Department of the Army
Fiscal Year (FY) 2019
Budget Estimates

Military Construction, Army
Army Family Housing
Homeowners Assistance Fund, Defense

JUSTIFICATION DATA SUBMITTED TO CONGRESS
February 2018

The estimated cost of this report for the Department of Defense is approximately $112,954.36 for Fiscal Year 2018. This includes $62,754.36 in expenses and $50,200 in DoD labor.
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Part IA - PARKING/ACCESS ROAD

Part IB - OCO/EDI

Part IC - HOST COUNTRY

Part II - APH

Part III - HOMEOWNERS ASSISTANCE
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### DEPARTMENT OF THE ARMY
### FISCAL YEAR 2019
### MILITARY CONSTRUCTION (Part I)
(DOLLARS ARE IN THOUSANDS)
### INSIDE THE UNITED STATES

#### STATE
#### INSTALLATION (COMMAND)
#### PROJECT NUMBER
#### PROJECT TITLE
#### AUTHORIZATION REQUEST
#### APPROPRIATION REQUEST
#### NEW/CURRENT MISSION

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**NEW/ CURRENT MISSION**

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Subtotal West Point Military Reservation Part I $160,000 160,000

* TOTAL MCA FOR New York $160,000 160,000

** TOTAL INSIDE THE UNITED STATES FOR MCA $611,200 716,200
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** TOTAL OUTSIDE THE UNITED STATES FOR MCA $113,500 113,500
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* TOTAL MCA FOR Worldwide Various | $0 | $182,068 |

** TOTAL WORLDWIDE FOR MCA | $0 | $182,068 |

MILITARY CONSTRUCTION (PART I) TOTAL | $724,700 | $1,011,768 |

Total Cost of New Mission Projects (1) | $99,000 |
Total Cost of Current Mission projects (18) | $730,700 |
Total Cost of other line items (4) | $182,068 |
Total Cost of FY 2019 MCA Projects (23) | $1,011,768 |
## COMMAND SUMMARY

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<td>Military Construction, Army Minor</td>
<td>0</td>
<td>72,000</td>
</tr>
<tr>
<td>Planning and Design</td>
<td>0</td>
<td>110,068</td>
</tr>
<tr>
<td></td>
<td>724,700</td>
<td>1,011,768</td>
</tr>
</tbody>
</table>

INSIDE THE UNITED STATES

OUTSIDE THE UNITED STATES

WORLDWIDE
MILITARY CONSTRUCTION, ARMY

The military construction program for the active Army shown in the schedules of this title is summarized in the following tabulation:

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>MILITARY CONSTRUCTION, ARMY</th>
<th>APPROPRIATIONS ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td>$1,011,768,000</td>
</tr>
<tr>
<td>2018 **</td>
<td></td>
<td>$579,196,092</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>$581,959,000</td>
</tr>
</tbody>
</table>

** FY2018 reflects Annualized Continuing Resolution program amount

1. **Major Construction.** The MCA major construction program is one of the most visible means of improving the working and living conditions of Army personnel. This program provides for military construction projects in the United States and overseas as authorized in currently effective Military Construction Acts and in this year’s request for Authorizations and Appropriations.

This request funds the Army’s most critical facility needs that support readiness both within the United States and overseas. The Army’s military construction investment focuses on support of Combatant Commander’s requirements; mission readiness; soldier and family readiness; installation capacity for energy and water security/resilience.

2. **Minor Construction.** Provision is made for construction of future unspecified projects that have not been individually authorized by law and do not cost more than the amounts specified in 10 U.S.C. 2805. Projects awarded with these funds may not exceed $6 million but if located in the United States, or its territories, commonwealths, and possessions the cost may be adjusted according to DoD’s published local construction cost index not to exceed $10 million.

3. **Planning & Design.** This provides for the necessary pre-award activities for military construction projects including surveys, studies, maintaining standards and criteria, design and cost estimates, and other related activities. This program also provides for host nation support design and construction management. In general, design funds requested in Fiscal Year 2019 will be used to design projects in the Army’s Fiscal Year 2020 and 2021 programs. All new construction projects are designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Code (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Compliance shall be to the extent project funds and technology allows. On-site renewable energy requirements may be met on an installation-wide or program-wide basis.
For acquisition, construction, installation, and equipment of temporary or permanent public works, military installations, facilities, and real property for the Army as currently authorized by law, including personnel in the Army Corps of Engineers and other personal services necessary for the purposes of this appropriation, and for construction and operation of facilities in support of the functions of the Commander in Chief, $1,011,768,000 to remain available until September 30, 2023: Provided, That of this amount, not to exceed $110,068,000 shall be available for study, planning, design, architect and engineer services, and host nation support, as authorized by law, unless the Secretary of Army determines that additional obligations are necessary for such purposes and notifies the Committees on Appropriations of both Houses of Congress of the determination and the reasons therefore.
Special Program Considerations

**Items of Interest-Authorizing Committees**

**Incremental and Phased Projects**

On page 537 (of the Senate Report 110-77, NDAA 2008), the Committee requested that the military departments include on each project justification document (the DD Form 1391), the entire cost of the requirement as well as the cost, by fiscal year, of each past and future phase or increment, in a table format. The Army has provided this information, as requested on all phased or incrementally funded projects in the FY 2019 Budget Request. The following phased or incrementally funded projects are:

<table>
<thead>
<tr>
<th>ST</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI</td>
<td>Fort Shafter</td>
<td>Command and Control Facility, Incr 4</td>
</tr>
<tr>
<td>SC</td>
<td>Fort Jackson</td>
<td>Reception Barracks Complex 3, Ph2</td>
</tr>
</tbody>
</table>

**Additional Issues**

**Requirement for Additional Authorization and a Funding Increment, FY 2015 Project:**

**Fort Shafter, Hawaii (FY 2015)**

- In FY 2015, Congress authorized the Army to construct a $311.4 million Command and Control (C2F) Facility at Fort Shafter, Hawaii. This project is required to provide a consolidated facility to support the command and control requirements of the U.S. Army Pacific (USARPAC). The C2F Complex includes administrative areas, secure operations building with Sensitive Compartmented Information Facility (SCIF), command group building, support operations building and a parking structure. Construction will be performed in compliance with pertinent Intelligence Community Directives.
- The project ($311.4 million) was incrementally funded initially across FY 2015 ($85.0 million), FY 2017 ($40.0 million), FY 2018 ($90.0 million) and FY 2019 ($96.4 million). The FY2018 NDAA increased the authorization to $370M in order to add cyber security measures, redundant power generators and accommodate growing, region-wide construction costs. The FY2018 action prompted an increase of the FY2019 increment to $105 million as shown on Page No. 37 of the Budget Estimates.
- The Army is seeking additional authorization of $48 million, for a total of $418 million. Reauthorization is needed to absorb further changes in unit costs, the area cost factor for Hawaii and escalation. The requested increase in authorization is based on a new Cost of Work (CWE) estimate calculated with the winning “Best Value” contract award for the main facility construction.
- A fifth funding increment ($98 million) is requested in FY2020. Additional military construction funds are required to complete the authorized scope.
- An adjusted DD Form 1391 that incorporates cost changes to the required features of work are provided on Page No. xv. The cost breakdown reflects the quickly increasing construction costs from actual bid data received from the winning bid for Phase 3 in April 2017. The selection sensitivity prevented this information from being used in the FY2018 budget that was submitted to Congress, but is applied now to better anticipate cost-to-complete over the next few years.
- This cash flow needed to complete the project is indicated by the Work in Place Curve provided on Page No. xviii.
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Command &amp; Control Fac (C2F)</td>
<td>SF</td>
<td>241,693</td>
<td>937.02</td>
<td>(226,472)</td>
</tr>
<tr>
<td>Parking Garage, Multistoried</td>
<td>SP</td>
<td>916</td>
<td>40.877</td>
<td>(37,443)</td>
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<tr>
<td>SCIF ODNI Compliance</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(18,240)</td>
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<tr>
<td>Substation</td>
<td>KVA</td>
<td>40,000</td>
<td>220.50</td>
<td>(8,820)</td>
</tr>
<tr>
<td>Redundant Power Generators</td>
<td>EA</td>
<td>6</td>
<td>2250000</td>
<td>(13,500)</td>
</tr>
<tr>
<td><strong>Total from Continuation page</strong></td>
<td></td>
<td></td>
<td></td>
<td>(16,429)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(7,615)</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(16,560)</td>
</tr>
<tr>
<td>Steam And/or Chilled Water Distribution</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(3,203)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(7,534)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,965)</td>
</tr>
<tr>
<td>Site Imp(13,718) Demo(606)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(14,324)</td>
</tr>
<tr>
<td>Info Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,330)</td>
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<tr>
<td><strong>ESTIMATED CONTRACT COST</strong></td>
<td></td>
<td></td>
<td></td>
<td>373,435</td>
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<tr>
<td><strong>CONTINGENCY (5.00%)</strong></td>
<td></td>
<td></td>
<td></td>
<td>18,672</td>
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<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>392,107</td>
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<tr>
<td><strong>SUPERVISION, INSPECTION &amp; OVERHEAD (6.50%)</strong></td>
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<td>25,487</td>
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<tr>
<td><strong>TOTAL REQUEST</strong></td>
<td></td>
<td></td>
<td></td>
<td>417,594</td>
</tr>
<tr>
<td><strong>TOTAL REQUEST (ROUNDED)</strong></td>
<td></td>
<td></td>
<td></td>
<td>418,000</td>
</tr>
<tr>
<td><strong>INSTALLED EQT-OTHER APPROPRIATIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td>(0)</td>
</tr>
</tbody>
</table>

10. Description of Proposed Construction

This is an incrementally funded project. Congress authorized the full amount of $311.4M in FY2015 and then raised the authorization to $370M in FY2018 to provide Redundant Power Generators, Cyber Security Measures and cost increases not anticipated since the initial Congressional authorization. In FY2019, Congress is requested to increase the authorization to $418M using this project data. Reauthorization is needed to absorb further changes in unit costs, the area cost factor for Hawaii and escalation. The first increment of $85M was appropriated in FY2015 (PN 70668). The second increment of $40M was appropriated in FY2017 (PN 76593). The third increment of $90M was appropriated in FY2018 (PN 58857). The fourth increment of $105M is requested in FY2019 (PN 76595). The fifth increment of $98M will be requested in FY2020 (PN 92340). Construct Command & Control Facility C2F including administrative areas; secure operations building with Sensitive Compartmented Information Facility (SCIF), command group building, support operations building and a parking structure. Construct redundant power generators to provide backup power to the facility and its critical command and control systems in the event of the loss of commercial power. Construction is in compliance with Intelligence Community directives including cyber security measures. Construction also includes special foundations, building information systems, fire protection and alarm systems, Intrusion Detection System (IDS) installation, Energy Monitoring and Control Systems (EMCS) connection, and
### 9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM</th>
<th>QUANTITY</th>
<th>COST</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY (CONTINUED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Information</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(6,900)</td>
</tr>
<tr>
<td>Cyber Security Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(5,000)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(4,529)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>16,429</strong></td>
</tr>
</tbody>
</table>

Antiterrorism measures. Building information systems for this project are unique in nature and not included in the unit cost of the building. Increased building antiterrorism/force protection (AT/FP) measures are included for the secure operations building. Supporting facilities include site development, site improvements, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by connection to the central utility plant built previously for this project. Access for individuals with disabilities will be provided. Facilities will be designed to a minimum life of 50 years in accordance with DoD's Unified Facilities Code (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 1200 Tons).

11. REQ: 360,000 SF  
ADQT: 25,000 SF  
SUBSTD: 200,000 SF  

### PROJECT:
Construct a Command and Control Facility at Fort Shafter, Hawaii. (Current Mission)

### REQUIREMENT:
The Department of the Army has directed that US Army Pacific (USARPAC) transform into an Operational, Expeditionary Army Service Component Command to support the Pacific Command Combatant Commander (COCOM). This Operational Headquarters project supports the increased scope for size and capability needed for the consolidated facility to support the command and control requirements of the Theater Army.

### CURRENT SITUATION:
U.S. Army Pacific functional operations are located in over 10 separate WWII wooden buildings. Current command and control operation and supporting functions are conducted in separate structures that are inadequate and inefficient. Years of termite infestation have endangered the structural integrity of all the buildings.
CURRENT SITUATION: (CONTINUED)
The water and sewer systems continue to suffer breakdowns and are continuously repaired. Existing facilities are aged, failing and do not provide the operational capability levels of electrical, mechanical, and communications infrastructure required by the Command. Existing facilities will be demolished under a separate project, while some may be retained due to their historical significance.

IMPACT IF NOT PROVIDED:
If this project is not provided USARPAC will continue to operate inefficiently in separate dilapidated buildings and be unable to fully realize the capabilities demanded by Army Transformation for the Army headquarters.

ADDITIONAL:
Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.
Work In Place (WIP) Curve – Fort Shafter Command & Control Facility (C2F)
Full Authorization = $418,000 K /¹ / Actual Award Date = 28 Sep 17

As of: 9 January 2018

Sch Construction Complete Date for Main C2F = 30 Sep 21 /⁵

Required Funding
Cumulative Funding Req’t
(burdened w/ T4C costs)
Expenditures /⁶

FY19 Requirement ($105,000 K) /⁴
Total Current at FY19 = $418,000 K

FY18 Programmed Funding ($90,000 K) /³
Total at FY18 = $215,000 K

FY’s 15 + 17 Funding /²
Total = $125,000 K

HECO Substation “Partial Award” before main contract (Dec 16) /⁴ /⁶

Generator Modification (3QFY18) /⁴ [FY18 Scope]

CSP Contract (3QFY18) /⁴

Parking Structure Contract (2QFY20) /⁴ & ⁵

Sewer Contract (3QFY19) /⁴

Water Well Contract (2QFY20) /⁴

FY15 - C2F - Increment #1 = $ 85,000 K /²
FY17 - C2F - Increment #2 = $ 40,000 K /²
FY18 - C2F - Increment #3 = $ 90,000 K /³
FY19 - C2F - Increment #4 = $ 105,000 K /⁴
FY20 - C2F - Increment #5 = $ 98,000 K /⁴

TOTAL = $ 418,000 K

Dates on the X-Axis represent the end of the month

Note 1: WIP is based on $418,000 K Government Estimate at award of main contract and includes request for additional scope, inflation, and revised cost factors (Special Considerations, FY19 President’s Budget)

Note 2: Total funds available at award includes FY15 ($85,000 K) and FY17 ($40,000 K) appropriations

Note 3: FY18 President’s Budget Request = $90,000 K.

Note 4: These contracts will be awarded separately from the main contract – requires full funding available at time of award (per FAR requirements)

Note 5: The Parking Structure construction will continue through 2Q22. It will be awarded as a separate contract. All funds must be available at time of award

Note 6: HECO needed funds “in-hand” before they could present sub-station plan to the Public Utility Commission prior to starting execution (6-9 month process)
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Anniston Army Depot (AMC)</td>
<td>82453</td>
<td>Weapon Maintenance Shop</td>
<td>$5,200</td>
<td>$5,200</td>
<td>C</td>
<td>5</td>
</tr>
</tbody>
</table>

Subtotal Anniston Army Depot Part I $5,200

* TOTAL MCA FOR Alabama $5,200
### PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer</td>
<td>7</td>
<td>3</td>
<td>2776</td>
<td>3,644</td>
</tr>
<tr>
<td>Enlist Civil</td>
<td>1</td>
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<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Civil</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>39</td>
<td>722</td>
<td>3,586</td>
</tr>
</tbody>
</table>

### INVENTORY DATA ($000)

- **A.** TOTAL AREA: 6,202 ha (15,325 AC)
- **B.** INVENTORY TOTAL AS OF 05 JUL 2017: 2,889,402
- **C.** AUTHORIZATION NOT YET IN INVENTORY: 127,709
- **D.** AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM: 5,200
- **E.** AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM: 0
- **F.** PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY): 0
- **G.** REMAINING DEFICIENCY: 135,664
- **H.** GRAND TOTAL: 3,157,975

### PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST</th>
<th>DESIGN STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>21520</td>
<td>Weapon Maintenance Shop</td>
<td>5,200</td>
<td>06/2017 10/2018</td>
</tr>
</tbody>
</table>

**TOTAL:** 5,200

### MISSION OR MAJOR FUNCTIONS:

Operate a supply depot for the receipt, storage, and issue of assigned commodities, i.e., general supply and ammunition, strategic and critical materials, shelter supplies, war reserve stock, etc.

Operate a depot maintenance facility for the repair, overhaul, modification, and conversion of assigned commodities, i.e., combat and tactical vehicles, artillery, small arms, ammunition, missiles, etc.

Provide installation support to attached organizations, and to operate assigned facilities.

### OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>Category</th>
<th>($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AIR POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
<td>0</td>
</tr>
</tbody>
</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21520 Light Gun Shop, Depot Level</td>
<td>m2 (SF)</td>
<td>1,189 ( 12,800)</td>
<td>2,960</td>
<td>(3,520)</td>
</tr>
<tr>
<td>00000 Cybersecurity</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(500)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(55)</td>
</tr>
<tr>
<td>Antiterrorism Measures</td>
<td>LS</td>
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<td>(43)</td>
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<tr>
<td>Building Information Systems</td>
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<td>(62)</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters</td>
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<td>--</td>
<td>(26)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(39)</td>
</tr>
<tr>
<td>Site Imp(77) Demo( )</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(77)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
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<td>--</td>
<td>(159)</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST
CONTINGENCY (5.00%) 4,729
SUBTOTAL 4,965
SUPV, INSPECTION & OVERHEAD (5.70%) 283
TOTAL REQUEST 5,248
TOTAL REQUEST (ROUNDED) 5,200
INSTALLED EQT-OTHER APPROP (0)

10. Description of Proposed Construction
Construct a Weapon Maintenance Shop addition. Supporting facilities will include utilities, electric service, storm sewer, communication and building information systems. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 141 kW/40 Tons).

11. REQ: 9,582 m2
ADQT: 8,393 m2
SUBSTD: NONE
PROJECT: Construct a Weapon Maintenance Shop at Anniston Army Depot, Alabama. (Current Mission)

REQUIREMENT: This project is required as part of an overall lean manufacturing process to increase efficiency and capacity for towed artillery overhaul in the Nichols Industrial Complex. This project supports reset and overhaul for towed artillery systems to improve readiness and reduce lifecycle cost of artillery systems. Therefore, an interim plan has been developed to temporarily utilize other depot assets until this project can be constructed. This increased efficiency will allow the partnership to potentially grow to include other DOD services and Foreign Military Sales(FMS). This
REQUIREMENT:  project will consolidate towed artillery repair and overhaul from four separate buildings into the addition to Building 423.

CURRENT SITUATION:  Currently the mission is being accomplished inefficiently in less than optimal conditions in multiple buildings on the installation. Towed artillery repair and overhaul is currently spread between Buildings 423 (disassembly and assembly), Building 128 (disassembly and assembly), Building 113 (fire control and optics assembly and repair), and Building 501 (fire control, targeting, and final inspection). Building 128 was previously used for transmission overhaul and only minimally suitable for towed artillery repair. This is a very inefficient way to manage the towed artillery repair and overhaul. It creates additional costs and time delays due to the lack of space in Building 428 to accommodate the entire requirement. The current towed artillery repair facility does not have the capacity to accomplish the projected work load.

IMPACT IF NOT PROVIDED:  If this project is not provided, ANAD will not be able to implement the desired Lean Manufacturing processes developed to improve efficiency and provide expanded capability to support our assigned mission, established partnerships, other DOD Services and Foreign Military Sales. The additional risk of accidents due to unnecessary movement of artillery pieces will continue to exist. The Army will continue to experience longer than necessary turn around time resulting in delayed delivery to the Soldiers in the field.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:

(a) Date Design Started............................ JUN 2017
(b) Percent Complete as of January 2018.......... 35.00
(c) Date 35% Designed.............................. JAN 2018
(d) Date Design Complete.............................. OCT 2018
(e) Parametric Cost Estimating Used to Develop Costs.. NO
(f) Type of Design Contract:  Design-bid-build
(g) An energy study and life cycle cost analysis will be documented during the final design.
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

   (2) Basis:
      (a) Standard or Definitive Design: NO

   (3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
      (a) Production of Plans and Specifications............ 254
      (b) All Other Design Costs............................ 136
      (c) Total Design Cost................................ 390
      (d) Contract........................................ 312
      (e) In-house........................................ 78

   (4) Construction Contract Award......................... APR 2019

   (5) Construction Start................................. JUN 2019

   (6) Construction Completion............................ JUN 2020

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NA</td>
</tr>
</tbody>
</table>

Installation Engineer: Phone Number: 256-235-7515
## DEPARTMENT OF THE ARMY
### FISCAL YEAR 2019
#### MILITARY CONSTRUCTION (Part I)
(DOLLARS ARE IN THOUSANDS)

<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>Fort Irwin (IMCOM)</td>
<td>70520</td>
<td>Multipurpose Range Complex</td>
<td>29,000</td>
<td>29,000</td>
<td>C</td>
<td>13</td>
</tr>
</tbody>
</table>

**Subtotal Fort Irwin Part I**
$29,000

**TOTAL MCA FOR California**
$29,000

PAGE NO. 9
6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>Officer</th>
<th>Enlist</th>
<th>CIVIL</th>
<th>Officer</th>
<th>Enlist</th>
<th>CIVIL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. As of 31 Oct 2017</strong></td>
<td>745</td>
<td>3545</td>
<td>975</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1752</td>
</tr>
<tr>
<td><strong>B. End FY 2023</strong></td>
<td>752</td>
<td>3554</td>
<td>1076</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1752</td>
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</table>

7. INVENTORY DATA ($000)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Total Area</strong></td>
<td>258,433 ha (638,599 AC)</td>
</tr>
<tr>
<td><strong>B. Inventory Total as of 05 Jul 2017</strong></td>
<td>3,986,627</td>
</tr>
<tr>
<td><strong>C. Authorization Not Yet in Inventory</strong></td>
<td>518,910</td>
</tr>
<tr>
<td><strong>D. Authorization Requested in the FY 2019 Program</strong></td>
<td>29,000</td>
</tr>
<tr>
<td><strong>E. Authorization Included in the FY 2020 Program</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>F. Planned in Next Three Years (New Mission Only)</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>G. Remaining Deficiency</strong></td>
<td>968,692</td>
</tr>
<tr>
<td><strong>H. Grand Total</strong></td>
<td>5,504,229</td>
</tr>
</tbody>
</table>

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>Code</th>
<th>Project Title</th>
<th>Cost ($000)</th>
<th>Design Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>17868</td>
<td>Multipurpose Range Complex</td>
<td>29,000</td>
<td>01/2017 - 10/2018</td>
</tr>
</tbody>
</table>

9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Included in the FY 2020 Program</strong>:</td>
<td>None</td>
</tr>
<tr>
<td><strong>B. Planned Next Three Program Years (New Mission Only)</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>C. Deferred Sustainment, Restoration, and Modernization (SRM)</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

The mission of the National Training Center and Fort Irwin is to provide tough, realistic, combined arms and services joint training for brigades and regiments in a mid-to high-intensity environment, while retaining the training feedback and analysis focus at battalion/task force level. It also provides a data source for training, doctrine, organization, and equipment improvements.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Air Pollution</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>B. Water Pollution</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>C. Occupational Safety and Health</strong></td>
<td>0</td>
</tr>
</tbody>
</table>
### 9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17868 Multipurpose Range Complex</td>
<td>EA</td>
<td>1 --</td>
<td>155,027</td>
</tr>
<tr>
<td>17868 Range Ops &amp; Control Area</td>
<td>EA</td>
<td>1 --</td>
<td>96,238</td>
</tr>
<tr>
<td>17868 Staging and Bivouac Area</td>
<td>EA</td>
<td>1 --</td>
<td>439,568</td>
</tr>
<tr>
<td>17971 Control Tower</td>
<td>EA</td>
<td>1 --</td>
<td>439,568</td>
</tr>
<tr>
<td>17122 Operation/Storage Bldg</td>
<td>m2 (SF)</td>
<td>74.32 (800)</td>
<td>4,047</td>
</tr>
<tr>
<td>Total from Continuation page(s)</td>
<td></td>
<td></td>
<td>(1,144)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>(246)</td>
</tr>
<tr>
<td>Site Imp( ) Demo(62)</td>
<td>LS</td>
<td>--</td>
<td>(62)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>(72)</td>
</tr>
<tr>
<td>ESTIMATED CONTRACT COST</td>
<td></td>
<td></td>
<td>26,110</td>
</tr>
<tr>
<td>CONTINGENCY (5.00%)</td>
<td></td>
<td></td>
<td>1,306</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td></td>
<td></td>
<td>27,416</td>
</tr>
<tr>
<td>SUPV, INSP &amp; OVERHEAD (5.70%)</td>
<td></td>
<td></td>
<td>1,563</td>
</tr>
<tr>
<td>TOTAL REQUEST</td>
<td></td>
<td></td>
<td>28,979</td>
</tr>
<tr>
<td>TOTAL REQUEST (ROUNDED)</td>
<td></td>
<td></td>
<td>29,000</td>
</tr>
<tr>
<td>INSTALLED EQT-OTHER APPROP</td>
<td></td>
<td></td>
<td>(9,632)</td>
</tr>
</tbody>
</table>

### 10. Description of Proposed Construction

Construct a modified standard design Multipurpose Range Complex (MPRC). Primary facilities include a 3-lane range, range operations control area, control tower, After Action Review (AAR) building, operations/storage building (small), bleacher enclosure, latrine pad/enclosure, ammunition loading dock, unit staging area, and bivouac area. Targeting layout for the MPRC will ensure capability to meet Multipurpose Machine Gun (MPMG) Heavy qualification requirements. Supporting facilities include electric service, site improvements, and building information systems. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 32 kWr/9 Tons).

### 11. REQ:
3 LN ADQT: NONE SUBSTD: NONE

PROJECT: Construct a Multipurpose Range Complex at Fort Irwin, California. (Current Mission)

REQUIREMENT: This project is required to train and test crews and dismounted infantry squads on the skills necessary to detect, identify, engage, and defeat stationary infantry and stationary/moving armor targets in a tactical array. It will provide both armor and infantry crews the opportunity to maneuver and engage moving targets.

CURRENT SITUATION: Fort Irwin currently has a Multipurpose Tank Range (MPTR) which is set up by hand as necessary to train tenant units. There is currently no reliable
1. COMPONENT  Army
2. DATE  01 FEB 2018

3. INSTALLATION AND LOCATION  Fort Irwin
   California

4. PROJECT TITLE  Multipurpose Range Complex

5. PROGRAM ELEMENT  22212A

6. CATEGORY CODE  17868

7. PROJECT NUMBER  70520

8. PROJECT COST ($000)  Approp 29,000

9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>85225 Latrine Pad/Enclosure</td>
<td>EA</td>
<td>4 --</td>
<td>--</td>
<td>13,217 (53)</td>
</tr>
<tr>
<td>75061 Covered Bleacher</td>
<td>EA</td>
<td>1 --</td>
<td>--</td>
<td>151,046 (151)</td>
</tr>
<tr>
<td>17123 After Action Review Bldg</td>
<td>m2 (SF)</td>
<td>165.00 (1,776)</td>
<td>--</td>
<td>4,686 (773)</td>
</tr>
<tr>
<td>14970 Ammunition Loading Dock</td>
<td>EA</td>
<td>1 --</td>
<td>--</td>
<td>82,365 (82)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>-- (33)</td>
</tr>
<tr>
<td>Building Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>-- (52)</td>
</tr>
</tbody>
</table>

Total 1,144

CURRENT SITUATION: (CONTINUED)

Capability to train crews to maneuver and engage moving targets.

IMPACT IF NOT PROVIDED: Fort Irwin will have limited ability to train Infantry Fighting Vehicles (IFV) and armor crews in a live-fire environment.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. No antiterrorism protection measures are required. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:
   (1) Status:
      (a) Date Design Started................................. JAN 2017
      (b) Percent Complete as of January 2018............ 35.00
      (c) Date 35% Designed................................. JAN 2018
      (d) Date Design Complete.............................. OCT 2018
      (e) Parametric Cost Estimating Used to Develop Costs. NO
      (f) Type of Design Contract: Design-bid-build
      (g) An energy study and life cycle cost analysis will be documented during the final design.

   (2) Basis:
      (a) Standard or Definitive Design: YES
      (b) Where Design Was Most Recently Used:
### A. Estimated Design Data: (CONTINUED..)

<table>
<thead>
<tr>
<th>Fort Bliss</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c) Percentage of Design utilizing Standard Design ...</td>
</tr>
</tbody>
</table>

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)

| (a) Production of Plans and Specifications | 1,376 |
| (b) All Other Design Costs | 742 |
| (c) Total Design Cost | 2,118 |
| (d) Contract | 1,694 |
| (e) In-house | 424 |

(4) Construction Contract Award: FEB 2019

(5) Construction Start: APR 2019

(6) Construction Completion: APR 2021

### B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
<th>Appropriation</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Equipment</td>
<td>OPA</td>
<td>2020</td>
<td>9,608</td>
<td></td>
</tr>
<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>9,632</td>
</tr>
<tr>
<td>STATE</td>
<td>INSTALLATION (COMMAND)</td>
<td>PROJECT NUMBER</td>
<td>PROJECT TITLE</td>
<td>AUTHORIZATION REQUEST</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Colorado</td>
<td>Fort Carson (IMCOM)</td>
<td>77301</td>
<td>Vehicle Maintenance Shop</td>
<td>77,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subtotal Fort Carson Part I</td>
<td></td>
<td></td>
<td>$77,000</td>
</tr>
</tbody>
</table>

* TOTAL MCA FOR Colorado $77,000 77,000
1. **COMPONENT**: ARMY  
2. **FY 2019 MILITARY CONSTRUCTION PROGRAM**  
3. **DATE**: 01 FEB 2018

4. **INSTALLATION AND LOCATION**: Fort Carson  
5. **US Army Installation Management Command**  

6. **AREA CONSTRUCTION COST INDEX**: 1.09

7. **PERSONNEL STRENGTH**:

<table>
<thead>
<tr>
<th></th>
<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>3149</td>
<td>20989</td>
<td>2932</td>
<td>16</td>
<td>178</td>
<td>194</td>
<td>885</td>
</tr>
<tr>
<td>B. END FY 2023</td>
<td>3148</td>
<td>21051</td>
<td>3019</td>
<td>14</td>
<td>192</td>
<td>3</td>
<td>194</td>
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</table>

8. **INVENTORY DATA ($000)**

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. TOTAL AREA........</td>
<td>151,075</td>
<td>ha</td>
<td>(373,313 AC)</td>
<td></td>
<td>7,770,660</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. INVENTORY TOTAL AS OF 05 JUL 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,058,215</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. AUTHORIZATION NOT YET IN INVENTORY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>77,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>548,865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. REMAINING DEFICIENCY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. GRAND TOTAL.........</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,516,740</td>
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</table>

9. **PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM**:

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>21410</td>
<td>Vehicle Maintenance Shop</td>
<td>116,400.00/SF(10813.91/m2)</td>
<td>77,000</td>
<td>01/2017 10/2018</td>
<td></td>
</tr>
</tbody>
</table>

10. **TOTAL**: 77,000

9. **FUTURE PROJECT APPROPRIATIONS**:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM:</td>
<td>14185</td>
<td>Company Operations Facility</td>
<td>62,000</td>
</tr>
</tbody>
</table>

10. **TOTAL**: 62,000

B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE

C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A

10. **MISSION OR MAJOR FUNCTIONS**:

Provide the nation's Armed Forces with a sustaining base and a power projection platform in support of National Security Objectives. Major functions include: support and enable operational and training requirements of Maneuver units; support basic and advanced skill training for new Soldiers; exercise command and control; provide for public safety and security; provide sound stewardship of installation resources and the environment; provide services/programs to enable readiness; execute community and family support services and programs; and maintain and improve installation infrastructure.

11. **OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES**:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AIR POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
<td>0</td>
</tr>
</tbody>
</table>

DD FORM 1390, JUL 1999  
PREVIOUS EDITION IS OBSOLETE  
PAGE NO. 19
### 9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21410 Vehicle Maintenance Shop</td>
<td>m2 (SF)</td>
<td>10,814 ( 116,400)</td>
<td>2,669</td>
<td>(28,867)</td>
</tr>
<tr>
<td>44224 Org Storage Bldg</td>
<td>m2 (SF)</td>
<td>6,308 ( 67,900)</td>
<td>1,389</td>
<td>(8,759)</td>
</tr>
<tr>
<td>85210 Org Vehicle Parking</td>
<td>m2 (SY)</td>
<td>134,705 ( 161,106)</td>
<td>98.07</td>
<td>(13,211)</td>
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<tr>
<td>21470 POL Storage Bldg</td>
<td>m2 (SF)</td>
<td>156.08 ( 1,680)</td>
<td>2,138</td>
<td>(334)</td>
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<tr>
<td>00000 Special Foundations</td>
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<td>--</td>
<td>--</td>
<td>(4,692)</td>
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<tr>
<td><strong>Total from Continuation page(s)</strong></td>
<td></td>
<td></td>
<td></td>
<td>(4,202)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
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<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(555)</td>
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<tr>
<td>Water, Sewer, Gas</td>
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<td>--</td>
<td>(1,605)</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
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<td>(4,454)</td>
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<tr>
<td>Storm Drainage</td>
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<td>--</td>
<td>(768)</td>
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<td>Site Imp (1,503) Demo ( )</td>
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<td>--</td>
<td>(1,503)</td>
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<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(523)</td>
</tr>
</tbody>
</table>

**ESTIMATED CONTRACT COST**

- **CONTINGENCY (5.00%)**
  - 3,474
- **SUBTOTAL**
  - 72,947
- **SUPV, INSPI & OVERHEAD (5.70%)**
  - 4,158
- **TOTAL REQUEST**
  - 77,105
- **TOTAL REQUEST (ROUNDED)**
  - 77,000
- **INSTALLED EQT-OTHER APPROP**
  - (1,891)

### 10. Description of Proposed Construction

Construct a standard design Vehicle Maintenance Shop. Project includes 2 large maintenance facilities, tactical/organizational vehicle parking, organizational storage, Unmanned Aerial Vehicle (UAV) storage building, storage with loading dock, petroleum and other hazardous material storage, and maintenance space, information systems, fire protection and alarm systems, Intrusion Detection System (IDS) installation, special foundations, and Energy Monitoring Control Systems (EMCS) connection. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, tank trail connections, curbs and gutters, upgrades to Butts Road and Wilderness Road, intersection improvements, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 1,020 kWt/290 Tons).

### 11. REQ:

- **165,236 m2**
- **ADQT:** 124,345 m2
- **SUBSTD:** 3,978 m2

**PROJECT:**

Construct a Vehicle Maintenance Shop at Fort Carson, Colorado. (Current
### 9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>COST ($000)</th>
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<tbody>
<tr>
<td>PRIMARY FACILITY (CONTINUED)</td>
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<td></td>
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</tr>
<tr>
<td>21412 UAV Storage Bldg</td>
<td>m2 (SF)</td>
<td>501.68 ( 5,400)</td>
<td>2,232 (1,120)</td>
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<tr>
<td>44220 Storage with Loading Dock</td>
<td>m2 (SF)</td>
<td>501.68 ( 5,400)</td>
<td>1,641 (823)</td>
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</tr>
<tr>
<td>21470 Hazardous Waste Storage Bldg</td>
<td>m2 (SF)</td>
<td>156.08 ( 1,680)</td>
<td>2,422 (378)</td>
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<tr>
<td>00000 Cyber Security Measures</td>
<td>LS</td>
<td>--</td>
<td>-- (750)</td>
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<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>-- (753)</td>
<td></td>
</tr>
<tr>
<td>Building Information Systems</td>
<td>LS</td>
<td>--</td>
<td>-- (378)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>4,202</strong></td>
</tr>
</tbody>
</table>

### PROJECT: (CONTINUED)

**Mission:**

This project is required to support the stationing of a Combat Aviation Brigade, (CAB) at Fort Carson. The Combat Aviation Brigade will be located at Butts Army Air Field (BAAF). The battalions will be consolidated into two large vehicle maintenance shops instead of constructing multiple separate facilities to efficiently accommodate the requirement.

**CURRENT SITUATION:**

Currently all facilities on Butts Army Airfield are fully occupied, including the one and only vehicle maintenance shop. The location of the current interim CAB vehicle maintenance shop, on the main cantonment area remote from BAAF, is inefficient and functionally inadequate to support the CAB.

**IMPACT IF NOT PROVIDED:**

If this project is not provided, Fort Carson will not be able to provide adequate permanent facilities to accomplish the stationing of the Combat Aviation Brigade at BAAF.

**ADDITIONAL:**

Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

### 12. SUPPLEMENTAL DATA:

**A. Estimated Design Data:**

<table>
<thead>
<tr>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Date Design Started</td>
<td>JAN 2017</td>
</tr>
<tr>
<td>(b) Percent Complete as of January 2018</td>
<td>35.00</td>
</tr>
<tr>
<td>(c) Date 35% Designed</td>
<td>JAN 2018</td>
</tr>
<tr>
<td>(d) Date Design Complete</td>
<td>OCT 2018</td>
</tr>
</tbody>
</table>
A. Estimated Design Data: (CONTINUED..)

(e) Parametric Cost Estimating Used to Develop Costs..        NO
(f) Type of Design Contract: Adapt-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design: YES
   (b) Where Design Was Most Recently Used: Fort Carson
   (c) Percentage of Design utilizing Standard Design ... 100

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):    ($000)
   (a) Production of Plans and Specifications............ 4,446
   (b) All Other Design Costs............................ 1,112
   (c) Total Design Cost.................................. 5,558
   (d) Contract.......................................... 3,613
   (e) In-house.......................................... 1,945

(4) Construction Contract Award............................ JAN 2019

(5) Construction Start..................................... MAR 2019

(6) Construction Completion................................ OCT 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMF - Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>774</td>
</tr>
<tr>
<td>Equip Strg - Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>528</td>
</tr>
<tr>
<td>POL/HAZ Strg - Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>10</td>
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<tr>
<td>Distib Co Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>122</td>
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<td>Intrusion Detection System</td>
<td>OPA</td>
<td>2021</td>
<td>40</td>
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<tr>
<td>EES (Access Control)</td>
<td>OPA</td>
<td>2021</td>
<td>110</td>
</tr>
<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>307</td>
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<td></td>
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<td>Total</td>
</tr>
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</table>

Installation Engineer:   Phone Number:   (719) 526-3415
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>NEW/ CURRENT MISSION</th>
<th>PAGE</th>
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</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>Fort Gordon (IMCOM)</td>
<td>88724</td>
<td>Cyber Instructional Fac and Network Ctr</td>
<td>99,000</td>
<td>99,000</td>
<td>N</td>
<td>29</td>
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</tbody>
</table>

Subtotal Fort Gordon Part I $ 99,000 99,000

* TOTAL MCA FOR Georgia $ 99,000 99,000
THIS PAGE INTENTIONALLY LEFT BLANK
1. COMPONENT
    FY 2019 MILITARY CONSTRUCTION PROGRAM

2. DATE
    01 FEB 2018

3. INSTALLATION AND LOCATION
    Fort Gordon
    Georgia

4. COMMAND
    US Army Installation Management Command

5. AREA CONSTRUCTION COST INDEX
    0.89

6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
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<td>OFFICER ENLIST</td>
<td>CIVIL</td>
<td>OFFICER ENLIST</td>
<td>CIVIL</td>
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<tr>
<td>AS OF 31 OCT 2017</td>
<td>2064</td>
<td>5693</td>
<td>3192</td>
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<tr>
<td>END FY 2023</td>
<td>2018</td>
<td>5605</td>
<td>3492</td>
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</table>

7. INVENTORY DATA ($000)

   A. TOTAL AREA..........    23,684 ha    (58,524 AC)
   B. INVENTORY TOTAL AS OF 05 JUL 2017............................. 4,503,961
   C. AUTHORIZATION NOT YET IN INVENTORY............................ 488,497
   D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM................ 99,000
   E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM................ 89,000
   F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)............... 85,000
   G. REMAINING DEFICIENCY.......................................... 449,177
   H. GRAND TOTAL................................................... 5,714,635

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>DESIGN STATUS</th>
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<tbody>
<tr>
<td>17136</td>
<td>Cyber Instructional Fac and Network</td>
<td>139,392.00/SF(12949.94/m²)</td>
<td>99,000</td>
<td>01/2017 01/2019</td>
</tr>
</tbody>
</table>
   TOTAL 99,000

9. FUTURE PROJECT APPROPRIATIONS:

   A. INCLUDED IN THE FY 2020 PROGRAM:
      | CODE | PROJECT TITLE                          | COST ($000) |
      | 17136 | Cyber Instructional Fac (Admin/Command) | 89,000       |
      TOTAL 89,000

   B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY):
      | CODE | PROJECT TITLE                          | COST ($000) |
      | 17136 | Cyber Instructional Facility (Classrooms) | 85,000       |
      TOTAL 85,000

   C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A

10. MISSION OR MAJOR FUNCTIONS:

    Fort Gordon has numerous tenant units with diverse missions. The major tenant is the U.S. Army Signal Corps. Fort Gordon has the largest information technology and communications training school in the Armed Forces. It is also home to the U.S. Army Cyber Command, the Southeast (SE) Regional Medical Command, the SE Regional Veterinary Command, the SE Regional Dental Command, the 93rd Sig Bde, the Gordon Regional Security Operations Center - one of three Joint CONUS-based intelligence platforms, the 513th MI Bde - theater-level intelligence and security, and Reserve/National Guard units.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
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<th>CATEGORY</th>
<th>($000)</th>
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<tbody>
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<tr>
<td>B. WATER POLLUTION</td>
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</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
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</table>
### Item UM (M/E) Quantity Unit Cost Cost ($000)

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<th>Quantity</th>
<th>Unit Cost</th>
<th>Cost ($000)</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>17136 Instruction Building</td>
<td>m2 (SF)</td>
<td>12,950</td>
<td>5,003</td>
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<td>--</td>
<td>(1,000)</td>
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<tr>
<td>Sustainability/Energy Measures</td>
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<td>(1,342)</td>
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<td>(7,002)</td>
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<td>SUPPORTING FACILITIES</td>
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<td>Steam/Chilled Water Distribution</td>
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<td>(1,333)</td>
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<td>Information Systems</td>
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<td>(1,103)</td>
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### Estimated Contract Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency (5.00%)</td>
<td>4,449</td>
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<tr>
<td>Subtotal</td>
<td>93,424</td>
</tr>
<tr>
<td>Supv, Insp &amp; Overhead (5.70%)</td>
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</tr>
<tr>
<td>Total Request</td>
<td>98,749</td>
</tr>
<tr>
<td>Total Request (rounded)</td>
<td>99,000</td>
</tr>
<tr>
<td>Installed Eqt.-Other Approp</td>
<td>66,925</td>
</tr>
</tbody>
</table>

### Description of Proposed Construction

Construct a Cyber Instructional Facility and Network Center. Project includes a standard design Top Secret/Sensitive Compartmented Information (TS/SCI) level automation-aided instructional area consisting of classrooms, instructional laboratories, instructor offices, conference/counseling rooms, administrative spaces, separate student and staff break areas, student records storage, research center, central storage, computer maintenance area, and network operations/digital training repository. Non-standard spaces include a secure video teleconferencing center and secure kiosk area. Project also includes a standard design TS/SCI level Mission Command Facility area to support the Cyber Center of Excellence (CoE) Headquarters activities and TS/SCI level general purpose administrative space. Provide redundant mechanical and electrical systems with generator backup power to critical areas, loading/service areas, secure information systems, and fire detection, protection and alarm systems. Provide Uninterruptable Power Source (UPS), Intrusion Detection System (IDS), and Closed Circuit TV (CCTV) installation. Provide Utility Monitoring Control Systems (UMCS) connection. Building information systems for this facility are unique in nature and are not included in the unit cost of the building. Supporting facilities include site development, utilities and connections, lighting, paving, walks, curbs and gutters, storm drainage, secure information systems, landscaping and signage. Parking will consist of expansion of the existing north parking lot. Heating and air conditioning will be provided by connection to the existing energy plant. Redundant heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for
Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Redundant air conditioning is estimated at 305 tons. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 2,961 kWr/842 Tons).

11. REQ: 46,377 m² ADQT: 599 m² SUBSTD: 14,797 m²

PROJECT: Construct a Cyber Instructional Facility and Network Center at Fort Gordon, Georgia. (New Mission)

REQUIREMENT: This project is required to provide the Cyber School Faculty and Staff instructional TS/SCI space to serve the Cyber Center of Excellence (CoE) training and education requirements as well as TS/SCI work space to support preparation of doctrine and training support publications, and unified training and modernization efforts for cyberspace operations, electronic warfare, cyber electromagnetic activity, and cyber-related signal intelligence.

CURRENT SITUATION: Currently training, operations, VTC, and Mission Control for Cyber, Signal, and Electronic Warfare take place in buildings constructed 40 to 50 years ago. Adequate space is not available to support future training loads or to support programs of instruction changes driven by advances in technology. Electrical and HVAC systems within these facilities do not adequately serve the power and cooling demand to meet mission requirements resulting in frequent electrical failures and very high room temperatures. There is limited classroom and operational space with TS/SCI capability with the requirement today and the need for TS/SCI facilities increasing. The current facilities do not have access to the Cyber weapons systems via the operational network and data center which operate at the TS/SCI level. Olmstead Hall which contains the current VTC does not meet TS/SCI standards and is scheduled for demolition. Moreover, TS/SCI work space is required to support the Cyber CoE Headquarters activities.

IMPACT IF NOT PROVIDED: If this project is not provided, Cyber CoE will be forced to cancel or seek to relocate the planned TS/SCI level technical training and operations portions of Cyber and Signal instruction to another location. This will further degrade and delay the mission readiness of the Cyber Mission Force (CMF), Cyber Protection, and National and Combat Mission Teams. The Army will continue to struggle to train and to develop cyber warriors to peak technological proficiency in obsolete and failed facilities, few of which meet TS/SCI standards. The deficiencies that exist in the various building systems will hamper and in some cases prevent this learning process, consequently holding the Army back from reaching its goal of having the world's most technologically capable Cyber Operations workforce. The vulnerabilities in the nation's information systems, communication systems, and other critical infrastructure systems will continue to be exploited by both known and unknown enemies, and the technological and industrial advancements being made by both government agencies and private companies along with the unforeseen manipulation of these complex and complicated systems will continue to present valid threats.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all

1. COMPONENT 2. DATE

Army 01 FEB 2018

3. INSTALLATION AND LOCATION 4. PROJECT TITLE

Fort Gordon Georgia Cyber Instructional Fac and Network Ctr

5. PROGRAM ELEMENT 6. CATEGORY CODE 7. PROJECT NUMBER 8. PROJECT COST ($000)

33140A 17136 88724 Approp 99,000

DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)
physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:
   A. Estimated Design Data:
      (1) Status:
         (a) Date Design Started............................... JAN 2017
         (b) Percent Complete as of January 2018............... 35.00
         (c) Date 35% Designed................................. JAN 2018
         (d) Date Design Complete.............................. JAN 2019
         (e) Parametric Cost Estimating Used to Develop Costs.. NO
         (f) Type of Design Contract: Design-bid-build
         (g) An energy study and life cycle cost analysis will be documented during the final design.

      (2) Basis:
         (a) Standard or Definitive Design: YES
         (b) Where Design Was Most Recently Used:
             Fort Gordon
         (c) Percentage of Design utilizing Standard Design ... 50

      (3) Total Design Cost (c) = (a)+(b) OR (d)+(e):
         (a) Production of Plans and Specifications............. 4,623
         (b) All Other Design Costs................................ 2,488
         (c) Total Design Cost........................................ 7,111
         (d) Contract..................................................... 5,689
         (e) In-house...................................................... 1,422

      (4) Construction Contract Award............................. MAY 2019

      (5) Construction Start......................................... JUL 2019

      (6) Construction Completion.................................. JUL 2022
### B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Appropriation</th>
<th>Fiscal Year</th>
<th>Cost (000)</th>
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<tr>
<td>UPS Equipment</td>
<td>OPA</td>
<td></td>
<td>2020</td>
<td>4,501</td>
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<td>Cyber Security Equipment</td>
<td>OPA</td>
<td></td>
<td>2020</td>
<td>4,024</td>
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<tr>
<td>IDS, CCTV, Security Equipment</td>
<td>OPA</td>
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<td>2020</td>
<td>1,065</td>
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<td>Info Sys - ISC</td>
<td>OPA</td>
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<td>2020</td>
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<tr>
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<td>2020</td>
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<td><strong>Total</strong></td>
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<td>Hawaii</td>
<td>Fort Shafter (IMCOM)</td>
<td>76595</td>
<td>Command and Control Facility, Incr 4</td>
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</table>

Subtotal Fort Shafter Part I

$0 105,000

* TOTAL MCA FOR Hawaii

$0 105,000
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6. PERSONNEL STRENGTH:  
   (1) PERMANENT  (2) STUDENTS  (3) SUPPORTED  (4) TOTAL  

   A. AS OF 31 JUL 2017  
      OFFICER ENLIST CIVIL OFFICER ENLIST CIVIL OFFICER ENLIST CIVIL  
      2297 3649 3321 16 19 1 22 23 2852 12,200  

   B. END FY 2023  
      OFFICER ENLIST CIVIL OFFICER ENLIST CIVIL OFFICER ENLIST CIVIL  
      2274 3454 3285 18 16 1 22 23 2811 11,904  

7. INVENTORY DATA ($000)  
   A. TOTAL AREA.......... 238 ha  (589 AC)  
   B. INVENTORY TOTAL AS OF ........................................ 1,439,780  
   C. AUTHORIZATION NOT YET IN INVENTORY............................ 414,338  
   D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM............... 0  
   E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM............... 0  
   F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)............... 0  
   G. REMAINING DEFICIENCY.......................................... 398,002  
   H. GRAND TOTAL................................................... 2,252,120  

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:  
   CAT CODE PROJECT TITLE SCOPE/UM ($000) START COMPLETE  
   14190 Command and Control Facility, Incr 4 241,693.00/SF(22454.00/m²) 105,000  05/2012 10/2015  
   TOTAL 105,000  

9. FUTURE PROJECT APPROPRIATIONS:  
   CATEGORY CODE PROJECT TITLE COST ($000)  
   A. INCLUDED IN THE FY 2020 PROGRAM:  
      14190 Command and Control Facility, Incr 5 32,000  
      TOTAL 32,000  
   B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE  
   C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A  

10. MISSION OR MAJOR FUNCTIONS:  
    Fort Shafter garrisons the Headquarters for United States Army Pacific Command and supporting organizations. It also provides on-post, Army Family Housing (RCI units) for approximately 560 families. Fort Shafter is also home of the 9th Regional Readiness Command (USAR) and Pacific Ocean Division (POD) of the US Army Corps of Engineers.  

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:  
   [($)00]  
   A. AIR POLLUTION 0  
   B. WATER POLLUTION 0  
   C. OCCUPATIONAL SAFETY AND HEALTH 0
10. Description of Proposed Construction  This is an incrementally funded project. Congress authorized the full amount of $311.4M in FY2015 and then raised the authorization to $370M in FY2018 to provide Redundant Power Generators, Cyber Security Measures and cost increases not anticipated since the initial Congressional authorization. In FY2019, Congress is requested to increase the authorization to $418M. Reauthorization is needed to absorb further changes in unit costs, the area cost factor for Hawaii and escalation. The first increment of $85M was appropriated in FY2015 (PN 70668). The second increment of $40M was appropriated in FY2017 (PN 76593). The third increment of $90M was appropriated in FY2018 (PN 58857). This request is for the fourth increment of $105M. The fifth increment of $98M will be requested in FY2020 (PN 92340). Construct Command & Control Facility (C2F) including administrative areas; secure operations building with Sensitive Compartmented Information Facility (SCIF), command group building, support operations building and a parking structure. Construct redundant power generators to provide backup power to the facility and its critical command and control systems in the event of the loss of commercial power. Construction is in compliance with Intelligence Community directives including cyber security measures. Construction also includes special foundations, building information systems, fire protection and alarm systems, Intrusion Detection System (IDS) installation, Energy Monitoring and Control Systems (EMCS) connection, and antiterrorism measures. Building information systems for this project are unique in nature and not included in the unit cost of the building. Increased building Antiterrorism/Force Protection (AT/FP) measures are included for the secure
9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
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<td>00000 Cyber Security Measures</td>
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<td>11,763</td>
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</table>

DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

Operations building. Supporting facilities include site development, site improvements, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by connection to the central utility plant built previously for this project. Access for individuals with disabilities will be provided. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 4,220 kW/1,200 Tons).

11. REQ: 33,445 m² ADQT: 2,323 m² SUBSTD: 18,581 m²

PROJECT: Construct a Command and Control Facility Complex at Fort Shafter, Hawaii.

REQUIREMENT: The Department of the Army has directed that U.S. Army Pacific (USARPAC) transform into an Operational, Expeditionary Army Service Component Command to support the Pacific Command Combatant Commander (COCOM). This Operational Headquarters project supports the increased scope for size and capability needed for the consolidated facility to support the command and control requirements of the Theater Army.

CURRENT SITUATION: U.S. Army Pacific functional operations are located in over 10 separate WWII wooden buildings. Current command and control operation and supporting functions are conducted in separate structures that are inadequate and inefficient. Years of termite infestation have endangered the structural integrity of all the buildings. The water and sewer systems continue to suffer breakdowns and are continuously repaired. Existing facilities are aged, failing and do not provide the operational capability levels of electrical, mechanical, and communications infrastructure required by the Command. Existing facilities will be demolished under a separate project, while some may be retained due to their historical significance.

IMPACT IF NOT PROVIDED: If this project is not provided USARPAC will continue to operate inefficiently in separate dilapidated buildings and be unable to fully realize the capabilities demanded by Army Transformation for the Army headquarters.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-acCORDANCE-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during
project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

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<th>Authorization</th>
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<th>FY2017 ($000)</th>
<th>FY2018 ($000)</th>
<th>*FY2019 ($000)</th>
<th>FY2020 ($000)</th>
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<td>$40,000</td>
<td>$90,000</td>
<td>$105,000</td>
<td>$98,000</td>
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<td>$90,000</td>
<td>$105,000</td>
<td>$98,000</td>
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* FY2019 Congressional request pending to raise Authorization to $418 million.

