New Central Library:
Muncie/Delaware County, Indiana

Thesis Project
College of Architecture and Planning
Ball State University

James Heath Gooden
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Thesis Proposal

College of Architecture and Planning

Ball State University

James Heath Gooden

September 18, 1970
I propose for my fifth year thesis project: a new central facility for the Muncie Public Library system. A new main library for the Muncie Community is being sought by the Library Director and the Board....a space requirement program has been written, sites studied and their availability investigated. Most people in government and concerned citizens agree that it is needed and should be done as soon as possible.

I propose this project for several reasons. It has been my desire to do a thesis project in Muncie primarily because of my deeply seeded interest in the community. Why the Library? Libraries and their antecedents have been through history an outstanding symbol of civilization. Since they are a repository and an accessible source for seekers of knowledge and information, they can, I think, assume an almost predictable immortality in that context. Of all public buildings, it seems to me that a library is the most public because of the impulsive, elective seeking of its contents and services by the public. No one is really required to go there; as, for example, they might be to a city hall or court house.

The basic program requirements, as established by the Director, his staff and the Library Board, compose a building of approximately 68,000 square feet with a budget of $1.5 million. This, I believe, is of a comprehensible and manageable size with sufficient complexity and challenge to produce a thesis of the quality necessary to meet the requirements of the College of Architecture and Planning for a Bachelor of Architecture, 1971.
New Central Library:
Muncie/Delaware County, Indiana

Program

College of Architecture and Planning

Ball State University

James Heath Gooden

October 9, 1970
THE PROJECT

In 1967 the Muncie Public Library Board of Trustees, Muncie, Indiana, selected the following authorities to survey the library needs of the Muncie community: Peter Hiatt, Ph.D., Associate Professor, Graduate Library School, Indiana University; Public Library Consultant, Indiana State Library and Donald Thompson, M.L.S., Librarian, Wabash College; Library Building Consultant.

On September 1, 1967, the results of their survey, "The Public Library Needs of Delaware County: The Community, The Muncie Public Library and the Future," was published. The following is quoted from that document:

Muncie and Delaware County need a new main library building. The reasons are simple and clear, and are dealt with in some detail in this report. An expanding collection, growing services, the need for modern facilities to house modern equipment, and aesthetic pleasure—these and many more reasons support the need long-recognized by the community leaders, for new, larger public library facilities.

The value of a new library building to help revitalize the downtown Muncie urban area should be kept in mind. Neither the location nor the functional ability of the building should be compromised for this purpose, but a public library is a key institution in the minds—if not the activities—of many people. A new public library building in a downtown area can do much to spur an interest in downtown renewal.

There can be no contest with the conclusion drawn that Delaware County, indeed Muncie City, cannot adequately serve its citizenry from the present downtown library building.

Minimum Standards for Public Library Systems, 1966 (American Library Association, Chicago, 1967) is based on the premise that
quality public library service can be offered only by systems of libraries serving a population of approximately 100,000. This does not mean that smaller units cannot offer the full range of materials, facilities, staff and services. It does mean that tremendously higher per capita support is necessary. Hiatt and Thompson in their survey that County-wide library service be instituted in Delaware County with the Muncie Public Library System forming the nucleus. As a result the population served would approximately 135,000 and would more than meet the minimum population figure recommended by the American Library Association for quality library service.

The Hiatt and Thompson recommendation will be assumed as adopted in the development of this program and in the design for a new central library facility to be located in Muncie, Indiana and known as the Delaware Public Library. #

In proposing to design a new central library facility for the Muncie community, the voluntary nature of the use of library services by the public was considered basic for the ultimate concept and resulting design of such a facility. With that basic concept premise in mind, the following objectives will serve as the framework for the development of this project.

A public library building should exemplify the spirit of service—library service. It should offer to the community a compelling invitation to enter, read, look, listen and learn. The interior and exterior features should attain the functional efficiency and beauty found in the best architectural achievements.

#In retrospect, more appropriately named Muncie/Delaware County Public Library.
The physical facilities of a public library should express the program of library service.

1. A library building should be the outgrowth of the cooperative efforts of a planning team from the beginning to the end of a project.

2. Although formulas for estimating the desirable size of a library building have been developed, these should not be accepted as absolute, but they may be used as a comparative check against the realistic data of the program.

The library building must be inviting and easy to use. Public libraries are places for all people to use books and nonbook materials. The convenience and comfort of the public should be given primary consideration, starting with a conspicuous entrance at street level and carrying through to seating arrangements which suit a variety of reading needs and habits. The library building and its services should have:

1. Readily apparent exterior identification and illumination
2. Exhibit space visible from the exterior and interior
3. Book and comfortable reading areas visible from the exterior
4. Entry access and interior features to facilitate use by the infirm and handicapped
5. A directory near the entrance to provide information about services, activities, offices and their location
6. Easily located and indetified service points, areas and library materials.
The library building should be efficient, flexible and expandable. Library buildings should be planned to accommodate community population growth for some fifteen to twenty years, plus the accelerated use of libraries growing out of the increased emphasis on formal and continuing education. Also, experience indicates that use of a library will increase substantially when an attractive, functional, new building has been opened. To achieve a high return on the community's investment, the building must be planned to encourage extensive and effective public use, the building must be planned to permit staff efficiency in all functions.

1. The building site and the orientation of the building on the site should permit future vertical and/or horizontal enlargement of the building.

2. The several sections of the library which readers use most frequently (book areas, reading areas, catalogs, information resources and service desks) should be located for public convenience and in functional relationship to permit economical operation and ease of supervision.

3. Logical locations for freight delivery, shipping, materials storage and cataloging and preparation of library materials should be planned in functional proximity to one another.

4. Fixed, load-bearing walls should be kept to a minimum, and stairways, elevators, booklifts, plumbing and heating and air-conditioning ducts which penetrate the floors should be located, insofar as possible, to provide flexibility in building utilization and to allow building enlargement without excessive cost.
5. Build plans must comply with state and local zoning, setback and building regulations except for such reasonable variances as are legally approved.

