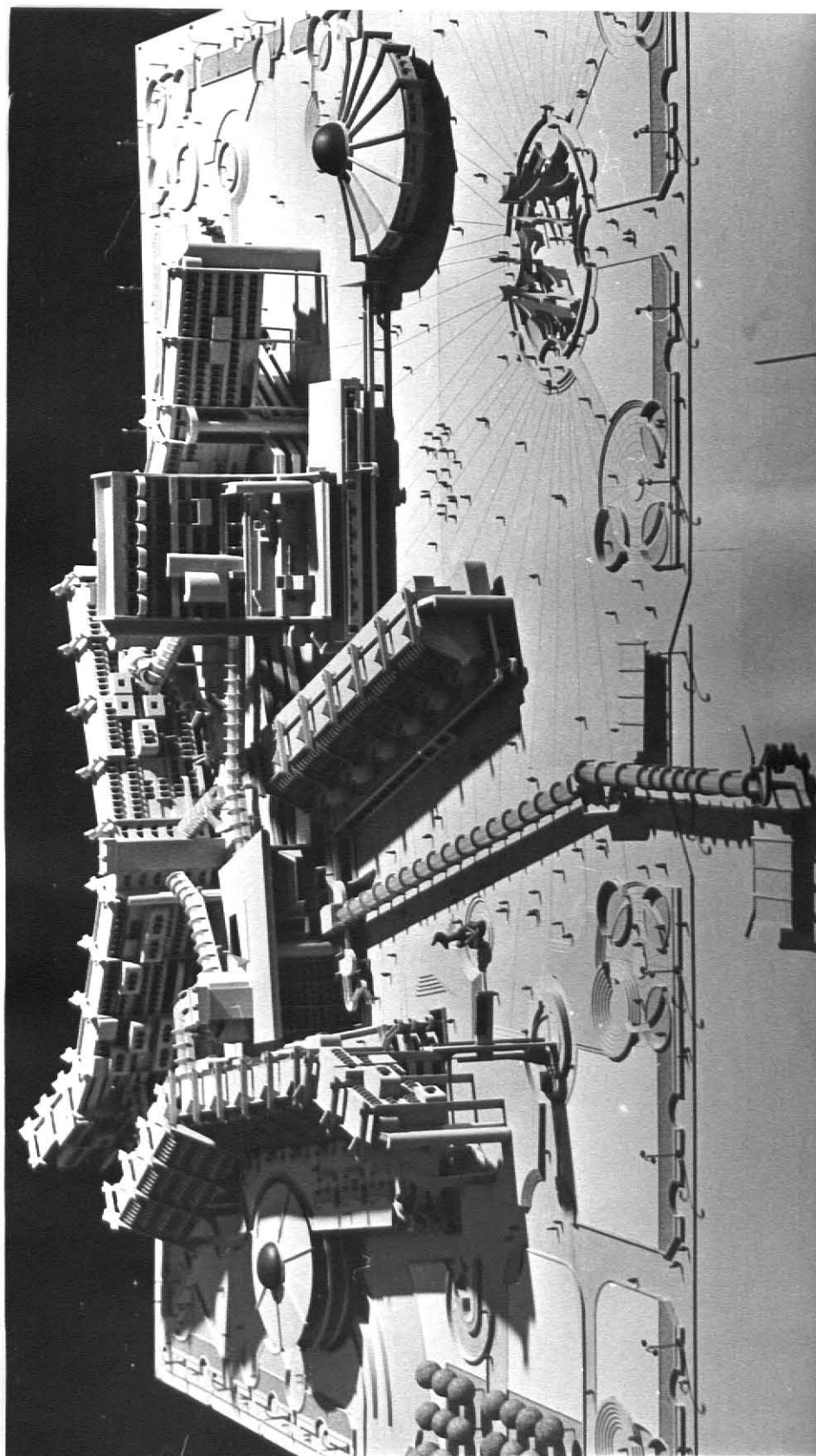
PLATE III

FIRST LEVEL PLAN

THIS BOOK CONTAINS NUMEROUS PAGES WITH DIAGRAMS THAT ARE CROOKED COMPARED TO THE REST OF THE INFORMATION ON THE PAGE.

THIS IS AS RECEIVED FROM CUSTOMER.

