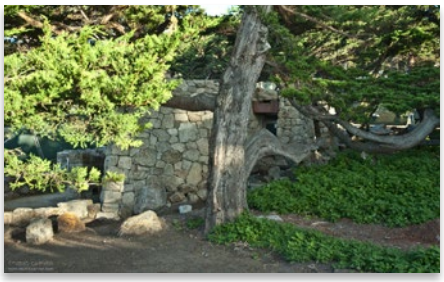

APWA Monterey Bay Chapter
2015 Public Works Project of the Year

City of Carmel-by-the-Sea Beach Restroom Project

Harris & Associates

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Background

The City of Carmel-by-the-Sea is an increasingly popular international tourist destination. For some time, the City recognized the need to construct permanent public restrooms at one of the more popular beach access points. Previously, only temporary portable restroom facilities were available at this location. The plan for the permanent restrooms has actually been in discussions for the past decade, and after much deliberation and public input, a design was finally settled upon. The current City administration is extremely proud to follow-through on its promise of delivering this facility.

The construction site for the new restroom is located on a bluff directly above the beach and across the street from a number of high-end residences. To blend with the beauty of the surrounding area, the architect designed a unique structure for the site. A stone veneer and board-form finish on the concrete walls provides a rustic look, and a "green roof" blends into the surrounding scenery, while the mahogany doors provide a rich contrast. Many have proclaimed, "If it's possible for a public restroom to be called beautiful, then this is the one that deserves to be!" The unique design and materials, small construction site and high-profile location provided additional challenges for the construction team to overcome.

Completion date. Any time extensions granted should be addressed in the submittal:

December 10, 2014. Time extensions were granted for a two-week work suspension and a six-week delay in obtaining power from PG&E. Constant follow-up with the utility resulted in an expedited utility connection, and a completion date nine days earlier than the revised contract completion date.

Construction schedule, management, and control techniques used:

The construction team's collaborative and responsive approach is the main contributor to the success of this project. The team provided quick turn-around on submittals and was very proactive in responding to RFIs and other issues. The City, Studio Carver Architects (architect), Tombleson, Inc. (contractor), Harris & Associates (construction management team), and other consultants worked together to keep the contractor's procurement process moving and mitigate delays. There were a number of custom items and materials used to construct this one-of-a-kind facility, and the team's proactive approach prevented these custom orders from becoming a time impact.

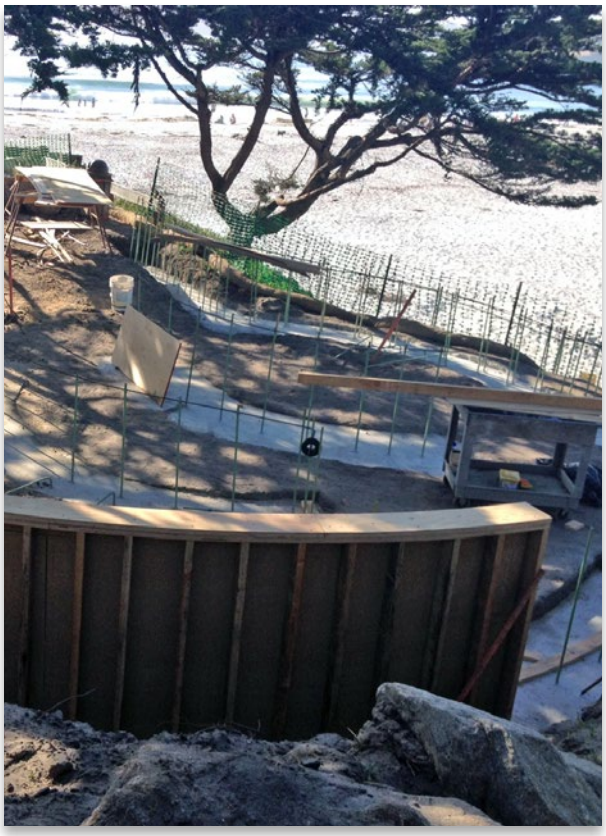
For example, one of the details called for "board forming" which essentially provided the look of a rough lumber finish to the concrete. The architect was quick to provide a review of the contractor's test panel, so that work on this forming element was able to proceed. The originally specified vendor for the specialty doors was no longer in business when the order was placed; the architect and contractor worked together to find an alternate vendor and product to prevent delays.

