

**DEPARTMENT OF DEFENSE
UNITED STATES ARMY
DRAFT FINDING OF NO PRACTICABLE ALTERNATIVE
FOR THE COOPER AVENUE WIDENING PROJECT ON
FORT GEORGE G. MEADE, MARYLAND**

1.0 Introduction

Fort George G. Meade (FMMD) is approximately 5,108 acres in size and located in northwest Anne Arundel County, Maryland (MD), roughly halfway between Baltimore, Maryland, and Washington, D.C. FMMD is one of the largest employers in Maryland and supports numerous tenant organizations from all military services and several federal agencies.

Due to the significant increase in demand to meet FMMD's 21st century mission, vehicle traffic has increased and saturated the existing road infrastructure on FMMD. Road improvement projects have been undertaken in recent years to improve security and vehicle movement. Rockenbach Road, Reece Road and Mapes Road provide the main access to FMMD and run westward to intersect Cooper Avenue from their intersections with MD Route 175 to the east. Access gate and road improvements to Rockenbach and Mapes and the road improvements to MD Route 175 are recently complete and Reece is under construction. The Cooper Avenue Widening project would build on and connect those project improvements as part of the campus master plan.

To support mission requirements, the Department of the Army (Army) proposes to widen Cooper Avenue from Rockenbach Road to Mapes Road from two to four lanes; widen Rose Street to four lanes from Reece Road to Mapes Road; and, widen the segment of Reece Road from the point east of Rose Street, where the new four-lane road from the Reece Access Control Point (ACP) ends, to the new proposed roundabout at its intersection with Cooper Avenue (see **Figure 1**). The purpose of this action is to improve security and traffic flow at, and around, Fort Meade to alleviate existing and anticipated future traffic congestion with continued mission growth. The Proposed Action is necessary to meet current Anti-Terrorism Force Protection (ATFP) standards and improve traffic flow in and around the installation. Furthermore, without improvement, current infrastructure conditions will continue to deteriorate and will be inadequate to support the installation.

Floodplains and associated wetlands have been identified in the Proposed Action area. Executive Order (EO) 11988, *Floodplain Management*, requires federal agencies to determine whether a proposed action will occur within a floodplain and to avoid floodplains to the maximum extent possible when there is a practicable alternative. The 100-year floodplain is defined as an area adjacent to a water body that has a 1 percent or greater chance of inundation in any given year. EO 11990, *Protection of Wetlands*, requires that each federal agency, to the extent permitted by law, “shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.” The term “wetland” means “those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances

does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.”

This draft finding was made available for public review and comment for 15 days. It was published in the *Capital Gazette* on May 30, 2023. No comments [or # of comments] were received in the 15-day review period. [description of comments, if received]

This draft finding incorporates the analysis and conclusions of the 2017 *Environmental Assessment for Proposed Road Improvements at U.S. Army Garrison, Fort George G. Meade, Maryland* (FMMD, 2017) and, as verified in the Record of Environmental Consideration (REC) dated 20 April 2023.

2.0 Proposed Action

The Proposed Action would widen Cooper Avenue from Rockenbach Road to Mapes Road from two to four lanes; widen Rose Street to four lanes from Reece Road to Mapes Road; and, widen the segment of Reece Road from east of Rose Street, where the new four-lane road from the Reece ACP ends, to the new proposed roundabout at Cooper Avenue and Reece Road. This action would facilitate improved traffic flow for the main entrance to the Defense Intelligence Support Agency (DISA) headquarters. The project would include two through lanes in each direction with dedicated turn lanes at each major intersection. Drainage systems, stormwater management, and erosion and sediment control design are also included as part of the Proposed Action. The reconstruction of Cooper Avenue also necessitates relocation of a utility duct bank. This relocation would run parallel to Cooper Avenue from Mapes Road to Rockenbach Road, and then parallel to Rockenbach both east and west to connect to existing manholes.

The Proposed Action was initiated based on findings of the *2016 Fort Meade Base-Wide Traffic & Safety Engineering Study and Plan* prepared by Gannett Fleming and meets federal and state standards for highway design.

