



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

December 11, 2003

MEMORANDUM

TO: Montgomery County Planning Board
VIA: John A. Carter, Chief, Community-Based Planning Division, JAC
FROM: Callum Murray, Potomac Team Leader
Community-Based Planning Division (301/495-4733)
CASE NUMBER: MR-03403-NCPC-1
REVIEW TYPE: Mandatory Referral
PROJECT NAME: Revised Master Plan for the Naval Surface Warfare Center, Clara Barton Parkway, West Bethesda
REVIEW BASIS: Article 28, Chapter 7-112 of Regional District Act
ZONE: R-200
LOCATION: Between Clara Barton Parkway and MacArthur Boulevard, west of the Capital Beltway
MASTER PLAN: Potomac Subregion
SUBMITTING AGENCY: National Capital Planning Commission (Hearing on January 8, 2004)

STAFF RECOMMENDATION: APPROVAL with the following conditions:

- Provide complementary shuttle services to Metro rail during peak demand generated by conferences that utilize the site facilities.
- Explore strategies to mitigate traffic queues when higher threat conditions are declared. These could include satellite parking lots and shuttle service, flexible work schedules, transit partnerships and more security personnel to staff gates.
- Provide clear pedestrian and bicycle path systems throughout the site connecting all buildings.
- Designate stream valleys and wetlands within the proposed Natural Areas.
- Reforest stream buffers that are currently mowed.
- Discontinue current turf management practices, including mowing, in wetland areas.

- Increase stream valley and wetland buffers from the Maryland Department of the Environment stipulated 25 feet to 100 feet.
- Explore innovative 'green roof' technologies to reduce storm water runoff.
- Implement appropriate temporary and permanent erosion, sedimentation, and storm water controls with the goal of reducing storm water runoff by 20 percent as required by Maryland Stormwater Management Guidelines.

Project Summary

The Naval Surface Warfare Center (NSWC) Carderock Division Infrastructure Management Plan (CDIMP) examines existing site conditions, analyzes development opportunities and constraints, and proposes a development plan to satisfy potential future needs at the NSWC Carderock Division's West Bethesda site. The plan updates the Master Plan completed in 1988. It is the third master plan update for the site, with the original plan developed in 1974 and subsequent updates in 1981 and 1988.

The goals of the Master Plan are to:

- Seek to create a long-term building plan that will meet future mission requirements.
- Create an infrastructure layout that will foster relationships with the adjacent residential community and the National Park Service.

The key recommendations of the Master Plan include:

- Implementation of a land use planning policy in which building densities diminish towards the perimeter in order to encourage buffering and vegetative screening from adjacent land uses.
- Redesign and realignment of the installation's three gates for security reasons.
- Re-alignment of on-site truck circulation.
- Designation of open space areas for vegetative screening, environmental protection, and passive recreation.

Subject Site

The West Bethesda site is located on approximately 187 acres bounded by the Clara Barton Parkway on the south and west, MacArthur Boulevard on the north and the Capital Beltway (I-495) on the east. (See Attachment 1.) The entire property is zoned R-200 (see Attachment 2) and has been a Federal facility for the past 105 years, since 1898. There are five land use types at the West Bethesda site, with the following acreages: Administration (18 acres), Research, Development, Testing and Evaluation (81 acres), Industrial (20 acres), Recreation (11 acres), and Open Space (57 acres). Mature trees on the site's periphery buffer the site from its neighbors, helping to blend the site with the adjacent residential communities to the north.

There are 111 buildings at the West Bethesda site, some of which are historic properties, with approximately 1.85 million square feet of building floor area, and 1,700 employees. The major historical feature is the David Taylor Model Basin Complex (Buildings 1, 2, 3 and 4). Access is via three gates. Vehicular access is primarily

through Gate 1 and Gate 3. Gate 1, accessible from Clara Barton Parkway, is considered the main gate, from which the majority of privately owned vehicles enter the site. Since September 11, 2001, vehicles undergo security inspections at this gate, which often has backups when higher threat conditions are declared. Gate 2, on MacArthur Boulevard, is secured and unmanned. It is opened as needed for special occasions. Gate 3 is the only access for trucks to enter the site because of a prohibition of trucks on Clara Barton Parkway and weight restrictions on MacArthur Boulevard as it crosses the Washington Aqueduct.

The Revised Master Plan

The revised Master Plan calls for construction of 250,100 square feet and the associated demolition of 33 buildings or structures totaling 188,249 square feet, for a net increase of 61,851 square feet. The number of employees will remain unchanged.

