BASELine

The quarterly newsletter of BASE Summer 2019

Urban Hospitality

From cozy, intimate boutique hotels to grand, complex mixed-use developments, our team enjoys the challenges of designing hotels in an urban setting to create memorable and exciting experiences for its guests. Our hospitality resume includes the full spectrum of projects from high-rises to large resort master plans and smaller resorts. Urban hotels require coordination of commercial structural systems with numerous functional and aesthetic requirements of the hospitality industry, often on tight sites, zero lot lines and other challenges of building in crowded cities. For larger urban hotels it is not unusual to have retail and residential components within the same project and yes, that super-cool hanging pool or bar. Even smaller boutique hotels in metropolitan settings face similar challenges, only on tighter budgets.

1528 N Wells Hotel

CHICAGO, ILLINOIS

Maximizing a tight site while meeting the time-honored traditions of a historic neighborhood.

This new mixed-use development is on a property of approximately 28,072 SF in the charming neighborhood of Old Town, home to historic architectural landmarks such as St. Michael Catholic Church. The design team was tasked to respect and honor the traditions of the surrounding building vernacular while providing the convenience and luxury of a modern hotel. The greatest design challenge was to minimize the imposing facade of a 13-story building among the existing one- to four-story structures in the area. This was accomplished by breaking the exterior faces with multiple setbacks over the height of the building, creating the feel of a much shorter and smaller structure. This required extensive coordination with the architect to locate columns and minimize transfer beams. Two stories were added below grade to make up for lost space that otherwise could have been added above. The design team worked closely with the earth retention system contractor to determine the best approach to support the basement walls, while

being cognizant of closely-abutting neighbors. Foundation work is scheduled to begin in the fall of 2019.

Developer: Chicago Development Partners Architect: Pappageorge Haymes Partners

THE RITZ-CARLTON RESIDENCES WAIKIKI BEACH HONOLULU, HAWAII

PACREP Architect: Contractor:

Guerin Glass Architects LP Albert C. Kobayashi, Inc.

Back-to-back PTI Project Award-winning champs!

The 704-key Ritz-Carlton Residences Waikiki Beach was recognized by the Post-Tensioning Institute for its exemplary use of posttensioning to solve architectural challenges. In 2017 the Phase 1 tower was named Project of the Year and in May 2019 Phase 2 received an Award of Merit.

The two 38-story luxury towers sit atop a shared eight-story podium with an amenities deck on Level 8. The project was encumbered by height limits, easements, a large wastewater pump station, and truck maneuvering areas under the building. These demanding conditions required long spans with maximized clear heights, offset foundations and columns, and transfer girders to transfer tower walls and columns onto a different set of podium level columns and walls. 7" thin post-tensioned slabs in the parking and tower levels allowed the project to maximize the number of floors within Waikiki's 350'-0" height limit.

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Maker Maxity Mumbai, India

Transferring 20 hotel floors over a ballroom.

Located in the Bandra-Kurla Complex area of Mumbai, this mixed-use development is comprised of two towers: a hotel with 240 keys and serviced apartments with 180 units. The towers are 22 stories and the total square footage encompasses 1.2 million SF.

Some of the unique challenges on the project included designing the building without expansion joints over its 750+ foot length and transferring 20+ floors of hotel over the ballroom. The workaround for

no expansion joints was to use strategically placed delayed pour strips and designing the podium for additional seismic forces from out-of-phase behavior of the towers. The ballroom transfer required a visually expressed concrete truss at Level 5 that spans 83 feet between building columns, which required significant coordination with the architect and mechanical engineer for aesthetics and functionality.



Owner:The Indian Film Combine Pvt. Ltd.Architect:ArchgroupContractor:Leighton India Contractors Pvt. Ltd.



Mandarin Oriental Honolulu

Honolulu, Hawaii

Level 20 cantilevered reflecting pool enhances hotel guest arrival experience.

This 400-foot high mixed-use tower is anchored by a 125-room (127-key) Mandarin Oriental hotel and includes 109 branded residences. Hotel guests will arrive at the luxurious ground level porte cochere and be escorted to the main hotel elevators where they will be whisked to the hotel lobby on the 20th floor. The elevator doors will open to a spectacular view of a reflecting pool that will appear to extend out to the Pacific Ocean. The reflecting pool cantilevers out approximately 38 feet from the edge of the main tower structure using a triangular-shaped structural steel box truss constructed out of both HSS and wide flange shapes. The truss is a full floor height in depth that provides space below the top chord for a unique guest bar space with a window opening allowing patrons a wonderful view of the Level 9 amenity deck on the podium structure. Together, these two unique experiences will help shape the memories of guests who choose to stay at this hotel that is scheduled to begin construction in July.

Owner: Manaolana Partners Design Architect: [au] workshop Executive Architect: AHL

Contractor: H

Hawaiian Dredging Construction Company

PLAZA AT CORAL GABLES CORAL GABLES, FLORIDA

Achieving savings with 75-foot spans.

This 2.25 million SF mixed-use development is situated on a seven-acre parcel along Ponce de Leon Boulevard in Coral Gables, FL. The project consists of a 242-key luxury 4.5-star hotel, two Class A office towers, retail stores, casual and fine dining restaurants, townhomes and a residential tower, and parking for 2,050 vehicles.

BASE performed value engineering of the post-tensioned slabs and five sets of unique steel transfer trusses on the third level, spanning approximately 66 feet and 75 feet over



Owner: Agave Ponce, LLC Architect: CallisonRTKL Inc.

Contractor: Coastal-Tishman Construction

a city-mandated easement. By reducing the top clear cover where possible and by changing the orientation of banded and uniform tendons, the total proposed savings for the post-tensioned slabs was over \$858,000.

The steel transfer trusses were full-story height, supporting levels of parking and an amenity deck above and hanging a retail floor below. Several alternative options for the transfer trusses were provided with post-tensioned transfer beams finally chosen for a total savings on the order of \$5M-\$6M.