



## Executive Director's Recommendation

Commission Meeting: October 1, 2020

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<b>PROJECT</b> <b>Wargaming Center, Parking Garage, and Area Distribution Node</b> Marine Corps Base Quantico Quantico, Virginia	<b>NCPC FILE NUMBER</b> 8212
<b>SUBMITTED BY</b> Naval Facilities Engineering Command Washington	<b>NCPC MAP FILE NUMBER</b> 2402.10(38.00)45191
<b>REVIEW AUTHORITY</b> Federal Projects in the Environs per 40 U.S.C. § 8722(b)(1)	<b>APPLICANT'S REQUEST</b> Approval of preliminary site and building plans
	<b>PROPOSED ACTION</b> Approve preliminary site and building plans with comments
	<b>ACTION ITEM TYPE</b> Consent Calendar

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### PROJECT SUMMARY

The Naval Facilities Engineering Command Washington has submitted preliminary site and building plans for a new Wargaming Center (WGC), a new parking garage, and an Area Distribution Node (ADN) at the Marine Corps Base Quantico in Quantico, Virginia. The new 100,433 square foot WGC will serve as the dedicated facility for wargame planning and execution, capable of supporting multi-sided events in an academic environment. The proposed facility will also serve as a dedicated venue to host wargaming events and conferences which are currently held at off-site facilities that are unable to accommodate meetings with sensitive information or arrange for the use of facilities to execute events with sensitive information. The proposed 132,116 square foot parking garage will include 352 parking spaces to support 475 daily occupants (175 staff and 300 students) and up to 300 visitors during events at the WGC. The ADN will house critical infrastructure necessary to support the new facility and is planned to replace the existing, aging Cinder City switchgear that is near the end of its useful life. Additional work associated with this project includes demolition of existing warehouse and storage facilities and stormwater management, landscaping, and sidewalk improvements.

The proposed project is located within Area Development Plan (ADP)-2 as identified in the *2019 Marine Corps Base Quantico Master Plan* (Master Plan). The proposed project was included in the Plan's expected short-term growth, and the Educational land use and location situated between the Marine Corps University (MCU) campus and the Town of Quantico are also consistent with the Master Plan. The Master Plan was approved by the Commission in December 2019. The new facilities will be constructed on approximately 10.5 acres of previously-developed land and are designed in accordance with Department of Defense United Facilities Criteria (UFC) for General Building Requirements and Architecture, and will be fully accessible in accordance with the Architectural Barriers Act (ABA).

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## KEY INFORMATION

- The proposed project is consistent with the *2019 Marine Corps Base Quantico Master Plan* which was approved by the Commission in December 2019.
- The project site was previously developed and currently houses warehouse and storage facilities and approximately 50 surface parking spaces that will be demolished to construct the proposed project.
- The proposed parking garage includes 352 parking spaces (plus 8 accessible spaces). The resulting parking ratio for the WGC facility is 1 space for every 1.5 regular daily occupants. Regular daily occupants include 175 staff and 300 students. Up to 300 visitors are also anticipated during events.
- The impact of the proposed parking spaces on the overall parking ratio for ADP-2 was not provided in this submission.
- The proposed structures are designed with Georgian-style architecture similar to other buildings on the MCU campus. The MCU campus is located within one of the Marine Corps Base Quantico historic districts on the National Register of Historic Places and the applicant is currently in coordination with the Virginia State Historic Preservation Office regarding the design approach.
- The majority of the WGC facility is built to UFC 4-010-05 standards for secure spaces. These standards call for efforts to minimize or eliminate building windows.
- The project will result in a net decrease of impervious surface area. Other environmental benefits include new stormwater management facilities and a net increase of 137 native trees.
- The project is currently pending completion of the National Environmental Policy Act (NEPA) and National Historic Preservation (NHPA) Section 106 processes.
- Demolition of existing site features is scheduled to occur late fall/early winter of 2020 – January 2021 with construction of the WGC slated to begin in April 2021.

## RECOMMENDATION

The Commission:

**Approves** the preliminary site and building plans for the new Wargaming Center (WGC), a new parking garage, and an Area Distribution Node (ADN) at the Marine Corps Base Quantico.

### *Site Design*

**Finds** the Wargaming Center, parking garage, and Area Distribution Node are appropriately sited in coordination with the MCU Master Plan and the required security setbacks.

**Finds** the landscaped treatment of the building setbacks are an appropriate use of the space that contribute to the expansion of the site's tree canopy, reduction of impervious surfaces, and supports the overall landscape character of Marine Corps Base Quantico.

**Commends** the applicant for its sustainable approach to the site and landscape design, including a net increase of 137 trees on the project site and a net decrease of impervious surfaces.

