

## Innovative HALS Methodology Developed for San Francisco Presidio Project

*By Chris Pattillo, PGAdesign*

Completed in 1936 as the southern access for the Golden Gate Bridge, Doyle Drive will be replaced by a parkway that crosses the northern rim of the San Francisco Presidio. Construction of the new road—a 1.2 mile section of Route 101—will impact an area that is rich in history dating to 1776.

The original adobe fort built by Spain in that year, later taken over by Mexico, was seized by American forces in 1848. A Civil War era fort was built here, and the Presidio has continued to play an important military role until recent years. Listed on the National

Register of Historic Places in 1966, the site deserved extensive documentation to record its historic features before they are modified, buried or destroyed during construction of the new parkway. Among the potentially impacted cultural resources are buildings, roadways, concrete batteries, stone walls, curbs, views and historic forests.

As part of project mitigation efforts, ICF/Jones & Stokes was charged with completing heritage documents under three programs: the Historic American Building Survey (HABS), Historic American Engineering Record (HAER) and the Historic American Landscape Survey (HALS). A relatively new

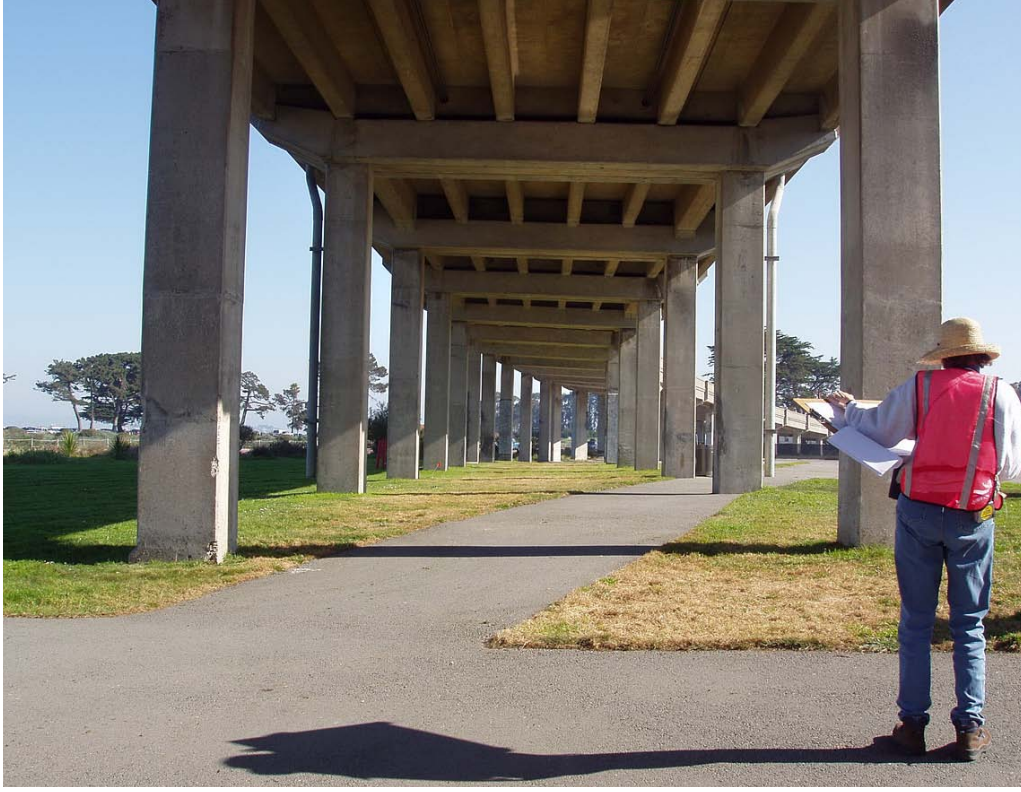
program, HALS is designed to record historic landscapes in three distinct ways: measured and interpretive drawings; written histories; and large format black and white as well as color photographs.

ICF asked PGAdesign, a 15-person landscape architect firm in Oakland, California, to produce the measured drawings. Discussion of an economic stimulus package had already been reported, raising the possibility that the Doyle Drive Replacement Project would receive federal funding. (Indeed, it was announced in March of 2009 that construction would begin a year earlier than planned.) Understanding the urgency of the situation, PGA principals Cathy Garrett and Chris Pattillo assembled a well qualified team and outlined a scope for phase one of the project, which was promptly approved by Caltrans, one of three entities administering the project.

