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AGENDA
King George County Wetlands Board
May 22nd, 2025, 6:30PM

CALL TO ORDER

APPROVAL OF MINUTES

- November 20th, 2024

PUBLIC COMMENT

- Comments will be limited to three minutes per person, to afford everyone an opportunity to speak. If comments relate to a specific public hearing item, we ask that you offer those comments at the time of the public hearing.

PUBLIC HEARINGS

- **VMRC Permit Application #2024-1141 and JPA Z-2025-00929**: Request by Farly Vale LLC Applicant proposes to perform maintenance on a dock structure for the purpose of bringing it back into service with the same specifications and footprint as the originally permitted design. The repair of the existing boat slip is to facilitate ingress and egress of private vessels. Note that the applicant no longer proposes to perform any dredging at this time. Information gathered from Application Letter for Hearing by Wetlands Board dated 3/31/25. The property is located on the Rappahannock River at 12475 Farley Vale Drive, Tax Map: 22, Parcel: 49A, King George, VA 22485.

OLD BUSINESS

- Vote to accept or amend by-laws

NEW BUSINESS

- FOIA Training webinar required within 90 days of notice for all board members. Please send confirmation of completion to our office by July 30, 2025

ADJOURNMENT

Groundwater & Environmental Services, Inc.

571 Southlake Boulevard
Midlothian, VA 23236

T. 866.222.7786

March 31, 2025

Via e-mail: Ltuthill@co.kinggeorge.state.va.us

Ms. Lucie Tuthill
Planner, Community Development
King George County
10459 Courthouse Drive, Suite 104
King George, Virginia 22485

Re: Application for Public Hearing by King George County Wetlands Board
Farley Vale, LLC.
Proposed Pier Maintenance (NAO-2024-01343 / 24-V1141)
12475 Farley Vale Drive
King George, Virginia

Dear Ms. Tuthill:

On behalf of our client, Farley Vale, LLC. (Client), Groundwater & Environmental Services, Inc. (GES) submits this letter as an application for public hearing of the above referenced project before the King George County Wetlands Board. This letter is intended to fulfill the requirements of Section 1-2-1 of Division 2 of the King George County Wetlands and Stormwater Ordinances, "Application Requirements."

Our client's Joint Permit Application, attached and dated May 10, 2024 with revisions, contains the following required information:

Name and address of the applicant.

PDF document page 24, Appendix A, Section 1.

Detailed description of proposed activities.

PDF document page 26, Appendix A, Section 3. Note that our client no longer proposes to perform any dredging at this time.

A map, drawn to an appropriate and uniform scale, showing the area of wetlands directly affected, the location of proposed work thereon, the area of existing and proposed fill and excavation, the location width, depth, and length of any proposed channel and disposal area, and the location of all existing and proposed structures, sewage collection and

treatment facilities, utility installations, roadways, and other related appurtenances or facilities, including those on adjacent uplands.

All figures containing all applicable items required in this section are found from PDF document pages 42 through 46, Appendix B.

A statement indicating whether use of a living shoreline for a shoreline management practice is not suitable, including reasons for the determination.

The consideration of a living shoreline practice is not applicable for this project. As explained on PDF document pages 12 through 14, Avoidance and Minimization and Compensatory Mitigation, the activities required to complete this work will result in no changes in classification or loss of Waters of the U.S. or jurisdictional wetlands.

A description of the type of equipment to be used and the means of equipment access to the activity site.

The project site will be accessed using the existing private access roads on the property as explained on PDF document page 12, Avoidance and Minimization.

The names and addresses of owners of record of adjacent land and known claimants of water rights in or adjacent to the wetland of whom the applicant has notice.

The project site is surrounded on all sides by the Rappahannock River or property owned by the applicant. The waterway is greater than 500-feet in width at the project site; however, the property owner name and address across the waterway from the site is provided on PDF document page 44, Appendix B, Figure 2. VMRC has already provided notice to riparian landowners.

There are no known competing claimants of water rights in or adjacent to the wetlands at the project site. The wetlands in question are on property owned by the applicant.

An estimate of cost, the primary purpose of the project, any secondary purposes of the project, including further projects, the public benefit to be derived from the proposed project.

An estimate of cost is provided on PDF document page 27, Appendix A, Section 4. Primary and secondary purposes and public benefit of the project are described in PDF document pages 11 and 15, Purpose and Need and Alternative Site Analysis.

A complete description of measures to be taken during and after the alteration to reduce detrimental offsite effects.

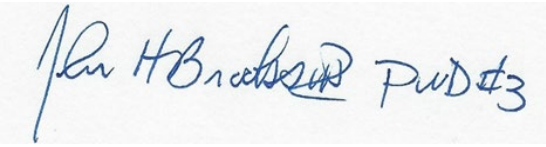
PDF document pages 12-13, 16-18, 19, and 20, Avoidance and Minimization, Threatened and Endangered Species, Cultural and Historic Resources, and Erosion and Sediment Control Plan, as well as Appendix A, Joint Permit Application and associated documents.

The completion date of the proposed work, project or structure.

PDF document page 26, Appendix A, Section 3. This work is not yet complete.

If you have any questions, you are welcome to contact me at 804-332-3063 or jbrooks@gesonline.com.

Sincerely,
Groundwater & Environmental Services, Inc.



John H. Brooks, III, PWD
Director – Ecological Services
Professional Wetland Delineator No. 003

Joshua Walker
Project Environmental Scientist

CC: Mr. Daniel Jacobs, Farley Vale, LLC (with Enclosures)
Ms. Kylie Harris, Virginia Marine Resources Commission (with Enclosures)

Attachments:
Farley Vale, LLC, Nationwide Permit #3 and #35 Application Package – May 10, 2024, revised

Groundwater & Environmental Services, Inc.

571 Southlake Boulevard
Midlothian, VA 23236

T. 866.222.7786

May 10, 2024

Via e-mail: emily.a.brooks@usace.army.mil

Ms. Emily Brooks
U.S. Army Corps of Engineers
Norfolk District Office
803 Front Street
Norfolk, Virginia 23510

Re: Nationwide Permit (NWP) #3 and #5 Application
Farley Vale, LLC.
Proposed Dock Repair and Maintenance Dredging
Farley Vale Drive
King George County, Virginia

Dear Ms. Brooks:

On behalf of Farley Vale, LLC. (Client), enclosed is an application for Nationwide Permits #3 and #35 from the U.S. Army Corps of Engineers (USACE), Virginia Department of Environmental Quality (DEQ), and the Virginia Marine Resources Commission (VMRC).

Our client proposes to perform maintenance on an existing dock structure, which has fallen into disrepair, and to maintenance dredge the areas around the dock and an existing boat slip to facilitate ingress and egress of vessels. Both activities are proposed to occur on a parcel owned by the Client or in state owned bottomland adjacent to the facilities. The proposed project is located off of Kings Highway and Farley Vale Drive in King George County, Virginia. The site was chosen due to the existing infrastructure, and the need for transport goods into and out of the property utilizing the Rappahannock River.

Due to the constraining conditions and requirements to provide sufficient access for barges and other vessels, which may draft between 14 and 16 feet under load, approximately 5.37 acres (233,837 square feet) of permanent impacts to Section 10 waters are unavoidable.

If you have any questions, you are welcome to contact me at 804-332-3063 or jbrooks@gesonline.com.

Sincerely,
Groundwater & Environmental Services, Inc.

John H. Brooks, III, PWD
Director – Ecological Services
Professional Wetland Delineator No. 003

Joshua Walker
Project Environmental Scientist

CC: Ms. Sarah Sivers, VDEQ, Northern Virginia Regional Office (with Enclosures)
Ms. Beth Howell, VMRC -Habitat Division (with Enclosures)

Farley Vale, LLC.

Nationwide Permit #3 and #35 Application Package

12475 Farley Vale Drive
King George County, Virginia

May, 2024

Nationwide Permit #3 and #35 Application Package

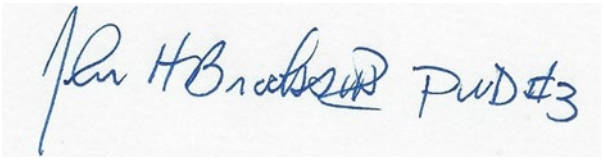
12475 Farley Vale Drive
King George, Virginia 22485

Prepared for:
Farley Vale, LLC
Mr. Daniel R. Jacobs
3090 McNeal Road
Woodbine, Maryland 21797

Prepared by:
Groundwater & Environmental Services, Inc.
571 Southlake Boulevard
Richmond, Virginia 23236
TEL: 804-332-3063
www.gesonline.com

GES Project:
1202757

Date:
May 10, 2024



John H. Brooks, III, PWD
Director – Ecological Services
Professional Wetland Delineator No. 003

Joshua Walker
Project Environmental Scientist

Table of Contents

Appendices

1 Executive Summary

1.1 Purpose and Need

Farley Vale, LLC. (Client), is applying for authorization under Nationwide Permit (NWP) #3 to rehabilitate a previously permitted dock structure, and authorization under NWP #35 to maintenance dredge the area adjacent to the dock and within an associated inlet/slip on property owned by the Client and within State owned bottomlands. The work will be performed in accordance with the originally permitted construction and dredge specifications and dimensions. The proposed project area is an approximately 15.75-acre portion in the south-east corner of the parcel owned by the Client (Project Area). The proposed project area is off of Kings Highway (VA-3) in King George County, Virginia.

The property containing the proposed project area is approximately 480-acres in area and is zoned for agricultural and industrial use, and is currently under a mine permit (Virginia Department of Energy Mine Permit #05670AD). The area of the property containing the project area is zoned for industrial use, and is not under a conservation easement or deed of restrictions that limits the development of the property as currently zoned. A small portion of the property has been developed for residential use, and two unimproved private access roads are present to facilitate access to various portions of the property from Kings Highway. The dock and inlet were originally permitted and constructed in the early 1980's by the Solite Corporation, which leased and operated a sand and gravel mining facility on most of the property. The dock and inlet structures were built for private use for the purpose of loading and unloading equipment and sand/gravel products and to facilitate transport of goods using the Rappahannock River.

The proposed repair and rehabilitation of the dock and inlet will restore infrastructure to a more usable state and allow for the continued transport of materials and equipment to and from the site via water. Access to the Rappahannock River provides an efficient and economical transport method to potential future uses of the property during mining and future reclamation activities.

1.2 Avoidance and Minimization

The site possesses the necessary existing infrastructure and acreage to accommodate the proposed project with minimal environmental impact. Impacts to jurisdictional features were avoided and minimized to the maximum extent practicable by incorporating resourceful site planning, where an updated delineation of waters of the United States (to include tidal and non-tidal wetlands) was used to minimize the extent of impacts, while keeping the impacts within the existing footprint of previously permitted activities.

Adequate access to this property can be provided only from Kings Highway, which is the closest and only constructed public road intersecting with the private roads leading to the proposed project area. It is neither practical nor feasible to provide access from any other location due to the nature of the proposed project area and existing facility. Utility infrastructure such as potable water and sanitary sewer are not required for the proposed project, and therefore installation is not necessary and will not contribute to additional impacts.

Impacts were minimized by limiting the footprint of the replacement dock to exactly those dimensions permitted in the original design. Dredging of the inlet channel will be conducted using hydraulic or mechanical dredging methods in such a manner that the depth of the channel bottom will create areas of isolated deep pockets, and will provide for and facilitate ingress and egress of large floating vessels (tugs and barges). Dredged material will be deposited within the currently permitted mined areas in a bermed, upland, non-wetland mined area with no outlet to the Rappahannock River or other waters/wetlands. Dredged material will be used for the purpose of land reclamation.

Due to the nature of the proposed work and in order to fulfill the goals of this project, approximately 233,837 square feet (5.37-acres) of permanent impacts resulting from dredging are unavoidable. See **Figures 1 through 5** for a detailed view of the proposed site plan. The temporary impacts are necessary for maintenance of a dock on the Rappahannock River to repair the dock to the same specifications and dimensions as originally permitted. Impact areas 1 and 2 are permanent impacts necessary in order to complete maintenance dredging adjacent to the dock area and an inlet channel to adequately facilitate ingress and egress of barges and tugs.

The project will result in unavoidable permanent impacts to approximately 5.37-acres (233,837 square feet) of tidal river bottom, which meets the intent of the least environmentally damaging alternative. These permanent impacts are due to proposed maintenance dredging activities, where the proposed impacts will result in no changes in classification or loss of jurisdictional waters. Furthermore, both areas have been permitted for dredging and were dredged previously. See **Figures 2 through 5** for a detailed view of proposed impact areas.

The properties/project area are not under a conservation easement or deed of restriction that limits the development of the property as currently zoned.

To avoid unnecessary unintended impacts to anadromous fish waters, all work will be conducted during the time period from July 1 through February 14.

The proposed work will not result in an increase of contamination in shellfish waters of fecal coliform bacteria, radionuclides, pesticides, or herbicides.

The proposed project area does not overlap any known submerged aquatic vegetation (SAV) waters based on 2022 survey data and 2018-2022 composite data as mapped by the Virginia Institute of Marine Science.

1.3 Alternative Site Analysis

Two alternatives were considered as a part of the proposed project: (1) the no-build; (2) development of the preferred alternative as described in the attached narratives.

The first alternative would mean that without maintenance the existing infrastructure and previously permitted infrastructure would continue to deteriorate and would remain unsuitable for use and intended purpose. The Client's need to continue to mine and reclaim the site would continue to be unsatisfied due to lack of access to water-based transport. The County would lose any potential benefit from increases in tax revenue such as from property taxes and income taxes.

Likewise, the Client would lose the opportunity for potential business in an area already designated for industrial use.

The proposed site has been selected because it will cause the least amount of environmental impact and possesses: the correct industrial zoning; close proximity to the necessary infrastructure; and existing features to accommodate the project, while minimizing environmental impact. Therefore, the proposed project is the least environmentally damaging preferred alternative.

1.4 Threatened and Endangered Species

On January 10, 2024, the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database tool was accessed to search for threatened and/or endangered species in the vicinity of the proposed project. Requests for project review were also sent to the Virginia Department of Conservation and Recreation (VDCR) and the Virginia Department of Wildlife Resources (VDWR). See **Appendix D** for complete details regarding assessment for potential sensitive, rare, threatened, and endangered species.

1.4.1 U.S. Fish and Wildlife Service

USFWS issued a determination that the proposed project is not reasonably certain to cause incidental take of the northern long-eared bat, tricolored bat, monarch butterfly, or the sensitive joint-vetch. No project activities will occur until Endangered Species Act (ESA) consultation between the USFWS and the USACE is completed. No known or mapped hibernacula or maternity roost sites are located in the vicinity of the project.

1.4.2 Virginia Department of Conservation and Recreation

Review of the VDCR Natural Heritage Data Explorer (NHDE) shows the proposed project area as having a “Medium” Potential Rare Species Richness, derived from the number of Predicted Suitable Habitat layers for rare species that fall within the project area. Predicted Suitable Habitats were developed using known occurrences of a species, a Species Habitat Model, and expert opinion. A search of the VDCR NHDE database did not return additional species of concern in the area of the proposed project.

1.4.3 Virginia Department of Wildlife Resources

The VDWR Virginia Fish and Wildlife Information Service (VAFWIS) database was searched on January 10, 2024, to determine considerations to potential impact of state-listed threatened and endangered species within two miles of the project area, the minimum search distance.

The proposed project is not reasonably certain to affect the Atlantic sturgeon, red-cockaded woodpecker, Indiana bat, northern long-eared bat, dwarf wedgemussel, eastern black rail, little brown bat, yellow lance, tricolored bat, loggerhead shrike, and Bachman’s sparrow. No known or mapped hibernacula or maternity roost sites are located in the vicinity of the project.

1.5 Cultural and Historic Resources

Upon review of the Virginia Department of Historic Resources (VDHR) Virginia Cultural Resources Information System (VCRIS), the proposed project area contains no mapped features of cultural or historic significance, is not within a historic district, and is not located within any mapped battlefields.

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2 Purpose and Need

Farley Vale, LLC. (Client), is applying for authorization under Nationwide Permit (NWP) #3 to rehabilitate a previously permitted dock structure, and authorization under NWP #35 to maintenance dredge the area adjacent to the dock and within an associated inlet/slip on property owned by the Client and within State owned bottomlands. The work will be performed in accordance with the originally permitted construction and dredge specifications and dimensions. The proposed project area is an approximately 15.75-acre portion in the south-east corner of the parcel owned by the Client (Project Area). The proposed project area is off of Kings Highway (VA-3) in King George County, Virginia.