### *Building Design*

**Notes** the proposed structures are designed with Georgian-style architecture consistent with the existing MCU buildings located within one of the Marine Corps Base Quantico historic districts on the National Register of Historic Places and the applicant is currently in coordination with the Virginia State Historic Preservation Office regarding the design approach.

**Notes** the secure nature of the Wargaming Center involves limitations to the building design, including the minimization of windows, as it is required to conform with Department of Defense secure space standards.

**Finds** the applicant integrated windows into the design of the Wargaming Center to the extent practicable without compromising security requirements.

**Finds** the building design of the Wargaming Center, parking garage, and Area Distribution Node are appropriate in context of the MCU campus and the security design requirements.

### *Parking*

**Notes** the proposed parking garage includes 352 parking spaces to serve 475 daily Wargaming Center occupants and 300 visitors during events, and that the project meets the 1:1.5 parking goal set forth in the Master Plan.

**Notes** the applicant has not yet developed a detailed Area Development Plan for ADP-2 and the existing parking ratio for the ADP was not provided with this submission.

**Requests** the applicant demonstrates how the proposed amount of parking for this project impacts the overall parking ratio for ADP-2 and Marine Corps Base Quantico's long-term goal of meeting a 1:2 parking ratio in the next submission.

## PROJECT REVIEW TIMELINE

<b>Previous actions</b>	<b>December 2019</b> – Approved 2019 Marine Corps Base Quantico Master Plan
<b>Remaining actions</b> (anticipated)	– Review of final site and building plans

## PROJECT ANALYSIS

### Executive Summary

The proposed project consists of three primary elements: a Wargaming Center, an Area Distribution Node, and a parking garage. The overall project limits are located within ADP-2 between the MCU campus and the Town of Quantico along Broadway Street. The WGC site measures 7.5 acres and is bounded by the base perimeter fence with 5<sup>th</sup> Avenue to the north; Broadway Street to the west; and Upshur Avenue to the south. The proposed ADN is located on a 0.5-acre area immediately east of the WGC and Moreell Avenue lies further east of the ADN. The proposed parking garage site measures approximately 2.5 acres and is located across from the WGC to the west of Broadway Street. The site is bounded by 6<sup>th</sup> Avenue to the north, existing CSX railroad tracks to the west, Martin Street to the south, and Broadway Street to the east. Both sites are heavily developed with existing warehouse and storage buildings, paving, loading areas, paved parking, and a large gravel lot. All existing structures within the project limits will be demolished to construct the proposed project.

The purpose of the proposed project is to provide Marine Corps Base Quantico with a wargaming facility configured with adequate instructional spaces for the conduction of wargame planning and execution, and to support the Combat Development Command, Operating Forces, Reserves, Supporting Establishment, and Headquarters Marine Corps (HQMC). The facility will support simulation and modeling of future environments, as well as provide the connectivity necessary to serve as the central node in a network configuration. Further, it will provide for the receipt, storage, and transmission of electronic sharing of sensitive information. The buildings have been sited and designed pursuant to the Department of Defense security design requirements while also respecting their adjacency to the primarily Georgian-style MCU campus.

The proposed two-story WGC facility will include administrative, public gathering, event spaces, and an auditorium on the first floor and wargaming functions on the second floor. Additional dedicated building systems rooms are proposed where required and practical in order to serve particular security zones. The proposed four-story parking garage will provide 352 parking spaces for 475 daily personnel and up to 300 visitors during events, and the proposed ADN will provide critical infrastructure support for the proposed facility, replacing the existing Cinder City switch gear which has reached the end of its useful life. The proposal also includes stormwater management and landscaping improvements that will result in a net decrease in impervious surfaces and a net increase in tree canopy on the project site.

Overall, the project is consistent with the master plan approved by the Commission in 2019. The proposed siting and building design are environmentally sensitive and respond to the surrounding context while also incorporating the necessary security requirements. Therefore, staff recommends the Commission **approves the preliminary site and building plans for the new Wargaming Center (WGC), a new parking garage, and an Area Distribution Node (ADN) at the Marine Corps Base Quantico.**

## Analysis

### *Site Design*

The main entrance of the WGC building faces Broadway Street and is setback to align with the building line established by the existing Gray Research Center to the south on the MCU campus. The north side of the building along 5<sup>th</sup> Avenue requires a minimum 50 foot setback from the perimeter fence due to its proximity to the base perimeter and to also preserve space for the Breckinridge Walk and Tree Grove identified in the 2009 MCU Master Plan. The utilitarian functions of the building, such as the loading dock and trash enclosures, are located on the northeast portion of the building where they will be least visible. An access road from Broadway Street on the south side of the building connects to the loading dock and continues west to tie back into Broadway Street. This site design was selected as the preferred option as it will accommodate the future realignment of the North Gate and the required security setbacks, and maximizes future MCU development space to the east of the WGC.

