# TOWARDS A THEORY OF PLANNING AESTHETICS:

## APPLICATION TO UNIVERSITY COMMONS,

## NEWARK

by
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**APPROVAL SHEET**

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# ABSTRACT

Title of Thesis:     Towards a Theory of Planning Aesthetics:
                     Application to University Commons, Newark

Kathy M. Gonzalez: Master of Science in Architectural Studies

Thesis directed by:   Prof. David L. Hawk

A theory of planning aesthetics will be developed and discussed in relation to a portion of the university area of Newark consisting of N.J.I.T., Rutgers, Essex County College, University of Medicine and Dentistry of New Jersey. The site is just east of the campuses and contains the the Newark Museum and the Newark Library.

The aesthetics of order will be covered at a community scale (the urban context) which will then be detailed as a study of the fractile portion of that entity (the building entity) relative to open spaces which give both entities character. Important in this work is three-dimensional perception, as opposed to traditional two dimensional planning analysis. Philadelphia and Pittsburgh, Pennsylvania provide examples of criteria used elsewhere that may guide design in Newark's rebuilding. Order and randomness are the actors in aesthetics. Order is used in the classical tradition of the mathematical approach to proportioning and gridding systems. This merges into the randomness of chaos where alongside order there may be an appearance of confusion. Herein, the two are treated not as opposites but as two sides of the same coin. The criteria for using aesthetics in this way are developed in the thesis.

These objectives are to establish an aesthetic purpose, an aesthetic character and a positive physical identity in the re-development of Newark. There is an energetic vitality and tremendous potential for the city of Newark to reach great heights in aesthetic planning. The urban context available to Newark with its variety

of developments, construction, building styles, and ample unused land contributes to the rise of planning aesthetics via scale, proportions, linkage, and space analysis.

## ACKNOWLEDGEMENT

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# LIST OF ILLUSTRATIONS

# PROBLEM STATEMENT

Newark is becoming a megapolis. Its progress is in becoming a Rennaissance City with new developments. In doing so, there exists the dismemberment of the communities which also account for the make up the entire city. As communities and neighborhoods grow, the intimacy begins to get lost in the mist of the inflating scale of urbanism. We must find a way to help the communities such as residential areas and the University Commons area to remain in clusters with a strong linkage among them. Together as a total package they will uniquely blend a pattern within the city of Newark which will then become a better inviting Newark .

In the context of contemporary building techniques, the artist's problem is fundamentally different from that of the past. Until the nineteenth century the artist used the same materials as the builders: wood stone, plaster, bronze, lead, terra cotta, and several kinds of paint. Todays' traditional building material are steel, aluminum, glass, and concrete; not mentioning the acoustical ceiling tiles type of sheetrock, vinyl, and ceramic finishes. None of these materials are shaped by hand. They are manipulated by machines in factories, transported to the site and bolted. fastened, and or sealed together forming one entire concept of the building entity. With the age of technology there is no reason why we cannot create a masterpiece (or a greater masterpiece) of architecture for our existing city of Newark as did the Romans, Greeks, French and the English of their respective time frame.

There are solutions to the problem of integrating the works of art to this new context of materials. One of them is to make the artwork out of similar materials. The same mechanical method thus produces an object or an image that by its

concentration will express complementary to the larger structure. Technically he or she must scale his or her work just above the scale of the person who sees it. Therefore indicating the scale of the architecture with which it will work.

Yet like the rest of our society, the city is constantly changing and adapting to new methods and techniques in the upward technological environment. It reflect also the aggregation into larger units that characterises our society in other aspects of architecture in this case being planning aesthetics as our one of many objectives. When this process is complete, the city may all well be a memory of the work at large. But while it lasts, it is a reality which extends into everyone's life.

Both the functional as well as the symbolic expressive qualities of built forms are essential sources of meaning in our understanding and use of the city. The problems which need to be resolved in the remaking of the city of Newark or any city is a bit complex, particularly in a democracy where full pay is given to many counter current special interest which are its life blood. They have no examples of city planning in the few democratically governed states of the past, so that we may guide ourselves not by precedents of Nero, Sixtus V, and Haussmann, but by the method of trial and error, and later reconciliation.

The specific problems which cities face are quite different from town to town or may have the similar problem whatever the case may be. Nevertheless, there is a broad pattern common to the three categories of cities. These are roughly catagorized as " the small city, big city, and the megapolis (Saarinen, p.87)." The line of demarcation between these are shadowy, but as each is recognizable in general, there is no need to try and specify small, big, or biggest.

The purposeful aesthetic qualities of Medieval towns have been described by Camillo Sitte as every traveler being aware of the "picturesque". The Piazza San Marco, the places of de la Cathedrale of innumeral French towns such as Albi, Bourges, Chartres, the market places in London and Belgium, are all dynamic

designs. The designs of great axial plans opened a mountain, the sea, collonades in buildings, long extended avenues, trees closing in all way beyond, until the end of a long travel a turn or closure would come to an end. The minor axis were carefully proportioned, and buildings were meticulously studied for placing, form, and height. In other words, it was three dimensional planning which consequently became architectural planning. In the typical gridiron planning the axis has has degenerated into a series of parallel lines without meaning or emphasis (with the exception of Philadelphia, Pennsylvania). This leading on to the blightness, the garbage, or just equally an empty space.

This does not mean that one must have either the grand plan or the perfect sinusoidal street. It merely means taking care and thinking in term of the existing topography as that of Pittsburgh, Pennsylvania; giving variety in the type and the size of the street. Whether an arterial highway, business thouroughfare, straight or curved, or dead-end residential streets, we must see that there does exist a uniformity of architectural aesthetics in planting within the confines of each. This also permits variations from street to street, that of open spaces, and surroundings to eachother. This means that above all things three dimensional thinking is necessary to achieve this goal. The ground plan of a city, no matter how fine it is may be completely meaningless to the pedestrian walking through it unless it is also expressed in the thrid dimension (see fig. 16).

In the scale of the urban entity the major growing disorder is the disturbing development of various construction developments having no link to the scope of the city as a whole. The environmental problems in the immediate area of Newark is the pedestrian satisfaction and comfort within the grounds of University Commons. The issue following the pedestrian paths are definitely the source where security is nesessary. The environmental stress and the visual clutter is another

among the list of problems faced in Newark. These of which are not just abandoned land with delapidated buildings but abandoned lots in general.

The University Commons is easily accessible from all points including the cultural centers, corporate centers, and institutional center, (see fig. 17). Walking through the street may not be as pleasing as what the center has to offer.

There is a lack of trees in the sidewalk areas, broken pavement, and no street furnishings such as benches, human scale lighting, planters, if no trees are available, and also importantly, the use of the telephone to be designed in such a fashion that it should be able to blend into the town setting. Small rest areas every other block is a method of connecting certain settings such as the educational areas with the residential areas providing them with light and tranquility. It also gives the public an immediate rest stop areas if along a commercial strip. It is an access of communication, and socialization, a break from the everyday monotony, and a spacial way to blend.

Pedestrians need local light source to accommodate their needs. It is also a pleasant scale to see light patterns when walking through the streets and avenues creating a rythmic path which is visible and aesthetically pleasing. Because ther is a lack of lighting especially in the evening going into the night, many accidents occur. The area covered at the intersections of High street, Central, and Sussex, at the triangular area, cars just predicate over pedestrians instead of yielding to them especially to the elders.

As far as the sidewalks are concerned; ther are many concrete pavements that are uneven causing falls and injuries which surprisingly enough may cause severe physical damage. The negative aspects of the open areas within the parking lots are the ready available facility to perform illegal activities. In continuing to have these empty lots whose only purpose is to degrade the existing areas which are trying to upgrade themselves are basically causing greater damage and lack of value

within the community. Therefore, the maintaining of blighted areas is a contribution to a decadence in the Newark community. Landscaping is so nessessary in these open areas. (see fig. 18 through 19). The only way for an owner to make a good impression on his land is to be sympathetic to the nature of society and try to improve his or hers lot. As for abandoned lots, some are perhaps even owned by the city, and therfore, the city should be the first in setting an example in planning aesthetics.

# THEORY OF AESTHETICS

The philosophy of urban aesthetics needs to be understood and implemented in terms of improvements of the manifestations that make up a city. This tradition began in the eighteenth century when aesthetics took its present name (then written as "esthetics"). Herein Aesthetics deals with the useful and the fine arts. It is dependent upon the expression, experience, and understanding of individuals who interact and give meaning to it. In its essense it requires responses and judgements relative to beauty.

The purpose of urban aesthetics is to help design the built environment in respond to human physical and psychological needs. Aesthetics should be one of the most important considerations in making architecture and cities. It requires more than mere contemplation or repetition of precedence if it is to be used to create great architecture and cities. Aesthetics is a part of our future as well as our past. It is a part of what we choose not to do as well as do. Planning aesthetics was present during the Greek, Roman, and Medieval eras. Their cities were designed and built in accordance with their dreams and necessities. The challenges of war, social intimacy, security, and power provided the designer of that time to determine the design best suited to withstand war and make a statement of life's aspirations.

Planning aesthetics is seen in three dimensions and reflected in four. Questions of space are crucial because the results affect the entire community. Designed spaces form an evolving fabric where narrow walls create and allow places for citizens to socialize. Public meeting areas are used for larger public purposes.

We need planning aesthetics so we may do in our cities what the Romans and the Greeks did in their lifetime. We do not need to create walls to protect

ourselves from immediate war, but we have related needs to design and distinguish three dimensional spaces which provide a support for the nessecities of living, socializing, resting, working, and communicating. The urban surroundings available to us, such as trees, street furnishing, lighting, textures, offer the essential elements of design for a new rennaisance of the city of Newark.

An aesthetic attitude develops when individuals become aware of their perceptions and try to visualize, analyze, and evaluated them positively or negatively. These perceptions may be of interest with or without practical thought to their relative function, and can dwell independent of the immediate information given.

Aesthetic is a quality perceived. Aesthetics normally requires visual elements for a back drop if not the subject. In this project, the content is the urban reformation of University Commons in the city of Newark, which begins in the minute scale of brick, stone, wood, and glass buildings. The dimensional qualities are perceived in patterns, links, color, sound, and texture, and are part of many types of reactions to things such as shape, surfaces, street curbs, massings, and scale.

Aesthetics involves various types of activities yet somehow focuses on the art of organizing and interpreting information. It involves principles of beauty and includes the study and reactions of others who experience moods, beliefs, and attitudes based on the creation of the architect.

# AESTHETICS OF AN URBAN ENTITY

The role of aesthetics in an urban entity is to establish a strong character and identity for people. The urban entity should complement its natural topography, unique features, and cultural heritage. Once these elements are selected, the form of the city (the urban entity) will then begin to assume its aesthetic and creative role. This will support a creative environment in which people may live. This would result in a city with a great diversity and freedom of choice; one which generates interaction between people and their urban surroundings.

Freedom of choice is very important. Force is not to be implied in nor by aesthetics. Aesthetics is a natural expression of taste in art, architecture, and beauty in all aspects of form supporting physical, biological, and psychological satisfaction. The concept of a city will continue to change. A city during the late Eighteenth century consisted of a relatively dense population living off of an agricultural hinterland. This was with or without manufacturing but with independence and specialization of functions.

In todays automated, technological world of the late twentieth century not only does a city consist of population, agriculture, and manufacturing, its demographics vary dramatically from year to year either by an increase or decrease in population. It is a world with advances in communication and transportation systems. Today's hi-tech society is well dependent of these interwoven strings of events that face our daily living be it at travel, work, or play.

A city represents the society that builds it. And as with the society it must accept change. Therefore, if people have a city operating its maximum success, the city will gives its people maximum service. This dual relationship is the reason for studying aesthetics in a city.

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# AESTHETICS OF A SINGLE ENTITY

Aesthetics of a single entity is a fractile portion from the larger entity from which it originates. A building in conglomeration with other buildings forms a three-dimensional space, an urban entity. As a result the building is the single entity. It consists of patterns and organization. It is a collection of patterns and functions organized as as a structure. Aesthetics of a building not only deals with beautiful cornices, elegant plantings and clean crisp windows, but integrates all of these into a oneness, a functional, workable whole. One element can be independent in itself, yet yield to the dependence of being needed to link to another element in order to create a masterpeice in a building design. Aesthetics of a building is its massing in proportion with its surroundings. Its use of lighting, color, detail, and the three-dimensional thinking behind it all.

When we see a building in equilibrium, our perception becomes an understanding of how or why the building has taken that shape, or how the flow of forces go straight into the ground. Moreover, we are confused or rather puzzled and at the same time admire certain structures when we can not understand how they stand up. This type of admiration is an aesthetic feeling.

# AESTHETICS IN ART AND SCIENCE

There have been some individuals who defined aesthetics as a science. A science relating to subjects such as math, physics, and chemistry. The difference between these concepts and the nature of philosophy is metaphysical. Metaphysics being the study of the nature of reality which relates to Logic, Epistomology, and Axiology (Hunt, p.171). (Definitions can be found in Glossary section.) Aesthetics is often thought of in five major categories. These are the psychology of art, sociology of art, aesthetic morphology, aesthetic value theory, and aesthetic semantics. It is sometimes divided into two major philosophies, the objective and the subjective. The objective is when art and aesthetics is contained, and the subjective occurs when one firmly believes that beauty is contained in the perception of the observer; how the observer percieves the object.

Aesthetics has been a part of philosophy since the time of Aristotle and Plato. During the eighteenth century, when aesthtics took its name, philosophers began writing important books on aesthetics. Among them were Immanuel Kant who wrote Critique of Judgement, and Friedrich Hegel who wrote Philosophy of Fine Art. Later writers included Tolstoy, Clive Bells, and Dewey.

In Kant's Critique of Judgement, he makes the similar comment to that made in the definition of Aesthetics (function). It is not by the meaning of representations or understanding of an object, "but by the imagination to the subject and its feeling of pleasure or pain. The judgement of taste is therefore not . . . logical but aesthetical, by which we understand that those whose determining around can be no other than subjective (Ross, p.103)."

There is no objective rule of taste to determine what is beautiful or not. It is purely aesthetical. Beauty in this sense is not judged on the concept of the object but on the feeling of the subject. Yet in order for aesthetics to be good, the object

must be thought as having a purpose, but the only being which has a definite purpose in life is man. He is the only one "who can determine his purpose by reason; or where he must receive them from external perception, yet can compare them with essential and universal purposes and can judge this their accordance aesthetically (Ross, p.116)."

In Hegels readings art is an idea while form is "the configuration of sensuous material." These two elements must harmonize in architecture. In his thoughts related to science, he has divided science into three individual parts: the universal, the particular, and the final part. His same divisions will also be implemented in the study and final design solution with the city of Newark and its foundation in history, education, culture, and corporate development.

Clive Bells writing in Art, argues that aesthetics provokes a peculiar emotion. It must be a personal experience but does not necessarily mean that all work of art produce the same emotion (Ross, p.116). It is agreed that there must be some quality shared by objects to provoke aesthetic emotions. These qualities are challenged and dicussed in terms of a better city structure, an interesting and worth while environment to see and walk through. What are these qualities to provoke interest in a University Commons? We will see these qualities in our design criteria for the community of University Commons.

Clive also mentions that lines and colors, patterns and shapes combined in a certain way stir our aesthetic emotion. These relations and combination of lines to him are called "Significant Forms." These form are the ones we will be in search of for the visual effects on aesthetics.

In Tolstoy's reading his strong opinion on arts success is because it produces arousal and transmits emotion, bringing people together enriching their humanity. On his interpretation of art, he mentions that it is the activity based on the fact that a mans' expression is received by another mans senses of sight, hearing, or touch.

"Art is a human activity consisting in this, that this one man conciously, by means of certain external signs, hands on to others the feelings he has lived through, and that the others are affected by these feelings and also experience them (Ross, p.181)." This is what art and the aesthetics in architecture is based on.

Another response as to aesthetics being an experience in architecture is seen in the beliefs of John Dewey. Art and aesthetics involves the action of doing and making. It is the cutting of stone, the welding of steel, the moulding of clay, and the construction of buildings, as the action of singing of songs, the playing of songs, and the movements of dance. The word "esthetics" refers to the appreciation and percieving. "It denotes the consumer rather than the producer's standpoint. . . and as with cooking, overt skillful action is on the side of the cook who prepares, while taste is on the side of the consumer . . . as there is a distinction between gardner who plans and. . . the householder who enjoys the finish  product (Ross, p.209)." This is very true for the point of view for the architect. The architect provides solutions for todays society and tries  to continue them on to the future while the public realm is the important source to determine its probabilities.

The true value of a city is not measured by just the value of real estate but also in terms of use value, which means how it would effect people in their day to day experience. Much of our daily experience of our college campus or residential community within the scope of the city occurs with collectively shared public areas such as parks, malls, shopping district, and the college pub. It provides and contains for many functions those of which some have been mentioned above and are very much synonomous with urban life. We as architects build in terms of content involving several important aspects. These are the dealings with the economical, political, and ideological challenges.

A society is an active organism, always in the process of becoming, and always in the constant process of change as mentioned before. This holds true for

the forms it creates. The matter of form and how it affects the public user. This at times is thought of as a secondary means of importance when in fact it is the most crucial point of the two connections between urban life and human effects.

The forms that societies have produced in the past eras can be seen as records of distinct changes in value systems and their associated forms. Between the middle ages and the modern era, there have been different approaches to the organization of a city. In most cases, when looking back at medieval maps, one can see that they were all done in the third dimension. Planners at that time period were not concerned with the one nor two dimensional grid. Their concern was in fact the spaces which lie between their buildings, their castles, and their homes.

Since most societies are re-evaluating the basic values that underlie the modern day way of living, pre-modern orders can be an invaluable source of comparison and learning. As we search for new forms of cohesion and try to reintegrate some of the values it is inevitable that new orders will be complete hybrids of both modern and pre-modern values associated with form.

In addition to the great forms that the city of Newark posseses, it should be noted that it does have a unique character. The building forms give a vital source of information; its material, the decade of its design, the antiquity of basic design concepts, and the everlasting thought of it to remain a lifetime. These forms are highly a source of giving us the public the pedestrians the better understanding and the use of the city. Essentially, the building of structures in an urban area when put together, their relationships in terms of shape, size, and patterns they produce, are also sources of information.

# THE ART OF AESTHETIC FORM

In their capacity as art forms, architectural forms satisfy our aesthetic needs. We obtain aesthetic satisfaction when we perceive a form, proportion, scale, harmony, and symbolism.

Many theories attempt to explain why certain proportions are more pleasing than others. They attempt to explain why a certain scale is aesthetically correct, and why certain shapes are harmonious. Similarly, many alternate approaches have been made for the symbolic content of architectural form. It should be made aware that certain terms including "correct proportions," and "scale of construction," also have purely technical definitions that differ from their aesthetic argument.

If certain shapes seem to have correct proportions, they are pleasing. But by observation, not everything has to abide by the golden rule; the golden triangle (the ratio a:b = (a + b:a)) to be pleasing. The correct aesthetic ratio is the qualitative aspect of form and depends on the relation between different parts, rather than on the absolute magnitude of these parts.(see fig. 1)

Architectural forms invoke their size by means of the design of their details. which in turn, match the material of which they are made up of in working drawing form. That is why classical temples have their structure based on the material of that period, and the number of size and scale of the structure, ie. columns. Therefore, the physical properties of certain building materials dictate how they ought to be used and what kind of shape thay should undertake. Lastly, the scale of the construction is intimately related to the aesthetic scale of structure.

We experience aesthetic pleasure when we observe architectural or technical forms with a harmony of shape that expresses mathematical or geometric laws of nature. We experience the same feeling with natural forms which express similar
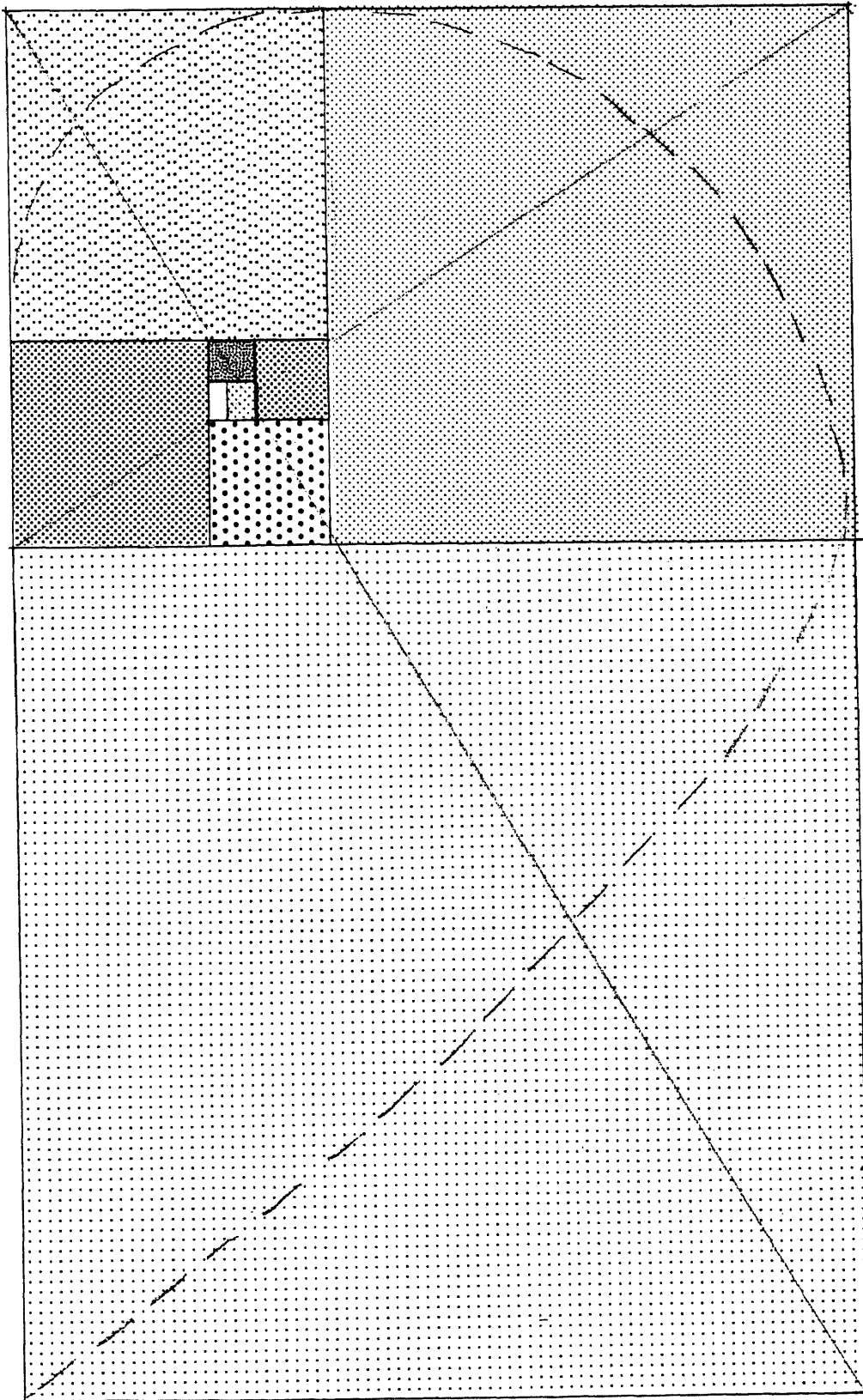
FIG. 1     THE GOLDEN SECTION

laws. What distinguishes architectural forms from purely technical forms is that the former passes a whole set of properties not shared by the latter, such as scale, decorative attitude, and a symbolic representation of most importantly, human emotion.

Architectural forms are characterized by the fact that they express the contribution of the arbitrary human element in the synthesis of the form. There is no way that we can judge as to how correct a certain form is. Similarly there are no rules that determine just how arbitrary architects are allowed to be. It is the dangerous interplay of the rational and irrational elements in design that make the synthesis of architectural forms such a fulfilling enterprise. This interplay is what is needed in the urban criteria for University Commons. There should be rational geometrical forms as well as irrational non-Euclidean spaces within the University Commons which would make it vivid and enjoyable. This geometrical forms may be implemented as sculpture, street patterns, and building structures such as an artist housing done by one of the students at the School of Architecture at N.J.I.T.

Whatever we are aiming for is a constantly changing sequence where people are the generators of the city. The creative activities are their goals and the physical elements are thier tools. The main concern in this research is the relationship of open spaces in a city which gives its urban entity a sense of character. These open spaces are the streets, the squares, the parks, the plazas, and the gardens. Other elements starting with the texture of pavement, walking surface of the city integrading with the tools of the people: the biological ingredients such as water, trees, signs, symbols and sculpture, will be more specific materials of the urban experience.

A city is constantly changing. Its concept, if developed from an origin, does not always mean what it does today nor will have similar meaning in the near future. There is no single correct design methods for a city. We as architect must use all our

knowledge and imagination to create a continuous feeling of satisfaction through years to come through our architecture provided for the city.

Anita Abramovitz wrote on the Egyptian contribution to the aesthetics of architecture. It holds true that by their use in the magic play of "light and shadow with varied spaces opening into eachother, (p. 39)," created great inspiration and physical satisfaction. We as architects of the future can also move through lights and shadows, courtyards and sculptures, wide streets and narrow paths, and enter silence as well as stimulating laughter and joy. Providing these physical appearances the aesthetic experience is also present in urban design.

The life of cities is of two types. One is the public and social, the extroverted and interelated. It is the life of the streets, plazas, parks, libraries, museums, and the excitement of the shopping areas. This life is basically out in the open, in the urban space, where crowds gather together, and people participate in the exciting urban interelationships. The second type of city is the private and the introverted. It is the need and use for an open space of a different kind. It is the necessity to have closure and silence, and, and a quality of a calm and relaxed state. It is the quiet stage at which intermediate areas of University Commons may provide the public with urban furniture such as benches, trees, variety of light sources, and public services. This would provide a positive reinforcing of what the needs are are what the challenges are to satisfy the community of University Commons.

Form has played an important element in aesthetics because with or without it, the perceptual influence varies dramatically into two extremes. These two extremes have been dealt with the various "epochs, races, and countries, such as the Egyptian, . . . the Greek, the Roman, and the Middle ages (Saarinen, p.39)." They are the ordered form and disorderly form.

There are reasons for such forms to exists. These architecturals forms address human needs and aesthetic needs. In their capacity as art forms, architectural forms satisfy our aesthetic needs. During the periods of the Roman Empire great openings in palaces were kept to view the city as part of contemplation or security. Nevertheless, their construction was to conform with scale of their time their massive symbolism of power, and the greatness sought in their building types. The delicacy of the Greeks as opposed to the Romans were the details in defining their surfaces, the ground treatments, and the use of their columns in temples.

In todays community the scale of windows and doors also play a major role in the planning of a city. It is through the use of door and windows that expression can be sought. They provide a functionl linkage between the private domain and the exterior public use which is the street. The link lies between the street ground used for commercial, institutional, educational, or cultural purpose. Therfore forms made out of windows and doors not only provide a visual linkage but a function to the urban space as well.

The interpretation of an ordering system within the concept of aesthetics is represented as an order of scale and function in a system. This system has been physically chosen to be that of an urban environment. Within this urban environment there are many systems making up the whole scope. There are many traffic systems, pedestrian systems, open systems and closed systems. In this particular study it will be the use, the sense, the work of elements, the effect, and the method these systems which will improve an environment as that of the chosen community for research, University Commons, Newark.

As the years go by, the city either takes on a new form or continues from the old form, or restructures the old so that the new form adds an interest in being a fruitful city yet with certain characteristics holding on to memories of times past. A city changes from day to day or years to years, therefore not having the exact same

definition in the future. I do feel that a city is a continuum. Order in the earlier stages to meant relying on the traditional orders such as the Greek orders, realigning surfaces and facades. Filling in abondoned lots with whatever we could build for the world of tomorrow.

The interpretation of order was the orthagonal approach. The same conditions of an x-y axis. Everything within the grid becoming as balanced and symmetrical as possible. It has been noticed that not all things need to follow the x-y axis or a symmetrical order for it to be aesthetically pleasing. The order can be a random pattern as well. Meaning that within any random pattern there exists an order, a system (see fig. 2).

In typical medieval cities, public spaces were small in scale. They became intimate and provided a sense of closure. All medieval towns contained a space if not many for which it acted as a market area where everyone gathered to talk and socialize. It was their meeting place. University Commons can also provide numerous meeting places where social intimacy can be experienced with all the open land and some which are abondoned. University Commons can provide parks, housing, or recreational facilities for the public. Achieving this, it will begin a new era of social and economical development. The organizational link is to provide several areas where individuals can enjoy, socialize, and relax and have a unique method to link on to the next open space. The medieval city although having an area open for market, it was considered a closed order of organization because it provided a passive organization geared to pedestrians and small vehicles if any.

The architects of the Medieval era had the vivid imagination for three dimensionality and the ability to adapt and harmonize their buildings into an "expression and coherent organism (Saarinen, p.49)." It was not a planned
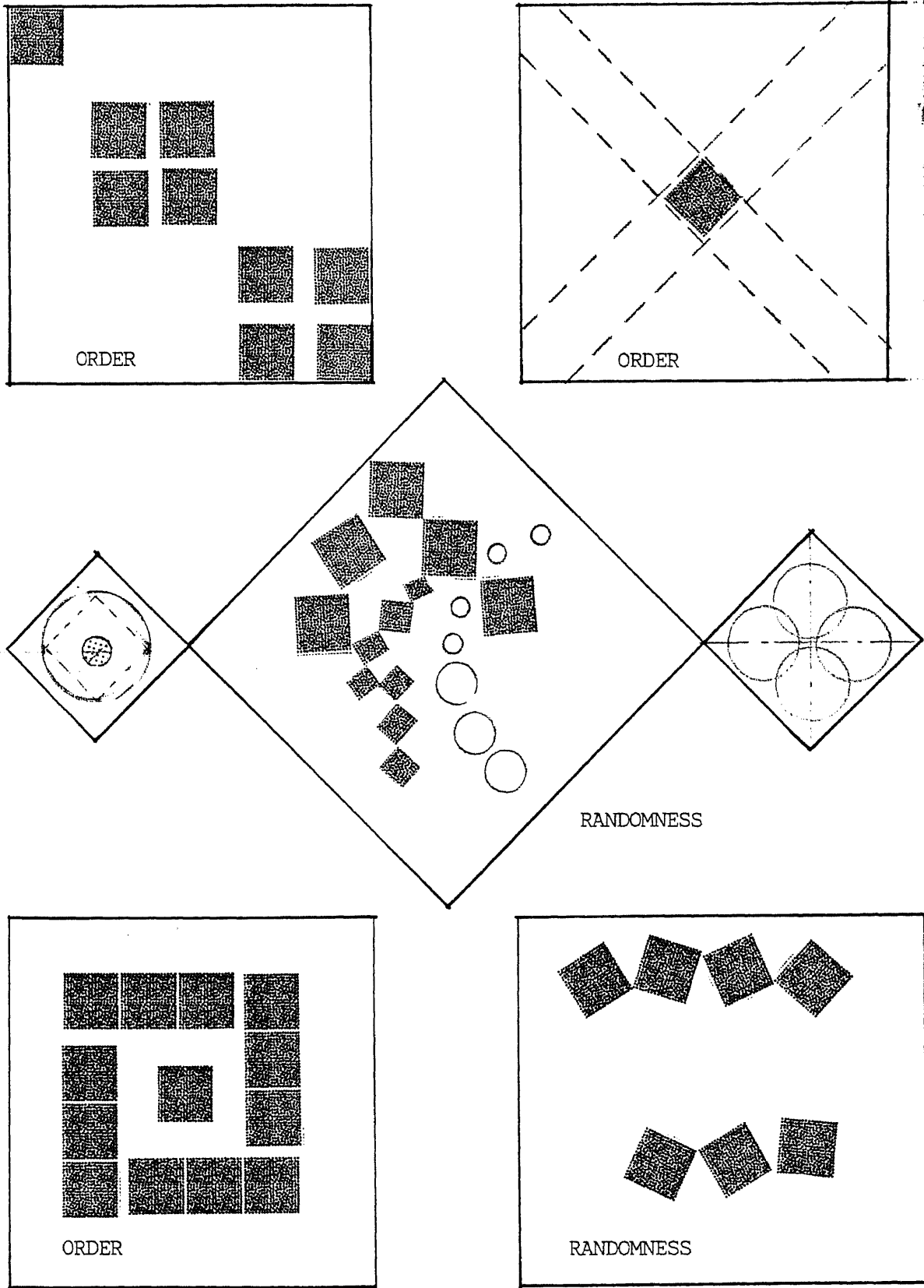
FIG. 2    PATTERNS OF ORDER AND RANDOMNESS

configuration of open areas and streets. It was built into "organisms of coordinate mass-effects (p. 49)."

It is the open spaces which give a character and quality to life in the city and establishes its "tempo" (as in rythm in music) and patterns. There are many types of open spaces of which different functions arise allowing the public to take advantage or enjoyment of such areas. The most common of these patterns also follows in the category of order and organization and linkage. This old area concept is called the street.

Streets have an intruiging characteristic. There are no two alike. Some streets are narrow while others are wide. Both types are perfectly pleasing if thought of enough with some aesthetic value in term of scale and the relation it has with peopleto. Their place of work, and their place for fun. With the use of planning aesthetics, most of the linkage in University Commons, Newark is through the use of streets. Renovating street fronts, landscaping open areas, adding light to certain areas would encourage a dramatic effect for the new community life be it at daylight or at night hours. Trees create patterns and may be used as buffers. Lighting arranged as concise as possible also produce lighting patterns and cast interesting shadows. All these few element when understanding their individual function, can provide University Commons a community with drama.

