architecture center: indianapolis
A THESIS PROJECT BY

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THESIS CRITIC
Marvin Rosenman

OUTSIDE CRITICS
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CONTENTS:

Introduction 2
Process 7
Final Presentation 20
Program 33
Building Types Study 99
Sketchbook 123
introduction
INTRODUCTION

At the College of Architecture of Ball State University the fifth year of study is referred to as the Thesis Year. In this nine month period the student is allowed to work on the project of his choice and takes on the main responsibility for organizing and gathering information for the project. The student makes all necessary contacts both inside and outside of the University and the assigned studio critic becomes just that, a critic. Having this responsibility to the client, himself, etc., the experience becomes as close to reality as possible for the student and therefore also becomes a good transition step into practice. The project which I worked on, Architecture Center: Indianapolis, is the largest project I have worked on. It is also located in the strongest urban context which I've worked in. Both the size and the location are optimum for the type of projects I would like to be involved with in the profession. This Thesis book serves as a record of the 30 week Thesis project.
Architecture Center: Indianapolis. In its basic form is an Architecture School in Indiana. At the present time the College of Architecture and Planning at Ball State University is the only State supported Architecture School in the State and it cannot and should not be expected to handle the number of students wishing to study Architecture. Ball State accepts 120 students every year out of approximately 700 applicants. This number of acceptances is appropriate in order to keep the relatively personal atmosphere which exists. As opposed to Ball State attempting to accept more students, there could be many benefits to developing a new school in another part of the State. Indianapolis, being the largest urban center in Indiana would be the appropriate location for this school. This project was located within the urban core of Indianapolis to extract all of the varied benefits available in a city such as this. Designing in a city allows for very strong influences from the variety of functions and ages of buildings in the city. Being a school to teach people (not only the students) about Architecture the building it exists in should reflect this variety of the city. The Architecture Center is so named because it is more than a school. It accepts the people and Architects of the city which should be the responsibility of any building in an urban environment such as this. The use of the Supply Store, Delicatessen and 'open' Library allow for the people of Indianapolis to experience the building also. The
response to the pedestrian and automobile were also very critical design issues in an urban context. Another issue involved was relating to an adjacent building which was being designed at the same time. Another Thesis student, Randy Hurst, and I chose sites next to each other so that we would be faced with what we felt was a very relevant problem in urban architecture. Because of the public use of the building and along with the private needs of the student, it takes on a schizophrenic appearance. The student is seen as the most important user of the building and therefore the studios become the most identifiable element visually in the design. The public elements of the design are located on the first two floors to respond to the street level and the proposed second level walkway for downtown Indianapolis. The materials and modular grid system; and methods in which they are used become representative of the current trends in architecture, and for lack of a better term and will be referred to as "High-Tech Derivative" in that it is not as inhuman as some "High-Tech" design can be, but at the same time allows for the flexibility of the design. Various details were considered towards middle and later periods in the process so that all scales were considered.
One of the main benefits of working on this project has been to develop a better understanding of designing in a dense urban environment, since I have a strong desire to work in and with an urban core. Since the College of Architecture is in Muncie, Indiana, with a population of about 80,000, it is difficult to have projects in earlier years which deal with an urban context of any scale. Therefore, since the Thesis year allows the student to go anywhere and do any project he wishes, I decided to work with a site in downtown Indianapolis since I had easy access to it. Also, this project has allowed me to express some of my ideas about what an architecture school should be like in Indiana, relating back to the problems of having the only one located in Muncie.

The most important aspect has been the chance to have total control over a major project with minimal outside instruction. This aspect has made the experience as close to reality as possible. The studio critic, Marvin Rosenman, and the outside critics have been very helpful with opinions and criticism, but this type of help should also be sought in the profession. Through this control over the project I have been better able to express ideas I feel about architecture without trying to conform to the desires of the professor and therefore I have been happier with the end results than any other project I have done.
process
The process of the design can be basically listed as follows:

(1) Programming - Site Analysis
(2) Schematic Alternatives
(3) Schematic Development
(4) Design Development
(5) Detail Development
(6) Presentation

PROGRAM (see program section)

The programming stage lasted 1 week in its initial phase. Subsequent to this there were several programming changes made throughout the design process. In this initial program much of the information and ideas about what the project should be were derived from my own experience of being an architecture student. The first part of the program dealt with the problem description as I saw it. Such things as what I saw as the validity of the project, planning by related organizations and financial considerations were discussed. The second part reiterated any state codes which would pertain to the project as derived from the uniform building code, 1976 Edition. The third part was a client description which involved discussion of all of the people that I felt would be significant clients of the project, and what responses should be made to these various clients, the student in particular. The fourth section of the program was the site analysis which described any external and internal site features which would have an influence on the design. Things such as Union Station, the new theatre complex, weather conditions, traffic analysis, access,
etc. were discussed in this section. The fifth and last area of the program was the area of space requirements. To develop the square footages listed in this section Ball State was used as a model as well as the program for the Ball State College of Architecture extension which was prepared by Prof. Robert Fisher.