The Master Plan proposes the demolition of buildings 8, 121, and flagstaff 137, which are contributing resources of the National Register eligible NSWC Carderock Division Historic District. The Maryland Historical Trust has reviewed the submission and has agreed that the historically significant buildings slated for demolition are not candidates for adaptive re-use due to building size, configuration, and environmental concerns.

The Master Plan responds to both natural and man-made constraints. The natural constraints include soils unsuitable for construction (32 acres), vegetation, wetlands, surface water, streams, floodplains and steep slopes. Many of these constraints are not mutually exclusive in terms of location as several areas are subject to multiple constraints. Man-made constraints include a controlled perimeter, historic features, explosive and magnetic safety arcs, and surrounding land use compatibility.

The land uses are proposed to be amended as follows: Administration (from 18 to 26 acres), Research, Development, Testing and Evaluation (from 81 to 93 acres), Industrial (from 20 to 12 acres), Recreation (from 11 to 8 acres), and Open Space (from 57 to 48 acres). The major construction projects include the following:

- P-246 – the National Maritime Technology Information Center, a 50,000 square foot building with a 300-seat auditorium with video teleconferencing/conference rooms that will be fully used at least eight times per year,
- P-188, a 67,000 square foot Engineering and Logistics Facility,
- P-102, a 44,700 square foot Dynamics Laboratory,
- P-304, a 62,000 Ship Virtual Prototyping Laboratory, and
- P-302, a Security Building and Initial Perimeter Control Initiative.

TRANSPORTATION

This memorandum is Transportation Planning staff's review of the subject mandatory referral. This mandatory referral is for the revised master plan of the Naval Surface Warfare Center West Bethesda site. The site is located approximately one mile from the Capital Beltway (I-495) and bounded by the Clara Barton Parkway on the south and west, MacArthur Boulevard on the north, and I-495 on the east in Potomac. The revised

master plan examines existing site conditions, analyzes development opportunities and constraints, and provides a future development plan.

Based on our review of the information contained in the revised master plan, Transportation Planning staff recommends the following comment to support approval of the referenced mandatory referral since the application meets the transportation-related requirements of the Adequate Public Facilities (APF) test:

- Provide complementary shuttle services to Metro rail during peak demand generated by conferences

The future development plan contained in the revised master plan does not increase the number of employees and thus, will not increase the number of weekday peak-period trips generated by the site. Therefore, no Local Area Transportation Review is required. The site is located in the Potomac Policy Area where there is no Policy Area Transportation Review requirement.

Three access points currently serve the site: one from Clara Barton Parkway (primary vehicular access), one from MacArthur Boulevard, and one from Eggert Drive. Eggert Drive provides the only access point for trucks to enter the site since trucks are prohibited on the Clara Barton Parkway and restricted on MacArthur Boulevard. Staff finds that the existing access points are adequate to provide accessibility from the region. Staff also finds that the proposed internal transportation and circulation system as shown on the future Site Development Plan provides an improved internal transportation system and the proposed vehicular and pedestrian circulation system is thus safer and more efficient than the existing system.

Staff finds that the existing truck access point from Eggert Drive, the only feasible truck access route to the site, is adequate and does not cause adverse impact on the surrounding residential streets. The proposed change of the internal truck route from Mitek Road to a realigned Highpoint Road is also an improvement.

On December 4, the NCPC provided portions of the Final Environmental Assessment that contains the traffic analysis for the Proposed Action. The Proposed Action includes the construction of new facilities at the site and the associated demolition of existing structures. A new National Maritime Technology Information Center would be utilized as a conference center and at maximum capacity would be expected to service 450 people for conferences and meetings and would be filled to capacity eight times a year. The transportation analysis indicates that under the Proposed Action, the eastbound Clara Barton Parkway ramp approach at the Front Gate Access Road intersection is projected to degrade to LOS "F" (using the average control delay criteria) from the current LOS "C" and the westbound Clara Barton Parkway approach at the MacArthur Boulevard/Clara Barton parkway intersection is projected to degrade to LOS "F" from the current LOS "E" during the PM peak hour. Staff notes that the traffic analysis uses Highway Capacity Manual (HCM) methodologies that differ from the Critical Lane Volume technique required in a Local Area Transportation Review (LATR). The greatest difference is the HCM analysis describes level of service for individual lane

groups at each intersection whereas the LATR methodology describes level of service for the intersection as a whole. The Environmental Assessment recommends that in order to mitigate the traffic congestion at the Clara Barton Parkway/Eastbound Ramp/Front Gate Access Road intersection, the installation should provide traffic management practices such as stationing a military police officer to more efficiently move traffic. Staff recommends that the installation also manage travel demand by providing complementary shuttle services to Metro rail during the peak demand generated by conferences and meetings that utilize the site facilities.

