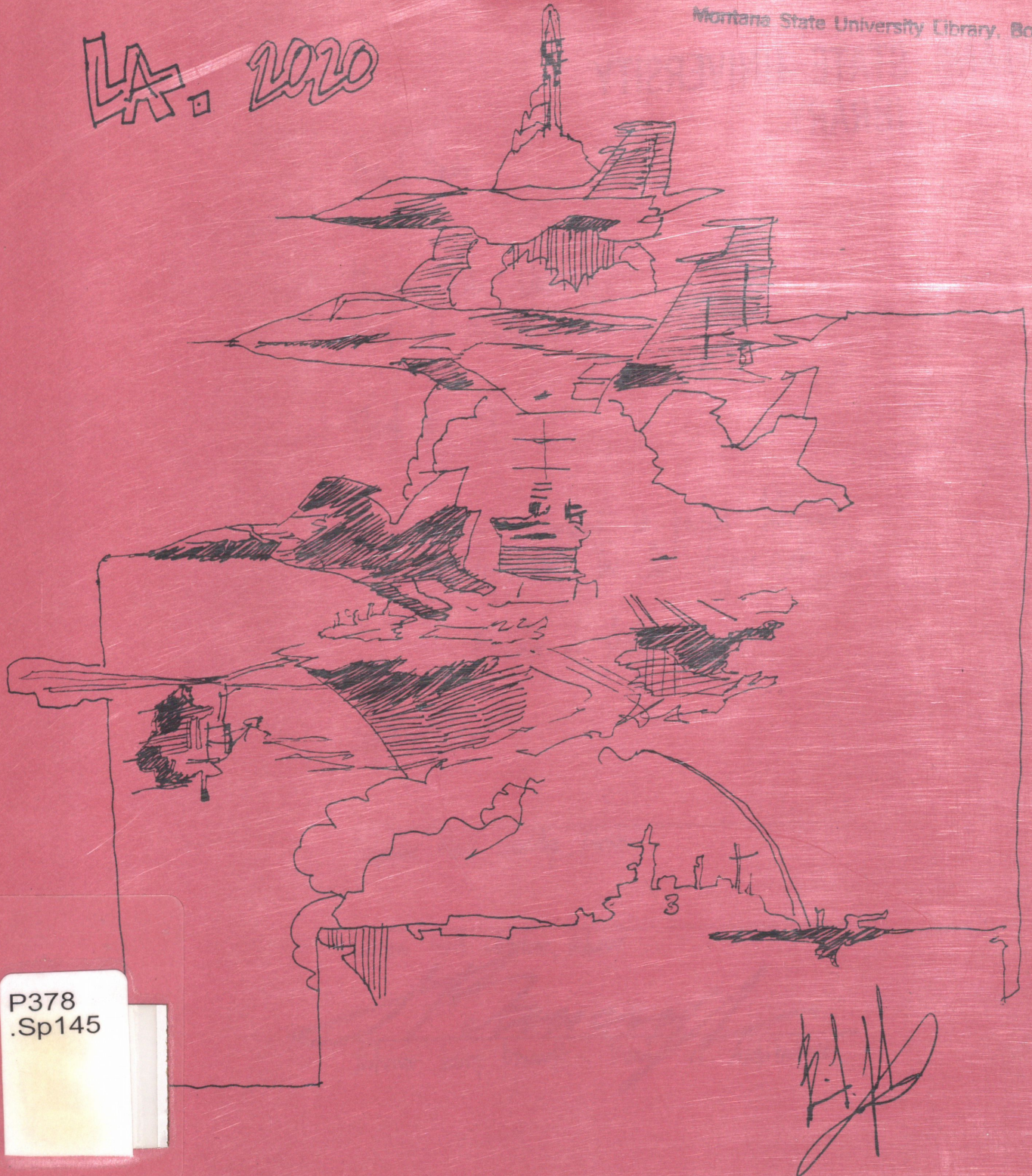


LA. 2020



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[Handwritten signature]

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Ernest L. Spahr

Hartford State University
School of Architecture

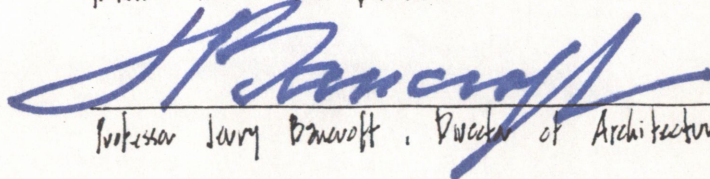
March 10. 89

A thesis paper submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Architecture

Approved:

Professor Clark Llewellyn, Advisor

Professor Scott Chaffin, Advisor



Professor Jerry Bancroft, Director of Architecture

PAF
MA
25/10
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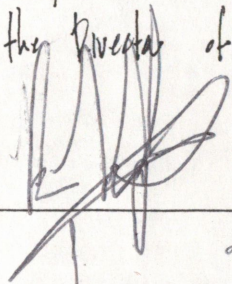

June 9. 89

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combination form/function

Exploration / Inquiry

Chicago Tribune Competition

Carroll

Tyrell Robotics Corp.
Dr. Edwin R. Tyrell
Sector 17-530
Jupiter Sattelite #2

T.Z.S. Partnership
Brian L. Spahr, A.I.A.
Sector 6, Zone 381
Los Angeles, CA.

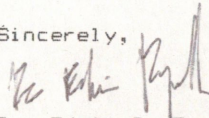
Dear Mr. Spahr,

After our previous meeting with you and your staff we have finalized our decision to go with your firm. It is obvious that your design team has the capabilities to solve our bulding with a trend setting solution.

I feel that the aspects we discussed earlier will be quite pertinent to the success of our building. Form and imagery must be our primary interest. Obviously the rigorous constraints of the Replicant production will be crucial, but for now a striking new building type is our primary concern. Enclosed are some very flexible square footages for your review. Later into the design sequence we will send you complete module specifications. As for now with our diversity and mobile production an articulate program should not be your concern.

We at Tyrell would like this building to reflect an icon, expressing our dominance in the line of bio-mechanics. It must be the best building on Earth symbolizing our great power and excellence in the field of robotics. Please continue your work for us and we will schedule a meeting to finalize our contracts.

Sincerely,



Dr. Edwin R. Tyrell

Thesis Statement —

Design a corporate Replicant factory for Dr. Edna Tyrell of Tyrell Corporation. The site will be Los Angeles, CA. It will facilitate the production of Robots and research & development. The design constraints will be limited to the criteria expressed to myself from Dr. Tyrell.

THESIS STATEMENT

The year is twenty hundred and twenty after the death of Jesus Christ. The location is a minor section of the great coastal metropolis, Los Angeles, CA. The site is located approximately ten blocks from the downtown epicenter. The vicinity conditions are quite diverse as there is not one specific class of people. Los Angeles has now become the melting pot of the world. It is the earth's major base for people traveling from the off world colonies. Modern technology has taken a giant step forward. Not only have other galaxies been discovered but they have been visited and occupied. Trends suggest that in future years all of Earth's population might desert and inhabit the new off world colonies. But for now the population is still quite large but there is plenty of room for everyone.

RECEIVED

Personal Goals:

To use this thesis project as a tangible benefit to acquire a position in a reputable architectural/design firm.

to solve a design problem which incorporates futuristic complications through both architectural and social solutions.

to provide a complete array of design solutions to the client through graphic renderings, a three dimensional model, and written form.

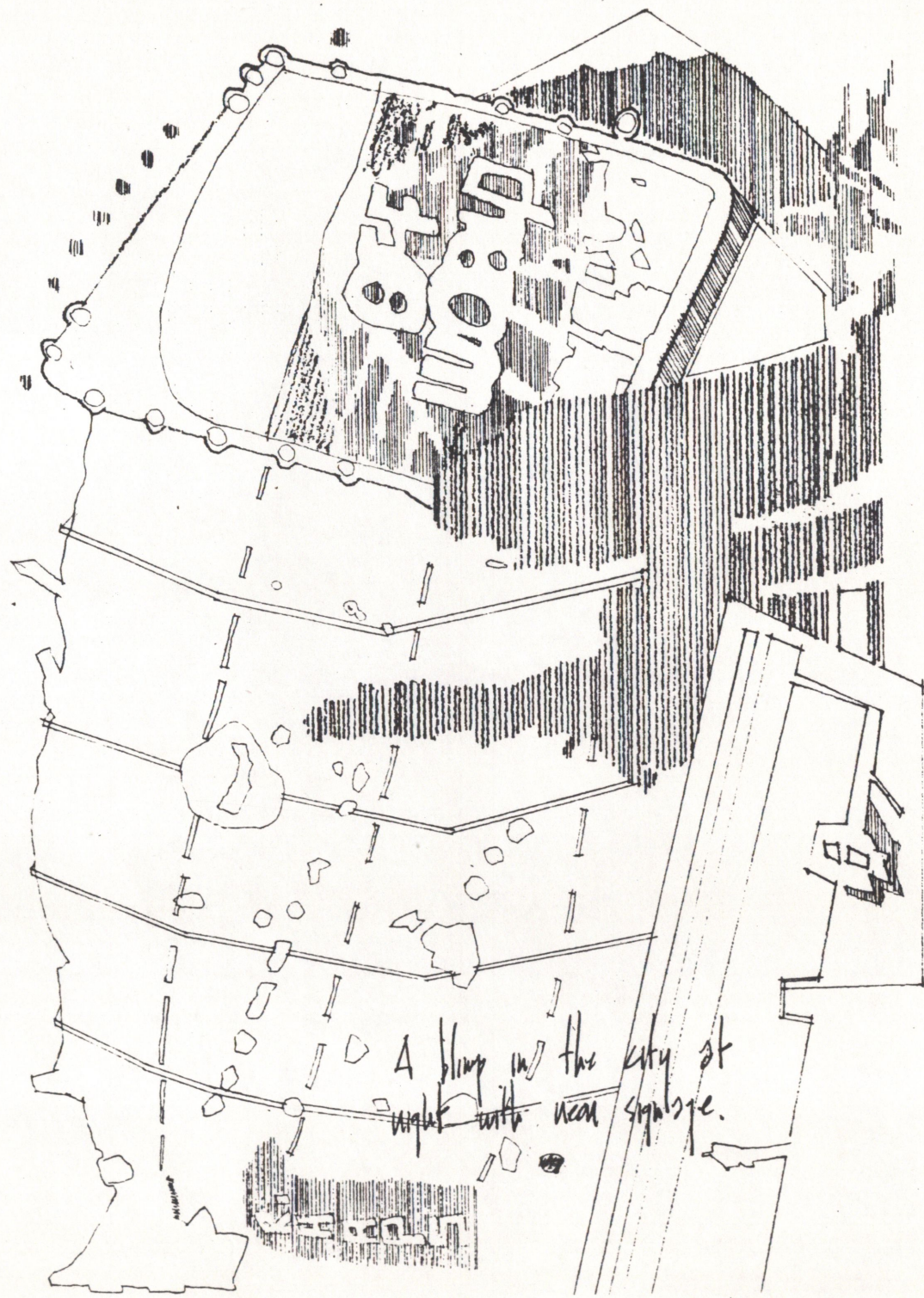
to produce professional quality renderings that will enhance my personal portfolio.

Gras

My thesis will be an investigation into the future. The source of my
active project is the movie Blade Runner. It depicts life in Los Angeles
during the early twenty first century. Technology has taken a incredible leap
forward while remaining stagnant in other ways. Megastuctures are abundant
in the city coexisting with dormant, depopulated older buildings. The population
is a diverse spectrum of people from all parts of the world. L.A.
has now become a universal base. There are off world colonies
located in adjacent galaxies. These galaxies have not only been discovered
and reached by humans but are currently being occupied. Unlike the
past where the entire population exists on earth, today the majority
of the people live off of the earth in other colonies. The remaining
population on earth must not leave due to various reasons. Although
some of the people choose not to depart earth for a prosperous off
world life, most are refused permission due to elderly age, failing
physiology, or genetic disorders.

The most significant advance in this world is the
development of robotics. The scientific development has allowed
the production of robots so reflective of man that only emotions
can be used to differentiate them. These robots or "Replicants"
are far superior to man in strength and agility, and equally
intelligent. In the off world colonies these Replicants are
used for hazardous duty. Other uses are for the military
as combat models as well as laborers, and leisure/pleasure

models. The leading robotics corporation is the Tyrell Corporation founded by Dr. Eldon Tyrell. The Replicants that the Tyrell Corporation make are representative of homo sapiens and all of our capabilities both physical and mental except emotions. Dr. Tyrell suggests that if left within a normal society the Replicants could possibly develop their own emotional responses. Therefore the designers have built in a failproof system - a few year lifespan. With the longevity factor limited, this allows dominance over the Replicants. In direct contrast to this theory some Replicants are secretly given emotional implants. By artificially supplying memories through pictures and small artifacts the Replicants can be made to lead a productive life assuming itself to be human.



A blimp in the city at
night with neon sign.

Nuclear waste dumps in city limits.

pollution levels extremely high; 90% of days air pollution reaches dangerous levels.

smog is so thick and dense over the city that sunlight seldom penetrates to the ground level.

radioactive waste contaminates some of the H₂O supply

The impact of these environmental factors on living, architecture, and transportation are moderate. People are getting pressed into a inward poisoning environment. But it is not happening very quickly. The adaptation to this living situation is quite physiological, and can take quite awhile to adjust to. Therefore the people still manage to get outside just to escape.

Architecture is also taking a step in a new direction. Instead of ornamentation and large exterior envelopes, the trend is stark, bold, shapes. Materials are also updated to produce longer lifespans. New materials on buildings must provide protection against acid rain, pollution, and contaminants.

ENVIRONMENTAL
CONCEPTS

People are moving off the planet earth to the off world colonies.

Earth is being deserted at a very high rate.

The remaining people on earth are either elderly, have genetic defects that disqualify them from leaving earth, or cannot make a significant contribution to a new colony. Also remaining are various high power leaders. Political figures, engineers, bio-chemists, and other geniuses are still producing their work. All of the corporations, government, and the nation still require these men to administrate.

DATA

POPULATION

Vehicular modes →

There are 3 major modes of transportation for civilian use. Airborne machines, conventional vehicles, and public transportation.

Airborne transportation comes in many sizes. First, the off world shuttles are quite insignificant in size. They are used for travel between earth and the off world colonies. Because of their size they require special landing parts stationed on the ground. The smaller parts located in town and on the buildings will not accommodate their size & weight. The shuttles must land in the suburbs on the special parts and then take a smaller transport to the city.

The smaller transports are used throughout the city. Their size allows them to land @ all the parts in the city. This includes the parts on buildings.

Conventional vehicles are abundant within the city. Traffic is not quite as hectic as it was in the late twentieth century. There are certain sectors within the city which prohibit vehicular traffic.

TRANSPORTATION

Public transportation is limited to taxis and a small transit system. The number of people using the public transportation system is quite small. The buses are medium sized versus the old ones.