12. SUPPLEMENTAL DATA:
A. Estimated Design Data:
(1) Status:
(a) Date Design Started .............................................. MAY 2012
(b) Percent Complete as of January 2018 .................... 100.00
(c) Date 35% Designed ............................................. JAN 2015
(d) Date Design Complete ........................................ OCT 2015
(e) Parametric Cost Estimating Used to Develop Costs .. YES
(f) Type of Design Contract: Design-bid-build

(2) Basis:
(a) Standard or Definitive Design: YES
(b) Where Design Was Most Recently Used: Fort Belvoir
(c) Percentage of Design utilizing Standard Design ... 50

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
(a) Production of Plans and Specifications ............... 2,638
(b) All Other Design Costs ..................................... 3,392
(c) Total Design Cost ........................................... 6,030
(d) Contract ..................................................... 3,392
(e) In-house ...................................................... 2,638
12. SUPPLEMENTAL DATA (CONTINUED)

A. Estimated Design Data: (CONTINUED)

(4) Construction Contract Award............................ JAN 2017

(5) Construction Start..................................... APR 2017

(6) Construction Completion................................ MAY 2021

B. Equipment associated with this project which will be provided from other appropriations:

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<tr>
<th>Equipment</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year</th>
<th>Appropriated Or Requested</th>
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<td>2,265</td>
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<td>Access Control System</td>
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Installation Engineer: Phone Number: 808-656-1289
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<td>Railcar Holding Area</td>
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Subtotal Crane Army Ammunition Activity Part I $ 16,000 16,000

* TOTAL MCA FOR Indiana $ 16,000 16,000
9. Cost Estimates

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<tr>
<th>ITEM</th>
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<th>QUANTITY</th>
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<th>COST($000)</th>
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<tr>
<td>PRIMARY FACILITY</td>
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</tr>
<tr>
<td>86010 Railcar Holding Yard</td>
<td>m (LF)</td>
<td>3,322 (10,900)</td>
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<td>(6,820)</td>
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<tr>
<td>44220 Disposition Storage</td>
<td>m2 (SF)</td>
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<tr>
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<td>Information Systems</td>
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<tr>
<td>Information Systems</td>
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</tr>
</tbody>
</table>

10. Description of Proposed Construction

Construct a Railcar Holding Area and relocate existing functions outside of munitions operation area. Work will include the installation of new rail lines to create a rail holding yard, installation of lightning protection, relocation of the operations facility, covered storage canopy, scale house, truck scale, disposition storage, open storage areas, and Post Construction Awards Services (PCAS). The project will include the installation of Closed Circuit Television (CCTV), Intrusion Detection Systems (IDS) installation, building information systems, and fire protection and alarm systems. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping, and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Demolish 4 buildings at Crane Army Ammunition Activity, IN (Total 1,044 m2/11,239 SF). Air Conditioning (Estimated 18 kWr/5 Tons).

11. REQ: 153 km ADQT: 126 km SUBSTD: 24 km
PROJECT: Construct a Railcar Holding Area at Crane Army Ammunition Activity, Indiana. (Current Mission)

REQUIREMENT: This project is required to increase the rail holding area capacity at Crane Army Ammunition Activity (CAAA) to safely and efficiently meet the current ammunition workload. Crane Army Ammunition Activity (CAAA) railcar holding yards lack the required Net Explosive Weight (NEW) capacity to support high volume munitions out-load operations. Further hampering NEW capability is the current location of the Defense Logistics Agency Disposition functions. In order to meet mission requirements, during times of heavy munitions out-loading, CAAA must operate under a Certificate of Risk Acceptance (CORA) with U.S. Army Joint Munitions Command (JMC), allowing for the temporary increase in explosive limits and violating Quantity Distance (QD) requirements as stated in Department of the Army Explosive Safety Standards. This project relocates the Defense Logistics Agency Disposition functions outside of the munitions operation area and replaces it with a new rail holding yard. Thus increasing CAAA’s overall rail holding yard NEW capacity, increasing NEW of surrounding storage magazines, and eliminating the need to operate under the CORA during high volume ammunition out-load operations.

CURRENT SITUATION: Currently, there are two rail holding yards, both of which have limited explosive capacity due to the Defense Logistics Agency Disposition functions (a non-munitions function) being located in the munitions area. Due to this limited capacity, Rail Yard 66 and Container Complex II must be used for additional storage. The main rail system connecting the valley with the rest of the activity utilizes a section of track that includes a steep grade. To gain access to the west side of the activity, the location of Container Complex II, locomotives must climb this steep grade using low tractive effort equipment, which requires several trips and is often limited to two cars at a time.

IMPACT IF NOT PROVIDED: If this project is not provided, Crane Army Ammunition Activity will not have the required capacity to support high volume munitions during out-load operations. The installation will continue to operate under a Certificate of Risk Acceptance allowing for the temporary increase in explosive limits and violating QD requirements as stated in Department of Defense Explosive Safety Standards. This situation will continue to impact efficient and effective out-load operations and will continue to expose personnel occupying the Defense Logistics Agency Disposition facilities to increased risk.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This
The project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement.

The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started...............................  APR 2017
   (b) Percent Complete as of January 2018...............  35.00
   (c) Date 35% Designed.................................  JAN 2018
   (d) Date Design Complete..............................  OCT 2018
   (e) Parametric Cost Estimating Used to Develop Costs..  YES
   (f) Type of Design Contract: Design-bid-build
   (g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design:  NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications............  744
   (b) All Other Design Costs.............................  401
   (c) Total Design Cost..................................  1,145
   (d) Contract..........................................  916
   (e) In-house..........................................  229

(4) Construction Contract Award.........................  JAN 2019

(5) Construction Start.................................  MAR 2019

(6) Construction Completion.........................  SEP 2020
12. **Supplemental Data** (continued..)

B. Equipment associated with this project which will be provided from other appropriations:

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<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Appropriated Or Requested</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
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<td>STATE</td>
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<td>PROJECT TITLE</td>
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<tr>
<td>Kentucky</td>
<td>Fort Campbell (IMCOM)</td>
<td>64296</td>
<td>Vehicle Maintenance Shop</td>
<td>32,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal Fort Campbell Part I</td>
<td>$</td>
<td>32,000</td>
<td>32,000</td>
<td></td>
</tr>
<tr>
<td>Fort Knox (IMCOM)</td>
<td>35782</td>
<td>Digital Air/Ground Integration Range</td>
<td>26,000</td>
<td>26,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Subtotal Fort Knox Part I</td>
<td>$</td>
<td>26,000</td>
<td>26,000</td>
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</tr>
<tr>
<td>* TOTAL MCA FOR Kentucky</td>
<td>$</td>
<td>58,000</td>
<td>58,000</td>
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</tbody>
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6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>PERMANENT</th>
<th>STUDENTS</th>
<th>SUPPORTED</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>3463</td>
<td>22138</td>
<td>2879</td>
<td>43</td>
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<tr>
<td>B. END FY 2023</td>
<td>3508</td>
<td>22623</td>
<td>2949</td>
<td>43</td>
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</table>

7. INVENTORY DATA ($000)

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A. TOTAL AREA</td>
<td>45,518 ha</td>
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<tr>
<td></td>
<td>(112,476 AC)</td>
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<td>B. INVENTORY TOTAL AS OF 05 JUL 2017</td>
<td>8,289,199</td>
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<tr>
<td>C. AUTHORIZATION NOT YET IN INVENTORY</td>
<td>1,644,027</td>
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<tr>
<td>D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM</td>
<td>32,000</td>
</tr>
<tr>
<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM</td>
<td>63,300</td>
</tr>
<tr>
<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)</td>
<td>0</td>
</tr>
<tr>
<td>G. REMAINING DEFICIENCY</td>
<td>1,003,635</td>
</tr>
<tr>
<td>H. GRAND TOTAL</td>
<td>11,032,161</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Project Title</th>
<th>Scope/UM</th>
<th>Start</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21410</td>
<td>Vehicle Maintenance Shop</td>
<td>58,200.00/SF(5406.95/m²)</td>
<td>01/2017</td>
<td>10/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>32,000</td>
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<td></td>
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9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Project Title</th>
<th>Cost ($000)</th>
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</thead>
<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM</td>
<td>21885</td>
<td>General Purpose Maintenance Shop</td>
<td>53,000</td>
</tr>
<tr>
<td></td>
<td>17897</td>
<td>Automated Infantry Platoon Battle Course</td>
<td>7,100</td>
</tr>
<tr>
<td></td>
<td>92110</td>
<td>Basements</td>
<td>3,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>63,300</td>
</tr>
</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:
Support and train an Airborne (Air Assault) Division, the 160th Special Operations Aviation Regiment, 5th Special Forces Group, and other non-divisional support units. Ensure the most efficient utilization of resources to operate the installation and discharge the Fort Campbell area support mission. Ensure that Fort Campbell is prepared for mobilization. Provide command and control, and prepare designated units to rapidly deploy worldwide for the performance of combat, combat support, and combat service support missions as assigned.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>Category</th>
<th>$(000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AIR POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
<td>0</td>
</tr>
</tbody>
</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21410 Vehicle Maintenance Shop</td>
<td>m2 (SF)</td>
<td>5,407 ( 58,200)</td>
<td>2,147</td>
<td>(11,611)</td>
</tr>
<tr>
<td>85210 Organizational Vehicle Parking</td>
<td>m2 (SY)</td>
<td>52,738 ( 63,074)</td>
<td>96.73</td>
<td>(5,101)</td>
</tr>
<tr>
<td>21412 Organizational Storage Bldg</td>
<td>m2 (SF)</td>
<td>2,341 ( 25,200)</td>
<td>1,967</td>
<td>(4,605)</td>
</tr>
<tr>
<td>21470 Oil Storage Building</td>
<td>m2 (SF)</td>
<td>156.08 ( 1,680)</td>
<td>1,966</td>
<td>(307)</td>
</tr>
<tr>
<td>21470 Hazardous Waste Storage</td>
<td>m2 (SF)</td>
<td>156.08 ( 1,680)</td>
<td>1,863</td>
<td>(291)</td>
</tr>
<tr>
<td>Total from Continuation page(s)</td>
<td></td>
<td></td>
<td></td>
<td>(982)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
<td>5,703</td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(2,235)</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(497)</td>
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<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(696)</td>
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<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(291)</td>
</tr>
<tr>
<td>Site Imp(1,473) Demo( )</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,473)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(511)</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST

CONTINGENCY (5.00%) 28,600
SUPY, INSPI & OVERHEAD (5.70%) 1,430
SUBTOTAL 30,030
TOTAL REQUEST 31,742
TOTAL REQUEST (ROUNDED) 32,000
INSTALLED EQT-OTHER APPROP (1,148)

10. Description of Proposed Construction

Construct a standard design Vehicle Maintenance Shop (VMS). Primary facilities include a vehicle maintenance shop, organizational vehicle parking, organizational storage building, oils storage building, hazardous waste storage, Energy Monitoring and Control Systems (EMCS) connection, Intrusion Detection System (IDS) installation, building information systems, fire alarm detection and reporting systems. Supporting facilities include utilities, paving, walks, curbs and gutters, parking, access roads, storm drainage, information systems, landscaping, site improvements, and antiterrorism measures. Heating and air conditioning will be provided by self-contained units. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 155 kWr/44 Tons).

11. REQ: 138,405 m²  ADQT: 90,730 m²  SUBSTD: 4,180 m²

PROJECT: Construct a Vehicle Maintenance Shop at Fort Campbell, Kentucky. (Current Mission).

REQUIREMENT: This project is required to provide an adequate Vehicle Maintenance Shop.
9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000 Cybersecurity Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(750)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
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<td>--</td>
<td>(232)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>982</td>
</tr>
</tbody>
</table>

REQUIREMENT: (CONTINUED)

and supporting facilities for an Aviation Support Brigade. Adequate existing facilities are not available to support maintenance operations. All existing facilities under these facility category codes are fully utilized. This project provides essential maintenance facilities required to meet the Brigade's mission.

CURRENT SITUATION: Currently the Soldiers assigned to this unit are working in either temporary relocatable structures or in inadequate facilities that do not meet the minimum square footage or features required by current standards. The temporary structures are undersized and are only intended to provide an interim solution until adequate permanent facilities can be provided. Parking for Soldiers' privately owned vehicles is grossly inadequate.

IMPACT IF NOT PROVIDED: If this project is not provided, the supported units will not be able to fully accomplish their maintenance mission. There are not enough adequate facilities for operations, organizational storage and vehicle maintenance. Operational, equipment, and training readiness will be adversely impacted by the lack of mission-critical facilities. Inadequate facilities will adversely impact overall readiness and the ability to contribute to the contingency operations and other operational missions.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
(a) Date Design Started............................... JAN 2017
(b) Percent Complete as of January 2018............ 35.00
(c) Date 35% Designed............................... JAN 2018
A. Estimated Design Data: (CONTINUED..)

(d) Date Design Complete..............................  OCT 2018
(e) Parametric Cost Estimating Used to Develop Costs..       YES
(f) Type of Design Contract:  Adapt-build

(2) Basis:
(a) Standard or Definitive Design:  YES
(b) Where Design Was Most Recently Used:
   Fort Campbell
(c) Percentage of Design utilizing Standard Design ...  90

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):      ($000)
(a) Production of Plans and Specifications............  1,674
(b) All Other Design Costs............................  1,116
(c) Total Design Cost.................................  2,790
(d) Contract..........................................  1,813
(e) In-house..........................................  977

(4) Construction Contract Award............................ APR 2019
(5) Construction Start..................................... JUN 2019
(6) Construction Completion................................ JUN 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Nomenclature</th>
<th>Procuring</th>
<th>Fiscal Year</th>
<th>Appropriated Or Requested</th>
<th>Cost ($000)</th>
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<tr>
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<td>OPA</td>
<td>2020</td>
<td>42</td>
<td></td>
<td></td>
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<tr>
<td>Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>256</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>1,148</strong></td>
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6. PERSONNEL STRENGTH:

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<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
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<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
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<td>5773</td>
<td>5584</td>
<td>1579</td>
<td>872</td>
<td>65</td>
<td>2199</td>
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<td>B. END FY 2023</td>
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<td>5421</td>
<td>4512</td>
<td>1096</td>
<td>1507</td>
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<td>2199</td>
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7. INVENTORY DATA ($000)

<p>| | | | | | | | |</p>
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<tr>
<th></th>
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<td>6,570,859</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. AUTHORIZATION NOT YET IN INVENTORY</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>354,223</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26,000</td>
</tr>
<tr>
<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM</td>
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<td></td>
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<td>0</td>
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<tr>
<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)</td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>G. REMAINING DEFICIENCY</td>
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<td></td>
<td></td>
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<td></td>
<td>108,891</td>
</tr>
<tr>
<td>H. GRAND TOTAL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,059,973</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th></th>
<th>CAT</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
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</thead>
<tbody>
<tr>
<td>17721 Digital Air/Ground Integration Range</td>
<td>4.00/EA(4.00/EA)</td>
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<td>01/2017</td>
<td>10/2018</td>
<td></td>
<td></td>
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<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>26,000</td>
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<td></td>
</tr>
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9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST ($000)</th>
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<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM)</td>
<td></td>
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</tr>
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</table>

10. MISSION OR MAJOR FUNCTIONS:


11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AIR POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
<td>0</td>
</tr>
</tbody>
</table>
### COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17721 Digital Air-Ground Range</td>
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<td>1 --</td>
<td>14183806</td>
<td>(14,184)</td>
</tr>
<tr>
<td>17721 Range Improvements</td>
<td>EA</td>
<td>1 --</td>
<td>3087819</td>
<td>(3,088)</td>
</tr>
<tr>
<td>17721 Range Site work</td>
<td>EA</td>
<td>1 --</td>
<td>3245371</td>
<td>(3,245)</td>
</tr>
<tr>
<td>17721 Range Operations Control Area</td>
<td>EA</td>
<td>1 --</td>
<td>29,154</td>
<td>(29)</td>
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<tr>
<td>17721 Control Tower</td>
<td>EA</td>
<td>1 --</td>
<td>668,375</td>
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<td></td>
<td>(1,163)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
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<td></td>
<td>834</td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(199)</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(146)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(46)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(2)</td>
</tr>
<tr>
<td>Site Imp(156) Demo(45)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(201)</td>
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<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(240)</td>
</tr>
</tbody>
</table>

**ESTIMATED CONTRACT COST**

- **CONTINGENCY (5.00%)**
  
- **SUBTOTAL**
  
- **SUPV, INSPECTION & OVERHEAD (5.70%)**
  
- **TOTAL REQUEST**
  
- **TOTAL REQUEST (ROUNDED)**
  
- **INSTALLED EQT-OTHER APPROP**

Construct a modified standard design Digital Air/Ground Integration Range (DAGIR). Primary facilities include the DAGIR, downrange improvements, sitework, range operations control area, control tower, operations/storage building, a new latrine and renovation of an existing latrine, battery shop, vehicle instrumentation dock, renovation of After Action Review (AAR) building, renovation of covered mess, renovation of ammo loading dock, and upgrade of unit staging area. Supporting facilities include electric service; water, sewer, and gas; paving, walks, curbs and gutters; storm drainage; site improvements, and building information systems. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Demolish 2 buildings at Fort Knox, KY (Total 89 m2/960 SF). Air Conditioning (Estimated 53 kWr/15 Tons).
sections, squads, and Platoons on skills necessary to detect, identify, and effectively engage stationary and moving infantry and/or armor targets in a tactical array. Company Combined Arms Live Fire Exercises (CALFEX) and fully integrated advanced tables are supported by this facility. Additionally, the DAGIR will enable critical air-ground integration tactics, techniques, and procedures (TTP) training to ensure the optimum teaming of ground and air, Army, and joint platforms. The DAGIR also supports medium or heavy combat aviation brigades (CABs).

CURRENT SITUATION: Currently, Fort Knox has a Multipurpose Range Complex/Heavy (MPRC-H) that is twenty years old and has legacy targetry that does not comply with current Army training standards and lacks the required infrastructure to provide automated scoring and feedback in support of direct fire and aviation gunnery. Currently, the MPRC serves both the Fort Knox and Fort Campbell units for aviation training. Fort Campbell does not have the space or the facilities required to provide Army standard aviation training. Existing facilities do not integrate with current targetry systems and the existing range does not have the density of targetry to meet standard Army training requirements. The mission of combat readiness is hindered due to the lack of existing ranges which can fully support the current doctrine and targetry systems.

IMPACT IF NOT PROVIDED: If this project is not provided, existing ranges cannot adequately meet the qualification-training throughput for aviation units stationed at Fort Campbell and Army units that train at Fort Knox. These units will continue to train under circumstances that will negatively impact the degree of proficiency required for combat.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships)
certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

   (1) Status:
       (a) Date Design Started................................. JAN 2017
       (b) Percent Complete as of January 2018............... 35.00
       (c) Date 35% Designed................................. JAN 2018
       (d) Date Design Complete.............................. OCT 2018
       (e) Parametric Cost Estimating Used to Develop Costs.. YES
       (f) Type of Design Contract: Design-bid-build
       (g) An energy study and life cycle cost analysis will be documented during the final design.

   (2) Basis:
       (a) Standard or Definitive Design: YES
       (b) Where Design Was Most Recently Used:
           Fort Bliss
       (c) Percentage of Design utilizing Standard Design ...

   (3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
       (a) Production of Plans and Specifications............ 1,365
       (b) All Other Design Costs.......................................................... 545
       (c) Total Design Cost................................................................. 1,910
       (d) Contract................................................................. 1,365
       (e) In-house................................................................. 545

   (4) Construction Contract Award............................ JAN 2019

   (5) Construction Start.............................. MAR 2019

   (6) Construction Completion.......................... MAR 2021
B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Appropriation Year</th>
<th>Cost ($)</th>
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<td>Target Equipment</td>
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<td>2021</td>
<td>11,502</td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
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Total 17,740
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<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST MISSION</th>
<th>PAGE</th>
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<tbody>
<tr>
<td>New Jersey</td>
<td>Picatinny Arsenal (IMCOM)</td>
<td>63054</td>
<td>Munitions Disassembly Complex</td>
<td>$41,000</td>
<td>$41,000 C</td>
<td>63</td>
</tr>
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<td></td>
<td></td>
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<td>Subtotal Picatinny Arsenal Part I</td>
<td>$41,000</td>
<td>$41,000</td>
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<td></td>
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<td>* TOTAL MCA FOR New Jersey</td>
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6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
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<tbody>
<tr>
<td>Officer Enlisted</td>
<td>79</td>
<td>148</td>
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<td>Civil Officer</td>
<td>0</td>
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</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>148</td>
<td>2938</td>
<td>3955</td>
</tr>
</tbody>
</table>

A. AS OF 31 OCT 2017

B. END FY 2023

7. INVENTORY DATA ($000)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tr>
<td>A. Total Area...........</td>
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<tr>
<td>B. Inventory Total As Of 05 JUL 2017............... 3,057,689</td>
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<tr>
<td>C. Authorization Not Yet In Inventory................ 181,293</td>
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<tr>
<td>E. Authorization Included in the FY 2020 Program............... 0</td>
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<tr>
<td>F. Planned in Next Three Years (New Mission Only)............ 0</td>
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<tr>
<td>G. Remaining Deficiency........................................ 199,767</td>
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</tr>
<tr>
<td>H. Grand Total.................................................. 3,479,749</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

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<thead>
<tr>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST/UM ($000)</th>
<th>START</th>
<th>COMPLETE</th>
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</thead>
<tbody>
<tr>
<td>31620</td>
<td>Munitions Disassembly Complex</td>
<td>22,771.00/SF(2115.49/m2)</td>
<td>41,000</td>
<td>06/2017 10/2018</td>
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<td></td>
<td><strong>TOTAL</strong></td>
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9. FUTURE PROJECT APPROPRIATIONS:

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<td>A. Included in the FY 2020 Program:</td>
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<tr>
<td>B. Planned Next Three Program Years (New Mission Only):</td>
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</tr>
<tr>
<td>C. Deferred Sustainment, Restoration, and Modernization (SRM):</td>
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</tr>
</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

Mission: To conduct R&D and life cycle engineering of assigned material. To execute assigned missions in support of other US Army Materiel Command (AMC) or Department of Defense (DOD) elements having centralized management responsibility for specific weapon systems. To maintain a technological base to accomplish development, productions and life cycle support of assigned materiel.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>A. Air Pollution</td>
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<tr>
<td>B. Water Pollution</td>
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<tr>
<td>C. Occupational Safety and Health</td>
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</table>
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### Cost Estimates

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31620 Munitions Disassembly Facility</td>
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<tr>
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<tr>
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<tr>
<td>42215 Day Storage Magazine</td>
<td>m2 (SF)</td>
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<td>(480)</td>
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<tr>
<td>42215 Long Term Storage Magazine</td>
<td>m2 (SF)</td>
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<td>Total from Continuation page(s)</td>
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<td>(2,344)</td>
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<td>SUPPORTING FACILITIES</td>
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<tr>
<td>Electric Service</td>
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<td>--</td>
<td>(552)</td>
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<tr>
<td>Water, Sewer, Gas</td>
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<td>--</td>
<td>(1,593)</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters</td>
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<td>--</td>
<td>--</td>
<td>(1,100)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,154)</td>
</tr>
<tr>
<td>Site Imp (4,725) Demo (2,380)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(7,105)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(422)</td>
</tr>
<tr>
<td><strong>ESTIMATED CONTRACT COST</strong></td>
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<td></td>
<td></td>
<td>37,082</td>
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<tr>
<td><strong>CONTINGENCY (5.00%)</strong></td>
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<td>1,854</td>
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<td><strong>SUBTOTAL</strong></td>
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<td></td>
<td>38,936</td>
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<tr>
<td><strong>SUPV, INSP &amp; OVERHEAD (5.70%)</strong></td>
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<td>2,219</td>
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<td><strong>TOTAL REQUEST</strong></td>
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<tr>
<td><strong>TOTAL REQUEST (ROUNDED)</strong></td>
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<tr>
<td><strong>INSTALLED EQT-OTHER APPROP</strong></td>
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<td>(1,005)</td>
</tr>
</tbody>
</table>

**10. Description of Proposed Construction**

Construct a Munitions Disassembly Complex comprised of a munitions disassembly facility, robotics experimentation/field office, render-safe area, day storage magazine and long term storage magazines with a storage shed. Interior facilities program will include a weapons firing tunnel with bullet catch system; high explosive material handling observation rooms; command and control room; and weapon and fuse disassembly. Project also includes mass notification system, building information systems, fire protection and alarm systems, Electronic Security System (ESS) installation, duress alarm, Closed Circuit Television (CCTV) installation, and Energy Monitoring and Control Systems (EMCS) connection. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, fencing, gates, storm drainage, building information systems, landscaping and signage, wetland mitigation. Existing building demolition requires either burn or thermal process of disposal as well as asbestos and lead paint abatement. Heating and air conditioning will be provided by self-contained system. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Demolish 4 buildings at Picatinny Arsenal, NJ (Total 58 m2/629 SF). Air Conditioning (Estimated 200 kWr/57 Tons).
### COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44222 Storage Shed</td>
<td>m2 (SF)</td>
<td>20.90 (225)</td>
<td>3,732</td>
<td>(78)</td>
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<tr>
<td>00000 EMCS Connections</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(54)</td>
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<tr>
<td>00000 IDS Installation</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(51)</td>
</tr>
<tr>
<td>31620 Cyber Security Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
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<td>--</td>
<td>--</td>
<td>(483)</td>
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<td>Antiterrorism Measures</td>
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<td>Building Information Systems</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>2,344</strong></td>
</tr>
</tbody>
</table>

### PROJECT: Construct a Munitions Disassembly Complex at Picatinny Arsenal, New Jersey.

**REQUIREMENT:** This project is required to provide facilities to support the Explosive Ordnance Disposal Technology (EDOT) Directorate. The EDOT Directorate provides technical support to the materiel development community in the area of development, validation, and verification of munitions disassembly procedures for all conventional U.S. munitions which supports Joint conventional ammunition for all services. This mission must be housed in collocated buildings, providing a safe and efficient order of operations. The nature of the large explosive safety arcs created by this mission requires a site away from inhabited facilities and activities that could be detrimental to the EDOT and installation mission. The EDOT Directorate also performs the Disassembly, Stripping, and Inerting (DSI) of first seen foreign munitions in order to perform Foreign Materiel Exploitation (FME) for all DoD Services and National Ground Intelligence Center (NGIC). The EDOT is the only U.S. Army organization authorized to perform this function. Furthermore they develop new operating concepts involving Explosive Ordnance Disposal (EOD) robots, armed robots, and robot-based munitions delivery systems and develop new tools and robotic applications to expand the role of robots in EOD missions. The EDOT Directorate requires facilities to continue the development, validation, and verification of munitions disassembly procedures for all munitions under the auspices of the Single Manager for Conventional Ammunition (SMCA); develop render safe procedures for the disposal of Improvised Explosive Devices (IED)s and other explosives; experiment with the use of IED tools equipped with EOD tools to counter IED threats in post-conflicts; and improve site stability and security operations. The EDOT staff requires resources in order to develop solutions giving the Soldier greater stand-off from IEDs and unexploded ordnance (UXOs).

**CURRENT SITUATION:** Currently the mission is being met in existing facilities that are undersized, deteriorated, and were not constructed for the current mission. The DSI of first seen foreign munitions is performed in Building 816. This WWII era facility was constructed to perform loading, assembly, and packing of land mines. The current facility has been limited to a net explosive weight (NEW) of 15 pounds due to proximity to inhabited buildings and the facility cannot be used to examine any 1.2 projectile hazard class munitions. Items that impact how the work is conducted include the lack of a floor drain, limited wash stands, and catch basins for capture of environmentally hazardous
CURRENT SITUATION: (CONTINUED)

Within the facility staff members do not have access to decontamination areas mandated by the DoD for safe munitions operations, latrines or change rooms, and conduct the mission in a severely inefficiently laid out building. The dysfunctional layout, mechanical systems, and structure of the building are not conducive to effective testing and identification of the most efficient and advantageous explosive operations in supporting the warfighter. The storage of foreign munitions and test hardware is inefficiently distributed in seven existing high explosive magazines in the 900-Area requiring daily transport of these munitions to the testing locations. Available munitions storage space is inadequate, which limits the quantity of foreign munitions used for daily testing ultimately resulting in limited experimentation and advanced information delivered to the intelligence and safety research community. This facility has a severely limited occupancy and only has the ability to support two EOD students at a time. With a mandate for an education mission meant to support 30-40 students per year with 10-12 on-site at a time, the existing structure cannot be used to train EOD Soldiers in ordnance disassembly and analysis. Additionally, the EODT does not have a facility to experiment with new operating concepts involving EOD robots, armed robots, and robot-based munitions delivery systems to develop new tools to create robotic applications in order to expand the role of robots in EOD missions.

IMPACT IF NOT PROVIDED: If this project is not provided the EODT Directorate will continue to operate under operational, environmental, safety, and health deficiencies and limitations, restricting the full potential of the mission. The ability to counter IED threats to EOD Soldiers and the Joint Force, as well as produce timely integration, demonstration, experimentation, and evaluation of an IED tools-based solution, and render-safe procedures will continue to be hindered by the limitations of their inadequate and unsafe facilities. The current test and research facilities cannot support the continued weapons evolution within overseas contingency operations and future potential threats. They will not be able to meet urgent user needs due to the inability to rapidly integrate, experiment, evaluate, and demonstrate new operational concepts for man-transportable robots equipped with tools to counter IED and Vehicle-Borne Improvised Explosive Device (VBIED) threats, lethal and non-lethal munitions, and special payloads. EODT will also remain incapable of meeting the mission requirement to train EOD Soldiers.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.
12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started...............................  JUN 2017
   (b) Percent Complete as of January 2018...............    35.00
   (c) Date 35% Designed.................................  JAN 2018
   (d) Date Design Complete..............................  OCT 2018
   (e) Parametric Cost Estimating Used to Develop Costs..       YES
   (f) Type of Design Contract:  Design-bid-build
   (g) An energy study and life cycle cost analysis will be
documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design:  NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):    ($000)
       (a) Production of Plans and Specifications............ 2,236
       (b) All Other Design Costs........................................ 1,204
       (c) Total Design Cost........................................... 3,440
       (d) Contract.........................                        2,752
       (e) In-house..................................................  688

(4) Construction Contract Award............................ APR 2019

(5) Construction Start..................................... JUN 2019

(6) Construction Completion................................ JUN 2021

B. Equipment associated with this project which will be provided from
other appropriations:

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<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
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<td>OPA</td>
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<tr>
<td>CCTV</td>
<td>OPA</td>
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<td>344</td>
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<tr>
<td>Info Sys - ISC</td>
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<td>357</td>
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Total                      1,005

Installation Engineer: Phone Number: 973-724-2434
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<tr>
<th>STATE</th>
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<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
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<tr>
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<td>Information Systems Facility</td>
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<td>Subtotal White Sands Missile Range Part I</td>
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<td>TOTAL MCA FOR New Mexico</td>
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</table>
### 6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
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<tr>
<td>OFFICER</td>
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<td>OFFICER</td>
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<td>A. AS OF 31 OCT 2017</td>
<td>64</td>
<td>61</td>
<td>1830</td>
</tr>
<tr>
<td>B. END FY 2023</td>
<td>73</td>
<td>155</td>
<td>1695</td>
</tr>
</tbody>
</table>

### 7. INVENTORY DATA ($000)

| A. TOTAL AREA .......... 936,364 ha (2,313,797 AC) |
| B. INVENTORY TOTAL AS OF 05 JUL 2017 ............................. 4,354,107 |
| C. AUTHORIZATION NOT YET IN INVENTORY ............................ 221,182 |
| D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM .............. 40,000 |
| E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM ............... 0 |
| F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY) ................ 0 |
| G. REMAINING DEFICIENCY ..................................... 75,730 |
| H. GRAND TOTAL ............................................. 4,691,019 |

### 8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST</th>
<th>START</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>13115</td>
<td>Information Systems Facility</td>
<td>56,268.00/SF (5227.47/m²)</td>
<td>40,000</td>
<td>06/2017</td>
<td>10/2018</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL:** 40,000

### 9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM: NONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 10. MISSION OR MAJOR FUNCTIONS:

White Sands Missile Range (WSMR), birthplace of America's missile and space activity, provides Army, Navy, Air Force, Department of Defense (DoD), and other organizations with high quality services for experimentation, test, research, assessment, development, and training in support of the Nation. WSMR always provides the best value; focusing on affordability and stewardship of resources, providing results that consistently exceed expectations while providing a high quality of life for our service members, civilians, and families.

### 11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AIR POLLUTION 0</td>
</tr>
<tr>
<td>B. WATER POLLUTION 0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH 0</td>
</tr>
</tbody>
</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13115 Information Systems Facility</td>
<td>m2 (SF)</td>
<td>5,227 ( 56,268)</td>
<td>3,707</td>
<td>(19,376)</td>
</tr>
<tr>
<td>81160 Redundant Power</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,598)</td>
</tr>
<tr>
<td>13120 Communications Center</td>
<td>m2 (SF)</td>
<td>185.81 ( 2,000)</td>
<td>5,294</td>
<td>(984)</td>
</tr>
<tr>
<td>88020 IDS Installation</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(104)</td>
</tr>
<tr>
<td>89220 EMCS Connection</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(52)</td>
</tr>
<tr>
<td>Total from Continuation page(s)</td>
<td></td>
<td></td>
<td></td>
<td>(8,010)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(522)</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
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<td>--</td>
<td>(77)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(161)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(240)</td>
</tr>
<tr>
<td>Site Imp(3,658) Demo(462)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(4,120)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,021)</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST 36,265
CONTINGENCY (5.00%) 1,813
SUBTOTAL 38,078
SUPV, INSPI & OVERHEAD (5.70%) 2,170
TOTAL REQUEST 40,248
TOTAL REQUEST (ROUNDED) 40,000
INSTALLED EQT-OTHER APPROP 13,360

10. Description of Proposed Construction

Construct an Information Systems Facility (ISF) and a Communications Center with redundant power, an Intrusion Detection System (IDS) and connection to the Energy Monitoring and Control System (EMCS). The facilities will have state of the art network systems, telephonic, voice, and enterprise storage equipment to support installation wide communication network services. The project includes administrative offices, laboratory space, a server farm area, enterprise storage systems, telephone switch room, information assurance secure operations center, customer support branch, data center Non-classified Internet Protocol Router (NIPR) Network space, Network Operations Center (NOC), secure room with vault for Outside Plant (OSP), Red NOC, Communications Security (COMSEC), Technical Support Network(TSN) data center, computer help desk, Secure Video Teleconferencing Center (VTC), telecommunications center, building information systems, Secret Internet Protocol Router (SIPR) Network data center, reception area, conference room, battery storage area, break room and, rest rooms. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Demolish 2
COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>COST ($000)</th>
</tr>
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<tr>
<td>00000 Cybersecurity Measures</td>
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<td>--</td>
<td>(750)</td>
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<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(416)</td>
</tr>
<tr>
<td>Antiterrorism Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(416)</td>
</tr>
<tr>
<td>Building Information Systems</td>
<td>LS</td>
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<td>--</td>
<td>(6,428)</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>8,010</strong></td>
</tr>
</tbody>
</table>

DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

buildings at White Sands Missile Range, NM (Total 2,061 m2/22,180 SF). Air Conditioning (Estimated 2,198 kWr/625 Tons).

PROJECT: Construct an Information Systems Facility at White Sands Missile Range (WSMR), New Mexico. (Current Mission)

REQUIREMENT: This project is required to provide WSMR with an adequate ISF necessary to provide a mission essential operational interaction affecting a 24-hour Information Technology and Information Management (IT/IM) between Command, tenants, and Other Government Agency (OGA) partners. The facility includes space for a command center for operations support, system and network administrators, operations floor, technical laboratory, Multi-service Technical Control Facility (MTCF), Defense Switched Network (DSN), operations center, administrative offices, customer service center, technical assistance for IT and land mobile radios. The facility also serves the Installation as a Docking Station (IAADS) in its baseline services. The ISF will contain a Network Operations Center (NOC), technical laboratory, Video Teleconferencing (VTC), classroom(s), training room(s), conference room(s) and offices.

CURRENT SITUATION: Currently the ISF occupies both limited and fragmented space in ten separate buildings located at WSMR. Each assigned building has undergone varying levels of retrofit to accommodate the current ISF mission. None of which have been successful for long-term planning. The cooling systems are highly inefficient and inadequate, partly due to the necessary alterations of past floor plans to accommodate equipment expansions throughout the years. The heating system is limited in that the temperature control in the personnel areas cannot be maintained at comfortable limits without overheating equipment areas. Hazardous materials like asbestos and lead are dealt with on a case-by-case basis. Existing building design lacks appropriate workstation space and circulation, is encumbered with safety concerns including poor air quality and limited reliable electrical redundancy, no grounding/bonding/shielding, and noncompliance with the Americans with Disabilities Act (ADA). Assigned geographically separated space cannot provide the operational synergy required for 24-hour information management and the necessary workforce fusion required for network defense.

IMPACT IF NOT PROVIDED: If this project is not provided, the WSMR ISF operations, situational awareness, and security of information and information systems may be compromised due to the inability to provide complete and continuous surveillance and response measures. The inability to expand and support existing and future network systems will negatively effect DoD efforts relating to IT/IM and information security. As
new military technologies and operational concepts grow and mature WSMR will need to position itself to process and transport vast amounts of electronic test data more reliably, efficiently, faster, and securely. The risk to the segment of the Global Information Grid (GIG) will affect the integrity and reliability of the global networks, adversely affecting field commanders’ capability to reach-back which is a vital mission requirement for the warfighter. Secure and reliable information may not be readily available to installation and field commanders and will compromise the integrity and confidentiality of information systems available to the warfighter.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
- (a) Date Design Started: JUN 2017
- (b) Percent Complete as of January 2018: 35.00
- (c) Date 35% Designed: JAN 2018
- (d) Date Design Complete: OCT 2018
- (e) Parametric Cost Estimating Used to Develop Costs: YES
- (f) Type of Design Contract: Design-bid-build
- (g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
- (a) Standard or Definitive Design: YES
- (b) Where Design Was Most Recently Used:
- (c) Percentage of Design utilizing Standard Design ...

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
- (a) Production of Plans and Specifications: 2,160
- (b) All Other Design Costs: 1,440
A. Estimated Design Data: (CONTINUED..)

(c) Total Design Cost................................. 3,600
(d) Contract.......................................... 2,880
(e) In-house.......................................... 720

(4) Construction Contract Award............................ APR 2019

(5) Construction Start..................................... JUN 2019

(6) Construction Completion................................ JUN 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year</th>
<th>appropriation Or Requested</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>OPA</td>
<td>2020</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>IDS Equipment</td>
<td>OPA</td>
<td>2020</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Electronic Access Control</td>
<td>OPA</td>
<td>2020</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Clean Agent Supp System w/ VES</td>
<td>OPA</td>
<td>2020</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>UPS Equipment</td>
<td>OPA</td>
<td>2020</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>2,532</td>
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<tr>
<td>Info Sys - PROP</td>
<td>RDT&amp;E</td>
<td>2020</td>
<td>10,358</td>
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</tbody>
</table>

Total 13,360

Installation Engineer: Phone Number: 575-678-2252
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>NEW/ CURRENT MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>West Point Military Reservation (IMCOM)</td>
<td>78804</td>
<td>Engineering Center</td>
<td>95,000</td>
<td>95,000</td>
<td>C 81</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78805</td>
<td>Parking Structure</td>
<td>65,000</td>
<td>65,000</td>
<td>C 85</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal West Point Military Reservation Part I</td>
<td>$160,000</td>
<td>160,000</td>
<td></td>
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</tr>
</tbody>
</table>

* TOTAL MCA FOR New York $160,000 160,000
6. PERSONNEL STRENGTH:

A. AS OF 31 OCT 2017:

<table>
<thead>
<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>761</td>
<td>406</td>
<td>2152</td>
<td>41</td>
<td>5268</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>4004</td>
<td>12,637</td>
</tr>
</tbody>
</table>

B. END FY 2023:

<table>
<thead>
<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>759</td>
<td>407</td>
<td>2111</td>
<td>6</td>
<td>3961</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3982</td>
<td>11,231</td>
</tr>
</tbody>
</table>

7. INVENTORY DATA ($000):

A. Total Area............. 6,507 ha (16,078 AC)
B. Inventory total as of 05 Jul 2017.................... 4,272,320
C. Authorization not yet in inventory...................... 92,000
D. Authorization requested in the FY 2019 program........... 160,000
E. Authorization included in the FY 2020 program............. 0
F. Planned in next three years (new mission only)............ 0
G. Remaining deficiency.................................... 369,850
H. Grand total........................................... 4,894,170

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17138</td>
<td>Engineering Center</td>
<td>$136,000.00/SF (12634.81/m2)</td>
<td>95,000</td>
<td>06/2017</td>
<td>05/2019</td>
</tr>
<tr>
<td>85218</td>
<td>Parking Structure</td>
<td>$450.00/EA (450.00/EA)</td>
<td>65,000</td>
<td>12/2017</td>
<td>07/2019</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>160,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. FUTURE PROJECT APPROPRIATIONS:

A. Included in the FY 2020 program: None
B. Planned next three program years (new mission only): None
C. Deferred sustainment, restoration, and modernization (SRM): N/A

10. MISSION OR MAJOR FUNCTIONS:

To educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honor, Country and prepared for a career of professional excellence and service to the Nation as an officer in the United States Army.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Air pollution</td>
</tr>
<tr>
<td>B. Water pollution</td>
</tr>
<tr>
<td>C. Occupational safety and health</td>
</tr>
</tbody>
</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17138 Instructional Building</td>
<td>m2 (SF)</td>
<td>12,635</td>
<td>4,379</td>
<td>55,334</td>
</tr>
<tr>
<td>14113 Guardbooth</td>
<td>m2 (SF)</td>
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<td>8,759</td>
<td>81</td>
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<tr>
<td>82610 Air-Conditioning Plant</td>
<td>kWr (TN)</td>
<td>3,517</td>
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<td>1,383</td>
</tr>
<tr>
<td>00000 Cyber Security Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>1,000</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
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<td>--</td>
<td>1,107</td>
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<tr>
<td>Total from Continuation page(s)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
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<tr>
<td>Electric Service</td>
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<td>3,384</td>
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<td>--</td>
<td>950</td>
</tr>
<tr>
<td>Steam/Chilled Water Distribution</td>
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<td>--</td>
<td>2,737</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters</td>
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<td>--</td>
<td>--</td>
<td>676</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>83</td>
</tr>
<tr>
<td>Site Imp(15,628) Demo(369)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>15,997</td>
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<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>232</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST
CONTINGENCY (5.00%) 4,302
SUBTOTAL 90,343
SUPV, INSPI & OVERHEAD (5.70%) 5,150
TOTAL REQUEST 95,493
TOTAL REQUEST (ROUNDED) 95,000
INSTALLED EQT-OTHER APPROP (40,722)

10. Description of Proposed Construction
Construct an Engineering Center to provide a state-of-the-art collaborative educational space in support of multi-disciplinary project based engineering education for Science, Technology, Engineering and Mathematics (STEM). Project includes an instructional building with mission-critical laboratory and laboratory support spaces, guard booth, an air conditioning plant, project fabrication spaces, high bay space with overhead lift capability, project display spaces, collaborative work spaces, capstone work spaces, conference rooms, spray booths, loading dock, a mass notification system, Building Information Systems (BIS), fire detection system, Intrusion Detection System (IDS) installation, and Energy Monitoring Control Systems (EMCS) connection to the installation central system. Supporting facilities include utilities, site improvements to include extension of existing historic pedestrian walk, extension of historic stone retaining walls, relocation of existing passive and active barriers, paving, vehicular drives, parking, walks, curbs and gutters, and storm drainage. Heating and air conditioning will be provided by a central plant. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air
### COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiterrorism Measures LS</td>
<td>--</td>
<td>--</td>
<td>(1,110)</td>
</tr>
<tr>
<td>Building Information Systems LS</td>
<td>--</td>
<td>--</td>
<td>(1,967)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>3,077</strong></td>
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</tbody>
</table>

### DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

Conditioning (Estimated 2,110 kWr/600 Tons).

11. REQ: 12,635 m²  ADQT: NONE  SUBSTD: 3,084 m²

**PROJECT:** Construct an Engineering Center at West Point Military Reservation, New York.

**REQUIREMENT:**  This project is required to provide the U.S. Military Academy (USMA) with flexible multi-disciplinary project based educational space for Science, Technology, Engineering and Mathematics (STEM) that achieves compliance with academic standards. The facility is required to compete with peer institutions for recruitment of STEM students and, in particular, highly recruited under-representative candidates. This project will provide open, unstructured project areas, high-bay space, collaborative workspaces and laboratories essential for project-based learning. By bringing the engineering and cyber programs from several different academic buildings into one, cross-disciplinary collaboration and project-based education will be brought up to 21st Century practices. High-bay space and overhead lift capability will allow Cadets to work on projects exceeding 8ft in height and to work thru the winter months. Open and unstructured project areas will allow proper materials handling capabilities. A proper loading dock, adjacencies for rapid fabrication, and visibility into fabrication and project spaces will cut down life, health, safety challenges. This project will provide air handling and fume ventilation for application of coatings, glues, paints and chemical treatments.

**CURRENT SITUATION:**  Currently, there are no adequate existing permanent facilities available at the West Point Military Reservation to support compliance with engineering academic standards and the requirements to turn out high caliber, Army ready Soldiers at the USMA. As functions and requirements have changed, existing facilities have become inadequate for the success of the program mission. Functions are scattered throughout the buildings, so preferred adjacencies, utilities, climate control, ceiling height and material handling capacity are not available. Adequate facilities for the support of project-based learning and Cyber Security Studies do not exist, and there are on-going issues with water infiltration, insufficient provision of air and circulation, inflexibility of layout spaces, and difficulty in providing new utilities.

**IMPACT IF NOT PROVIDED:**  If this project is not provided, the USMA engineering education facilities will fail to meet the standards set by peer universities risking Cadet injury, potential loss of Engineering Accreditation, and loss of prime Collegiate recruits. The quality of the engineering education at the Academy will continue to deteriorate, particularly as compared to peer and near-peer institutions. The nationally-ranked engineering programs absolutely require this modernization to maintain the edge, and a failure to act will have a significant negative impact on the accession of trained engineers and cyber-security personnel into the Army as cadets and potential cadets.
choose other academic majors and other universities. Further, recruiting of new cadets, particularly those not familiar with the USMA, such as under-represented groups, would be negatively impacted as the deteriorated existing facility looks progressively less competitive with peer institutions.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
(a) Date Design Started................................. JUN 2017
(b) Percent Complete as of January 2018............... 35.00
(c) Date 35% Designed................................. JAN 2018
(d) Date Design Complete.............................. MAY 2019
(e) Parametric Cost Estimating Used to Develop Costs.. YES
(f) Type of Design Contract: Design-bid-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
(a) Standard or Definitive Design: YES
(b) Where Design Was Most Recently Used: Port Gordon
(c) Percentage of Design utilizing Standard Design ... 50

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):
(a) Production of Plans and Specifications............ 4,730
(b) All Other Design Costs............................ 430
(c) Total Design Cost................................. 5,160
(d) Contract.......................................... 4,730
(e) In-house.......................................... 430
A. Estimated Design Data: (CONTINUED..)

(4) Construction Contract Award............................ SEP 2019

(5) Construction Start..................................... NOV 2019

(6) Construction Completion................................ NOV 2022

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<tr>
<td>Info Sys - PROP</td>
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<td><strong>40,722</strong></td>
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Installation Engineer: Phone Number: 845-938-3415
### Cost Estimates

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
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<tbody>
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<td>PRIMARY FACILITY</td>
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<tr>
<td>85218 Parking Structure</td>
<td>450</td>
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<tr>
<td>00000 Cyber Security Measures</td>
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<td>(454)</td>
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<tr>
<td>Sustainability/Energy Measures</td>
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<td>--</td>
<td>(578)</td>
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<tr>
<td>Antiterrorism Measures</td>
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<td>--</td>
<td>(454)</td>
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<td>SUPPORTING FACILITIES</td>
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<td><strong>CONTINGENCY (5.00%)</strong></td>
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<td><strong>SUBTOTAL</strong></td>
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<td><strong>SUPV, INSP &amp; OVERHEAD (5.70%)</strong></td>
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<td><strong>TOTAL REQUEST (ROUNDED)</strong></td>
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<tr>
<td><strong>INSTALLED EQT-OTHER APPROP</strong></td>
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<td>(0)</td>
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</table>

#### 10. Description of Proposed Construction

Construct Parking Structure for faculty and staff to support the academic program within the central Cadet Zone area of West Point Military Reservation, NY. The parking structure shall provide 450 parking stalls, access elevators, exterior paved walkways, lighting, electronic security system, and guard booth. Supporting facilities include solar arrays mounted to shade structures on the roof, electric service, outdoor security lighting, electric car charging stations, Common Access Card (CAC) reader enabled control access gates, fire protection (to include a dry sprinkler system and additional fire hydrants), elevator, and stairs. The project also includes site improvements for utility connections, extension of existing historic pedestrian mall (Thayer Walk), extension and replacement of historic stone retaining walls, renovation of in-kind historic properties, relocation of existing passive and active barriers, vehicular drives, parking, exterior paved pedestrian areas, curbs and gutters, storm drainage, building information systems, signage, and landscaping. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

#### 11. REQ:

450 SP ADQT: NONE SUBSTD: NONE

PROJECT: Construct a Parking Structure at West Point Military reservation, NY. (Current Mission)

REQUIREMENT: This project is required to support the parking demand within the academic
REQUIRED: (CONTINUED)
campus of West Point. Parking and circulation studies conducted by the Garrison in the
past indicate the need to eliminate existing parking due to antiterrorism force
protection violations; the need to restrict vehicle access within the academic campus for
safety and security purposes; and the need to provide additional parking for staff and
faculty. This project would comply with recommendations made by the Garrison’s parking
and circulation studies by providing a 450 parking spaces within a multi-story parking
structure. Its proposed location along Thayer Road will support the parking demands of
faculty and staff, and accommodate displaced parking to be removed in accordance with
minimum antiterrorism force protection standards.
CURRENT SITUATION: Parking within the academic campus area is critically short, and
does not meet the requirement of numerous faculty and staff that work within this area.
Additionally, much of the parking is in violation of Antiterrorism force protection
standards, and needs to be relocated. Examples of this violation include parking on the
roof of Thayer Hall (the location of most Cadet classrooms and over 1,000 DoD personnel
during peak operation hours); and parking adjacent and underneath Mahan Hall (another
major academic and administrative facility). Additionally, parking may be permitted for
visitors on a limited basis, which is currently unavailable within the academic campus.
Due to the steep terrain and limited developable land and the dense arrangement of campus
buildings, the parking structure will be multi-story. This will enable the required 450
parking spaces to fit within the dense urban campus, minimize the amount of land needed,
and account for the steep slopes. The steep terrain and rock conditions will require
extensive rock blasting and removal/disposal.
IMPACT IF NOT PROVIDED: If this project is not provided, a gross deficit in parking
throughout the academic campus will continue to be a critical issue at the installation.
The need for faculty and staff parking within the campus will necessitate the continued
use of parking on and adjacent to Thayer and Mahan Halls. This will prolong violations of
minimum antiterrorism force protection standards. Distant parking lots are beyond the
acceptable distance to principal buildings per international building codes.
ADDITIONAL: Required assessments have been made for supporting facilities and the
project is not in a 100-year floodplain in accordance with Executive Order 11988. This
project has been coordinated with the installation physical security plan, and all
physical security measures are included. All required antiterrorism protection measures
are included. Alternative methods of meeting this requirement have been explored during
project development. This project is the only feasible option to meet the requirement.
The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships)
certifies that this project has been considered for joint use potential. The facility
will be available for use by other components. Sustainable principles, to include life
cycle cost effective practices, will be integrated into the design, development and
construction of the project and will follow the guidance detailed in the Army Sustainable
Design and Development Policy - complying with applicable laws and executive orders.
12. SUPPLEMENTAL DATA:
A. Estimated Design Data:
   (1) Status:
   (a) Date Design Started.................................  DEC 2017
   (b) Percent Complete as of January 2018.............  15.00
A. Estimated Design Data: (CONTINUED..)
   (c) Date 35% Designed.................................  JUN 2018
   (d) Date Design Complete..............................  JUL 2019
   (e) Parametric Cost Estimating Used to Develop Costs..        NO
   (f) Type of Design Contract:  Design-bid-build
   (g) An energy study and life cycle cost analysis will be
documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design:  NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):    ($000)
   (a) Production of Plans and Specifications............  1,740
   (b) All Other Design Costs............................  3,440
   (c) Total Design Cost.................................  5,180
   (d) Contract..........................................  4,176
   (e) In-house..........................................  1,004

(4) Construction Contract Award............................ SEP 2019

(5) Construction Start..................................... OCT 2019

(6) Construction Completion................................ OCT 2022

B. Equipment associated with this project which will be provided from
other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested</th>
<th>Cost ($000)</th>
</tr>
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Installation Engineer:  Phone Number:  845.938.3415
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION</th>
<th>APPROPRIATION CURRENT</th>
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<tbody>
<tr>
<td>North Carolina</td>
<td>Fort Bragg (IMCOM)</td>
<td>82254</td>
<td>Dining Facility</td>
<td>10,000</td>
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* TOTAL MCA FOR North Carolina $10,000 $10,000

Subtotal Fort Bragg Part I $10,000 $10,000
6. PERSONNEL STRENGTH:

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<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
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<td>8214</td>
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<td>B. END FY 2023</td>
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<td>8311</td>
<td>724 2944</td>
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<td></td>
<td>105</td>
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7. INVENTORY DATA ($000)

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<td>(1,463,974 AC)</td>
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<td>B. AUTHORIZATION NOT YET IN INVENTORY</td>
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<td>C. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM</td>
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<td>D. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM</td>
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<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)</td>
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<td>H. GRAND TOTAL</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

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<th>CAT CODE</th>
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<th>SCOPE/UM</th>
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<td>10/2018</td>
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9. FUTURE PROJECT APPROPRIATIONS:

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<th>PROJECT TITLE</th>
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<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM:</td>
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<td>Dining Facility</td>
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<td>TOTAL</td>
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<td>B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE</td>
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<tr>
<td>C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A</td>
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10. MISSION OR MAJOR FUNCTIONS:

- Provide the nation's Armed Forces with a sustaining base and a power projection platform, in support of National Objectives. Major functions include: Support and enable operational and training requirements of Maneuver units, support basic and advanced skill training for new Soldiers; exercise command and control; provide for public safety and security; provide sound stewardship of installation resources and the environment; provide services/programs to enable readiness; execute community and family support services and programs; maintain and improve installation infrastructure.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

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<th>CATEGORY</th>
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<td>B. WATER POLLUTION</td>
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<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
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### 9. COST ESTIMATES

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<th>ITEM</th>
<th>QUANTITY</th>
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<th>COST($000)</th>
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<td>(7,301)</td>
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<tr>
<td>00000 Cybersecurity Measures</td>
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<td>(500)</td>
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<tr>
<td>Sustainability/Energy Measures</td>
<td>LS -</td>
<td>--</td>
<td>(149)</td>
</tr>
</tbody>
</table>

| SUPPORTING FACILITIES                   |          |           |            |
| Electric Service                        | LS -     | --        | (234)      |
| Water, Sewer, Gas                       | LS -     | --        | (175)      |
| Paving, Walks, Curbs And Gutters        | LS -     | --        | (85)       |
| Storm Drainage                          | LS -     | --        | (132)      |
| Site Imp(288) Demo( )                   | LS -     | --        | (288)      |
| Information Systems                     | LS -     | --        | (138)      |

| ESTIMATED CONTRACT COST                 |          |           | 9,002      |
| CONTINGENCY (5.00%)                     |          |           | 450        |
| SUBTOTAL                                |          |           | 9,452      |
| SUPV, INSP & OVERHEAD (5.70%)           |          |           | 539        |
| TOTAL REQUEST                           |          |           | 9,991      |
| TOTAL REQUEST (ROUNDED)                 |          |           | 10,000     |
| INSTALLED EQT-OTHER APPROP              |          |           | (0)        |

10. Description of Proposed Construction

Construct a permanent party modified small standard design Dining Facility. Project includes food preparation and cooking areas, entrance/ control area, serving, dining (300 F N seating capacity), dishwashing, pot wash, administration, staff locker area, patron's restrooms, waste disposal, receiving and loading dock, cold and dry storage, building information systems, fire detection, alarm, and suppression systems, and Energy Monitoring Control Systems (EMCS) connection. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 211 kWr/60 Tons).
REQUIREMENT: (CONTINUED)

Training Facility (ATF) a remote site on Fort Bragg. Growth of ATF has increased to a transient population of approximately 450 personnel with anticipated growth to reach 850 by 2019.

