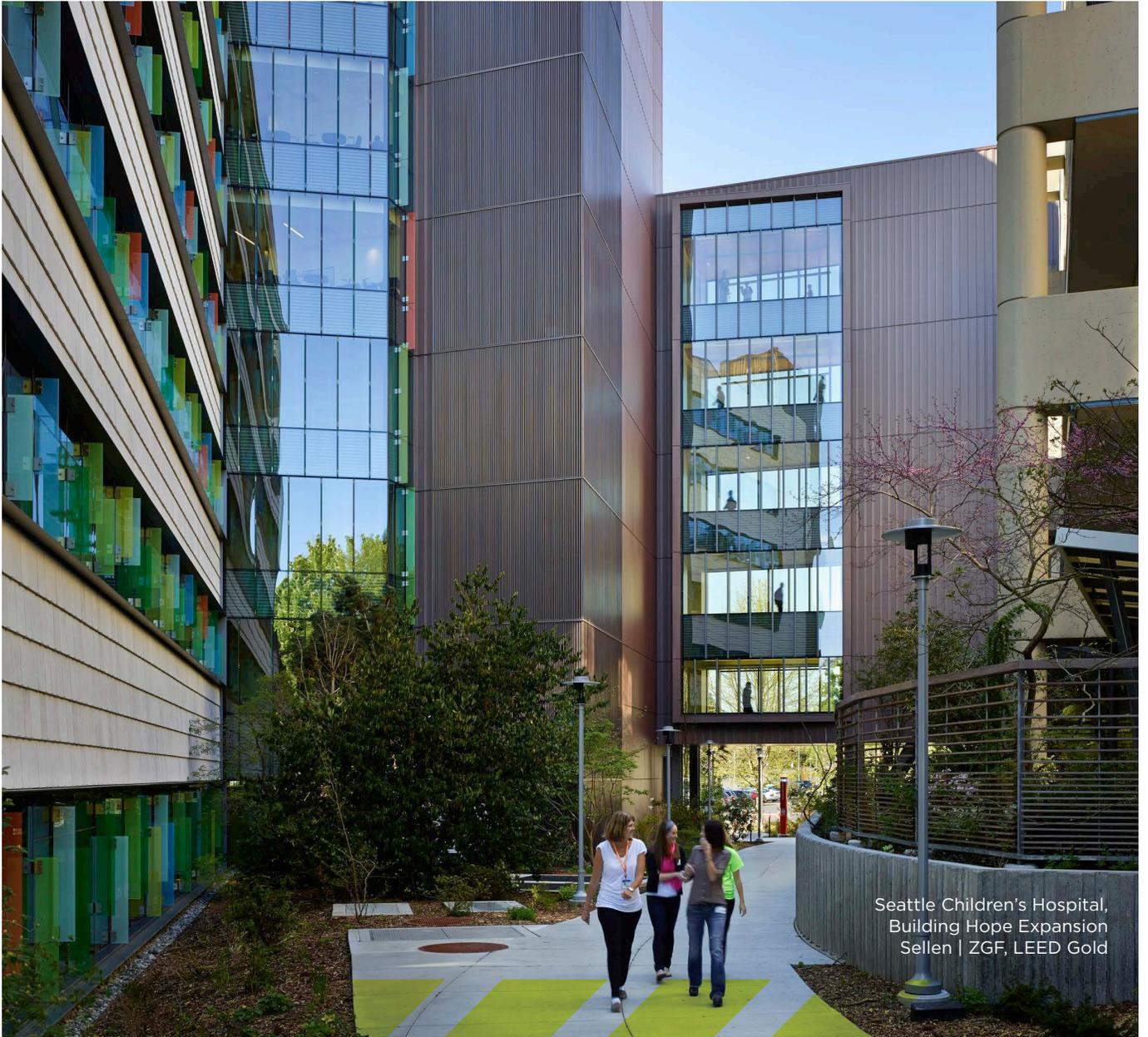


Level 4





Seattle Children's Hospital,  
Building Hope Expansion  
Sellen | ZGF, LEED Gold

# 7. Project Approach Additions

Our team brings extensive experience working together designing and building high-performing, energy-efficient systems, as well as guaranteeing your building's energy performance for years to come. This experience will allow the Sellen | ZGF team to apply lessons learned as we work with the DES to maximize value.