Pedestrian →

In the surrounding vicinity of the site, walking is a feasible method of travel. Especially during the evening and night hours when there is high security in the area.

continued

Early into the twenty first century, the Tyrell Corporation advanced Robotic evolution into the Nexus Six phase, this allowed the designers to produce robots that are virtually identical to the human species. The Nexus Six phase were far superior in physical strength and agility, and almost equal in intelligence to the genetic engineers that designed them. The primary function of these Nexus models was for slave labor. They were also used in hazardous situations such as exploration and colonization of other planets.

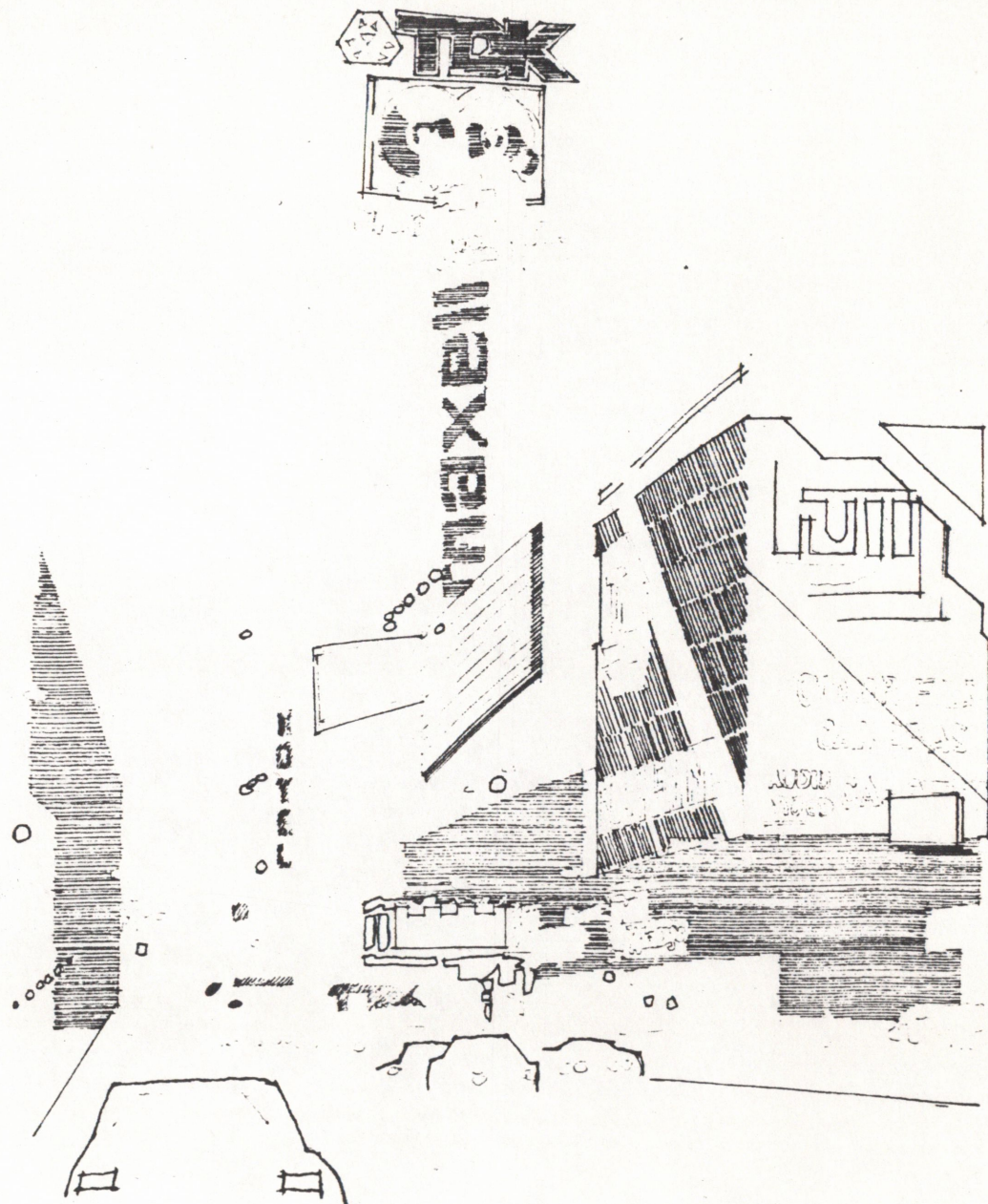
TYRELL CORP

Night life is very active in the city area. 24 hour activity is prevalent throughout the city. Bars, nightclubs, cabarets, opium bars, and other illegal and legal activities occur every night. Whorehouses, opium bars, and gambling have all become legalized activities. Most of the illegal activity is linked to gangs either looting, vandalizing, or at war with each other.

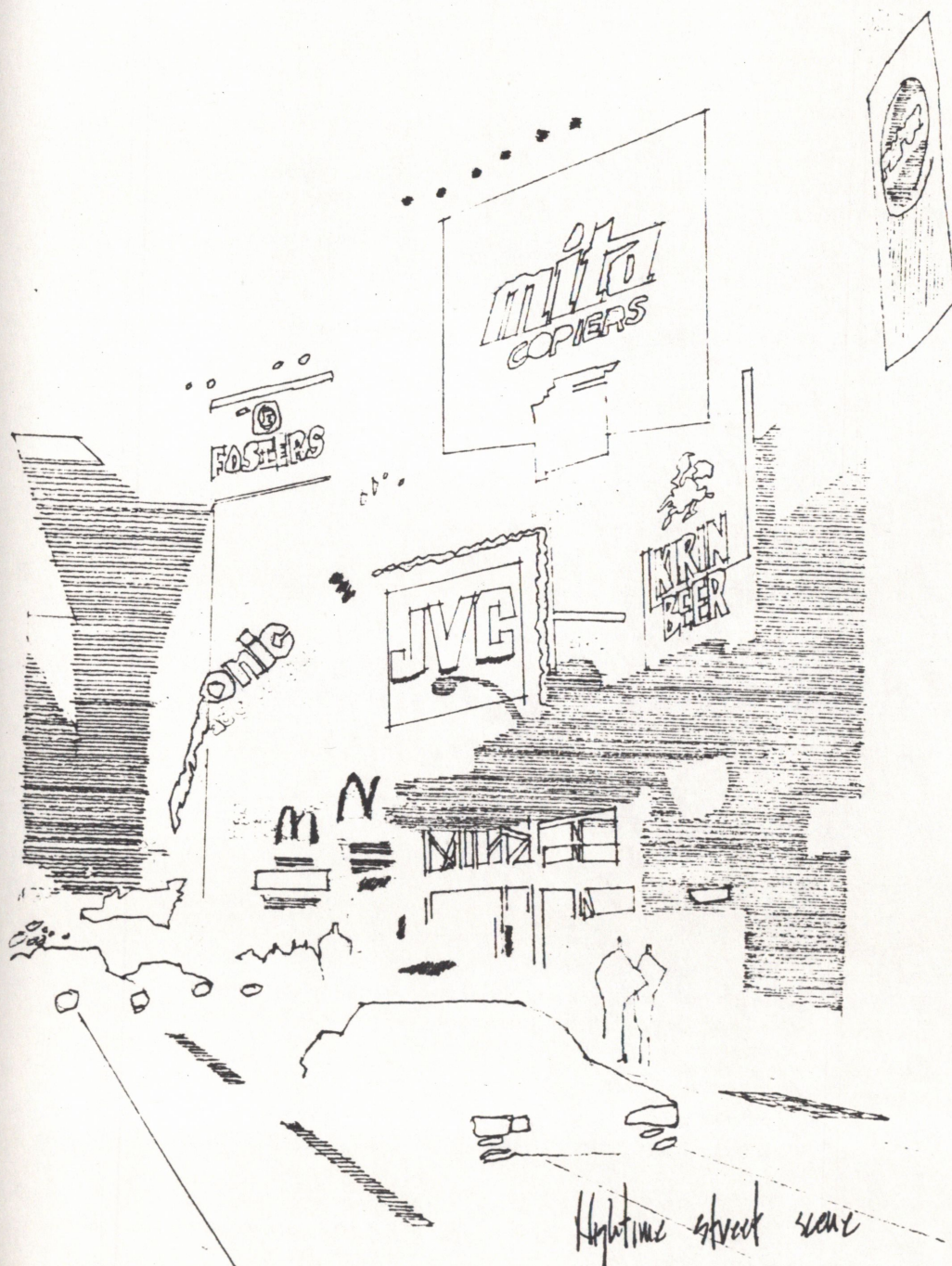
Signage is a big part of the visual experience. Neon signs are everywhere, located not only on the sides of buildings but on the tops also. This is for viewing from the sky while driving. Building envelopes have become a great accessible space for signage. With the smog, pollution, and general breakdown of the atmosphere these signs are becoming very large. This is for visual contact even in the poorest conditions. In addition with the all of the airborne traffic it is very visible to place signage on the tops of buildings.

Also since rooftops must be quite visible considering all of the airborne traffic, it could be a area to express form, sculpture, and signage.

END



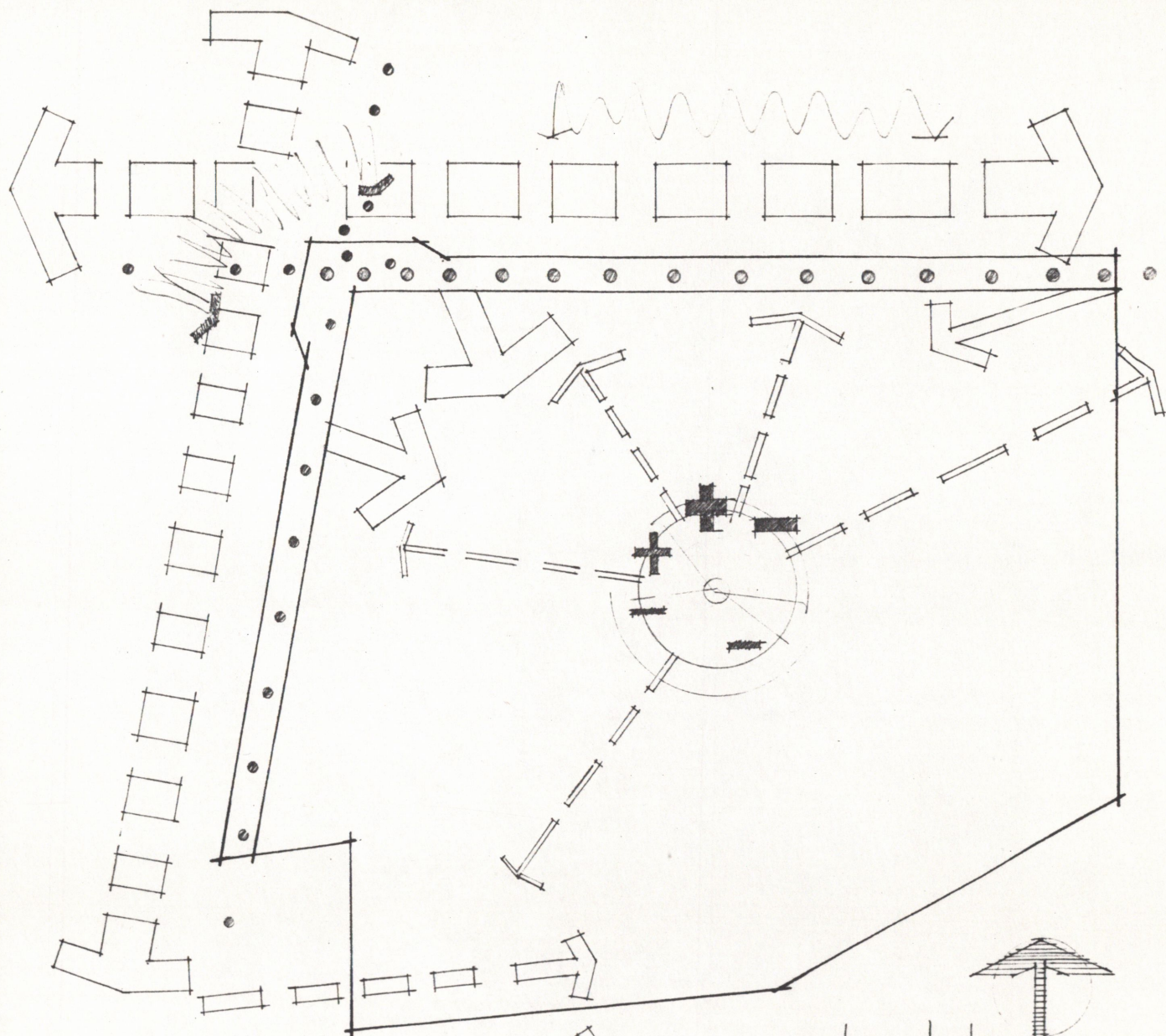
Highway near square



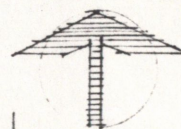
Nighttime street scene

~~SITE~~ ANALYSIS

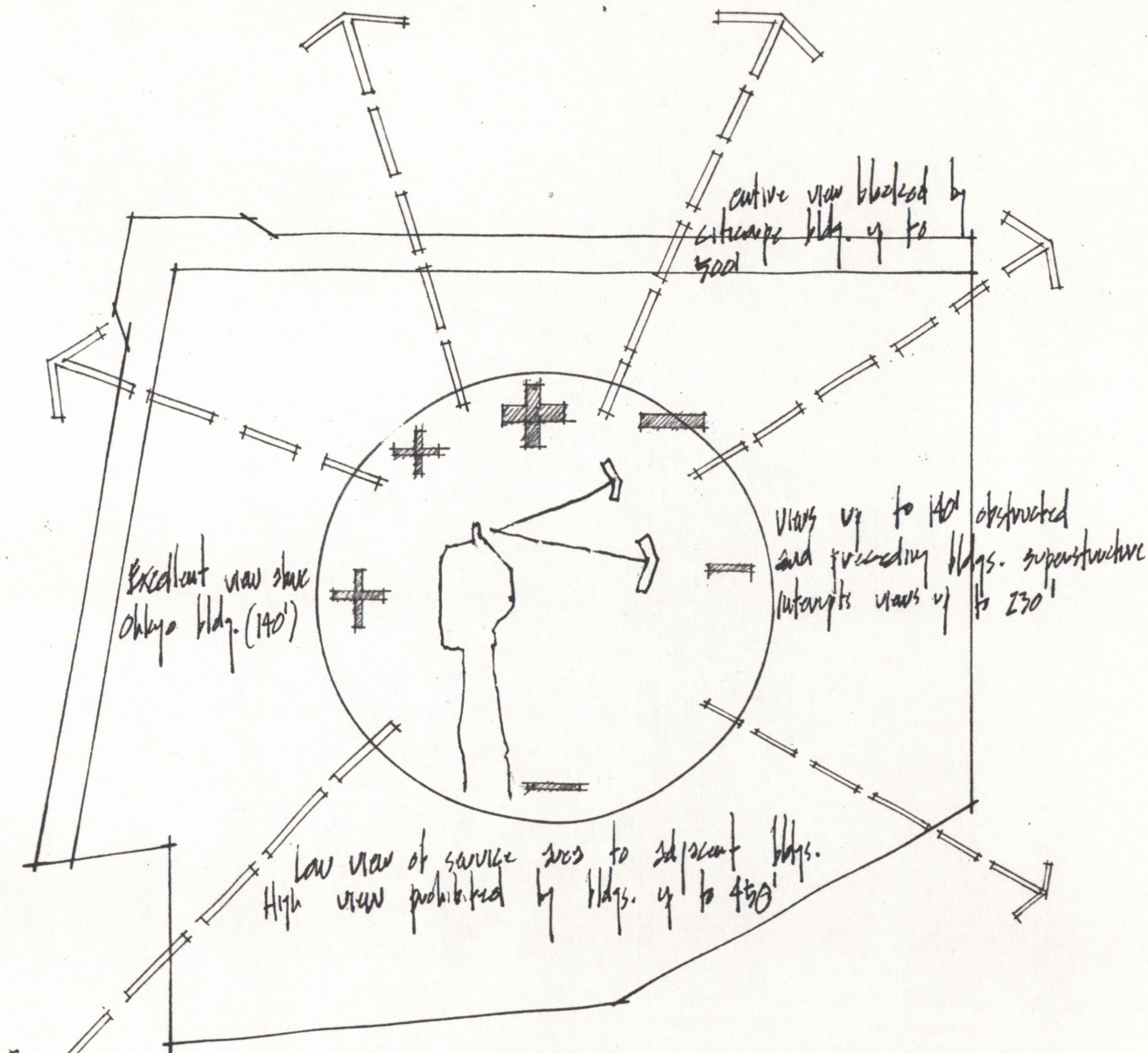
Views, potential and blocked
vehicular & pedestrian traffic
sq. ft of site & buildable areas