Links are the connectors in various urban or single systems. Streets link us Block to block as an elevator links us floor to floor. Links are the crucial point for any plan or three dimensional design. The function of links are an aesthetic value providing comfort by use of access, connections in lights and shadows. It is the artery of the city, building, either old or new, as it is one of our vital organs in human life as well (see fig. 3).
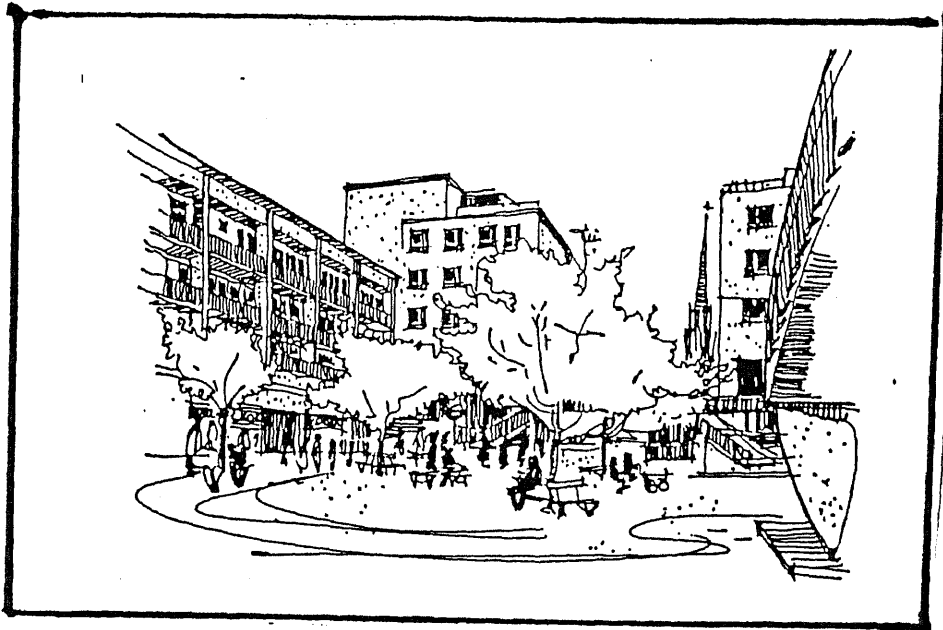
## LANDSCAPED VS NON-LANDSCAPE

FLOWERING TREES IN OPEN AREAS
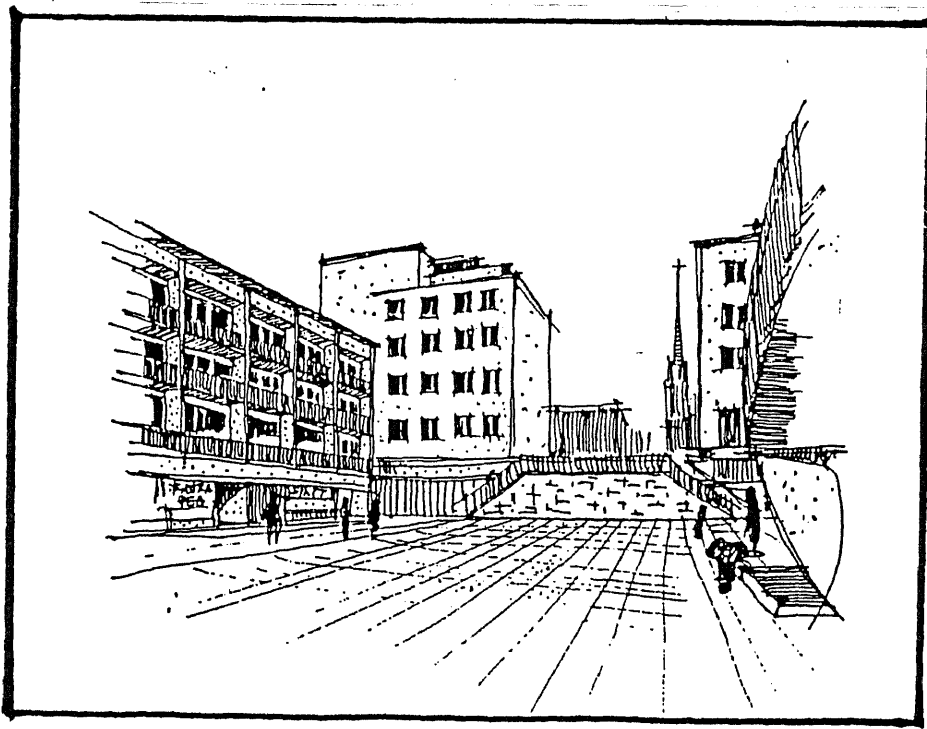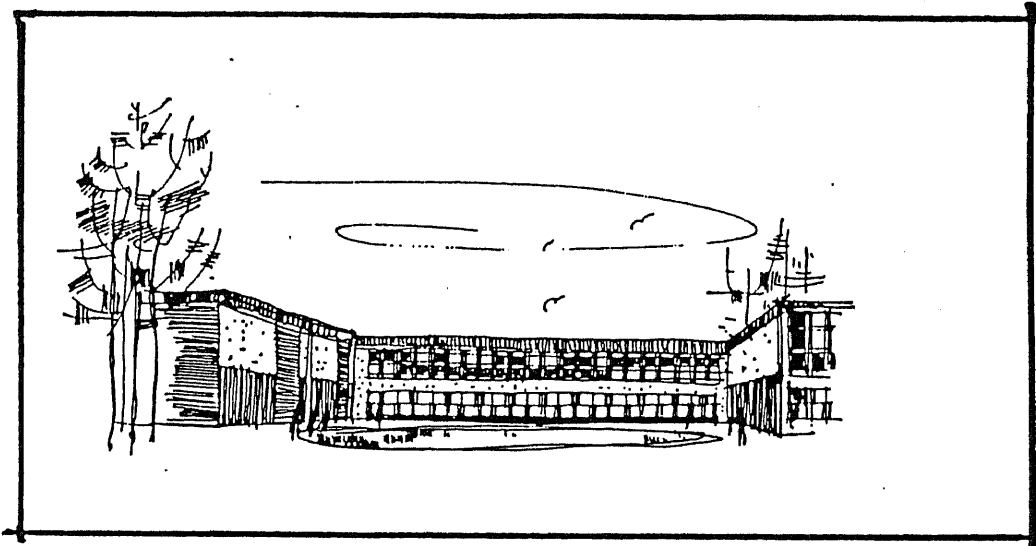
CREATE AN INVITING SENSE TO

THE PUBLIC.



FIG. 3

LOW OUTDOOR SPACE VS. HIGH OUTDOOR SPACE

IF SCALE IS AN ISSUE IN THE "COMMONS"

AREA, THEN LOW REST AREAS OR GARDENS

MAY BE VERY EFFECTIVE IN ORDER

TO HAVE A SMOOTH TRANSITION FROM

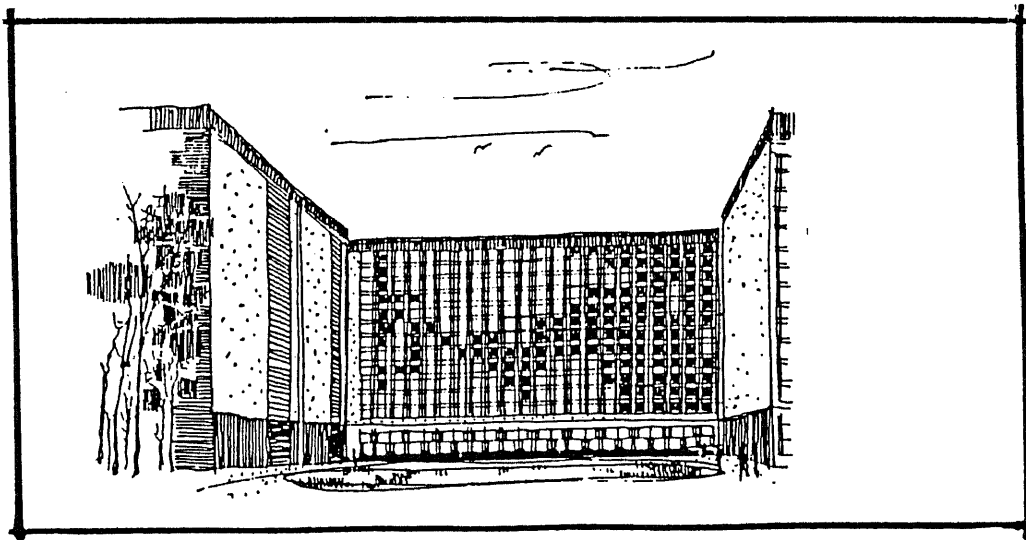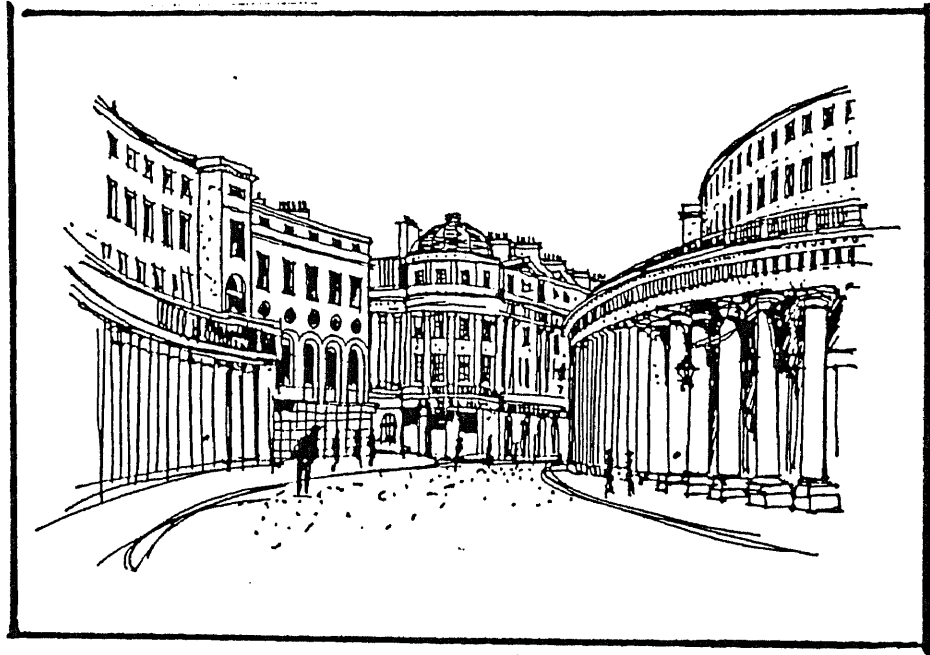THE CORPORATE PART OF THE CITY.



FIG. 3a

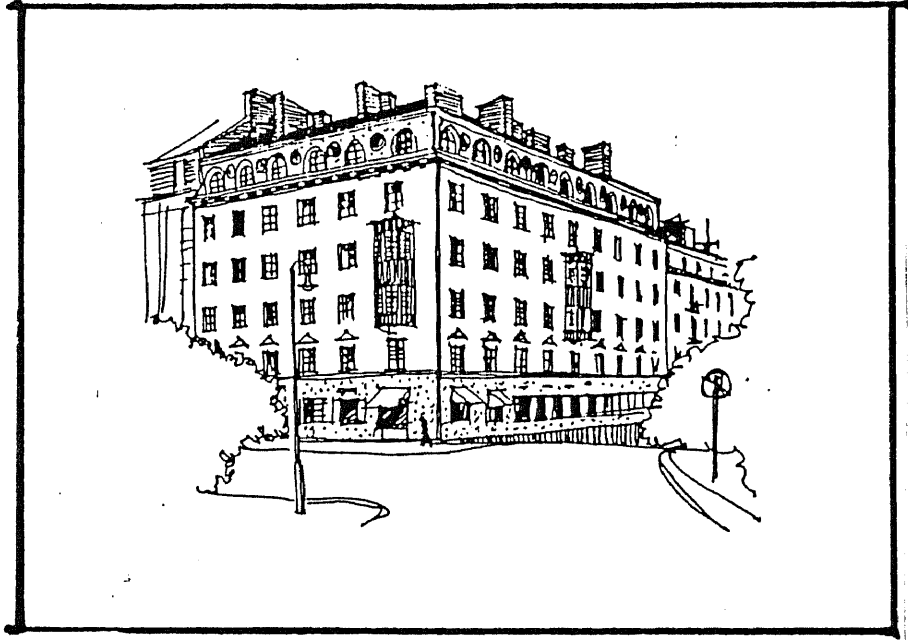_CURVED OUTDOOR SPACE   VS.   STRAIGHT OUTDOOR   SPACE_

CERTAIN STREETS WITH ROUGH CORNERS

SHOULD BE SMOOTHED IN OR OUT TO

PROVIDE EASIER TRAFFIC ACCESS.



FIG. 3b

SHALLOW SPACE  VS.  DEEP  SPACE

PLEASANT          UNPLEASANT
LIGHT             HEAVY
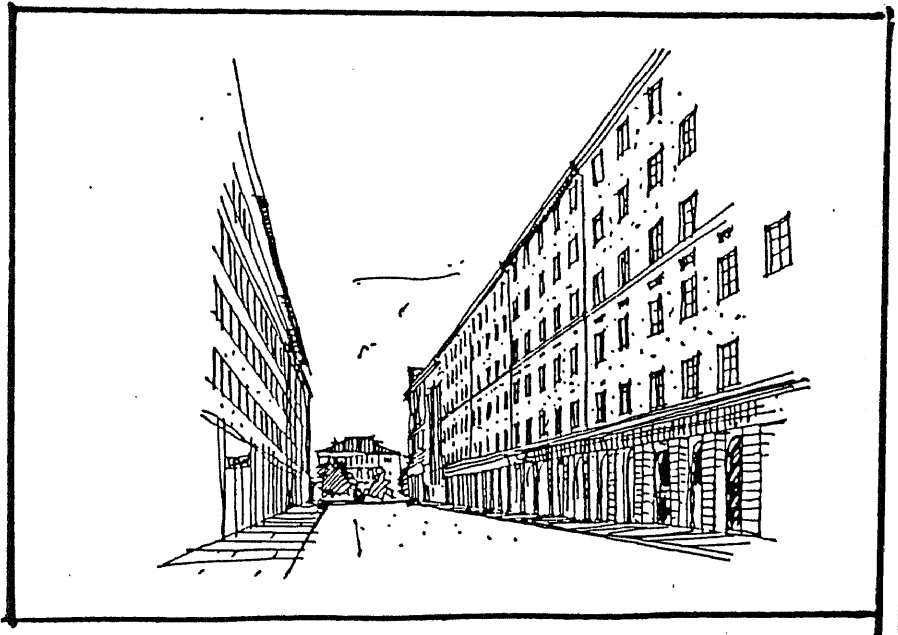


FIG. 3c

## OPEN OUTDOOR vs. CLOSED OUTDOOR

IT IS BEST TO LEAVE CERTAIN LOTS AS RESTING

GREEN AREAS INSTEAD OF BUILDING ON THEM

OR AROUND THEM. SPACES LEFT BETWEEN

BUILDINGS ARE VERY CRITICAL IN

PLANNING AESTHETICS.
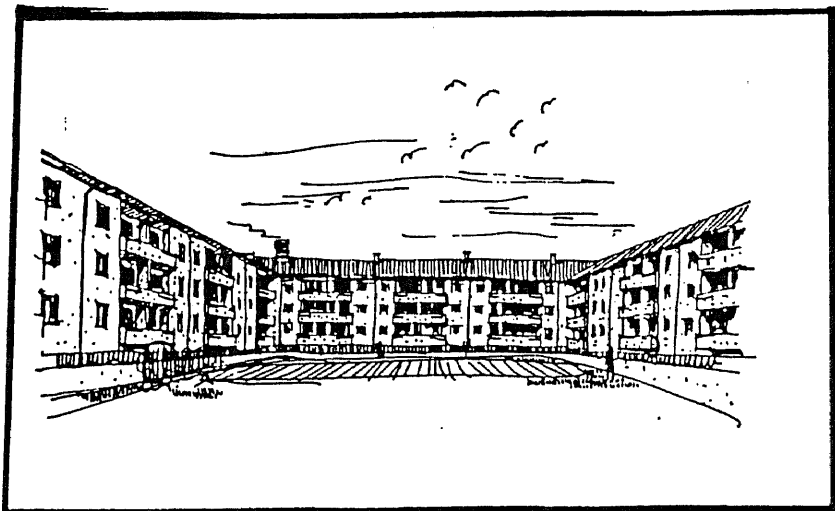


FIG. 3d

In typical examples of Medieval cities, public spaces were small and intimate in scale, providing a sense of enclosure. The closed order was a very passive urban organization, geared to pedestrian use and small vehicles such as push carts, horses, and wagons. Entire communities functioned almost as a single extended family, while the public provided a context that functioned as an active extension of an individuals private domain.

From the fourteenth century on, major changes in the organization of cities paralleled the development of intercity trade and the rebirth of classical concepts of order and thought. These new systems, much larger and less intimate in scale, were geared to the more rapid movements of the horse drawn carraige as a principle mode of access. Broad avenues and large squares, organized in highly structured plans, expressed both a greater control over nature and a desire for a greater sense of interaction with it. Nevertheless, all maps and drawings produce during the Medieval period were done in three dimensional form (see fig. 4 and 4a).

From garden cities and suburbs to "radiant cities and towns, a new freedom and a new style of life has been encapsuled. A high level of mobility, personal isolation, and independence from a communal context are all major characteristics of the new open order. While personal space and its real benefits were greatly increased, the advantages and supports for a collective life, which cities have provided prior to the industrial period, faded from the popular memory of modern societies (see fig. 4b).

A basic characteristic of the modern approach to urban development has been the reduction of architecture to disengaged objects. Influenced by the technological imagery and various movements in art, buildings in new landscapes have become increasingly conceived as machine-like artifacts and abstract sculpture, or complex industrial megastructure. The modern environment has become like a collection of isolated and unrelated fragments of every size and shape and only
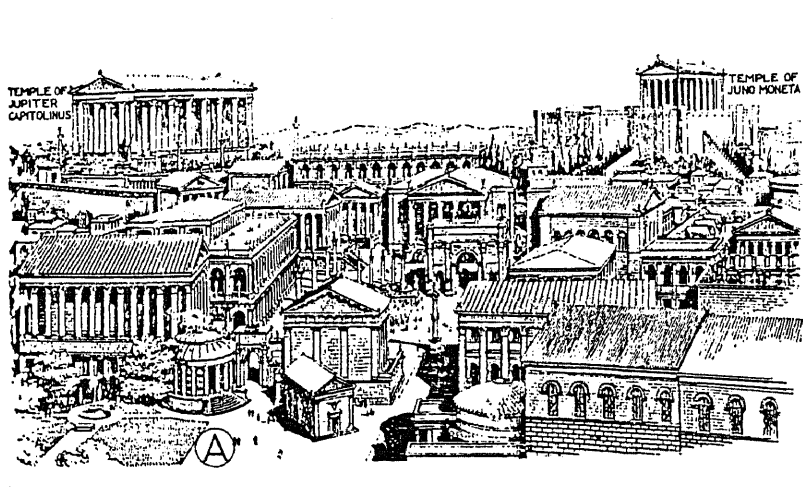
FIG. 4      THE ROMAN FORUM

(Source:  Morris, p.49)
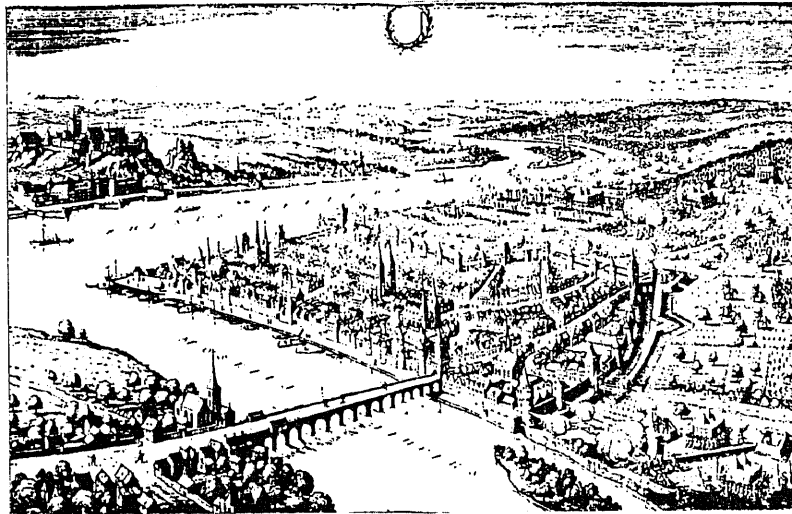


FIG.  4a.      Coblenz.  Early 17th century
               view of the city.
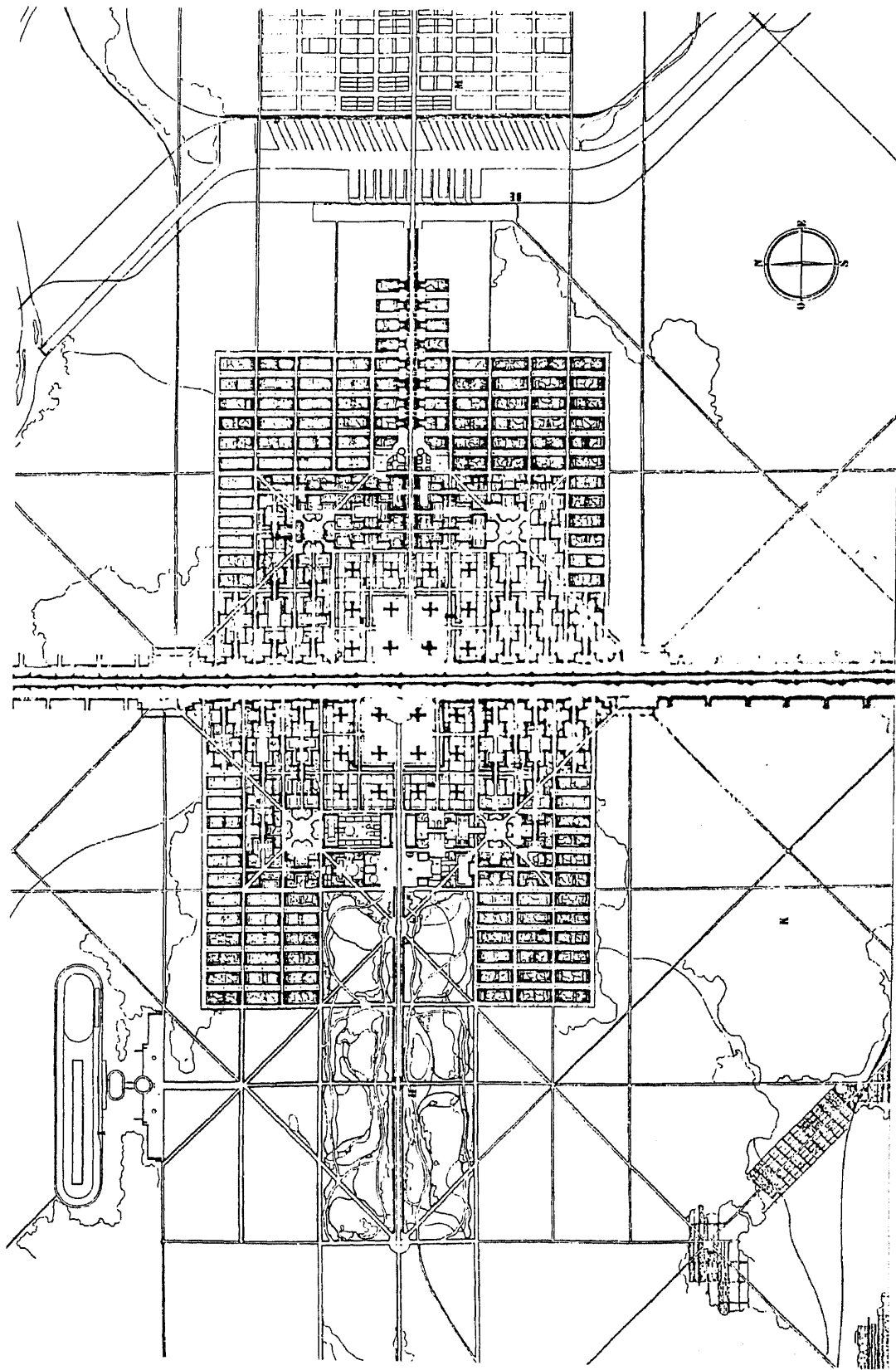               Early Medieval walls.

FIG. 4b     Contemporary Garden City.    Le Corbusier

vaguely related to human experience. This is the case we will see in the University Commons area of Newark, New Jersey.

Directly related to the reduction of architectural structures to the single entity of objects, the most dominant characteristics of the modern tradition has been the deterioration and virtual dissappearance of the public domain. The public has been reduced to the use of the spaces having multiple social as well as functional roles, which are all being lost. We must reconstruct our ways of re-establishing numbers of criteri in order for aesthetics to be used.

The experience in an urban entity has always been the collective experience of both places and spaces concieved for linkage between people and social interaction. Perception is such an important aspect of our lives that we tend to take it for granted. As in scientific research, we can not begin to analyze a complex phenomena without some approach and seeking a certain degree of detachment or emphasis on fractile systems of an entire urban system.

We must consider that not only does a form of a building or its structure should relate to other buildings, but the forms should also play a role in defining public space. Like built forms, the spacial forms of public spaces also convey essential information. While the organization of facades can have an important impact on scale and character of public spaces, the use of openings are also very critical. This is an area to be analyzed at the community of University Commons, Newark. There are so many landmarks surrounding University Commons, yet buildings have either been abandoned, destroyed, or left for society to observe as a constant reminder of the inconsistancy of city organization and conservation. In Newark's street scape must take in account for the relationship of housing to institutions, residential to educational, but most importantly, the relationship of the spaces left in between such parameters.

Spacial order is becoming an important impact in many areas of several cities. In this study it is the University Commons, Newark. Why have we let a dismemberment of a community exist? Should there be scattered fragments within the city left untouched, and if yes, to what level? These are questions which spacial order takes an important level of understanding. It is an existing element in a highly complex entity; the urban entity of Newark.

Spacial order is a main component in the making of architectural elements be it a simple building or a megastructure of a city. Its reasons for a spacial understanding is to find spacial relationships with other patterns and how they function and react to the public. This in another study is called "space syntax." Space syntax is a study of the analysis of patterns created by architectural forms both at a building scale and urban scale.

As in the case studies presented of Pittsburgh and Philadelphia, Pennsylvania space syntax is the example where by one starts picking similarities and differences between an ordered pattern and a random pattern. Both constitute an interface between the open space and the buildings enclosing its space. It also studies the different human effects on these organizational patterns.

In addition to the greater density and variety of people activities, the experience of the urban environment, as opposed to the experience of the suburban or rural environments, is unique by virtue of the character and quality of the public. The first of the two visual components of the public domain is the built and spacial form. The form of a building determined by its shape and size, can be highly expressive aesthetically and is a source of information in our understanding and use of the city of Newark. To a varying extent, the forms of building tells us about their content. Of equal importance, when buildings are put together, the relationship they have in terms of shape and size of their form as well as the patterns they produce in space, are also a source of information.

When we come to consider the art of building which is architecture and the art of organizing large groups of building into an urban environment such as University Commons, it is also an extension of architecture. There is a variety of components involved. These components are forms and the variety of materials. They can also be natural as well as synthetic. It is to our judgement that we can except or drawback from architecture. In comparing Philadelphia with Pittsburgh, Pennsylvania, there are several things to say and discuss. One of the many issues are the hierarchy of building scales. Hierarchy seems to have always been there ever since the time of primitive man.

Cathedrals were built as high as possible for religious purposes. As the years went by, people began to work. Therefore, needing more space, horizontal expansion was limited. This led to the thinking of vertcality. " The alternate solution is to go up (Abramovitz, p.154)." This is why we see skyscrapers in our cities tody. We ignore the fact that there exists vertical system in the room unless we are already taught about it. This is where we should lie our concerns on. The drive to yield to the public in forms that give us the grace we deserve as architects. Since we cannot expand horizontally, we expand vertically. This results in our awareness of why the eye level needs not only to be pleasing but the verticality left between high-rise structures are also important.

We must take in account open areas vs. closed; real estate, transportation, and most importantly, the public vs. slums vs. There are many situations which try to govern what a city should be like. In reality no one should say what it should be, but what it can be and wants to become. A city can never be fruitful if it is a forced idea. A building can never be a wonderful piece of of art that is useful to mankind if it is not made with craft and workmanship. In doing so, a material transforming itself from ones feelings and truths of the arts then becomes a complete piece of art. This is later used in construction for the use and admiration of man. If we can not

establish art in a dwelling place as small as four walls, the how are we to define art, aesthetics, and order in an urban form?

We as architects must be more creative and loose in implementing interesting patterns in buildings which then will be a focal point in creating a collection of buildings which in turn becomes a city or yields to the city. Examples of these buildings have been done by the students of the School of Architecture at N.J.I.T. Their drawings can be seen in the design solution chapter where their intentions lie on combining the existing factors surrounding University Commons and the designing of an architecture that will enhance the community as well as give the city of Newark a better support other that the corporate sector. We must enjoy the art and development of our city life. In this respect it will make us feel as " king and queens who have conquered cities, . . . and have conquered civilizations (Abramovitz, p.156)."

Three visual components that make up the public domain include built and spacial forms, the treatment of surfaces, ground treatment, and furnishings. Within the urban entity, the expressive qualities of buildings extend beyond individual building structures. Once again it is stressed that we must not only consider the relationship of building structures but the defining of public spaces.

The conclusive decision of planning aesthetics is the planning and design in the third dimension. Our subject in the area is the third dimension of University Commons. To regress in time perhaps seem redundant yet it yields to the progressive decision of planning in University Commons. Planning aesthetics should noy only be considered in terms of the regular grid like two dimensional street pattern, but to be preconcieved as the town designs of the Medieval epoch.

Comparing the irregular pattern of the Medieval form-order concept with our regular grid plan which results in a three dimensional disorder, The Medieval town was concieved in the third dimension and not just as a street grid system.

"It was built into an organism of coordinate mass effects (Saarinen, p.49)." The geometrical plan of the grid iron pattern was drawn on paper with hardly any notion of "organic thought (p. 50)." (see fig. 5 through 5c).

For an easier understanding after seeing the illustrations of the Medieval methods of mapping and towm planning, we can conclude that medieval town planning aesthetics was a closed order. We in today's present 1989 design problems are trying to design an open order in the third dimension bearing in mind the type of activities occuring presently and forseeing what will occur in the future. This was the exact method of planning which occured in the medeival era, the planning for publi use and defense.

Mastery of the Medieval three dimensional form as well as the underlying two dimensional pattern grew out of the technical factors of the defensive purpose and means of transportation. The defense was against men armed with man propelled weapons, bows, arrows, spears, and other sources of weapons, assisted in some cases by way of horses. Crooked streets of the late fifteen and sixteen centuries and their sudden openings made hand in hand street fighting difficult for the invaders who did not know the town and transportation was exclusively on foot.

Architecture and aesthetics had to follow with the changing of the times, increasing luxury, the centralizing power of the city, and the great increase in travel. In Paris Baron Haussmann made street wide and straight, connected all strategic spots, and provided circulation for troops from any part of the city to any other, quickly and efficiently. In comparison to three dimensionality, Haussmann did nearly nothing to the essential of city planning. The relationship of permanent things and streets were just merely two dimensional. None of the cities in America were Medieval or portraying three dimensional design. From the beginning our cities were open and free. Defense was incidental. They were wooden palisades against the indians. For this reason the colonial towns show a pattern quite

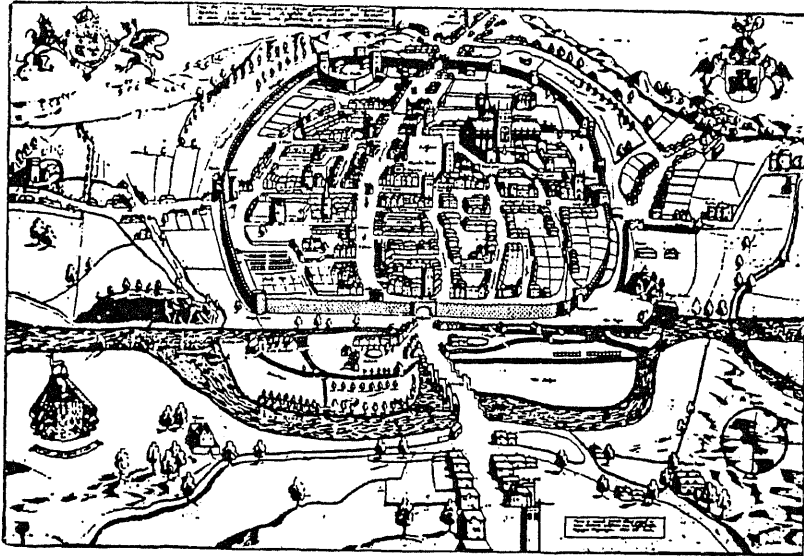FIG. 5      Exeter depicted in 1587.
            Early city walls as a military
            significance.

                         (Source: Morris, p.74)



FIG. 5a     Furnes 1590.  Town and country
            planning.  Sir Patrick Abercrombie.
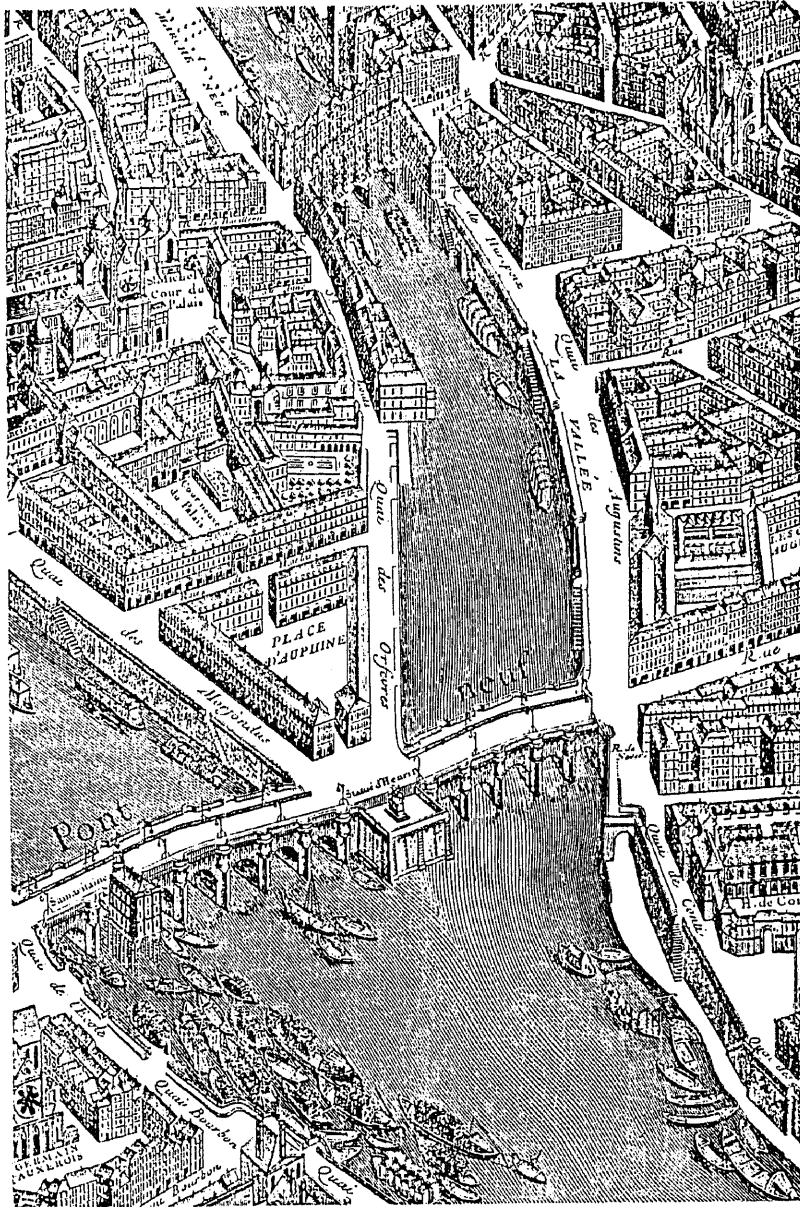
                         (Source: Morris, p.74)

FIG. 5b   La Place Douphine and Pont Nuef, France
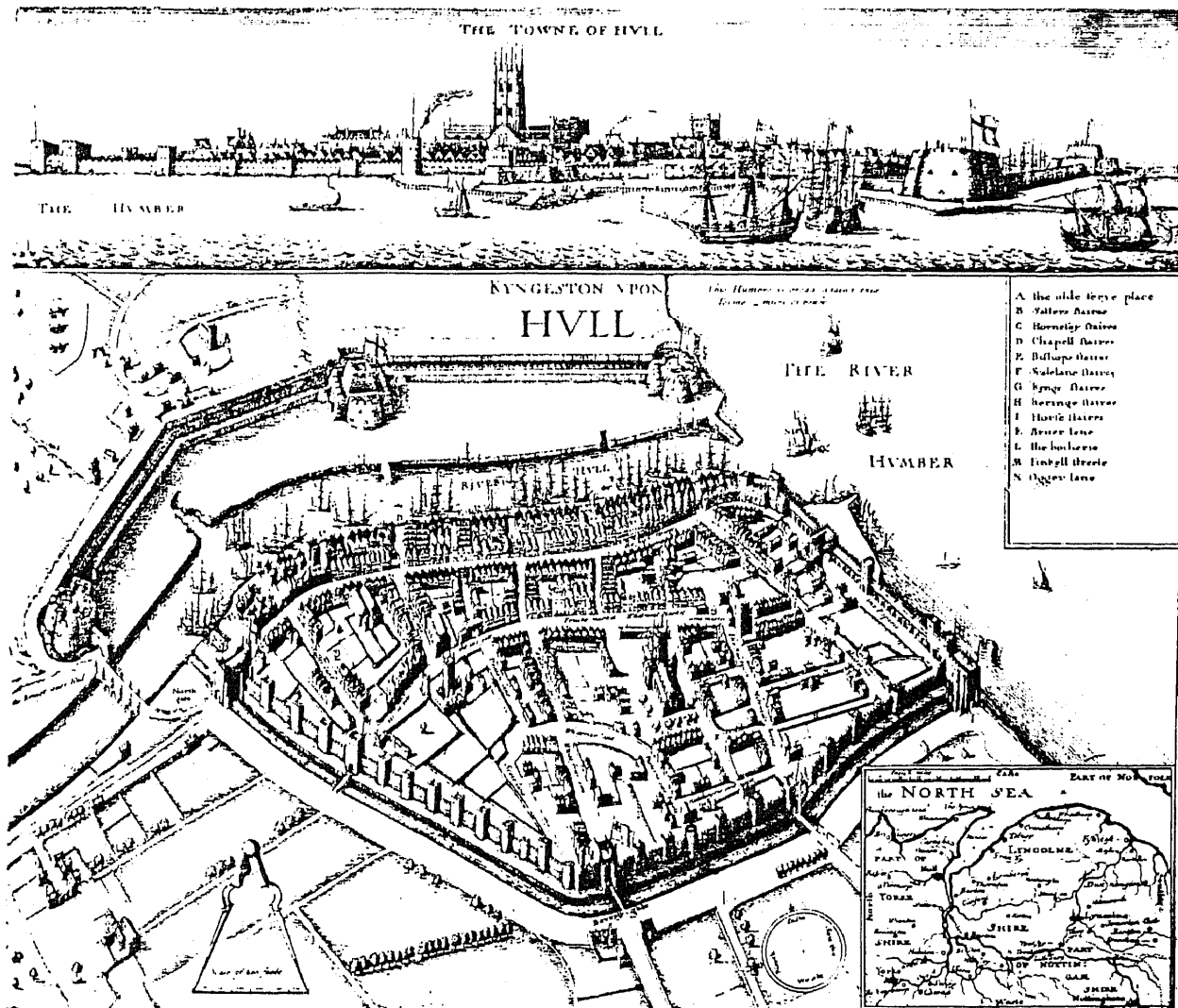1734-39.  Old Medieval bridge from the
Turgot plan.

