

**National Security Agency  
FY 2013 Military Construction, Defense-Wide  
(\$ in Thousands)**

<u>State/Installation/Project</u>	<u>Authorization Request</u>	<u>Approp. Request</u>	<u>New/ Current Mission</u>	<u>Page No.</u>
<b>Colorado</b>				
Buckley Air Force Base Denver Power House	30,000	30,000	C	125
<b>Maryland</b>				
Fort Meade High Performance Computing Center Inc 2	-	300,521	C	128
NSAW Recapitalize Building #1/ Site M Inc 1	128,600	25,000	C	131
<b>Utah</b>				
Camp Williams IC CNCI Data Center 1 Inc 4	-	191,414	C	134
<b>United Kingdom</b>				
RAF Menwith Hill Station MHS Utilities and Roads	3,795	3,795	C	138
<b>Total</b>	<b>162,395</b>	<b>550,730</b>		

1. COMPONENT NSA/CSS DEFENSE	FY 2013 MILITARY CONSTRUCTION PROGRAM								2. DATE February 2012	
3. INSTALLATION AND LOCATIONS ADF-C Buckley Air Force Base, Colorado				4. COMMAND NSA/CSS				5. AREA CONSTRUCTION COST INDEX .96		
6. PERSONNEL STRENGTH Tenant of US ARMY A. AS OF B. END FY	PERMANENT			STUDENTS			SUPPORTED			TOTAL
	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
				CLASS	IFIED					
7. INVENTORY DATA (\$000)										
A. TOTAL ACREAGE										
B. INVENTORY TOTAL AS OF Aug 1999										
C. AUTHORIZED NOT YET IN INVENTORY										
D. APPROPRIATION REQUESTED IN THIS PROGRAM										
E. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										
F. PLANNED IN NEXT THREE YEARS										
G. REMAINING DEFICIENCY										
H. GRAND TOTAL										
8. PROJECTS REQUESTED IN THIS PROGRAM:										
CATEGORY CODE	PROJECT NUMBER	PROJECT TITLE				COST (\$000)	DESIGN START	STATUS COMPLETE		
813	25643	Denver POWERHOUSE (FY13)				30,000	Oct 2011	0%		
9. FUTURE PROJECTS:										
a. INCLUDED IN FOLLOWING PROGRAM										
CATEGORY CODE	PROJECT TITLE				COST (\$000)					
b. PLANNED IN NEXT THREE YEARS										
CATEGORY CODE	PROJECT TITLE				COST (\$000)					
10. MISSION OR MAJOR FUNCTION										
Agency activities are classified.										
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:										
A. AIR POLLUTION										
B. WATER POLLUTION										
C. OCCUPATIONAL SAFETY AND HEALTH										

<b>1. Component</b> NSA/CSS DEFENSE		<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012	
<b>3. Installation and Location</b> ADF-C Buckley Air Force Base, Colorado			<b>4. Project Title</b> DENVER POWER HOUSE		
<b>5. Program Element</b>	<b>6. Category Code</b> 813	<b>7. Project Number</b> 25643	<b>8. Project Cost (\$000)</b> \$30,000		
<b>9. COST ESTIMATES</b>					
Item		U/M	Quantity	Unit Cost	Cost (\$000)
<b>PRIMARY FACILITY</b>					<u>25,671</u>
Generator Building		LS			(25,206)
Antiterrorism/Force Protection		LS			(400)
Building Information Systems		LS			(65)
<b>SUPPORTING FACILITIES</b>					<u>1,512</u>
Electric Service and Distribution		LS			(1049)
Water, Sewer, Gas Distribution		LS			(112)
Site work		LS			(105)
Earthwork		LS			(136)
Information Systems		LS			(110)
<b>TOTAL CONSTRUCTION COST</b>					<u>27,183</u>
Contingency (~5%)					1,359
<b>SUBTOTAL</b>					<u>28,542</u>
SIOH (5.70%)					1,447
Total Project Request					<u>29,989</u>
<b>TOTAL PROJECT COST (ROUNDED)</b>					<u>30,000</u>
Equipment / Furniture / IT & Security Fit-up Provided From Other Appropriations					(2,000)

**10. DESCRIPTION OF PROPOSED CONSTRUCTION:** This project provides for the distribution of power brought to the site by the newly constructed power plant. This project is within a fenced, limited access complex, in order to alleviate current Aerospace Data Facility (ADF-C) power deficiencies and allow for mission growth. The POWER HOUSE facility will be approximately 20,000 SF and will include the addition of up to five 2.5 MW generators and associated equipment. Supporting facilities include Heating and Air conditioning systems with redundant utilities, electrical service, exterior and security lighting, fire protection and alarm systems, information systems, and site improvements. Access for the handicapped will be provided. Comprehensive building and furnishings related interior design services will also be provided. Earthwork will include rough grading, bulk excavation, service entrance infrastructure, storm drainage structures, and duct banks for utility power services. Site work will include final grading, curb and gutter installation, road paving, walkways, groundcover and landscaping.

11. REQUIREMENT: 20,000 SF                      ADEQUATE: 0 SF                      SUBSTANDARD: None

**PROJECT:** Construct an expansion of the Aerospace Data Facility (ADF-C) power plant infrastructure to accommodate mission growth and address increased loads, deficiencies and to allow the redistribution of loads from the existing ADF-C power plant to the new power plant.

**REQUIREMENT:**

The project is required to leverage the residual power remaining from the power feeder brought to site in support of the MV, in order to alleviate the current power deficiencies at the ADF-C. Distribution of power from the newly installed power plant will include the addition of up to 5 diesel Generators and associated equipment. Identify loads to be moved from existing ADF-C power plant and re-feed them from the new power plant.