CURRENT SITUATION: Currently, dining facility functions are conducted in Building O-9073 which was constructed in 1982 and does not meet current standards. This facility was designed and constructed with a seating capacity for 100 Soldiers. Cold storage is located in Building O-9050, a separate facility. The presence of mold is a continuous abatement issue. Current electrical, mechanical, and plumbing systems as well as kitchen equipment are at the end of their useful life. The ATF is a remote training site on the western side of the Fort Bragg reservation with the nearest dining facility being approximately 25 miles away in the main cantonment area.

IMPACT IF NOT PROVIDED: If this project is not funded, ATF will continue to have an inadequate dining facility that is essential to effectively support command mission requirements. Continued use of an undersized facility with remote cold storage negatively impacts food storage, food preparation functions, and food service. Additionally, inadequate dining space will continue resulting in extended serving hours for each meal. This population growth will only increase the demand causing further space and time issues related to serving.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

   A. Estimated Design Data:

   (1) Status:
   (a) Date Design Started................................. APR 2017
   (b) Percent Complete as of January 2018............. 35.00
   (c) Date 35% Designed................................. JAN 2018
   (d) Date Design Complete............................... OCT 2018
   (e) Parametric Cost Estimating Used to Develop Costs.. YES
   (f) Type of Design Contract: Adapt-build
   (g) An energy study and life cycle cost analysis will be documented during the final design.
A. Estimated Design Data: (CONTINUED..)
   (2) Basis:
      (a) Standard or Definitive Design: YES
      (b) Where Design Was Most Recently Used:
          Fort Bragg
      (c) Percentage of Design utilizing Standard Design ... 75
   (3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
      (a) Production of Plans and Specifications............ 560
      (b) All Other Design Costs............................ 340
      (c) Total Design Cost.................................... 900
      (d) Contract.......................................... 585
      (e) In-house.......................................... 315
   (4) Construction Contract Award......................... FEB 2019
   (5) Construction Start................................. APR 2019
   (6) Construction Completion............................. OCT 2020

B. Equipment associated with this project which will be provided from
other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested Cost ($000)</th>
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<tbody>
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<tr>
<td>STATE</td>
<td>INSTALLATION (COMMAND)</td>
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<tr>
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<tr>
<td>South Carolina</td>
<td>Fort Jackson (IMCOM)</td>
<td>76218</td>
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Subtotal Fort Jackson Part I $ 52,000 52,000

* TOTAL MCA FOR South Carolina $ 52,000 52,000
6. PERSONNEL STRENGTH:

<table>
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<tr>
<th></th>
<th>OFFICER</th>
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<th>CIVIL</th>
<th>OFFICER</th>
<th>ENLIST</th>
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<tbody>
<tr>
<td>(1) PERMANENT</td>
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<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>974</td>
<td>3788</td>
<td>2178</td>
<td>399</td>
<td>21364</td>
<td>19</td>
<td>166</td>
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<td>(2) STUDENTS</td>
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B. END FY 2023

<table>
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<tr>
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<th>ENLIST</th>
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<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
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</tr>
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<tbody>
<tr>
<td>(1) PERMANENT</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>911</td>
<td>4061</td>
<td>2087</td>
<td>392</td>
<td>20222</td>
<td>31</td>
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<td>390</td>
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<td>30,233</td>
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<td>(2) STUDENTS</td>
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<tr>
<td>(3) SUPPORTED</td>
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<tr>
<td>(4) TOTAL</td>
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</table>

7. INVENTORY DATA ($000)

<p>| | | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>A. TOTAL AREA...........</td>
<td>21,166 ha</td>
<td>(52,303 AC)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>B. INVENTORY TOTAL AS OF 05 JUL 2017.............................</td>
<td>3,805,162</td>
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<tr>
<td>C. AUTHORIZATION NOT YET IN INVENTORY...........................</td>
<td>677,578</td>
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<tr>
<td>D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM..............</td>
<td>52,000</td>
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<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM...............</td>
<td>0</td>
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<tr>
<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)...............</td>
<td>0</td>
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<tr>
<td>G. REMAINING DEFICIENCY..........................................</td>
<td>310,595</td>
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<tr>
<td>H. GRAND TOTAL...................................................</td>
<td>4,845,335</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>72181</td>
<td>Trainee Barracks Complex 3, Ph2</td>
<td>180,300.00/SF(16750.41/m2)</td>
<td>52,000</td>
<td>01/2016</td>
<td>10/2018</td>
<td></td>
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</table>

TOTAL 52,000

9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST ($000)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM</td>
<td>NONE</td>
<td></td>
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<tr>
<td>B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY)</td>
<td>NONE</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM)</td>
<td>N/A</td>
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</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

Provide Basic Combat Training (BCT)/Initial Entry Training (IET), BCT/IET Management & Development, Advanced Individual Training (AIT), and One-Station Unit Training (OSUT). Provide support to the Soldier Support Institute which includes the Adjutant General School, Finance School, Recruiting & Retention School, and NCO Academy. Provide support to the U.S. Army Chaplain Center & School, Drill Sergeant School, DoD Polygraph Institute, and other tenant units and activities. Provide direct support to United States Army Reserve (USAR) components & training divisions.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

| $000 | |
| A. AIR POLLUTION | 0 |
| B. WATER POLLUTION | 0 |
| C. OCCUPATIONAL SAFETY AND HEALTH | 0 |
THIS PAGE INTENTIONALLY LEFT BLANK
10. Description of Proposed Construction: Construct Phase 2, of a two-phase project, to provide a standard-design Trainee Barracks Complex for 1200 Soldiers with Company Operations Facilities (COF). This phase will include three barracks/company operations facilities, three physical training pits, building information systems, fire protection and alarm systems, video surveillance system installation, Intrusion Detection System (IDS) installation, Electronic Security System (ESS) installation and an Energy Monitoring and Control System (EMCS) connection. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 1,407 kWr/400 Tons).

11. REQ: 19,879 PN ADQT: 13,410 PN SUBSTD: 780 PN
PROJECT: Construct Training Barracks Complex 3, Phase 2 at Fort Jackson, South Carolina. (Current Mission)
REQUIREMENT: This phased project is required to provide a standard Basic Combat Trainee (BCT) Complex to support 1,200 trainees (5 Companies) and a cadre of 130 personnel. The provision of BCT is the primary mission of Fort Jackson, which includes supporting the growth in training loads, and providing administrative and cadre support areas.

CURRENT SITUATION: This BCT is currently being accommodated in separate, relocatable, billeting, dining, instructional, operations, training, and supply facilities. The BCT facilities are widely dispersed and poorly situated. Their location is inappropriately intermixed with permanent-party barracks, post administration, community support, and operations functions. Excessive distances between these buildings cause numerous control problems for supporting cadre personnel. Trainees and cadre must march through these areas on the way to and from billeting, mess halls, and training areas causing delays and increased levels of frustration in a heavy traffic zone and endangers the lives of both Soldiers and motorists. The current barracks are filled to capacity. Barracks designed for a capacity of 220 personnel are regularly housing 300 trainees. Male and female Soldiers are currently housed in deteriorating, temporary modular buildings, which were not constructed to current space standards. The Army has also increased the course length of Basic Combat Training (BCT) by one week for a total of ten weeks of training time, which further increases the pressure on overcrowded facilities. Areas for clothes washing and laundry disposition are also inadequate.

IMPACT IF NOT PROVIDED: If this project is not provided, basic trainees will be forced to continue utilizing substandard, obsolete, overcrowded and decaying facilities dispersed throughout a large area poorly suited for basic training. There is a disproportionate ratio of males to females crowded into already inadequate facilities, which continues to struggle to remain in compliance with Gender Integrated Training (GIT). Failure to provide this project will also result in higher attrition rates and a general loss in efficiency, effectiveness, functional and operational ability, morale, quality of training, and quality of life for Soldiers. These identified problems and the subsequent negative impact on training effectiveness will only worsen as the projected increases to training loads being forecasted for Fort Jackson come to fruition. This has an extremely negative impact on training, readiness, morale, and Soldier recruitment and retention.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.
FY2019 MILITARY CONSTRUCTION PROJECT DATA

1. COMPONENT
Army

2. DATE
01 FEB 2018

3. INSTALLATION AND LOCATION
Fort Jackson
South Carolina

4. PROJECT TITLE
Trainee Barracks Complex 3, Ph2

5. PROGRAM ELEMENT
85796A

6. CATEGORY CODE
72181

7. PROJECT NUMBER
76218

8. PROJECT COST ($000)
Approp 52,000

<table>
<thead>
<tr>
<th>FY2015($000)</th>
<th>FY2019($000)</th>
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<tbody>
<tr>
<td>Authorization</td>
<td>$52,000</td>
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<tr>
<td>Authorization of Appropriation</td>
<td>$52,000</td>
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<tr>
<td>Appropriation</td>
<td>$52,000</td>
</tr>
</tbody>
</table>

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
(a) Date Design Started................................. JAN 2016
(b) Percent Complete as of January 2018.................. 35.00
(c) Date 35% Designed.................................. JAN 2018
(d) Date Design Complete................................. OCT 2018
(e) Parametric Cost Estimating Used to Develop Costs... NO
(f) Type of Design Contract: Design-bid-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
(a) Standard or Definitive Design: YES
(b) Where Design Was Most Recently Used:
   Fort Jackson
(c) Percentage of Design utilizing Standard Design ... 100

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
(a) Production of Plans and Specifications.............. 2,415
(b) All Other Design Costs................................ 1,301
(c) Total Design Cost..................................... 3,716
(d) Contract.................................................. 2,973
(e) In-house.................................................. 743

(4) Construction Contract Award.......................... MAR 2019

(5) Construction Start...................................... MAY 2019

(6) Construction Completion................................ MAY 2021
B. Equipment associated with this project which will be provided from other appropriations:

<table>
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<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested Cost ($000)</th>
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<tbody>
<tr>
<td>NA</td>
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Installation Engineer: Phone Number: 803-751-3829
<table>
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<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
<th>CURRENT MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>Fort Bliss (IMCOM)</td>
<td>74989</td>
<td>Supply Support Activity</td>
<td>24,000</td>
<td>24,000</td>
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<tr>
<td></td>
<td>Subtotal Fort Bliss Part I</td>
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<td>$ 24,000</td>
<td>24,000</td>
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</tr>
<tr>
<td></td>
<td>* TOTAL MCA FOR Texas</td>
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<td></td>
<td>$ 24,000</td>
<td>24,000</td>
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<tr>
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<td>** TOTAL INSIDE THE UNITED STATES FOR MCA</td>
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<td>$ 611,200</td>
<td>716,200</td>
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</table>
6. PERSONNEL STRENGTH: (1) PERMANENT (2) STUDENTS (3) SUPPORTED (4) TOTAL

<table>
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<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
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<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>3855</td>
<td>23580</td>
<td>3452</td>
<td>162</td>
<td>1533</td>
<td>5</td>
<td>907</td>
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<td>8078</td>
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<td>B. END FY 2023</td>
<td>3850</td>
<td>23416</td>
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<td>157</td>
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7. INVENTORY DATA ($000)

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<tr>
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<tr>
<td>Authorization Included in the FY 2020 Program</td>
<td>0</td>
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<tr>
<td>Planned in Next Three Years (New Mission Only)</td>
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<tr>
<td>Remaining Deficiency</td>
<td>406,711</td>
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<tr>
<td>Grand Total</td>
<td>13,719,822</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>Project Title</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
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<tbody>
<tr>
<td>44226</td>
<td>Supply Support Activity</td>
<td>61,920.00/SF (5752.55/m2)</td>
<td>24,000</td>
<td>07/2012</td>
<td>10/2018</td>
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9. FUTURE PROJECT APPROPRIATIONS:

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<th>Category</th>
<th>Cost ($000)</th>
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<tbody>
<tr>
<td>A. Included in the FY 2020 Program:</td>
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</tr>
<tr>
<td>B. Planned Next Three Program Years (New Mission Only):</td>
<td>None</td>
</tr>
<tr>
<td>C. Deferred Sustainment, Restoration, and Modernization (SRM):</td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

Provides support to the 1st Armored Division; William Beaumont Army Medical Center; US Army Sergeants Major Academy, and other tenant activities and units. A multi-functional installation that serves as a Power Projection Platform as well as test bed for Joint and Combined Warfare, employing state-of-the-art technologies.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Air Pollution</td>
<td>0</td>
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<tr>
<td>B. Water Pollution</td>
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<tr>
<td>C. Occupational Safety and Health</td>
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</table>
## COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
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<tbody>
<tr>
<td>PRIMARY FACILITY</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>44226 SSA Warehouse</td>
<td>m2 (SF)</td>
<td>5,753 ( 61,920)</td>
<td>1,555</td>
<td>(8,942)</td>
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<tr>
<td>14179 Overhead Canopy</td>
<td>m2 (SF)</td>
<td>1,756 ( 18,900)</td>
<td>1,144</td>
<td>(2,009)</td>
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<td>85210 Organizational Vehicle Parking</td>
<td>m2 (SY)</td>
<td>38,988 ( 46,629)</td>
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<td>85110 Loading/Unloading Apron</td>
<td>m2 (SY)</td>
<td>3,597 ( 4,302)</td>
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<td>(608)</td>
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<tr>
<td>89220 EMCS Connection</td>
<td>LS</td>
<td>--</td>
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<tr>
<td>Total from Continuation page(s)</td>
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<td></td>
<td></td>
<td>(790)</td>
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</tbody>
</table>

| SUPPORTING FACILITIES | | | | |
| Electric Service | LS | -- | -- | (1,723) |
| Water, Sewer, Gas | LS | -- | -- | (851) |
| Paving, Walks, Curbs And Gutters | LS | -- | -- | (702) |
| Storm Drainage | LS | -- | -- | (439) |
| Site Imp(1,319) Demo( ) | LS | -- | -- | (1,319) |
| Information Systems | LS | -- | -- | (256) |

### ESTIMATED CONTRACT COST

- **CONTINGENCY (5.00%)**: 1,084
- **SUBTOTAL**: 22,764
- **SUPV, INSP & OVERHEAD (5.70%)**: 1,298
- **TOTAL REQUEST**: 24,062
- **TOTAL REQUEST (ROUNDED)**: 24,000
- **INSTALLED EQT-OTHER APPROP**: 0

### Description of Proposed Construction

Construct standard design general purpose storage building with loading docks for use as Supply Storage Activity (SSA) Warehouse. Primary facilities include storage buildings with loading docks, overhead canopy storage, loading/unloading apron, organizational vehicle parking, building information systems, fire protection and alarm systems, and Energy Monitoring and Control Systems (EMCS) connection, and installation of Intrusion Detection System (IDS), Closed Circuit Television (CCTV), and duress alarm. Supporting facilities include underground utilities (water, sewer, gas), electric service, parking and access roads, paving, sidewalks, curbs and gutters, sanitary sewer system, storm drainage, information systems, landscaping, site development, and site improvements. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 436 kWr/124 Tons).

### Project Details

- **PROJECT**: Construct a Supply Support Activity (SSA) Warehouse at Fort Bliss, Texas.
PROJECT: (CONTINUED)
(Current Mission)

REQUIREMENT: This project is required to accommodate logistic and administrative operations and will provide space for organizational supply storage. The storage buildings will provide deployment and sustainment operations critical to meeting materiel end-item maintenance, repair, and deployment supply storage. The storage buildings will also include enclosed, covered and open storage space to accomplish materiel receiving, turn-in, shipping, distribution, and storage. The SSA warehouse is space for organizational supply storage and provides enclosed, covered, and open storage space to accomplish material receiving, turn-in, shipping, distribution, and storage of supplies. CURRENT SITUATION: Currently the SSA functions for the 3 Brigades are being operated out of temporary structures of various sizes. Each Brigade SSA function currently occupies 3 temporary structures that are not a long term solution for warehousing mission essential components. All existing facilities suitable for use are fully utilized. The SSA warehouse maximizes and builds upon the increased connectivity being developed for battle command. Other warehouses similar to this type on base are already undersized for the functions they support. There is no room available to expand them.

IMPACT IF NOT PROVIDED: If this project is not provided, Fort Bliss will not be able to efficiently accommodate storage and distribution of material associated with the Supply Support Activities (SSA) and require the continued use of temporary facilities.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

(a) Date Design Started.................. JUL 2012
(b) Percent Complete as of January 2018........ 35.00
(c) Date 35% Designed.................... JAN 2018
(d) Date Design Complete.................. OCT 2018
(e) Parametric Cost Estimating Used to Develop Costs.. YES
(f) Type of Design Contract: Design-bid-build

(2) Basis:
(a) Standard or Definitive Design: YES
(b) Where Design Was Most Recently Used: Fort Sill
(c) Percentage of Design utilizing Standard Design ... 85

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):
(a) Production of Plans and Specifications........ 1,385
(b) All Other Design Costs..................... 775
(c) Total Design Cost........................... 2,160
(d) Contract........................................ 1,404
(e) In-house........................................ 756

(4) Construction Contract Award.................. MAY 2019
(5) Construction Start............................ JUL 2019
(6) Construction Completion........................ JUL 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
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<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Appropriated Or Requested</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
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* TOTAL MCA FOR Germany $31,000 31,000
1. **COMPONENT**
   - **FY 2019 MILITARY CONSTRUCTION PROGRAM**

2. **DATE**
   - **01 FEB 2018**

3. **INSTALLATION AND LOCATION**
   - **1. ARMY**
   - **Germany**
   - **Various**

4. **COMMAND**
   - **US Army Installation Management Command**

5. **AREA CONSTRUCTION COST INDEX**
   - 1.07

6. **PERSONNEL STRENGTH:**
   - **(1) PERMANENT**
   - **(2) STUDENTS**
   - **(3) SUPPORTED**
   - **(4) TOTAL**
   - **OFFICER**
   - **ENLIST**
   - **CIVIL**
   - **OFFICER**
   - **ENLIST**
   - **CIVIL**
   - **OFFICER**
   - **ENLIST**
   - **CIVIL**

   **A. AS OF 31 OCT 2017**
   - 4582
   - 19023
   - 12516
   - 4
   - 120
   - 7
   - 2661
   - 5255
   - 16916
   - 61,084

   **B. END FY 2023**
   - 4700
   - 19545
   - 12234
   - 4
   - 145
   - 3
   - 2661
   - 5280
   - 15760
   - 60,332

7. **INVENTORY DATA ($000)**
   - **A. TOTAL AREA........**
   - 46,148 ha (114,035 AC)
   - **25,332,700**
   - **C. AUTHORIZATION NOT YET IN INVENTORY**
   - 1,761,501
   - **D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM**
   - 31,000
   - **E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM**
   - 0
   - **F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)**
   - 0
   - **G. REMAINING DEFICIENCY**
   - 2,073,938
   - **H. GRAND TOTAL**
   - 29,199,139

8. **PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:**
   - **CAT**
   - **CODE**
   - 17213
   - **PROJECT TITLE**
   - Mission Training Complex
   - **SCOPE/UM ($000)**
   - 45,620.00/SF (4238.23/m2)
   - **START**
   - 01/2017
   - **COMPLETE**
   - 10/2018
   - **TOTAL**
   - 31,000

9. **FUTURE PROJECT APPROPRIATIONS:**
   - **CATEGORY**
   - **CODE**
   - A. INCLUDED IN THE FY 2020 PROGRAM: NONE
   - B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE
   - C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A

10. **MISSION OR MAJOR FUNCTIONS:**
    Installations support US Army, Europe and Seventh Army (USAREUR), a trained and ready force capable of rapidly responding and operating jointly in support of US European Command (EUCOM) theater strategy. Installations serve as a base for projecting power in and out of the EUCOM area of responsibility by providing facilities for training, maintaining, housing, and supporting USAREUR's subordinate and supporting units/organizations.

11. **OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:**
    - **A. AIR POLLUTION**
    - 0
    - **B. WATER POLLUTION**
    - 0
    - **C. OCCUPATIONAL SAFETY AND HEALTH**
    - 0
9. COST ESTIMATES

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<th>ITEM Description</th>
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<th>UNIT COST</th>
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ESTIMATED CONTRACT COST:

| CONTINGENCY (5.00%)                      | 1,384    |
| SUBTOTAL                                  | 29,071   |
| SUPV, INSP & OVERHEAD (6.50%)             | 1,890    |
| TOTAL REQUEST                             | 30,961   |
| TOTAL REQUEST (ROUNDED)                   | 31,000   |
| INSTALLED EQT-OTHER APPROP                | (0)      |

10. Description of Proposed Construction

Construct a Mission Training Complex which includes a battle command training center, entry control facility, Tactical Operations Center (TOC) pads, Intrusion Detection System (IDS) installation, Energy Monitoring and Control System (EMCS) connection, and building information systems. Support facilities include electric service; water, sewer, and gas; steam and/or chilled water distribution, paving, walks, curbs and gutters; storm drainage; site improvement; and information systems. Heating and air conditioning will be provided by a self contained unit. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 404 kWr/115 Tons).

11. REQ: 4,238 m2  ADQT: NONE  SUBSTD: NONE

PROJECT: Construct a Mission Training Complex at East Camp Grafenwoehr, Germany. (Current Mission)

REQUIREMENT: Facility is required to support individual and collective digital training and battle staff training using constructive simulations with Command, Control, Communications, Computers and Intelligence Interoperability (C4I). This project is
REQUIRED: (CONTINUED)
required to provide effective training in the command and control of individual as well as combined operations in a simulated tactical environment, incorporating appropriate opposing forces. This complex is required to support several different levels of battle command training for contingency force units and various additional combat, combat support, and combat service support units. Battle simulations and command post exercises are conducted at company, battalion, brigade, division, corps and joint levels. Size and complexity of battle command training using simulations and C4I systems have increased significantly.

CURRENT SITUATION: The Joint Multinational Simulations Command (JMSC) currently uses 50 re-purposed transient training barracks buildings in five zones that were marginally upgraded in the mid-1990s to execute Command Post exercises. Operating within current facilities requires extensive extra manpower to set up and reconfigure multiple networks depending on the classification of the exercise and type of enclave required (U.S., coalition, NATO etc.). This extra manpower and time to move equipment and setup simulation systems for each exercise can require up to 70 Soldiers to augment and secure the multiple entry points for classified exercises. This dramatically increases the cost for Cyber security, especially in light of our frequent use of coalition and NATO networks in addition to U.S. networks. Standard tactical operation center equipment cannot be properly utilized due to low ceilings and undersized facilities that cannot be reconfigured to meet larger room requirements.

IMPACT IF NOT PROVIDED: Lack of a standardized footprint at Grafenwoehr adds cost to the Army overall as it requires a unique solution set for each exercise. The U.S Army Europe will continue to deploy additional Soldiers from the Continental U.S. for security augmentation at significant cost. The Army will continue to inefficiently use resources to reconfigure networks and exercise areas, utilize sub-standard training areas and classrooms impacting the efficacy of training and will continue with higher cyber security costs.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: This project is not within an established NATO infrastructure category of common funding nor is it expected to become eligible in the foreseeable future.

12. SUPPLEMENTAL DATA:
   A. Estimated Design Data:
      (1) Status:
         (a) Date Design Started.................................. JAN 2017
### A. Estimated Design Data: (CONTINUED..)

- **(b) Percent Complete as of January 2018** ............... 35.00
- **(c) Date 35% Designed**............................... JAN 2018
- **(d) Date Design Complete**.............................. OCT 2018
- **(e) Parametric Cost Estimating Used to Develop Costs..** NO
- **(f) Type of Design Contract:** Design-bid-build

(2) **Basis:**
- **(a) Standard or Definitive Design:** YES
- **(b) Where Design Was Most Recently Used:** Fort Sill
- **(c) Percentage of Design utilizing Standard Design ...** 95

(3) **Total Design Cost (c) = (a)+(b) OR (d)+(e):** ($000)
- **(a) Production of Plans and Specifications**.............. 1,480
- **(b) All Other Design Costs**................................. 1,041
- **(c) Total Design Cost**................................. 2,521
- **(d) Contract**.......................................... 1,629
- **(e) In-house**.......................................... 892

(4) **Construction Contract Award**............................ JUN 2019

(5) **Construction Start**................................. AUG 2019

(6) **Construction Completion**............................... AUG 2021

### B. Equipment associated with this project which will be provided from other appropriations:

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<th>Equipment Nomenclature</th>
<th>Fiscal Year</th>
<th>Procuring Appropriation Or Requested</th>
<th>Cost ($000)</th>
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9. COST ESTIMATES

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ESTIMATED CONTRACT COST
CONTINGENCY (5.00%) 938
SUBTOTAL 18,764
SUPV, INSPECTION & OVERHEAD (6.50%) 1,281
TOTAL REQUEST 20,045
TOTAL REQUEST (ROUNDED) 21,000
INSTALLED EQT-OTHER APPROP (0)

10. Description of Proposed Construction

Construct Barracks facilities to accommodate 216 personnel. Primary facilities include living and sleeping quarters, baths, storage, service areas, building information systems, fire protection and alarm systems, and Energy Monitoring Control Systems (EMCS) connection. Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Demolish 38 buildings at Honduras Various, HO (Total 3,115 m2/33,533 SF). Air Conditioning (Estimated 397 kW/113 Tons).

11. REQ: 816 PN ADQT: 600 PN SUBSTD: 204 PN
PROJECT: Construct Barracks at Soto Cano Air Base, Honduras. (Current Mission)

REQUIREMENT: This project is required to provide basic Army-standard lodging for 216 enlisted personnel stationed at Army Support Activity Soto Cano (ASA-SC) directly supporting Joint Task Force-Bravo (JTF-B), in their mission of providing Counternarcotics and Humanitarian Assistance throughout Central America for U.S. Southern
REQUIREMENT: (CONTINUED)

Command (SOUTHCOM).

CURRENT SITUATION: Currently over 200 military personnel reside in sub-standard wooden
structures at Army Support Activity Soto Cano (ASA-SC). These facilities were constructed
as temporary facilities in the mid 1980’s for a two to five year life span. The wooden
structures have no insulation, plumbing or fire protection systems and are infested with
termites resulting in significant life, safety and health concerns. Adequate existing
facilities are not available to support the personnel that are stationed at the
installation. One-third of the lodging facilities at ASA-SC are temporary wooden
structures. The wooden structures have been extended well beyond their designed life
expectancy by annual sustainment investment of $400k to $500k per year to combat termite
infestation, humidity, moisture, mold and other factors common to the tropical
environment of Honduras in order to maintain these facilities slightly above a condemned
status.

IMPACT IF NOT PROVIDED: If this project is not provided, ASA-SC will not be able to
provide basic Army-standard living conditions for enlisted personnel directly supporting
JTF-B’s mission in Central America. Life and Health safety requirements will not be able
to be achieved and degraded quality of life conditions for JTF-B personnel could
negatively impact the JTF-B mission.

ADDITIONAL: Required assessments have been made for supporting facilities and the
project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This
project has been coordinated with the installation physical security plan, and all
physical security measures are included. All required antiterrorism protection measures
are included. Alternative methods of meeting this requirement have been explored during
project development. This project is the only feasible option to meet the requirement.
The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships)
certifies that this project has been considered for joint use potential. The facility
will be available for use by other components. Sustainable principles, to include life
cycle cost effective practices, will be integrated into the design, development and
construction of the project and will follow the guidance detailed in the Army Sustainable
Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:
   (1) Status:
      (a) Date Design Started.......................... JAN 2017
      (b) Percent Complete as of January 2018............ 35.00
      (c) Date 35% Designed............................ JAN 2018
      (d) Date Design Complete.......................... OCT 2018
      (e) Parametric Cost Estimating Used to Develop Costs.. NO
      (f) Type of Design Contract: Design-bid-build
      (g) An energy study and life cycle cost analysis will be
documented during the final design.

   (2) Basis:
      (a) Standard or Definitive Design: YES
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

(b) Where Design Was Most Recently Used:
   Honduras Various

(c) Percentage of Design utilizing Standard Design ...    75

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):    ($000)
   (a) Production of Plans and Specifications.............    976
   (b) All Other Design Costs..............................    525
   (c) Total Design Cost....................................    1,501
   (d) Contract.............................................    1,201
   (e) In-house...............................................    300

(4) Construction Contract Award......................... MAR 2019

(5) Construction Start.................................... MAY 2019

(6) Construction Completion................................ MAY 2021

B. Equipment associated with this project which will be provided from other appropriations:

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<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>Korea Various (IMCOM)</td>
<td>91589</td>
<td>Command and Control Facility</td>
<td>17,500</td>
<td>17,500</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Camp Tango</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Korea</td>
<td>Korea Various Part I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Subtotal</td>
<td>$ 17,500</td>
<td>17,500</td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>* TOTAL MCA FOR Korea</td>
<td></td>
<td></td>
<td>$ 17,500</td>
<td>17,500</td>
<td></td>
</tr>
</tbody>
</table>
6. PERSONNEL STRENGTH: (1) PERMANENT (2) STUDENTS (3) SUPPORTED (4) TOTAL

A. AS OF 31 OCT 2017

<table>
<thead>
<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
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<td>71</td>
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<td>1756</td>
<td>6337</td>
<td>9887</td>
<td>50,962</td>
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B. END FY 2023

<table>
<thead>
<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Total</th>
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<tbody>
<tr>
<td>3508</td>
<td>21054</td>
<td>8931</td>
<td>0</td>
<td>116</td>
<td>0</td>
<td>1755</td>
<td>6337</td>
<td>8241</td>
<td>49,942</td>
</tr>
</tbody>
</table>

7. INVENTORY DATA ($000)

A. TOTAL AREA........... 7,876 ha (19,461 AC)
B. INVENTORY TOTAL AS OF 05 JUL 2017............................. 14,949,605
C. AUTHORIZATION NOT YET IN INVENTORY............................ 1,212,406
D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM.............. 17,500
E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM.............. 0
F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY).............. 0
G. REMAINING DEFICIENCY.......................................... 1,843,411
H. GRAND TOTAL................................................... 18,022,922

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>START</th>
<th>COMPLETE</th>
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</thead>
<tbody>
<tr>
<td>14190</td>
<td>Command and Control Facility</td>
<td>5,249.00/SF(407.65/m2)</td>
<td>06/2017</td>
<td>10/2018</td>
</tr>
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</table>

TOTAL 17,500

9. FUTURE PROJECT APPROPRIATIONS:

A. INCLUDED IN THE FY 2020 PROGRAM: NONE
B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE
C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A

10. MISSION OR MAJOR FUNCTIONS:

Eighth United States Army (EUSA) exercises command and control of all assigned units. Organizes, equips, trains, and employs forces to ensure optimum readiness for combat operations. Maintains a posture of combat readiness to deter any attack upon the Republic of Korea (ROK) and if deterrence fails, conducts sustained Army, joint, and combined military operations to defeat the enemy. Provides logistical and administrative support for forces, including Headquarters, United Nations Command (HQ UNC), in order to fulfill the operational requirements of Republic of Korea - US Combined Forces Command (ROK-US CFC) and US Forces, Korea (USFK).

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

A. AIR POLLUTION 0
B. WATER POLLUTION 0
C. OCCUPATIONAL SAFETY AND HEALTH 0
### 9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14190 Command &amp; Control Pac (C2F) m2 (SF)</td>
<td>487.65</td>
<td>28,910</td>
<td>(14,098)</td>
</tr>
<tr>
<td>00000 Cyber Security LS</td>
<td>--</td>
<td>--</td>
<td>(750)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures LS</td>
<td>--</td>
<td>--</td>
<td>(139)</td>
</tr>
<tr>
<td>Building Information Systems LS</td>
<td>--</td>
<td>--</td>
<td>(71)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Service LS</td>
<td>--</td>
<td>--</td>
<td>(189)</td>
</tr>
<tr>
<td>Water, Sewer, Gas LS</td>
<td>--</td>
<td>--</td>
<td>(56)</td>
</tr>
<tr>
<td>Information Systems LS</td>
<td>--</td>
<td>--</td>
<td>(154)</td>
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</table>

**ESTIMATED CONTRACT COST**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTINGENCY (5.00%)</td>
<td>773</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>16,230</td>
</tr>
<tr>
<td>SUPV, INSPI &amp; OVERHEAD (6.50%)</td>
<td>1,055</td>
</tr>
<tr>
<td>TOTAL REQUEST</td>
<td>17,285</td>
</tr>
<tr>
<td>TOTAL REQUEST (ROUNDED)</td>
<td>17,500</td>
</tr>
<tr>
<td>INSTALLED EQT-OTHER APPROP</td>
<td>(3,621)</td>
</tr>
</tbody>
</table>

### 10. Description of Proposed Construction

Construct an underground Command and Control Facility. The work involves constructing the facility and installing secure communications and other Information Technology (IT) systems and backbone to connect this facility to the entire Command Post (CP) Tango Complex. The construction will meet UFC 4-010-5 Sensitive Compartmented Information Facilities (SCIF) Planning, Design, and Construction. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

### 11. REQ:

| 488 m2 | ADQT: | NONE | SUBSTD: | NONE |

**PROJECT:** Construct a Command and Control Facility at Command Post (CP) Tango, Korea. (Current Mission)

**REQUIREMENT:** This project is required to provide adequate Sensitive Compartmented Information Facilities (SCIF) to support the mission of the United States Forces in Korea (USFK) at Command Post Tango.

**CURRENT SITUATION:** Currently USFK operations are in the temporary SCIF at the U.S. Army Garrison Yongsan, approximately 10 miles from CP Tango. This is inadequate to support the
CURRENT SITUATION: (CONTINUED)

USFK contingency mission, and the temporary SCIF accreditation will expire in FY19.

IMPACT IF NOT PROVIDED: The USFK will be unable to effectively support the USFK Commander during contingency operations by working in a temporary, unhardened facility at Yongsan, instead of being co-located with the USFK Command and G-Staff within the secured facility of the CP Tango tunnel complex.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement.

The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders. This project is located on an installation which will be retained by Eighth United States Army for the foreseeable future. The possibility of Host Nation funding has been addressed but sufficient funds from the Host Nation programs are not available to support this requirement.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started................................. JUN 2017
   (b) Percent Complete as of January 2018............... 35.00
   (c) Date 35% Designed................................. JAN 2018
   (d) Date Design Complete.............................. OCT 2018
   (e) Parametric Cost Estimating Used to Develop Costs.. YES
   (f) Type of Design Contract: Design-bid-build

(2) Basis:
   (a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications................... 994
   (b) All Other Design Costs.................................. 536
   (c) Total Design Cost........................................ 1,530
   (d) Contract.................................................. 535
   (e) In-house................................................. 995

(4) Construction Contract Award............................. FEB 2019
A. Estimated Design Data: (CONTINUED..)

(5) Construction Start..................................... APR 2019

(6) Construction Completion................................ JAN 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
<th>Appropriated</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDS Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td>Access Control Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>195</td>
<td></td>
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<tr>
<td>CCTV Equipment</td>
<td>OPA</td>
<td>2021</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>VTC Equipment</td>
<td>OPA</td>
<td>2021</td>
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<tr>
<td>A/V Packages</td>
<td>OPA</td>
<td>2021</td>
<td>408</td>
<td></td>
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<tr>
<td>SCIF Equipment</td>
<td>OPA</td>
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<td>UPS Equipment</td>
<td>OPA</td>
<td>2021</td>
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<tr>
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<td>2020</td>
<td>81</td>
<td></td>
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<tr>
<td>Info Sys - PROP</td>
<td>OPA</td>
<td>2020</td>
<td>510</td>
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Total                              3,621
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<th>NEW/MISSION</th>
<th>PAGE</th>
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<tr>
<td>Kuwait</td>
<td>Camp Arifjan</td>
<td>62866</td>
<td>Vehicle Maintenance Shop</td>
<td>44,000</td>
<td>44,000</td>
<td>C</td>
<td>137</td>
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<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td>Subtotal Kuwait Various Part I</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* TOTAL MCA FOR Kuwait</td>
<td>$ 44,000</td>
<td>44,000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>** TOTAL OUTSIDE THE UNITED STATES FOR MCA</td>
<td>$ 113,500</td>
<td>113,500</td>
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9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>21410 Vehicle Maintenance Shop</td>
<td>m2 (SF)</td>
<td>8,617 (2,779)</td>
<td>(23,947)</td>
</tr>
<tr>
<td>85210 Organizational Vehicle Parking</td>
<td>m2 (SY)</td>
<td>25,591 (126.94)</td>
<td>(3,249)</td>
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<tr>
<td>89120 Plant /Utilities Building 415</td>
<td>m2 (SF)</td>
<td>170.00 (9,103)</td>
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<tr>
<td>00000 Cyber Security Measures</td>
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<td>-- (1,000)</td>
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<tr>
<td>81160 Redundant Power</td>
<td>EA</td>
<td>2</td>
<td>542,409 (1,840)</td>
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<td>Total from Continuation page(s)</td>
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<td>-- (187)</td>
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<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>-- (1,057)</td>
</tr>
<tr>
<td>Site Imp(1,736) Demo( )</td>
<td>LS</td>
<td>--</td>
<td>-- (1,736)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>-- (257)</td>
</tr>
</tbody>
</table>

10. Description of Proposed Construction

Construct a Vehicle Maintenance Shop (VMS) with a paint bay, sandblast bay, welding bay, warehouse, and other support functions. Other primary facilities include organizational vehicle parking, hazardous material storage building, a utility building for power generator and central compressed air generator. Supporting facilities include site development, utilities and connections, perimeter security devices, lighting, paving, walks, curbs and gutters, storm drainage, fencing, and signage. Heating and air conditioning will be provided by self-contained system. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 11,961 kWr/3,401 Tons).

11. REQUIREMENT:

This project is required to support the Army Prepositioned Stocks-Kuwait (APS) mission at Camp Arifjan. There is a severe shortage of vehicle maintenance
9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
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</tr>
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<tr>
<td>21470 Hazardous Material Storage</td>
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<td>1</td>
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<td>203,610 (204)</td>
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<td>Sustainability/Energy Measures</td>
<td>LS</td>
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<td>--</td>
<td>(590)</td>
</tr>
<tr>
<td>Antiterrorism Measures</td>
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<td>--</td>
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<td>Building Information Systems</td>
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<td>(456)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1,840</strong></td>
</tr>
</tbody>
</table>

REQUIREMENT: (CONTINUED)

Facilities that can be used to maintain the APS sets for Brigade Combat Teams. Most of the APS maintenance mission is performed outdoors. Sunshades have been added outside APS maintenance facilities but they do little to shelter vehicles from wind and sand. They cannot substitute for a fully enclosed maintenance building with overhead bridge crane, power, compressed air, and other support. Maintenance of tracked and wheeled vehicles with overhead bridge cranes is required to support lifting tank turrets and heavy equipment in the maintenance bays. The shortage of adequate maintenance bays increase service times required to restore equipment to combat ready condition. There will be a continuing increase in the APS maintenance mission in the Central Command Area of Responsibility (CENTCOM AOR) for the foreseeable future, due to operational requirements for the issue and return of APS equipment.

CURRENT SITUATION: Currently operations are limited to one enclosed maintenance building at Camp Arifjan, Kuwait. The existing facility, while in good condition, is severely undersized to support the total APS maintenance mission to keep vehicles combat ready. The APS mission also includes theater-wide support for retrograde operations in the CENTCOM AOR to return vehicles to the Theater Sustainment Stocks and Brigade Combat Teams. The use of sunshades does not provide an adequate quantity of space to support the total APS maintenance requirement. Maintenance personnel are at the mercy of wind, dust, sand storms, and high temperatures in excess of 110 degrees Fahrenheit during much of the year. The original maintenance facility was designed to accommodate approximately 300 maintenance personnel. The current total requirement is over 600 maintenance personnel to maintain all APS vehicles and equipment. As such, ongoing maintenance occurs under open shade structures adjacent to the original facility. These outdoor structures do not provide an environment suitable for the type of maintenance required. In addition to being undersized, the current maintenance facility lacks lift capability, exhibits poor interior design, which impedes safety lanes and access/egress in maintenance areas, jeopardizing mission execution and safety of assigned staff.

IMPACT IF NOT PROVIDED: If this project is not provided, the U.S. Army Field Support Battalion (AFSBN) in Kuwait will be unable to adequately support the APS mission. Maintenance operations will continue to be negatively impacted by a lack of adequate space in a windy, dusty, and hot environment. The above problems will persist, resulting in maintenance personnel continuing to operate from temporary and substandard facilities. Lack of adequately sized and equipped maintenance bays providing, power, lighting, compressed air, and overhead bridge cranes, impact the AFSBn ability to maintain vehicles and equipment at the required standard readiness level.

ADDITIONAL: Required assessments have been made for supporting facilities and the
project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (a) Date Design Started..........................</td>
<td>JAN 2017</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1 (b) Percent Complete as of January 2018..........</td>
<td>35.00</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1 (c) Date 35% Designed............................</td>
<td>JAN 2018</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1 (d) Date Design Complete..........................</td>
<td>OCT 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (e) Parametric Cost Estimating Used to Develop Costs..</td>
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</tr>
<tr>
<td></td>
<td>1 (f) Type of Design Contract: Design-bid-build</td>
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B. Basis:

<p>| | | | | |</p>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2 (a) Standard or Definitive Design: YES</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2 (b) Where Design Was Most Recently Used: Kandahar</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>2 (c) Percentage of Design utilizing Standard Design ...</td>
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C. Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>3 (a) Production of Plans and Specifications.........</td>
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<tr>
<td></td>
<td>3 (b) All Other Design Costs..........................</td>
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</tr>
<tr>
<td></td>
<td>3 (c) Total Design Cost..................................</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>3 (d) Contract...........................................</td>
<td>2,574</td>
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<tr>
<td></td>
<td>3 (e) In-house............................................</td>
<td>1,386</td>
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(4) Construction Contract Award.......................... APR 2019

(5) Construction Start..................................... JUN 2019

(6) Construction Completion.............................. OCT 2021
Installation Engineer: Phone Number: 965.2389.3374

<table>
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<th>Cost ($000)</th>
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## DEPARTMENT OF THE ARMY
### FISCAL YEAR 2019
#### MILITARY CONSTRUCTION (Part I)
(DOLLARS ARE IN THOUSANDS)

<table>
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<th>STATE</th>
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### WORLDWIDE VARIOUS

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### MINOR CONSTRUCTION

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** TOTAL MCA FOR WORLDWIDE VARIOUS **

|       | $ 0 182,068 |

** TOTAL WORLDWIDE FOR MCA **

|       | $ 0 182,068 |

MILITARY CONSTRUCTION (PART I) TOTAL

|       | $ 724,700 1,011,768 |

PAGE NO. 141
### 9. COST ESTIMATES

<table>
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<tr>
<th>ITEM</th>
<th>UNIT (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
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### SUPPORTING FACILITIES

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<th>COST($000)</th>
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This item provides for criteria development, and design and construction surveillance for projects funded by foreign nations where U.S. Forces are the sole or primary user.

### 11. Description of Proposed Construction

This item provides for criteria development, and design and construction surveillance for projects funded by foreign nations where U.S. Forces are the sole or primary user.
### 1. COMPONENT

<table>
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<tr>
<th>Army</th>
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### 2. DATE

| 01 FEB 2018 |

### 3. INSTALLATION AND LOCATION

| Planning and Design Host Nation Worldwide Various (Planning and Design) |
| Host Nation Support |

### 4. PROJECT TITLE

| Planning and Design Host Nation Worldwide Various (Planning and Design) |
| Host Nation Support |

### 5. PROGRAM ELEMENT

| 91211A |

### 6. CATEGORY CODE

| 96400 |

### 7. PROJECT NUMBER

| 82201 |

### 8. PROJECT COST ($000)

| Approp 34,000 |

---

**REQUIREMENT: (CONTINUED)**

phasing for users, and protects against latent deficiencies).
### COST ESTIMATES

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### SUPPORTING FACILITIES

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<tr>
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<tr>
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### Description of Proposed Construction

This item provides for: parametric, concept, and final design of major and unspecified minor construction projects; value engineering; and the development of standards and criteria for Army facilities in conjunction with the Navy and Air Force.

### REQUIREMENT

This funding is required to provide design and engineering services for regular Military Construction, Army (MCA) and Unspecified Minor projects, including value engineering, and continued development of design criteria and standard designs (conventional functional layouts). This account is dissimilar to any other line item in the Army's MCA budget in that it is reflective of an operations expense, versus a defined scope of a single construction project. Funds will be used by the U.S. Army Corps of Engineers (USACE) districts for in-house designs, Architect-Engineer (A-E) contracts, and administrative support functions. These funds are required for accomplishment of final correction, review, reproduction and advertisement of projects in the FY 2019 program; for advancement to final design of projects in FY 2020 and for initiation of design of projects in FY 2021. The funds request for the annual planning and design requirement includes value engineering, the costs to update standards and criteria, guide specifications, technical manuals, and the cost to continue the Department of the Army (DA) Facility Standardization Program.
### 9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
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### SUPPORTING FACILITIES

<table>
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10. Description of Proposed Construction

The details of this program are reported in the National Intelligence Program FY19 Congressional Budget Justification Volume 3 General Defense Intelligence Program published by the Office of the Director of National Intelligence. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

### Cost Estimates

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Cost ($000)</th>
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**Supporting Facilities**

- Estimated Contract Cost: 72,000
- Contingency (0.00%): 0
- Subtotal: 72,000
- Supv, Inspect & Overhead (0.00%): 0
- Total Request: 72,000
- Total Request (rounded): 72,000
- Installed Eq't-Other Approp: (0)

### Description of Proposed Construction

Provision is made for future unspecified minor construction projects including construction, alteration, or conversion of permanent or temporary facilities as authorized under Title 10 USC 2805. Projects awarded with these funds must cost more than $2,000,000 while not exceeding $6,000,000. If located in the United States, or its territories, commonwealths, and possessions, the cost may be adjusted according to DoD’s published local construction cost index not to exceed $10,000,000. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

### Project

- Project: Minor military construction, worldwide.
- Requirement: This line item is needed to provide for unspecified projects that have not been individually authorized by law. They typically meet emergent requirements for which the need cannot reasonably be foreseen in time to be included in this Military Construction, Army program.
- Current Situation: These emergent projects address high national priorities such as critical mission requirements, facility conversions, environmental protection, health, and safety. These projects cannot wait until the next annual budget submission.
- Impact if Not Provided: If not provided, the Army will not be able to address emergent requirements that arise during the year.
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<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Installation</th>
<th>State or Country</th>
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<th>Estimated Program Year Funding</th>
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<td></td>
<td>Fort Jackson</td>
<td>SC</td>
<td>Access Control Point</td>
<td>81267</td>
<td>25,000</td>
<td>&gt;2023</td>
</tr>
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<td>A</td>
<td></td>
<td>Fort Jackson</td>
<td>SC</td>
<td>Access Control Point</td>
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<tr>
<td>R</td>
<td></td>
<td>Fort Campbell</td>
<td>TN</td>
<td>Cantonment Area Roads and Access Control Point</td>
<td>81363</td>
<td>16,500</td>
<td>&gt;2023</td>
</tr>
<tr>
<td>R</td>
<td></td>
<td>Fort Bliss</td>
<td>TX</td>
<td>Vehicle Bridge</td>
<td>64610</td>
<td>11,000</td>
<td>&gt;2023</td>
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<tr>
<td>A</td>
<td></td>
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<td>TX</td>
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<td>TX</td>
<td>Defense Access Roads (DAR)</td>
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<td>20,000</td>
<td>&gt;2023</td>
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<td>R</td>
<td></td>
<td>Fort A.P. Hill</td>
<td>VA</td>
<td>Vehicle Bridge</td>
<td>81733</td>
<td>6,100</td>
<td>&gt;2023</td>
</tr>
</tbody>
</table>

**Total Cost**: 990,800

This exhibit is submitted in response to House Report 115-188, "The Military Construction and Related Agencies Appropriation Bill, 2018", page 28 which states:
“Parking issues at DOD facilities - Military construction budget constraints are negatively affecting the ability of the Department of Defense to address urgent parking requirements at certain U.S. military installations. The lack of parking is a safety issue and a detriment to the well-being of the employees, both civilian and military. The committee is concerned that many DOD facilities in the Departments inventory do not have sufficient parking to meet installation requirements. Furthermore, these deficiencies can contribute to traffic congestion and are serious problems on base. The Committee is concerned that the Department does not have a coherent strategy to address the growing parking requirements at installations that have significant growth. For example, Fort Meade, which already was home to the National Security Agency (NSA), became the headquarters for the newly formed U.S. Cyber Command in 2010. By 2011, the Defense Information Systems Agency, which handles the Pentagon’s IT and communications needs, had moved onto the base. In 2005, the base had just over 33,500 employees. Today it has about 57,000, more than double the numbers of the workers at the Pentagon. As a result of this growth, parking at Fort Meade has become a serious issue. Therefore, the Secretary of Defense is directed to submit to the Committee with the fiscal year 2019 military construction budget request: an updated list of unfunded requirements for parking facilities, access control points, and road construction at DOD facilities that have serious parking, access, and road congestion issues. Finally, the Secretary is further directed to submit, with the fiscal year 2019 military construction budget request, a list of how those requirements will be incorporated into their construction requests for fiscal years 2019 through 2023.”
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
<th>NEW/ CURRENT MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Bulgaria Various (IMCOM)</td>
<td>91241</td>
<td>EDI: Ammunition Holding Area</td>
<td>5,200</td>
<td>5,200</td>
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<tr>
<td></td>
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<td>Subtotal Bulgaria Various Part I</td>
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<td>$ 5,200</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>* TOTAL MCA FOR Bulgaria</td>
<td>$ 5,200</td>
<td>$ 5,200</td>
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<tr>
<td>Cuba</td>
<td>Guantanamo Bay Naval Station (ARSOUTH)</td>
<td>81389</td>
<td>OCO: High Value Detention Facility</td>
<td>69,000</td>
<td>69,000</td>
<td>C</td>
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<td></td>
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<td>$ 69,000</td>
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<td>* TOTAL MCA FOR Cuba</td>
<td>$ 69,000</td>
<td>$ 69,000</td>
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<td>Poland</td>
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<td>EDI: Ammunition Storage Facility</td>
<td>52,000</td>
<td>52,000</td>
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<td></td>
<td></td>
<td>91237</td>
<td>EDI: Rail Extension and Railhead</td>
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<td>6,400</td>
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<tr>
<td></td>
<td></td>
<td>91239</td>
<td>EDI: Staging Area</td>
<td>51,000</td>
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<td></td>
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<td>Subtotal Poland Various Part I</td>
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<td></td>
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<td>* TOTAL MCA FOR Poland</td>
<td>$ 144,400</td>
<td>$ 144,400</td>
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<tr>
<td>Romania</td>
<td>Mihail Kogalniceanu (MK) FOS (IMCOM)</td>
<td>88517</td>
<td>EDI: Explosives &amp; Ammo Load/Unload Apron</td>
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<td>21,651</td>
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<td>Subtotal Mihail Kogalniceanu (MK) FOS Part I</td>
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<td>$ 21,651</td>
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<td></td>
<td></td>
<td>* TOTAL MCA FOR Romania</td>
<td>$ 21,651</td>
<td>$ 21,651</td>
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<tr>
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<td>** TOTAL OUTSIDE THE UNITED STATES FOR MCA</td>
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<td>$ 240,251</td>
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<td>PROJECT NUMBER</td>
<td>PROJECT TITLE</td>
<td>AUTHORIZATION REQUEST</td>
<td>APPROPRIATION CURRENT REQUEST</td>
<td>MISSION CURRENT PAGE</td>
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<tr>
<td>-------</td>
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<td>----------------</td>
<td>--------------</td>
<td>-----------------------</td>
<td>------------------------------</td>
<td>---------------------</td>
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<td>Worldwide Various</td>
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<td>EDI/OCO: Planning and Design</td>
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<td></td>
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<td>20,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* TOTAL MCA FOR Worldwide Various</td>
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<td></td>
<td></td>
<td>$</td>
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<td>20,999</td>
<td></td>
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<tr>
<td>** TOTAL WORLDWIDE FOR MCA</td>
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<td></td>
<td></td>
<td>$</td>
<td>0</td>
<td>20,999</td>
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<tr>
<td>MILITARY CONSTRUCTION (PART IB) TOTAL</td>
<td></td>
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<td></td>
<td>$</td>
<td>240,251</td>
<td>261,250</td>
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</tbody>
</table>

- Total Cost of New Mission Projects: 0
- Total Cost of Current Mission Projects: 240,251
- Total Cost of other line items: 20,999
- Total Cost of FY 2019 MCA Projects: 261,250
## DEPARTMENT OF THE ARMY
### FISCAL YEAR 2019
#### MILITARY CONSTRUCTION (Part IB)
#### (DOLLARS ARE IN THOUSANDS)

<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Bulgaria Various (IMCOM)</td>
<td>91241</td>
<td>EDI: Ammunition Holding Area</td>
<td>5,200</td>
<td>5,200</td>
<td>C 3</td>
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</table>

**Subtotal Bulgaria Various Part IB**

5,200

5,200

* TOTAL MCA FOR Bulgaria

$ 5,200

5,200
THIS PAGE INTENTIONALLY LEFT BLANK
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
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<tbody>
<tr>
<td>PRIMARY FACILITY</td>
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<td></td>
<td></td>
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<tr>
<td>42510 Ammunition Storage Pad</td>
<td>m2 (SY)</td>
<td>4,442 ( 5,313)</td>
<td>31.64</td>
<td>(141)</td>
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<td>42510 Ammunition Storage Pad Berm</td>
<td>m3 (CY)</td>
<td>21,800 ( 28,513)</td>
<td>104.21</td>
<td>(2,272)</td>
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<td>14113 Access Control Building</td>
<td>m2 (SF)</td>
<td>18.58 ( 200)</td>
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<td>(116)</td>
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<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(52)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(310)</td>
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<td>Water, Sewer, Gas</td>
<td>LS</td>
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<td>--</td>
<td>(255)</td>
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<td>Paving, Walks, Curbs And Gutters</td>
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<td>--</td>
<td>(380)</td>
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<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(52)</td>
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<tr>
<td>Site Imp(1,078) Demo( )</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,078)</td>
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</table>

ESTIMATED CONTRACT COST

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>CONTINGENCY (5.00%)</td>
<td>233</td>
<td></td>
<td></td>
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<tr>
<td>SUBTOTAL</td>
<td>4,889</td>
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<td>SUPV, INSP &amp; OVERHEAD (6.50%)</td>
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<td>TOTAL REQUEST</td>
<td>5,207</td>
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<tr>
<td>TOTAL REQUEST (ROUNDED)</td>
<td>5,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTALLED EQT-OTHER APPROP</td>
<td>(0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Description of Proposed Construction

Construct an Ammunition Holding Area to support units training and operating from the Novo Selo Training Area Forward Operating Site. Primary facilities include ammunition holding pads, entry control point, tank trail, and connecting road. Supporting facilities include utility connections, security lighting, area lightning protection, paving, storm drainage, site clearing and grading, fencing, landscaping, and signage. Low Impact Development Best Management Practices (LID-BMPs) and sustainability and energy enhancement measures are included. Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Facilities will be designed as permanent construction in accordance with DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation facilities in support of military operations; Host Nation regulations.