Confidential Office Client Campus Headquarters, Sellen and ZGF Architects

## Project Approach

Sellen and ZGF have a long and successful history of collaborating on more than 3 million square feet and the delivery of more than 30 projects and throughout the Northwest. We are both well-versed in design-build delivery and over the years have built a level of trust that facilitates open and honest communication and supports making the right decisions to achieve the best quality and value for our clients. We will continue to incorporate integrated project delivery (IPD) and lean methodologies and tools during the design and construction phases. These include:

- **Clarity Around Conditions of Satisfaction:** The three proprietary meetings have started this process, and we look to the scope validation period to further clarify the DES and stakeholder goals. Alignment of our team with yours is a key to success.
  - **Big Room/Design Charrettes:** We have started using this tool during our proposal response, and see a continuation of all-hands-on-deck meetings to develop the design further. The charrette process may also be useful when we further refine the list of betterments with the DES.
- The Sellen | ZGF team views our design-builder's contingency as a tool that gives us the flexibility to price the 1063 Block Replacement as aggressively as possible so we can deliver the DES the best facility possible for your budget.
- 
- **Pull Planning:** We used pull planning to develop our response schedule. Our project schedule is also based on this method. We will discuss with the DES how to further incorporate pull planning into the review times and owner submittal reviews.
  - **Innovative Design Packaging:** Our preliminary schedule indicates the main design packages needed to facilitate the permitting and construction schedule. As we have done on previous projects, including Federal Center South, we will also explore strategic ways to assemble the bid packages to meet the diverse business participation goals.
  - **Early Vendor Integration:** To develop our proposed GMP, we have engaged vendors for pricing, identification of savings opportunities and added value. As such, some vendors have already been identified. Additional vendors will be procured very early in the process to help assist us with the design and set pricing in this rising market.
  - **Cost Control:** As we have already begun to do, we will continue our culture of designing to a budget rather than budgeting a design,



or target value budgeting. One main project goal is to achieve the most value for your money.

- **Optimize the Whole:** Numerous decisions throughout the project will affect the operation, functionality and long-term flexibility. To make sure the team makes the right decisions along the way, we will be aligned in our dedication to do what is best for the project rather than each particular system. We will be using Energy Life-Cycle Cost Analysis (ELCCA), one tool to help us optimize the whole, along with qualitative analysis of alternatives.
- **Virtual Design and Construction (VDC):** Our team's VDC 3-D and 4-D Building Information Modeling (BIM) strategy focuses on transparency of information and communication. We will apply this technology to develop more accurate estimates; improve project partner interactions;

encourage early subcontractor participation and maximize the value of that early involvement; improve team coordination; inform construction scheduling and sequencing; minimize subcontractor added costs and risks; resolve issues of constructability; and improve overall project quality.

- **Continuous Improvement:** As the project progresses, the team's ideas and opportunities will be documented and evaluated. While some may not appear to fit the budget at first, if their life-cycle value proves to be beneficial our team will continue to try and find ways to incorporate them by optimizing the design to reduce their cost. In this way, we can continue to deliver best value to the DES. We have already begun this process and have included some of our preliminary value-add betterments in Section 17.

## Self-Performed Work

Sellen is a builder, and the largest employer of union craft people in Washington state. The reliability inherent in not having to train our crews for each operation is a major benefit that Sellen can bring to the 1063 Block Replacement project. Our craftspeople clearly understand our standards for quality, safety and performance, and we are better able to control these factors when we self-perform work.

In addition, because Sellen self-performs work on many critical-path and labor-intensive elements of a project, we are able to set the pace for subcontractors and establish milestones for other construction components. Sellen typically self-performs 15% to 20% of the work on our projects. Based on our understanding of the requirements for your project, we anticipate self-performing the following scopes of work with our own crews. (Asterisk indicates scopes of work normally

“Thank you for representing our project so wonderfully. Your leadership throughout this entire project process is truly appreciated by all of us at GSA.”

