Space Totals

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Plaza</td>
<td>106,875 sq. ft.</td>
</tr>
<tr>
<td>Headquarters</td>
<td>282,625 sq. ft.</td>
</tr>
<tr>
<td>Theatre/Auditorium</td>
<td>136,963 sq. ft.</td>
</tr>
<tr>
<td>Hotel/Restaurants</td>
<td>108,750 sq. ft.</td>
</tr>
<tr>
<td>Parking</td>
<td>281,376 sq. ft.</td>
</tr>
<tr>
<td><strong>Net Total</strong></td>
<td><strong>918,589 sq. ft.</strong></td>
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</tbody>
</table>

Circulation and unassignable area (see cost section following).

918,589 sq. ft. + 75 = 1,224,785 sq. ft.

Gross total 1,225,785 sq. ft.

Areas required for construction
1,224,785 + 43,560 = 28.0 acres

Landscaping 2.5

Parking (1 acre = 125 cars) 1.0 acres

Parking expansion
125 acres 1.0 acres

Staff Parking (85) 0.68 acres

Total Acres Required 33.08 acres

For present and future scope of project.
Cost Breakdown

The following approximate total budget requirement is obtained from the Facility Programming Notebook by A.E. Palmer.

A. Building Cost:
918,589 + 75 = 1,224,785 sq. ft. Gross
1,224,785 sq. ft. gross x $60 unit cost = 73,487,100.

B. Fixed Equipment:
73,487,100 x 20% = 14,687,420

C. Site Development:
73,487,100 x 5% = 3,674,355

D. Total Construction Cost:
A + B + C = 91,858,875

E. Site Acquisition/Demolition-Deleted

F. Moveable Equipment:
$73,487,100 x 15% = 11,023,065

G. Professional Fees:
$91,858,875 x 6% = 5,511,533

H. Contingencies:
$91,858,875 x 10% = 9,185,885

I. Administrative Costs:
$91,858,875 x 2% = 1,837,178

J. Total Budget Required:
(D through J) $119,416,540

P.A. of W. is a nonprofit religious organization whose economic structure depends mainly on offerings and donations from its members. Therefore, additional financial aid should be sought from outside private co-operations and governmental assistance.
SYMBOLISM RESPONSIVENESS

The conceptual design of the center is quite unique. Many design features of historical importance are seen in its form. Yet it doesn't draw solely from any one example. It maintains its own separate identity from any other structure past or present. It is a culmination of many religious thoughts past or present. Yet, not one single religious symbolic thought can stand alone because as the Bible is composed of many books all revealing one basic truth so does this facility all point to one simple presentation, GOD's united relationship with man.

The issues I found more confusing and complicated were those dealing with the church's role(s) in today's society. What place does the church play in man's life today? What are the attitudes, feelings, needs, wants, etc. of the people today for their church? What areas of a person's life should/does the church play a part in?

The answer to these questions and others like them was found in the famous church in Rome, St. Peter's Basilica. It was in this historic example of early christian architecture that the answer sounded forth.
St. Peter's Basilica exemplified the of GOD for man as can be seen in the symbolic way the Colonade reaches out and wraps around an open plaza where the multitudes of people come to hear the Gospel.

The P.A.W./N.H.C.P. responds in a similar way. The office complex, commercial plaza, and hotel together surrounds an open plaza as does St. Peter's. At the open end of the plaza sets the church. This arrangement symbolizes man's love for GOD thru the church. Instead of the church embracing man; the secular world embraces the church, GOD's throne on earth. And the all aspects of life portrayed by the different building wrapping around the church, does man need GOD. All other symbolism is found richly impart in the church itself. The triangular shape the church takes in plan with it's three towers, portray the Godhead embodiment, yet due to the singular use of the triangle; the oneness of God is expressed; the basic truth of unity as shown in God's relationship with His creation.

The three towers themselves express the historic thought of the relationship between God and man. The Square ( turned on it's end ) expresses God, man's Creator; JESUS, man's Savior; the Holy Ghost, man's preserver and guide, and man himself. These towers also exemplify man's ascension into heaven as the elevator is seen rising from one level to the next. Each tower is a major vertical circulation path within the church. The two facing the major entry allow movement up to the other levels of the church.
The tallest tower facing the open plaza permits not only movement up to higher levels of the church but also to a prayer room located above and overlooking the entire center.

The center is to serve both the rich and poor, the sophisticated and simple at the sametime showing no "respect of person" for any race or group of people. This thought is expressed in the design of the exterior facades of the center. The three elevations facing the main streets passing the site (14th, Cole, and Delmar), are smooth and continuous while the three interior facades framing the plaza are very articulated with portions of the building moving in and out.
RELATIONSHIPS

Internal

The building's parti, when viewed in plan, appears to be the letter 'C' facing the auditorium and represents the words, 'church,'christains', or 'Christ'.

