

# STAFF RECOMMENDATION



Hart

NCPC File No. 7231

## WASHINGTON NAVY YARD INSTALLATION OF A PHOTOVOLTAIC SYSTEM (BUILDINGS 126 AND 386)

1314 Harwood Street, SE  
Washington, DC

Submitted by the United States Department of Defense, Department of the Navy

August 25, 2011

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### Abstract

The Department of the Navy has submitted a proposal to install a 48-panel, photovoltaic system on a canopy on the top level of the parking garage (Building 386) adjacent to Building 126, the Washington Navy Yard main visitor's center. This project is part of a multi-phased energy enhancement demonstration project at the Washington Navy Yard. The system will provide power to Building 126. Previous energy enhancements made to Building 126 under Phase 1 included replacing windows, adding solar light tubes, increasing wall insulation, and adding a geothermal heat pump.

### Commission Action Requested by Applicant

Approval of preliminary and final building plans, pursuant to 40 U.S.C. § 8722(b)(1) and (d).

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### Executive Director's Recommendation

The Commission:

**Approves** the preliminary and final building plans for the installation of a 48-panel photovoltaic system on the top level of Building 386, an existing parking garage just north of Building 126 on the Washington Navy Yard (WNY).

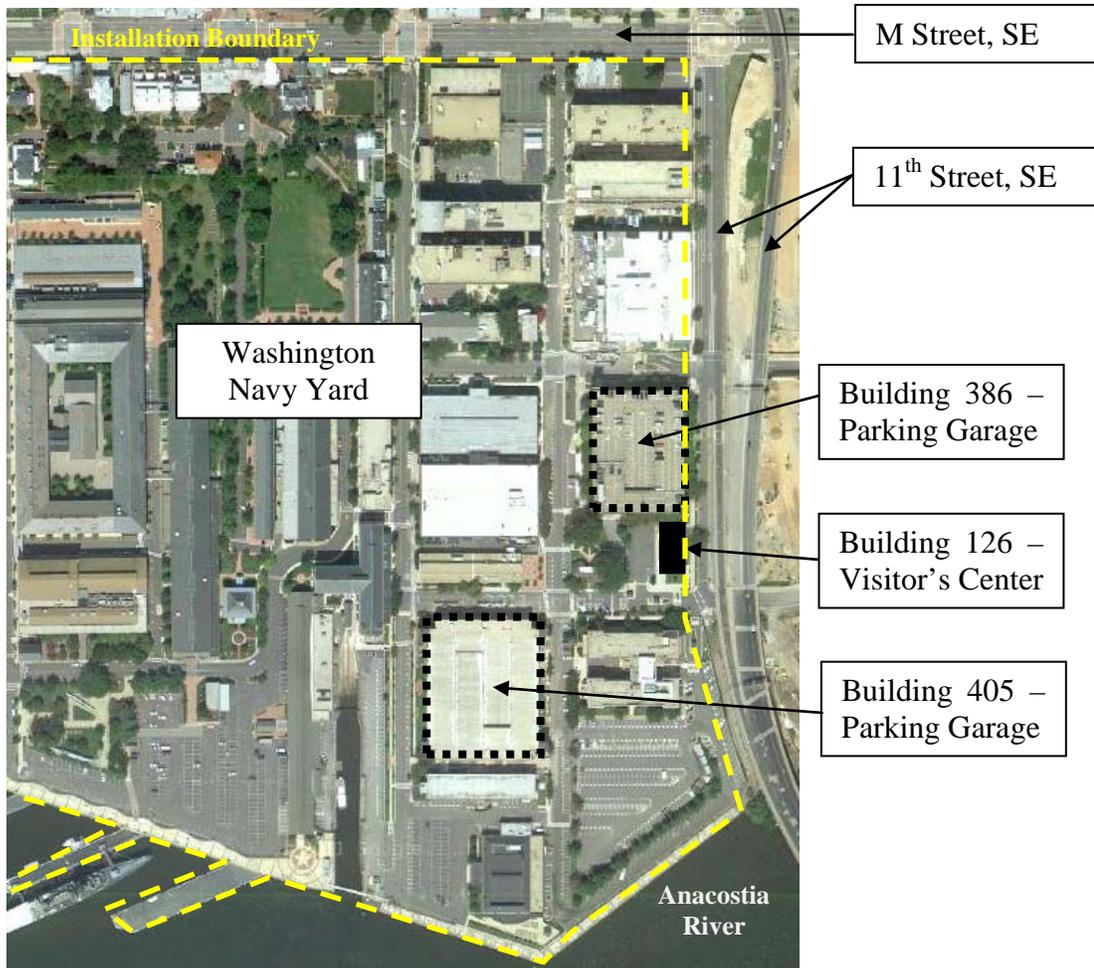
**Notes** that although a recent Commission action for a project at the Washington Navy Yard stated that "no future submittals at the WNY will be considered until an updated master plan is submitted," that this proposal is a minor one that does not increase the population at the installation, does not include any interior space, will have "no adverse effect" on historic resources and is comprised of elements that reduce the installation's energy consumption.