Appropriate and adequate quality and quantity of lighting and other mechanical equipment should be provided in the building. The standards for the mechanical equipment must meet the specific needs of the building for its readers and staff, and such standards should be comparable to those used in the best public, commercial, and retail establishments. The quality and quantity of lighting are of prime importance in a structure planned for reading. Carefully engineered control of both sound and temperature is particularly needed in a building designed for sustained periods of concentrated study. The control of temperature and humidity preserves library materials and contributes to reader comfort and staff efficiency.

1. Consultants should be engaged to design illumination, heating, ventilating, air-conditioning and mechanical equipment.

2. The quality of lighting is more important than the intensity, but the intensity recommended in most circumstances would be about 50 footcandles of maintained intensity, defined as about two thirds of the new installation intensity, on the reading surfaces.

3. Special attention should be given to control of exterior and interior sound by means of building insulation, acoustical ceilings, sound-absorbent wall coverings, carpet or resilient floor coverings and sound-absorbent partitions.
Furniture and equipment should harmonize with the architecture of the building, contribute to the efficiency of the library service program and provide a comfortable, inviting environment. Furnishings and equipment should be selected or designed with appropriate beauty, durability, comfort and ease of maintenance to provide a facility that is pleasant and efficient to serve varied needs and activities of the library's clientele and staff.

The central facility of a library system should be located and designed to provide maximum accessibility and space for the full range of library service needed by the area served. The central facility is the focal point of service and administration both in its immediate locality and for the member or branch libraries in the system. In it people should find the level of library service that will help them meet their many interests, needs and obligations. The central facility building of a system, which constitutes the reading and resource center for many people as well as the administrative center of the system, should be adequate to fulfill the objectives of the program of service.

1. The site for the central facility building should be where the largest percentage of all the people to be served will have access to the library frequently in the normal pursuit of their activities. The site should have heavy pedestrian traffic; be convenient to public transportation; and have conveniently available automobile parking in public, commercial or library parking facilities.

2. Storage space and equipment for physical handling of audio-visual and other nonbook materials should preserve such
materials from damage and deterioration and yet make them readily available to users.

3. The major space in the building should be allocated for materials, seating and services to accommodate those who use the facility most.

4. Space should be allocated for books and services to children. Space and equipment for story hours may be separate, or may be merged with multipurpose meeting rooms.

5. Space should be considered for transitional services to meet the needs of young adults even though reading interests and educational requirements will cause them to use the adult areas.

6. Physical provision should be made for staff desks to provide advisory service to users, in person, information and reference services to users by telephone and in person, and guidance in the use of the library's resources.

7. Book and material lending facilities should ensure rapid, accurate handling of transactions. The facilities should include such machines and automated devices as will assure efficient and economical procedures.

8. Multipurpose rooms should be provided for meeting, viewing and listening by groups and individuals, with auxiliary space for chairs, folding-table storage, coats, audio-visual and exhibit equipment and possibly a service kitchenette.

9. Adequate space and facilities for the acquisition and processing library materials must be provided.

10. Space must be provided in the library system for the
activities of the library extension service program and include the following: office space, work space, receiving, shipping and loading area for bookmobiles. Bookmobile storage is currently provided at the Kennedy Branch Library and it seems that function could be continued at that location and possibly another branch on the South Side rather than provide garage space on costly Downtown real estate.

11. The administrative area must be planned to allow for sufficient areas or offices to accommodate administrative and personnel directors, service coordinators, business and clerical personnel and a supply area.

12. Quarters must be provided for the personal needs of the library staff and should include a lounge-lunch room (with possible kitchen facilities), lockers and rest rooms with a place to lie down in the ladies room.

13. A convenience drive-up facility and/or short time parking spaces should be provided for ease and quick pick-up and return of books and non-book materials.

14. Space as needed should be considered for the following miscellaneous services and functions:

a. Public cloakroom for users dispersed in reading areas

b. Public pay telephones and facilities for out-of-town telephone directories

c. Photocopy equipment for use by staff and public
d. Package lockers for public use—coin or token operated

e. Typewriters for public use

f. Public rest rooms located for visual control from staff service desks

g. Smoking conveniences or lounge space for smoking and light refreshments

h. Study carrels for open or assigned use

i. Vertical transportation for public, staff, books and equipment

j. Conference room for board, staff, and group study

k. Printing, duplicating and photographic supplies and equipment

l. Exhibit preparation supplies and equipment with drawing boards, paper cutters, sink and work tables

m. Equipment storage, repair shop and storage for maintenance supplies and equipment

n. Janitor's closets on each level equipped with mop sink.

PROJECT CONTEXT

Muncie is located 57 miles northeast of Indianapolis and is accessible by railroad, state and federal highways, and the Delaware County airport which is equipped to handle jet aircraft. The Mississinewa and the West Fork of the White River traverse the county; neither is navigable. The White River flows through Muncie
which is the county seat. Indianapolis, the state capital, and
Cincinnati are the largest metropolitan areas within convenient distance of
Muncie. The city is served by three major railroads: Penn Central,
Chesapeake and Ohio, and Norfolk and Western. Daily passenger ser-
vice on the Penn Central between Indianapolis and Cleveland is all
that is available. The fore going transportation media plus ex-
tensive facilities give Muncie above average accessibility to
industry and marketing needs.

Accepting the assumption that the new central library
facility will serve a county wide system and the fact that Muncie
is the population, governmental and cultural center of Delaware
County, it is recommended that the facility be located in Muncie.
More specifically, the site selected should be in the Central Busi-
ness District (CBD), which Victor Gruen Associates define as the
area bounded by Wyssor Street on the north, Madison on the east,
Victor on the south and Franklin on the west.

The Hiatt and Thompson survey supports this recommendation
with its first two factors to be considered in selecting the site
and they are listed in this section for convenience:

1. The site should be in an area where it will serve the
greatest number of people. The best site is as close as possible
to the center of the business district adjacent to retail stores,
banks, and similar types of businesses.