Facility will be designed and certifiable to the highest LEED rating attainable within available resources with a target of LEED-NC Silver and will include: sustainable site characteristics, water and energy efficiency, materials and resources criteria, and indoor environmental quality. Stormwater management to mitigate environmental impact per EISA requirements is included. This project is to be compliant with the current version of the Maryland Procurement Office (MPO), Facilities Engineering Design Standards (FEDS) as well as site facilities criteria

<b>1. Component</b> NSA/CSS DEFENSE		<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012	
<b>3. Installation and Location</b> ADF-C Buckley Air Force Base, Colorado			<b>4. Project Title</b> DENVER POWER HOUSE		
<b>5. Program Element</b>		<b>6. Category Code</b> 813	<b>7. Project Number</b> 25643	<b>8. Project Cost (\$000)</b> Authorized FY13 \$30,000 Appropriated FY13 \$30,000	

**CURRENT SITUATION:**

The ADF-C currently projects being out of power capacity in the FY15 timeframe. Completion of the NSA/CSS Colorado Power house will alleviate this issue.

**IMPACT IF NOT PROVIDED:**

There is no current plan in place to alleviate this issue. Without this project, the site will be out of power in 3 years. As the maximum power available is approached, the higher the chance of equipment failure, compounding an already serious situation.

**ADDITIONAL:**

This project has been coordinated with multi-agency input covering a number of disciplines to include physical security, and complies with all required physical security and/or combating terrorism measures. Building and Utility requirements have been explored throughout the development of this project, and the design as it stands has been chosen as the most feasible option to meet said requirements. Construction on the Buckley Air Force Base (BAFB) is more complex than at similar military installations for several reasons. First, the nature of work being done at the ADF-C and subsequently BAFB mandates very closely scheduled events, with outages and other sensitive work typically occurring on weekends and at night. Second, limited access to controlled facilities during the programming and design phases can lead to unforeseen conditions during construction. Finally, access to the installation, clearances for personnel, waiting for escorts, and other daily processes at NSA create additional costs for contractors. Escorts are required for positive control of access to primary and secondary utilities which service critical NSA operational facilities.

**12. SUPPLEMENTAL DATA:**

1. Status

- (a) Design Start: Oct 2011
- (b) Design 35% Complete: Jan 2012
- (c) Construction Start: Jan 2013
- (d) Construction Complete: Jan 2014
- (e) Type of Contract: Design/Bid/Build

2. Total Cost

Construction: \$30,000

<b>1. COMPONENT NSA/CSS DEFENSE</b>		<b>FY 2013 MILITARY CONSTRUCTION PROGRAM</b>					<b>2. DATE February 2012</b>	
<b>3. INSTALLATION AND LOCATION  FT. George G. Meade, Maryland</b>			<b>4. COMMAND  NSA/CSS</b>			<b>5. AREA CONSTRUCTION COST INDEX 1.00</b>		
<b>6. PERSONNEL STRENGTH</b>		<b>PERMANENT</b>		<b>STUDENTS</b>		<b>SUPPORTED</b>		<b>TOTAL</b>
IC Community Installation		OFF	ENL	CIV	OFF	ENL	CIV	
a. AS OF					x			
b. END FY					CLASS	IFIED		
<b>7. INVENTORY DATA (\$000)</b>								
A. TOTAL ACREAGE								200
B. INVENTORY TOTAL AS OF DEC 2010								0
C. AUTHORIZED NOT YET IN INVENTORY								0
D. APPROPRIATION REQUESTED IN THIS PROGRAM								325,521
E. APPROPRIATION INCLUDED IN FOLLOWING PROGRAM								489,000
F. PLANNED IN NEXT THREE YEARS								203,010
G. PLANNING AND DESIGN COST								0
H. REMAINING DEFICIENCY								0
<b>I. GRAND TOTAL</b>								<b>1,017,731</b>
<b>8. PROJECTS REQUESTED IN THIS PROGRAM:</b>								
<u>CATEGORY</u>	<u>PROJECT</u>	<u>PROJECT TITLE</u>	<u>COST</u>	<u>DESIGN</u>	<u>STATUS</u>			
<u>CODE</u>	<u>NUMBER</u>		<u>(\$000)</u>	<u>START</u>	<u>COMPLETE</u>			
141	24649	HIGH PERFORMANCE COMPUTING CENTER (FY13)	\$300,521	Dec 2010	Feb 2012			
141	23773	NSAW Recapitalization/Site M (FY13)	\$25,000	May 2011	Oct 2013			
<b>9. FUTURE PROJECTS:</b>								
a. INCLUDED IN FOLLOWING PROGRAM								
<u>CATEGORY</u>	<u>PROJECT</u>	<u>PROJECT TITLE</u>	<u>COST</u>					
<u>CODE</u>	<u>NUMBER</u>		<u>(\$000)</u>					
141	24649	HIGH PERFORMANCE COMPUTING CENTER (FY14)	\$431,000					
141	23773	NSAW Recapitalization/Site M (FY14)	\$58,000					
b. PLANNED IN NEXT THREE YEARS								
<u>CATEGORY</u>	<u>PROJECT</u>	<u>PROJECT TITLE</u>	<u>COST</u>					
<u>CODE</u>	<u>NUMBER</u>		<u>(\$000)</u>					
141	23773	NSAW Recapitalization Site M (FY15)	45,600					
141	17836	South Campus Building Re-Feed(FY15)	69,000					
141	17869	North Campus Building Feeders (FY16)	16,000					
141	28492	Cooper Avenue Facility/SWM (FY16)	5,000					
141	21099	Central Boiler Plant Replacement (FY16)	26,500					
141		Classified Materials Conversion (FY17)	40,910					
<b>10. MISSION OR MAJOR FUNCTION</b>								
Agency activities are classified.								
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>								
A.	AIR POLLUTION		TBD					
B.	WATER POLLUTION		TBD					
C.	OCCUPATIONAL SAFETY AND HEALTH		TBD					
DD Form 1390, DEC 76								