- grand views onto site
- grand views off site
- pedestrian activity
- major noise
- vehicle traffic

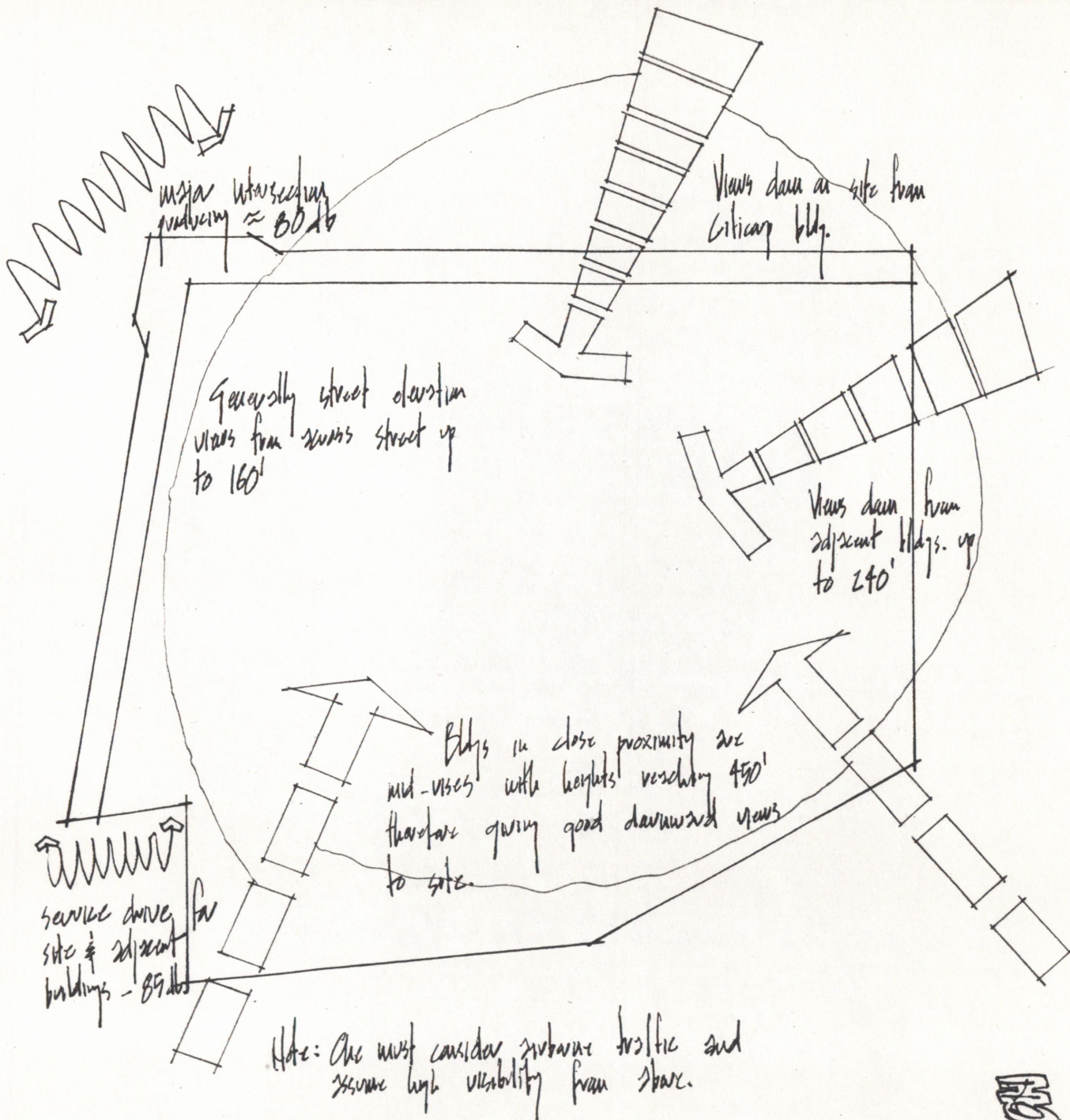


PLAN

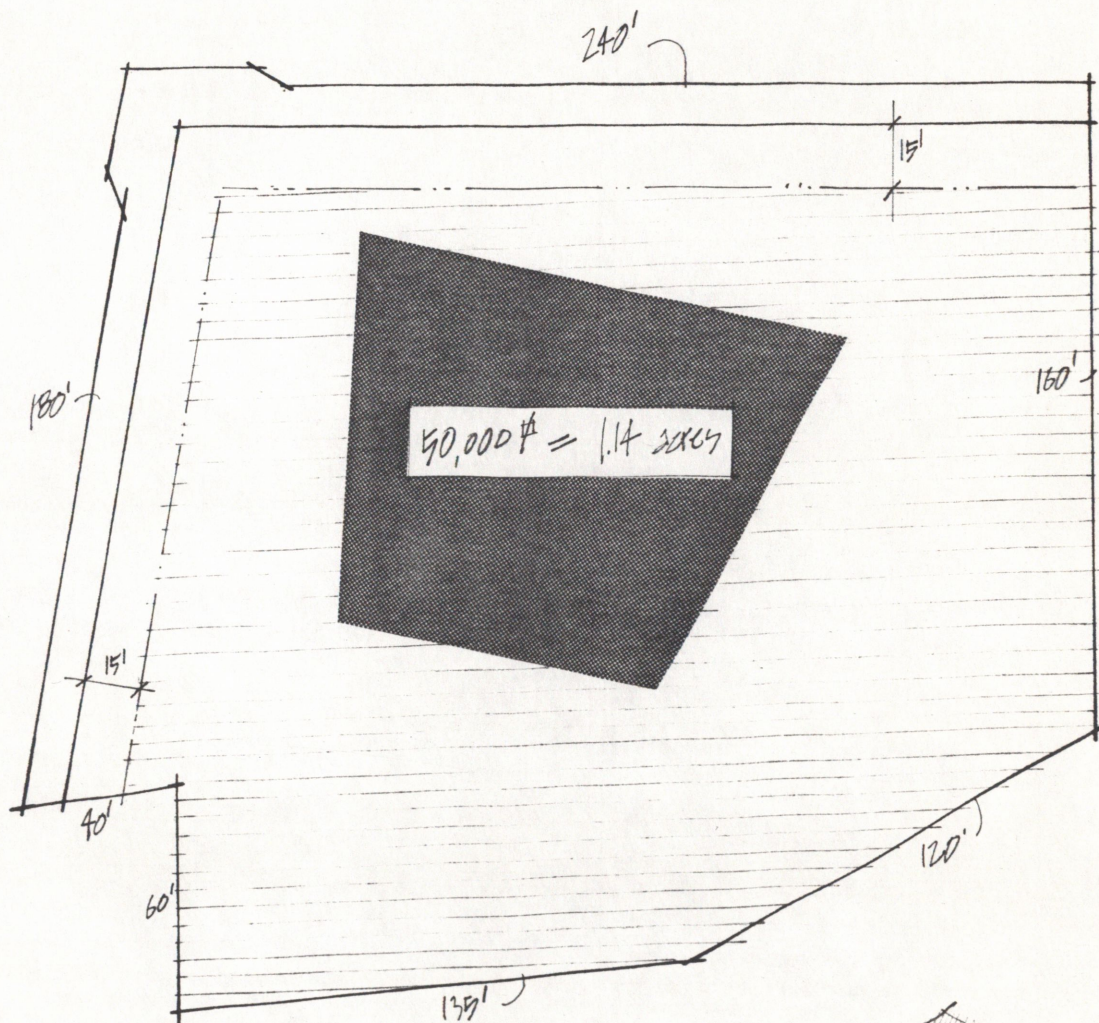


Note: judgements about the quality of the views assumes clear views with no obstruction. This includes cloud cover, pollution, and smog. Therefore these are mentioned over very seldom.

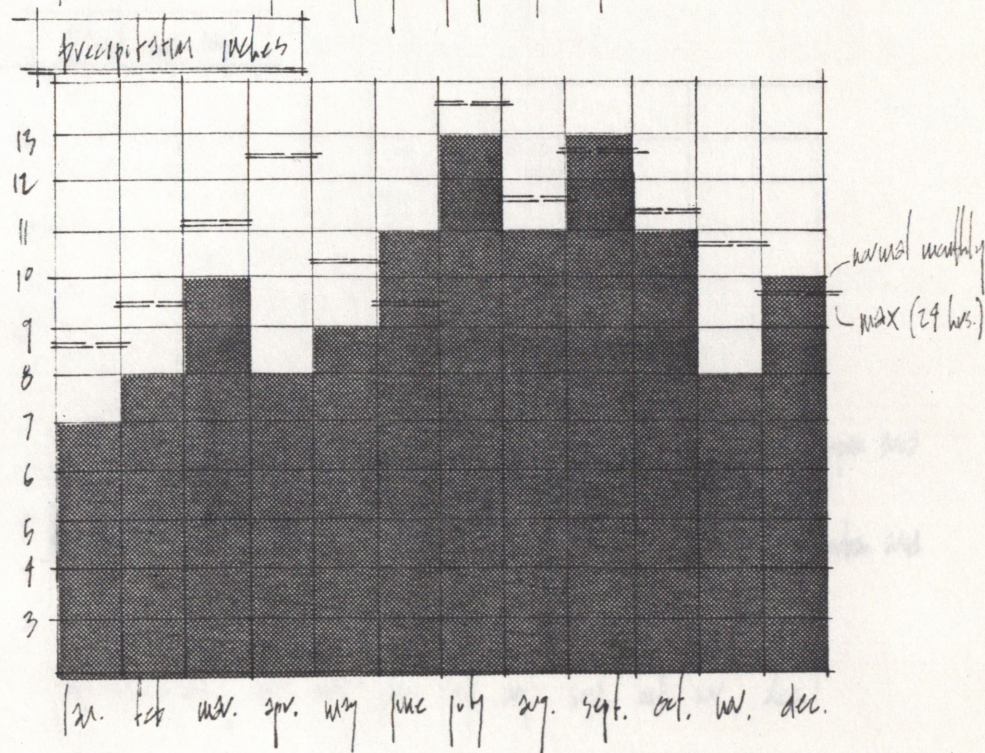
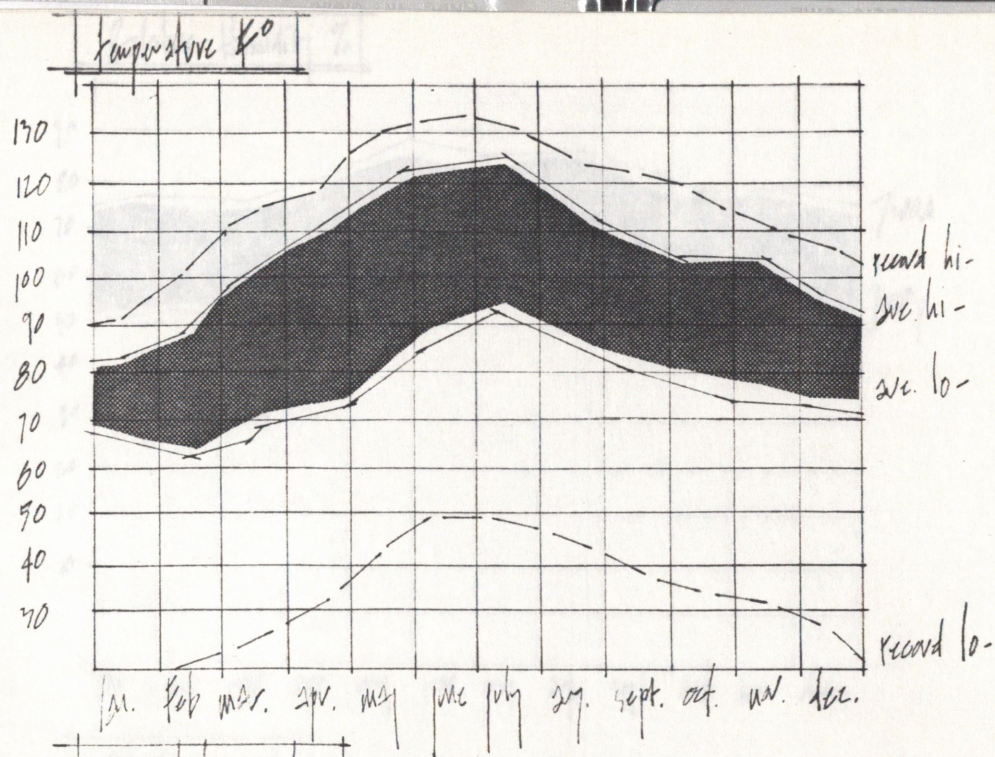
THE GREAT VIEW OFF