2. The site should be on or near main through streets.
Most authorities, including Hiatt and Thompson, suggest that a
fifteen (15) to twenty (20) year projection in planning for library facilities is about all that one can realistically make. The 1985 population projections for Delaware County range from 145,000 to 186,000—an average of 166,000. On that basis, the minimum area recommended by Hiatt and Thompson for the Delaware Public Library system in 1985 is 65,000 to 70,000 square feet—an average of 68,000 sq. ft.

The Muncie Public Library now provides 32,800 sq. ft. of permanent space as follows: main Carnegie building, 20,000 sq. ft.; Maring Branch, 3,600 sq. ft.; Hunt Branch, 4,200 sq. ft.; Kennedy Branch (excluding bookmobile area), 5,000 sq. ft. Deducting the 32,800 existing from the 68,000 projected, leaves a net gain needed of 35,200 sq. ft. The 68,000 sq. ft. figure is for basic library services only. New and enlarged existing special services, functions and areas will according to the Hiatt and Thompson, add several thousand square feet, depending on what they are, to accommodate developmental growth.

Considering the above, the library consultants have recommended that the entire net space of 68,000 sq. ft. be planned for the new central facility. It is logical to assume that in establishing a county wide system, new branch facilities will be opened around the county in and outside Muncie. These additional facilities, then, would provide space to accumulate the gross area needed for a good, progressive public library system serving a population of 166,000.
SITE SELECTION FACTORS

Our consultants and the American Library Association recommend that libraries generally should have only two primary levels above the ground and one below. Considering that and the square footage requirement recommended above leads to point three in site selection.

3. The site must accommodate 68,000 sq. ft. of building distributed over a basement and more or less two levels above ground. A minimum of a half block is suggested to accommodate that plus service area, parking and exterior circulation—the standard half block in the Muncie CBD has about 31,250 sq. ft.

4. The site should permit the main entrance to be at grade level.

5. The site should permit maximum use of a view into the interior of the library.

6. The site should be large enough to permit additions on the back of the building, on the two sides or as another floor.

7. The site should, if possible, allow the building to be oriented to the north (first) or the east (second) to avoid sun glare.

8. The site should provide free space for parking if possible in addition to being in an area as described in point no. 1 above. However, if there is any question about whether both criteria can be attained, those in point no. 1 should be given preference. There should be a limited number of 10 or 15 minute spaces for drop-off and pick-up convenience.
9. The site should not be in a cultural or civic center where there may be a minimum number of people, particularly after 5 p.m.

10. The site should not necessarily be in the geographic center of population especially if this means in a residential area, unless this happens to coincide with the location described in point no. 1.

11. The site should not be selected with the idea of constructing a monolithic building or monument to a special person or cause.

12. The Library has the right of Eminent Domain.

SITE CHOICE

The site selected for the project is the site of the existing Carnegie library building on the southeast corner of Jackson and Jefferson Streets plus the following: Parcel No. 1, the property now owned by the Merchants National Bank of Muncie, immediately adjacent to the east boundary of the Library property, consisting of 62 feet along Jackson and 125 feet deep to the alley; Parcel No. 2, located on the northeast corner of Adams and Jefferson owned by Muncie Theater Realty Co. and consisting of 197 feet along Adams and 125 feet on Jefferson to the alley south of the existing Library property and Parcel No. 1. These two acquisitions add 32,375 sq. ft. of property adjacent and completely surrounding the present site.

Combined with the 16,875 sq. ft. now owned and the vacation of the alley bisecting the site--1,970 sq. ft.--the central facility will have a total of 51,220 sq. ft. of ground bordered by an entire
block of Jefferson Street and over a half block of both Jackson and Adams. All three streets in this location are primary traffic arteries to and in the CBD.

**SITE QUALITIES**

In addition to fulfilling the factors required in points 1 to 12 above, the selected site offers several other significant advantages.

1. It is directly in the middle of the expansion area of the CBD. Known activities at the time are: the announced plans for a 6 story office building by the Merchants National Bank on Mulberry Street one block west and a half block north; the plans of Central Indiana Gas Co. to erect a new office building on Mulberry one block west on Jackson where the Delaware Hotel has already been demolished; the nearly completed expansion of Indiana Bell Telephone's Central Office, adjacent to the east and providing a 7 story tower and 2 additional basic floors (11 total); The construction of a new 3 story District Office for Indiana Bell at Charles and Madison Streets one block south and one and a half blocks east. While the name is not known, it has been indicated by an interviewed official that another firm is interested in a quarter block in the area for an office.

2. Madison Street which is two blocks east and the primary north-south thoroughfare to central Muncie, will be relieved of the heavy through truck and auto traffic when the proposed by-pass, carrying highways 3, 35, and 67, is completed. All traffic on
those routes now use Madison. This will greatly facilitate getting to the CBD for those living in the large areas of the community to Madison Street. It is also believed to be the major influence on the growth of the CBD in that direction.

3. The YMCA is located diagonally across on the southwest corner of Adams and Jefferson and has potential night and day library users plus public facilities for meetings and recreation which draw adults and children to the area.

4. The YMCA is one block south on the corner of Jefferson and Charles and provides the same potential and opportunities as the YM.

5. The First Baptist Church, a handsome "Gothic Style" limestone structure with a tower and a corner yard is immediately across the street on the southeast corner of Adams and Jefferson.

6. The City Hall, a public build of dubious architectural and functionary distinction, but none-the-less locally important, is diagonally across on the northwest corner of Jackson and Jefferson.

7. The A. E. Boyce Co.--business supplies, furniture and printing--occupies a four year old and architecturally pleasing building on the northeast corner of Jackson and Jefferson. This was the first new building in what is now the growth area.

8. Two block west is Walnut Street, the primary retail shopping street, where a mall is actively being sought by Muncie Foresight Inc. which is a non-profit organization formed to activate a revitalization of Muncie's CBD.
9. Muncie Foresight has proposed a major parking lot (and potential parking garage) to support the Mall a block and a half long and a half block wide along Mulberry from Adams north to the alley between Jackson and Main. This is exactly one block west of the site and property acquisition for it has begun.