The property containing the proposed project area is approximately 480-acres in area and is zoned for agricultural and industrial use, and is currently under a mine permit (Virginia Department of Energy Mine Permit #05670AD). The area of the property containing the project area is zoned for industrial use, and is not under a conservation easement or deed of restrictions that limits the development of the property as currently zoned. A small portion of the property has been developed for residential use, and two unimproved private access roads are present to facilitate access to various portions of the property from Kings Highway. The dock and inlet were originally permitted and constructed in the early 1980's by the Solite Corporation, which leased and operated a sand and gravel mining facility on most of the property. The dock and inlet structures were built for private use for the purpose of loading and unloading equipment and sand/gravel products and to facilitate transport of goods using the Rappahannock River.

The proposed repair and rehabilitation of the dock and inlet will restore infrastructure to a more usable state and allow for the continued transport of materials and equipment to and from the site via water. Access to the Rappahannock River provides an efficient and economical transport method to potential future uses of the property during mining and future reclamation activities.

3 Avoidance and Minimization

The site possesses the necessary existing infrastructure and acreage to accommodate the proposed project with minimal environmental impact. Impacts to jurisdictional features were avoided and minimized to the maximum extent practicable by incorporating resourceful site planning, where an updated delineation of waters of the United States (to include tidal and non-tidal wetlands) was used to minimize the extent of impacts, while keeping the impacts within the existing footprint of previously permitted activities.

Adequate access to this property can be provided only from Kings Highway, which is the closest and only constructed public road intersecting with the private roads leading to the proposed project area. It is neither practical nor feasible to provide access from any other location due to the nature of the proposed project area and existing facility. Utility infrastructure such as potable water and sanitary sewer are not required for the proposed project, and therefore installation is not necessary and will not contribute to additional impacts.

Impacts were minimized by limiting the footprint of the replacement dock to exactly those dimensions permitted in the original design. Dredging of the inlet channel will be conducted using hydraulic or mechanical dredging methods in such a manner that the depth of the channel bottom will create areas of isolated deep pockets, and will provide for and facilitate ingress and egress of large floating vessels (tugs and barges). Dredged material will be deposited within the currently permitted mined areas in a bermed, upland, non-wetland mined area with no outlet to the Rappahannock River or other waters/wetlands. Dredged material will be used for the purpose of land reclamation.

Due to the nature of the proposed work and in order to fulfill the goals of this project, approximately 233,837 square feet (5.37-acres) of permanent impacts resulting from dredging are unavoidable. See **Figures 1 through 5** for a detailed view of the proposed site plan. The temporary impacts are necessary for maintenance of a dock on the Rappahannock River to repair the dock to the same specifications and dimensions as originally permitted. Impact areas 1 and 2 are permanent impacts necessary in order to complete maintenance dredging adjacent to the dock area and an inlet channel to adequately facilitate ingress and egress of barges and tugs.

The project will result in unavoidable permanent impacts to approximately 5.37-acres (233,837 square feet) of tidal river bottom, which meets the intent of the least environmentally damaging alternative. These permanent impacts are due to proposed maintenance dredging activities, where the proposed impacts will result in no changes in classification or loss of jurisdictional waters. Furthermore, both areas have been permitted for dredging and were dredged previously. See **Figures 2 through 5** for a detailed view of proposed impact areas.

The properties/project area are not under a conservation easement or deed of restriction that limits the development of the property as currently zoned.

To avoid unnecessary unintended impacts to anadromous fish waters, all work will be conducted during the time period from July 1 through February 14.

The proposed work will not result in an increase of contamination in shellfish waters of fecal coliform bacteria, radionuclides, pesticides, or herbicides.

The proposed project area does not overlap any known submerged aquatic vegetation (SAV) waters based on 2022 survey data and 2018-2022 composite data as mapped by the Virginia Institute of Marine Science.

4 Compensatory Mitigation

Impacts to jurisdictional features required in the furtherance of the proposed project will result in no changes in classification or loss of waters of the U.S. or jurisdictional wetlands. Therefore, compensatory mitigation is not necessary to achieve “no net loss” of aquatic resources function and value to Federal and State Waters.

5 Alternative Site Analysis

Two alternatives were considered as a part of the proposed project: (1) the no-build; (2) development of the preferred alternative as described in the attached narratives.

The first alternative would mean that without maintenance the existing infrastructure and previously permitted infrastructure would continue to deteriorate and would remain unsuitable for use and intended purpose. The Client's need to continue to mine and reclaim the site would continue to be unsatisfied due to lack of access to water-based transport. The County would lose any potential benefit from increases in tax revenue such as from property taxes and income taxes. Likewise, the Client would lose the opportunity for potential business in an area already designated for industrial use.

The proposed site has been selected because it will cause the least amount of environmental impact and possesses: the correct industrial zoning; close proximity to the necessary infrastructure; and existing features to accommodate the project, while minimizing environmental impact. Therefore, the proposed project is the least environmentally damaging preferred alternative.

6 Threatened and Endangered Species

On January 10, 2024, the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database tool was accessed to search for threatened and/or endangered species in the vicinity of the proposed project. Requests for project review were also sent to the Virginia Department of Conservation and Recreation (VDCR) and the Virginia Department of Wildlife Resources (VDWR). See **Appendix D** for complete details regarding assessment for potential sensitive, rare, threatened, and endangered species.

6.1 U.S. Fish and Wildlife Service

The USFWS issued a determination that the proposed project is not reasonably certain to cause incidental take of the northern long-eared bat (NLEB). No project activities will occur until Endangered Species Act (ESA) consultation between the USFWS and the USACE is completed.

- The proposed project is not reasonably certain to cause incidental take of the NLEB, a federally listed endangered species. The project area does not possess the qualities to be reasonably considered suitable habitat for the NLEB, those being winter hibernacula and live trees and snags large enough to contain crevices suitable for summer maternity roosting. No hibernacula or known summer maternity roosts have been identified in the proposed project area according to maps produced by the VDWR. Captures of the NLEB have been reported in surrounding jurisdictions, such as near Fredericksburg and Port Royal; however, 3-mile buffers surrounding the NLEB capture locations do not overlap with the proposed project area. Furthermore, no trees are expected to be necessary to be removed to fulfill the goals of this project. Any trees within the proposed project area that could constitute suitable habitat for the NLEB will remain standing.
- The proposed project is not reasonably certain to cause incidental take of the tricolored bat, a proposed federally endangered species. Similarly to the NLEB, the project area does not possess the qualities to be reasonably considered suitable habitat for the tricolored bat, those being large tracts of dense trees and underbrush. Neither conditions suitable for winter hibernacula nor summer roosting habitats are present at this site. In addition, the project area is not located in the vicinity of known hibernacula or maternity roost sites mapped by VDWR, therefore the presence of protected bat species is low and unlikely, and therefore the likelihood of impacts to these species are very low.
- The proposed project is not reasonably certain to cause incidental take of the monarch butterfly, a candidate for federal listing. The project area lacks suitable habitat and breeding conditions for the monarch butterfly. The obligate host species milkweed is not present within the project area.
- The proposed project is not reasonably certain to cause incidental take of the sensitive joint-vetch, a federally threatened flowering plant species. All work for this proposed project will take place outside of any intertidal marshes that may provide suitable habitat for this species. The proposed project area additionally does not possess such intertidal

wetlands that also have bare to sparsely vegetated substrate which is of critical importance to this plant to outcompete opportunistic perennial plant species.

The proposed project area is not within 660 feet of a known bald eagle nest nor does it intersect with eagle concentration areas. There is no Critical Habitat identified within the project area.

6.2 Virginia Department of Conservation and Recreation

Review of the VDCR Natural Heritage Data Explorer (NHDE) shows the proposed project area as having a "Medium" Potential Rare Species Richness, derived from the number of Predicted Suitable Habitat layers for rare species that fall within the project area. Predicted Suitable Habitats were developed using known occurrences of a species, a Species Habitat Model, and expert opinion. A search of the VDCR NHDE database did not return additional species of concern in the area of the proposed project.

6.3 Virginia Department of Wildlife Resources

The VDWR Virginia Fish and Wildlife Information Service (VAFWIS) database was searched on January 10, 2024, to determine considerations to potential impact of state-listed threatened and endangered species within two miles of the project area, the minimum search distance.

- The proposed project is not reasonably certain to affect the Atlantic sturgeon, a federally and state listed endangered species, as all work will occur outside of the anadromous fish waters time of year restriction of February 15 through June 30. Therefore, the Atlantic sturgeon is not expected to be present, and incidental unintentional take of the species is very unlikely.
- The proposed project is not reasonably certain to affect the red-cockaded woodpecker, a federally and state listed endangered species. The project area lacks the mature longleaf pine forest with an open understory that make up the preferred habitat of this species. Disturbance from human activity in the surrounding area and a lack of frequent natural burning result in habitat that is not expected to be suitable for this species. Known populations of the red-cockaded woodpecker in Virginia are isolated to locations in Sussex County and the City of Chesapeake, and they do not tend to migrate.
- The proposed project is not reasonably certain to affect the Indiana bat, a federally and state listed endangered species. The project area does not possess the qualities to be reasonably considered suitable habitat for the Indiana bat, those being winter hibernacula and live trees and snags large enough to contain crevices or peeling bark suitable for summer maternity roosting. Known populations of the Indiana bat in Virginia are miniscule, according to the VDWR, and they are not known to travel further east than the Blue Ridge.
- The proposed project is not reasonably certain to cause incidental take of the northern long-eared bat, a federally endangered and state threatened species, for the reasons described above in **6.1**.

- The proposed project is not reasonably certain to affect the dwarf wedgemussel, a federally and state listed endangered species. The presence of the dwarf wedgemussel has not been confirmed in this portion of the lower Rappahannock, though there are some reported populations upstream within the river basin closer to Fredericksburg. Disturbance of the river bottom of the main channel of the Rappahannock River is not anticipated in the course of completing this work.
- The proposed project is not reasonably certain to affect the eastern black rail, a federally threatened and state endangered species, as its preferred habitat of brackish marshes, inland tidal creeks, and salt marshes are not present in the project area. Furthermore, the project area lacks the dense and low-lying vegetative cover which would provide suitable habitat for this species.
- The proposed project is not reasonably certain to affect the yellow lance, a federally and state listed threatened species, as suitable habitat including medium to coarse sandy substrate and evidence of other mussels or mussel beds were not present at the project site.
- The proposed project is not reasonably certain to affect the little brown bat, a state endangered species, as suitable hibernacula and summer roosting conditions are not present within the project area. There are no known winter hibernacula or summer maternity roost sites within or near the proposed project area.
- The proposed project is not reasonably certain to cause incidental take of the tricolored bat, a state endangered and proposed federally endangered species, for the reasons described above in **6.1**.
- The proposed project is not reasonably certain to affect the loggerhead shrike or the migrant loggerhead shrike, both a state threatened species and subspecies, respectively. The project area is not within the current distribution of the loggerhead shrike, with the closest confirmed habitats located in Sussex and Greensville Counties. The preferred habitat for this species consists of grazed pastures and open farm fields surrounded by forest, which are not present within or near the project area.
- The proposed project is not reasonably certain to affect the Bachman's sparrow, a state threatened species, as the old growth pine forests with an open understory and frequent natural burning that are typically associated with habitat for this species are not present within the proposed project area. The known current range of this species does not extend into the region of Virginia that includes the proposed project area.

7 Cultural and Historic Resources

Upon review of the Virginia Department of Historic Resources (VDHR) Virginia Cultural Resources Information System (VCRIS), the proposed project area contains no mapped features of cultural or historic significance, is not within a historic district, and is not located within any mapped battlefields.

The Powhatan Historic District (DHR ID 048-0018) is approximately 3 miles to the east of the proposed project area.

Two mapped Architectural features are located within the property but outside of the proposed project area (DHR IDs 048-0028, 048-0083). The proposed work will not affect either of the mapped locations and will be entirely out of the viewshed of each site.

For more information on assessed cultural and historic resources, see **Appendix F**.

8 Erosion and Sediment Control Plan

The final site plan is required to include an Erosion and Sediment Control Plan that meets the latest State regulations and adheres to the methodology prescribed in the Virginia Erosion and Sediment Control Handbook (Third Edition, 1992) published by the Virginia Department of Environmental Quality. Appropriate erosion and sediment controls will be used and maintained in effective operating condition during construction, and all work below the high tide line will be permanently stabilized at the earliest date practicable.

9 Previous Agency Action (Jurisdictional Determination)

The USACE notified GES on April 18, 2023, and reiterated on November 15, 2023, that standalone Jurisdictional Determination requests would no longer be prioritized over pending permit applications. As a USACE-confirmed jurisdictional determination is not a required component for a complete Nationwide Permit application, GES is submitting the wetland delineation report with this document to be reviewed concurrently with the Nationwide Permit application.

References

Natural Heritage Data Explorer. January 10, 2024. Virginia Department of Conservation and Recreation, Natural Heritage Program. Accessed January 10, 2024.

Virginia Fish and Wildlife Information Service. Virginia Department of Wildlife Resources. Accessed January 10, 2024.

Virginia Cultural Resources Information System. Virginia Department of Historic Resources. Accessed January 10, 2024.

Information for Planning and Consultation. U.S. Fish & Wildlife Service. Accessed January 10, 2024.

Virginia Erosion and Sediment Control Handbook, Third Edition. Virginia Department of Environmental Quality. 1992

Maritime Chart Service. National Oceanic and Atmospheric Administration. May 1, 2023. Accessed April 5, 2024.

Appendix A – Joint Permit Application

FOR AGENCY USE ONLY	
	Notes:
JPA#	

APPLICANTS

PLEASE PRINT OR TYPE ALL ANSWERS. If a question does not apply to your project, please print N/A (not applicable) in the space provided. ***If additional space is needed, attach extra 8 ½ x 11 inch sheets of paper.***

Check all that apply			
☐ Pre-Construction Notification ☑ (PCN) NWP # 3 & 35 *(For Nationwide Permits ONLY - No DEQ-VWP permit writer will be assigned)*	☐ SPGP ☐ PASDO-PGP SELF VERIFICATION *(Replaces Regional Permit 17 (RP-17))*	☐ DEQ Reapplication Existing permit number: _____	☐ Receiving federal funds Agency providing funding: _____

PREVIOUS ACTIONS RELATED TO THE PROPOSED WORK (Include all federal, state, and local pre application coordination, site visits, previous permits, or applications whether issued, withdrawn, or denied)

Historical information for past permit submittals can be found online with VMRC - https://webapps.mrc.virginia.gov/public/habitat/ - or VIMS - http://ccrm.vims.edu/perms/newpermits.html

Agency	Action / Activity	Permit/Project number, including any non-reporting Nationwide permits previously used (e.g., NWP 13)	Date of Action	If denied, give reason for denial
USACE	Preliminary Jurisdictional Determination			

1. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION
The applicant(s) is/are the legal entity to which the permit may be issued (see How to Apply at beginning of form). The applicant(s) can either be the property owner(s) or the person/people/company(ies) that intend(s) to undertake the activity. The agent is the person or company that is representing the applicant(s). If a company, please also provide the company name that is registered with the State Corporation Commission (SCC), or indicate no registration with the SCC.

Legal Name(s) of Applicant(s)			Agent (if applicable)		
Daniel Jacobs, Farley Vale, LLC			John Brooks, III, Groundwater and Environmental Services, Inc.		
Mailing address			Mailing address		
3090 McNeal Road			571 Southlake Boulevard		
City	State	ZIP Code	City	State	ZIP Code
Woodbine	MD	21797	Richmond	VA	23236
Phone number w/area code	Fax		Phone number w/area code	Fax	
			866-222-7786		
Mobile	E-mail		Mobile	E-mail	
434-989-6094	daniel@reademanagement.com		804-332-3063	jbrooks@gesonline.com	
State Corporation Commission Name and ID number (if applicable) 11187104			State Corporation Commission Name and ID number (if applicable) F1117318		

Certain permits or permit authorizations may be provided via electronic mail. If the applicant wishes to receive their permit via electronic mail, please provide an e-mail address here: _____

1. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION (Continued)

Property owner(s) legal name, if different from applicant			Contractor, if known		
n/a			n/a		
Mailing address			Mailing address		
City	State	ZIP code	City	State	ZIP code
Phone number w/area code	Fax		Phone number w/area code	Fax	
Mobile	E-mail		Mobile	E-mail	
State Corporation Commission Name and ID number (if applicable)			State Corporation Commission Name ID number (if applicable)		

2. PROJECT LOCATION INFORMATION

(Attach a copy of a detailed map, such as a USGS topographic map or street map showing the site location and project boundary, so that it may be located for inspection. Include an arrow indicating the north direction. Include the drainage area if the SPGP box is checked on Page 7.)

