

# CPI Foundation

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



## Project Profile: Power House, Alcatraz Island

**Project** Structural Building Repair

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

**team** Military Veterans, College Students

**completed** Summer 2013

**owner** National Park Service

**location** Alcatraz Island, Golden Gate National Recreation Area, San Francisco, California



Before: Power House



Top: Exterior front façade in progress;  
Bottom: Exterior front façade repairs completed, prior to painting



Before: Interior column



In Progress: Interior column with custom formwork for pumped concrete



After: Interior column with preserved historic material, prior to painting

### Project Highlights

- **Outcomes:** Repaired interior & exterior front façade, repaired interior beam & columns
- **Special Considerations:** Historic metal windows/doors originally placed integrally with façade concrete - repair project included their removal/storage during selective demolition then replacement in original configuration with repair concrete material; temporary interior wood wall constructed to protect solar array batteries
- **Work Items:** Vertical and overhead concrete form & pump under pressure (commonly accepted in industry as among the most technically challenging repair methods); finish concrete to historic texture; build wood formwork & shoring; place steel reinforcing; preserve historic metal windows/doors; ensure project site safety & accessibility for team & NPS staff, and safety for visitors

## PROJECT PROFILE details Power House, Alcatraz Island



Interior façade existing conditions



Interior façade beam formwork



Volunteer structural engineer training team on proper placement of steel reinforcing



Scaffolding constructed by team at facade



Team member grinding surface of repairs to achieve historic texture; safety first



Historic window/deteriorated concrete



Historic window removed during construction



Deteriorated concrete removed, reinforcing steel cleaned/new steel installed



Historic window and doors reinstalled integrally with façade concrete

## 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.