PGA then began creating new methodologies for the project within a framework that provided limited precedents. After Congress created HALS in 2000, draft guidelines weren't finalized until 2005. Only three other sites have begun Level 1 (thorough) documentation in California and each is quite different in character than the linear Doyle Drive and its impact on eight historic periods. The result was that suitable models



*View of Golden Gate Bridge framed by Doyle Drive structure.*



Field crew recording existing conditions data.

were difficult to find. Our previous work on cultural landscape inventories (CLI) and reports (CLR), as well as our contributions to historic structures reports (HSR), provided some guidance. Our experience with HALS of three of the other California sites was also extremely helpful in meeting the challenge.

Settling on a scale of 1:20 as ideal for covering the irregular area of impact (varying from a narrow corridor on either side of the roadway to 2,000 feet in width at intersections), PGA decided to plot two sheets for each section. Softscape features like plants, topography and non-paved surfaces would be recorded on one of the sheets, and hardscape features on the other. Each sheet would be prepared by a two person team working in the field. Knowing that conditions and methodologies would evolve during the project, PGA avoided waste by plotting only enough sheets for one or two days in advance.

Without the benefit of time to test and refine the methodology, PGA's teams began working in an area that had already been scheduled for tree removal. There were some initial inconsistencies in recording methods, but we refined our process with each day's experience and found the teams to be efficient working groups. One person in each team drew features on the plan sheet while the other made notes on a field inventory form we had created for the project. The teams also helped us decide what to record—and how—while providing a greater degree of safety during work in overgrown areas hidden from view.

The working groups soon developed abbreviated notations that greatly enhanced the project's efficiency. Based on two existing surveys and field observations, the softscape team at first recorded a list of species for each sheet, assigned numbers, and noted the plant numbers on the plan sheets.

After a few days in the field, however, we were able to prepare a plant list of the species we had found. We then assigned two character acronyms for shrubs, perennials, ground cover and vines (*Cotoneaster lacteus* became CL, for example) and adopted a four character designation for trees (such as PR/MP for *Pinus radiate*/Monterey Pine). A printed plant list allowed the plan recorder to list the species on the plan, eliminating the need to prepare a field species list for each sheet on the inventory form.

The hardscape team developed a similar system of abbreviated codes for such features as curbs, stone walls, fences, furnishings, handrails and lights—in this case organizing them by type. Because many of the features occurred repeatedly, the simple notation "B1" could stand in for a very long entry like "Barrier, concrete 0"30" tall, 4"8" wide w/slightly peaked top, 9"x 6" sq. curb on the bottom on the road side, sometimes retaining, sometimes freestanding. (Doyle Drive detail—mimics proportions on Golden Gate Bridge)." A marked reduction in recording time was coupled with a greater consistency in the way features were recorded.

PGA's improved efficiency provided time for capturing greater detail. The hardscape

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team used a GPS unit to take latitude and longitude readings for features hidden from view in aerial photographs, and therefore missing from the survey. These coordinates were recorded on the field inventory form. As part of the softscape team, meanwhile, I had an opportunity to observe the site as a whole while my partner, Cate Bainton, made her drawings. I recorded my impressions of



*Towering Monterey Cypress—one of three species planted in the historic forest.*

what stood out in each piece of the Doyle Drive puzzle, trying to capture the character of the site in a way that would be useful in assembling the pieces of that puzzle for a reading of the complete landscape.

I also took 150 to 275 photographs during each day in the field, to augment the written record as well as Brian Grogan’s official large format, black and white photography. I developed and refined a naming system for the digital photos, intended to assist in preparation of the existing conditions plans in the subsequent phase. Because this work would be done much later, in the office and out of sight of the physical field conditions, the extensive photographs would help drafters understand what should be depicted.

The quality of the initial work is doubly important in this case because there may be no

opportunity for a second look. Many cultural resources are documented and then retained, but the demolition of Doyle Drive is imminent. In fact, it may commence even before our HALS documents are complete. Failure to adequately record a feature could mean that it truly would be lost forever. Understanding the value and importance of HALS for a project like this, PGA placed the highest priority on careful planning for future needs and contingencies. It was the heart of PGA’s innovations in methodology.

*Next Chapter: Methodology  
Refinements and Mapping*

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## Mission Statement

The California Preservation Foundation provides statewide leadership, advocacy and education to ensure the protection of California’s diverse cultural heritage and historic places.

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*Doyle Drive pedestrian walk  
affords powerful views of the  
City of San Francisco.*