

**Washington Headquarters Service
 Military Construction, Defense-Wide
 FY 2008 Budget Estimates
 (\$ in Thousands)**

<u>State/Agency/Installation/Project</u>	<u>Authorization Request</u>	<u>Approp. Request</u>	<u>New/ Current Mission</u>	<u>Page No.</u>
Virginia				
Pentagon Reservation				
Pentagon Reservation Electrical Upgrades	18,531	18,531	C	221
Total	18,531	18,531		

1. COMPONENT Washington Headquarters Services		FY 2008 MILITARY CONSTRUCTION PROGRAM				2. DATE February 2007					
3. INSTALLATION AND LOCATION Pentagon Reservation, Arlington, Virginia			4. COMMAND Washington Headquarters Services			5. AREA CONSTRUCTION COST INDEX 1.02					
6. PERSONNEL		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
a. AS OF											N/A
b. END FY											N/A
7. INVENTORY DATA (\$000)											
a. TOTAL ACREAGE										N/A	
b. INVENTORY TOTAL AS OF										N/A	
c. AUTHORIZATION NOT YET IN INVENTORY										N/A	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										18,531	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										N/A	
f. PLANNED IN NEXT THREE PROGRAM YEARS										N/A	
g. REMAINING DEFICIENCY										N/A	
h. GRAND TOTAL										18,531	
8. PROJECTS REQUESTED IN THIS PROGRAM											
a. CATEGORY				b. COST (\$000)		DESIGN START		STATUS COMPLETE			
(1) CODE	(2) PROJECT TITLE			(3) SCOPE							
	Pentagon Reservation Electrical Upgrades					18,500		10/07		4/09	
										Anticipated 9 Months for Design	
9. FUTURE PROJECTS N/A											
10. MISSION OR MAJOR FUNCTIONS Primary facility is a new electrical substation housed in a partially underground reinforced concrete enclosure, a 69kVA utility supply feeder, 13kV switch gear, and electrical service to the Pentagon. Supporting work includes demolition of an existing retaining wall and paved surface; remediation of excavated soil; site utilities; replacement of existing paving, walks, curbs, and gutters disturbed by construction; and site improvements above and adjacent to the enclosure structure (required to blend with existing infrastructure). Anti-terrorism/force protection measures shall be incorporated in accordance with criteria prescribed in the current UFC regulations. Facility shall be designed in accordance with the National Electrical Code, National Fire Protection Association Life Safety Code, Standards of Seismic Safety for Federally Owned Buildings, and the Uniform Federal Accessibility Standards (for site improvements).											
11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES											
										(\$000)	
A. Air Pollution		0									
B. Water Pollution		0									
C. Occupational Safety and Health		0									

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5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER 2008-1	8. PROJECT COST (\$000) 18,531	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST (\$000)	COST (\$000)
PRIMARY FACILITY				
Single Transformer Substation	LS	1	4,134	11,787 (4,134)
69kV Utility Supply Feeder	LS	1	4,993	(4,993)
Enclosure Structure	SF	6,375	195	(1,244)
13kV Switchgear	LS	1	1,416	(1,416)
SUPPORTING FACILITIES				
Demolition	LS	1	45	376 (25)
Soil Remediation	LS	1	35	(35)
Site Utilities	LS	1	45	(25)
Paving, Walks, Curbs, and Gutters	LS	1	65	(35)
Site Improvements	LS	1	256	(256)
ESTIMATED CONTRACT COST				12,163
ESCALATION				<u>365</u>
SUBTOTAL 1				12,528
DESIGN/BUILD FEE				<u>1,253</u>
SUBTOTAL 2				13,781
SUPERVISION, INSPECTION & OVERHEAD				<u>827</u>
SUBTOTAL 3				14,608
CONTINGENCY				<u>730</u>
SUBTOTAL 4				15,337
TERF (Tax Effect Recovery Factor)				<u>3,195</u>
TOTAL REQUEST				18,531
TOTAL REQUEST (ROUNDED)				18,531
10. DESCRIPTION OF PROPOSED CONSTRUCTION				
Primary facility is a new electrical substation housed in a partially underground reinforced concrete enclosure, a 69kVA utility supply feeder, 13kV switch gear, and electrical service to the Pentagon. Supporting work includes demolition of an existing retaining wall and paved surface; remediation of excavated soil; site utilities; replacement of existing paving, walks, curbs, and gutters disturbed by construction; and site improvements above and adjacent to the enclosure structure (required to blend with existing infrastructure). Anti-terrorism/force protection measures shall be incorporated in accordance with criteria prescribed in the current UFC regulations. Facility shall be designed in accordance with the National Electrical Code, National Fire Protection Association Life Safety Code, Standards of Seismic Safety for Federally Owned Buildings, and the Uniform Federal Accessibility Standards (for site improvements).				

