A CIVIC
THEATER
AND
AUDITORIUM
FOR THE CITY OF
INDIANAPOLIS
INDIANA

SUBMITTED AS
PARTIAL FULFILLMENT
OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ARCHITECTURE
SEPTEMBER 1, 1950
BY
DONALD E. CLARK

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ARCHITECTURE
DEDICATED

TO

GEORGE RUSSELL WEST

ARCHITECT
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Board of Zoning Appeals
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President 1950  
Indianapolis Matinee Musical  
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Director of Public Relations  
Butler University  
Indianapolis, Indiana

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Indianapolis, Indiana

Mr. Powell  
Assistant Manager  
Boston Gardens

George R. West  
Architect  
Indianapolis, Indiana

My Father and Mother,  
Sister, and two Brothers
LETTER OF SUBMITTAL

Graduate House, Rm. 220A
Massachusetts Institute of Technology
Cambridge, 39, Massachusetts
June 23, 1950

Professor Lawrence B. Anderson
Head of the Department of Architecture
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Anderson:

As partial fulfillment of the requirements for the degree of Master of Architecture, I wish to submit my proposed thesis for your approval. As a problem I intend to design a Civic Auditorium for the city of Indianapolis, Indiana.

Such a building would afford accommodations for civic and cultural gatherings, both large and small; a place for entertainment and education for all segments of the community; for musical and theatrical events; for exhibitions and shows, and as a convention center.

Preliminary research indicates that the building should accommodate a seating capacity of approximately 13,000 in the main auditorium and also include two smaller spaces, a music hall of approximately 3,000 seats and a small auditorium to seat 500 persons.

The city at present has no building adequate in size, plan, or location to accommodate its civic activities. Consequently, its cultural growth and prestige are stunted by this condition. It is the opinion of many civic minded and well advised persons that the city cannot afford longer to be without one. Many drives have been started by public organizations to accomplish this objective.

Respectfully yours,

Donald E. Clark
30. August. 1950

Mr. Donald E. Clark
Room 220A, Graduate House
M.I.T.
Cambridge, Massachusetts

Dear Mr. Clark:

I am glad to give formal approval of the Department of Architecture to your proposed thesis subject: A Civic Auditorium for the City of Indianapolis, Indiana, which you plan to submit toward the requirements for the degree of Master in Architecture.

Sincerely yours,

Lawrence B. Anderson
In Charge of the
Department of Architecture

LBA:BAP
FOREWORD
A civic theater and auditorium is a building which, provided by civic or private enterprise, is run on professional non-profit making lines to provide a high standard of entertainment for the citizens of the city. Since its function is not concerned with commercial profit, such profits as are made by any particular presentation or function, over and above the running cost of the building, are used to provide for better entertainment in the future. Although such a building may be started by the aid of a grant or by a subscription fund, it will be expected to be self supporting once it has been established.

A building of this type must be very flexible in accommodations so it can meet the large and varied requirements of civic functions and entertainment. It must be so planned that both the theater and auditorium can be used separately and simultaneously, each with its own activity.

This need for a great variety of entertainment means that the theater will be used for grand opera, legitimate plays, presentation, ballet, vaudeville, revue, operetta, and symphonies. Because it is a non-profit or non-commercial theater, small profits from a very successful presentation can be expended on other productions. It may be able to depart occasionally from proven box office successes and present productions of
high artistic merit which do not necessarily attract large crowds. The theater will also be expected to present from time to time productions having an educational value such as the school certificate play of the year.

The auditorium will be used for large civic functions, such as trade exhibitions, auto shows, youth gatherings, political gatherings, home shows, all types of conventions, dancing, and other civic events. When the demand indicates the necessity, it will also be used to supplement the theater for symphonies, concerts, and choral groups.

Small meeting rooms, flexible enough to be readily adjustable for changing demands and a larger assembly room are also to be included in the building. These are to be used by all the civic organizations of the city for their regularly scheduled meetings, and to serve the needs of the auditorium when required by conventions and similar events.

Parking space below the building must also be provided, because the demands which such a building would place on existing city parking facilities could not be met otherwise.

The requirements of such a building have been changing very rapidly and great care must be taken to see that the form which provides for the current fashion will not be transformed
into a white elephant by the passage of time. It is true of almost any building that its solid form lives long after the purpose for which it was designed has died; of a theater and auditorium this is particularly true.
The erection of a Civic Theater and Auditorium for the city of Indianapolis has long been considered by the population and its many civic organizations to be of paramount importance in the economic and cultural development of the city. Though possessing such facilities in the past, they have been sadly neglected in the last few decades.

Indianapolis was incorporated as a city in 1847. By 1860 more than 100 manufacturing concerns were located here. Musical and literary organizations were thriving. From this beginning the city has grown to become the largest city in the United States not on navigable water. The population of Indianapolis is now over 500,000. The closely surrounding towns increase this figure to 1,250,000 people.

As a commercial and railway center the city is one of the most important in the Middle West. More than half of all the farming in Indiana is done within 75 miles of the city, now the third largest corn and livestock market in the nation. It is also an important banking center and the home of several insurance companies.

The city has a large diversity of industry. It is a great center for machine shop products, automobiles, bodies, and accessories. A number of plants are devoted to the manufacture of paper and furniture. Serums and pharmaceutical items
are produced here, notably by Eli Lilly and Company, one of the largest biological laboratories in the country. Many plants manufacture textiles and clothing of all sorts. General Motors Corporation has several large plants located in the city, of which the largest is Allison Engineering, an international leader in aircraft engine production. Consequently, Indianapolis has become a popular convention city the year round. As of July 1st it has already been host to over 300 conventions during the year 1950.

With this geographical and industrial expansion there has been a steady cultural growth. The Civic Theater was first organized in 1915 and for more than 25 years has produced both serious drama and light comedy. The Indianapolis Symphony Orchestra, sponsored by the Indiana State Symphony Society, is a distinguished musical organization. The Mannerchor was founded in 1854 by a group of Germans, and for many years has provided excellent concerts. Many groups representing business, civic improvement, agriculture, social service, musical education, and other activities have been organized. The Indianapolis Council of Women, for example, now has an affiliated membership of 30,000 women. In the Parent Teachers Associations there are 84 affiliated Parent Teachers Associations.
Though the need for a Civic Theater and Auditorium has increased a hundred fold since the turn of the century, the city had better facilities for housing its civic functions in the early 90's than it has today. Then world famous operatic stars, artists, musicians, conductors, and orchestras appeared regularly. These were given in Tomlinson Hall, built especially for cultural activities and public gatherings. Since this time, however, Tomlinson Hall has aged to such an extent that the city will no longer permit it to be used.

There were two legitimate theaters in the city. However, the English Theater, the largest of the two, was razed just recently because of its antiquity. It is to be replaced by a large commercial building. The other theater is a very small playhouse entirely inadequate in every way for a large production.

Accommodations for large public gatherings are likewise inadequate. Three buildings for such a purpose exist in the city, the Murat Temple, the Butler University Fieldhouse, and the State Fair Coliseum.\(^1\) None of these three buildings were designed for general cultural and civic activities. They are seldom available, being used throughout most of the year to

\(^1\) Plate No. 1
serve their own particular purpose.

The Murat Temple seats 2000 people. It was built primarily for the use of the Shrine Order of the Free and Accepted Order of the Masons. For lack of other accommodations the building is used at the present time by the Indianapolis Symphony Orchestra. The stage facilities are quite inadequate for any large scale drama presentation and acoustically incorrect for musicals.

The Butler University Fieldhouse has a normal seating capacity of 14,943 people. Its main function is to house all the home basketball games and athletic functions of the school. The building is rented to the Indianapolis Olympians, professional basketball club, and is also the scene of the sectional, regional, semi-final, and final basketball tournament under the auspices of the Indiana High School Athletic Association. It is located on the university campus six miles from the center of the city. One street car line and one motor coach line provide public transportation facilities.

The State Fair Coliseum is the latest of the three structures to be built. It has a seating capacity of 12,000 people. Its main function is to accommodate the horse shows, the cattle judgements, and similar activities of the Indiana State Fair.
It is also used by the professional hockey team of the city, the Indianapolis Capitals, and occasionally for a visiting roller derby. The building has an earth floor and an arena type of seating. It is located on the State Fair grounds, 3½ miles from the center of the city. Public transportation provides one street car line and one motor coach line to the grounds. For a large attendance special motor coaches must be used.

This unfortunate lack of adequate facilities causes many important events such as operas, musical events, lectures, concerts, recitals, trade, professional, and other conventions and exhibitions to by-pass the city. Several years ago the Metropolitan Opera Company wanted to include Indianapolis in its Middle West spring tour. Plans were laid and advanced to the point of looking for a suitable hall, but none could be found. The only theater with the stage facilities and seating capacity essential to such a project, the Indiana Theater, was occupied with the showing of motion pictures. The city was forced to abandon the entire project.

The city has been given the legal authority to construct such a building. The 1937 Acts of the Legislature, Chapter 301, provides for an auditorium district in every county having a population of 300,000 or more, and provides that such
district has the power to construct and provide and there-
after maintain a public auditorium, and has the power to
acquire real estate therefore by purchase, and for the pur-
pose of providing funds for purchase and construction, is
empowered to issue bonds and has the power to fix fees,
rates and charges for the use of such a building.

A meeting took place in December, 1944, between the Mayor
Robert H. Tyndali, George A. Kuhn, Chairman of the postwar
planning committee, and a group of representatives of var-
ious civic and cultural organizations. At this meeting the
Mayor assured the group that a Civic Theater and Auditorium
already was under consideration in the committee's plans for
the future development of the city.