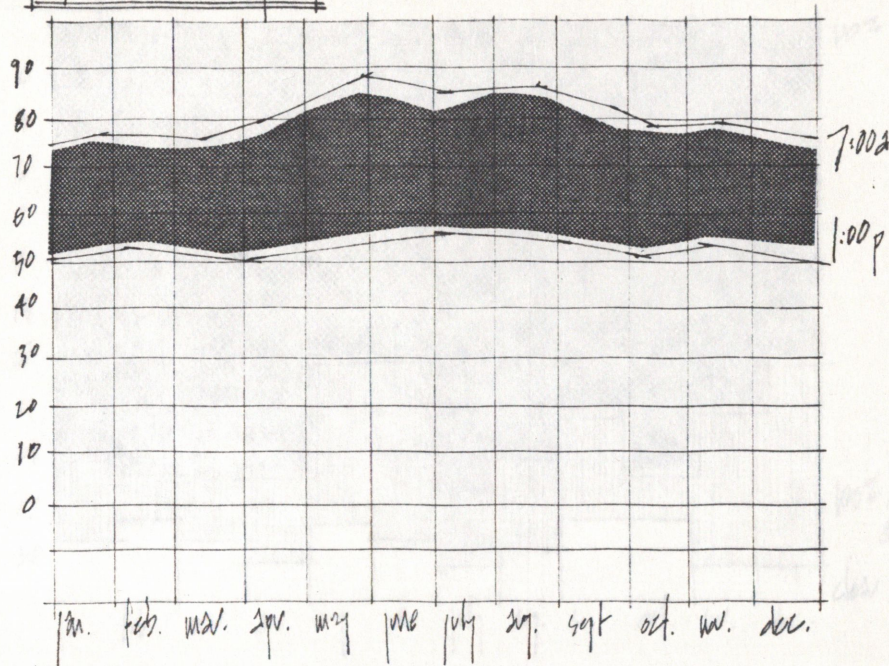
120
 120
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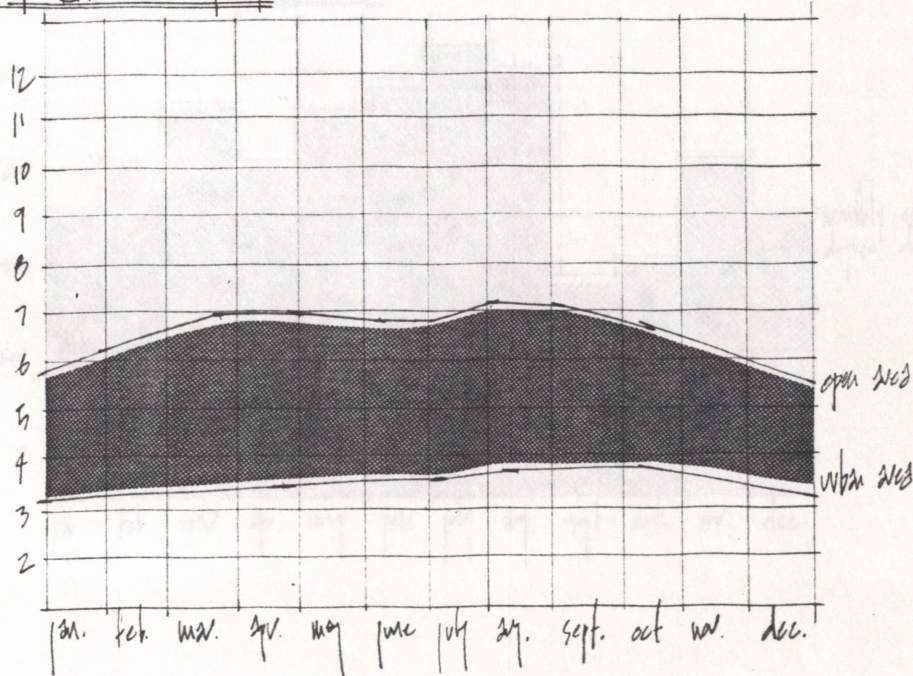
WALC 11 = 520'



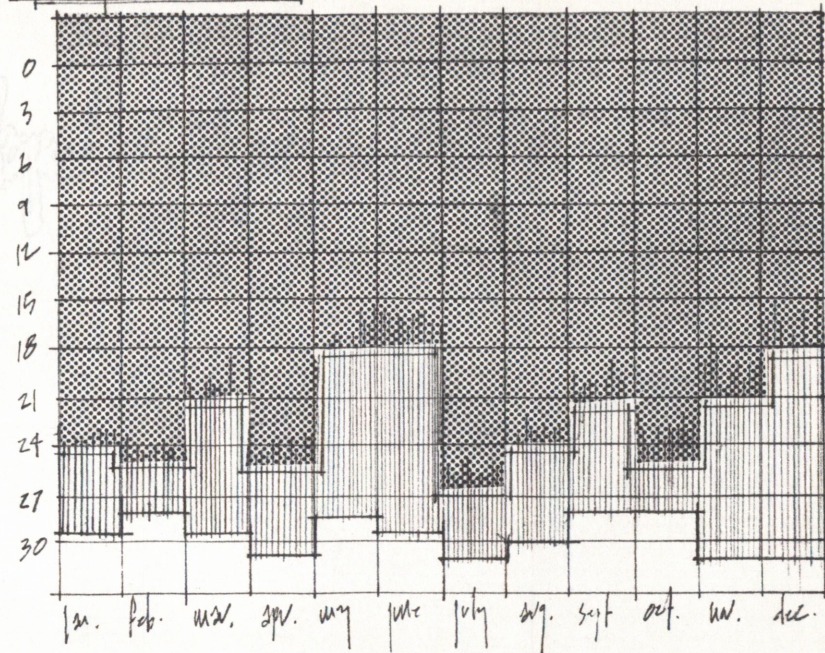
Relative Humidity %



Wind av. mph.



sky cover (days)

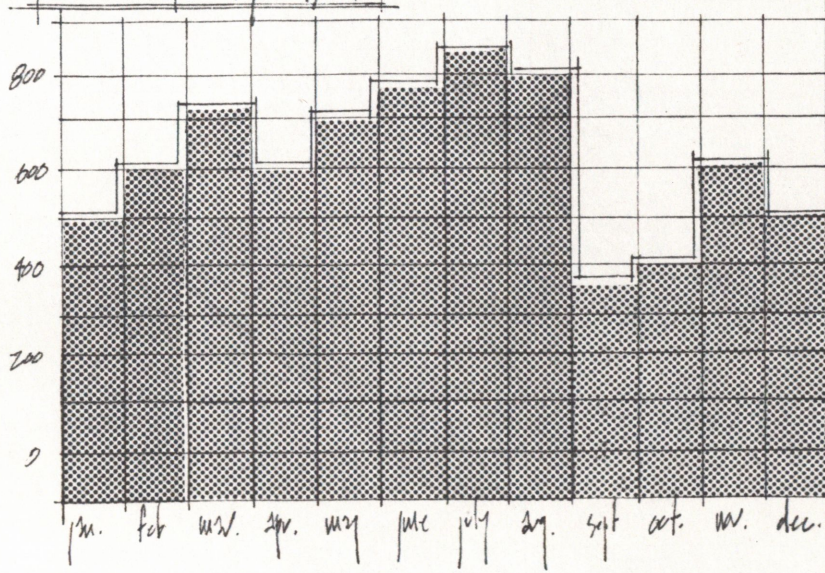


100% overcast
sky
condition
@ 5000 ft.

100% overcast
@ 500 ft.

clear sky

annual degree days of/over



monthly cooling
degree days

Proprietary Space Requirements

1981

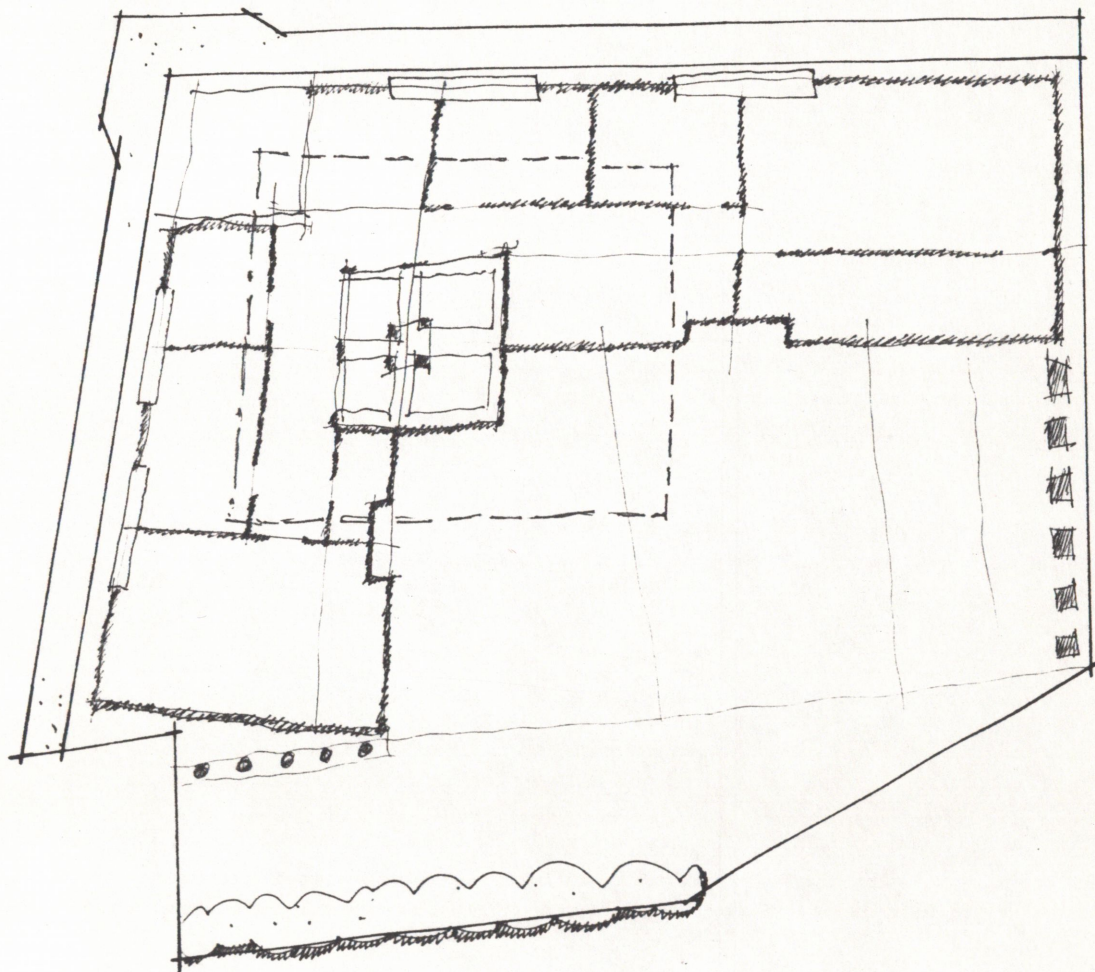
Vehicle entry part	8000 ₪
receiving area	2000 ₪
audis 20 @ 2000 ₪	40,000 ₪
conference room	4,000 ₪
briefing room	2,000 ₪
storage	4,000 ₪
presidential suites	4,000 ₪

research & development	10,000 ₪
computer lab	10,000 ₪
physical therapy	5,000 ₪
surgery	20,000 ₪
port op.	5,000 ₪
laboratories	10,000 ₪

lobby	2,000 ₪
reception & waiting	2,000 ₪
administration	3,000 ₪
storage/supply	2,000 ₪
prep. area/central storage	5,000 ₪
circulation	14,000 ₪
	7,000 ₪

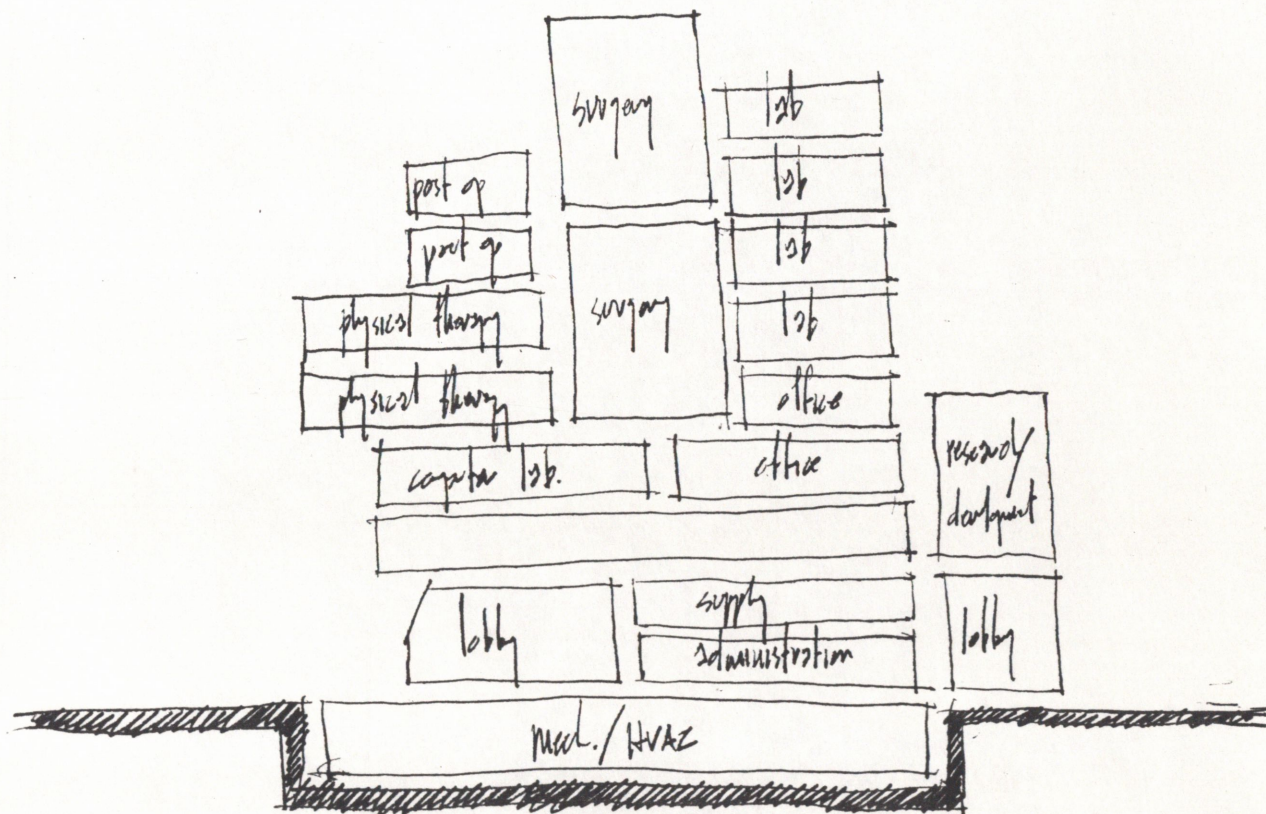
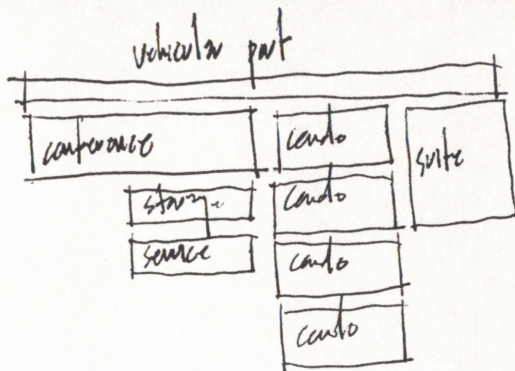
HVAC
TOTAL