The construction site surface consists primarily of existing roads of asphalt paving and existing concrete sidewalks. With the widening and minor realignment, areas consisting of adjacent strips of grass, woods and impervious surfaces are included. Significant portions of the existing road paving would be retained and resurfaced where feasible.

The Proposed Action would permanently impact approximately 4,375 square feet of nontidal forested wetlands regulated by the United States Army Corps of Engineers (USACE) and the Maryland Department of the Environment (MDE) and 5,808 square feet of MDE-regulated nontidal wetland buffer at the intersection of Cooper Avenue and Rockenbach Road. No temporary wetland impacts would be anticipated.

Additionally, the Proposed Action would require approximately 869 square feet of permanent stream impacts to Midway Branch at Cooper Avenue and Rockenbach Road, as well as 61,099 square feet of permanent impacts and 903 square feet of temporary impacts (62,002 square feet total) to the 100-year floodplains of Midway and Franklin Branches. The impacts described in these two paragraphs have been authorized by MDE through a Letter of Authorization (LOA) #202261174/22-NT-0167, dated 25 January 2023.

Pursuant to EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input* (2015), which amended the floodplain definition of EO 13807, this FONPA also considers impacts to the 500-year floodplain as a result of the Proposed Action. This amounts to approximately 2,400 square feet of permanent impacts to the 500-year floodplain of Franklin Branch (see inset of **Figure 2** for the impacts associated with the Rose Street widening).

3.0 Impacts and Mitigation Measures

3.1 100-Year and 500-Year Floodplains

EO 11988 states if the only practicable alternative requires siting in a floodplain, the agency shall, prior to taking action, design or modify its action to minimize potential harm to or within the floodplain.

The intersection of Cooper Avenue and Rockenbach Road is constrained by both natural resources and existing development. Midway Branch, a perennial stream running primarily north to south through FMMD, crosses under the intersection in a multi-barreled culvert system. An unnamed tributary with associated floodplain wetlands flows east to west within the Proposed Action area, passing under Cooper Avenue and intersecting with Midway Branch southwest of the roadway intersection. Forests bound the roadways and include protected forest conservation areas.

Two residential developments east of Cooper Avenue and immediately adjacent to the project area, Potomac Place and Reece Crossing, are on parcels leased to a private firm to operate installation family housing. The lease agreements impose restrictions on the construction activities that can be performed on the parcels. These lease restrictions act as restraints to the proposed design (WRA 2022). The DISA headquarters complex, completed in 2011, is located along the west side of Cooper Avenue from just north of the Mapes Road intersection to approximately 1,500 feet north of the Reece Road intersection. North of DISA, the terrain is heavily wooded along the west edge of Cooper Avenue and a designated forest conservation area.

Natural and man-made constraints at the Cooper/Rockenbach intersection, as described above, severely limit opportunities to shift the road alignment to completely avoid floodplain and wetland impacts. Any shift of the intersection east or west would still result in floodplain impacts because of the stream alignment. Improvements to the intersections described in the Proposed Action are vital since these roads are part of the main arterial network that provides access across FMMD and connect to roadway improvements already under construction.

Natural features within the project site will be conserved to the maximum extent practicable. The construction Limit of Disturbance (LOD) has been minimized as much as practical to implement the road improvements while meeting applicable roadway design criteria and MDE permitting requirements. The proposed road alignment follows the existing road alignment, maximizing the re-use of existing paved areas, albeit with a wider footprint.

Implementation of the Proposed Action would result in the Army permanently impacting approximately 61,099 square feet and temporarily impacting approximately 903 square feet of the 100-year floodplain of the Midway and Franklin Branches, and permanently impact approximately

2,400 square feet of the 500-year floodplain of Franklin Branch.