Rick Thomas, Acting Branch Chief  
U.S. General Services Administration



performed by Sellen forces that may also be bid to select, qualified subcontractors to ensure the most competitive price.)

- Supervision
- Site support
- Safety
- Survey and layout
- Selective demolition
- Concrete formwork\*
- Concrete placement
- Concrete finishing
- Site concrete work\*
- Precast concrete erection\*
- Steel erection\*
- Miscellaneous steel placement\*
- Underlayment / floor prep\*
- Rough carpentry
- Finish carpentry
- Door, frame, and hardware installation\*
- Miscellaneous specialties installation\*
- Cranes and hoisting operation\*

### Competitive Self-Performed Work

We are routinely asked to demonstrate that our self-performed work is competitive. For large scopes of work such as horizontal concrete placement, we will solicit bids from multiple companies. We will review vendors' bids, performance and quality of work alongside Sellen's proposal with the DES to determine which vendor to use. Sellen will update the procurement status in our monthly report, and, as with

## Case Study: Project Betterments

On **Federal Center South**, our team focused on providing the GSA best value for the dollars allotted with a list of betterments. As early construction progressed and project risks decreased, we worked with the GSA to help manage the contingency to achieve maximum value of the total budget.

Betterments included in the project after contract award included:

- Maximized daylighting
- Enhanced lighting controls
- Energy dashboards
- Rainwater harvesting
- Geothermal wells
- The diagrid structural system

all parts of the contract, the DES is welcome to review the financial status at any time.

Another way we can assure the DES of the competitiveness of our self-performed work is we can share recent buy-out data from similar projects currently under construction. For small scopes of work, this may be sufficient substantiation.

### Design-Builder Contingency

The Sellen | ZGF team views our design-builder's contingency as a tool that gives us the flexibility to price the 1063 Block Replacement as aggressively as possible so we can deliver the DES the best facility possible for your budget. We want to work with the DES to provide the most value in the building throughout the

design and construction processes.

With this in mind, we have included a contingency for our team as a separate line item in our proposed GMP, used to cover risks associated with unforeseen design and construction costs that the design-builder is contractually obligated to provide. We will be 'open-book' with the DES and share the contingency status on a monthly basis.

Instances where we may need to use the design-builder's contingency might include:

- Unrecoverable costs that may be incurred due to failure of a subcontractor to perform.
- Unforeseen increases in labor wages or labor burden.
- Increases in insurance coverage cost during the construction period.



- Unforeseen costs for expediting materials, as may be required to meet the construction schedule.
- Increases in cost due to material or equipment unit prices exceeding estimates, or escalation of costs during construction.
- Variances in construction means and methods due to construction requirements not anticipated during preparation of the GMP, but not due to changes in contract scope.

### Owner Contingency

Uses for the owner's contingency generally fall into two main categories: 1) unknown conditions, and 2) the DES or tenant scope changes. When project risks are identified and appropriately mitigated, funds from the owner's

contingency can also be used for scope that adds value to the project, or what we have referred to throughout this proposal as "betterments."

During the design phase, we will work with the DES and its tenants to further develop and refine a list of betterments (some of our preliminary betterment recommendations are included in Section 17). After further discussion with the DES, we can augment our list to include cost and schedule implications of each betterment, as well as priority factor, as some may need to be decided upon earlier in the project's progress than others. We will also include betterments decision dates in our design decisions timeline, so you are aware at all times when each betterment decision needs to be made.

As the project progresses both in design and construction, the potential risk to the owner will decrease and we can start discussing allocating contingency funds toward betterments. For example, we will be demolishing and excavating the majority of the existing slab-on-grade in the first part of construction. We view this as a high-risk activity, as the potential for hazardous material or undocumented conditions can have cost implications. Once the earthwork and utility installation is complete by the second quarter of 2015, however, the unused funds allocated for hazardous material can be tagged and applied toward scope changes and betterments. Ultimately the owner's contingency is not only an initial safeguard, but it also has the potential to enhance the project.