The parking garage is located according to the MCU Campus Appearance Plan with a total setback from Broadway Street of 31 feet which includes a 12-foot lawn area between the back of the curb and the 10-foot wide sidewalk. The setback area will be planted with trees and other landscaping and include space for underground utilities. Users will access the parking garage via driveways that connect the deck with an existing surface parking lot to the west and 6<sup>th</sup> Street to the east. Pedestrian circulation is provided by egress stair towers located in the southeast and southwest corners of the building. An elevator is provided adjacent to the southwest stair tower for accessibility.

The ADN is a simple, rectangular building with the main entrance to the building facing west toward the WGC. A concrete service drive and entrance is proved at the front of the building and a tubular ornamental fence surrounds the building to provide the required 33-foot minimum standoff protection.

Collectively, the WGC, parking garage, and ADN considered several factors in the placement of the building and access roads to incorporate security requirements while respecting the existing and future expansion of the adjacent MCU campus. Therefore, staff recommends the Commission **finds the Wargaming Center, parking garage, and Area Distribution Node are appropriately sited in coordination with the MCU Master Plan and the required security setbacks.** The project also proposes to incorporate stormwater Best Management Practices (BMPs) and new trees into the open spaces created by the building setbacks. The plant palette would be consistent with the MCU Master Plan and primarily consist of native trees, shrubs, and groundcovers with seasonal interest and resistance to deer. Native plants decrease maintenance costs, as plants adapt to the local climate and require less water than non-natives. Existing natural areas and the proposed native plants provide a sense of place supporting the landscape character of Quantico. A mix of river birch, sugar, maple, willow oaks, and crepe myrtles will introduce new color and greenery to the existing Town of Quantico viewshed from 5<sup>th</sup> Avenue. Overall, staff recommends the Commission **finds the landscaped treatment of the building setbacks are an appropriate use of the space that contribute to the expansion of the site's tree canopy, reduction of impervious surfaces, and supports the overall landscape character of Quantico.**

As noted previously, the proposed project is located on a previously developed site. The majority of the existing site consists of impervious surfaces and the proposed project will result in a net

decrease in the amount of impervious surface area and a reduction in the stormwater volume and flow from the sites. In addition, although five trees will be removed for construction of the project, 142 trees will be planted on the project sites. The project also proposes several stormwater BMPs to achieve and exceed the Virginia Department of Environmental Quality's (VA DEQ) required stormwater quality and quantity treatment. The intent of exceeding the requirement is to accrue stormwater credits that can be applied to future projects where space is more limited. Overall, staff recommends the Commission **commends the applicant for its sustainable approach to the site and landscape design, including a net increase of 137 trees on the project site and a net decrease of impervious surfaces.**

### *Building Design*

The three proposed facilities are designed to reflect the tenants and design ideas of the Georgian style with a simple/symmetrical massing, decorative trim and accent elements, and a formal, pronounced entrance. This exterior aesthetic is similar to the other buildings on the MCU campus. As such, staff recommends the Commission **notes the proposed structures are designed with Georgian-style architecture consistent with the existing MCU buildings located within one of the Marine Corps Base Quantico historic districts on the National Register of Historic Places and the applicant is currently in coordination with the Virginia State Historic Preservation Office regarding the design approach.**

The WGC facility is designed in accordance with the Base Exterior Architecture Plan (BEAP) of Marine Corps Base Quantico. Primary exterior materials for the WGC consist of a red brick façade with architectural cast stone elements. The primary brick field will be laid in a common bond pattern. Brick accent bands and panels of running bond, herringbone, and soldier course patterns are designed into the elevation in order to break down large masses of wall into smaller geometric elements. Glazing is limited to an insulated aluminum-framed storefront system and entry doors at the primary building entry. Additionally, a limited number of clerestory windows are provided along the west, north and south elevations to permit the passage of natural light into the open office areas on the first floor. These windows will be inoperable, will have visual, acoustic protection, and will be alarmed. All exterior doors and glazing are designed to meet Antiterrorism/Force Protection (AT/FP) requirements and the majority of the building is designed to UFC 4-010-05 standards. As such, staff recommends the Commission **notes the secure nature of the Wargaming Center involves limitations to the building design, including the minimization of windows, as it is required to conform with Department of Defense secure space standards.** Moreover, the second floor does not propose any exterior glazing because this floor will consist of wargaming arenas and breakout rooms that are not conducive to natural light. Artificial lighting and audiovisuals will be controlled for the purposes of the wargaming exercises. Although these requirements pose significant design challenges, staff recommends the Commission **finds the applicant integrated windows into the design of the Wargaming Center to the extent practicable without compromising security requirements.**

The proposed parking garage has a rectangular form also designed in accordance with the BEAP similarly to other recent facilities of the same nature on the installation. The exterior façade consists of structural precast concrete with integral brick masonry, similar to the exterior provided

by the nearby MCU parking deck. Openings are provided in the exterior façade above each horizontal panel at the floor line, allowing for natural light and ventilation to enter the facility. Impact forces are resisted by solid sections of the provided exterior wall panels along the building perimeter. These solid sections also prevent headlights from spilling directly out of the facility to adjacent neighbors both on and off the installation.