Under the Proposed Action, the Army would implement best management practices (BMPs) and low-impact-development (LID) measures to reduce the potential for adverse impacts on the floodplain. BMPs and LID measures are incorporated into the Proposed Action to avoid or minimize impacts on floodplains and are collectively described, as follows:

- Adhere to appropriate permits (or letters of exemption) from the MDE and USACE to comply with Sections 404/401 of the CWA and comply with all BMPs established throughout this consultation process. Letter of Authorization Number 202261174/22-NT-0167 was issued 25 January 2023 and contains conditions of authorization incorporated herein.
- Obtain a *Maryland General Permit for Stormwater Associated with Construction Activity* to manage stormwater associated with construction of the Proposed Action. FMMD would prepare and adhere to a state-approved Erosion and Sediment Control Plan and submit a Notice of Intent to meet the requirements of the federal National Pollutant Discharge Elimination System program. FMMD would also manage stormwater discharges and maintain water quality through compliance with existing total maximum daily loads.
- Comply with Maryland Tier II Antidegradation Review policies.
- Comply with Maryland's Erosion and Sediment Control Regulations, Stormwater Management Regulations, the Maryland Stormwater Management and Erosion & Sediment Control Guidelines for State and Federal Projects and associated technical memoranda.
- Incorporate, as required by Section 438 of the Energy Independence and Security Act, green infrastructure or low impact development measures to maintain the pre-development hydrology of the Project Site to the maximum extent technically feasible during operation, minimizing any change in the rate, volume, and temperature of stormwater discharging to off-site areas.
- Incorporate, as required by EO 13508, stormwater control BMPs to manage and reduce pollution flowing from the Project Site into the Chesapeake Bay and its tributaries.
- Demarcate the construction LOD in the field to prevent encroachment on unpermitted surface water resources.
- Establish construction staging areas at least 100 feet away from surface water resources.
- If excavating below the groundwater table, incorporate measures that minimize potential impacts to local shallow groundwater, including dewatering these areas, preventing discharge of any water potentially contaminated during the construction/demolition process, and restoring sites to natural subsurface conditions prior to construction.
- The above steps would be implemented as "mitigation by design" and are a proactive means of minimizing environmental impacts.

Taken together, these and other yet to be determined BMPs and mitigation measures would avoid or minimize the loss of, and impacts on, floodplains within the Proposed Action location. These

measures represent all practicable measures to minimize harm to floodplains.

The No Action Alternative, which would leave Cooper Avenue, Reece Road and Rose Street in their existing configurations, was carried forward for analysis in the Roads EA in accordance with National Environmental Policy Act (NEPA) requirements to provide a baseline against which impacts of the Proposed Action could be measured. Because it does not meet the purpose of and need for the Proposed Action, this alternative is not “practicable” within the meaning of EO 11990.

3.2 Wetlands

EO 11990 states that if the only practicable alternative requires siting in a wetland, the agency shall, prior to taking action, design or modify its action to minimize potential harm to or within the wetland.

Implementation of the Proposed Action would result in the Army permanently impacting approximately 4,375 square feet of nontidal forested wetlands regulated by USACE and MDE and 5,808 square feet of MDE-regulated nontidal wetland buffer at the intersection of Cooper Avenue and Rockenbach Road. No temporary wetland impacts would be anticipated. As the Proposed Action would impact less than 5,000 square feet of nontidal wetlands, mitigation was not required under the aforementioned Letter of Authorization from MDE.

Under the Proposed Action, the Army would implement best management practices (BMPs) and low-impact development (LID) measures to reduce the potential for adverse impacts on the wetlands. BMPs and LID measures are incorporated into the Proposed Action to avoid and minimize impacts on wetlands and are collectively described in Section 3.1.

Taken together, these and other yet to be determined BMPs and mitigation measures would avoid or minimize loss and impacts within floodplains and wetlands within the Proposed Action area on Fort Meade. These measures represent all practicable measures to minimize harm to wetlands.

4.0 Finding of No Practicable Alternative

During development of the Proposed Action, the Fort Meade Environmental Office worked proactively to ensure the purpose and need of the Proposed Action was met while also avoiding as many potential impacts to floodplains and wetlands as practicable. Due to operational requirements and site constraints, it was determined that complete avoidance of floodplains and wetlands was not feasible; however, the Proposed Action minimizes potential impacts to the greatest degree practicable while also achieving the required results.

Accordingly, I find there is no practicable alternative to siting the Proposed Action entirely outside of the floodplains and/or wetlands; however, the Army will ensure that all practicable measures to minimize impacts are incorporated into the Proposed Action.