PRIMARY STRUCTURAL FRAMING PLAN

CIRCULATION PLAN

STRUCTURAL PLAN

VEHICLE — PEDESTRIAN
VERTICAL
HORIZONTAL
EXTERIOR WALKWAY
CONVEYOR

WICHITA CIVIC CENTER

MASTER OF ARCHITECTURE THESIS
KANSAS STATE UNIVERSITY
C.B. BUNGER ADVISOR PROF. J.C. HEINTZELMAN

FIRST LEVEL PLAN

A-1 CIRCULATION
A-2 OFFICE
A-3 RESTROOM
A-4 PEDESTRIAN CONVEYOR

B-1 LAW COURTS
B-2 OFFICE
B-3 GATE FOOD
B-4 NATION
B-5 CORRIDOR
B-6 EXTERIOR WALKWAY
B-7 INFORMATION-CASHIERS

C-1 OFFICE
C-2 CORRIDOR
C-3 RESTROOM
C-4 EXTERIOR WALKWAY
C-5 RAMP

D-1 VISITORS GALLERY
D-2 COUNCIL CHAMBER BELOW
D-3 RESTROOM
D-4 OFFICE
D-5 COMMON AREA
D-6 CORRIDOR

H-1 RAMP

I-1 TICKET BOOTH
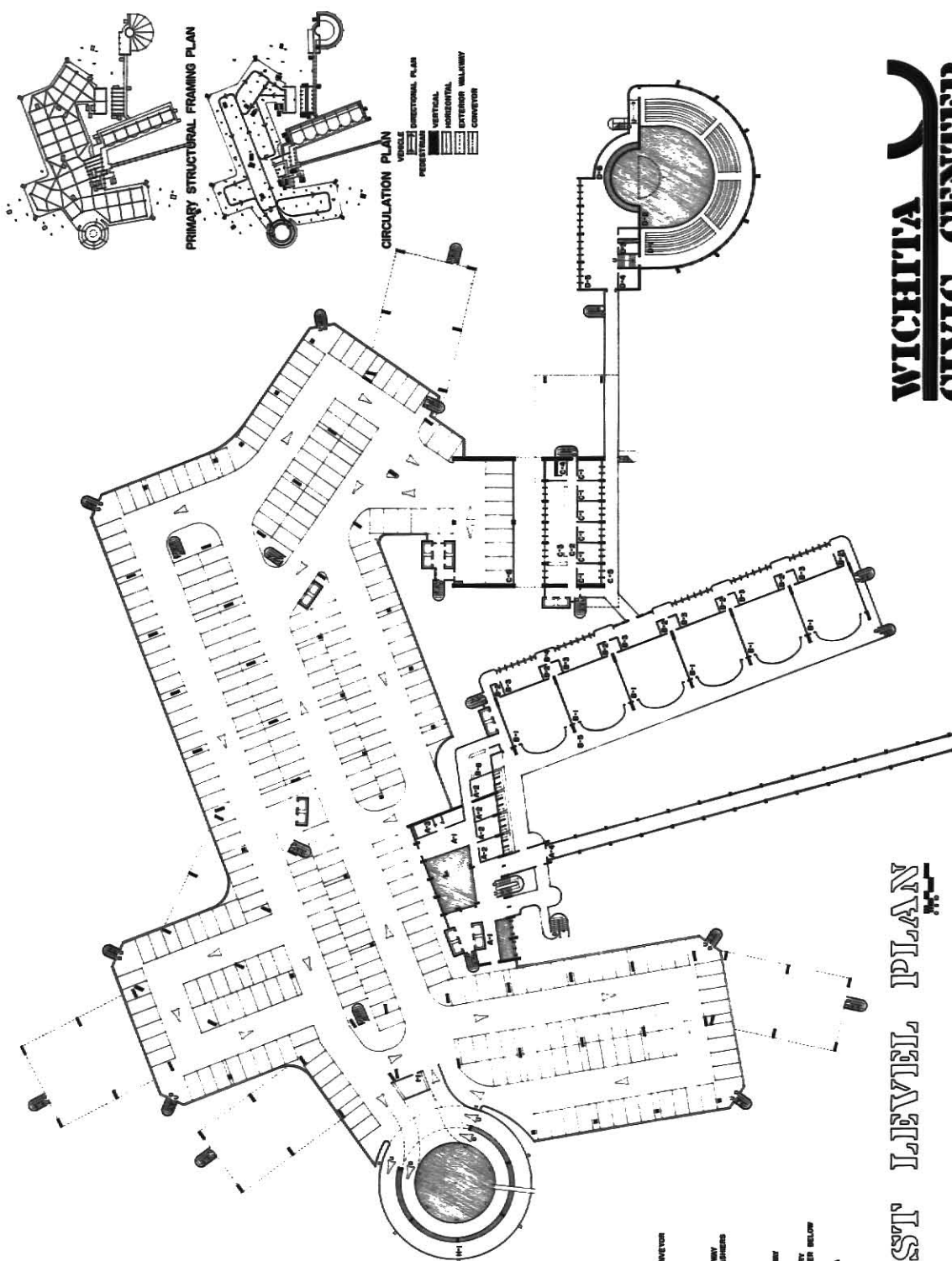
PLATE IV

FOURTH LEVEL PLAN
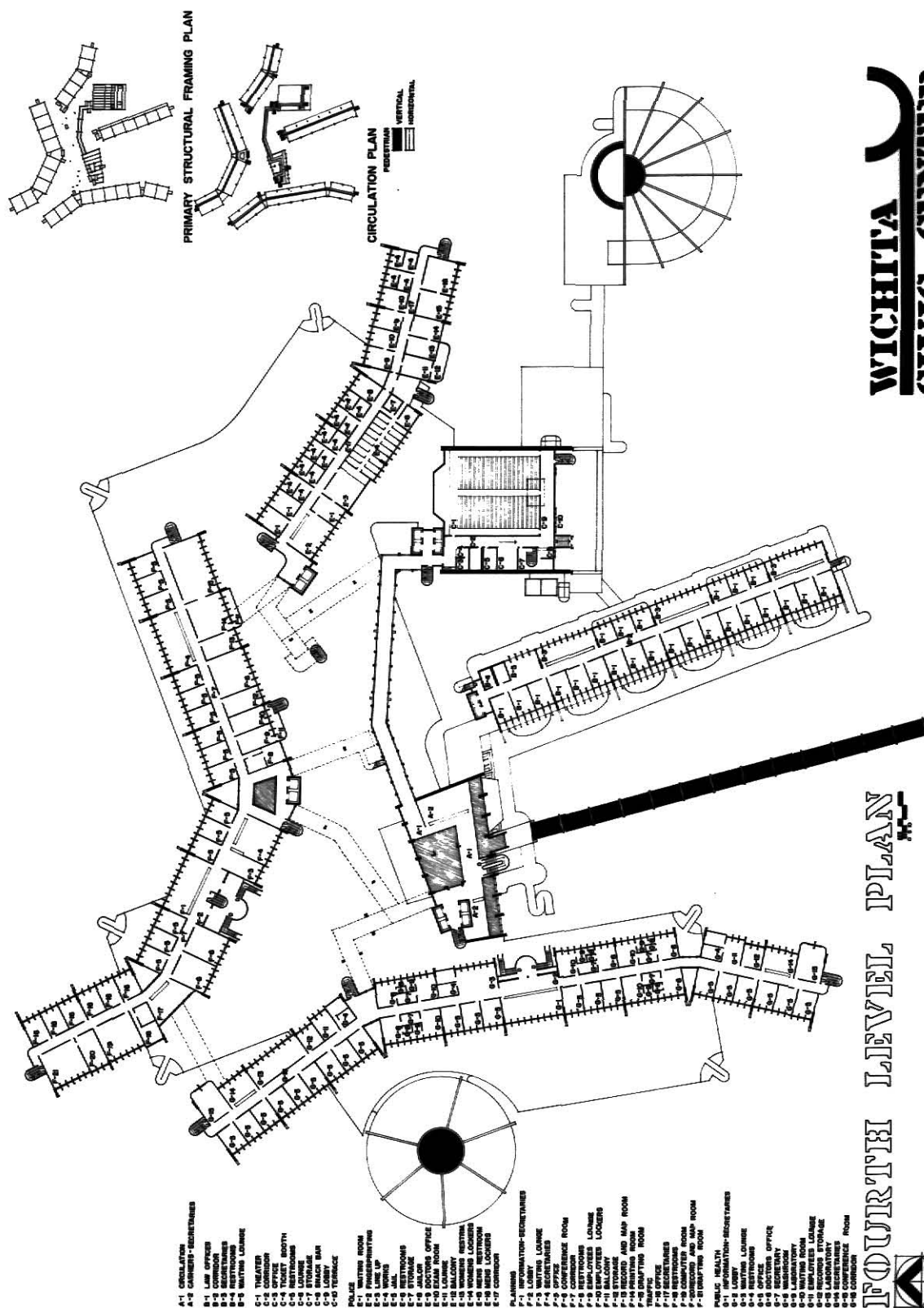
PRIMARY STRUCTURAL FRAMING PLAN

CIRCULATION PLAN

WICHITA CIVIC CENTER

FOURTH LEVEL PLAN

PLATE V

SECTIONS AND BUILDING KEY
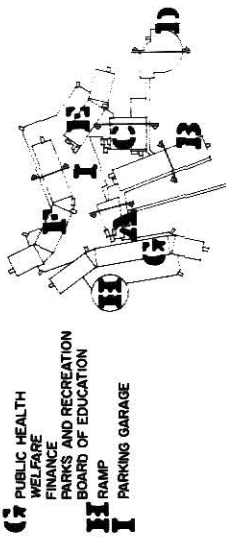