→ ≈ 160,000 ₪



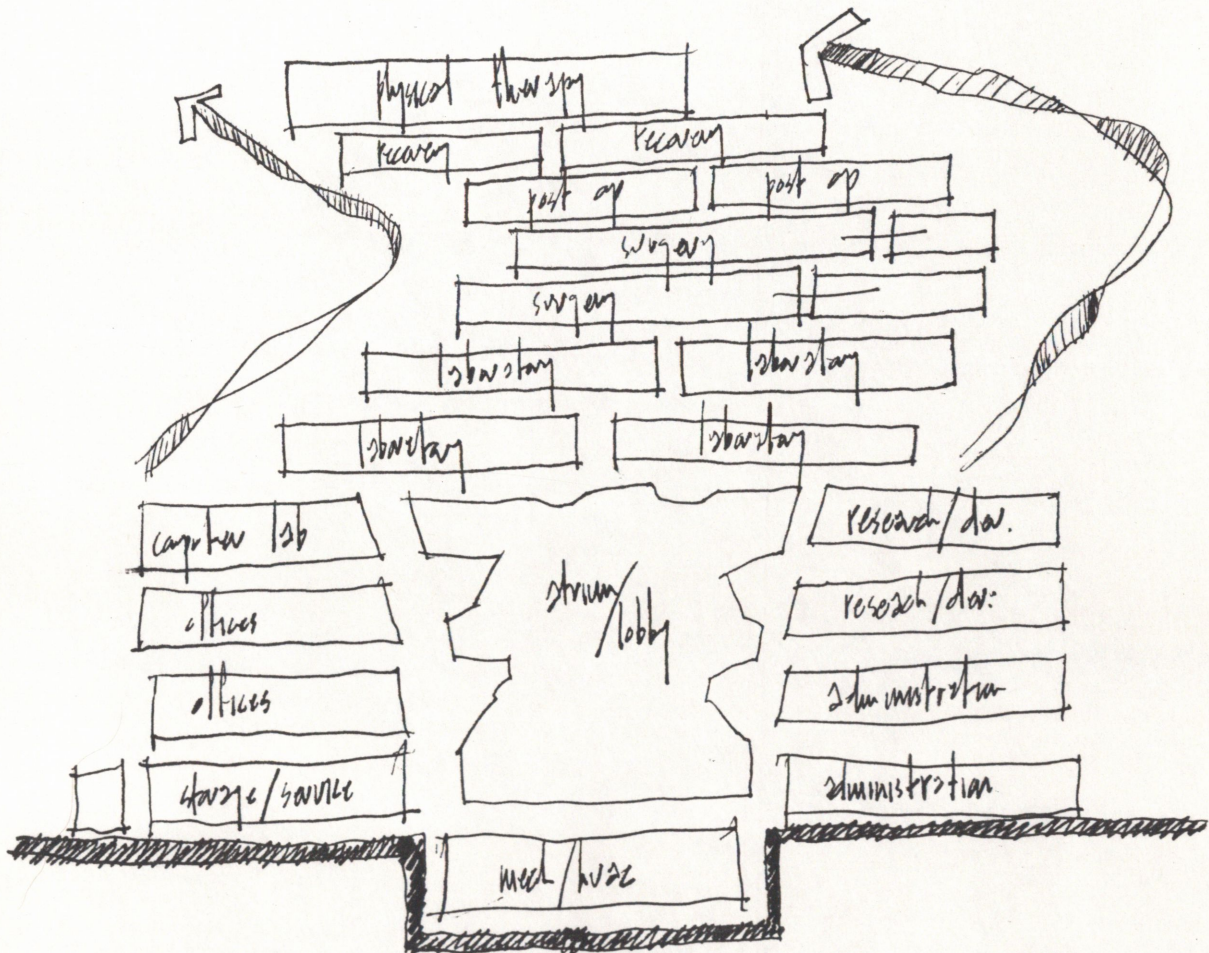
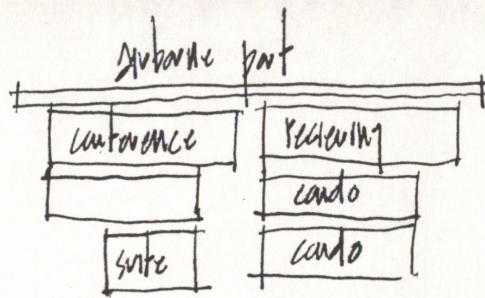
ground use for building footprints -

GAZETTE



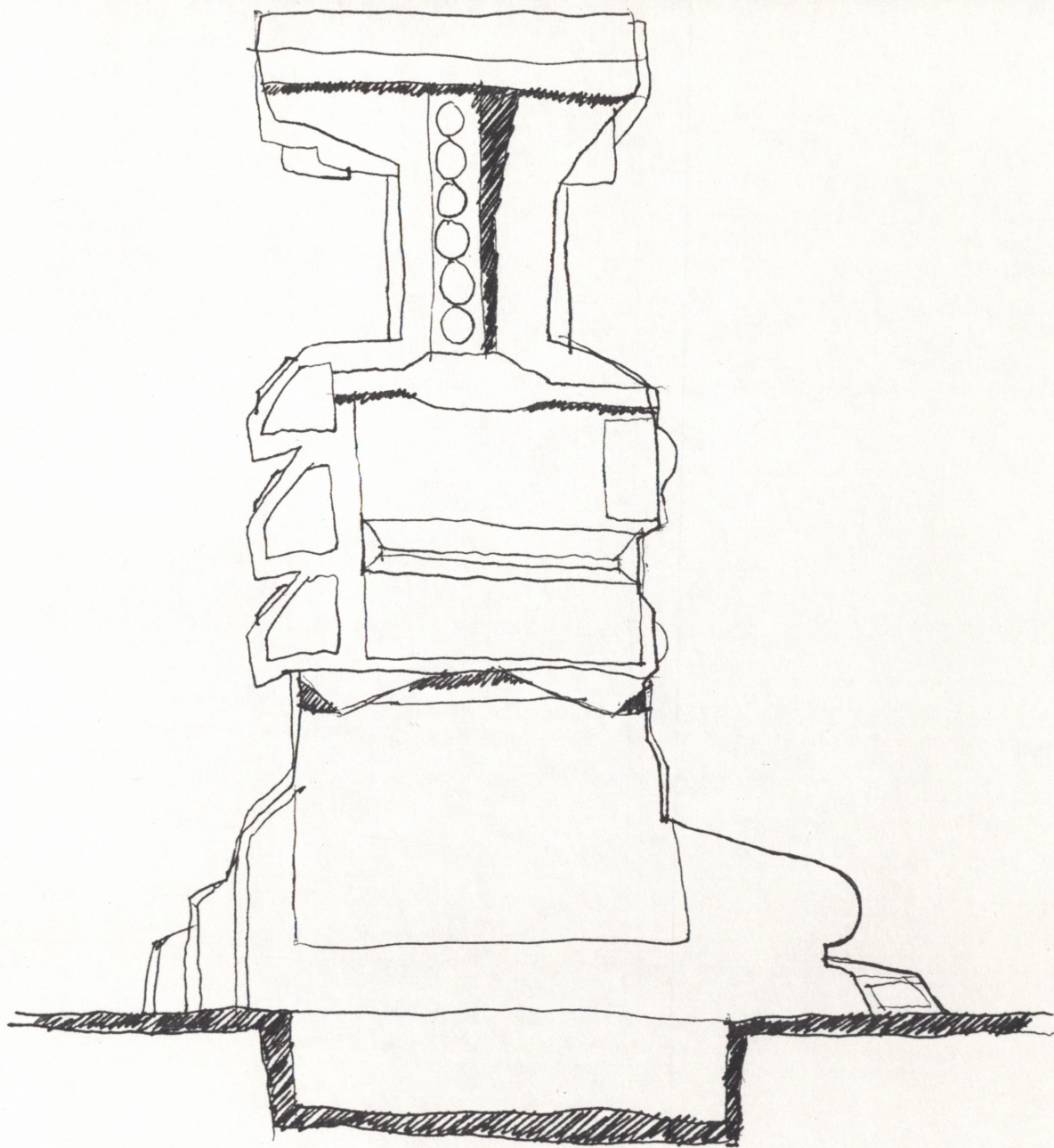
space expenditures relative to activity/production

CHARTING



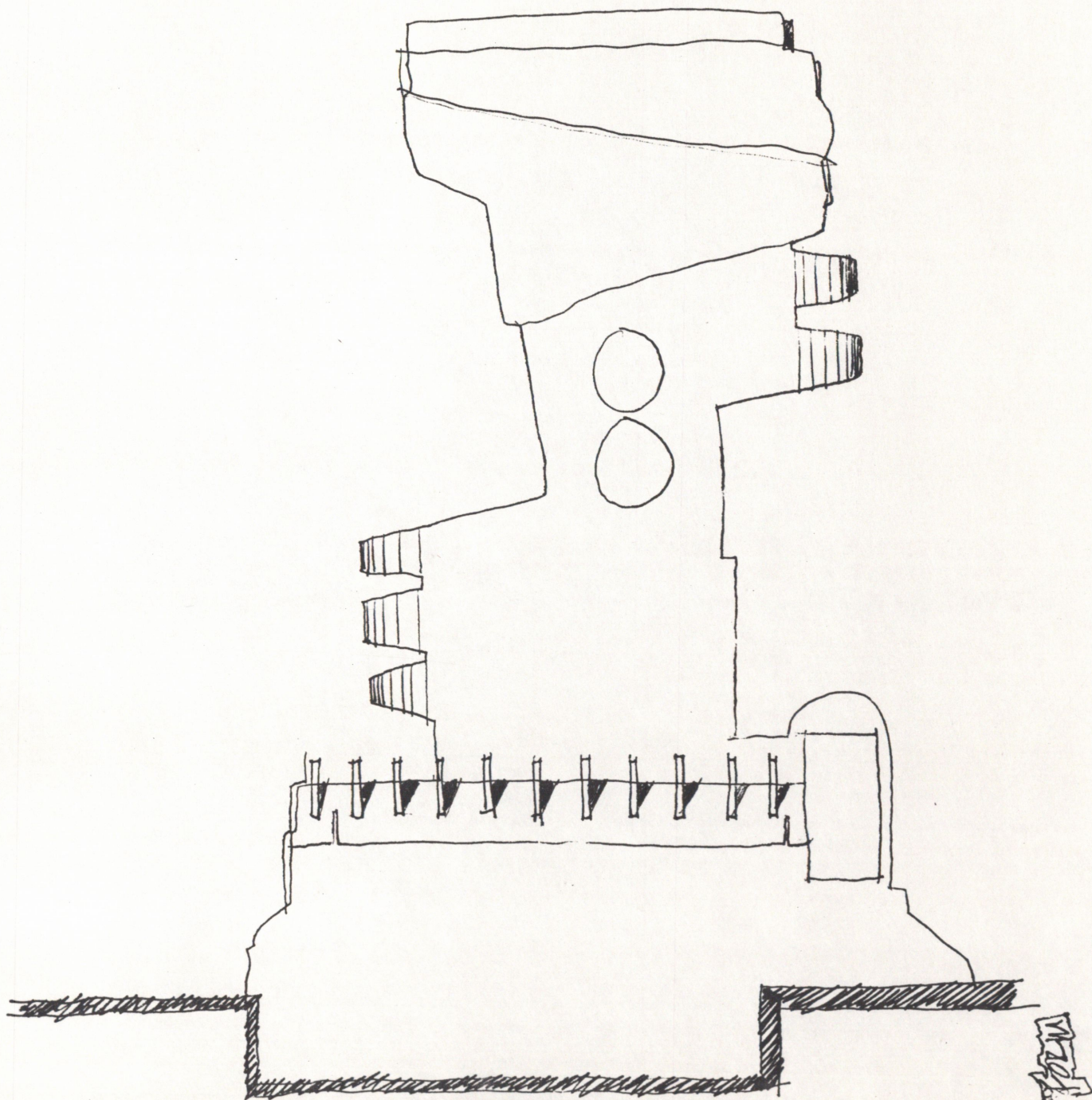
to space adjacencies relative to function

