

CPI Foundation

Increasing Readiness for Our Veterans, Our Infrastructure, Our National Parks



Project Profile: Alcatraz Penitentiary Roof Access

project Structural Building Repair

objectives Military-to-Civilian Career Training, Historic Preservation, Increase Safe Access

team Military Veterans, College Students

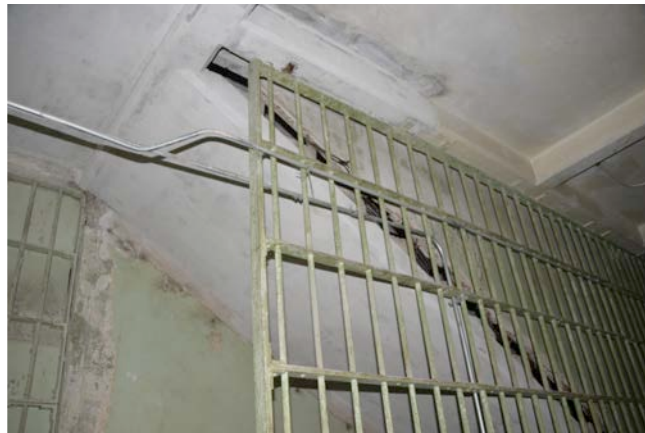
completed Summer 2015

owner National Park Service

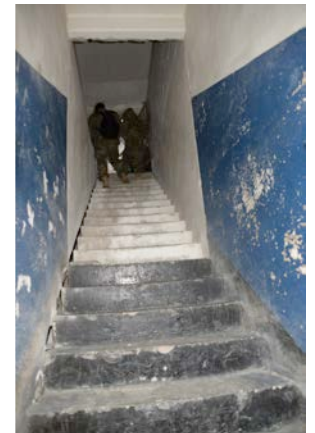
location Alcatraz Island, San Francisco, California



Before: extensive concrete deterioration & steel corrosion, unsafe conditions



After Below: all repairs completed from below to retain historic fabric above



After Above: stair treads & space above retain all historic fabric and character

Project Highlights

- **Outcomes:** Repaired stairs, landing, & structural beams restoring safe access to sole roof entry point
- **Special Considerations:** Character-defining features maintained - stair treads with their story-telling indentations from over a 100 years of foot travel were suspended in place with work completed from below; protected historic Native American wall markings on opposite wall; night work as necessary to minimize disruption of 5,000 daily visitors in adjacent spaces
- **Work Items:** Overhead concrete form & pump under pressure on sloped surface (commonly accepted in industry as among the most technically challenging repair methods); finish concrete to historic texture; build wood formwork & shoring; place steel reinforcing; manage enclosed space working conditions; ensure project site safety for team & NPS staff, and safety for visitors

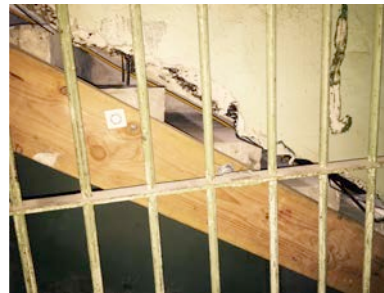
CPI PROJECT PROFILE details Alcatraz Penitentiary Roof Access



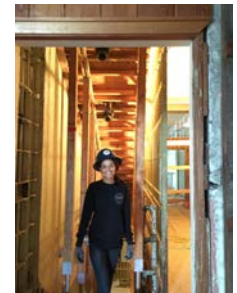
Beam formwork; new beams support repaired landing at top of stairs



Formwork & safety shoring



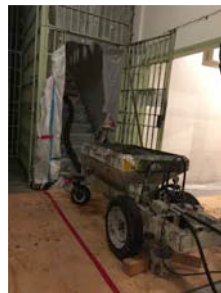
Historic concrete stair treads suspended in place while repairs completed from below



Team member



Concrete mixer; repairs completed at night to avoid visitor interruption



Concrete pump with hoses reaching up into confined space



Moving concrete-loaded hose to next port during high-pressure pumping



CPI military veteran participant explaining project during visit from U.S. Army chain of command

CPI FOUNDATION PROJECT & TECHNICAL CAPABILITIES

- Expert staff engage hands-on and manage teams of highly qualified and vetted members of our active duty armed forces preparing for transition to civilian careers
- Self-perform concrete, wood, steel, & composite construction as design-build projects coordinated with owners; larger projects include self-performed work in addition to managing consultants & sub-contractors
- Repair, new construction, and historic preservation projects in urban, remote, wilderness, and marine areas include historic structures & site features; visitor & utility facilities; trails; water utility systems; projects that improve access, health, safety, & recreation, including ADA access; roads; bridges; tunnels; and parking lots
- Leader in advancing innovative technological solutions to structural and infrastructure challenges that collectively promote durability, sustainability, and comply with preservation, environmental, & other regulations

The CPI Foundation is a proven public/private partnership program working with the U.S. Departments of Defense and Interior, and with industry companies across the country. The program benefits the United States and its taxpayers by combining the strengths and needs of three national concerns: our military veterans, our infrastructure, and our national parks. Helping avoid potential military-to-civilian transition pitfalls, CPI offers career preparation & placement and hands-on training programs for transitioning active duty service members at all levels from all service branches while completing construction, repair, deferred maintenance, and safety/access projects in national parks and public lands.