(Source: Morris, p.159)

FIG. 5c    1665  Kingston Hall, England
           Characteristics of Medieval waterside pattern.

(Source: Morris, p.101)
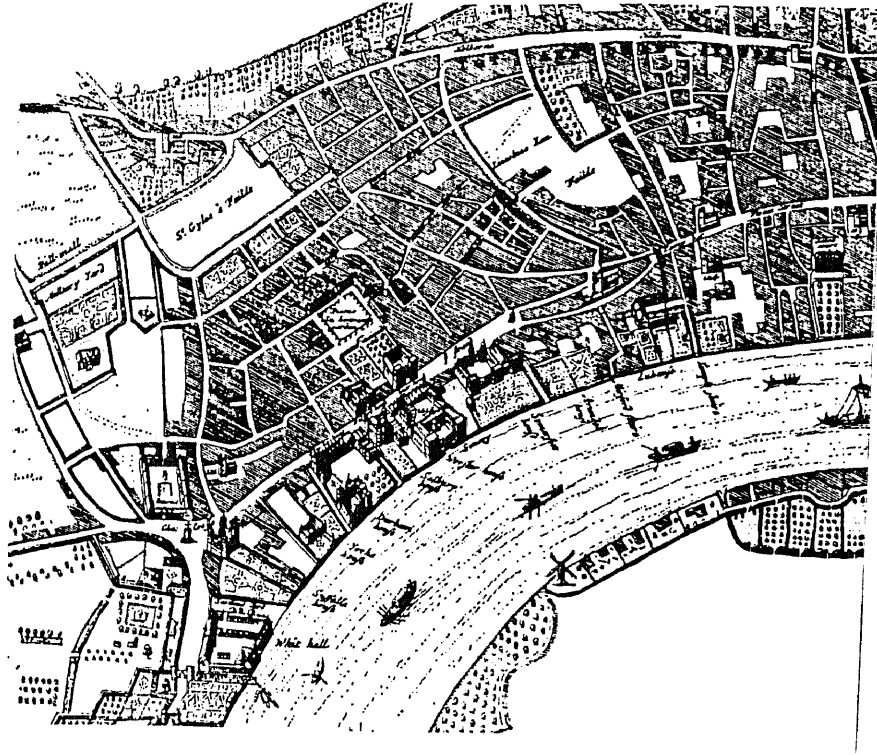
FIG. 5d      Portion of London at Thames River.
             The joining of London and the city
             of Westminster.   1667.


                              (Source: Morris, p. 150)

different from anything found in Europe. In small towns, particularly the hill towns developed a different planning aesthetics of which certain examples are Savanah, Georgia, Philadelphia and Pittsburgh, Pennsylvania, ans Washington, D.C.

So within the framework of gridiron patterns, Main Street appeared to be the wide road with the business buildings porticoed for shade. The residencial streets were wide as well yet held to a different surface texture. Their streets were not paved in full width. They included grass areas as strips and trees to cast shadows and form entry points. The houses were well set back to give better depth to the open space.

In the analysis of the city of Philadelphia and Pittsburgh, Pennsylvania; we see the difference between two dimensional design of Philadelphia and the beginnings of three dimentional design in Pittsburgh. Keeping these two cities in mind we can determine the best possible way for University Commons, Newark to work as an irregular order of three-dimensional design.

# EXAMPLES OF AESTHETICS IN URBAN DESIGN
## PHILADELPHIA, PENNSYLVANIA

The plan of Philadelphia was established by William Penn and Thomas Holme. The combined Holme-Penn plan for Philadelphia was drawn in 1683. The ideal was for the city to have a large front street, a high street near the middle, and a broad street in the middle of the city from side to side. In the center of the city there is a square of ten acres. Each angle was to contain houses for public affairs, meetings, assembly, the State House, school house, and several other houses for public use. William Penn initiated the eight streets to run next to High Street running front to front or rather running river to river, and twenty streets besides Broad Street that run across the city from side to side. This is illustrated in figure six. The city was laid out as a green country town on a grid iron pattern, formed by a quadrant having City hall as its center.

The focus of life in the city at that time was the port. The riverfront was covered with ships that exported fur, lumber, and food supplies. The early residential sections of the city were located as close to the port as possible. Houses were built individually or in pairs. The first houses were based on the country house of the first English yeoman. They were modest in size and still Medieval in style with steeply pitched roofs, prominent chimneys and small windows. Most of them were two stories high with one room per floor and a winding staircase. English building traditions were modified by the Quaker emphasis on simplicity and by the presence of craftsmen from Holland and Germany who introduced features such as glazed brick and  Flemished bond brick patterns.

By the end of the 18th century, architects began to draw directly on Greek and Roman forms. The steady increase in construction encouraged the introduction of new ideas, usually derived from the English sources. As a structural system, cast
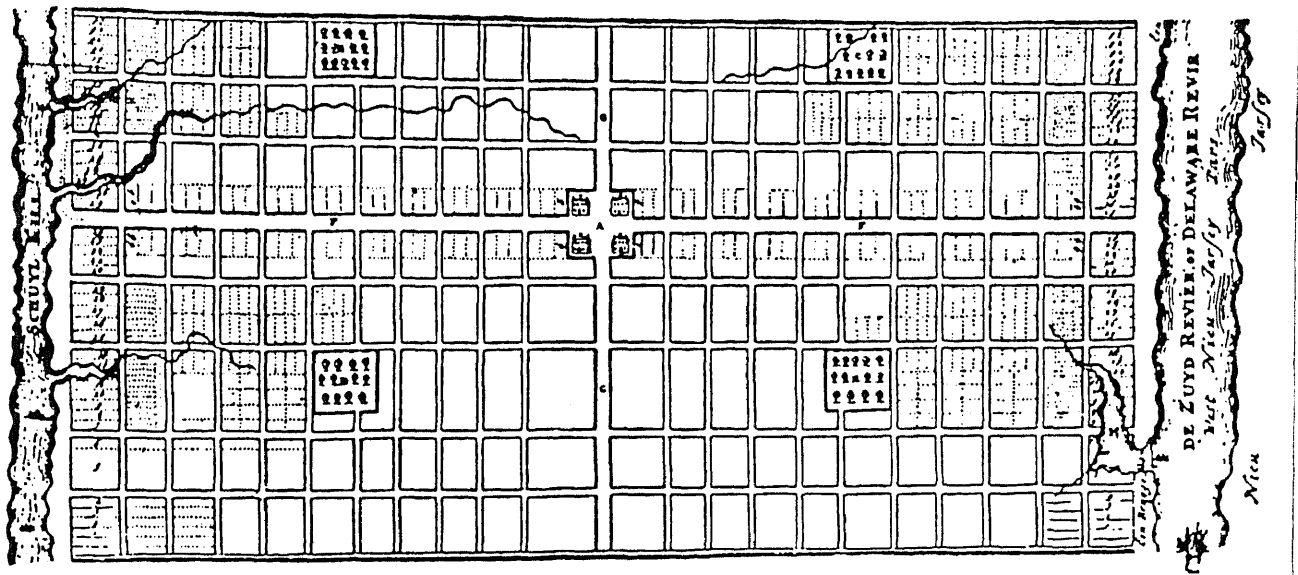
FIG. 6      PENN-HOLMSTEAD PLAN    City of Philadelphia, 1683.

(Source: Morris,p. 266)



FIG. 6a      Waterfront view of the city of Philadelphia, 1683

(Source: Morris, p. 267)

iron made it possible to use big windows to light large floor areas of commercial structures. Although Philadelphia grew, the small red-brick row house lost whatever charm they had once possessed and became the urban neurosis of factory workers to crowd into them converting them into multi dwellings which were never intended to be. The qauint alleys and smaller street of the grid iron pattern became oppressive.

The Philadelphia redevelopment authority under the state law of 1945, was constituted under a board appointed by the mayor. Its purpose was to eliminate blighted areas in cooperation with both public and private enterprises. The active planning for Center City Philadelphia began in 1947 with the greater Philadelphia Exposition. The Philadelphia City Planning commission's Central district Study was one of the first urban renewal plans undertaken by the city. The plan covered the old city, which included areas of Society Hill and Independence Hall. Philadelphia had its moments of oppression, but has proven to be a good city, a successful city.

Philadelphia's older homes are still well kept to its aesthetic form and detail of the past. It is the remembrance of the past which brings fond memories to what once happened and how a new city was formed and created to become a prominant city. Philadelphia's Boulevards and Avenues are surrounded by trees and landscape. There are lights and flags, libraries and museums, galleries and halls, all surrounded with the thought, planification, and implementation of aesthetics.

Although there are new techniques for the modern look at aesthetics, Philadelphia is quite remarkable in the sense that it has kept a scale in relation to its people and has captured the interest of the people with simple expressions. By 1980, most of the major manufacturing plant that gave the city's its reputation as the workshops of the world at the end of the 19th century were gone. Downtown was dominated by tall office buildings, reflecting the shift to service economy. Philadelphia was still a city of homes. The city was increasingly successful in maintaining its position as a major office center. Private investment in downtown

housing, a dramatic new retail shopping center, a Rennaissance of restaurants and the completion of several new hotels suggest a renewed vitality. Philadelphia contains a blend of the new structures with the sensativity in mind of scale and hierarchy of existing homes and buildings.

The proof of this lies in Center City where the most common public facility, City Hall, contains its two story glass curtain wall lobby integrating with the street level and pedestrian pattern. Because of its open view it brings in the view of the city scape to the building. I. M. Pei is well known for his apartments towers within the town houses of Philadelphia. He to creates a special blend of design solutions for Pittsburgh to regain its identity. Throughout its entirety, pedestrian flow has been a major cause for the linkage between two areas in Philadelphia. The link between Society Hill and Penn Center happened to be reiforced by the street level commercial areas. By doing so, this created areas with gardens and walkways. Some areas were open others closed such as access to subways.

This same reasoning is necessary for the planning aesthetics of University commons. The need to link the corporate areas with the institutional and educational parts of the city can be done via the public. As in Bower's Design of Market Street Philadelphia, we too can design a "people street (Bacon, p. 294)." full of versitality and character for the rise of a fruitful city of Newark.
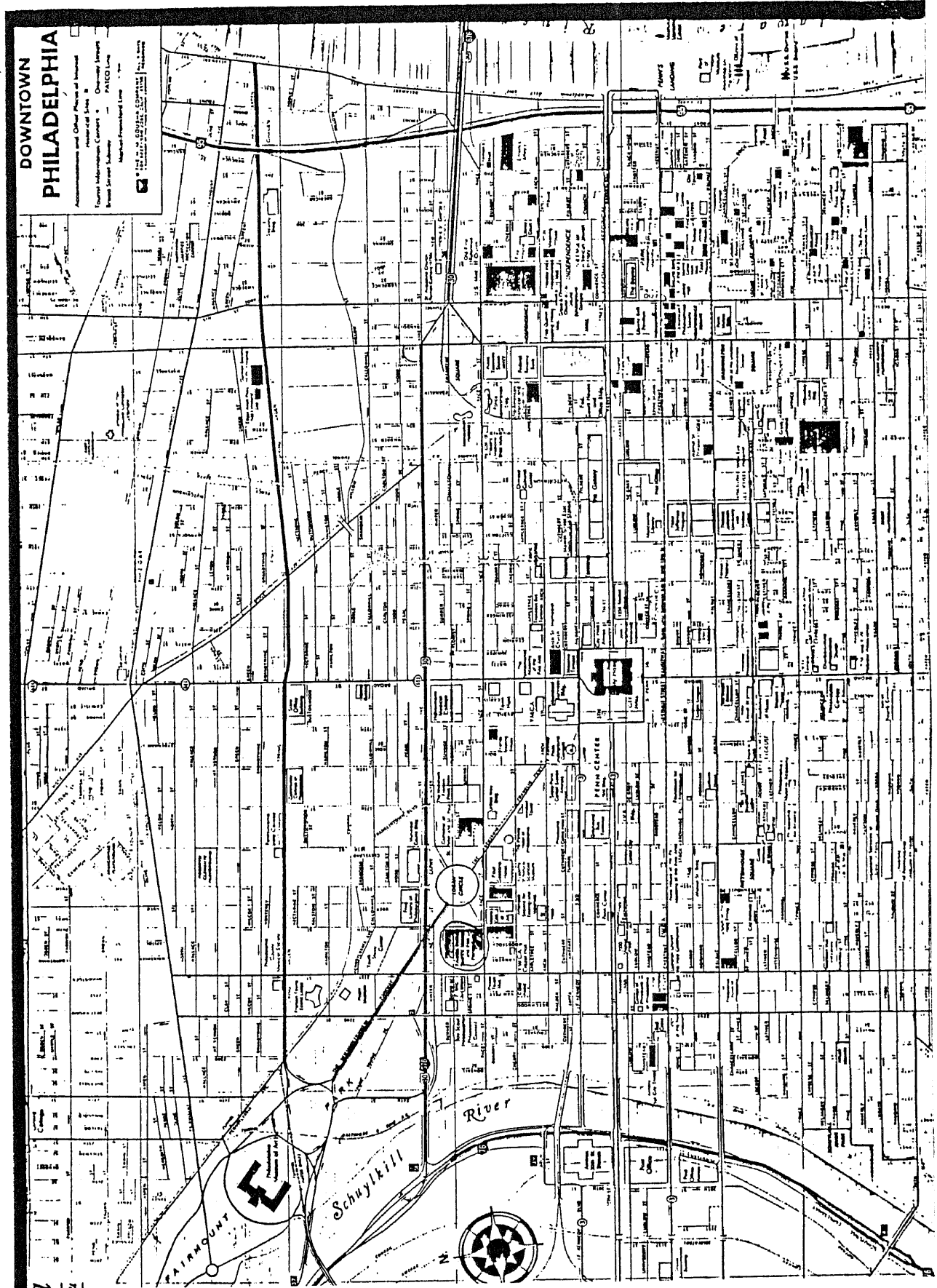
FIG. 7

# PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pennsylvania is a city in the foothills of the Appalachian Mountains in the south western part of the Allegheny and Monongahela rivers where they join to form the Ohio River. Pittsburgh also has a major airport, highways. The most obvious of highways are the Pennsylvania Turnpike, the Penn-Lincoln Highway, and the eight laned highway at Fort Pitt Bridge.

Pittsburgh's industrial importance is based upon the strategic locations and natural resources which originally included abundant timber, clay for bricks, and sand for glass. There were also great deposits of coal, petroleum, and natural gas. Steel had its early dominance in the industry despite the development of the large steel centers elsewhere. In Pittsburgh there are locations of some of the largest plants of the United States Steel and of Jones and Laughlin, as well as of important independent producers. It is the home of the widely known companies established by George Westinghouse of Westinghouse Air Brake Compaoy and Westinghouse Corporation. The city is the seat of the Aluminum Company of America and the Gulf Oil Corporation. Its ship building tradition is carried by the Dravo Corporation. Its pioneering in food processesing is recalled by a major plant of the Hienz Company. Many new companies were established in Pittsburgh after World War II.

Pittsburgh's rivers lined up with steel mills and factories present a picture of a working man's city. A city created and risen to fame by the hands and sweat of the people. From Mount Washington you can see Gateway Center, The Gulf Building, and the Cathedral of Learning. Parks, green hills, and most of all streets bordered by trees are what make Pittsburgh very vivid and alive. The existence of nature

surrounding the architecture blends and communicates the fullness of a city creating a better environment and aspirations for the future.

In Pittsburgh you may come across the percentage of single family residences to be high. Ever since World War II however, there was a marked increase in the three story walkup and elevators apartment (then called "luxury Apartments"). The most impressive area is the Point and the building relationship in the business district called the Golden Triangle. It takes its name because of it strategic location during the era of militia and its excellent means for transportation.

Pittsburgh has beautiful and large university campuses. Among the largest of them is the University of Pittsburgh. It is widely known for its forty-two story Cathedral of Learning. The campus consists of fourteen schools. Carnegie Mellon University was established in 1967 by the merging Institute of Technology founded in 1900 by Andrew Carnegie and the Mellon Institute. These are located at the heart of the city making it so simple for any student to have access to the public transportation if necessary.

Pittsburgh has a great amount of green area. The approximate park area in Pittsburgh is 2,000 acres. Most parks are located on high land (except for The Point) and give a dramatic view of the industrial valleys below. Overlooking the Monongahela River is Schenly Park. Towards the eastern part of the city are the Frick and Mellon Park. On the high north side is River park which contains the Allegheny Observatory. Over the Allegheny, Highland Park contains the principle city reservoirs, municipal zoo, children's zoo, and aquarium. The green foliage and landscape add a wonder of beauty to anyone who first experience the city of Pittsburgh.

The long lasting impression of Pittsburgh are the hills. Nature here is untouched. There are tunnels made through mountains providing a form of autmotive circulation which does not disrupt the remainder of nature. There is a

form of order in the making of such tunnels which divert the attention of just passing through. Instead, it creates a rythm and pattern of openings. These openings give a surprising view of different hues of color and forms of green landscape to the driver and or passengers.

In the residential areas the hills have been well kept with its original cobblestone pavement. There is very few if any, excavated homes to fit on a flat terrain. It is a remarkable view and interesting one with regards to patterns and organizational systems. There is no central datum point as that of Philadelphia which is placed on an orthagonal grid. Point Park is the Datum Point for Pittsburgh. This datum point of Pittsburgh is where the Allegheny and Monongahela Rivers meet. The Point is a wonderful area. The water itself is a fascination of romance and a new beginning, a symbol of new life.

All throughout history, The Point (or The Golden Triangle as it is sometimes called.) has been an important focal point in society. It has been a strategic asset whether in military, retail, or corporate prestige. Point Park is well situated and well wrapped between bridges, yet it hold to that certain identity as a city. Downtown Pittsburgh is very small. Structurally, Pittsburgh's city grid is not orthagonal. Pittsburgh's streets do not run in a straight fashion. The streets meet at different angles to each other creating for some a monotony and for others a diversity.

The face of Downtown Pittsburgh is a perfect delight. It is well composed in an overall context of old and new in architecture blending to form one large entity. Althought the downtown area of Pittsburgh is small, it gives way to its pedestrians and is excellently integrated with its immediate surroundings. Pittsburgh has reached a new Rennaisance and is an extremely fruitful example of defying the interpretation of order as a purely symmetrical function. It is therefore understood

that aesthetics is not in fact just a systematic organization of elements, materials, and structure, but can also be one of complete randomness.

Having to live in a city which reflects warmth, closeness, yet an openness to freedom, is what we need. And if this is true and well planted in an urban form, people will nourish this city to continue onto the existence of time. If the city is not a happy one to live in, then revenge is set upon it. It becomes a center of growing decadence and abandonment. There is no need to live in slums, abandoned tenantments, nor create unwanted space just to infill an open lot. There is a need to build for human beings. There is a need to distinguish between art, craft, talent, work of art, work of masters, and the results and realities for long termed dreams.

The life of Pittsburgh is pleasant. Generally speaking it has the two fold ingredients of a city. These are the excitments of downtown and the serenity of country life, all intermingled as one. It has a public life, social life, life of the streets and plazas, parks, civic, and historical centers, shopping areas, college and university life. There are cafes, museums, and art galleries. The other half of Pittsburgh is the quiet serene half. The life which yield to relaxation and tranquility. It encounters the area which lets you walk through the natural land and think of beauty, art, quality, and nature. Pittsburgh's topography is greatly admired and appreciated. The majority of its' natural topography is untouched and works with the city not against it . This is what makes planning aesthetics so unique. Aesthetics uses its available sources such as topography for example to enhance surroundings without neglegence.

Rigid order is no fun unless there is some mystery to keep you going. Some other form of identity which captures ones body and soul to have a passion to perceive in an urban environment is a quality of aesthetics. It is combining simplicity and stamina to capture the interest of the public who are there to see, feel, hear, or touch every second of their lifetime. The student examples within the University

Commons area have developed several positives schemes to aquire the richness the city of Newark has to offer. Some people are blind to conceive an idea to justify a progressive future while the students of architecture at N.J.I.T. have been able to reach such goals to begin the perfection towards a brighter community by via their designs.
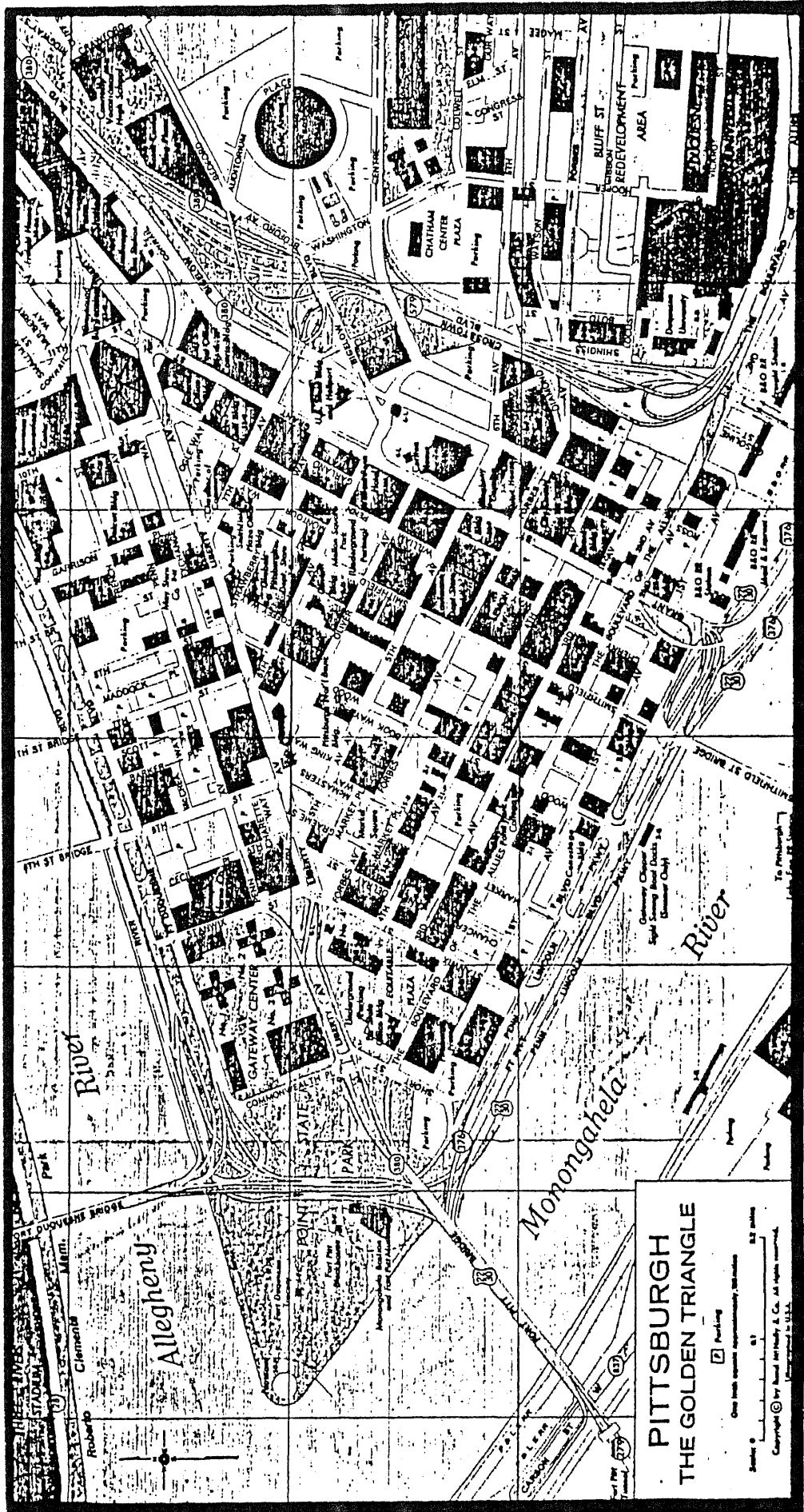
PITTSBURGH
THE GOLDEN TRIANGLE

FIG. 8
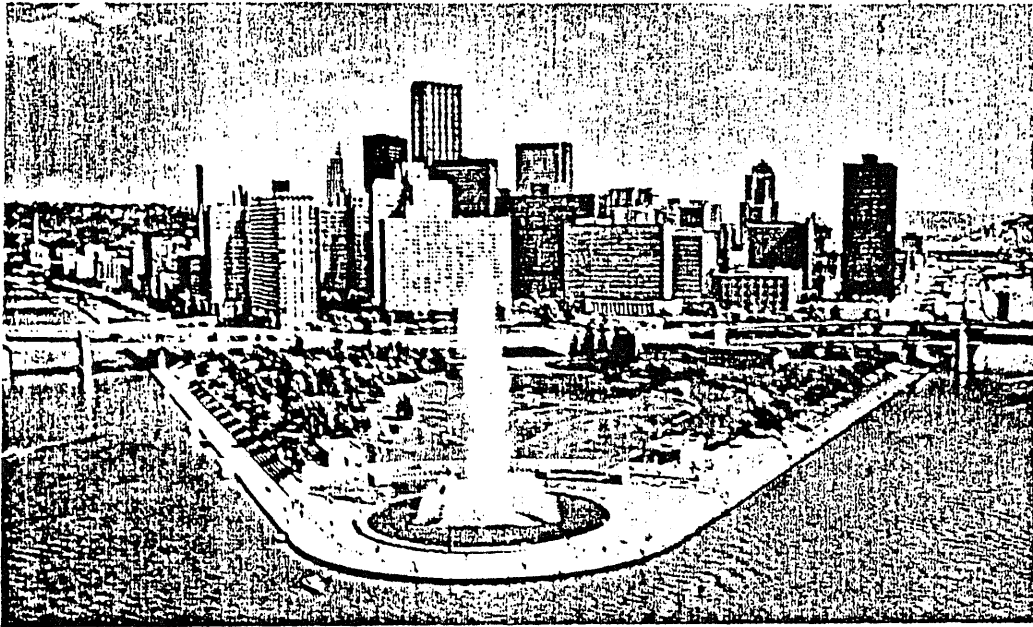
A CLOSE UP VIEW OF THE FOUNTAIN IN POINT STATE PARK.

FIG. 10

Blaw-Knox

Pennsylvania
Railroad Warehouse

Tenth St.

Bridge

Bridge

Blvd.

Proposed Allegheny River Bridge

Allegheny River

Proposed
parking garage

United Engineering

Bedford Ave.

Lower Hill

Proposed
arena

Parking garage

Duquesne

Sixth St.

Penn Ave.

Gimbel's
Dept. Store

Seventh

Ave.

Fort

Stanwix St.

Gateway Center

Liberty Ave.

redevelopment area

Centre Ave.

Horne's
Dept.
Store

Alcoa

(In design under)

Bell Tel. Co.

Peoples-Pgh. Bank

Park and
garage

St.

Parking
authority
garage

Point State Park

Fifth

St.

Mellon-U. S.
Steel

Kaufmann's

Ave.

Point

State Office Bldg.

St.

Parking authority
garages

Grant

Smithfield

Crosstown Blvd. (In design)

Point Bridge

Proposed
parking garage

Ferry

Redevelopment area boundary

The
Blvd.

Market St.

Wood St.

of

the

Allies

Downtown
Pittsburgh

Proposed Monongahela River Bridge

Penn-Lincoln

Fort

Pitt

Carson

Monongahela River

Parkway

Blvd.

St.

Proposed
tunnel
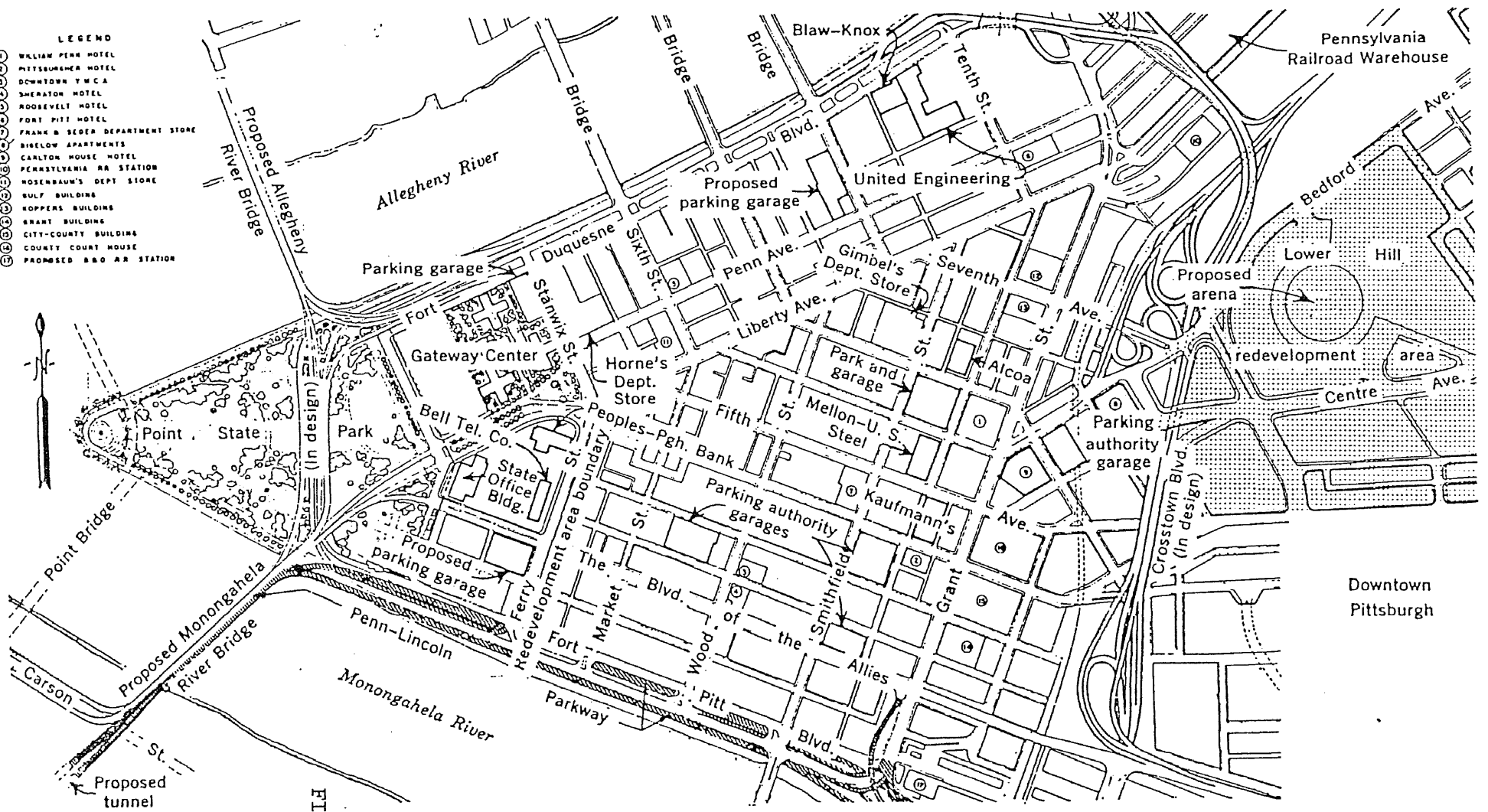
FIG. 9

FIG. 11
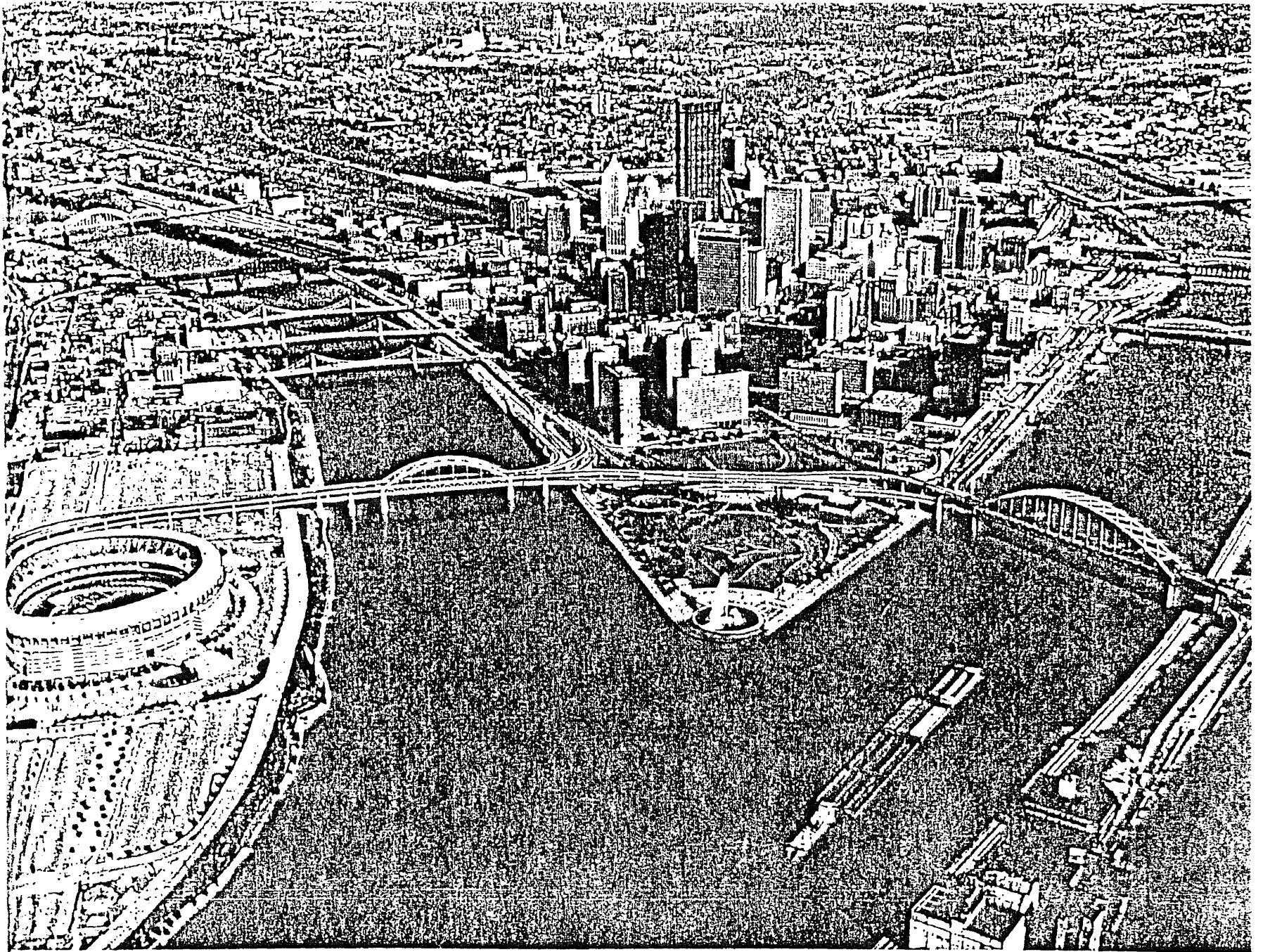
THE GOLDEN TRIANGLE AS PORTRAYED FROM A PLANE BY PILOT-PHOTOGRAPHER NORMAN W. SCHUMM.