Date

Deputy Assistant Secretary of the Army
Installations, Housing, and Partnerships

Attachments:

Figure 1. Cooper Avenue Widening Project Location

Figure 2. Wetlands and Floodplains within the Limits of Disturbance (LOD)

MDE Authorization Number 202261174/22-NT-0167 (January 25, 2023)

References:

EO 11988, *Floodplain Management*

EO, 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*

EO 11990, *Protection of Wetlands*

WRA 2022 Cooper Avenue Road Widening, Fort George G. Meade, MD, 95% Final Design Analysis, Whitman Requardt & Associates, LLP's (WRA), 2022.

FMMD 2017 Final Environmental Assessment, Proposed Road Improvements at U.S. Army Garrison, Fort George G. Meade, MD, November 2017.

Attachments

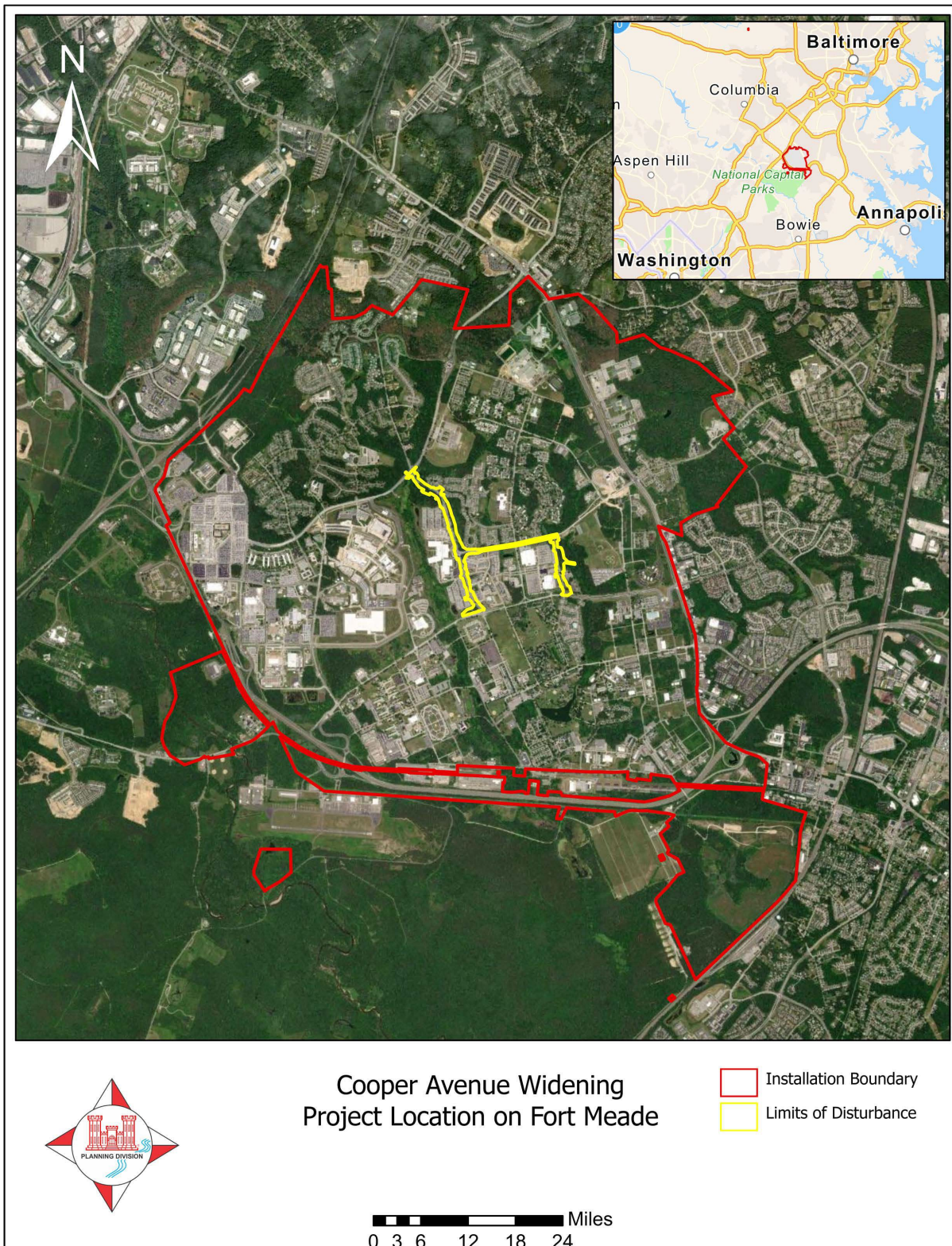


Figure 1: Cooper Avenue Widening Project Location

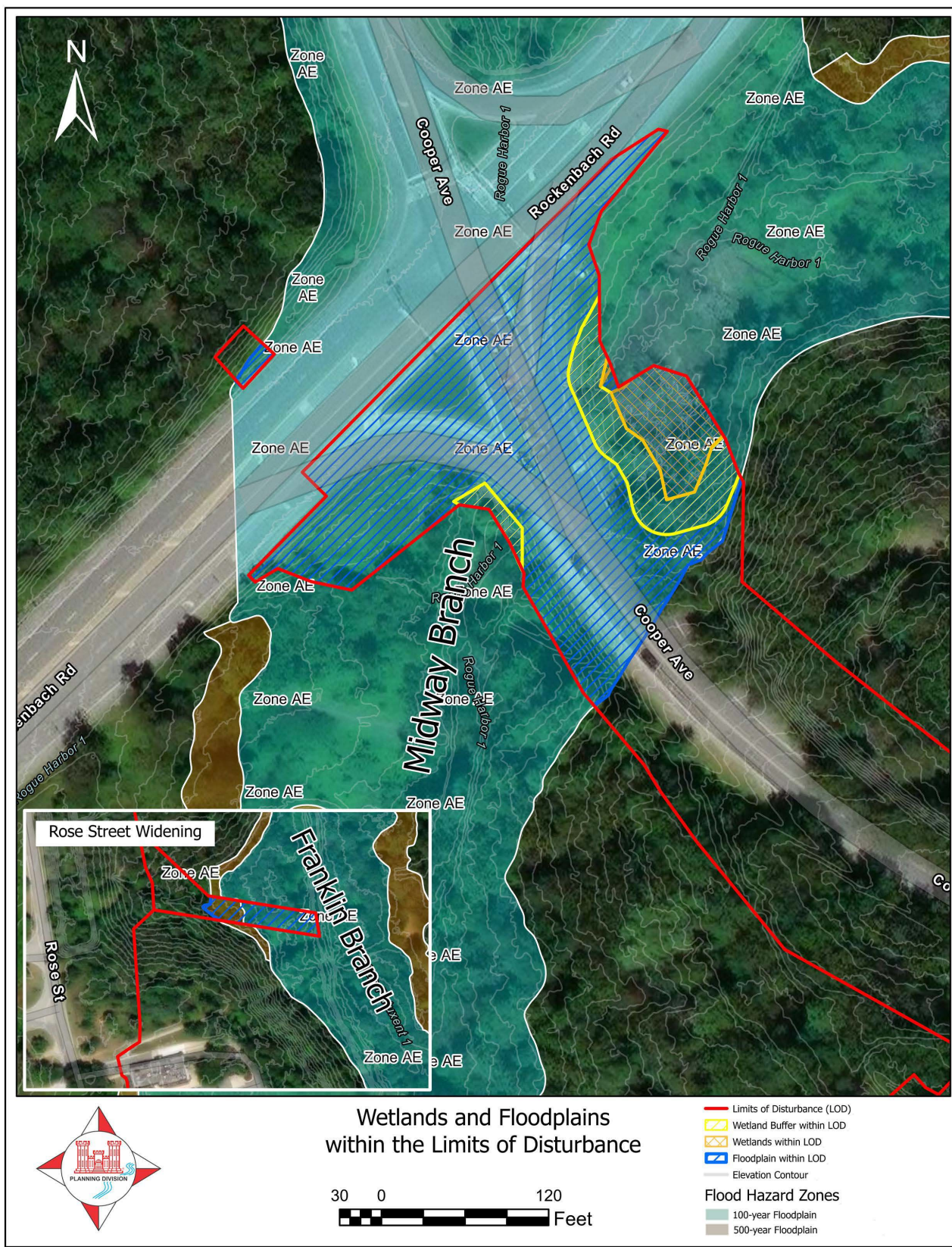


Figure 2: Wetlands and Floodplains within the Limits of Disturbance (LOD)

