



Texas Agency Builds On Capitol Concept

A \$581-million revamp of Austin's Capitol Complex, first of two phases, consolidates state agencies while creating a mall-lined cultural district **BY JOHN GREGERSON**

GREATER TRANSPARENCY
The 12-story 1601 Congress State Office Building, one of two structures included in Phase 1 of the revamped Texas State Capitol Complex, features abundant glazing.

Although the Texas Facilities Commission (TFC) routinely juggles statewide projects collectively valued in the hundreds of million dollars, including dozens of new and renovated office buildings, it is anything but business as usual for the Austin-based agency these days as it moves to transform Austin's Texas State Capitol Complex.

In an effort to consolidate state agencies and wean them off escalating lease costs, TFC is undertaking a transformation so massive that it dwarfs

any project the state has undertaken since construction of the 132-year-old Capitol itself, says Mike Novak, executive director of TFC. "It's like building the pyramids," he says.

The \$581-million first phase of the project broke ground in mid-2018. With a planned second phase, the project is valued at nearly \$900 million. Along a linear stretch of Congress Avenue, extending north of the Capitol, the first phase encompasses a pair of office buildings, including the 14-story,



603,000-sq-ft George HW Bush Building and the 12-story, 416,000-sq-ft 1601 Congress facility, 3,100 parking spaces mostly located under the buildings and portions of Congress Avenue and, at grade level, replacement of those portions of Congress with a three-acre pedestrian mall that will host concerts and other public events. Phase 1 building will occupy the east side of the mall, while Phase 2 will occupy the west side.

The undertaking responds to a legislative mandate requiring that TFC eliminate leased space occupied by widely dispersed state agencies. Taxpayer-backed bonds are funding both phases, though the structures will save taxpayers \$25 million annually on leases upon completion, says Novak. Additionally, TFC anticipates that consolidating staff into state-owned buildings will result in greater operating efficiencies within and among agencies, adds John Raff, deputy executive director of TFC's facilities design and construction division.

In all, the two phases will relocate 3,000 existing

state employees, although agencies selected to consolidate in the new buildings have yet to be named, Raff says.

To some extent, the project, part of a larger 2013 master plan for the Capitol Complex devised by the Austin office of architect-engineer Page, intentionally echo the National Mall in Washington, D.C. The objective is to create a visitor destination that celebrates the Capitol. Grade levels of both first-phase buildings, for instance, will feature facilities to attract the public, including plazas and cultural elements or dining, says Raff.

A pair of existing museums opposite Phase 1 structures on the mall's west side will complement the creation of a cultural district within the Capitol Complex, according to plans.

The project has generated excitement so great that "some TFC employees are delaying retirement until it is completed," says Novak, who notes that Phase 1 is due for completion in 2022 and Phase 2, including an additional pair of office buildings and an extension of the mall, in 2025.

The project also has drawn at least one key participant—Lou Saksen, project executive with Balfour Beatty, Austin, construction management agent for Phase 1—out of retirement.

"I retired in 2015 and rejoined Balfour Beatty in 2016, when Balfour Beatty was commissioned with overseeing Phase 1," Saksen recalls. "I wanted to be part of a project this iconic."

Balfour Beatty is overseeing six project packages currently underway, including excavation, utility relocations, a central utility plant expansion, underground parking, the mall and the two buildings, each executed by an architect or engineer of record paired with a construction manager at-risk.

Breaking the Capitol Complex into packages not only provided opportunity for a greater number of designers and builders to participate in the project, but shaved about a year and a half off construction.

"TFC determined it could begin early work on excavation and utility relocation while other portions of Phase 1 were in the design stage," says Saksen.

Much of excavation is complete—a total of 1.17 million tons—with the remaining packages all currently under construction. The concrete-framed Bush building is the furthest along, with work having recently begun on above-grade portions of the project.

JE Dunn, Austin, is serving as CM for excavation and utility relocation, with CobbFendley, Austin, serving as site services manager. Dunn also is working on expansion of the central utility plant, and A/E Jacobs is performing design work.

