2.0 Building Information

Primary Project Team

- Design Architect : Harry Cobb, **Pei, Cobb, Freed & Partners** *Architects LLP* : www.pcf-p.com
- Architect of Record : **A. Epstein & Sons International** : www.epstein-isi.com
- Structural Engineer : **Halvorson Kaye** Structural Engineers : www.halvorsonkaye.com
- Owner : **Higgins Development Partners, LLC :** www.higginsdevelopment.com
- MEP Engineer : **Environmental Systems Design (ESD), Inc.** : www.esdesign.com
- General Contractor/CM : **BOVIS LEND LEASE** : www.bovis.com

Building Function

The owner of the Hyatt Center is Higgins Development Partners, LLC but the major tenants include the corporate headquarters of Pritzker/Hyatt Corporation, international law firm of Mayer, Brown, Roye & Maw, LLP, and Goldman Sachs & Co. financial institution among others. The primary purpose for construction of the Hyatt Center is to provide elegant commercial office space within the central Chicago business district.

The Hyatt Center is comprised of a 7-story retail space at the base and a 49-story high-rise tower equaling 1.7 million gross square feet overall. High-rise offices are currently being leased by Mayer, Brown, Roye & Maw equaling 450,000sf, Hyatt Corporation equaling 315,000sf, and Goldman Sachs & Co. equaling 200,000sf of leased spaces among other tenants.

Location and Site

Site

The site for the Hyatt Center is located at 71 South Wacker Drive; Chicago, IL, the heart of the Chicago business district. It can be seen from the city and site maps in Figures 2.1a-b below, the Hyatt Center sits between South Wacker Drive and South Franklin Street with frontage on West Monroe Street.

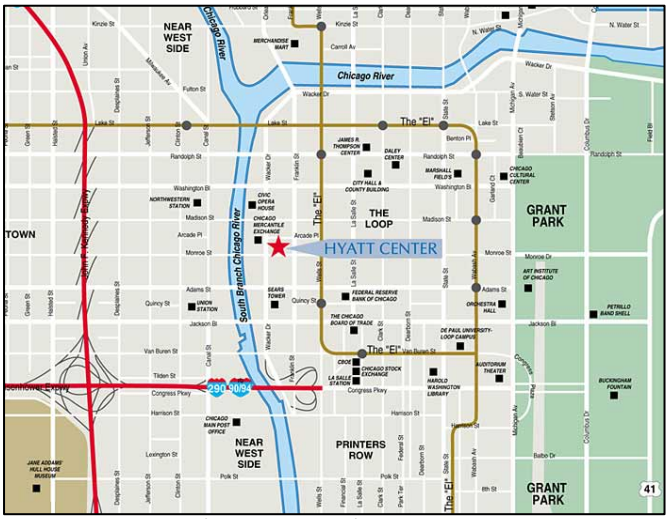

Figure 2.1a: City Map

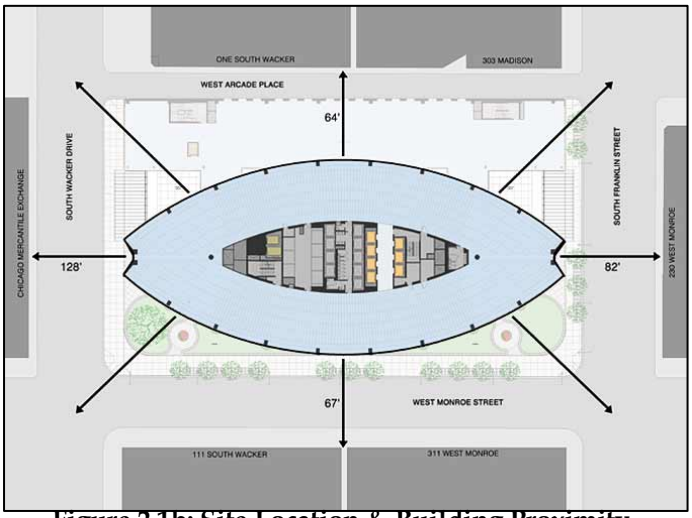

Figure 2.1b: Site Location & Building Proximity

Site Soil Conditions

Historically three buildings were constructed on the current site, including the 13-story Hart Schaffner & Marx manufacturing plant, built in 1909, on the east, an unnamed building on the northwest location of the site and a building for Kent College of Law on the southwest. All three buildings were demolished in 1980 and the site was used as a parking parcel recently on South Wacker Drive and West Monroe Street, however, tight site conditions are present where foundation piles conflicts with existing caissons from the underground Wacker Drive project to the west of the site.