<b>1. COMPONENT</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012
<b>3. Installation and Location</b>  FT. George G. Meade, Maryland		<b>4. Project Title</b>  HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 2	
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 24649	<b>8. Project Cost (\$000):</b> FY13: <b>\$300,521</b>

**9. COST ESTIMATES**

Item	U/M	Quantity	Unit Cost	Cost (\$000)
<b>PRIMARY FACILITY</b>				<u>567,828</u>
Building Modular Shells	LS			(50,500)
Mechanical	LS			(118,428)
Electrical	LS			(225,040)
Building Enhancements	LS			(65,200)
Site Preparation	LS			(19,380)
Fire Protection	LS			(5,020)
Building Security (Antiterrorism/Force Protection)	LS			(15,140)
Communications	LS			(7,040)
Commissioning	LS			(31,500)
General Conditions	LS			(30,580)
<b>SUPPORTING FACILITIES</b>				<u>180,600</u>
Interim Visitor Control Center	LS			(4,490)
Interim Vehicle Control Center	LS			(2,750)
Primary Electrical Service	LS			(28,600)
Site Improvements/Demolition	LS			(7,400)
General Construction	LS			(106,510)
Site Security Perimeter Control (Anti-Terrorism/Force Protection)	LS			(21,700)
Construction Security	LS			(9,150)
<b>TOTAL CONSTRUCTION COST</b>				<u>748,428</u>
Contingency (~5%)				37,421
<b>SUBTOTAL</b>				<u>785,849</u>
SIOH (5.70%)				44,793
Design/build - Design Cost				29,937
Total Project Request				<u>860,579</u>
<b>TOTAL PROJECT COST (ROUNDED)</b>				<b><u>860,579</u></b>
Equipment / Furniture / IT & Security Fit-up Provided From Other Appropriations				(40,000)

**10. DESCRIPTION OF PROPOSED CONSTRUCTION:** The FY13 appropriation amount represents the second increment of the High Performance Computing Center totaling 60 MW of technical load. The effort includes building shell and core or modular structural components; finished flooring (both raised and administrative); ceiling; associated air pollution control as required; and electrical, mechanical, back-up generation to support critical processes and fire suppression systems. Building utilities will include building electrical service, chilled water equipment and comfort cooling systems, communications backbone, fire alarm and protection systems and plumbing. Site infrastructure will include primary electrical service to the site, stormwater management to mitigate environmental impact, domestic water, reclaimed water sewer and as required all connection fees. Security measures include, but are not limited to, an interim Visitor Control Center for construction personnel, interim and permanent perimeter security with fencing, access control facilities, an interim Vehicle Cargo Inspection Facility for construction and internal security systems. Physical and Technical security of the construction site will be assured. The requirement includes, but is not limited to, substations, roadways, requisite parking, warehousing, potable water, waste water management, CBRN detection and explosive storage vessels and any other requirements resulting from design and or mission developments and final site(s) determination. This project will be designed in accordance with the Uniform Federal Accessibility Standards (UFAS) Americans with Disabilities Act (ADA) Accessibility Guidelines and Antiterrorism Force Protection (ATFP) standards. Unified Facilities Criteria (UFC) will be an integral part of design consideration. This project is to be compliant with the current version of the Maryland Procurement Office (MPO), Facilities Engineering Design Standards (FEDS).

1. Component NSA/CSS DEFENSE	FY 2013 MILITARY CONSTRUCTION PROJECT DATA		2. Date February 2012
3. Installation and Location  FT. George G. Meade, Maryland		4. Project Title  HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 2	
5. Program Element	6. Category Code 141	7. Project Number 24649	8. Project Cost (\$000): FY13: \$300,521
<p>11. REQUIREMENT: ~60 MW Tech Load      ADEQUATE: None      SUBSTANDARD: None</p> <p><b>PROJECT:</b> Construct ~60 MW HIGH PERFORMANCE COMPUTING CENTER</p> <p><b>REQUIREMENT:</b> This project is required to provide approximately 60MW of technical load High Performance Computing Center support to mission operations. The project will include but will not be limited to the following and any other requirements resulting from design and or mission developments:</p> <p>(1) Site Planning/Project Management</p> <p>a) Mechanical and Electrical plants designed to prevent/reduce transfer of noise and vibrations to the computer areas.</p> <p>b) Adequate management facilities for U.S. Government and local services will be provided including interim and permanent parking, roads and project management trailers plus any other requirements resulting from design and or mission developments.</p> <p>(2) Facilities</p> <p>a) Computing center technical load of 60 MW distributed across raised floor is a design parameter for the facility.</p> <p>b) The infrastructure support area and administrative areas will be designed to support state-of-the-art high-performance computing devices and associated hardware architecture.</p> <p>c) Enhancements to the building for IT and security include construction as a Sensitive Compartmented Information Facility (SCIF), as well as, requirements related to Anti-terrorism/Force Protection (AT/FP).</p> <p>d) Visitor Control; Vehicle Inspection Centers; permanent and temporary utilities to site; parking structures, roads, trailers, and warehousing; and kennel and any other requirements resulting from design and or mission developments.</p> <p>(3) Structural</p> <p>a) Technical load will be distributed across the computing areas.</p> <p>b) Seismic considerations are to be made in the facility design.</p> <p>c) Computing center areas are to have depressed slab construction with a floor load rating of approximately 600 PSF.</p> <p>d) Facility command and control contained in a central modular office component.</p> <p>e) Facility will be designed and constructed in accordance with the Unified Facilities Criteria (UFC).</p> <p>f) Facility will have loading docks with vehicle bays, which will be equipped with dock levelers sized to handle tractor trailers and any other requirements resulting from design and or mission developments.</p> <p>(4) Electrical</p> <p>a) Design technical load capacity is 60 MW with loads distributed across the computing center areas.</p> <p>b) Supervisory Control and Data Acquisition (SCADA) to either PDU level or distribution panel level and EMCS, as required.</p> <p>c) Concurrent maintainability / reliability and any other requirements resulting from design and or mission developments will be an integral part of design consideration.</p> <p>(5) Mechanical</p> <p>a) Chilled water system will be designed to support both air and water-cooled equipment, with SCADA and EMCS as required.</p> <p>b) Each computer center area will have air and water-cooled equipment with Computer Room Air Handlers (CRAHs) and Air Conditioners (CRACs) located external to the raised floor area. The piping headers / systems are to be designed to accommodate full electrical heat load.</p> <p>c) Back-up capability for mechanical equipment and air distribution.</p> <p>d) Cooling towers, Potable water, Water Treatment systems.</p> <p>e) Fire protection - Double interlocked pre-action fire protection system for all electrical and mechanical support spaces.</p> <p>f) Wet pipe for administrative and raised floor areas per DOD standards. Data halls will be provided with a clean agent fire suppression system.</p> <p>g) Concurrent maintainability / reliability and any other requirements resulting from design and or mission developments will be an integral part of design consideration.</p> <p>(6) Security Systems</p> <p>a) Video surveillance, Intrusion detection and CBRN detection systems, and interim and permanent perimeter security with fencing.</p> <p>b) Explosive Storage Vessel</p> <p>c) Card access control system and any other requirements resulting from design and or mission developments.</p> <p>DD Form 1391, DEC 76</p>			