The architectural firm of Ayres, Kingbury, and Ward made some
preliminary design studies of the building, which were pub-
lished in a brochure and presented to the city in 1946.

Obviously there is a need for such a building. It should be
large enough to accommodate a sufficient number of people to
make the entrance fee reasonably low in cost to larger groups
and so located as to be equally accessible by either public
or private transportation. Such an addition to the city of
Indianapolis would be a great step forward to the cultural
prominence which a metropolis of its type should possess.
2 SITES
The most ideal location of a site would be in the area known as the Mile Square of the city. This area, as the name implies, is one mile square and located at the very center of Indianapolis, the center being defined by the Monument Circle. The area is bounded by North Street, East Street, South Street and West Street, which define its four sides. Located in the area is the main business district of the city.

The city is built on level ground and patterned after Washington, D.C. The streets intersect at right angles and form squares which have a frontage of 420 feet per side. Four great avenues cut away diagonally from the business section to facilitate arrival to and departure from the city. Washington Street (US 40) is the main east-west thoroughfare and Meridian Street is the main north-south thoroughfare. Washington Street is commercially more important than Meridian Street.

In the South part of the Mile Square are the warehouses of the wholesale district, freight yards, railroad terminal, and many of the city's factories. The West side of this area is occupied by the State House and various allied government buildings. Beyond these is White River surrounded by packing houses, factories, and drab streets of workers homes; and Indiana Avenue, slanting northwest into the densely popu-
lated Negro section. Both the North and East sections are much less industrialized and congested. On both of these sides the residential area commences directly beyond the business center.

These existing conditions have stopped virtually all expansion to the South and West, and forced the city to develop to the North and East. The northern part extends much farther in its direction than the eastern section because of the broad avenues running North and South.

Public transportation in the city is by trackless trolley and motor coach. All motor coach lines terminate at the Monument Circle and all trackless trolley lines approach to within one block of this point. It is a very short walk from any transportation terminal to anyplace within the mile square. The street railway system of Indianapolis ranks, according to government officials throughout the United States and Canada, as one of the finest in the world.

Beside the relationship of the site to the overall plan and function of the city, other aspects should be recognized; such as the types of surrounding structures, and the adequacy of room to spread the buildings without cramping one department on top of another.
Mr. Leacroft has written the following in his latest book, 2

"The civic theater of the future, while still situated amidst the hustle and bustle of ordinary everyday life, should definitely be planned with a view to adding to the recreational amenities of the city or town. With this point in mind, the site chosen should be in some pleasant open space near the center of the town which can be provided with gardens: thereby adding to the lunch time amenities of sandwich eating citizens, while at the same time ensuring that the theater is always in their thoughts. If some such open space is not already available, then the site chosen should be large enough to enable the theater building to be designed with some civic dignity. If possible, it should form some part of an entertainment center, and might be grouped with such buildings as the Museum, Art Gallery and Library."  

Taking all these points of the city plan and function, transportation, space requirements and relationship under consideration the following two sites were selected for investigation:

1. The city square bounded by Market Street, Ohio Street, Delaware Street, and Alabama Street.

2. The city square bounded by Muhigan Street, North Street, Pennsylvania Street, and Delaware Street.

Both sites have the same dimensions of 420 x 420 feet or an area of 176,400 square feet.

SITE NO. 1

The first site selected was suggested by the City Plan Commissioner. It is located two blocks east of the Monument Circle, ideal for public transportation, directly north of the County Court House, and directly south of the City Hall. 3

The entire southern half of the square is now occupied by the City Market House and the old Tomlinson Hall. 4 The land under both buildings is already owned by the city. This partial ownership considerably decreases the total land cost. 5

The northern half of the square is considerably occupied by privately owned buildings. However, the only building difficult to obtain would be the Moose Lodge directly behind the City Market House on Delaware Street. 6

The square directly west of the site unfortunately does not provide desirable adjoining property, consisting mostly of old one and two story wood and brick veneer store buildings used in conjunction with the market. If the market house was moved these would probably become vacant if not remodeled.

The removal of the city market also presents an enormous problem. No space large enough to accommodate a building of its

3. Plate 3
4. Plates 4, 5, 6
5. Plate 7
6. Plate 5
SOUTHEAST CORNER AT MARKET STREET AND ALABAMA STREET. CITY MARKET IN FOREGROUND. TOMLINSON HALL IN BACKGROUND.

SOUTHWEST CORNER AT DELAWARE STREET AND MARKET STREET. TOMLINSON HALL FOREGROUND. CITY MARKET BACKGROUND.
SOUTHWEST CORNER ON DELAWARE STREET. CITY MARKET FOREGROUND. MOOSE LODGE DIRECTLY BEHIND IN CENTER

NORTHWEST CORNER ON DELAWARE STREET. COMMERCIAL BUILDING FOREGROUND. MOOSE LODGE CENTER
NORTHEAST CORNER ON OHIO STREET. ALL COMMERCIAL BUILDINGS

NORTHWEST CORNER ON ALABAMA STREET. COMMERCIAL BUILDING FOREGROUND. CITY MARKET BACKGROUND
## Assessed Valuation Site No. 1

### LOT, LAND, BUILDING, AND AREA OF SQUARE

<table>
<thead>
<tr>
<th>LOT</th>
<th>LAND</th>
<th>BUILDING</th>
<th>AREA OF SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$886,000*</td>
<td>$550,000</td>
<td>176,000 SQ.FT.</td>
</tr>
<tr>
<td>2</td>
<td>10,820</td>
<td>18,320</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>24,210</td>
<td>10,400</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>17,410</td>
<td>6,400</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>78,820</td>
<td>19,500</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4,000</td>
<td>23,400</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>19,800</td>
<td>10,880</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>28,470</td>
<td>13,040</td>
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</tr>
<tr>
<td>9</td>
<td>33,940</td>
<td>26,550</td>
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<tr>
<td>10</td>
<td>34,600</td>
<td>4,740</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>30,150</td>
<td>20,280</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$282,220</strong></td>
<td><strong>$703,610</strong></td>
<td><strong>$5.59 / SQ.FT.</strong></td>
</tr>
</tbody>
</table>

### Assessed Value

- **GRAND TOTAL**: $985,830

*This land owned by the city. Not included in the total.*
size would be available immediately, and such a project would be very expensive. I doubt whether the city could stand this expense at this time.

The parking accommodations surrounding this site are very favorable. Estimates were made on only parking garages and lots within a one and two block radius. Within the one block radius from the site there are accommodations for 1992 cars. Parking space for 1049 cars are available in the next area two blocks distant from the site, making a total capacity for 3041 automobiles only a very short walking distance away. Curb parking was not considered. However, since all of these are located so near the very center of the city, only 50% or less of the total capacity would probably be available for use at an evening performance.

SITE NO. 2

The second site selected is the same site chosen by the architectural firm of Ayres, Kingsbury, and Ward previously mentioned. This site is located four city blocks north of the Monument Circle. It is directly east of the World War Memorial Plaza, a wide and nicely landscaped mall at one end of which is the World War Memorial and at the other end the Main City Library.

7. Plate 8
8. Plate 3
None of this square is owned by the city. The western half was in the past the old site of Butler University and has been offered to the city for the original price paid for it in 1926. A parking lot occupies a major portion of the site. The only major buildings are the two used by the Indiana University Extension Center. Two large service stations and a garage complete the structures on the site. The assessed value is consequently much less than the first site studied, amounting to $3.34 per square foot.

The parking accommodations surrounding this site are not too favorable. Estimates were made in the same manner as for the first site. Within the one block radius there are accommodations for 250 cars and in the next block radius for 1413 cars, making a total of 1663 parking spaces being provided. However, a higher percentage of availability can be figured because of the slightly increased distance from the center of town.

9. Plates 9, 10, 11
10. Plate 12
11. Plate 8
SOUTHWEST CORNER AT MICHIGAN STREET AND PENNSYLVANIA STREET.
PARKING LOT FOREGROUND

NORTHWEST CORNER AT PENNSYLVANIA STREET AND NORTH STREET.
PARKING LOT FOREGROUND
PLATE 10

NORTHEAST CORNER AT NORTH STREET AND DELAWARE STREET. SERVICE STATION IN FOREGROUND

NORTHEAST CORNER ON DELAWARE STREET. INDIANA UNIVERSITY BUILDING BACKGROUND
PLATE II

SOUTHEAST CORNER ON DELAWARE STREET. SERVICE STATION IN FOREGROUND

SOUTHWEST CORNER ON MICHIGAN STREET. INDIANA UNIVERSITY BUILDING BACKGROUND
PLATE 12

ASSESSED VALUATION SITE NO. 2

LOT  | LAND  | BUILDING | AREA OF SQUARE
-----|-------|----------|-----------------|
1    | $206,250 | $400 | 176,400 sq.ft. |
2    | 36,000 | 20,000 |
3    | 32,000 | 20,000 |
4    | 16,000 | 2,560  |
5    | 25,920 | 89,280 |
6    | 39,200 | 20,000 |
7    | 26,500 | 20,000 |
8    | 8,320  | -      |
9    | 13,200 | 55,000 |

TOTAL  | $403,390 | $227,240 | ASSESSED VALUE
GRAND TOTAL  | $630,630 | $3.58 / sq.ft.
3 MATERIAL
The building being designed is basically a combination of two building forms, a theater and an auditorium. Any discussion which would tend to treat both at the same time would become very complex. Both are concerned with providing pleasure for the public, but where this is the only concern of the theater, the purpose of the auditorium entails not only that of pleasure but also of business. For this reason the material will be presented separately, except in instances where it will apply equally to both forms.