Street Address (911 address if available)	City/County/ZIP Code
12475 Farley Vale Drive	King George, VA 22485
Subdivision	Lot/Block/Parcel #
	22-49A

Name of water body(ies) within project boundaries and drainage area (acres or square miles).
Rappahannock River 1,730 sq. mi.

Tributary(ies) to: Rappahannock River
Basin: Rappahannock Sub-basin: Lower Rappahannock
(*Example: Basin: James River Sub-basin: Middle James River*)

Special Standards (based on DEQ Water Quality Standards 9VAC25-260 et seq.): Shellfish waters

Project type (check one)
_____ Single user (private, non-commercial, residential)
X Multi-user (community, commercial, industrial, government)
_____ Surface water withdrawal

Latitude and longitude at center of project site (decimal degrees): 38.241933 / -77.278746
(Example: 37.33164/-77.68200)

USGS topographic map name: Rappahannock Academy, VA

8-digit USGS Hydrologic Unit Code (HUC) for your project site (See http://cfpub.epa.gov/surf/locate/index.cfm): 02080104
If known, indicate the 10-digit and 12-digit USGS HUCs (see http://consapps.dcr.virginia.gov/htdocs/maps/HUExplorer.htm) :
0208010402 020801040201

Name of your project (*Example: Water Creek driveway crossing*) Farley Vale Dock

Is there an access road to the project? ☑ Yes ☐ No. If yes, check all that apply: ☐ public ☑ private ☐ improved ☑ unimproved

Total size of the project area (in acres): 15.75

2. PROJECT LOCATION INFORMATION (Continued)

Provide driving directions to your site, giving distances from the best and nearest visible landmarks or major intersections:

From the King George County Circuit Court building, turn right on Kings Highway (VA-3) and travel west for 7 miles. Make the second left turn after the intersection with Lagrange Lane (VA-605) and continue 1 mile south along the unimproved road to reach the project area.

Does your project site cross boundaries of two or more localities (i.e., cities/counties/towns)? ☐ Yes ☑ No
If so, name those localities:

3. DESCRIPTION OF THE PROJECT, PROJECT PRIMARY AND SECONDARY *PURPOSES*, PROJECT *NEED*, INTENDED USE(S), AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)

- The purpose and need must include any new development or expansion of an existing land use and/or proposed future use of residual land.
- Describe the physical alteration of surface waters, including the use of pilings (#, materials), vibratory hammers, explosives, and hydraulic dredging, when applicable, and *whether or not tree clearing will occur* (include the area in square feet and time of year).
- Include a description of alternatives considered and measures taken to avoid or minimize impacts to surface waters, including wetlands, to the maximum extent practicable. Include factors such as, but not limited to, alternative construction technologies, alternative project layout and design, alternative locations, local land use regulations, and existing infrastructure
- For utility crossings, include both alternative routes and alternative construction methodologies considered
- For surface water withdrawals, public surface water supply withdrawals, or projects that will alter in stream flows, include the water supply issues that form the basis of the proposed project.

Applicant proposes to perform maintenance on an existing dock structure for the purpose of bringing it back into service with the same specifications and footprint as the originally permitted design. Applicant proposes to dredge sediment from tidal inlet of the Rappahannock River to repair existing boat slip and facilitate ingress and egress of private vessels.

Date of proposed commencement of work (MM/DD/YYYY)	Date of proposed completion of work (MM/DD/YYYY)
07/01/2024	02/14/2025
Are you submitting this application at the direction of any state, local, or federal agency? _____Yes __X__No	Has any work commenced or has any portion of the project for which you are seeking a permit been completed? _____ Yes __X__ No

If you answered "yes" to either question above, give details stating when the work was completed and/or when it commenced, who performed the work, and which agency (if any) directed you to submit this application. In addition, you will need to clearly differentiate between completed work and proposed work on your project drawings.

n/a

Are you aware of any unresolved violations of environmental law or litigation involving the property? _____Yes __X__No
(If yes, please explain)

4. PROJECT COSTS

Approximate cost of the entire project, including materials and labor: $ 100,000

Approximate cost of only the portion of the project affecting state waters (channelward of mean low water in tidal areas and below ordinary high water mark in nontidal areas): $ 100,000

5. PUBLIC NOTIFICATION (Attach additional sheets if necessary)

Complete information for all property owners adjacent to the project site and across the waterway, if the waterway is less than 500 feet in width. If your project is located within a cove, you will need to provide names and mailing addresses for all property owners within the cove. If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line. Per Army Regulation (AR 25-51) outgoing correspondence must be addressed to a person or business.

Failure to provide this information may result in a delay in the processing of your application by VMRC.

Property owner's name	Mailing address	City	State	ZIP code
n/a, waterway is greater than 500 feet in width				

Name of newspaper having general circulation in the area of the project: Fredericksburg Free Lance-Star

Address and phone number (including area code) of newspaper 1340 Central Park Boulevard, Fredericksburg, VA 22401 ; 540-374-5001

Have adjacent property owners been notified with forms in Appendix A? _____Yes n/a No (attach copies of distributed forms)

6. THREATENED AND ENDANGERED SPECIES INFORMATION

Please provide any information concerning the potential for your project to impact state and/or federally threatened and endangered species (listed or proposed). Attach correspondence from agencies and/or reference materials that address potential impacts, such as database search results or confirmed waters and wetlands delineation/jurisdictional determination. Include information when applicable regarding the location of the project in Endangered Species Act-designated or -critical habitats. Contact information for the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Virginia Dept. of Game and Inland Fisheries, and the Virginia Dept. of Conservation and Recreation-Division of Natural Heritage can be found on page 4 of this package.

7. HISTORIC RESOURCES INFORMATION

Note: Historic properties include but are not limited to archeological sites, battlefields, Civil War earthworks, graveyards, buildings, bridges, canals, etc. Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the USACE from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the USACE, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.

Are any historic properties located within or adjacent to the project site? X Yes ____ No _____ Uncertain
If Yes, please provide a map showing the location of the historic property within or adjacent to the project site.

Are there any buildings or structures 50 years old or older located on the project site? ____ Yes X No _____ Uncertain
If Yes, please provide a map showing the location of these buildings or structures on the project site.

Is your project located within a historic district? ____ Yes X No ____ Uncertain

If Yes, please indicate which district: n/a

7. HISTORIC RESOURCES INFORMATION (Continued)

Has a survey to locate archeological sites and/or historic structures been carried out on the property?
___ Yes _x__ No ___ Uncertain

If Yes, please provide the following information: Date of Survey: _____

Name of firm: _____

Is there a report on file with the Virginia Department of Historic Resources? ____ Yes ____X____ No ___Uncertain

Title of Cultural Resources Management (CRM) report: _____

Was any historic property located? ____ Yes ____ No __ Uncertain

8. WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION

Report each impact site in a separate column. If needed, attach additional sheets using a similar table format. Please ensure that the associated project drawings clearly depict the location and footprint of each numbered impact site. For dredging, mining, and excavating projects, use Section 17.

	Impact site number 1	Impact site number 2	Impact site number 3	Impact site number 4	Impact site number 5
Impact description (use all that apply): F=fill EX=excavation S=Structure T=tidal NT=non-tidal TE=temporary PE=permanent PR=perennial IN=intermittent SB=subaqueous bottom DB=dune/beach IS=hydrologically isolated V=vegetated NV=non-vegetated MC=Mechanized Clearing of PFO (*Example: F, NT, PE, V)*	EX, T, PE, SB, NV	EX, T, PE, SB, NV			
Latitude / Longitude (in decimal degrees)					
Wetland/waters impact area (square feet / acres)	206,937 / 4.75	26,900 / 0.62			
Dune/beach impact area (square feet)					
Stream dimensions at impact site (length and average width in linear feet, and area in square feet)					
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)	0	0			

8. WETLANDS/WATERS IMPACT INFORMATION (Continued)					
Cowardin classification of impacted wetland/water or geomorphological classification of stream *Example wetland: PFO; Example stream: 'C' channel and if tidal, whether vegetated or non-vegetated wetlands per Section 28.2-1300 of the Code of Virginia*	R1 Riverine	R1 Riverine			
Average stream flow at site (flow rate under normal rainfall conditions in cubic feet per second) and method of deriving it (gage, estimate, etc.)	2,000 cfs, estimate	2,000 cfs, estimate			
Contributing drainage area in acres or square miles (*VMRC cannot complete review without this information*)	1,730 sq. mi.	1,730 sq. mi.			
DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone waters Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII https://law.lis.virginia.gov	Class II	Class II			
For DEQ permitting purposes, also submit as part of this section a wetland and waters boundary delineation map – see (3) in the Footnotes section in the form instructions.					
For DEQ permitting purposes, also submit as part of this section a written disclosure of all wetlands, open water, or streams that are located within the proposed project or compensation areas that are also under a deed restriction, conservation easement, restrictive covenant, or other land-use protective instrument.					

9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR CERTIFICATIONS

READ ALL OF THE FOLLOWING CAREFULLY BEFORE SIGNING

PRIVACY ACT STATEMENT: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.

CERTIFICATION: I am hereby applying for permits typically issued by the DEQ, VMRC, USACE, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR CERTIFICATIONS (Continued)

Is/Are the Applicant(s) and Owner(s) the same? ☑ *Yes* ☐ *No*

Legal name & title of Applicant	Second applicant's legal name & title, if applicable
Daniel Jacobs, Farley Vale, LLC	
Applicant's signature	Second applicant's signature
Date 4/16/2024	Date
Property owner's legal name, if different from Applicant	Second property owner's legal name, if applicable
n/a	
Property owner's signature, if different from Applicant	Second property owner's signature
Date	Date

CERTIFICATION OF AUTHORIZATION TO ALLOW AGENT(S) TO ACT ON APPLICANT'S(S') BEHALF (IF APPLICABLE)

I (we), Farley Vale, LLC (and) _____,
APPLICANT'S LEGAL NAME(S) – *complete the second blank if more than one Applicant*

hereby certify that I (we) have authorized Groundwater and Environmental Services, Inc (and) _____
AGENT'S NAME(S) – *complete the second blank if more than one Agent*

to act on my (our) behalf and take all actions necessary to the processing, issuance, and acceptance of this permit and any and all standard and special conditions attached. I (we) hereby certify that the information submitted in this application is true and accurate to the best of my (our) knowledge.

Applicant's signature	Second applicant's signature, if applicable
Date 4/16/2024	Date
Agent's signature and title	Second agent's signature and title, if applicable
Date	Date

CONTRACTOR ACKNOWLEDGEMENT (IF APPLICABLE)

I (we), _____ (and) _____,
APPLICANT'S LEGAL NAME(S) – *complete the second blank if more than one Applicant*

have contracted _____ (and) _____
CONTRACTOR'S NAME(S) – *complete the second blank if more than one Contractor*

to perform the work described in this Joint Permit Application, signed and dated _____.

I (we) will read and abide by all conditions as set forth in all federal, state, and local permits as required for this project. I (we) understand that failure to follow the conditions of the permits may constitute a violation of applicable federal, state, and local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes.
In addition, I (we) agree to make available a copy of any permit to any regulatory representative visiting the project site to ensure permit compliance. If I (we) fail to provide the applicable permit upon request, I (we) understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all of the terms and conditions.

Contractor's name or name of firm (printed/typed)	Contractor's or firm's mailing address	
Contractor's signature and title	Contractor's license number	Date
Applicant's signature	Second applicant's signature, if applicable	
Date	Date	

12. MARINAS AND COMMERCIAL, GOVERNMENTAL, AND COMMUNITY PIERS

Have you obtained the Virginia Department of Health's approval for sanitary facilities? _____Yes n/a No
You will need to obtain this authorization or a variance before a VMRC permit will be issued.

Will petroleum products or other hazardous materials be stored or handled at the facility? _____Yes X No
If your answer is yes, please attach your spill contingency plan.

Will the facility be equipped to off-load sewage from boats? _____Yes X No

EXISTING: wet slips: X dry storage: _____	*PROPOSED:* wet slips: X dry storage: _____

13. FREE STANDING MOORING PILES, OSPREY NESTING POLES, MOORING BUOYS, AND DOLPHINS (not associated with piers)

Number of vessels to be moored: 0	Type and number of mooring(s) proposed: Dolphin, 10

In the spaces provided below, give the type (e.g., sail, power, skiff, etc.), size, and registration number of the vessel(s) to be moored

TYPE	LENGTH	WIDTH	DRAFT	REGISTRATION #

Give the name and complete mailing address(es) of the owner(s) of the vessel(s) if not owned by applicant (attach extra sheets if needed):

n/a

Do you plan to reach the mooring from your own upland property? X Yes _____No
If "no," explain how you intend to access the mooring.

n/a

14. BOAT RAMPS

Will excavation be required to construct the boat ramp? _____Yes _____No. If "yes," will any of the excavation occur below the plane of the ordinary high water mark/mean high water line or in wetlands? _____Yes _____No. If "yes," you will need to fill out Section 17 for this excavation.
Where will you dispose of the excavated material?

_____

What type of design and materials will be used to construct the ramp (open pile design with salt treated lumber, concrete slab on gravel bedding, etc.)?

Location of nearest public boat ramp	Driving distance to that public ramp _____miles

Will other structures be constructed concurrent with the boat ramp installation? _____Yes _____No
If "yes," please fill out the appropriate sections of this application associated with those other activities.

16. BEACH NOURISHMENT (Continued)

Describe the type(s) of vegetation proposed for stabilization and the proposed planting plan, including schedule, spacing, monitoring, etc. Attach additional sheets if necessary.

17. DREDGING, MINING, AND EXCAVATING

FILL OUT THE FOLLOWING TABLE FOR DREDGING PROJECTS

	NEW dredging				MAINTENANCE dredging			
	Hydraulic		Mechanical (clamshell, dragline, etc.)		Hydraulic		Mechanical (clamshell, dragline, etc.)	
	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet
Vegetated wetlands								
Non-vegetated wetlands								
Subaqueous land					94,940	233,837	**	**
Totals					94,940	233,837	**	**

Is this a one-time dredging event? ___Yes _x_____ No If "no", how many dredging cycles are anticipated: as needed
(_____ initial cycle in cu. yds.) (_____ subsequent cycles in cu. yds.)

Composition of material (percentage sand, silt, clay, rock):
Provide documentation (i.e., laboratory results or analytical reports) that *dredged* material from on-site areas is free of toxics. If not free of toxics, provide documentation of proper disposal (i.e., bill of lading from commercial supplier or disposal site).

60% sand, 10% silt, 30% rock ; Dredged material is expected to be free of toxics.

Please include a dredged material management plan that includes specifics on how the dredged material will be handled and retained to prevent its entry into surface waters or wetlands. If on-site dewatering is proposed, please include plan view and cross-sectional drawings of the dewatering area and associated outfall.
Dredged material will be deposited in the mine pits in the center of the property under an active mine permit. The pits are bermed, upland, non-wetland disposal area on-site with no outlet to the Rappahannock River for the purpose of land reclamation in the former mine area.

Will the dredged material be used for any commercial purpose or beneficial use? _x_____Yes _____No
If yes, please explain:

Dredged material will be used for land reclamation.

If this is a maintenance dredging project, what was the date that the dredging was last performed? 1982
Permit number of original permit: _____ *(It is important that you attach a copy of the original permit.)*

**Maintenance dredging will be either hydraulic or mechanical

17. DREDGING, MINING, AND EXCAVATING (Continued)

For mining projects: On separate sheets of paper, explain the operation plans, including: 1) the frequency (e.g., every six weeks), duration (i.e., April through September), and volume (in cubic yards) to be removed per operation; 2) the temporary storage and handling methods of mined material, including the dimensions of the containment berm used for upland disposal of dredged material and the need (or no need) for a liner or impermeable material to prevent the leaching of any identified contaminants into ground water; 3) how equipment will access the mine site; and 4) verification that dredging: a) will not occur in water body segments that are currently on the effective Section 303(d) Total Maximum Daily Load (TMDL) priority list (available at http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL/TMDLDevelopment/TMDLProgramPriorities.aspx) or that have an approved TMDL; b) will not exacerbate any impairment; and c) will be consistent with any waste load allocation/limit/conditions imposed by an approved TMDL (see, "What's in my backyard" or subsequent spatial files at http://www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx to determine the extent of TMDL watersheds and impairment segments).