<b>1. Component</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012
<b>3. Installation and Location</b>  FT. George G. Meade, Maryland		<b>4. Project Title</b>  HIGH PERFORMANCE COMPUTING CENTER (HPCC), INCREMENT 2	
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 24649	<b>8. Project Cost (\$000):</b> <b>FY13: \$300,521</b>

Facility will be designed and certified to the highest LEED certification attainable within available resources with a target of LEED-NC Silver and will include: sustainable site characteristics, water and energy efficiency, materials and resources criteria, and indoor environmental quality.

**CURRENT SITUATION:**

No current data processing capability exists at the planned location to meet anticipated mission requirements.

**IMPACT IF NOT PROVIDED:**

Current and anticipated mission requirements will not be met without completion in the specified time frame.

**ADDITIONAL:**

- a) The project will be coordinated with the installation physical security plan, and all physical security measures are included.
- b) All required environmental and AT/FP measures are included.
- c) An economic analysis has been prepared and used in evaluating this project. This project is the most cost effective method to satisfy the requirement.
- d) This project will provide government support facilities, including but not limited to trailers or other suitable office space, communications equipment and services, furniture and other support as required managing the design and construction phases of the project and any other requirements resulting from design and or mission developments.

**12. SUPPLEMENTAL DATA:**

- a) Status
 

(i) Date Design Started	Dec 2010
(ii) Percent Completed as of Jul 2011	35%
(iii) Date Design - Build RFP Completed	Feb 2012
(iv) Parametric Estimates have been used to develop project cost	
(v) Type of Design Contract	Design/Build
- b) Basis
 

(i) Standard or Definitive Design:	Yes
(ii) Date Design was Most Recently Used:	N/A
(iii) Percentage of Design Utilizing Standard Design	N/A
- c) Total Design Cost (Total \$000)
 

(i) Production of Plans and Specs	
Design-Build RFP - P&D	\$35,000
Design-Build Design - MILCON	\$29,937
(ii) Total Design Cost (iii)=(i)+(ii) or (iv)+(v)	\$64,937
(iv) Contract	
Design-Build RFP	\$35,000
Design-Build Design	\$29,937
(v) In House	\$64,937
- d) Construction Contract Award
- e) Construction Start
- f) 1<sup>st</sup> Data Center Module Complete
- g) Construction Complete - Project



<b>1. Component</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012
<b>3. Installation and Location</b>  FT. George G. Meade, Maryland			<b>4. Project Title</b>  NSAW RECAPITALIZE BUILDING #1/SITE M INCR. 1
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 23773	<b>8. Project Cost (\$000)</b> <b>\$128,600</b> Authorized FY13 <b>\$128,600</b> Appropriated FY13 <b>\$25,000</b>

## 9. COST ESTIMATES

Item	U/M	Quantity	Unit Cost	Cost (\$000)
<b>PRIMARY FACILITY</b>				<u>86,980</u>
NSAW Recapitalization Building #1	SF	148,500	\$541.50	(80,413)
Leadership in Energy and Environmental Design (LEED)	LS			(1,818)
Sustainable Design and Development (SSD) and Energy Policy ACT				
Anti-terrorism/Force Protection (AT/FP)	LS			(4,749)
<b>SUPPORTING FACILITIES</b>				<u>28,818</u>
(To include general utilities and infrastructure, site work, replacement of existing facilities, parking structure)				
<b>TOTAL CONSTRUCTION COST</b>				<u>115,798</u>
CONTINGENCY (5.00%)				5,790
SUBTOTAL				<u>121,588</u>
SIOH (5.70%)				6,930
TOTAL PROJECT COST				<u>128,518</u>
<b>TOTAL PROJECT COST (ROUNDED)</b>				<b><u>128,600</u></b>
Installed Equipment Provided from Other Appropriations				(57,881)

10. **DESCRIPTION OF PROPOSED CONSTRUCTION:** NSAW Recapitalization Building #1 represents the initiation of a long term development plan to replace existing facilities and infrastructure that are unable to support the increasingly intense technological requirements of evolving missions. Recapitalization Building #1 begins to address a growing shortfall of state of the art workspace for some of the Agency's most critical mission elements. The FY13 appropriation amount represents the first increment of a three part funding profile.