**THEATER**

The theater form has in the past been very slow to change and meet the different ideas which are constantly developing. However, a keen interest has been shown recently in improving this situation. Informative literature, which in the past was woefully very meager, has begun to appear. Architects have thought of the theater as a new and untraditional type of building, instead of tinkering with adaptations of a traditional form. This reformation started in Europe, because there much more emphasis is placed on legitimate theaters than motion picture houses. There are many notable examples, but two of the most recent outstanding ones are the Theater at Malmo, Sweden, by Sigurd Lewerentz
and the Total Theater by Walter Gropius. The latter has not yet been built, but may be in the near future. The main theme of both designs is the close relationship between the stage, performer, and audience. It is in this feature where there has been a major tendency toward change.

At the present time scenery is of the built-up set type. The scenery is built and painted specially for each play. They are placed on the stage to follow the walls of a room and thus produce a box set, or room with its fourth wall missing. The play concentrates on the spoken word and the actor-audience contact.

In conjunction with the goal for closer contact between actor and audience, there is trying to be achieved at the same time a less spectacular production because of the competition of the film industry which by its resources can achieve it much more simply and easily. This is the trend known as abstractionism in scenery. Attempts have been made either to eliminate scenery altogether, to strip it of limiting detail, or to reduce it to the elements of pure design, in the belief that each member of the audience can supply for himself imaginatively the best surroundings of the dramatic action.

On the other hand there is the tendency, also revolting from the strong realism of drama, to admit that a theater is a
theater, that it is not real, cannot be real, and to be most effective must be frankly artificial, and theatrically conventional, calling a stage a stage.

There also has been, in recent years, a great revival of interest in music and ballet which may bring with it a revived interest in the "painted form" of scenery consisting of wings set at the sides and parallel with the stage. The whole stage would be dominated by one large backcloth, a few essential properties, and various new methods and colors of lighting.

Such opposite views indicate that in this phase of theater design fads and fashions change very rapidly. What is preached today is condemned tomorrow. It is impossible to predict the trends with accuracy for even a decade.

This unpredictability has caused Burris-Meyer and Cole to say in their recent book the following, 12

"Which of these trends, opposed as they are one to another, will dominate the future theater? In the opinion of the authors: NONE. The theater as an art form is broad enough to encompass and nurture them all. The theater as an architectural form must be capable of housing them all. Well designed theaters have successfully housed all the changing forms of production in the past."

Such a view indicates that past criticism arises then not from the great variation of stage productions, but from the inadequacies and space starvation of the theaters, themselves.

There are two main methods of play production, the 'repertory' principle and the 'repertoire' principle. The repertory type of production consists of having a play or presentation of various types run for two or three weeks at a time. In the repertoire type the company first rehearses some half dozen plays which are then performed on different nights of the week, new plays being introduced into or failures dropped from, the repertoire as required. In the planning of this theater the repertory type of production will be primarily considered.

The care of theater planning is the stage-house. This is the central form about which a theater must be built. It should provide the dominant mass of the theater building, be boldly emphasized rather than concealed. The attempt to dwarf the stage-house results in an unworkable theater; the attempt to conceal the stage-house, instead of making it the dominate feature of the exterior, results in the worst type of architecture. The result is a building whose exterior does not express the essential features of the plan. The other basic elements surrounding the core, the auditorium, workshops,
dressing rooms, and storage areas, must then be related to the stage-house as an organized composition.

The stage-house is composed of three main parts; the fly loft, the stage floor, and the storage area for scenery needed during the progress of a production.

The flying space is located above the stage for the storage and system for hanging or flying scenery. All scenery and the safety curtain should be raised without the necessity of rolling.

There are two established systems for flying scenery, the rope system and the counterweight system. The operation of both is similar. The difference is that in the rope system the lifting is usually done by hand power with sandbags occasionally attached to partially balance a heavy piece of scenery, where in the counterweight system counterweights are an integral part of the system and wire rope is used throughout. Counterweight systems can be economically laid out to cost not much more than a rope system and have a great advantage of long life, dependability, and safety, but they are more fixed in operation and not as flexible for various types of scenery as the rope system.

Then there are two types of counterweight systems, the single
purchase and the double purchase. In the single purchase system the counterweight travels the full height of the building and is at stage level when the scenery is flown. In the double purchase system the counterweight travels through a distance equal to half the height through which the scenery can travel and is located at the fly gallery level. The single purchase system is more direct. In both cases the loading gallery is located just below the grid level and the hand brake is located at the fly gallery. If a truck area is located on only one side of the stage the single purchase system can be used. The tension blocks at the floor can be concealed behind a wall or covered surface. The pinrail is attached to the outside of the fly gallery. Belaying pins are fit vertically into the rail to which the lines are tied.

The flying scenery system is not the only system used for moving scenery. Another system used today is to build a complete scene with both scenery and furniture on platforms or trucks which are rolled onto the stage.

This system of scene shifting has many advantages in saving both in production and rehearsal. Instead of each set having to be dismantled, sides unlashed, ceilings flied and all the furniture carted offstage and stacked, the setting remains intact and can be positioned or removed in a minute or less.
Heavy pieces, such as stairways, porticos, and hillsides, are much more easily handled.

The stage floor includes both the acting area and enough space on each side and the back for circulation of the performers, assemblage of the chorus, and movement of scenery.

For a great number of artistic productions it is necessary that openings be provided in the floor of the acting area and that certain portions of the floor be raised or lowered for certain effects. This system of openings and stage divisions is called traps. Because of the variety of productions, traps have occurred in all parts of the acting area. Thus sound practice indicates that it is best to install a complete system of traps which would include the entire acting area of the stage. The traps should also divide the floor in such a way that the maximum amount of flexibility can be obtained with the least amount of reconstruction. This qualification demands a versatile method of operation.

There are two types of methods used to produce various levels to the stage floor; building platforms as scenery and setting them on the acting area; elevating sections of the stage floor on understage machinery. The latter is more desirable.

The former method involves the maximum of effort in building
and handling, of time and materials, and of storage space if platforms are to be kept for re-use. The cost involved in these operations would far exceed over a number of years the original expense applied to the construction of the latter.

The second method reduces effort, time, materials, and storage space with the added advantage of greater variety in size, shape, position, and height of the raised sections. There are many various elevator systems by which this is accomplished.13 However, the desire for maximum flexibility must be tempered by a consideration of expense and average use. In a building of this type it is unnecessary to use the most complicated and flexible elevators, which quite reasonably are the most expensive.

Therefore, a system of Portable Trap Elevators was selected as being the most appropriate to use. These elevators are mounted on castors to permit movement under any part of the stage. A number sufficient to elevate approximately 20% of the stage area at one time is considered sufficient. Two or more may be used in combination.

Such a system requires no fixed understage construction thereby leaving this space open for the placement of stairs and ladders to entrances through the stage floor, and for the mass

movement of people.

Since this theater is to run on repertory lines the storage space need not be over large. It will only be necessary to store the stock scenery from which the different productions are built up, and while the scenery for the present production is standing on the stage the workshop will be making the scenery for the following production. Many of the visiting companies will bring their own scenery and backdrops. It must also be remembered that the varied type of anticipated presentation such as symphonies, choral groups, and etc., will result in a broken and smaller schedule of plays, thus tending to also reduce the size of the storage area.

Flats are usually stored in a vertical position in bays approximately 6 feet deep and 4 to 5 feet wide along the walls of the workshop and around the edge of the stage, if the wall areas will permit it.

A space should be provided for some scenery construction in the form of standard and specially shaped flats, building of truck sets, construction and repair of special pieces of furniture, and the painting of blackcloths.

The connecting link between the stage-house and the auditorium is the proscenium opening. It performs two functions; it
controls the attention of the audience and directs it toward the stage; it conceals the working area of the stage from the audience. Its width should be equal to that of the acting area. The height is determined by the sight lines from the rear of the auditorium and the provision of a pleasant proportion. The width should be of sufficient size to accommodate the largest production anticipated, the width being reduced for smaller productions by the addition of a portable and adjustable inner proscenium.

However, the proscenium as it has been known in the past with its definite picture frame design is slowly disappearing. Today theatrical production refuses to take place within a strictly limited space. This formal frame does not permit the intimate contact between performer and audience previously mentioned. There are two methods of solving this.

One method is to treat the front of the auditorium as a continuation of the decorative wall features, principally by the use of a curtain, as used in the Cine Plaza Theater in Juarez, Mexico. Such a method is very flexible. The opening to the stage is made by opening the curtain, which is in this case the same as the front curtain, by the contour method. The opening can easily be adjusted to the type of production. This would permit the omission of the secondary proscenium opening.
The other method is to form the proscenium opening by the continuation of the ceiling and walls onto the stage area, the lines running uninterrupted to the front curtain. When a forestage is used the allusion that the audience area actually penetrates into the acting area would be produced.

The planning of the audience side of the theater is governed by one primary consideration; the audience comes to the theater to see the show. Burris-Meyer and Cole emphasized this quite concisely when they said, 14

"As each member of the audience enters the auditorium he wants to see the usher, the steps, the aisles, row and seat (including the hat rack), his wife's gloves (on the floor), the program, the show (at an angle and distance consistent with visual fidelity and credibility), the emergency exit, and the regular exit."