11. REQ: 4,442 m2 ADQT: NONE SUBSTD: NONE

PROJECT: Construct an Ammunition Holding Area at Novo Selo Training Area (NSTA) Forward Operating Site (FOS), Bulgaria. (Current mission)

REQUIREMENT: This project is required to support theater ammunition storage requirements, which have more than doubled as U.S. Army, Europe (USAREUR) pursues opportunities to disperse and forward position ammunition storage stocks. USAREUR has increased forward-stationed forces and their associated ammunition stockpiles as part of the mission to deter further Russian aggression. The NSTA ammunition holding area is required to support both forward stationed rotational units as well as units training on nearby ranges. Completion of the facility will reduce deployment timelines, improve
REQUIREMENT: (CONTINUED)
responsiveness, and facilitate massing of combat power. Forward posturing represents the
U.S. commitment to NATO and European security by supporting the rapid introduction of
combat capability along the eastern flank.
CURRENT SITUATION: Existing ammunition storage at NSTA consists of above-ground storage
pads that do not meet safety standards and are not large enough to support U.S.
requirements. There is no site nearby that provides storage capacity with requisite
safety setbacks to meet U.S. Army requirements.
IMPACT IF NOT PROVIDED: If this project is not provided, ammunition must be configured
and transported over 2,100 kilometers from Miesau, Germany to NSTA. Because of the lack
of safe and secure storage sites, large caliber ammunition cannot be stored forward,
severely degrading operational readiness and deployment timelines. Positioning
ammunition forward at NSTA speeds the U.S. ability to configure units for combat and
reduces demands for critical line haul and rail assets during a contingency.
ADDITIONAL: Project will be submitted to the North Atlantic Treaty Organization's
(NATO) U.S. Mission for notice of intent to pre-finance. This project is partially
eligible for funding within an established NATO infrastructure category for common
funding. This project has the potential for partial recoupment of costs from NATO.
Required assessments have been made for supporting facilities and the project is not in a
100-year floodplain in-accordance-with Executive Order 11988. This project has been
coordinated with the installation physical security plan, and all physical security
measures are included. All required antiterrorism protection measures are included.
Alternative methods of meeting this requirement have been explored during project
development. This project is the only feasible option to meet the requirement. The
Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships)
certifies that this project has been considered for joint use potential. The facility
will be available for use by other components. Sustainable principles, to include life
cycle cost effective practices, will be integrated into the design, development and
construction of the project and will follow the guidance detailed in the Army Sustainable
Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:
A. Estimated Design Data:
   (1) Status:
      (a) Date Design Started............................. OCT 2017
      (b) Percent Complete as of January 2018............ 5.00
      (c) Date 35% Designed.............................. MAR 2018
      (d) Date Design Complete........................... OCT 2018
      (e) Parametric Cost Estimating Used to Develop Costs.. NO
      (f) Type of Design Contract: Design-bid-build
      (g) An energy study and life cycle cost analysis will be
documented during the final design.

      (2) Basis:
         (a) Standard or Definitive Design: NO
12. SUPPLEMENTAL DATA (CONTINUED...)

A. Estimated Design Data: (CONTINUED...)

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):

(a) Production of Plans and Specifications............ 295
(b) All Other Design Costs............................ 104
(c) Total Design Cost................................ 399
(d) Contract........................................ 240
(e) In-house......................................... 159

(4) Construction Contract Award............................ FEB 2019

(5) Construction Start.................................... MAR 2019

(6) Construction Completion............................. MAR 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Appropriated Or Requested</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
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<tr>
<td>STATE</td>
<td>INSTALLATION (COMMAND)</td>
<td>PROJECT NUMBER</td>
<td>PROJECT TITLE</td>
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<tr>
<td>-------</td>
<td>------------------------</td>
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<td>----------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Cuba</td>
<td>Guantanamo Bay Naval Station (ARSOUTH)</td>
<td>81389</td>
<td>OCD: High Value Detention Facility</td>
<td>$69,000</td>
</tr>
</tbody>
</table>

Subtotal Guantanamo Bay Naval Station Part I

* TOTAL MCA FOR Cuba

$69,000

$69,000
1. COMPONENT
Army

2. DATE
01 FEB 2018

3. INSTALLATION AND LOCATION
Guantanamo Bay Naval Station
Cuba (Cuba Various)

4. PROJECT TITLE
OCO: High Value Detention Facility

5. PROGRAM ELEMENT
22096A

6. CATEGORY CODE
73015

7. PROJECT NUMBER
81389

8. PROJECT COST ($000)
Approp 69,000

9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>(M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST ($000)</th>
</tr>
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<tbody>
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<tr>
<td>73015 Confinement Facility</td>
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<td>00000 Special Foundation</td>
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<td>00000 Cyber Security Measures</td>
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<td>81160 Redundant Power Generator</td>
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| ESTIMATED CONTRACT COST | | | 61,671 |
| CONTINGENCY (5.00%) | | | 3,084 |
| SUBTOTAL | | | 64,755 |
| SUPV, INSPI & OVERHEAD (6.50%) | | | 4,209 |
| TOTAL REQUEST | | | 68,964 |
| TOTAL REQUEST (ROUNDED) | | | 69,000 |
| INSTALLED EQT-OTHER APPROP | | | (2,282) |

10. Description of Proposed Construction
Construct a High Value Detention Facility in support of Joint Task Force Guantanamo (JTF - GTMO) operations. Project includes the confinement facility having maximum security features commensurate for terrorist detainees. Primary facilities include special foundations, cyber security measures and redundant power capability. Building features include Intrusion Detection System (IDS) and Close Circuit Television (CCTV) surveillance installation, building information systems, antiterrorism/force protection measures and Energy Monitoring Control System (EMCS). All of these electronic arrangements are unique to this facility. An integrated perimeter security fencing system will also be provided. Supporting facilities include all utilities, site improvements, paving, walks, curbs, gutters, parking, exterior lighting, storm drainage and information system cabling. The cost includes transporting all the construction materials, labor, and equipment from the United States to Cuba. The cost also provides temporary housing on site during the entire construction duration for contractor personnel, since there are no local alternatives. Heating and air conditioning will be provided by self-contained system. Comprehensive building and furnishings related interior design services are required. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 317 kWr/90 Tons).
11. REQ:    2,861 m²  ADQT:            NONE  SUBSTD:    2,267 m²

PROJECT: Construct a High Value Detention Facility at U.S. Naval Station, Guantanamo Bay, Cuba. (Current Mission)

REQUIREMENT: In support of the JTF-GTMO mission, this project is required to provide an adequate maximum security detention facility with legal visitation area which conforms to our domestic and international legal obligations to provide a safe and humane detention environment with confidential visitation area for individuals detained under the Authorization for the Use of Military Force, as informed by the laws of war.

CURRENT SITUATION: Existing facilities have far exceeded their service life expectancy and are deteriorating rapidly. The tropical climate at GTMO has compounded the problems associated with aging facilities. Additionally, electrical, mechanical, and secure communications systems within the current facilities are stressed and at risk of failure, further reducing the ability to meet mission requirements. The inefficiencies experienced in proper separation, seclusion, and control of occupants put the JTF GTMO staff at risk.

IMPACT IF NOT PROVIDED: If this project is not provided, detainees will continue to be housed in facilities that will degrade to the point of risking failure to meet operational and life, health, and safety standards. Portions of the current camp will become unusable in the near term. JTF-GTMO staff would continue to conduct detainee operations in an increasingly unsafe environment resulting in a negative effect on mission execution.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:
   (1) Status:
      (a) Date Design Started................................. AUG 2017
      (b) Percent Complete as of January 2018.............. 15.00
      (c) Date 35% Designed................................. MAR 2018
      (d) Date Design Complete............................. JAN 2019
A. Estimated Design Data: (CONTINUED..)

(e) Parametric Cost Estimating Used to Develop Costs: NO

(f) Type of Design Contract: Design-bid-build

(g) An energy study and life cycle cost analysis will be documented during the final design.

2. Basis:

(a) Standard or Definitive Design: NO

3. Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)

(a) Production of Plans and Specifications............ 3,588

(b) All Other Design Costs............................ 1,932

(c) Total Design Cost.................................. 5,520

(d) Contract........................................... 4,416

(e) In-house............................................ 1,104

4. Construction Contract Award............................ MAY 2019

5. Construction Start.................................... JUL 2019

6. Construction Completion................................ JUL 2022

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Appropriated Fiscal Year</th>
<th>Requested Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Visit Area Security Equi</td>
<td>OPA</td>
<td>2021</td>
<td>130</td>
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<tr>
<td>Uninterruptable Power Supply</td>
<td>OPA</td>
<td>2021</td>
<td>1,664</td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>488</td>
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Total 2,282
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Poland Various (IMCOM)</td>
<td>90030</td>
<td>EDI: Ammunition Storage Facility</td>
<td>52,000</td>
<td>52,000</td>
<td>C 15</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>91237</td>
<td>EDI: Rail Extension and Railhead</td>
<td>6,400</td>
<td>6,400</td>
<td>C 19</td>
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<tr>
<td></td>
<td></td>
<td>91239</td>
<td>EDI: Staging Area</td>
<td>51,000</td>
<td>51,000</td>
<td>C 23</td>
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<td>$109,400</td>
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<tr>
<td>(USAREUR)</td>
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<td>88542</td>
<td>EDI: Rail Extension and Railhead</td>
<td>14,000</td>
<td>14,000</td>
<td>C 27</td>
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<td></td>
<td></td>
<td>91238</td>
<td>EDI: Bulk Fuel Storage</td>
<td>21,000</td>
<td>21,000</td>
<td>C 31</td>
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<td></td>
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<td>$35,000</td>
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<td></td>
<td></td>
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<td>* TOTAL MCA FOR Poland</td>
<td>$144,400</td>
<td>$144,400</td>
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</table>
## COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42280 Earth Covered Magazines</td>
<td>m2 (SF)</td>
<td>5,990 (64,480)</td>
<td>3,939</td>
<td>(23,599)</td>
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<tr>
<td>14113 Entry Control Building</td>
<td>m2 (SF)</td>
<td>92.90 (1,000)</td>
<td>5,122</td>
<td>(476)</td>
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<tr>
<td>42510 Maintenance Pad</td>
<td>m2 (SY)</td>
<td>929.03 (1,111)</td>
<td>961.19</td>
<td>(893)</td>
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<tr>
<td>21835 Repair Bays, Forklift Storage</td>
<td>m2 (SF)</td>
<td>92.90 (1,000)</td>
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<tr>
<td>21612 Ammunition Surveillance Shop</td>
<td>m2 (SF)</td>
<td>77.11 (830)</td>
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<td>Total from Continuation page(s)</td>
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<td>SUPPORTING FACILITIES</td>
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<td>Electric Service</td>
<td>LS</td>
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<td>(2,262)</td>
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<td>Water, Sewer, Gas</td>
<td>LS</td>
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<td>(933)</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
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<td>--</td>
<td>(10,101)</td>
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<td>Site Imp(4,084) Demo( )</td>
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<td>(4,084)</td>
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<tr>
<td>Information Systems</td>
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<td>(2,876)</td>
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<tr>
<td>Other</td>
<td>LS</td>
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<td>--</td>
<td>(437)</td>
</tr>
</tbody>
</table>

| ESTIMATED CONTRACT COST                        |          |          |           | 46,898     |
| CONTINGENCY (5.00%)                            |          |          |           | (2,345)    |
| SUBTOTAL                                       |          |          |           | 49,243     |
| SUPV, INSPI & OVERHEAD (6.50%)                 |          |          |           | 3,201      |
| TOTAL REQUEST                                  |          |          |           | 52,444     |
| TOTAL REQUEST (ROUNDED)                        |          |          |           | 52,000     |

### PROJECT

Construct an Ammunition Storage Facility at Powidz Air Base (AB), Poland.

**Self-contained systems will be provided for heating and cooling. Facilities will be designed as permanent construction in accordance with UFC 1-202-01, Host Nation Facilities in Support of Military Operations; host nation regulations. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Comprehensive building and furnishings related interior design services are required. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 7 kWr/2 Tons).**
PROJECT: (CONTINUED)
(Current Mission)

REQUIREMENT: A joint use ammunition storage and maintenance complex is required to support the U.S. Army’s Northern Logistics and Power Projection Hub at Powidz, Poland. The new ammunition storage area will support forward stationed rotational Army and Air Force units, the brigade sized APS storage facility, and ammunition transfers between our strategic theater supplies in Germany and tactical forces in Poland and the Baltics. The mission to assure our Allies, deter Russian aggression, and protect U.S. interests and personnel in Europe requires increased forward stationed forces and additional prepositioned equipment stocks and associated ammunition supplies in theater. This project supports forward stationed forces, as well as a brigade combat team sized APS equipment set. Completion of the project will reduce deployment timelines, improve responsiveness, and provide additional combat power in a pre-crisis or crisis environment. Forward posturing represents an unwavering commitment and strategic investment in NATO and European security. In addition to supporting the rapid introduction of combat capability into theater, this facility also supports ongoing training and exercises.

CURRENT SITUATION: The existing ammunition storage area at Powidz consists of small, above-ground, metal-roofed storage huts which will be demolished and replaced with NATO-standard ammunition storage igloos. There is no other site under U.S. control in central or northern Europe that provides adequate storage capacity with the quantity-safety distances to meet these requirements.

IMPACT IF NOT PROVIDED: If this project is not provided, ammunition must be configured in Miesau, Germany, loaded into containers, and then transported 1,000 kilometers to Powidz AB. Because of the lack of storage igloos, ammunition would be stored outdoors in shipping containers, subject to weather and temperature changes which will severely degrade operational readiness and delay deployments and staging. Maintenance of ammunition cannot take place on-site as no ammunition surveillance facility exists and our capability to support contingency operations will be severely constrained due to the lack of US/NATO standard ammunition storage capacity. Positioning ammunition at Powidz facilitates preparing units for combat and eliminates competition for critical rail and line haul assets in Western Europe.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to
ADDITIONAL: (CONTINUED)

include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: Project will be submitted to the North Atlantic Treaty Organization's (NATO) U.S. Mission for notice of intent to pre-finance. This project is partially eligible for funding within an established NATO infrastructure category for common funding, identified as CP3A - 0019. This project has the potential for partial recoupment of costs from NATO.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started............................... OCT 2017
   (b) Percent Complete as of January 2018.............. 5.00
   (c) Date 35% Designed................................. APR 2018
   (d) Date Design Complete.............................. JAN 2019
   (e) Parametric Cost Estimating Used to Develop Costs.. NO
   (f) Type of Design Contract: Design-bid-build
   (g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications............. 3,000
   (b) All Other Design Costs............................. 751
   (c) Total Design Cost.................................. 3,751
   (d) Contract........................................... 2,438
   (e) In-house............................................ 1,313

(4) Construction Contract Award.......................... MAY 2019

(5) Construction Start.................................... JUL 2019

(6) Construction Completion................................ JUL 2021
## FY 2019 MILITARY CONSTRUCTION PROJECT DATA

1. COMPONENT

   Army

2. DATE

   01 FEB 2018

3. INSTALLATION AND LOCATION

   Poland Various
   Poland

4. PROJECT TITLE

   EDI: Ammunition Storage Facility

5. PROGRAM ELEMENT

   22096A

6. CATEGORY CODE

   42280

7. PROJECT NUMBER

   90030

8. PROJECT COST ($000)

   Appropriated
   52,000

### 12. SUPPLEMENTAL DATA (CONTINUED..)

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td></td>
<td></td>
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</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>86010 Railroad Tracks with Railhead</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(3,159)</td>
</tr>
<tr>
<td>86010 Engine Runaround Track</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(650)</td>
</tr>
<tr>
<td>45110 Concrete Hardstand</td>
<td>LS</td>
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<td>(156)</td>
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<td>Sustainability/Energy Measures</td>
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<td>(79)</td>
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<td>Antiterrorism Measures</td>
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<td>(79)</td>
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<tr>
<td>Building Information Systems</td>
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<td>--</td>
<td>(11)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
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<td>(181)</td>
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<td>Paving, Walks, Curbs And Gutters</td>
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<td>Storm Drainage</td>
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<td>ESTIMATED CONTRACT COST</td>
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<tr>
<td>CONTINGENCY (5.00%)</td>
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<td>SUBTOTAL</td>
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<td>SUPV, INS &amp; OVERHEAD (6.50%)</td>
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<tr>
<td>DESIGN/BUILD-DESIGN COST (4.00%)</td>
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<td>232</td>
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<td>TOTAL REQUEST</td>
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<tr>
<td>INSTALLED EQT-OTHER APPROP</td>
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<td>(0)</td>
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</tbody>
</table>

10. Description of Proposed Construction

Construct a Rail Extension and Railhead at Zagan Training Area, Poland. Primary facilities include a railroad track extension and railhead, engine runaround track, hardstand, antiterrorism/force protection measures, and building information systems. Supporting facilities include utility connections, security lighting, area lightning protection, storm drainage, and site improvements. Low Impact Development Best Management Practices (LID-BMPs) are included. Facilities will be designed as permanent construction in accordance with DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations; Host Nation regulations. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided.

11. REQUIREMENT: This project is required to support U.S. Army, Europe's (USAREUR) mission, to assure our Allies, and to deter further Russian aggression in the Atlantic Resolve area of operation. The project will provide new rail lines and spurs, end and side-load ramps, staging and laydown area, hardstand and service lanes. The project supports USAREUR's objective of providing the capability, including essential infrastructure, to mass an armored brigade combat team (ABCT) within 72 hours anywhere in Europe. In
REQUIREMENT: (CONTINUED)

addition to its primary function to facilitate rapid movement of combat capability in theater, the facility will be available to reconstitute units and equipment engaged in a crisis; to serve as a U.S. controlled marshalling area for reception and staging of additional forces as required; and for the maintenance, storage and consolidation of additional equipment used to support training and exercises.

CURRENT SITUATION: There are no existing rail loading areas adjacent to U.S. operational areas, forcing tracked vehicles to drive on local roadways. In addition, the closest short side-load docks are dangerous and slow for rail operations and a crane is required to supplement loading and unloading operations. The current facilities are not large enough to support U.S. military equipment and under current conditions it takes up to 30 days to deploy out of the area due to insufficient rail capacity.

IMPACT IF NOT PROVIDED: If this project is not provided, rotational armored brigade combat teams (ABCTs) will not be able to move via rail, which will negatively impact U.S. flexible deterrent response options. The capability to rapidly and frequently move both equipment and personnel is key to deterrence. Failure to establish side- and end-load railheads jeopardizes the survivability of equipment in the event of contingency operations. Heavy equipment transporters (HETs) are not available in sufficient quantities to move our heaviest vehicles and the local road and bridge network will not support line haul movements through much of Eastern Europe.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: Project will be submitted to the North Atlantic Treaty Organization's (NATO) U.S. Mission for notice of intent to pre-finance. This project is partially eligible for funding within an established NATO infrastructure category for common funding, identified as CP3A - 0019. This project has the potential for partial recoupment of costs from NATO.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:

(a) Date Design Started........................................ OCT 2017
(b) Percent Complete as of January 2018............... 5.00 OCT 2018
(c) Date 35% Designed....................................... AUG 2019
(d) Date Design Complete.................................... NO
(e) Parametric Cost Estimating Used to Develop Costs..
(f) Type of Design Contract: Design-build
A. Estimated Design Data: (CONTINUED..)

(2) Basis:
   (a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):  ($000)
   (a) Production of Plans and Specifications..............  339
   (b) All Other Design Costs..............................  173
   (c) Total Design Cost..................................  512
   (d) Contract...........................................  410
   (e) In-house............................................  102

(4) Construction Contract Award............................. MAR 2019

(5) Construction Start...................................... JUN 2019

(6) Construction Completion................................ JAN 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested Cost ($000)</th>
</tr>
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<tr>
<td>NA</td>
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### COST ESTIMATES

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<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
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<td><strong>SUPPORTING FACILITIES</strong></td>
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<td>Electric Service</td>
<td>LS</td>
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<td>(9,836)</td>
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<td>Paving, Walks, Curbs And Gutters</td>
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<td>-- - -</td>
<td>(2,444)</td>
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<td>Site Imp(2,644) Demo( )</td>
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<td>-- - -</td>
<td>(2,644)</td>
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<td>Antiterrorism Measures</td>
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<td>-- - -</td>
<td>(240)</td>
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</table>

- **Estimated Contract Cost**: $43,935
- **Contingency (5.00%)**: $2,197
- **Subtotal**: $46,132
- **Supv, InsP & Overhead (6.50%)**: $2,999
- **Design/Build-Design Cost (4.00%)**: $1,845
- **Total Request**: $50,976
- **Total Request (Rounded)**: $51,000

### Description of Proposed Construction

Construct Staging Areas for use as Intermediate Staging Bases (ISBs) for reception, staging, and onward movement of ground forces. Primary facilities include tent pads, organizational parking areas and concrete pads for equipment maintenance and combat configuration activities. Supporting facilities include pre-wired electrical connections, site improvements and security measures. Low Impact Development Best Management Practices (LID-BMPs) and sustainability and energy enhancement measures are included. Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Facilities will be designed as permanent construction in accordance with DoD Unified Facilities Criteria (UFC) 1-202-01, Host Nation Facilities in Support of Military Operations; Host Nation regulations; and UFC 1-200-02, High Performance and Sustainable Building Requirements. Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.
effectively in contingency operations. USAREUR's objective is to provide the capability, including essential infrastructure, to mass an armored brigade combat team (ABCT) within 72 hours anywhere in Europe. This project is required to provide an ISB at DPTA and one at the Zagan training area. Construction includes four 1,200 person camps at Zagan and two 1,200 person camps at DPTA. The ISBs will be located near established Host Nation training areas and ranges. The ISBs will support the reception, staging, and onward movement of an armored brigade-sized formation at each site. The austere staging areas will be used by deployed units to rapidly assemble, acquire supplies, and configure their equipment for combat before transitioning to tactical assembly areas. The ISBs are also required to provide staging area for units drawing Army Preposition Stocks (APS) equipment as they assemble in western Poland. This projects supports plans to deploy combat units from CONUS, draw APS equipment stored in Belgium, Netherlands and Germany and then use these ISBs to assemble units with this equipment and supplies. The ISBs will also support major training exercises in Poland, which typically include 40,000-50,000 NATO personnel.

CURRENT SITUATION: There is currently insufficient staging capacity to support planned operations for U.S. and multinational allies in Poland. The lack of staging bases in Poland limits the amount of combat power that can be generated forward at the onset of a crisis. There is also a significant shortfall of life support capacity to accommodate the rotational replacement of ABCTs, aviation units, and other enablers in Atlantic Resolve. This forces movement of units to sites further west during rotational overlap, which weakens the U.S. deterrence posture.

IMPACT IF NOT PROVIDED: If this project is not provided, the lack of staging capacity in Poland will continue to lengthen operational timelines and delay the ability to configure units for combat. Without these ISBs, USAREUR's ability to rapidly mass tailored combat power for simultaneous, decisive action against a fast-moving enemy will be severely limited.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: This project is partially eligible for funding within an established NATO infrastructure category for common funding, identified as CP3A - 0019. This project has the potential for partial recoupment of costs from NATO.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:

(a) Date Design Started........................... OCT 2017
A. Estimated Design Data: (CONTINUED)

(b) Percent Complete as of January 2018.................. 35.00
(c) Date 35% Designed..................................... JAN 2018
(d) Date Design Complete................................. JAN 2019
(e) Parametric Cost Estimating Used to Develop Costs.. NO
(f) Type of Design Contract: Design-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
(a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
(a) Production of Plans and Specifications.............. 0
(b) All Other Design Costs................................. 4,000
(c) Total Design Cost....................................... 4,000
(d) Contract.................................................. 2,600
(e) In-house.................................................. 1,400

(4) Construction Contract Award.......................... APR 2019
(5) Construction Start...................................... JUN 2019
(6) Construction Completion............................... JAN 2022

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested Cost ($000)</th>
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### 9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
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#### ESTIMATED CONTRACT COST

- **CONTINGENCY (5.00%)**: 605
- **SUBTOTAL**: 12,697
- **DESIGN/BUILD-DESIGN COST (4.00%)**: 508
- **TOTAL REQUEST**: 14,030
- **TOTAL REQUEST (ROUNDED)**: 14,000
- **INSTALLED EQT-OTHER APPROP**: (0)

### 10. Description of Proposed Construction

Construct a Rail Extension and Railhead with spurs in support of the U.S. Army’s Northern Logistics and Power Projection Hub at Powidz Air Base, Poland. Primary facilities include rail line, railhead with covered storage building, end and side load/off-load ramp, staging and laydown area, hardstand, and service lane. Fire suppression/detection systems and Energy Monitoring and Control Systems (EMCS) will be provided. Supporting facilities include utility connections, security lighting, area lightning protection, paving, nonorganizational vehicle parking, walkways, storm drainage, site clearing and grading, fencing, landscaping, and signage. Low Impact Development Best Management Practices (LID-BMPs) and sustainability and energy enhancement. Heating and air conditioning will be provided by self-contained system. Access for individuals with disabilities will be provided. Cyber Security Measures will be incorporated into this project. Sustainability/Energy measures will be provided. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Air Conditioning (Estimated 134 kW/38 Tons).
REQUIREMENT: A railhead with end-load and side-load capabilities is required to support a brigade-sized equipment set in Army Prepositioned Stocks (APS) storage, to provide echelons-above-brigade logistics for forward stationed rotational units, and to supply tactical distribution networks in Poland and the Baltics. Speed of assembly of forces is critical for deterrence. This project is required to provide the capacity to rapidly deliver prepositioned heavy equipment from Powidz to tactical assembly areas for exercises or contingency operations. USAREUR’s objective is to provide the capability, including essential infrastructure, to mass an armored brigade combat team (ABCT) within 72 hours anywhere in Europe. The Army's easternmost APS site will be established on Powidz AB and rail will be the primary means of moving equipment and fuel into and out of this forward operating site. This project will also support future bulk fuel deliveries and the planned fuel point expansion at Powidz.

CURRENT SITUATION: Current rail infrastructure on the airbase is limited to a single rail line with two spurs running past a decaying, Cold War era, side-load concrete and wood railhead. This is insufficient to safely support U.S. equipment loading and offloading operations. One spur has weight restrictions on the side-load dock and the other spur was designed for staging of rail cars only. The side-load dock cannot support U.S. Army tracked vehicles and the existing rail is currently only used to support fuel delivery to the airbase.

IMPACT IF NOT PROVIDED: If this project is not provided, APS equipment will not be able to move via rail, restricting U.S. forces' ability to receive, load, and disperse equipment. Getting equipment out of storage and into a combat configuration is key to the deterrence strategy. Failure to establish rail loading capabilities with multiple rail spurs and both side-load and end-load ramps jeopardizes the survivability of the equipment in the event of a contingency. Equipment would have to be driven off the airbase or transported by Heavy Equipment Transporters (HETs), significantly increasing deployment timelines. HETs are not available to move the heaviest equipment and much of the existing road and bridge network in Eastern Europe does not support movement of Main Battle Tanks via HET. Support to reception and staging activities at the primary logistics and power projection hub in Poland will be severely limited without this railhead.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility
will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate.

NATO SECURITY INVESTMENT: This project is partially eligible for funding within an established NATO infrastructure category for common funding, identified as CP3A - 0019. This project has the potential for partial recoupment of costs from NATO.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started............................ FEB 2017
   (b) Percent Complete as of January 2018............. 35.00
   (c) Date 35% Designed................................ JAN 2018
   (d) Date Design Complete............................ OCT 2019
   (e) Parametric Cost Estimating Used to Develop Costs.. YES
   (f) Type of Design Contract: Design-build
   (g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications............. 363
   (b) All Other Design Costs............................ 121
   (c) Total Design Cost................................... 484
   (d) Contract............................................ 121
   (e) In-house............................................. 363

(4) Construction Contract Award.......................... APR 2019

(5) Construction Start..................................... JUN 2019

(6) Construction Completion................................ JAN 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested</th>
<th>Cost ($000)</th>
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9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
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<td>(84)</td>
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</table>

ESTIMATED CONTRACT COST

| CONTINGENCY (5.00%)       | 951 |

SUBTOTAL

| SUPV, INSP & OVERHEAD (6.50%) | 1,298 |

TOTAL REQUEST

| TOTAL REQUEST (ROUNDED) | 21,000 |

10. Description of Proposed Construction

Construct a Bulk Fuel Storage and pipeline distribution system supporting the US Army’s Northern Logistics and Power Projection Hub at Powidz Air Base, Poland. Primary facilities include primary and secondary containment for bulk fuel tanks, pollutant catch basins, standby generators, waste POL storage tanks, above ground POL pipeline, POL fueling support facility. Supporting facilities includes area fire and lightning protection systems, site development, connectors for additional fuel receipt capability, utilities and connections, perimeter security, lighting, paving, walks, curbs, gutters, storm drainage, landscaping, fencing, and signage. Low Impact Development, sustainability, building information systems, and energy enhancement measures are included. Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. Heating, ventilation, and air-conditioning (HVAC) will be provided by standalone system (peak demand estimated at 3 tons). Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Facilities will be designed to a minimum life of 40 years in accordance with DoD’s Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.
9. COST ESTIMATES (CONTINUED)

<table>
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<tr>
<th>ITEM</th>
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<th>UNIT</th>
<th>COST ($000)</th>
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<tr>
<td>289.56 (595)</td>
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<tr>
<td>86010 Railroad Tracks w/Ties and Ballast (LF)</td>
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<td>1,331 (385)</td>
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<td>81160 Redundant Power LS</td>
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<td>Sustainability/Energy Measures LS</td>
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<td>Building Information Systems LS</td>
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</table>

REQUIREMENT: This project is required to support Atlantic Resolve rotations, a brigade-sized set of prepositioned equipment and combat aviation brigade flight operations and contingency response missions from centrally-located Powidz AB. Forward positioning of fuel at Powidz is critical in reducing deployment timelines and improving responsiveness. Powidz AB serves as a power projection node with reception, staging, onward movement, and integration capabilities. Critical to its success is developing adequate, forward-based, fuel storage to sustain daily aircraft movements in and out of the theater as well as providing strategic fuel for the associated logistical operations and the Army Prepositioned Stocks (APS) project.

CURRENT SITUATION: Powidz AB currently has two fuel points with approximately 500,000 gallon capacity in each site. This is insufficient to support the rotational U.S. Army Combat Service Support Battalion task force, the brigade-sized set of APS equipment, and the 40-50 aircraft associated with the Combat Aviation Brigade task force and other units using the site for reception and staging activities. As an example, the 2d Armored Cavalry Regiment deploys battalion-sized elements to Poland supporting NATO’s enhanced Forward Presence mission. These convoys typically stop at Powidz to refuel and resupply. U.S. and NATO bulk fuel pipelines currently end at the former East-West border of Germany and the existing bulk fuel at Powidz and other sites in Poland is typically supplied via rail cars; existing fuel supplies are extremely vulnerable to disruption and sabotage.

IMPACT IF NOT PROVIDED: If this project is not provided, the U.S. will not have sufficient bulk fuel storage and distribution capabilities to support U.S. and NATO deterrence and contingency response missions. As the Army in Europe’s northern logistics hub, this site must support the APS storage mission, fixed and rotary wing operations for both the Army and U.S. Air Forces Europe, forward stationed logistics units which transfer supplies and fuel between established theater distribution networks in Germany, and tactical distribution networks in Poland and the Baltics.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and
construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: Project will be submitted to the North Atlantic Treaty Organization's (NATO) U.S. Mission for notice of intent to pre-finance. This project is partially eligible for funding within an established NATO infrastructure category for common funding, identified as CP3A - 0019. This project has the potential for partial recoupment of costs from NATO.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:
(1) Status:
(a) Date Design Started.............................. OCT 2017
(b) Percent Complete as of January 2018............. 15.00
(c) Date 35% Designed............................... MAR 2018
(d) Date Design Complete............................ OCT 2018
(e) Parametric Cost Estimating Used to Develop Costs.. NO
(f) Type of Design Contract: Design-bid-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
(a) Standard or Definitive Design: NO

(3) Total Design Cost \( c = (a)+(b) \) OR \( d+(e) \): \($000\)
(a) Production of Plans and Specifications............. 1,092
(b) All Other Design Costs................................ 588
(c) Total Design Cost.................................... 1,680
(d) Contract............................................. 1,344
(e) In-house............................................. 336

(4) Construction Contract Award.......................... FEB 2019

(5) Construction Start.................................... APR 2019

(6) Construction Completion................................ APR 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested</th>
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<td>PROJECT TITLE</td>
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<td>Romania</td>
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<td>88517</td>
<td>EDI: Explosives &amp; Ammo Load/Unload Apron</td>
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Subtotal Mihail Kogalniceanu (MK) POS Part I $ 21,651 21,651

* TOTAL MCA FOR Romania $ 21,651 21,651

** TOTAL OUTSIDE THE UNITED STATES FOR MCA $ 240,251 240,251
9. COST ESTIMATES

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<th>ITEM</th>
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<td>PRIMARY FACILITY</td>
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</table>

10. Description of Proposed Construction

Construct an explosives and ammunition loading/unloading apron. Primary facilities include an aircraft loading/unloading apron, a blast exhaust deflector, a cable vault, and associated taxiways. Supporting facilities include site development, utility connections, lighting, maintenance access road, and storm water management. Low Impact Development Integrated Management Practices (LID-IMP), sustainability and energy enhancement measures are included. Demolish 14 buildings and 8 bunkers at Mihail Kogalniceanu FOS, RO (Total 2,769 m2/29,810 SF). Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

11. REQ: 49,579 m2 ADQT: NONE SUBSTD: NONE

PROJECT: Construct an explosives and ammunition loading/unloading apron at Mihail Kogalniceanu (MK) Air Base, Romania. (Current Mission)

REQUIREMENT: This project is required to provide an explosives and ammunition loading and unloading apron with appropriate safety setbacks and taxiways. It will facilitate onward movement of both fixed wing and rotary wing aircraft carrying hazardous cargo, including weapons and ammunition in support of the U.S. Army's Southern Logistics and Power Projection Hub. MK Air Base is the primary reception, staging, onward movement and integration (RSOI) site in the Black Sea region. The airfield is a key enabler extending...
1. COMPONENT
Army

2. DATE
01 FEB 2018

3. INSTALLATION AND LOCATION
Mihail Kogalniceanu (MK) FOS
Romania

4. PROJECT TITLE
EDI: Explosives & Ammo Load/Unload Apron

5. PROGRAM ELEMENT
22096A

6. CATEGORY CODE
11380

7. PROJECT NUMBER
88537

8. PROJECT COST ($000)
Approp
21,651

9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
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<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST ($000)</th>
</tr>
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<tr>
<td>11212 Fixed Wing Taxiway</td>
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<tr>
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</table>

REQUIREMENT: (CONTINUED)
DoD's global distribution nodes between the CENTCOM and EUCOM areas of responsibility. This project enables US Army Europe’s deterrence activities at this site, which include sustainment of a rotational battalion sized element from the armored brigade combat team, frequent multinational exercises, and U.S. Transportation Command’s (TRANSCOM) multimodal air and sea port operations in the area.

Critical to the U.S.' ability to support RSOI operations is the availability of a hazardous cargo apron and associated taxiways to accommodate uploaded narrow-body aircraft. This project provides MK Air Base the infrastructure required to meet distribution hub requirements supporting the daily movement of a battalion-sized element of personnel through this site. These facilities will directly improve multimodal operations and allow greater responsiveness during multinational exercises and training with Allies and partners while bolstering U.S. capability and readiness to support aligned forces.

CURRENT SITUATION: Current aircraft parking aprons at MK Air Base cannot support hazardous cargo operations. All ammunition and other hazardous cargo must be transported via ground convoy or rail, which requires extensive multi-national coordination efforts and a lengthy approval process to permit transit across five international borders. The nearest U.S.-controlled hazardous cargo apron is at Ramstein Air Base, 2,100 km west of MK Air Base. Compounding the challenge is the existing airfield and ramp, which support both military and civil operations. Hazardous cargo operations cannot safely occur without significantly impacting passenger operations or off-post activities.

IMPACT IF NOT PROVIDED: If this project is not provided, ammunition, weapons and other hazardous cargo will not be allowed to transit the MK Air Base, severely degrading operational readiness and deployment timelines and military operations will continue to interfere with international commercial flights at the airport. Military cargo will be exposed to civilian passenger traffic and the airfield will be unable to support military aircraft transiting the area in support of USTRANSCOM and USEUCOM plans for contingencies, operations, and training engagements.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility
ADDITIONAL: (CONTINUED)

will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Date Design Started............................. FEB 2017
   (b) Percent Complete as of January 2018.............. 35.00%
   (c) Date 35% Designed............................... JAN 2018
   (d) Date Design Complete............................ JUL 2019
   (e) Parametric Cost Estimating Used to Develop Costs: NO
   (f) Type of Design Contract: Design-build
   (g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design: NO

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications.............. 515
   (b) All Other Design Costs............................ 171
   (c) Total Design Cost................................ 686
   (d) Contract........................................... 171
   (e) In-house.......................................... 515

(4) Construction Contract Award.......................... FEB 2019

(5) Construction Start.................................. APR 2019

(6) Construction Completion.............................. APR 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year Appropriated Or Requested</th>
<th>Cost ($000)</th>
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<tr>
<td>NA</td>
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Installation Engineer: Phone Number: DSN 656.5081
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<tr>
<th>STATE</th>
<th>INSTALLATION (COMMAND)</th>
<th>PROJECT NUMBER</th>
<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION CURRENT REQUEST</th>
<th>MISSION</th>
<th>PAGE</th>
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<td></td>
<td>Worldwide Various</td>
<td>92296</td>
<td>Planning and Design (PLANDES)</td>
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<td>43</td>
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<td>EDI/OCO: Planning and Design</td>
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<td>** Subtotal Planning and Design Part I</td>
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## 9. COST ESTIMATES

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<th>UNIT COST</th>
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<td>PRIMARY FACILITY</td>
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### SUPPORTING FACILITIES

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<th>UNIT COST</th>
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<td>CONTINGENCY (0.00%)</td>
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<td>SUPV, INSPI &amp; OVERHEAD (0.00%)</td>
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<td>TOTAL REQUEST</td>
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<td>INSTALLED EQT-OTHER APPROP</td>
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</table>

## 10. Description of Proposed Construction

This item provides for parametric, concept, and final design of construction projects in support of European Deterrence Initiative (ERI) Overseas Contingency Operations (OCO) projects.

## 11. Requirement

**PROJECT:** Planning and design funds.

**REQUIREMENT:** This funding is required to provide design and engineering services for EDI/OCO Military Construction, Army (MCA) projects, including value engineering. This account is dissimilar to any other line item in the Army's MCA budget in that it is reflective of an operations expense, versus a defined scope of a single construction project. Funds will be used by the U.S. Army Corps of Engineers (USACE) districts for in-house designs, Architect-Engineer (A-E) contracts, and administrative support functions.
Host Country In-Kind Contributions  
Republic of Korea Funded Construction  
Calendar Year (CY) 2019  
Authorization Request  
Part IC

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<tr>
<th>CAT CODE</th>
<th>PROJECT NUMBER</th>
<th>PROJECT DESCRIPTION</th>
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<th>($000)</th>
<th>PAGE NO.</th>
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<tr>
<td>Camp Carroll</td>
<td>81242 59534</td>
<td>Upgrade Electrical Distribution, Ph 2</td>
<td>Current</td>
<td>$52,000</td>
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<tr>
<td>Camp Walker</td>
<td>83210 82244</td>
<td>Repair/Replace Sewer Piping System</td>
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<td>Camp Humphreys</td>
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<td>QUANTITY</td>
<td>UNIT COST</td>
<td>COST($000)</td>
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<td>----------------------------------------------------------------------</td>
<td>----</td>
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<td>-----------</td>
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<tr>
<td>Primary U/G Electrical Distribution Line</td>
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<tr>
<td>Load &amp; Fault Interrupter Switches</td>
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<td>58</td>
<td>103,534</td>
<td>(6,005)</td>
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<tr>
<td>Primary Switching Station</td>
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<td>--</td>
<td>(2,694)</td>
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<tr>
<td>KEPCO’s Work</td>
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<td>--</td>
<td>(2,000)</td>
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<td>Transformers, Pad Mtd</td>
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<td>(13,278)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
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<td></td>
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<tr>
<td>Site Imp(2,830) Demo(575)</td>
<td>LS</td>
<td>--</td>
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<td>(3,405)</td>
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| ESTIMATED CONTRACT COST                                              |    |          |           | 46,528     |
| CONTINGENCY (5.00%)                                                  |    |          |           | 2,326      |
| SUBTOTAL                                                             |    |          |           | 48,854     |
| SUPERVISION, INSPECTION & OVERHEAD (6.50%)                           |    |          |           | 3,176      |
| TOTAL REQUEST                                                        |    |          |           | 52,030     |
| TOTAL REQUEST (ROUNDED)                                              |    |          |           | 52,000     |
| INSTALLED EQT-OTHER APPROPRIATIONS                                   |    |          |           | (0)        |

10. Description of Proposed Construction

Utilize host-nation funding to upgrade the electrical distribution system (Phase II of II) including underground primary and secondary electrical lines, ducts, manholes, hand holes, pad mounted transformers, pad mounted sectionalizing switches and switchgears, pad mounted junction (cable termination), other associated hardware, testing and connecting all new feeders to the existing 22.9KV switching station no.2. Upgrade the existing switching station no.2 that was constructed under Phase I by replacing the entire switchgear lineup with new Vacuum Circuit Breakers (VCB), and the addition of a Korea Electric Power Company (KEPCO) incoming service line no.2. The existing capacitor banks will be removed. Vacuum Circuit Breakers (VCB) serving the capacitor banks will be converted to spare breakers. The distribution upgrade includes converting the remaining overhead primary and secondary lines from previous Phase I to an underground distribution system. Conversion of overhead CATV system to underground will be provided using new and existing spare ducts. This also includes converting the overhead CATV lines in previous Phase I. Overhead data lines that are provided and maintained by commercial service providers will remain. Existing poles from previous Phase I project and this project will be removed except those required for street or area lighting and/or ones that are required as fore mentioned commercial service providers. The street lighting system will remain. Insulating fluids will be tested and be disposed appropriately. Paving, walks, curbs and gutters will be restored. Provide Power Monitoring System for the upgraded switching station no.
1. COMPONENT
   Army
2. DATE
   01 FEB 2018
3. INSTALLATION AND LOCATION
   Camp Carroll Korea
4. PROJECT TITLE
   Upgrade Electrical Distribution, Phase 2, A16R710
5. PROGRAM ELEMENT
   812 42
6. CATEGORY CODE
   59534
7. PROJECT NUMBER
8. PROJECT COST ($000)
   52,000
9. COST ESTIMATES (CONTINUED)

<table>
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<th>ITEM</th>
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<th>QUANTITY</th>
<th>UNIT</th>
<th>COST ($000)</th>
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<tr>
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<td>Power Monitoring System</td>
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<td>LS</td>
<td>(1,870)</td>
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<td>--</td>
<td>LS</td>
<td>(3,900)</td>
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<td><strong>Total</strong></td>
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<td>13,278</td>
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2. which will include all underground data cables, ducts, manholes/hand holes, and all necessary equipment for a complete operational system. Monitoring equipment will be located in the main DPW bldg. Antiterrorism and Force Protection (AT/FP) measures will be considered for all pad-mounted electrical equipment including providing lockable manhole covers. UFC 3-600-01 will be considered when locating electrical equipment adjacent to buildings and other equipment. Supporting facilities include site clearing, demolition and disposal of paving, walks, curbs, gutters, existing: wiring, transformers, 5.7KV switching station no. 1 and 2 including associated distribution system conductors and electrical hardware. Site improvements will include site improvement, landscaping, paving, walks and gutters all disturbed areas will be restored.

11. REQ: 14,433 m    ADQT: 9,409 m    SUBSTD: 10,750 m

PROJECT: Upgrade the electrical distribution system (Phase II of II) including underground primary and secondary electrical lines, ducts, manholes, hand holes, pad mounted transformers, pad mounted switches and switchgears, pad mounted junction boxes, monitoring system, other associated hardware, testing and connecting all new feeders to the 22.9KV switching station no. 2. The work will include removal of all remaining overhead primary and secondary systems in Phase I. (Current Mission)

REQUIREMENT: Camp Carroll is home of DLA Distribution Korea and MSC-K which provides USFK with the peninsula-wide logistics capability for peacetime and contingent operations as well as other Area IV mission critical elements. Camp Carroll also provides the major life support activities for the U.S. Army enclave in Waegwan, Korea. This Phase II project provides the electrical capability to the majority of these functions. The 2014 Southern Hub/Area IV Development Plan includes 18 large scale facility requirements in the Phase II footprint of which 12 are operational mission requirements. These new projects include DLA Warehouse, MSC-K Warehouse, APS-4 Warehouse, Rail Upgrade, MSC-K Battery Shop, Replace APS-4 VMF, Replace APS-4 Clamshell, MSC-K Wash Rack, Consolidated BN HQ & UEPH 302PN, Upgrade H-832, and the Plastic Media Blast Booth. This Camp Carroll Upgrade Electrical Distribution project is required to provide an adequate electrical distribution system for continued support to existing facilities, current master plan, and 20% unknown future expansion. This upgrade is urgently needed to meet the overall electrical
REQUIREMENT: (CONTINUED)
power distribution needs of Camp Carroll’s mission operations.

CURRENT SITUATION:
The existing electrical system in Phase II area consists of six (6) overhead 5.7kV main and sub-feeder circuits. These overhead circuits are either currently overloaded or will be overloaded when the currently programmed projects are constructed including the Battery Shop (A12R202), H-805 Relocation (A05L02), Sustainment Facilities Upgrade Phase 1 DLA Warehouse (A17R625), Replace APS-4 Maintenance Facility (A13R660), Sustainment Facilities Upgrade Phase 2, MSC-K Warehouse (A19R610), Minor Maintenance Facility - APS-4 Clamshell (A13R658). The existing 5.7kV distribution system voltage is obsolete and no longer matches the Korean 22.9kV standard voltage, which is supplied by Korea Electric Power Company (KEPCO). All existing primary lines in Phase II areas are overhead. All existing secondary distribution lines in Phase I and Phase II areas are also overhead. These are not in compliance with current Eighth U.S. Army standards. Retaining the obsolete voltage system complicates and delays maintenance and repair due to the difficulty of obtaining non-standard system components, which increase the costs heavily.

IMPACT IF NOT PROVIDED:
The 5.7kV overhead distribution system in Phase II area is past its useful life and is continually showing accelerated signs of failing. DPW power outage records indicate system failures due to the natural elements (wind and rain) and equipment insulation short circuit faults. This maintenance will continue to repair about 12,488 LF of failing overhead lines which will be extremely difficult and complicated, and delayed by having to use non-standard system components. System reliability is seriously compromised by unscheduled and frequent power outages. Maintenance and repair costs will continue to increase on the electrical distribution systems that have surpassed their useful life. Maintenance work to bring back up any unscheduled outage that exceed 8 hours continuous will affect all mission essential and critical base operations, including other supporting activities.

Camp Carroll will experience a shortage of power capacity of about 7,000 KW. The current contract capacity from KEPCO power service is 12,000 KW for Camp Carroll. Current peak load is approximately 9,168 KW. Ongoing and programmed construction work in Phase I area will require at least 2,000 KW of power. Without an upgrade of the KEPCO incoming service, the base will be subjected to a shortage of about 4,000 KW, which includes the required minimum 15% spare capacity as required by the UFC 3-501-01. Other future construction projects in Phase I and II areas will further require another additional capacity of 7,832 KW. The projected power capacity that will be required for all future projects as currently programmed and planned is 19,000 KW. If this project is not constructed, Camp Carroll will no longer be capable of supporting reserve power for contingency and future construction. An additional (KEPCO) service line including the upgrade of the existing 22.9kV switching station no. 2 will be required when the currently
IMPACT IF NOT PROVIDED: (CONTINUED)
programmed projects are completed.

The 5.7kV system distribution voltage works with an ideal peak load current of 200 amperes. Anything higher will require larger overhead conductors and heavier duty pole hardware. With the current peak load of 5,580 KW for entire Phase II area, this equates to about 700 amperes. This puts a heavy burden on the 5.7kV system that is past its useful life. A 22.9kV system can easily support the 6,000 KW peak load at a lower voltage drop, lesser line losses, and better voltage regulation overall. The 22.9kV is a far more efficient system than 5.7kV overall, and will meet Korea Electric Power Company (KEPCO) distribution voltage standards.

ADDITIONAL:
1. The 22.9kV electrical system will meet Korea Electric Power Company (KEPCO) primary distribution network standards. Any voltage transformation to lower 5.7kV system will be eliminated thus increasing overall voltage regulation to the facilities due to less line losses and voltage drop. The proposed underground distribution line system will provide much less exposure to weather elements such as wind, rain, snow, lightning strikes, and other severe weather disturbances, thus creating a much reliable system. Maintenance and spare parts for the 22.9kV system is also available locally, which will be critical for quicker response times during repairs and regular maintenance upkeep of the entire system. A per DPW's maintenance and power outage records since 2010, the 22.9kV system accounts for less than 10% of the outages, with the rest under the 5.7kV system.

2. Except for the Phase I Upgrade Electrical Distribution project, which converted the 5.7kV overhead system to 22.9kV underground in Phase I area, there has been no recent power load study for Camp Carroll. A complete base-wide power and protection coordination study will be provided as part of 22.9kV system upgrade work.

3. The project is required to meet all applicable Design Standards and criteria for the electrical substation replacement and primary electrical power distribution.

4. The Deputy Assistant Secretary of the Army(Installations,Housing and Partnerships) certifies that this project has been considered for joint use potential. This facility will be available for use by other components.

5. The possibility of Host Nation funding has been addressed. Funds from Host Nation programs are available to support this requirement.

6. No portion of this facility is intended for Republic of Korea personnel exclusive or primary use.
1. COMPONENT  Army  
2. DATE  01 FEB 2018  

3. INSTALLATION AND LOCATION  Camp Carroll  Korea  
4. PROJECT TITLE  Upgrade Electrical Distribution, Phase 2, A16R710  

5. PROGRAM ELEMENT  812  
6. CATEGORY CODE  42  
7. PROJECT NUMBER  59534  
8. PROJECT COST ($000)  52,000  

ADDITIONAL: (CONTINUED)  
7. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.
1. COMPONENT
   REPUBLIC OF KOREA FUNDED CONSTRUCTION (ROKFC)
   Army
2. DATE
   01 FEB 2018
3. INSTALLATION AND LOCATION
   Camp Walker
   Korea
4. PROJECT TITLE
   REPAIR/REPLACE SEWER PIPING SYSTEM,
   A13R662
5. PROGRAM ELEMENT
   832 10
6. CATEGORY CODE
   82244
7. PROJECT NUMBER
   8,000
8. PROJECT COST ($000)
   9. COST ESTIMATES

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<th>COST($000)</th>
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</tr>
<tr>
<td>150mm PVC Sewer Line</td>
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<td>SUPPORTING FACILITIES</td>
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<tr>
<td>Site Imp(250) Demo(1,483)</td>
<td>LS</td>
<td>--</td>
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</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST
CONTINGENCY (5.00%)  
SUBTOTAL
SUPERVISION, INSPECTION & OVERHEAD (6.50%)
TOTAL REQUEST
TOTAL REQUEST (ROUNDED)
INSTALLED EQT-OTHER APPROPRIATIONS

10. Description of Proposed Construction
Utilize host nation funding to replace and reconfigure the deteriorated sewer piping system, and upgrade undersized and under capacity sewer piping, including the temporary sewer by-pass and sewage lift station with force main, traffic control, AC pavement repair, and sodding. Also included is connection of Camp Walker sewer system to the City Wastewater Treatment Plant. Actual connection will be done by the City with a corresponding utility connection fee.

11. REQ: 7,983 m  
ADQT: NONE  
SUBSTD: 7,606 m

PROJECT:
Repair/replace sewer system to support current/emerging mission requirements on Camp Walker. (Current Mission)

REQUIREMENT:
Camp Walker contains the Area IV critical mission elements including: the Southern node of peninsula-wide signal infrastructure, Noncombat Evacuation Operations hub, CP Oscar, Logistics Support Activity, 168th Multifunctional Medical Battalion HHD, 19th ESC administrative functions and TEMF, 6th Regional Signal Support Center, 36th Signal Battalion, 169th Signal Company, and general mission support.

