

Memorandum

To: Board of Governors
From: Steve Berberich, Vice President, Corporate Services
Date: September 9, 2008
Re: Decision re: Iron Point site work, design assist and commissioning

This memorandum requires Board action.

EXECUTIVE SUMMARY

At the March 2008 Board of Governors meeting, the Board approved \$10 million to perform the design development and construction document phase of the Iron Point project. At the May 2008 meeting, the Board approved the project as a design-build project.

Since then, CAISO has made significant progress on the project. The City of Folsom Architectural Review Committee and the Traffic Safety Review Committee have fully reviewed and approved the project design. The City of Folsom Planning Commission is scheduled to review the project on September 17, 2008. We submitted the site work package, which includes final grading and utilities, to the City of Folsom in August, and anticipate receiving a permit for the site work in October.

Consistent with the design-build contracting method, we will overlap some work. In this case, we are prepared to start the site work and design assist efforts, now that the design phase has reached the 60% completion mark. We are also prepared to solicit bids to begin the site work. The site work consists of rough grading, installation of underground utilities, and grading the building pads in preparation for foundations. Our design builder will also be contracting with building trades to bring them into the design process – known as “design assist”.

In addition to the site and design assist activities, we intend to continue the LEED certification process with the intent of achieving a Gold level rating. An important prerequisite to participating in LEED is fundamental commissioning of the building energy system. In fundamental commissioning a third party verifies that the building’s energy related systems are installed, calibrated and that they perform according to the owner’s project requirements, basis of design, and construction documents.

Management recommends that the Board approve a budget amount not to exceed \$8.25 million for site work, design assist, general conditions, and fundamental commissioning.

SITE WORK

Site work is expected to begin immediately following the necessary approvals from the City of Folsom. The site work will largely consist of site leveling, installation of utilities and grading the building pads for foundation work. This will mark the first stages of construction and be the first signs to surrounding properties that we have begun construction activities. Final site work will be done in later stages of the project, but this initial site work will allow certain elements of construction that have known designs to begin quickly.

GENERAL CONDITIONS

The general conditions activities are those costs associated with preparing and maintaining the site for construction activities. It includes construction trailers, equipment rentals, cranes, hookups and related activities during the life of the project.

DESIGN ASSIST SUBCONTRACTORS

In the design/ build contracting method approved by the Board at the May 2008 meeting, the hiring of specialty subcontractors to assist in the design process is key to success of the process. The principal project contractor has identified five subcontracting trades they feel will add the most value in ensuring the constructability of the project as well as being critical to controlling overall project costs. The design assist trades can be divided into two categories. In the first category the trades take a generic design from the architect or engineers and develop shop drawings¹ that are then reviewed by the architect or engineers to ensure that the designs can be effectively and efficiently implemented. The design assist trades in this category are:

1. Pre-cast concrete
2. Curtainwall systems
3. Elevator

The second category for design assist trades are for trades where there are numerous means and methods for installation and have equipment with long lead times such as chillers, generators, and air handling equipment. An example of how these design assist trades help during design is that often architects and engineers do not take into consideration air duct or pipe sizes, pipe bending radius, or even the number of pipes or ducts when determining working space in rooms, above the ceiling, or under a raised floor. When these issues are identified in the field change orders often result. Including certain trades in the design process reduces the likelihood of these types of conflicts. Additionally, in the design process these trades can help to reduce installation costs through a more thoughtful design. The design assist trades in this category are HVAC and electrical.

FUNDAMENTAL COMMISSIONING

Fundamental commissioning begins early in the design process and includes a design review of the owner's project requirements, basis of design, and design documents. The commissioning agent develops the commissioning specification and reviews contractor submittals for commissioned systems for compliance with the owner's project requirements and basis of design. The commissioning agent also develops a systems manual for future operating staff and verifies that the contractors have completed the training requirements identified in the commissioning specifications for operating staff.

COST DETAIL

¹ Shop drawings are detailed drawings produced by the vendor of how the vendor intends to build the product.

Activity	Estimated Cost
Site work	\$ 4,500,000
Fees and bonds	\$ 500,000
General conditions	\$ 1,000,000
Design assist	\$ 500,000
Connection and City of Folsom fees	\$ 200,000
Fundamental commissioning	\$ 550,000
Contingency	\$ 1,000,000
Total	\$ 8,250,000

MANAGEMENT RECOMMENDATION

Moved, that the CAISO Board of Governors authorizes Management spend an amount not to exceed \$8.250 million for the site work, design assist, and commissioning work on the Iron Point Project, as described in the memorandum dated September 9, 2008.