The Herron School of Art in Indianapolis was also used as a model when programming and designing the Architecture Center: Indianapolis. Herron was helpful in determining housing needs for the students and also the relationship with IUPUI (Indiana University~Purdue University at Indianapolis).

The Building Types Study (see Building Types Study section) is a collection of designs, pieces of designs, or any thing in general which you think may effect your decisions about your design. These items which go into the Building Types Study may be things very well liked or disliked. In my case there are not very many architecture schools documented, so several examples of architecture schools were included which I did not consider to be very interesting.

The development of functional relationship diagrams also occurs in the programming phase.

SCHEMATIC ALTERNATIVES

After the completion of the program and site analysis a 2 week period is allocated to develop 3 schematic alternatives. These schematics are very generalized concepts of what direction the project might go. As early as the programming phase I started to make sketches and notes in my sketchbook (see sketch-
book) which helped in decisions about what these three directions might be. From this point on the sketchbook becomes a very important tool for making decisions and also acts as a memory up through the final presentation at the end of the 30 week Thesis. I carried my sketchbook with me most of the time because ideas don't come when you want them to, and very often several ideas come at once which would be hard to remember if not written down or sketched. The building types study also had a strong influence on the 3 schematics chosen.

CONCEPT #1

The first concept dealt with a strong relation to the Union Station, the theater, and the plaza which might be formed by the three. One of the strong ideas in this concept
was also tying into the train sheds and using them for studio space to add variety to the spaces in the building. An idea developed here was that often rehabed buildings such as Cooper Union by John Hejduk make more interesting architecture schools because of the variety in spaces and the 'accident' spaces which must be used for other than what they were designed. Also, as mentioned before, variety in the design was seen as a critical issue.

CONCEPT #2

Concept #2 was based strongly on the need for flexibility in the studio and library spaces, and the non-flexibility in the offices, classrooms, etc. The basic idea of Frei Otto's Tent Structures was used here in that rigid forms for offices,
classrooms, etc. were used to support a cable structure under which any thing in the way of studio and library spaces could happen based on a steel grid.

CONCEPT #3

In Concept #3 the idea of the schizophrenia of the building was accepted as meaning two different buildings with a common connection of the studio spaces. A different site just north of the theater was used which had more land space so that 2 buildings with only 4 levels (as opposed to 6 levels in the earlier 2 concepts) could be investigated.