CURRENT SITUATION:
The existing failed Camp Walker sewer system consisting of deteriorated, damaged,
9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
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<th>QUANTITY</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Force Main Line, 100mm PVC</td>
<td>m</td>
<td>140</td>
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<tr>
<td>Lift Station</td>
<td>EA</td>
<td>1</td>
<td>89,000 (89)</td>
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<tr>
<td>Sewer Manholes</td>
<td>EA</td>
<td>349</td>
<td>1,968 (687)</td>
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<tr>
<td>Temporary Sewer Bypass Line</td>
<td>LS</td>
<td>--</td>
<td>-- (306)</td>
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<tr>
<td>Mobilization / Demobilization</td>
<td>LS</td>
<td>--</td>
<td>-- (82)</td>
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<tr>
<td>75 mm A.C. Pavement Restoration</td>
<td>m2</td>
<td>5,772</td>
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<tr>
<td>Traffic Control</td>
<td>LS</td>
<td>--</td>
<td>-- (83)</td>
</tr>
<tr>
<td>City WWTP Connection Fee</td>
<td>LS</td>
<td>--</td>
<td>-- (850)</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>2,403</strong></td>
</tr>
</tbody>
</table>

CURRENT SITUATION: (CONTINUED)

blocked, and undersized components which are currently operating at maximum capacity. Sewer manholes overflow during rain events with raw sewage flowing into streets. This is due to infiltration of storm water thru cracks in the sewer piping system and reduced sewer capacity due to corrosion and blockages. The sewer system cannot support existing or increased population requirements including exercises, NRO operations, and future stationing actions.

The sewer system includes two primary septic tanks, multiple lift stations, force mains and approximately 8,000 linear meters of sewer piping. The septic system provides 132,000 gallons of sewage treatment per day. Camp Walker produces between 126,925 to 139,625 gallons of sewage per day. The corresponding utilization rates are between 96%-106% of maximum capacity. The sewer piping system is also operating at maximum capacity per UFC requirements. A recent hydraulic analysis reports the sewer lines operating below the required minimum flow, above the ‘90% of full pipe capacity’ and above the ‘80% of required depth of flow’. The studies have shown approximately 29% of the existing sewer lines have cracks, corrosion, and/or blockages while 25% of the existing sewer system is undersized and 11% have insufficient slopes. The UFCs require lines operating beyond the any capacity requirement to be completely replaced with adequate pipe size and type. Damaged pipes are required to be replaced.

As an interim strategy until this ROKFC project is completed, an OMA funded sewer upgrade is programmed to support the requirements of AFB Tower 1, 2, 3, 4, and the Middle/High School. This OMA project will include replacement of existing sewer mains serving the four AFB towers including addition of a sewage lift station and force main. The OMA project will also include an additional septic tank that can adequately support the four AFB towers. The OMA project will not correct sewer system failing components beyond the requirements of the four AFB towers and Middle/High School including deteriorated, damaged, undersized, and blocked lines.
1. COMPONENT  
Army  

2. DATE  
01 FEB 2018  

3. INSTALLATION AND LOCATION  
Camp Walker  
Korea  

4. PROJECT TITLE  
REPAIR/REPLACE SEWER PIPING SYSTEM, A13R662  

5. PROGRAM ELEMENT  
832  

6. CATEGORY CODE  
10  

7. PROJECT NUMBER  
82244  

8. PROJECT COST ($000)  
8,000  

IMPACT IF NOT PROVIDED:  
If the utility repair and replacement are not performed, old and deteriorating sewer piping will continue to fail resulting in sewage overflow during high population and/or rain events degrading the installations readiness capability resulting in the inability to “Fight Tonight”. Continued corrosion will result in increased sewer line cracks, leaking and overflow. This will lead to more infiltration of storm water into the sanitary sewer system and will further decrease the capacity of the existing system. Sewer manholes will continue to overflow with raw sewage flowing into the streets causing severe environmental hazard. Also the sewer collection and treatment system will not support the future requirements of Camp Walker.  

ADDITIONAL:  
The CCTV condition assessment is based on the National Association of Sewer Service Companies (NASSCO) Pipeline A CCTV assessment of the existing sewer system was conducted in 2013 (Sewer System Study FY12 OMA, II-00580-2J Perform Utilities Study, Area IV Installations Camp Walker, dated June 2013, USAG Daegu, Korea, AMKOR). Results of the assessment showed cracks and corrosion in some sections of the sewer system. Approximately 29% of the existing system showed cracks and/or corrosion. These cracks in the existing sewer system result to severe infiltration causing overflow in sewer manholes as observed in at least three sewer manholes. Continues corrosion will result to more cracks which will induce more infiltration and system overflow. Capacity assessment of the existing sewer collection and treatment system to support future Camp Walker expansion based on approved Master Plan using latest Department of Defense, Unified Facilities Criteria (UFC) 3-240-04A, Wastewater Collection, dated 16 January 2004, and UFC 3-240-09A, Domestic Wastewater Treatment, dated 16 January 2004 showed inadequate sewer pipe sizes and slopes. Approximately 25% of the existing sewer system is undersized, while approximately 11% of the sewer system do not have adequate slopes to maintain the required system velocity. Two other studies completed in 2015 provided similar results (Sewer Collection and Treatment System Analysis (10% Design), CY18 ROKFC In-Kind A13R662, Repair/Replace Sewer Piping System, Camp Walker, Korea, MML), (Camp Walker Utilities Assurance Report: Sanitary Sewer System Study, FY16 AFH MILCON 81427, Construct a 15 Story AFH Tower, USAG Daegu, Korea, TJD).  

1. Sustainable principles will be integrated into the design, development, and construction of the project and it will be programmed to achieve LEED Silver Certifiable facilities in accordance with Executive Order 13123 and other applicable laws and Executive Orders.  

2. The Deputy Assistant Secretary of the Army (Installations, Housing & Partnerships) certifies that this project has been considered for joint use potential. This facility will be available for use by other components.  

3. The possibility of Host Nation funding has been addressed. Funds from Host
ADDITIONAL: (CONTINUED)

Nation programs are available to support this requirement.

4. No portion of this facility is intended for Republic of Korea personnel exclusive or primary use.

5. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.
Utilize host-nation funding to construct walking trails in the Troop Housing Area and re-surface service roads within the Family Housing and Schools area with asphalt to be used as combination of service roads and trails. Crosswalks will be provided on the Warrior Loop when trails intersect with the traffic network.

The trails in the Troop Housing Area will include area lighting, signs, paving, site furnishings, such as benches, trash cans and bicycle racks, three pocket parks, and landscaping, which will include trees. Coordination with other projects that are constructing portions of the trail in the Troop Housing area is essential to maintain the integrity of the system.

The trails will generally conform to the Installation Planning Standards, September 2015. The Community Trail will meet the installation's Small Trail with Service Vehicle Access standards. The Troop Trail will meet the installation's Regular Trail with Service Vehicle Access standards. The Cross Road Trail will meet the installation's Monolithic Trail with Fire Truck Access Standards. The Double Trail will meet the Divided Trail with Fire Truck Access Standards. During the design phase, the AE must meet with the Master Planning Division of the Directorate of Public Works to further refine trails sizes and details.

The focus for trail lighting, benches and signs will be the trail system between
### 9. COST ESTIMATES (CONTINUED)

#### PRIMARY FACILITY (CONTINUED)

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Cost  ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benches</td>
<td>EA</td>
<td>38</td>
<td>1,820</td>
</tr>
<tr>
<td>Signs</td>
<td>EA</td>
<td>38</td>
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<tr>
<td>Trail Crosswalk - With Traffic Lights</td>
<td>EA</td>
<td>4</td>
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<tr>
<td>Landscaping</td>
<td>SF</td>
<td>683,035</td>
<td>1.01</td>
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<tr>
<td>Trees</td>
<td>EA</td>
<td>2,000</td>
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<tr>
<td>Pocket Park (paving, benches, lights)</td>
<td>EA</td>
<td>3</td>
<td>100,000</td>
</tr>
<tr>
<td>Bicycle Parking Rack (12 bike,double sided)</td>
<td>EA</td>
<td>25</td>
<td>465.00</td>
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<tr>
<td>Roundabout Landscaping</td>
<td>EA</td>
<td>1</td>
<td>50,000</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
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<td>3,711</td>
</tr>
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</table>

3rd Street and 11th Street. Planning Charrettes may identify other areas where these amenities may be appropriate.

Street trees are required in areas to ensure that the installation road network complies with the Installation's Planning Standards.

Facilities must meet Americans with Disabilities Act (ADA) requirements.

### 11. REQ: 5 EA  ADQT: 4 EA  SUBSTD: NONE

**PROJECT:**

Construct trails and landscaping in designated areas as well as provision of signage throughout the trails network in accordance with the Camp Humphrey Landscape Master Plan. (Current Mission)

**REQUIREMENT:**

This project is required to provide adequate services to the increased population associated with re-stationing U.S. Forces as part of the Land Partnership Plan (LPP). The U.S. Forces Korea LPP consolidates forces and returns a number of existing U.S. Army Garrisons back to the Republic of Korea Government (ROKG). This project will be built on Camp Humphreys, which is an enduring installation.

**CURRENT SITUATION:**

There are insufficient park space and trail facilities capable of supporting the increased population and requirements associated with the programmed expansion of Camp Humphreys. The landscape design, trails, and amenities are needed to accommodate troops, their dependents, and all Garrison residents.

**IMPACT IF NOT PROVIDED:**

If this project is not provided, the quality of life for Soldiers and their families relocating to Camp Humphreys will be negatively impacted.
1. COMPONENT
   Army

2. DATE
   01 FEB 2018

3. INSTALLATION AND LOCATION
   Camp Humphreys
   Korea

4. PROJECT TITLE
   Site Development, A11R977

5. PROGRAM ELEMENT

6. CATEGORY CODE
   750

7. PROJECT NUMBER
   65

8. PROJECT COST ($000)
   87155
   7,800

ADDITIONAL:
A. This project has been coordinated with the installation physical security plan and includes all physical security measures.
B. Alternative methods of meeting the requirements have been explored during the project development. This project is the only feasible option to meet this requirement.
C. Sustainable principles shall be integrated into the design, development, and construction of this project and it will achieve a minimum of LEED Silver level in accordance with the current U.S. Army Sustainable Design and Development Policy and other applicable laws and Executive Orders. This facility shall be designed to achieve energy consumption levels that are at least 30 percent below the levels established in the current version of the ASHRAE Standard 90.1 or the International Energy Conservation Code, as appropriate. All equipment going into this facility must be Energy Star rated or on the Federal Energy Management Program (FEMP) approved list. All utilities shall be metered using an advanced meters as defined by FEMP. Strict adherence to the Camp Humphreys Installation Design is required.
D. All of the 21 Building Standards for Antiterrorism/Force Protections (AT/FP) will apply to this project, including a Mass Notification System, and site measures, which are outlined in UFC 4-010-01, dated 9 February 2012. All facilities will meet current UFC 4-010-01 standards for buildings and site. Additional AT/FP site features will include concrete pop-up bollards and barriers. Major AT/FP building features will include design for progressive collapse and blast resistant windows.
E. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components.
F. Facilities will be designed to a minimum life of 50 years and energy efficiencies meeting, on average, ASHRAE 189.1 standards through improved building envelop and integrated building systems performance.
G. An economic analysis has been prepared and was utilized in evaluating this project. This project is the most cost effective method to satisfy the requirement.
H. Connection for underground utilities is required between the facility and the utility corridor.
I. The project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.
J. No portion of this facility is intended for Republic of Korea personnel exclusive or primary use.
<table>
<thead>
<tr>
<th>1. COMPONENT</th>
<th>2. DATE</th>
<th>3. INSTALLATION AND LOCATION</th>
<th>4. PROJECT TITLE</th>
<th>5. PROGRAM ELEMENT</th>
<th>6. CATEGORY CODE</th>
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<th>8. PROJECT COST ($000)</th>
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<tr>
<td>Army</td>
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<td>Camp Humphreys, Korea</td>
<td>MOD A14R550 Air Support Operations Squadron</td>
<td>141 32</td>
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<th>COST ($000)</th>
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<tr>
<td>PRIMARY FACILITY</td>
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<tr>
<td>Renovate Ready Building (F-2011)</td>
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<td>Renovate Vehicle maintenance Shop (F-2002)</td>
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<td>Electric Service</td>
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<td>Storm Drainage</td>
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<td>(715)</td>
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<td>Antiterrorism Measures</td>
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<td>Information Systems</td>
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<td>(62)</td>
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| ESTIMATED CONTRACT COST      |    |          |           | 22,006      |
| CONTINGENCY (5.00%)          |    |          |           | 1,100       |
| SUBTOTAL                     |    |          |           | 23,106      |
| SUPERVISION, INSPECTION & OVERHEAD (6.50%) |    |          |           | 1,502       |
| TOTAL REQUEST                |    |          |           | 24,608      |
| TOTAL REQUEST (ROUNDED)      |    |          |           | 25,000      |
| INSTALLED EQT-OTHER APPROPRIATIONS |    |          |           | (0)         |

10. Description of Proposed Construction

Utilize host-nation funding to renovate seven facilities for use as the Air Support Operations Squadron (ASOS) compound. The repurposed facilities include Administrative General Purpose, Ready Building, Vehicle Maintenance Shop, Battalion Headquarters, Simulator Building, Organizational Storage and Overhead Protection. Exterior and interior renovation will be required to convert the buildings to the new use to include potential mold remediation. All facilities will include an energy management and control system (EMCS), fire protection and alarm systems, and building information systems. Comprehensive building and furnishings-related interior design services are required. The handicapped will be provided for in areas that employ civilians. All other areas will be considered to be occupied by able-bodied military personnel and will not be required to provide for the handicapped. Supporting facilities include underground utilities; security lighting; parking; paving, walks, curbs and gutters; fencing and gates; dumpster pad enclosures; storm drainage; exterior information systems; fire protection site improvements; and new fuel storage tanks, if required.

Renovate F-02010: Administrative Building, General Purpose for Tactical Planning Cell and Operations program. Facility to include heritage room, administrative spaces, and rooms with CENTRIX and SIFR capabilities.

Renovate F-02011: Ready building, Facility to be used as Ready Building to include space for operations, Map Room, Battery Storage, Conex Storage, personnel lockers (120) and group lockers. An existing armory vault will be renovated to meet Army...
Regulation AR-190-11, Physical Security of Arms, Ammunition, and Explosives and reused. The facility requires extensive power and grounding requirements. Renovate F-02022: Simulator Building (Non-Motion Based); Facility to include dome simulator with sound attenuation, classrooms, instructors offices. The simulator will require SIPR access and is a secure room. This facility requires renovation of the toilet area to accommodate the handicapped.
Renovate F-02037: Battalion Headquarters with secure capabilities. Facility to include auditorium and conference room for secret level briefings, including permanently mounted projection equipment and CENTRIX and SIPR capabilities. The 607th Weather Squadron will occupy the first floor and will employ civilians. This floor will need to provide handicapped access. The 604th ASOS will occupy the second floor and will not employ civilians. This level is not required to be handicapped accessible.
Renovate F-02002: Vehicle Maintenance Shop; Facility currently used by DPW for HVAC, plumbing, and electrical repairs will be renovated to become a vehicle maintenance shop and wash bay. This facility will enclose the existing exterior wash bay at the south end of the structure. It will include a work area, tool storage area and office space with NIPR drops. The existing showers and dressing room will be converted to a female toilet and janitor’s closet.
Renovate F-02009: Organizational Storage Building; this facility is for organizational equipment and supplies and is considered uninhabited. This structure will be enclosed with overhead doors.
Renovate F-02044: Organizational Storage Building; vehicle storage and is considered uninhabited. The structure will be partially enclosed by adding fascia to the front of the structure to a height of 12 feet above grade. Demolish 3 buildings at Camp Humphreys, KR (227 Total m2).
PROJECT: (CONTINUED)
Vehicle Maintenance Shop. (Current Mission)

REQUIREMENT:
This project is required to provide adequate services to meet the increased population associated with restationing of US Forces. This project will be built on USAG Humphreys which is an enduring installation.

CURRENT SITUATION:
There are insufficient facilities capable of supporting the increased requirement associated with the programmed expansion of USAG Humphreys.

IMPACT IF NOT PROVIDED:
If this project is not provided the current inadequate facilities will not support future growth as required in the USFK Theater Master Plan.

ADDITIONAL:
A. JOINT USE CERTIFICATE: The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. This facility will be available for use by the other components.
B. No portion of this facility is intended for Republic of Korea personnel exclusive or primary use.
C. ANTITERRORISM/FORCE PROTECTION: All of the 21 Building Standards for Antiterrorism/Force Protection (AT/FP) will apply to this project, including a Mass Notification System, and site measures, which are outlined in UFC 4-010-01, dated 9 February 2012. All facilities will meet current UFC 4-010-01 standards for buildings and site. Such additional AT/FP site features will include concrete pop-up bollards and barriers. Major AT/FP building features will include design for progressive collapse and blast resistant windows.
D. SUSTAINABLE DESIGN AND DEVELOPMENT: Sustainable principles shall be integrated into the design, development, and construction of this project and it will achieve a minimum of LEED Silver in accordance with the current US Army Sustainable Design and Development Policy and other applicable laws and Executive orders. This facility shall be designed to achieve energy consumption levels that are at least 30 percent below the levels established in the current version of the ASHRAE Standard 90.1 or the International Energy Conservation Code, as appropriate. All equipment going into this facility must be Energy Star rated or on the Federal Energy Management Program (FEMP) approved list. All utilities shall be metered using advanced meters as defined by FEMP. Strict adherence to the USAG Humphreys Installation Design is required.
E. HOST NATION: This project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future.
F. PHYSICAL SECURITY: This project has been coordinated with the installation physical security plan, and all physical security measures are included.
G. Connection for underground utilities is required between the facility and the utility corridor.
H. Full fire protection as required by regulation and UFC 3-600-01 to include a
ADDITIONAL: (CONTINUED)

fire alarm/suppression system; mass notification system (MNS) as required by UFC 4-010-01; access control systems and connection to the utility monitoring control system (UMCS). Fire Alarm panels shall include zone module cards that can support 16 zones. These additional zones are required to transmit exact location data to the computerized D-21 Monaco fire alarm computer located at the fire department communication center through the use of a BT-AM building transmitter installed at the building in design.

I. Site improvements include earthwork and landscaping, and an environmental site survey. USACE (United States Corps of Engineers) geotechnical testing of soil and groundwater for metals, chlorinated solvents, SVOCs (Semi-Volatile Organic Compound), PCBs (Polychlorinated Biphenyls), VOCs (Volatile Organic Compounds), BTEX (Benzene, Toluene, Ethyl Benzene, and Xylene) and TPH (Total Petroleum Hydrocarbon). This testing scope may be reduced based on historical information or site evaluation with concurrence between USACE and the USAG Humphreys Environmental Division.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>SF</td>
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<td>Electric Service</td>
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<td>32,969</td>
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ESTIMATED CONTRACT COST                                      | 110,096 |
CONTINGENCY (5.00%)                                          | 5,505   |
SUBTOTAL                                                    | 115,601 |
SUPERVISION, INSPECTION & OVERHEAD (6.50%)                   | 7,514   |
TOTAL REQUEST                                               | 123,115 |
TOTAL REQUEST (ROUNDED)                                     | 123,000 |
INSTALLED EQT-OTHER APPROPRIATIONS                          | (0)     |

10. Description of Proposed Construction

Utilize host-nation funding to construct one standard design Large Tactical Equipment Maintenance Facility Complex (TEMF) 5,407 GSM (UFC 4-214-02), one Company Operations Facility that is standard design IAW UFC 4-140-02, one Large Battalion Headquarter with classroom, an organizational storage facility, a concrete organizational parking for tracked vehicles, a POV parking area, a HAZMAT storage facility, and a POL storage facility. All buildings will have first floor structural slab, pile foundations, utility monitoring and control systems and building information systems. The Company Operations Facilities includes administrative module, supply (readiness) module, covered concrete hardstand area, and loading/service areas.

Heating/ventilation will be provided in the maintenance bays and central heating and air conditioning will be provided in the support area of the maintenance bays and the company ops. Vehicle exhaust system and compressed air system will be provided in the vehicle maintenance bays.

Supporting facilities include underground utilities (electrical/national gas/water/sewage) and security lighting, sidewalks, curbs and gutters, storm drainage, site improvements, fencing, exterior information system, oil/water separators, waste oil storage, trash area/pads, bicycle racks and a fuel oil storage tank. Heating will be compatible for the use with either oil or natural
gas. Access for individuals with disabilities is required. Supporting facility costs for this project are much higher than normal. This is because of very high site improvement costs. This project required an engineered backfill approximately 650,000 M3 and soil preparation of approximately 50,000 M2. This will increase site improvement costs significantly.

Full fire protection as required by regulations and UFC 3-600-01 to include a fire alarm/suppression system; mass notification system (MNS) as required by UFC 4-010-01; access control systems; intrusion detection system (IDS); and connection to the utility monitoring control system (UMCS). Fire Alarm panels shall include zone module cards that can support 16 zones. These additional zones are required to transmit exact location data to the computerized D-21 Monaco fire alarm computer located at the fire department communication center through the use of a BT-XM building transmitter installed at the building in design.

Site improvements include earthwork and landscaping and an environmental site survey. USACE (United States Corps of Engineers) geotechnical testing of both and groundwater for metals, chlorinated solvents, SVOCs (Semi-Volatile Organic Compound), PCBs (Polychlorinated Biphenyls), VOCs (Volatile Organic Compounds), BTEX (Benzene, Toluene, Ethyl Benzene and Xylene) and TPH (Total Petroleum Hydrocarbon). This testing scope may be reduced based on historical information or site evaluation with concurrence between USACE and Camp Humphreys Environmental Division.
All exterior doors will be equipped with HT24 electronic locksets.

Demolition and disposal: None

PROJECT:
Use host nation funding to construct one standard design Large Tactical Equipment Maintenance Facility Complex (TEMP) 5,407 SM (UFC 4-214-02), with a six Company Operations Facility that is standard design IAW UFC 4-140-02, one Large Battalion Headquarter with classroom, an organizational storage facility, concrete organizational parking for tracked vehicles, a POV parking area, a HAZMAT storage facility, a POL storage facility (New Mission).

REQUIREMENT:
The Department of the Army directed reassignment of an Echelon Above Brigade (EAB) Engineer Battalion to Camp Humphreys, Pyeongtaek, Korea. This Army-directed alignment follows the major realignment of U.S. Forces in Korea Theater Master Plan. New construction is required to meet this requirement. This project is required to support the increase in population associated with the stationing of new units in South Korea. This project will be built on Camp Humphreys, which is an enduring installation.

CURRENT SITUATION:
There are insufficient maintenance facilities on Camp Humphreys capable of meeting the Tactical Equipment Maintenance Facility (TEMF) requirements for units being stationed on Camp Humphreys. There are no TEMFs/vehicle maintenance facilities that can be upgraded or expanded to meet the requirements of these units. New construction is the only alternative.

IMPACT IF NOT PROVIDED:
If this project is not provided, the Department of the Army's directed alignment will not be met, or it will be met but will require units to operate in substandard facilities that must be retrofitted to meet uses for which they were not designed. Thus, the options are not to implement the DAs directive, or to implement it in a manner that will be inefficient and unsafe.

ADDITIONAL:
A. This project has been coordinated with the installation physical security plan, and all physical security measures have been included.
B. Alternative methods of meeting the requirements have been explored during the project development. This project is the only feasible option to meet this requirement.
C. Sustainable principles shall be integrated into the design, development, and construction of this project and it will achieve a minimum of LEED Silver in accordance with the current US Army Sustainable Design and Development Policy and other applicable laws and Executive Orders. This facility shall be designed to
achieve energy consumption levels that are at least 30 percent below the levels
established in the current version of the ASHRAE Standard 90.1 or the
International Energy Conservation Code, as appropriate. All equipment going into
this facility must be Energy Star rated or on the Federal Energy Management
Program (FEMP) approved list. All utilities shall be metered using advanced meters
as defined by FEMP. Strict adherence to the USAG Humphreys Installation Design
Guide is required.
D. All of the 21 Building Standards for Antiterrorism/Force Protections (AT/FP)
will apply to this project, including a Mass Notification System, and site
measures, which are outlined in UFC 4-010-01, dated 9 February 2012 change 1, 1
Oct 2013. All facilities will meet current UFC 4-010-01 standards for buildings
and site. Such additional AT/FP site features will include design for progressive
collapse and blast resistant windows.
E. The Deputy Assistant Secretary of the Army (Installations, Housing and
Partnerships) certifies that this project has been considered for joint
use potential. The facility will be available for use by other components.
F. This project is located on an enduring installation which is to be retained by
United Forces Korea (USFK) for the foreseeable future. The possibility of Host
Nation funding has been addressed to support this requirement.
G. Facilities will be designed for a minimum life of 50 years and energy
efficiencies meeting, on average, ASHRAE 189.1 standards through improved building
envelop and integrated building systems performance.
H. Comprehensive interior design package for the AE to be completed as required
by UFC 3-120-10.
I. No portion of this facility is intended for Republic of Korea personnel
exclusive or primary use.
1. COMPONENT  
Army

2. DATE  
01 FEB 2018

3. INSTALLATION AND LOCATION  
Camp Humphreys
Korea

4. PROJECT TITLE  
Unaccompanied Enlisted Personnel Housing, P2, A20R2000P2

5. PROGRAM ELEMENT  
721 11

6. CATEGORY CODE  
91140

7. PROJECT NUMBER  
76,000

8. PROJECT COST ($000)  


9. COST ESTIMATES  

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<th>UNIT COST</th>
<th>COST($000)</th>
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10. Description of Proposed Construction  
Utilize host-nation funding to construct two 302 person eight-story Unaccompanied Enlisted Personnel Housing per the current Army Standard for Unaccompanied Enlisted Housing at Camp Humphreys. The Unaccompanied Enlisted Personnel Housing Barracks will include private modules with individual living/sleeping rooms and each room shall contain closets and a combination of private kitchens and bathrooms to be shared by a maximum of two people. Barracks will include four elevators per building (one freight elevator and three passenger elevators). Unaccompanied Enlisted Personnel Housing support areas include circulation spaces (stairs and corridors); mechanical, electrical, and communication spaces; exterior boot wash areas; and an outdoor storage building. Accessibility to the living/sleeping rooms will be from interior enclosed corridors. Exterior balcony access is not authorized for new construction. Unaccompanied Enlisted Personnel Housing common areas include entry lobby, Charge of Quarters station with counter, vending areas, ice machine, janitor's closet, public phones and toilets. If laundry facilities are consolidated in the facility, they may also be located in this area, along with a provision for a field gear cleaning area (mud room). One of the two towers shall contain a fire pump room.

Supporting facilities include underground utilities (electrical, natural gas, water, and sewer systems); utility monitoring and control system; parking; paving, sidewalks, curbs and gutters; dumpster and pad/trash enclosures; storm drainage;
1. COMPONENT
   Army
2. DATE
   01 FEB 2018
3. INSTALLATION AND LOCATION
   Camp Humphreys
   Korea
4. PROJECT TITLE
   Unaccompanied Enlisted Personnel Housing, P2, A20R200P2
5. PROGRAM ELEMENT
   721
6. CATEGORY CODE
   11
7. PROJECT NUMBER
   91140
8. PROJECT COST ($000)
   76,000
9. COST ESTIMATES (CONTINUED)

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<td>Building Information Systems</td>
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Exterior information systems; fire protection, outdoor vending area, facility and parking signage, area security lighting, and site improvements. Barracks site design will include circulation sidewalks; two multi-purpose recreation courts, two 30person gazebos; one BBQ shelter; six covered bicycle racks; and landscaping to include all grass, trees, and vegetation within the project boundaries. Additional information technology requirements include a mass notification system as required by UFC 4-010-01. Coordinate design and construction of all site supporting facilities with current Garrison Land Development, Utilities and Infrastructure (LDUI) plans and ensure all site supporting systems are integrated with all LDUI elements on-site and off-site.

A. Heating and air conditioning will be provided and, if applicable and practical, will be compatible for use with natural gas. Active and passive solar energy will be considered and included if cost effective. This facility shall be designed to make maximum use of natural climate, ventilation, and lighting, as well as use of energy efficient window and building insulation.

B. Connection for underground utilities is required between the facility and the utility corridor.

C. Site improvements include earthwork and landscaping.

D. Full fire protection as required by regulation and UFC 3-600-01 to include a fire alarm/suppression system; mass notification system (MNS) as required by UFC 4-010-01; access control systems; and connection to the utility monitoring control system (UMCS). Fire Alarm panels shall include zone module cards that can support 16 zones. These additional zones are required to transmit exact location data to the computerized D-21 Monaco fire alarm computer located at the fire department communication center through the use of a BT-XM building transmitter installed at the building in design.

11. REQ: 35,782 PN  ADQT: 13,548 PN  SUBSTD: 15,440 PN

PROJECT:
Utilize host-nation funding to construct two 302 PN Unaccompanied Enlisted Personnel Housing (UEPH) Barracks. (Current Mission)

REQUIREMENT:
This project is required to provide working/mission facilities that meet current Army Standard Design criteria and to support the increase in population at Camp Humphreys as part of the U.S. Forces Korea Theater Master Plan (USFK TMP). This
REQUIREMENT: (CONTINUED)
project will be built on Camp Humphreys, which is an enduring installation.

CURRENT SITUATION:
Adequate permanent facilities are not available to support the increase in population at USAG Humphreys as part of the USFK TMP. All existing facilities suitable for use under this category code are fully utilized.

IMPACT IF NOT PROVIDED:
If this project is not provided, Camp Humphreys will have a deficit of barracks spaces and be unable to support future growth as required by the USFK TMP.

ADDITIONAL:
A. JOINT USE CERTIFICATE: The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. This facility will be available for use by the other components.

B. ANTITERRORISM/FORCE PROTECTION: All of the 21 Building Standards for Antiterrorism/Force Protections (AT/FP) will apply to this project, including a Mass Notification System, and site measures, which are outlined in UFC 4-010-01, dated 9 February 2012, change 1, 1 Oct 2013. All facilities will meet current UFC 4-010-01 standards for buildings and site. Such additional AT/FP site features will include concrete pop-up bollards and barriers. Major AT/FP building features will include design for progressive collapse and blast resistant windows.

C. SUSTAINABLE DESIGN AND DEVELOPMENT: Sustainable principles shall be integrated into the design, development, and construction of this project and it will achieve a minimum of LEED Silver certified in accordance with the current US Army Sustainable Design and Development Policy and other applicable laws and Executive Orders. This facility shall be designed to achieve energy consumption levels that are at least 30 percent below the levels established in the current version of the ASHRAE Standard 90.1 or the International Energy Conservation Code, as appropriate. All equipment going into this facility must be Energy Star rated or on the Federal Energy Management Program (FEMP) approved list. All utilities shall be metered using advanced meters as defined by FEMP. Strict adherence to the Camp Humphreys Installation Design Standard is required.

D. HOST NATION: This project is located on an enduring installation which will be retained by United States Forces Korea (USFK) for the foreseeable future. The possibility of Host Nation funding has been addressed to support this requirement.

E. PHYSICAL SECURITY: This project has been coordinated with the installation physical security plan, and all physical security measures are included.

F. ECONOMIC ANALYSIS: An economic analysis has been prepared and was utilized in evaluating this project. This project is the most cost effective method to satisfy the requirement.
G. Comprehensive interior design package for the AE to complete as required by UFC 3-120-10.

H. No portion of this facility is intended for Republic of Korea personnel exclusive or primary use.
Department of the Army
Fiscal Year (FY) 2019
Budget Estimates

Army Family Housing

JUSTIFICATION DATA SUBMITTED TO CONGRESS
February 2018
# DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

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<td>Summary of Inventory and Condition</td>
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<td>(Exhibit FH-8)</td>
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<td>Operation, Maintenance and Utilities, Summary (Exhibit FH-2)</td>
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<td>Foreign Currency Exchange Data (Exhibit PB-18)</td>
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<td>Management Summary and Exhibit OP-5</td>
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<td>Services Summary and Exhibit OP-5</td>
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<td>Furnishings Summary and Exhibit OP-5</td>
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Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
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<td>Analysis of Leased Units (Exhibit FH-4)</td>
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SUMMARY

($ in Thousands)

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<th>$707,169</th>
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<tr>
<td>FY 2018 Annualized Continuing Resolution (CR) Adjustments</td>
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<tr>
<td>*Total FY 2018 PB Request with Annualized CR Adjustments</td>
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* Reflects the FY 2018 President’s Budget request with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

PURPOSE AND SCOPE

The Army Family Housing (AFH) Budget Request supports the operation, maintenance, leasing, privatization oversight and construction for military Family housing worldwide. In support of the Army’s Facility Investment Strategy (FIS), the FY 2019 Budget Request funds the Department’s goal of providing fully adequate Family housing units. It also supports the Secretary of Defense’s commitment to improve military housing for our Soldiers and their Families.

MAJOR FACTORS

The Army Family housing inventory reflects adjustments made as a result of improved accountability. Facilities deteriorate over time and become inadequate; transformation and stationing decisions generate new and revised housing requirements. The Army is using both Family Housing Operation and Maintenance and Construction funds to eliminate inadequate dwellings and housing shortages. These funding requests will improve the quality of life for Soldiers and their Families.

The Army Family Housing Construction (AFHC) request includes the third increment of funding for a Camp Humphreys Family housing project authorized in FY 2017, new construction of 118 Family housing units at: Fort McCoy, WI and USAG Italy (Vicenza), IT; replacement of 116 units at Fort Buchanan, PR and USAG Daegu (Camp Walker), KO; and improvement of 72 Family housing units at USAG Rhineland-Pfalz (Baumholder), GE.

The Army Family Housing Operations (AFHO) request is based on annual changes to the inventory, inflation, and currency adjustments. These programmatic adjustments are explained in each section.

The Army’s scheduled Residential Communities Initiative (RCI) program consists of over 85,000 privatized end state units at 44 Army locations, representing over 98% of the on-post Family housing inventory in the U.S. The Army continues to execute additional oversight and accountability as directed by legislation and extend the life of the Army’s infrastructure investment.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
SUMMARY (Continued)

PROGRAM SUMMARY
Authorization is requested for the performance of new construction, improvements, planning and design of future construction projects, operation, maintenance, utilities, leasing, and privatization oversight for Army Family Housing in the amount of $707,169,000:

Appropriation of $707,169,000 is requested to fund:
  a. Family Housing New Construction, Construction Improvements, Planning and Design, and
  b. Family Housing Operation and Maintenance to support inventory authorized in existing legislation.

REQUEST
A summary of the FY 2019 AFH funding program follows:

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<tr>
<th>Sub Total (in Thousands)</th>
<th>Grand Total (in Thousands)</th>
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<td>STATE</td>
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<tr>
<td>Wisconsin</td>
<td>Fort McCoy [IMCOM]</td>
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** TOTAL INSIDE THE UNITED STATES FOR AFH $6,200 6,200
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<th>PROJECT TITLE</th>
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<th>APPROPRIATION REQUEST</th>
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<tbody>
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<td>Italy Various (IMCOM)</td>
<td>88759</td>
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<td>95,134</td>
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<td></td>
<td>Family Housing New Construction</td>
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<td>Subtotal Italy Various Part IIA</td>
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<td>Korea</td>
<td>Korea Various (IMCOM)</td>
<td>81429</td>
<td>Camp Walker</td>
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<td></td>
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<td>153,000</td>
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<td>Puerto Rico</td>
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<td>Subtotal Fort Buchanan Part IIA</td>
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## Army Family Housing Construction Improvements (Part IIB)

### Outside the United States

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<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
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<tbody>
<tr>
<td>Germany Various (IMCOM)</td>
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Subtotal Germany Various Part IIB  

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* TOTAL AFH FOR Germany  

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** TOTAL OUTSIDE THE UNITED STATES FOR AFH  

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MILITARY CONSTRUCTION (PART IIB) TOTAL  

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<p>| | | | | | |</p>
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PAGE NO. 5
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<th>PROJECT TITLE</th>
<th>AUTHORIZATION REQUEST</th>
<th>APPROPRIATION REQUEST</th>
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<td>Planning and Design (PLANDES)</td>
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<td>Family Housing P &amp; D</td>
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<td></td>
<td>Subtotal Planning and Design Part IIA</td>
<td>$</td>
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<td></td>
<td></td>
<td></td>
<td>* TOTAL AFH FOR Worldwide Various</td>
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<td></td>
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<td></td>
<td>** TOTAL WORLDWIDE FOR AFH</td>
<td>$</td>
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<td></td>
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<td></td>
<td>MILITARY CONSTRUCTION (PART IIA) TOTAL</td>
<td>$</td>
<td>195,334</td>
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</table>
### DEPARTMENT OF THE ARMY

**Fiscal Year (FY) 2019 Budget Estimates**

**Army Family Housing**

### FH-11 PB Inventory and Condition of Government-Owned, Family Housing Units

**WORLDWIDE**

(Number of Dwelling Units in Inventory)

**Fiscal Year 2019**

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning of FY Adequate Inventory Total</strong></td>
<td>7,964</td>
<td>8,151</td>
<td>9,307</td>
<td>8,781</td>
<td>9,439</td>
<td>9,675</td>
<td>9,869</td>
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<tr>
<td>FCI of 90% to 100% (Good Condition)</td>
<td>6,412</td>
<td>6,602</td>
<td>7,527</td>
<td>6,740</td>
<td>7,404</td>
<td>7,640</td>
<td>7,835</td>
</tr>
<tr>
<td>FCI of 80% to 89% (Fair Condition)</td>
<td>1,552</td>
<td>1,549</td>
<td>1,780</td>
<td>2,041</td>
<td>2,035</td>
<td>2,035</td>
<td>2,034</td>
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<tr>
<td><strong>Beginning of FY Inadequate Inventory Total</strong></td>
<td>2,364</td>
<td>2,303</td>
<td>1,632</td>
<td>1,429</td>
<td>1,102</td>
<td>1,008</td>
<td>854</td>
</tr>
<tr>
<td>FCI of 60% to 79% (Poor Condition)</td>
<td>1,759</td>
<td>1,698</td>
<td>876</td>
<td>864</td>
<td>671</td>
<td>610</td>
<td>517</td>
</tr>
<tr>
<td>FCI of 59% and below (Failing Condition)</td>
<td>605</td>
<td>605</td>
<td>756</td>
<td>565</td>
<td>431</td>
<td>398</td>
<td>337</td>
</tr>
<tr>
<td><strong>Beginning of FY Total Inventory</strong></td>
<td>10,328</td>
<td>10,454</td>
<td>10,939</td>
<td>10,210</td>
<td>10,541</td>
<td>10,683</td>
<td>10,723</td>
</tr>
</tbody>
</table>

| **Percent Adequate - Begin of FY Inventory** | 77%     | 78%     | 85%     | 86%     | 90%     | 91%     | 92%     |

| **Inadequate Inventory Reduced Through:** |         |         |         |         |         |         |         |
| Construction (MilCon) | 18       | 60      | -       | -       | -       | -       | -       |
| Maintenance & Repair (O&M) | -       | 335     | 95      | 92      | 56      | 83      | 119     |
| Privatization | -       | -       | -       | -       | -       | -       | -       |
| Demolition/Divestiture/Division/Conversion | 43     | 276     | 108     | 235     | 38      | 71      | 75      |
| Funded by Host Nation | -       | -       | -       | -       | -       | -       | -       |

| **Adequate Inventory Changes:** | 187     | 1,156   | (526)   | 658     | 236     | 194     | 277     |
| Construction (MilCon) | 192     | 889     | 36      | 572     | 180     | 116     | 160     |
| Maintenance & Repair (O&M) | -       | 335     | 95      | 92      | 56      | 83      | 119     |
| Privatization | -       | -       | -       | -       | -       | -       | -       |
| Demolition/Divestiture/Division/Conversion | (5)    | (68)    | (657)   | (6)     | -       | (5)     | (2)     |

| **End of FY Adequate Inventory Total** | 8,151   | 9,307   | 8,781   | 9,439   | 9,675   | 9,869   | 10,146  |
| FCI of 90% to 100% (Good Condition) | 6,602   | 7,527   | 6,740   | 7,404   | 7,640   | 7,835   | 8,138   |
| FCI of 80% to 89% (Fair Condition) | 1,549   | 1,780   | 2,041   | 2,035   | 2,035   | 2,035   | 2,034   |
| **End of FY Inadequate Inventory Total** | 2,303   | 1,632   | 1,429   | 1,102   | 1,008   | 854     | 660     |
| FCI of 60% to 79% (Poor Condition) | 1,698   | 876     | 864     | 671     | 610     | 517     | 323     |
| FCI of 59% and below (Failing Condition) | 605     | 756     | 565     | 431     | 398     | 337     | 337     |
| **End of FY Total Inventory** | 10,454  | 10,939  | 10,210  | 10,541  | 10,683  | 10,723  | 10,806  |

| **Percent Adequate - End of FY Inventory** | 78%     | 85%     | 86%     | 90%     | 91%     | 92%     | 94%     |

| **DoD Performance Goal - 90% of World-wide inventory at FCI of at least 80% (Good or Fair Condition)** | 90%     | 90%     | 90%     | 90%     | 90%     | 90%     | 90%     |
DEPARTMENT OF THE ARMY  
Fiscal Year (FY) 2019 Budget Estimates  
Army Family Housing

### FH-11 PB Inventory and Condition of Government-Owned, Family Housing Units

**UNITED STATES (CONUS plus Hawaii and Alaska)**  
(Number of Dwelling Units in Inventory)  
Fiscal Year 2019

<table>
<thead>
<tr>
<th>Number of Units - U.S.</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning of FY Adequate Inventory Total</td>
<td>591</td>
<td>619</td>
<td>861</td>
<td>631</td>
<td>657</td>
<td>664</td>
<td>690</td>
</tr>
<tr>
<td>FCI of 90% to 100% (Good Condition)</td>
<td>516</td>
<td>547</td>
<td>674</td>
<td>430</td>
<td>460</td>
<td>467</td>
<td>494</td>
</tr>
<tr>
<td>FCI of 80% to 89% (Fair Condition)</td>
<td>75</td>
<td>72</td>
<td>187</td>
<td>201</td>
<td>197</td>
<td>197</td>
<td>196</td>
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<tr>
<td>Beginning of FY Inadequate Inventory Total</td>
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<td>153</td>
<td>104</td>
<td>51</td>
<td>23</td>
<td>23</td>
<td>23</td>
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<tr>
<td>FCI of 60% to 79% (Poor Condition)</td>
<td>114</td>
<td>114</td>
<td>63</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<tr>
<td>FCI of 59% and below (Failing Condition)</td>
<td>39</td>
<td>39</td>
<td>41</td>
<td>44</td>
<td>18</td>
<td>18</td>
<td>18</td>
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<tr>
<td>Beginning of FY Total Inventory</td>
<td>744</td>
<td>772</td>
<td>965</td>
<td>682</td>
<td>680</td>
<td>687</td>
<td>713</td>
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<td>Percent Adequate - Begin of FY Inventory</td>
<td>79%</td>
<td>80%</td>
<td>89%</td>
<td>93%</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
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<td>Inadequate Inventory Reduced Through:</td>
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<tr>
<td>Construction (MilCon)</td>
<td>-</td>
<td>49</td>
<td>53</td>
<td>28</td>
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<tr>
<td>Maintenance &amp; Repair (O&amp;M)</td>
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<td>-</td>
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<td>Privatization</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Demolition/Divestiture/Diversion/Conversion</td>
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<td>43</td>
<td>32</td>
<td>26</td>
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<tr>
<td>Funded by Host Nation</td>
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<td>(230)</td>
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<tr>
<td>Construction (MilCon)</td>
<td>33</td>
<td>295</td>
<td>28</td>
<td>7</td>
<td>26</td>
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<td>-</td>
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<tr>
<td>Maintenance &amp; Repair (O&amp;M)</td>
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<td>21</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Privatization</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>Demolition/Divestiture/Diversion/Conversion</td>
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<td>(59)</td>
<td>(251)</td>
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<td>End of FY Adequate Inventory Total</td>
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<td>631</td>
<td>657</td>
<td>664</td>
<td>690</td>
<td>688</td>
</tr>
<tr>
<td>FCI of 90% to 100% (Good Condition)</td>
<td>547</td>
<td>674</td>
<td>430</td>
<td>460</td>
<td>467</td>
<td>494</td>
<td>492</td>
</tr>
<tr>
<td>FCI of 80% to 89% (Fair Condition)</td>
<td>72</td>
<td>187</td>
<td>201</td>
<td>197</td>
<td>197</td>
<td>196</td>
<td>196</td>
</tr>
<tr>
<td>End of FY Inadequate Inventory Total</td>
<td>153</td>
<td>104</td>
<td>51</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>FCI of 60% to 79% (Poor Condition)</td>
<td>114</td>
<td>63</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>FCI of 59% and below (Failing Condition)</td>
<td>39</td>
<td>41</td>
<td>44</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>End of FY Total Inventory</td>
<td>772</td>
<td>965</td>
<td>682</td>
<td>680</td>
<td>687</td>
<td>713</td>
<td>711</td>
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<td>Percent Adequate - End of FY Inventory</td>
<td>80%</td>
<td>89%</td>
<td>93%</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
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## FH-11 PB Inventory and Condition of Government-Owned, Family Housing Units
### FOREIGN (includes U.S. Territories)
**(Number of Dwelling Units in Inventory)**

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<th>Fiscal Year 2019</th>
<th>Number of Units - Foreign</th>
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<td>FCI of 80% to 89% (Fair Condition)</td>
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<td><strong>Beginning of FY Inadequate Inventory Total</strong></td>
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<td><strong>Percent Adequate - Begin of FY Inventory</strong></td>
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<td><strong>Inadequate Inventory Reduced Through:</strong></td>
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<td>Construction (MilCon)</td>
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<tr>
<td>Maintenance &amp; Repair (O&amp;M)</td>
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<tr>
<td>Privatization</td>
<td>-</td>
</tr>
<tr>
<td>Demolition/Divestiture/Conversion/Conversion</td>
<td>43</td>
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<tr>
<td>Funded by Host Nation</td>
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<td><strong>Adequate Inventory Changes:</strong></td>
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<tr>
<td>Construction (MilCon)</td>
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<td>Privatization</td>
<td>-</td>
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<tr>
<td>Demolition/Divestiture/Conversion/Conversion</td>
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<td><strong>End of FY Inadequate Inventory Total</strong></td>
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<tr>
<td>FCI of 60% to 79% (Poor Condition)</td>
<td>1,584</td>
</tr>
<tr>
<td>FCI of 59% and below (Failing Condition)</td>
<td>566</td>
</tr>
<tr>
<td><strong>End of FY Total Inventory</strong></td>
<td>9,682</td>
</tr>
<tr>
<td><strong>Percent Adequate - End of FY Inventory</strong></td>
<td>78%</td>
</tr>
</tbody>
</table>
**DEPARTMENT OF THE ARMY**  
*Fiscal Year (FY) 2019 Budget Estimates*  
Army Family Housing  
**FH-8 Exhibit: Annual Inadequate Family Housing Elimination FY 2017**

<table>
<thead>
<tr>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,328</td>
<td>2,364</td>
<td>61</td>
</tr>
<tr>
<td>1,341</td>
<td>239</td>
<td>18</td>
</tr>
<tr>
<td>840</td>
<td>85</td>
<td>43</td>
</tr>
</tbody>
</table>

**Total Units at beginning of FY 2017**

FY 2017 total traditional construction (Milcon) and O&M projects to eliminate inadequate units

- AFHC/Right-Sizing/USAG Stuttgart: 1,341

FY 2017 total units demolished/ divested/ or otherwise permanently removed from Family housing inventory

- Demolition/Camp Zama: 840

**Total Units at end of FY 2017**

- 10,454 units
- 2,303 units
- 61 units
### DEPARTMENT OF THE ARMY

#### Fiscal Year (FY) 2019 Budget Estimates

**Army Family Housing**

FH-8 Exhibit: Annual Inadequate Family Housing Elimination FY 2018

<table>
<thead>
<tr>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,454</td>
<td>2,303</td>
<td>671</td>
</tr>
</tbody>
</table>

#### Total Units at beginning of FY 2018

- FY 2018 total traditional construction (Milcon) and O&M projects to eliminate inadequate units
  - *AFHC/Right-Sizing/USAG Ansbach*: 1,041 units, 221 units addressed
  - *AFHC/Improve/USAG Wiesbaden*: 2,064 units, 246 units addressed
  - *AFHO/Minor M&R/USAG Baumholder*: 1,309 units, 234 units addressed
  - *AFHO/Minor M&R/USAG Grafenwoehr*: 1,487 units, 227 units addressed
  - *AFHO/Major M&R/USAG Grafenwoehr*: 1,487 units, 163 units addressed
  - *AFHO/Minor M&R/USAG Stuttgart*: 1,335 units, 221 units addressed
  - *AFHO/Major M&R/USAG Stuttgart*: 1,335 units, 214 units addressed
  - *AFHO/Minor M&R/USAG Wiesbaden*: 2,064 units, 246 units addressed
  - *AFHO/Minor M&R/USAG Daegu*: 55 units, 5 units addressed
  - *AFHO/Minor M&R/USAG Yongsan*: 267 units, 4 units addressed
  - *AFHO/Minor M&R/Kwajalein Atoll*: 452 units, 300 units addressed
  - *AFHO/Minor M&R/Lake City AAP*: 16 units, 16 units addressed
  - *AFHO/Major M&R/Watervliet Arsenal*: 16 units, 16 units addressed

- FY 2018 total units demolished/ divested/ or otherwise permanently removed from Family housing inventory
  - *Disposal/Dugway*: 210 units, 2 units removed
  - *Demolition/Sierra*: 19 units, 18 units removed
  - *Demolition/Natick SCC*: 76 units, 76 units removed
  - *Reduction due to Right-Sizing/USAG Ansbach*: 1,041 units, 173 units removed
  - *Disposal/USAG Baumholder*: 1,309 units, 90 units removed
  - *Conversion/USAG Baumholder*: 1,309 units, 52 units removed
  - *Conversion/USAG Stuttgart*: 1,335 units, 221 units removed
  - *Conversion/USAG Italy*: 249 units, 249 units removed
  - *Conversion/USAG Wiesbaden*: 2,064 units, 242 units removed
  - *Conversion/Camp Zama*: 797 units, 42 units removed
  - *Disposal/Kwajalein Atoll*: 452 units, 286 units removed

#### Total Units at end of FY 2018

- 10,939 units, 1,632 units addressed, 671 units permanently removed
## FH-8 Exhibit: Annual Inadequate Family Housing Elimination FY 2019

**Total Units at beginning of FY 2019**

<table>
<thead>
<tr>
<th></th>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 total traditional construction (Milcon) and O&amp;M projects to eliminate inadequate units</td>
<td>10,939</td>
<td>1,632</td>
<td>203</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/USAG Ansbach</td>
<td>1,017</td>
<td>149</td>
<td>9</td>
</tr>
<tr>
<td>* AFHO/Right-Sizing/USAG Stuttgart</td>
<td>1,348</td>
<td>183</td>
<td>65</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/Dugway PG</td>
<td>155</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/Hawthorne AD</td>
<td>28</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>* AFHO/Major M&amp;R/Watervliet Arsenal</td>
<td>16</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

**FY 2019 total units demolished/divested or otherwise permanently removed from Family housing inventory**

<table>
<thead>
<tr>
<th></th>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Reduction due to Right-Sizing/USAG Ansbach</td>
<td>1,017</td>
<td>140</td>
<td>6</td>
</tr>
<tr>
<td>* Reduction due to Right-Sizing/USAG Stuttgart</td>
<td>1,348</td>
<td>183</td>
<td>41</td>
</tr>
<tr>
<td>* Demolition/USAG Wiesbaden</td>
<td>2,008</td>
<td>187</td>
<td>40</td>
</tr>
<tr>
<td>* Conversion/USAG Wiesbaden</td>
<td>2,008</td>
<td>147</td>
<td>18</td>
</tr>
<tr>
<td>* Conversion/USAG Yongsan</td>
<td>267</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>* Disposal/USAG Wiesbaden</td>
<td>2,008</td>
<td>129</td>
<td>2</td>
</tr>
<tr>
<td>* Demolition/Fort Buchanan</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>* Demolition/USAG Japan</td>
<td>872</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>* Demolition/USAG Italy</td>
<td>248</td>
<td>248</td>
<td>51</td>
</tr>
<tr>
<td>* Divesture/SSC Natick</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
</tbody>
</table>

**FY 2019 total units added to the Family housing inventory**

<table>
<thead>
<tr>
<th></th>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Inventory Correction/Dugway PG</td>
<td>155</td>
<td>45</td>
<td>(9)</td>
</tr>
<tr>
<td>* Inventory Correction/Lake City</td>
<td>-</td>
<td>2</td>
<td>(7)</td>
</tr>
<tr>
<td>* Inventory Correction/McAlester AAP</td>
<td>13</td>
<td>1</td>
<td>(4)</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Ansbach</td>
<td>1,017</td>
<td>182</td>
<td>(24)</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Italy</td>
<td>248</td>
<td>197</td>
<td>2</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Rheinland-Pfalz</td>
<td>-</td>
<td>453</td>
<td>(73)</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Stuttgart</td>
<td>1,348</td>
<td>151</td>
<td>(9)</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Wiesbaden</td>
<td>2,008</td>
<td>229</td>
<td>(18)</td>
</tr>
<tr>
<td>* Inventory Correction/USAG Daegu</td>
<td>225</td>
<td>14</td>
<td>(2)</td>
</tr>
</tbody>
</table>

**Total Units at end of FY 2019**

<table>
<thead>
<tr>
<th></th>
<th>Total Inventory</th>
<th>Total Inadequate Inventory</th>
<th>Total Inadequate Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 total traditional construction (Milcon) and O&amp;M projects to eliminate inadequate units</td>
<td>10,210</td>
<td>1,429</td>
<td>203</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/USAG Ansbach</td>
<td>1,017</td>
<td>149</td>
<td>9</td>
</tr>
<tr>
<td>* AFHO/Right-Sizing/USAG Stuttgart</td>
<td>1,348</td>
<td>183</td>
<td>65</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/Dugway PG</td>
<td>155</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* AFHO/Minor M&amp;R/Hawthorne AD</td>
<td>28</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>* AFHO/Major M&amp;R/Watervliet Arsenal</td>
<td>16</td>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>
(a) CONSTRUCTION AND ACQUISITION. -- Using amounts appropriated pursuant to the authorization of appropriations in section 2103(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Army may construct or acquire family housing units (including land acquisition and supporting facilities) at the installations or locations, in the number of units, and in the amounts set forth in the following table:

<table>
<thead>
<tr>
<th>State</th>
<th>Installation</th>
<th>Purpose</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>Fort McCoy</td>
<td>7 units</td>
<td>6,200,000</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Fort Buchanan</td>
<td>26 units</td>
<td>26,000,000</td>
</tr>
<tr>
<td>Germany</td>
<td>USAG Rheinland-Pfalz (Baumholder)</td>
<td>72 units</td>
<td>32,000,000</td>
</tr>
<tr>
<td>Korea</td>
<td>USAG Daegu (Camp Walker)</td>
<td>90 units</td>
<td>68,000,000</td>
</tr>
<tr>
<td>Korea</td>
<td>USAG Humphreys</td>
<td>Note 1</td>
<td>85,000,000</td>
</tr>
<tr>
<td>Italy</td>
<td>USAG Italy (Vicenza)</td>
<td>111 units</td>
<td>95,134,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>306 units</td>
<td>312,334,000</td>
</tr>
</tbody>
</table>

Note 1: Third increment of $85,000,000 for the construction project which was authorized in FY 2017 for $297,000,000.

