

## **POST PROJECT EVALUATION FOR A DESIGN BUILD PROJECT**

**Project Name:** Salem Public Library Improvements  
**Exemption Approval:** Council Meeting, October 8, 2018  
**Contractor:** Howard S. Wright (HSW)

### **PROJECT DESCRIPTION**

The project provided a seismic retrofit of the building and adjacent parking structure to withstand a catastrophic earthquake. Improvements also included increased ADA accessibility and building upgrades to plumbing, lighting, HVAC, window, roof, and electrical systems.

### **INTRODUCTION AND BACKGROUND**

In November 2017, Salem voters approved the Salem Public Library general obligation bond measure 24-432 authorizing \$18.6 million for seismic safety, security, and accessibility upgrades to the Salem Public Library and associated parking facilities.

Due to the complexities of the project and the relatively short timeline to deliver the project under the requirements of the bond, City staff made recommendations to deliver the project using a progressive design build (DB) contracting method. The DB method allows for contractor involvement at the very beginning of the design phase to develop the most cost-effective solution that can be delivered in a shorter overall construction duration, compared to traditional design-bid-build contracting methods.

On October 8, 2018, City Council acting in its capacity as the local contract review board, approved staff's recommendation by adopting findings in support of an exemption from the competitive bidding process and authorized the use of a DB contracting method for design and construction of this project.

Oregon Revised Statute (ORS) 279C.355 and Public Contracting Rules (PCR) 9.7 require a final evaluation of the public improvement project upon its completion. The evaluation must include the following:

1. Financial information consisting of cost estimates, the Guaranteed Maximum Price (GMP), contract changes, and the actual cost.
2. A narrative description of successes and failures during the design, engineering, and construction of the project.
3. An objective assessment of the use of the alternative contracting process as compared to the findings required by ORS 279C.355.

## FINANCIAL INFORMATION

The original project budget from the bond included \$18.6 million plus an additional \$3.2 million from bond premiums and projected interest earnings for a total of \$21.8 million. The improvements identified in the bond measure were estimated to fall within this total budget. Additional funding was identified during design to fund other improvements that were not originally part of the project scope. These additional funds included \$1,145,294 from the general fund to provide new power transformers to the Civic Center Campus and \$620,590 from the Library Foundation to fund add-on enhancements that were not originally identified to be included with the improvements. These added funds allowed the project to complete additional improvements. Below is a summary of the budget including additional funds, actual costs, and resulting savings.

Initial Bond Budget	Additional Funding	Total Funding	Actual Costs	Savings
\$21,817,995	\$1,145,294 General Fund Transformer	\$24,064,245	\$23,719,633	\$344,612
	\$620,590 Library Foundation			
	\$312,355 Additional interest earnings			
	\$107,750 ETO Incentives			

The original DB Agreement set a GMP of \$17,875,918 which included the design phases for the project. City-initiated amendments throughout the project increased the final GMP to \$20,015,704. These amendments to the GMP to add scope to the project were possible due to good fiscal management and close coordination with HSW throughout construction. The amendments were approved at key points in the contract to maximize efficiency of the work. Below is a table that summarizes the budget along with additional funding and changes to the GMP throughout construction.

Amendment Description	Bond Funding	Other Funding	GMP
Initial GMP	\$17,380,328	\$495,590	\$17,875,918
Transformer		\$1,145,294	\$19,021,212
Front Entry	\$462,314	\$125,000	\$19,608,526
Art Lighting, CC Media, Library Carts	\$28,456	\$41,934	\$19,678,916
Parking Garage Deck Coating	\$248,567		\$19,927,483

Added Furniture	\$72,458		\$19,999,941
Shelf Signage	\$15,763		\$20,015,704

The above cost summary represents the budget expenditures related to the alternate contracting method. Other costs on the project that are not included in the GMP but make up the difference between the actual costs and the GMP include: City project management, consultant owner's representative, inspection, testing, permit fees, asbestos abatement, and furniture, fixtures and equipment.

## PROJECT SUCCESSES AND FAILURES

Overall, design and construction of the Salem Public Library Improvements was a success. The final project resulted in meeting the objectives of the bond, but also included many improvements that enhanced and transformed how the library looks and operates. Some specific examples of benefit added to the project by the DB method are as follows:

- Early contractor/designer/owner collaboration to consider design elements, and weigh costs against the criticality of the improvement. This allowed the project team to work together to optimize the location of the large concrete seismic shear walls for best construction efficiency and lowest cost. The process also produced a budget revision tracker (BRT) that allowed the team to prioritize improvements and created a list of “buy back” items that could be funded should contingency funding allow.
- Open and transparent financial management between the City and HSW allowed the project team to reallocate GMP dollars and owner contingency funds toward scope items on the buyback list generated by the BRT. In the end, the City was able to complete a large portion of those early design cuts as well as the transformative upgrades sponsored by the Library Foundation. Examples include the addition of windows in the western reading areas on the main floor, replacement of existing staircases to improve wayfinding and open up the main floor, entry plaza improvements, and replacing the aged traffic coating on the top deck of the parking structure.
- Project construction started right at the beginning of the Covid-19 pandemic in April of 2020. There was a lot of uncertainty regarding whether the project should continue. However, with the developed relationship between the City and HSW through the DB process, the decision to continue the work was ultimately the best for the project. HSW was able to stay ahead of important material supply items and keep the overall schedule of the project on track. Similarly, the relationship developed by the DB team helped to overcome impacts to the project from severe wildfire smoke in the fall of 2020.

- Other than the City-initiated amendments to the GMP, there were no change orders on the project. The communication within the DB team, between the architect, and contractor during design and construction allowed for issues to be resolved early and within the contractor's contingency.

## **OBJECTIVE ASSESSMENT OF ALTERNATIVE CONTRACTING PROCESS**

ORS 279C.355 requires contracting agencies to submit evaluations for public contracts that have been exempted from the competitive bidding process. In October 2018, Council adopted findings in support of an exemption from the competitive bidding process and authorized the use of DB contracting for design and construction of the Salem Public Library Improvement project.

Alternate contracting processes provide agencies with another tool to respond to the challenging demands of delivering complex projects. In particular, the DB contracting method can provide for overall project cost and time savings. The following is provided to meet the requirements of the ORS.

One of the key distinctions of the DB method is the early involvement of the contractor on the project; this allows for collaboration and relationships to be built among the project team which directly leads to cost and time savings on the project. An essential part of each construction project is the value engineering evaluation. Value engineering is the means used to determine the best project design that meets the needs and priorities of the owner, within the owner's budget. Value engineering is done most effectively by a team consisting of the owner, architect, and the contractor. When the contractor participates, the team can render the most comprehensive evaluation of all factors that affect the cost, quality, and schedule of the project. The DB method allows agencies to set the schedule and sequence work with the contractor during the design phase of a project. Through integrated participation, a project's scope and design evolve to bring greater value for the owner in a way that is very difficult to achieve by the design-bid-build method.

Additionally, contracts with DB are designed to create a better working relationship with the contractor. Consequently, the overhead and profit fee are generally in the 3-5% range, which contractors indicate is slightly lower than the fee anticipated on similar design-bid-build contracts.

This method also results in fewer change orders during construction. As a result, the project is more likely to be completed on time and within budget. Fewer change orders reduce the administrative costs of project management for both the City and the contractor.

In summary, the DB contracting method provided for the successful delivery of the required improvements and is an effective and efficient tool for public agencies to deliver projects. The Salem Public Library Improvements project was able to realize the benefits of cost control, better information for decision making, improved teamwork, and less risk for contract disputes. The design build delivery method proved to be a complete success for this project.