Throughout the entire design process the project was considered from all scales and in three dimensions also. Models were an integral part in making design decisions.
The single design which began to develop at this stage was closest in form to concept #1 but actually involved ideas from all three of the original concepts. In this phase the same portion of the site was used as in concept #1 and also the orienting of the main public spaces diagonally out to the northeast of the site to relate to the city and the public space created by Union Station, the theater, and Illinois Street. Also, the idea of the train sheds for studio spaces was used. The idea of flexibility of the studio spaces was kept in that the studio spaces were left open with the possibility of being divided, but not the necessity. The idea of the 2 buildings of concept #3
was used in that the buildings, public and private, were stacked vertically and symbolically separated by a change in geometry of the building; the curved studios vs. the rectilinear forms of the lower public spaces. They were also physically separated by a 'gap' in the building created by the outdoor workspace at the third level. The studios took the higher levels to give them the optimum views of the city. Observation is one of the primary learning tools of the architect. The curved form looks in towards the city, while giving a panoramic view of the surrounding areas. Because of the problems of heat gain on the south and west glass of the studio a double wall was created with sunscreens in between to set as a thermal trap for the sun. Faculty offices were also located in the same areas as the studios to give the students and professors easy access to one another. The classrooms and exhibit spaces were also located on these floors to help mix the various years of students. Several rooftop spaces were used to maximize views and also to add variety to the experience of being in the building. The third level outdoor workshop has already been mentioned; also, there is an outdoor lecture area above the indoor lecture room. Adjacent to the delicatessen is an outdoor eating area. The lower public areas pull back to form a plaza and at the same time project out into this plaza area to become dominant to the public. Ideas about what materials, mechanical systems, and structure systems were considered at this point, but no specific decisions were made.
Major overall design and concept decisions were made during the schematic development. In the design development stage, possible valuations on the design were considered and several more significant changes in the design came about. A definite structural system was developed throughout both phases which had significant influences on the building both visually and organizationally. The mechanical system was also finalized at this stage with the help of the systems critics in the studios. A forced air system was recommended with a mechanical room in the lower level. A separate rooftop mounted unit was used for the train shed studios. The structural system is a steel grid
with 16 foot square bays and 15 foot ceiling heights for the studio spaces. Grid system continues down through the lower non studio spaces to support these spaces also while becoming a constant reminder of the studios above. Where the grid is not used, specialized systems are used to fit the need, such as long span wide flanges for connections to the train sheds, steel joists for the classroom wing, and concrete "Ts" for the floor and roof of the lecture hall. The steel in the grid system is square tubular members painted dark gray to match the outside skin of the studios. Where the grip penetrates through the outside work space the columns are painted white to remove their dominance and increase the awareness of the split in the building. Using this grid system allowed for a very flexible form to take over in the studios which has been mentioned as a positive factor previously. The studios were opened with glazing on all north and south walls to allow for a visual bridging effect across the train sheds which are a major boundary on the site. The form of the studios is a very identifiable feature and shows the importance of the studios through strong form and color. In this sense it becomes a singular monumental identifying element, therefore small irregularly shaped windows have been punched in the east and west walls to remind of the individual student. The windows in the faculty offices are of a similar type but punched with regularity in shape, size, and spacing to represent the rigidity of the offices vs. the oper quality of the studio. Triangular openings are cut in studio floors to allow views up and down and help with the mixing of the students. Gloss is used to cover these openings because of State Fire Code.
In the lower public areas changes are also made to help tie the entire project together. The library allows maximum north light in the curved glass wall and diffused south light over the tops of the library offices for natural lighting for reading areas and work stations. The plaza paving, landscaping, and exhibit plaza were also developed in this stage. The double level exhibit area is developed to help tie the two levels of entries together.

Detailing in lighting, handrails, sunscreens, windows, etc. were developed at this stage to help tie the project together and also to the turn-of-the-century industrial styles of architecture around the site.

Material decisions were also made in this final stage. Metal sandwich panels were used in the studio levels to relate to the High-Tech qualities of the design, to add to the variety in the area, and also as a hard backboard for the softness of the surrounding brick buildings. The dark gray color allows the studios to become dominant as mentioned before and would create an interesting effect by 'disolving' at night to allow the lights from within to become dominant. The panels are also easy to assemble and once again reflect the flexibility of the studios.

The interior of the studios is simply white painted drywall so as to be easily defaced in any way the student desires. This could be related to Peter Eisenman's idea of "unloading" the space and showing the students to 'load' it; in other words,
to put whatever meanings they wish into it. The student should take an active role in creating the space he works in. Having the high (14') ceilings also helps this idea in that they become less of a barrier. Whatever colors the student chose to use in his studio space would become very visible from the outside and would work very well with the neutral grey exterior. The main color on the exterior aside from the sunscreens is "pouring" out the main entries in the form of the canvas barrel vault, brick paving, and colored banners; representing the insides of the Architecture Center spilling out and responding to the city.

The lower levels are modular precast concrete panels to relate to the modular panels of the studios while at the same time the pale grey of the concrete contrasts the dark grey of the studios. The sketchbook (Appendix #3) may be helpful in seeing the various considerations involved in the design and how they relate. Also as a detail development a mural for the west wall of the lower lobby was designed which was an abstract of the design.

FINAL PRESENTATION

Each presentation before the final was used as a model of possible techniques which might be used in the final. These earlier presentations became study models and therefore the final presentation is simply a synthesis.
final presentation
level 2 entry

architecture center:
indianapolis

lobby- west wall
program
architecture center:
Indianapolis program
A Thesis Program by

Greg M. Detmer

January 3, 1978

College of Architecture and Planning

Ball State University
1. Think your message will probably expand. 

2. Are you prepared to think about the addition of others. 

3. Site analysis.

4. Area requires.

5. Client.

6. Codes.
As the title of the project suggests; Architecture Center: Indianapolis, the project should be more than a school for the teaching of a select group of people. Instead it should be the 'center' of architecture in Indianapolis and also in Indiana. Obviously, the school should be the main aspect and center of attention as far as the design is concerned.