SYSTEMS



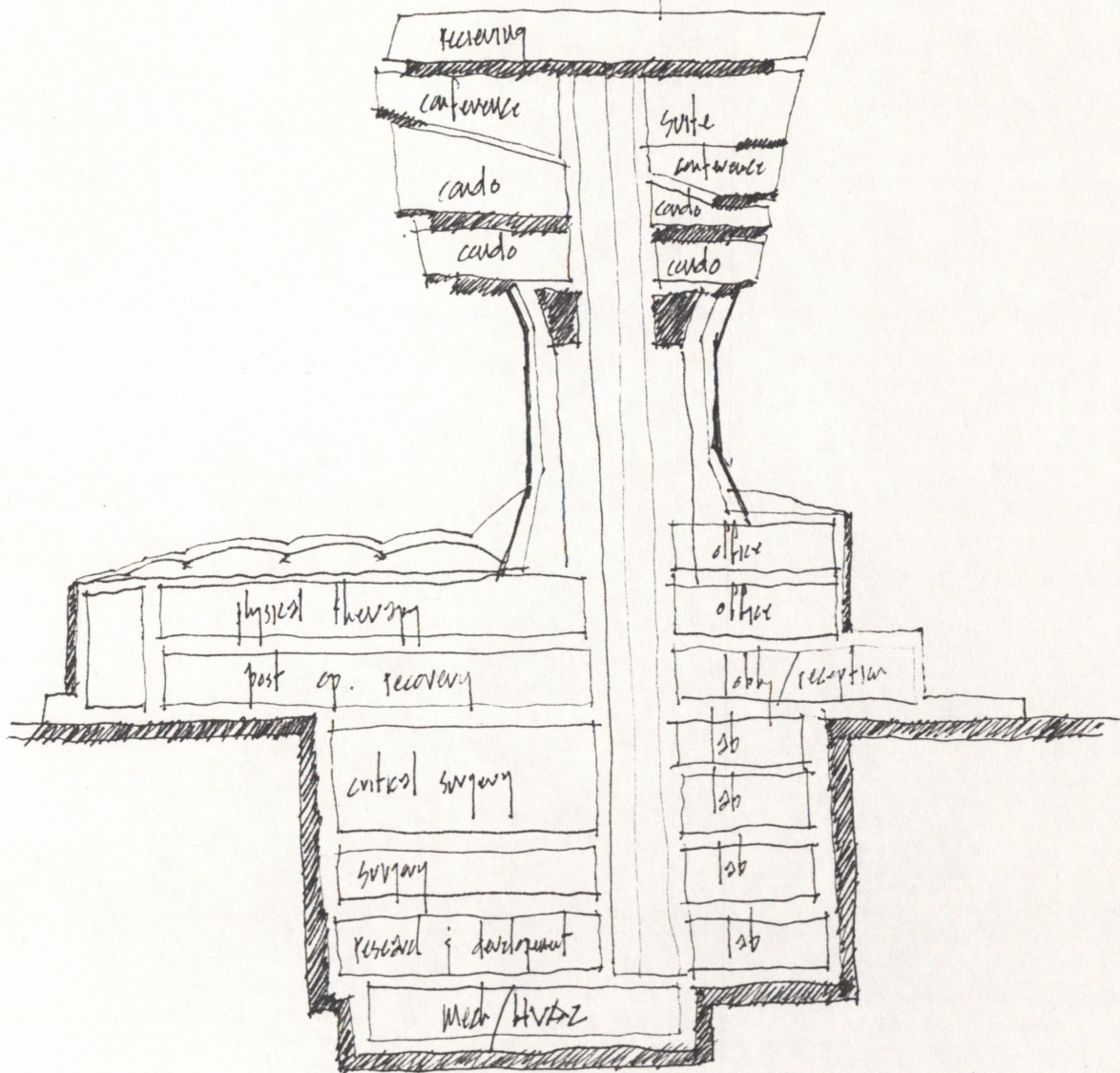
© Kevin Studios / Wazany

Wazany



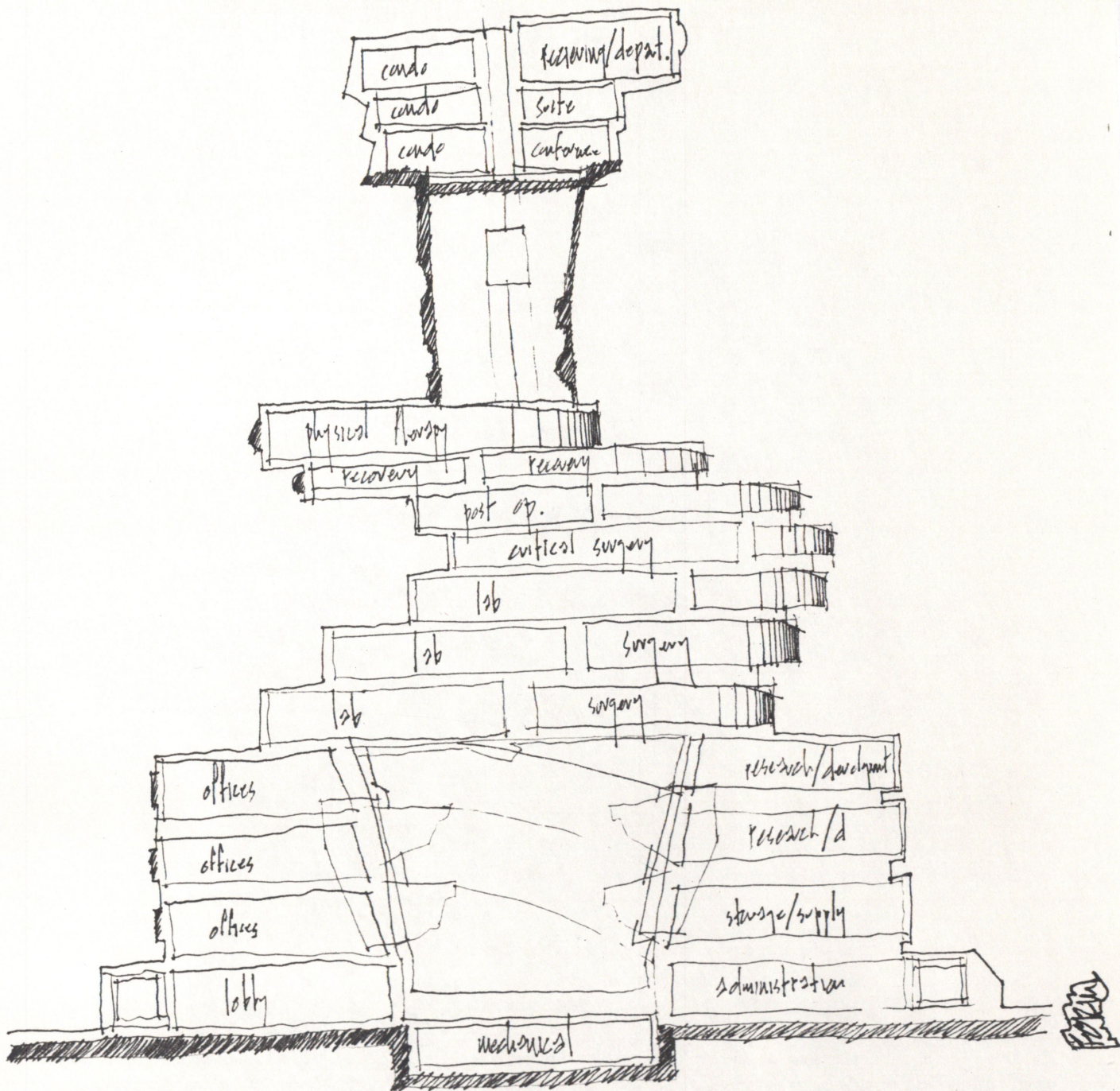
Harmon Studios / 1/23/2017

1/23/2017

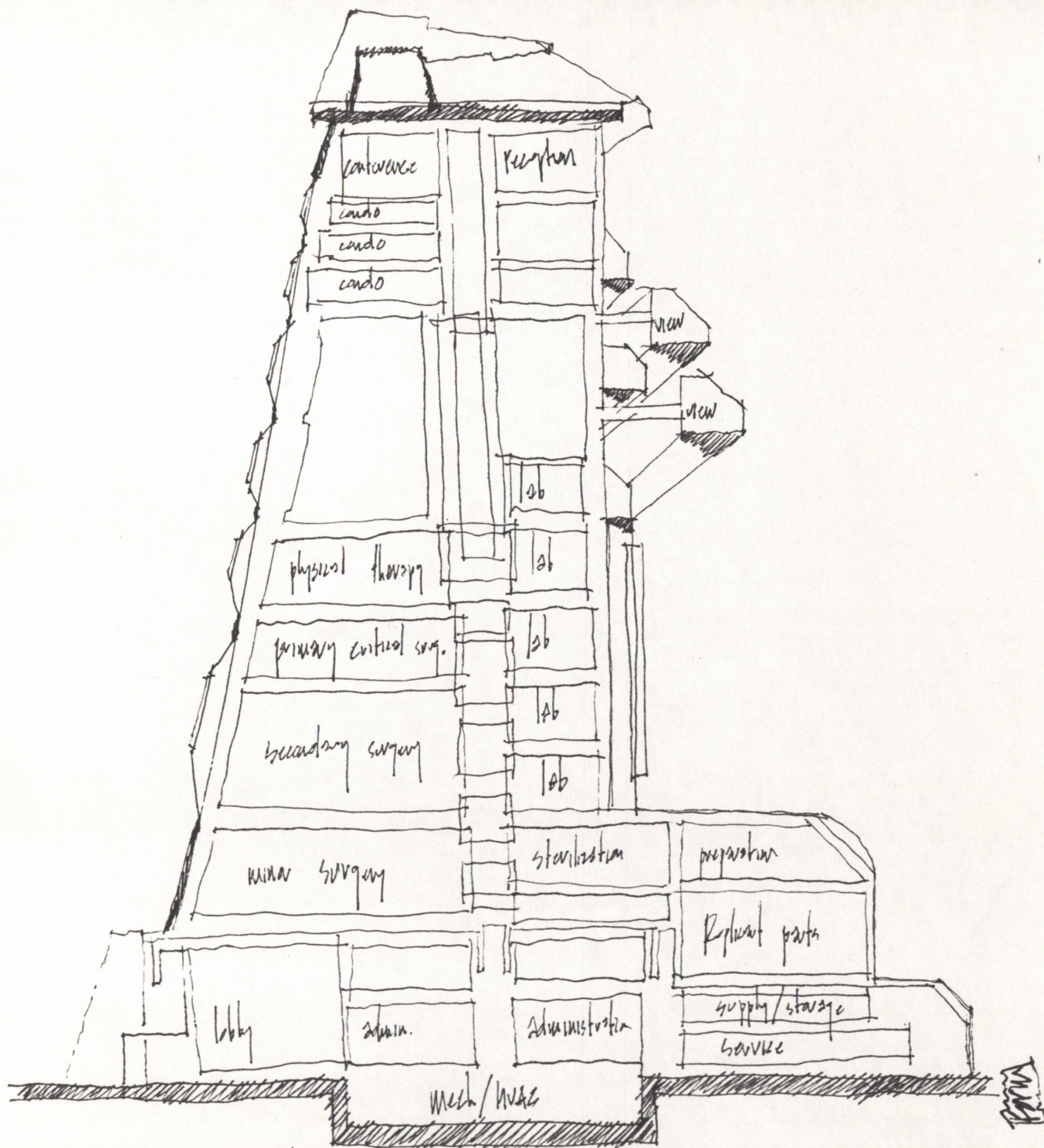


combustion studies form/function

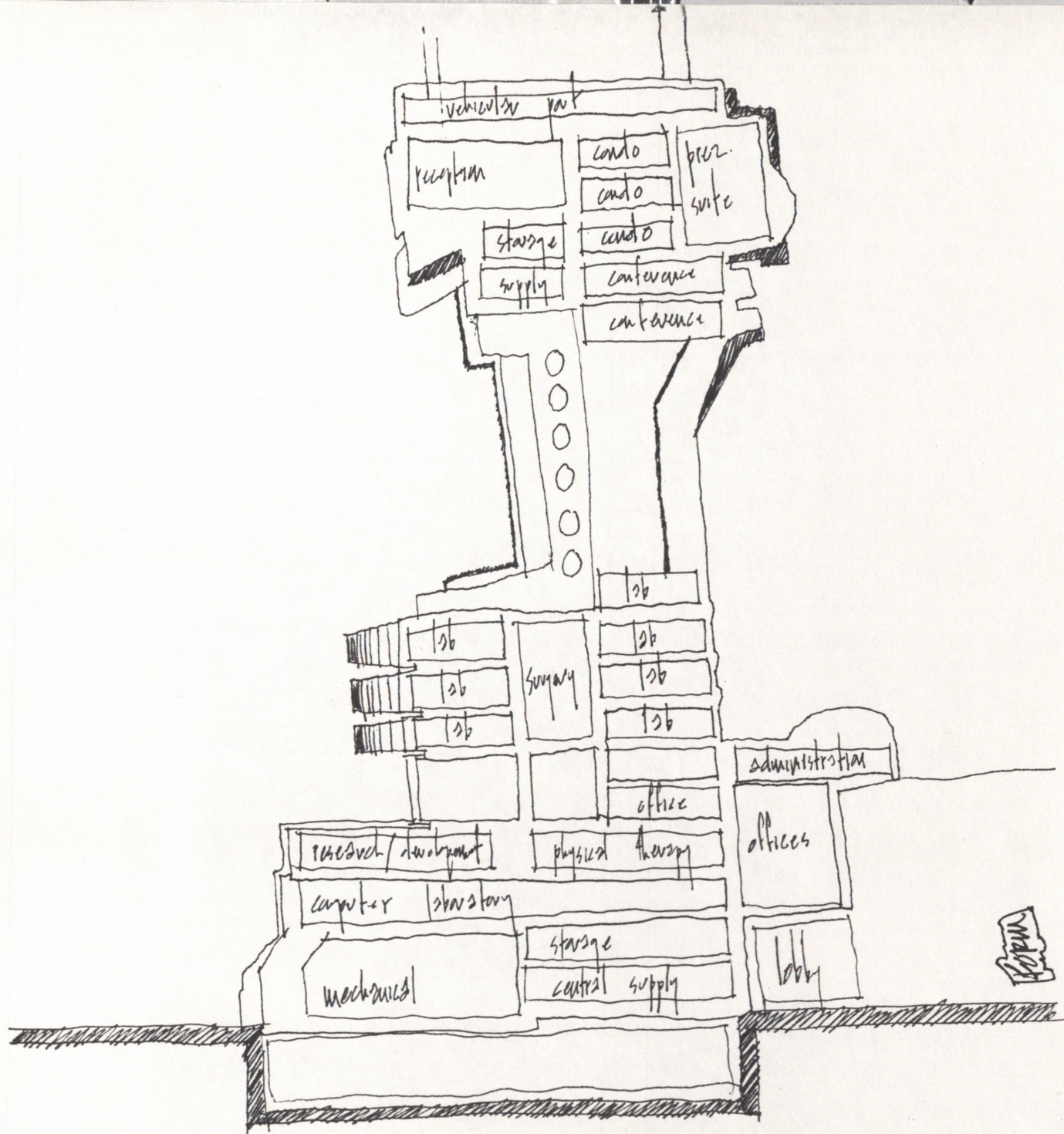
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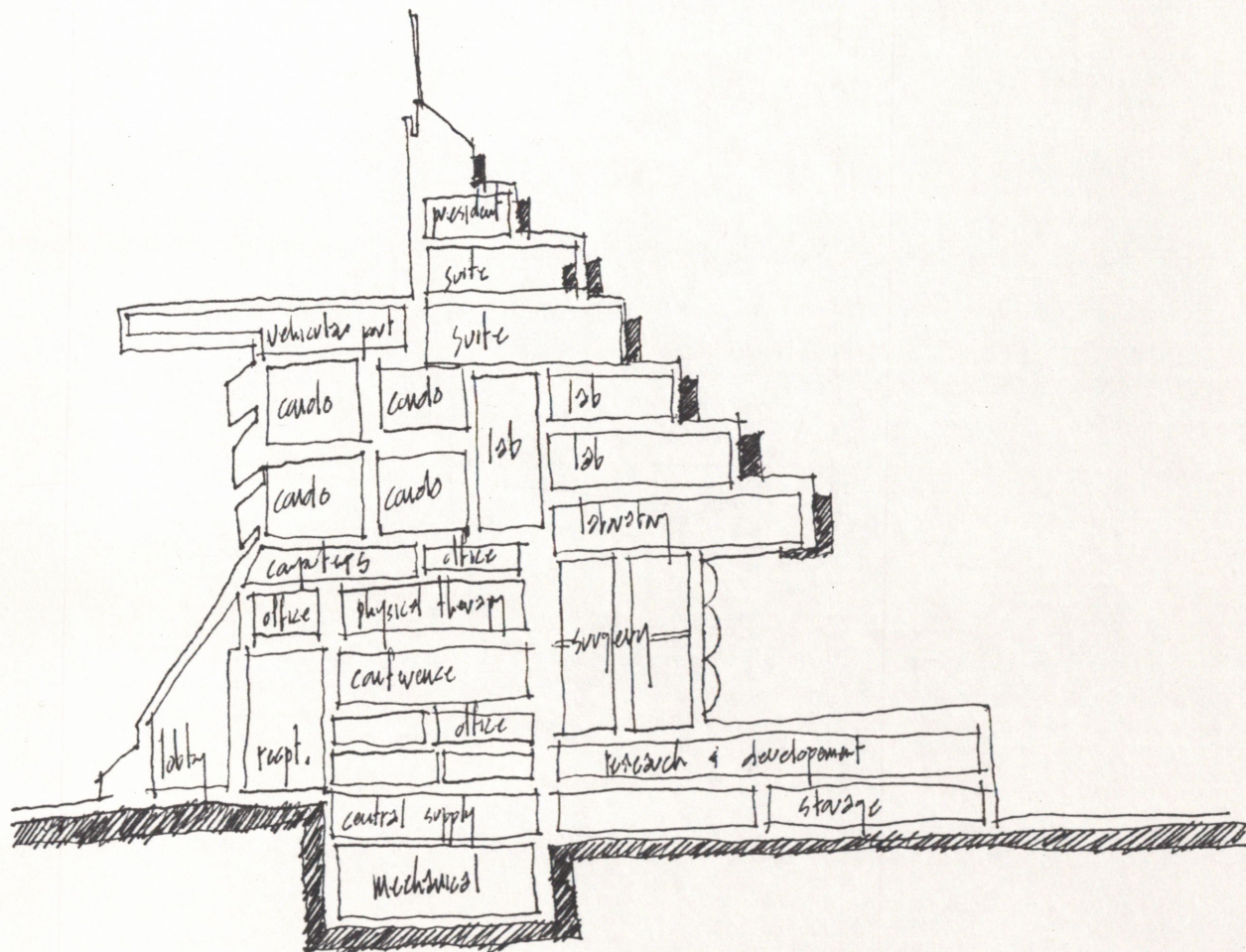