The showman also has certain qualifications which he demands of this area. Again Burris-Meyer and Cole aptly stated this when they wrote, 15

"The showman wants the audience to see: walls and ceiling only as they contribute to the atmosphere of the theater, objects of decoration which are significant as focal points in the decorative scheme and contribute to the feeling of luxury, the organ console and orchestra when they are part of the show. The showman wants to

14. Ibid.
15. Ibid.
conceal from view all elements in structure or equipment which will detract from the desired atmosphere of the house or fatigue the audience, as: backstage areas sometimes visible through the wings, loud speakers about the proscenium, stage lighting units (balcony pans, insufficiently masked booms at the sides of the proscenium), orchestra and organ console when their visual aspects are not essential to the show, or bright open light sources."

Such requirements place a very strict limitation on the size and shape of the auditorium. For the patron to see the show he must not be too far to one side, too far back, or too high above the stage level. Because he must see the organ console and orchestra these must be placed either in front or to the front side, but so located as not to detract from the action on the stage.

Greek theaters were semicircular with the horizontal sight line 90° to the center line. This was all right because there was no proscenium. But it must be remembered that almost all of theatrical companies operating today are designed to operate in the realistic box set, where some sort of a proscenium is used. This is especially true of the repertory companies. Failure to remember this point still gives us some theaters with impossible sight lines.

Because of the great variety of productions which will be performed in the theater it is essential that the orchestra
pit and forestage be made as flexible and interchangeable as possible. For certain productions an orchestra is an integral part of the presentation and for other plays a very minor role, sometimes being entirely omitted and replaced by the forestage.

The forestage is becoming more and more important as more emphasis is being placed on the relationship of the actors to the audience. The stage sets are also designed in many cases for the use of a forestage.

When neither an orchestra pit or a forestage is required it is very profitable to the management if this area could provide additional seating space. This area of flooring could be designed as a mechanically operated lift to rise and fall as required. The fall should be low enough to permit entrance to the pit from below, unseen by the audience. A removable form of balustrade could be provided when the area is lowered. The rise should be great enough to bring the area up to the level of the stage to form the forestage. A very good example of this type of versatility is the forestage of the theater at Malmo, Sweden. 16

The main concern in the design of the front part of the theater, which includes the foyer, lobby, and lounge, is to provide enough space to comfortably accommodate all of the patrons.

The foyer has a two fold purpose, it is the location for the ticket windows and also a waiting area for the audience to meet friends. Enough ticket windows should be so located as to make a speedy sale of tickets. A good solution to this problem would be to deviate from the standard custom of individual ticket windows, and instead provide a long, open, and non-divided counter which would permit the ticket sellers to move freely from one type of ticket window to another. As the demand requires, doors are best placed on the long dimension of the foyer. There should also be a straight path across the foyer to facilitate the patrons who have bought tickets in advance.

The lobby is principally a distribution area with the ticket taker between it and the theater proper. The best location for the ticket taker is on the center line of the house. Each patron should be able to get to his aisle or staircase by a route which will involve a minimum crossing of the route of any other patron.

The lounge is used principally at intermission. It is best to split the traffic at the entrance to this area, leaving the central part free for congregation, by locating the lavatories to the left and right before the patron enters the lounge. Traffic eddies tend to form in corners, so it may be best to
locate chairs here with large tables and settees in the center.

Every legitimate theater requires a projection booth and accompanying facilities from time to time for certain productions. Moreover, there may be a time when motion pictures will be shown. This area should be large enough to comfortably accommodate all of the machinery required. The area across the back of the balcony is the best location for this section and may also include the facilities for sound control.

AUDITORIUM

The auditorium, though not as complicated and technical in planning as the theater, is very similar in its broader aspects of circulation, public accommodations, and main space allocations.

There have not been too many auditoriums designed in recent years just as auditoriums. They are usually either combined as a part of another structure and therefore dependent on their component for much of the design, or they are of such magnitude that they are no longer auditoriums, but stadiums or arenas.

The auditorium, unlike the theater, must be able to provide a large floor area, cleared of all obstructions, to make its
use as flexible as possible. This is the core of the building, all other elements must be related to it. It is best to have this area on grade or as near to grade as conditions and design will permit. It can assume a variety of shapes from circles and ellipses to rectangles and squares, but whatever its shape, the flexibility should not be sacrificed.

The patron should be able to reach the main assembly area from the entrance doors by the most direct route and arrive at his seat as quickly as possible. For this reason circulation areas must surround the entire building. Because of the large number of patrons using this building, vertical transportation must not hinder the ease of traffic flow. The employment of ramps is considered the best way to meet this requirement.

Although the best seating arrangement attempts to avoid the use of balconies, it is usually impossible to do so because of area and sight limitations. The audience likes to be as near the action as possible. When balconies are used it should be remembered that the audience must be able to see from a seated position and not forced to stand in order to see the main floor area near the balcony front. This requires a careful study of sight lines.
When a built-in stage is considered as part of the scheme it should be located opposite the main entrance so it can be immediately seen from the entrance. Like the theater, the patron should be able to see the auditorium, stage, seats, ramps, and concessions as he enters. The stage area should also be a private entrance from the street for use by the visiting speakers, and other private facilities such as toilets, lounge, and private rooms.

Concessions are usually included in the building if it is possible to do so. Not only are they a good source of income but an added accommodation for the patron. They should be available on all floors used for public space.

**PARKING GARAGE**

In the past decade parking facilities have become a serious problem in most of the large cities throughout the country. Parking garages are becoming more and more popular. When they are located directly in the metropolitan center it is usually very difficult to find enough room to erect them and still retain the much needed office buildings, keep intact the city plan, or find a site whose land cost is low enough to make such a building economically secure. For this reason several cities have built or plan to build underground
parking garages.

The outstanding example of underground parking is the Union Square Garage in San Francisco, California, one of the first of its size and kind to be built. 17 It is four stories deep, uses a minor split level system of parking, accommodates 1700 automobiles, and has four combined entrances and exits on each side of the square. Since then Los Angeles, Detroit, and Pittsburg have made studies for similar underground parking.

Pittsburg's planned garage is, like San Francisco's, to be built under a park. 18 But a combined entry and exit will be on only two sides of the square. It has been found that entry from all four sides in the Union Square Garage created too much traffic confusion. They have also provided for more ample entry reservoir space.

This scheme's reservoir space is long enough to hold 27 cars which will greatly reduce pick up time. Both garages have attendant parking. The designers also used the staggered floor plan which in this case increased the garage capacity by some 40 cars per floor over level schemes, and also reduced the ramp cost because of the shorter distance between floors.

18. ARCHITECTURAL FORUM, November 1949, pp. 70-71.
In the split level system of parking additional space is gained by overlapping the cars on staggered cantilevered floors. This type of floor system also overcomes what is perhaps the chief problem in the economical construction of parking garages: the space eating factor of long ramps. A very good example of this type of construction was just recently completed in Miami, Florida. In this garage the width of 165'- 0" required for six lanes of cars parked on a level floor was reduced to 151'- 6" with the staggered system. Multiply this difference of 13'- 6" five or six times and the saving of space can be readily appreciated.

4

PROGRAM
The following program is the statistical data on which the design is based. It has been shown in outline form for clarity.

**THE THEATER**

**FOYER**
1. area - 1 square foot per seat of house
2. doors placed on long dimension of house
3. door width as required by State Building Code:
   - 2' per 100 persons to 1000
   - 1' per 100 additional persons to 2000
   - 6" per 100 additional persons over 3000
   - total width required 32'-6" (6 double doors at 5'-8" equals 34'-0")
4. total area-----------------------------2500 sq.ft.

**BOX OFFICE**
1. located in foyer to one side of traffic path
2. long counter type selected over individual window
3. 20% of people buy tickets just before curtain time
4. one ticket window per 200 people who buy tickets just before curtain time. (3 windows required)
5. should include advance sales window to serve both foyer and outside of building, large enough for 2 clerks (approximate size, 8' x 12')

**LOBBY**
1. doors or opening in whole wall between foyer and lobby equal to outside doors
2. a feeling of luxury should exist
3. area based on 1.8 square feet per seat of house
4. ticket taker can handle 1000-1500 persons (minimum of 3 required)

5. total area------------------------45,000 sq.ft.

CHECK ROOM

1. best location is where entering line will pass it before dividing

2. usually located on right side of house

3. counter wide enough for 5 attendants per 1000 seats (45 feet minimum width)

4. if possible located in conjunction with offices for control

5. everyone will usually check something if space is provided.

6. average storage - 4 coats per 1.3 square feet

7. total area------------------------3,250 sq.ft.

LOUNGE

1. area based on 8 square feet per seat of house

2. feeling of luxury should exist

3. ample accommodations for relaxation

4. telephones near entrance

5. lavatories to left and right of entrance

6. refreshment bar (if any) located in this area

7. small exhibition space may be provided

8. could be used for rehearsal

9. total area------------------------20,000 sq.ft.

POWDER AND TOILET ROOM - WOMEN

1. minimum of one dressing table per 600 seats in powder room - total number required, 4
2. five closets per 1000 seats  
   total number required -- 12

3. five lavatories per 1000 seats  
   total number required -- 12

4. These are minimum requirements. When performances run over three hours the lavatory traffic is increased fourfold. It is best to increase the above figures as much as possible.

5. area-------------------------------------------800 sq.ft.

SMOKING AND TOILET ROOM - MEN

1. smoking room large enough to provide small private lounge

2. five urinals per 1000 seats - total, 12

3. three lavatories per 1000 seats - total, 8

4. two closets per 1000 seats - total, 5

5. These are minimum requirements and if possible should be increased for the same reason as the women's facilities.

6. area-------------------------------------------800 sq.ft.