# COMPARISON ANALYSIS BETWEEN PITTSBURGH AND PHILIDELPHIA

Both cities Pittsburgh and Philadelphia hold to basic similar concepts. Public awareness of the city and the solutions for their needs are what makes the city. The differencs occurs in the priority of criterias.

It has been made aware that in comparing Pittsburgh and Philadelphia, Philadelphia follows a grid-like pattern and works well. Pittsburgh however does not have an ordered pattern, but a random one. Nevertheless it works very well. This concludes that not everything must follow a one nor two dimensional pattern of such an orderly fashion as the Romans to be interesting or aesthetically pleasing for that matter.

The similarities between Philadelphia and Pittsburgh is that they are both surrounded by two bodies of water. Philadelphia has the Schuylkill River and the Delaware River. Pittsburgh has the Allegheny River and the Monongahela. The difference with these two cities in respect to their rivers is that Philadelphia's river do not meet as the Allegheny River do meet (fig.12 and fig.12a). They both have a datum point. Philadelphia has its City Hall and Pittsburgh has its Point. (fig.12b and fig.12c). Both also have an abundance of green park area.

The difference in twe two cities are that Philadelphia has an orthagonal grid while Pittsburgh has an angular random grid (fig.12d and fig.12e). Philadelphia's Center city spreads throughout the streets. Pittsburgh's street spreads outwards to the bridges. Lastly, and the most important factor and the most obvious difference in the two cities is that Philadelphia is an a plain and Pittsburgh is a city within hills and valleys.

Both, Philadelphia and Pittsburgh, provide good examples of planning aesthetics for University Commons. Both have distinct characteristics, but this does

not mean that University Commons must go one direction or the other. The simplicity of design is that you can make it whatever it wants to become. Diversity in any aspect of life is recognizable and therefore in a city, it is what makes people tick. In both instances of Philadelphia and Pittsburgh, their environment is to improve its present society and continue its growth for the future. Their housing and building relationships is one of great importance. There are many residences buildings and institutions in Newark that could possibly link into a few similar cores to maintain a stronger identity if any. In bothe city examples, the relationship between the old and the new structures have been quite an accomplishment. All of the blighted areas have been transformed into beautiful park areas for those of all ages. Other areas have been made for public use.

SCHUYLKILL RIVER

DELAWARE RIVER

PHILADELPHIA

MAJOR STREETS

SECONDARY STREETS

MINOR STREETS

NORTH

FIG. 12

ALLEGHENY RIVER

MONONGAHELA RIVER
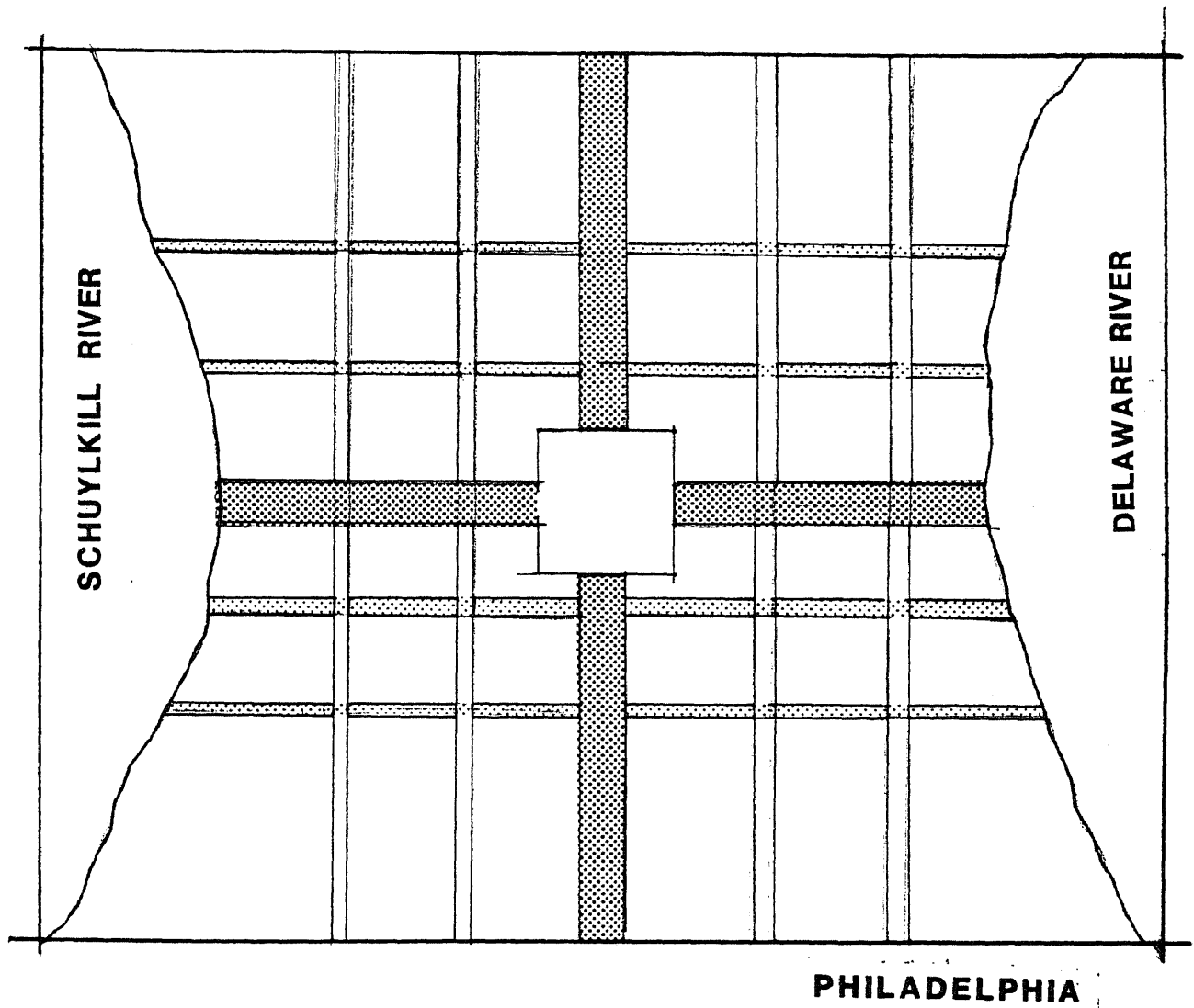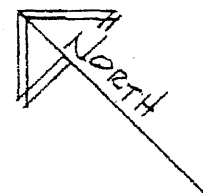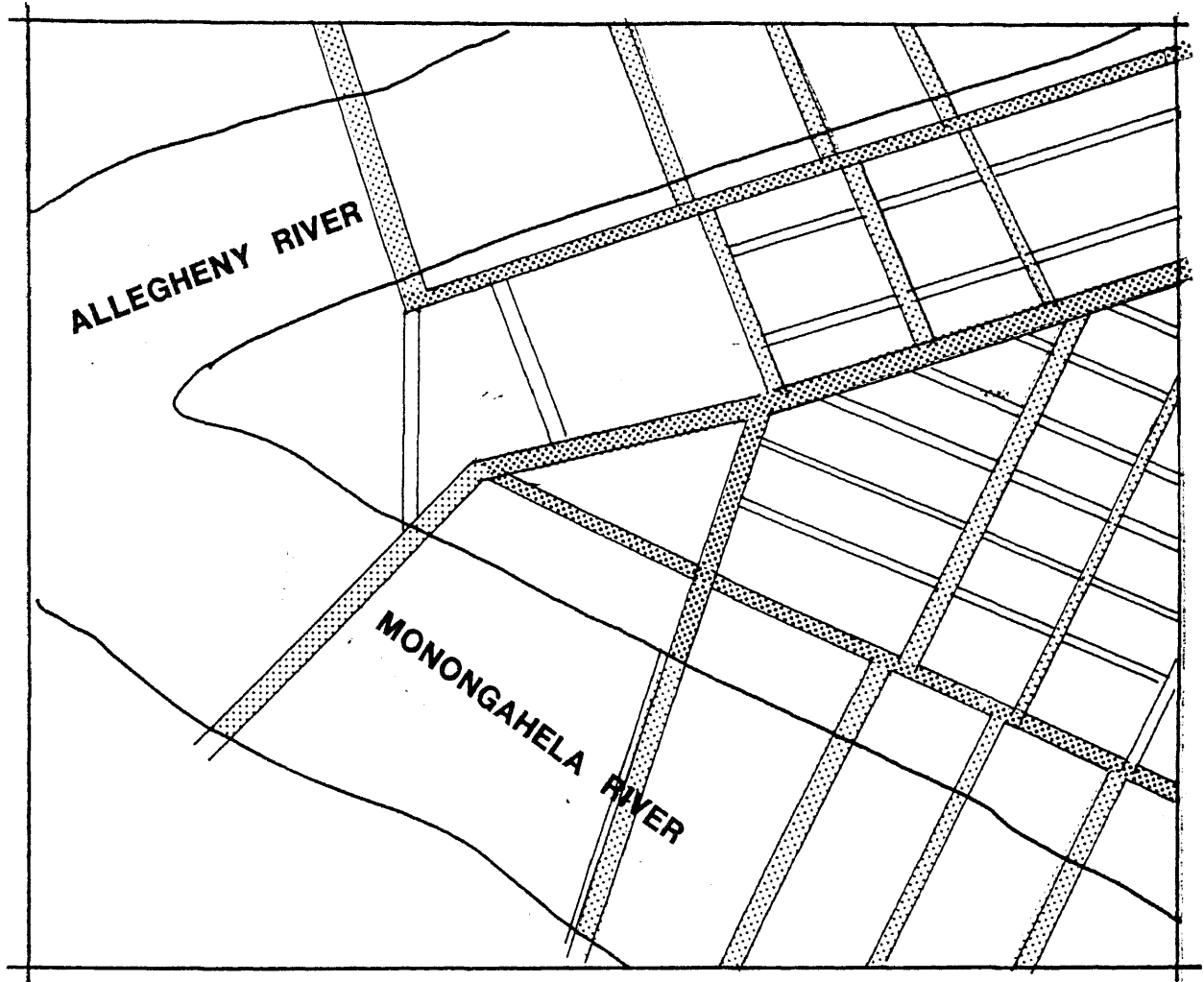
PITTSBURGH

MAJOR STREETS

SECONDARY STREETS

MINOR STREETS

NORTH

FIG. 12a

SCHUYLKILL RIVER

DELAWARE RIVER
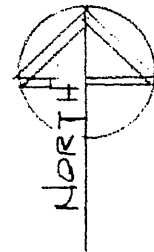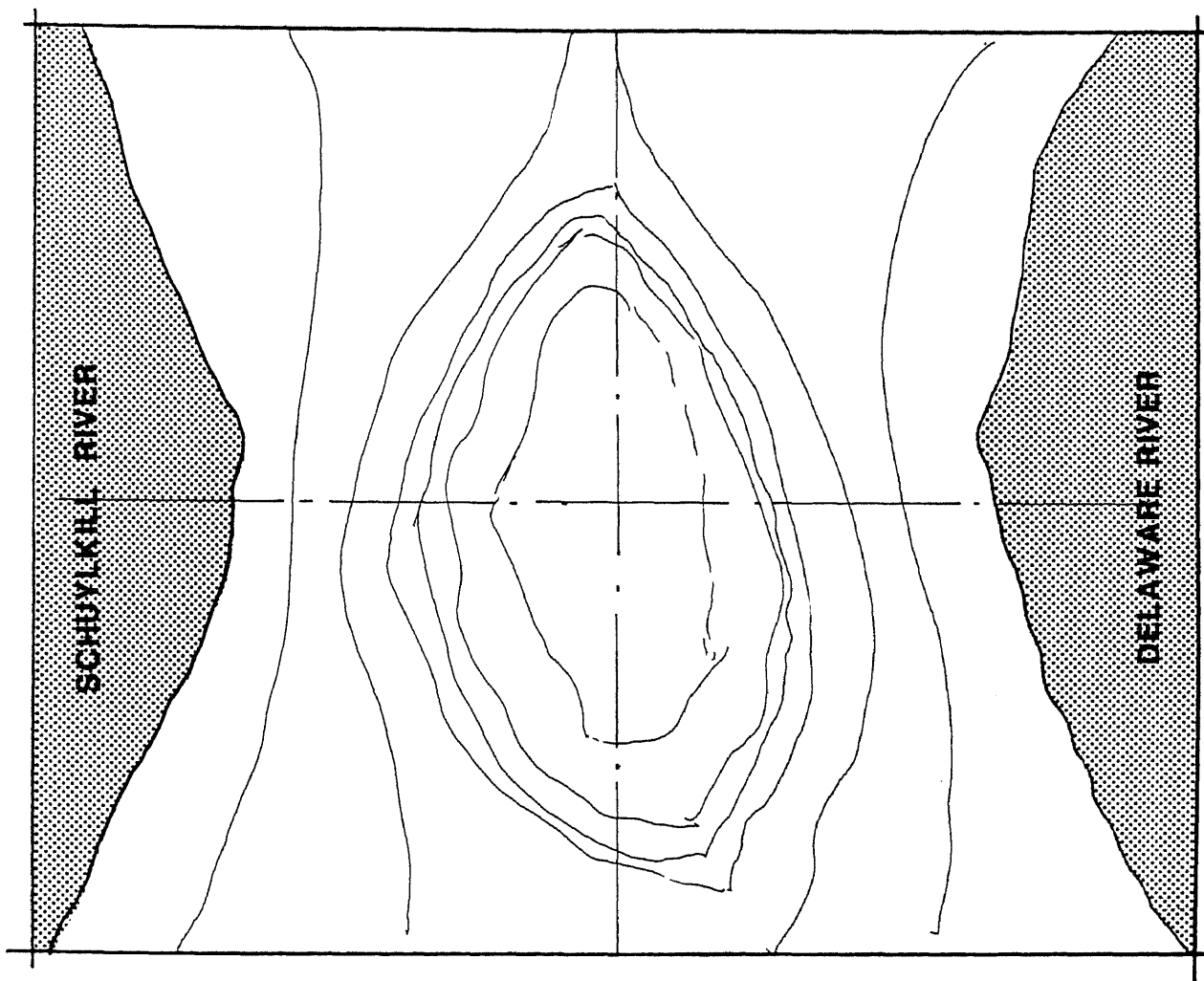
PHILADELPHIA'S BOUNDARIES

NORTH
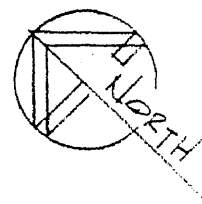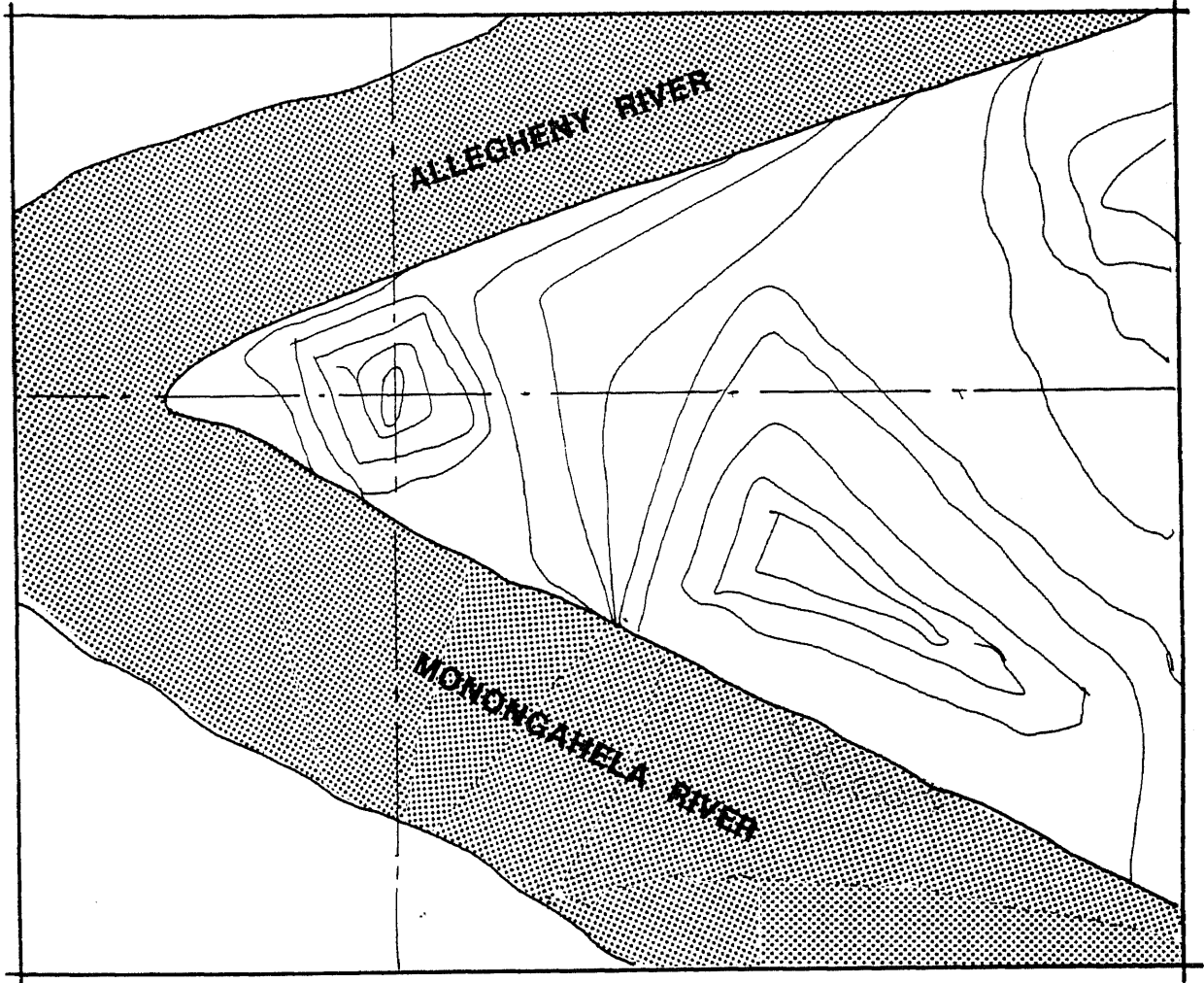
FIG. 12b

**PITTSBURGH'S BOUNDARIES**

FIG. 12c

NORTH
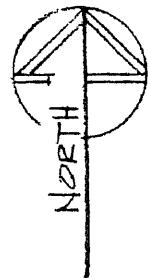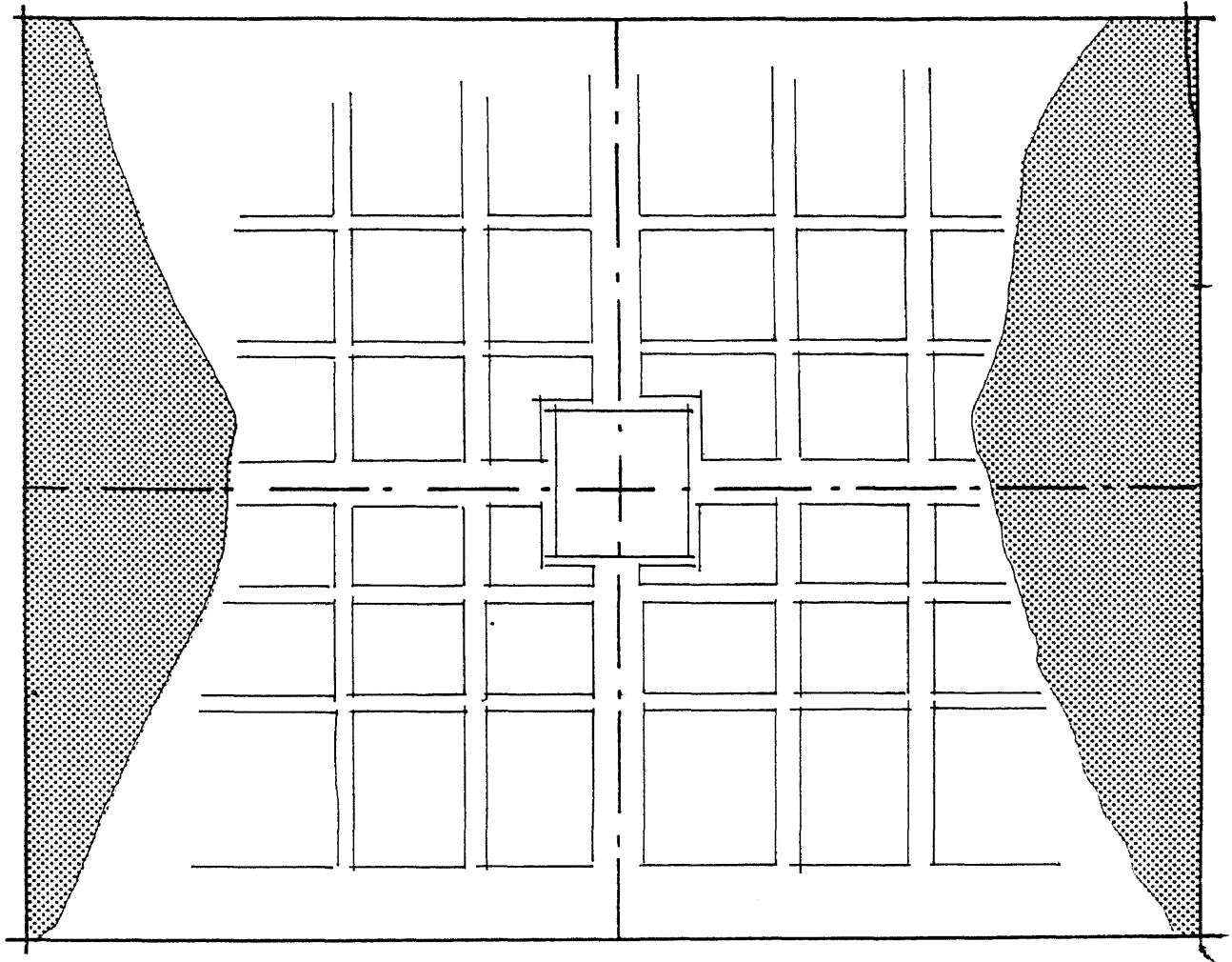
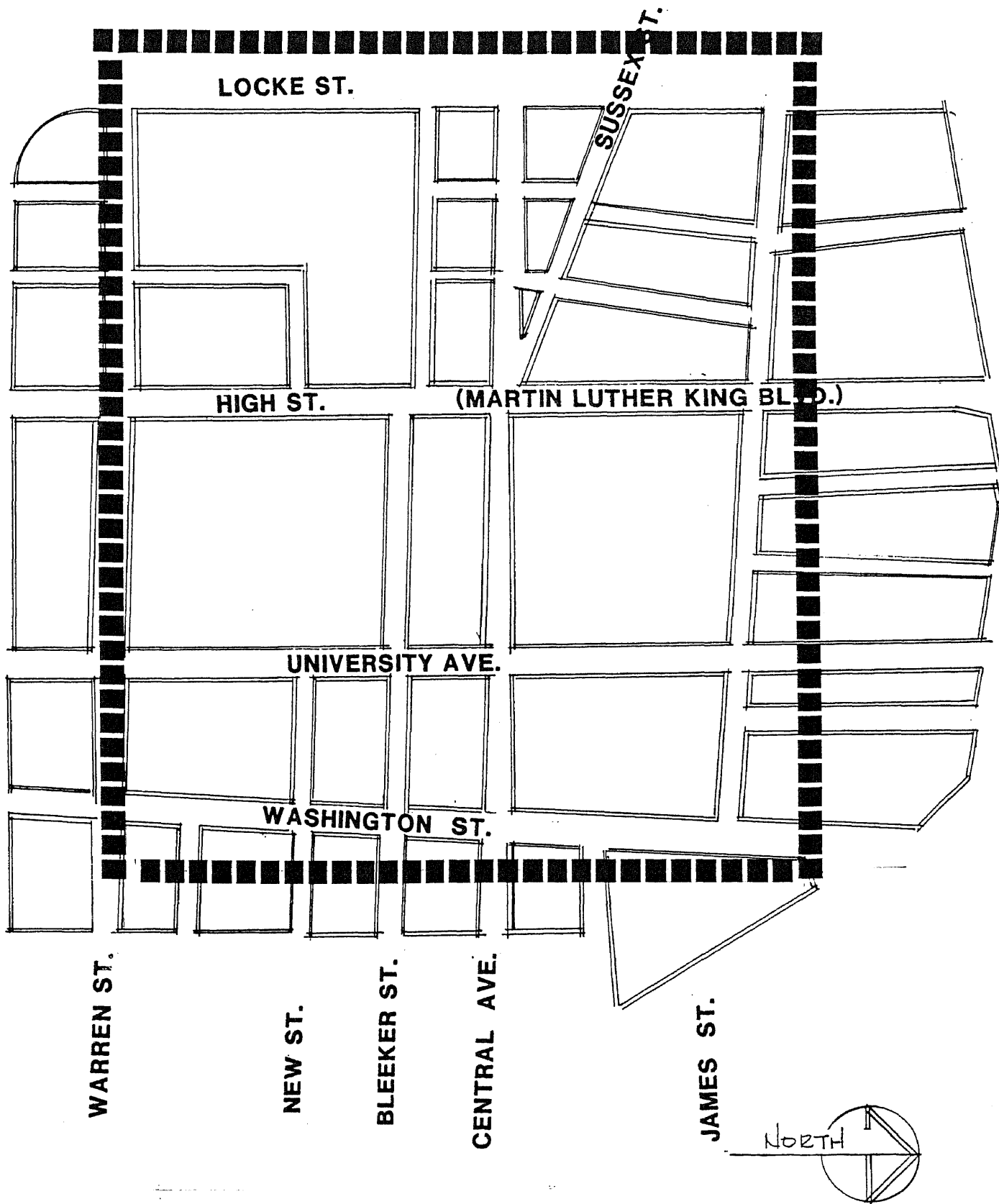**PHILADELPHIA'S ORTHAGONAL GRID PATTERN**
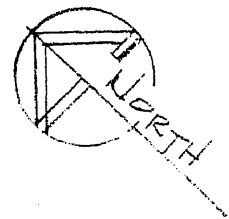
FIG. 12d
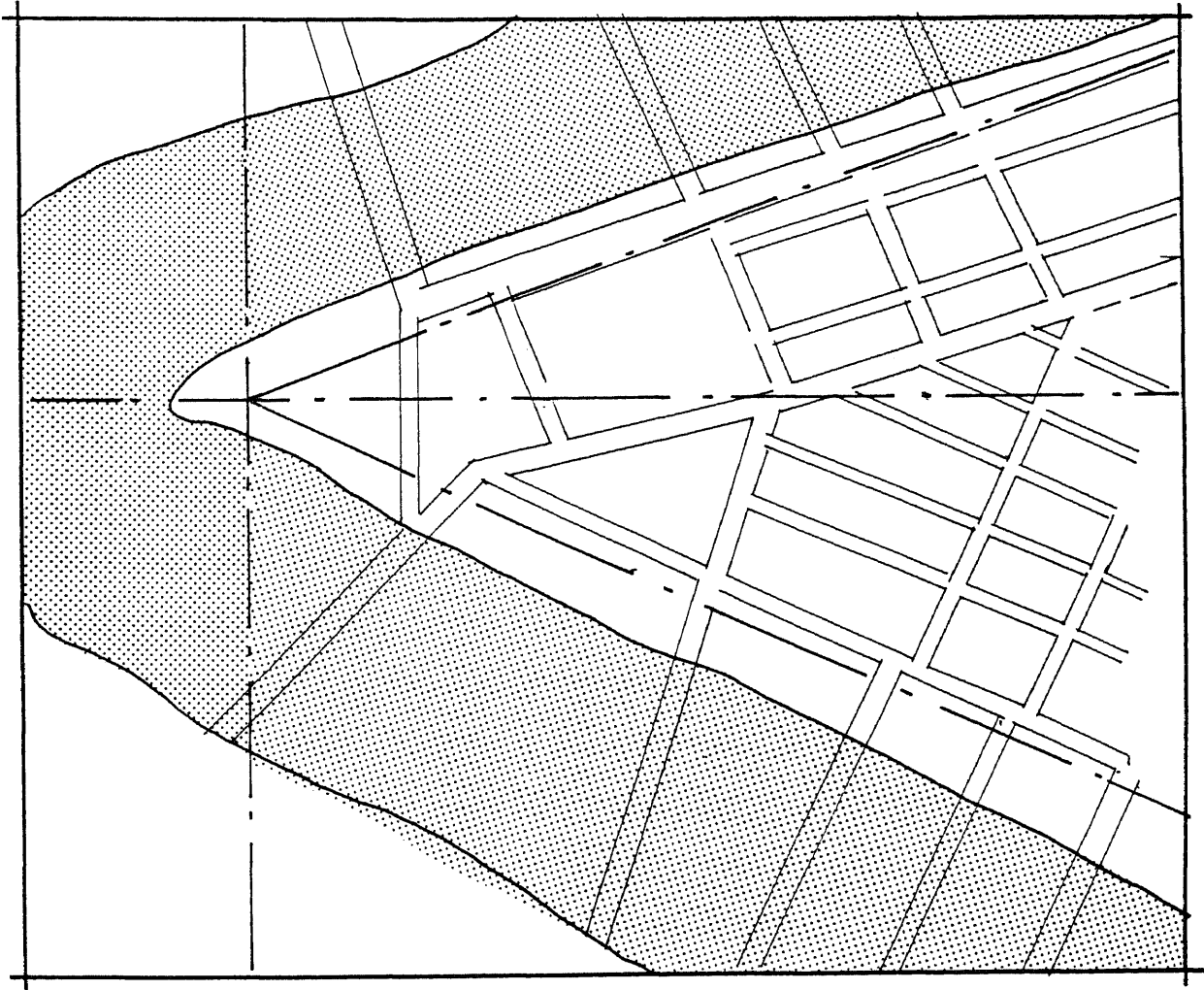
**PITTSBURGH'S RANDOM GRID PATTERN**

NORTH
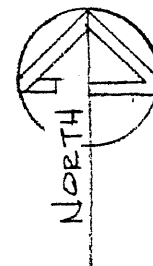
FIG. 12e

# IMPLEMETATIONS OF PLANNING AESTHETICS
## UNIVERSITY COMMONS, NEWARK


Newarks existing parameters for this study lie between the lines of educational institutions, medical facilities, cultural centers, such as the Newark Museum, the Newark Library, and also its corporate development areas. The area of study in this community are bound by four major streets. These boundaries are Warren Street and Central Avenue. running parrallel to eachother, with Washington Street and Locke Street adjacent to them. A small extension of this area of concentration to be included is the boundaries set by High Street ( Martin Luther King Boulevard), Orange Street and back to Washington Street (see fig. 13).

This university commons area encompasses a mixture of residential and commercial blocks along High Street, University Avenue, and Washington Street all parallel to eachother. Warren Street, New Street, Central Avenue, and James Street crossing each of the former mentioned before all contain educational buildings composing of the University Commons area. New Street street could be the new central artery for this new compositions for the University Commons. It create a magnificent diversity among pedestrians of all ages as well as students. It can become the Gate to the educational realm with Warren and Bleeker streets acting as secondary means of acces to New Street as counterparts in the viewing into a new domain of a university campus as it should be.

The campuses of New Jersy Institute of Technology together with Rutgers University and Essex County College inspire confidence, strength, establish character and determination in their students. In doing so, it should provide stamina and a University identity of strength and character to open its horizon onto

LOCKE ST.

SUSSEX ST.

HIGH ST.     (MARTIN LUTHER KING BLVD.)

UNIVERSITY AVE.

WASHINGTON ST.

WARREN ST.

NEW ST.

BLEEKER ST.

CENTRAL AVE.

JAMES ST.

NORTH

NEWARK'S RESEARCH BOUNDARIES

N. T. S.

FIG. 13

the city scape and make itself known to to the rest of the public eye. Philadelphia and Pittsburgh's universities are good examples of this identity which Newark can also achieve and obtain. If fragmental portions of the city are scattered in an array of patterns, it should be analyized as to where it might belong or should belong in order to mold it into a unique element or elements in the city. All fragments must have an origin from where they were in order to be recognized. Therefore, any fragmentation made in this area should be done in a careful and considerable manner.

On Warren Street going up towards Locke Street we face New Jersy Institute of Technology and Rutgers University. This area is well kept. What is lacking around it are the shades of trees and a path made by them. Walking through high Street we pass through Fraternity Row, the Fraternity homes, residential homes. These fraternity homes should be carefully renovated or cleaned on the exterior facades of most of the buildings. Fraternity homes are a symbol of distinction in a university. The majority are all brownstones. If kept clean and window trims maintained it would read very well as a continuous row of nor just buildings but University homes. Saint Michael's Hospital established since 1867 is also on the same street as the university fraternity homes. It is a brick front building. University Avenue running one way towards high Street has a combination of residential buildings followed by small commercial establishments ending onto Warren with the Rutger University Campus at the corner.