Have you applied for a permit from the Virginia Department of Mines, Minerals and Energy? _____Yes _____No If Yes:
Existing permit number: n/a _____ Date permit issued: _____

Contributing drainage area: 1,730 _____square miles	Average stream flow at site (flow rate under normal rainfall conditions): 2,000 _____cfs

18. FILL (not associated with backfilled shoreline structures) AND OTHER STRUCTURES (other than piers and bonthouses) IN WETLANDS OR WATERS, OR ON DUNES/BEACHES

Source and composition of fill material (percentage sand, silt, clay, rock):

_____

Provide documentation (i.e., laboratory results or analytical reports) that *fill* material from *off-site* locations is free of toxics. If not free of toxics, provide documentation of proper disposal (i.e., bill of lading from commercial supplier or disposal site). Documentation is not necessary for fill material obtained from on-site areas.

Explain the purpose of the filling activity and the type of structure to be constructed over the filled area (if any):

Describe any structure that will be placed in wetlands/waters or on a beach dune and its purpose:

Will the structure be placed on pilings? ____ Yes ____ No	Total area occupied by any structure. _____ Square Feet
How far will the structure be placed channelward from the back edge of the dune? _____feet	How far will the structure be placed channelward from the back edge of the beach? _____feet

19. NONTIDAL STREAM CHANNEL MODIFICATIONS FOR RESTORATION OR ENHANCMENT, or TEMPORARY OR PERMANENT RELOCATIONS

If proposed activities are being conducted for the purposes of compensatory mitigation, please attach separate sheets of paper providing all information required by the most recent version of the stream assessment methodology approved by the Norfolk District of the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality, in lieu of completing the questions below. Required information outlined by the methodology can be found at:
http://www.nao.usace.army.mil/Missions/Regulatory/UnifiedStreamMethodology.aspx *or*
http://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Mitigation.aspx.

For all projects proposing stream restoration provide a completed Natural Channel Design Review Checklist and Selected Morphological Characteristics form. These forms and the associated manual can be located at:
https://www.fws.gov/chesapeakebay/StreamReports/NCD%20Review%20Checklist/Natural%20Channel%20Design%20Checklist%20Doc%20V2%20Final%2011-4-11.pdf

Has the stream restoration project been designed by a local, state, or federal agency? ____ Yes ____ No. If yes, please include the name of the agency here: _____.

Is the agency also providing funding for this project? _____ Yes _____ No

Stream dimensions at impact site (length and average width in linear feet, and area in square feet):
L: _____(feet) AW:_____ (feet) Area:_____ (square feet)

Contributing drainage area: _____acres *or* _____square miles

APPENDIX C

Chesapeake Bay Preservation Act Information

The proposed work is a water-dependent exempt activity

Please answer the following questions to determine if your project is subject to the requirements of the Bay Act Regulations:

1. Is your project located within Tidewater Virginia? X Yes ____No (See map on page 31) - If the answer is "no", the Bay Act requirements do not apply; if "yes", then please continue to question #2.

2. Please indicate if the project proposes to impact any of the following Resource Protection Area (RPA) features:

____ Tidal wetlands,

____ Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow,

X Tidal shores, [subaqueous bottomland / river bottom]

____ Other lands considered by the local government to meet the provisions of subsection A of 9VAC25-830-80 and to be necessary to protect the quality of state waters (contact the local government for specific information),

____ A buffer area not less than 100 feet in width located adjacent to and landward of the components listed above, and along both sides of any water body with perennial flow.

If the answer to question #1 was "yes" and any of the features listed under question #2 will be impacted, compliance with the Chesapeake Bay Preservation Area Designation and Management Regulations is required. **The Chesapeake Bay Preservation Area Designation and Management Regulations** are enforced through locally adopted ordinances based on the Chesapeake Bay Preservation Act (CBPA) program. Compliance with state and local CBPA requirements mandates the submission of a ***Water Quality Impact Assessment (WQIA)*** for the review and approval of the local government. Contact the appropriate local government office to determine if a WQIA is required for the proposed activity(ies).

The individual localities, not the DEQ, USACE, or the Local Wetlands Boards, are responsible for enforcing the CBPA requirements and, therefore, local permits for land disturbance are not issued through this JPA process. **Approval of this wetlands permit does not constitute compliance with the CBPA regulations nor does it guarantee that the local government will grant approval for encroachments into the RPA that may result from this project.**

Notes for all projects in RPAs

Development, redevelopment, construction, land disturbance, or placement of fill within the RPA features listed above requires the approval of the locality and may require an exception or variance from the local Bay Act ordinance. Please contact the appropriate local government to determine the types of development or land uses that are permitted within RPAs.

Pursuant to 9VAC25-830-110, *on-site delineation of the RPA is required for all projects in CBPAs*. Because USGS maps are not always indicative of actual "in-field" conditions, they may not be used to determine the site-specific boundaries of the RPA.

Notes for shoreline erosion control projects in RPAs

Re-establishment of woody vegetation in the buffer will be required by the locality to mitigate for the removal or disturbance of buffer vegetation associated with your proposed project. Please contact the local government to determine the mitigation requirements for impacts to the 100-foot RPA buffer.

Pursuant to 9VAC25-830-140 5 a (4) of the Virginia Administrative Code, shoreline erosion projects are a permitted modification to RPAs provided that the project is based on the "best technical advice" and complies with applicable permit conditions. In accordance with 9VAC25-830-140 1 of the Virginia Administrative Code, the locality will use the information provided in this Appendix, in the project drawings, in this permit application, and as required by the locality, to make a determination that:

1. Any proposed shoreline erosion control measure is necessary and consistent with the nature of the erosion occurring on the site, and the measures have employed the "best available technical advice"
2. Indigenous vegetation will be preserved to the maximum extent practicable
3. Proposed land disturbance has been minimized
4. Appropriate mitigation plantings will provide the required water quality functions of the buffer (9VAC25-830-140 3)
5. The project is consistent with the locality's comprehensive plan
6. Access to the project will be provided with the minimum disturbance necessary.

Nationwide Permits (NWP) Effective **February 25, 2022**

Clean Water Act (CWA) Section 401 Certification Compliance

(INITIAL ALL THAT APPLY)

_____I am applying for written verification from the USACE of one or more of the following Nationwide Permits (NWP): **1, 2, 9, 10, 24, and 32**. As the VDEQ waived §401 Water Quality Certification for these NWPs, no further action needed.

_____I am applying for written verification from the USACE of **NWP 17**. As the DEQ denied General §401 Certification for this NWP, I understand that I must apply to the VDEQ for an Individual §401 Water Quality Certification decision.

X_____I am applying for written verification of one or more of the following NWPs: **4, 5, 6, 7, 8, 11, 15, 19, 20, 23, 25, 28, 30, 31, 34, 35, 37, 38, 41, 45, 46, 49, 53, and 54.** PLEASE SELECT ONE OF THE FOLLOWING.

X____ I attest that my project complies/will comply with all of the VDEQ's General §401 Water Quality Certification Conditions (A.1-A.12) listed in Appendix A.

OR

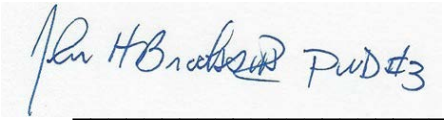
_____ I am applying to the VDEQ for a VWP Permit or Coverage decision and/or an Individual §401 Water Quality Certification decision.

X_____I am applying for written verification of one or more of the following NWPs: **3, 13, 14, 16, 18, 22, 27, 33, 36, 59.** PLEASE SELECT ONE OF THE FOLLOWING.

X____ I attest that my project complies/will comply with all of the NWP-specific, General §401 Water Quality Certification Conditions (A.1-A.12 listedin Appendix A.), and impact thresholds.

OR

_____ I am applying to the VDEQ for a VWP Permit or Coverage decision and/or an Individual §401 Water Quality Certification decision.



5/10/2024

Applicant/Agent Signature and Date

Farley Vale Dock

Project Name

EXHIBIT A

WILLIAM B. ELLEN, INC.
MARINE PLANNERS AND CONSULTANTS
POST OFFICE BOX 704
GLOUCESTER, VIRGINIA 23061
804-693-4901

September 29, 1980

Mr. George Wallace
Zoning and Building Administrator
King George County
King George, Virginia 22485

Dear Mr. Wallace:

In accordance with the Nation-wide Building Code and your county building ordinances enclosed please find an application submitted in behalf of the Solite Corporation, P.O. Box 883, Fredericksburg, Virginia 22401, seeking authorization to dredge approximately 79,000 cubic yards of material and construct a timber marginal wharf with mooring dolphin on and adjacent to their leased property in the Rappahannock River, King George County, Virginia.

The property is owned by Edward S. Taylor and is adjoined by the properties of Frank B. Taylor and the G.W. Marshall Estate. The estimate cost of dredging and construction is $200,000 and a prime contractor has yet to be selected. All dredging and construction will be in accordance with the enclosed drawings.

Please issue the Building Permit in the name of the Corporation and return a copy to me so that the other regulatory agencies can be informed of your approval.

If you have any questions, please do not hesitate to contact me.

With kindest regards, I remain,

Sincerely yours,

William B. Ellen
President

WBE:plm
Enclosures

TYPICAL DOLPHIN SECTION

0 1 2 3
SCALE IN FEET

12' to MHW

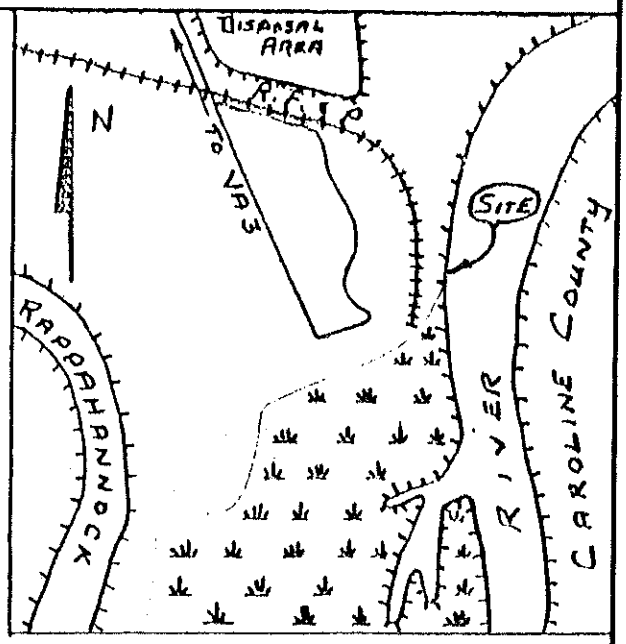
5/8" ϕ CABLE W/ CLAMPS

10"-12" ϕ PILING 40' LONG 5-PILE CLUSTER

NOTE: ALL TIMBER TREATED. ALL HARDWARE GALVANIZED. PILING FOR MOORING DOLPHIN TO BE DRIVEN TO RESISTENCE.

PLAN

0 100 200 300
SCALE IN FEET



VICINITY MAP

0 1000 2000 3000 4000
SCALE IN FEET

FROM: USGS "RAPPAHANNOCK ACADEMY"

Buoy No. 98

RAPPAHANNOCK RIVER CHANNEL

EBB FLOOD

-15 -15 -15

-3 -3 -3 -3 -3 -3

-2 -2 -2 -2 -2

-1 -1 -1

PROPOSED DREDGING

230'

10'

275'

N

75'

50'

MLW
MHW

① PROPOSED MARGINAL PIER & MOORING DOLPHIN (6)

50'

② LEASED PROPERTY OF: SOLITE CORPORATION

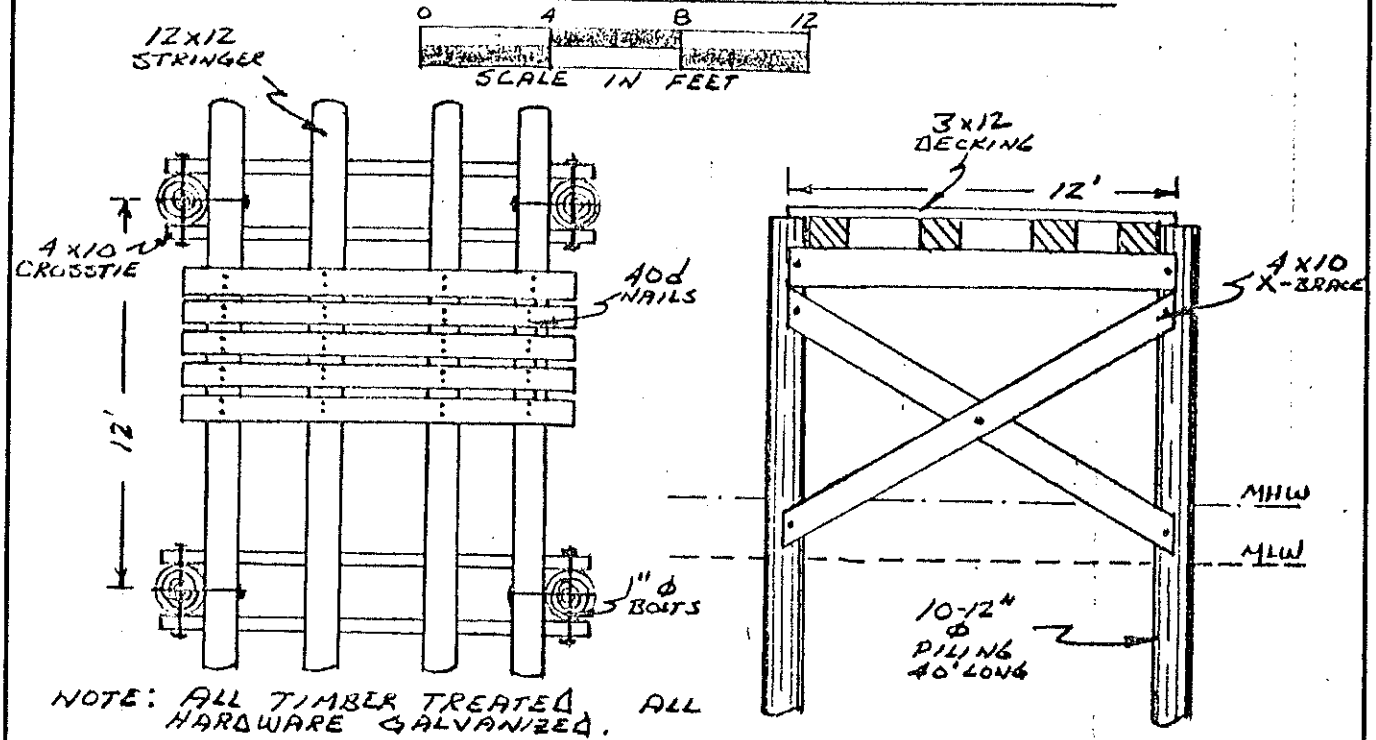
PURPOSE: DEVELOPMENT
DATUM MLW = 0 IN FEET
ADJACENT PROPERTY OWNERS:
① G.W. MARSHALL ESTATE
② FRANK B. TAYLOR

3

JES

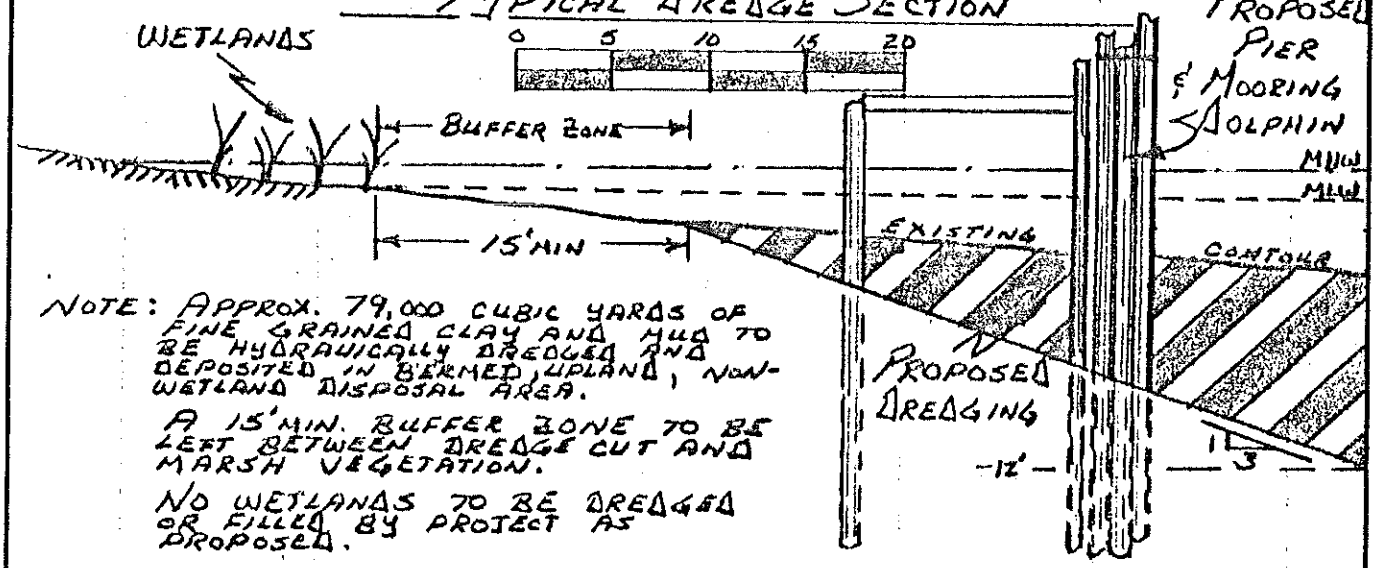
PROPOSED DREDGING & CONSTRUCTION IN RAPPAHANNOCK RIVER AT KING GEORGE
COUNTY OF STATE VA
APPLICATION BY SOLITE CORPORATION
SHEET 1 OF 3 DATE 6-19-80

TYPICAL PIER PLAN & SECTION



NOTE: ALL TIMBER TREATED, ALL HARDWARE GALVANIZED.