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**PROJECT DESCRIPTION**

Site

The project is located on the southeastern portion of the Washington Navy Yard (WNY) on the top level of Building 386, a parking garage. Building 126, which is adjacent to Building 386, is the main WNY visitor’s center and is accessed via an entrance along 11<sup>th</sup> Street, SE.



**Washington Navy Yard**

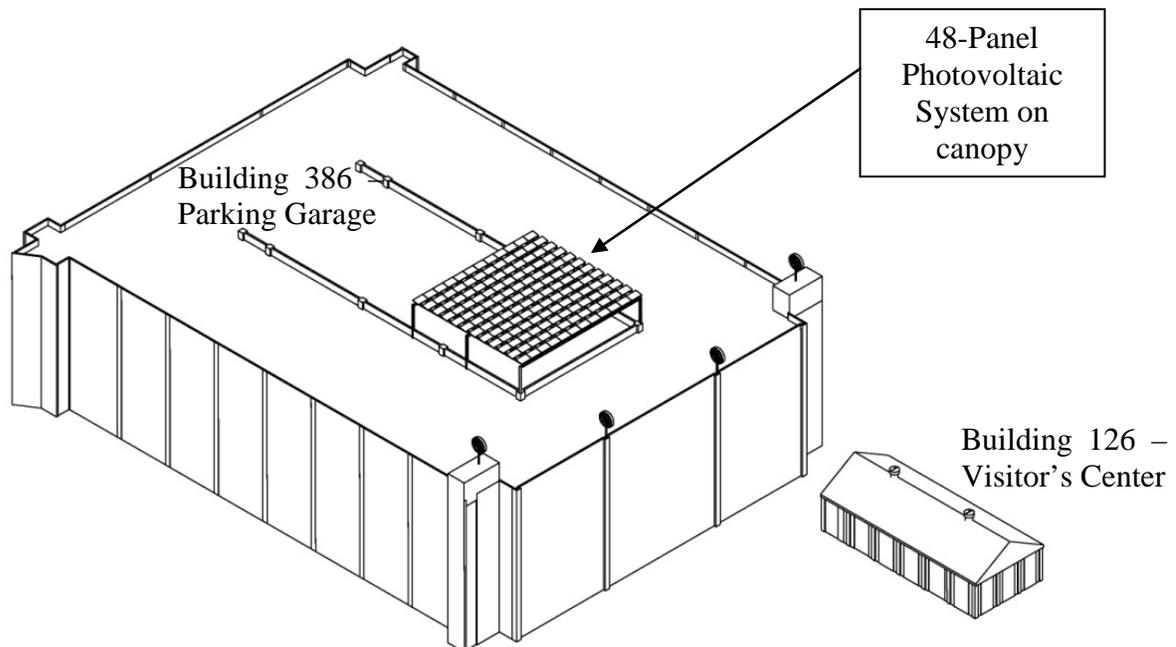
Background

The last Commission action for a project at the Washington Navy Yard (WNY) was in June 2010 for an addition to an existing parking garage (Building 405) and at that time the Commission Action included the following statement “...that no future submittals at the WNY will be considered until an updated master plan is submitted.” The Commission action also required the

new master plan to identify all employees on the WNY and in nearby leased space, required parking to be restricted at an existing surface parking lot or from the top level of the Building 386 in an effort to bring the installation's parking ratio in compliance with the Comprehensive Plan parking ratio, required a study to be undertaken to understand how the Navy can reduce parking at the WNY and requested that a TMP be included in the master plan. The action restricting project submittals at the WNY was included in the project approval because the last NCPC approved master plan for the Washington Navy Yard was in 1990.

### Proposal

The proposal is to install a 48-panel photovoltaic (PV), 28.2kW system on a canopy on the top level of the parking garage (Building 386) adjacent to Building 126 as part of a multi-phased energy enhancement demonstration project at the Washington Navy Yard. Previous energy enhancements to Building 126 (Phase 1) included the following: window replacement, adding solar light tubes, increasing wall insulation, and adding a geothermal heat pump. Phase 2A of the project is the installation of the PV system and Phase 2B will be the installation of four wind turbines.



