

October 1, 1993  
ILR 93-S

Senator Howard A. Stephenson  
1038 East 13590 South  
Draper, Utah 84020

**Subject: Capitol Redwood Deck**

Senator Stephenson:

At your request, we have completed an audit of the cost and time period involved in the construction of the redwood deck on the lower north side of the Utah State Capitol. Specifically, you asked how much the project cost, who constructed it, how many labor hours were devoted to it, and why it took so long to construct.

We contacted the Division of Facilities Construction and Management (DFCM) and determined the redwood deck cost approximately \$6,300. Inmates from Utah Correctional Industries (UCI) constructed the deck, but no records were available to determine the labor cost or number of labor hours devoted to the project. Construction on the deck began the middle of May, but was not completed until the end of August. Construction was delayed because workers assigned to the project were also used to complete unexpected projects at the Capitol.

**Redwood Deck Answered Several Needs**

The location of the deck was previously an area comprised of a concrete retaining wall filled with earth in which various flowers were planted. The DFCM considered this planter area for renovation for several reasons. Because of its location at the Capitol's lower north side, plants were out of direct sunlight and did not grow well. The planter area, therefore, was a perennial eyesore. Meanwhile, the DFCM's Capitol Hill Maintenance Office received a large number of complaints from employees having to walk through the smoke filled lower north entrance of the Capitol. Smokers, having no where else to go, congregated around the

entrance to smoke. In addition, the DFCM received complaints from Capitol Protective Services about the tobacco smoke which entered their control room through a fresh air intake located adjacent to this same entrance. These factors, along with a desire for an additional exterior break area, prompted the DFCM to consider an alternative use for the planter area.

### **Deck's Costs Not Easily Isolated**

The DFCM, taking into consideration the conditions outlined above, determined that three options were available: leave the area as is (an eye sore), demolish the area and replace it with a break area consisting of a concrete deck and a wall to cover the exposed foundation, or demolish the area and replace it with a break area consisting of a redwood deck with tables and a perimeter bench. Table I below outlines the options and costs considered by the DFCM. It should be noted, however, that the project's actual costs could not easily be isolated.

<b>Table I</b>	
<b>Planter Area Option Costs</b>	
<b>Concrete Slab</b>	<b>Cost</b>
Demolition	\$2,519
Slab Construction	2,877
<b>Total</b>	<b>5,396</b>
<b>Redwood Deck</b>	<b>Cost</b>
Demolition	\$2,519
Deck Construction	3,783
<b>Total</b>	<b>6,302</b>

The demolition of the planter area consisted of removing the concrete retaining wall and soil. The rental of a compressor and jackhammers were necessary for demolition because the retaining wall was constructed from steel-reinforced concrete. In addition, because of the amount of material to be removed, the use of a front-end loader was also necessary. The labor costs to demolish the existing planter area were also significant. The demolition of the planter area, however, was necessary whether a concrete or redwood deck was built.

The option of simply replacing the planter area with a concrete slab was complicated by the fact that the removal of the planter would have exposed the Capitol's unsightly foundation. Replacing the area with a concrete slab would have necessitate the construction of a concrete wall to cover the exposed foundation, thereby significantly increasing that option's price. In addition, the concrete slab option would not have contained benches or tables. UCI estimated the construction of the concrete slab and wall, while less costly than the construction of a redwood deck, would result in a less useful and aesthetic break area.

The DFCM constructed the redwood deck because of cost and functionality considerations. For less than 20 percent more than the cost of a concrete slab and wall, a redwood deck could be constructed complete with furniture. UCI provided documentation for the rental costs incurred during the demolition phase and also the materials cost of the redwood itself. The balance of the redwood deck's reported cost consisted of the cost of labor.

UCI, however, was not able to provide documentation for either the labor costs, or the number of labor hours directly attributable to the demolition of the planter and the construction of the redwood deck. Because several unexpected projects were undertaken by the work crew assigned to the redwood deck during the period of its construction, UCI did not keep track of the number of labor hours or the total labor costs for each of the individual projects. The labor cost figure of \$3,742 (\$1,871 for the demolition of the planter area and \$1,871 for the deck's construction) assigned to the redwood deck, therefore, is an estimate based on the total labor costs of all the various projects completed at the Capitol.

Consequently, while documentation was provided to support the materials cost and rental fees incurred for the deck's construction and demolition, no accurate assessment of the labor cost or number of labor hours incurred is available. Because the deck's \$6,302 price tag is based on an estimate of the labor costs, this figure cannot be considered highly reliable.

### **Deck Construction Delay Caused by Additional Unexpected Projects**

The redwood deck project began mid-May 1993 and ended late-August. Originally, the project was planned to take one week to complete. Because other more important projects were given priority, however, the redwood deck took much longer than expected.

Workers from UCI, under the direction of supervisor Vic Middleton, performed the labor for the construction of the redwood deck. During the construction period of the deck, the four-man work crew assigned to the deck project also completed work on several other projects at the Capitol. These projects included repairing steps at the State Office Building, as well as the removal of curbs and a covering of asbestos as part of the Capitol Plaza paver

Senator Howard A. Stephenson  
October 1, 1993  
Page 4

replacement project. UCI also constructed boardwalks leading to the Capitol Cafeteria, made necessary by the pavement replacement project.

Although the redwood deck project was already underway, the other projects were given priority because an independent contractor, hired to complete the paving project, could not proceed until these other projects were completed. The removal of the curbs and the abatement of a layer of asbestos were unexpected additions to the Capitol Plaza pavement replacement project. Because these projects were not part of the independent contractor's initial bid, they would have cost the state additional funds. While the contractor submitted bids to complete this unexpected additional work, according to Jack Quintana, DFCM Assistant Director, UCI's bids were considerably less.

The completion of the redwood deck was delayed because of the involvement of the deck's workers on other more important, unexpected construction projects at the Capitol.

We hope this letter has provided the information you need on this issue. If you have any questions or need additional information, please contact us.

Sincerely,

Wayne L. Welsh  
Auditor General

WLW:BRK/lm