BUILDING KEY

A ORIENTATION BUILDING
B LAW COURTS
   LAW OFFICES
C MUNICIPAL GOVERNMENT OFFICES
   THEATER
   RESTAURANT
   LIBRARY
   ART GALLERY
   CONFERENCE ROOMS
D COUNCIL CHAMBER

E POLICE
   FIRE
   CIVIL DEFENCE
F PLANNING
   TRAFFIC
   BUILDING AND ZONING
   REAL ESTATE
   HOUSING
   PUBLIC WORKS

G PUBLIC HEALTH
   WELFARE
   FINANCE
   PARKS AND RECREATION
   BOARD OF EDUCATION
H RAMP
I PARKING GARAGE

SECTION D

D-1 COUNCIL CHAMBER
D-2 VISITORS GALLERY
D-3 LOUNGE
D-4 CORRIDOR
D-5 EXHIBITION
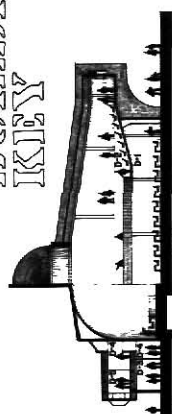
SECTION B

B-1 OFFICE
B-2 CORRIDOR
B-3 LAW COURT
B-4 ANTE ROOM
B-5 SECRETARIES
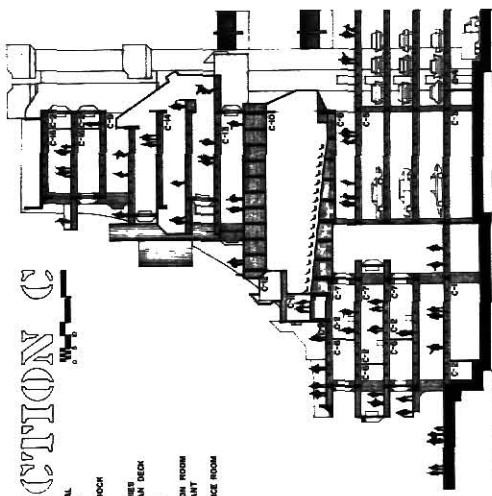
SECTION C

C-1 MECHANICAL
C-2 CORRIDOR
C-3 STORAGE
C-4 LOADING DOCK
C-5 PARKING
C-6 OFFICE
C-7 SECRETARIES
C-8 PEDESTRIAN DECK
C-9 TERRACE
C-10 THEATER
C-11 LOBBY
C-12 PROJECTION ROOM
C-13 RESTAURANT
C-14 LIBRARY
C-15 CONFERENCE ROOM