MANAGER'S OFFICE

1. small office for general manager, assistant manager, and at least 1 secretary (10' x 12' each)

2. lavatory facilities

3. closet facilities

4. clothes changing accommodations for manager and assistant manager

5. should be adjoining box office

6. total area-------------------------------------------500 sq.ft.
**USHER'S LOCKER ROOM AND SHOWER**

1. facilities for 12 ushers required
2. locker room separate from toilet with individual lockers
3. toilet room should provide
   1. lavatory
   1. closet
   1. urinal
   1. double shower stall
4. can be located in any convenient place
5. total area----------~-------------------------400 sq.ft.

**AUDITORIUM**

1. should have as nearly as possible horizontal sight lines not over 100° from the plane of the stage front
2. vertical sight lines should not be greater than 30° from horizontal plane of stage.
3. distance to back wall should not be over 125 ft from front of stage to permit actions and facial expressions to be seen
4. lowest seat must be so located that patron can see the stage floor
5. seating capacity to be as close to 3000 as above factors will permit
6. standard seating will be used because they provide more seats per unit area than continental seating
7. State Building Code permits not more than 14 seats in any one row
8. proscenium width varies for the different types of productions from 26 feet to 80 feet, an average width of 48 feet has been selected.

THE STAGE AREA

1. There are various methods of determining the size of the acting area and stage. The size of the acting area is a direct function of the number of performers who use it, and the stage size is determined by the amount of scenery and storage space. Considering the various types of productions for which the stage is to be used the following sizes were determined. 21

acting area 48 feet wide and 30 feet deep (1440 sq.ft.)
stage 100 feet wide and 60 feet deep (6000 sq.ft.)

2. stage should be connected directly to workshop by a large opening fitted with a fire resisting door sliding shutter

3. the distance that scenery is moved should be kept to a minimum

4. traps are to cover most of the acting area

5. Major Furnishings

A. flying light gallery above proscenium
B. fly gallery at side and 30' above stage
C. loading gallery 6' below gridiron and over fly gallery
D. electrician's switch board (approximately 12' wide and 7' high) located at the side and 7' above the stage
E. reflector spotlights surrounding inside of proscenium opening
F. stacking rack for scenery flats
G. cyclorama

ELECTRICIAN'S STORE ROOM

1. small room for storage of:

A. spots, flashlights—loose and on stands
B. lighting battens (6' lengths)
C. drawer space for slides, colored sheets, etc.
D. hanging space for chandeliers, etc.

21. Ibid., p. 84
2. easily accessible to workshops and storage area
3. may be placed next to electricians' switchboard
4. area---------------------------------200 sq. ft.

WING ROOMS
1. small room located on each side of stage
2. used for entrance of actors to forestage
3. area---------------------------------100 sq. ft.

ORGAN ROOM
1. large enough to accommodate organ chests
2. located on side of stage
3. area---------------------------------200 sq. ft.

ORCHESTRA PIT
1. The number of musicians vary with each type of production so an average number of 75 was selected.
2. provide flexibility to change to forestage or extension of auditorium floor
3. provide 10 square feet per musician
4. add 100 square feet for piano or harp
5. total area---------------------------------850 sq. ft.

GREEN ROOM
1. general lounge facilities for about 35 people
2. should have ample natural light
3. small kitchenette or snack bar (optional)
4. should be closely related to stage as possible
5. could be used as cast assembly room
6. total area------------------------------------500 sq.ft.

7. Furnishings
   A. settees, easy chairs, tables
   B. several writing tables
   C. card table

OFFICE DRESSING ROOMS

1. dressing room each for producer, stage director, and stage manager
2. should be as near the stage as possible
3. size approximately 10' x 12' each
4. area per room-----------------------------120 sq.ft.

PRIVATE DRESSING ROOMS

1. Although number of stars vary with each production it is estimated that 12 rooms will be sufficient.
2. may be planned as double rooms
3. size approximately 10' x 12'
4. area per room-----------------------------120 sq.ft.
5. Furnishings
   A. separate dressing table with mirror above for each occupant
   B. a full length mirror (1 minimum)
   C. closet space (2' x 3' min) per person curtained off or separated from rest of room
   D. locked clothes space for each person 3' wide with drawers, shoe space
   E. lavatory, closet, and shower
   F. one easy chair per person (beside dressing table chair)

CHORUS DRESSING ROOMS

1. room large enough for 12 persons each
2. five rooms required
3. each room should have clear floor space of 12' x 20'

4. total area per room--------------------------300 sq.ft.

5. Furnishings
   A. one lavatory per 4 persons (3 required)
   B. two continuous dressing tables down the center of room is best plan
   C. walls to have ranges of cabinets with sliding doors and curtained hanging space for clothes
   D. one full length mirror per 8 persons (2 required)

DRESSING ROOMS (GENERAL)

1. natural light and ventilation if possible

2. make up done entirely by artificial light, so must be possible to exclude daylight entirely from room at will

3. lights around each mirror

4. linoleum floor

5. small throw rugs in private dressing rooms

STAGE DOORKEEPER'S ROOM

1. small room 6' x 8'

2. located at stage entrance

3. Furnishings
   A. one desk with chair
   B. letter racks for company
   C. keyboard
   D. telephone for company's use

TRUNK ROOM

1. small room for storage of theatrical hampers and trunks belonging to company

2. should be located close to stage doorkeeper's room and under his control
BATHS AND TOILETS

1. should be directly accessible to each group of chorus dressing rooms

2. fixtures per room are
   A. 2 closets
   B. 3 showers
   C. 1 bath tub

WARDROBE ROOM

1. used for cutting, fitting, making and storing of costumes

2. size 12' x 20' of clear space

3. total area-----------------------------------500 sq. ft.

4. Furnishings
   A. facilities for washing minor articles of clothing
   B. ironing facilities
   C. a cutting table 4'- 6" wide and 6'- 9" long with access on all four sides
   D. 2 sewing machines
   E. cabinet space for wigs, curtains, etc.
   F. large closet space for costumes

LIBRARY AND BOARD ROOM

1. can be located in any convenient position in building

2. room would be used mainly as a board room for various theater committees

3. provision for collection of play scripts, working copies, and books can be located around walls and available to producer, stage director, and members of play reading committee

ARCHIVES ROOM

1. small room
2. should be adjacent to Library and Board Room
3. used for storage of designs, models, theater photography, play bills, programs, etc.

FIRST AID ROOM
1. size 8' x 10'
2. Furnishings
   A. surgical table
   B. first aid cabinet
   C. lavatory
   D. stools and chairs

STAFF LOCKER AND TOILET ROOM
1. lockers for 30 men
2. small lounge area
3. toilet facilities
   A. 2 closets
   B. 2 urinals
   C. 4 lavatories
   D. 5 showers
4. closet available to flymen on fly gallery
5. total area-----------------------------400 sq.ft.

MUSICIAN'S LOCKER AND TOILET ROOM
1. lockers for 75 musicians
2. music cabinets
3. toilet facilities
   A. 3 closets
   B. 6 urinals
   C. 6 lavatories

CONDUCTOR'S DRESSING ROOM
1. size 8' x 10'
2. locker for clothes
3. private toilet and shower

WORKSHOP
1. should connect directly to stage and truck bay
2. good natural light--preferable north light
3. ceiling height should be 30' clear to provide flying height above scene setting trucks for moving of flats
4. track system across ceiling on approximately 15' centers
5. carpentry area should accomodate
   A. 1 carpenter's bench - 3' x 10'
   B. 1-2 working benches - 2' x 18'
      (3 feet of working space around)
   C. lumber storage space (possibly located under working tables)
   D. assembly area for erection of complete settings on trucks (should be close to painting area and stage)
   E. area for new black cloth assembly 6' x 50'

6. painting area should accommodate
   A. painting frame 30' high and 50' wide
   B. washing area for flats (could use sinkage well if movable painting frame is used)

7. area-----------------------------6000 sq.ft.

TOOL STORAGE
1. small room located next to carpenter's bench
2. could also be master carpenter's office

PAINTER'S OFFICE
1. small room for storage of designs and models and space for drawing board
2. located near paint frame if possible

PAINT STORAGE

1. small room located near paint frame
2. should have large sinks and small range for heating water

STORAGE OF FLATS

1. should be stored in vertical position
2. wall opposite paint frame good location
3. flats vary in thickness from 1 1/2" to 2"
4. 100 flats can be stored in 15 feet of wall length

STORAGE OF ROLLED SCENERY

1. flat storage can be roofed over and shelves attached to wall, overhead pulley tracks being used for placement

STORAGE OF THREE DIMENSIONAL PIECES

1. usually use truck bay (trucks can be upended)
2. additional storage could be placed over truck area for small pieces
3. any units required for alterations of orchestra pit or forestage could also be located here

PROPERTY AND FURNITURE STORAGE

1. space should be approximately equivalent to workshop area
2. can be located either above or below stage and use elevators
3. numerous tiers of drawers and shelves for small fragile objects
4. closets with sliding doors for drapes, loose covers, etc.
5. area----------------------------------------6000 sq.ft.

MECHANICAL EQUIPMENT ROOM

1. located in basement and as near to center of building as design will permit

2. will provide space for
   A. air conditioning unit and all accompanying equipment
   B. transformers and generators

3. area----------------------------------------1500 sq.ft.