The site of the project is downtown Indianapolis, Indiana, at the corner of Georgia and Illinois streets. This is one block west and three blocks south of the Monument Circle. Monument Circle is geographically the center of the city. Indianapolis, on the other hand, is the geographical center of Indiana, a rather logical place to put the 'Architecture Center'. A center to study architecture (not only by the student) should be located in such a setting because of the benefits that could be derived from being in the largest metropolitan area in Indiana. The strongest variety of architecture lies in Indianapolis. The urban context would be very beneficial because of the density of public, commercial, government, industry, and private activities which occur there; and most importantly, the density of people and their daily transactions which is what architecture is all about.

With all of the activities which occur in the city the Architecture Center should be receptive to the city, otherwise it would be taking up valuable space in the urban core which should be beneficial to the city. The Center could be a place for architects from Indianapolis and Indiana to use. It could become a resource center for these people with it's library, meeting spaces, and collection of professional and specialized professors. There is often a communication problem between
college professors and people in the field because of the egos involved. This problem may not exist in architecture as much as other fields because of the fact that most architects went to college and can relate to the college experience and what the student is involved in, but it still exists to some degree. The architecture school being pulled away from the physical contacts of the university and joined with the space and the people which it prescribes to deal with should help this situation, especially if the school can draw the attention of the practicing architect and also the layman through various methods. The Center could also develop some contact with the layman by being located in such a diversified position as the urban core.

The site is in an area of specialization - hotels, convention center, parking structures, business offices, retail, and adjacent to a future theater complex. This variety, which the Architecture Center will be adding to is what makes the downtown area in any city an enjoyable and interesting place. The Architecture Center should thrive on this variety and respond to it. The variety should be reflected in the design.

The Architecture Center should be a flexible building and be able to change with the demands placed on it. Areas such as the studios and the library will be constantly changing and the building should be able to except these changes.
VALIDITY

The Profession of architecture is becoming more complex and more important constantly. The schools in which the architects are taught are, in essence, the most important architecture in the world. There is an increasing number of applicants to architecture schools in Indiana judging by the increasing number of applicants at the College of Architecture at Ball State University. Only 120 now students are admitted to the Ball State College of Architecture each year, well below half of those that apply. Notre Dame also has an architecture school but since it is a private school, it is difficult for many people to pay the high tuition. Ball State is the only state supported school in Indiana at the present time with an architecture school, and it can not and should not handle the numbers of students wishing to study architecture. If a school were to expand to accept too large a number of students then the strong relationships within the school would be lost. A second state supported school could absorb some of this abundance of students. The two schools could then support each other by means of visiting professors, guest lecturers, etc. Ball State also has other problems in supporting an architecture school. There is little benefit to be seen in being so closely related to a large university. The Architecture Center: Indianapolis could rely on the IUPUI* campus a few blocks away for the general studies necessary much in the same in the same way as the Herron Art School is doing now. In speaking with Mr. Thomas, the assistant to the dean at Herron, I found that the school was not too much effected by becoming involved with IUPUI. They still have basically the same program that they did when it was a private school. The Architecture Center would not be bothered with some of the irrelevant politics involved in the university system.

* Indiana University, Purdue University at Indianapolis
As for the reasons for locating the Architecture Center in Indianapolis, there are several which have already been mentioned in the Problem Description such as the central locality in the state and the vitality of the urban center. Indianapolis has a well developed highway system of relatively easy access to the site. The cost of living for the student is also relatively low compared to other major urban centers. Mr. Thomas also commented that Indianapolis was an economical place for the students at Herron to live.

Another problem at Ball State is its location. Muncie is a non-progressive industrial town which has little if any concern for the student, especially the architecture student. Indianapolis, on the other hand, would be much more receptive to the student and the school, especially the architects. Along with Muncie being a non-progressive town, Ball State is the least progressive of the major state supported schools, this is definitely not conducive to the progressive atmosphere necessary for an architecture school.

Since the College of Architecture at Ball State University does not have much contact with the people in Muncie, it is sometimes criticized for having projects which do not deal with reality. Great use could be made of architects and other related professionals in Indianapolis who could be used as critics from outside the school, which would make the student more aware of outside opinions.

Generally I wholeheartedly agree with your suggestions.
PLANNING BY RELATED ORGANIZATIONS

The College of Architecture and Planning at Ball State University will have a strong influence in the design of the Architecture Center. Many of the area requirements set in this program will be derived from what they have at Ball State. When the Architecture Center is in operation these two schools will have a strong influence on each other. They can become a resource for one another through both information and people.