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3. INSTALLATION AND LOCATION Pentagon Reservation, Arlington, Virginia		4. PROJECT TITLE Pentagon Reservation Electrical Upgrades		
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER 2008-1	8. PROJECT COST (\$000) 18,531	
<p>11. REQUIREMENT: 6375 SF ADEQUATE: SUBSTANDARD: 6375 SF</p> <p>PROJECT: This project will provide enhanced reliability to the electrical system supplying the Pentagon Reservation.</p> <p>REQUIREMENT: The details of this project are classified, reference "Defense Facilities Division Electrical Upgrade" dated March 31, 2005 and related "Balanced Survivability Assessment", copies of which can be provided to appropriate officials upon request. Detailed requirements are contained within these studies which examined all aspects of the Pentagon reservation's electrical systems and recommended a strategic plan to enhance them. This project is the first phase of that strategic plan, though it is completely independent of any future phases. However, the two subsequent phases are necessary to fully achieve the results recommended in the above documents.</p> <p>CURRENT SITUATION: The existing electrical system does not provide the level of reliability recommended in the above studies.</p> <p>IMPACT IF NOT PROVIDED: To understand the impact of not providing this facility, the reviewer should refer to the classified studies, "Defense Facilities Division Electrical Upgrade" dated March 31, 2005 and related "Base Survivability Assessment Study". Without constructing this facility, the Pentagon Reservation will be unable to achieve the level of enhanced reliability recommended in the studies.</p> <p>ADDITIONAL INFORMATION: All cost items on Page 1 (to include escalation, design/build fee, SIOH, and contingency) other than "supporting facilities" are extracted from the study's parametric cost estimate. The TERF line item refers to "Tax Effect Recovery Factor" and is intended to reimburse a utility for taxes incurred on income generated by their portion of construction. This is a mandatory cost, since a utility firm must complete a portion of this project. TERF is further explained in the study and is regulated by the Federal Energy Regulatory Commission (FERC).</p>				

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a. ESTIMATED DESIGN DATA:

- (1) STATUS:
- (a) DATE DESIGN STARTED Oct-07
- (b) PERCENT COMPLETE AS OF JANUARY 2007..... 0%
- (c) DATE DESIGN EXPECTED TO BE 35% COMPLETE..... Mar-08
- (d) DATE DESIGN EXPECTED TO BE 100% COMPLETE..... Aug-08
- (e) PARAMETRIC COSTS TO DEVELOP COSTS (ESTIMATE INCLUDED IN CLASSIFIED STUDY) YES
- (f) TYPE OF DESIGN CONTRACT..... DESIGN / BUILD
- (g) AN ENERGY STUDY AND LIFE CYCLE COST ANALYSIS WILL BE DOCUMENTED DURING FINAL DESIG
- (2) BASIS:
- (a) STANDARD OR DEFINITIVE DESIGN YES ___ NO X
- (b) WHERE DESIGN WAS MOST RECENTLY USED N/A
- (3) TOTAL DESIGN COST (c)=(a)+(b) or (d)+(e) (\$000)
- (a) PRODUCTION OF PLANS AND SPECIFICATIONS..... 6% .75M
- (b) ALL OTHER DESIGN COSTS..... 4% .5M
- (c) TOTAL..... 1.25M
- (d) CONTRACT.....DESIGN/BUILD
- (e) IN-HOUSE..... NO
- COST OF REPRODUCTION OF PLANS AND SPECS..... .050M
- (4) CONSTRUCTION CONTRACT AWARD DATE May-08
- (5) CONSTRUCTION START (Design/Build starting at 35%) May-08
- (6) CONSTRUCTION COMPLETION DATE Apr-09

b. EQUIPMENT ASSOCIATED WITH THIS PROJECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS

<u>EQUIPMENT NOMENCLATURE</u>	<u>PROCURING APPROPRIATION</u>	<u>FISCAL YEAR APPROPRIATION OR REQUESTED</u>	<u>COST (\$000)</u>
N/A	N/A	N/A	0
TOTAL			0

12. Supplemental Data:

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SPACE CRITERIA

**Pentagon Reservation Electrical Upgrade
Area Requirements**

AUTHORIZED **REQUIRED**

Pentagon Reservation Electrical Upgrade
a. Enclosure Structure

6,375 SF 6,375 SF

Total

6,375 SF 6,375 SF

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DETAILED REQUIREMENTS STATEMENTS

GENERAL: This facility is required to provide enhanced redundancy and reliability in accordance with the classified "Defense Facilities Division Electrical Upgrade", dated March 21, 2005, and the "Balanced Survivability Assessment".