**Site Isometric  
Buildings 386 and 126 with PV System**

The proposed 48-panel, PV system will be attached to a canopy 14.67 feet in height, 67.6 feet long and 44.44 feet in width. The canopy will cover 3,000 square feet. Its installation will not require the removal of any parking spaces in the parking garage as it will be mounted above the ramp connecting the top floor to the floor below.

A future phase of this energy enhancement project, previously included as part of this proposal, will be to install four wind turbines, 6 feet in diameter at the edge of the parking garage roof. As

the historic preservation review process, or Section 106 process, is not complete for the wind turbines the Navy will submit this project at a later date.

**PROJECT ANALYSIS**

Executive Summary

Staff has reviewed the project and finds that the main issues are historic preservation concerns and compliance with the Commission’s action not to consider any future submittals at the Washington Navy Yard until an installation master plan is submitted. Generally, staff is in support of opportunities for energy conservation at federal installations and this project is not an exception. This energy demonstration project is noteworthy as it incorporates many different elements from alternative energy to energy conservation to retrofitting existing buildings. These are all commendable examples of how the federal government could address energy usage concerns in the future. Therefore staff recommends that the Commission **approve the preliminary and final building plans for the installation of a 48-panel photovoltaic system on the top level of Building 386, an existing parking garage just north of Building 126 on the Washington Navy Yard (WNY).**

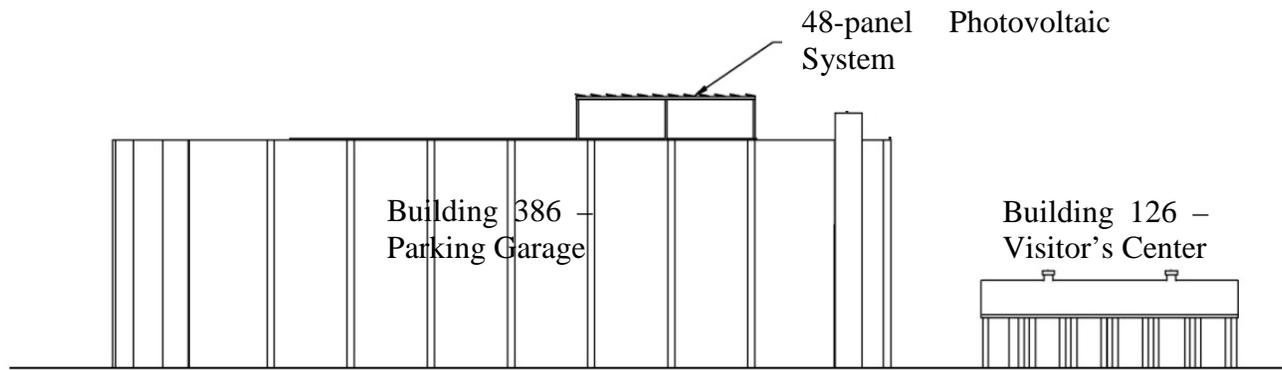
Historic Preservation

The historic preservation issue is important given that much of the Washington Navy Yard is a historic district and Building 126 is a contributing resource within the National Register-eligible Eastern Extension of the Washington Navy Yard. The proposed photovoltaic system, however,

will be sited on a non-contributing parking garage, Building 386, north of Building 126. Since the photovoltaic system is to be mounted on a canopy, 14.67 feet in height, on top of the parking garage and is set back more than 30 feet from the edge of the top level of the parking garage, it will not be visible from the ground. The District of Columbia State Historic Preservation Officer has noted that the photovoltaic array will have no adverse effect on historic properties.



**Washington Navy Yard Historic District**



**West Elevation  
Buildings 386 and 126 with PV System**

Previous Washington Navy Yard Project Commission Action – June 2010

The second issue is the Commission’s prior action for the parking garage project (Building 405) at the WNY in June 2010 which included the following statement that “...no future submittals at the WNY will be considered until an updated master plan is submitted.” In reviewing this proposal, staff examined recently completed research on its authority to require installation master plans. In addition, staff reviewed how the Commission has recently handled instances in which projects were submitted without a recent master plan being approved. Staff also took into consideration the size and scope of this project and any impacts it may have.

