

Critical Area Commission

STAFF REPORT

January 6, 2021

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| APPLICANT: | Maryland Transportation Authority |
| PROPOSAL: | Bay Bridge Vehicle Storage Building Replacement and New Office Building |
| JURISDICTION: | Anne Arundel County |
| COMMISSION ACTION: | Vote |
| STAFF RECOMMENDATION: | Approval with conditions |
| STAFF: | Kate Durant |
| APPLICABLE LAW/ REGULATIONS: | COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Lands COMAR 27.02.06 Conditional Approval of State or Local Agency Programs in the Critical Area |

DISCUSSION

The Maryland Transportation Authority (MDTA) is seeking approval to construct a new office building and demolish and replace an existing maintenance building, located at the William Preston Lane Jr. Memorial (Bay) Bridge Facility. The 3.03-acre project site is located at 800 Oceanic Drive, on the western shore side of the Bay Bridge, and is currently used to maintain MDTA vehicles. The Critical Area designation is Intensely Developed Area (IDA).

Site improvements will include a new parking area, additional parallel parking along the street, sidewalks, stormwater management, and new utility connections. The new building is required to provide office space for employees who will be working on long-term major capital projects related to improving the Bay Bridge. The existing vehicle maintenance building needs to be replaced to elevate it out of the flood plain and upgrade the equipment inside. The existing lot coverage is 0.73 acres and the proposed lot coverage is 0.38 acres, for total lot coverage of 1.11 acres after the project is completed. Additionally, MDTA is proposing permanent Buffer disturbance of 2,758 square feet to install a stormwater management facility.

This project requires Commission approval because it does not qualify for approval under MDTA's existing General Project Memorandum of Understanding (MOU) with the Critical Area Commission. Additionally, the project requires conditional approval under COMAR 27.02.06 by the Commission because the proposed permanent disturbance in the Buffer is not water dependent.

Proposed Impacts to the Critical Area

The existing vehicle maintenance building will be razed and rebuilt on the same footprint, but it will be elevated above the floodplain and to accommodate the new Coast Smart siting and design guidelines, which will be discussed further below. The replacement building is in largely the same footprint, but shifted slightly further away from the water. MDTA states that the site is very constrained and there is no other location to place the vehicle maintenance building.

The new office building will be constructed immediately to the southwest of the existing vehicle maintenance building and there will be a small parking lot between the two buildings. The area where the office building is proposed is currently covered with grass and is outside the Buffer. A submerged gravel wetland is proposed adjacent to the southwest end of the new office building, which is required to treat the newly proposed lot coverage. Approximately 8,873 square feet of tree canopy will be cleared for this stormwater facility. A microbioretenion basin will also be installed to the southeast, across Oceanic Drive. This facility is located within the Buffer. MDTA has indicated that this best management practice (BMP) is necessary to fulfill Maryland Department of the Environment (MDE) environmental site design (ESD) stormwater management treatment requirements.

Buffer Impacts

Permanent disturbance to the Buffer is 2,758 square feet in order to construct the microbioretenion basin. No trees will be cleared in the Buffer.

Critical Area 10% Phosphorus Reduction

The proposed project is required to meet the Critical Area Commission's 10% phosphorus reduction requirements. MDTA calculated the annual removal requirement and determined that it is 1.04 lbs P/year. The proposed stormwater management BMPs will provide an annual reduction of 1.57 lbs P/ year, for an excess of 0.53 lbs P/year. MDTA has requested to bank their water quality credit with MDE. Additionally, MDTA has asked the Commission whether they could use excess 10% credit to count towards 347 square feet of tree canopy mitigation. Given MDTA is seeking conditional approval to disturb the Buffer in order to install the microbioretenion basin and owes Buffer mitigation as a result of locating the stormwater management feature in this area, Commission staff recommends denial of this request.

Mitigation

Mitigation for Buffer impacts will be provided at a 3:1 ratio for permanent disturbance for a required Buffer mitigation of 8,274 square feet. Mitigation for tree canopy clearing in the Critical Area outside of the Buffer will be provided at a 1:1 ratio for a required mitigation of 8,873 square feet. MDTA is proposing to meet both requirements (17,147 square feet) by planting 16,800 square feet along US-301 next to the Bay Bridge E-Z Pass Stop-in Center, which is located adjacent to Mezick Pond and is approximately 1,700 feet north of the project site.