The following is a population record of the city of Newark since 1850. In graphic form it is translated on Fig. 14 as a noticable decrease in population. This is due to the tremendous area of blight within the city such as in areas resembling ghettos of the past and low income housing which are not well kept nor maintained to code.
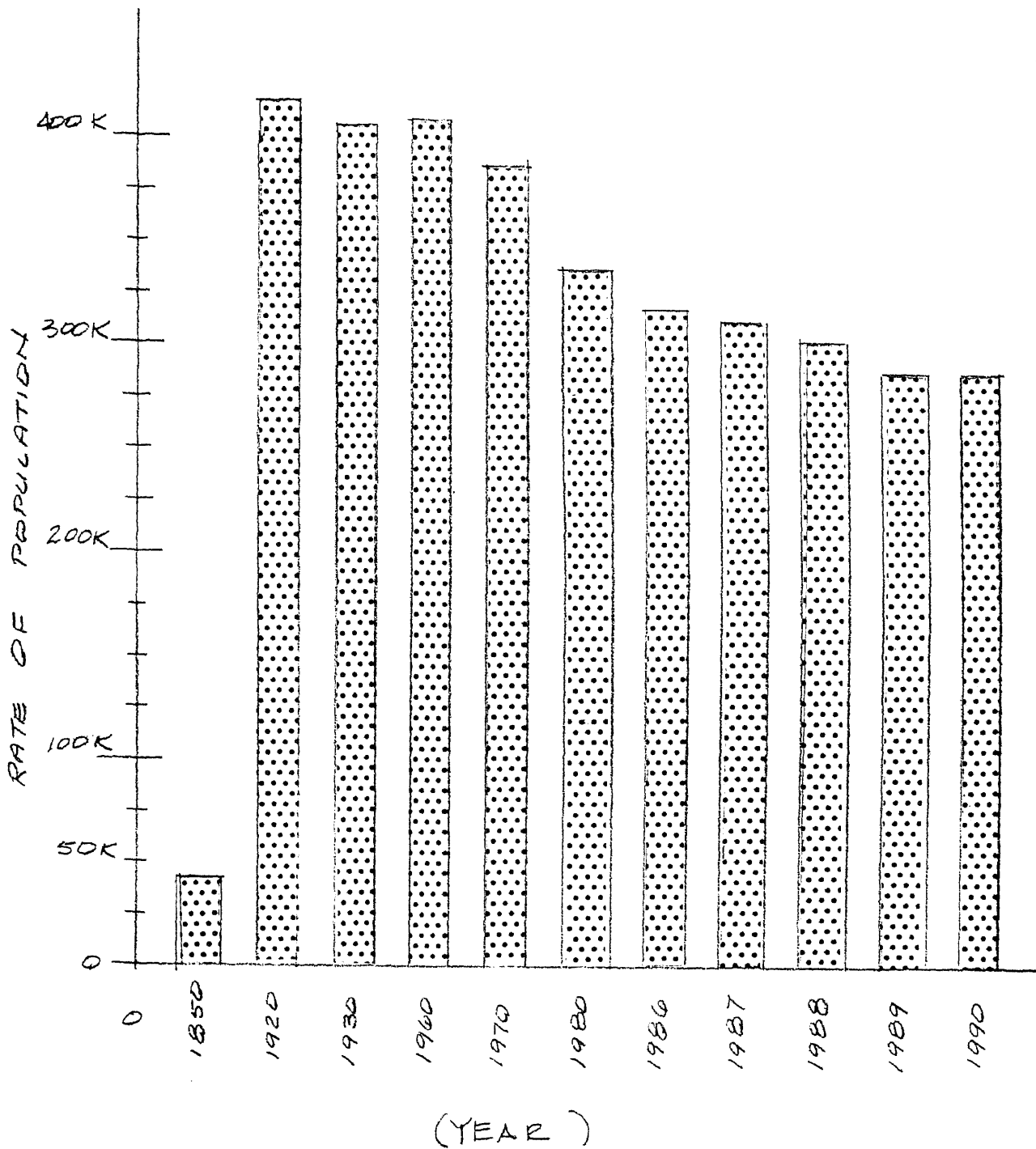
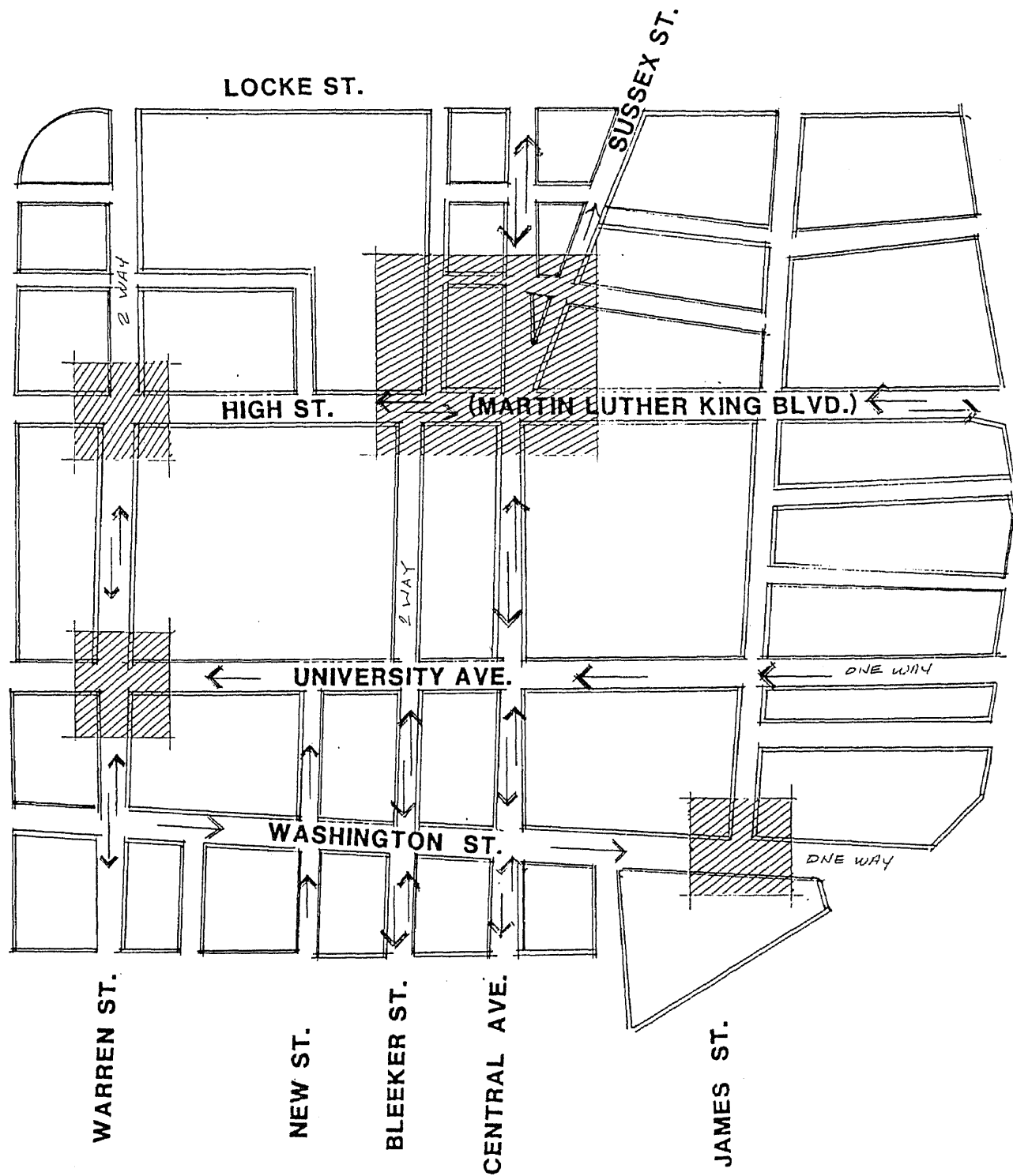THE POPULATION OF THE CITY OF NEWARK SINCE 1850

FIG. 14

# NEWARK'S POPULATION

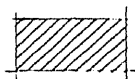| | |
|------|---------|
| 1850 | 38,894  |
| 1920 | 414,524 |
| 1930 | 402,917 |
| 1960 | 405,220 |
| 1970 | 382,417 |
| 1980 | 329,248 |
| 1986 | 316,849 |
| 1987 | 315,196 |
| 1988 | 312,000 |
| 1989 | 312,000 |
| 1990 | 315,100 |

Newark lies eight miles west of New York City, on Newark Bay and the banks of the Passaic River. It is the largest city in the state of New Jersey. The central focus of Newark lies in the downtown district; the business sector. In its center lies Military Park, to the north one comes across Washington Park surrounded by the cultural buildings which include the Newark Public Library and the Newark Museum. Both of which have fascinating interior architectural structures in its building as well (see fig. 15).

As far as organization is concerned here, Newark's four major links to a pattern of organization is seen as the transportation network of communication. It is the constant movement of railways, sea, highways, or air which have made a great accessibility for Newark to be the great communication center in the eastern portion of the nation. Is this is so then why is it considered the "armpit" of the eastern United States? Newark's transportation system; its harbor,its docks, airports, bridges, buses, and subway system is the main substance of holding Newark Newark together. We as architects must take great consideration of these factors and put them to our use implementing them in the daily necessity of living and blending it for the welfare of a brighter future.

Traffic patterns at the college campus integrates with the business district making a congestion in some areas. The most traffic encompassed in the morning and in the afternoon rush hours are at Warren Street, University Avenue, and most of all Central Avenue. This causes friction at an extent where congestion should be eliminated in a proper manner where the conjestion could be directed elsewhere. The view and link of the Central Avenue is a positive element for the improvement of the area in study because it runs from the educational end through the institional

LOCKE ST.

SUSSEX ST.

HIGH ST.    (MARTIN LUTHER KING BLVD.)

2 WAY

UNIVERSITY AVE.

ONE WAY

WASHINGTON ST.

ONE WAY

WARREN ST.

NEW ST.

BLEEKER ST.

CENTRAL AVE.

JAMES ST.

NEWARK'S TRAFFIC PATTERN

CONJESTED AREAS.

FIG. 15

to the corporate and commercial sectors. Central Avenue is the link between corporate, residential, educational, institutional, and commercial (see fig. 16).

This is one of the many solutions to be considered in trying to find unique ways of connecting individual areas with one another. There can also be developed a smooth transition from the quality of space for the student to the realm of the coporate world always keeping in mind the public as the overall walker, the pedestrians way through the town.

In this study, these traffic systems, or traffic patterns will be considered by lessening the friction in some way and giving way to the public user, the student life, the elderly, and the pedestrians in general. This will not only be good for the free flow of traffic percieved, but it will create a better visual image to see in the morning and in the afternoon. It is here that the third dimension is very important in dertermining what these space should be occupied for. should it be a street in totality? Should it be a closed order or a complete open area only to the public.

We can see that the city has become a jungle of past products. Fragments left behind can yield the city as well as distort it. In this case it affects the city of Newark very negatively. The need to improve the quality and utility of the public environment is important to all, but to reach this stage or level, we must face the actual urban entity with an understanding of what has happened , what is about to happen, and what will or can happen. It is the understanding of the lack of design or too much of it. Be it what it may, we must see the facts of what are the existing damages to our university commons before we exactly start giving proposals to things which may not have any meaning at all.

We need once again to evaluate our urban spaces and to design them to perform aesthetically for the good of the community. It should be realized that the open spaces ( also known as space syntax) are not just spaces for whimzical decor. They are located for a reason and a purpose. The design solutions do not only
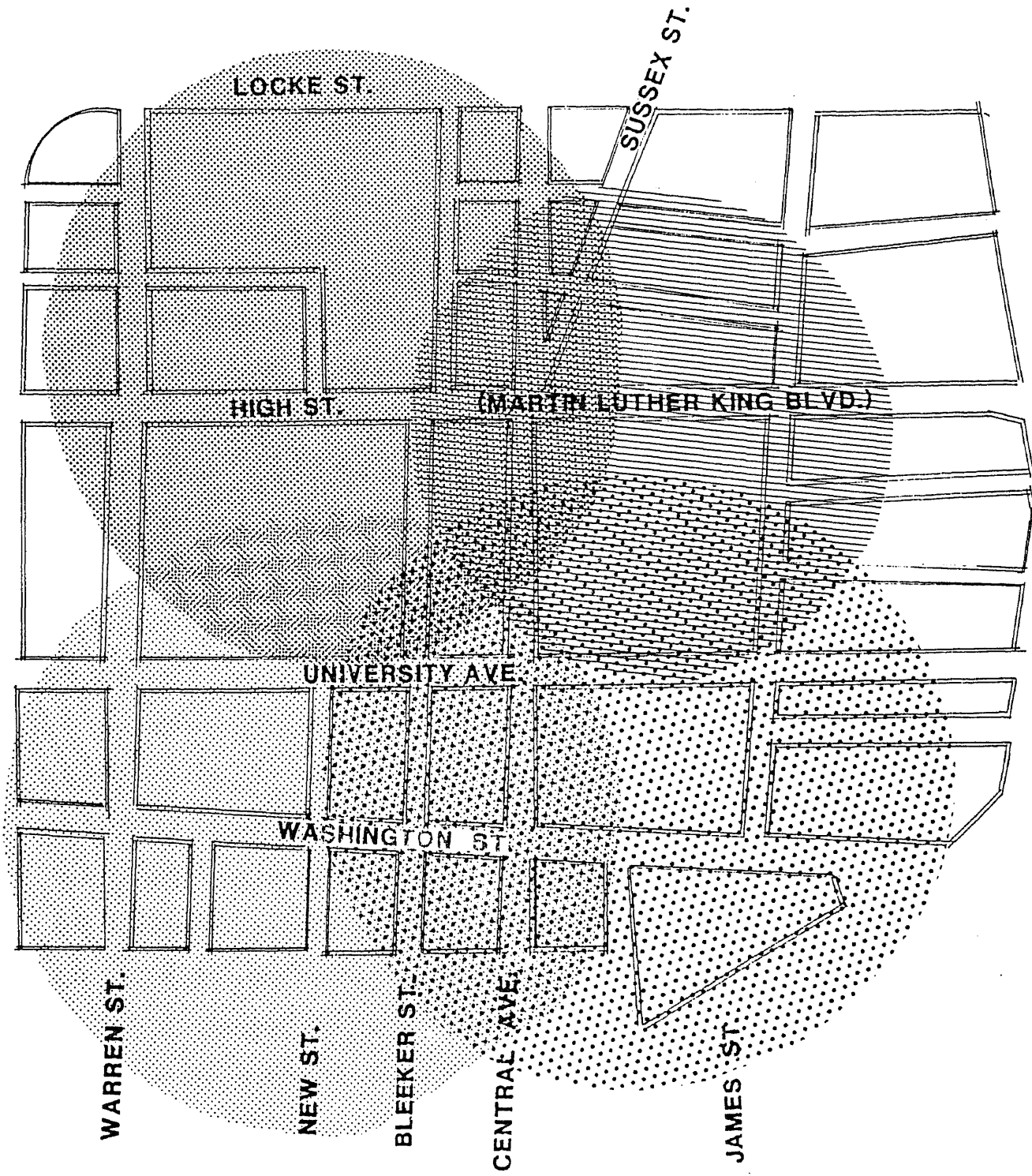
NEWARK'S LINKAGE SYSTEM

FIG. 16

pertain to certain single elements or rather single entities, but deal with the urban entity as well. The mass design created to establish a character and supportive identity to the city of Newark through University Commons was done by the fourth year students of architecture at N.J.I.T.

The students at the School of Architecture of N.J.I.T. dealt with a single city block of their choosing and developed his or her design to their best potential in regards to the single buildings entity and exploring it to the relationship to, from, and with the urban entity that which is the University Commons area within the city of Newark. There are three design solutions developed by three individual students accordingly. In all three schemes there exists one similar theme. Their theme to the response to the strength, identity, and planning aesthetics is via housing for students, professionals, researchers, artists, and the like to be able to become a part of this new city life which has been neglected for so long. It is true that to begin in planning aesthetics we have to start from the very first layer. That layer seems to be at the street level, commercial patterns, pedestrian circulations, and much more. In turn what these students have accomplished is the use of the single elments and combined then in each of their cases to share and provide us the architects with people to begin using the proposed facilities such as our our street furniture and streets which communicated from one end of the city to another. In there thinking, it is the exact interpretation as that of Sir Edmund Bacon. "The purpose of design is to affect the public who uses it (p. 21)." Therefore, for the students, if there is no public then there is no purpose to design. There is no night life in the University Commons. It is because there is no one around no place to stay, no place welcoming enough to stay, admire, and be affected by new creative ideas.

The students have introduce interesting, exciting, motavating, and several approaches for the planning aesthetics criteri.
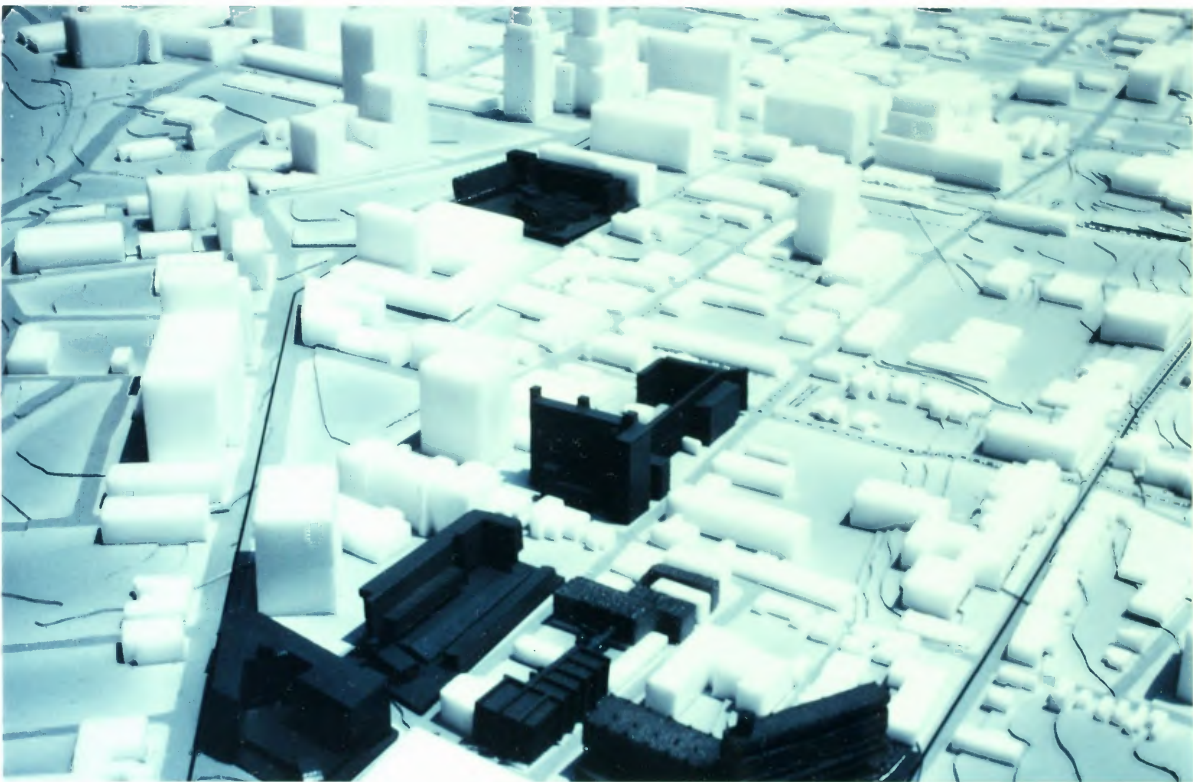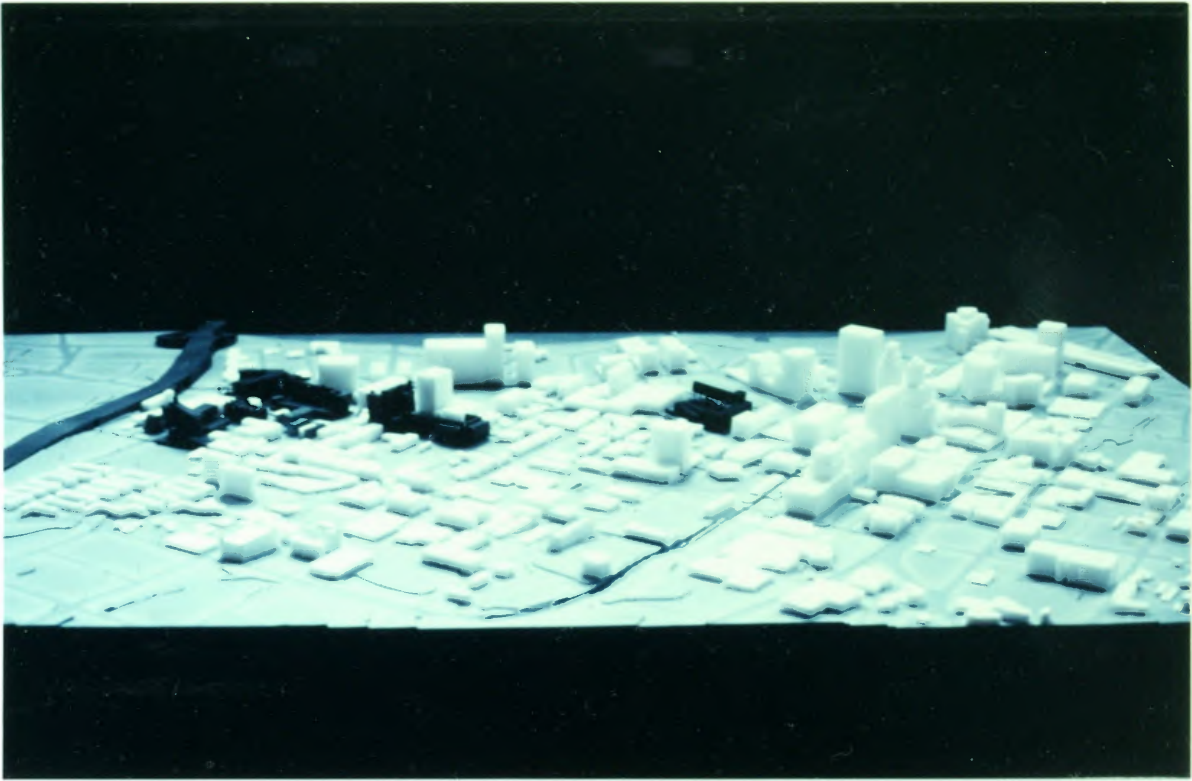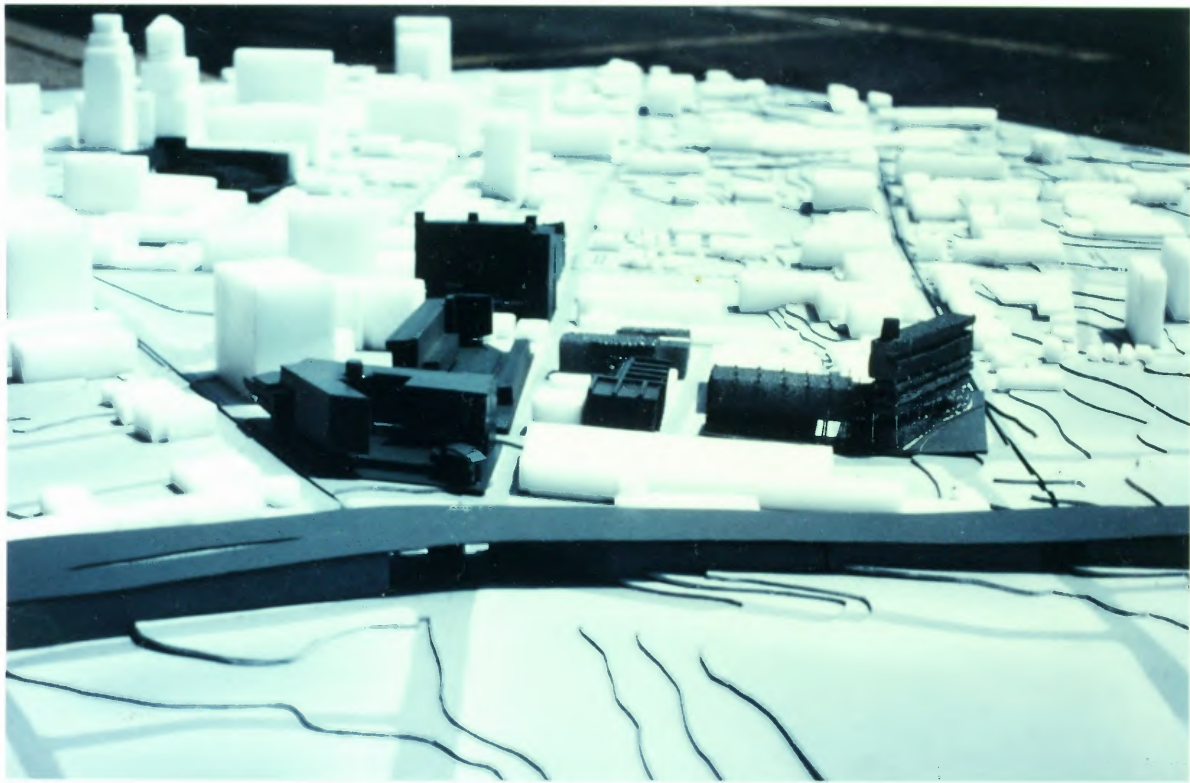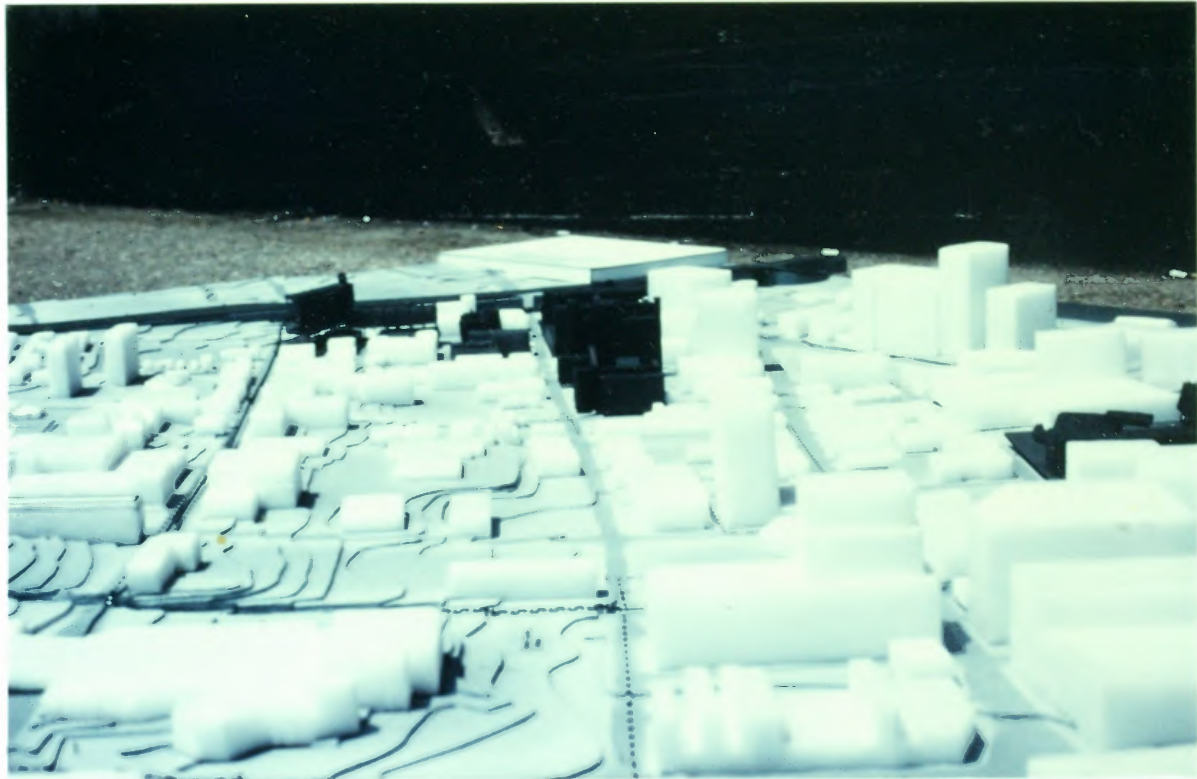
FIG. 17

FIG. 17a

# DESIGN SOLUTIONS

The three design solutions described in this section are of the following students:  Timothy Frazee, "A Celebration of a Parking Structure,";  Robert Moore, "Artist Housing and Sculpture Garden.";  and Miss Maria Periera, " The Hierarchy of Office Buildings, Research Laboratories, and Public Theatre use."

Tim Frazee's design solution to the University Commons was to create a parking facility without it becoming an obstacle to the beauty of the site.  His model and drawings demonstrate how a parking structure can have integrity yet not present itself in a manner that will not turn the public off.  It is a four story structure with a plaza level and a water courtyard below grade level illuminated by skylights above. Within this courtyard there are facilities for an underground gallery where exhibits can be shown and presented to the public.  This parking facility is not only for those who bring cars but also invites pedestrians.  It produces a versitality which lets the user stay awhile and relax before they move into the rush of the day.  This is a way of redefining solutions for public needs.  It took a different route from the normal order of design.  It is interesting in that it combines the necessity of parking without it becoming just another four story parking garage. It relates to fundamental planning for public use throughout a structure without neglecting public space.
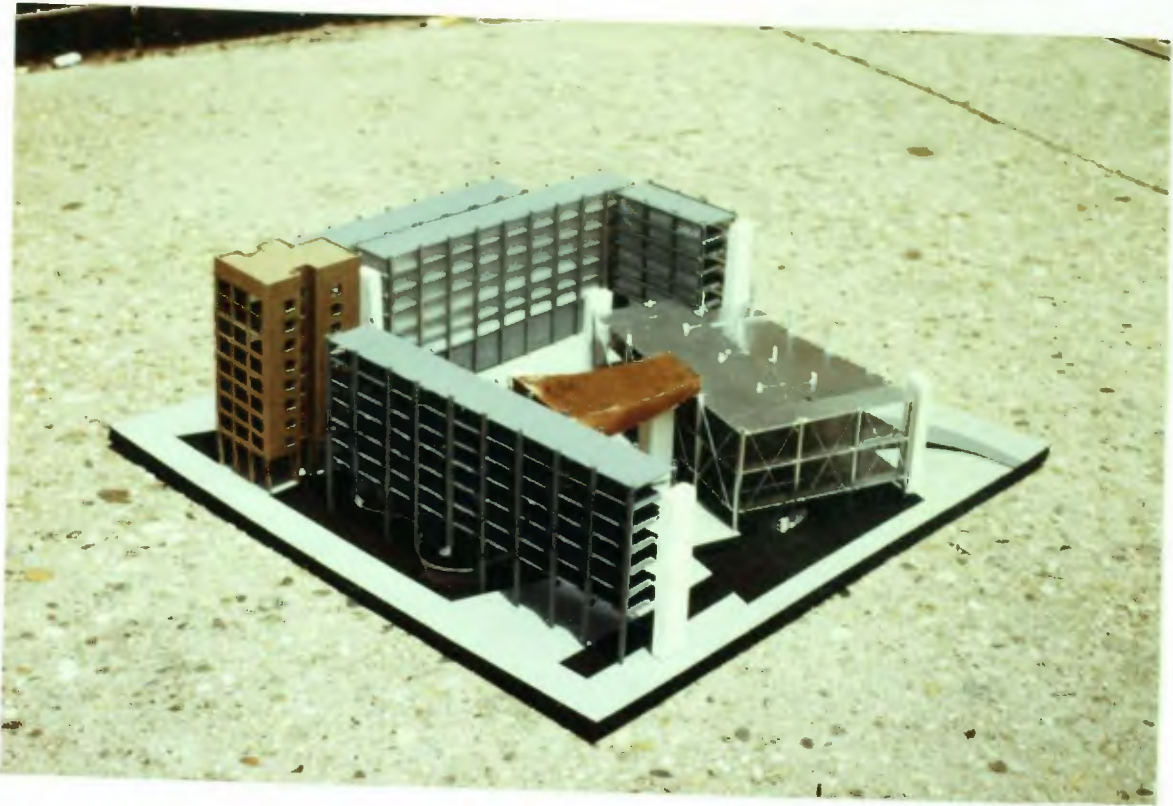
Timothy Frazee



FIG. 18

Robert Moore designed an artist housing structure around a truss design walkway. His main interest was the cultural aspect of the University Commons. When looking at his design solution as an urban entity, it is easy to see how his use of the truss system makes a statement about technology and art. His housing was proportionally configured to the surrounding buildings. He showed a sensativity towards the historical aspects of the environment as well as the potentials in new artistic forms being developing. His Building design is located at the corners of Central and University Avenues and concentrates on the Newark Museum. His housing facility is for students as well as design professionals to stay overnight or even live in the midst of the cultural part of the city. His walkway provides a dual view. One towards the housing structure which wraps the entire corner and creating a courtyard. The courtyard is a sculpture garden open day and night providing lighting effects for the evening hours. Here the public can experience a sense of satisfaction and ease. At the Exterior end of the walkway in view of the city, is one of his most interesting plans. The higher you go the more of the city scape you will see. The open truss design enables the user to see any point of the city he or she wants to admire, but through a technical screen.
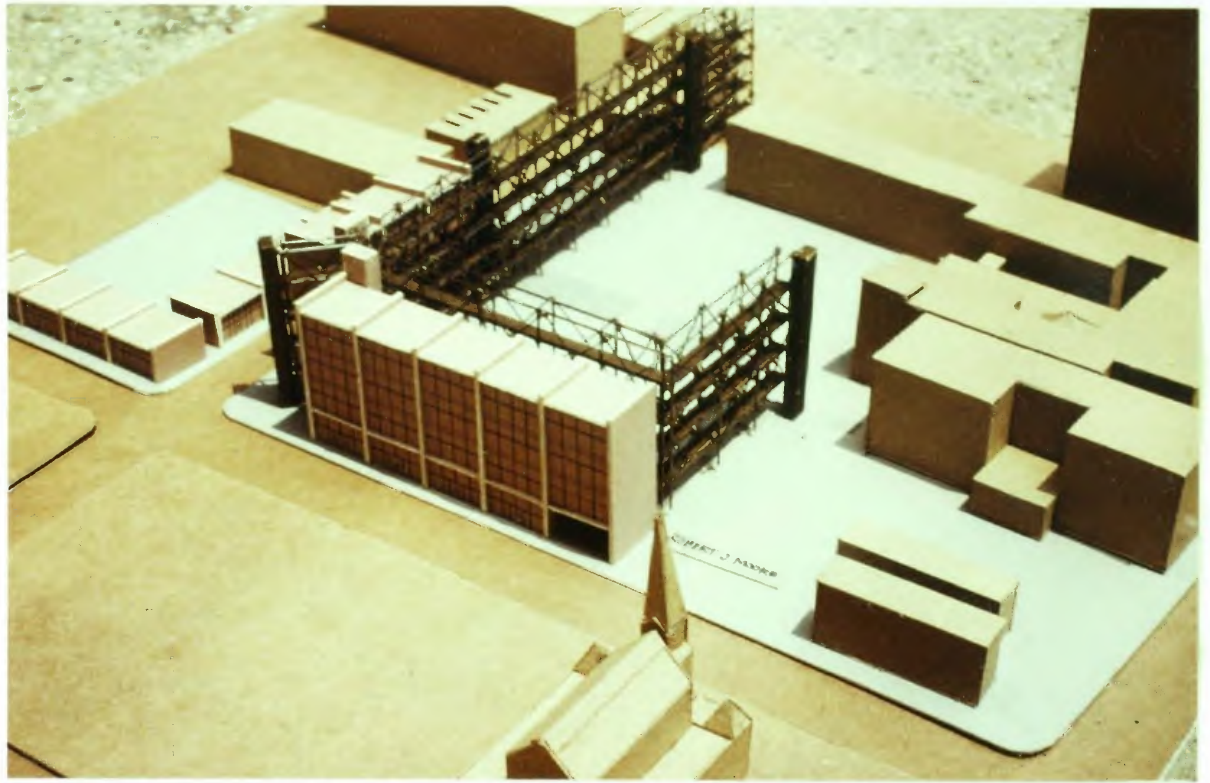
Robert Moore
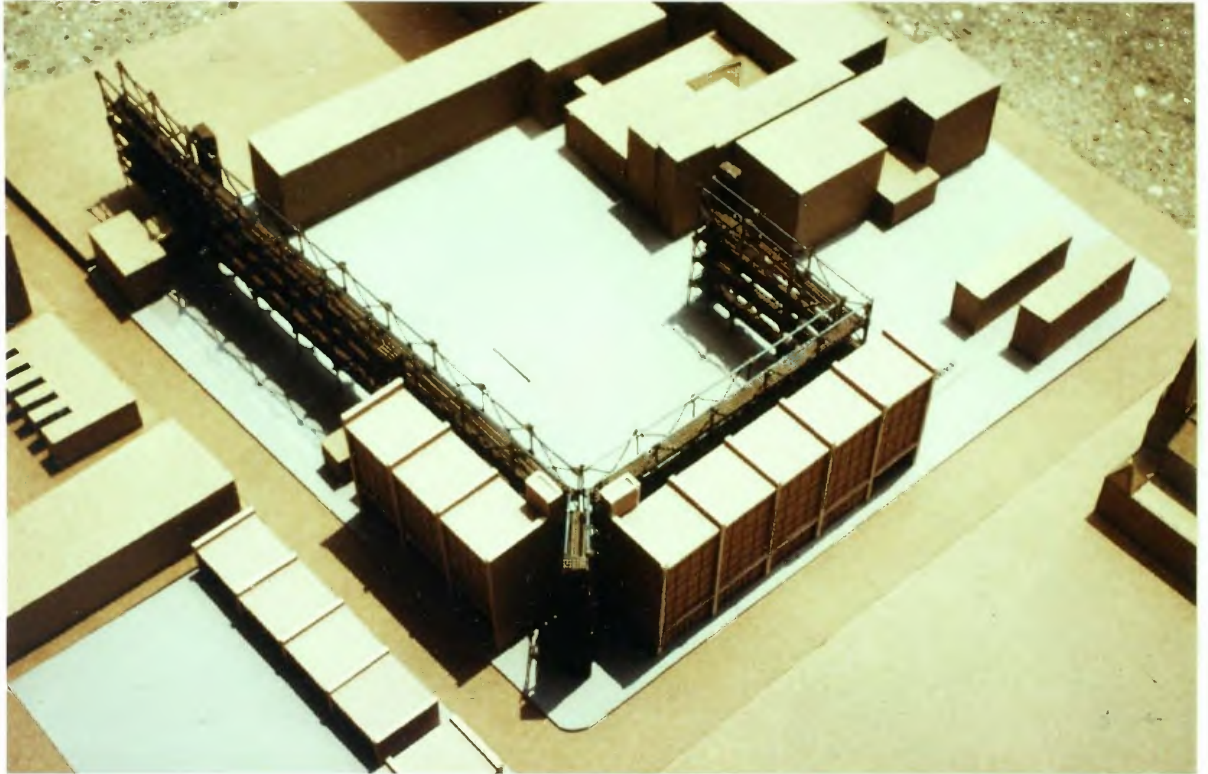