As staff has recently reviewed several projects at installations without an updated master plan, and the Commission had questions regarding clarifying its authority and responsibilities regarding master plans, staff conducted research on this issue. Under the Planning Act of 1952, NCPC is permitted to request information that it determines is necessary in order to effectively review projects and coordinate federal development in the region. In support of this, the Commission has included in Section 1 of its Submission Guidelines the following “...that an approved master plan is a required preliminary stage of planning, prior to the receipt of site and building plans for individual projects.” In addition, the guidelines state that the Commission “...will not approve or recommend favorably on project plans for installations in which there is no approved master plan unless the agency provides an explanation that is satisfactory to the Commission as to the agency’s reason for not submitting a current master plan or modification to the approved master plan.” Finally, Section 8 of the Submission Guidelines describes the instances when a modification to a master plan is required. These instances are listed as follows:

- A major change in the character or intensity of an existing use is proposed, or
- The proposed modifications or revisions would significantly change the off-site impact of the Federal activities and uses carried out within the site.

Several projects have recently been submitted to the Commission that were not included in an existing master plan and were not accompanied by a master plan update, including: a PX and two office buildings at Fort Belvoir; a child development center project at Quantico Marine Corps Base; and a parking garage project (Building 405) at the Washington Navy Yard. In each case the Commission viewed these projects on the installation as significant or might cause a significant impact. In addition, the Commission had extensive discussions about these projects due to the master plans not being updated and the impacts of these projects on the installation and off the installation not being fully understood. The proposed PV system project at the WNY is not a significant undertaking and is not likely to cause a significant impact.

In its decision to submit this project without an updated master plan, the Navy states that a master plan modification is not required with this proposal because it:

- is a minor one that covers 3,000 square feet and does not include any additional personnel,
- will not change the character, intensity or extent of either Building 126 or 386,
- is entirely within the WNY perimeter, and
- does not involve any change in the existing site or allocation of land at the WNY.

In addition, the Navy states that this minor project will not significantly change the off-site impact of the federal activities and uses carried out within the site.

After reviewing this proposal and the Navy's reasoning for submitting it without an updated master plan, staff agrees with the Navy that this is a minor project as it covers 3,000 square feet, is entirely located on the WNY, does not impact any historic resources, and will not involve any additional personnel, increase interior space or allocation of land at the WNY. In addition, staff finds that the project provides the Navy with a working demonstration site for Navy personnel to learn about using a renewable energy source and energy conservation projects. Furthermore, staff supports this project, which will produce energy for the visitor's center, as it aligns with the Executive Order 13514 and the 2007 Energy Independence and Security Act, as well as the Commission's sustainability efforts. Therefore staff recommends that the Commission **note that although a recent Commission action for a project at the Washington Navy Yard stated that "no future submittals at the WNY will be considered until an updated master plan is submitted," that this proposal is a minor one that does not increase the population at the installation, does not include any interior space, will have "no adverse effect" on historic resources and is comprised of elements that reduce the installation's energy consumption.**

Finally, staff has been meeting with the Navy on the update to the Washington Navy Yard Master Plan over the past year and a draft document is expected to be submitted to the Commission by the end of this year.

## CONFORMANCE

### Comprehensive Plan for the National Capital

This project is not inconsistent with the policies contained in the Federal Workplace and the Preservation and Historic Features Elements of the *Comprehensive Plan for the National*

*Capital: Federal Elements*, and specifically the policies that pertain to promoting energy efficiency and conservation and protecting views to and from historic resources.

#### Relevant Federal Facility Master Plan

While this project is not included in the 1990 Washington Navy Yard Master Plan, it is not inconsistent with the plan as it reuses an existing building and it provides for a reduction of the energy usage for a small portion of the installation.

#### National Environmental Policy Act (NEPA)

NAVFAC has determined that this project qualifies as a Categorical Exclusion under its NEPA regulations (OPNAVINST 5090.1C Chapter 5-5.1 (B)(23) which states the following: “Non routine repair and renovation, and donation or other transfer of structures, vessels, aircraft, vehicles, landscapes or other contributing elements of facilities listed or eligible for listing in the National Register of Historic Places which will result in no adverse effect.” . As this project is located in the District of Columbia, NCPC has an independent responsibility under NEPA and staff finds that this project conforms to categorical exclusion 8(C)21 under NCPC’s *Environmental and Historic Preservation Policies and Procedures*.

#### National Historic Preservation Act (NHPA)

The District of Columbia State Historic Preservation Office (DC SHPO) reviewed the project and determined that the 48-panel photovoltaic array will have “...’no adverse effect’ on historic properties because the [48 panels] are unlikely to be visible.” As this project is located in the District of Columbia, NCPC has an independent responsibility under NHPA and staff concurs with the DC SHPO determination.

## CONSULTATION

#### Coordinating Committee

The Coordinating Committee reviewed this proposal on August 10, 2011 and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies represented. The participating agencies were: NCPC, the National Park Service; the General Services Administration; the District of Columbia Office of Planning; the District of Columbia Department of Housing and Community Development and the Washington Metropolitan Area Transit Authority.