CONTROL AND PROJECTION ROOM

1. Provide for
   A. four projector machines
   B. toilet facilities
   C. film vault
   D. film rewind area
   E. storage
   F. mechanical room

2. small lounge area

3. parts will be of three kind: projection, observation, combination observation and spotlight

AUDITORIUM

FOYER

1. area -is 1 square foot per seat of house

2. doors placed on long dimension of house

3. State Building Code same as foyer of theater
   total width required - 70 feet.
   (12 double doors at 6'- 0" equals 72'- 0")
4. total area-----------------------------------10,000 sq.ft.

LOBBY

1. area - 1.8 square feet per seat of house
2. doors equal to outside doors
3. number of ticket takers based on same data as theater lobby - 8 required (at certain functions ticket takers aren't used)
4. total area-----------------------------------18,000 sq.ft.

AUDITORIUM

1. seating capacity based on 1 seat per 6 sq.ft.
2. must be clear of all visual obstructions
3. should accommodate 6000 seats
4. approximate area--------------------------36,000 sq.ft.

BOX OFFICE

1. based on same data as theater box office
2. should have length equivalent to 10 ticket windows (30 feet)
3. should be adjacent to office area
4. should include advance sales window to serve both foyer and outside of building

MANAGER'S OFFICE

1. same qualifications as theater office, however these are not for permanent occupancy because each function in the auditorium will have its own management

STAGE

1. large enough to accommodate 15 speakers
2. size - 60 feet wide and 25 feet deep
3. not to be equipped for scenery
4. will be acoustically designed for speakers and music
5. private entrance to street
6. forestage to be removable
7. total area------------------------1500 sq.ft.

SPEAKERS' LOUNGE

1. closely related to stage
2. small storage area
3. privacy is a prime requisite
4. area-------------------------------1000 sq.ft.

MESSENGER'S ROOM

1. located close to stage
2. small room (8' x 10')

STAGE TOILET - WOMEN

1. very small room
2. facilities
   A. 2 closets
   B. 2 lavatories

STAGE TOILET - MEN

1. very small room
2. facilities
   A. 1 closet
   B. 1 urinal
   C. 2 lavatories

PRIVATE MEETING ROOMS

1. located adjacent to lounge
2. should be flexible space
3. each room large enough to accommodate a small table for 8 people

STORAGE SPACE
1. located so as to have direct access space from loading dock straight through to auditorium
2. space for storage of
   A. 6000 chairs
   B. packing crates and boxes
3. can be located in basement
4. area------------------------------------------10,000 sq.ft.

EMPLOYEE'S LOCKER AND TOILET ROOM
1. located in basement near service entrance
2. provision for 15 lockers
3. toilet facilities
   A. 2 closets
   B. 2 urinals
   C. 4 lavatories
   D. showers
4. area------------------------------------------500 sq.ft.

PUBLIC TOILET - WOMEN
1. located directly off of lobby
2. equally accessible from all parts of auditorium
3. five closets per 2000 seats - total 25
4. five lavatories per 2000 seats - total 25

PUBLIC TOILET - MEN
1. located directly off of lobby
2. equally accessible from all parts of auditorium
3. five urinals per 2000 seats - total 25
4. three lavatories per 2000 seats - total 15
5. two closets per 2000 seats - total 10

CONCESSIONS
1. should be located on both floors and directly off of lobby
2. surrounded by open area as much as possible

PUBLIC MEETING ROOMS

ENTRANCE
1. accessible both from street and from auditorium
2. space large enough to accommodate a small information desk
3. closet space
4. area-----------------------------------------------1500 sq.ft.

MEETING ROOMS
1. should be very flexible to provide single rooms or double rooms
2. size of single room - 25' x 30'
3. provide individual storage space for various civic organizations
4. have natural light
5. area per room--------------------------------------750 sq.ft.
LARGE MEETING ROOM

1. adjacent to other meeting rooms
2. capacity - 500 people
3. area-----------------------~---------------3000 sq.ft.

PUBLIC TOILET - WOMEN

1. facilities
   A. 5 closets
   B. 5 lavatories
2. small powder room to accommodate 2 tables

PUBLIC TOILET - MEN

1. facilities
   A. 2 closets
   B. 3 urinals
   C. 5 lavatories
2. small smoking room

UNDERGROUND PARKING GARAGE

Parking Area

1. area allocation of one car per 105 square feet
2. use of split level parking
3. ramps to have a 2½ grade
4. depth of garage equivalent to 2 floors
5. parking to be by attendant
6. two entrances from and to street level
OFFICE

1. locate one at each entrance
2. size - 8' x 10'
3. small storage space adjacent

PUBLIC TOILET - WOMEN

1. facilities
   A. 2 closets
   B. 2 lavatories
   C. 1 small dressing table

PUBLIC TOILET - MEN

1. facilities
   A. 1 closet
   B. 2 urinals
   C. 2 lavatories
5

SOLUTION
The principal object in the solution of the design was to provide a well integrated plan and still maintain an exterior which would express the true function of each component part. Because of the large areas involved it soon became evident that the size of the site prohibited an extensive open plan, but by close relationship of elements common to both the theater and auditorium the solution was achieved.

The best location of the building in the city was selected as Site No. 2 as previously described in part 2 of the text. This site was chosen because of the following factors.

Its total cost is decidedly less than the total cost of Site No. 1 and probably could be more easily obtained.

The removal of the buildings on Site No. 1 as compared to Site No. 2 would increase the enormity of this problem tenfold.

It is surrounded by low buildings as compared to the high buildings around Site No. 1 and therefore would have a more visual prominence.

Its environment is much better. Even though Site No. 1 is located between the City Hall and County Courthouse, Site No. 2 is located opposite the World War Memorial Plaza and in the proximity of the Main City Library and World War Memorial.

Its added distance from the center of the city was considered to be an advantage. It is in a less congested traffic area, thereby more easily accommodating a large attendance.

Since parking is to be provided on the site, the difference in the present surrounding parking facilities were not considered a major factor.
The main entrance to both the theater and auditorium was placed facing the large landscaped area of the plaza, thus providing a nice vista both to and from the building. The meeting rooms are placed to the front and have the same provisions. This orientation also places the main entrance off of Pennsylvania Street, the major thoroughfare running north and south.

The service entrance was planned to serve both the theater and auditorium, thereby requiring only one drive off of the street. It was placed off of North Street to avoid congestion as much as possible, North Street being the minor street surrounding the site.

Very little communication was provided between the theater and auditorium. Extensive study of the function of each element revealed that this was necessary. The theater must have very little interruptions and be well insulated from the noise and commotion of a rowdy convention. Likewise, the auditorium must be provided with an atmosphere of vocal freedom.

Entrance to the underground parking garage is located on only two sides of the square, Pennsylvania Street and Delaware Street. These two streets running north and south are very wide and would carry the largest volume of traffic. Both entrances would also serve as exits.
CONSTRUCTION
This type of building is classified by the State Building Code as being of Group "A" occupancy and Type I construction. In Type I buildings the structural frame must be of fireproofed structural steel or iron, or reinforced concrete.

Because of the large open areas required by the function of the building a rigid frame was selected as the basic structural element. The frame will be of reinforced concrete, which was considered to be more economical than fireproofed steel because of the large repetition of similar bays and the omission of a suspended ceiling.

It was felt that this omission of a suspended ceiling, except in a few cases over small rooms, was justified. There will be very few ducts or pipes run horizontally above the main floor in the large spaces, these being located in vertical shafts with the openings in the walls, the required horizontal runs located under the first floor or on the ceiling of the parking garage. The electrical wiring will be cable either embedded in the concrete slab or placed between the concrete slab and furred expanded wire mesh when a ceiling material is used.

The ceiling of the large elements of the plan, such as the theater auditorium, stage house, and workshop will be framed by lightweight steel trusses. The ceiling of the auditorium
will be framed by reinforced concrete arch ribs supporting a thin concrete shell, placed midway in the depth of the ribs at the neutral axis. 22

The ceiling of the parking garage will be a reinforced concrete slab waterproofed by a membrane and a protective cover of concrete. Where earth is required for planting, it will be 3'-6" deep and tree boxes 5'-0" deep. This area will be drained by drain tile laid similar to the system used to drain football fields.

The garage floors and ramps will all be reinforced concrete structural slabs so designed as to provide a smooth ceiling (Patented Smooth Ceiling System). A floor of this type would permit the ducts and pipes to be snugged-up close to the ceiling thus reducing the floor to floor height and the depth of excavation.

The building will be completely air conditioned. The system will also be used for heating the building in winter as well as cooling it in summer. The only area which will be heated by a radiator system will be the stage area. No boilers are required. The steam will be obtained directly from the city lines.

The exterior materials of the building will be mostly smooth finished concrete treated for extra whiteness and a small

22. ARCHITECTURAL FORUM, Products and Practice, September 1948. Pp. 138-139
amount of colored tile, structural glass, or marble. Other color will be achieved by use of painted solid doors and paving.
CIVIC THEATER AND AUDITORIUM FOR THE CITY OF INDIANAPOLIS

Submitted in partial fulfillment for the degree of Master in Architecture at the Massachusetts Institute of Technology.

Donald E. Clark  September 1950
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BIBLIOGRAPHY

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Mr. A. T. Frankel  
Indiana Trust Building  
Indianapolis 4, Indiana  

Dear Mr. Frankel:  

I am a graduate student in Architecture at the Massachusetts Institute of Technology. I have selected to design a Civic Auditorium for the city of Indianapolis as my thesis subject.