A Buffer Management Plan has been submitted to staff providing the details of the 16,800 square feet of planting, including species, location and monitoring and maintenance provisions. Plantings will consist of a mix of canopy and understory trees, including red maple, hackberry,

sweetgum, pin oak, willow oak, bald cypress, eastern redbud, and serviceberry. MDTA has submitted a signed planting agreement for the plantings. Commission staff recommends that the Commission request an additional 347 square feet of planting either on-site or at the proposed planting location.

Permits and Review by Other Agencies

Stormwater Management Plan and Sediment Erosion Control

The stormwater management concept plan was approved on August 6, 2020. The erosion and sediment control plan approval is pending and should be a part of the final authorization of the stormwater management plan from the Maryland Department of the Environment.

Department of Natural Resources

The Department's Wildlife and Heritage Service (WHS) confirmed in an October 16, 2018 letter that there are no records of any State or Federal rare, threatened or endangered species within the project site.

United States Fish and Wildlife Service

The U.S. Fish and Wildlife Service Chesapeake Bay Field Office online project review process, conducted on September 24, 2018, indicated that there are no USFWS listed endangered species, refuges, or fish hatcheries within the vicinity of the project.

Maryland Historical Trust

The Maryland Historical Trust confirmed that there are no historic properties in the area.

Public Notification Requirements and Comments

In accordance with COMAR 27.03.01.03, notice of the proposed project will be published in The Capital Gazette no later than December 22, 2020. A sign with information about the project will be posted on the site as well. Any comments will be noted at the Commission meeting.

Coastal Resiliency

As required per COMAR 27.02.05.03, State agencies who are proposing development activities on State-owned lands shall demonstrate that the agency has considered the likelihood of inundation by sea level rise over the course of the design life of the project, and to demonstrate that the development identifies and incorporates climate resilient practices in order to avoid or minimize environmental or structural damage associated with a coastal hazard, an extreme weather event, sea level rise, and other coastal impacts. Additionally, this project is subject to the Maryland Coast Smart Construction Program. Therefore, MDTA has provided information addressing both the Coast Smart Construction Siting and Design Guidelines, as well as the Commission's regulations. A summary of that information is as follows:

Vulnerability Assessment

The various online GIS mapping layers available in DNR's Coastal Atlas demonstrate the project site is vulnerable to projected sea level rise, with the greatest threat coming from the combination

of sea level rise and storm surge. The proposed site improvements are located beyond the 0-2 foot predicted sea level rise zone and just beyond the edge of the 2-5 foot sea level rise zone. The maintenance building is located within the new Coast Smart mapping standard, called the CS-CRAB, or Coast Smart Climate Ready Action Boundary. However, the new office building is located outside the CS-CRAB. This mapping analysis is discussed further below. Finally, the entire site, including the access road to the site are located within a Category 2 storm surge.

The Chesapeake Bay side of the property is protected by a revetment and breakwater. The shoreline adjacent to Westinghouse Bay has a forested buffer of at least 50 feet in width and is fairly stable. The project itself will not impact any wetland migration corridors, but the sea level rise wetland adaptation areas analysis and the marsh protection potential index indicate that the forested area adjacent to Oceanic Dr, just to the south of the project site may have some future value as wetland.

Coast Smart Construction Program

As noted above, this project is subject to the Maryland Coast Smart Construction Program and portions of the proposed project are located within the CS-CRAB. The CS-CRAB, or Coast Smart Climate Ready Action Boundary, is a new mapping layer that reflects future sea level rise and storm surge events.¹

The new office building is located outside the CS-CRAB. However, the replacement vehicle maintenance building is located within the CS-CRAB. MDTA is proposing to elevate both structures. The proposed maintenance facility will be constructed on a slab at grade and the elevation increased to above the CS-CRAB elevation, by 1.42 feet. Additionally, MDTA proposes to also raise the first floor elevation of the office building above the CS-CRAB, even though it is not within the CS-CRAB.