10. Several other parking lots only one block and one in the same block serve the area of our site.

11. The Director of the Muncie-Delaware Plan Commission has indicated that his agency is studying the proper site for the expanded central library facility and that preliminary findings point to the area selected.

12. The Director of the Muncie Public Library has as his first choice the half block along Adams between Jefferson and Elm. That includes half of the site chosen for this project. He does not favor including the existing site but would not wholly oppose it.

13. Influential Directors (those contacted) of Muncie Foresight favor the site selected.

14. The site is flat and would require demolition only of the small Merchants National Drive-in bank facility on Parcel No. 1. Parcel No. 2 is now a surface parking lot. There are no natural elements or vegetation which would be destroyed or impaired by development of the site.

15. The block in which the site is located is longer in the east-west direction than the standard block in the CBD by about 90 feet.
Consequently, an area greater than one quarter of the standard block remains for the existing parking facility.

SITE DISADVANTAGES

1. The Muncie Theater Realty Co. is reluctant to sell their extremely high occupancy parking facility for reasonable price. The contend it is needed to provide parking for their Rivoli Theater, one block west at Adams and Mulberry. However, this objection could be relieved by the fact that during the business week the theater operates evenings only (a recent change), the proposed Muncie Foresight parking facility is across the street from the theater there would still be a portion of the existing lot remaining as described in 14 above and the possibilities of using whatever library parking is available when not needed by the library at night and on week-ends.

2. The telephone, electric and gas utilities all have easements and important service in the alley which bisects the length of the site. Vacating the portion of the alley through the library site will involve expense in providing for these utilities.

OTHER SITES CONSIDERED

Choice 2: The half block along Adams between Jefferson and Elm Streets. Cost? $175,000. The owners have rejected an offer of $150,000 made by the library.

Choice 3: The half block on the north side of Charles between Mulberry and Jefferson Streets. Cost? Between $175,000 and $200,000.
Choice 4: The half block on the west side of High Street between Main and Washington Streets. Cost: Between $125,000 and $150,000.

While all of the above alternative site choice meet several of the site selection factors, none came close to qualifying in as many as the site selected nor do any have the additional advantages possessed by the site.

TIMING

The Merchants National Bank will begin its new home office building in the Spring of 1971 according to their recent announcement. When completed, it will incorporate the drive-in function now located on Parcel No. 1 of the Library site. The bank's president indicated that that would likely be within two years and that the real estate would then be available—a point in time which would coincide neatly with the development of this project.

There are no buildings on Parcel No. 2 which means there would be no resulting lease expiration delays or demolition to slow the progress of the project. Such conditions permit a continuous flow, without interruption, of the project from planning through financing and design to construction.

While the site affords almost 20,000 sq. ft. more than the projected 15 to 20 requirement, the remaining parking lot adjacent to the site on Adams Street contains 19,850 sq. ft. which could be considered as potential area for long-range expansion. There is always the possibility, of course, that it will not remain a parking lot with business community growth in the area.
BUILDING CHARACTER

Certainly the advantages of the site selected stand on their own merit. Not with standing, the old Carnegie building, which contained the primary library facility of the Muncie community since 1904, almost as certainly makes one look to that site first. Consequently, its consideration was omitted from the listing of site advantages and disadvantages so that they would not be merely rationale in its support.

The Hiatt and Thompson survey renders the old building as hopeless and beyond consideration in the future functioning of the central library facility for Delaware County. They say it is crowded and cut up into small rooms, particularly in the basement. That is superficial. It is crowded, but that is because more space is needed. There are, in reality, only 4 or 5 small rooms which are restricted by structurally functioning, bearing walls. Two of these are on the main floor and the others are on the ground floor (not really a basement). These easily could contain functions which need the size spaces they provide. The large percentage of the main floor is completely open, even if not in the form of one great rectangle or square, and most of the ground floor rooms are very large and could contain any number of functions requiring their own space.

Other objections the consultants find are the "twelve tall columns which are set in open areas". That is not true. The columns, while the do penetrate some space, really define the
four major open areas on the main floor. Another problem they find in connecting a "modular" addition to a "fixed function" building is that the "floor levels do not usually match". They can, however. They also contend that alteration and repair to an existing building is expensive. So is new construction.

The Library Director, Mr. Leon Jones, who has been extremely cooperative in this project, basically agrees with the consultants, but concedes that he would be open minded in looking at a solution incorporating the old building.

The Carnegie structure carries the identity of the Public Library in the Muncie community, and it has done so for 66 years—over half the library's existence (it was established in 1874). It represents an era in which the philanthropy of a great American industrialist (like it or not), Andrew Carnegie, made possible these important public facilities to hundreds of thousands of people who were previously deprived of their services. Our particular building is especially well proportioned and has crisp, simple Doric detailing. These good qualities are not found on most Classical Revival structures built at the turn of the Century. It also has the advantage of limited use of different materials and of a good maintenance program which has kept it in good condition. All of the architectural qualities have the ability to compliment and blend with a contemporary, functional addition.

While it is agreed with Hiatt and Thompson and the distributors of tax dollars that the building should not be a "monument",
it is recognized that a library is an important public building and deserves to be distinctive and one in which the community can take pride—save the "plain pipe racks" for the Sanitary District garage. The existing building can be the vehicle for this distinction and character and will be included in this project as an active, functional part of the new Delaware Public Library central facility.

The basic characteristics for the complete building follow.

1. There should be a minimum of interior walls, particularly load-bearing, thus providing a maximum of open space for flexibility. This does not mean it should have the appeal of an empty warehouse.

2. Basically there should be only one means of public egress and it should be at grade level or accessible without hardship to the elderly, infirm, and physically handicapped.

3. It is desirable that the design permit the interior to be seen from the street.

4. It should compel the Public to enter.

5. Circulation should permit all patrons to enter the library easily and find what they want with a minimum of effort.

6. The most important or most used functions should be housed on the entry level.

The basic space relationships follow.

1. Each public area should have its own shelving, office, and work area. Wherever possible, two or more service areas should
be arranged so that they can share staff, materials, and other facilities.

2. The Technical Services area should be designed to provide a smooth flow of materials from loading dock to receiving room to acquisitions to classifying and cataloging to public services areas.