Two weeks ago I was talking to Mr. Hollister of the City Planning Commission about research on this subject. He showed me a brochure of a proposed Civic Auditorium for the city designed by a former architectural firm of Indianapolis. Unfortunately, this brochure was published in 1946 and Mr. Hollister did not have an extra copy. However, he told me that if I contacted you I might be able to obtain one. I visited your office Friday, March 31, and in your absence spoke to your brother. He suggested I write you.

I would certainly be grateful if you have a brochure available and are free to send it to me. Any other information which you could send me on the subject would be equally appreciated and would assist me in my research.

I have enclosed some stamps so there may be no postage expense on your part. If there is a charge for the brochure please inform me of the amount and I will remit it immediately.

Thank you very much for your valuable time and assistance. Looking forward to hearing from you as soon as possible, I am

Respectfully yours,

Donald E. Clark
Director of Athletics  
Butler University  
Indianapolis, Indiana  

Dear Sir:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. Such a building should be advantageously located, correctly designed for the present and future, and financially secure.

One phase of the research requires that as much data as possible be obtained on the present city facilities for large public gatherings and social functions, such as the Butler Fieldhouse.

I certainly would be grateful for any assistance which you could give me, and have prepared the following list of questions to indicate the type and scope of the information I am seeking. Any other information which you could send me on the subject would be equally appreciated and assist me in my research.

If there is a charge for any published pamphlets or reports on the administration of the Butler Fieldhouse or concerning the information which I am seeking, please inform me of the amount and I will remit it immediately.

Thank you for your valuable time and assistance. Looking forward to hearing from you as soon as possible, I am

Respectfully yours,

Donald E. Clark
Question List

1. Present seating capacity of the building.
2. Adequacy of present seating.
3. List of the functions which are held in the building.
4. The number of functions per year for the last two or three years.
5. The dates of these functions.
6. The time of day of these functions.
7. The amount of time required per day for the function.
8. The number of attendance per function. (If exact number not available the average attendance)
9. The adequacy of present traffic facilities.
11. Do these functions financially support themselves.
12. What additional functions could have been added if it had been possible to do so.
13. Your opinion on the size a new Civic Auditorium should be.

The foregoing Question List was included with the letters to Butler University, Murat Temple and the Coliseum at the State Fair Grounds.
Dear Mr. Clark:

This office has received your letter of April 17 requesting certain information concerning the Butler University Fieldhouse. We are enclosing a data sheet which includes several interesting statistics on the building.

As you probably know, the Fieldhouse serves to house all home basketball games and athletic functions of our school. During the past year the building was rented to the Indianapolis Olympians, professional basketball club. You will also remember that the Fieldhouse is the scene of the sectional, regional, semi-final, and final basketball tournaments played under the auspices of the Indiana High School Athletic Association. On occasion the building has been used to present nationally known radio and screen stars in musical reviews. The attendance and dates of these various events vary too much to list them.

I hope that this information will be of some use to you in your thesis.

Sincerely yours,

[Signature]

JTB:mc

Enclosure
Manager
Murat Temple
Indianapolis, Indiana

Dear Sir:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. Such a building should be advantageously located, correctly designed for the present and future, and financially secure.

One phase of the research requires that as much data as possible be obtained on the present city facilities for large public gatherings and social functions, such as the Murat Temple.

I certainly would be grateful for any assistance which you could give me, and have prepared the following list of questions to indicate the type and scope of the information I am seeking. Any other information which you could send me on the subject would be equally appreciated and assist me in my research.

If there is a charge for any published pamphlets or reports on the administration of the Murat Temple or concerning the information which I am seeking, please inform me of the amount and I will remit it immediately.

Thank you very much for your valuable time and assistance. Looking forward to hearing from you as soon as possible, I am

Respectfully yours,

Donald E. Clark
Manager  
Coliseum, State Fair Grounds  
Indianapolis, Indiana

Dear Sir:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. Such a building should be advantageously located, correctly designed for the present and future, and financially secure.

One phase of the research requires that as much data as possible be obtained on the present city facilities for large public gatherings and social functions, such as the Coliseum.

I certainly would be grateful for any assistance which you could give me, and have prepared the following list of questions to indicate the type and scope of the information I am seeking. Any other information which you could send me on the subject would be equally appreciated and assist me in my research.

If there is a charge for any published pamphlets or reports on the administration of the Coliseum or concerning the information which I am seeking, please inform me of the amount and I will remit it immediately.

Thank you very much for your valuable time and assistance. Looking forward to hearing from you as soon as possible, I am

Respectfully yours,

Donald E. Clark
Mr. Leslie F. Ayres, Architect  
518 North Beville Avenue  
Indianapolis 1, Indiana

Dear Mr. Ayres:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. A major part of the thesis is research.

When I was in Indianapolis two weeks ago I called your office for an interview, but you were to be out of town for a few days and I had to return to school without seeing you.

I would certainly be grateful for any information that you could give me on the requirements and analysis of such a building. I have obtained a copy of the Civic Auditorium brochure published in 1946 from Mr. Frankel.

Some of the problems which I am encountering concern Space Relationship and Use, Seating, Site Selection, Parking, and Circulation. I have listed on the accompanying sheet these problems in a more detailed form to indicate and more fully explain the type of information which I am trying to find. If it is inconvenient for you to answer these yourself and have any pamphlets, booklets, written material, or any general information which from your experience you think I could use and are free to send me, I would take good care of them and return them as soon as possible.
I am terribly sorry that I am required to do this by correspondence as I realize the work it entails and I certainly do not wish to violate any professional ethics, but I would be deeply grateful for any time you could give me.

Please send any material by C.O.D. or, if this is not possible, I will remit any expense. The time element is very short on thesis problems, as you know, and I would greatly appreciate hearing from you as soon as possible.

Sincerely yours,

Donald E. Clark
Space Relationship and Use

List of present and future organizations which could be expected to use the building.

The size of these organizations in membership.

Schedule of their meetings on weekly, monthly, or yearly basis.

Average expected attendance at these functions.

Information determining the number and size of meeting rooms.

Type and size of organizations which would use the meeting rooms and at what times would they be used.

Since the possibility of banquets in the main auditorium was considered, what is the estimated size of the kitchen?

Will the main auditorium and music hall be used at the same time or will the schedule of activities separate their use?

Seating

By what analysis was the capacity of the large auditorium, music hall, and small auditorium decided?

If the main auditorium was to be divided at certain times, what seating capacities to be in each division?

Were the seats to be removed and replaced in blocks or individually to meet the various demands of the main auditorium?

Was the small auditorium to be fixed seats or removable?
Site Selection

Were there any other sites considered besides the one selected? If so, where?

What were their advantages and disadvantages?

Is there a possibility of obtaining present plans of the site or sites?

Is there a possibility of using the entire city block between Delaware Street and Pennsylvania Street?

Do you have estimated costs of the demolition of the buildings on the site?

Parking

What desirable amount of parking space should building provide?

Any information on the percentage of parking space per parking lot available after 6:00 P.M.

Any information on the percentage of people who would drive cars to the building, and those who would come by city transportation.

Circulation

Are public facilities provided for each major space to permit the use of one and the closing of others?

Were any private rooms considered?

General

Is there contemplated any difficulty or conflict with other assembly buildings in the city, such as the Butler Fieldhouse, Murat Temple, or State Fair Coliseum?
Dear Mrs. Hibben:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. A major part of this thesis is research.

I have several articles from the newspapers praising your enthusiasm and the work you are doing to get for our city a legitimate theater and civic auditorium. I would certainly be grateful for any information that you could give me on the requirements and analysis of such a building. I have obtained a copy of the Civic Auditorium brochure published in 1946 from Mr. Frankel.

Some of the problems which I am encountering concern the organizations which would use the building and the various types of spaces which they would require. I have listed these problems on the accompanying sheet in a more detailed form, just to indicate the type of information that I am trying to find. Perhaps you know of other information which could also help me.

If it is inconvenient for you to answer these yourself and have any pamphlets, booklets, written material, or general information which you are free to send me, I would take good care of them and return them as soon as possible.
I am terribly sorry that I am required to do this by correspondence as I realize the work it entails, but I would deeply appreciate any time you could give me.

Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Organizations

Estimated list of present and future organizations which could be expected to use the building.

The approximate membership of these organizations.

Approximate schedule of their meetings on weekly, monthly, or yearly basis.

Average expected attendance at these meetings.

Space Analysis

Approximate number of meeting rooms required.

How many people should these rooms accommodate?

Should they have kitchen accommodations?
If so, how many?

Should there be a small library for the chorus and choral societies?
C O P Y

Mrs. Donald E. Clark
Graduate House, Rm. 220A
Mass. Institute of Technology
Cambridge, Massachusetts

Dear Mr. Clark:

Your letter, received yesterday, is very much appreciated. I am pleased that you thought I would be of help to you in your interesting and important thesis.

We are working for an auditorium combining a theater, Convention Hall and also a Music Hall for year around reasonable entertainment such as concerts. This Music Hall to be an audience room possibly with tables where soft drinks could be served. There is nothing here now for young people, but movies and taverns, except city and country clubs and the out of the way expensive entertainment in the gloomy Murat since our fine, historic Englishes was so unnecessarily torn down.

I think the inclusion of dining rooms and kitchens would be wonderful. The best location seems to be the Fort Wayne diagonal section which is an awkward arrangement, as it is not only there, but in all four such sections of the city.

There is an Indiana Fund for a new government building. The next legislature will have to pass on that in January 1951. That might be built north of the state house and would bring under one roof all the now scattered Indiana government offices.

