THE FOUR SEASONS HOTEL AND PRIVATE RESIDENCES

Project Program
Once an iconic mid-century office building, the Four Seasons New Orleans Hotel and Private Residences has been re-imagined into a luxury hotel and residential complex with 341 guest rooms, 81 condominiums and 11 penthouses. The 33-story, historic waterfront skyscraper is on the National Historic Register and holds the honor of Excellence in Historic Preservation from the Louisiana Landmarks Society.
To deliver the development's programmatic needs, the construction manager, Woodward Tishman, A Joint Venture, managed the extensive renovation and rehabilitation of the existing building, and added a new five-story podium to accommodate 200,000 sf of meeting space, two restaurants, pool, and spa. In addition to the all-new lower podium of the building, two additional floors were added to the top of the building and encompass an indoor/outdoor observation deck rising 350 feet above the riverfront and feature a 360-degree panoramic view of the City of New Orleans.

The interior of the building, originally fitted for an office high-rise, has been transformed into the luxury hotel where guest rooms feature Four Seasons upscale standards like floor-to-ceiling windows (River or City view) with automated blackout curtains, signature Four Seasons beds and linens, Carrara marble bathrooms, 65-inch flatscreen television, tablet for in-room controls and hotel services, bedside charging stations, Nespresso coffee maker and tea kettle, and twice daily housekeeping with evening turndown service. An unusual feature of the project is the multi-level, interactive visitor experience. Accessed directly from the plaza and flanked by giant digital projection screens, a grand staircase leads visitors to an immersive exhibit gallery celebrating the city's cultural heritage.

Location

New Orleans, Louisiana

Services Provided

Architecture, Structural Engineering, Construction Manager at Risk

Self-Performed Services

Architectural Millwork, Structural Steel and Misc. Metals

Project Size

744,000 sf

Project Completed

May 2021, Hotel
May 2022, Residences

Awards

2022, Louisiana Landmark Society, Excellence in Historic Preservation

2022, ENR TX&LA, Best Renovation/Restoration Project

2021, Morial Award for Corporation of the Year

2019, ACI Louisiana Best Overall Concrete Project

2019, ACI Louisiana Best Concrete Renovation Project

Challenges and Teamwork

The complexities of a rehabilitation project of this scale required a tremendous amount of ingenuity and teamwork to overcome. The most obvious challenge was the feat of demolition and material movement in a 33-story tower with no vertical transportation. The team developed a temporary solution to demo the upper floors until the final solution was installed. The "Common Hoisting Platform" is a trusted concept of the team's national JV partner, AECOM Tishman, and ran materials and personnel from floors 1-32 from November of 2018 through March of 2021.
The structural challenge of core reinforcement was a testament to the value that collaboration with design-assist contractors bring to a project. It was determined early on that the activities around the elevator reconfiguration would result in a weakening of the structure and require core reinforcement. The design-assist structural contractor and specialty engineer designed a concept for a concrete enlargement system that garnered praise from the American Concrete Institute, Louisiana Chapter's Awards program for Best Repair and Restoration, and overall Best Concrete Project in 2019.

As expected in a building of this type, the unforeseen challenges were many. The proximity of the site to 2 active railways posed logistical issues throughout the project, and with two years of historic river levels (2018 and 2019), the team faced stop work bans from the US Army Corps of Engineers and New Orleans Levee Board that would have resulted in 200+ lost days. Through the technical expertise of the structural engineer and his team of consultants, they were able to obtain variances and permit waivers to advance operations despite the limitations.

There were several building deficiencies revealed during demolition and other construction activities that resulted in the increase of the budget and schedule. From unrealized differential settlement to discovering deteriorated steel on the top floors of the building; the JV team relied on the resiliency of the project managers and field leadership, the flexibility of their designers and engineers, and the determination of their subcontractors and trade partners to overcome these challenges and deliver the owner's vision.