The Herron Art School will be influential as a model design school. Herron has been located close to the downtown area for 75 years and in recent years has become part of the IUPUI complex. With this background they will serve as a very good model. Herron has both day and night classes and could be used by the students at the Architecture Center for art classes.

As mentioned before, the Architecture Center will be part of the IUPUI complex much in the same way that Herron is. IUPUI will be responsible for the general studies taken by the student.

The new Theater complex on the same site will be changing throughout the design process and will constantly affect the Architecture Center in different ways.

The Union Station renovation will be very beneficial for the site and surrounding areas. With the several new facilities being constructed at one time, it should insure the success of the project.

Other projects which are in the planning process by the city at the present time, such as the upper level walkway which would connect the

13
downtown area for pedestrians above the street level, would also be very beneficial to the projects. Report UPR 770 of the Department of Metropolitan Development studies this prospect in detail. Another project which would help would be the peoplemover project which is an elevated mass transit system which would connect several downtown areas and also the IUPUI campus.
Most of the financial support for the Architecture Center: Indianapolis will be in the form of state support. State support is the dominant type of endowment at IUPUI, and as far as financing is concerned, the Architecture Center will just be another department at IUPUI. Other support will be in the form of tuition payments from the students.

The current cost per year at Ball State University per student is $795.00 per year for a normal academic load (1977/78 school year).

The current cost per year at the Herron Art School, where the curriculum is planned out for the student is $650.00 per year (1977/78 school year). It is assumed that the cost for the student at the Architecture Center: Indianapolis will be in the same general area.

Estimated building costs for a building of this type would be 45 to 55 dollars per square foot. With an estimated building area of 79,000 sq.ft. this would put the overall cost of the building from $3,500,000 to $4,300,000.
Occupancy allowed

Group A - Division 2.1

- Any building or portion of a building having an assembly room
  with an occupant load of 300 or more without a stage, including
  such buildings used for educational purposes and not classed
  as a group B or group R, division 2 occupancy

Fire Zone #1

Fire resistance of exterior walls

- 2-hour, less than 20 feet
- 1-hour elsewhere

Openings in exterior walls

- not permitted less than 5 feet
- protected less than 20 feet

Fire Zone #1 restrictions

- only of type I, II-F.R., II one hour, III one hour, or IV
- open parking garages may be of type II - N construction as
  permitted by section 11.09
- roof coverings shall be fire retardant as specified in section
  3203(e)

Required separations in buildings of mixed occupancies

<table>
<thead>
<tr>
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<th>B-1</th>
<th>B-2</th>
<th>B-3</th>
<th>B-4</th>
<th>B-5</th>
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<tr>
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<td>3 h</td>
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Maximum Height of Buildings

47
<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
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<tbody>
<tr>
<td>F.R.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Unlimited</td>
<td>160</td>
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<td>not permitted</td>
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(F.R.-fire resistant, HT-heavy timber, N-no requirement)

Uniform and concentrated loads

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<th>Uniform seating &amp; other areas</th>
<th>Stage areas &amp; enclosed platforms</th>
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<td>Private pleasure car storage</td>
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<td>Stack rooms</td>
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<tr>
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General requirements for group A, division 2.1 occupancies

- a fire-resistive ceiling shall not be required in one-story buildings of type II, one-hour, II-N, III, IV, or V construction having an open frame roof.

- division 2.1 occupancies with an occupant load of 1000 or more shall be of type I, II-F.R., II, one hour, III, one hour, or IV construction.

- group A assembly rooms having an occupant load of 1000 or more shall not be located in the basement.

Location on Property

- All buildings housing Group A, Divisions 2, 2.1, 3 and 4

48
Occupancies shall front directly upon or have access to a public street not less than 20 feet in width. The access to the public street shall be a minimum 20-foot wide right-of-way unobstructed and maintained only as access to the public street. The main entrance to the building shall be located on the public street or one the access way.

Exit Facilities

- Stairs, exits, and smokeproof enclosures shall be provided as specified in chapter 33. (see also section 3310.)

Shaft Enclosures

- Elevator shafts, vent shafts and other vertical openings shall be enclosed, and the enclosure shall be as specified in section 1706.