3. Staff facilities, such as staff room, rest rooms, and lockers should be located in the greatest area of staff concentration.

4. Wherever possible, multiple use of certain areas and functions should be possible. For example, public meeting rooms can be used for exhibits, board meetings, staff meetings, etc.

5. Vertical circulation equipment and mechanical distribution should be in a core convenient to both public and staff.

The most used departments should be nearest the entrance.

7. Their should be convenient access to public meeting rooms from the Audio-Visual department.

8. Book storage and materials not in circulation will be in the basement.

FINANCING

The Library Board of Trustees has projected a budget of $1.5 million for a new central facility. That figure will be used as the basic budget for this project.

The financing of the project will be by bond issue, as is the normal method for financing most public building projects.
The steps for obtaining funds by public bond issue follow.

1. The circulation of a petition for public signatures supporting the bond issue.

2. Processing the petition and the waiting period.

3. Process of issue and sale of bonds:
   a. Ordinance of issue
   b. Printing the bonds
   c. Advertising for bids to purchase the bonds
   d. Contracts of purchase.

The two additional parcels of land necessary to complete the site compose 32,375 sq. ft. and will cost approximately $150,000. Parcel No. 1 is estimated at today's value to cost approximately $37,500; Parcel No. 2, $112,500. These values are based on the estimated value of $75,000 for a quarter of a block (125' x 125') in the library neighborhood.

The total estimated cost of this needed real estate coincides exactly with the amount the library now has in its Library Improvement Reserve Fund (LIRF) earmarked for the purchase of property for the central library facility. This money has come from the yearly budget appropriation of tax money.

It is possible that the bank parcel (No. 1), which was figured as one eighth of a block, could be purchased for less than estimated since it is not a corner lot; but, figuring it as was done, permits a conservative total estimate.
ZONING

The selected is located in zoning classification C-1, general commercial, and a library is a conforming use in that classification. The site is also located in Fire Zone 1 and the building must conform to the requirements of that zone—the strictest. The structure must also be designed according to the requirements of the State of Indiana Administrative Building Council's group classification covering public libraries. Any local codes which impose stricter requirements than the state's codes govern.

In the C-1 district, the following restrictions apply:

- Front Yard Set-Back: None
- Side Yard Set-Back: None
- Minimum Rear Yard: 15 feet
- Maximum Height: 125 feet
- Maximum Coverage: 90%

Sanitary sewers completely surround the site in the bordering streets. There are no sewage easements through the site.

It will be necessary to petition for vacation of the alley running through the site, east and west, between Jackson and Adams Streets. If any zoning variance is necessary, it appears that the 15 feet minimum rear yard requirement might need to be lessened.

BUILDING FUNCTIONS

The building functions are listed below according to one of the following four classifications: Public; Private with Public Contact; Private; and Unassigned—to be used as required for
miscellaneous needs in all three of the above classifications.

PUBLIC

1. Adult Services
2. Adult Reader Seats
3. Children's Room
4. Audio-Visual
5. Meeting-Conference Space
6. Indiana History

PRIVATE WITH PUBLIC CONTACT

1. Adult Services Staff Space
2. Administration-Business

PRIVATE

1. Receiving
2. Audio-Visual Staff Space
3. Extension and Branch Office
4. Technical Processes
5. Staff Conveniences
6. Book Storage
7. Mechanical

UNASSIGNED

Private Collections--Miscellaneous Storage Requirements--Janitor's Closets--Public Rest Rooms--Public Conveniences
(pay phones, smoking area, refreshments, etc.)--Circulation (vertical and horizontal)--Shop--Supplies--Typing Room--
Growth (expansion)--Public Entry Area
<table>
<thead>
<tr>
<th>Areas</th>
<th>Sq. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adult Services</strong></td>
<td></td>
</tr>
<tr>
<td>8,000 reference books</td>
<td>640</td>
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<tr>
<td>10,000 business and technical books</td>
<td>800</td>
</tr>
<tr>
<td>10,000 popular reading room books</td>
<td>800</td>
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<td>90,000 stack books</td>
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<td>10,740</td>
</tr>
<tr>
<td><strong>Staff Work Space</strong></td>
<td></td>
</tr>
<tr>
<td>Adult Services</td>
<td>1,250</td>
</tr>
<tr>
<td>Circulation Desk and Workroom</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,250</td>
</tr>
<tr>
<td><strong>Public Seating</strong></td>
<td></td>
</tr>
<tr>
<td>180 reader seats * 30 sq. ft.</td>
<td>5,400</td>
</tr>
<tr>
<td><strong>Receiving Area</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Children's Room</strong></td>
<td></td>
</tr>
<tr>
<td>18,000 books</td>
<td>1,500</td>
</tr>
<tr>
<td>6 staff * 125 sq. ft.</td>
<td>750</td>
</tr>
<tr>
<td>1 supervisor's office</td>
<td>250</td>
</tr>
<tr>
<td>60 seats * 20 sq. ft.</td>
<td>1,200</td>
</tr>
<tr>
<td>--- Story Hour</td>
<td>300</td>
</tr>
<tr>
<td>2 toilets</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,200</td>
</tr>
<tr>
<td><strong>Audio-Visual</strong></td>
<td></td>
</tr>
<tr>
<td>10,000 recordings</td>
<td>1,000</td>
</tr>
<tr>
<td>2,000 films</td>
<td>200</td>
</tr>
<tr>
<td>--- art reproductions with 20 seats</td>
<td>600</td>
</tr>
<tr>
<td>--- listening facilities, 2 booths</td>
<td>200</td>
</tr>
<tr>
<td>--- books (4,000), scores (1,000), files</td>
<td>500</td>
</tr>
<tr>
<td>--- work area</td>
<td>1,000</td>
</tr>
<tr>
<td>--- office</td>
<td>250</td>
</tr>
<tr>
<td>--- film circuit office</td>
<td>350</td>
</tr>
<tr>
<td>--- film preview area</td>
<td>300</td>
</tr>
<tr>
<td>--- printing and displays</td>
<td>600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,500</td>
</tr>
</tbody>
</table>
### Business and Administration