Governor Shricker has suggested including a 2000 seat auditorium. They have that arrangement in Harrisburg, the capital of Pennsylvania. We need both a centrally located theater in the government building and an auditorium etc. on Pennsylvania Street at Fort Wayne Avenue by the Memorial Plaza too.
I suggest your writing Mr. Edward D. Pierre, Architects and Builders Building, Indianapolis 4, Ind. He can give you the data you desire better than anyone I know. He has worked harder and longer for the betterment of Indianapolis than anyone here. He has been trying for years to have an auditorium. He is a fine Architect and planned the State Library near the State House. I phoned him this morning and he said he would be glad to hear from you. I will forward him your letter so that he will begin right away to gather data for you, or rather he already has it.

I hope to hear from you again and want to know how you come out on your thesis. I know it will be very fine.

Very truly yours,

Evadne H. Hibben

July 2nd, 1950

P. S. We need that Auditorium for so many things. I will give you a short list to help you until you hear from Mr. Pierre. Conventions, Political, agricultural, teachers, church, medical etc, etc. There have been over 200 conventions here since January 1st, 1950.

The fine musical and ballet performances of the Arthur Jordan Conservatory. Local and legitimate theater.

Symphony Orchestra
The Gladys Alwas season.
Town Hall.
Veterans Organization of World War I and II.

All these and more want and need adequate meeting places, a theater and auditorium.

E.H.H.
Mr. Hollister
City Planning Commission
City Hall
Indianapolis 4, Indiana

Dear Mr. Hollister:

In regard to our conversation of several weeks ago, I wish to thank you again for your assistance. I am still doing research on my thesis and wonder if I could prevail again upon your time for some additional information.

The problems which I am confronted with concern two site locations for the Civic Auditorium, the proposed site between Michigan Street and North Street and the present site of the City Market and Tomlinson Hall. I would like to know if it is reasonable to consider that the city could purchase the additional half of either one of these city blocks, and if so, an estimated approximation of the cost in land, buildings, and demolition of these buildings. If the City Market block proved to be the most favorable site, does the Planning Commission have any ideas on the relocation of the City Market?

I also wondered if it would be possible to have some plans or descriptions on the location and capacities of the future parking garages planned by the city for the mile square area.

Thank you very much for any information which you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Mr. Donald E. Clark  
Cambridge, Massachusetts

Dear Mr. Clark:

Your letter of June 30 poses some questions very difficult to answer. However, I will try to give you the best "guessimates" I can.

The previously proposed site on Pennsylvania between Michigan and North is virtually clear, except for the timber "sports arena" and a small frame building on North Street. The land has been offered at original cost to the owner - $525,000, and cost of structures and their demolition should not bring the total above $600,000. The additional half of that block, however, would probably cost close to $900,000 all told.

The City Market block (north half), would probably run to $1,000,000 at least.

While the city could condemn these sites, no saving would be effected, and I do not know how it could possibly raise the money; therefore cannot say it reasonable to consider such action. I believe that the only way an auditorium can be achieved is on a subscription fund campaign.

As to parking structures - the city has no plans. One privately financed structure, 5 - levels, 575 capacity, has been started in construction at S. E. Corner of Illinois and Maryland. Another proposal, recently announced, is the Trimble Oil Company project at N. W. Corner of New York and Meridian, 3 levels, 375 capacity.

Respectfully yours,

Noble P. Hollister  
Executive Secretary
Mr. Robert Armstrong, President
Indianapolis Symphonic Choir
5770 North Pennsylvania Street
Indianapolis, Indiana

Dear Mr. Armstrong:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Mrs. Oranda C. Bangsberg  
Indianapolis Camp Fire Girls  
3360 North Meridian Street  
Indianapolis, Indiana

Dear Mrs. Bangsberg:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design will include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Dear President:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Mrs. Elva Henson, President
Indianapolis Council of Women
3737 College Avenue
Indianapolis, Indiana

Dear Mrs. Henson:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I would like to have is as follows:

1. Membership
2. Typical monthly or yearly schedule of business and social meetings which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings generally are held
5. Type of room to meet your requirements

Thank you very much for any time you can give me.
Looking forward to hearing from you as soon as possible,
I am

Sincerely yours,

Donald E. Clark
Mrs. Doris Holmes, President
Women's Rotary Club of Indianapolis
150 North Meridian Street
Indianapolis, Indiana

Dear Mrs. Holmes:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I would like to have is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible.

I am

Sincerely yours,

Donald E. Clark
Graduate House, Rm. 220A  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts  
July 15, 1950

Mrs. Louis B. Kruger, Secretary  
Indiana Federation of Clubs, Seventh District  
1030 Butler Avenue  
Indianapolis, Indiana

Dear Mrs. Kruger:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me.  
Looking forward to hearing from you as soon as possible,  
I am

Sincerely yours,

Donald E. Clark
Miss Marion Laut, President
Indianapolis Matinee Musical
5270 Pleasant Run Boulevard
Indianapolis, Indiana

Dear Miss Laut:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I would like to have is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me.
Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Jordon Conservatory

My dear Mr. Clark:

Your thesis certainly sounds interesting to an inhabitant of Indianapolis who is also a musician. I only hope your dream may some day become a reality. I am delighted to help and I trust the following information will be adequate to your needs. If not I should be happy to cooperate in any other way.

The Indianapolis Matinee Musicale has an overall membership of about 500 in the adult groupings and 200 in the Student and Junior classifications. The adult groups are: Active (around 150), Chorale (60) Associate and Professional-Associate (300).

The active section present 95% of the programs and the entire membership is eligible to attend but only on the 3 artist concerts do we really have S.R.O.

Up to the present we have been presenting our semi-monthly programs in Agris auditorium which has been adequate as to size only, quite frankly! These meetings are held at 2 P.M. most of the year with an occasional guest artist program at nite. A stage large enough to put on a dance program yet small enough not to make a 7 foot grand piano look lost and bewildered is our desire.

All the business is conducted by a board of some 15 members so a small committee room is also a necessity for us.

The Chorale section presents two concerts a year (Spring and Fall) with guest artists which are open to the public. As a last resort they have been given in Churches, in the War Memorial, etcetera. The Chorale also has a weekly Tuesday morning rehearsal for which they need a sizable room with piano. The Chorale concerts are Sunday afternoon affairs, occasionally at nite.

The Junior and Student sections have monthly meetings on Sunday afternoons starting at 2:30 and 4 o'clock respectively. Average attendance is 100. A stage is very desirable. It might interest you to know that the meetings are now held at the D.A.R. Chapter House if you are acquainted with that small auditorium. It is ideal both as to size and intimacy.
I forgot to mention the reception and tea which the Active section sponsors for all the membership after each guest artist concert requiring a large room, and the fall card party money-raising project (isn't that inevitable?) with similar need.

I trust I have covered the situation.

Yours truly,

Marian Laut
Graduate House, Rm. 220A
Massachusetts Institute Technology
Cambridge 39, Massachusetts
July 15, 1950

Mrs. John H. Lewis, President
Women's Civic Club
1526 Haynes Avenue
Indianapolis, Indiana

Dear Mrs. Lewis:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design will include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are usually held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
Mr. Paul Mathews, President
Indianapolis Chapter American Guild
Spink Arms Hotel
Indianapolis, Indiana

Dear Mr. Mathews:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design will include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of the thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building
3. Approximate attendance at these meetings (just an estimate)
4. Time of day meetings are generally held
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark
July 19, 1950

Mr. Donald E. Clark  
Graduate House, Room 220-A  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

Dear Mr. Clark:

Repeating to your letter of July 15, I give you the following information regarding our organization for your use in connection with your thesis.

We have a membership of approximately 220 and meet monthly in the evenings for approximately nine months of each year. Our normal attendance is around 100, except on occasions when visiting recitalists present programs, when we have from 300 to 500 in attendance. Our meetings are for the most part held in local churches because of the organs there available.

I hope that in the design you are preparing for a civic auditorium you will include in the music hall recommendations for a large pipe organ, for we have always thought that such facilities should be available in a city the size of Indianapolis.

Wishing you success in your present enterprise, I am

Very truly yours,

Paul R. Matthews  
Dean

Paul R. Matthews  
410 North Meridian Street  
Indianapolis
Mrs. Burt McCammon  
Parent Teacher Association - City Council  
East 59th Street  
Indianapolis, Indiana  

Dear Mrs. McCammon:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design will include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership  
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building  
3. Approximate attendance at these meetings (just an estimate)  
4. Time of day meetings are generally held  
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me.  
Looking forward to hearing from you as soon as possible,  
I am,

Sincerely yours,

Donald E. Clark
Graduate House, Rm. 220A  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts  
July 15, 1950

Mrs. George Rose, Secretary  
Indianapolis Women's Club  
3221 North Pennsylvania Street  
Indianapolis, Indiana

Dear Mrs. Rose:

I am a graduate student in Architecture at the Massachusetts Institute of Technology and working toward a Master of Architecture degree. My home, however, is in Indianapolis. As my thesis subject I have selected to design a Civic Auditorium for the city. The design would include a music hall and theater, a convention hall, and meeting and assembly rooms of various sizes. A major part of this thesis is research.

I would be very grateful if you could give me some information about your organization which would permit me to provide adequate accommodations for you. The type of information I am seeking is as follows:

1. Membership  
2. Typical monthly or yearly schedule of business meetings and social parties which would be held in the building  
3. Approximate attendance at meetings (just an estimate)  
4. Time of day meetings are generally held  
5. Type of room desired to meet your requirements

Thank you very much for any time you can give me. Looking forward to hearing from you as soon as possible, I am

Sincerely yours,

Donald E. Clark