The Texas State Capitol Complex dwarfs any project the state has undertaken since construction of the 132-year-old Capitol itself. "It's like building the pyramids."

—Mike Novak,
Executive Director,
Texas Facilities
Commission

FINE FORM Due to its prominent site at the gateway of the Capitol Complex project, the 14-story George HW Bush Building received greater articulation than its relatively unfettered counterpart, the 1601 N. Congress Building.



STARRING ROLE A lone star fronts the existing Bullock State History Museum, opposite the rising Bush Building.



The team of CM Flintco, Austin, and Dallas-based architect-engineer HKS is executing the 1801 Congress structure, and White Construction and architect-engineer Kirksey Architecture, both of Austin, the 1601 Congress structure. Parking and the mall fall under the purview of White and Kirksey.

While Balfour Beatty is coordinating construction efforts, including sequencing, scheduling, budget and change orders, Page is working to ensure that design work conforms with its master plan. It is working with TFC and Balfour Beatty to ensure that the conceptual design for Phase 1 is executed. Architects and engineers of record for each package, along with corresponding construction managers at-risk, employed the conceptual design along with master plan design guidelines as the basis for design development, construction documents and construction.

For the two buildings, TFC, Page and Balfour Beatty focused on fleshing out cores and shells—in

some cases in accordance with state guidelines, such as height, massing and sight lines relating to the Capitol, which is sited at the terminus of the project, says Paul Bielamowicz, principal with Page. Because the Bush building is located further from the Capitol than the 1602 building, it stands two stories taller than 1602.

Serving as the gateway to the mall at its northernmost point, the Bush Building is highly articulated, featuring a curved vestibule that echoes characteristics of a museum located across the street. By comparison, the as yet unnamed 1602 is less fettered, says Bielalmowicz,

who notes that both building primarily are clad with glazing to promote daylighting. Studies indicated that workers are more productive when they have access to natural light, Raff says.

Conceptual design underwent rigorous review by a panel of architects appointed by top state officials, with progress evaluated at the 50%, 75%, and 100% stages of planning, and recommendations were implemented accordingly, Bielalmowicz says.

Design guidelines encompassed a variety of systems, from architecture to mechanical, electrical and IT. As plans unfolded, Balfour Beatty assisted TFC in developing budgets and schedules for the six packages before the agency handed over each to their respective teams of designers and CMs, says Saksen.

Work Balance

The hierarchical nature of the Capitol Complex marks a departure for TFC's facilities and design division,