Construct NSAW Recapitalization Building #1 with associated site work and environmental measures. The facility will be built on Fort George G. Meade. The primary facility will include core and shell structure and foundations; electrical/mechanical service and distribution components and systems; fire protection, alarm, and suppression; information technology, communications, and security systems support infrastructure; exterior finishes and weatherproofing. Interior build out will provide structural raised access floor systems, ceiling, recessed lighting, and fire-rated interior partitions. Project requires comprehensive interior design. The Supporting facilities include a parking structure, site preparation and infrastructure improvements, utility services, and distribution systems, loading dock and perimeter security measures. Site preparation work will include standard clearing, grubbing, cut, fill, and grading, storm water management and environmental protection structures. Additional site work will provide for curb and gutter, walkways and patios, roads and parking, and storm water management facilities. Utility site construction will provide emergency backup power generation, heating and cooling equipment. Perimeter security construction will extend perimeter fence line and surveillance capabilities, and provide for increased vehicle control capacity. Supporting Facilities exceed 25% of Primary Facilities due to construction of a parking structure. This project will be designed in accordance with the Uniformed Federal Accessibility Standards (UFAS)/Americans with Disabilities Act (ADA)/Architectural Barriers Act (ABA) accessibility guidelines, Antiterrorism/Force Protection (AT/FP) standards and Unified Facilities Criteria (UFC) design standards. Utility systems capacity and reliability will support mission critical loads to mandated standards commensurate with the facility mission criticality rating. Information assurance requirements will be incorporated into the design. The facility will include sustainability features that can be cost effectively integrated to meet, at minimum, a Leadership in Energy and Environmental Design (LEED) Green Building Council Silver-certified rating.



<b>1. COMPONENT</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROGRAM</b>						<b>2. DATE</b> February 2012				
<b>3. INSTALLATION AND LOCATION</b> UTAH NATIONAL GUARD FACILITY CAMP WILLIAMS, UTAH				<b>4. COMMAND</b>  NSA/CSS				<b>5. AREA CONSTRUCTION COST INDEX</b> 1.03			
<b>6. PERSONNEL STRENGTH</b>	PERMANENT			STUDENTS			SUPPORTED			TOTAL	
	OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV		
a. AS OF 30 SEP 2008	0	0	0	0	0	0	0	0	0	0	
b. END FY 2010	0	0	0	0	0	0	0	0	0	0	
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACREAGE										200	
B. INVENTORY TOTAL AS OF 30 SEP 2008										208,400	
C. AUTHORIZED NOT YET IN INVENTORY										1,529,500	
D. APPROPRIATION REQUESTED IN THIS PROGRAM										191,414	
E. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0	
F. PLANNED IN NEXT THREE YEARS										0	
G. REMAINING DEFICIENCY										0	
H. GRAND TOTAL										1,737,900	
<b>8. PROJECTS REQUESTED IN THIS PROGRAM:</b>											
<u>CATEGORY</u> <u>CODE</u>	<u>PROJECT</u> <u>NUMBER</u>	<u>PROJECT TITLE</u>				<u>COST</u> <u>(\$000)</u>	<u>DESIGN</u> <u>START</u>	<u>DESIGN</u> <u>COMPLETE</u>			
141	21078	IC CNCI Data Center 1 - (FY13)				191,414	Nov 08	Feb 10			
<b>9. FUTURE PROJECTS:</b>											
a. INCLUDED IN FOLLOWING PROGRAM											
<u>CATEGORY</u> <u>CODE</u>	<u>PROJECT</u> <u>NUMBER</u>	<u>PROJECT TITLE</u>				<u>COST</u> <u>(\$000)</u>					
b. PLANNED IN NEXT THREE YEARS											
<u>CATEGORY</u> <u>CODE</u>	<u>PROJECT</u> <u>NUMBER</u>	<u>PROJECT TITLE</u>				<u>COST</u> <u>(\$000)</u>					
<b>10. MISSION OR MAJOR FUNCTION:</b> Agency activities are classified.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
A. AIR POLLUTION										0	
B. WATER POLLUTION										0	
C. OCCUPATIONAL SAFETY AND HEALTH										0	

