

**ULI Chicago 7<sup>th</sup> Annual Vision Awards  
June 13, 2018**



**Project Finalist: 150 N. RIVERSIDE**

**Project Team:**

Developer: Riverside Investment & Development

Architecture Firm: Goettsch Partners (GP)

Structural Engineer: Magnusson Klemencic Associates (MKA)

**Project Description:**

The site located at 150 North Riverside Plaza has tempted and frustrated Chicago real estate veterans for decades: Despite being one of the most prominent development sites in the city --one that allowed up to two acres and nearly 1.4 million square feet of development rights if fully assembled --it had less than 25,000 square feet of actual "buildable" fee-simple land. And that land was only 85 feet wide at its widest point, with the remaining two-thirds of the site covered by seven active rail lines connecting into Union Station. Further, the practical buildable width of the site was much narrower. The setback requirements imposed by both the adjacent Amtrak rail lines, in addition to the City of Chicago's riverwalk guidelines, reduced the available width of the parcel down to less than 50 feet. In addition to its size, the site presented a host of other unique physical challenges in addition to the

size and width of the buildable fee-simple land:

- The site had no existing utility connections (gas, water, power, telecommunications or sewer), and all such utilities were separated from the property by the adjacent rail lines.
- In order to create a usable plaza (as well as parking, loading and lobby access) the site required a 1 ½-acre bridge to be built over the active rail lines, for which work could only take place from 11:00 p.m. - 4:00 a.m. in order to maintain train schedules without interruption.
- The site was not large enough to accommodate the ground-mounted cranes that were necessary to erect the bridge over the tracks and the lower portion of steel that forms the transfer between the office floor plates and the structural base.
- The site's 360 feet of river frontage required a complete reconstruction of the existing river-wall structure that retained the eastern edge of the property.

Once the architectural and structural concepts were outlined, a host of additional technical innovations were employed in order to unlock maximum value from the property:

- It is the first project in North America to utilize high-strength, low-alloy Grade 70 structural steel for primary wide-flange framing. This steel was the only option by which the project could achieve the strength required in the load transfer for the core-supported design, while at the same time remaining light enough to be erected by conventional means.
- The tower required the second-largest (next to Trump Tower) contiguous concrete "mat" slab foundation ever constructed in Chicago, as well as drilled caissons equal to the largest ever utilized in the city.

- In order to adhere to the requisite Amtrak setbacks, the bridge system spanning over the tracks is entirely supported over three 30"-wide walls, which are supported by 112 individually drilled 10"-diameter "micropile" foundations. These micropiles have the highest bearing capacity ever utilized in Chicago.
- In order to complete the bridge over the rail lines and the base of the tower, a Manitowoc 888 Ringer crane was mounted to a custom-created barge assembly that floated in the river - a first in Chicago for a crane of that size and lifting capacity.
- It is the first building in Chicago to utilize a tuned liquid mass damper to control building drift and acceleration, and the first building in North America to also utilize this element for fire-suppression water storage. This damper system consists of twelve individual chambers at the top of the building holding nearly 250,000 gallons of water.
- It is the first new Class A+ office development in Chicago with the newest destination dispatch elevator controls, and the only destination dispatch system in Chicago with integrated "one touch" security access and elevator call selection.
- It is the first office building in Chicago with web-managed Building Management Enterprise Software, inclusive of all applicable operational components:
  - o Building Automation
  - o Lighting
  - o Fire & Life Safety
  - o Security
  - o Power and Energy
  - o Elevator Monitoring
- It is the first new office development in Chicago with fully distributed, landlord-installed DAS (distributed antenna system) for in-building cellular amplification.
- It is the first new Class A+ Tower in Chicago certified Wired Platinum for telecommunications system excellence.
- It is the first new office development in Chicago with landlord-installed microducted fiber-optic backbone for tenant use.
- The building possesses the most advanced façade system in the local marketplace, with 50-75% greater acoustical performance than conventional insulated glass units. This system was implemented due to proximity to the adjacent elevated Green Line train above Lake Street.
- The building lobby is enclosed by the tallest structural glass-fin-supported storefront system in the world; this system was purpose-built in order to accommodate the 100' distance the wall needed to span, and is hung from the structure above like a glass curtain.
- Finally, the lobby is adorned by a one-of-a-kind, 3,000-square-foot sculptural digital media installation, with artwork concepts contributed by several of the best known artists and creative firms in the country.

By employing design, logistical and technical solutions, the team was able to create a building that occupies less than 25% of the two-acre property and dedicates the remaining 1 ½ acres to a large urban park, plaza and riverwalk.

The tower itself is the most technologically advanced office building in Chicago, and boasts highly efficient rectilinear floor plates with floor-to-ceiling acoustically treated glass, allowing for 9'6" typical ceilings. With systems and infrastructure designed well beyond the prevailing Class A+ standard, the development team has created a new benchmark for high-performance office environments in Chicago. The result has led to direct leasing success, with nearly 85% of the building pre-leased upon opening, including the global headquarters for William Blair & Company, Hyatt Hotels Corporation and Navigant Consulting.