TYPICAL DREDGE SECTION



NOTE: APPROX. 79,000 CUBIC YARDS OF FINE GRAINED CLAY AND MUD TO BE HYDRAULICALLY DREDGED AND DEPOSITED IN DIKED UPLAND, NON-WETLAND DISPOSAL AREA.

A 15' MIN. BUFFER ZONE TO BE LEFT BETWEEN DREDGE CUT AND MARSH VEGETATION.

NO WETLANDS TO BE DREDGED OR FILLED BY PROJECT AS PROPOSED.

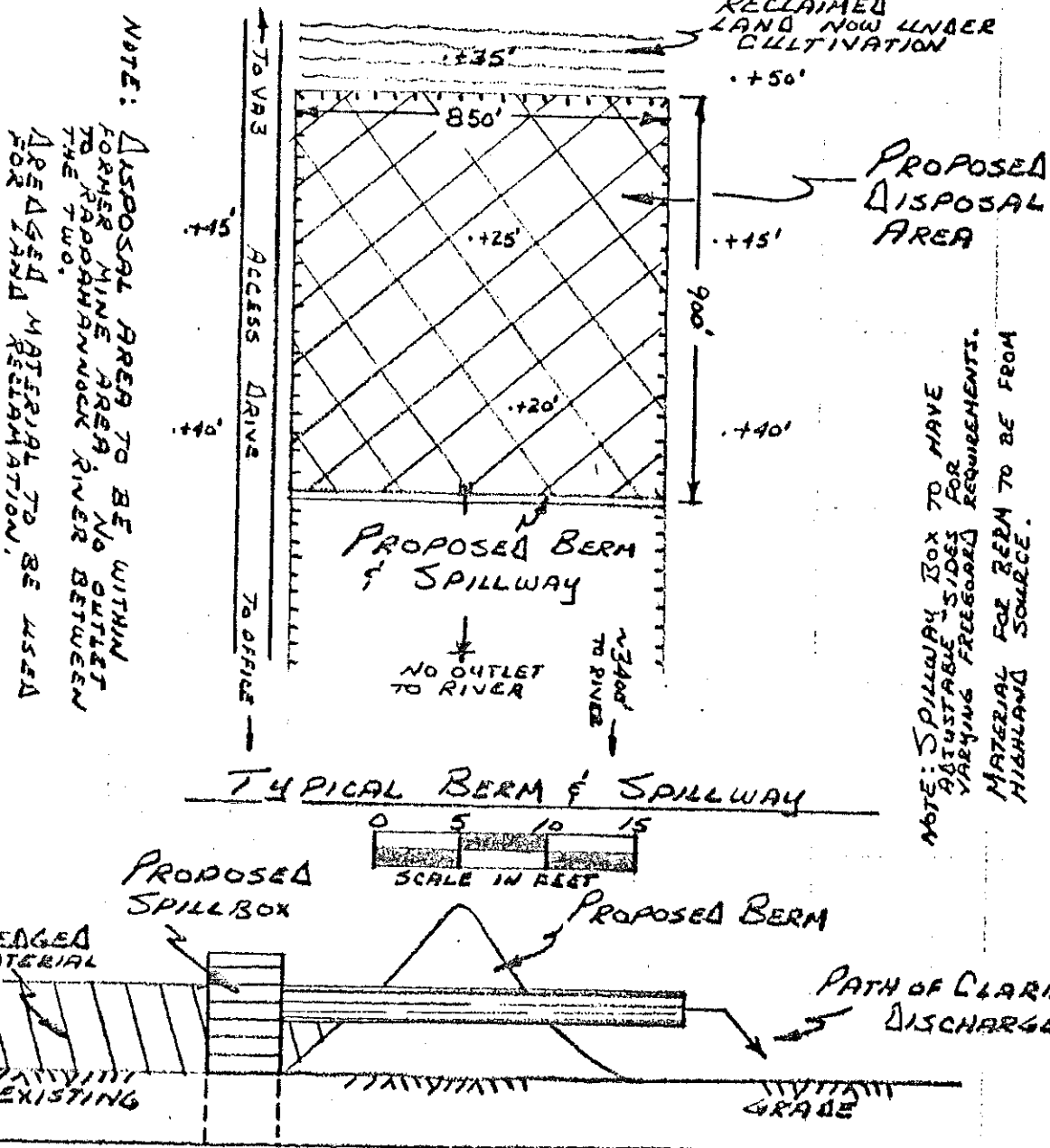
PURPOSE: DEVELOPMENT
DATUM MLW = 0 IN FEET
ADJACENT PROPERTY OWNERS:
① G. W. MARSHALL EST.
② FRANK B. TAYLOR

3

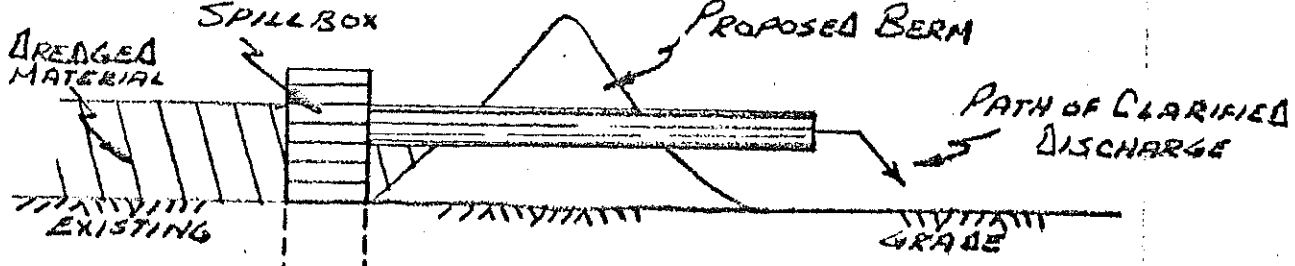
AES

PROPOSED DREDGING & CONSTRUCTION
IN RAPPAHANNOCK RV.
AT KING GEORGE
COUNTY OF STATE VA
APPLICATION BY SOLITE CORP.
SHEET 2 OF 3 DATE 6-19-80

Disposal Area Plan



Typical Berm & Spillway



PURPOSE: Development

DATUM MLW = 0 IN FEET

ADJACENT PROPERTY OWNERS:

① G.W. Marshall Est.

② Frank B. Taylor

YES

Proposed Dredging & Construction

IN Rappahannock River

AT King George

COUNTY OF STATE VA

APPLICATION BY Solite Corp.

SHEET 3 OF 3 DATE 6-19-80

EXHIBIT B

King George County, Virginia

DEPARTMENT OF BUILDING INSPECTION
AND ZONING ADMINISTRATION
P. O. Box 246
King George, Virginia 22485

GEORGE L. WALLACE
Building Inspector
Zoning Administrator
(703) 775-7111

October 1, 1980

Mr. William B. Ellen, Inc.
Marine Planners and Consultants
Post Office Box 704
Gloucester, Virginia 23061

Dear Mr. Ellen:

Your request for a building permit for Solite Corporation to construct a timber marginal wharf with mooring dolphin on property owned by Edward S. Taylor, located in King George County has been received by this office. Prior to issuing a building permit, the zoning classification and use of the structure to be constructed must be determined to ensure compliance with the County Zoning Ordinance.

It will be necessary for you to complete and return the enclosed zoning permit application before your request for a building permit can be processed.

If you have questions regarding this matter, please do not hesitate to contact me.

Sincerely,

G. L. Wallace
Zoning Administrator

GLW/ef

Enclosure: Application for zoning permit

EXHIBIT C

WILLIAM B. ELLEN, INC.
MARINE PLANNERS AND CONSULTANTS
POST OFFICE BOX 704
GLOUCESTER, VIRGINIA 23061
804-693-4901

COPY

October 6, 1980

Mr. George L. Wallace
Building Inspector and Zoning Administrator
King George County
P.O. Box 246
King George, Virginia 22485

RE: Solite Corporation

Dear Mr. Wallace:

In accordance with your letter of October 1, 1980, enclosed please find an application for Zoning Permit submitted in behalf of the above referenced applicant.

As indicated on the application the proposed timber marginal wharf will be for the private use of Solite Corporation only. No moorage or offloading services will be offered to other barging operations in the river except those directly connected to Solite Corporation.

Thank you for your assistance in this matter. If you have questions or require additional data please do not hesitate to contact me.

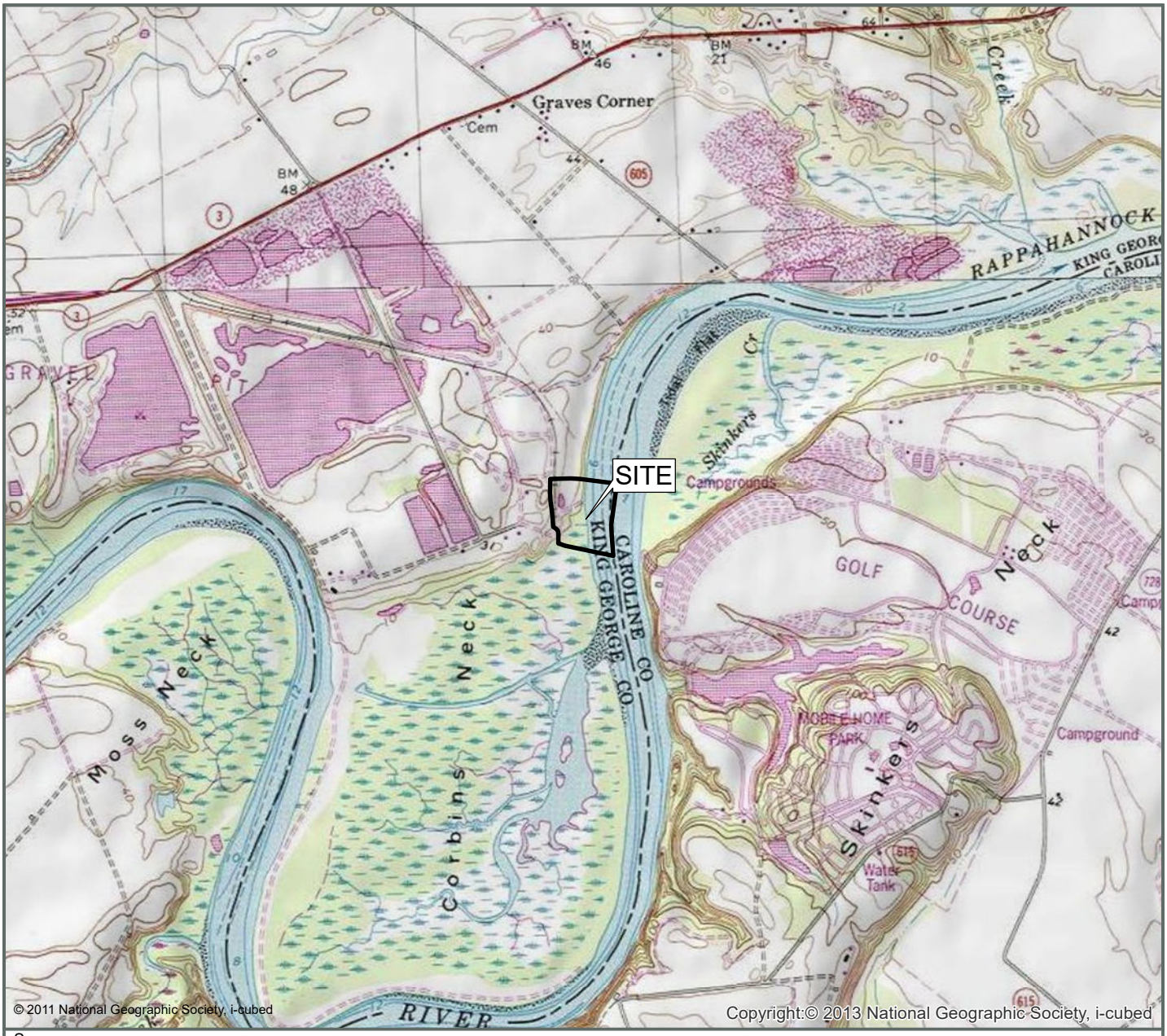
With kindest regards, I remain,

Sincerely yours,

William B. Ellen
President

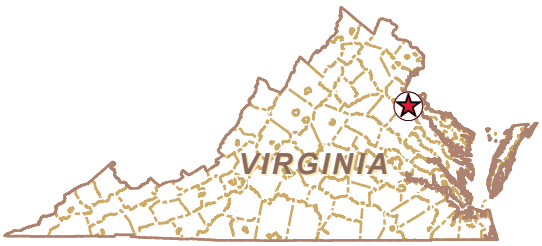
WBE:plm
Enclosures

Appendix B – Figures



N:\Blacksburg\Projects\Reade_Management_Dan_Jacobs\Farley_Vale\GIS\Farley_Vale_SLM.mxd - Scale 1:24,000 - 3/22/2024 10:31:45 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Sources:
USGS 7.5 Minute Series
Topographic Quadrangle
Rappahannock Adademy, Virginia
Passapatanzy, Virginia
Contour Interval = 10 feet



Site Location Map

Farley Vale LLC
Farley Vale Drive
King George, VA

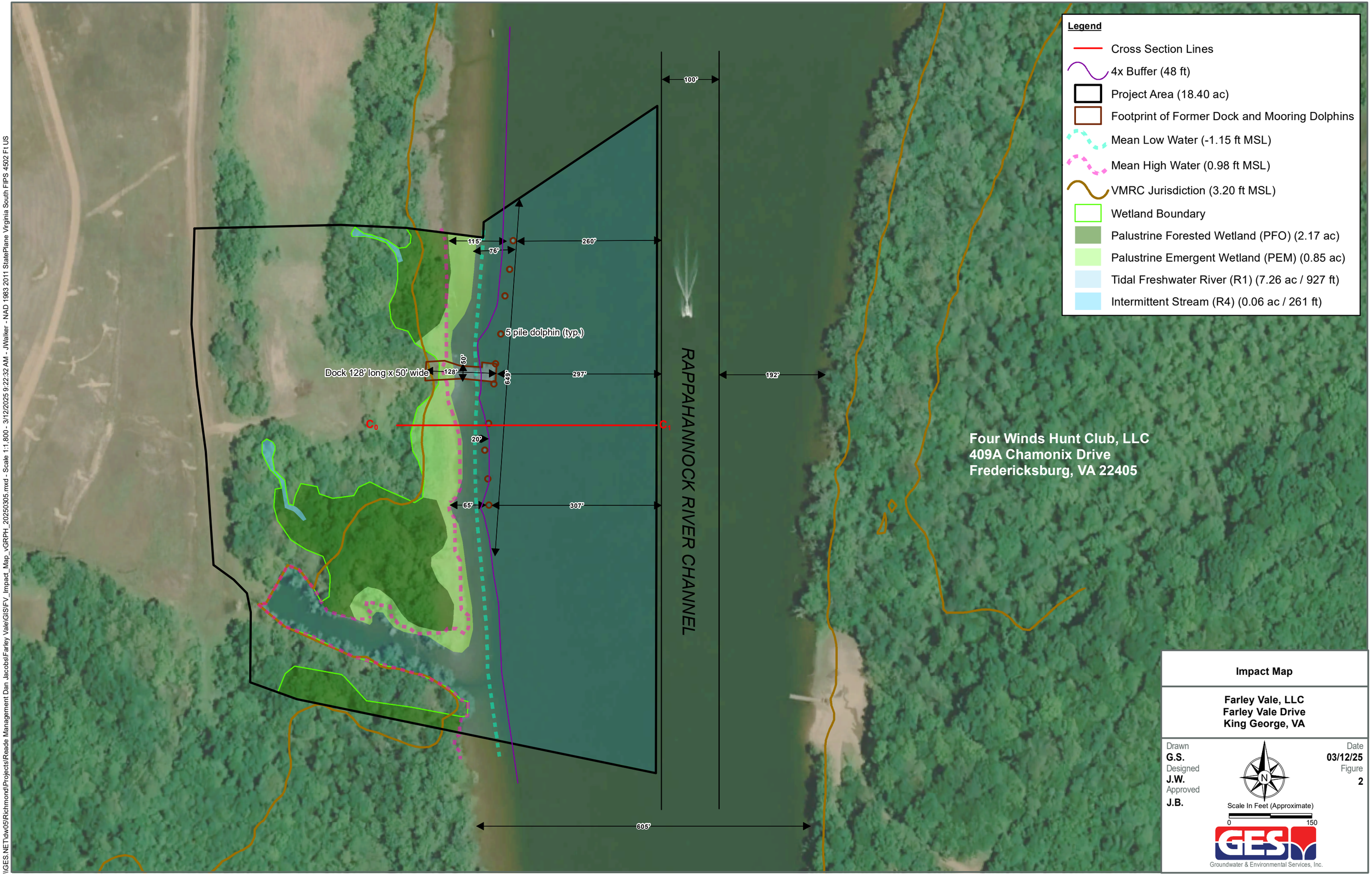
Drawn **GKS**
Designed **DMC**
Approved **JBW**

Date **3/22/24**
Figure **1**

N

Scale In Feet (Approximate)
0 2,000

GES
Groundwater & Environmental Services, Inc.