SECTION F

9TH LEVEL
8TH LEVEL
7TH LEVEL
6TH LEVEL
5TH LEVEL
4TH LEVEL
3RD LEVEL
2ND LEVEL
1ST LEVEL
GROUND
BASEMENT
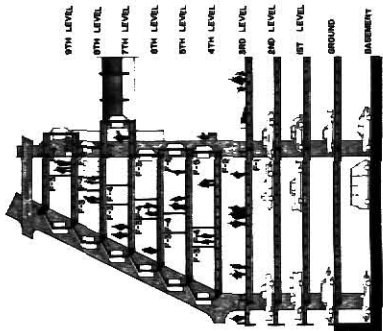
F-1 PARKING
F-2 PEDESTRIAN DECK
F-3 OFFICE
F-4 CORRIDOR
F-5 RECORD AND MAP ROOM
F-6 PLAN ROOM
F-7 CONFERENCE ROOM
F-8 FILING STORAGE
F-9 SECRETARIES
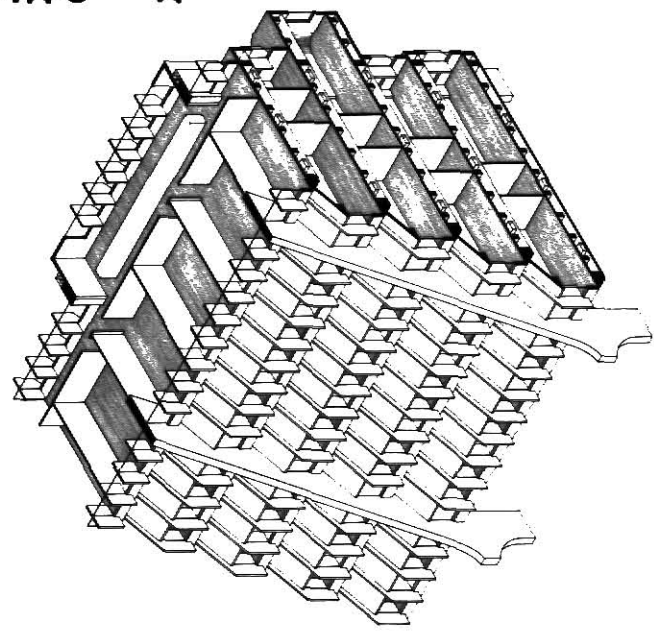
ISOMETRIC

ASSEMBLY OF PRECAST BUILDING COMPONENTS
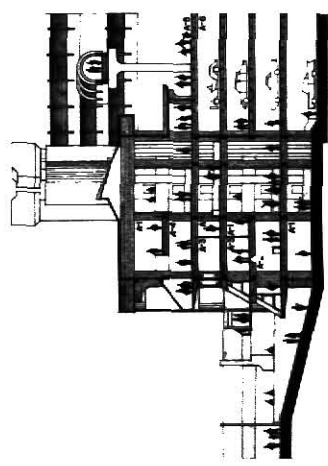
SECTION A

A-1 CIRCULATION
A-2 GARDENS
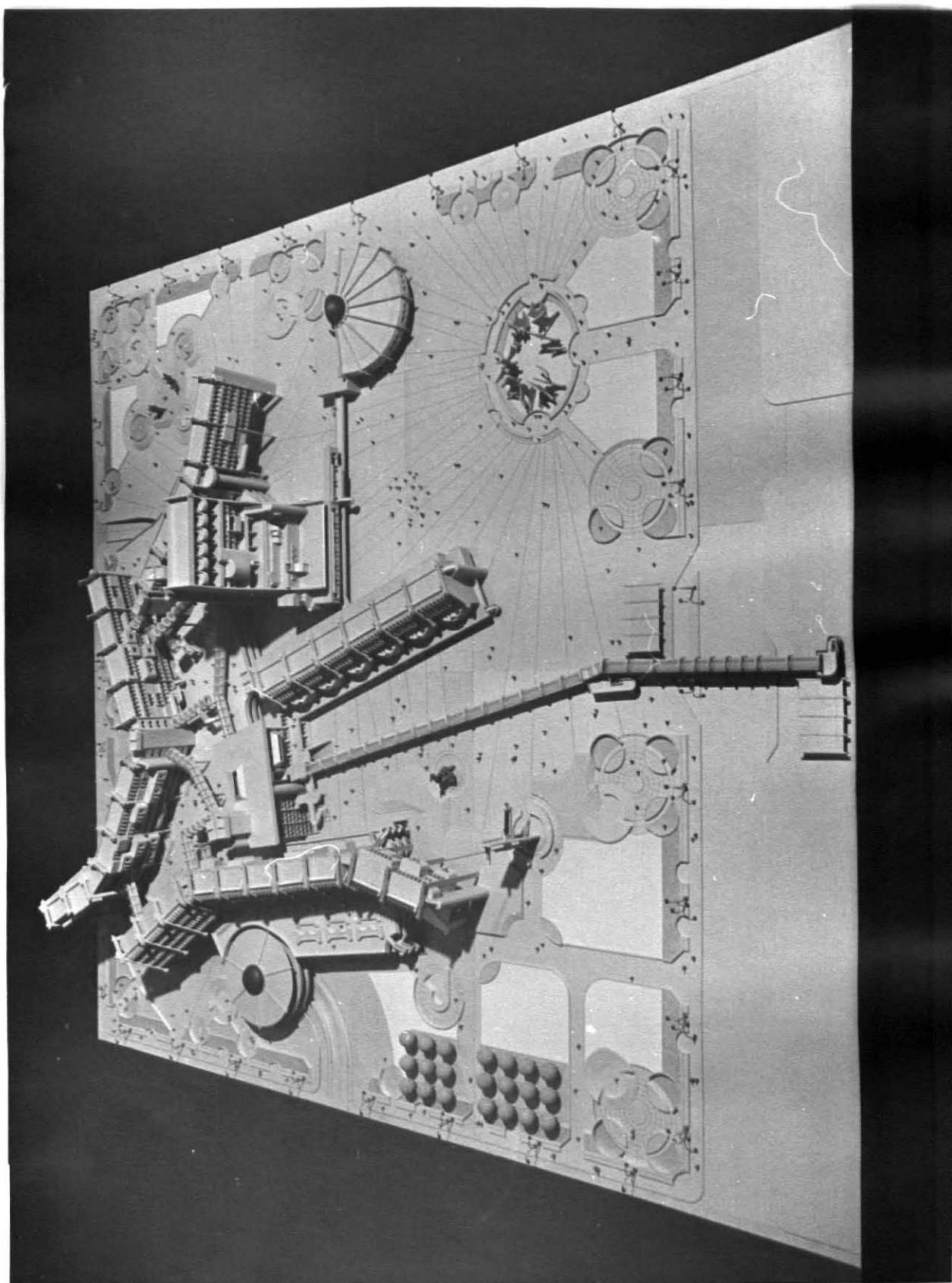A-3 OFFICE
A-4 LOUNGE
A-5 PEDESTRIAN DECK
A-6 PARKING