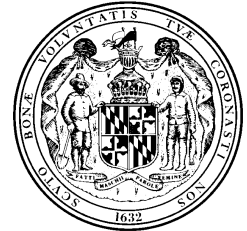
STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION
WETLANDS AND WATERWAYS PROTECTION PROGRAM
LETTER OF AUTHORIZATION

AUTHORIZATION NUMBER: 202261174/22-NT-0167

EFFECTIVE DATE: January 25, 2023

EXPIRATION DATE: January 25, 2028

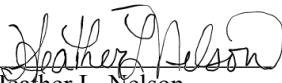
AUTHORIZED PERSON: Fort George G. Meade
Directorate of Public Works
4216 Roberts Avenue - STE 5115
Fort George G. Meade, MD 20755
Attn: Raymond W. Walker



IN ACCORDANCE WITH ENVIRONMENT ARTICLE §5-503(a) AND §5-906(b), ANNOTATED CODE OF MARYLAND (2007 REPLACEMENT VOLUME), COMAR 26.17.04 AND 26.23.01, AND 26.08.02 AND THE ATTACHED CONDITIONS OF AUTHORIZATIONS, **Fort George G. Meade** ("AUTHORIZED PERSON"), IS HEREBY AUTHORIZED BY THE WATER AND SCIENCE ADMINISTRATION ("ADMINISTRATION") TO CONDUCT A REGULATED ACTIVITY IN A NONTIDAL WETLAND, BUFFER, OR EXPANDED BUFFER, AND/OR TO CHANGE THE COURSE, CURRENT OR CROSS-SECTION OF WATERS OF THE STATE, IN ACCORDANCE WITH THE ATTACHED PLANS APPROVED BY THE ADMINISTRATION ON **January 25, 2023** ("APPROVED PLAN") AND PREPARED BY **Whitman, Requardt & Associates LLP** AND INCORPORATED HEREIN, AS DESCRIBED BELOW:

Regulated activities associated with the widening of COoper Avenue for dualization purposes from Mapes Road to Rockenbach Road; Reece Road from Cooper Avenue to MacArthur Road; and Rose Street from Mapes Road to Reece Road. The project also includes the design of a roundabout at the existing signalized Cooper Avenue and Reece Road intersection and the relocation of communications lines along Rockenbach Road. The project temporarily impacts 903 square feet of 100-year nontidal floodplain. The project permanently impacts 78 linear feet (869 square feet) of stream, 4,375 square feet of forested wetland, 5,808 square feet of wetland buffer, and 61,099 square feet of 100-year nontidal floodplain. The project is located on Route 174 Reece Road just after the Franklin Branch crossing on Fort Meade, Anne Arundel County.

MD Grid Coordinates 160718 x 421655


Heather L. Nelson
Program Manager
Wetlands and Waterways Protection Program

Attachments: Conditions of Authorization

cc: WSA Compliance Division w/ file
U.S. Army Corps of Engineers

THE FOLLOWING CONDITIONS OF AUTHORIZATION APPLY TO ALL ACTIVITIES AUTHORIZED BY
AUTHORIZATION NUMBER 202261174/22-NT-0167