The complex from it's placement around the church indicates the church's Dominance over the other areas in the center. This notion is further illustrated by the way the rest of the complex steps back away from the church and also in the height of the tallest structure, the church.

(Refer to picture page 5)

Because many of the areas in this center are designed for various uses, I was able to connect the edges of the office complex, the hotel, and the mall to each other by overlapping certain areas of one facility over the areas of another as in the mall and office center or by creating a multipurpose space between them as found between the office complex and the hotel.

Views were developed based on two criteria; inbound views from passers-by wanting to know what functions, services etc. are offered by each element of this project and those views from the complex areas into the courtyard. The exterior facade responds to the views from passers-by and therefore this facade is penetrated extensively with Transparent Fenestrations to communicate to potential users the specific services each building offers.
The interior elevations facing the plaza and auditorium are for viewing out into the open courtyard and therefore this exterior space was carefully delineated to communicate to the users the value and essence of the complex as well as serve as a picturesque painting. No views were developed out from the site because there was no way of controlling the sites surrounding this complex.

Circulation through the center was a major issue and was dealt with by making accessibility into every area easy for the handicapped realizing that if they could reach a certain designation without undue stress and fatigue that the healthy would be able to also. Therefore, elevators were placed near every major entry of each building, and wrapped around them a set of stairs. Also for convenience, all restrooms were located behind the elevators. The horizontal movement of the center lies in the center of each building dividing it in half. For the church, this horizontal circulation is wrapped around the auditerian. The idea behind the circulation of the center is simplicity; the circulation is continuous.

The mechanical systems are ideally located throughout the center. The healthy system is located within the sublevel parking areas found under each facility, the water system and the air conditioning units were placed on the upper most level of each building. For the auditorium all systems are located on the basement level.

**External Relationships**

The external relationships relating to this center are developed to compliment existing services, amenities, and facilities. Because the existing convention center is located two blocks from this site, an overhead walkway system is developed to connect the two facilities, thereby enhancing the interaction, activities, and services offered by both. Small quick food facilities were located along one of the walkway systems to provide the existing convention complex, and office buildings
with easy access to these facilities. In addition to this, certain amenities were developed to create a more humane environment for the clientel such as landscaped areas for leisure and relaxation, and bus stops, and drop off lanes for automobiles.

Major Issues Encountered

One of the major issues confronted was that of "structural integrity." The development of a functional and feasible system was established which could express the center's many symbolic images. Therefore a column and beam system of 25' each was selected because it could express the idea of ascension through verticality and provided the flexibility of expansion of all interior spaces. A 25' x 25' system became the building block for a range of possibilities in area and structural variety such as 25x25, 25 x 50, 25 x 75, 25 x 100, 50 x 50, 50 x 75, 50 x 100, 75 x 75', 75' x 100, and 100' x 100' areas. Therefore a system of locating a column every 25' in one direction and 50 or 75 feet in the other direction used.

The three towers serve as the vertical structural elements of the church and its horizontal structural members span across and connect to the two towers. This permitted a more open space without columns.

Parking is placed under the center for ease of access to and from each building. This makes it possible to be able to walk only a short distance at night in a well-lit and patrolled lot.

The development of a system for the distribution of the mechanical systems follows the horizontal circulation corridors. Heat is distributed through the floor, and cooling is distributed through the ceiling.
Design Solution

The solution to this project is best seen from the final drawings; plans, elevations, and sections.

The complex has a total of six above ground levels. The top level is used for storage of files and merchandise and the mechanical systems for the mall and office areas, and a work out area is provided above the hotel.

Parking for a total of 542 cars is located below the mall; hotel and office facilities on two levels. Each level provides space for 221 automobiles. Tunnels connect the parking levels under the mall and hotel and the lower level of the auditorium. Upon entry into the lobby area of the auditorium, a person can take elevators or stairs up into the main sanctuary.

In the auditorium the zigzag of the walls serve two purposes: one to provide a lounging space directly off of the corridor way or to provide an area for the seating of ushers and the placing of lights and cameras in the auditorium itself. The auditorium is enclosed in an envelope and this is surrounded by corridors which again are enclosed by the exterior walls to prevent unwanted noise from disrupting the services. Dressing rooms, practice rooms and offices on the second and third levels surround the balcony levels of the auditorium and the fourth level is solely recording and telecasting.

A small reading room separating the offices is provided along with a small lounge area to service each set of offices for the church.

