Facility Reduction Program

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FRP Background & Approach

• Background
  • The primary mission of Army Installations and Corps of Engineer Districts is construction of new facilities and facility maintenance; not demolition
  • 2004 Huntsville Center was tasked by the Army to manage the Facility Reduction Program (FRP) with a sole mission of demolition
  • Beginning with MSFC in 2008, the FRP has expanded to support multiple DoD and federal agencies in their demolition requirements.

• Mission
  • Develop new technology that will reduce cost, waste, and improve schedule
  • Utilize the expertise in the commercial demolition industry reduce the excess inventory in the Federal Government
  • Reduce excess facility removal cost through competition between professional demolition contractors and maximization landfill diversion and recycling credits
Advantages of HNC Execution

- Significantly lower costs
- Proper scope for environmental actions
- Demolition managed by those who have Demolition as their No. 1 mission
- Provide centralized planning to take advantage of economies-of-scale
- Remove facilities with minimal manpower burden to Installation
- Demolition and Environmental industry experts available under consulting contracts
- Demolition MATOC contract vehicles developed for execution
- Competition of every task order between all MATOC contractors in a region to ensure best pricing
- Project Management, Contracting, and Engineering In-House Staff
- Applied lessons learned DoD-wide
- All salvageable materials are included in the FFP contract which encourages the contractors to maximize salvage values in their proposal prices
- FRP landfill diversion has increased to an average of 72%
Historical Demolition Issues

- Most convenient local contract vehicles were used
- Not much demolition executed by expert demolition contractors
- Execution tracking and reporting was limited to non-existent
- Salvage and landfill diversion savings not maximized
- No consistent application of demolition lessons learned across the Army
- Appropriate environmental scope for demolition not applied consistently Army-wide
- Cost was too high (2003 - $16/sf)
FRP Execution Overview

Average Worldwide Demolition Cost for Army

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Average Cost ($/SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY04</td>
<td>$7.80</td>
</tr>
<tr>
<td>FY05</td>
<td>$8.01</td>
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<tr>
<td>FY06</td>
<td>$10.76</td>
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<tr>
<td>FY07</td>
<td>$11.40</td>
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<tr>
<td>FY08</td>
<td>$9.24</td>
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<tr>
<td>FY09</td>
<td>$11.37</td>
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<tr>
<td>FY10</td>
<td>$10.85</td>
</tr>
<tr>
<td>FY11</td>
<td>$8.00</td>
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</tbody>
</table>
## Execution Statistics (FY04-11)

### Army Only

<table>
<thead>
<tr>
<th>FY</th>
<th>Funds Received</th>
<th>Excess SF Removed</th>
<th>Estimated Energy and SRM Savings/Yr</th>
<th>Years Saved</th>
<th>Total Cumulative Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY04</td>
<td>$16,722,888</td>
<td>1,728,592</td>
<td>$6,914,368</td>
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<td>$55,314,944</td>
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<tr>
<td>FY05</td>
<td>$10,959,866</td>
<td>975,625</td>
<td>$3,902,500</td>
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<td>$27,317,500</td>
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<tr>
<td>FY06</td>
<td>$23,038,315</td>
<td>1,924,941</td>
<td>$7,699,764</td>
<td>6</td>
<td>$46,198,584</td>
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<tr>
<td>FY07</td>
<td>$13,070,000</td>
<td>865,183</td>
<td>$3,460,732</td>
<td>5</td>
<td>$17,303,660</td>
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<tr>
<td>FY08</td>
<td>$23,495,200</td>
<td>2,048,274</td>
<td>$8,193,096</td>
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<td>$32,772,384</td>
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<tr>
<td>FY09</td>
<td>$20,217,856</td>
<td>1,390,617</td>
<td>$5,562,468</td>
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<td>$16,687,404</td>
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<tr>
<td>FY10</td>
<td>$10,000,000</td>
<td>526,054</td>
<td>$2,104,216</td>
<td>2</td>
<td>$4,208,432</td>
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<tr>
<td>FY11</td>
<td>$16,500,000</td>
<td>1,500,000</td>
<td>$6,000,000</td>
<td>1</td>
<td>$6,000,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$134,004,125</strong></td>
<td><strong>10,959,286</strong></td>
<td></td>
<td></td>
<td><strong>$205,802,908</strong></td>
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Demolition Contract Vehicles and Contract Capacity

Prior to FY05, the Army had no demolition specific contract vehicles
FRP MATOC Demolition Regions

Northeast
Bhate Associates
Charter Environmental
Marcor Remediation
All Phase Services
Conti Federal Services

Mideast
Brandenburg Industrial
All Phase Services
Border Demolition
Marcor Remediation

Midwest
Bhate Associates
Brandenburg Industrial
Marcor Remediation
North American Dismantling
Parsons Infrastructure

Pacific
Border Demolition
Bhate Associates
Central Environmental
Brandenburg Industrial
NW Demolition
## HNC Execution Cost Impacts