Critical Area Climate Resilience Considerations

Per Critical Area regulations, MDTA has considered the likelihood of sea level rise and other coastal impacts. As a result of the Coast Smart construction analysis MDTA is raising the at-grade elevation of the replacement structure as well as the first floor elevation of the new building. MDTA states the building design life span is intended to last between 2050 and 2100 with those measures. Wetland migration impacts are not anticipated, and the mitigation provided for the permanent Buffer disturbance and tree clearing should provide additional resiliency to the forested area adjacent to the wetlands by the Bay Bridge E-Z Pass Stop-in Center on the other side of Route 50/301.

¹ State agencies that propose a capital project over \$500,000 to construct a new structure or replace a substantially damaged structure, are required to evaluate those structures for compliance with the Maryland Coast Smart Construction Program. New and replacement structures are to be located outside the CS-CRAB to the maximum extent practicable. If they are not located outside the CS-CRAB, then the design criteria require the first floor elevation to be constructed at or above the CS-CRAB Elevation to ensure minimal flooding and storm surge impacts. Additionally, the mechanical and electrical systems associated with these structures shall be at least three feet above the first floor elevation.

CONDITIONAL APPROVAL PROCESS (COMAR 27.02.06.01)

In order to qualify for consideration by the Commission for conditional approval, it shall be shown by the proposing or sponsoring agency that the project has the following characteristics. Responses were supplied by MDTA and summarized by Commission staff:

B. (1) That there exist special features of the site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

The reconstruction of the maintenance building and the construction of the office building are required for staff working on upcoming long-term major capital projects at the Bay Bridge. The existing maintenance building is located entirely within the Critical Area on land owned by the State; therefore, it would be impossible to reconstruct the maintenance building and construct the new office building outside of the Critical Area. The area available for development within the MDTA Bay Bridge right-of-way (ROW) is limited and constructing this project elsewhere would likely cause a greater impact to the Critical Area, as well as require MDTA to acquire additional real estate.

B. (2) That the project or program otherwise provides substantial public benefits to the Critical Area Program;

The proposed mitigation plantings will provide water quality and habitat benefits at a nearby offsite location by connecting fragmented forested areas in the buffer adjacent to tidal wetlands. The proposed project will also provide stormwater management for the additional lot coverage in the IDA.

B. (3) That the project or program is otherwise in conformance with this subtitle;

Other than the permanent disturbance to the 100-foot Buffer and the tree clearing, the proposed project conforms to the regulations in this subtitle. The permanent disturbance to the 100-foot Buffer of an open grassed area will be mitigated at a 3:1 ratio, and the tree clearing located outside of the Buffer will be mitigated at a 1:1 ratio. The proposed mitigation will provide water quality and habitat benefits keeping with the intent of the Critical Area law.

The conditional approval request shall, at a minimum, contain the following:

C. (1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State or local agency program or project;

If Buffer disturbance were not allowed on this site, there would not be sufficient space to provide the required stormwater management to fulfill MDE treatment requirements, or the required sidewalk to provide safe conditions for onsite personnel. The proposed project is necessary to facilitate upcoming long-term major capital projects at the Bay Bridge.

C. (2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05;

In addition to complying with the Critical Area Commission's Conditional Approval process, the project has also been reviewed by the Maryland Department of the Environment. Final approval from the County is pending until the Critical Area Commission reviews and approves this project. Other than the disturbance to the 100-foot Buffer and the tree clearing, the proposed project conforms to the County's Critical Area program.