A two-week work suspension occurred just after the foundation excavation was completed. An adjacent homeowner had concerns over the height of the structure and possible impacts to their view, which resulted in the City opening a two-week comment period, during which work on the site was suspended. Upon resuming work, the project team worked together to come up with ways to minimize the impacts to the schedule. For example, a revised schedule for placing concrete for perimeter walls allowed the stone mason to begin work earlier which helped mitigate the delays.

Despite proactive coordination with the local utility, the scheduled date for connection of power was six weeks beyond the scheduled completion. The construction manager provided constant follow-up with the utility representatives; the result was an earlier completion of the electrical tie-in allowing the project to open to the public nine days ahead of the revised completion date.

Safety performance including number of lost-time injuries per 1000 man-hours worked and overall safety program employed during the construction phase:

There were 0 lost time injuries. The contractor had periodic safety meetings to cover routine and new operations and any specific City guidelines and requirements.



Environmental considerations including steps taken to preserve and protect the environment, endangered species, etc., during the construction phase:

There were no endangered species encountered during the project. The Carmel Bay is one of California's 34 listed Areas of Significant Biological Significance (ASBS), and therefore, heightened efforts were made to ensure that there was no runoff or debris permitted to leave the site.

In the City of Carmel-by-the-Sea, there is also a heightened sensitivity to trees; there are strict ordinances regarding the protection of trees, and no construction tools or materials could come into contact with the trees within the construction site. The team installed tree protection to safeguard the trees on the site during construction, and hand digging was required in some areas, so as not to damage the root systems of trees adjacent to the building. The City's forester also visited the site to ensure compliance with local ordinances and consult with the team on the limited tree trimming permitted to accommodate the building itself. In one case, the stone veneer was customized to go around a tree that leaned into one of the building perimeter walls.

Community relations—a summary of the efforts by the agency, consultant and contractor to protect public lives and property, minimize public inconvenience and improve relations:

The City and construction team actively communicated with adjacent and nearby residents. This effort began with walking door-to-door with flyers and discussing the upcoming construction with residents within a two block radius. The team posted renderings of the finished bathrooms and fact sheets on the site fences, and cut holes in the fences that allowed people to view the progress on the site. The project team would take time to speak with pedestrians and community residents who passed the site on the neighboring path and educate them about the project.

One issue that arose in terms of community relations involved the height of the structure itself. The houses located across from the site had concerns that their view may be obstructed. The tie-in to the existing sewer was the critical element driving the overall height of the structure. The team exercised great care to make sure that the pipeline grade was carefully controlled to achieve the minimum gradient without exceeding the maximum allowable elevation. A future resident (whose home was being constructed directly across from the site) voiced concerns about the building height compelling the City to issue a two-week work suspension on the project and open a public comment period. The team proactively reached out to the homeowner's architect and explained how the team and project were adhering to all of the guidelines and regulations concerning the height of the structure. No residents came forward with comments or complaints during the two-week suspension period and the project was able resume construction.

Unusual accomplishments under adverse conditions, including but not limited to, adverse weather, soil or site conditions, or other occurrences over which there was no control:

Despite being a small restroom facility, this project had numerous challenges the team had to provide creative solutions to. First, the staging area for the contractor's materials and equipment amounted to two parking spaces and an on-site container. The team also had to carefully plan and pay attention to the coordination of the multiple crews and material deliveries; this was essential in maintaining schedule without exceeding storage capacity. Due to the small site footprint, the contractor also had to use smaller equipment and skilled workers (e.g. grading operations). Lastly, a number of protected trees directly adjacent to the building also restricted overhead space available.