Special Hazards

- Chimneys and heating apparatus shall conform to the requirements of chapter 37 of this code and the mechanical code.
- Motion picture rooms shall conform to the requirements of chapter 140.
- Flammable liquids shall not be stored or stored in a group A occupancy.
- All exterior openings in a boiler room or rooms containing control heating equipment if located below openings in another story or 10 feet from other doors or windows of the same building shall be protected by a fire assembly having a three-fourths-hour fire retention rating. Such fire assemblies shall be fixed, automatic or self-closing.

Every room containing a boiler or central heating plant shall be separated from the rest of the building by not less than a
one-hour fire-resistive occupancy separation. Exception: boilers or central heating plants where the largest piece of fuel equipment does not exceed 400,000 BTU per hour input.

<table>
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<th>Area per Tier (sq.ft.)</th>
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<th>Mechanical Access Automatic Fire-extinguishing System</th>
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<tr>
<td>HI-II.</td>
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Open Parking Garages: Interior Walls

Distance from property line to building:

- 0'-10'  2-hour
- 10'-20'  1-hour

Permanent Occupancy of Public Property

- No part of any structure or any appendage thereto, except signs, shall project beyond the property line of the building site, except as specified in the chapter.

- Structures or appendages regulated by this code shall be constructed of materials as specified in section 1710.

- Nothing in this code shall prohibit the construction and use of a structure between buildings and over or under a public way provided the structure complies with all requirements of this code.

- The space adjoining a building below a sidewalk on public property may be used and occupied in connection with the building for any purpose not inconsistent with this code or other laws or ordinances.
regulating the use and occupancy of such spaces on condition that
the right so to use and occupy may be revoked by the city at any
time and that the owner of the building will construct the necessary
walls and footings to separate such space from the building and pay
all costs and expenses attendant therewith.

-Oriel windows, balconies, unroofed porches, cornices, and appendages
such as water tables, sills, capitals, bases and architectural pro-
jections, may project over the public property of the building
site a distance as determined by the clearance of the lowest part
of the projection above grade immediately below, as follows:

  - Clearance above grade less than 3 feet - no projection
    permitted
  - Clearance above grade over 3 feet - 1 inch of projection is
    permitted for each additional inch of clearance, provided that
    no such projection shall exceed a distance of 4 feet.

-Awnings are temporary shelter supported entirely from the exterior
wall of a building

-Awnings shall have noncombustible frames but may have com-
  bustible coverings. Every awning shall be collapsible and
  retractable.
The client is a very difficult term to define in a project such as this. There are really several clients of varying importance. Each has both similarities and differences in what they need the project to do for them.

The client in the 'traditional' sense would be IU. They would be the controllers of the money and also would have the final say in the decisions. A main problem could develop here in that IU is not oriented towards the design fields. The main interests there are in medicine, law, and business. Judging from the conversation with Mr. Thomas of the Herron Art School, they encounter few problems in dealing with the administration at IU. They allow Herron to control themselves for the most part. This type of relationship would also be necessary for the Architecture Center.

Another possible client would be the people of Indianapolis and of Indiana. Since the main source of financial support for the Architecture Center would be through the state, then the center should be responsive to the people who pay the taxes. The center is a public facility. The center should be available for the architects and non-architects of Indiana to use as a resource and information center.

The most important client involved would be the student. If the building needs to respond to one group in particular it is the student. The student is also one of the main financial contributors to the center and they are the reason it exists. The building needs to be flexible to respond to the students needs and wants. Many schools have the
problem of being more concerned with the staff and faculty and the politics involved, when the student doesn't care about the politics involved in running a large university. The main concern of the school should be the student and this should be reflected in the design.
INDIANAPOLIS-LAPION COUNTY

In 1970, Indianapolis ranked 29th in size among the 250 metropolitan areas in the country. Indianapolis serves much of central Indiana as a regional center for marketing, supply and distribution of goods and services; for financial and commercial activities; for cultural events; for political and administrative governmental services; and for medical services. This role has been strengthened by Indianapolis' location at the center of the state, at the hub of transportation facilities.

In addition to these, Indianapolis also serves as an educational center for the state of Indiana. Indiana and Purdue Universities have a combined urban campus with a student population approaching 20,000.

In addition there are 16 special purpose schools downtown. The majority of Indianapolis office space is downtown. Of all the office space development since 1961, 52% has been built downtown. The major banks have all chosen to keep their main offices within the Regional Center.

Besides containing many of the region's nightclubs, restaurants, and theaters, the Indianapolis Regional Center contains two of Indiana's biggest entertainment attractions, the Indianapolis Convention Center and the new Sports Arena. It also contains the main branch of the Indianapolis Public Library, the Indiana State Library, and the State Museum. Unfortunately, in the planning of the Indianapolis Museum of Art it was decided to locate it outside of the downtown area. Indianapolis also has 61 acres of parks and open space and 27 of the city's historic landmarks and buildings including Union Station.