Lighting was important in this area. The need for both natural and artificial types of lighting is employed to create different expressions of mood etc. Therefore the roof elements of the church are transparent to permit light to filter in and illuminate the vertical stair towers, the prayer room, and the auditorium itself.

An auto dropoff was placed at the main entry of the church to permit cars, busses, etc. to leave and pick up those attending the services.

The first and second levels of the office building is to be the National Headquarters' Center for the P.A.W. while the
third to the fifth floors are to be rented to other businesses to generate income for the organization.

The areas facing the interior court of the third, fourth and fifth floors are to be main office space for the employer of each business renting space in the complex, while the remainder of the space facing 14th street will be divided into the office space needed for the employees.

These general office spaces wrap around and overlap. The mall steps back away from the church indicating the importance of the church within the context of this project.

Only two shipping and receiving areas are provided; one between the mall and office center to handle the incoming merchandise and supplies and trash pickups to the commercial mall and the other between the hotel and office complex to handle incoming food stuffs as well as trash pickups for the hotel restaurant.

A series of food facilities a line the 2nd level walkway of the mall and between every two restaurants is a recessed and raised outdoor dining area.

The hotel restaurant itself has a fascinating dining concept of the site with rows of trees to cover the pedestrian walks surrounding the outer edge of the complex. Trees are also used within the court and are grouped in several locations to provide a shaded area for leisure.

A pool and fountain is placed at the area of the church symbolizing the healing waters. The elevator as it ascends from the first level appears visually to rise out of this pool, and as it descends appears to come and rest on top of it. The pool is recessed so as not to interfere with the setting up of a stage for outside services. The court is therefore stepped down so as to make viewing more pleasant. Also, the overhead walkway system that wraps around the complex can serve as a balcony for such services.
PENTECOSTAL ASSEMBLIES OF THE WORLD
1 Parking
2 Mechanical rm.
3 Lobby
4 Lounge
5 Shops
6 Reading rm.
7 Office
8 Multi-purpose
9 Auditorium
10 Storage
11 Dining
12 Dressing rm.
13 Practice rm.
14 Conference rm.
15 Hotel rm.
16 Communication rm.
17 Prayer rm.
18 Track
19 Exercise rm.
20 Elevators
21 Kitchen facilities
dry stor., off.,
freeze, cooler,
food prep., clean up
Conclusion

Flexibility is one of the key issues in the design of this center. Both the mall and office buildings can expand or decrease in the size of its shops and office spaces by moving the interior non-structural walls from column to column.

Circulation is simple. The horizontal corridors are located down the center of the mall, hotel, and office with minor corridors extended from the major corridor into the more private areas. The vertical circulation is in the forum of stairs and elevators which are located near every entry. The circulation of the church wraps around the auditorium.

This center is richly engulfed in religious symbolism. I feel that this is the most significant factor in the success of the center.

Due to the key location of this center, all areas such as accessibility, service amenities, and local support of nearby residents and potential buyers from the Central Business District the success of the center has been enhanced.
Building Type Analysis
Building Type Summary

PENTECOSTAL ASSEMBLIES
OF THE
WORLD

building type analysis
BUILDING TYPE ANALYSIS

The building type analysis identifies a representative group of current facilities that are similar to the P.A.W./N.H.C.P. I have chosen two facilities designed by the same architect.

Floor plans will be shown and a simplified zone floor plan will divide the building into the following zones.

Public - lobbies, members areas, restrooms, and cafeteria.

Auditorium
Offices
Hotels
Restaurant
Commercial

The following conventions were used:

Main circulation paths
Vertical circulation
Public entry
Loading Dock
Views
Enclosure
Peachtree Plaza Hotel
of Peachtree Center
Atlanta, Georgia
Architect: John Portman

Typical Guest Room Floor
Tower Meeting Room Level
Revolving Restaurant
Activity Spaces
General Plan Organization
Circulation:
Circular Horizontal Circulation at each level.
Vertical Circulation to each level in form of elevators and stairs.
Public entry into main level and sublevels.

Views:
Views are directed outward from each activity space each space overlook other space.

Public space:
Large Interior Spaces relating to all spaces visually. Activity Nodes or gathering areas for people to watch movement and experience activities of the main public space.

Activity space:
Each level has a separate and independent activity. Bright colors are used in all public spaces. Natural elements incorporated within the interior of each space.
Times Square Hotel
New York, New York
Architect: John Portman
Circulation:
Vertical circulation found in the core areas are the elevators and stairs.
Horizontal circulation is similar for each level.
All circulation is logical and directional.

Views:
Views are directed outward from each space.

Public space:
Large interior areas relating visually to all other spaces are important.