<b>1. Component</b> NSA/CSS DEFENSE		<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012	
<b>3. Installation and Location</b> UTAH NATIONAL GUARD FACILITY, CAMP WILLIAMS, UTAH			<b>4. Project Title</b> IC CNCI DATA CENTER 1, INCREMENT 4		
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 21078	<b>8. Total Project Cost (\$000) \$1,529,500</b>  <b>FY13: \$191,414</b>		
<b>9. COST ESTIMATES</b>					
Item		U/M	Quantity	Unit Cost	Cost (\$000)
<b>PRIMARY FACILITY</b>					<u>1,139,499</u>
Building Modular Shells		LS			(56,420)
Mechanical		LS			(215,170)
Electrical		LS			(648,779)
Building Enhancements		LS			(111,270)
Site Preparation		LS			(19,380)
Fire Protection		LS			(5,050)
Building Security (Antiterrorism/Force Protection)		LS			(15,340)
Communications		LS			(6,010)
Commissioning		LS			(30,600)
General Conditions		LS			(31,480)
<b>SUPPORTING FACILITIES</b>					<u>190,600</u>
Visitor Control Center/Interim Visitor Control Center		LS			(14,390)
Vehicle Control Center/Interim Vehicle Control Center		LS			(3,850)
Primary Electrical Service		LS			(23,500)
Site Improvements/Demolition		LS			(6,500)
General Construction (water, sewer, gas)		LS			(105,410)
Site Security Perimeter Control (Antiterrorism/Force Protection)		LS			(26,800)
Construction Security		LS			(10,150)
<b>TOTAL CONSTRUCTION COST</b>					<u>1,330,099</u>
Contingency (~5%)					66,540
<b>SUBTOTAL</b>					<u>1,396,639</u>
SIOH (5.70%)					79,608
Design/build - Design Cost					53,204
Total Project Request					<u>1,529,451</u>
<b>TOTAL PROJECT COST (ROUNDED)</b>					<u>1,529,500</u>
Equipment & Utilities Provided From Other Appropriations					(192,000)
<p><b>10. DESCRIPTION OF PROPOSED CONSTRUCTION:</b> This final increment of the fully authorized incrementally funded project constructs a 65 MW technical load data center to include modular structural components; finished flooring (both raised and administrative); ceiling; generators and associated air pollution control; and electrical, mechanical, and fire suppression systems. Building utilities will include building electrical service, chilled water equipment and comfort cooling systems, communications backbone, fire alarm and protection systems and plumbing. Site infrastructure will include, possible land acquisition in support of utility infrastructure, primary electrical service to the site, storm water management to mitigate environmental impact, water, sewer and as required all connection fees. Existing communications hut will be demolished. The design/construction is to be capable of concurrent maintainability. Adequate management facilities for U.S. Government and local services will be provided. Security measures include, but are not limited to, a permanent Visitor Control Center for data center personnel, an interim Visitor Control Center for construction personnel, interim and permanent perimeter security with fencing, access control facilities, a permanent Vehicle Cargo Inspection Facility, an interim Vehicle Cargo Inspection Facility for construction and internal security systems. Physical and Technical security of the construction site will be assured. The site will be surveyed for unexploded ordinance and remediation action taken as required. The requirement includes but is not limited to substations, roadways, adequate parking, fuel tanks, warehousing, potable water, waste water management, CBRN detection and explosive storage vessels and any other requirements resulting from design and or mission developments. This project will be designed in accordance with the Uniform Federal Accessibility Standards (UFAS)/Americans with Disabilities Act (ADA) Accessibility Guidelines and Antiterrorism Force Protection (ATFP) standards. Unified Facilities Criteria to be an integral part of design consideration. Contingency level based on site security requirements and volatility in construction materials and labor. This project is to be compliant with the current version of the Maryland Procurement Office (MPO), Facilities Engineering Design Standards (FEDS).</p>					

<b>1. Component</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012
<b>3. Installation and Location</b> UTAH NATIONAL GUARD FACILITY, CAMP WILLIAMS, UTAH			<b>4. Project Title</b> IC CNCI DATA CENTER 1, INCREMENT 4
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 21078	<b>8. Total Project Cost (\$000)</b> \$1,529,500  <b>FY13 \$191,414</b>

11. REQUIREMENT: 65 MW Tech Load      ADEQUATE: None      SUBSTANDARD: None

**PROJECT:** Construct a 65 MW Technical Load Data Center.

**REQUIREMENT:** This project is required to provide a 65MW technical load data center to support mission operations. The project will include but will not be limited to the following and any other requirements resulting from design and or mission developments:

- (1) Site Planning/Project Management
  - a) Mechanical and Electrical plants designed to prevent / reduce transfer of noise and vibrations to the data centers.
  - b) Adequate management facilities for U.S. Government and local services will be provided including, interim and permanent parking, roads and project management trailers and any other requirements resulting from design and or mission developments.
- (2) Facilities
  - a) Data center technical load of 65 MW distributed across raised floor is a design parameter for the facility.
  - b) The infrastructure support area and administrative areas will be designed to support state-of-the-art high-performance computing devices and associated hardware architecture.
  - c) Enhancements to the building for IT and security include construction as a Sensitive Compartmented Information Facility (SCIF), as well as, requirements related to Antiterrorism Force Protection (AT/FP).
  - d) Visitor Control, Vehicle Inspection Centers, permanent and temporary Utilities to site, adequate parking, roads, trailers, warehousing, Kennel and any other requirements resulting from design and or mission developments.
- (3) Structural
  - a) Technical load will be distributed across the data center areas.
  - b) Seismic considerations are to be made in the facility design.
  - c) Data center areas are to have depressed slab construction with a floor load rating of 1,200 PSF.
  - d) Facility command and control contained in a central modular office component.
  - e) Facility will be designed and constructed in accordance with the Unified Facilities Criteria (UFC).
  - f) Facility will have a loading dock with vehicle bays, at least three (3) of which will be equipped with dock levelers sized to handle tractor trailers and any other requirements resulting from design and or mission developments.
- (4) Electrical
  - a) Design technical load capacity is 65 MW with loads distributed across the data center areas.
  - b) Supervisory Control and Data Acquisition (SCADA) to either PDU level or distribution panel level and EMCS, as required.
  - c) Dedicated substation for each critical Uninterruptible Power System (UPS).
  - d) Generators include Selective Catalytic Reduction (SCR) pollution control equipment, fuel oil storage tanks and distribution system.
  - e) Primary and Secondary Substations, UPS, Generator backup for facility systems and concurrent maintainability / reliability and any other requirements resulting from design and or mission developments.
- (5) Mechanical
  - a) Chilled water system is to be designed to support both air and water-cooled equipment, with SCADA and EMCS as required.
  - b) Each data center area is to have air and water-cooled equipment with Computer Room Air Handlers (CRAHs) and Air Conditioners (CRACs) located external to the raised floor area. The piping headers / systems are to be designed to accommodate full electrical heat load.
  - c) Back-up capability for mechanical equipment and air distribution.
  - d) Cooling towers, Potable water, Water Treatment systems.
  - e) Fire protection - Double interlocked pre-action fire protection system for all electrical and mechanical support spaces.
  - f) Wet pipe for administrative and raised floor areas per DOD standards. Data halls will be provided with a clean agent fire suppression system and any other requirements resulting from design and or mission developments.
- (6) Security Systems
  - a) Video surveillance, Intrusion detection and CBRN detection systems, and interim and permanent perimeter security with fencing.
  - b) Explosive Storage Vessel
  - c) Card access control system and any other requirements resulting from design and or mission developments.

