

FORT PICKETT REGIONAL TRAINING INSTITUTE PHASE II

BLACKSTONE, VIRGINIA



PROJECT INFO

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|---------------------------|-------------------|
| Function | Military Housing |
| Project Cost | \$28 Million |
| Total Stories | 2 |
| Size | 116,400 SF |
| Construction Dates | 10/25/10-12/31/11 |
| Delivery Method | Design-Build |

PROJECT TEAM

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|------------------------------|------------------------------|
| Owner | Virginia Army National Guard |
| Project Administrator | Army Corps of Engineers |
| Designer/Builder | Barton Malow Company |
| Structural | Desai/Nasar Consulting |
| Civil | Mindel, Scott, & Associates |
| Electrical | ETS Engineers |
| Mechanical/Plumbing | Sellinger Associates |

SPECIAL THANKS



OVERALL RESULTS

Total Cost Savings: \$1,416,256
Total Schedule Savings: 2 Weeks
Total Quality: Increased
Total Risk: Decreased

ANALYSIS #1: MATERIAL TRACKING TECHNOLOGY

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| Problem | High Use of Prefabricated and Precast Elements on Project Extensive Coordination Involved in Material Management Process |
| Process | Investigated Project that have Utilized Material Tracking Selected a System that was Most Appropriate for the Project Developed an Implementation Plan |
| Results | Cost to Implement \$9,300 Eliminates 2% Job Cost Related to QA/QC Issues and Reorders Significantly Minimizes Risk Associated with Precast Planks |

ANALYSIS #2: SHORT INTERVAL PRODUCTION SCHEDULE

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|----------------|---|
| Problem | Precast Hollow-Core Planks was Critical Activity Crew Management between 3 Buildings |
| Process | Investigated the Use of SIPS on Past Projects Resequenced Work Developed a SIPS for the Plank Erection Sequence |
| Results | Saved 11 Work Days Saved \$117,524 |

ANALYSIS #3: PRECAST CONCRETE EXTERIOR FAÇADE PANELS

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|----------------|--|
| Problem | Building Accessibility for Workers and Materials Quality of Masonry Work |
| Process | Redesigned Exterior Façade Using Precast Panels Developed an Implementation Strategy |
| Results | Reduced Enclosure Activities by 14.4 Weeks Saved \$1,094,129 Reduced Site Congestion Altered Architectural Appearance |

ANALYSIS #4: MODULARIZED BATHROOM UNITS

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|----------------|---|
| Problem | Amount of Work in Bathrooms Compared to the Bedrooms Concentrated Work Area Quality of Work |
| Process | Developed an Implementation Plan Conducted a Feasibility Study |
| Results | Accelerated Fit-Out Schedule by 8 Weeks Saved \$213,903 Delivered a Higher Quality Product |