The ADN will also be designed in accordance with the BEAP and is a simple, geometric form that will be clad in red brick with a single-slope roof. A concrete entry stoop and ramp are provided on the main entry to facilitate equipment movement and maintenance access. Despite security design constraints, all three of the proposed facilities are designed to complement each other and the surrounding buildings on the MCU campus. Therefore, staff recommends the Commission **finds the building design of the Wargaming Center, parking garage, and Area Distribution Node are appropriate in context of the MCU campus and the security design requirements.**

### *Parking*

The project site currently consists of warehouse and storage facilities, a paved surface parking lot with 50 spaces, and a gravel parking lot that provides parking and staging for local events such as town parades. The paved and gravel parking lots will be removed along with the demolition of the existing structures in order to construct the proposed project. The proposed project includes construction of a new parking garage on the west side of Broadway Street to support the WGC facility. Staff recommends the Commission **notes the proposed parking garage includes 352 parking spaces to serve 475 daily Wargaming Center occupants and 300 visitors during events, and that the project meets the 1:1.5 parking goal set forth in the Master Plan.** The regular daily occupants will include 175 staff and 300 students, resulting in a parking ratio of 1 space for every 1.5 regular daily occupants (1:1.5) for this project.

The Marine Corps Quantico's Transportation Management Plan (TMP) established the base's planning goal for an employee parking ratio of 1:1.5 in the short range and 1:2 in the long range consistent with NCPC's parking ratio policies for the installation. When the 2019 Master Plan was approved, the Commission noted that the base would develop specific Area Development Plans to further detail building, parking, open spaces, and other elements. Staff recommends the Commission **notes the applicant has not yet developed a detailed Area Development Plan for ADP-2 and the existing parking ratio for the ADP was not provided with this submission.**

Although the proposed parking ratio for this individual project is consistent with the desired ratio, the impact of this project's proposed parking on the overall ADP-2 parking ratio is important to understanding the proposed project in the context of the larger installation. Further, since the current parking ratio for ADP-2 was not provided in the submission materials, staff recommends the Commission **requests the applicant demonstrates how the proposed amount of parking for this project impacts the overall parking ratio for ADP-2 and Marine Corps Base Quantico's long-term goal of meeting a 1:2 parking ratio in the next submission.**

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## CONFORMANCE TO EXISTING PLANS, POLICIES AND RELATED GUIDANCE

### **Comprehensive Plan for the National Capital**

Staff analyzed the project using guidance in the Comprehensive Plan, particularly those policies related to the Urban Design, Historic Preservation, Transportation, and Environment Elements. Applicable policies include promoting sustainable, compatible, and adaptable development practices, efficient use of parking, minimizing impervious surfaces, and tree replacement.

### **National Historic Preservation Act**

This project is subject to a consultation under Section 106 of the National Historic Preservation Act (NHPA). Through this process, the Marine Corps has consulted with the Virginia State Historic Preservation Officer (VA SHPO) and Stafford and Prince William Counties on the proposed development. A Memorandum of Agreement (MOA) is currently under development with the VA SHPO and will be provided with the next submission. Since this project is located on federal land in the environs NCPC does not have an individual responsibility to comply with Section 106 of the NHPA for this project.

### **National Environmental Policy Act**

The applicant originally anticipated that the project would qualify for a Categorical Exclusion (CATEX) under the National Environmental Policy Act (NEPA); however, the need for an MOA under Section 106 of the NHPA excludes the project from qualifying for a CATEX. Therefore, an Environmental Assessment (EA) is currently in preparation.

## CONSULTATION

As mentioned above, the project is currently being coordinated with the VA SHPO, Prince William and Stafford Counties, and the VA DEQ regarding stormwater management plan approval. Since the project is consistent with the 2019 Master Plan additional coordination with external agencies is not necessary at this time. Coordination with the appropriate state and local agencies will be finalized prior to the next submission.