<b>1. Component</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>		<b>2. Date</b> February 2012
<b>3. Installation and Location</b> UTAH NATIONAL GUARD FACILITY, CAMP WILLIAMS, UTAH		<b>4. Project Title</b> IC CNCI DATA CENTER 1, INCREMENT 4	
<b>5. Program Element</b>	<b>6. Category Code</b> 141	<b>7. Project Number</b> 21078	<b>8. Total Project Cost (\$000) \$1,529,500</b>  <b>FY13: \$191,414</b>

REQUIREMENT (Continued)

Facility will be designed and certified to the highest LEED certification attainable within available resources with a target of LEED-NC Silver and will include: sustainable site characteristics, water and energy efficiency, materials and resources criteria, and indoor environmental quality.

CURRENT SITUATION:

No current data processing capability exists at the planned location.

IMPACT IF NOT PROVIDED:

Current and anticipated mission requirements will not be met without completion in the specified time frame.

ADDITIONAL:

- a) This project has been coordinated with the installation physical security plan, and all physical security measures are included.
- b) All required environmental and AT/FP measures are included.
- c) An economic analysis has been prepared and used in evaluating this project. This project is the most cost effective method to satisfy the requirement.
- d) This project will provide government support facilities, including but not limited to trailers or other suitable office space, communications equipment and services, furniture and other support as required managing the design and construction phases of the project and any other requirements resulting from design and or mission developments.

## 12. SUPPLEMENTAL DATA:

- a) Status
  - (i) Date Design Started Nov 2008
  - (ii) Percent Completed as of Jan 2009 35%
  - (iii) Date Design - Build RFP Completed Feb 2010
  - (iv) Parametric Estimates have been used to develop project cost
  - (v) Type of Design Contract Design/Build
- b) Basis
  - (i) Standard or Definitive Design: No
  - (ii) Date Design was Most Recently Used: N/A
  - (iii) Percentage of Design Utilizing Standard Design N/A
- c) Total Design Cost (Total \$000)
  - (i) Production of Plans and Specs
    - Design-Build RFP - P&D \$ 45,000
    - Design-Build Design - MILCON \$ 53,204
  - (ii) All Other Design Cost - P&D \$ 15,000
  - (iii) Total Design Cost (iii)=(i)+(ii) or (iv)+(v) \$113,204
  - (iv) Contract
    - Design-Build RFP \$ 45,000
    - Design-Build Design \$ 53,204
  - (v) In House \$ 15,000
- d) Construction Contract Award - Increment 1 Aug 2009
- e) Construction Start - Increment 1 Sep 2009
- f) Construction Complete - Project Dec 2013

<b>1. COMPONENT</b> NSA/CSS DEFENSE	<b>FY 2013 MILITARY CONSTRUCTION PROGRAM</b>						<b>2. DATE</b> February 2012				
<b>3. INSTALLATION AND LOCATION</b>  RAF MENWITH HILL, UNITED KINGDOM	<b>4. COMMAND</b>  NSA/CSS						<b>5. AREA CONSTRUCTION COST INDEX</b>  1.15				
<b>6. PERSONNEL STRENGTH</b> USAF Installation		PERMANENT			STUDENTS			SUPPORTED			TOTAL
		OFF	ENL	CIV	OFF	ENL	CIV	OFF	ENL	CIV	
a. AS OF					x						
b. END FY					CLASS	IFIED					
<b>7. INVENTORY DATA (\$000)</b>											
A. TOTAL ACREAGE											
B. INVENTORY TOTAL AS OF September 30,2010											
C. AUTHORIZED NOT YET IN INVENTORY											0
D. AUTHORIZATION REQUESTED IN THIS PROGRAM											3,795
E. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM											9,000
F. PLANNED IN NEXT THREE YEARS											0
G. REMAINING DEFICIENCY											0
H. GRAND TOTAL											12,795
<b>8. PROJECTS REQUESTED IN THIS PROGRAM:</b>											
CATEGORY CODE	PROJECT NUMBER	<u>PROJECT TITLE</u>					COST (\$000)	DESIGN START	<u>COMPLETE</u>		
851-147	MWHL133001	MHS DoDDS Utilities & Road (FY13)					3,795	Dec 11	Oct 12		
<b>9. FUTURE PROJECTS:</b>											
a. INCLUDED IN FOLLOWING PROGRAM											
CATEGORY CODE	<u>PROJECT TITLE</u>						COST (\$000)				
	MHS Power Substation (FY14)						9,000				
b. PLANNED IN NEXT THREE YEARS											
CATEGORY CODE	<u>PROJECT TITLE</u>						COST (\$000)				
<b>10. MISSION OR MAJOR FUNCTION</b> Agency activities are classified.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES:</b>											
D. AIR POLLUTION											0
E. WATER POLLUTION											0
F. OCCUPATIONAL SAFETY AND HEALTH											0