Page 2 of 4

1. **Validity:** Authorization is valid only for use by Authorized Person. Authorization may be transferred only with prior written approval of the Administration. In the event of transfer, transferee agrees to comply with all terms and conditions of Authorization.
2. **Initiation of Work, Modifications and Extension of Term:** Authorized Person shall initiate authorized activities with two (2) years of the Effective Date of this Authorization or the Authorization shall expire. Authorized Person may submit written requests to the Administration for (a) extension of the period for initiation of work, (b) modification of Authorization, including the Approved Plan, or, (c) not later than 45 days prior to Expiration Date, an extension of the term. Requests for modification shall be in accordance with applicable regulations and shall state reasons for changes, and shall indicate the impacts on nontidal wetlands, streams, and the floodplain, as applicable. The Administration may grant a request at its sole discretion.
3. **Responsibility and Compliance:** Authorized Person is fully responsible for all work performed and activities authorized by this Authorization shall be performed in compliance with this Authorization and Approved Plan. Authorized Person agrees that a copy of the Authorization and Approved Plan shall be kept at the construction site and provided to its employees, agents and contractors. A person (including Authorized Person, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Authorization, Approved Plan or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Department of the Environment Article, Annotated Code of Maryland (2007 Replacement Volume).
4. **Failure to Comply:** If Authorized Person, its employees, agents or contractors fail to comply with this Authorization or Approved Plan, the Administration may, in its discretion, issue an administrative order requiring Authorized Person, its employees, agents and contractors to cease and desist any activities which violate this Authorization, or the Administration may take any other enforcement action available to it by law, including filing civil or criminal charges.
5. **Suspension or Revocation:** Authorization may be suspended or revoked by the Administration, after notice of opportunity for a hearing, if Authorized Person: (a) submits false or inaccurate information in Permit application or subsequently required submittals; (b) deviates from the Approved Plan, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Authorization; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Administration to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Administration; or (g) does not have vested rights under this Authorization and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.
6. **Other Approvals:** Authorization does not authorize any injury to private property, any invasion of rights, or any infringement of federal, State or local laws or regulations, nor does it obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
7. **Site Access:** Authorized Person shall allow authorized representatives of the Administration access to the site of authorized activities during normal business hours to conduct inspections and evaluations necessary to assure compliance with this Authorization. Authorized Person shall provide necessary assistance to effectively and safely conduct such inspections and evaluations.
8. **Inspection Notification:** Authorized Person shall notify the Administration's Compliance Program at least five (5) days before starting authorized activities and five (5) days after completion. For Allegany, Garrett, and Washington counties, Authorized Person shall call 301-689-1480. For Carroll, Frederick, Howard, Montgomery, and Prince George's counties, Authorized Person shall call 301-665-2850. For Baltimore City, Anne Arundel, Baltimore, Calvert, Charles, and St. Mary's, Authorized Person shall call 410-537-3510. For Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester, Authorized Person shall call 410-901-4020. If Authorization is for a project that is part of a mining site, please contact the Land and Materials Administration's Mining Program at 410-537-3557 at least five (5) days before starting authorized activities and five (5) days after completion.
9. **Sediment Control:** Authorized Person shall obtain approval from the Anne Arundel Soil Conservation District for a grading and sediment control plan specifying soil erosion control measures. The approved grading and sediment control plan shall be included in the Approved Plan, and shall be available at the construction site.
10. **Best Management Practices During Construction:** Authorized Person, its employees, agents and contractors shall conduct authorized activities in a manner consistent with the Best Management Practices specified by the Administration.
11. **Disposal of Excess:** Unless otherwise shown on the Approved Plan, all excess fill, spoil material, debris, and construction material shall be disposed of outside of nontidal wetlands, nontidal wetlands buffers, and the 100-year floodplain, and in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands.