FIG. 18a

Maria Pereira developed a three level design solution. It consists of an office tower, a research laboratory, and a public component encompassing experimental theatre, conference rooms, and cafeteria. All of Miss Pereira components were raised one story above ground with the ground level meeting the public in the form of retail and commercial spaces. The materials chosen for her model represents the materials being generally used today: aluminum, steel, plexiglass, and copper. The site for this design is King Street and Orange Street. The buildings above grade play against the angle of the streets in the overall urban context, and comment on at the geometry of Newark. The lower level has been changed to follow the immediate street grid of the supporting structure. Her social response to physical planning aesthetics is to have cafes, waterfalls, and shopsfor lots of people. We as architects must do such things to create a primary source for living and dwelling in urban conditions. Many can benefit from such design criteria. Her housing consists of research facilities to enable students, professors, and science and medical professionals to live near their laboratories. The office spaces are for small offices. They are not intended for large firms. Miss Pereira, as did the other two students, became very aware of scale and relationships. Her chosen location enables doctors, nurses, and interns from the nearby St. Michael's Hospital to participate in nice dwelling spaces to enjoy living in the University Commons areas.
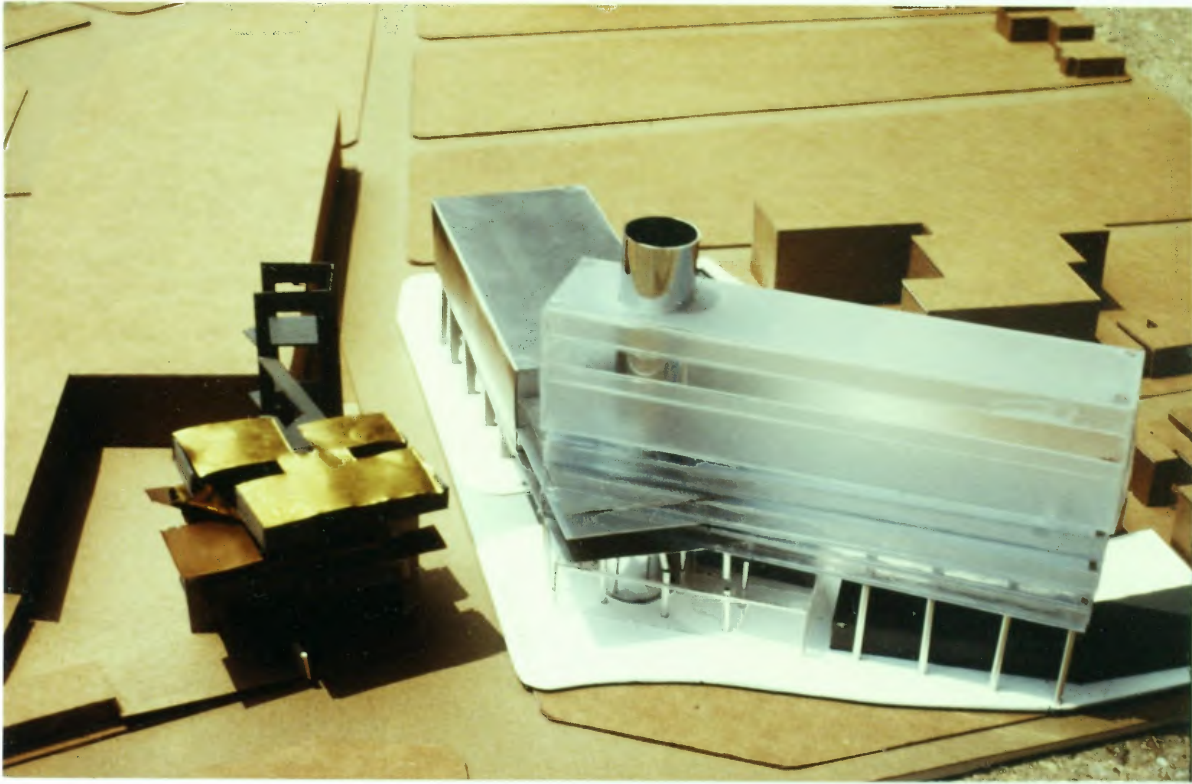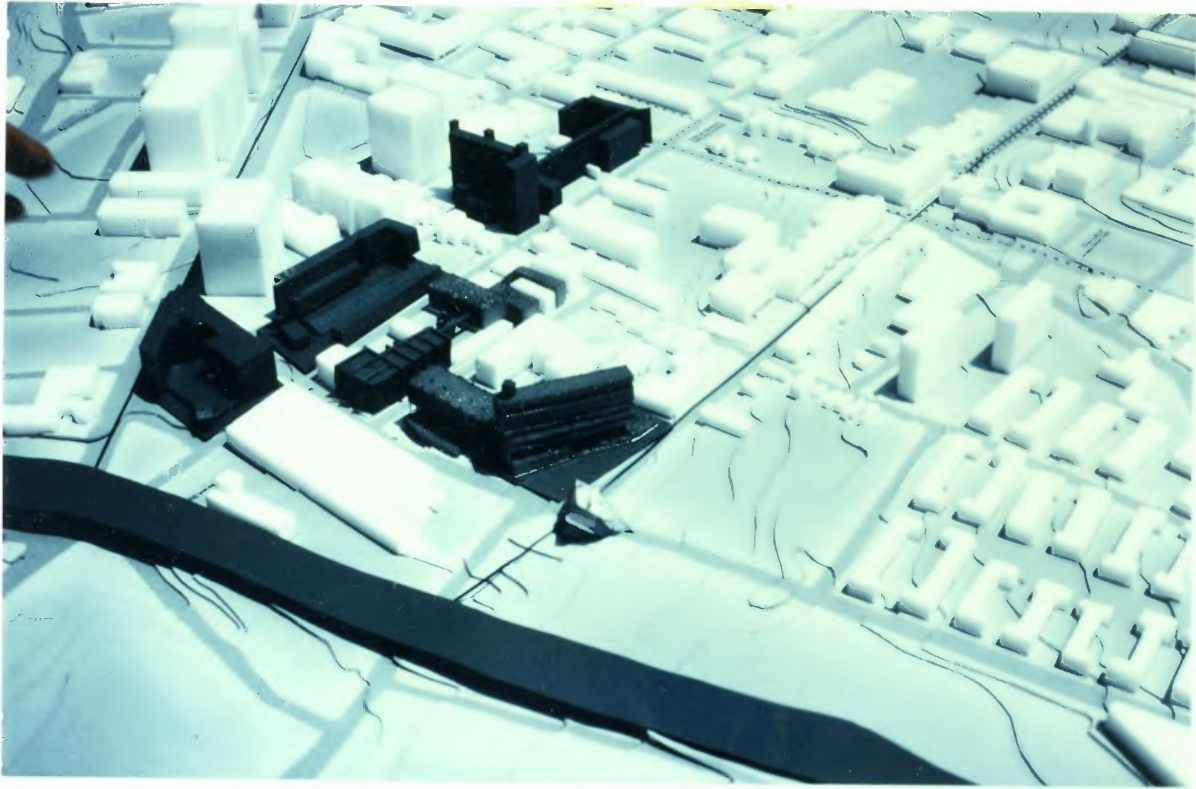
Maria Pereira



FIG. 18b

Many of the existing potentials in Newark exist because of its historic character, as developed over a span of nearly 150 years. It has a wide range of architectural styles. In finding solutions to problems in the physical features and site design of the University Commons, the students showed an awareness of the historic character and the importance of scale. Their sense of aesthetics dealt with order, proportions, and criticisms, and as such helps define the character of each building and the city. The following points outline guidelines for other future designers.

1.PROPORTIONS:

Proportions in our dwelling unit effect our human senses, as do colors. The same is true at the private and public scale. As home or shop owners, we can do as we please with our properties yet should take into consideration the effects our acts will have in the overall context of the street and city scape. For example, buildings with very bright red window trims may fail to match an existing brick. It may be a statement about an architectural period, or a community on how distinct and daring a design is but when seen next to its neighbor it may not fit into the motif of the previous facades. One must be very sensitive to these types of situations and the consequences which may at first seem trivial.

2. TESTING OF MATERIALS AND COLORS:

People tend to forget that the color on a small swatch is not the same as seeing the entire element to be painted of the same swatch. It is important to test a model of the paint on which great concern lies in the public eye. If there are mock up walls in a construction site then why not paint the walls? This would benefit the owner via testing the pleasure to the public eye observing the proposal and to be

able to see their aesthetic views or feelings. Great care should be taken in painting masonry structure. This can be negative to the look of a building. Brick tends to look best in its natural color.

Buildings containing iron work should only have them painted either semi-gloss or glossy Black. Other paints tend to chip and fade with time and weather against them. The other reason is an aesthetic one. Black would be the only color that would resemble the period of material and color of times past. White has been used, but is not recommended unless really taken under serious considerations.

### HISTORICAL DETAILS:

Cornices in most brownstone homes are the first things which lack the care they need. Because of their exposed position, they are the first to deteriorate. Their replacement and renovation of work is so important that they must not be overlooked. Replication of these cornices are very expensive either in size or quality of the craftmenship involved. A great deal of consideration must be taken in finding objects that will replicate such cornices. A price may be obtained if ordered in bulk. Similarly, the replication of elements that require a mold are also expensive. Interior ceiling mouldings of fifty years ago or terra cotta figurines can be very costly in getting a mold, but once it has been purchased, the use of duplication is half the amount spent in the beginning and the mold is free for as long as it is needed.

### URBAN TEXTURE:

Street texture itself is the most important of all details linking a project to a city. It is the ground on which the public decides to step on, walk through, or just stand on. Concrete is used on most city sidewalks but why not incorporate a pattern

onto the concrete mixture when wet? If brick paving is too expensive, then why not add color or created decor in the concrete mixture? If there is no limit on expense then Brick pavement could be an ideal solution. It blends itself with the row houses in the immediate areas. It creates a scale linking to the intimacy of areas that now have it. It also links areas in relation to one another. Concrete pavers could be used in park areas and be repeated in rest areas onlong the commercial and corporate ends.

## II. LINKING GUIDELINES TO SPECIFICACTIONS:

UNIVERSITY AVENUE:

1. Lighting:

Install new street lighting in a proportional scale, lending its aesthetic appearance to envelop warmth and confidence and security.

2. Parking Lots:

Screen parking lots with landscape. Trees would be very appropriate but if for financial reason are scarces, the bushes of some sort should be provided creating an ambient space as well as an inviting place.

3. Telephone Lines:

The elimination of overexposed wires is greatly appreciated by all who must walk through the daily maze of street fronts. There are methods of placing telephone cables and electrical conduits underground. This would be a pleasurable sight to see. A jungle of electrical weeds which once destroyed our home fronts can now be hidden from our paths and still continue to serve its purpose. This allows us to further ourselves as a community establishing goals for the future.


HIGH STREET:

1. Lighting:

Lighting at this street is to the bear minimum. If there is to be some sort of preservation and recreation of what is left of Newark to be inspired and remember well, it is through the use of light and their various types of intensity. Lighting effects can create various typre of moods if done very well. There are soothing light, informational lights, security lights, aesthetic lights, and more.

## 2. Traffic:

In certain areas where High Street becomes very wide, there could be a solution to cut down on traffic by providing angle parking and creating a sitting area with flowering trees enclosing such space creating a different view not only for the pedestrian but for the early morning driver as well.

## BLEEKER STREET:

### 1. Parking Lot:

Between High Street and Washington, the hospitals parking lot is to be landscaped well enough to hide away the abandoned houses to the rear of it. The hospitals parking lot is spacious enought to accommodate scaled lighting as those of the period of the established hospital enhancing its character and giving the hospitals appearance a different impact for the public to be aware of.

## NEW STREET:

### 1. Abandoned Buildings:

Between University Avenue and Washington there are several buildings that are being restored while others have been left abandoned and destroyed. The city should give a little more consideration to the home owners who are trying to break over the destructive barriers that Newark has left behind. As a home owner, it should be well noted that before any work is involved one must inform him or herself of the type of next door facility will be for their benefit of not and finding out through the city about such things.

IMPROVEMENT IN PROGRESS IS BEING

DONE AT A MODERATE RATE.

THERE ARE STILL ABANDONED HOUSES

WHICH NEED TO BE RENOVATED IN ORDER

TO CONTRIBUTE TO THE HISTORICAL

CHARACTER OF THE COMMUNITY.

FIG. 19

FLOWERING TREES AND
THE USE OF HUMAN
SCALE LIGHTING EFFECT
CREATE A PATTERN OF
COMMUNICATION BETWEEN
STREETS AND BUILDING.
THEY GIVE A WELCOME
FEELING TO THE PUBLIC.



FIG. 19a
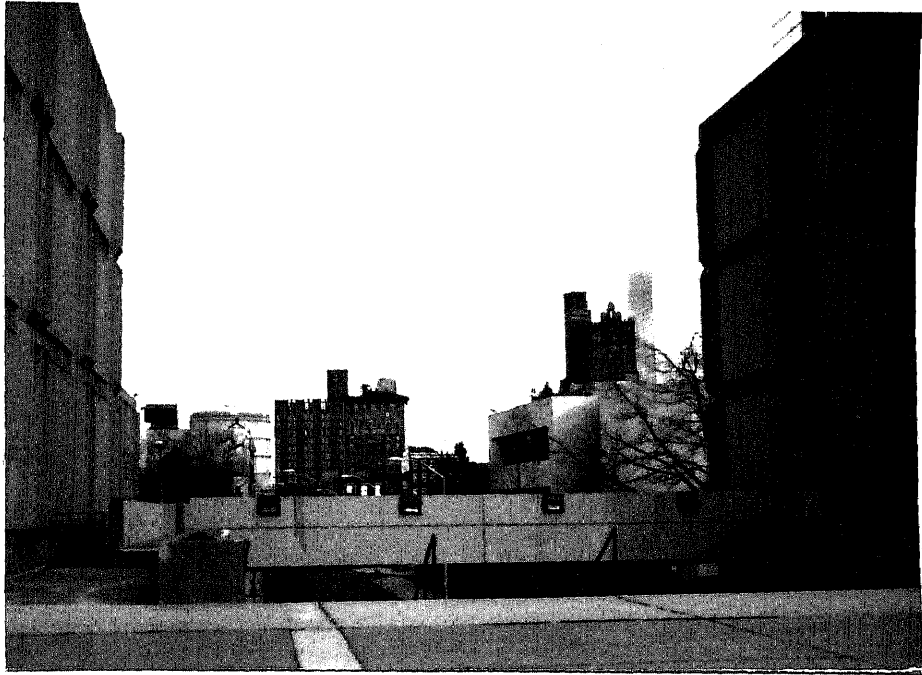
FIG. 19b

FIG. 19c

IN ORDER TO CONTINUE AN IDENTITY
FOR "UNIVERSITY COMMONS" WE MUST
PRESERVE OUR HISTORICAL ATTRIBUTES.
THIS IN TURN WILL MAKE A CITY GROW
IN CHARACTER FOR THE FUTURE AND
THOSE LIVING FOR THE FUTURE.

FIG. 19d

## GENERAL CRITERIA FOR NEW UNIVERSITY COMMONS, NEWARK

I. To follow an aesthetic structure by introducing intimacy, scale, and proportions to areas of observation by pedestrians such as that of University Commons.

II. In order to link for example, the educational areas such as that of University Commons, closed orders, clustered orders, open orders of atmosphere should be implemented. A closed order could be one of surrounding trees, walls to band out traffic noise, or a change in grade level can also provide diversity in the environment. A cluster can be of random choice where various areas of furniture can be repetative and therefore create some sort of a connection. An open order could be a simple fountain with level changes surrounding it creating a delicate space as well as a vibrant and refreshing feeling.

## SPECIFIC CRITERIA FOR NEW UNIVERSITY COMMON, NEWARK

A. Street trees should be required at least one per every twenty feet of frontage.

B. Trees should be provided in the ratio of one tree per 300 s.f. of open space.

C. Sitting areas should be part of all open areas of relaxation and social activity for students and pedestrians.

    1.  Seating should be more frequently provided. It should include a back for support especially for the elderly and made out of comfortable material ie. wood instead of stone.

D.  Areas of shade and shelter should be provided.

E.  Areas where there appears concrete pavement and visual gratification should consist of brick pavement or stone to add distinction and a closed relation with older buildings.

F.  Planters or shrubs should be located at points where traffic occur creating a noise buffer and also a pleasant visual effect for the driver looking in.

G.  Easy access should be provided to students and pedestrians to open spaces from sidewalk areas.

H.  Public services should be clustered in open areas such as telephones at restuing places, water fountains for students sitting and reading, any public facility available to encourage what little space we have in order to make it better and aesthetically pleasing and most of all, satisfying.

    1. Drinking fountains should be free standing, usable by adults and childrean as well. They are to be easily cleaned and maintained as a visual aesthetic pleasure.

I.   Low scale (human scale) lighting should be provided. It should be supplemental to existing street lighting with low fixtures maximum height to be at 10'-0".They are to be spaced at least every twenty feet as a minimum.

J.   Projecting signs should be no more than one third the width of the sbutting sidewalk and located no higher than the roof line of a multi-story building or 15'-0" above the sidewalk for a single story building.

K.   Letter size should be no larger than 18" (inches) for building identificationsigns or 8" (inches) for occupancy signs, which include occupancy signs. No more than 10 percent of a window should be covered with a permanent sign.  Signs identifying and or explaining local history should be encouraged, with a 20 percent larger amount in size allowable.

L.   Light sources for illuminating should be steady, not too strong nor too dull. Lighting for signs should be shielded and directed only at the sign.  The intensity of light should be one foot candle four feet from the sign. Signs in residential areas should not be illuminated between 11:00pm. and 7am. unless the establishment is open to the general public during those hours.

Many of these criteri have been arising gradually to the surface. Everything in life takes time, yet if the will power to succeed and achieve that what we want remains strong, then with patience everything should come together.  The city of Newark has an abundance of element to offer and an increasingly magnificent potential for future years to come. Its waterfront is also as an important impact as do the cities of Philadelphia and Pittsburgh. There has been studies and plans to

renovate and develop the waterfront along the Passaic River since 1982. These thought have not died yet. There is plenty of perseverance ahead. Planning Aesthetics and the third dimension has been in existence for numerous years. Let us say for now that planning aesthetics has been dormant for a while, but has made a come back to remain as a continuum for the future society.

The waterfront as in all cities should improve the image of Newark as best as possible. There should be a unique connection with all of the various types of development happening in the downtown area of Newark. The schools and universities are in need to have a sense of being part of the great city of Newark. By creating a linkage through the use of architecture, planning aesthetics, and technology, Newark's vitality will encompass and surprise other neighboring cities such as Jersey City which is also under tremendous change.

Newark has tremendous assets to us the public users, the city dwellers, the student, and the elderly. Because they have been lost throughout the years, it has been quite difficult for any characteristic to restore the city to make it come back. The analysis of three dimensional space is a very crucial part in aesthetic planning because it deal with exactly what goes on in the spaces between created elements. Is there a purpose for planning aesthetics? The answer for this study is yes. There is no reason as to not think in three dimensions. The world is very different and was not meant to be flat.

There has been revitalization studies made for the City of Newark. In 1985, Linda k. Landy of Business Strategy Associates in New York, wrote about Newark's potentential. With out knowing Newark, in nine monthe she captured what the essence of Newark is all about and the people in it as well. In her own words she describes the goals of Newark to be: " . . . There is an opportunity to rebuild Newark in a way that is planned and coordinated where all sectors benefit and negative effects are minimized. The task requires investment and commitment,

belief, hard work, and perhaps most important of all, listening, understanding, discussion and compromise-all directed at a **unified** goal of an economically and socially healthy Newark (N.J. Star Ledger, Nov. 25,1985 p.N1) ."

In 1986 There were council meetings being held fot the construction of homes for University Heights. In 1987 There were proposal for an Art Center giving way to a "city beautification (N.J. Star Ledger, July 23,1987 p.1)." When speaking of lights creating a certain physical impact, the PSE&G building created a certain character of that needed glow. The interest and eye catcher is important and the effects of lights on trees give a great feeling a personal scale, a human scale, and self gratification of knowing that it is a city where many positive things can happen for the public benefit.

In June of 1988 the Renaissance group proposeed an excellent idea as to subdivide Newark business district into four parts. By doing so, it will not create a negative mitosis of the city of Newark, but will give newark a chance to establish points of refferal and connection to and from other areas. The subdivisions will not lose their identity but reinforce themselves by making themselves avilable to other areas as we in turn create facilities to link the divisions with the use of green space, street furnishing lighting, trees, pavement patterns, and more planning aesthetics.

Present Day 1989, there have come about many addition to the corporate end of Newark. The links are still not noticable. But work has been intiallized in areas of educational facilities such as construction at N.J.I.T. The need for street furnishings and areas for student to congregate beside the small pub is necessary. All these changes, suggestions, proposals, and criteri are for a purpose, a goal, and a satisfaction. Open areas are as equally important to a city as the proposal of a new building attempted to be approved in order to be built.

The purpose of the life of a city is to give satifaction to its dwellers and co-dwellers. Lending itself to improvements and contributing to the future city of

promenades, restaurants, cafes, libraries, art galleries, universities, and small shops are the small elements which makes a city come alive. How do these elements enable the city to come alive? By the use of the public. It has been said before, the city does not only give life to its people, but without people, the city would never be.
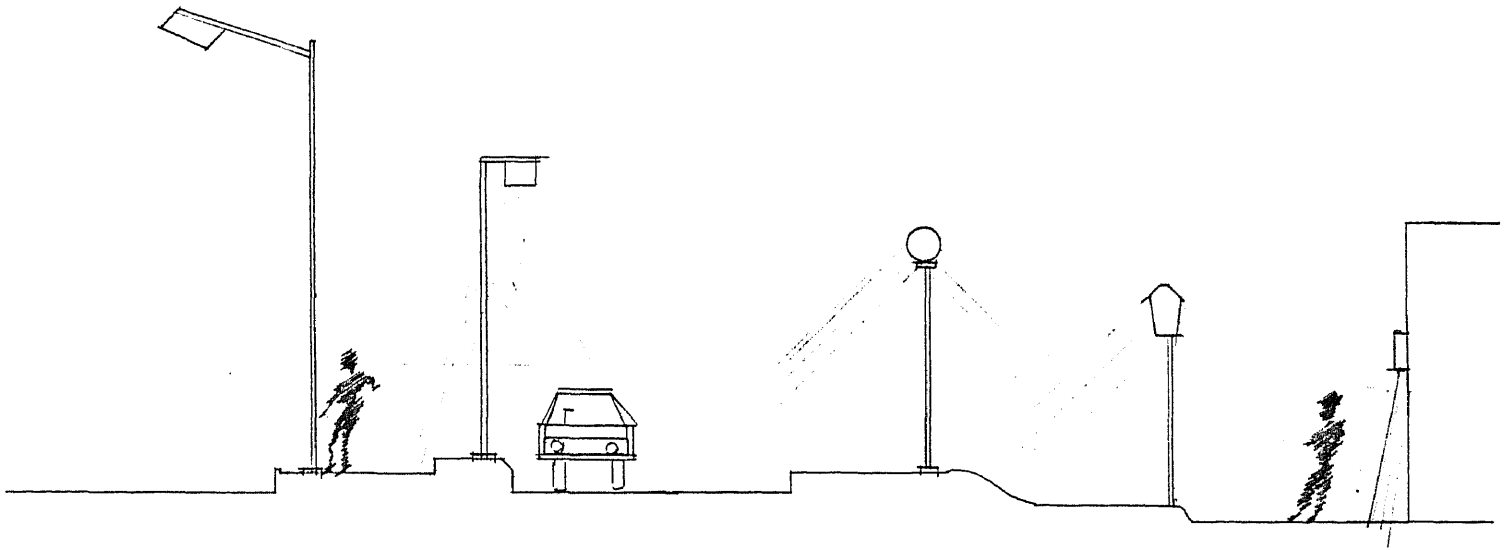
LIGHTING SCALE:

— NOT TO SCALE.

DIFFERENT SCALES OF LIGHTING SERVE DIFFERENT NEEDS.

FIG. 20

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# DEFINITIONS

AESTHETIC MORPHOLOGY: The study of forms and styles in art.

AESTHETIC SEMANTICS: The study of the language used in describing and discussing art.

AESTHETIC VALUE THEORY: The study of the function of art and principles for its judgement.

AXIOLOGY: The analysis of values to determine their meaning, character, origins, types, and criteria (p. 22).

BROWNSTONE: A dark brown or reddish brown sandstone used as facing and trim of buildings during the middle and late nineteenth century.

CAST IRON: Iron cast in a mold. This process of mold making permits the repetition of elements at a lesser cost.

CAST STONE: An imitation of real stone made from the mixtures of cement, sand, and coloring materials.

CLADDING: An exterior wall covering of metal or other composition, usually applied in sheets or roles.

CLAPBOARD: An exterior application of horizontal overlapping wood boards, thicker at their edges than at the top.

CORBEL: A block or series of blocks, stepping out from the face of a wall to act as support for some overhanging member.

CORNICE: The projecting exterior trim of a structure at the meeting of the roof ans wall. Any molded projection which comes from a door window.

COURSING: A layer of masonry units running horizontally in the walls.

DENTIL: A band of small toothlike blocks under a cornice.

DOUBLE KEYSTONE: A keystone flanked, for decorative effect, by half keystone on each side.

ECLECTICISM: The taking of elements and details of the past for architectural decorative designs combining into a new design for building, partucularly during the second half of the nineteenth century in Europe and the U.S.A.

EPISTOMOLOGY:   The study of origins.

FACADE:   The exterior face of the building, usually the main front.

FACIA:   A wide flat, plain horizontal band below a cornice.

FLEMISH BOND:   A method of laying brick in which headers and strechers alternate in each course and in which each header is centered with respect to the strecher above and below it.

GABLE:   The triangular portion of the roof top of a building having a double slope.

KEYSTONE:   The central voussoir of an arch. It either projects or or is carved, or ic in contrat to the remaining portion of the materials.

LENTIL:   A horizontal structural member over an opening which carries the weight of the wall above it. It is often made of wood or stone.

LOGIC:   "that which belongs to intelligent speech or to a well functioning reason, "ordered, systemized ... (155)." Logic is an instrument, or tool for the unlocking of the intelligable connections found in concepts and in things.

MANSARD ROOF:   A roof having a double slope, the lower slope being much steeper.

MASONRY:   Stone, Brick, or Pre-cast Block laid up in a wall.

METAPHYSICS:   The study of the most general and persuasive characteristics of the universe. Existence, change, time, cause-effect relationships, space, substance, identity, uniqueness, difference, unity, variety, sameness, and oneness (p. 169).

PSYCHOLOGY OF ART:   The study of human behavior when creating or experiencing art.

ROW HOUSE:   One of an unbroken line of houses sharing one or more side walls with its neighbors.

SIDE LIGHT:   A framed area of a fixed glass along side the door.

SOCIOLOGY OF ART:   The study of how art effects and is effected by human activities.

SOFFIT:   The exposed under surface of any overhead component of a  building suach as an arch, balcony, beam, cornice, or lintel.

STOOP:   A raised platform reached by steps and leading to the entrance of a house (typical in Newark)

STUCCO FINISH:   An exterior finish composed of portaland cement, lime, and sand mixed with water.

TERRA COTTA:   A baked clay product used either structurally in hollow blocks or as an ornamental facing material.

TRANSOM LIGHT:   A glazed pane above a horizontal member or over a door.

WROUGHT IRON:   Iron that is hammered or froged into shape, usually for decorative purposes.

# APPENDIX A

## A COLLECTION OF QUOTES ON ART, AESTHETICS, & ARCHITECTURE

The work of art in some sense a liberation of the personality. Normally our feelings are inhibited and repressed. We contemplate a work of art, immediatelty there is a release, not only a release but also a heightening, a sublimation. Art is the economy of feeling and expression. It is emotion cultivating good form.

"The city is a people's art, a shared experience, twe place where the artist eets the greatest number of potential appreciators . . . it is the function of the active person to establish the creative force and also develop a receptivitu to it."

- Edmund Bacon

Architecture is an art as well as science in so far that it expresses its opinions by using the mediums of a building as an artist uses paintings and or sculptures to express their outlook on life. We express our feeling in terms of buildings which have some utilitarian purpose. The goal, the ideal is to please. An artist attempts to create pleasing forms to satisfy our senses in beauty. In aknowledgeing this beauty, the level of unity and harmony is reached. The aesthetic pleasure and the sence of control over any type order is the acceptance of a unity and it will to live.

"Art is an expression . . . . it is the basic creative act in all the arts . . . "

- Benedetto Croce

Architects develop the proper skills and disciplines neccessary to manipulate his materials according to his or her immagination and to allow him or her to arrive at a personal solution for the expression of his ideas. Architecture seems to be the logical starting point for any study of the visual arts because of mans necessity to shelter himself and to devise a framework for his activities to be social, religious, domestic, etc. The building art is the best example of the partnership and b7vic identity of useful art by its utility, form, and function.

"Art, we must admit, is not the expression in plastic form of any particular ideal. It is the expression of any ideal that the artist can realize in plastic form."

- Herbert Read

Since the early days of the Greek philosophy, men have tried to find in art a geometrical law. This law is what they identified with beauty. For if art and aesthetics is harmony, and harmony and proportion is due to the observance of proportions, they assumed that these proportions are fixed. The geometrical proportion known as the Golden Section has for centuries been regarded as a key to the mysteries of art. This application became universal not only in art, but in nature.

The use of the golden section is to secure the right proportion between length and breath in the rectangles made by windows and doors,picture frames, etc. The pyramids of Egypt have been explained by this golden section, and the Gothic Cathedral is easily interpreted by it and its use of proportions. The Golden section has also been used in the relationship between the space above the skyline to the space below it, foreground to background, and equally of various lateral divisions.

"Aesthetics studies all the arts, including music, literature, theatre, dance . . . as well as architecture. It deals with the useful as well as the 'fine' arts in so far as they appeal t aesthetic taste."

- Vico

"The ancient city and the modern city, for all their differences are both human cities. And nature, whatever may be said on the subject, has changed but little in the course of the centuries that separate us from Plato; it is always the same motives- the attraction toward the "good things" of life; riches, pleasure, ambition, .. . that impel and determine its passions; it is always the same motives: honor, fidelity, love of truth, and devotion to the good which guide and enlighten its acts."