The underlying fill at site of the Hyatt Center consists of construction rubble of mainly brick, sand, gravel, broken concrete and wood from previous demolished buildings. Very stiff silty clay soils extend approximately 65 feet below grade followed by extremely dense gray silt to gravelly sand at levels 95 feet below grade. Underlying the overburden soils is hard dolomite (bedrock) at elevations ranging from 92 to 96 feet below grade. According to the geotechnical report conducted on the site by STS Consultants in September 2001 and the information categorized in ASCE 7-02 the site class was determined to be "C."

Architecture

The overall architecture of the building, designed by Pei, Cobb Freed & Partners; Harry Cobb, consists of an oval-shaped footprint with a curvilinear glass and stainless steel curtain wall on the tower. Mezzanine levels to the north provide retail spaces, food service, a health club and conference rooms for the buildings tenants as well as two below grade parking levels for 165 vehicles. Significant blast mitigation programs were incorporated into the building without imposing on aesthetics and overall architecture of the building.

Figure 2.2: Hyatt Center Rendering

A three-story wrap around lobby with exposed granite, limestone and marble finishes provides for spacious and comfortable circulation through the building entrances as seen in Figure 2.3. Extensive landscaping of outdoor plazas on the West Monroe Street frontage provide for outdoor seating and relaxing walks under the shade trees, unusual in an urban landscape.

A unique 6" raised floor system provides tenants with an economic space layout by allowing communication and electrical wiring to be run under the finished floor giving unlimited interior design options. Paired with typical 32,000sf planning spaces, the curvilinear floor plate design and floor to ceiling glass provides excellent panoramic views of the Chicago downtown business district.

Building Envelope

The Hyatt Center curvilinear façade consists of bright glazed glass, stainless steel spandrels and polished aluminum mullions which are attached directly to exterior steel spandrels and the floor slab at each floor. At lower levels, blast-level loads control the design of the curtain wall including connections, the insulated panels and structural elements. A green roof is incorporated into the architecture of the building, also providing environmental points towards LEED certification.

Electrical System

Utility service for the Hyatt Center is provided by COMED at 3Φ – 4 wire 480Ψ/277V which is transformed down to 3Φ – 4 wire 120/208V at 800 amp electrical vaults on each floor. Lighting and electrical specific design is accomplished during tenant "fit-out." Detailed descriptions of electrical and security systems are withheld due to proprietary secrets and potentially security sensitive material.

Figure 2.3: Finished Lobby

Mechanical System

Three distribution spaces located on the 3rd, 22nd and 48th floors provide adequate room for mechanical equipment. Air-handling units on the 3rd floor are sized for the lower – ¼ of the building. Air-handling units on the 22nd floor are sized for the middle– ½ of the building. And air-handling units on the 48th floor are sized for the upper– ¼ of the building. Cooling sources consists of a 22nd floor chiller (3 @ 1500 tons and 1 @ 750 tons). A 4-cell roof-top cooling tower unit is operated with 2-cells during winter with the remaining cells being drained. Electric heating units are used in tenant space; however, design and specific details are limit to the tenant "fit-out" design documentation. Ventilation of exhaust, janitor closets and toilet fumes is accomplished by exhaust fans on each floor venting to a central core, exiting at the roof level.

Fire Protection System

The Hyatt Center is designed as a "core" building project which means all building systems are present during the initial design; however, final design and system connection for each office space are to be completed by each tenant during "fit-out". In general this means all systems such as fire protection as supplied during construction, however, final sprinkler layout and stand-pipe configuration are designed as needed for code by each tenant, the building is only perched with a vertical wet standpipe system which loops on each floor. Sprayed cemetitious fireproofing is applied to exposed structural members in compliance with UL fire resistance ratings.

Vertical Transportation

Vertical transportation is facilitated through the central core wall structure providing for multi-level staged elevators and stairwells. At the base of the lobby and parking areas access to portions of the building is achieved through 9 elevators in 4 core locations totaling 32 elevators. Nine elevators service the lower floors B2 to level 9 "low-rise"; nine service levels 9 to level 22 "low-mid-rise"; another nine service levels 22 to level 33 "high-mid-rise" and finally nine "high-rise" elevators service from level 32 to the roof at level 48.