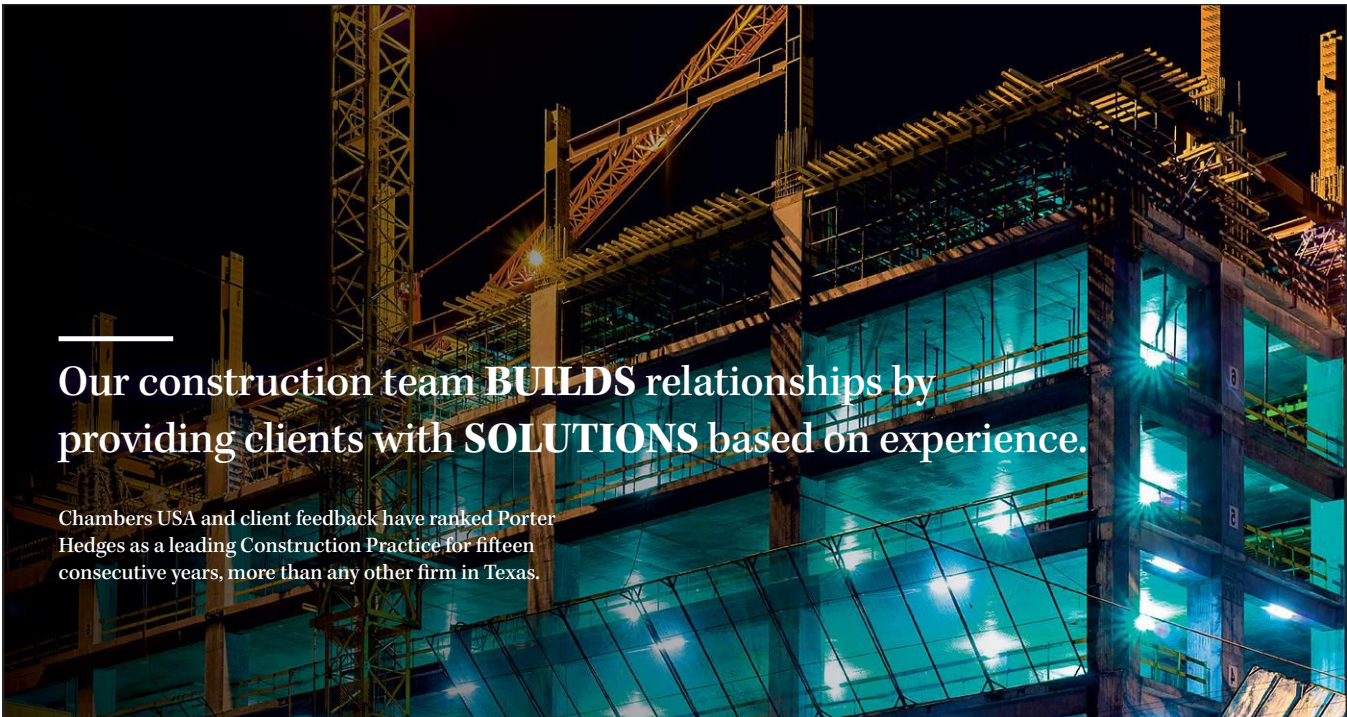
PUBLIC PLACE
The mall will separate the Bush building (left foreground) and the Bullock Museum (right foreground) and host concerts and other events to complement the cultural aspects of the Capitol Complex project.

staffed with 41 personnel and currently undertaking an additional 55 projects valued at nearly \$800 million. Each of the division’s 15 project managers manage multiple projects, with workload balanced in accordance with the total number of undertakings, their size, duration, complexity, travel demands and a project manager’s level of expertise.

“On average, our project managers each oversee

3.5 projects under design or construction,” says Raff. “However, project managers oversee work from cradle to grave, so they may have another three or four that are in planning or in warranty.”

Design and construction are further supported by a project management director, five administrators, five construction managers, a planning director, two space management and planners, a pair of architects



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DOWN UNDER

The George HW Bush Building and other project components will feature several levels of below-grade parking.



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and energy management directors and six design/CAD technicians for smaller projects, among others. Recent projects include \$26 million in renovations to the 12-story LBJ Library and, miles from the Capitol, the North Austin Project. That project entails a nine-story,

406,000-sq-ft, \$186-million facility to consolidate the Texas Health and Human Services Commission, the intent being to eliminate lease holds—much like the Capitol Complex Project.

“We typically assign a senior project manager to larger new construction projects, and the manager focuses on that single project alone,” says Raff.

By comparison, TFC has assigned five project managers to the Capitol Complex Project, assisted by six counterparts with Balfour Beatty. “We had a good handle on managing the architects and engineers, but needed help with managing logistics,

schedules and construction budget for the six-package construction program,” Raff says.

In addition, senior project managers with Balfour Beatty dedicated a communications specialist to the project, a general superintendent who walks the site daily, six senior field personnel and a building information modeling (BIM) specialist who has combined Revit-supported models from each package into a single model to detect conflicts and ensure all aspects of work conform to the master plan.

TFC is deploying drones and time-lapse photography from three onsite cameras to assess the project’s schedule and accuracy. The agency also has engaged in laser scanning to ensure the size of excavated spaces meet their precise dimensions.

So far, so good, as the mammoth project continues its trajectory toward completion, Raff says.

At present, 300 to 400 workers are on site. Those numbers will swell to 1,000 as work progresses, Saksen adds. ■

*“Build miracles.
Enlist technology.
Make the impossible possible.”*

— George A. Pontikes, Jr.