Impact Map

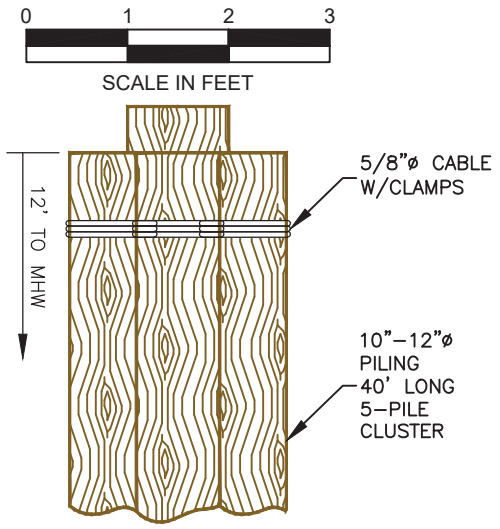
Farley Vale, LLC
Farley Vale Drive
King George, VA

Drawn **G.S.**
Designed **J.W.**
Approved **J.B.**
Date **03/12/25**
Figure **2**

Scale In Feet (Approximate)
0 150

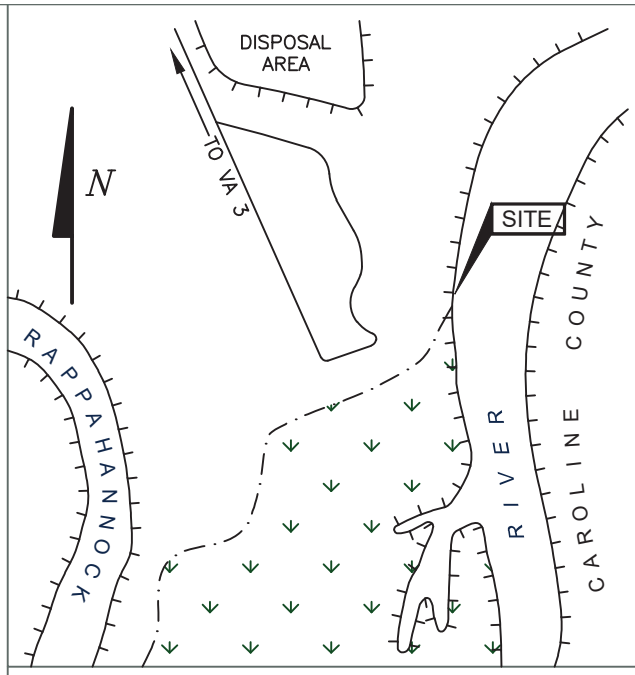
Groundwater & Environmental Services, Inc.

TYPICAL DOLPHIN SECTION



NOTE:
ALL TIMBER TREATED, ALL HARDWARE GALVANIZED. PILING FOR MOORING DOLPHIN TO BE DRIVEN TO RESISTANCE.

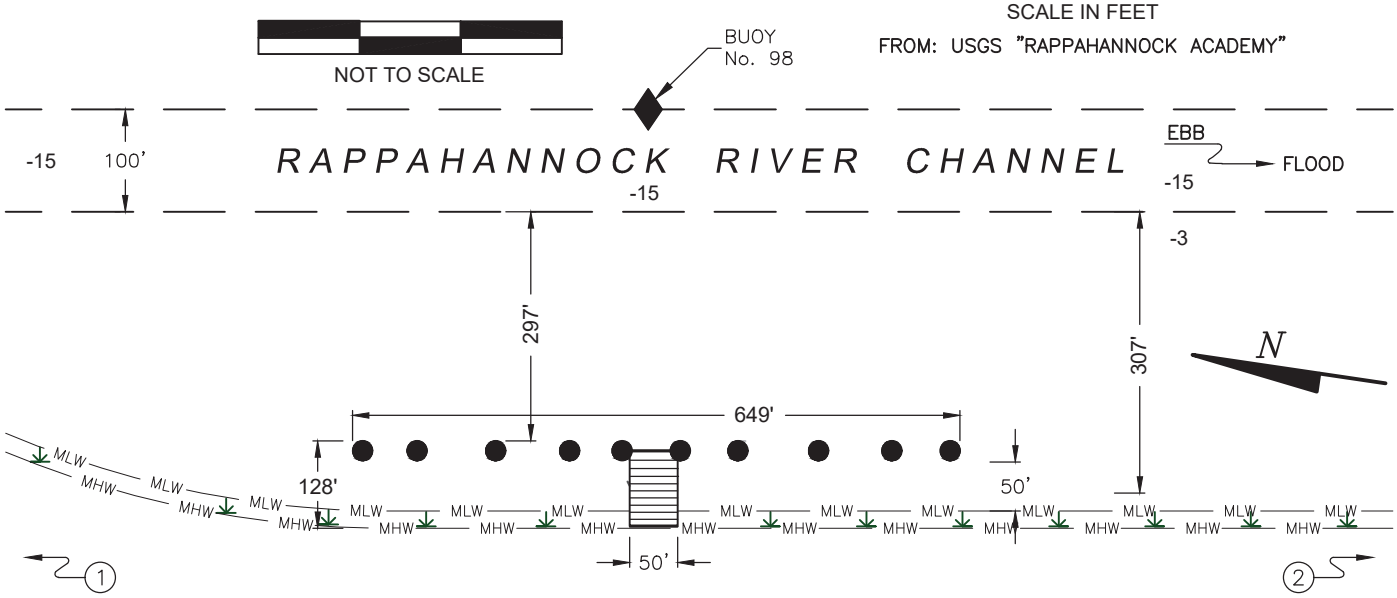
VICINITY MAP



0 100 200 300
SCALE IN FEET
FROM: USGS "RAPPAHANNOCK ACADEMY"

PLAN

NOT TO SCALE



PROPOSED MARGINAL PIER & MOORING DOLPHIN (10)

PROPERTY OF:
FARLEY VALE, LLC.

Proposed Construction Details

Farley Vale LLC
Farley Vale Drive
King George, Virginia

Drawn E.V.
Date 03/12/25
Designed
Figure 3
Approved

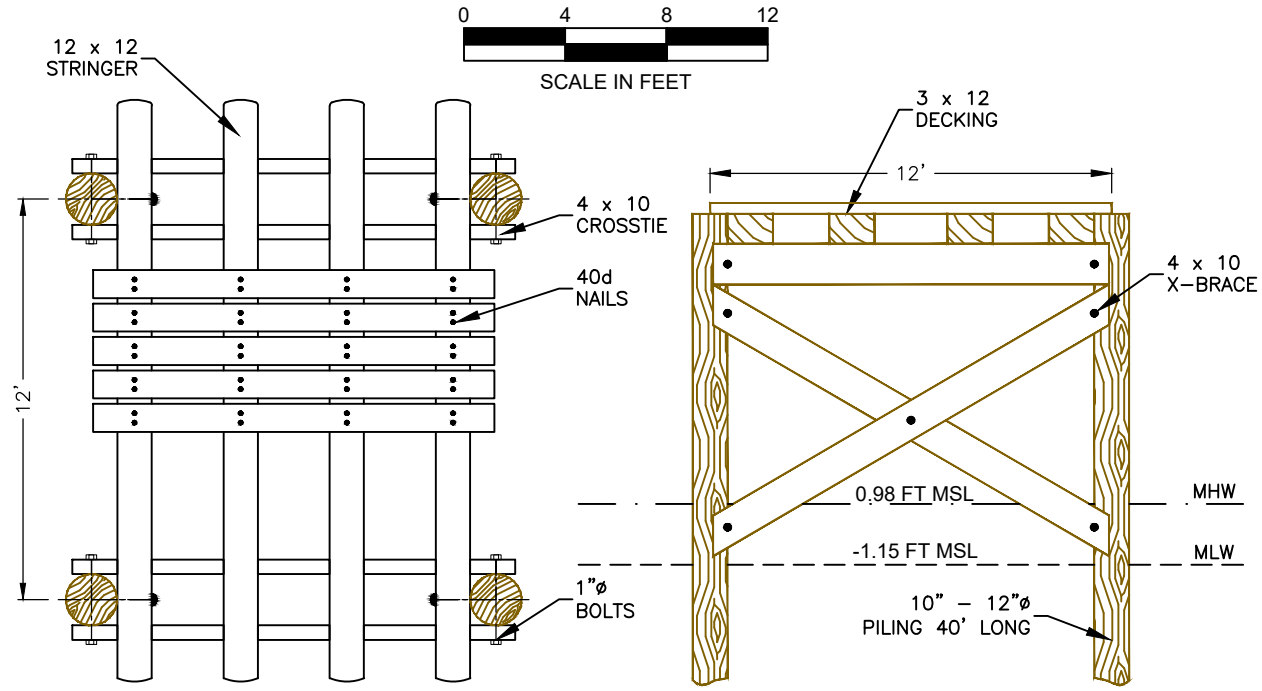
Scale In Feet (As Shown)

GES
Groundwater & Environmental Services, Inc.

Source:
King George County BOS
Solite Wharf - 1980.pdf

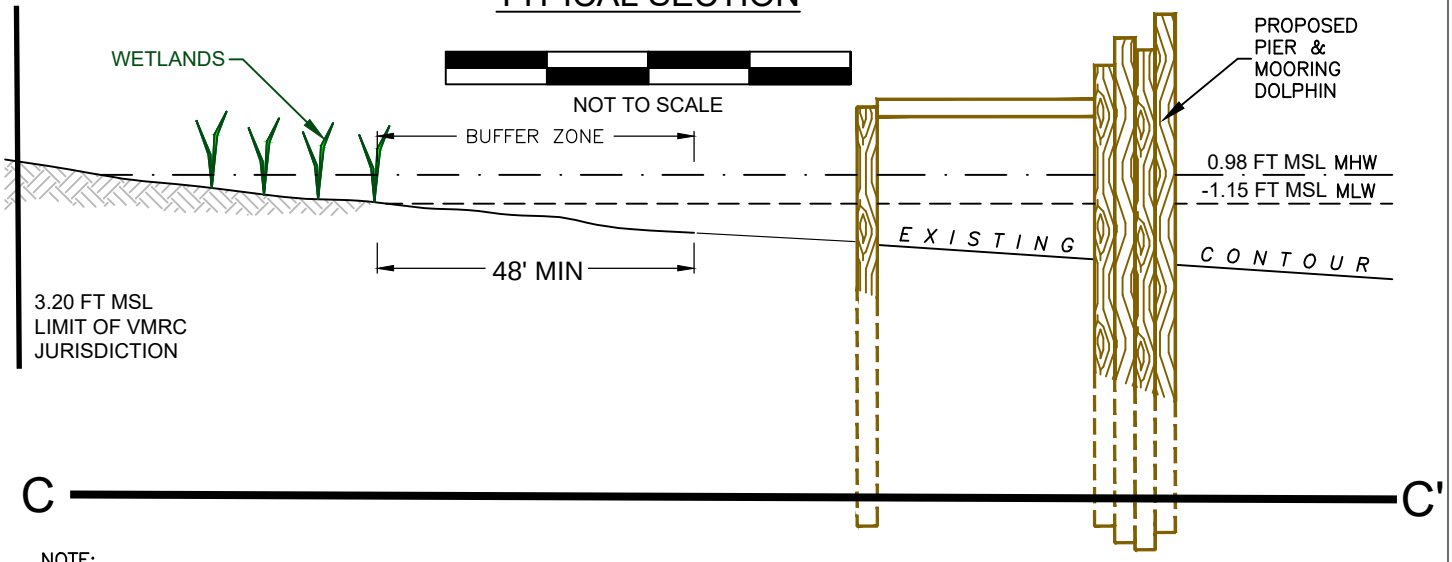
N:\Graphics\Graphics\1200-Richmond\MISC\Farley Vale LLC\Farley Vale LLC_Construction Detail Sheets.dwg, SH-1, EVega

TYPICAL PIER PLAN & SECTION



NOTE:
ALL TIMBER TREATED.
ALL HARDWARE GALVINIZED.

TYPICAL SECTION



NOTE:
NO WETLANDS TO BE DREDGED OR FILLED BY PROJECT AS PROPOSED.

Source:
King George County BOS
Solite Wharf - 1980.pdf

Proposed Construction Details

Farley Vale LLC
Farley Vale Drive
King George, Virginia

Drawn E.V.
Date 03/12/25
Designed
Figure 4
Approved

Scale In Feet (As Shown)

Groundwater & Environmental Services, Inc.

N:\Graphics\Graphics\1200-Richmond\MISC\Farley Vale LLC\Farley Vale LLC_Construction Detail Sheets.dwg, SH-2, EVega

Appendix C – Preliminary Jurisdictional Determination

Farley Vale, LLC

Preliminary Jurisdictional Waters of the U.S. Determination and Delineation Package

12475 Farley Vale Drive
King George County, Virginia

April, 2024

Preliminary Jurisdictional Waters of the U.S. (WOTUS) Determination and Delineation Package

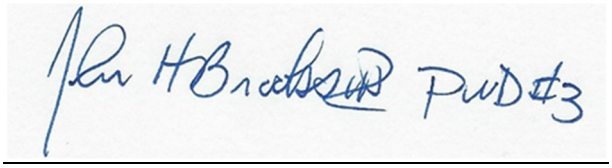
12475 Farley Vale Drive
King George County, Virginia 22485

Prepared for:
Farley Vale, LLC
Mr. Daniel R. Jacobs
3090 McNeal Road
Woodbine, Maryland 21797

Prepared by:
Groundwater & Environmental Services, Inc.
571 Southlake Boulevard
Richmond, Virginia 23236
TEL: 804-332-3063
www.gesonline.com

GES Project:
1202756

Date:
April 2, 2024



John H. Brooks, III, PWD #3
Director – Ecological Services
Professional Wetland Delineator #0003

Joshua Walker
Project Environmental Scientist

Table of Contents

Figures

Tables

Appendices

1 Project Information Sheet

General

Project Name:	Farley Vale Dock WOTUS Delineation
State:	Virginia
County:	King George
Latitude:	38.241933 North
Longitude:	77.278746 West
Project Area Size:	+/- 15.75 acres
HUC Code:	Rappahannock River-Mount Creek Subwatershed (HUC 12 - 020801040201)
Waterbodies (TNW):	Rappahannock River

Corresponding Information

USGS Quad:	Rappahannock Academy, VA
USDA Soils Map:	https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm King George County, Virginia

Owner

Name:	Farley Vale, LLC
Address:	3090 McNeal Road Woodbine, Maryland 21797

Applicant

Name:	Farley Vale, LLC
Address:	3090 McNeal Road Woodbine, Maryland 21797
Contact:	Mr. Daniel R. Jacobs

Consultant

Name:	Groundwater & Environmental Services, Inc.
Address:	571 Southlake Boulevard Richmond, Virginia 23236
Telephone/Email:	804-332-3063 / JBrooks@gesonline.com
Contact:	Mr. John H. Brooks, III, PWD, No. 3

2 Introduction

On behalf of Farley Vale, LLC., Groundwater & Environmental Services, Inc. (GES) field personnel conducted a delineation on January 23, 2024, to identify Waters of the U.S. (WOTUS), including wetlands, within an approximately 15.75-acre portion of the parcel identified as Parcel Number 22-49A (Project Area). The parcel containing the project area is owned by Farley Vale, LLC., and is located off of Kings Highway (VA-3) near the intersection with Farley Vale Drive in King George County, Virginia. A copy of the signed USACE Jurisdictional Waters Determination Request Form is included as **Appendix A**.