## ONLINE REFERENCE

The following supporting documents for this project are available online at [www.ncpc.gov](http://www.ncpc.gov):

- Project Synopsis

**POWERPOINT (ATTACHED)**

# Marine Corps Base Quantico Wargaming Center

Quantico Virginia

Approval of Preliminary Site and Building Plans

Naval Facilities Engineering Command Washington

# Project Summary

**Commission Meeting Date:** October 1, 2020

**NCPC Review Authority:** 40 U.S.C. § 8722(b)(1)

**Applicant Request:** Approval of Preliminary Site and Building Plans

**Session:** Consent Calendar

**NCPC Review Officer:** Stephanie Free

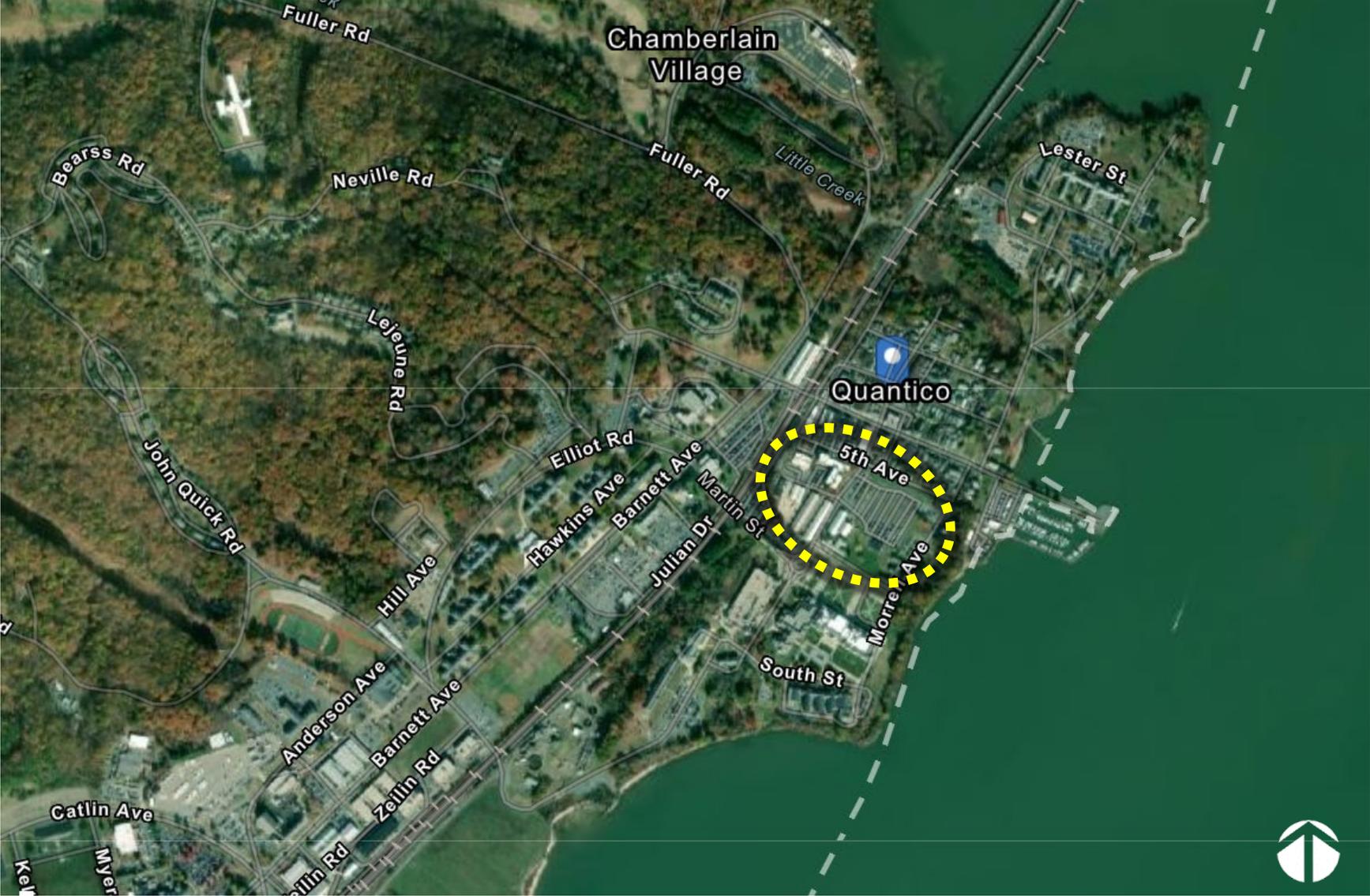
**NCPC File Number:** 8212

## Project Summary:

The Naval Facilities Engineering Command Washington requests approval of preliminary site and building plans for a dedicated wargaming facility, configured with adequate instructional spaces for the conduction of wargame planning and execution at Marine Corps Base (MCB) Quantico. The project will include construction of a 100,443 square foot Wargaming Center (WGC), a 132,116 square foot parking garage, and an Area Distribution Node (ADN). The buildings will be constructed on previously developed land and is consistent with the 2019 MCB Quantico Master Plan.