<b>Component</b> NSA/CSS DEFENSE		<b>FY 2013 MILITARY CONSTRUCTION PROJECT DATA</b>			<b>2. Date</b> February 2012	
<b>3. Installation and Location</b> ROYAL AIR FORCE MENWITH HILL, HARROGATE, UNITED KINGDOM				<b>4. Project Title</b> MHS UTILITIES AND ROADS		
<b>5. Program Element</b>		<b>6. Category Code</b> 851-147	<b>7. Project Number</b> MWHL133001		<b>8. Project Cost (\$000)</b> \$3,795	
<b>9. COST ESTIMATES</b>						
Item		U/M	Quantity	Unit Cost	Cost (\$000)	
<b>PRIMARY FACILITY</b>						
Road		SM	5880	209	3,341	
Electric		LS			(1,229)	
Water, sewer, gas		LS			(689)	
Information Systems		LS			(556)	
Walks and Lights		LS			(379)	
Stormwater drainage		LM	840	185	(155)	
Lead Remediation		LM	840	110	(92)	
		CM	825	292	(241)	
<b>SUPPORTING FACILITES</b>						
Site Improvements		LS			85	
Clearing		LS			(10)	
Landscaping		LS			(25)	
					(50)	
<b>TOTAL CONSTRUCTION COST</b>					<u>3426</u>	
CONTINGENCY (5.00%)					168	
SUBTOTAL					<u>3594</u>	
SIOH (5.7%)					200	
<b>TOTAL PROJECT COST (ROUNDED)</b>					<b><u>3,795</u></b>	
<b>10. DESCRIPTION OF PROPOSED CONSTRUCTION:</b> All work and material required to construct and improve 840 meters of roadway required to access the new DODEA facility to accommodate school pedestrian and two lanes of vehicle traffic. Road improvements include widening to published standards, straightening, leveling, addition of lighting, addition of sidewalks, and addition of stormwater drainage system. Improve approximately 420 meters of Wensleydale Road and 265 meters of Third Avenue with widening, straightening, leveling, addition of lighting, addition of sidewalks, and addition of drainage, curb and gutter. Construct approximately 150 meters new two lane road including lighting, sidewalks, drainage, curb and gutter. Remediate lead contaminated soil for approximately 250 meters along Wensleydale Road as required for the roadway improvements. Any lead remediation shall be accomplished by a certified lead abatement contractor. Additionally install new utility service to school location to include water service, sewer service, electrics, and communications in accordance with Air Force, DoD, and base standards. This project is to be compliant with the current version of the Maryland Procurement Office (MPO), Facilities Engineering Design Standards (FEDS).						
11. REQUIREMENT: 840 LM		ADEQUATE: 0 LM		SUBSTANDARD: 840 LM		
<b>PROJECT:</b> All work and materials required for the construction of Utilities and improvements to 840 meters of roadway required for pedestrian, vehicle and utility access the new DODEA facility.						
<b>REQUIREMENT:</b> All work and material required for the construct and improve 840 meters of roadway required to access the new DODEA facility to accommodate school pedestrian and two lanes of vehicle traffic. Road improvements include widening to published standards, straightening, leveling, addition of lighting, addition of sidewalks, and addition of stormwater drainage system. Improve approximately 420 meters of Wensleydale Road with widening, straightening, leveling, addition of lighting, addition of sidewalks, and addition of drainage, curb and gutter. Construct approximately 150 meters new two lane road including lighting, sidewalks, drainage, curb and gutter. Remediate lead contaminated soil for approximately 250 meters along Wensleydale Road as required for the roadway improvements. Additionally, install new utility service to school location to include water service, sewer service, electrics, and communications in accordance with Air Force, DoD, and base standards.						
<b>CURRENT SITUATION:</b> The site selected for the new DODEA school facility does not currently have an access road or required utilities. The existing roads leading to the area of the school are structurally deficient, and are not currently constructed to accommodate any pedestrian traffic. The existing roads are also not properly constructed to accommodate large vehicles required by a school such as busses, delivery trucks and emergency response vehicles. The school cannot function without a proper pedestrian and vehicle access system, or basic utility service.						



1. Component NSA/CSS DEFENSE	FY 2013 MILITARY CONSTRUCTION PROJECT DATA		2. Date February 2012
3. Installation and Location  ROYAL AIR FORCE. MENWITH HILL, HARROGATE, UNITED  KINGDOM		4. Project Title  MHS UTILITIES AND ROADS	
5. Program Element	6. Category Code 851-147	7. Project Number MWHL133001	8. Project Cost (\$000) \$3,795
<p><b>IMPACT IF NOT PROVIDED:</b> If the utilities and road are not constructed to the new school, then it will be deficient of the basic utilities and facility access. Without the access road and utilities the new facility will be in jeopardy of being constructed.</p> <p><b>ADDITIONAL:</b> This project has been coordinated with the DODDEA and installation physical security plan; all physical security measures are included. All Anti-Terrorism/Force Protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meeting the requirement. Sustainable principles will be integrated into the design, development, and construction of the project in accordance with Executive Order (EO) 13123 and other applicable laws and EOs. SIOH is 5.7% to fund United Kingdom execution agents and Air Force project oversight.</p> <p>This project will provide government support facilities, including but not limited to trailers or other suitable office space, communications equipment and services, furniture and other support as required of the project and any other requirements resulting from design and or mission developments.</p> <p>This project has been considered for joint use potential. The facility will support other components. The utility and access road support to the new facility are in accordance with published DoD instructions and manuals.</p> <p><b>NATO SECURITY INVESTMENT:</b> This project is not within a common NATO Infrastructure category, nor is it expected to become eligible. This is an installation utility/infrastructure project, and does not qualify for joint use at this location. However, all tenants on this installation are benefited by this project.</p>			
12. SUPPLEMENTAL DATA:			
1. Status			
(a) Design Start:		Dec 2011	
(b) Design 35% Complete:		Feb 2012	
(c) Construction Start:		Oct 2012	
(d) Construction Complete:		Dec 2013	
(e) Type of Contract:		Design/Bid/Build	
2. Total Cost			
Construction:		\$3,795	