□ combination studies form/function



o combination form/function - study





Kotani

One idea the Tyrell Corporation would like to explore is the use of raw metals and steel in an exposed manner. This is to say that these materials would be used both on the interior and the exterior. These members may be used, but not limited to, the building structure, finished surfaces, flooring, and even for minute details such as fixtures, hardware, and furniture.

It seems that many times both concrete and steel are incorporated into a building for the sole purpose of structure. They contend that these materials possess many unique qualities that can allow them to remain uncovered. Both steel and concrete have exposed surfaces that can be very pleasing to our senses if left uncovered.

EXPLORATION

Another possibility that the Tyrell Corporation expressed interest in was that of making the building representative of their Robots. This could be executed in many ways. First through the skeleton the structure could be expressed therefore mimicking the actions of a robot.

By making part of the building detachable this system would be reflective of the work that the Tyrell Corporation does. Possible the entire top section of the building detaches and acts as a subterranean transport for in galaxy travel.

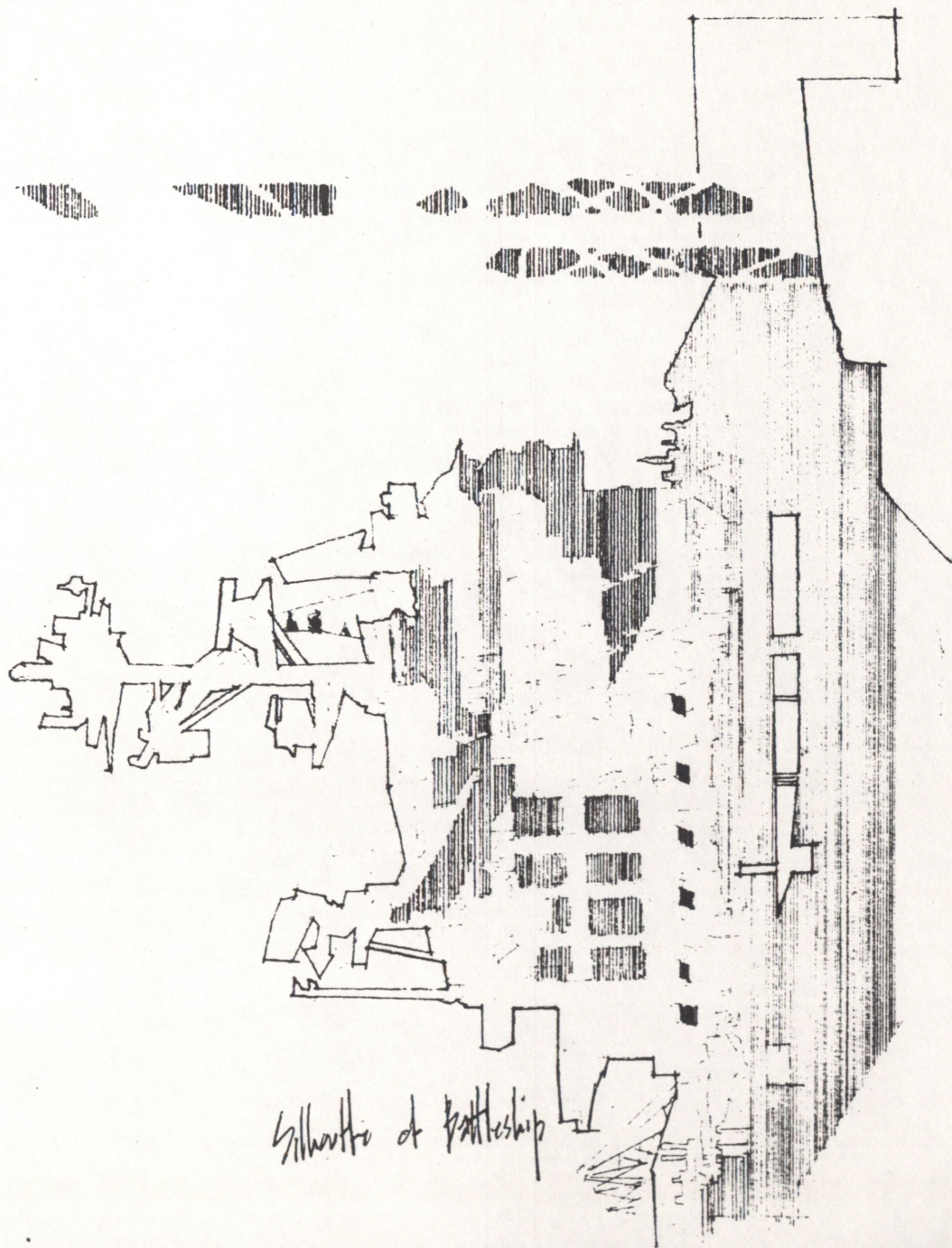
Or maybe the HVAC system is exposed thereby making noise and producing moving parts, much like a Robot. All of these possibilities could even be incorporated at the same time.

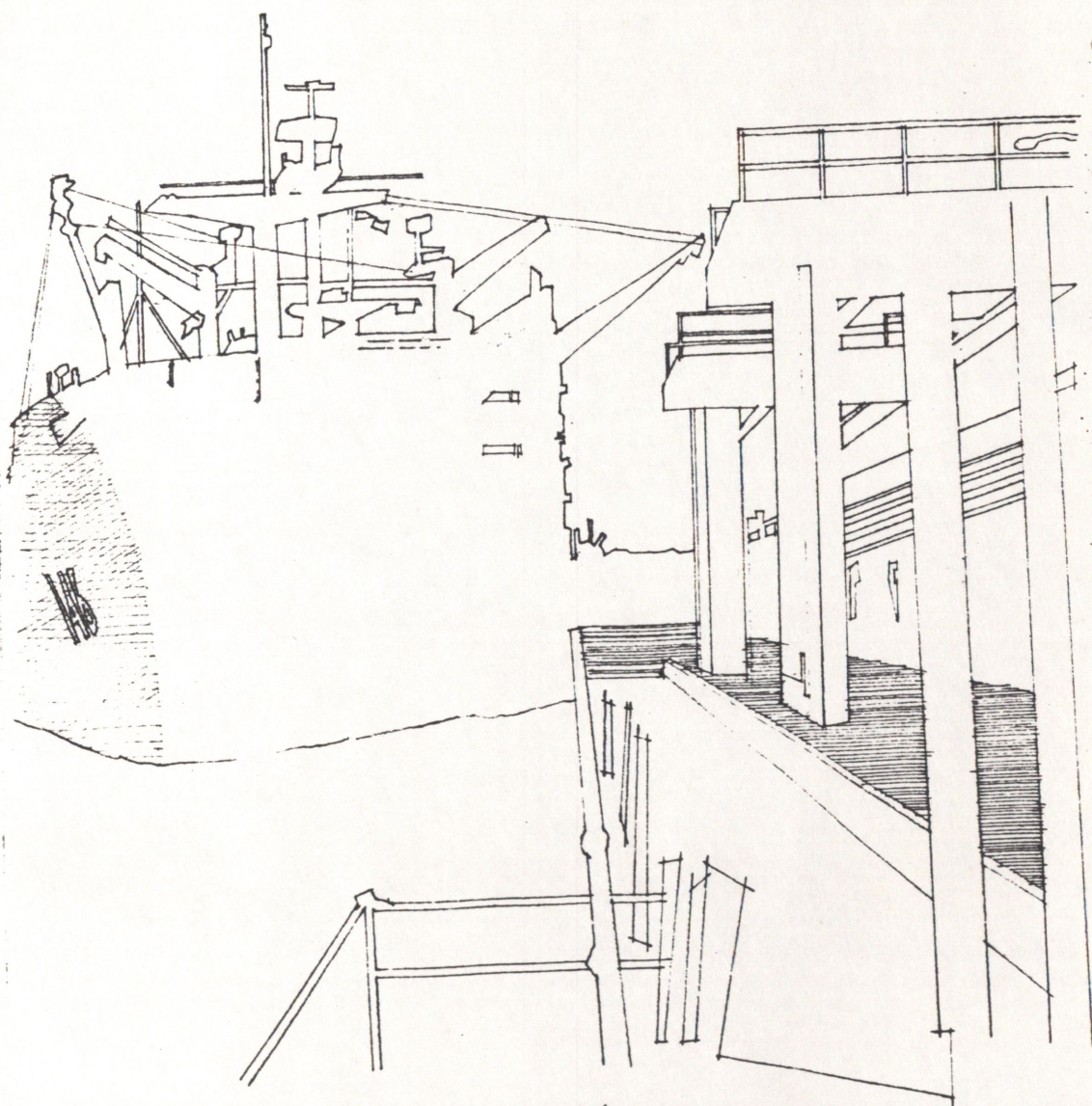
Exploration

The advanced technology today now permits not only travel to other planets, but also the capability to survive and endure on these distant planets (satellites). Traveling to and from these off world colonies has produced incredible advances in flight machines. The people on Earth have developed a fondness to these vehicles. This is due in part because of the association to the distant colonies but also because of the striking silhouettes that these great machines produce while arriving and departing Earth.

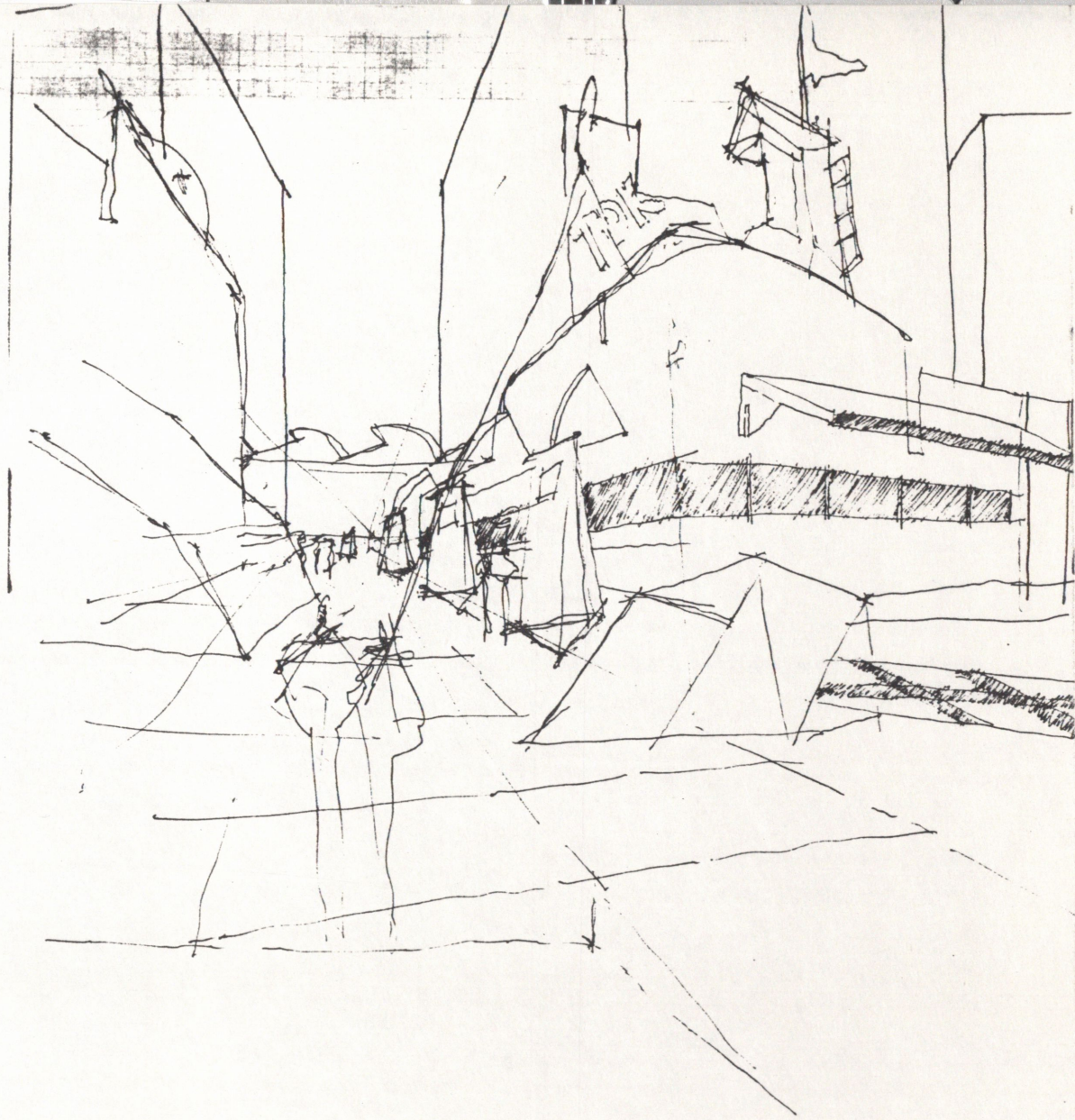
The Tyrell Corporation would like these images to be incorporated into their building. Other examples that have been suggested revolve around fighting machines, war ships, and carriers. Both power and mobility seem to be reflective of these images.