(b) PLANNING AND DESIGN. -- Using amounts appropriated pursuant to the authorization of appropriations in section 2103(a) and available for military family housing functions as specified in the funding table in section 4601, the Secretary of the Army may carry out architectural and engineering services and construction design activities with respect to the construction or improvement of family housing units in an amount not to exceed [[$33,559,000] $18,326,000].

SEC. 2103. AUTHORIZATION OF APPROPRIATIONS, ARMY.

(a) IN GENERAL.

(5) For military Family housing functions:

(A) For construction and acquisition, planning and design, and improvements of military Family housing and facilities, [[$182,662,000] $330,660,000].
(B) For support of military Family housing (including the functions described in Section 2833 of Title 10, United States Code), and notwithstanding other provisions of law, for support of military Family housing authorized in Subchapter II of Title 10, United States Code [$346,625,000] $376,509,000.

APPROPRIATION LANGUAGE

Family Housing Construction, Army

For expenses of Family housing for the Army for construction, including acquisition, replacement, addition, expansion, extension, alteration, architectural and engineering services and construction design activities for construction and improvements as authorized by law, [$182,662,000] $330,660,000 to remain available until September 30, 2023.

Family Housing Operation and Maintenance, Army

For expenses of Family housing for the Army for operation and maintenance, including debt payment, leasing, privatization oversight, minor construction, and principal and interest charges, as authorized by law, [$346,625,000] $376,509,000.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
AUTHORIZATION AND APPROPRIATION LANGUAGE (Continued)

Items of Interest – MILCON Appropriations Committees

According to Title 10 USC Sections 2831 and 2884 and Public Law 114-223, MILCON/VA Appropriations Act, 2017, the Army provides the following reports:

General and Flag Officers Quarters, Maintenance and Repair over $35K (See Tab, GFOQ M&R over $35K);

General and Flag Officers Quarters, Anticipated Operation and Maintenance Expenditures Exceeding $35K per Unit (See Tab, GFOQ O&M costs);

General and Flag Officers Quarters, Units Over 6,000 Net Square Feet (NSF) (See Tab, GFOQ O&M costs);

General and Flag Officers Quarters, Annual Cost Report (Submitted separately).
DEPARTMENT OF THE ARMY  
Fiscal Year (FY) 2019 Budget Estimates  
Army Family Housing  
NEW CONSTRUCTION

($ in Thousands)

| FY 2019 Budget Request | $280,334 |
| FY 2018 Program Budget   | $114,947 |

PURPOSE AND SCOPE

This program provides for construction where analysis indicates it is more economical to build new units rather than lease or revitalize existing Army Family housing. New units are built when adequate off post housing is not available. Cost estimates include site preparation, demolition, land acquisition, construction, and initial outfitting with fixtures and integral equipment, along with associated facilities such as roads, driveways, walks, utility systems, and community facilities.

PROGRAM SUMMARY

Authorization is requested in FY 2019 for:

1. Construction of 234 new Family housing units.

2. Appropriation in the amount of $280,334,000 to fund construction of 234 new Family housing units.

A summary of the requested new construction funding program for FY 2019 follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Mission</th>
<th>Units Constructed</th>
<th>Units Demolished</th>
<th>Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort McCoy, WI</td>
<td>Current</td>
<td>7</td>
<td>6,200</td>
<td></td>
</tr>
<tr>
<td>Fort Buchanan, PR</td>
<td>Current</td>
<td>26</td>
<td>26,000</td>
<td></td>
</tr>
<tr>
<td>USAG Daegu (Camp Walker), KO</td>
<td>Current</td>
<td>90</td>
<td>68,000</td>
<td></td>
</tr>
<tr>
<td>USAG Humphreys, KO</td>
<td>Current</td>
<td>n/a</td>
<td>85,000*</td>
<td></td>
</tr>
<tr>
<td>USAG Italy (Vicenza), IT</td>
<td>Current</td>
<td>111</td>
<td>95,134</td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>234</td>
<td>118</td>
<td>280,334</td>
<td></td>
</tr>
</tbody>
</table>

* Third increment of $85,000,000 for the construction project which was authorized in FY 2017 for $297,000,000.
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### Personnel Strength

<table>
<thead>
<tr>
<th></th>
<th>As of 31 Oct 2017</th>
<th>End FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Officer</strong></td>
<td>375</td>
<td>374</td>
</tr>
<tr>
<td><strong>2. Enlisted</strong></td>
<td>955</td>
<td>888</td>
</tr>
<tr>
<td><strong>3. Civil</strong></td>
<td>1202</td>
<td>1183</td>
</tr>
<tr>
<td><strong>4. Support</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>5. Total</strong></td>
<td>294</td>
<td>289</td>
</tr>
<tr>
<td><strong>6. Officer</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>7. Enlisted</strong></td>
<td>1051</td>
<td>1051</td>
</tr>
<tr>
<td><strong>8. Civil</strong></td>
<td>2453</td>
<td>2453</td>
</tr>
<tr>
<td><strong>9. Support</strong></td>
<td>1911</td>
<td>1468</td>
</tr>
<tr>
<td><strong>10. Total</strong></td>
<td>8,241</td>
<td>7,706</td>
</tr>
</tbody>
</table>

### Inventory Data ($000)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total Area</td>
<td>52,449 ha (129,605 AC)</td>
</tr>
<tr>
<td>B. Inventory Total as of 05 Jul 2017</td>
<td>3,444,043</td>
</tr>
<tr>
<td>C. Authorization Not Yet in Inventory</td>
<td>45,900</td>
</tr>
<tr>
<td>D. Authorization Requested in the FY 2019 Program</td>
<td>6,200</td>
</tr>
<tr>
<td>E. Authorization Included in the FY 2020 Program</td>
<td>0</td>
</tr>
<tr>
<td>F. Planned in Next Three Years (New Mission Only)</td>
<td>0</td>
</tr>
<tr>
<td>G. Remaining Deficiency</td>
<td>0</td>
</tr>
<tr>
<td>H. Grand Total</td>
<td>3,496,143</td>
</tr>
</tbody>
</table>

### Project Appropriations Requested in the FY 2019 Program

<table>
<thead>
<tr>
<th>CAT</th>
<th>Project Title</th>
<th>Scope/UM</th>
<th>Start</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>71113</td>
<td>Family Housing New Construction</td>
<td>7.00/FA(7.00/FA)</td>
<td>08/2017</td>
<td>12/2018</td>
</tr>
</tbody>
</table>

**Total:** 6,200

### Future Project Appropriations

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Project Title</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Mission or Major Functions

Fort McCoy, Wisconsin is a semi-active installation and is maintained on a continuous basis in support of permanent complement, Active Army, tenants, United States Army Reserves, USAR Component Groups, National Guard, Marine Reserves, and Airborne Forces Activities for the states of Illinois, Iowa, Minnesota, Upper Peninsula of Michigan, and Wisconsin, for a total in excess of 67,000 troops during annual training, environmental training, and annual MUTA Support.

### Outstanding Pollution and Safety Deficiencies

<table>
<thead>
<tr>
<th></th>
<th>($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Air Pollution</td>
<td>0</td>
</tr>
<tr>
<td>B. Water Pollution</td>
<td>0</td>
</tr>
<tr>
<td>C. Occupational Safety and Health</td>
<td>0</td>
</tr>
</tbody>
</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71113 Lt Col &amp; Major, Grade O4&amp;5 3 Bed FA</td>
<td>4</td>
<td>630,159</td>
<td>(2,521)</td>
<td></td>
</tr>
<tr>
<td>71113 Lt Col &amp; Major, Grade O4&amp;5 4 Bed FA</td>
<td>3</td>
<td>705,353</td>
<td>(2,116)</td>
<td></td>
</tr>
<tr>
<td>Sustainability/Energy Measures LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(93)</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Service LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(35)</td>
</tr>
<tr>
<td>Water, Sewer, Gas LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(119)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(512)</td>
</tr>
<tr>
<td>Site Imp(175) Demo( ) LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(175)</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST

5,571

CONTINGENCY (5.00%) 279

SUBTOTAL 5,850

SUPV, INSP & OVERHEAD (5.70%) 333

TOTAL REQUEST 6,183

INSTALLED EQT-OTHER APPROP 6,200

10. Description of Proposed Construction
Construct 7 single Family Housing units for Field Grade Officers (FGO) consisting of three 4-bedroom units and four 3-bedroom units. Project includes individual unit metering of utilities, hard wired interconnected smoke detectors, carbon monoxide detection, garages, storage, patios, backyard fencing, landscaping, and all equipment and appliances for fully functional residential living units. Project includes neighborhood amenities, walkways, roads, utilities, Utility Energy Monitoring and Control System (UEMCS), environmental measures required by law and associated supporting infrastructure. Project shall comply with the Army Standard for Family Housing and the Army Family Housing Standard Design Criteria and site adapt design from current project. Facilities will be designed to a minimum life of 40 years and energy efficiencies meeting, Leadership In Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. At least five percent of the total on post Family Housing will be accessible or readily and easily modifiable for use by persons with disabilities and includes additional 300 Gross SF or SM for harsh climates.

Criteria for Proposed Construction:
Unified Facility Criteria (UFC) 4-711-01 Family Housing dated 13 July 2006.
UFC 1-200-01 The Whole Building Design Guide 1 July 2013, Chg 3, 1 August 2015.
AR 420-1 Facilities Management dated 12 February 2008, Rapid Action Revision 24 August
DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

2012.
AR 210-20, Master Planning for Army Installations, dated 16 May 2005.

PROJECT: Construction of 7 Field Grade Officer Family housing consisting of three 4-bedroom units and four 3-bedroom units to include neighborhood amenities, energy conservation, and supporting infrastructure. (Current Mission)

REQUIREMENT: The current requirement, as outlined in the 18 Jan 2011 Fort McCoy Housing Market Analysis (HMA), for on post government control housing is for a total of 134 units. Fort McCoy currently has 57 units and 56 additional units awarded in FY14 are under construction. Therefore 21 additional units are required. After this project is completed, 14 additional units are still required to meet the total HMA requirement of 134 homes.

CURRENT SITUATION: Fort McCoy currently has 57 government-controlled units on post, with a total requirement of 134, per the latest HMA. This leaves a deficiency of 77 units, creating a substantial shortfall in Fort McCoys ability to house military Families. The FY14 project to construct 56 of the 77 deficit is currently under construction, still leaving 21 units unfunded.

IMPACT IF NOT PROVIDED: If this project is not provided, Soldiers and their Families will continue to live in inadequate rental units. The local rental market has insufficient numbers of suitable 3 and 4 bedroom single Family homes. Military Families will continue to be adversely affected, deteriorating their overall quality of life.

ADDITIONAL: An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. Mission requirements, operational considerations, and location are incompatible with use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:

(a) Design Start Date................................. AUG 2017
(b) Percent Complete as of January 2018................. 25.00
(c) Date 35% Designed................................. APR 2018
(d) Date Design Complete............................... DEC 2018
(e) Parametric Cost Estimating Used to Develop Costs.. YES
(f) Type of Design Contract: Design-bid-build
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

   (g) An energy study and life cycle cost analysis will be documented during the final design.

   (2) Basis:

      (a) Standard or Definitive Design:N

   (3) Total Design Cost (c) = (a)+(b) OR (d)+(e):    ($000)

      (a) Production of Plans and Specifications............ 264
      (b) All Other Design Costs............................ 366
      (c) Total Design Cost................................. 630
      (d) Contract.......................................... 410
      (e) In-house.......................................... 220

   (4) Construction Contract Award............................ APR 2019

   (5) Construction Start..................................... MAY 2019

   (6) Construction Completion................................ MAY 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
</tr>
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<tbody>
<tr>
<td>Nomenclature</td>
<td>Appropriation</td>
<td>Approp</td>
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<tr>
<td>Appliances</td>
<td>AFH-O</td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
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<tr>
<td>Info Sys - PROP</td>
<td></td>
<td>2020</td>
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### Military Family Housing Justification

<table>
<thead>
<tr>
<th>3. DOD Component</th>
<th>Army</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Data As Of</td>
<td>170522</td>
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#### Analysis of Requirements and Assets

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<tr>
<th></th>
<th>Current</th>
<th>Projected</th>
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<tr>
<td></td>
<td>Officer</td>
<td>E9-E4</td>
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<tr>
<td>6. Total Personnel Strength</td>
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<td>529</td>
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<td>7. Permanent Party Personnel</td>
<td>190</td>
<td>529</td>
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<tr>
<td>8. Gross Family Housing Requirements</td>
<td>135</td>
<td>381</td>
</tr>
<tr>
<td>9. Total Unacceptably Housed ((a+b+c))</td>
<td>36 114</td>
<td>0</td>
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<tr>
<td>a. involuntarily Separated</td>
<td>0</td>
<td></td>
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<tr>
<td>b. in Military Housing to be disposed/replaced</td>
<td>0</td>
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</tr>
<tr>
<td>c. Unacceptably Housed - in Community</td>
<td>36 114</td>
<td>0</td>
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<td>10. Voluntary Separations</td>
<td>3 28</td>
<td>31</td>
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<tr>
<td>11. Effective Housing Requirements</td>
<td>134 230</td>
<td>364</td>
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<tr>
<td>12. Housing Assets ((a+b))</td>
<td>120 230</td>
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<tr>
<td>a. Under Military Control</td>
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<td>(1) Housed in Existing DoD Owned/Controlled</td>
<td>39 74</td>
<td>113</td>
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<tr>
<td>(2) Under Contract/Approved</td>
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<td>(4) Inactive</td>
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<td>b. Private Housing</td>
<td>81 156</td>
<td>0</td>
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<tr>
<td>(1) Acceptably Housed</td>
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<td>(2) Acceptable Vacant Rental</td>
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<td>13. Effective Housing Deficit</td>
<td>14</td>
<td>14</td>
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<tr>
<td>14. Proposed Project</td>
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</table>

#### Remarks (Specify Item Number)

The current requirement, as outlined in the 13 Sep 2017 Fort McCoy Housing Market Analysis (HMA), for on post government control housing is for a total of 127 units. Fort McCoy currently has 113, which includes 56 units recently constructed and completed in Jun 2017 (FY14 project). Therefore, 14 additional units are required. After this project is completed, seven additional units are still required to meet the total HMA requirement of 127 homes. FY2019, PNC416 constructs 7 Field Grade Officer Family housing consisting of three 4-bedroom units and four 3-bedroom units to include neighborhood amenities, energy conservation, and supporting infrastructure. Fort McCoy's mission is to underpin Total Force Readiness by serving as a training center and a support site for power projection missions. They are a Secondary Mobilization Force Generation Installation and an Army Community of Excellence for the Army and Army Reserve. They support Total Force and Total Army Training and Readiness for all branches and components of America's Armed Forces, holding more than 150,000 joint, inter-agency, and multinational forces conducting integrated training annually.
6. PERSONNEL STRENGTH: (1) PERMANENT (2) STUDENTS (3) SUPPORTED (4) TOTAL

<table>
<thead>
<tr>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
<th>Officer</th>
<th>Enlist</th>
<th>Civil</th>
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<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>415 2552 620</td>
<td>0 19 0</td>
<td>29 343 1276</td>
<td>5,254</td>
<td></td>
<td></td>
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<tr>
<td>B. END FY 2023</td>
<td>424 2651 617</td>
<td>0 15 0</td>
<td>29 351 1254</td>
<td>5,341</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

7. INVENTORY DATA ($000)

A. TOTAL AREA........... 302 ha (746 AC)
B. INVENTORY TOTAL AS OF 05 JUL 2017......................... 731,553
C. AUTHORIZATION NOT YET IN INVENTORY....................... 30,000
D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM........ 26,000
E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM............ 0
F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)........... 0
G. REMAINING DEFICIENCY........................................ 0
H. GRAND TOTAL................................................ 787,553

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>($000)</th>
<th>START</th>
<th>COMPLETE</th>
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<tbody>
<tr>
<td>71113</td>
<td>Family Housing Replacement</td>
<td>26.00/FA(26.00/FA)</td>
<td>26,000</td>
<td>05/2017</td>
<td>03/2019</td>
</tr>
</tbody>
</table>

TOTAL 26,000

9. FUTURE PROJECT APPROPRIATIONS:

A. INCLUDED IN THE FY 2020 PROGRAM: NONE
B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE
C. DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A

10. MISSION OR MAJOR FUNCTIONS:

As the only Department of Defense installation in the Caribbean; support the training and readiness of more than 15,000 Active, Guard and Reserve component Soldiers, Sailors, Airmen, Marines, and Coast Guardsmen. Serve as the exclusive provider of facilities, infrastructure, and the full range of installation Base Operations support and services to stationed and transient training units, installation tenants, and area support customers (off-post). Provide standardized, effective, and efficient services, facilities, infrastructure, and quality-of-life programs to Soldiers, Families, and Civilian employees, including nearly 200,000 Family members, Civilians, and retirees located throughout Puerto Rico, U.S. Virgin Islands, Miami and Latin America. On order, provide Defense Support of Civil Authorities. Partner with SOUTHCOM, DEA, and others to accomplish diverse missions and enhance relations with nearly eight regional foreign nations.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

A. AIR POLLUTION 0
B. WATER POLLUTION 0
C. OCCUPATIONAL SAFETY AND HEALTH 0
## 9. Cost Estimates

<table>
<thead>
<tr>
<th>Item Description</th>
<th>UM (M/E)</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Cost (000)</th>
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</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
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<td></td>
</tr>
<tr>
<td>71112 F. Hsg, Colonel, O6, 4 BR, OCONU</td>
<td>FA</td>
<td>2</td>
<td>577,937</td>
<td>(1,156)</td>
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<tr>
<td>71113 W. Officer, W4-W5, 4 BR, OCONUS</td>
<td>FA</td>
<td>3</td>
<td>537,029</td>
<td>(1,611)</td>
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<tr>
<td>71113 W. Officer, W4-W5, 3 BR, OCONUS</td>
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<td>(1,416)</td>
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<tr>
<td>71114 CO Grade Officer, O1-O3, 4 BR, O FA</td>
<td>FA</td>
<td>1</td>
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<td>(455)</td>
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<tr>
<td>71115 Senior NCO, E9 4 BR, OCONUS</td>
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<tr>
<td>Total from Continuation page(s)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
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<td></td>
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<tr>
<td>Electric Service LS</td>
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<td>577,937</td>
<td>(585)</td>
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<tr>
<td>Water, Sewer, Gas LS</td>
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<td>537,029</td>
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<tr>
<td>Paving, Walks, Curbs And Gutters LS</td>
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<td></td>
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<tr>
<td>Storm Drainage LS</td>
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<td></td>
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<td>(921)</td>
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<tr>
<td>Site Imp(1,676) Demo(2,891) LS</td>
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<td></td>
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<tr>
<td>Information Systems LS</td>
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<td>(168)</td>
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<tr>
<td>Antiterrorism Measures LS</td>
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<td></td>
<td></td>
<td>(163)</td>
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<tr>
<td>Other LS</td>
<td></td>
<td></td>
<td>577,937</td>
<td>(670)</td>
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<tr>
<td>ESTIMATED CONTRACT COST</td>
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<tr>
<td>CONTINGENCY (5.00%)</td>
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<td></td>
<td>1,144</td>
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<tr>
<td>SUBTOTAL</td>
<td></td>
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<td>24,017</td>
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<tr>
<td>SUPY, INSPI &amp; OVERHEAD (6.50%)</td>
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<td>1,561</td>
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<td>TOTAL REQUEST</td>
<td></td>
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<tr>
<td>TOTAL REQUEST (ROUNDED)</td>
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<td></td>
<td>26,000</td>
<td></td>
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<tr>
<td>INSTALLED EQT-OTHER APPROP</td>
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<td></td>
<td>(130,000)</td>
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</table>

### 10. Description of Proposed Construction

Construct twenty-six (26) replacement Family quarters: 2 four-bedroom Senior Officer (O6) quarters, 1 four-bedroom Company Grade Officer (O1-03, W1-W3) quarters, 3 three-bedroom Senior Non-Commissioned Officer (E9, W4-W5) quarters, 4 four-bedroom Senior Non-Commissioned Officer (E9, W4-W5) quarters, 2 three-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 2 four-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 4 four-bedroom Senior Non-Commissioned Officer (E1-E6) quarters and 8 three-bedroom Junior Non-Commissioned Officer (E1-E6) quarters. Project includes storage, garages, patios, backyard fencing, landscaping, air conditioning, emergency lights, and private entrance. Supporting facilities include: site work, all required utility systems, storm drainage, street lighting, and information systems. Measures in accordance with the Department of Defense (DoD) Minimum Antiterrorism for Buildings standards will be provided. At least five percent of these units will be accessible and easily modifiable for use by persons with disabilities. Comprehensive building and furnishings related interior design services are required. This project will include home design features that will help lower energy consumption by reducing the heat gain load in homes. This includes Low-e glazing on windows, Insulation in roof/walls, and High-efficiency air conditioning units. Natural ventilation will be maximized through ceiling fans and operable windows. This project includes all equipment and appliances for fully functional residential living units. All major appliances refrigerator, oven, microwave, will meet Energy Star standards, and all new homes will be outfitted with solar water heaters and LED lights.
### 9. COST ESTIMATES (CONTINUED)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST ($000)</th>
</tr>
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<tbody>
<tr>
<td>71115 Senior NCO, E7-E8, 4 BR, OCONUS</td>
<td>FA</td>
<td>2 --</td>
<td>455,241</td>
<td>(910)</td>
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<td>71115 Senior NCO, E7-E8, 3 BR, OCONUS</td>
<td>FA</td>
<td>2 --</td>
<td>399,696</td>
<td>(799)</td>
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<td>71116 Jr NCO E1-E6, 4 BR, OCONUS</td>
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<td>4 --</td>
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<td>71116 Jr NCO E1-E6, 3 BR, OCONUS</td>
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<td>8 --</td>
<td>357,426</td>
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<tr>
<td>00000 Hurricane Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,681)</td>
</tr>
<tr>
<td>00000 Cyber Security</td>
<td>LS</td>
<td>--</td>
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<td>(250)</td>
</tr>
<tr>
<td>89220 EMCS Connection</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(135)</td>
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<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(962)</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
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<td>9,066</td>
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### DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

Project includes individual unit metering of utilities, hard wired interconnected smoke detectors, and carbon monoxide detection. In addition, this project includes neighborhood amenities (tot lot, play lot, picnic area, benches, etc.), walkways, Utility Energy Monitoring and Control System (UEMCS), environmental measures required by law and associated supporting infrastructure. Project shall comply with the Army Standard for Family Housing and the Unified Facility Criteria 4-711-01.

This project will also include the installation of Photovoltaic (PV) Power Inverter System and Rainwater Harvesting System in accordance with the Energy Policy Act of 2005 (EPACT 2005) Section 203. Facilities will be designed to a minimum life of 40 years and energy efficiencies meeting, Leadership In Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. Demolish 56 buildings at Fort Buchanan, PR (Total 10,437 m2/112,344 SF).

**PROJECT:** Construct twenty-six (26) replacement Family quarters. 2 four-bedroom Senior Officer (O6) quarters, 1 four-bedroom Company Grade Officer (01-03, W1-W3) quarters, 3 three-bedroom Senior Non-Commissioned Officer/Warrent Officer (E9, W4-W5) quarters, 4 four-bedroom Senior Non-Commissioned Officer/Warrent Officer (E9, W4-W5) quarters, 2 three-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 2 four-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 4 Four-Bedroom Senior Non-Commissioned Officer (E1-E6) quarters and 8 three-bedroom Junior Non-Commissioned Officer (E1-E6) quarters. Project will include neighborhood amenities, supporting infrastructure, and will demolish 56 existing Army Family Housing units. (Current Mission)

**REQUIREMENT:** This project is required to improve existing Family housing living conditions at Fort Buchanan, by providing quarters that meet current standards of quality of life, energy conservation, size, habitability, and safety. Existing homes are deteriorated and inadequate in terms of Army Family Housing (AFH) standards for size, configuration and amenities.

**CURRENT SITUATION:** The Las Colinas housing area consists of 29 dwelling units, built in
CURRENT SITUATION: (CONTINUED)

1948. The Coconut Grove housing area consists of 27 dwelling units, built in 1955. Dwelling units are deteriorated and fail to meet current Army Family Housing standards for size, amenities, safety, and maintainability. These deficiencies cannot be sustained indefinitely and require continuous expenditure of operations and maintenance dollars.

IMPACT IF NOT PROVIDED: If this project is not provided, Family housing quarters will continue to deteriorate; adversely affecting the quality of life for all residents. Overall dwelling unit quality will continue to deteriorate and temporary fixes of deficiencies will continue to drain funds while facilities fail to comply with Army Family Housing standards.

ADDITIONAL: This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

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<thead>
<tr>
<th>(1) Status:</th>
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<tbody>
<tr>
<td>(a) Design Start Date.................................</td>
</tr>
<tr>
<td>(b) Percent Complete as of January 2018.................</td>
</tr>
<tr>
<td>(c) Date 35% Designed.................................</td>
</tr>
<tr>
<td>(d) Date Design Complete...............................</td>
</tr>
<tr>
<td>(e) Parametric Cost Estimating Used to Develop Costs..</td>
</tr>
<tr>
<td>(f) Type of Design Contract: Design-bid-build</td>
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<table>
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<tr>
<th>(2) Basis:</th>
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<tbody>
<tr>
<td>(a) Standard or Definitive Design:Y</td>
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<table>
<thead>
<tr>
<th>(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):</th>
<th>($000)</th>
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<tbody>
<tr>
<td>(a) Production of Plans and Specifications........</td>
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<td>(b) All Other Design Costs..........................</td>
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<tr>
<td>(c) Total Design Cost................................</td>
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<td>(d) Contract..........................................</td>
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<td>(e) In-house..........................................</td>
<td>450</td>
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| (4) Construction Contract Award..................... | JUL 2019 |
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

(5) Construction Start................................. AUG 2019

(6) Construction Completion......................... SEP 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Appropriated Fiscal Year</th>
<th>Cost (000)</th>
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<td>Washer 26 ea</td>
<td>AFH-O</td>
<td></td>
<td>2019</td>
<td>26,000</td>
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<td>Dryer 26</td>
<td>AFH-O</td>
<td></td>
<td>2019</td>
<td>26,000</td>
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<tr>
<td>Info Sys - ISC</td>
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<tr>
<td>Info Sys - PROP</td>
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<td>2020</td>
<td>0</td>
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Total: 130,000
### MILITARY FAMILY HOUSING JUSTIFICATION

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<tr>
<th>3. DOD COMPONENT</th>
<th>Army</th>
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<tr>
<td>4. REPORTING INSTALLATION</td>
<td></td>
</tr>
<tr>
<td>a. NAME</td>
<td>Fort Buchanan</td>
</tr>
<tr>
<td>b. LOCATION</td>
<td>Fort Buchanan, Puerto Rico</td>
</tr>
<tr>
<td>5. DATA AS OF</td>
<td>150930</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>ANALYSIS OF REQUIREMENTS AND ASSETS</th>
<th>CURRENT</th>
<th>PROJECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICER (a)</td>
<td>E9 - E4 (b)</td>
<td>E3 - E1 (c)</td>
</tr>
<tr>
<td>6. TOTAL PERSONNEL STRENGTH</td>
<td>86</td>
<td>241</td>
</tr>
<tr>
<td>7. PERMANENT PARTY PERSONNEL</td>
<td>86</td>
<td>241</td>
</tr>
<tr>
<td>8. GROSS FAMILY HOUSING REQUIREMENTS</td>
<td>50</td>
<td>168</td>
</tr>
<tr>
<td>9. TOTAL UNACCEPTABLY HOUSED (a+b+c)</td>
<td>13</td>
<td>60</td>
</tr>
<tr>
<td>a. INVOLUNTARILY SEPARATED</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. IN MILITARY HOUSING TO BE DISPOSED/REPLACED</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>c. UNACCEPTABLY HOUSED - IN COMMUNITY</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>10. VOLUNTARY SEPARATIONS</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11. EFFECTIVE HOUSING REQUIREMENTS</td>
<td>37</td>
<td>108</td>
</tr>
<tr>
<td>12. HOUSING ASSETS (a+b)</td>
<td>49</td>
<td>132</td>
</tr>
<tr>
<td>a. UNDER MILITARY CONTROL</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>(1) Housed in Existing DoD Owned/Controlled</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>(2) Under Contract/Approved</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(3) Vacant</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>(4) Inactive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. PRIVATE HOUSING</td>
<td>37</td>
<td>110</td>
</tr>
<tr>
<td>(1) Acceptably Housed</td>
<td>37</td>
<td>110</td>
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<tr>
<td>(2) Acceptable Vacant Rental</td>
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<tr>
<td>13. EFFECTIVE HOUSING DEFICIT</td>
<td>-12</td>
<td>-24</td>
</tr>
<tr>
<td>14. PROPOSED PROJECT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REMARKS (Specify item number)
FY2019, P78348: Project will demolish 56 existing Army Family Housing units and construct twenty-six (26) replacement unit: 2 four-bedroom Senior Officer (06) quarters, 1 four-bedroom Company Grade Officer (01-03, W1-W3) quarters, 3 three-bedroom Senior Non-Commissioned Officer (E9, W4-W5) quarters, 4 four-bedroom Senior Non-Commissioned Officer (E9, W4-W5) quarters, 2 three-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 2 four-bedroom Senior Non-Commissioned Officer (E7-E8) quarters, 4 four-bedroom Senior Non-Commissioned Officer (E1-E6) quarters and 8 three-bedroom Junior Non-Commissioned Officer (E1-E6) quarters. Project will include neighborhood amenities and supporting infrastructure. The project is required to improve existing Family housing living conditions at Fort Buchanan that meet current standards of quality of life, energy conservation, size, habitability, and safety. Current inventory is deteriorated and inadequate in terms of Army Family Housing standards for size, configuration, and amenities. Military manpower population is based on 3 Feb 2016 ASIP Report (SAMAS as of 30 September 2015). Breakdown by paygrade is based on a 2015 Housing Market Analysis, dated 26 May 2016.

DD Form 1523, NOV 90
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

This page intentionally left blank
6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>(1) PERMANENT</th>
<th>(2) STUDENTS</th>
<th>(3) SUPPORTED</th>
<th>(4) TOTAL</th>
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</thead>
<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>681 Officer</td>
<td>3026 Enlisted</td>
<td>1453 CivilENLIST</td>
<td>0 Officer</td>
</tr>
<tr>
<td>B. END FY 2023</td>
<td>700 Officer</td>
<td>3115 Enlisted</td>
<td>1433 CivilENLIST</td>
<td>0 Officer</td>
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</tbody>
</table>

7. INVENTORY DATA ($000)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. TOTAL AREA........................................</td>
<td>1,235 ha (3,052 AC)</td>
</tr>
<tr>
<td>B. INVENTORY TOTAL AS OF 05 JUL 2017................</td>
<td>3,644,146</td>
</tr>
<tr>
<td>C. AUTHORIZATION NOT YET IN INVENTORY................</td>
<td>17,369</td>
</tr>
<tr>
<td>D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM...</td>
<td>95,134</td>
</tr>
<tr>
<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM....</td>
<td>0</td>
</tr>
<tr>
<td>F. PLANNED IN NEXT THREE YEARS (NEW MISSION ONLY)....</td>
<td>0</td>
</tr>
<tr>
<td>G. REMAINING DEFICIENCY................................</td>
<td>0</td>
</tr>
<tr>
<td>H. GRAND TOTAL........................................</td>
<td>3,756,649</td>
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</tbody>
</table>

8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Project Title</th>
<th>Scope/Um</th>
<th>Cost ($000)</th>
<th>Start</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT 71116 Family Housing New Construction</td>
<td>71116</td>
<td>Family Housing New Construction</td>
<td>111.00/FA(111.00/FA)</td>
<td>95,134</td>
<td>05/2017</td>
<td>09/2018</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>95,134</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Project Title</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. INCLUDED IN THE FY 2020 PROGRAM: NONE</td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>B. PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE</td>
<td></td>
<td></td>
<td>N/A</td>
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</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

Installation support for US Army, Europe and Seventh Army (USAREUR), specifically the Southern European Task Force (SETAF) and 173rd Infantry (ABN) Brigade; a trained and ready force capable of rapidly responding and operating jointly in support of US EUCOM theater strategy. Installations serve as bases for projecting power in and out of EUCOM area of responsibility by providing facilities for training, maintaining, housing, and supporting SETAF and the 173rd IN (ABN) BDE. These units provide flexible, scalable joint task force components for use in expeditionary operations as well as mission, installation support, and quality of life organizations required to maintain a trained and ready force overseas.

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost ($000)</th>
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<tr>
<td>A. AIR POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
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</table>
9. COST ESTIMATES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71116 Junior NCO Enlisted E-1 thru 6</td>
<td>FA</td>
<td>86 --</td>
<td>503,114</td>
<td>(43,268)</td>
</tr>
<tr>
<td>71116 Junior NCO Enlisted E-1 thru 6</td>
<td>FA</td>
<td>8 --</td>
<td>593,266</td>
<td>(4,746)</td>
</tr>
<tr>
<td>71116 Junior NCO Enlisted E-1 thru 6</td>
<td>FA</td>
<td>12 --</td>
<td>689,584</td>
<td>(8,275)</td>
</tr>
<tr>
<td>71112 Family Housing, Colonel, Grade O</td>
<td>FA</td>
<td>5 --</td>
<td>625,766</td>
<td>(3,129)</td>
</tr>
<tr>
<td>85218 Parking Garage, Multistoried</td>
<td>m2 (SF)</td>
<td>6,280 (67,600)</td>
<td>742.50</td>
<td>(4,663)</td>
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<tr>
<td>Total from Continuation page(s)</td>
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<td></td>
<td></td>
<td>(5,585)</td>
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<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
<td></td>
<td></td>
<td>15,408</td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(2,795)</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(2,625)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,155)</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(2,044)</td>
</tr>
<tr>
<td>Site Imp(1,034) Demo(3,772)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(4,806)</td>
</tr>
<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(1,983)</td>
</tr>
</tbody>
</table>

ESTIMATED CONTRACT COST
CONTINGENCY (5.00%) | 85,074 |
SUBTOTAL | 89,328 |
SUPV, INSP & OVERHEAD (6.50%) | 5,806 |
TOTAL REQUEST | 95,134 |
TOTAL REQUEST (ROUNDED) | 95,134 |
INSTALLED EQT-OTHER APPROP | (480) |

10. Description of Proposed Construction
Construct a total of 111 dwellings comprised of 106 Junior Enlisted and five Senior Officer Family Housing Quarters at two Vicenza Italy sites (Villaggio and Caserma Ederle).

Villaggio:
Project constructs 61 units to include: living areas, kitchen, bathrooms, bedrooms, storage, parking garage and private entrance. Supporting facilities include demolition of existing housing units and construction of required infrastructure for housing recapitalization. Site work shall include but not be limited to: all required utility systems, storm drainage, street improvements, lighting, and information systems. Heating and air conditioning will be provided by a geothermal ground pump system supplying multiple units. Residential automatic sprinkler system will be provided.

Caserma Ederle:
Project constructs 50 units to include: living areas, kitchen, bathrooms, bedrooms, storage, garage/ driveway combo and private entrance. Supporting facilities include demolition of existing facilities and infrastructure within 7 acre footprint and construction of required infrastructure for housing recapitalization. Site work shall include but not be limited to: all required utility systems, storm drainage, street improvements, lighting, and information systems. Heating and air conditioning will be provided by a geothermal ground pump system supplying multiple units. Residential
<table>
<thead>
<tr>
<th>ITEM</th>
<th>UM (M/E)</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>75018 Playground for Preschool Children</td>
<td>m2 (SF)</td>
<td>808.26 (8,700)</td>
<td>354.02</td>
<td>(286)</td>
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<tr>
<td>00000 Cybersecurity</td>
<td>LS</td>
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<td>--</td>
<td>(782)</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(928)</td>
</tr>
<tr>
<td>Building Information Systems</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>(3,589)</td>
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<tr>
<td><strong>Total</strong></td>
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<td></td>
<td></td>
<td><strong>5,585</strong></td>
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</tbody>
</table>

DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

Construction at both sites shall be in accordance with the Department of Defense DoD Minimum Antiterrorism for Building Standards. Comprehensive building and furnishings related interior design services are required. Project shall comply with the Army Standard for Family Housing and Unified Facility Criteria (UFC) 4-711-01/4-711-02A. Design and construction includes requirements of current Sustainable Design Development and Policy Update (Environmental and Energy Performance). Possible necessary Environmental Remediation will be addressed by this project. Facilities will be designed to a minimum life of 40 years in accordance with DoD's UFC 1-200-02 and energy efficiencies meeting, Leadership in Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. Demolish 3 buildings at Camp Ederle, IT (Total 777 m2/8,362 SF), and 46 buildings at Vicenza Fam Hsg, IT (Total 7,540 m2/81,163 SF). Air Conditioning (Estimated 127 kW/36 Tons).

PROJECT: Construct 111 dwelling units for Junior enlisted and Senior Officer personnel at two sites (61 units Villaggio and 50 units Caserma Ederle). Project demolishes 15 existing housing buildings (52 units) at Villaggio and non-housing facilities at Caserma Ederle in order to provide required clear area on which to build the new housing and supporting infrastructure.

REQUIREMENT: This Project is required to provide Army Family Housing for junior enlisted and Senior Officer personnel residing in the Vicenza Military Community (VMC) area who currently reside either off-post or in antiquated facilities on post. The 2016 Housing Market Analysis (HMA) for the (VMC) establishes the requirement for 1,177 dwelling units. Villaggio currently has 249 Family Housing Units including 228 which are reserved for junior enlisted personnel. The installation maintains 540 adequate government leased units, leaving a deficit of 388 Family housing units which combined with the existing 249 inadequate on-post units equals a 637 unit requirement still to construct or lease. New facilities will comply with current Army Family Housing for space, security and storage. New housing units will replace and increase capacity to existing non-compliant Family housing in the Villaggio community that have exceeded their useful life and construct additional units on Caserma Ederle (50 Units). This project is one of four neighborhoods planned for phased redevelopment and is critical to launching the AFH recapitalization program with the primary goal to maximize JNCO on-post family...
REQUIREMENT: (CONTINUED)
housing at Vicenza. This project will provide complete and usable housing for 111 Families at two sites in Vicenza Italy.
CURRENT SITUATION: Currently, the installation does not have adequate Family housing for junior enlisted and Senior Officer personnel. The available delta for meeting the total defined requirement continues to be met at minimum capacity by off-post private rentals. The private rental market is unable to sustain the Family population within a close proximity of military bases which the junior enlisted personnel support. This continues to create isolation and separation from the VMC community. Furthermore, most junior enlisted personnel Families share a single vehicle creating additional logistical concerns between supporting the mission of the Soldier and Family needs of the spouse. Early separation from the Army has been directly correlated to Family housing within the VMC. Existing housing facilities may alleviate isolation, however current conditions with a "Q-3" red,(Poor)rating on the Installation Status Report (ISR) do not provide for an increase in overall quality of life on post. Villaggio housing area, was constructed in the late 1950s and early 1960s to support the Vicenza military community. Some dwellings had minor interior renovations between 1989 and 1992 and others received additions and renovations between 1995 and 1997. None of the units meet current Army standards for Family Housing. The current Family housing units do not meet space standards and do not meet current energy requirements. Units lack a foyer allowing wind and rain to enter directly into the living room. After sixty years of continued use by Army Families, the antiquated facilities are in need of replacement. Interior fixtures and finishes are old, worn and continually in need of replacement. Electrical, telephone and television wiring and outlets have over the years been added numerous times and in many instances are surfaced-mounted, old, worn and present safety concerns. Tile flooring and stairs are cracked and chipped. Current facilities do not meet modern energy requirements and lack fire protection systems that are required on current Family housing units. In addition to the significant deficit of housing, existing units require excessive maintenance because of age, configuration and overall condition never having received a major capital investment. IMPACT IF NOT PROVIDED: If this project is not provided, inadequate on-post Family housing will continue to experience ever increasing, inefficient, breakdown maintenance and piecemeal repairs. Lower enlisted service members and their Families assigned to Vicenza will be required to live in inadequate housing both on and off post that does not provide adequate quality of life. This adversely affects the quality of life of military members and their Families. The effects of isolation from being dispersed further off post and the associated delays in mission recall time also impacts readiness. ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable
ADDITIONAL: (CONTINUED)
principles, to include life cycle cost effective practices, will be integrated into the
design, development and construction of the project and will follow the guidance detailed
in the Army Sustainable Design and Development Policy - complying with applicable laws
and executive orders.

NATO SECURITY INVESTMENT: This project is not within an established NATO infrastructure
category of common funding nor is it expected to become eligible in the foreseeable
future.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Design Start Date................................. MAY 2017
   (b) Percent Complete as of January 2018............... 35.00
   (c) Date 35% Designed................................. JAN 2018
   (d) Date Design Complete.............................. SEP 2018
   (e) Parametric Cost Estimating Used to Develop Costs.. YES
   (f) Type of Design Contract: Design-bid-build
   (g) An energy study and life cycle cost analysis will be
documented during the final design.

(2) Basis:
   (a) Standard or Definitive Design:N

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
   (a) Production of Plans and Specifications............ 5,461
   (b) All Other Design Costs............................ 2,729
   (c) Total Design Cost................................. 8,190
   (d) Contract.......................................... 5,324
   (e) In-house.......................................... 2,866

(4) Construction Contract Award............................ MAY 2019

(5) Construction Start..................................... JUL 2019

(6) Construction Completion................................ DEC 2021
B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Fiscal Year</th>
<th>Appropriated</th>
<th>Cost ($000)</th>
</tr>
</thead>
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<td>2021</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Range (Stove) Gas 30 IN</td>
<td>AFH-O</td>
<td>2021</td>
<td>96</td>
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<tr>
<td>Dishwasher</td>
<td>AFH-O</td>
<td>2021</td>
<td>52</td>
<td></td>
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<tr>
<td>Dryer</td>
<td>AFH-O</td>
<td>2021</td>
<td>67</td>
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<tr>
<td>Washer</td>
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<td>90</td>
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<td>OPA</td>
<td>2020</td>
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<td>Info Sys - PROP</td>
<td>OPA</td>
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</table>

Total 481
### MILITARY FAMILY HOUSING JUSTIFICATION

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<th>2. FISCAL YEAR</th>
<th>REPORT CONTROL SYMBOL</th>
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<tr>
<td>(FY/MON)</td>
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<td>DD-AT&amp;L(AR)1716</td>
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<tr>
<td>180103</td>
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<table>
<thead>
<tr>
<th>3. DOD COMPONENT</th>
<th>4. REPORTING INSTALLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>a. NAME: USAG Vicenza</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. DATA AS OF</th>
<th>b. LOCATION: Vicenza, Italy</th>
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<tbody>
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### ANALYSIS OF REQUIREMENTS AND ASSETS

<table>
<thead>
<tr>
<th></th>
<th>CURRENT</th>
<th>PROJECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFFICER</td>
<td>E9 - E4</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 6. TOTAL PERSONNEL STRENGTH | 750 | 2,402 | 1,186 | 4,338 |
| 7. PERMANENT PARTY PERSONNEL | 750 | 2,402 | 1,186 | 4,338 |
| 8. GROSS FAMILY HOUSING REQUIREMENTS | 479 | 1,226 | 204 | 1,909 |

| 9. TOTAL UNACCEPTABLY HOUSED (a+b+c) | 168 | 292 | 7 | 467 |

|                      | OFFICER | E9 - E4  | E3 - E1  | TOTAL  |
|                      | (a)     | (b)      | (c)      | (d)    |
|                      |         |          |          |        |

| a. INVOLUNTARILY SEPARATED | 0 | 0 | 0 | 0 |
| b. IN MILITARY HOUSING TO BE DISPOSED/REPLACED | 0 | 0 | 0 | 0 |
| c. UNACCEPTABLY HOUSED - IN COMMUNITY | 168 | 292 | 7 | 467 |

| 10. VOLUNTARY SEPARATIONS | 0 | 8 | 3 | 11 |

| 11. EFFECTIVE HOUSING REQUIREMENTS | 311 | 926 | 194 | 1,431 |

| 12. HOUSING ASSETS (a+b) | 311 | 926 | 194 | 1,431 |

| a. UNDER MILITARY CONTROL | 76 | 494 | 183 | 753 |
| (1) Housed in Existing DoD Owned/Controlled | 76 | 494 | 183 | 753 |
| (2) Under Contract/Approved | 0 | 0 | 0 | 0 |
| (3) Vacant | 0 | 0 | 0 | 0 |
| (4) Inactive | 0 | 0 | 0 | 0 |

| b. PRIVATE HOUSING | 235 | 432 | 11 | 678 |
| (1) Acceptably Housed | 235 | 432 | 11 | 678 |
| (2) Acceptable Vacant Rental | 0 | 0 | 0 | 0 |

| 13. EFFECTIVE HOUSING DEFICIT | 0 | 0 | 0 | 0 |

| 14. PROPOSED PROJECT | 5 | 60 | 46 | 111 |

### REMARKS (Specify item number)

FY2019, PN88759: Project will demolish 52 existing Army Family Housing units and construct 111 dwelling units: 5 four-bedroom Senior Officer (06) quarters, 86 three-bedroom Junior Non-Commissioned Officer (E1-E6) quarters, 8 four-bedroom Junior Non-Commissioned Officer (E1-E6) quarters, and 12 five-bedroom Junior Non-Commissioned Officer (E1-E6) quarters. Project will include neighborhood amenities and supporting infrastructure. The project is required to improve existing Family housing living conditions at USAG Vicenza that meet current standards of quality of life, energy conservation, size, habitability, and safety. Current inventory is deteriorated, does not meet energy requirements, lacks fire protection systems and are inadequate in terms of Army Family Housing standards for size, configuration, and amenities. Data based upon Housing Market Analysis Report, dated 16 September 2016, which evaluated the availability of suitable and affordable housing for both accompanied and unaccompanied military personnel stationed at USAG Vicenza by pay grade.
6. PERSONNEL STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
<th>OFFICER</th>
<th>ENLIST</th>
<th>CIVIL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. AS OF 31 OCT 2017</td>
<td>3417</td>
<td>20347</td>
<td>9147</td>
<td>0</td>
<td>71</td>
<td>0</td>
<td>50,962</td>
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<tr>
<td>B. END FY 2023</td>
<td>3508</td>
<td>21054</td>
<td>8931</td>
<td>0</td>
<td>116</td>
<td>0</td>
<td>49,942</td>
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7. INVENTORY DATA ($000)

<table>
<thead>
<tr>
<th></th>
<th>7,876 ha (19,461 AC)</th>
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<tr>
<td>A. INVENTORY AREA...........</td>
<td>14,948,605</td>
</tr>
<tr>
<td>B. INVENTORY TOTAL AS OF 05 JUL 2017.............................</td>
<td>500,391</td>
</tr>
<tr>
<td>D. AUTHORIZATION REQUESTED IN THE FY 2019 PROGRAM................</td>
<td>153,000</td>
</tr>
<tr>
<td>E. AUTHORIZATION INCLUDED IN THE FY 2020 PROGRAM................</td>
<td>0</td>
</tr>
<tr>
<td>G. REMAINING DEFICIENCY...........................................</td>
<td>0</td>
</tr>
<tr>
<td>H. GRAND TOTAL...................................................</td>
<td>15,602,996</td>
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8. PROJECT APPROPRIATIONS REQUESTED IN THE FY 2019 PROGRAM:

<table>
<thead>
<tr>
<th>CAT</th>
<th>PROJECT TITLE</th>
<th>SCOPE/UM</th>
<th>COST ($000)</th>
<th>START</th>
<th>COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>71114</td>
<td>Family Housing Replacement</td>
<td>90.00/FA(90.00/FA)</td>
<td>68,000</td>
<td>01/2017</td>
<td>08/2018</td>
</tr>
<tr>
<td>71115</td>
<td>Family Housing New Construction Incr</td>
<td>432.00/FA(432.00/FA)</td>
<td>85,000</td>
<td>07/2015</td>
<td>05/2017</td>
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<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>153,000</td>
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9. FUTURE PROJECT APPROPRIATIONS:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODE</th>
<th>PROJECT TITLE</th>
<th>COST ($000)</th>
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</thead>
<tbody>
<tr>
<td>A.</td>
<td>71115</td>
<td>Family Housing New Construction Incr</td>
<td>82,000</td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td>PLANNED NEXT THREE PROGRAM YEARS (NEW MISSION ONLY): NONE</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td>DEFERRED SUSTAINMENT, RESTORATION, AND MODERNIZATION (SRM): N/A</td>
<td></td>
</tr>
</tbody>
</table>

10. MISSION OR MAJOR FUNCTIONS:

Eighth United States Army (HUSA) exercises command and control of all assigned units. Organizes, equips, trains, and employs forces to ensure optimum readiness for combat operations. Maintains a posture of combat readiness to deter any attack upon the Republic of Korea (ROK) and if deterrence fails, conducts sustained Army, joint, and combined military operations to defeat the enemy. Provides logistical and administrative support for forces, including Headquarters, United Nations Command (HQ UNC), in order to fulfill the operational requirements of Republic of Korea - US Combined Forces Command (ROK-US CFC) and US Forces, Korea (USFK).

11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:

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<thead>
<tr>
<th>CATEGORY</th>
<th>($000)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
</tr>
<tr>
<td>B. WATER POLLUTION</td>
<td>0</td>
</tr>
<tr>
<td>C. OCCUPATIONAL SAFETY AND HEALTH</td>
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### Cost Estimates

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Cost ($000)</th>
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</thead>
<tbody>
<tr>
<td><strong>Primary Facility</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71114 Junior NCO, O1-3 3 Bedrooms, OCO FA</td>
<td>60 --</td>
<td>403,174</td>
<td>(24,190)</td>
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<tr>
<td>71114 Junior NCO, O1-3 4 Bedrooms, OCO FA</td>
<td>26 --</td>
<td>459,219</td>
<td>(11,940)</td>
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<tr>
<td>71114 Junior NCO, O1-3 5 Bedrooms, OCO FA</td>
<td>4 --</td>
<td>531,367</td>
<td>(2,125)</td>
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<tr>
<td>71114 Elevators EA</td>
<td>3 --</td>
<td>135,980</td>
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<tr>
<td>71114 Mechanical Penthouse EA</td>
<td>1 --</td>
<td>147,834</td>
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<td><strong>Total from Continuation page(s)</strong></td>
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<td>(16,005)</td>
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<tr>
<td><strong>Supporting Facilities</strong></td>
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<td>6,003</td>
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<tr>
<td>Electric Service LS</td>
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<td>--</td>
<td>(618)</td>
</tr>
<tr>
<td>Water, Sewer, Gas LS</td>
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<td>--</td>
<td>(959)</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters LS</td>
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<td>--</td>
<td>(891)</td>
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<td>Storm Drainage LS</td>
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<td>--</td>
<td>(967)</td>
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<tr>
<td>Site Imp(1,251) Demo(502) LS</td>
<td>--</td>
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<td>(1,753)</td>
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<td>Information Systems LS</td>
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<td>--</td>
<td>(725)</td>
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<td>Antiterrorism Measures LS</td>
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<td>--</td>
<td>(90)</td>
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<tr>
<td><strong>Estimated Contract Cost</strong></td>
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<td>60,819</td>
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<tr>
<td>Contingency (5.00%)</td>
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<td><strong>Subtotal</strong></td>
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<td>63,860</td>
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<tr>
<td>Supv, Inspect &amp; Overhead (6.50%)</td>
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<td>4,151</td>
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<td><strong>Total Request</strong></td>
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<td>68,011</td>
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<tr>
<td><strong>Total Request (rounded)</strong></td>
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<td>68,000</td>
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<tr>
<td><strong>Installed Eq't-Other Approp</strong></td>
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### Description of Proposed Construction

Construct a 15-story apartment tower of 60 each JR NCO/ENL 3BR at 1860 GSF, 26 each JR NCO/ENL 4BR at 2150 GSF, and 4 each JR NCO/ENL 5BR at 2510 GSF Army Family Housing (AFH) units with a partial underground parking structure. The tower includes an electrical substation and a natural gas governor building to support the tower. The tower will consist of 4 EA five-bedroom, 26 EA four-bedroom, and 60 EA three-bedroom units for housing command sponsored junior noncommissioned officers and enlisted personnel. Project includes living areas, kitchens, bathrooms, bedrooms, storage, and private entrance with ancillary facilities such as tot lots, multiple age playgrounds, picnic pavilions, gazebos, etc., and underground parking garage connecting the tower to accommodate 135 vehicles. Construction will include elevator access with elevators sized to accommodate emergency medical evacuation equipment, fire protection sprinkler & fire alarm system, individual hot water, heating, air conditioning controls, hard-wired interconnected smoke/carbon monoxide detectors, storage, and all equipment and government furnished installed appliances for functional living units, and telephone/TV system. Measures in accordance with the Department of Defense DoD Minimum Antiterrorism/Force protection (AT/FP) for Buildings standards will be provided as appropriate, including a mass notification system, CCTV, access control for the tower and POV parking garage and other site measures. First floor structural slab, pile foundations, building information system and utility monitoring and control system (UMCS) are required. Comprehensive building and furnishings - related interior design services are required. Heating, ventilation and air conditioning will be provided by central systems/connections to the...
DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

An energy plant using dual fuel system to use oil or natural gas. Supporting facilities include all required underground utility systems, storm drainage, security and warning lighting, paving, walks, curbs and gutters, fencing, signage, dumpster pad/trash enclosure, exterior information systems, fire protection, site improvements, and fuel storage tank. Accessibility for individuals with disabilities will be provided.