The new, two-story, 100,443 SF WGC will house wargaming exercises in an academic environment. The facility will provide normal operating hours 0900-1700, with the potential for future capability of 24/7 operations. The facility will include offices for 172 staff and up to 288 wargaming participants at a time, for a total of 460 daily occupants. Auditorium space will provide for up to 300 additional occupants. There will be multiple secure areas to facilitate multiple games and discussions concurrently. The new parking garage will provide 360 spaces (including 8 ADA spaces) and the ADN will house critical infrastructure to support the new facilities.

# Site Location

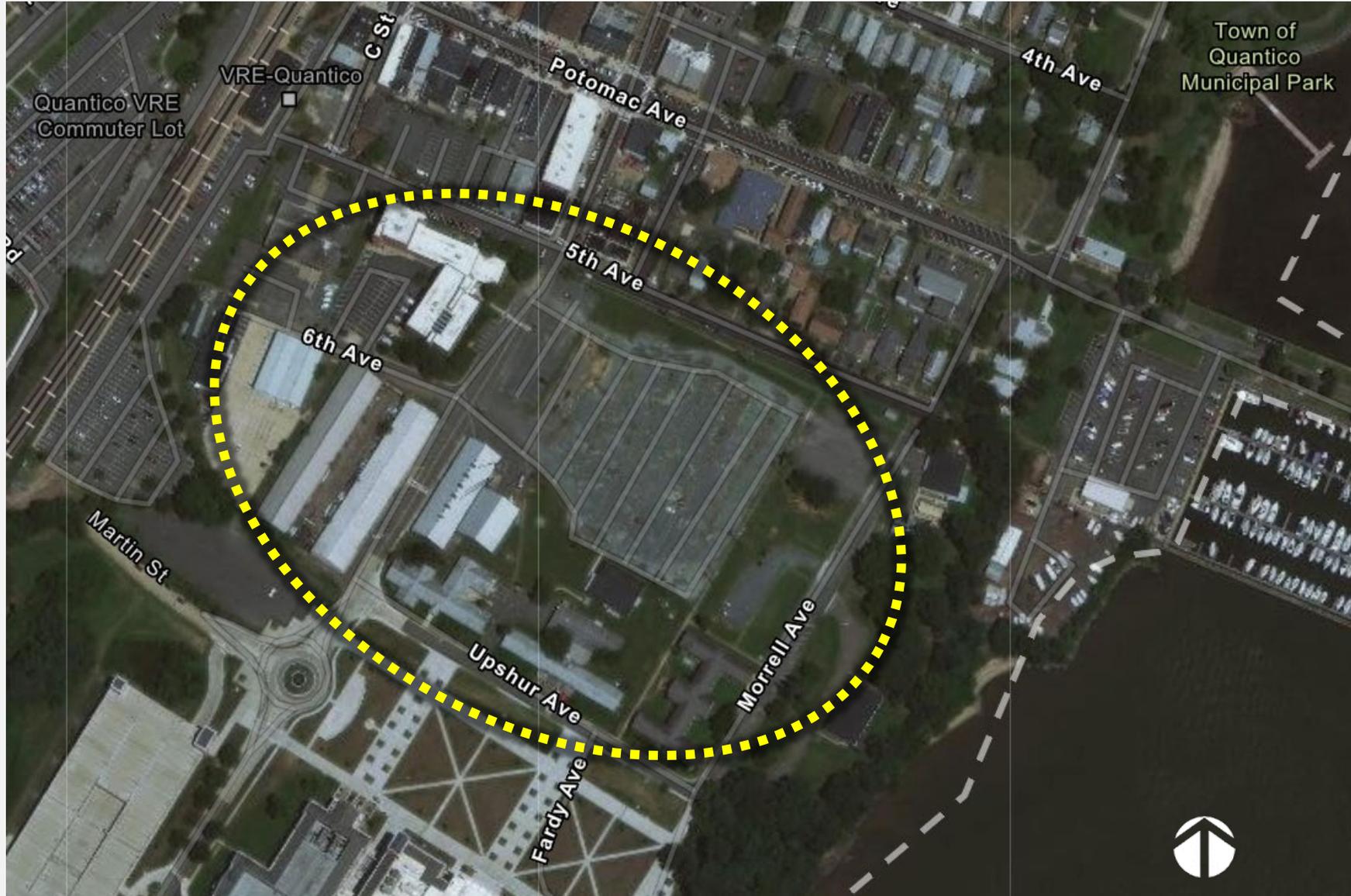


Location Map



# MCB Quantico – Site Location

- Previously developed site
- Mix of trailers, warehouses and other storage facilities
- Located between Town of Quantico and Marine Corps University (MCU) campus