WICHITA CIVIC CENTER

MASTER OF ARCHITECTURE   THESIS
KANSAS STATE UNIVERSITY
C.G. BUNGER   ADVISOR PROF. J.C. HERTZELMAN

PLATE VI

OVERHEAD VIEW FROM SOUTH, OF SITE DEVELOPMENT AND BUILDING COMPLEX

PLATE VII

OVERHEAD VIEW FROM NORTH, OF SITE DEVELOPMENT AND BUILDING COMPLEX
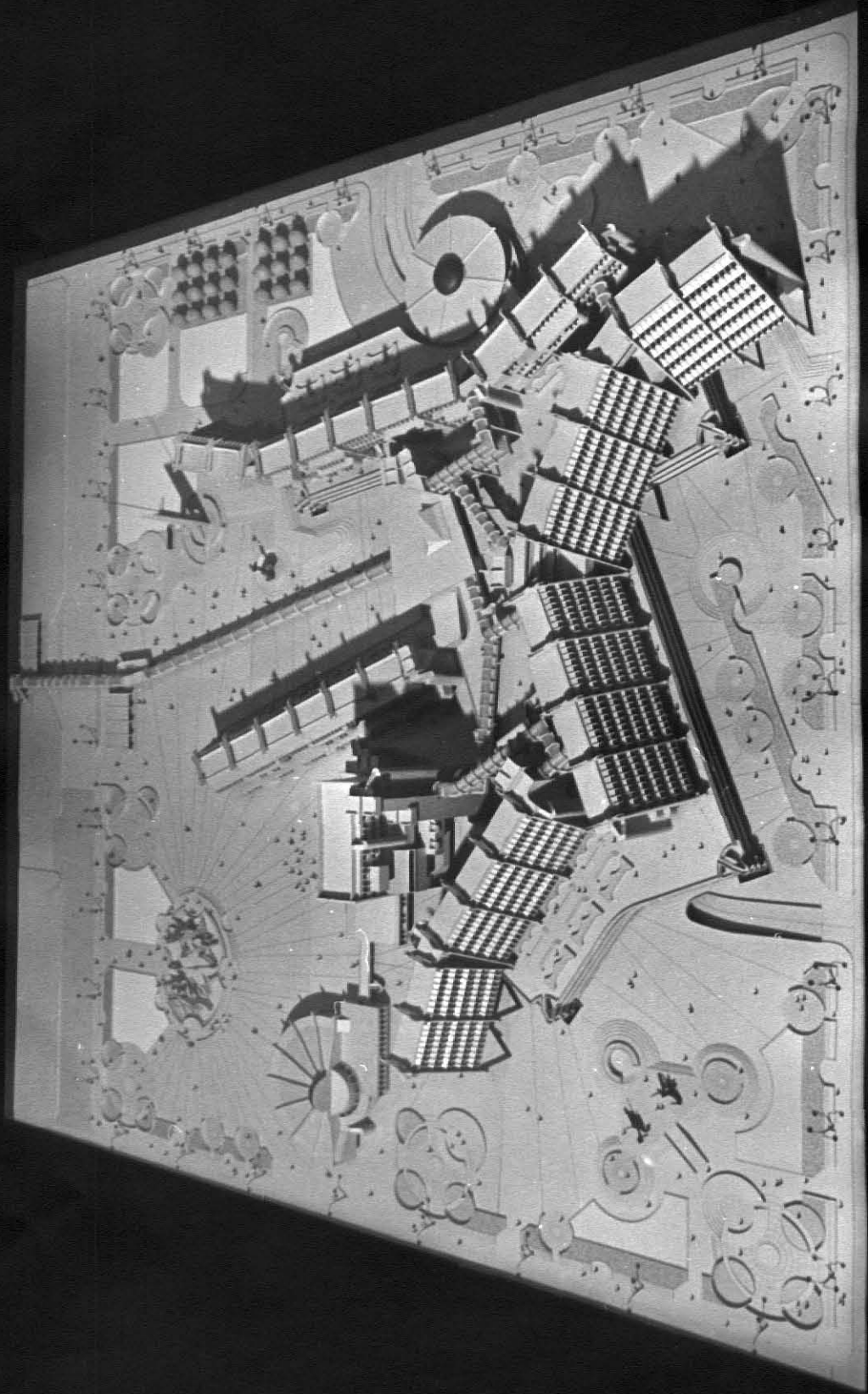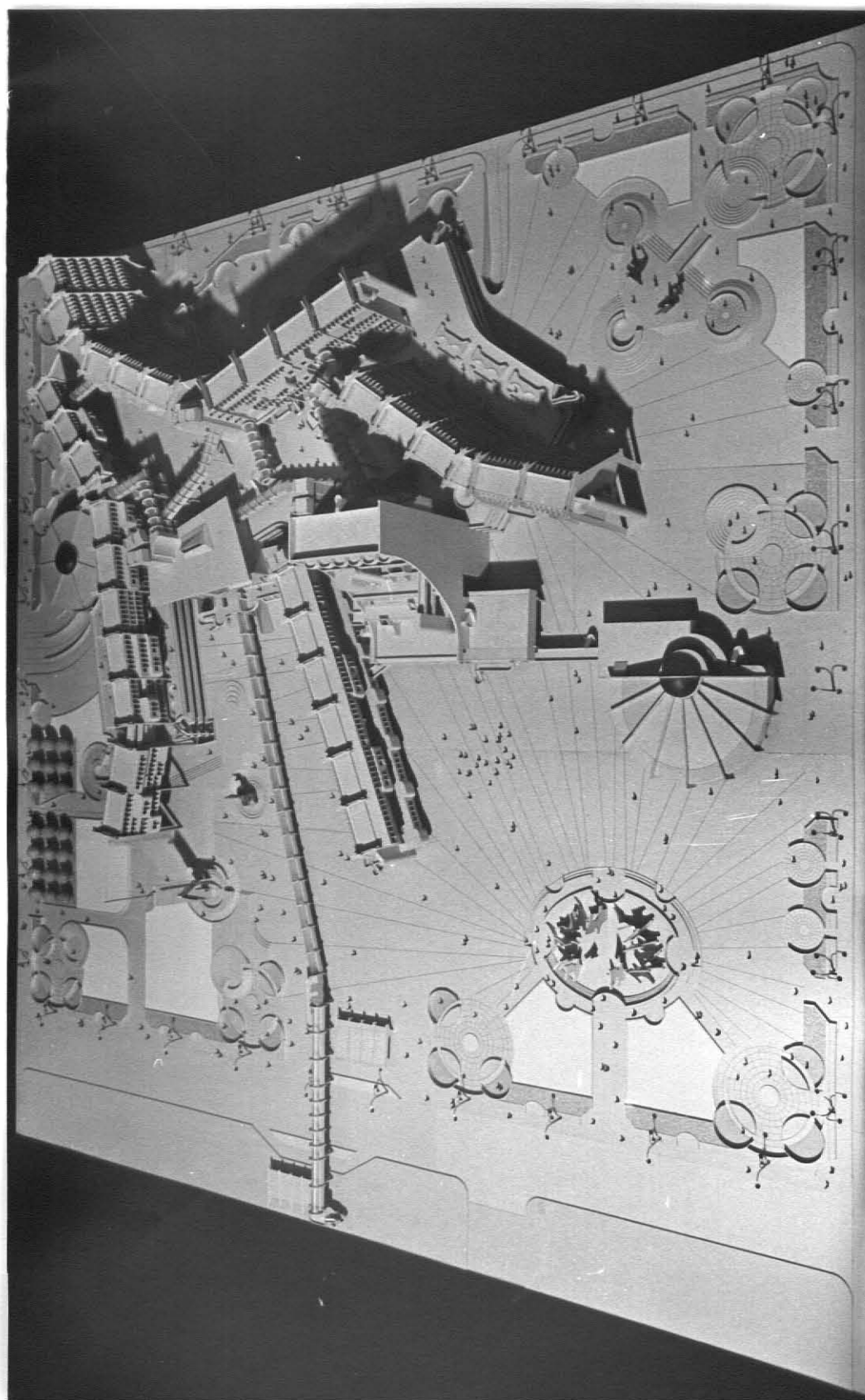
PLATE VIII