- Alexander Koyre
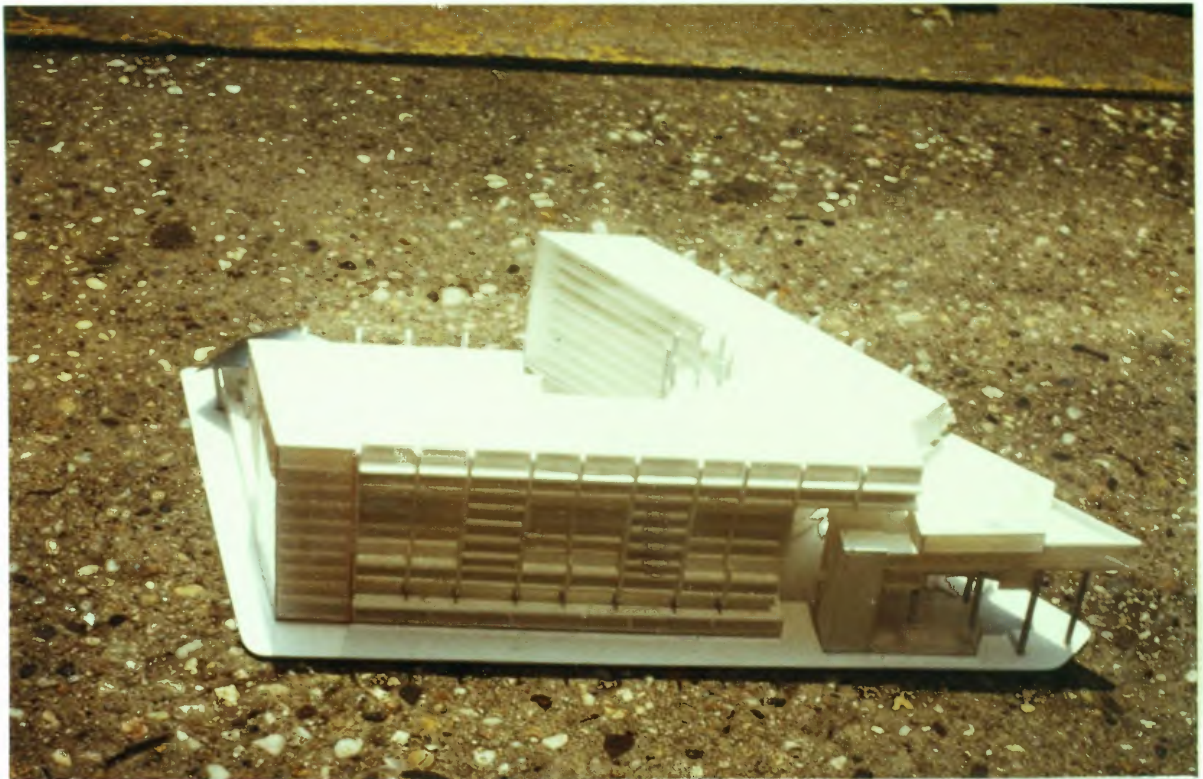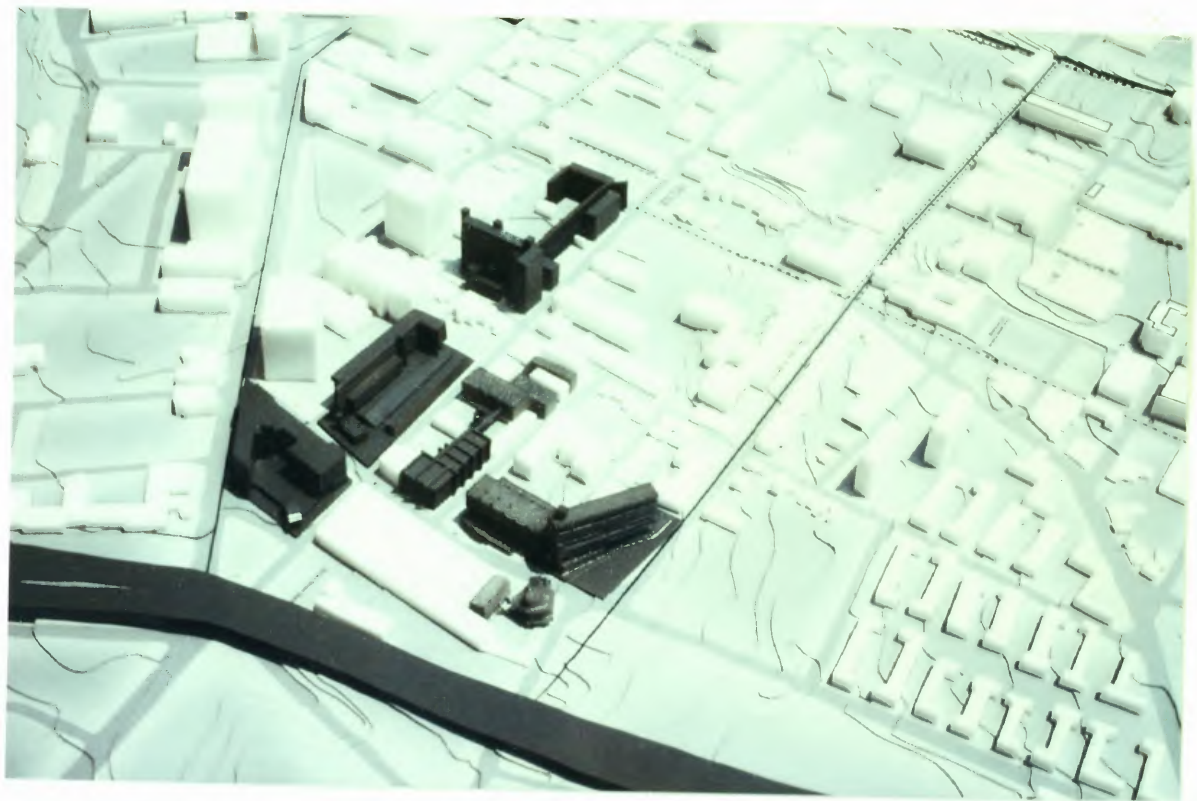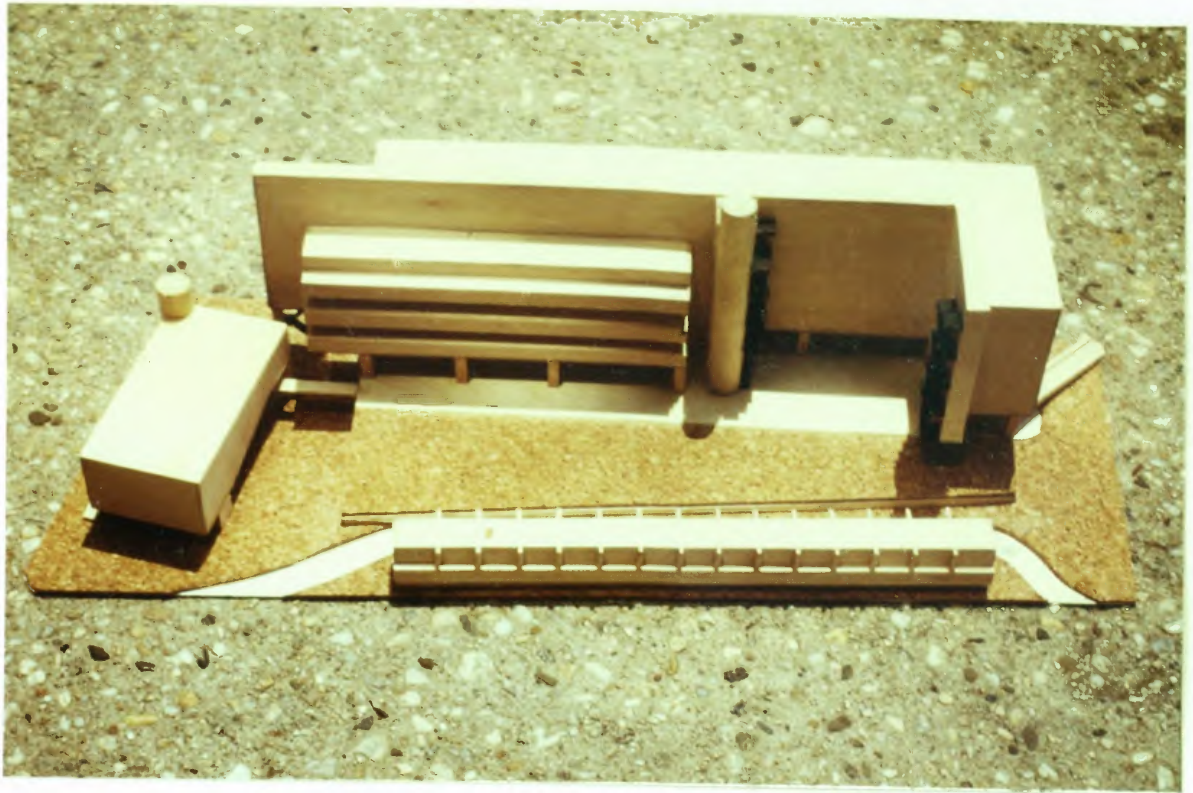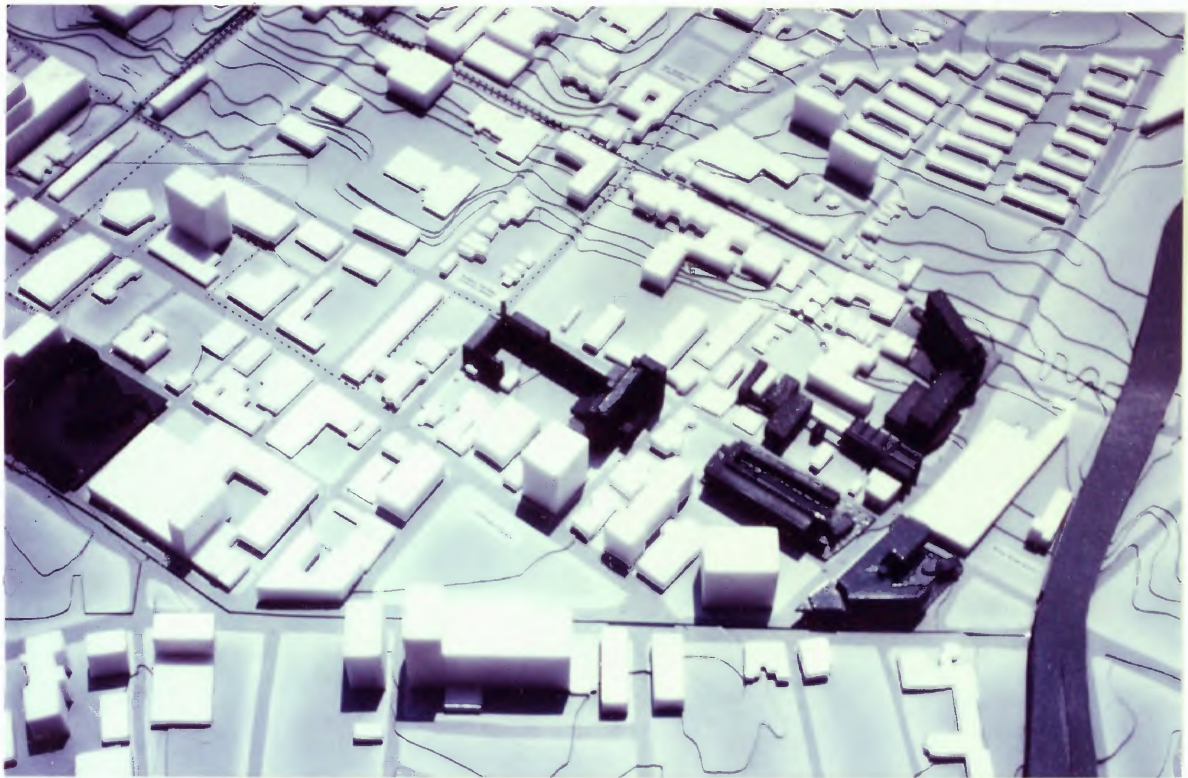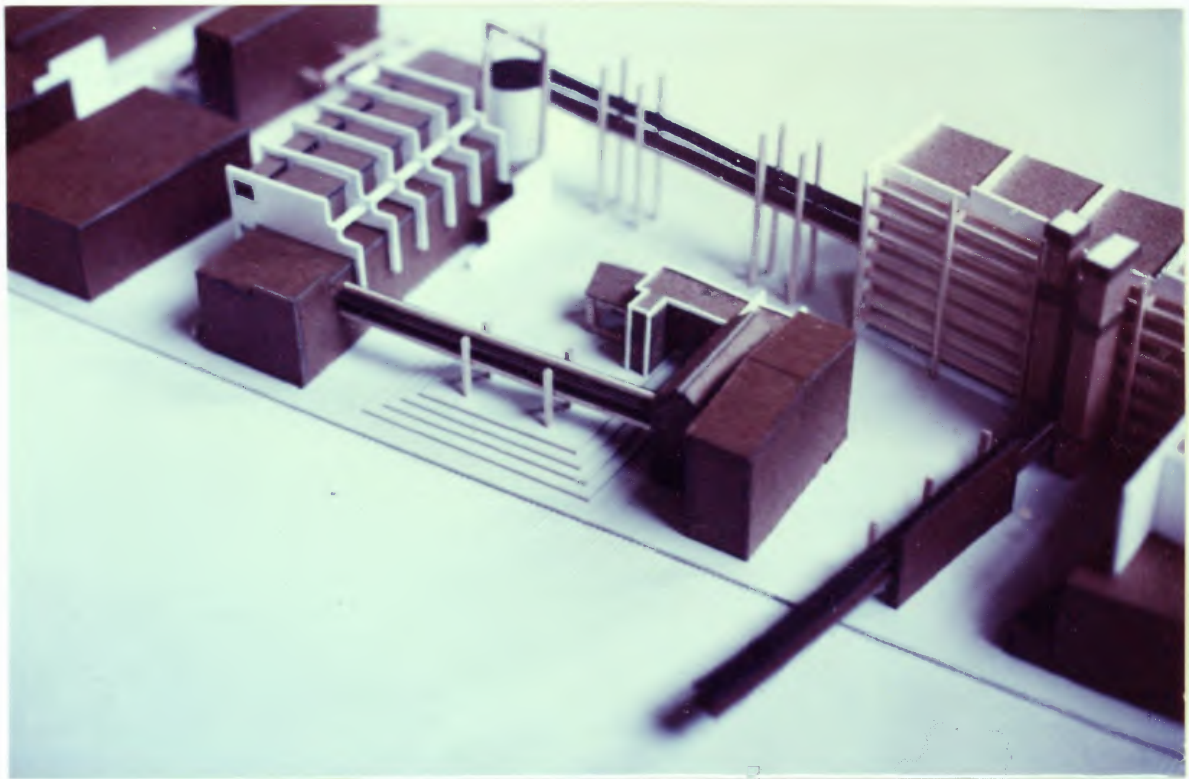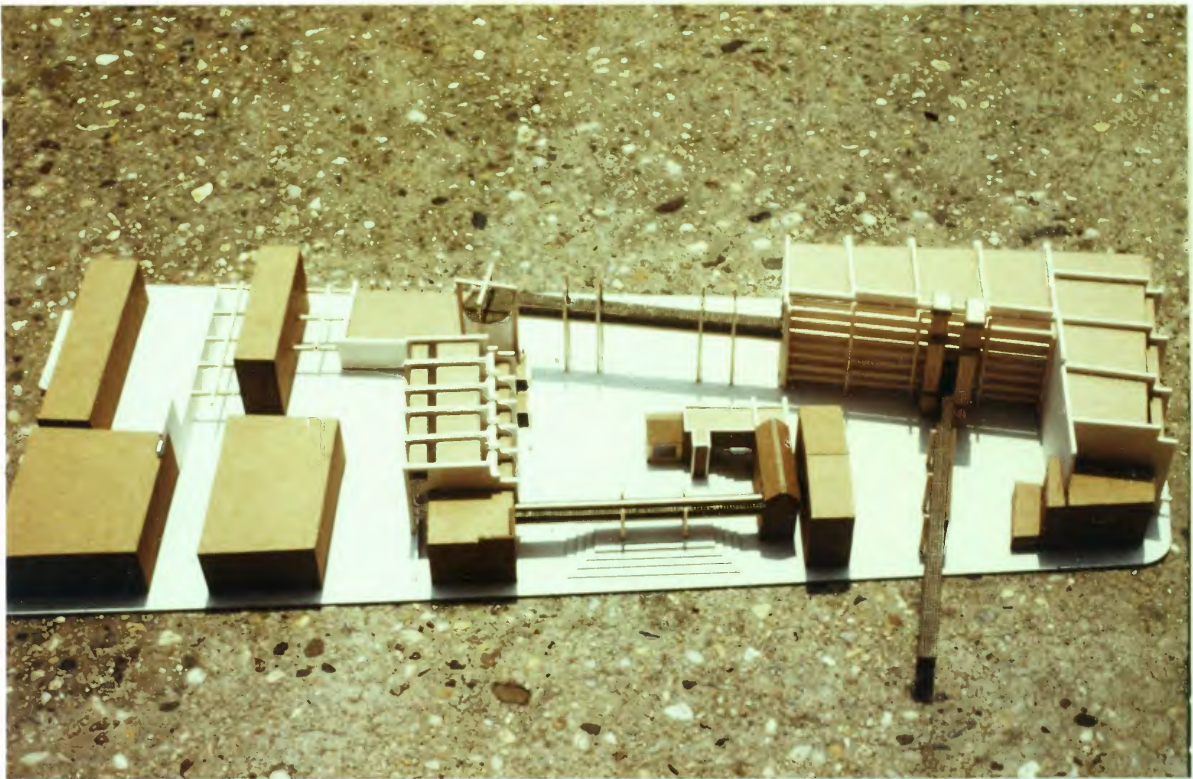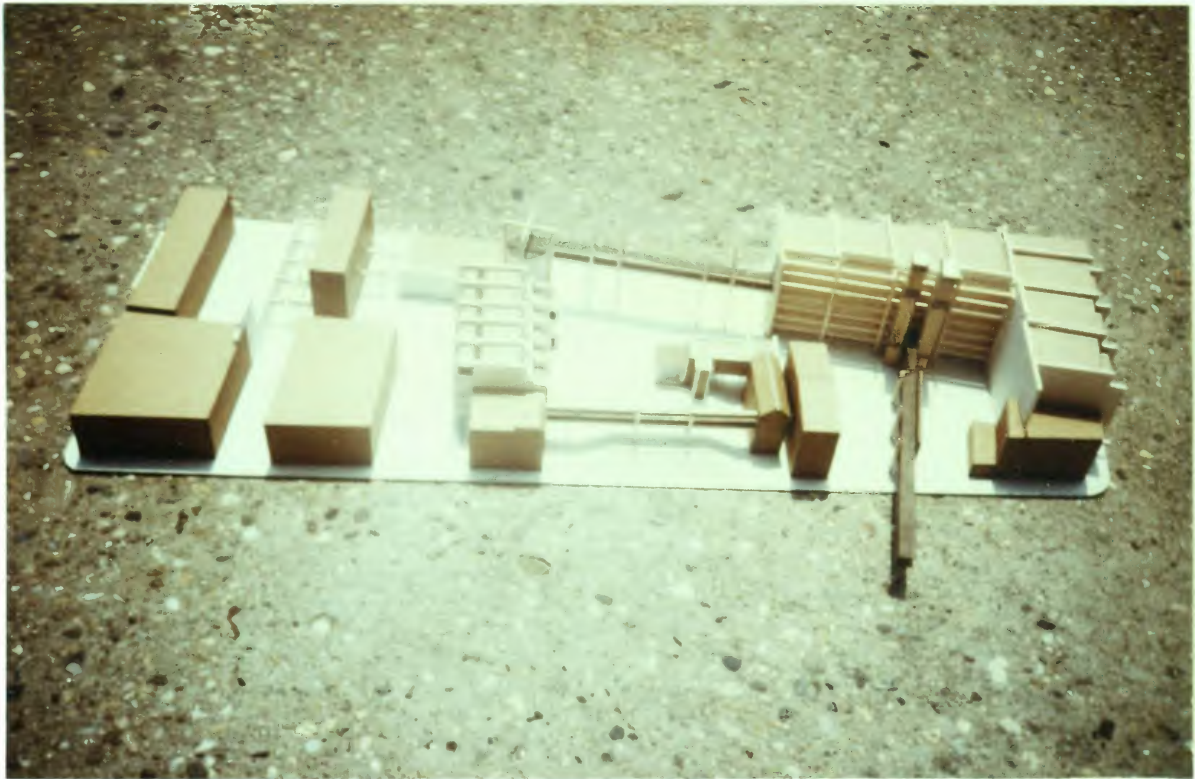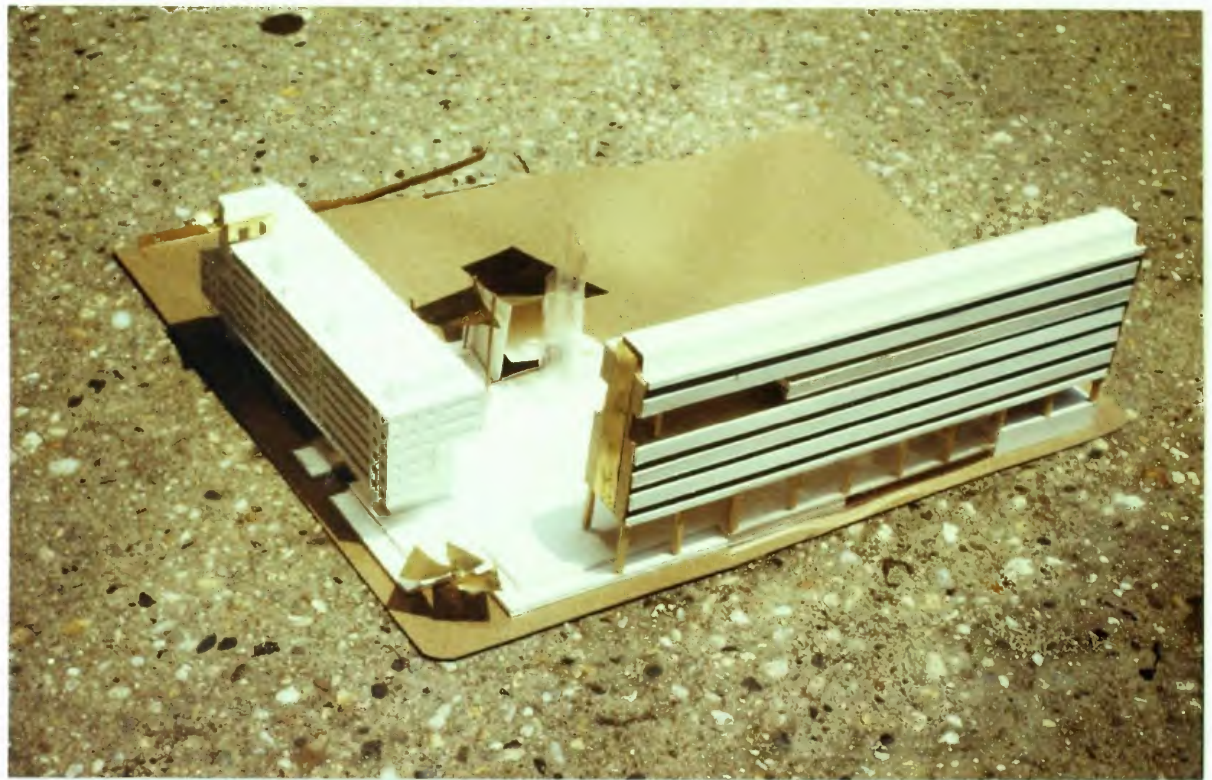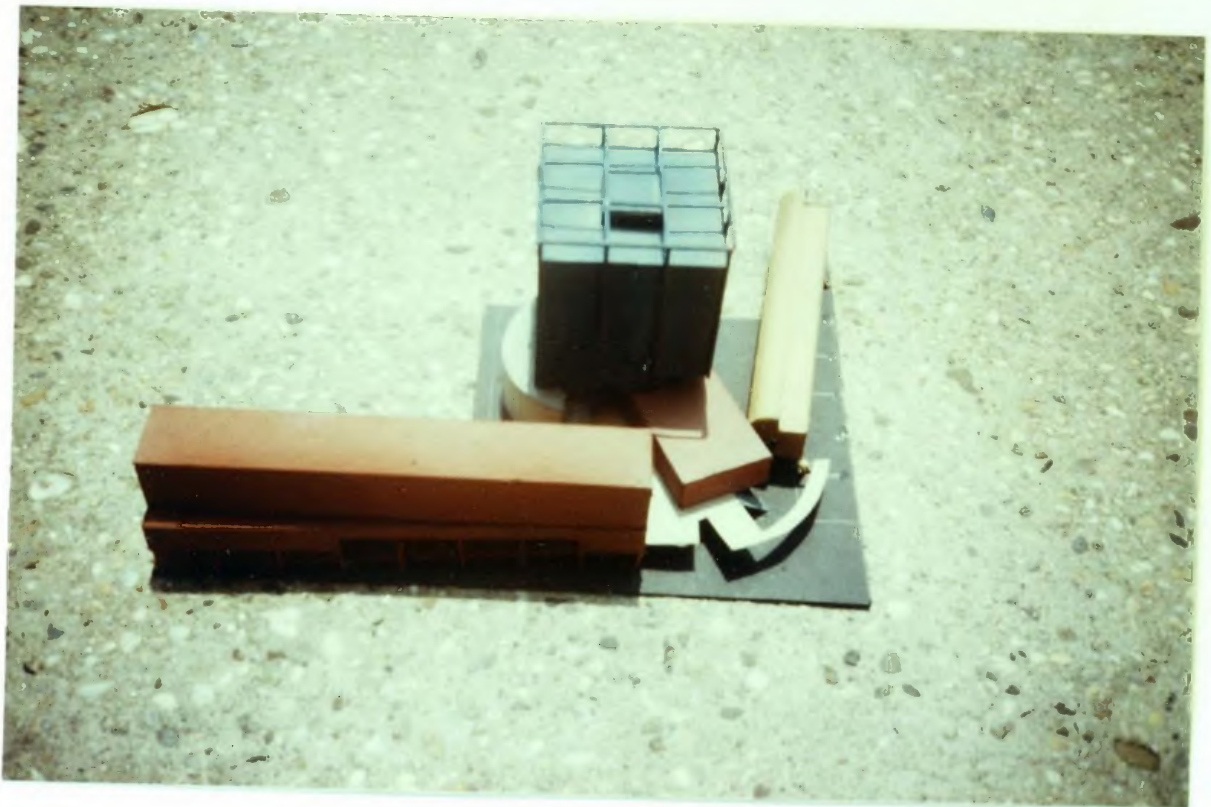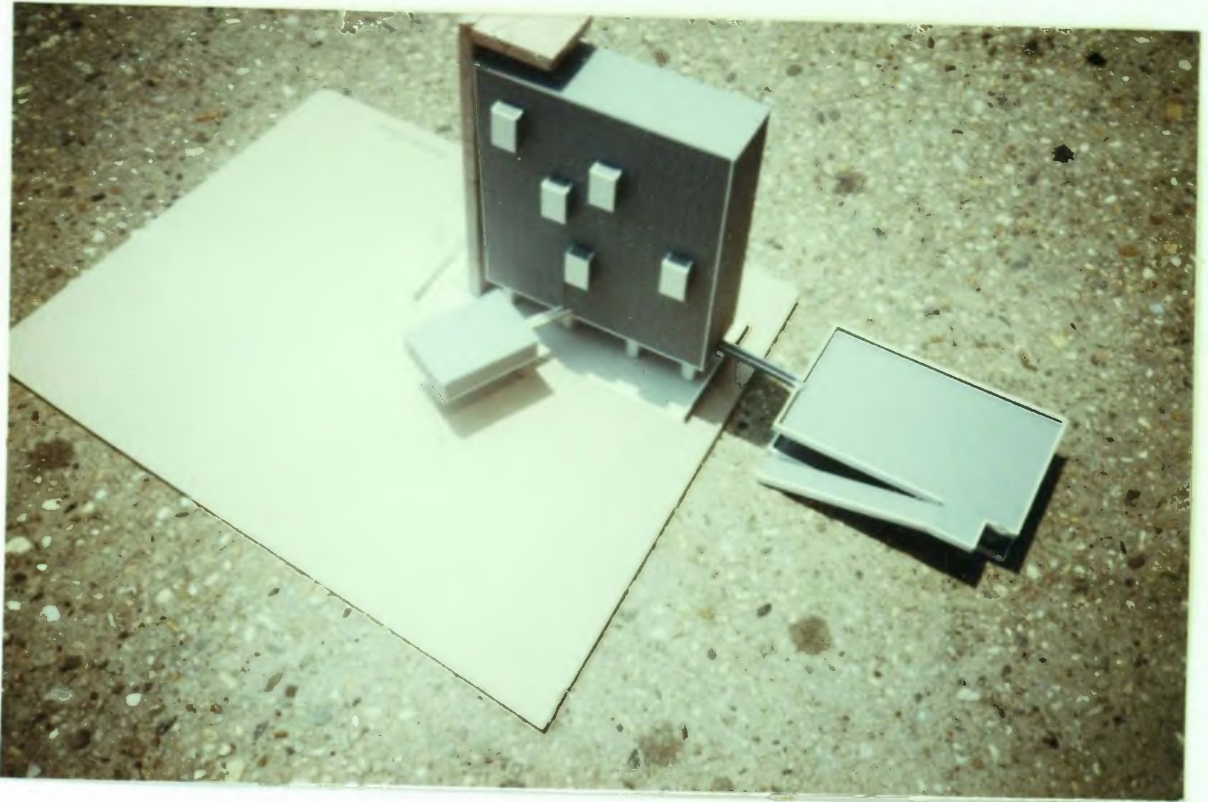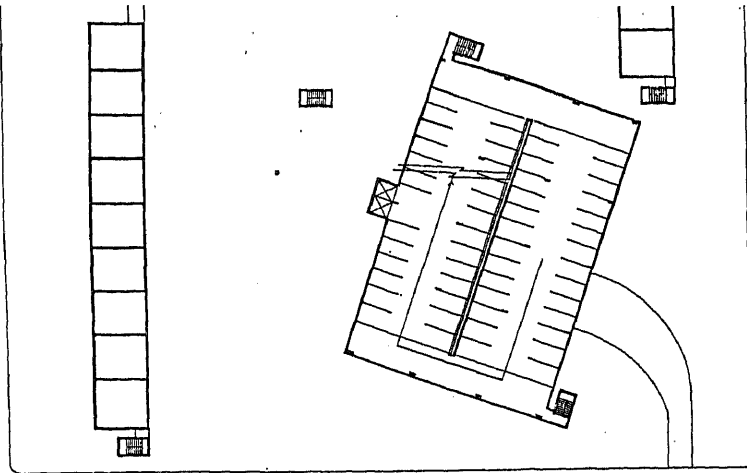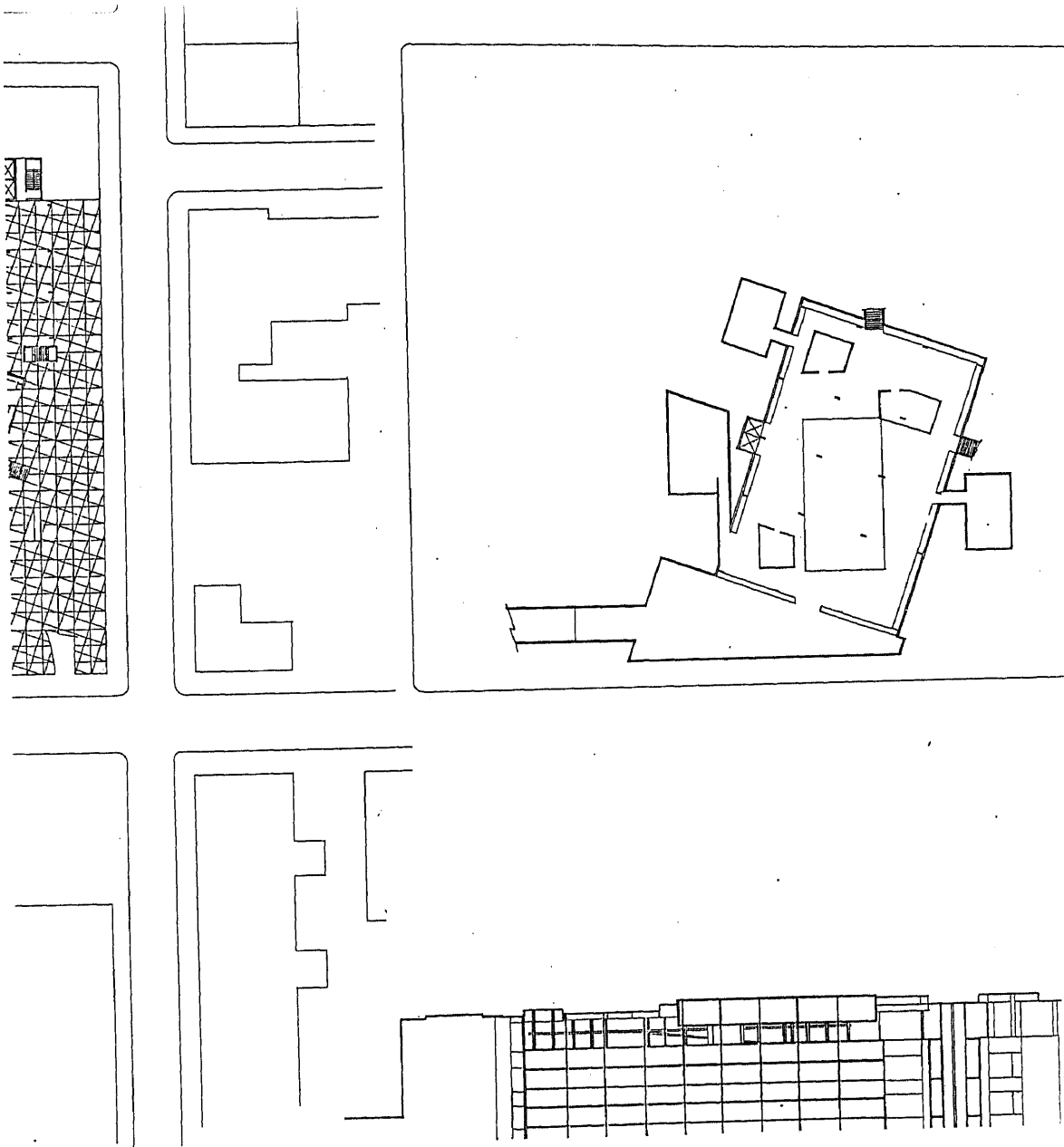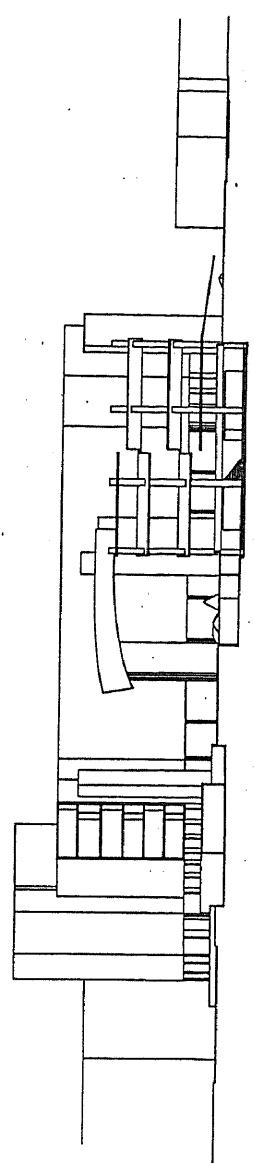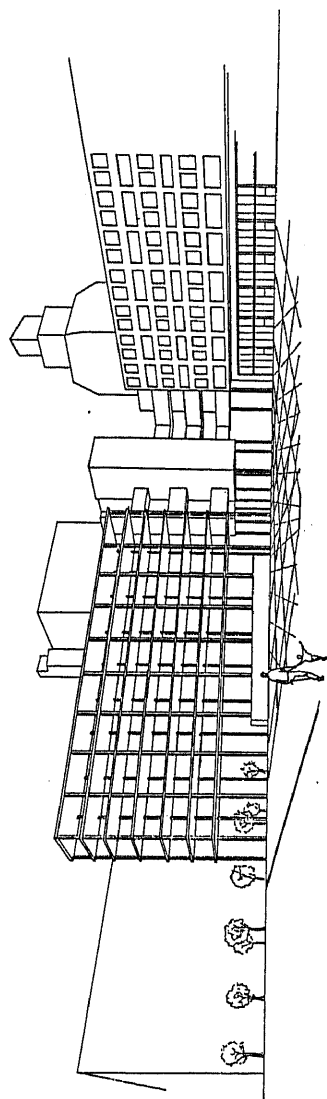
Philadelphia's "Center City" with view towards
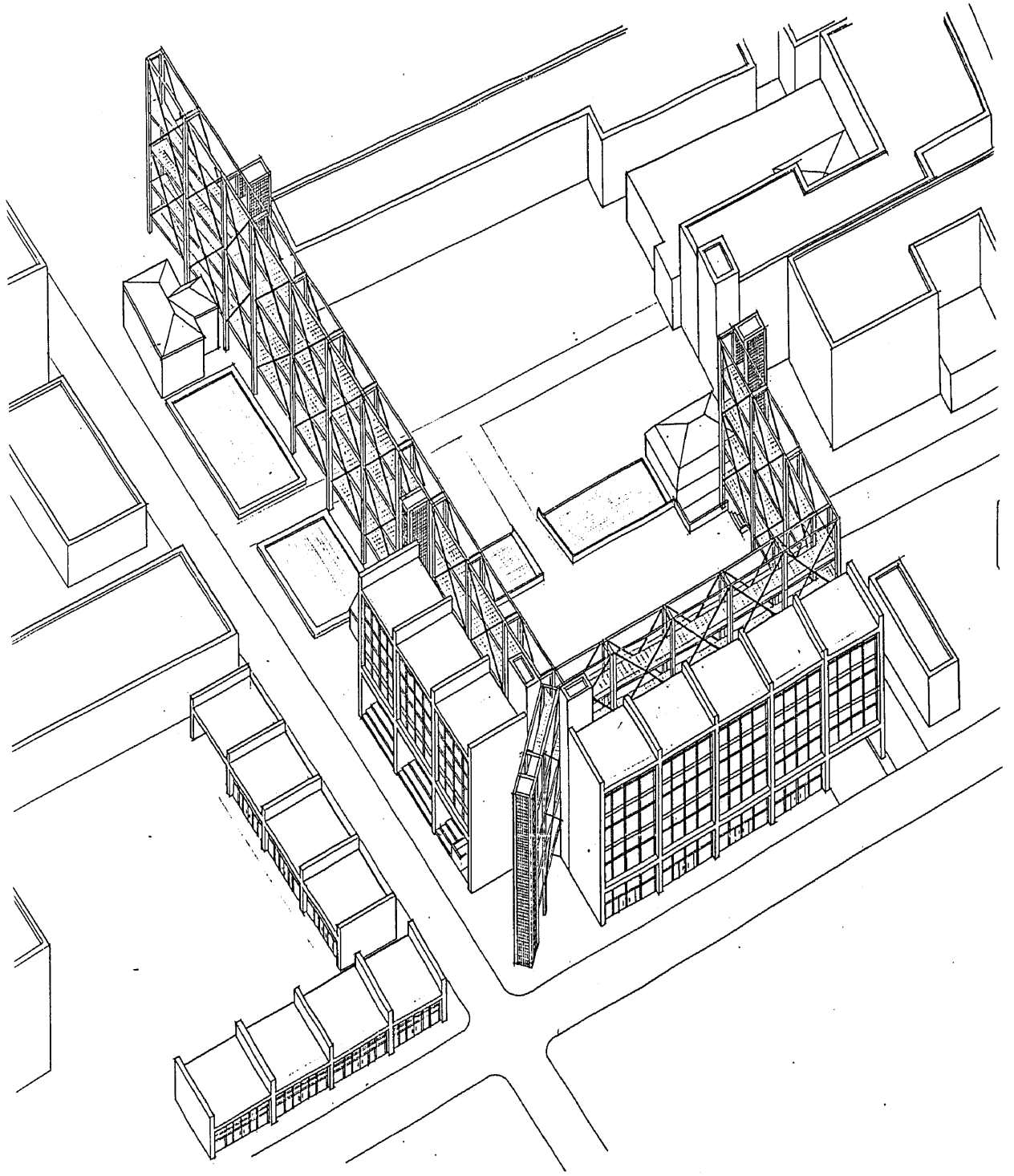the Museum of Art through Benjamin Franklin Pkwy.
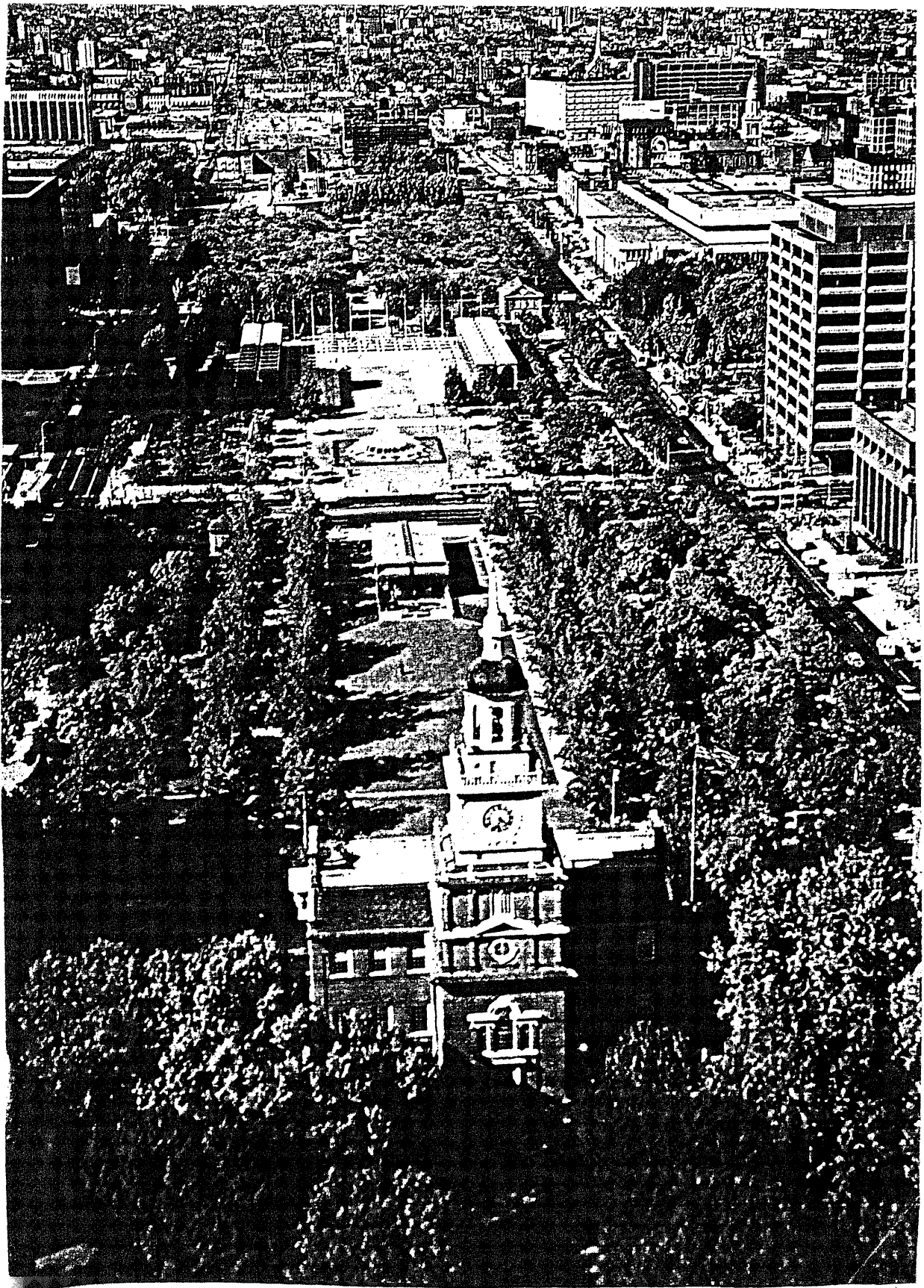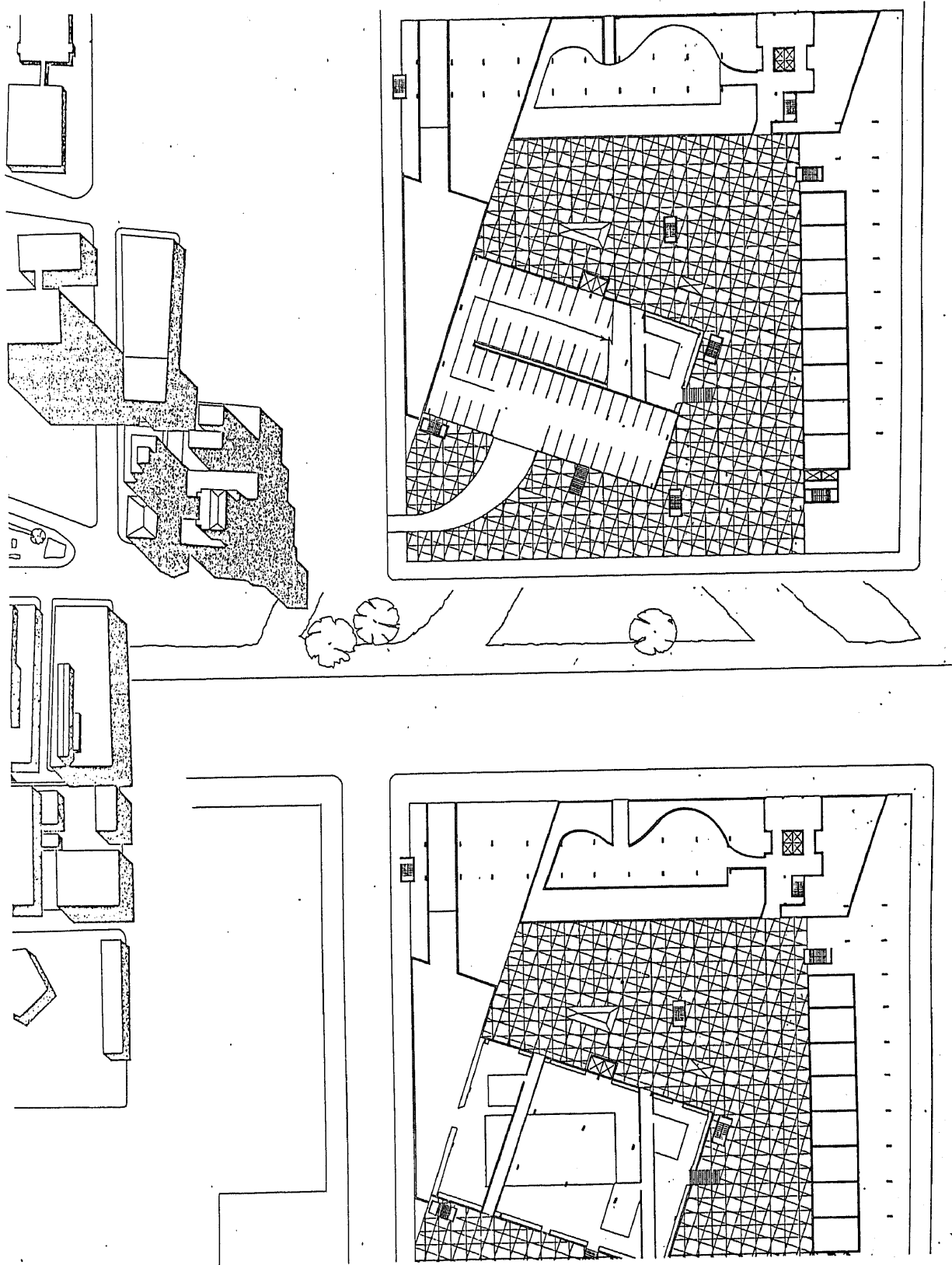
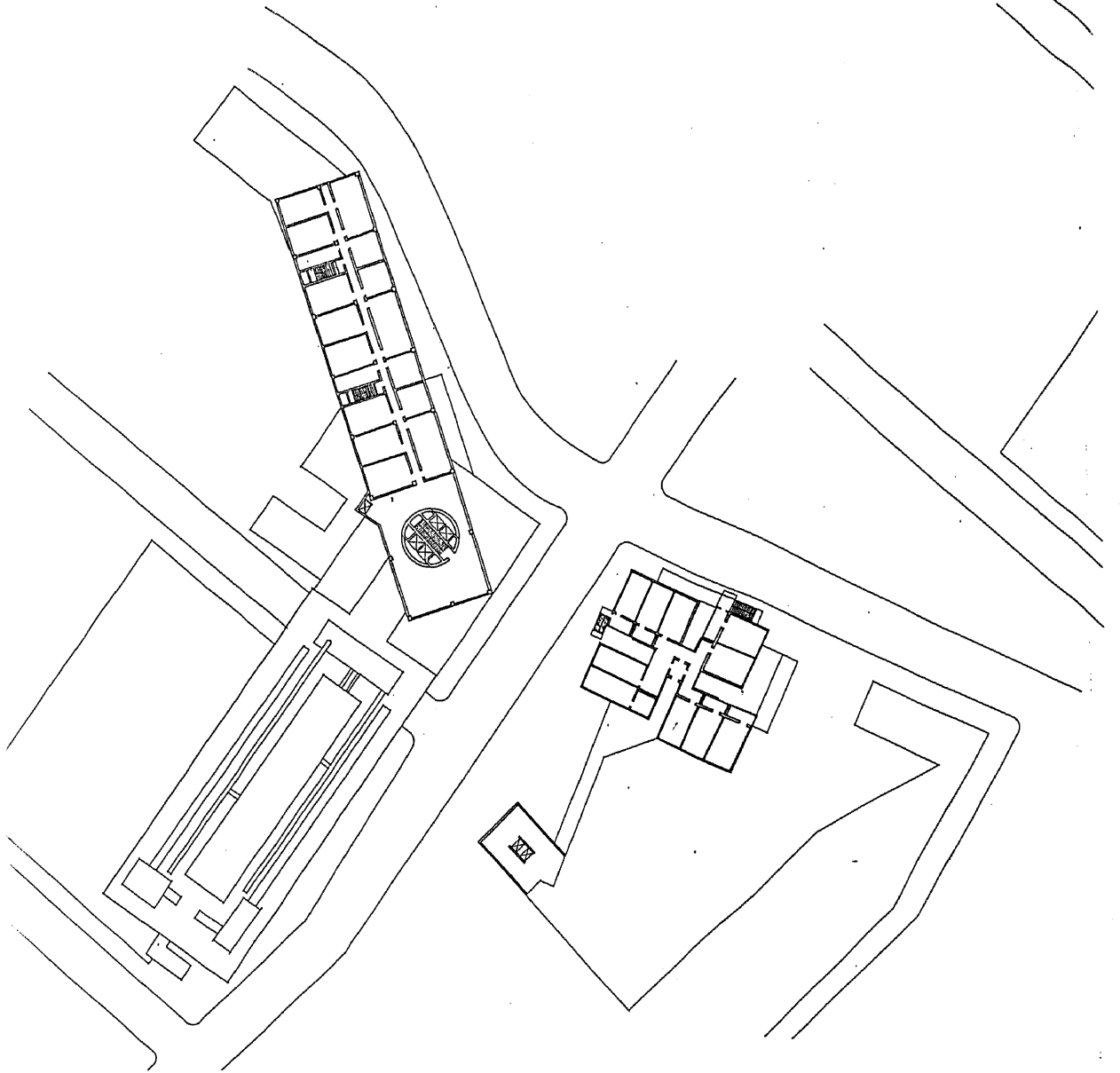Timothy Frazee Design Solutions