# Site Context – Base Buildings and Architecture



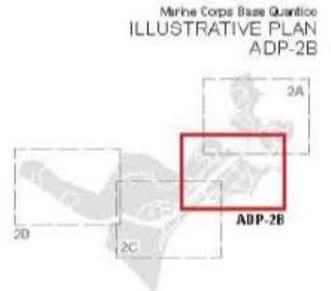
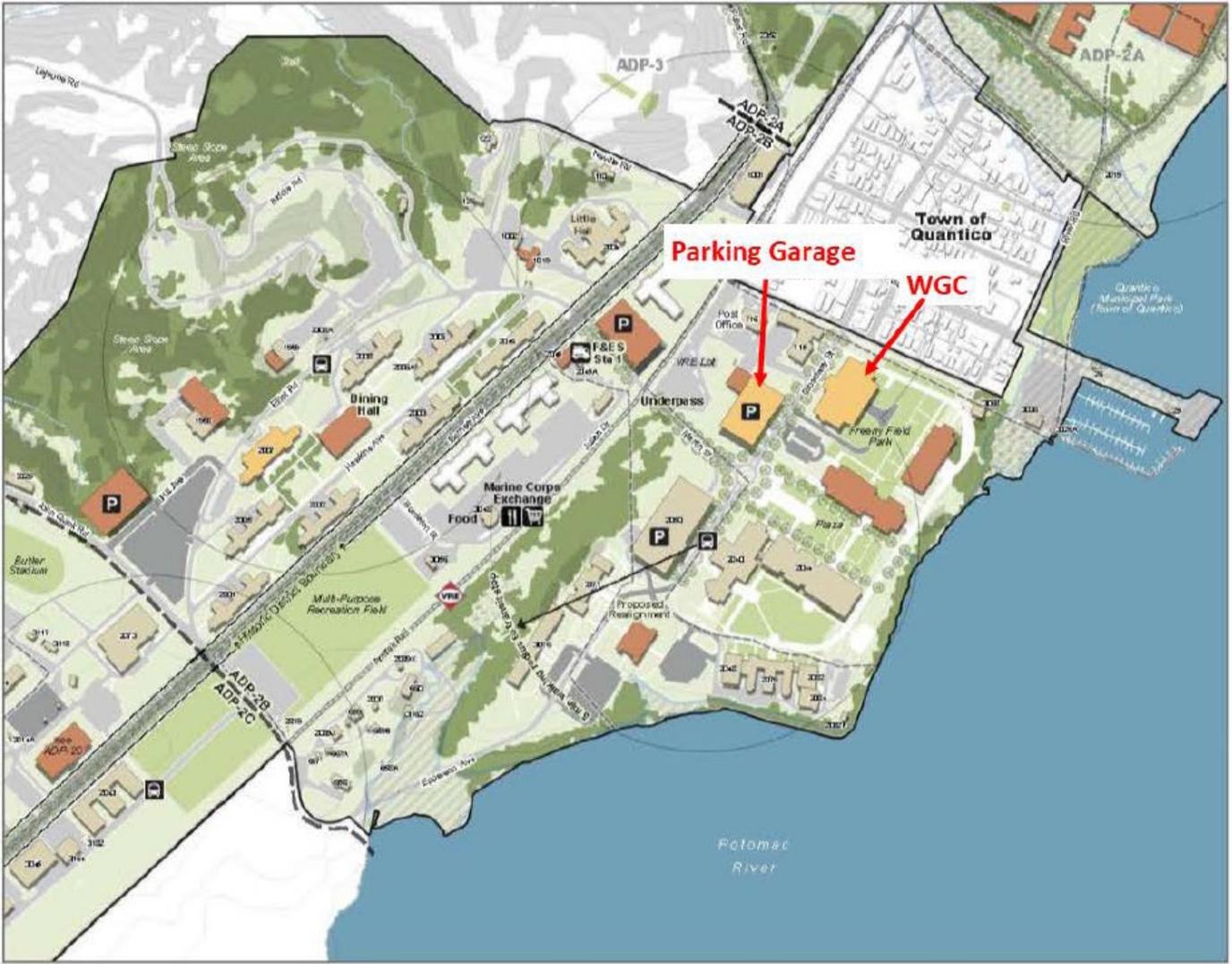
# Site Context – Marine Corps University

WGC Project Site



# MCB Quantico – Master Plan Context

Figure PS-7 ADP-2B Illustrative Plan



**Key**

**Buildings**

- Long-Term (LT) Renovation or New
- Short-Term (ST) Renovation or New
- National Footprint (N)
- Existing Building
- Parking Structure

**Roads & Parking**

- Bus/Shuttle Stop
- Proposed Roads & Parking
- Existing Roads & Parking
- Flood Hazard (1% Annual Chance)
- ADP 2
- Marine Corps Base Quantico Boundary