### Historical Cost Savings Examples (2005-2009)

<table>
<thead>
<tr>
<th>Location</th>
<th>Initial Funds Request</th>
<th>Demo Cost after HNC Assistance</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft Myer</td>
<td>$3,100,000</td>
<td>$1,760,000</td>
<td>$1,340,000</td>
</tr>
<tr>
<td>Ft Hamilton</td>
<td>$3,300,000</td>
<td>$1,565,000</td>
<td>$1,735,000</td>
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<td>Ft Leavenworth</td>
<td>$6,700,000</td>
<td>$3,700,000</td>
<td>$3,000,000</td>
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<tr>
<td>NASA LaRC</td>
<td>$8,400,000</td>
<td>$3,700,000</td>
<td>$4,700,000</td>
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<tr>
<td>Moffett Field</td>
<td>$5,240,000</td>
<td>$2,638,000</td>
<td>$2,602,000</td>
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<tr>
<td>Lackland AFB</td>
<td>$14,000,000</td>
<td>$6,200,000</td>
<td>$7,800,000</td>
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<tr>
<td>DLA - Richmond</td>
<td>$9,770,000</td>
<td>$4,601,000</td>
<td>$5,169,000</td>
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<tr>
<td>Tobyhanna AD</td>
<td>$1,900,000</td>
<td>$375,000</td>
<td>$1,525,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$52,410,000</strong></td>
<td><strong>$24,539,000</strong></td>
<td><strong>$27,871,000</strong></td>
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</tbody>
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Typical FRP Project Execution

- Project approved/funded by Customer
- CEHNC awards pre-demo environmental survey (if no current ACM reports exist)
- Pre-demo environmental survey conducted
- CEHNC schedules pre-planning/scope development site visit (if required)
- CEHNC issues RFP Task Order and schedules pre-proposal site visit/bid walk
- IDIQ (Demolition) Contractors prepare bid proposal
- CEHNC evaluates proposals and awards FRP task order
- IDIQ Contractor prepares and submits abatement/demo work plan for COE and Customer review/approval
- Environmental abatement completed by IDIQ Contractor
- Building(s) / structure(s) removed by IDIQ Contractor
- Site restoration and clean-up completed by IDIQ Contractor
- IDIQ Contractor submits final report
- Final report reviewed and approved by COE and Customer
- Project Close Out
NASA Project Support
Michoud Assembly Facility

Project Details

- 3 facilities
  - Building 111 – concrete and steel frame (84,508 sf)
  - Building 119 - steel frame and masonry (5,625 sf)
  - Building 123 – wood frame (220 sf)
- Contract Award - $1,095,437
- Contractor - Charter Environmental
- Original Budget - $6,200,000
- Diversion Percentage – 95.85%
- Schedule (Field) – 7 months
- Project Status - Complete
NASA Project Support
Michoud Assembly Facility
NASA Project Support
Langley Research Center

Project Details
- 22 Facilities (39,619 sf)
- Contract Award - $734,452
- Contractor - Bhate Associates
- Original Budget - $800,000 (11 facilities)
- Diversion Percentage – 95.71%
- Schedule (Field) – 6 months
- Project Status - Complete
NASA Project Support
Langley Research Center

Project Details

- 4 Wind Tunnel Complexes
  - Full Scale – bldg 643 (103,278 sf)
  - 16’ - bldg1146 Compound (59,734 sf)
  - Bldg 640 – (29,940 sf)
  - Bldg 641 – (24,414 sf)
- Contract Award - $3,652,880
- Contractor – Charter Environmental
- Original Budget - $8,400,000 (Full Scale and 16’ only)
- Diversion Percentage (Projected) – 91%
- Salvage Credit - $1,200,000
- Projected Schedule (Field) – 11 months
- Project Status - 35% Complete
NASA Project Support
Langley Research Center
NASA Project Support
Langley Research Center
NASA Project Support
Langley Research Center

Project Details
- 4 Buildings (53,008 sf)
- Contract Award - $355,365
- Contractor - All Phase Services
- Original Budget - $700,000
- Diversion Percentage (Projected) – 85%
- Projected Schedule (Field) – 3 months
Project Details

- 1 Buildings (134,003 sf)
  - Building 2 - 2\textsuperscript{nd} building constructed at GSFC
- Contract Award - $569,102.00
- Contractor – MARCOR Remediation
- Original Budget - $3,500,000
- Diversion Percentage (Projected) – 70%
- Projected Schedule (Field) – 3 months
NASA Project Support

Planned Projects

- Marshall Space Flight Center
  - Santa Susana Field Laboratory – Demolition Budget Development
  - MSFC – Demo of buildings 4471 and 4481
- Goddard Space Flight Center
  - Wallops Island Flight Facility – Overhead steam line removal
- Langley Research Center
  - Demolition of Low-Turbulence Pressure Tunnel Complex
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