Even though downtown Indianapolis has many positive assets and great potential, it doesn't offer a pleasant pedestrian environment. Expect
for Monument Circle and the downtown parks, the pedestrian is either on the sidewalk, in the street, in an alley or in a building. Spaces should be provided for eating, recreating, talking and resting out of doors. Except for parks, there is a general lack of significant landscaping in downtown Indianapolis. Much of the new construction has provision for landscaping, but there are still many blocks with no landscaping. Parking is at such low density that people often have to walk several blocks from car to destination. Sixty-three percent of the 30,318 Mile Square parking spaces are surface spaces.

CIRCULATION

The basic circulation system in Indianapolis is a grid and radial system of conventional streets and highways. At the center of the City is Monument Circle. The Circle forms the meeting point of the historic grid and radial axes which provide Indianapolis with a structure generally reminiscent of Washington, D.C. Indianapolis has a circumferential limited access highway system. The belt system has done much to relieve traffic congestion in the center of Indianapolis. A second inner belt distributes traffic to the downtown streets. One arm of the inner highway system, Interstate 70 in this case, passes a few blocks south of the Architecture Center: Indianapolis site, providing easy entry and exit from the downtown area.
SITE ANALYSIS

A. Context: The proposed facilities will be located in Indianapolis, Indiana. Indianapolis is located in the central portion of the state - 186 miles southeast of Chicago, 234 miles east of St. Louis, and 178 miles northwest of Cincinnati. Specifically, its latitude is 39 degrees, 45 minutes north and its longitude is 86 degrees, 15 minutes west. Currently, the greater metropolitan area has a population of approximately one million. Indianapolis is located within Marion County, which is bounded by Hancock County to the east, Madison to the northeast, Hamilton to the north, Boone to the northwest, Hendricks to the west, Morgan to the southwest, Johnson to the south, and Shelby to the southeast.

B. Site Description: The city block with which we are concerned is located in the Central Business District of Center Township, Indianapolis. Similar to the basic grid pattern of the downtown area, it is a 420 foot square bounded by Georgia Street to the north, Illinois Street to the east, Louisiana Street to the south, and Capitol Avenue to the west, all 90 feet in width. The block is sectioned into quarters by Mobile Street, 20 feet in width, which runs east-west and a 15 foot alley which runs north-south. It is on the east half of the block that the new facilities will be located.

C. Legal Description: Square 88 (see plot map page

<table>
<thead>
<tr>
<th>Owner</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meridian Investors Co.</td>
<td>148 St. southside S-E 1-4, Sq.</td>
</tr>
<tr>
<td></td>
<td>28, Center Township, Indianapolis</td>
</tr>
</tbody>
</table>
7. Meridian Investors Co. 52 ft. northside S-E 1-4, Sq. 88, Center Township, Indianapolis
8. Atkinson Warren Co. 16.5 ft. southside N-E 1-4, Sq. 88, Center Township, Indianapolis
9. Atkinson Warren Co. 33.5 ft. southside N-E 1-4, Sq. 88, Center Township, Indianapolis
10. Atkinson Warren Co. 50 ft. southside N-E 1-4, Sq. 88, Center Township, Indianapolis
11. Salvation Army 50 ft. northwestside N-E 1-4, Sq. 88, Center Township, Indianapolis
12. Indiana National Bank 50 ft. northeastside N-E 1-4, Sq. 88, Center Township, Indianapolis
13. MJS Realty Corp. 50 ft. northwestside N-E 1-4, Sq. 88, Center Township, Indianapolis
14. Salvation Army 50 ft. northwestside N-E 1-4, Sq. 88, Center Township, Indianapolis
15. Salvation Army 50 ft. northwestside N-E 1-4, Sq. 88, Center Township, Indianapolis
16. Indianapolis Painters Union 50 ft. northwestside N-E 1-4, Sq. 88, Center Township, Indianapolis

D. Existing Use: Parking facilities, no structures.

E. Zoning: C-4 Community-Regional Commercial District
1. Permits major business groupings and regional shopping centers.
2. Permits most C-1 and C-3 uses as well as department and discount department stores.
3. Limited outdoor activities permitted.
4. Heavy traffic generators require excellent thoroughfare access.
6. 65 ft. building height maximum; provided however, that within 200 ft. of a residential district, the maximum height shall be 35 ft.
7. Yards: side - 0 ft.; rear - 0 ft.
8. 20 ft. setback (side or rear) where adjacent to a residential district.
F. Utilities: The Indianapolis Power and Light Plant is located in the immediate vicinity. Acquisition of temporary and permanent utility services should present no unusual problems. Lines for water, gas, power and telephones run both north-south and east-west beneath the major streets. Storm sewers at each street intersection drain the site.