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 staff @ 125 sq. ft.</td>
<td>500</td>
</tr>
<tr>
<td>storage room</td>
<td>250</td>
</tr>
<tr>
<td>Director's office</td>
<td>300</td>
</tr>
<tr>
<td>Assistant Director's office</td>
<td>250</td>
</tr>
<tr>
<td>Board room</td>
<td>350</td>
</tr>
<tr>
<td>switchboard</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,300</strong></td>
</tr>
</tbody>
</table>

### Extension and Branch Office

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
</tr>
</tbody>
</table>

### Technical Processes

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 books</td>
<td>500</td>
</tr>
<tr>
<td>10 staff @ 125 sq. ft.</td>
<td>1,250</td>
</tr>
<tr>
<td>--- catalog supervisor's office</td>
<td>250</td>
</tr>
<tr>
<td>--- catalog and furniture</td>
<td>250</td>
</tr>
<tr>
<td>--- equipment</td>
<td>750</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,000</strong></td>
</tr>
</tbody>
</table>

### Meeting-Conference Space

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 large area</td>
<td>1,500</td>
</tr>
<tr>
<td>2 small areas</td>
<td>1,000</td>
</tr>
<tr>
<td>2 conference areas</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,000</strong></td>
</tr>
</tbody>
</table>

### Indiana History

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 books</td>
<td>500</td>
</tr>
<tr>
<td>20 reader seats @ 25 sq. ft.</td>
<td>500</td>
</tr>
<tr>
<td>--- microfilm</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,100</strong></td>
</tr>
</tbody>
</table>

### Staff Conveniences

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>lunch-lounge (kitchenette), toilets, lockers</td>
<td>800</td>
</tr>
</tbody>
</table>

### Book Storage

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>150,000 books</td>
<td>12,000</td>
</tr>
</tbody>
</table>

### Mechanical

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>5,000</td>
</tr>
</tbody>
</table>

### Unassigned

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,900</strong></td>
</tr>
</tbody>
</table>

### Grand Total

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>68,400</strong></td>
</tr>
</tbody>
</table>
1. SITE DELAWARE PUBLIC LIBRARY PROJECT
2. SITE CHOICE NO. 2
3. SITE CHOICE NO. 3
4. SITE CHOICE NO. 4
A. WHITE RIVER
B. COUNTY BUILDING
C. PROPOSED WALNUT STREET MALL
D. PROPOSED MALL PARKING

MAP No. 1 - C.B.D.
<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Project</td>
<td>1</td>
</tr>
<tr>
<td>Project Context</td>
<td>9</td>
</tr>
<tr>
<td>Site Selection Factors</td>
<td>12</td>
</tr>
<tr>
<td>Site Choice</td>
<td>13</td>
</tr>
<tr>
<td>Site Qualities</td>
<td>14</td>
</tr>
<tr>
<td>Site Disadvantages</td>
<td>17</td>
</tr>
<tr>
<td>Other Sites Considered</td>
<td>17</td>
</tr>
<tr>
<td>Timing</td>
<td>18</td>
</tr>
<tr>
<td>Building Character</td>
<td>19</td>
</tr>
<tr>
<td>Financing</td>
<td>22</td>
</tr>
<tr>
<td>Zoning</td>
<td>24</td>
</tr>
<tr>
<td>Building Functions</td>
<td>24</td>
</tr>
<tr>
<td>Areas</td>
<td>26</td>
</tr>
</tbody>
</table>

**MAPS AND PHOTOS**

- Site Orientation to Central Business District (CBD)
  Map No. 1 28
- Site Influences Map No. 2 29
- Visual Lock Outward 30
- Visual Lock Inward 32
New Central Library: Muncie/Delaware County, Indiana

Abstract

College of Architecture and Planning

Ball State University

James Heath Gooden

May 3, 1971
In the "Building Character" section of the program for this project, the value of retaining and utilizing the existing Carnegie library building was discussed fully. The decision to keep it and use it provided an immediate, tangible design limitation.

Various schemes to physically connect the existing with the new did not respect the Palladian unity of the Carnegie building.

The functional areas of the library were divided into two categories: Direct Library Services; Supplemental and Administrative Services. These two basic categories were further analyzed according to three types of contact: Public; Semi-Public; and Private. This analysis indicated that the supplemental and administrative services could be physically separated from the direct library services and be assigned to the Carnegie building with the latter in a new structure. With this separation, it seemed desirable to serve both with a common entry point for the convenience of directing users to the various services.

Because of the functional relationship requirements of the direct services around the public entrance, the necessary massing also negated the individuality of the Carnegie structure. Therefore, schemes utilizing a common entry area were unsuccessful.

To pull the massing of the new building away from the old required locating the public entrance as far distance as possible, but still in view. Such a scheme required careful exterior planning to develop a "library place" that would unify the old and new. The design development was based on that scheme.
After reviewing the two categories of service and considering the variables, it seemed desirable to house the administrative functions with the direct services if site development allowed adequate space in the new structure. It would always be possible in the future, if expansion required it, to relocate them in the old building. This leads to the question of to what use could the Carnegie building be put? First of all, it would need a name to facilitate identification of what is located where in the library complex. It could be named Library Hall. The program requires meeting/conference space for the expanded library. This space requires a location that permits its use at times when the library proper might be closed. Library Hall would provide such a space. Other uses:

<table>
<thead>
<tr>
<th>Library lecture series</th>
<th>Lectures (other than library series)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library film series</td>
<td>Recitals</td>
</tr>
<tr>
<td>Large public meetings</td>
<td>Receptions</td>
</tr>
<tr>
<td>City Council</td>
<td>Dances</td>
</tr>
<tr>
<td>County Council</td>
<td>Charity events</td>
</tr>
<tr>
<td>School Boards</td>
<td>Banquets and dinners</td>
</tr>
<tr>
<td>Plan Commission</td>
<td>Historical Museum</td>
</tr>
<tr>
<td>Zoning Board</td>
<td>Exhibits</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
</tr>
</tbody>
</table>

For the library proper, it was obvious from preliminary investigations that if all the direct services could be located just inside the main entrance, it would be ideal. With this in mind and considering the relationship to the old library and other site influences, the design for this thesis project was developed.
The Carnegie Building
Schematic Design
DIRECT LIBRARY SERVICES
(TECH. PROCESSES, CUSTODIAL, ETC.)