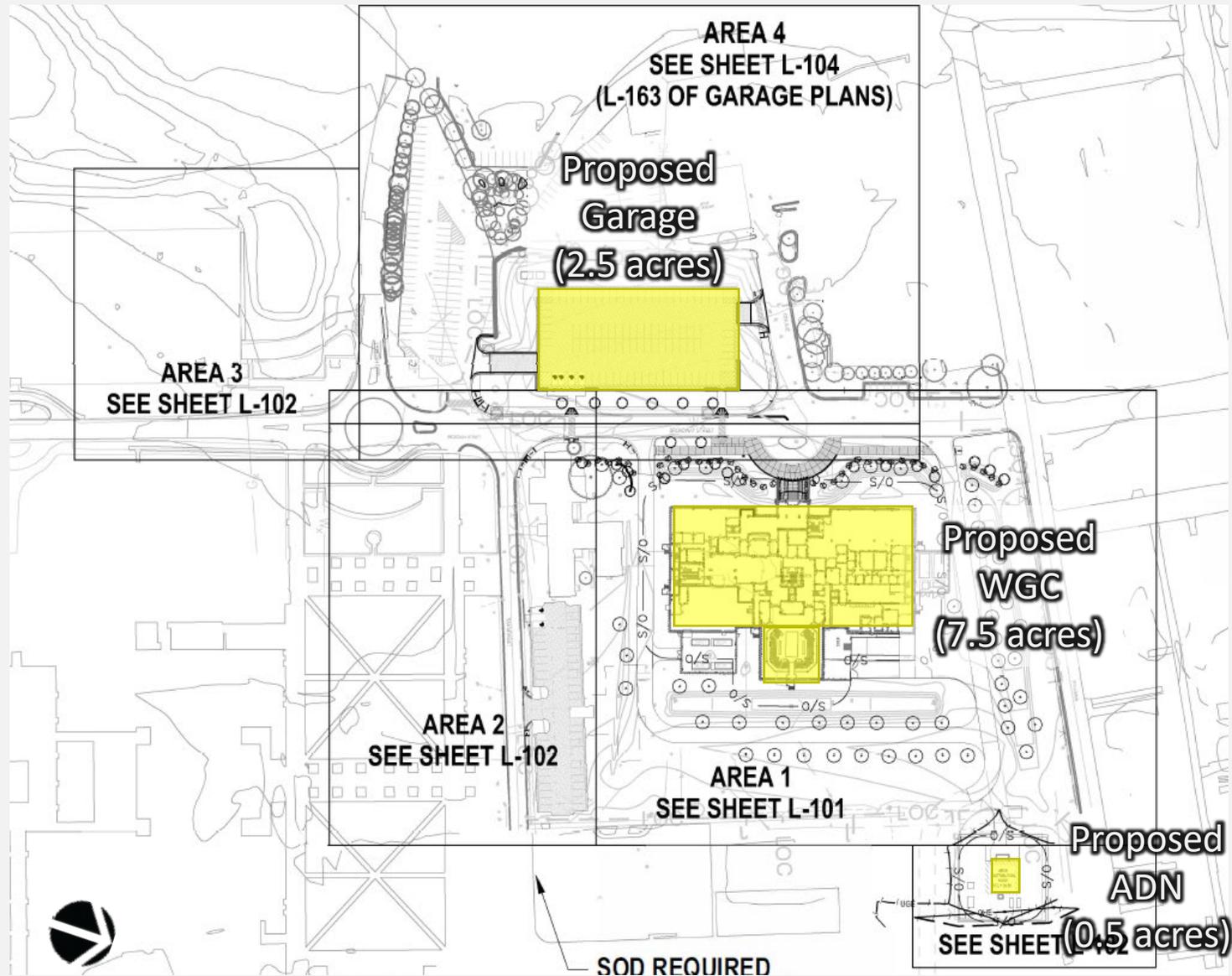
1 in = 500 Feet

0 200 500 1,000 Feet

0 0.25 Miles

# Wargaming Center – Overall Site Plan

- Net decrease in impervious surface area
- Five existing trees will be removed
- 142 trees (56 shade trees, 86 ornamental) are proposed



# MCB Quantico – Wargaming Center

- 100,433 square foot facility; 2 stories
- Georgian-style architecture similar to existing buildings on the Marine Corps University Campus
- 460 daily occupants, with space for an additional 300 visitors during events



# MCB Quantico – Parking Garage

- 132,116 square feet; 4 stories
- 360 parking spaces, including 8 accessible spaces
- Resulting parking ratio of 1:1.5 for daily occupants
- 45 spaces designated for visitors (15% of anticipated max. of 300 visitors)



# MCB Quantico – Area Distribution Node

- Provides support infrastructure for new MGC
- Replaces the existing, aging Cinder City switchgear that is near the end of its useful life