In terms of transit service, Montgomery County does not plan on increasing or changing service to the campus due to current low ridership levels. The County will keep the route as it provides a convenient turnaround area for the Ride-on vehicles.

The Infrastructure Management Plan states that additional land will become available, as obsolete facilities are removed, to create tree-lined boulevards on the most heavily traveled routes, linking the site's main areas. Building upon the current network of sidewalks, new sidewalks are proposed to parallel the tree-lined boulevards. These pedestrian routes are critical to facilitate the efficient movement of people and the establishment of a walkable campus.

The Approved and Adopted Potomac Subregion Master Plan promotes the use of alternative modes of transportation, including walking and biking. Staff recommends that clear pedestrian and bicycle path systems be provided throughout the site connecting all buildings. Sidewalks should be provided on both sides of Forrestal Road, the "Main Street" for the campus. To the extent possible, new buildings should be located close to this central street for a more compact development, to minimize walking distances.

ENVIRONMENT

Environmental Planning staff recommends approval of this plan with the following comments:

- Place stream valleys and wetlands within the proposed Natural Areas
- Reforest stream buffers that are currently mowed.
- Increase stream valley and wetland buffers from the Maryland Department of the Environment stipulated 25 feet to 100 feet.
- Explore innovative 'green roof' technologies to reduce storm water runoff.

Watershed

The Naval Surface Warfare Center is located in the Potomac Subregion and is within the fourth largest watershed on the east coast. A 100-year floodplain encroaches on the northeastern corner of the Bethesda site and the easternmost portion of the site drains eastward into the Rock Run tributary. A small un-named creek is located in the western portion of the installation. This creek receives runoff from the residential areas to the north. Discharge occurs to the south through a culvert, and into a tributary of the Potomac River.

Topography

The topography of the site is gently sloping with elevations ranging from 105 feet to 155 feet above mean sea level. The overall grade of the site is three percent or less and the primary construction areas are relatively level.

Storm Water Management

The proposed construction in combination with the associated demolitions would result in a net increase in impervious surface of 174,410 square feet, with the potential to increase the amount of storm water runoff in an area of moderately low permeability. To minimize impacts, appropriate temporary and permanent erosion, sedimentation, and storm water controls should be implemented with the goal of reducing storm water runoff by 20 percent as required by Maryland Stormwater Management Guidelines. Innovative low-impact development measures such as green roofs should also be explored.

Wetlands

Wetlands are located in three general areas on the site. The first is within a 100-year floodplain at the site's northeast boundary. The second is along a natural drainage course at the west end of the site. The third is along a natural drainage course that runs along the southernmost portion of the site, east of the main entrance. Much of the latter area, which is frequently saturated, is currently maintained as a mowed lawn. Discontinuation of turf management practices would likely result in the establishment of wetland vegetation over time and is recommended.

Forest Conservation

Approximately half (88 acres) of the Bethesda site consists of buildings, roads, and other structures. The remainder of the installation consists of approximately 38 percent (70 acres) mowed lawn and approximately 12 percent (24 acres) forests and scattered wooded patches. The proposed primary construction areas and associated roads and parking areas are characterized primarily by existing buildings and parking areas with maintained lawns, landscape vegetation and individual trees around the existing structures. Forested habitat including non-tidal wetland habitat occur immediately to the west of the proposed development area.

Noise

The proposed plan for this site should pose no objectionable noise levels to the surrounding area. However, the Department of Environmental Protection administers the Montgomery County Code Chapter 31B Noise Control and may require a noise study to test noise disturbance and determine mitigation if needed at a later time.

Dust and Air Quality

There should be no objectionable fumes, dust or odors resulting from the proposed development.

Public Consultation

The Master Plan was developed with input from community members via visioning and alternative development workshops. This process enabled stakeholders to provide input towards the future development of the Carderock site. The NSWC Carderock

Division held public meetings on February 27, 2002 and March 13, 2003 to update and notify citizens of the status of building demolition, including that of historic properties, new construction, and landscaping projects, and held on-site community meetings quarterly. Planning staff notified local citizens associations and other interested organizations on November 20, 2003, that a mandatory referral application had been submitted. To date, no comments have been received.

CONCLUSION

Staff finds the revised Carderock Division Infrastructure Management Plan to be compatible with existing and proposed adjacent development and recommends approval with conditions.

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Attachments

1. Vicinity Map
2. Zoning Map
3. Naval Surface Warfare Center Infrastructure Management Plan
4. Public Notice