3 Site Information

3.1 Site Location

The project area is located approximately 10 miles east of Fredericksburg, Virginia on the west bank of the Rappahannock River (River) just north of Corbins Neck, south of Kings Highway (VA-3) in the area of Graves Corner, Virginia. The project area is located within the Rappahannock River-Mount Creek subwatershed (HUC 12 – 020801040201), which is below the fall line and is subject to the ebb and flow of tidal action.

3.2 Site Description

The project area has a combination of open meadow and forested land cover and is part of a rural agricultural parcel along the banks of the Rappahannock River. The portion of the parcel containing the project area is zoned as an industrial district (I), with the remainder zoned as limited agricultural (A-1). The site is currently undergoing post-mining reclamation and is still under an active mining permit. A dock and boat slip within the project area are in need of repair and are the focus of the delineation.

4 Methods of Delineation

4.1 Preliminary Offsite Investigation & Data Review

A review of publicly available resources was performed prior to the onsite field investigation to determine if there is the potential for jurisdictional areas. These mapping resources generally include, but are not limited to, the United States Geological Survey (USGS) maps, the United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils database, and the United States Fish & Wildlife Service National Wetlands Inventory (NWI) database.

4.2 Field Investigation

The property was delineated based upon the methodology outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual; the USACE Wetland Delineation Manual: Atlantic and

Gulf Coastal Plain, and subsequently issued USACE regulatory guidance regarding the identification of jurisdictional stream channels through the recognition of field indicators of an ordinary high-water mark within drainage features.

The WOTUS boundary was flagged with consecutively numbered pink flags labelled "wetland delineation" at approximately 50-foot intervals. Field data stations were established within close proximity to the flagged WOTUS boundary, within 10 to 20 feet, in order to document the upland and wetland conditions existing along the jurisdictional boundary. Field data stations were labelled and marked in the field with bright yellow flagging. Features identified in the field have been approximated via GPS and will ultimately be survey located and presented in future submittals such as a potential future permit application. Photographs were taken of the field data stations to depict existing site conditions along the delineation boundary. Field data sheets are included in **Appendix B**. Site photographs collected during the field delineation are included in **Appendix C**.

5 Delineation Findings

5.1 Preliminary Offsite Investigation & Data Review Findings

The USGS map depicts the project area as open meadow with forested areas along the bank of the Rappahannock River (the River). Farley Vale Drive loops from Kings Highway south and back north near the project area. South of the project area, the area labeled as Corbins Neck is mapped as largely forested wetlands. A railroad is depicted on the USGS maps which is no longer present on the property. The project area has generally gradual topography, sloping to the south and east in the direction of the River, with slopes becoming slightly steeper closer to the banks. The project area has a topographic high elevation of approximately 25 feet above mean sea level (MSL), transitioning to approximately 0-10 feet above MSL at the lowest elevations along the River (**Figure 1**: Site Location Map).

The NRCS web soil survey identifies seven soil series/complexes within the project area, and open water. The predominant soil type that exists within the property is Fresh water swamp. The onsite soil types and descriptions are listed in **Table 1**, and locations are shown on **Figure 2**: Environmental Inventory Map.

Table 1 – Summary of Soils Within the Project Area

Name	Description	Hydric Status
Fresh water swamp	Poorly drained	Hydric
Sand and gravel pits	N/A	N/A
Galestown-Sassafras complex, 15-30% slopes	Somewhat excessively drained	Non-Hydric
Wickham fine sandy loam, 6-12% slopes, eroded	Well-drained	Non-Hydric
Wickham fine sandy loam, 2-6% slopes	Well-drained	Non-Hydric
Wickham fine sandy loam, 0-2% slopes	Well-drained	Non-Hydric
Tidal marsh	Very poorly drained	Hydric

Name	Description	Hydric Status
Water	N/A	N/A

NWI mapping depicts several mapped features in the project area. The Rappahannock River (R1UBV), a tidal river, is located along the eastern portion, where a fresh water palustrine emergent and shrub scrub wetland (PEM1/SS1R) is adjacent to the western bank of the Rappahannock River and borders the inlet to the south. A palustrine forested wetland (PFO1S) is located to the south of the inlet. Several mining excavations and stormwater ponds (PUBFx and PUBFh) are depicted outside of the project area, where all are shown on **Figure 2**: Environmental Inventory Map. The areas mapped on Figure 2 generally correspond to areas flagged in the field.

6 Onsite Determination & Findings

6.1 Jurisdictional Area Summary

The onsite determination found the presence of wetlands and jurisdictional channels that were not as mapped by the NWI and NRCS delineated soils. The project area contains two potentially jurisdictional WOTUS areas (A and B). The project area contains both tidal and non-tidal waters of the U.S. In this reach of the Rappahannock River, mean high water (MHW) is approximately 0.98-feet above mean sea level (MSL), and mean low water (MLW) is approximately 1.15-feet below MSL.

The Rappahannock River is designated as Area “A” and includes adjacent tidal and non-tidal wetlands which extend to the toe of a steep slope, which represent the general WOTUS/upland boundary within the project area. Area “A” also includes an inlet/slip, which is contiguous and connected to the tidal Rappahannock. Two intermittent streams were delineated within the project area that originate from niche points. These streams flow into downgradient non-tidal wetlands, which ultimately flow to the Rappahannock. Area “A” contains approximately 927 linear feet (6.77-acres) of tidal river (R1 waters below MLW), 0.57-acres (24,836 sq. ft.) of tidal flats (non-vegetated R1 waters between MLW and MHW), and 0.35-acres (15,105 sq. ft.) of tidal palustrine emergent (PEM) wetland. Area “A” also contains approximately 261 linear feet (0.06-acres) of non-tidal intermittent stream (R4 waters), 0.69-acres (30,074 sq. ft.) of non-tidal PEM wetland, and 1.59-acres (69,165 sq. ft.) of non-tidal palustrine forested (PFO) wetland.

Area “B” is located south of the delineated inlet/slip within Area “A”, and consists of forested wetland adjacent to the Rappahannock River. Area “B” is separated from the inlet by an upland berm, which is believed to be constructed from fill material originating from the slip. Area “B” contains approximately 0.31-acres (13,431 sq. ft.) of non-tidal PFO wetland.

In total, the project area contains approximately 2.65-acres (115,396 sq. ft.) and 261 linear feet of non-tidal jurisdictional wetlands and waters, and approximately 7.69-acres (335,107 sq. ft.) and 927 linear feet of tidal jurisdictional wetlands and waters, respectively. The WOTUS system presumably obtains water from rainfall, runoff, and a shallow groundwater table, as well as the

twice daily inundation from the tidal influences and regular flood flows from the Rappahannock River.

Sample points (SPs) A2, A4, A5, A9, A11, and B1 were established to document the presence of conditions consistent with WOTUS. SP-A1, A3, A6 through A8, A10, and A12 through A14 were established to document the upland conditions.

As of February 11, 2024, King George County has received between 75-100% of normal precipitation (NOAA National Integrated Drought Information System) over the preceding 30 days, indicating normal rainfall conditions at the time of the delineation. King George County, along with most of Virginia, was not considered to be in a drought as of January 30, 2024 (U.S. Drought Monitor). Based on this information, hydrologic conditions are considered to be typical for this time of year.

Vegetation at the wetland sample points included river birch (*Betula nigra*), American sycamore (*Platanus occidentalis*), common reed (*Phragmites australis*), narrowleaf cattail (*Typha angustifolia*), broadleaf cattail (*Typha latifolia*), tulip poplar (*Liriodendron tulipifera*), green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), Indian wood oats (*Chasmanthium latifolium*), and wingstem (*Verbesina alternifolia*)

A summary of the jurisdictional areas identified onsite is provided below in **Table 2**: Potential Jurisdictional Area Summary, and the approximate location and approximate size of jurisdictional areas delineated onsite are shown on **Figure 3**: Preliminary Jurisdictional WOTUS Delineation Map. Information regarding wetland boundaries is listed in **Table 2**: Potential Jurisdictional Area Summary and **Figure 3**: Preliminary Jurisdictional WOTUS Delineation Map.

Table 2 – Potential Jurisdictional WOTUS Summary

Summary of Waters of the U.S.

Resource ID	Type and Area in Acres (sq. ft. / lin. ft.) of Non-Tidal WOTUS		
	PFO	**PEM**	**Riverine (R4)**
A	1.59 (69,165)	0.69 (30,074)	0.06 (2,726 / 261)
B	0.31 (13,431)	-	-
Total	1.90 (82,596)	0.69 (30,074)	0.06 (2,726 / 261)
Total WOTUS Area	**2.65 ac (115,396 sq. ft. / 261 lin. ft.)**		
Resource ID	**Type and Area in Acres (sq. ft. / lin. ft.) of Tidal WOTUS**		
	PEM	**Tidal Flat (R1)**	**Riverine (R1)**
A	0.35 (15,105)	0.57 (24,836)	6.77 (295,166 / 927)
Total	0.35 (15,105)	0.57 (24,836)	6.77 (295,166 / 927)
Total WOTUS Area	**7.69 ac (335,107 sq. ft. / 927 lin. ft.)**		

6.2 Upland Area Summary

The project area consists of approximately 5.41-acres of upland, which lies adjacent to and upgradient from the potentially jurisdictional areas. SP-A1, A3, A6, A7, A8, A10, A12, A-13, and A14 were established to document the upland conditions. Vegetation at these sample points included Kentucky bluegrass (*Poa pratensis*), broom-corn (*Sorghum bicolor*), sand plantain (*Plantago arenaria*), white oak (*Quercus alba*), tulip poplar (*Liriodendron tulipifera*), American sycamore (*Platanus occidentalis*), Japanese honeysuckle (*Lonicera japonica*), Asian pony's-foot (*Dichondra micrantha*), Christmas fern (*Polystichum acrostichoides*), red maple (*Acer rubrum*), eastern red cedar (*Juniperus virginiana*), and green ash (*Fraxinus pennsylvanica*).

References

National List of Hydric Soils 2010, United States Department of Agriculture Natural Resource Conservation Service,

https://efotg.sc.egov.usda.gov/references/Public/IL/State_List_NRCS_Hydric_Soils_Report_Dynamic_Data.html

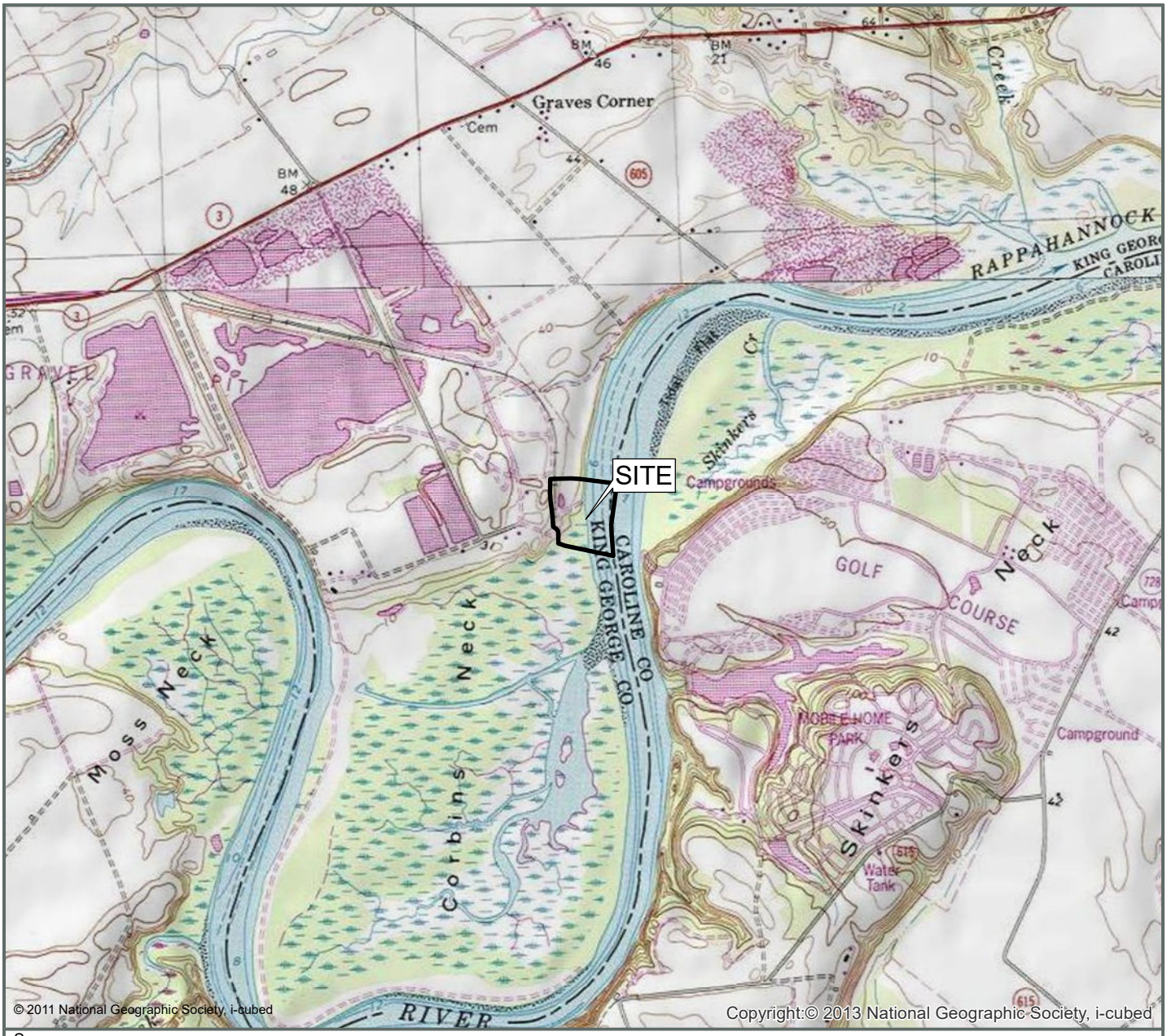
United States Department of Agriculture Natural Resources Conservation Service, https://websoilsurvey.nrcs.usda.gov/app/

United States Geological Survey 7.5-Minute Quadrangle Topographic Map, Rappahannock Academy, Virginia 2022

United States Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)

Wetland Training Institute. 1995. Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual, Wetland Training Institute, Glenwood, NM, USA.