Space:
Each level has a separate and independent activity.
Bright colors are used in all public spaces.
Natural elements incorporated within the interior of each space.
Concept

The basic concept of this building follows a very simple plan: one of a large square with smaller extensions on either side. Views are oriented outwardly from the front and back facades.

Circulation

There are two circulation corridors found in the building. The vertical circulation stairs and elevators exist in the two extensions on either side of the bldg. The horizontal circulation of the upper two levels consist of one corridor running between the vertical circulation shafts on either end and feeds the offices located on either side. On the lower two levels the corridor wraps around a rectangular core of offices or an atrium space.
Structure

The structural system is based on a rectangular Bay System using columns as a major interior system and the bldg. being enclosed by a brick facade.

Facade

The exterior facade is broken into two statements; the lower half expressing a strong vertical statement as can be seen by the three massive columns in front. The top half expresses a strong horizontal image. Each section is broken up in rhythmic vertical patterns.

Image

The image of the building doesn't match the function of the bldg. The building has offices on the top 2 levels and visa, citizenship, commercial on the lower 2 levels. The image portrayed is that of a group of upside down-steps.
San Francisco Hilton  
Arch. William R. Tabler

Concept

This concept appears to be a box resting on stilts. The rooms are arranged around the exterior edge of the bldg. while the dining, ballrooms, and parking are located toward the center.

Circulation

The vertical circulation are elevators located at 2 of the interior corner sections. A corridor dividing the 2 rows of rooms runs completely around the bldg. ramps are provide for the automobile for vertical circulation within the structure.

Unique Features

The unique feature of this bldg. is the parking. Guest can register inside their cars and for most can drive their cars up to the level they will be staying on.
Structure

The structural geometry called for a high strength steel structure while the rigidity of a reinforced concrete structure was needed for the guest room tower. The solution was to suspend the garage structure from nine steel truss of 100' span and 3-story depth raised on 18 columns to the 12-14 floor level. The room tower was cast around and tied to this structure at key points.

Facade

The pattern of windows fall into a rhythematic progression where each row of windows is identical to each second row of windows.
Concept

This free-form shape comes in the image of a partial figure 8 while the rest of the site forms the rest of the figure. Views are oriented exteriorly from either the North or South.

Circulation

The horizontal circulation curves around the shape dividing the rooms on the typical floor. The major vertical circulation is located at the midpoint of the two wings. Stairs are located periodically within the wings.
Structure

The structure is basically of column support. The columns within the exhibition area are aligned in a direction 45 degrees to those supporting the typical floors.

Facade

The facade of the bldg. appears to be a huge band with major vertical strips and minor horizontal lines.

Unique Features

The unique features are the Drive-up entrance to the lobby level and a down-hill ramp to the ballroom. Thus traffic for the hotel guest and ballroom patrons can be completely separate.

Enclosure
John Hancock Bldg., San Francisco Arch. S.O.M.

Concept

This concept is a simple 5 ft. module system with a circulation core in the center. It appears to be a tower on stilts.

Circulation

This bldg. has one vertical circulation core, and all movement is off this shaft. The offices enclose this core on all 4 sides and easy accessibility is seen to all the services provided within the core. The 2 forms off circulation within the core are stairs and elevators.

Structure

The structure appears to be a cantilever. Each floor cantilevers from all 4 directions from the core element and the whole system rest on a series of columns found in the bottom two levels.
Facade

The rhythm of the facade is very ordered and is the same for all four sides. The bottom two levels are quite different. A difference in texture as well as the rhythm is noticed.

Unique Features

The unique feature of this John Hancock Bldg. is seen is the lower two floors. They seem to serve a different function from the top floors.

Image

The image appears to be a very massive and solid structure resting on very delicate column supports; as a big piece of cake sets in a very dainty china bowl.
BUILDING TYPE SUMMARY

The building type study has helped me to obtain valuable information for the type of facility I am designing.

All public entrances and main public spaces should be directly connected to each other. All public areas should be spacious enough to relate to large crowds. All employee and work spaces need to be placed out of view and access to the public.

One of the most exciting aspects of the main public spaces are the elements of nature such as trees, fountains, and wildlife that people enjoy interacting with. Activity nodes or people generating areas need to be placed directly of to the side of the main circulation path of all public spaces. Overlapping of views into as many different areas are of secondary concern.

The circulation paths are all logical and directional in each level with every activity.
FOOTNOTES

A  Time Savers Standards/
Architectural Design Data, McGraw-
Hill, pg. 696

B  Time Savers Standards/
Building Types, McGraw-Hill, pg. 303

C  Ibid. pg. 621

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