SUPPORT STAFF & FACILITIES

A-Y
CHILDRENS ROOM
INDIANA HISTORY COLLECTION

SEATING
REF. PERIODICALS
READER'S GUIDES
YOUTH STACKS
POP. READING
BUSINESS & TECHNICAL
MAGS. & PAMPHLET PILES
ADULT SERVICES

PUBLIC CONVENIENCES

CIRCULATION

CARD CATALOG
INFORMATION

ADMINISTRATION
MEETING-CONF
EXHIBITION

SUPPLEMENTAL & ADMINISTRATIVE SERVICES

DIRECT LIBRARY SERVICES

DIRECTORY

AREA ACCESS
FLOW STUDY

EXIT
ENTER
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT LIBRARY SERVICES</td>
<td>PUBLIC</td>
</tr>
<tr>
<td>CATALOG</td>
<td>600</td>
</tr>
<tr>
<td>INFORMATION</td>
<td>120</td>
</tr>
<tr>
<td>ADULT-YOUTH SERVICES</td>
<td></td>
</tr>
<tr>
<td>REF. BOOKS</td>
<td>400</td>
</tr>
<tr>
<td>READING ROOMS</td>
<td>200</td>
</tr>
<tr>
<td>LIB. BULL.</td>
<td>100</td>
</tr>
<tr>
<td>3 YEAR STAFF</td>
<td>200</td>
</tr>
<tr>
<td>STAFF</td>
<td></td>
</tr>
<tr>
<td>SEATING</td>
<td>1000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3000</td>
</tr>
<tr>
<td>CHILDREN'S ROOM</td>
<td></td>
</tr>
<tr>
<td>BOOKS</td>
<td>1500</td>
</tr>
<tr>
<td>SEATING</td>
<td>1200</td>
</tr>
<tr>
<td>STORY HOUR</td>
<td>300</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3000</td>
</tr>
<tr>
<td>4070</td>
<td></td>
</tr>
<tr>
<td>AUDIO-VISUAL</td>
<td></td>
</tr>
<tr>
<td>RECORDINGS</td>
<td>400</td>
</tr>
<tr>
<td>FILMS</td>
<td>200</td>
</tr>
<tr>
<td>STAFF</td>
<td>1000</td>
</tr>
<tr>
<td>OFFICE</td>
<td>800</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1850</td>
</tr>
<tr>
<td>1100</td>
<td></td>
</tr>
<tr>
<td>INDIANA HISTORY - GIFT COLLECTIONS</td>
<td></td>
</tr>
<tr>
<td>BOOKS</td>
<td>500</td>
</tr>
<tr>
<td>SEATING</td>
<td>600</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1100</td>
</tr>
<tr>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>TECH. PROCESS</td>
<td></td>
</tr>
<tr>
<td>STAFF</td>
<td>1000</td>
</tr>
<tr>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>CONVENIENCES</td>
<td></td>
</tr>
<tr>
<td>PUBLIC</td>
<td>900</td>
</tr>
<tr>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td>BOOK STORAGE - GEST. DOCUMENTS</td>
<td></td>
</tr>
<tr>
<td>5400</td>
<td></td>
</tr>
<tr>
<td>BUILDING SERVICES</td>
<td></td>
</tr>
<tr>
<td>MECHANICAL REPAIR</td>
<td>800</td>
</tr>
<tr>
<td>10,000 - 12,000</td>
<td></td>
</tr>
<tr>
<td>CONTINGENCIES AND CIRCULATION</td>
<td></td>
</tr>
</tbody>
</table>
SUPPLEMENTAL & ADMINISTRATIVE SERVICES

3000#
MEETING-CONF. AREA

1750#
ADMINISTRATION

500#
STORAGE

300#
DIRECTOR

250#
ASST. DIR.

100#
BRANCH REPRO.

150#
SWITCHBOARD

150#

3000#
INFORMATION (3500# LIB NEWS)

TOTAL 1350
Structural/Mechanical/Electrical Schematics
Thesis Logs
THESIS LOG

Signatures of Faculty or Consultants

Date: 9-23-70

Consultation Time 1.5 hrs.

Notes:
- Mr. Jones not enthused about utilizing old library building as part of new program 68,000 sq ft minus 20,000 sq ft of old leaves only 48,000 sq ft but 20,000 sq ft not all that functional
- Would be expensive to get in first class condition
- Would be difficult to administrate if not physically connected
- Wants street level main entrance
- However, would be very interested in seeing what could be done and would appreciate gain analyses. Thought space would like the preservation of the old and would be proud
THESIS LOG

Signatures of Faculty or Consultants:  

Date: 9-28-70  

Consultation Time: 20 Min. hrs.  

Notes:

Merchants National Bank. Drive-in facility east of M.P.2. Very likely will be on market if present expansion plans progress - in two years - have not established a value operating in old structure might be nice sentimentally, but not efficient from a business point of view.

Mr. Rivenes is President, Merchants National Bank
THESIS LOG

Signatures of Faculty or Consultants

V.P., AMER. NATL. BANK

Date: 09-29-70

Consultation Time 1/2 hrs.

Notes:

Site discussion
1. Should tie into downtown renewal.
2. Moving toward Madison St. makes site good.

Delaware Hotel $100,000

160 W. 600M 1/4 Block $75-100,000
15, 625 $16
125 x 125 1/4 Block

"Core" Mulberry, High, Wash, Seymour

3. Strongest place for library expansion is around existing site.

W. Seward 1944 ex officio Committee Muncie foresight

W. Seward, ex officio Committee Muncie foresight

W. Seward, ex officio Committee (ex officio American National Bank)
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants

Date: 9-30-70

Consultation Time 1/2 hrs.