Comprehensive building and furnishings - related interior design services are required. Project shall comply with the Army Standard for Family Housing, Unified Facility Criteria 4-711-01, and Installation Planning Standard. Facilities will be designed to a minimum life of 40 years and energy efficiencies meeting, Leadership In Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. Design and construction includes requirements of current Sustainable Design and Development (SDD) and Energy Policy Act of 2005 (EPAct05) Update Environmental and Energy Performance. No asbestos remediation is required. Demolish 5 buildings (10 dwelling unit) at Camp Walker, Korea (17,866 Total SF).

PROJECT: Construct a 15 story apartment tower of 60 each JR NCO/ENL 3BR at 1860 GSF, 26 each JR NCO/ENL 4BR at 2150 GSF, and 4 each JR NCO/ENL 5BR at 2510 GSF Army Family Housing (AFH) units and an underground parking structure.

REQUIREMENT: This project is required to minimize the AFH deficit in Area IV and will use the design-bid-build method of contracting based on an existing concept design. Due to the limited on-post space available for construction, existing AFH units built in 1959, will be demolished to make way for high-density, vertical construction.

CURRENT SITUATION: There are 72 existing AFH units at Camp Walker and 150 Leased AFH units at Camp George with an on-post requirement of 410 AFH units. Forty AFH units will be demolished to construct AFH Towers 1, 2, 3, and 4. The 150 Leased AFH units on Camp George are possibly being divested and are inadequate due to lack of fire suppression systems. Construction of all four towers provides a total of 392 on-post adequate AFH units resulting in a 18 AFH unit on-post deficit. The total Area IV AFH requirement is 644 units while the Korean community can only provide 130 adequate AFH units resulting in a 122 AFH unit deficit after Towers 1, 2, 3, and 4 construction.
IMPACT IF NOT PROVIDED: If this project is not provided, Families assigned to Daegu will not be able to find adequate, affordable, available housing. Additionally, married Soldiers may serve unaccompanied tours or will live in inadequate housing or outside the market area requiring an excessive commute. Off-post security will continue to be an issue. This will adversely affect the Commander’s readiness and health, safety, quality of life and morale for Soldiers and their Families.

ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders. This project is located on an installation which will be retained by Eighth United States Army for the foreseeable future. The possibility of Host Nation funding has been addressed but sufficient funds from the Host Nation programs are not available to support this requirement.

12. SUPPLEMENTAL DATA:
   A. Estimated Design Data:
      (1) Status:
         (a) Design Start Date................................. JAN 2017
         (b) Percent Complete as of January 2018............... 35.00
         (c) Date 35% Designed.................................. JAN 2018
         (d) Date Design Complete............................... AUG 2018
         (e) Parametric Cost Estimating Used to Develop Costs.. YES
         (f) Type of Design Contract: Design-bid-build
         (g) An energy study and life cycle cost analysis will be documented during the final design.

      (2) Basis:
         (a) Standard or Definitive Design:N

      (3) Total Design Cost (c) = (a)+(b) OR (d)+(e): ($000)
         (a) Production of Plans and Specifications.............. 3,900
         (b) All Other Design Costs................................ 1,680
         (c) Total Design Cost..................................... 5,580
         (d) Contract................................................. 3,627
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

  (e) In-house.................................................. 1,953

  (4) Construction Contract Award............................ MAR 2019

  (5) Construction Start..................................... MAR 2019

  (6) Construction Completion............................... MAR 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Procuring</th>
<th>Appropriation</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
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<tbody>
<tr>
<td>3 Bed Room (60 Unit) Furn &amp; Ap</td>
<td>AFH-O</td>
<td>2020</td>
<td>861</td>
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<td>4 Bed Room (26 Unit) Furn &amp; Ap</td>
<td>AFH-O</td>
<td>2020</td>
<td>436</td>
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<tr>
<td>5 Bed Room (4 Unit) Furn &amp; App</td>
<td>AFH-O</td>
<td>2020</td>
<td>78</td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
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<tr>
<td>Total</td>
<td></td>
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<td>1,375</td>
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### Military Family Housing Justification

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<tr>
<th>3. DOD Component</th>
<th>4. Reporting Installation</th>
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</thead>
<tbody>
<tr>
<td>Army</td>
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<thead>
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<thead>
<tr>
<th>12. Housing Assets (a+b+c)</th>
<th>13. Total Housing Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 226 10 330</td>
<td>53 60 7 120</td>
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<table>
<thead>
<tr>
<th>14. Proposed Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 90 0 90</td>
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</tbody>
</table>

### Remarks (Specify item number)
FY2019, PBN1429: Construct a 15 story high-rise Army Family Housing (AFH) apartment tower for Junior Noncommissioned Officers (NCO)/Enlisted (E6 & below). This project will provide 90 AFH dwelling units: 26 four-bedrooms (4-BR) Junior NCO/Enlisted at 2,150 gross square foot (GSF) and 4 five-bedrooms (5-BR) Junior NCO/Enlisted (Category Code 71116) apartments with partial underground parking structures. The project includes living areas, kitchen, bathrooms, bedrooms, storage, and private entrance with ancillary facilities such as tot lots, multi age playgrounds, picnic pavilions, gazebos, etc., and underground private own vehicles parking garage connecting the tower to accommodate 135 vehicles. The project supports Land Partnership Program (LPP). USAG Daegu AFH total requirement will be satisfied by FY2020-22 with three AFH towers; 90 dwelling units each for a total of 270 units. The total AFH assets end state will be 542 units consisting of 150 leased units plus 360 proposed units in 4 towers, with 32 remaining units. The military manpower population is based on 25 July 2016 ASIP Report (SAMAS as of 11 December 2015). The 2016 Housing Market Analysis Report, dated 28 December 2016, evaluated the availability of suitable and affordable housing for both accompanied and unaccompanied military personnel stationed at USAG Daegu by pay grade.

DD Form 1523, NOV 90

Previous editions are obsolete.
## 9. Cost Estimates

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>COST($000)</th>
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<tbody>
<tr>
<td>PRIMARY FACILITY</td>
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<tr>
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<td>288 --</td>
<td>317,725 (91,505)</td>
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<td>FA</td>
<td>36 --</td>
<td>415,003 (14,940)</td>
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<tr>
<td>00000 Special Foundation</td>
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<td>71115 Elevators</td>
<td>EA</td>
<td>18 --</td>
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<td>(1,833)</td>
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<td>Site Imp(9,907) Demo( )</td>
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<td>(4,632)</td>
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<tr>
<td>Information Systems</td>
<td>LS</td>
<td>--</td>
<td>(9,907)</td>
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<tr>
<td>Antiterrorism Measures</td>
<td>LS</td>
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<td>(607)</td>
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<td>ESTIMATED CONTRACT COST</td>
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<td>CONTINGENCY (5.00%)</td>
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<td>SUBTOTAL</td>
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<td>SUPV, INSPI &amp; OVERHEAD (6.50%)</td>
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<td>INSTALLED EQT-OTHER APPROP</td>
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### 10. Description of Proposed Construction

This is an incrementally funded project. Congress authorized the full amount of $297M in FY 2017. The first increment of $100M was appropriated in FY2017(PN86689). The second funding increment of $34.402M is requested in FY 2018(PN91380). The third funding increment of $85M will be requested in FY 2019(PN86877). The fourth increment of $77.598M will be requested in FY 2020(PN91327).

This project constructs high rise, multi-story Family housing apartment towers to accommodate a total of 432 Family Dwelling Units for accompanied Senior Non-Commissioned Officers (E7-E8) and accompanied Company Grade and Warrant Officer (O1-O3 & W1-W3). The groups have identical space requirements. Apartment configurations are planned to be 288 three-bedroom, 108 four-bedroom and 36 five-bedroom units. Project includes an underground parking garage, elevators, common areas, basement space special foundations and building information systems. Ancillary facilities include: tot lots, multi-age playgrounds, BBQ grill storage area, and public restrooms. Project will provide individual heating and air conditioning controls, hard-wire interconnected smoke/carbon monoxide detectors, storage and appliances. Antiterrorism/Force Protection (AT/FP) will be provided as appropriate, including mass notification systems, CCTV, access control for the buildings and parking garage and other site measures. Facilities will be designed to a minimum life of 40 years and energy efficiencies meeting, Leadership In Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. Public areas, as well as a minimum of five percent of the individual dwelling units, will be accessible and easily

---

**Camp Humphreys**

Korea (Korea Various)

**Family Housing New Construction Incr 3**
DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)
Accommodate the requirements of persons with disabilities. Central fire protection & alarm system and utility monitoring and control system (UMCS) will be provided. Comprehensive building and furnishings with related interior design services are required. Heating, ventilation and air conditioning will be provided. Supporting facilities include: underground utilities, security lighting, paving, walks, curbs and gutters, fencing & gates, signage, dumpster pad/ trash enclosure, storm drainage, exterior information systems, landscaping, and site improvements.

PROJECT: Construct high rise, multi-story Family housing apartment towers to accommodate a total of 432 Family Dwelling Units for accompanied Senior Non-Commissioned Officers (E7-E8) and accompanied Company Grade and Warrant Officer (O1-O3 & W1-W3), with ancillary facilities. (Current Mission)

REQUIREMENT: This project is required as a result of the relocation of US Forces in Korea to the two hubs at 1. USAG Humphreys/Osan AB and 2. USAG Daegu. The Yongsan Relocation Plan (YRP) agreement between the US and Republic of Korea (ROK) allows US Forces to be consolidated south of the Han River and return numerous small Army Garrison sites to the host nation. YRP will require the majority of command sponsored military personnel and Families to relocate from USAG Yongsan to USAG Humphreys. The Land Partnership Plan (LPP) agreement also relocates military personnel from Area I to USAG Humphreys, causing additional facility requirements at Humphreys. This project will be built on USAG Humphreys, which is an enduring installation.

CURRENT SITUATION: There is insufficient inventory of Family housing units at USAG Humphreys to accommodate the number of Families that will reside at Humphreys upon completion of the US Forces relocation.

IMPACT IF NOT PROVIDED: If this project is not provided, the Garrison will not be able to provide the required on-post dwelling units, as directed by Commander, U.S. Forces Korea (USFK). For readiness, 40% of the total command sponsored Families are required to live on-post.

ADDITIONAL: The Host Nation (ROK) has previously funded the construction of 327 Family housing units. These units are currently under construction. This project has been coordinated with the installation physical security plan and all physical security measures are included. All required anti-terrorism/force protection measures are included.
ADDITIONAL: (CONTINUED)

Included. Alternative methods of meeting the requirement have been explored during project development. This project is the only feasible option to meet this new requirement. Sustainable principles will be integrated into the design, development, and construction of this project in accordance with Executive Order 13423 and other applicable laws and Executive Orders. The Deputy Assistant Secretary of the Army (Installations, Housing, and Partnerships) certifies that this project has been considered for joint use potential. This facility will be available for use by other components. A parametric cost estimate based upon project engineering design was used to develop this budget estimate. This project is located on an installation which will be retained by Eighth United States Army for the foreseeable future. The possibility of Host Nation funding has been addressed but sufficient funds from the Host Nation programs are not available to support this requirement. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders. This project is located on an installation which will be retained by Eighth United States Army for the foreseeable future. The possibility of Host Nation funding has been addressed but sufficient funds from the Host Nation programs are not available to support this requirement.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:

(a) Design Start Date................................. JUL 2015
(b) Percent Complete as of January 2018............. 100.00
(c) Date 35% Designed................................. MAY 2016
(d) Date Design Complete............................... MAY 2017
(e) Parametric Cost Estimating Used to Develop Costs.. NO
(f) Type of Design Contract: Design-bid-build
(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:

(a) Standard or Definitive Design:Y

(3) Total Design Cost (c) = (a)+(b) OR (d)+(e):

(a) Production of Plans and Specifications............ 9,624
(b) All Other Design Costs............................ 2,429
(c) Total Design Cost................................. 12,053
(d) Contract............................................ 8,036
(e) In-house............................................ 4,017
12. SUPPLEMENTAL DATA (CONTINUED..)

A. Estimated Design Data: (CONTINUED..)

(4) Construction Contract Award............................ AUG 2017

(5) Construction Start..................................... SEP 2017

(6) Construction Completion................................ SEP 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment Nomenclature</th>
<th>Procuring Appropriation</th>
<th>Fiscal Year</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Bed Room (144 Unit) Furn &amp; A</td>
<td>AFH-O</td>
<td>2021</td>
<td>2,323</td>
</tr>
<tr>
<td>4 Bed Room (54 Unit) Furn &amp; Ap</td>
<td>AFH-O</td>
<td>2021</td>
<td>986</td>
</tr>
<tr>
<td>5 Bed Room (6 Unit) Furn &amp; App</td>
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<td>2021</td>
<td>108</td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>0</td>
</tr>
<tr>
<td>Info Sys - PROP</td>
<td>OPA</td>
<td>2020</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>3,417</strong></td>
</tr>
</tbody>
</table>
Work In Place (WIP) Curve – USAG Humphreys – FY17 AFH New Construction PN 86689 / Full Authorization = $297,000 K / 1 / Actual Award Date = 31 Aug 17 / 4

As of: 9 January 2018

Note 1: FY17 President’s Budget requested one project = $143,563K. FY17 NDAA authorized both FY17 & FY19 scope at $297,000K.

Note 2: FY17 MILCON/VA Appropriation Act provided $100,000K for FY17 project.

Note 3: FY18 President’s Budget Request (Incr #2) = $34,402.

Note 4: The full scope of this project will be awarded via two separate contracts of approximately similar size. Contract #1 was awarded on 31 Aug 17. Contract #2 is scheduled for award in Oct 2018.

Assumption: Incremental funds will be available 1 Jan of the FY.
## Military Family Housing Justification

### Analysis of Requirements and Assets

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Officer (a)</td>
<td>E9 - E4 (b)</td>
</tr>
<tr>
<td><strong>6. Total Personnel Strength</strong></td>
<td>825</td>
<td>4,427</td>
</tr>
<tr>
<td><strong>7. Permanent Party Personnel</strong></td>
<td>825</td>
<td>4,427</td>
</tr>
<tr>
<td><strong>8. Gross Family Housing Requirements</strong></td>
<td>784</td>
<td>3,623</td>
</tr>
<tr>
<td><strong>9. Total Unacceptably House (a+b+c)</strong></td>
<td>103</td>
<td>202</td>
</tr>
<tr>
<td>a. involuntarily Separated</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. In Military Housing to Be Disposed/Replaced</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>c. Unacceptably House - in Community</td>
<td>103</td>
<td>202</td>
</tr>
<tr>
<td><strong>10. Voluntary Separations</strong></td>
<td>438</td>
<td>3,037</td>
</tr>
<tr>
<td><strong>11. Effective Housing Requirements</strong></td>
<td>243</td>
<td>384</td>
</tr>
<tr>
<td><strong>12. Housing Assets (a+b)</strong></td>
<td>243</td>
<td>384</td>
</tr>
<tr>
<td>a. Under Military Control</td>
<td>96</td>
<td>162</td>
</tr>
<tr>
<td>(1) Housed in Existing DoD Owned/Controlled</td>
<td>96</td>
<td>162</td>
</tr>
<tr>
<td>(2) Under Contract/Approved</td>
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<td>0</td>
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<tr>
<td>(3) Vacant</td>
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<td>0</td>
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<tr>
<td>(4) Inactive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b. Private Housing</td>
<td>147</td>
<td>222</td>
</tr>
<tr>
<td>(1) Acceptably Housed</td>
<td>147</td>
<td>222</td>
</tr>
<tr>
<td>(2) Acceptable Vacant Rental</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>13. Effective Housing Deficit</strong></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Remarks
FY2019, PKN6877: Increment three of the Congressionally-authorized combined FY17 and FY19 projects to construct a total of 432 Dwelling Units. Increment three provides funding towards construction of a complex of three (3) high-rise towers for 216 enlisted Soldiers and their Families. Apartments (units) are 18 five-bedrooms (5-BR), 54 four bedrooms (4-BR), and 144 three bedrooms (3-BR). This project is required to support the Yongsan Relocation Plan (YRP) and the Land Partnership Program (LPP) that relocates major units to Camp Humphreys. Current inventory consists of 352 units located in medium- and high-rise buildings funded in FY00, 01, 02, and 09 with AFHC funds. Host Nation (HN) has funded and is constructing another 327 units (216 apartments in 3 high rise towers almost identical to this project). When complete, these 327 HN dwelling units will be turned over to Army to operate and maintain. Block 11; Based on Housing Market Analysis (HMA, 15 June 2017) adjusted for population changes. Military Commander guidance states that Effective Housing requirement is a minimum of 2,768 units, or 40% Command Sponsor Program (CSP). A requirement of 40% would create a housing deficit of 1,108 units. Breakdown by paygrade is based on HMA.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
CONSTRUCTION IMPROVEMENTS

<table>
<thead>
<tr>
<th>($ in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 Budget Request $32,000</td>
</tr>
<tr>
<td>FY 2018 Program Budget $34,156</td>
</tr>
</tbody>
</table>

PURPOSE AND SCOPE
This Construction Improvements program provides funding for the improvement of existing Family housing units by revitalization. Revitalization of military Family housing units is requested when it is more economical to renovate rather than replace.

These existing units require major improvements, or revitalization, to meet contemporary living and energy standards.

PROGRAM SUMMARY
Authorization is requested for appropriation for whole house revitalization and improvements to 72 units. Projects exceeding the statutory funding limitation (10 USC 2825) of $50,000 per dwelling unit (adjusted by the area construction cost factor) are documented by the DD Forms 1391 which follow this summary. This project is listed in the following table:

<table>
<thead>
<tr>
<th>Location</th>
<th>Historic</th>
<th>Type</th>
<th>No. of Units</th>
<th>Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAG Rheinland-Pfalz (Baumholder), GE</td>
<td>No</td>
<td>JNCO</td>
<td>72</td>
<td>32,000</td>
</tr>
<tr>
<td>Total Construction Improvements</td>
<td></td>
<td></td>
<td>72</td>
<td>32,000</td>
</tr>
</tbody>
</table>

FUNDING SUMMARY

<table>
<thead>
<tr>
<th>Construction Improvements Program ($000)</th>
<th>Requested Authorization Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32,000</td>
<td>32,000</td>
</tr>
<tr>
<td>ITEM</td>
<td>QUANTITY</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>PRIMARY FACILITY</td>
<td></td>
</tr>
<tr>
<td>71116 Family Housing, Junior NCO/Enlis</td>
<td>FA</td>
</tr>
<tr>
<td>71116 Building Info Systems Req'mts fo</td>
<td>EA</td>
</tr>
<tr>
<td>Sustainability/Energy Measures</td>
<td>LS</td>
</tr>
<tr>
<td>Antiterrorism Measures</td>
<td>LS</td>
</tr>
<tr>
<td>SUPPORTING FACILITIES</td>
<td></td>
</tr>
<tr>
<td>Electric Service</td>
<td>LS</td>
</tr>
<tr>
<td>Water, Sewer, Gas</td>
<td>LS</td>
</tr>
<tr>
<td>Steam/Chilled Water Distribution</td>
<td>LS</td>
</tr>
<tr>
<td>Paving, Walks, Curbs And Gutters</td>
<td>LS</td>
</tr>
<tr>
<td>Site Imp(566) Demo( )</td>
<td>LS</td>
</tr>
</tbody>
</table>

**ESTIMATED CONTRACT COST**

- CONTINGENCY (5.00%)
- SUBTOTAL
- TOTAL REQUEST
- TOTAL REQUEST (ROUNDED)
- INSTALLED EQT-OTHER APPROP

Project provides whole neighborhood revitalization of 72 Army Family Housing (AFH) Dwelling Units (DUs) in four existing inadequate four-story stairwell apartment buildings. Project reconfigures buildings to combine and right-size 96 undersized apartments into 72 adequate dwelling units (56 three-bedroom and 16 four-bedroom units) meeting current standards for Junior Enlisted families. Renovations provide replacement of deteriorated building systems and components to include: electrical and mechanical systems, improvements to comply with applicable force protection and energy conservation requirements, addition of balconies, fire alarm/sprinkler systems, modernize common stairwell walk-ups, construct private laundry rooms in each apartment, restore and modernize kitchens and bathrooms, heating systems, interior plumbing, electrical systems (110 and 220V), TV/telephone/Internet wiring and distribution, built in closets, doors, windows, repair of basement areas, and storage rooms. On the exterior of the buildings repair/replace failed/failing gutters and downspouts, connections to storm drainage lines, leaks in roof, damp-proofing of perimeter basement walls, replace damaged roof tiles and exterior insulation, patch plaster, re-paint building exterior, install neighborhood recreational amenities, exterior flammable storage and trash collection enclosures, upgrade electrical, water and sewer utility distribution systems, upgrade landscaping, playgrounds and provide covered parking. Project shall include provisions for removal of asbestos, lead-based paint and Polycyclic Aromatic Hydrocarbons (PAH). Project shall comply with the Army Standard for Family Housing and Europe's Army Family Housing Standard Design Guide. Design will ensure all applicable requirements of the current Sustainable Design and Development Policy.
DESCRIPTION OF PROPOSED CONSTRUCTION: (CONTINUED)

Update (Environmental and Energy Performance) are met and buildings will be designed to a minimum life of 40 years and energy efficiencies meeting, Leadership in Energy and Environmental Design for Housing at the silver certification level through improved building envelope and integrated building systems performance. At least five percent of these units will be accessible or readily and easily modifiable for use by persons with disabilities.

PROJECT: Modernize and improve Junior non-Commissioned Officer and enlisted Family housing in four stairwell type Family Housing buildings. Resultant Dwelling Units = 72.

REQUIREMENT: The existing stairwell apartment buildings built in the 1950s have deteriorated to the point that they are inadequate and require complete revitalization. The units were adequate when originally constructed, but no longer meet current size or adequacy standards. Major systems and components all require modernization. This project is required to meet basic Family housing standards for the Baumholder military end state population, to provide military Families with housing conditions that conform to current adequacy standards for comfort, habitability, size, safety, and energy conservation. The project is supported by the results of the European Infrastructure Consolidation (EIC) report, confirming that Baumholder is again an enduring installation. This project continues execution of the Baumholder buyout to recapitalize worst stairwell buildings first in order to eliminate required housing as documented in the HQDA contracted Housing Market Analysis dated 8 April, 2016.

CURRENT SITUATION: Military Families assigned to Baumholder continue to be required to occupy inadequate housing built in the 1950s. These are four-story apartment buildings with common stairwell walkups and 24 undersized units per building that do not meet quality of life or Antiterrorism / Force Protection (AT/FP) standards. Buildings have utility systems, doors, windows, roofing, exterior facades, kitchens, baths and other major building components that have outlived their useful life.

IMPACT IF NOT PROVIDED: If this project is not provided, Service Members will continue to reside in inadequate and undersized housing that will continue to deteriorate and consume increased maintenance and energy costs. This adversely affects the health, safety and quality of life of the Soldiers and their Families. The Army continues to reassess any off-post questionable areas in the Housing Market Area. There is no perceived problem associated with the Germany refugee population that would lead to a higher security risk that needs to be factored into housing requirements for Baumholder. The 8-April-2016 Housing Market Analysis (HMA) for Baumholder indicates there is an endstate requirement for 740 units. Divesting the Wetzel housing area leaves a deficit of adequate inventory to meet the requirement. USAG Rheinland-Pfalz and the Baumholder Military Community remain vigilant in our force protection posture in the current environment, both on post and off post. On post housing remains critical to Soldier and Family readiness and resiliency.

ADDITIONAL: USAREUR's Conventional Forces Europe (CFE) planners have certified the end-state requirement for this installation. The life cycle cost analysis shows revitalization to be more cost effective than all other feasible alternatives. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included.
ADDITIONAL: (CONTINUED)
ares included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations and Housing) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include Life Cycle cost-effective practices, will be integrated into the design, development, and construction of the project in accordance with Executive Order 13423, 10 USC 2802(c), and other applicable laws and Executive Orders. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. An economic analysis has been prepared and utilized in evaluating this project. This project is the most cost-effective method to satisfy the requirement. The Deputy Assistant Secretary of the Army (Installations, Housing and Partnerships) certifies that this project has been considered for joint use potential. The facility will be available for use by other components. Sustainable principles, to include life cycle cost effective practices, will be integrated into the design, development and construction of the project and will follow the guidance detailed in the Army Sustainable Design and Development Policy - complying with applicable laws and executive orders.

NATO SECURITY INVESTMENT: This project is not within an established NATO infrastructure category for common funding, nor is it expected to become eligible in the foreseeable future. This project is not within an established NATO infrastructure category of common funding nor is it expected to become eligible in the foreseeable future.

12. SUPPLEMENTAL DATA:

A. Estimated Design Data:

(1) Status:
   (a) Design Start Date......................... AUG 2017
   (b) Percent Complete as of January 2018.............. 35.00
   (c) Date 35% Designed............................. JAN 2018
   (d) Date Design Complete.......................... SEP 2018
   (e) Parametric Cost Estimating Used to Develop Costs.. NO
   (f) Type of Design Contract: Design-bid-build
A. Estimated Design Data: (CONTINUED..)

(g) An energy study and life cycle cost analysis will be documented during the final design.

(2) Basis:
(a) Standard or Definitive Design: Y

(3) Total Design Cost \( (c) = (a) + (b) \text{ OR } (d) + (e) \): \( ($000) \)
(a) Production of Plans and Specifications ............ 1,919
(b) All Other Design Costs .................................. 871
(c) Total Design Cost ........................................... 2,790
(d) Contract ....................................................... 1,814
(e) In-house ....................................................... 976

(4) Construction Contract Award ......................... JUN 2019

(5) Construction Start .......................................... AUG 2019

(6) Construction Completion ................................. AUG 2021

B. Equipment associated with this project which will be provided from other appropriations:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Nomenclature</th>
<th>Procuring</th>
<th>Appropriation</th>
<th>Appropriated Or Requested</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen Appliances</td>
<td>AFH</td>
<td>2021</td>
<td>291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washer / Dryer</td>
<td>AFH</td>
<td>2021</td>
<td>73</td>
<td></td>
<td></td>
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<tr>
<td>Info Sys - ISC</td>
<td>OPA</td>
<td>2020</td>
<td>0</td>
<td></td>
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<tr>
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<td></td>
<td>2020</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 364
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
PLANNING AND DESIGN

($ in Thousands)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 Budget Request</td>
<td>$18,326</td>
</tr>
<tr>
<td>FY 2018 Program Budget</td>
<td>$33,559</td>
</tr>
</tbody>
</table>

PURPOSE AND SCOPE

This program provides funding for preparing working drawings, specifications, cost estimates, project planning reports, final design drawings and reviews of construction proposals. Also included are architectural and engineering services supporting new or improvement construction projects and costs incurred in developing requests for project proposals. These funds are used to plan and design future Family housing new and improvement construction, as well as energy conservation projects.

Authorization and Appropriation Request

Authorization and appropriation is requested for [$33,559,000] $18,326,000 in FY 2019 to fund Family housing construction planning and design activities.

PROGRAM SUMMARY

Planning and Design funds will provide for solicitation of FY 2019 projects, final design of FY 2020 projects and initiation of design of FY 2021 projects. This funding also provides for studies and updating construction standards and criteria.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

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10. Description of Proposed Construction  Provides for parametric, concept and final design of Family housing new and improvement projects; associated surveys; value engineering; and development of standards and criteria for Army Family housing facilities and properties.

PROJECT:  Planning and design funding for Family housing.

REQUIREMENT:  This funding is required to provide for Architect-Engineer (A-E) services, site surveys and preparation of designs and specifications for the Army Family housing construction program, including value engineering, and continued development of design criteria, standards, specifications and technical manuals. Funds will be used by the US Army Corps of Engineers (USACE) for in-house designs, A-E contracts, and administrative support functions. These funds are required for accomplishment of final correction, review, reproduction and advertisement of FY 2019 projects; for advancement to final design of FY 2020 projects; and for initiation of design of FY 2021 projects.

IMPACT IF NOT PROVIDED:  If these funds are not provided, development of Family housing new and improvement projects will not be accomplished, preventing execution of the FY 2019, 2020 and 2021 construction programs.
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DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
OPERATION, MAINTENANCE, AND UTILITIES

($ in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>FY 2019 Budget Request</th>
<th>FY 2018 Program Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 Budget Request</td>
<td>$196,456</td>
<td>$177,194</td>
</tr>
</tbody>
</table>

PURPOSE AND SCOPE

1. Operation Account. The Operation account provides for expenses in the following sub-accounts and includes both direct and indirect support for operation, maintenance, and utilities for government-owned, government-operated Family housing units, as applicable:

   a. Management – Provides funding for Family housing management, installation administrative support and for services provided by Housing Services Offices (HSO) to provide information to place Families in local community housing. It also includes housing requirement surveys, condition assessments of existing housing, and development of Family housing construction and repair projects. The Management account provides for the operation of the Family housing modules of the enterprise Military Housing (eMH) system that supports effective housing management and personnel costs for those Army employees staffing the HSO at all locations, including privatized housing locations.

   b. Services – Provides basic installation service support functions such as refuse collection and disposal, insect and pest control, snow removal and street cleaning, and the Family housing proportional share of fire and police protection.

   c. Furnishings – Provides for procurement, management, control, moving and handling of furnishings and household equipment; maintenance, repair, and replacement of existing furnishings and equipment at all installations, including General/Flag Officers Quarters (GFOQ) at privatized housing locations.

   d. Miscellaneous – Provides payments to Department of Homeland Security for Coast Guard Family housing units occupied by Army personnel.

2. Maintenance Account. The Maintenance account provides funding for the following activities required to maintain Family housing real property assets:

   a. Recurring Maintenance & Repair (M&R) – Includes service calls, interior and exterior painting, between occupancy maintenance, and minor M&R work.

   b. Major Maintenance and Repair – Major M&R work continues our revitalization program to extend the useful life of the quarters, reduce future maintenance and utility costs, and increase occupancy. This account also provides for repairs and improvements to extend the useful life of units.
c. **Exterior Utilities** – Includes costs for Maintenance and Repair (M&R) of sewer and water lines, primary and secondary electric lines, and other exterior utilities used exclusively by Family housing.

d. **Maintenance and Repair, Other Real Property** – Includes work on grounds, surfaced areas, playgrounds, and other real property serving the Family housing community.

e. **Alterations & Additions** – Includes low-cost incidental (minor) improvements not to exceed $3,000 per dwelling unit. This work is normally performed concurrently with maintenance and repair projects and includes modifications to quarters to meet the needs of exceptional Family members.

3. **Utilities Account**. The Utilities account includes the costs of heat, air conditioning, electricity, water, and sewage for Family housing units.

**PROGRAM SUMMARY**

Authorization and appropriation are requested for [$177,194,000] $196,456,000 for FY 2019. This amount, together with estimated reimbursements of [$15,000,000] $15,000,000, will fund the Operation, Utilities, and Maintenance program at [$192,194,000] $211,456,000. A summary follows:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Maintenance</th>
<th>Utilities</th>
<th>Total Direct</th>
<th>Reimbursement</th>
<th>Total Program</th>
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</thead>
<tbody>
<tr>
<td>63,054</td>
<td>75,530</td>
<td>57,872</td>
<td>196,456</td>
<td>15,000</td>
<td>211,456</td>
</tr>
</tbody>
</table>

**EXHIBIT FH-2 SUMMARY**

Operational requirements are a function of the annual cost-per-unit of supported installations. In FY 2019, the foreign inventory will represent 92 percent of the average Army-owned inventory.
### DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates

**Army Family Housing**

**OPERATION, MAINTENANCE, AND UTILITIES (Continued)**

**INVENTORY AND MAINTENANCE, SUMMARY (WORLDWIDE)**

*Excludes Leased & Privatized Units and Costs*

<table>
<thead>
<tr>
<th>A. INVENTORY DATA</th>
<th>FY 2017 ACTUALS</th>
<th>FY 2018 BUDGET ESTIMATE</th>
<th>FY 2019 BUDGET ESTIMATE</th>
</tr>
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<tbody>
<tr>
<td>INVENTORY BEGINNING OF YEAR</td>
<td>10,328</td>
<td>10,454</td>
<td>10,939</td>
</tr>
<tr>
<td>INVENTORY END OF YEAR</td>
<td>10,454</td>
<td>10,939</td>
<td>10,210</td>
</tr>
<tr>
<td>EFFECTIVE AVERAGE INVENTORY</td>
<td>10,393</td>
<td>10,699</td>
<td>10,577</td>
</tr>
<tr>
<td>HISTORIC UNITS</td>
<td>211</td>
<td>217</td>
<td>211</td>
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**UNITS REQUIRING O&M FUNDING:**

<table>
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<tr>
<th></th>
<th>CONUS</th>
<th>Foreign</th>
<th>Worldwide</th>
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<tr>
<td>a. CONUS</td>
<td>759</td>
<td>870</td>
<td>825</td>
</tr>
<tr>
<td>b. Foreign</td>
<td>9,634</td>
<td>9,829</td>
<td>9,752</td>
</tr>
<tr>
<td>c. Worldwide</td>
<td>10,393</td>
<td>10,699</td>
<td>10,577</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>B. FUNDING REQUIREMENT</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. OPERATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Management</td>
<td>3,830</td>
<td>3,467</td>
<td>3,432</td>
</tr>
<tr>
<td>b. Services</td>
<td>687</td>
<td>835</td>
<td>993</td>
</tr>
<tr>
<td>c. Furnishings</td>
<td>1,930</td>
<td>1,198</td>
<td>1,498</td>
</tr>
<tr>
<td>d. Miscellaneous</td>
<td>N/A</td>
<td>464</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>SUBTOTAL - OPERATION</strong></td>
<td>6,447</td>
<td>5,499</td>
<td>5,923</td>
</tr>
</tbody>
</table>

| 2. UTILITIES           | 3,918   | 5,631   | 5,471   |

| 3. MAINTENANCE         |         |         |         |
| a. Annual Recurring M&R | 3,145   | 2,211   | 2,928   |
| c. Exterior Utilities  | 230     | 162     | 214     |
| d. M&R, Other Real Prop. | 537     | 378     | 500     |
| e. Alts., & Additions  | 153     | 108     | 143     |
| **SUBTOTAL MAINTENANCE** | 7,671   | 5,394   | 7,141   |

| Foreign Currency Adjustments | 2,000 |

| 4. APPROPRIATION        | 18,035  | 189,905 | 16,524  |
|                         | 187,124 | 177,194 | 18,535  |
| 5. REIMBURSABLE PROGRAM | 1,443   | 15,000  | 1,418   |
|                         | 15,000  | 15,000  | 15,000  |
| 6. TOTAL O&M PROGRAM    | 19,479  | 204,905 | 17,926  |
|                         | 192,194 | 19,953  | 211,456 |

*EXHIBIT FH-2*
### DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

**OPERATION, MAINTENANCE, AND UTILITIES (Continued)**

**OPERATION AND MAINTENANCE, SUMMARY – U.S. (incl. Alaska and Hawaii)**

*Excludes Leased & Privatized Units and Costs*

#### A. INVENTORY DATA

<table>
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<tr>
<th></th>
<th>FY 2017 ACTUALS</th>
<th>FY 2018 BUDGET ESTIMATE</th>
<th>FY 2019 BUDGET ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVENTORY BEGINNING OF YEAR</td>
<td>744</td>
<td>772</td>
<td>965</td>
</tr>
<tr>
<td>INVENTORY END OF YEAR</td>
<td>772</td>
<td>965</td>
<td>682</td>
</tr>
<tr>
<td>EFFECTIVE AVERAGE INVENTORY</td>
<td>759</td>
<td>870</td>
<td>825</td>
</tr>
<tr>
<td>HISTORIC UNITS</td>
<td>211</td>
<td>217</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNITS REQUIRING O&amp;M FUNDING:</td>
<td>759</td>
<td>870</td>
<td>933</td>
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#### B. FUNDING REQUIREMENT

<table>
<thead>
<tr>
<th></th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OPERATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Management</td>
<td>25,696</td>
<td>19,503</td>
<td>20,889</td>
<td>18,174</td>
<td>19,065</td>
<td>17,788</td>
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<tr>
<td>b. Services</td>
<td>470</td>
<td>357</td>
<td>513</td>
<td>447</td>
<td>563</td>
<td>525</td>
</tr>
<tr>
<td>c. Furnishings</td>
<td>1,057</td>
<td>802</td>
<td>589</td>
<td>513</td>
<td>679</td>
<td>634</td>
</tr>
<tr>
<td>d. Miscellaneous</td>
<td>N/A</td>
<td>464</td>
<td>N/A</td>
<td>400</td>
<td>N/A</td>
<td>408</td>
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<tr>
<td>SUBTOTAL - OPERATION</td>
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<td>21,126</td>
<td>22,451</td>
<td>19,533</td>
<td>20,745</td>
<td>19,355</td>
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<td>2,682</td>
<td>2,036</td>
<td>3,463</td>
<td>3,013</td>
<td>3,101</td>
<td>2,894</td>
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<tr>
<td>3. MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Annual Recurring M&amp;R</td>
<td>2,153</td>
<td>1,634</td>
<td>1,360</td>
<td>1,183</td>
<td>1,660</td>
<td>1,548</td>
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<tr>
<td>b. Major M&amp;R Projects</td>
<td>2,468</td>
<td>1,873</td>
<td>1,559</td>
<td>1,356</td>
<td>1,902</td>
<td>1,775</td>
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<tr>
<td>c. Exterior Utilities</td>
<td>158</td>
<td>120</td>
<td>99</td>
<td>87</td>
<td>121</td>
<td>113</td>
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<tr>
<td>d. M&amp;R, Other Real Prop.</td>
<td>368</td>
<td>279</td>
<td>232</td>
<td>202</td>
<td>283</td>
<td>264</td>
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<td>e. Alts. &amp; Additions</td>
<td>105</td>
<td>80</td>
<td>66</td>
<td>58</td>
<td>81</td>
<td>76</td>
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<td>SUBTOTAL MAINTENANCE</td>
<td>5,252</td>
<td>3,986</td>
<td>3,317</td>
<td>2,885</td>
<td>4,048</td>
<td>3,777</td>
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<td>4. APPROPRIATION</td>
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<td>27,148</td>
<td>29,231</td>
<td>25,431</td>
<td>27,894</td>
<td>26,025</td>
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<tr>
<td>5. REIMBURSABLE PROGRAM</td>
<td>52,174</td>
<td>12,000</td>
<td>54,545</td>
<td>12,000</td>
<td>54,545</td>
<td>12,000</td>
</tr>
<tr>
<td>6. TOTAL O&amp;M PROGRAM</td>
<td>51,579</td>
<td>39,148</td>
<td>43,024</td>
<td>37,431</td>
<td>40,755</td>
<td>38,025</td>
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</table>

**EXHIBIT FH-2**
## DEPARTMENT OF THE ARMY

Fiscal Year (FY) 2019 Budget Estimates

Army Family Housing

OPERATION, MAINTENANCE, AND UTILITIES (Continued)

OPERATION AND MAINTENANCE, SUMMARY -- FOREIGN (incl. U.S. territories)

Excludes Leased & Privatized Units and Costs

### A. INVENTORY DATA

<table>
<thead>
<tr>
<th></th>
<th>FY 2017 ACTUALS</th>
<th>FY 2018 BUDGET ESTIMATE</th>
<th>FY 2019 BUDGET ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INVENTORY BEGINNING OF YEAR</td>
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<td>9,682</td>
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<td>9,752</td>
</tr>
<tr>
<td>HISTORIC UNITS</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>UNITS REQUIRING O&amp;M FUNDING:</strong></td>
<td>9,634</td>
<td>9,829</td>
<td>9,752</td>
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</table>

### B. FUNDING REQUIREMENT

<table>
<thead>
<tr>
<th></th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
<th>UNIT COST ($)</th>
<th>TOTAL COST ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. OPERATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Management</td>
<td>2,107</td>
<td>20,299</td>
<td>1,924</td>
<td>18,915</td>
<td>1,898</td>
<td>18,514</td>
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<tr>
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<td>704</td>
<td>6,785</td>
<td>863</td>
<td>8,484</td>
<td>1,023</td>
<td>9,977</td>
</tr>
<tr>
<td>c. Furnishings</td>
<td>1,999</td>
<td>19,255</td>
<td>1,252</td>
<td>12,303</td>
<td>1,560</td>
<td>15,208</td>
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<td>d. Miscellaneous</td>
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<td>-</td>
<td>N/A</td>
<td>-</td>
<td>N/A</td>
<td>-</td>
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<td><strong>SUBTOTAL - OPERATION</strong></td>
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<td>4,039</td>
<td>39,702</td>
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<td>5,823</td>
<td>57,238</td>
<td>5,638</td>
<td>54,978</td>
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<td></td>
<td></td>
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<tr>
<td>a. Annual Recurring M&amp;R</td>
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<td>31,052</td>
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<td>35,596</td>
<td>2,622</td>
<td>25,767</td>
<td>3,458</td>
<td>33,724</td>
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<tr>
<td>c. Exterior Utilities</td>
<td>236</td>
<td>2,272</td>
<td>167</td>
<td>1,644</td>
<td>221</td>
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<td>390</td>
<td>3,838</td>
<td>515</td>
<td>5,023</td>
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<td>112</td>
<td>1,096</td>
<td>147</td>
<td>1,435</td>
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<td><strong>SUBTOTAL MAINTENANCE</strong></td>
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<td>75,735</td>
<td>5,578</td>
<td>54,823</td>
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<td>71,754</td>
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<td></td>
</tr>
<tr>
<td><strong>4. APPROPRIATION</strong></td>
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<td>162,757</td>
<td>15,440</td>
<td>151,763</td>
<td>17,477</td>
<td>170,431</td>
</tr>
<tr>
<td><strong>5. REIMBURSABLE PROGRAM</strong></td>
<td>5,660</td>
<td>3,000</td>
<td>5,660</td>
<td>3,000</td>
<td>5,660</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>6. TOTAL O&amp;M PROGRAM</strong></td>
<td>15,689</td>
<td>165,757</td>
<td>15,689</td>
<td>154,763</td>
<td>15,689</td>
<td>173,431</td>
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EXHIBIT FH-2
### Army Family Housing Operations

<table>
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<tr>
<th></th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td>Requiring Execution</td>
<td>Requiring Execution</td>
<td>Requiring Execution</td>
</tr>
<tr>
<td>Denmark</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Euro</td>
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<td>266,693 0.9329</td>
<td>280,575 0.8582</td>
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<tr>
<td>Japan</td>
<td>20,001 122.4519</td>
<td>28,356 111.3365</td>
<td>33,057 111.5938</td>
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<tr>
<td>Norway</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Singapore</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>South Korea</td>
<td>30,564 1,151.5242 0.8990</td>
<td>34,787 1,156.1200 0.9329</td>
<td>45,821 1,128.1127 0.8582</td>
</tr>
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<td>Turkey</td>
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<td>-</td>
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<tr>
<td>United Kingdom</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>309,667</td>
<td>329,836</td>
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### Army Family Housing Construction

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<tbody>
<tr>
<td></td>
<td>Requiring Execution</td>
<td>Requiring Execution</td>
<td>Requiring Execution</td>
</tr>
<tr>
<td>Denmark</td>
<td>-</td>
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</tr>
<tr>
<td>Euro</td>
<td>-</td>
<td>56,601 0.9329</td>
<td>127,131 0.8582</td>
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<tr>
<td>Japan</td>
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<tr>
<td>Singapore</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>South Korea</td>
<td>154,554 1,151.5242 0.8990</td>
<td>34,402 1,156.1200 0.9329</td>
<td>153,000 1,128.1127 0.8582</td>
</tr>
<tr>
<td>Turkey</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>154,554</td>
<td>91,003</td>
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### Family Housing Operation and Maintenance Reprogramming Actions

#### Fiscal Year 2017

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<th>Account</th>
<th>FY 2017 Appropriation ($000)</th>
<th>FY 2017 DD 1415 RPG ($000)</th>
<th>FY 2017 BLW THD RPG ($000)</th>
<th>FY 2017 Above THD RPG ($000)</th>
<th>% RPG</th>
<th>FY 2017 End of Year ($000)</th>
</tr>
</thead>
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<td><strong>Utilities</strong></td>
<td>55,428</td>
<td>(14,709)</td>
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<td>-27%</td>
<td></td>
<td>40,719</td>
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<tr>
<td><strong>Operations</strong></td>
<td>58,915</td>
<td>(1,393)</td>
<td>9,943</td>
<td>15%</td>
<td></td>
<td>67,465</td>
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<tr>
<td>Management</td>
<td>40,344</td>
<td>(542)</td>
<td>-</td>
<td>-1%</td>
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<td>39,802</td>
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<td>Services</td>
<td>7,993</td>
<td>(851)</td>
<td>-</td>
<td>-11%</td>
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<td>7,142</td>
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<tr>
<td>Furnishings</td>
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<td>Miscellaneous</td>
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<td>64</td>
<td>16%</td>
<td></td>
<td></td>
<td>464</td>
</tr>
<tr>
<td><strong>Leasing</strong></td>
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<td>119,569</td>
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<tr>
<td><strong>Maintenance</strong></td>
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<td>18,976</td>
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<td></td>
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<td>79,721</td>
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<td><strong>Adjustments</strong></td>
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<td></td>
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<td>Privatization Support</td>
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<td><strong>Close Year App</strong></td>
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<td>(2,018)</td>
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<td></td>
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</table>
Budget Methodology
The Operation account includes four sub-accounts: management, services, furnishings, and miscellaneous. All Operation sub-accounts are considered “must pay accounts” in order to manage and operate Family housing.

The Management sub-account is estimated based on historic expenditures that have been adjusted for a reduction of manpower requirements.

The Services sub-account provides police and fire protection, trash pickup and other municipal functions and is estimated based on historic, per-unit expenditures that have been adjusted for increased service contract requirements.

The Furnishings sub-account is estimated based on historic, per-unit expenditures that have been adjusted for increased requirements worldwide.

The Miscellaneous sub-account is based on anticipated interagency reimbursement (Department of Defense to Department of Homeland Security) for U.S. Coast Guard housing provided to Army personnel.

Summary of Primary Adjustments in FY 2019 Budget
The FY 2019 request supports Army-owned Family housing inventory. Funding adjustments are due primarily to currency fluctuation and increased requirements worldwide.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

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DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
OPERATION ACCOUNT
MANAGEMENT SUB-ACCOUNT

<table>
<thead>
<tr>
<th>($ in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2019 Budget Request</td>
</tr>
<tr>
<td>FY 2018 Program Budget</td>
</tr>
</tbody>
</table>

The Management sub-account provides funding for the continued requirement of salaries, referral services, housing requirements analysis, and project planning. The overall FY 2019 Management sub-account is decreased by program adjustments due to reduction of manpower requirements, price adjustments for non-pay/non-fuel inflation, civilian personnel raise, and increased foreign currency fluctuation adjustments.

All Army installations continue to require a housing staff to provide housing services related to the community (e.g., referrals to private sector housing, deposit waiver, and community liaison). This workforce supports military personnel with their housing requirements, regardless of whether they are seeking on-post, privatized or community housing.
## DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

**OPERATION ACCOUNT**
**MANAGEMENT SUB-ACCOUNT**
RECONCILIATION OF INCREASES AND DECREASES
EXHIBIT OP-5

$ In Thousands

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
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<td>3</td>
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<tr>
<td></td>
<td>a. Non-pay/non-fuel Inflation</td>
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<tr>
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<td>b. Civilian Personnel Raise</td>
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<td></td>
<td>c. Foreign Currency Fluctuation</td>
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<td>4</td>
<td>Program Adjustments:</td>
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<td>5</td>
<td>FY 2019 President's Budget Request</td>
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DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
OPERATION ACCOUNT
SERVICES SUB-ACCOUNT

($ in Thousands)

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>FY 2019 Budget Request</td>
<td>$10,502</td>
</tr>
<tr>
<td>FY 2018 Program Budget</td>
<td>$8,930</td>
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</table>

The FY 2019 request is based on the level of support for refuse collection, street cleaning, snow removal, police and fire protection, entomology, pest control, and custodial services. Program adjustments in the Exhibit OP-5 are based on increased service requirements worldwide. FY 2019 Services sub-account is also increased by currency fluctuation adjustments.
### DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
OPERATION ACCOUNT
SERVICES SUB-ACCOUNT
RECONCILIATION OF INCREASES AND DECREASES
EXHIBIT OP-5

### $ In Thousands

<table>
<thead>
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<th></th>
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<td>2</td>
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<td>3</td>
<td><strong>Price Adjustments</strong>: Currency Fluctuation Adjustments</td>
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<tr>
<td>4</td>
<td><strong>Program Adjustments</strong>: Increased service requirements</td>
<td>751</td>
</tr>
<tr>
<td></td>
<td>due to increased inventory worldwide</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>FY 2019 President's Budget Request</td>
<td>10,502</td>
</tr>
</tbody>
</table>
The Furnishings sub-account is used for procuring, controlling, managing, moving and handling, maintaining, and repairing household furnishings and equipment (e.g., refrigerators, ranges, and where authorized, washers and dryers). In overseas and foreign locations, added furniture items (e.g., beds, tables, and dressers) are authorized.

Program adjustments in the Exhibit OP-5 are based on increased furnishings requirements worldwide. FY 2019 Furnishings sub-account is also increased by currency fluctuation adjustments.

**EFFECT OF PRIVATIZATION**

Furnishings for privatized GFOQs are supported as required.
<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
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<td>1.</td>
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<td>4.</td>
<td>Program Adjustments: Increased furnishings requirements worldwide</td>
<td>$1,760</td>
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<td>5.</td>
<td>FY 2019 President's Budget Request</td>
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February 2018

DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
OPERATION ACCOUNT
MISCELLANEOUS SUB-ACCOUNT

<table>
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<th>($ in Thousands)</th>
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<tbody>
<tr>
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<td>$408</td>
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<tr>
<td>FY 2018 Program Budget</td>
<td>$400</td>
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</tbody>
</table>

The FY 2019 Miscellaneous sub-account funds payment to Department of Homeland Security for Coast Guard housing provided to Army Soldiers and their Families. The Miscellaneous sub-account increased slightly due to increased Coast Guard housing requirements.
<p>| | | |</p>
<table>
<thead>
<tr>
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<td>3.</td>
<td><strong>Program Adjustments:</strong> Increased requirements for Coast Guard housing</td>
<td>8</td>
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<tr>
<td>4.</td>
<td>FY 2019 President’s Budget Request</td>
<td>408</td>
</tr>
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</table>
Maintenance and Repair (M&R) requirements are computed using the DoD Facilities Sustainment Model (FSM) and planned major M&R projects. Factors are established based on costs per square foot for dwelling units at the installation level and then adjusted to budget year estimates by applying non-pay inflation, and currency fluctuation factors. The result is annual sustainment costs.

The Army maintains an inventory valued at approximately $5.6 billion as measured by replacement costs. Ensuring these facilities are consistently occupied requires sound property management and timely recurring maintenance for preservation and protection of this major investment.

The Maintenance and Repair Account is adjusted primarily due to currency fluctuation and increased major M&R project requirements worldwide.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
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<td>4</td>
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<td>5</td>
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</table>
The project list in this section is provided for authorization in accordance with the reporting requirement stated in Title 10 USC Sections 2831 and 2884 and Public Law 114-223, MILCON/VA Appropriations and Military Construction, Veterans Affairs, and Related Appropriations Act, 2017. Information is provided regarding the anticipated costs for those GFOQ where maintenance and repair obligations in FY 2019 are expected to exceed $35,000 per dwelling unit.

The Army’s FY 2019 GFOQ program consists of 364 units at a total cost of $10,642,549 for operations, maintenance, utilities, and leasing costs. The program supports 165 Army-owned and leased GFOQ units and funds operations costs for 199 privatized GFOQ units across the Army. The Army’s FY 2019 operations and maintenance (O&M) program totals $6,921,681 for all 364 GFOQs. Of the 364 units, 61 are projected to exceed $35,000 in O&M at a total O&M cost of $4,636,702. The Army programs maintenance and repair (M&R), which includes recurring work such as service calls, preventive maintenance, between occupancy maintenance, minor repairs, and major M&R projects for government-owned homes that will be retained long-term. The Army’s FY 2019 GFOQ M&R program for the 165 Army-owned and leased GFOQs totals $4,224,441. This includes 42 GFOQs where the total M&R cost per dwelling unit exceeds $35,000 for a total M&R cost of $2,833,802. Of these 42 units, there are three major repair projects and one minor repair project totaling $293,639. For FY 2019, the programmed major projects are at US Army Garrison Benelux-Chievres, Belgium, Rock Island Arsenal, IL, and US Army Garrison Daegu, Korea.

The Army continues to seek alternatives to replace large and expensive GFOQ. The FY 2019 program supports the Army’s ongoing goal to buy-out major repairs at legacy GFOQ worldwide.

In historic quarters major work is coordinated with the appropriate State Historic Preservation Office. The Army has stewardship for historic dwelling units and a legal responsibility under the provisions of the National Historic Preservation Act, Public Law 89-665, as amended, to preserve and maintain these units. Many of the Army’s remaining GFOQ were built prior to any Congressional size limitations and are generally larger and more expensive to maintain than more contemporary structures. Deferring required repairs will accelerate the rate of deterioration, increase the final cost of repairs and preclude compliance with Congressionally directed preservation responsibilities.

The Army’s project review and approval process eliminates unnecessary maintenance and repair. The following requested repairs are necessary to ensure that the quarters are maintained in a safe, sanitary and livable condition.
<table>
<thead>
<tr>
<th>STATE</th>
<th>INSTALLATION</th>
<th>NET SQUARE FOOTAGE</th>
<th>HIS- YEAR</th>
<th>MAINT &amp; NEW MAINT &amp; NEW</th>
<th>QUARTERS NO.</th>
<th>TORIC</th>
<th>BUILT</th>
<th>REPAIRS LEASE</th>
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<td>DISTRICT OF COLUMBIA</td>
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<td>Fort Lesley J. McNair</td>
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<tr>
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<td></td>
<td>201 Second Avenue</td>
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<td>1903</td>
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<td></td>
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<td>Maintenance and repairs including service calls - $5,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; security - $5,000.</td>
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<td>Quarters 3</td>
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<td>Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; security - $6,000.</td>
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<td>Maintenance and repairs including service calls - $5,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; security - $5,000.</td>
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<td>Quarters 5</td>
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<td>BUILT</td>
<td>REPAIRS LEASE</td>
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</tbody>
</table>

Quarters 6
221 Second Avenue 2,834 Yes 1903 $86,400 - -
Operations/Utilities - $63,927; Total O&M - $107,677
Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; interior painting - $20,400; security - $5,000.

Quarters 7
225 Second Avenue 4,436 Yes 1903 $61,000 - -
Operations/Utilities - $83,777; Total O&M - $90,027
Maintenance and repairs including service calls - $6,000; self help - $200; routine maintenance and repairs - $15,800; grounds maintenance - $5,000; exterior painting - $28,000; security - $6,000.