OVERHEAD VIEW FROM EAST, OF SITE DEVELOPMENT AND BUILDING COMPLEX

PLATE IX

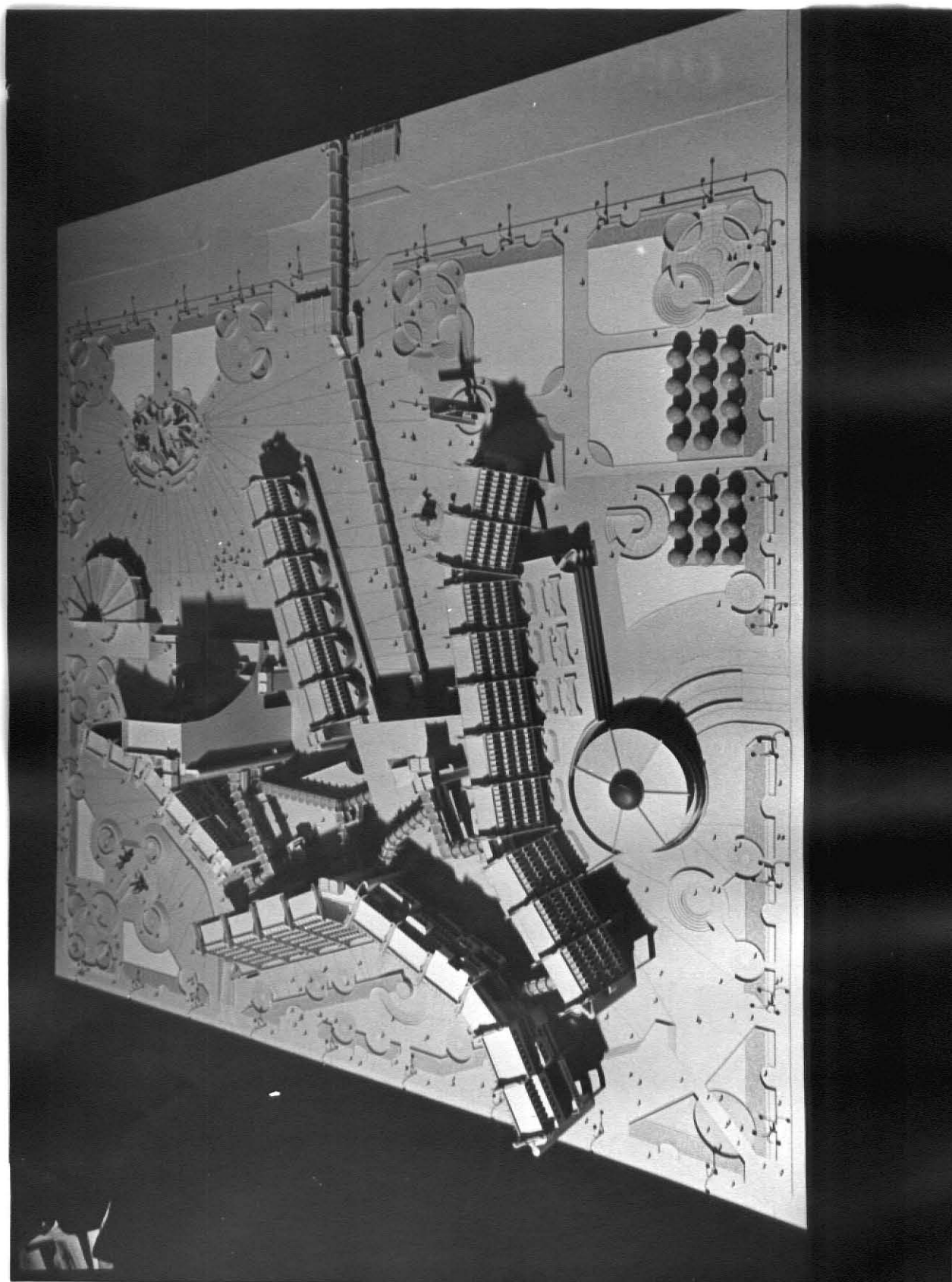OVERHEAD VIEW FROM WEST, OF SITE DEVELOPMENT AND BUILDING COMPLEX

PLATE X

PARTIAL VIEW OF BUILDINGS AND EXTERIOR CIRCULATION SYSTEM.
ELEVATED PEOPLE CONVEYOR IN THE FOREGROUND OF PHOTOGRAPH,
TERMINATES AT ORIENTATION BUILDING. LAW COURTS AND OFFICES
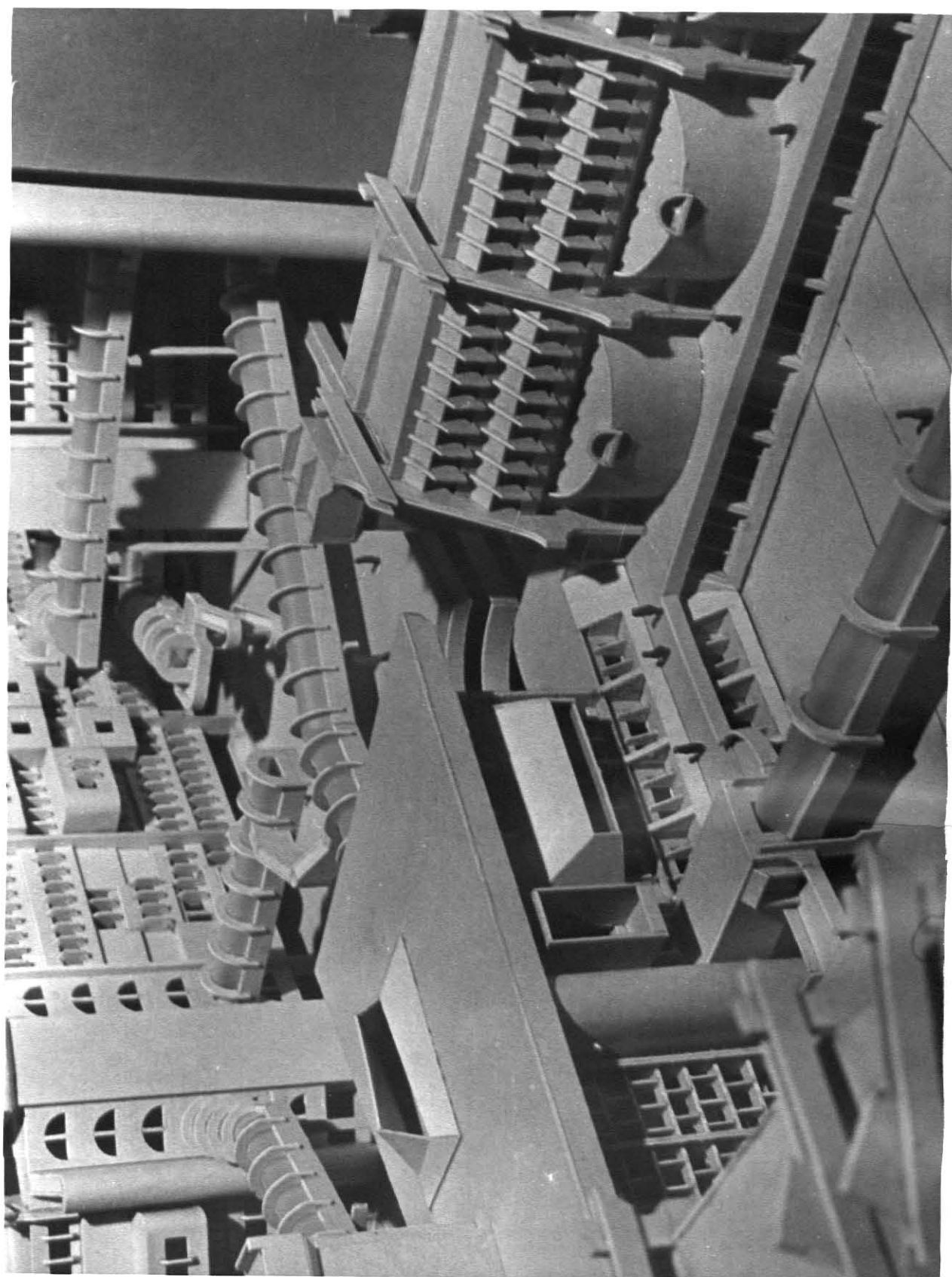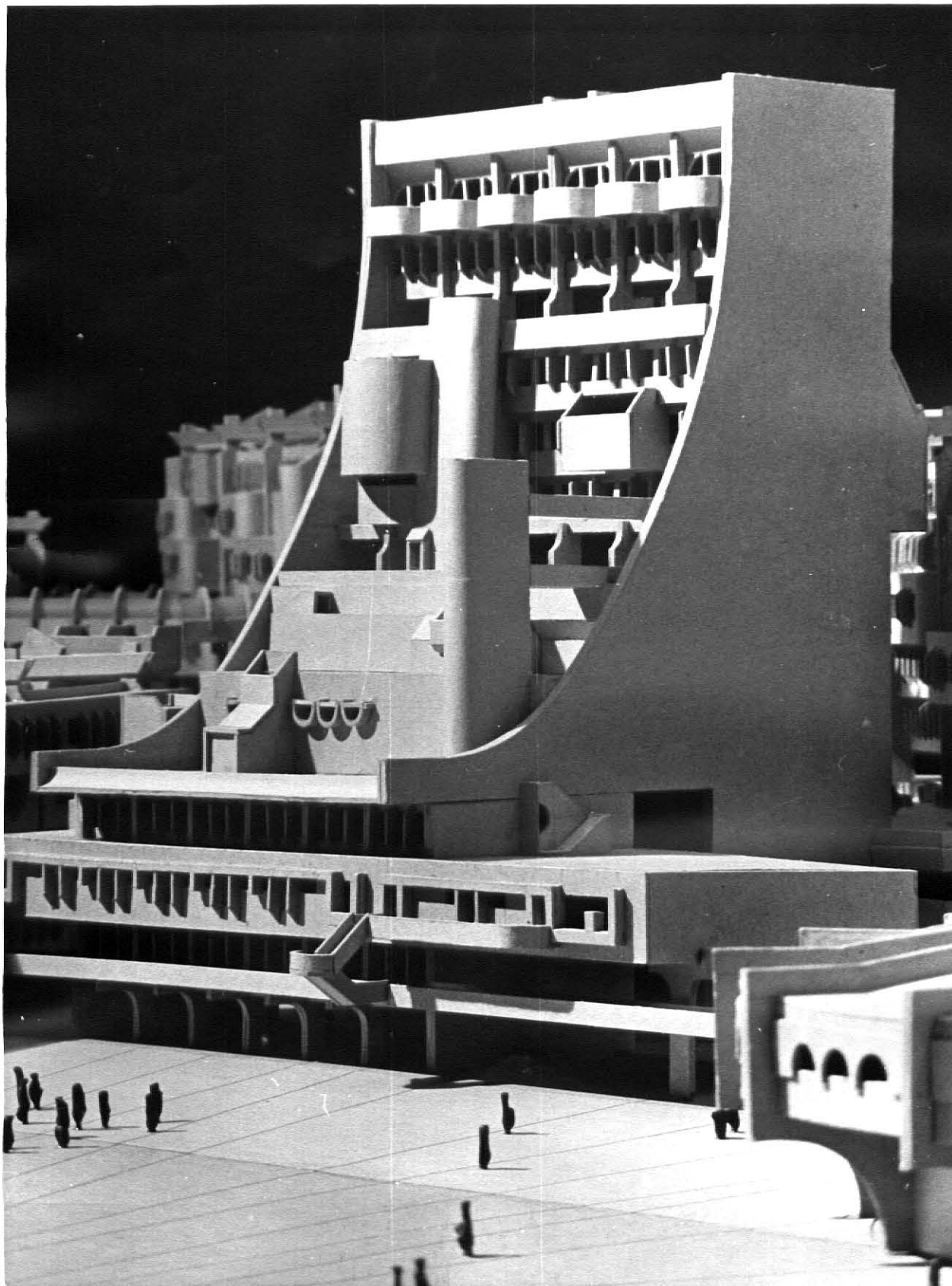ARE AT THE RIGHT SIDE OF PHOTOGRAPH.

PLATE XI

VIEW OF HIGHRISE BUILDING WHICH INCLUDES
FACILITIES FOR GOVERNMENT OFFICIALS AND THE
GENERAL PUBLIC

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A STUDY OF URBAN AESTHETICS

by

CHARLES GRANT BUNKER

B. Arch., University of Miami, Florida, 1970

—————————

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF ARCHITECTURE

Department of Architecture

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1972

This thesis is a study to explore and develop urban aesthetics in a rational and intuitive manner. It represents the implementation of a philosophy concerning architecture. This philosophy is derived from ideas about modern architecture in general, but is modified to accommodate a unique situation. These ideas are not in any way meant to be extreme or final, but form a basis from which further and more advanced ideas can be developed.

A comprehensive program is developed for the architectural design of a Civic Center Complex in an urban environment. The Civic Center is the means by which the philosophy is implemented. It is a building and spatial type that is inclusive of many design needs. While the program is hypothetical, it accepts the existing urban social and physical systems. The complexities and problems encountered are anticipated as being relevant to those in which the designer will be challenged in future professional practice.

This work makes no claim to originality. It is not original in its general assumptions, method of inquiry, and in some instances choice of details. Rather, it attempts to synthesize many sources into a coherent approach.