Notes:
- Feel present site most suitable in its relationship to heart of town and growth, development pattern.
- Unimproved land is point important.
- Questions adaptability of exiting to present buildings and really can see it presently incorporated.
- Traffic circulation is important and mixed in this location.
- Library and functions in the city.
Mr. Brown's comments are in general, correctly making a study for a commentary that will be finished, but won't be ready before two or three weeks. Seems to be reading in location of en...
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants

Date: 10-1-60
Consultation Time 1/2 hrs.

MUNCIE SANITARY DIST.
MR. LACEY

Notes:

ELLER - ADAMS & JEFFERSON - 951.71 FT

SANITARY SEWERS: NONE THOUGHT OF

IN BLOCKS WEST OF JACOBS, ELM, ADAMS, JEFFERSON.

SEWERS LOCATED IN ADAMS FLOWING EAST (8") AND LARGER IN JACOBS FLOWING WEST.
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants

Date: 10-1-70
Consultation Time 1/2 hrs.

Notes:

EASEMENT IN E-W ALLEY SOUTH OF EXISTING LITERALLY WITH 6" LP GAS MAIN RUNNING ENTIRE LENGTH OF STREET.

4" MAIN ON NORTH SIDE OF JACKSON
8" MAIN ON EAST SIDE OF JACKSON

TO VACATE ALLEY:

1. PETITION
2. UTILITIES INVOLVED TELL E. ENGINEER DETERMINE IF LINES, MAINS, ETC., CAN BE ABANDONED (1 OUT OF 10 LINES - GAS CO)
3. IF NOT, DEVELOPER MUST STL CLE , 8" DRAINING (APPROX. linear dist ~ 150 ft) AND REPAIR OR COVER AS NEEDED BY CITY OR PROPERTY OWNER
which would be less energetic and, therefore, less explosive.
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants 1 & M ELEC. CO.
Date: 10-1-70
Consultation Time 1/4 hrs.
D. R. Starling, Supervising Engineer
George Phillips, President

Notes:
- Main sewer trenching to 15' south alley, aerial
- Would have to be relocated under building by 25,000
- Permanent transformer for library service
THESIS LOG

Signatures of Faculty or Consultants

Date: 10-1-70

Consultation Time 1/4 hrs.

Notes:

COST OF MOVING TELEPHONE UTILITY
MAIN ARTERY OF DIST. TO WEST
$250,000. IN ALLEY + AERIAL

ACCESS TO LINES FROM BUILDING
(-----) IS POSSIBLY

$30-410,000
THESIS LOG

Signatures of Faculty or Consultants: INDO, HELL, TEL.

Date: 10-1-70

Consultation Time: 1 hrs.

DONALD W. JONES, F.D. SERV. SUPERVISOR
329 E. JACKSON ST.
385-1567

Notes:
DIMENSIONS OF TEL TLOG. MAKE 1
SITE LOCATION 1

65' x 10'

MICRO DRAINAGE AREA.

135' 15'
CORE LINE

14' 16' HEADING TO 710' CURB

ALLEY
3' 4''

JACkSON
THESIS Log

Signatures of Faculty or Consultants: FLAWLESS COUNTY BUILDING

Date: 10-2-70

Consultation Time: ___ hrs.

Notes:

1. COUNTY SURVEY; SURVEY MAPS OF CENTRAL MUNCIE

2. CENTRAL TRAFFIC ACCESS; WILLIAM AND 1ST STREETS OF SURROUNDING INFLUENCES
THESIS LOG

Signatures of Faculty or Consultants: Muncie Building Comm

Date: 10-5-70

Consultation Time: ________ hrs.

Notes:

FIRE ZONE

2-1 DIST

FRONT YARD -- NOTE --

SIDE YARD -- NINE

MAX 1ST - 105 FT

MIN 2ND YARD -- 125 FT

MAX (2ND FLOOR) - 90% 

Muncie Building, Muncie, Indiana
THESIS LOG

Signatures of Faculty or Consultants

Date: 10-6-70

Consultation Time 1/4 hrs.

Notes:

LOCATION OF WATER MAINS ON OR AROUND SITE: BLOCK BETWEEN JACKSON, ALANS & JEFFERSON ST.

NONE IN ALLEY. PRECIPITATE TAP OF LATERAL DOWN LAST SIDE ROAD.
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants

Date: 1-22-71

Consultation Time 2 hrs.

Notes:

interior space not bold enough
Timid loosen up
Don't see old as I do—hidden
Interesting landscape while
AIA HQ Campus. I.M. Pei to connect
Levels of the City
get as much open space as possible

try anything. do it.

Interpenetration of activities? Children w/ adults

Volumes of spaces

Who uses it?

Operations Center. Physically unique?

outside to inside + function

outside

Circulation

Kohns Yale art gallery

Phillip Johns proposed addition to Boston
Henry Arch in street
for "monarch" behind
book idea out to connect
COLLEGE OF ARCHITECTURE AND PLANNING
Ball State University
Muncie, Indiana

THESIS LOG

Signatures of Faculty or Consultants  
YEUNG

Date: 2-17-71
Consultation Time 1/4 hrs.

Notes:
FOR CORDER SPACE ABOVE STAIRS
LIGHT WT. POTS
DEPTH 36" LT. WT. SOILS.

MAURANE LOCUS
THORNLESS HONEY LOCUS
HAWTHORNE
LITTLE LEAF LINDEN
THESIS LOG

Signatures of Faculty or Consultants

Date: 4-8-71

Consultation Time: 1.5 hrs.

Notes:

SIZING & TYPE

EQUIPMENT

READING

GRAPHS
THESIS LOG

Signatures of Faculty or Consultants: [Signature]

Date: 4-1-71

Consultation Time: 1.5 hrs.

Notes:

GAS BOILER - CHILLER - FORCED AIR SYSTEM
- 3% A.H. UNITS
- REHEAT COILS IN ZONES
  WITH THERMOSTAT CONTROL

COOLING TOWER ON TOP

CEILING DEFUSERS FOR SUPPLY

LIMITED FRESH AIR SYSTEM