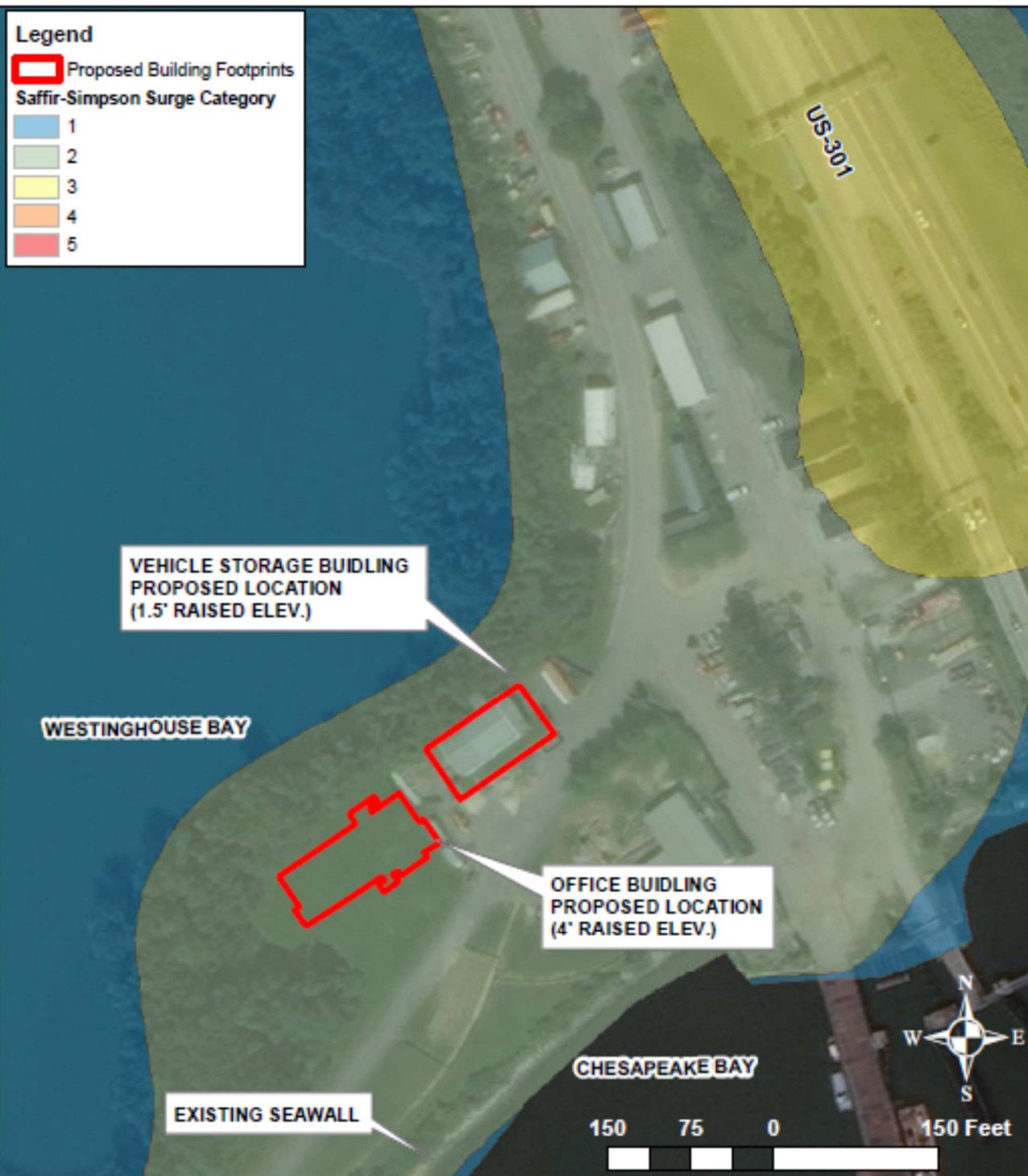
C. (3) Measures proposed to mitigate adverse effects of the project or program or an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

Mitigation is proposed for the Buffer disturbance of open grassed areas at 3:1 and for the tree clearing outside of the Buffer at 1:1. The mitigation will be planted nearby offsite to connect fragmented forested areas within the Buffer adjacent to tidal wetlands, which will provide a benefit to water quality and habitat. The proposed mitigation provides 16,800 square feet of credit, which provides mitigation for the Buffer disturbance and the tree clearing.

RECOMMENDATION

Staff recommends approval of this project with the following conditions:

1. Within 30 days of approval, MDTA shall revise the proposed planting plan to provide an additional 347 square feet of planting, for a total mitigation requirement of 17,147 sf of planting and submit the plan to Commission staff for review and approval. MDTA cannot use excess 10% credit to count towards 347 square feet of tree canopy mitigation.
2. Prior to the start of construction, the Maryland Transportation Authority shall provide a completed revised Planting Agreement form and copies of all final approvals, such as stormwater management plans and erosion and sediment control plans, to Commission staff.



USACE SLOSH Hurricane Surge Model

MDTA Tracking No. BB-3004

William Preston Lane Facility Maintenance & Office Building Replacement

Anne Arundel County, Maryland

November 2019

This data was prepared by the U.S. Army Corps of Engineers, Baltimore District, Planning Division in January 2016,