G. Sensory Factors: The area is designated as one of support for the primary downtown district. Presently it is within a dense urban context but facilitates mainly automotive traffic. It is noisy, congested, and contains the similar crime problems of other major metropolitan areas. As well, the area lacks the physical sensation of urban density, as there are many open spaces which break the 'street rhythm'. Surrounding structures are noteworthy for both their architecture and potential development, but at present, they lack the necessary appeal to draw pedestrian traffic. To the east, the Atkinson Hotel and other retail facilities will break morning light, and to the west the Salvation Army warehouses will break the western winds.

H. Existing Structures: To the south of the site, directly across Louisiana, are train sheds, and to the southeast is Union Station. It is the most significant structure in the area. It has a granite foundation, brown stone from Pennsylvania for moldings, pressed bricks for the external facade, wood and iron moldings, and stained glass in the interior. This, along with the 150 ft. high clock tower, provides a landmark on the south side of the city core. The station and
its sheds set a definite hard edge, boundary for the downtown business district. Union Station is presently unoccupied, but there is a unique and unlimited redevelopment potential. To restore and redevelop this building and make it an integral part of the urban fabric marks a strong effort to create a dynamic, diverse, and inviting city core. This, in conjunction with other renovations, new construction, and future development plans, can produce a pleasant, thriving urban vitality for a presently decaying area. Specifically, the Romanesque Revival structure will retain its historic nature as a transportation center. Support facilities within the building are projected to be devoted to railroad exhibits, museums, restaurants on wheels, small retail shops, entertainment, night activities for residents and visitors, public services (postal baggage, travel information, rest and relaxation areas) and small offices, some of which will primarily complement the convention-oriented activities of the Convention Center. The Indiana Convention Center, located north of Georgia Street and one block west of the site, will also complement the area with business and entertainment activities. Another recent addition to the area is Merchants Plaza. Its multi-use of hotel facilities, businesses, small retail shops, entertainment, and restaurant spaces again encourages a vital, diversified magnet to visitors and residents alike. Directly adjacent to the site is the Atkinson Hotel, a recently renovated structure which potentially can serve as housing for students/theatre artists. Its height
is scaled by detail at street level. Just east of the hotel are retail and office facilities. They add to the architectural diversification of the area and continue the pedestrian flow at the street scale. To the west of the site are warehouses used by the Salvation Army, whose loading dock faces the site. This implies a possible vehicular path leading to Union Station, which as a transportation center needs direct access.

I. Future Development: This area is to play an essential role in the projected development of Indianapolis. In addition to the construction of Merchants Plaza, the Convention Center, and the projected use of Union Station, other related facilities need exist to attract activities to the immediate environs. The plan of Union Station illustrates the desirability of developing entire blocks. This can best be supported and accommodated by multi-use development with plazas, pedestrian systems and service-oriented activities. Among specific proposals in this area are the following:

1. Hotel, motel, apartment complexes immediately south of the Convention Center.

2. Office complexes in the vicinity of the Convention Center.

3. Retail and entertainment complexes: these are not to be typical shopping complexes or a replacement for downtown, but exceptional for their visual character, charm, quality, and diversity.

4. Plazas, with an underground link between Union Station and the Atkinson Hotel, which are valued, defined.

5. Upper level pedestrian links with physical continuity from Union Station to the Convention Center. The provision of shopping's alleys, tree-lined avenues, galleries and plazas are intended to create pedestrian links between
such major points as the Circle, the Convention Center, the Transit Terminal and the Sports Arena.

6. Movement systems such as air taxi, bus terminals, taxi stands, etc. to and from Indianapolis International Airport.

7. Parking facilities.
CENTRAL INDIANA

Indianapolis Regional Center and its Primary Support Area
WIND SPEED AND DIRECTION

(miles per hour)
TEMPERATURE RANGES

(degrees fahrenheit)
PRECIPITATION

J  F  M  A  M  J  J  A  S  O  N  D

13
12
11
10
9
8
7
6
5
4
3
2
1

(inches)