TYRELL





Vestryan st Part.



The Tribune Competition

- * Exerts from original competition program

Introduction

The Chicago Tribune's one hundred thousand dollar Architectural Competition, announced on June 10, 1922, attained a three-fold objective. It coincided with the seventy-fifth anniversary of the Chicago Tribune. It had for its prime motive the enhancement of civic beauty; its avowed purpose was to secure for Chicago the most beautiful office building in the world. It aimed to provide for the world's greatest newspaper a worthy structure, a home that would be an inspiration to its own workers as well as a model for generations of newspaper publishers.

The Tribune Paper

The Chicago Tribune made its initial appearance in June 10, 1847-four hundred copies printed on a hand press in a single room in a building at Lake and LaSalle Streets. The Chicago Tribune, truly part of Chicago and meshed with its destiny, has also grown each day contributing no mean share to the political, social, and economic development of Chicago and the middle west. Today the Tribune employs over thirty-one hundred people and produces over four million newspapers weekly.

Program of the Competition

The Chicago Tribune proposes to erect an office building upon its North Michigan Avenue property for the housing of its executive and business departments, the project is to include enlarged quarters for the steadily expanding departments now operating in the Plant Building. The new structure will be erected directly in front of the Plant with a frontage of 100 feet along Michigan Boulevard and will become the headquarters of this great city newspaper. In addition to ample facilities for present operations, the building will be adaptable to the future expansion of all

departments.

To erect the most beautiful and distinctive office building in the world is the desire of the Tribune, and in order to obtain the design for such an edifice, this competition has been instituted.

1. Proposed Building:

The proposed building will be erected upon the unoccupied portion of the Tribune property at 431 North Michigan Avenue. The building site has a frontage of one hundred feet on Michigan Avenue and extends one hundred thirty five feet east along Austin Avenue.

2. Conditions and Requirements of the Building:

- A. It cannot be reiterated too emphatically that the primary objective of the Chicago Tribune in instituting this competition is to secure the design for a structure distinctive and imposing-the most beautiful office building in the world.
- B. Each competitor is referred to the accompanying plot which indicated the present sidewalks and grades along the site of the proposed building.
- C. The lower stories of the new building will be used by various Tribune departments. The upper stories will be available for public office space.
- D. It is assumed that the building will be made solid over the entire available building site up to a height of at least 175 feet. From this point the competitor may step back the building as he sees fit, bearing in mind that the Chicago Building ordinance permits the occupation of a building for office purposes up to a height of 260 feet (This height was increased to 310 feet after the competition.) The use of a tower as a feature in the design is left to the judgment of each competitor. Should a tower be considered, its limit of height must not exceed 400 feet (modified to 450 feet) above Michigan Avenue grade level. The area of the tower or a portion of the building

extending above the 260 feet (310 feet) limit must not exceed 3600 square feet.

- E. The number of office stories is left to the judgment of each competitor. The heights of the lower stories must correspond with those of the adjoining Plant building.
- F. From the Michigan Avenue grade level to the 260 foot limit of height for the main portion of the building the depth of reveal or distance from the property line to the inside face of the plaster walls is limited to 6 feet on both Michigan Avenue and Austin Avenue.
- G. The exterior building materials are left to the judgment of each competitor.
- H. Each competitor must fully comply with the Building Ordinance of the City of Chicago.

Responses to questions from competitors.

It is unnecessary for the purpose of this competition to know the mechanical needs of the Chicago Tribune or to be concerned with the plans for developing and extending the various departments which will occupy space in the new Building. The purpose and desire of the Tribune in instituting this competition is to secure primarily a distinctive and beautiful exterior design.

The provision for stepping back the Building above a minimum height of 175 feet should in no way be confused with the requirement of Paragraph F, which limits the reveal from the property line to the inside face of the plaster walls of the building to 6 feet on both Michigan Avenue and Austin Avenue. The depth of reveal referred to applies to the exterior wall treatment only, and governs the depth of a continuous wall carried to a maximum height of 260 feet. A recessed loggia or a monumental entrance reveal would not be considered a violation to this requirement.

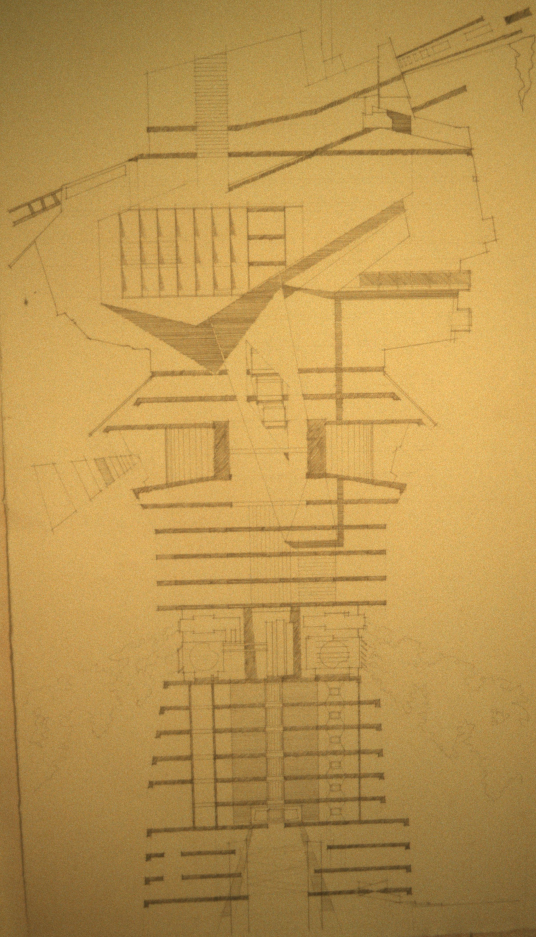




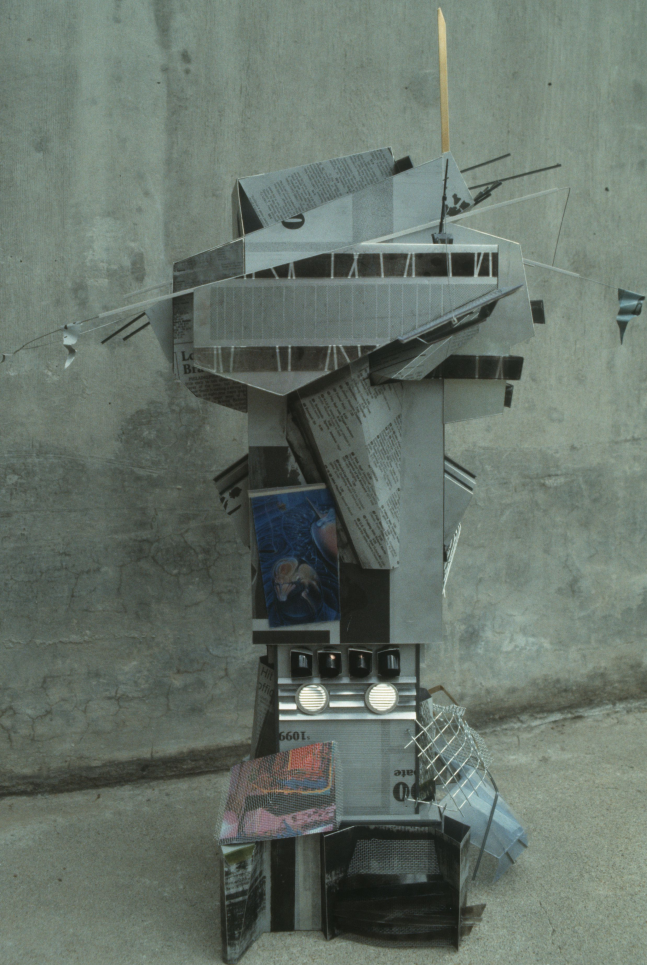








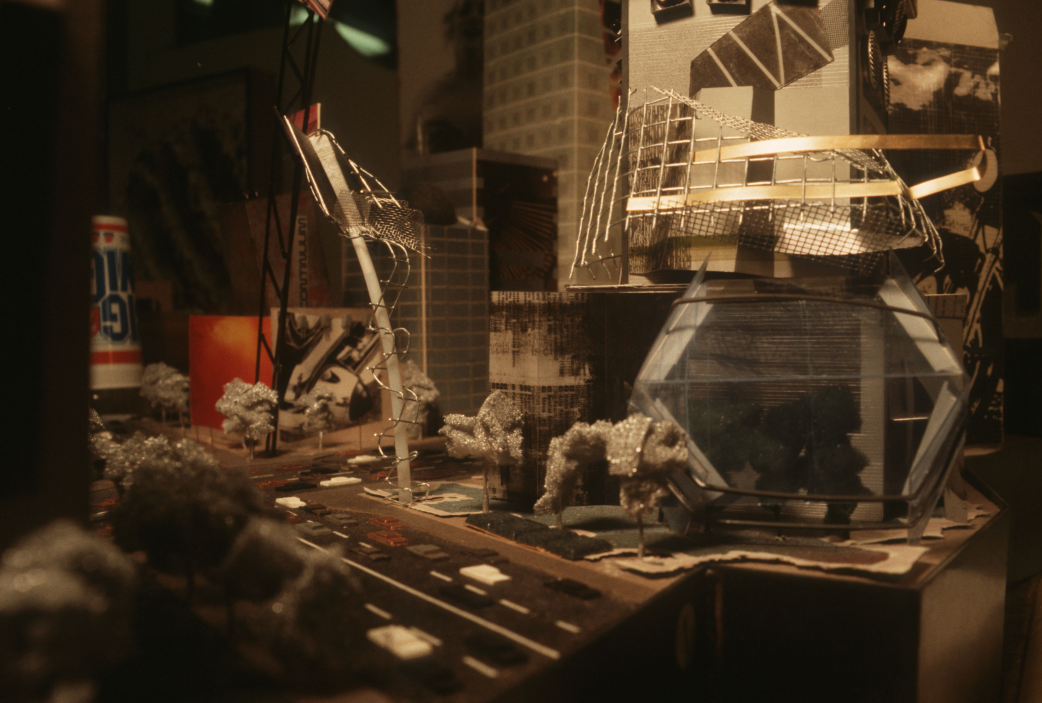


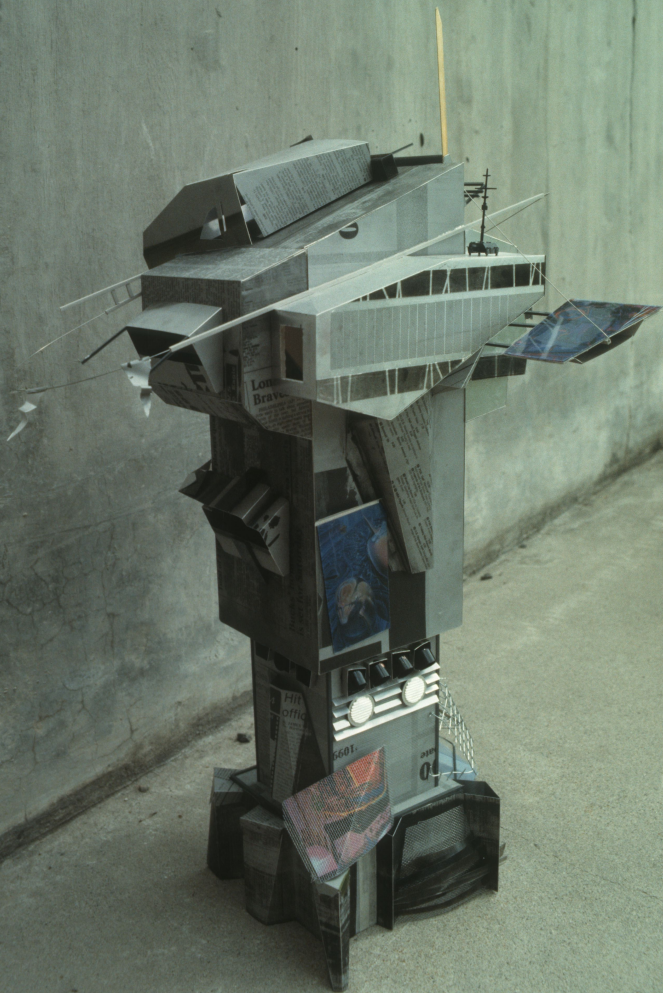






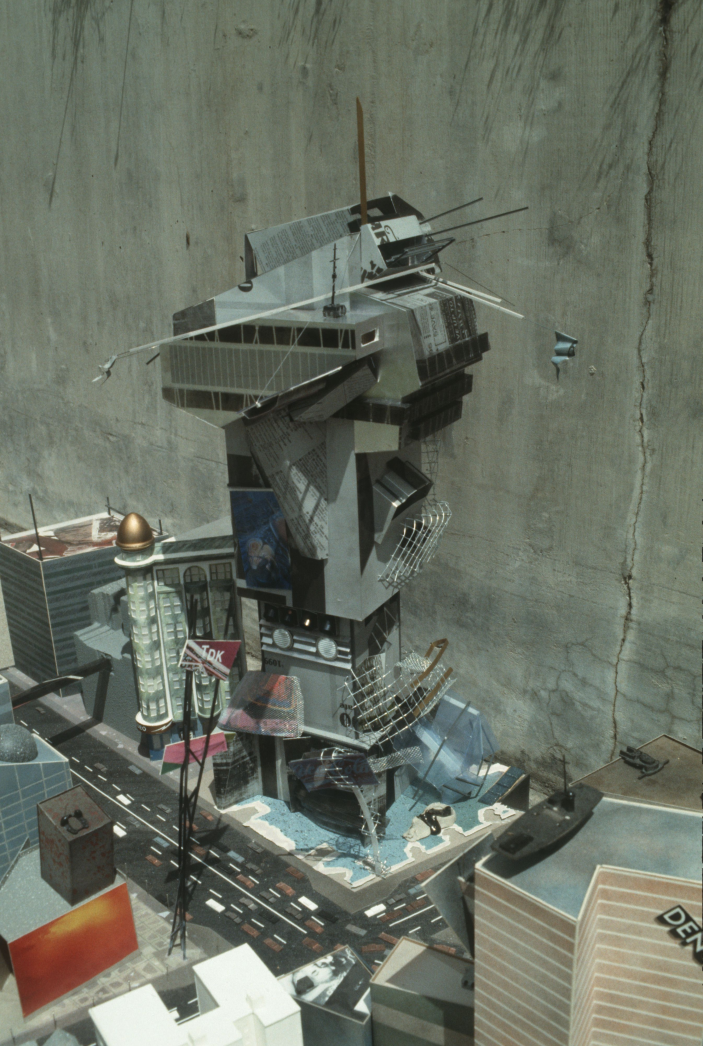












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