DATA ON ACCOMMODATIONS NOW IN USE: Current electrical systems do not allow the level of reliability recommended in the studies referenced above.

ANALYSIS OF DEFICIENCY: Deficiency is fully defined in the studies referenced above.

ANALYSIS OF ALTERNATE FACILITIES AND LOCATIONS: The Pentagon Master plan recommended three sites on the Pentagon Reservation. The site chosen was the most cost effective and appropriate one given future plans for the reservation.

ANALYSIS OF CRITERIA FOR NEW CONSTRUCTION: The size and capacity of the project is as recommended in the studies referenced above, as well as within the constraints of the proposed site.

STATEMENT OF PROGRAM RELATED EQUIPMENT: None

DISPOSITION OF PRESENT ACCOMMODATIONS: This is new construction. However, an existing retaining wall will be demolished and replaced, and an existing paved area demolished and replaced.

SURVIVAL MEASURES: None.

CONTRIBUTION TO MISSION: The benefits of this project to the Pentagon and its mission are as outlined in the studies referenced above.

CLEAN AIR ACT AMENDMENT OF 1990: Permitting and other procedural requirements mandated by state, interstate, and local air pollution control agencies have been complied with for this project.

PROTECTION OF WETLANDS: Project has been evaluated for compliance with Executive Order No. 11990 and is not sited in wetland.

REQUEST FOR "EXCEPTION TO CRITERIA ": None

TELECOMMUNICATIONS: Telephone service is available on the Pentagon Reservation and is within 1000 feet of the proposed site. PFFPA has a separate secure communication line and fiber network within the Pentagon Reservation. The facility will not require connection to the PFFPA source.

ECONOMIC ANALYSIS: An economic analysis has been conducted. The economic analysis is a part of the classified study, "Defense Facilities Division Electrical Upgrade" dated March 31, 2005.

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NATIONAL ENVIRONMENTAL POLICY ACT: Project has been analyzed for potential environmental impact in accordance with applicable regulations.

POLLUTION ABATEMENT: The design of proposed project includes, where appropriate, the provision of facilities for air and water pollution control IAW Executive Order No. 11752.

COASTAL ZONE PLAN: In accordance with the provisions of Section 102(2)(c) of the National Environmental Policy Act of 1969, the project has been reviewed, and it is determined to be in compliance with the State's Coastal Zone Plan.

ENDANGERED SPECIES ACT: Proposed project is in consonance with Section 7 of the Endangered Species Act (P.L. 93-205(87) STAT. as amended).

FALLOUT PROTECTION: In accordance with Section 601 of Public Law 89-568, as amended, the design of this project has been prepared to maximize fallout protection. Fallout shelters have been excluded from any structure only for the following reason: (1) Adequate protection areas are available to fulfill a station's requirements; (2) The presence of personnel during a period of fallout radiation would impair facility operations; or (3) Economic limitations necessitated either deferral or accomplishment by some other means.

FLOOD HAZARD: Project has been evaluated for flood hazards in compliance with Executive Order 11988, and the facility is not sited in an area known to be subjected to flooding.

DESIGN FOR ACCESSIBILITY OF PHYSICALLY HANDICAPPED PERSONNEL: In accordance with Public Law 90-480, provisions for the physically handicapped personnel will be provided for, where appropriate, in the design of the facility.

NATIONAL HISTORIC PRESERVATION ACT OF 1966: A survey has been completed, and it revealed that this undertaking will not affect, either directly or indirectly, any property included in, or eligible for, inclusion in the National Register of Historic Places.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): 29 CFR 1926 "Construction Standard: The project is in compliance with the construction standards set forth by OSHA and implemented in the construction projects Safety Plan.

CHESAPEAKE BAY PRESERVATION ACT: Project has been evaluated for erosion control and Best Management Practices to control run-off of stormwater.

DATE

Scott Bohnhoff
Safety and Environmental Management