Safety Program

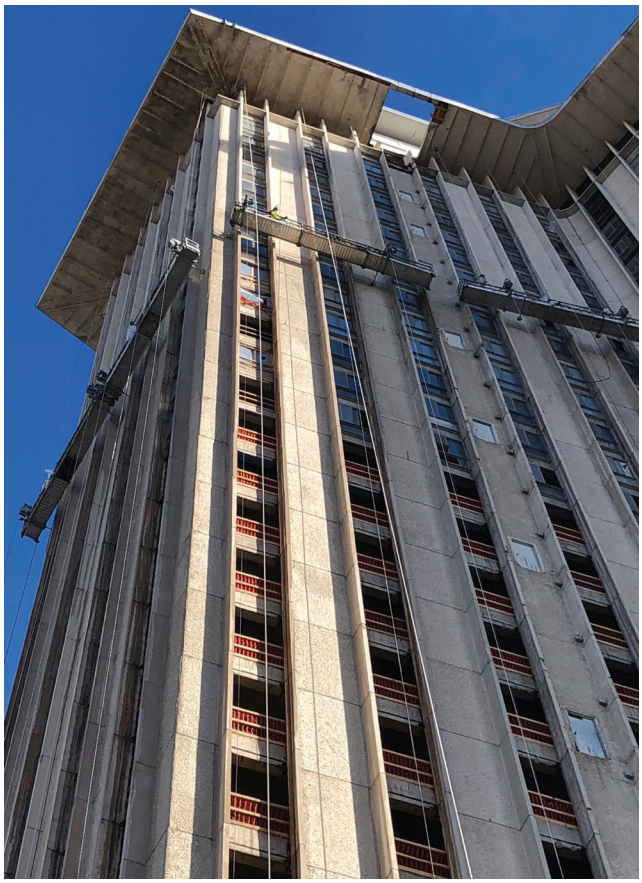
The nature of work along with the sheer number of workers on site (peaked at over 700/day) led the JV team to put a rigorous focus on safety. The program started with early adoption of the site safety program based on each JV team member's safety protocols. The JV team structure consisted of one dedicated site-specific safety officer, and at the peak of the project, there were three full-time safety officers. Each team member was required to obtain an OSHA 30, as well as each superintendent of the major subcontractors onsite. All workers and visitors of the site were required to wear full PPE (hat, vest, gloves, eye protection, boots).

Subcontractors were held to equal safety expectations. If a subcontractor had more than 50 people on site at a given time, they were required to have their own dedicated safety officer. New subcontractors were required to attend Site-Specific Safety Trainings and weekly site-wide safety stand downs. Subs were required to submit regular Job Safety Analysis/Job Hazard Analysis (JSA/JHA) as well as Pre-Task Analysis to the Safety Officer.
The unique technology used for safety was the Spot-r system, a wearable device to track time, attendance, safety, and location of each person on site. This cellular monitoring device provides a direct line of communication for workers to report injuries, safety incidents and hazards with one-push button functionality, and detects falls over 6' with an accelerometer. This technology reinforced the focus on safety and accountability on the job site.

A unique aspect contributing to the commitment of safety is the use of a Contractor Controlled Insurance Program (CCIP). This program took the insurance responsibility away from the individual subcontractors and put the onus to fund and manage the insurance on the JV team. This added contractual obligation heightened the team's focus on a rigorous safety program. With over 3.5 million man hours, the program resulted in only 15 recordables. None of these resulted in lost time, hospitalizations, or job transfers. Only a small number of these recordables resulted in restricted work.

"Worker injuries for the Four Seasons project site were far below the expected losses, given the $80Million+ payroll generated over the span of the project. To date, the worker's compensation loss rate is less than half of the expected loss rate, significantly reducing the cost of the risk under the CCIP plan."

Sandy Smith, Marsh USA



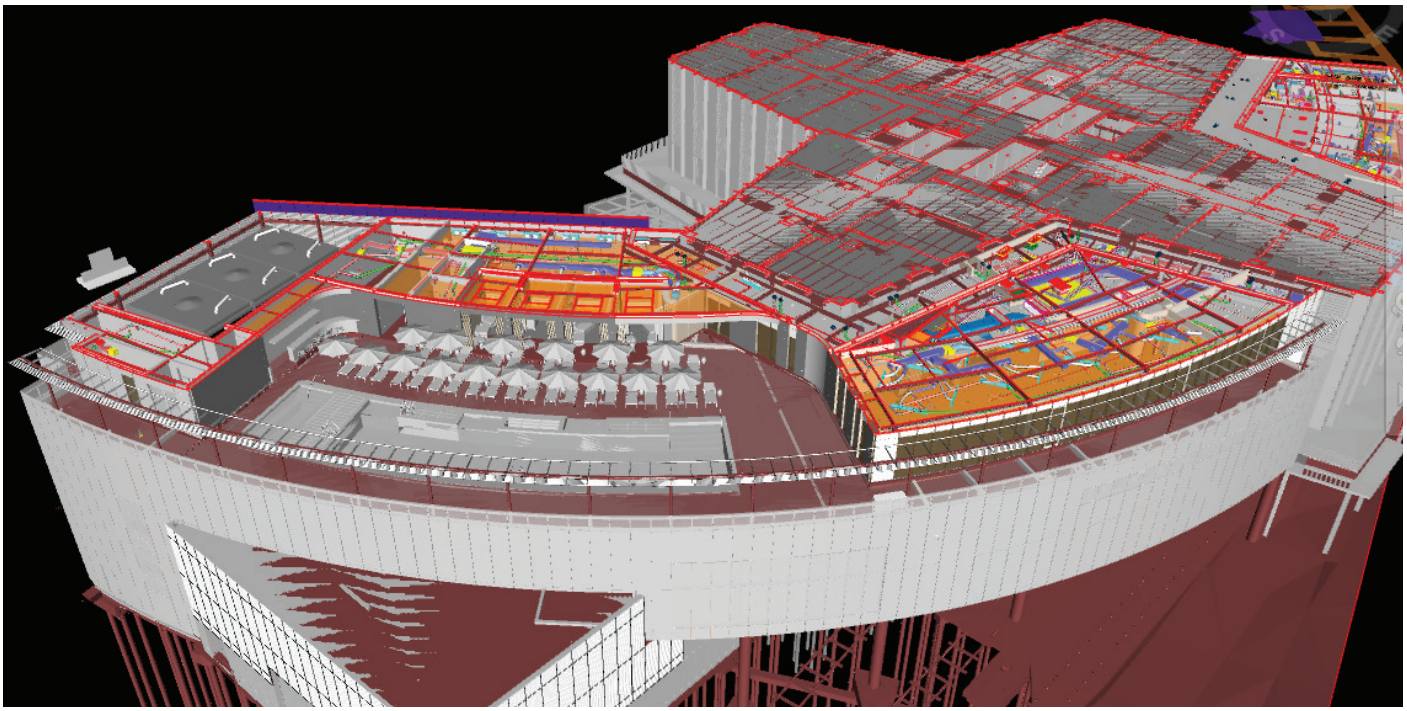
Innovation and Contribution to the Industry and Community