12. **Temporary Staging Areas:** Temporary construction trailers or structures, staging areas and stockpiles shall not be located within nontidal wetlands, nontidal wetlands buffers, or the 100-year floodplain unless specifically included on the Approved Plan.
13. **Temporary Stream Access Crossings:** Temporary stream access crossings shall not be constructed or utilized unless shown on the Approved Plan. If temporary stream access crossings are determined necessary prior to initiation of work or at any time during construction, Authorized Person, its employees, agents or contractors shall submit a written request to the Administration and secure the necessary permits or approvals for such crossings before installation of the crossings. Temporary stream access crossings shall be removed and the disturbance stabilized prior to completion of authorized activity or within one (1) year of installation.
14. **Discharge:** Runoff or accumulated water containing sediment or other suspended materials shall not be discharged into waters of the State unless treated by an approved sediment control device or structure.
15. **Instream Construction Prohibition:**
 - ☐ No instream construction is to occur under this Authorization;
 - ☒ To protect important aquatic species, motor driven construction equipment shall not be allowed within stream channels unless on authorized ford crossings. Activities within stream channels are prohibited as determined by the classification of the stream (COMAR 26.08.02.08): Midway Branch is a Use I waterway; in-stream work may not be conducted from March 1st through June 15th inclusive, of any year.
16. **Instream Blasting:** Authorized Person shall obtain prior written approval from the Administration before blasting or using explosives in the stream channel.
17. **Minimum Disturbance:** Any disturbance of stream banks, channel bottom, wetlands, and wetlands buffer authorized by this Authorization or Approved Plan shall be the minimum necessary to conduct permitted activities. All disturbed areas shall be stabilized vegetatively no later than seven (7) days after construction is completed or in accordance with the approved grading or sediment and erosion control plan.
18. **Restoration of Construction Site:** Authorized Person shall restore the construction site upon completion of authorized activities. Undercutting, meandering or degradation of the stream banks or channel bottom, any deposition of sediment or other materials, and any alteration of wetland vegetation, soils, or hydrology, resulting directly or indirectly from construction or authorized activities, shall be corrected by Authorized Person as directed by the Administration.

FEDERALLY MANDATED STATE AUTHORIZATIONS

The State of Maryland issued a Water Quality Certification to the U.S. Army Corps of Engineers for projects receiving federal authorization under the Maryland State Programmatic General Permit, Regional General Permit for Chesapeake Bay Total Maximum Daily Load (TMDL) Activities and non-suspended Nationwide Permits. In addition, as applicable, this Authorization constitutes the State's concurrence with the Applicant's certification that the activities authorized herein are consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. Activities in the following counties are not subject to the Maryland Coastal Zone Management requirement: Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington.

U.S. ARMY CORPS OF ENGINEERS AUTHORIZATION

The U.S. Army Corps of Engineers has reviewed this activity and has granted authorization under the Maryland State Programmatic General Permit (MDSPGP-6), as a Category A activity d Linear Transportation Activities. The terms and conditions of the MDSPGP-6, as outlined on the Maryland Department of the Environment website:
https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/MDSPGP6_conditions.aspx; should be followed when performing the authorized work.

**BEST MANAGEMENT PRACTICES FOR WORKING IN
NONTIDAL WETLANDS, WETLAND BUFFERS,
WATERWAYS AND 100-YEAR FLOODPLAINS**

- 1) No excess fill, construction material, or debris shall be stockpiled or stored in nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 2) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 3) Do not use the excavated material as backfill if it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. If additional backfill is required, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance.
- 4) Place heavy equipment on mats or suitably operate the equipment to prevent damage to nontidal wetlands, nontidal wetland buffers, waterways, or the 100-year floodplain.
- 5) Repair and maintain any serviceable structure or fill so there is no permanent loss of nontidal wetlands, nontidal wetland buffers, or waterways, or permanent modification of the 100-year floodplain in excess of that lost under the originally authorized structure or fill.
- 6) Rectify any nontidal wetlands, wetland buffers, waterways, or 100-year floodplain temporarily impacted by any construction.
- 7) All stabilization in the nontidal wetland and nontidal wetland buffer shall consist of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Hordeum sp.), Oats (Uniola sp.), and/or Rye (Secale cereale). These species will allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other non-persistent vegetation may be acceptable, but must be approved by the Nontidal Wetlands and Waterways Division. **Kentucky 31 fescue shall not be utilized in wetland or buffer areas.** The area should be seeded and mulched to reduce erosion after construction activities have been completed.
- 8) After installation has been completed, make post-construction grades and elevations the same as the original grades and elevations in temporarily impacted areas.
- 9) To protect aquatic species, in-stream work is prohibited as determined by the classification of the stream:

Use I waters: In-stream work shall not be conducted during the period March 1 through June 15, inclusive, during any year.

Use III waters: In-stream work shall not be conducted during the period October 1 through April 30, inclusive, during any year.

Use IV waters: In-stream work shall not be conducted during the period March 1 through May 31, inclusive, during any year.

- 10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway. Culverts shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species, unless the purpose of the activity is to impound water.