The site was also adjacent to a heavily-used pedestrian trail. All operations that impacted the trail required special attention to detouring pedestrians safely around operations. One of the City's requirements was that the trail be re-opened at the end of each work shift. This required the contractor to carefully plan operations so that the path could be restored and/or re-opened by the end of the day. In addition, the site was situated directly across from multi-million dollar homeowners who were concerned about impacts of the project on their ocean views. The project team worked to minimize the impacts of noise, dust and disruptions to the surrounding residents. The team also chose a smaller generator for on-site power to minimize noise, and equipment and materials were all housed behind screened fencing to reduce visual impacts of the construction.

The design of the structure presented its own set of challenges. Rather than conventional, linear concrete walls, the design called for the construction of curved walls: the entire layout was based on a radial grid. In addition, the design called for a "board-form" texture on the front exterior wall. These features required skilled labor, creativity and additional time to build.

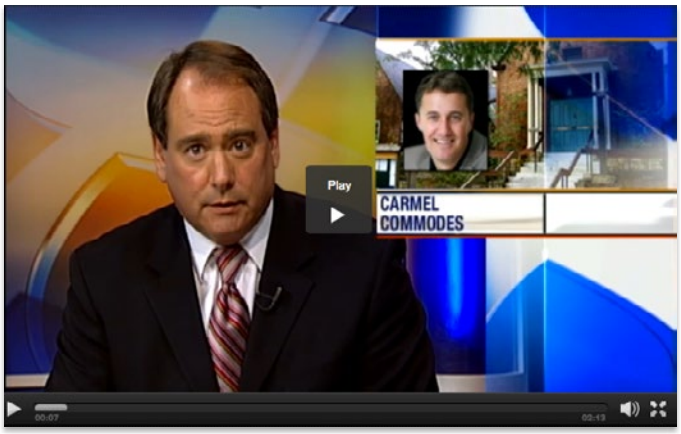
The design also included a stone veneer to cover the exterior walls to provide a more rustic appearance; this detail resulted in a couple of challenges. The supplier for the stone identified an issue with the specified stone material and recommended that the stone material from another quarry be used. The architect's timely evaluation of the proposed substitute stone prevented any delay in procuring the new material. Another facet of the stone veneer was the overall appearance of the installed stone. In order to achieve the architect's aesthetic design, the architect worked directly with the stone masons to place specific stones in precise locations to achieve the desired effect.

The collaborative, proactive and responsive nature of the team led to the successful construction of a unique and beautiful—yes, beautiful—restroom facility that quietly makes its presence known while blending in with the natural beautiful of its surroundings. The City of Carmel-by-the-Sea managed to keep its promise to the surrounding community in function and form: the usefulness of the restroom facility is equal to its aesthetically pleasing appearance.

Additional considerations you would like to bring to the attention of the project review panel such as innovations in technology and/or management applications during the project:

The project team expended considerable effort during the review of the plans and specifications to guarantee that the contractor had a reliable set of documents on which to base his bid. A mandatory pre-bid walk-through was held, during which the unique aspects of the project (e.g. requirement to maintain the pedestrian trail during construction; sensitivity/protections required for trees; noise mitigation measures; special exterior wall treatments and the subjective nature of the stone veneer installation) were reviewed and explained. The team's efforts during pre-construction produced a solid set of bid documents which accurately defined the project and allowed the contractor to understand the project expectations. As a result, the contractor assembled a skilled team of workers and subcontractors who produced an exceptional product with no claims.

The team contributed an important cost-savings idea to the City after initial discussion and research. The contractor suggested the use of directional boring using HDPE pipe in lieu of standard trench and backfill to install a copper water supply line. This alternative installation resulted in a $12,000 credit in cost and a time savings of nearly one week. An additional benefit of the directional boring method was that the pedestrian trail was only impacted for one day, whereas the conventional trench and backfill method would have impacted the trail for a minimum of one week.



KSBW Channel 8 Monterey News report from August 7, 2012 on the construction of the Carmel-by-the-Sea restroom facilities