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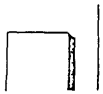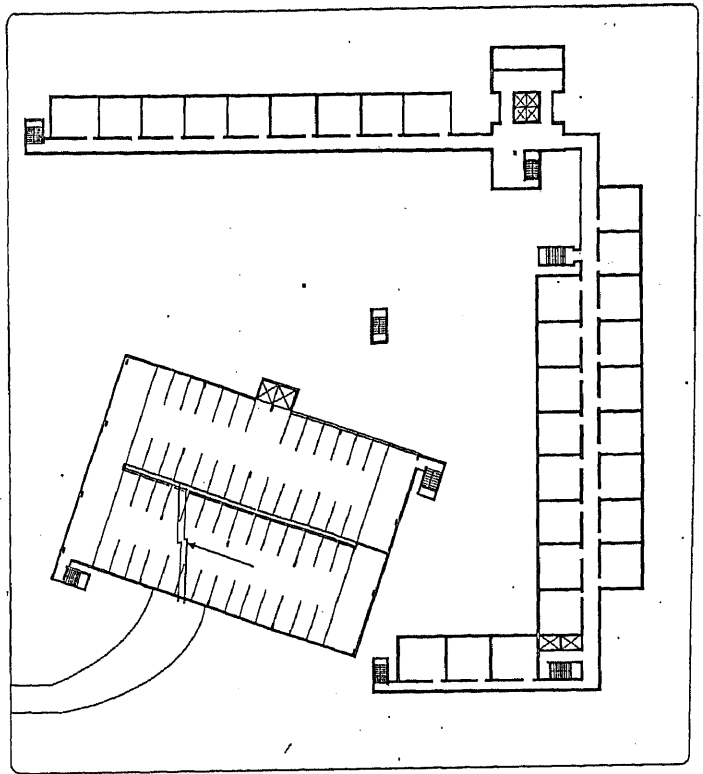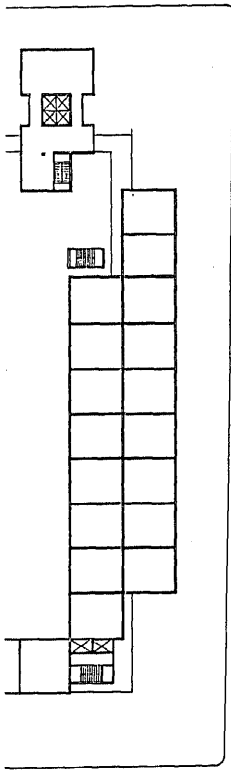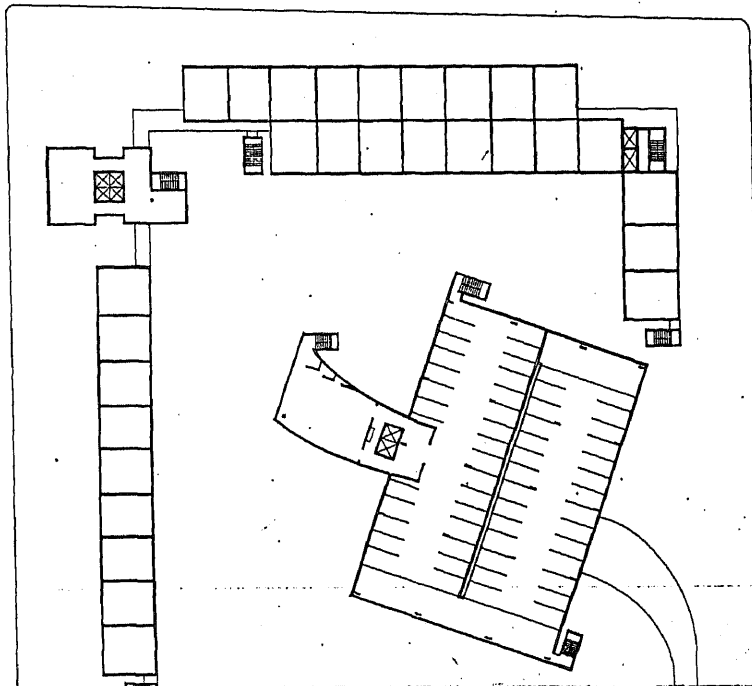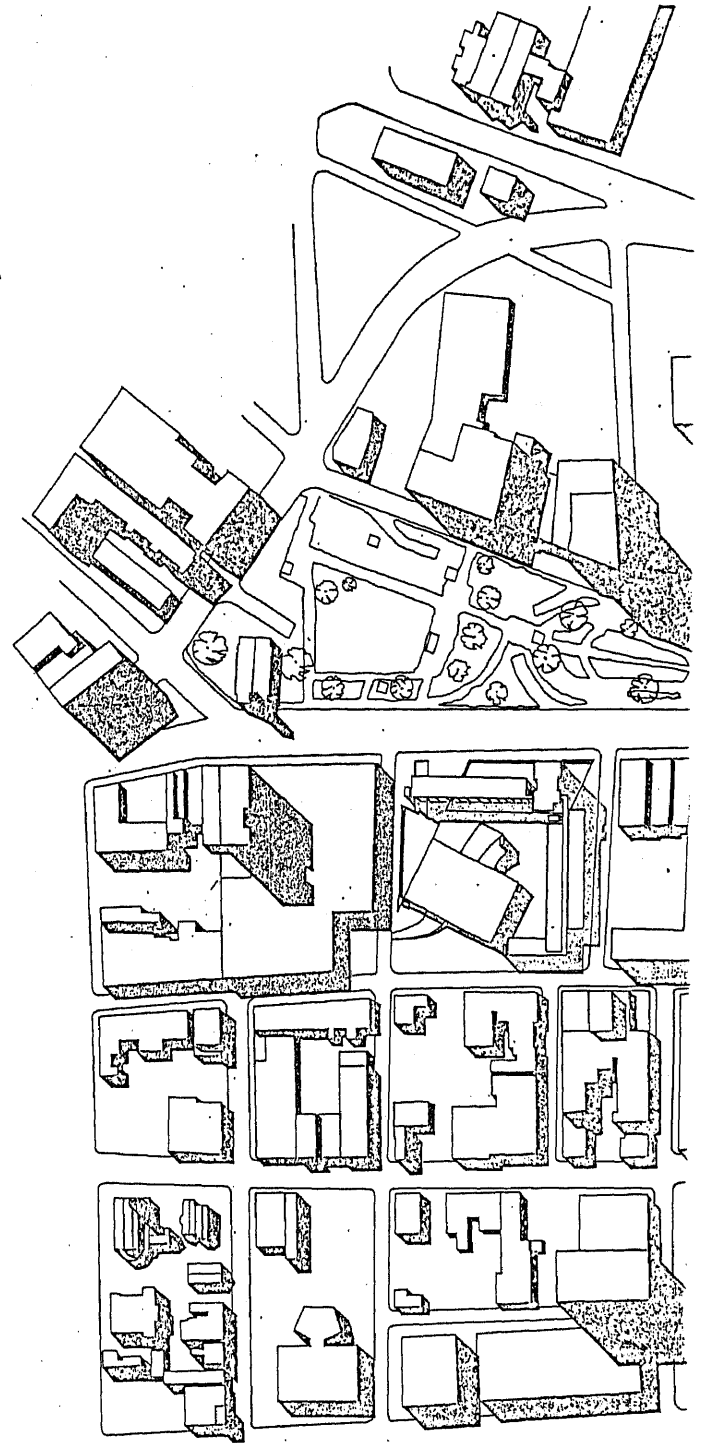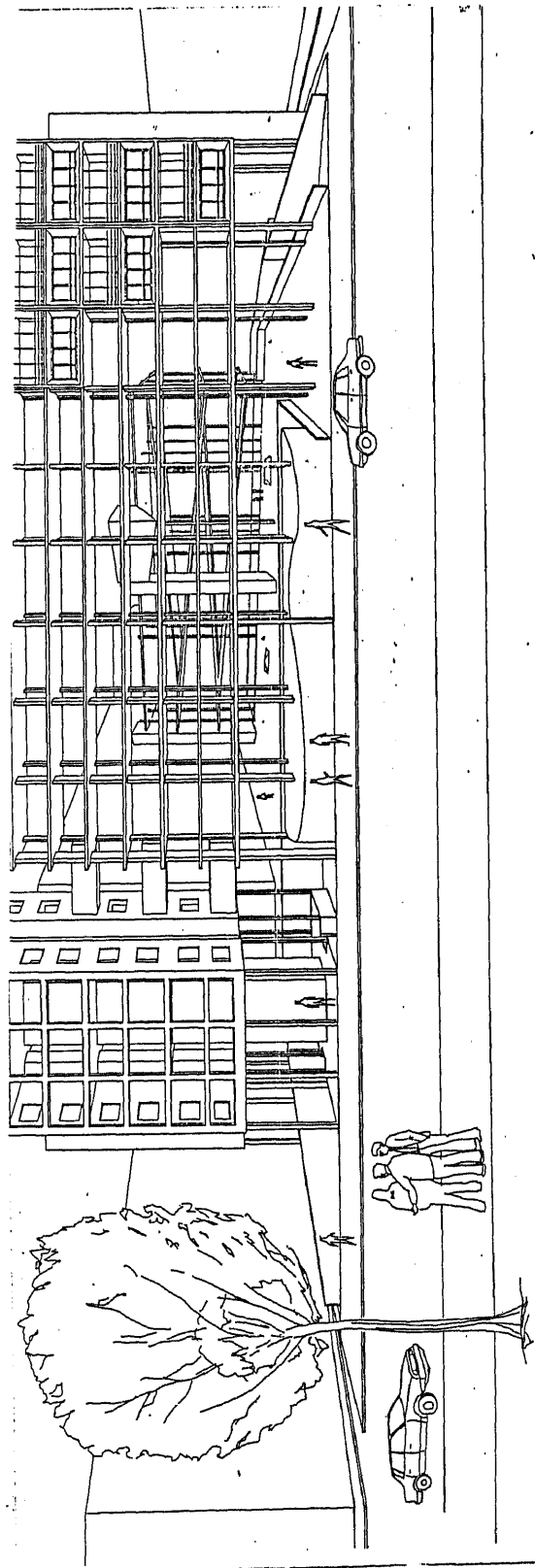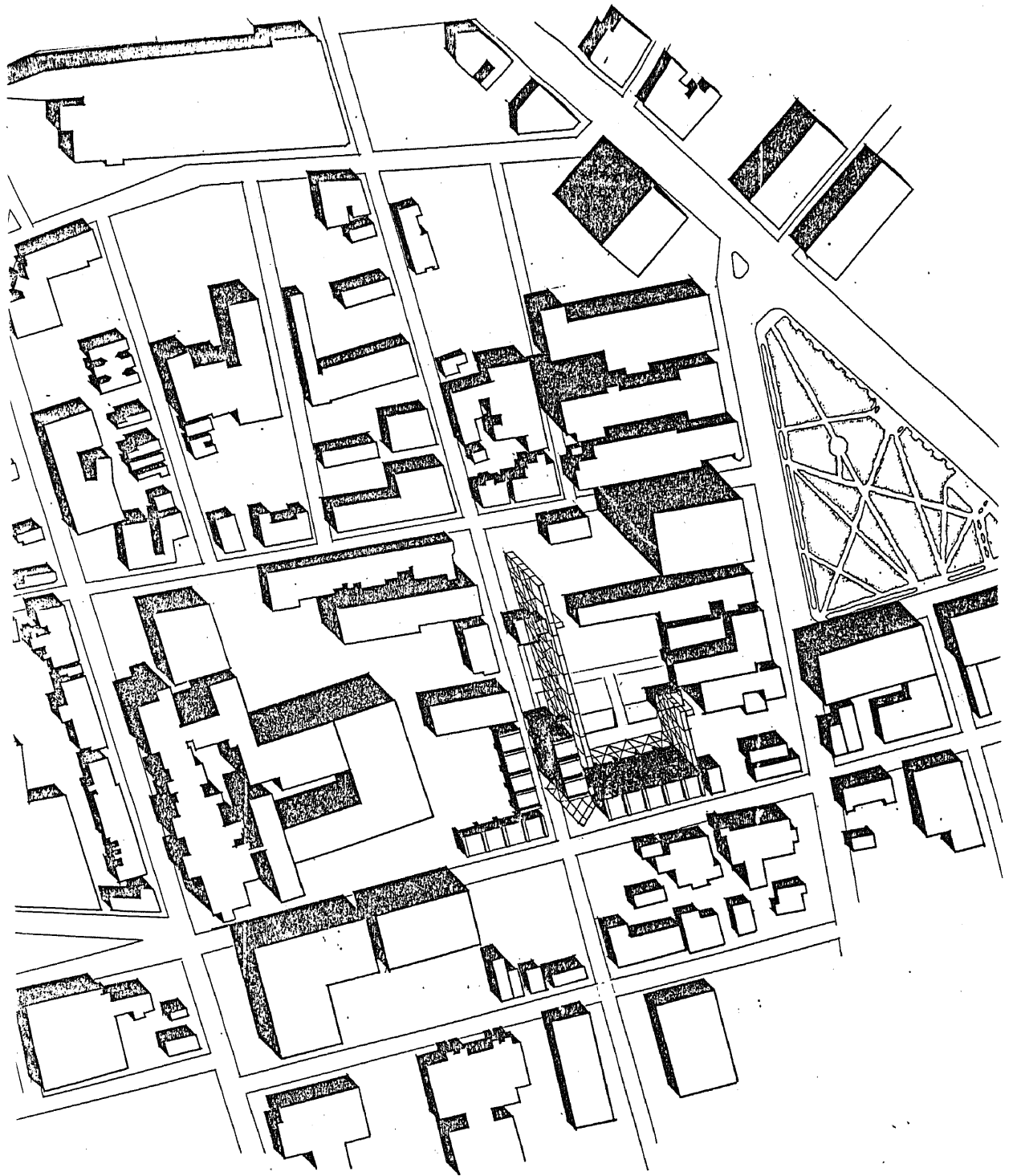
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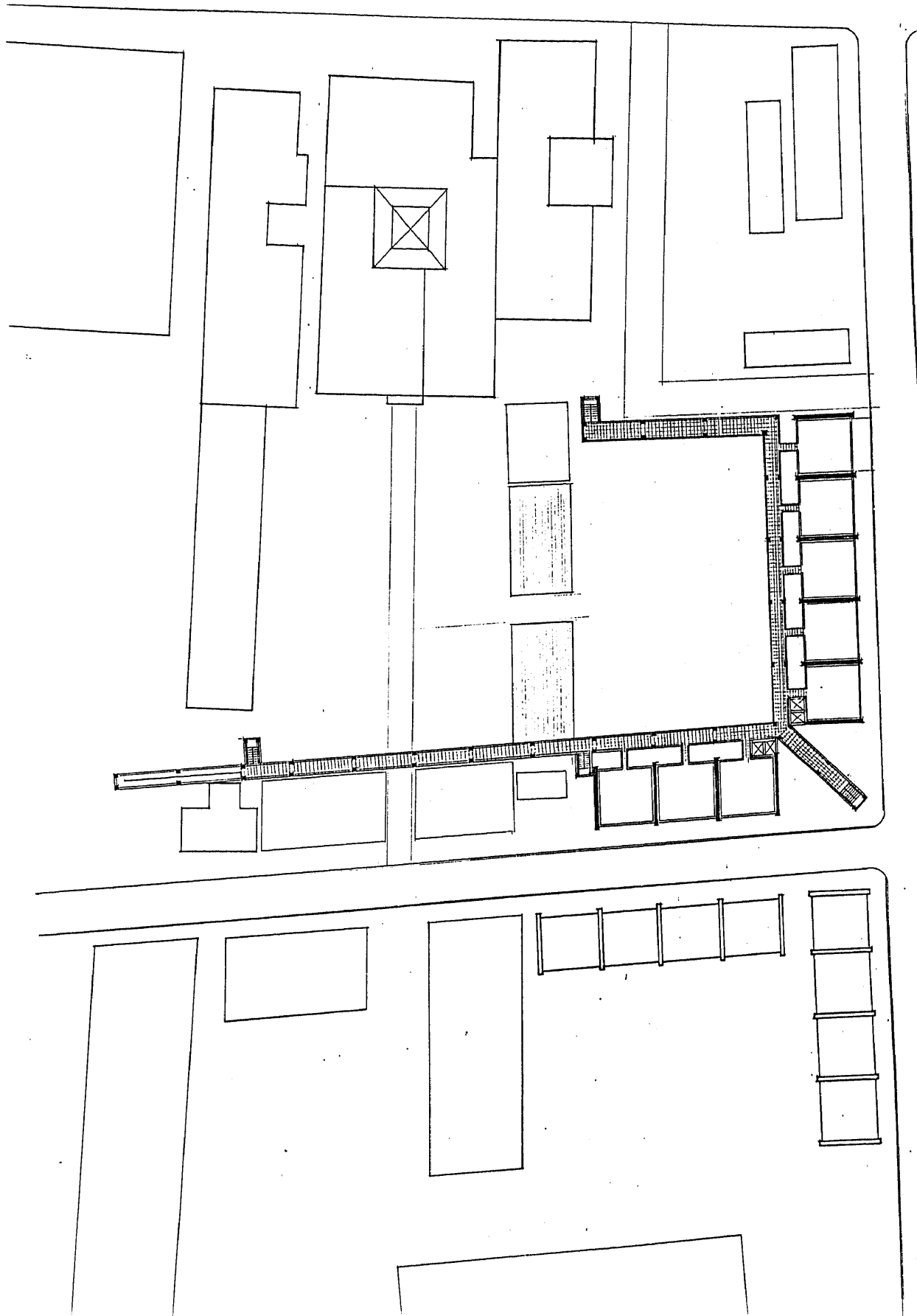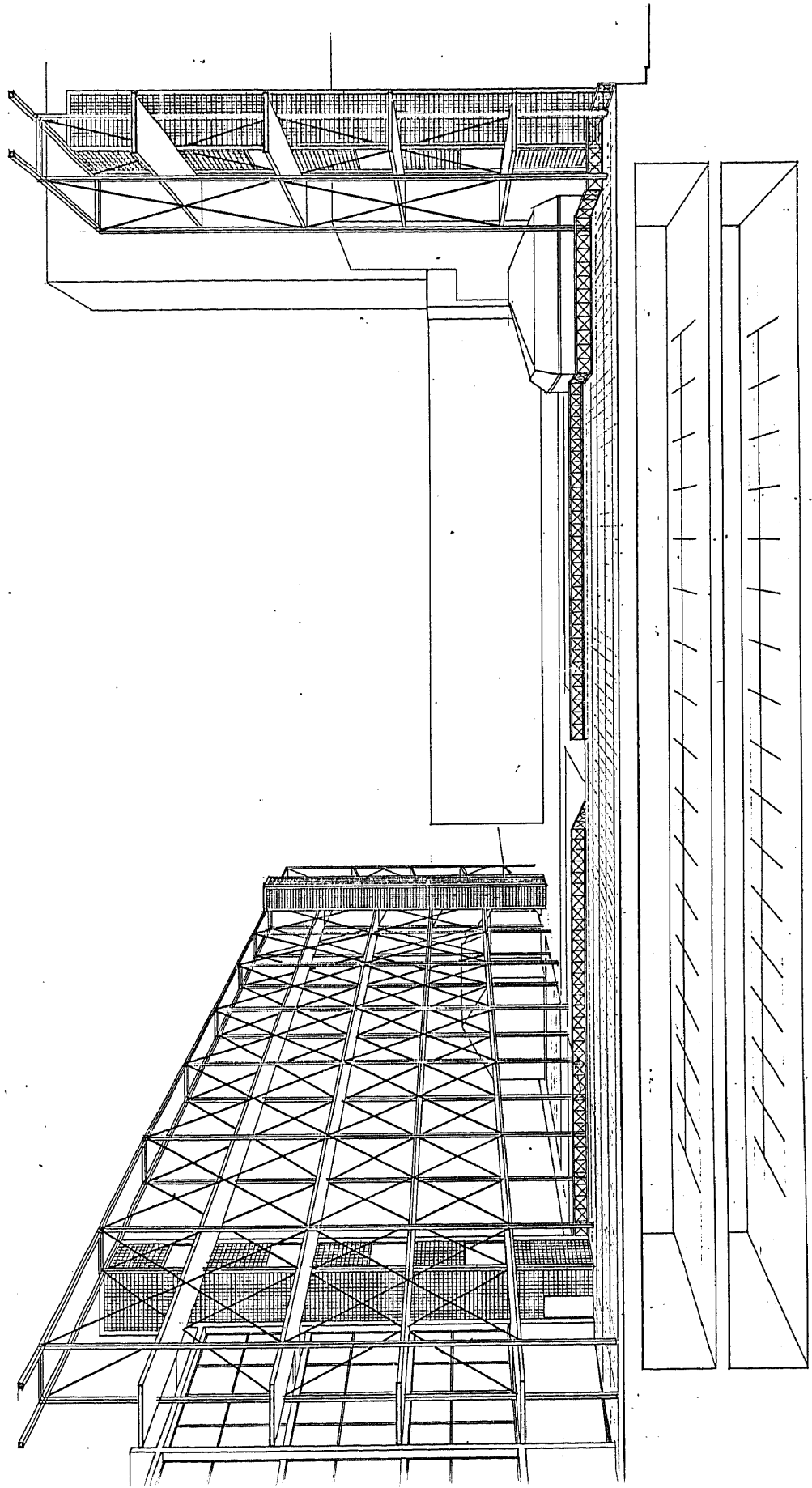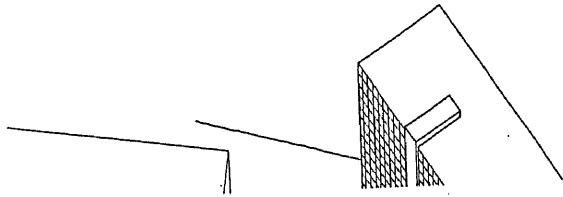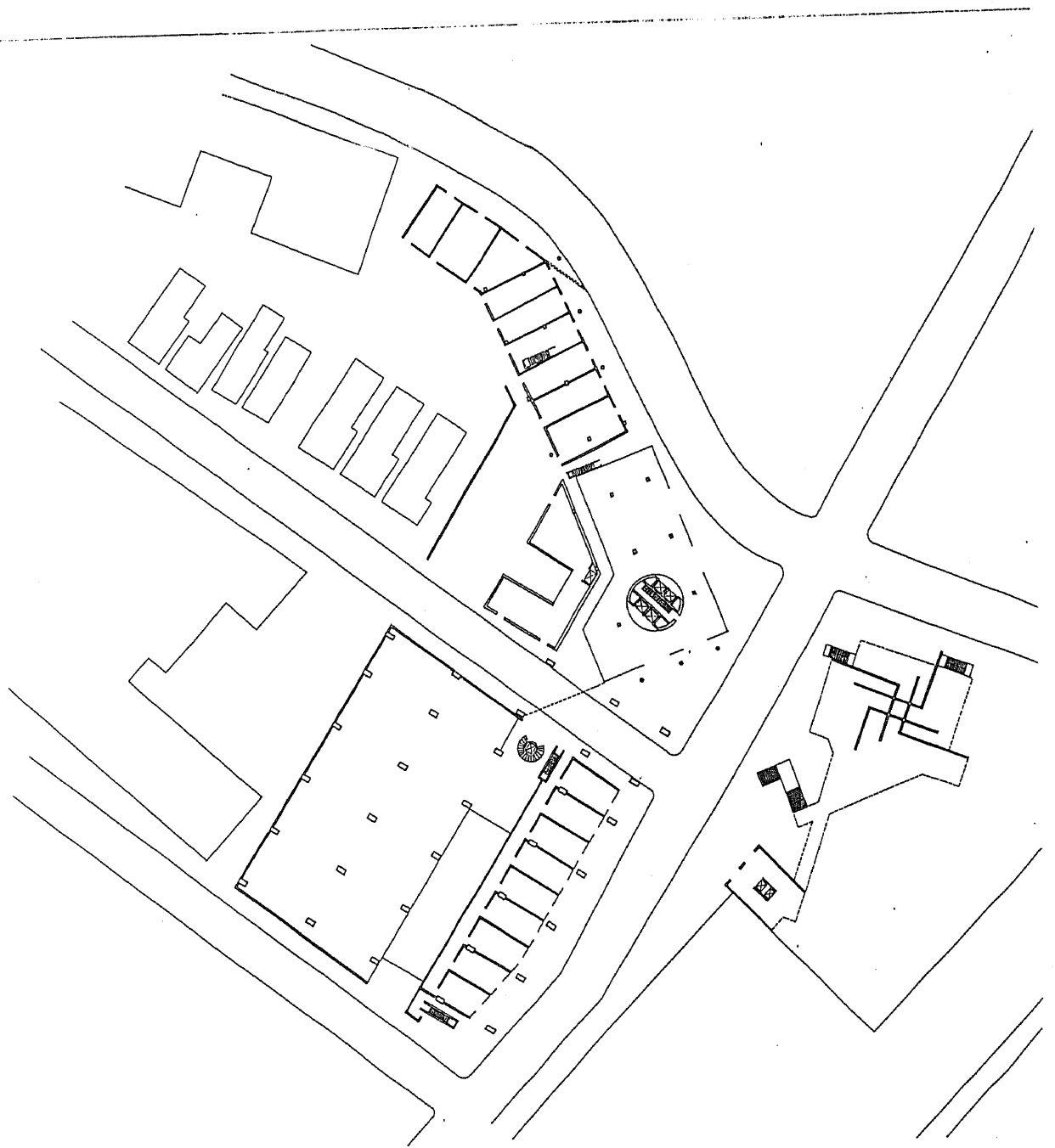
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