Quarters 8
229 Second Avenue 4,057 Yes 1903 $62,000 - -
Operations/Utilities - $71,827; Total O&M - $79,077
Maintenance and repairs including service calls - $6,000; self help - $200; routine maintenance and repairs - $15,800; grounds maintenance - $6,000; exterior painting - $28,000; security - $6,000.

Quarters 9
233 Second Avenue 4,278 Yes 1903 $62,000 - -
Operations/Utilities - $76,727; Total O&M - $83,977
Maintenance and repairs including service calls - $6,000; self help - $200; routine maintenance and repairs - $15,800; grounds maintenance - $6,000; exterior painting - $28,000; security - $6,000.

Quarters 10
237 Second Avenue 3,169 Yes 1903 $54,000 - -
Operations/Utilities - $61,677; Total O&M - $73,027
Maintenance and repairs including service calls - $5,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; security - $5,000.
DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
GENERAL/FLAG OFFICERS QUARTERS (GFOQ)
EXCEEDING $35,000 PER DWELLING UNIT

<table>
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<tr>
<th>STATE</th>
<th>INSTALLATION</th>
<th>NET SQUARE FOOTAGE</th>
<th>HIS- TORY</th>
<th>YEAR</th>
<th>MAINT &amp; REPAIRS</th>
<th>NEW LEASE WORK</th>
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</table>

**Quarters 11**
241 Second Avenue 3,169 Yes 1903 $54,000 - -
Operations/Utilities - $56,677; Total O&M - $68,027
Maintenance and repairs including service calls - $5,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; security - $5,000.

**Quarters 12**
245 Second Avenue 3,169 Yes 1903 $86,400 - -
Operations/Utilities - $63,927; Total O&M - $107,677
Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; interior painting - $20,400; security - $5,000.

**Quarters 13**
249 Second Avenue 3,169 Yes 1903 $86,400 - -
Operations/Utilities - $66,277; Total O&M - $110,027
Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; interior painting - $20,400; security - $5,000.

**Quarters 14**
253 Second Avenue 3,169 Yes 1903 $86,400 - -
Operations/Utilities - $58,927; Total O&M - $102,677
Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $5,000; exterior painting - $25,000; interior painting - $20,400; security - $5,000.

**Quarters 15**
257 Second Avenue 3,169 Yes 1903 $87,400 - -
Operations/Utilities - $64,277; Total O&M - $109,027
Maintenance and repairs including service calls - $5,000; change of occupancy - $12,000; self help - $200; routine maintenance and repairs - $13,800; grounds maintenance - $6,000; exterior painting - $25,000; interior painting - $20,400; security - $5,000.
### DEPARTMENT OF THE ARMY

Fiscal Year (FY) 2019 Budget Estimates

Army Family Housing

**GENERAL/FLAG OFFICERS QUARTERS (GFOQ)**

**EXCEEDING $35,000 PER DWELLING UNIT**

<table>
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<tr>
<th>STATE</th>
<th>INSTALLATION</th>
<th>NET SQUARE FOOTAGE</th>
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<th>MAINT &amp; REPAIRS</th>
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#### Quarters 16

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<th>His-Year</th>
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<td>Rock Island Arsenal</td>
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<tr>
<td>Quarters 4</td>
<td>3294 Terrace Drive</td>
<td>4,455</td>
<td>1872</td>
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<td>Operations/Utilities - $14,175; Total O&amp;M - $153,700</td>
<td>Maintenance and repairs including service calls - $9,500; change of occupancy - $3,000; routine maintenance and repairs - $6,850; grounds maintenance - $3,500; interior painting - $8,000; project (IJO 15-5013) to replace the roof - $114,500.</td>
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#### Quarters 6

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<th>His-Year</th>
<th>Maint &amp; Repairs</th>
<th>New Built</th>
<th>Lease Work</th>
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</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>Joint Base Myer-Henderson Hall</td>
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<tr>
<td>Quarters 1</td>
<td>206 Washington Ave</td>
<td>8,460</td>
<td>1899</td>
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<td>Operations/Utilities - $127,997; Total O&amp;M - $112,277</td>
<td>Maintenance and repairs including change of occupancy - $16,000; grounds maintenance - $6,000; interior painting - $23,100; routine maintenance and repairs - $11,500; security - $7,000; self help - $200; service calls - $6,000.</td>
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</table>
## DEPARTMENT OF THE ARMY

Fiscal Year (FY) 2019 Budget Estimates

Army Family Housing

GENERAL/FLAG OFFICERS QUARTERS (GFOQ)

EXCEEDING $35,000 PER DWELLING UNIT

<table>
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<tr>
<th>STATE</th>
<th>INSTALLATION</th>
<th>NET SQUARE FOOTAGE</th>
<th>HIS-TORIC NO.</th>
<th>YEAR</th>
<th>MAINT &amp; REPAIRS</th>
<th>LEASE REPAIRS</th>
<th>NEW WORK</th>
</tr>
</thead>
</table>

### Quarters 2

202 Washington Ave | 3,618 | Yes | 1899 | $56,000 | - | - |

Operations/Utilities - $86,227; Total O&M - $91,277

Maintenance and repairs including change of occupancy - $15,000; grounds maintenance - $5,000; interior painting - $15,600; routine maintenance and repairs - $10,200; security - $5,000; self help - $200; service calls - $5,000.

### Quarters 5

114 Grant Ave | 3,405 | Yes | 1903 | $47,320 | - | - |

Operations/Utilities - $86,352; Total O&M - $84,597

Maintenance and repairs including change of occupancy - $12,000; grounds maintenance - $5,000; interior painting - $12,320; routine maintenance and repairs - $7,800; security - $5,000; self help - $200; service calls - $5,000.

### Quarters 6

110 Grant Ave | 7,365 | Yes | 1908 | $76,500 | - | - |

Operations/Utilities - $126,122; Total O&M - $118,977

Maintenance and repairs including change of occupancy - $15,000; grounds maintenance - $6,000; interior painting - $22,500; routine maintenance and repairs - $7,800; security - $7,000; self help - $200; service calls - $6,000; project to renovate main floor bathroom and entrance for handicapped accessibility - $12,000.

### Quarters 8

102 Grant Ave | 4,255 | Yes | 1903 | $60,255 | - | - |

Operations/Utilities - $99,212; Total O&M - $103,382

Maintenance and repairs including change of occupancy - $15,000; grounds maintenance - $6,000; interior painting - $18,255; routine maintenance and repairs - $7,800; security - $7,000; self help - $200; service calls - $6,000.

### Quarters 11A

321-A Jackson Ave | 2,742 | Yes | 1892 | $44,779 | - | - |

Operations/Utilities - $64,780; Total O&M - $66,456

Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $11,979; routine maintenance and repairs - $8,600; security - $5,000; self help - $200; service calls - $4,000.
### STATE INSTALLATION NET SQUARE HISTORIC YEAR MAINT & NEW QTRS NO. FOOTAGE TORIC BUILT REPAIRS LEASE WORK

#### Quarters 11B
- **321-B Jackson Ave**
  - 2,951 Yes 1891 $45,100 - -
  - Operations/Utilities - $58,480; Total O&M - $66,456
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $12,300; routine maintenance and repairs - $8,600; security - $5,000; self help - $200; service calls - $4,000.

#### Quarters 12A
- **317-A Jackson Ave**
  - 2,701 Yes 1892 $40,875 - -
  - Operations/Utilities - $56,880; Total O&M - $54,652
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $8,075; routine maintenance and repairs - $8,600; security - $5,000; self help - $200; service calls - $4,000.

#### Quarters 13B
- **313-A Jackson Ave**
  - 1,973 Yes 1903 $44,779 - -
  - Operations/Utilities - $46,900; Total O&M - $66,456
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $11,979; routine maintenance and repairs - $8,600; security - $5,000; self help - $200; service calls - $4,000.

#### Quarters 14A
- **309-A Jackson Ave**
  - 1,998 Yes 1903 $44,379 - -
  - Operations/Utilities - $39,157; Total O&M - $58,456
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $11,979; routine maintenance and repairs - $8,200; security - $5,000; self help - $200; service calls - $4,000.

#### Quarters 14B
- **309-B Jackson Ave**
  - 1,927 Yes 1903 $44,379 - -
  - Operations/Utilities - $36,514; Total O&M - $76,594
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $11,979; routine maintenance and repairs - $8,200; security - $5,000; self help - $200; service calls - $4,000.
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<th>HIS- YEAR BUILT</th>
<th>MAINT &amp; REPAIRS</th>
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## DEPARTMENT OF THE ARMY

Fiscal Year (FY) 2019 Budget Estimates

Army Family Housing

GENERAL/FLAG OFFICERS QUARTERS (GFOQ)

EXCEEDING $35,000 PER DWELLING UNIT

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<th>STATE</th>
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<th>NET SQUARE FOOTAGE</th>
<th>HIS- YEAR</th>
<th>MAINT &amp; NEW REPAIRS LEASE WORK</th>
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### Quarters 24B
- **224-B Lee Ave**
  - 2,682 Yes 1896 $41,108 - -
  - Operations/Utilities - $57,987; Total O&M - $56,485
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $9,708; routine maintenance and repairs - $7,200; security - $5,000; self help - $200; service calls - $4,000.

### Quarters 25B
- **220-C Lee Ave**
  - 2,594 Yes 1896 $41,108 - -
  - Operations/Utilities - $62,437; Total O&M - $60,935
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $9,708; routine maintenance and repairs - $7,200; security - $5,000; self help - $200; service calls - $4,000.

### Quarters 26A
- **216-A Lee Ave**
  - 2,999 Yes 1896 $43,379 - -
  - Operations/Utilities - $60,187; Total O&M - $60,956
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $11,979; routine maintenance and repairs - $7,200; security - $5,000; self help - $200; service calls - $4,000.

### Quarters 28
- **208 Lee Ave**
  - 1,623 Yes 1935 $40,475 - -
  - Operations/Utilities - $41,417; Total O&M - $56,752
  - Maintenance and repairs including change of occupancy - $10,000; grounds maintenance - $5,000; interior painting - $8,675; routine maintenance and repairs - $7,600; security - $5,000; self help - $200; service calls - $4,000.

### BELGIUM

(0.9329 EURO / 1 $ budget rate)

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<th>Interior painting</th>
<th>Routine maintenance and repairs</th>
<th>Security</th>
<th>Self Help</th>
<th>Service Calls</th>
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</table>
- **49 Avenue du Jeu de Paume**
  - **Quarters 12**
    - 3,766 No 1956 $39,749 $103,251 -
    - Operations/Utilities - $55,792; Total O&M - $84,733
    - Maintenance and repairs including incidental improvements - $3,000; interior painting - $6,591; routine maintenance and repairs - $13,643; security - $4,477; self help - $900; service calls - $11,138.
### Army Family Housing

#### GENERAL/FLAG OFFICERS QUARTERS (GFOQ) EXCEEDING $35,000 PER DWELLING UNIT

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#### 1 Chateau Gendebien

- Quarters 1
  - Maintenance and repairs including grounds maintenance: $6,200
  - Interior painting: $18,644
  - Routine maintenance and repairs: $31,854
  - Security: $258,128
  - Self help: $5,610
  - Service calls: $25,239
  - Project to install magnetic & pin code lock switches on perimeter fence pedestrian gates: $48,216

#### 9B Grand Chemin de Masnuy

- Quarters 31
  - Maintenance and repairs including grounds maintenance: $1,846
  - Interior painting: $16,157
  - Routine maintenance and repairs: $10,299
  - Security: $3,625
  - Self help: $800
  - Service calls: $5,924

#### KOREA

- Daegu
  - Quarters 1 (PN 91231)
    - Maintenance and repairs including other real property (sidewalks): $200
    - Interior painting: $3,000
    - Routine maintenance and repairs: $5,850
    - Self help: $110
    - Service calls: $1,500
    - Project to repair the roof and sun room: $118,923
## DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

### GENERAL/FLAG OFFICERS QUARTERS (Continued)

Units Projected to Exceed $35K per Unit in Operation and Maintenance (O&M)

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<th>Utilities</th>
<th>Lease</th>
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State/Country
Korea
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
Virginia
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Virginia
Virginia
Virginia
Virginia

Installation Name
USAG Daegu
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson
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Joint Base Myer - Henderson
Joint Base Myer - Henderson
Joint Base Myer - Henderson

Street Address
001-S Camp Walker (CW0000)
206 Washington Avenue (1)
202 Washington Avenue (2)
114 Grant Avenue (5)
110 Grant Avenue (6)
106 Grant Avenue (7)
102 Grant Avenue (8)
208 Lee Avenue (28)
321-A Jackson Avenue (11A)
321-B Jackson Avenue (11B)
317-A Jackson Avenue (12A)
317-B Jackson Avenue (12B)
313-A Jackson Avenue (13A)
313-B Jackson Avenue (13B)
309-A Jackson Avenue (14A)
309-B Jackson Avenue (14B)
305-A Jackson Avnue (15A)
301-A Jackson Avenue (16A)
301-B Jackson Avenue (16B)
213-A Lee Avenue (19A)
209-A Lee Avenue (20A)
205-B Lee Avenue (21B)
201-A Lee Avenue (22A)
201-B Lee Avenue (22B)
228-A Lee Avenue (23A)
224-B Lee Avenue (24B)
220-C Lee Avenue (25B)
216-A Lee Avenue (26A)
212-A Lee Avenue (27A)
212-B Lee Avenue (27B)
Grand Totals

Year
Built
1996
1899
1899
1903
1908
1909
1903
1935
1892
1891
1892
1892
1903
1903
1903
1903
1908
1908
1908
1932
1932
1932
1932
1932
1896
1896
1896
1896
1903
1903
NSF Operations Maj Proj
2,100
8,025 118,923
8,460
42,477
0
3,618
35,277
0
3,405
37,277
0
7,365
42,477
12,000
4,707
27,627
0
4,255
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1,623
16,277
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2,742
21,677
0
2,951
15,377
0
2,701
13,777
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2,774
19,077
0
1,980
22,327
0
1,973
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1,998
14,077
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16,327
0
2,682
15,377
0
2,594
19,827
0
2,999
17,577
0
3,715
19,077
0
2,718
14,077
0

M&R
Total M&R
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69,800
69,800
56,000
56,000
47,320
47,320
64,500
76,500
27,000
27,000
60,255
60,255
40,475
40,475
44,779
44,779
45,100
45,100
40,875
40,875
22,800
22,800
22,800
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41,108
41,108
41,108
43,379
43,379
22,900
22,900
22,900
22,900
3,006,532
3,329,171

Utilities
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85,520
50,950
49,075
83,645
56,085
56,085
25,140
43,103
43,103
43,103
43,103
25,223
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25,600
25,600
25,600
25,600
25,600
42,610
42,610
42,610
42,610
43,020
43,020
2,105,959

DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
GENERAL/FLAG OFFICERS QUARTERS (Continued)
Units Projected to Exceed $35K per Unit in Operation and Maintenance (O&M)

0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
502,855

Lease

O&M
137,608
112,277
91,277
84,597
118,977
54,627
103,382
56,752
66,456
60,477
54,652
41,877
45,127
66,456
58,456
66,556
36,414
37,714
71,377
38,077
64,477
72,477
71,077
41,077
59,822
56,485
60,935
60,956
41,977
36,977
4,636,702

Total Cost
(Inc Lease
& Utils)
144,928
197,797
142,227
133,672
202,622
110,712
159,467
81,892
109,559
103,580
97,755
84,980
70,350
91,679
83,536
91,636
79,374
80,674
114,337
63,677
90,077
98,077
96,677
66,677
102,432
99,095
103,545
103,566
84,997
79,997
7,245,516

February 2018


This program provides for utility services for Army Family Housing that include electricity, natural gas, propane, steam/hot water, fuel oil, coal, water and sewage.

Utility requirements are estimated based on historic, per unit expenditures that have been adjusted for inflation factors.

The annual energy consumption reduction goal is reflected in the program. As in prior years, construction and major maintenance and repair projects will contribute to meeting energy reduction goals.

The account is adjusted primarily due to currency fluctuation and decreased utilities requirements.
# UTILITIES

## RECONCILIATION OF INCREASES AND DECREASES

**EXHIBIT OP-5**

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
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</tr>
<tr>
<td>2. FY 2018 Current Estimate</td>
<td>60,251</td>
</tr>
<tr>
<td>3. Price Adjustments: Currency Fluctuation Adjustments</td>
<td>4,623</td>
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<tr>
<td>4. Program Adjustments: Decreased Utilities Requirements</td>
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<td>5. FY 2019 President's Budget Request</td>
<td>57,872</td>
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Army FY 2019
Family Housing summary of Unit Detail

<table>
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<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Utilities ($000)</td>
<td>55,428</td>
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<td>Electricity (Kwh)</td>
<td>139,044,743</td>
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<td>Heating:</td>
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<td></td>
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<td>Gas (BBL)</td>
<td>2,234,319</td>
<td>2,248,948</td>
<td>2,230,457</td>
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<td>Fuel Oil (BBLS)</td>
<td>26,561</td>
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<td>Purchased Steam (MBTU)</td>
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<td>1,047,890</td>
<td>1,039,274</td>
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<td>Propane (BBLS)</td>
<td>3,594</td>
<td>3,603</td>
<td>3,573</td>
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<td>Water (Kgal)</td>
<td>1,532,708</td>
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<td>Sewage (Kgal)</td>
<td>1,286,398</td>
<td>1,291,821</td>
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DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing
LEASING ACCOUNT
($ in Thousands)

FY 2019 Budget Request $161,252
FY 2018 Program Budget $148,538

PURPOSE AND SCOPE
The purpose of the leasing program is to provide adequate Family housing at both domestic and foreign locations when temporary housing is needed to satisfy housing shortfalls or affordable adequate housing is not readily available. In addition, it provides funding to reimburse Department of State (DoS) for use of embassy housing. The leasing program, authorized by 10 USC 2828, 10 USC 2834, and 10 USC 2835, provides for the payment of rent, operation and maintenance costs to private-sector landlords for the rental of homes. The program also includes funding for services, such as utilities, refuse collection and maintenance, when these services are not provided as part of the lease contract. Funding to the DoS includes unit rent and utilities, furnishings pool and generator pool buy-ins and mandatory DoS security upgrades. Once leased, these units are managed and assigned to military Families as government quarters.

The Army continues to rely on the private sector to meet the majority of housing needs. The Army leases Family housing where affordable adequate private-rental housing is not readily available or where the DoS Chief of Mission requires it.

The U.S. Army Installation Management Command, the U.S. Army Recruiting Command, the U.S. Army Cadet Command, the U.S. Military Entrance Processing Command, and eight DoD and Army Commands with DoS embassy leased housing project their requirements annually to the Army Housing Headquarters Office. The Army Housing Headquarters Office validates the requirement request against historic execution rates, known programmatic and stationing changes, and confirms costs with the DoS when applicable.

PROGRAM SUMMARY
Authorization and appropriation are requested for $161,252,000 to fund leases and related expenses in FY 2019. A summary of the leasing program for the most recent three program years follows:

<table>
<thead>
<tr>
<th>Lease Type</th>
<th>FY 2017 (Actuals)</th>
<th>FY 2018 (Estimate)</th>
<th>FY 2019 (Estimate)</th>
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<tr>
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<td>Leases Supported</td>
<td>Cost $000</td>
<td>Leases Supported</td>
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<tr>
<td>Domestic</td>
<td>208</td>
<td>4,678</td>
<td>295</td>
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<tr>
<td>Foreign</td>
<td>3,978</td>
<td>114,891</td>
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<td>Total</td>
<td>4,186</td>
<td>119,569</td>
<td>4,578</td>
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</table>
JUSTIFICATION:

Domestic Leasing: The domestic leasing program provides adequate housing for Army Families on a temporary basis. Domestic leases support the Active Component and include key and essential Service members assigned to the U.S. Southern Command in Miami, Florida and independent duty leases for Soldiers assigned to the U.S. Army Recruiting Command, the U.S. Army Cadet Command, and the U.S. Military Entrance Processing Command. In FY 2016, Army Headquarters changed the policy governing the independent duty leasing program predominately to be consistent with the Air Force and Navy in the out-of-pocket threshold used to qualify members.

Foreign Leasing: The FY 2019 foreign leasing program consists of 4,486 leased units that are leased under 10 USC 2828 and 10 USC 2834. The Army requests funds to reimburse payment for directly charged costs such as housing unit rent, utilities, security upgrades, furniture pool buy-ins, and generator pool buy-ins for housing leases required by the Department of State for Department of Defense (DoD) personnel in a given country.

PROGRAM ADJUSTMENTS

The program is adjusted for currency fluctuation and increased DoD foreign lease requirements and independent duty lease program changes.
February 2018

DEPARTMENT OF THE ARMY
Fiscal Year (FY) 2019 Budget Estimates
Army Family Housing

LEASING
RECONCILIATION OF INCREASES AND DECREASES
EXHIBIT OP-5

$ In Thousands

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<td>a</td>
<td>Increased DoD foreign lease requirements</td>
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<td>b</td>
<td>Domestic lease program changes</td>
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<td>5</td>
<td>FY 2019 President's Budget Request</td>
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## DEPARTMENT OF THE ARMY

Fiscal Year (FY) 2019 Budget Estimates

**Army Family Housing**

**LEASING ACCOUNT, FH-4 DISPLAY**

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<thead>
<tr>
<th>Units Leased</th>
<th>FY2017 (Actuals)</th>
<th>FY2018 (Estimate)</th>
<th>FY2019 (Estimate)</th>
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<td>Supported Months</td>
<td>Lease</td>
<td>($000)</td>
<td>Units</td>
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<td>Independent Duty, Various Locations</td>
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<td>Hattiesburg, MS</td>
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<tr>
<td>Rock Island, IL</td>
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<tr>
<td>El Paso, TX</td>
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<tr>
<td>Miami, FL</td>
<td>6</td>
<td>72</td>
<td>529</td>
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<tr>
<td><strong>Total Domestic</strong></td>
<td>208</td>
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<td><strong>FOREIGN LEASING</strong></td>
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<td>EUSA (Korea)</td>
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<tr>
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<td><strong>Total Korea</strong></td>
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<tr>
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<td><strong>Total USAREUR</strong></td>
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## FOREIGN LEASING

### Department of State (DoS) Leasing – Reimbursed Foreign

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<thead>
<tr>
<th>Country</th>
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<th>FY2018 (Estimate)</th>
<th>FY2019 (Estimate)</th>
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<td>Supported Months</td>
<td>Units Lease</td>
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### Department of State (DoS) Leasing — Reimbursed Foreign

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### Other Foreign Leasing

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### Total Foreign Leasing

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### TOTAL LEASING PROGRAM

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<td>4,186 50,172 119,569</td>
<td>4,578 54,852 148,539</td>
<td>4,744 56,928 161,252</td>
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### The threshold for classifying foreign leases as high cost leases is determined by first adjusting the $20,000 authority for CPI changes. If the country uses the Euro, then the CPI-adjusted $20,000 ($25,000 in Italy) authority is multiplied by the result of the conversion-to-Euro adjusted rate divided by the FY budget rate. The conversion to Euro adjusted rate is the FY 1988 currency rate divided by the official, permanent Euro conversion rate – for Belgium, its 40.3399 and for the Netherlands, its 2.20371. For non-EU countries, the CPI-adjusted $20,000 ($25,000 and $35,000 in Korea) authority is adjusted for exchange fluctuations since FY 1988. Leases exceeding a country’s threshold are counted against the Army’s high cost lease allocation.

### Note: Department of State Housing Pool participants are not subject to the maximum lease amounts cited for foreign leases in Section 2828(e)(1) of Title 10, United States Code. Clarification of participation in Department of State Housing Pools is discussed in Section 2834 of Title 10, United States Code.
PURPOSE AND SCOPE

The Department of Army continues to employ the tools authorized by the Military Housing Privatization Initiative (MHPI) Act to execute an aggressive Family housing privatization program. The goal of this program is to improve the wellbeing of Army Families by providing quality, affordable Family housing in the United States (U.S.) at locations where adequate local housing is not available. The Army’s Residential Communities Initiative (RCI) program consists of 85,288 privatized end state units at 44 Army locations, representing over 98% of the on-post Family housing inventory in the U.S. The Initial Development Plan (IDP), which varies from 3 to 14 years, is the timeframe in which all inadequate homes in a project/installation will be renovated or replaced, and construction of additional units is completed. In FY 2018, all of the projects / installations completed their IDPs. The Army maintains oversight of the program through a rigorous Portfolio and Asset Management (PAM) process. The Army may consider future Family housing privatization where needed and feasible. The program is a key component of the Army’s strategy to ensure long term sustainment of quality residential communities for Soldiers and their Families.

Program Summary

The FY 2019 funding request provides $18,801,000 for RCI program portfolio and asset management, oversight and operation. Funding will support civilian pay, travel, and contracts for environmental and real estate assessments, training, and real estate and financial consultant services. Program adjustments in Exhibit OP-5 are based on the number of annual site visits/inspections, and programmatic reviews and reports. The budget request is based on cost factors associated with staffing and workload projections. Workload is driven by the number of installations in the post-privatization PAM phase, the number of anticipated project major decision actions and oversight and accountability requirements. The applied cost factors for work elements of each phase are based on experience and established fees. The RCI program continues to execute additional oversight and accountability requirements directed by the National Defense Authorization Act (NDAA) 2013. This legislation requires assessments and reporting of specific financial requirements being completed under the Portfolio and Asset Management Program. In addition, the Army Audit Agency has detailed property management oversight requirements and compliance responsibilities.
Estimated Basic Allowance for Housing (BAH) To Be Paid To Members Living In Privatized Housing

It is estimated that the Department of the Army will pay BAH under section 403 of title 37 to members living in privatized housing the amounts of $1,508,459 in FY 2018 and $1,547,679 in FY 2019. The number of units of military family housing upon which these estimated payments are made is 73,938 in FY 2018 and 73,938 in FY 2019. The number of units of military unaccompanied housing upon which these estimated payments are made is 1,025 in FY 2018 and 1,025 in FY 2019.

These estimates meet the reporting requirement stipulated in 10 USC 2884 (b) (2). However, it must be noted that it is difficult to project the true cost of BAH allowances provided to members living in privatized housing. BAH allowances for members in privatized housing are not specifically tracked in budget or execution data, as these members receive the same allowances as those who live on the economy. BAH accounting data is available for only the various categories of payments (for instance, domestic with and without dependents, partial, overseas housing allowances, etc.).

The table below summarizes FY 2019 RCI program costs ($ in Thousands).

| Program/Project Management and Oversight                  | $11,401 |
| Environmental/Real Estate/Training (U.S. Army Corps of Engineers Services) | $ 1,900 |
| Portfolio Management Advisory Support                     | $ 5,500 |
| **Total**                                                  | **$18,801** |
### PRIVATIZATION

**RECONCILIATION OF INCREASES AND DECREASES**

EXHIBIT OP-5

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<th>Description</th>
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<td>2. FY 2018 Current Estimate</td>
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<td>3. Program Adjustments:</td>
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<td>a. Reduced number of annual site visits/inspections</td>
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<td>monthly to quarterly and semi-annually</td>
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Grand Totals                       | 81,837 | 85,444 | $1,953 | 80,597 | 85,288 | 85,288 | $1,939 | 119 |
NOTES:

1. The date the real property is transferred (land and family housing units) to the private owner/developer, and when service members become entitled to receive Basic Allowance for Housing (BAH).
2. Provide the name of the MHPI Project given to the privatization project, including the name given to integrated/grouped projects. The MHPI project name should be consistent with the MHPI project name used in the previously approved OSD/OMB Scoring report and/or subsequent notification to Congress.
3. List the MHPI project location by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
4. This section relates the previously-approved OSD/OMB project scope and funding amounts contained in the scoring package and/or subsequent Notification of Funds Transfer letters to Congress.
5. Provide the number of family housing units to be conveyed by installation and state to the Developer, including each installation and state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
6. Provide the end state number of family housing units by installation and state to the Developer, including each installation/state incorporated into the integrated/grouped MHPI project, as previously-approved in the OSD/OMB Scoring report.
7. Provide all of the funding source information for the MHPI project as reflected in the previously-approved OSD/OMB report and consistent with the project summary details accompanying the Notification of Transfer letter to Congress, such as:
   a. The amount of funds to be used for the Government’s cost of the project (i.e., equity contribution, credit subsidy costs, differential lease payments, etc.).
   b. The fiscal year(s) of the funding sources to be used to cover the Government’s cost of the MHPI project.
   c. The type of funds (e.g., FH New Construction, FH Construction Improvements, FH Improvement Funds) to be used to cover the Government’s cost of the MHPI project.
   d. The project(s) that are used to source the Government’s cost of the privatization project.
8. This section relates to the Military Departments’ actual and/or current plan, which might or might not be consistent with the details contained in the previously-approved OSD/OMB Scoring report and project summary to Congress for the MHPI project due to extenuating circumstances.
9. Provide the actual and/or revised planned number of family housing units conveyed to the Developer by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
10. Provide the actual and/or revised, planned number of family housing units by installation and state, including each installation/state incorporated into the integrated/grouped MHPI project.
11. Provide the total number of privatized family housing units in the inventory for each MHPI project by installation/state, including each installation/state incorporated into the integrated/grouped MHPI project, regardless if they are currently occupied or not.
12. Provide all the "actual and/or current" funding sources used to fund the MHPI project, which might or might not be consistent with the details contained in the previous-approved OSD/OMB Scoring report and project summary (i.e., project amount, budget year of funds, source project, appropriation) to Congress for the MHPI project due to extenuating circumstances. If possible and/or available, please provide the requested funding information by installation/state.
13. Provide the applicable MHPI authorities in subchapter IV of Chapter 169 in title 10 U.S.C. was used and/or proposed to be used for the privatization project. Designators are as follows:
   1 = 10 USC 2873 - Government Direct Loans
   2 = 10 USC 2873 - Loan Guarantees
   3 = 10 USC 2875 - Investments, such as DoD Equity Contributions in non-governmental entities
   4 = 10 USC 2877 - Differential Lease Payments
   5 = 10 USC 2878 - Conveyance or Lease of Existing Property and Facilities
14. Totals of number of units conveyed, number of end state units, and funding amounts.
The Reimbursable program provides for the collection and use of payments for utilities and services, routine maintenance and repair, rents associated with the use of government housing by authorized occupants, and damages caused by occupant negligence. This account provides authority to incur costs for services and repair of damages to be reimbursed by collection of payments from Federal and non-Federal sources.

The following table shows the source of receipts for the Family housing account.

<table>
<thead>
<tr>
<th></th>
<th>FY 2018 (Budget Request)</th>
<th>FY 2019 (Budget Estimate)</th>
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<td>Federal Sources</td>
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Department of the Army
Fiscal Year (FY) 2019
Budget Estimates

Homeowners Assistance Fund, Defense

JUSTIFICATION DATA SUBMITTED TO CONGRESS
February 2018
# DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense

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<table>
<thead>
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<th>DESCRIPTION</th>
<th>PAGE NUMBER</th>
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<td>BUDGET APPENDIX EXTRACT</td>
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<td>PROGRAM AND SCOPE</td>
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<td>PROGRAM SUMMARY</td>
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<tr>
<td>AUTHORIZATION AND APPROPRIATION LANGUAGE</td>
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<td>PROGRAM FINANCIAL SUMMARY</td>
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<tr>
<td>EXHIBIT HA1 – WORKLOAD AND OBLIGATION DATA</td>
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<td>EXHIBIT HA2 – STATUS OF ACCOUNTS</td>
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<td>EXHIBIT HA3 – WORK UNIT DATA</td>
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DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense
SUMMARY

(In Thousands)

| FY 2019 Program/Appropriation | $6,937/ -0- |
| FY 2018 Program/Appropriation | $7,571/ -0- |

Program and Scope

This fund finances the Department of Defense Homeowners Assistance Program (HAP). The HAP is a benefit program available to assist eligible beneficiaries in three categories:

1. Military and civilian Federal employee homeowners when the real estate market is adversely affected directly related to the closure or reduction-in-scope of operations due to Base Realignment and Closure (BRAC).
2. Service members who are wounded, injured, or made ill as a consequence of duties during a forward deployment after September 11, 2001; and
3. The spouses of a member of the Armed Forces or a civilian employee of the Department of Defense or the United States Coast Guard who is killed in the line of duty or in the performance of his or her duties during a deployment on or after September 11, 2001, in support of the Armed Forces or died from a wound, injury, or illness incurred in the line of duty during such a deployment.

HAP provides some financial assistance to these homeowners when they are unable to sell their homes under reasonable terms and conditions. Although HAP provides for acquisition of dwellings under certain circumstances, since there is no governmental requirement for these residential properties and the government must resell any properties it acquires immediately, HAP is therefore not subject to the general procedures for acquiring and disposing of Army real property. Moreover, HAP is not a claims program. All determinations made by the Secretary of Defense are final and conclusive and, by statute, are not subject to judicial review. Therefore, every effort must be made to ensure that each applicant is treated fairly and receives the maximum benefits for which he/she may be eligible within available appropriations.

Per DoD Directive 4165.50E, the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)) has overall responsibility and, through the Office of the Assistant Secretary of Defense for Energy, Installations, and Environment provides oversight for this program. The Army, acting as the DoD Executive Agent for administering the HAP, uses the Headquarters, U. S. Army Corps of Engineers (HQUSACE) to implement the program.
Program Summary

The FY 2019 budget requests authorization of appropriation in the amount of $0 to fund Homeowners Assistance Fund program expenses. The total program estimate for FY 2019 is $6,936,527 and will be funded with revenue from sales of acquired properties, and prior year unobligated balances. Program expenses include payments to homeowners for losses on private sales; costs of judicial foreclosures; property acquisitions by liquidating and/or assuming outstanding mortgages; partial payment of homeowners' lost equity on government acquisitions; retirement of debt after the sale of properties when the government assumes mortgages; and administrative expenses.

The Homeowners Assistance Fund, Defense (HOA) is a non-expiring revolving fund. The Program Financial Summary chart that follows shows that the fund receives funding from several sources: appropriations, borrowing authority, reimbursable authority, prior fiscal year unobligated balances, appropriation transfers, revenue from sale of acquired properties, and recovery of prior year obligations. The fund is not a profit-making endeavor. Although the proceeds from the sale of homes are returned to the fund, this revenue does not always replenish it nor totally fund projected requirements. Since the Homeowners Assistance Fund is not self-sustaining, periodic appropriations may be required to maintain its solvency as a revolving fund. In the past, Congress has authorized the transfer of funds from the BRAC account to the Homeowners Assistance Fund when BRAC programs cause HAP activity.

The FY2019 HAP financial condition requires no budget request to fund the program requirements and maintain the fund's solvency. The program will maintain the fund's solvency with prior year carryover and revenue. Program activity and funding requirements for HAP are based on execution timelines and eligible Wounded, Ill, and Injured and Surviving Spouses. This estimate of zero request is based on no planned BRAC related closures or realignments or other non-BRAC unit restationing in FY2019.
DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense
AUTHORIZATION AND
APPROPRIATION LANGUAGE

For use in the Homeowners Assistance Fund established pursuant to section 1013(d) of the Demonstration Cities and Metropolitan Development Act of 1966, as amended (42 U.S.C. 3374), [0] $-0- to become available on October 1, 2018 and remain available until expended.

General Provision: Continue the annual provision of transfer authority from BRAC into HAP in the General Provisions of the Military Quality of Life and Veterans Affairs Appropriations Act.
The chart below is a summary of the funding for FY2017, FY2018 and FY2019

### PROGRAM FINANCIAL SUMMARY

<table>
<thead>
<tr>
<th>Program Financial Summary</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
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<tr>
<td>Transfer To/From Other Account</td>
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<tr>
<td>Total Budget Authority Requested</td>
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<tr>
<td><strong>Reimbursable Resources</strong></td>
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<td><strong>Other Program Resources</strong></td>
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<td>3,476,195</td>
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<td>Recovery of Prior Year Balances</td>
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<td>Payments to Homeowners</td>
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<td>Acquisition of Real Property</td>
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<tr>
<td>e. Total Investment</td>
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<td>2,158</td>
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<tr>
<td>a. Payments - Private Sales</td>
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<td>411</td>
<td>29,357</td>
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<td>b. Payments - Real Property</td>
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<td>c. Payments - Foreclosures</td>
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<tr>
<td>d. Payments - Reimbursements/Refunds</td>
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<td>e. Subtotal - Payments to Homeowners</td>
<td>14</td>
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<td>h. Total Expense - Acquisition</td>
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<td>3. EXPENSE - MANAGEMENT &amp; DISPOSAL</td>
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<td>b. Interest/Taxes/Insurance</td>
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EXHIBIT HA-1
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<td>AVG ($)</td>
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<td><strong>b. Liquidation of Mortgages</strong></td>
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<td>(3) Other Liens</td>
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<td><strong>c. Total Payments</strong></td>
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<tr>
<td><strong>d. Mortgages Assumed</strong></td>
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### 2. EXPENSE

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<td><strong>a. Payments - Private Sales</strong></td>
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<tr>
<td><strong>g. Administrative Expense</strong></td>
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<tr>
<td><strong>h. Total Expense - Acquisition</strong></td>
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### 3. EXPENSE - MANAGEMENT & DISPOSAL

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<th>Budget Request - FY 2019</th>
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<td><strong>b. Interest/Taxes/Insurance</strong></td>
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<tr>
<td><strong>d. Maintenance &amp; Operating Expense</strong></td>
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<tr>
<td><strong>f. Total Expense Management &amp; Disposal</strong></td>
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<td>Dollars (000)</td>
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### 5. TOTAL PROGRAM - INVESTMENT AND EXPENSE

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<th>Budget Request - FY 2019</th>
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<td>AVG ($)</td>
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## DEPARTMENT OF ARMY

**Fiscal Year (FY) 2019 Budget Estimates**

**Homeowners Assistance Fund, Defense Workload and Obligation Data**

**FY 2019**

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<tr>
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<tr>
<td>a. Equity Payments</td>
<td>5</td>
<td>46</td>
<td>9,200</td>
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<tr>
<td>b. Liquidation of Mortgages</td>
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</tr>
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<td>171,286</td>
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<td>(3) Other Liens</td>
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<td>0</td>
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<tr>
<td>c. Total: Payments</td>
<td>12</td>
<td>1,245</td>
<td>103,750</td>
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<td>d. Mortgages Assumed</td>
<td>0</td>
<td>0</td>
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<tr>
<td>e. Total Investment</td>
<td>1,245</td>
<td>3,156</td>
<td>2,158</td>
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<tr>
<td>2. EXPENSE</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a. Payments - Private Sales</td>
<td>14</td>
<td>411</td>
<td>29,357</td>
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<td>b. Payments - Real Property</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>c. Payments - Foreclosures</td>
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<td>0</td>
<td>0</td>
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<td>d. Payments - Reimbursements/Refunds</td>
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<td>0</td>
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<tr>
<td>e. Subtotal - Payments to Homeowners</td>
<td>14</td>
<td>411</td>
<td>29,357</td>
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<tr>
<td>f. Appraisals</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>g. Administrative Expense</td>
<td>1,399</td>
<td>3,147</td>
<td>4,211</td>
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<td>h. Total Expense - Acquisition</td>
<td>1,810</td>
<td>3,800</td>
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<td>3. EXPENSE - MANAGEMENT &amp; DISPOSAL</td>
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</tr>
<tr>
<td>a. Appraisals</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>b. Interest/Taxes/Insurance</td>
<td>12</td>
<td>11</td>
<td>917</td>
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<td>c. Sales Expense</td>
<td>13</td>
<td>63</td>
<td>4,846</td>
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<td>d. Maintenance &amp; Operating Expense</td>
<td>0</td>
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<td>e. Administrative Expense</td>
<td>79</td>
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<td>211</td>
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<td>f. Total Expense Management &amp; Disposal</td>
<td>153</td>
<td>615</td>
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<td>4. TOTAL EXPENSE</td>
<td>1,963</td>
<td>4,415</td>
<td>4,779</td>
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<td>5. TOTAL PROGRAM - INVESTMENT AND EXPENSE</td>
<td>3,208</td>
<td>7,571</td>
<td>6,937</td>
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**EXHIBIT HA-1**
## DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense

### STATUS OF ACCOUNTS - PART I
FY 2017 Budget Actual

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CASH ($000)</th>
<th>DEBT RECEIPT ($000)</th>
<th>TOTAL ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXPENDITURE ACCOUNT - RESOURCES AND APPLICATIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. RESOURCES</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(1) Unobligated Balance Start of Year</td>
<td>89,606</td>
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<td>89,606</td>
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<td>(2) Appropriations</td>
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<td>0</td>
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<tr>
<td>(3) New Authorization to Spend Agency Debt Receipts</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(4) Transfer To/From Other Account</td>
<td>25,000</td>
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<td>25,000</td>
</tr>
<tr>
<td>(5) Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Sales (Cash)</td>
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<td>0</td>
<td>3,476</td>
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<td>(b) Sales (Non-Cash)</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>(c) Other Revenue</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(6) Less Retirement of Debt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Principal Payments on Mortgages</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(b) Mortgage Transfers</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>(7) Recovery of Prior Year Obligations</td>
<td>778</td>
<td>0</td>
<td>778</td>
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<td>(8) Total</td>
<td>68,860</td>
<td>0</td>
<td>68,860</td>
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<td>b. APPLICATIONS</td>
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<tr>
<td>(1) Payments on Acquisitions of Properties</td>
<td>410</td>
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<td>410</td>
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<td>(2) Value of Mortgages Payable Assumed</td>
<td>0</td>
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<td>(3) Expenses</td>
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<td>(4) Transfer of Miscellaneous Receipts</td>
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<td>0</td>
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<tr>
<td>(5) Total</td>
<td>3,208</td>
<td>0</td>
<td>3,208</td>
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<tr>
<td>c. UNOBLIGATED BALANCE - END OF PERIOD</td>
<td>65,652</td>
<td>0</td>
<td>65,652</td>
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EXHIBIT HA-2
DEPARTMENT OF ARMY  
Fiscal Year (FY) 2019 Budget Estimates  
Homeowners Assistance Fund, Defense  
STATUS OF ACCOUNTS - PART II  
FY 2017 Budget Actual

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TOTAL ($000)</th>
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<tbody>
<tr>
<td>1. PROPERTY ACCOUNT</td>
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</tr>
<tr>
<td>a. ON HAND, START OF YEAR</td>
<td>2,231</td>
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<tr>
<td>b. PAYMENTS FOR EQUITY AND MORTGAGES ON ACQUISITION OF PROPERTIES</td>
<td>1,245</td>
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<tr>
<td>c. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>d. LESS ACQUISITIONS PRICE OF PROPERTIES SOLD</td>
<td>3,476</td>
</tr>
<tr>
<td>e. ON HAND, END OF YEAR</td>
<td>0</td>
</tr>
<tr>
<td>2. BORROWING ACCOUNT (MORTGAGES PAYABLE)</td>
<td></td>
</tr>
<tr>
<td>a. BALANCE PAYABLE, START OF YEAR</td>
<td>0</td>
</tr>
<tr>
<td>b. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>c. LESS PAYMENTS ON PRINCIPAL:</td>
<td></td>
</tr>
<tr>
<td>(1) Monthly Payments</td>
<td>0</td>
</tr>
<tr>
<td>(2) Mortgage Prepayment (Buydowns)</td>
<td>0</td>
</tr>
<tr>
<td>d. LESS VALUE OF MORTGAGES TRANSFERRED</td>
<td>0</td>
</tr>
<tr>
<td>e. SUBTOTAL - RETIREMENT OF DEBT</td>
<td>0</td>
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<tr>
<td>f. BALANCE PAYABLE - END OF PERIOD</td>
<td>0</td>
</tr>
<tr>
<td>3. NET EQUITY IN PROPERTY</td>
<td>0</td>
</tr>
<tr>
<td>4. RECAPITULATION FOR PROPERTIES SOLD*</td>
<td>Total</td>
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<td>a. SALES PRICE</td>
<td>3,476</td>
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<td>b. LESS:</td>
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<td>(2) M&amp;D Expense</td>
<td>465</td>
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<tr>
<td>c. NET GAIN OR (LOSS)</td>
<td>(2,025)</td>
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</table>

*Excludes Acquisition Administrative Expense

EXHIBIT HA-2
### 1. EXPENDITURE ACCOUNT - RESOURCES AND APPLICATIONS

#### a. RESOURCES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CASH ($000)</th>
<th>DEBT RECEIPT ($000)</th>
<th>TOTAL ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Unobligated Balance Start of Year</td>
<td>65,652</td>
<td>0</td>
<td>65,652</td>
</tr>
<tr>
<td>(2) Appropriations</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(3) New Authorization to Spend Agency Debt Receipts</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(4) Transfer To/From Other Account</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(5) Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Sales (Cash)</td>
<td>2,591</td>
<td>0</td>
<td>2,591</td>
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<tr>
<td>(b) Sales (Non-Cash)</td>
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<td>0</td>
</tr>
<tr>
<td>(c) Other Revenue</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(6) Less Retirement of Debt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Principal Payments on Mortgages</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(b) Mortgage Transfers</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(7) Recovery of Prior Year Obligations</td>
<td>0</td>
<td>0</td>
<td>0</td>
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#### b. APPLICATIONS

<table>
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<th>CASH ($000)</th>
<th>DEBT RECEIPT ($000)</th>
<th>TOTAL ($000)</th>
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</thead>
<tbody>
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<td>(1) Payments on Acquisitions of Properties</td>
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<td>653</td>
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<td>(2) Value of Mortgages Payable Assumed</td>
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<td>0</td>
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<td>6,918</td>
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<td>(4) Transfer of Miscellaneous Receipts</td>
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<tr>
<td>(5) Total</td>
<td>7,571</td>
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</table>

#### c. UNOBLIGATED BALANCE - END OF PERIOD

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CASH ($000)</th>
<th>DEBT RECEIPT ($000)</th>
<th>TOTAL ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60,672</td>
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<td>60,672</td>
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# DEPARTMENT OF ARMY
## Fiscal Year (FY) 2019 Budget Estimates
### Homeowners Assistance Fund, Defense
#### STATUS OF ACCOUNTS - PART II
##### FY 2018 Budget Enactment

## February 2018

<table>
<thead>
<tr>
<th>ITEM</th>
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<tbody>
<tr>
<td><strong>1. PROPERTY ACCOUNT</strong></td>
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</tr>
<tr>
<td>a. ON HAND, START OF YEAR</td>
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</tr>
<tr>
<td>b. PAYMENTS FOR EQUITY AND MORTGAGES ON ACQUISITION OF PROPERTIES</td>
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<tr>
<td>c. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>d. LESS ACQUISITIONS PRICE OF PROPERTIES SOLD</td>
<td>2,591</td>
</tr>
<tr>
<td>e. ON HAND, END OF YEAR</td>
<td>565</td>
</tr>
<tr>
<td><strong>2. BORROWING ACCOUNT (MORTGAGES PAYABLE)</strong></td>
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</tr>
<tr>
<td>a. BALANCE PAYABLE, START OF YEAR</td>
<td>0</td>
</tr>
<tr>
<td>b. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>c. LESS PAYMENTS ON PRINCIPAL:</td>
<td></td>
</tr>
<tr>
<td>(1) Monthly Payments</td>
<td>0</td>
</tr>
<tr>
<td>(2) Mortgage Prepayment (Buydowns)</td>
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</tr>
<tr>
<td>d. LESS VALUE OF MORTGAGES TRANSFERRED</td>
<td>0</td>
</tr>
<tr>
<td>e. SUBTOTAL - RETIREMENT OF DEBT</td>
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<td>f. BALANCE PAYABLE - END OF PERIOD</td>
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<td><strong>3. NET EQUITY IN PROPERTY</strong></td>
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<tr>
<td><strong>4. Recapitulation for Properties Sold</strong></td>
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<tr>
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</tr>
<tr>
<td>b. LESS:</td>
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</tr>
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<td>(1) Acquisition Price</td>
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<tr>
<td>(2) M&amp;D Expense</td>
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</tr>
<tr>
<td>c. NET GAIN OR (LOSS)</td>
<td>850</td>
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*Excludes Acquisition Administrative Expense*
## DEPARTMENT OF ARMY

Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense

### STATUS OF ACCOUNTS - PART I
FY 2019 Budget Request

<table>
<thead>
<tr>
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<th>CASH ($000)</th>
<th>DEBT RECEIPT ($000)</th>
<th>TOTAL ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXPENDITURE ACCOUNT - RESOURCES AND APPLICATIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. RESOURCES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Unobligated Balance Start of Year</td>
<td>60,672</td>
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<tr>
<td>(2) Appropriations</td>
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<td>0</td>
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<tr>
<td>(3) New Authorization to Spend Agency Debt Receipts</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(4) Transfer To/From Other Account</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(5) Revenue</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(a) Sales (Cash)</td>
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<td>(b) Sales (Non-Cash)</td>
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<td>0</td>
</tr>
<tr>
<td>(c) Other Revenue</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(6) Less Retirement of Debt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Principal Payments on Mortgages</td>
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<td>0</td>
</tr>
<tr>
<td>(b) Mortgage Transfers</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(7) Recovery of Prior Year Obligations</td>
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<td>b. APPLICATIONS</td>
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<td>(3) Expenses</td>
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EXHIBIT HA-2
<table>
<thead>
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<th>ITEM</th>
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</thead>
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<tr>
<td>1. PROPERTY ACCOUNT</td>
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<tr>
<td>a. ON HAND, START OF YEAR</td>
<td>565</td>
</tr>
<tr>
<td>b. PAYMENTS FOR EQUITY AND MORTGAGES ON ACQUISITION OF PROPERTIES</td>
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<tr>
<td>c. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>d. LESS ACQUISITIONS PRICE OF PROPERTIES SOLD</td>
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<tr>
<td>e. ON HAND, END OF YEAR</td>
<td>950</td>
</tr>
<tr>
<td>2. BORROWING ACCOUNT (MORTGAGES PAYABLE)</td>
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</tr>
<tr>
<td>a. BALANCE PAYABLE, START OF YEAR</td>
<td>0</td>
</tr>
<tr>
<td>b. VALUE OF MORTGAGES PAYABLE ASSUMED</td>
<td>0</td>
</tr>
<tr>
<td>c. LESS PAYMENTS ON PRINCIPAL:</td>
<td></td>
</tr>
<tr>
<td>(1) Monthly Payments</td>
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</tr>
<tr>
<td>(2) Mortgage Prepayment (Buydowns)</td>
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</tr>
<tr>
<td>d. LESS VALUE OF MORTGAGES TRANSFERRED</td>
<td>0</td>
</tr>
<tr>
<td>e. SUBTOTAL - RETIREMENT OF DEBT</td>
<td>0</td>
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<tr>
<td>f. BALANCE PAYABLE - END OF PERIOD</td>
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<td>3. NET EQUITY IN PROPERTY</td>
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<td>4. RECAPITULATION FOR PROPERTIES SOLD*</td>
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<td>b. LESS:</td>
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<td>(2) M&amp;D Expense</td>
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*Excludes Acquisition Administrative Expense

EXHIBIT HA-2
### Applications for Assistance

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<th>NAF</th>
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<td>15</td>
<td>4</td>
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<td>b. Received</td>
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<tr>
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<td>(1) Homes acquired - for outstanding mortgages balance</td>
<td>0</td>
<td>0</td>
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<tr>
<td>(2) Homes acquired - at 75%</td>
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<td>(3) Homes acquired - no mortgage</td>
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<tr>
<td>(4) Reimbursement for losses on private sales</td>
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<tr>
<td>(5) Reimbursement for losses on real property</td>
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<tr>
<td>(6) Payments in foreclosure cases</td>
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<td>(7) Settlements - no payment due</td>
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<td>(8) Other (Not Eligible or Application Withdrawn)</td>
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<tr>
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### Acquired Homes

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<th>Civilian</th>
<th>NAF</th>
<th>Total</th>
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<tbody>
<tr>
<td>a. On hand - start of year</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Acquired</td>
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<tr>
<td>c. Disposed of</td>
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<td>d. On hand - end of period</td>
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### Mortgages Payable

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<th>NAF</th>
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<tr>
<td>b. Assumed</td>
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<tr>
<td>c. Less liquidated</td>
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### Other Data

<table>
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<tr>
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<tr>
<td>(1) Approved</td>
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<tr>
<td>(2) Disapproved</td>
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## DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense

### WORK UNIT DATA
FY 2018 Budget Enactment

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<tr>
<th>ITEM</th>
<th>MILITARY</th>
<th>CIVILIAN</th>
<th>NAF</th>
<th>TOTAL</th>
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1. APPLICATIONS FOR ASSISTANCE
   a. ON HAND - START OF YEAR 0 0 0 0
   b. RECEIVED 19 6 0 25
   c. LESS ACTIONS COMPLETED:
      (1) Homes Acquired - for outstanding mortgages balance 0 0 0 0
      (2) Homes Acquired - at 75% 17 2 0 19
      (3) Homes Acquired - no mortgage 0 2 0 2
      (4) Reimbursement for losses on private sales 0 2 0 2
      (5) Reimbursement for losses on real property 0 0 0 0
      (6) Payments in foreclosure cases 0 0 0 0
      (7) Settlements - no payment due 0 0 0 0
      (8) Other (Not Eligible or Application Withdrawn) 0 0 0 0
   d. ON HAND - END OF PERIOD 2 0 0 2

2. ACQUIRED HOMES
   a. ON HAND - START OF YEAR 0
   b. ACQUIRED 21
   c. DISPOSED OF 19
   d. ON HAND - END OF PERIOD 2

3. MORTGAGES PAYABLE
   a. ON HAND - START OF YEAR 0
   b. ASSUMED 0
   c. LESS LIQUIDATED 0
   d. ON HAND - END OF PERIOD 0

4. OTHER DATA
   a. SECOND MORTGAGES LIQUIDATED 0
   b. APPRAISALS MADE 0
   c. APPEALS PROCESSED:
      (1) Approved 0
      (2) Disapproved 0
      (3) Pending 0

EXHIBIT HA-3
<table>
<thead>
<tr>
<th>ITEM</th>
<th>MILITARY</th>
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<th>NAF</th>
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<td>b. RECEIVED</td>
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<td>(1) Homes Acquired - for outstanding mortgages balance</td>
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<td>(2) Homes Acquired - at 75%</td>
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<td>c. DISPOSED OF</td>
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<td>b. ASSUMED</td>
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<td>c. LESS LIQUIDATED</td>
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EXHIBIT HA-3
### DEPARTMENT OF ARMY
Fiscal Year (FY) 2019 Budget Estimates
Homeowners Assistance Fund, Defense

**PROGRAM AND FINANCING**
FY 2019

<table>
<thead>
<tr>
<th></th>
<th>Actual FY 2017</th>
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<th>Budget Request FY 2019</th>
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<td>Units</td>
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**EXHIBIT HA4**