As the largest private development in the city, the rehabilitation of this historic, 33-story structure and the JV team's innovative approach will leave a lasting effect on our industry, community, and local economy.

Through a unique city requirement, this development resulted in immense impact on the local, small business economy. The City of New Orleans set forth a goal that 35% of the construction value (roughly $122.5 million) had to be awarded to certified Disadvantaged Business Enterprises (DBE). Through a rigorous DBE Program, implemented by the JV team, this project has achieved 38% total DBE participation. Totaling to over $140 million to DBE firms, the efforts gained praise from the city and local agencies and the project is now a case study on the success and positive impact of small business programs.

The implementation of the "Common Hoisting Platform" was a feat of material movement through this 33-story structure, a system that had never been utilized before in New Orleans. This innovative concept was a marvel at the foot of Canal Street from 2018 through 2021. By using this system, the project's daily operations were positively impacted. The team was able to locate the hoist directly where it would tie-in to a single stack of units to minimize disruption to the interior buildout sequence and restoration of historic precast panels, while also increasing productivity by allowing operations to continue on guest rooms while also progressing the envelope.

The use of technology for Building Information Modeling was essential to the project. The team used Navisworks to coordinate major trades like mechanical, electrical, plumbing, fire suppression, and food service. A critical activity that benefited from the use of BIM was the coordination of the MEP trades and special systems within the floor-to-floor structure. Not only did the ceiling clearances vary from floor to floor, but they were so tight that components had to be coordinated down to 3/16s of an inch on some floors. Without the use of virtual modeling, this effort would have resulted in countless clashes between trades, inaccurately sized components, and hours lost on re-work and re-coordination.



Other Tools and Technologies

PROCORE
OPENSPACE
vPlanner
AUTODESK NAVISWORKS
P6 ORACLE
BLUEBEAM REVU
VOYAGE CONTROL
spot-r radius by triax

Construction Quality and Craftsmanship

The Four Seasons New Orleans is the city's newest 5-star hotel, and with that came 5-star expectations of quality and craftsmanship. From material selection to a rigorous 3 step inspection process, the team executed extraordinary results with our finish trades.

The designer's vision of floor to ceiling Carrara marble bathrooms in the guest rooms required a special trip to Carrara, Italy to select and approve the mix of stone. The approved dry lays were then immediately packaged and air freighted to the project for installation in the model guest rooms.

The team implemented the Four Seasons' corporate model room process to establish the guest room quality control/assurance expectations. The three-step process includes a closed wall inspection to ensure proper mechanical/plumbing/acoustics, then an architectural finish inspection, and finally FF&E installation inspection. Additionally, acoustic isolation and each room's Sound Transmission Class (STC) rating was an important factor to the flagship hotel brand and major part of the inspection/modeling process.

The aptly named "Chandelier Bar" is the centerpiece of the hotel lobby. A custom-made chandelier from the Czech Republic suspends over the circular bar and catches the light of 15,000 crystals. To install this critical interior element, 2 electricians from Allstar Electric, the prime electrical subcontractor, set the chandelier in place on scaffolding around the bar. One person in a lift individually hung each stand to complete this impressive element.

Three of the many historic elements the designers and JV team focused on were the exterior aluminum louvers (or sunshades), exterior precast concrete panels, and the first-floor interior lobby. The sunshades presented a unique challenge in that the anodized finish was so corroded that simple cleaning did not get them to the restoration level expected.

The historic design team and exterior subcontractor (Glass Zinsel JV) explored many options and ultimately decided on dismantling each of the 1,164 sunshades individually, removing the existing anodized finish down to the raw aluminum, removing the corrosion and re-anodizing them to match the original finish. Due to this meticulous effort in quality standards, 324 louvers were re-installed to the owner's desire and requirements of the historic program.

woodward

woodwarddesignbuild.com

Prepared by:
Woodward Design+Build
Contributors:
Woodward Design+Build and AECOM Tishman
Photo Credits:
Christian Horan Photography, Mike Palumbo Photo, and CambridgeSeven