Figures



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Sources:
USGS 7.5 Minute Series
Topographic Quadrangle
Rappahannock Adademy, Virginia
Passapatanzy, Virginia
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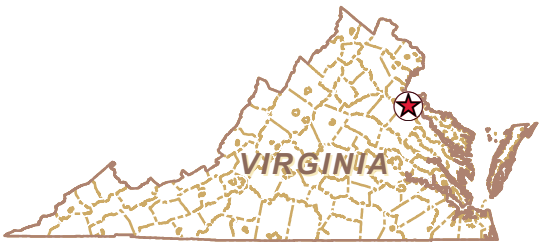


Site Location Map

Farley Vale LLC
Farley Vale Drive
King George, VA

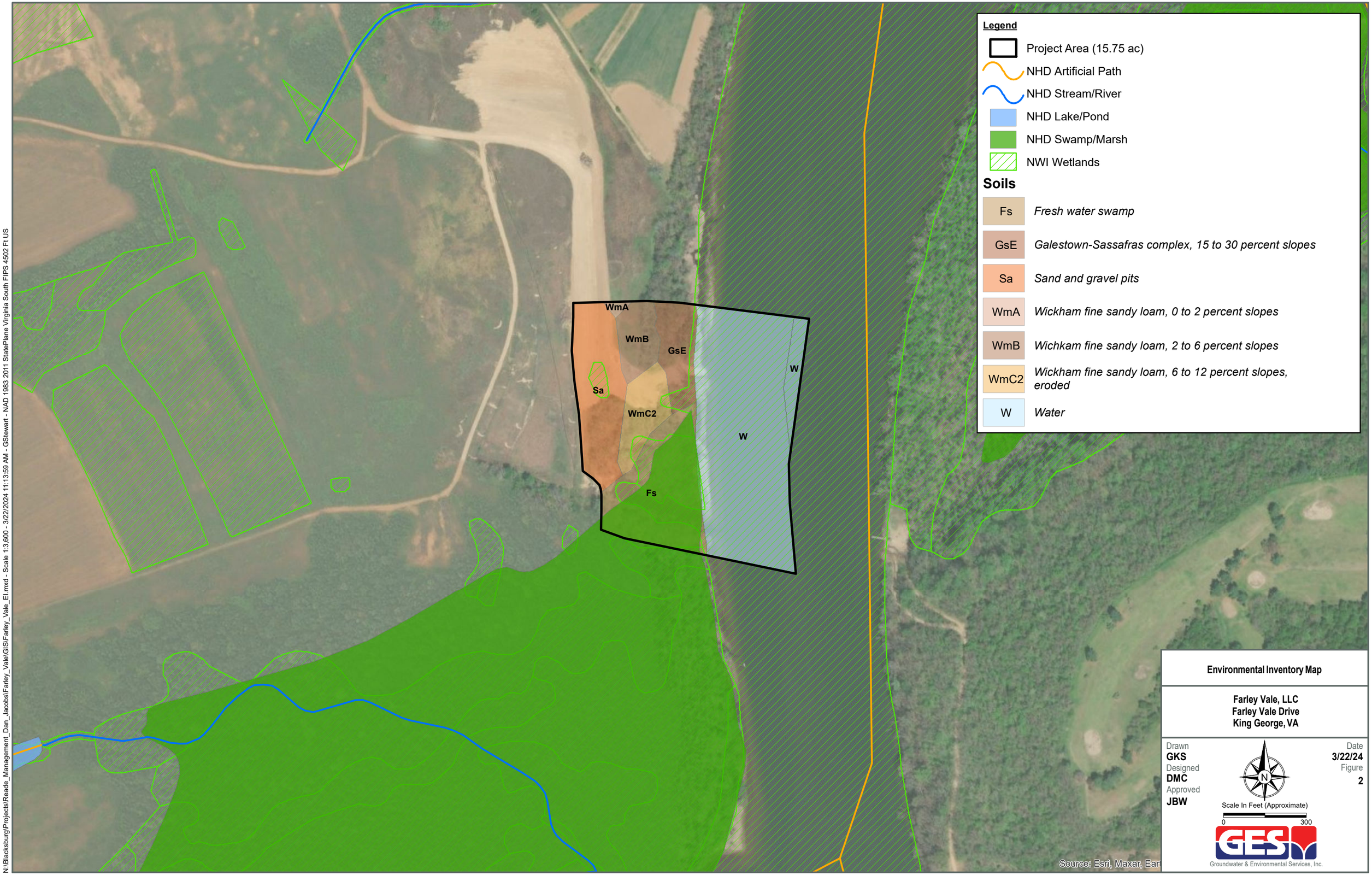
Drawn **GKS**
Designed **DMC**
Approved **JBW**

Date **3/22/24**
Figure **1**

N

Scale In Feet (Approximate)
0 2,000

GES
Groundwater & Environmental Services, Inc.



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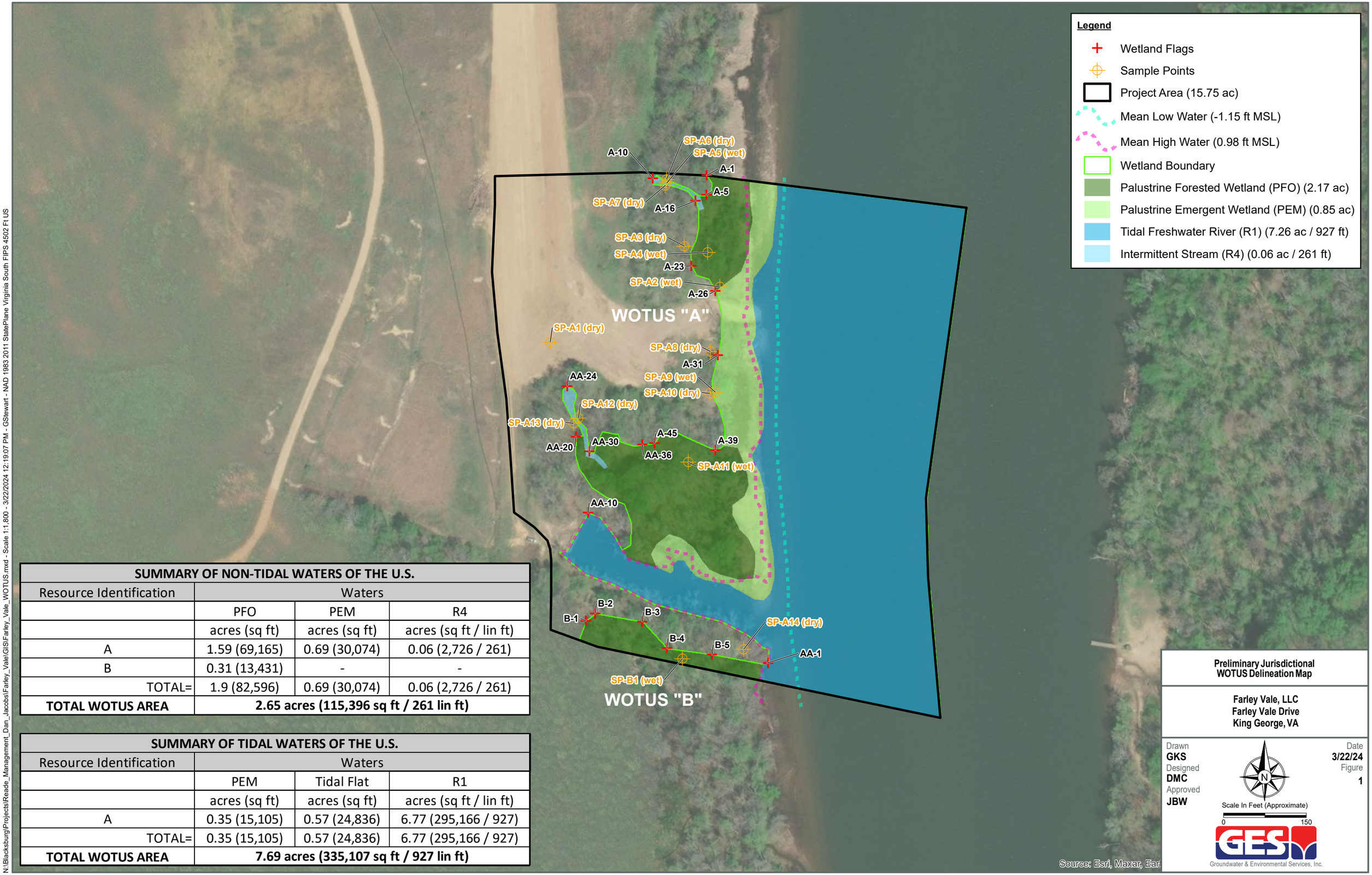

SUMMARY OF NON-TIDAL WATERS OF THE U.S.			
Resource Identification	Waters		
	PFO	PEM	R4
	acres (sq ft)	acres (sq ft)	acres (sq ft / lin ft)
A	1.59 (69,165)	0.69 (30,074)	0.06 (2,726 / 261)
B	0.31 (13,431)	-	-
TOTAL=	1.9 (82,596)	0.69 (30,074)	0.06 (2,726 / 261)
TOTAL WOTUS AREA	**2.65 acres (115,396 sq ft / 261 lin ft)**		

SUMMARY OF TIDAL WATERS OF THE U.S.			
Resource Identification	Waters		
	PEM	Tidal Flat	R1
	acres (sq ft)	acres (sq ft)	acres (sq ft / lin ft)
A	0.35 (15,105)	0.57 (24,836)	6.77 (295,166 / 927)
TOTAL=	0.35 (15,105)	0.57 (24,836)	6.77 (295,166 / 927)
TOTAL WOTUS AREA	**7.69 acres (335,107 sq ft / 927 lin ft)**		

Preliminary Jurisdictional WOTUS Delineation Map

Farley Vale, LLC
Farley Vale Drive
King George, VA

Drawn **GKS**
Designed **DMC**
Approved **JBW**
Date **3/22/24**
Figure **1**

Scale In Feet (Approximate)
0 150

GES Groundwater & Environmental Services, Inc.

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Appendix A – USACE Jurisdictional Waters Determination Request Form

NORFOLK DISTRICT REGULATORY OFFICE
PRE-APPLICATION AND/OR JURISDICTIONAL WATERS DETERMINATION REQUEST FORM

This form is used when you want to determine if areas on your property fall under regulatory requirements of the U.S. Army Corps of Engineers (USACE). Please supply the following information and supporting documents described below. This form can be filled out online and/or printed and then mailed, faxed, or e-mailed to the Norfolk District. Submitting this request authorizes the US Army Corps of Engineers to field inspect the property site, if necessary, to help in the determination process. **THIS FORM MUST BE SIGNED BY THE PROPERTY OWNER TO BE CONSIDERED A FORMAL REQUEST.**

The printed form and supporting documents should be mailed to:

U.S. Army Corps of Engineers, Norfolk District
Regulatory Branch
803 Front Street
Norfolk, Virginia 23510-1096

Or faxed to (757) 201-7678

Or sent via e-mail to: CENAO.REG_ROD@usace.army.mil

Additional information on the Regulatory Program is available on our website at:
http://www.nao.usace.army.mil/
Please contact us at 757-201-7652 if you need any assistance with filling out this form.

Location and Information about Property to be subject to a Jurisdictional Determination:

1. Date of Request: April 2, 2024
2. Project Name: Farley Vale Dock
3. City or County where property located: King George
4. Address of property and directions (attach a map of the property location and a copy of the property plat): 12475 Farley Vale Drive, King George, VA 22485
5. Coordinates of property (if known): 38.241933 N , 77.278746 W
6. Size of property in acres: +/- 15.75
7. Tax Parcel Number / GPIN (if available): 22-49A
8. Name of Nearest Waterway: Rappahannock River

9. Brief Description of Proposed Activity, Reason for Preapplication Request, and/or Reason for Jurisdictional Waters Determination Request:
Farley Vale, LLC is requesting a Jurisdictional Determination following a WOTUS delineation conducted by GES in January 2024. The applicant intends to utilize this determination in pursuit of a potential future permit application.

10. Has a wetland delineation/determination been completed by a consultant or the Corps on the property previously? ☐ YES ☐ NO ☒ UNKNOWN

If yes, please provide the name of the consultant and/or Corps staff and Corps permit number, if available:

Property Owner Contact Information:

Property Owner Name: Farley Vale, LLC
Mailing Address: 3090 McNeal Road
City: State: Zip: Woodbine, MD 21797
Daytime Telephone: 434-989-6094
E-mail Address: daniel@reademanagement.com

If the person requesting the Jurisdictional Determination is **NOT** the Property Owner, please also supply the Requestor's contact information here:

Requestor Name: same as above
Mailing Address:
City: State: Zip:
Daytime Telephone:
E-mail Address:

Additionally, if you have any of the following information, please include it with your request: wetland delineation map, other relevant maps, drain tile survey, topographic survey, and/or site photographs.

CERTIFICATION: I am hereby requesting a preapplication consultation or jurisdictional waters and/or wetlands determination from the U.S. Army Corps of Engineers, for the property(ies) I have described herein. I agree to allow the duly authorized representatives of the Norfolk District Corps of Engineers and other regulatory or advisory agencies to enter upon the premises of the project site at reasonable times to evaluate inspect and photograph site conditions. This consent to enter the property is superior to, takes precedence over, and waives any communication to the contrary. For example, if the property is posted as "no trespassing" this consent specifically supercedes and waives that prohibition and grants permission to enter the property despite such posting. I hereby certify that the information contained in the Request for a Jurisdictional Determination is accurate and complete:

Property Owner's Signature

4/16/2024
Date

Appendix B – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024
Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A1
Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 0-2
Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242427 Long: -77.279353 Datum: NAD83
Soil Map Unit Name: Sa - Sand and gravel pits NWI classification: PUBFx
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A1 is in upland. None of the three indicators are present. Soil is too compacted to dig much below the surface with hand tools.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of wetland hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A1

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 25)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	60	Yes	FACU
2. *Sorghum bicolor*	20	No	FACU
3. *Plantago arenaria*	20	No	FACU
4. *Setaria pumila*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
50% of total cover: 53	20% of total cover: 21		
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	105 (A)		415 (B)

Prevalence Index = B/A = 3.95

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is not present at this sample point.

SOIL

Sampling Point: SP-A1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/3	100						Sand and gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compaction, gravel

Depth (inches): 2

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed at this sample point. Disturbed soil too compacted to dig through with hand tools.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A2

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242690 Long: -77.278277 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-A2 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Indicators of wetland hydrology observed. Saturation to the surface, water table observed at 4" depth below surface.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A2

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Betula nigra*	30	Yes	FACW
2. *Liriodendron tulipifera*	20	Yes	FACU
3. *Platanus occidentalis*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
	55	=Total Cover	
50% of total cover: 28		20% of total cover: 11	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fagus grandifolia*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5	=Total Cover	
50% of total cover: 3		20% of total cover: 1	
Herb Stratum (Plot size: 5)			
1. *Phragmites australis*	90	Yes	FACW
2. *Ludwigia palustris*	10	No	OBL
3. *Typha latifolia*	5	No	OBL
4. *Typha angustifolia*	5	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	=Total Cover	
50% of total cover: 55		20% of total cover: 22	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	125	x 2 =	250
FAC species	0	x 3 =	0
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	170 (A)		370 (B)
Prevalence Index = B/A =			2.18

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL

Sampling Point: SP-A2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/3	100						Organic, sandy loam
2-20	2.5Y 3/1	70	7.5YR 4/4	30	C	PL		Sandy silty loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A3

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242895 Long: -77.278499 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A3 is in upland. None of the three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of wetland hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A3

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus alba*	30	Yes	FACU
2. *Liriodendron tulipifera*	20	Yes	FACU
3. *Platanus occidentalis*	20	Yes	FACW
4. *Betula nigra*	10	No	FACW
5.			
6.			
7.			
8.			
	80	=Total Cover	
50% of total cover: 40		20% of total cover:	16

Sapling/Shrub Stratum (Plot size: 25)			
1. *Liriodendron tulipifera*	10	Yes	FACU
2. *Nyssa sylvatica*	10	Yes	FAC
3. *Betula nigra*	5	Yes	FACW
4.			
5.			
6.			
7.			
8.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover:	5

Herb Stratum (Plot size: 5)			
1. *Lonicera japonica*	50	Yes	FACU
2. *Dichondra micrantha*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70	=Total Cover	
50% of total cover: 35		20% of total cover:	14

Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	30	x 3 =	90
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	175 (A)		600 (B)
Prevalence Index = B/A =			3.43

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is not present at this sample point.

SOIL

Sampling Point: SP-A3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/4	100						Silty sandy loam
5-20	10YR 4/4	70	2.5Y 5/1	30				Silty sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A4

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242863 Long: -77.278352 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-A4 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 4

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology was observed at this sample point. Saturation observed at 4 inches depth, water table observed at 10 inches depth.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A4

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus occidentalis*	20	Yes	FACW
2. *Liriodendron tulipifera*	10	Yes	FACU
3. *Betula nigra*	10	Yes	FACW
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
50% of total cover: 20	20% of total cover: 8		

Sapling/Shrub Stratum (Plot size: 25)			
1. *Liriodendron tulipifera*	10	Yes	FACU
2. *Betula nigra*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	20	=Total Cover	
50% of total cover: 10	20% of total cover: 4		

Herb Stratum (Plot size: 5)			
1. *Smilax rotundifolia*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	
50% of total cover: 5	20% of total cover: 2		

Woody Vine Stratum (Plot size: 15)			
1. *Smilax rotundifolia*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	
50% of total cover: 5	20% of total cover: 2		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	20	x 3 =	60
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	80 (A)		220 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL Sampling Point: SP-A4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	2.5Y 5/1	80	7.5YR 4/4	20	C	PL		Silty sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A5

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.243210 Long: -77.278605 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-A5 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 0
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology was observed at this sample point. Water is seeping out of side slopes forming adjacent wetlands to a small stream. Water at surface.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A5

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Platanus occidentalis*	10	Yes	FACW
3. *Liriodendron tulipifera*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	

Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Ilex opaca*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover: 5	

Herb Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	5	x 3 =	15
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	60 (A)		135 (B)
Prevalence Index = B/A =			2.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL

Sampling Point: SP-A5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-18	5GY 3/1	100						Sandy loam with gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- X Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A6

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 10-15

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.243229 Long: -77.278606 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A6 is in upland. None of the three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A6

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Platanus occidentalis*	10	Yes	FACW
3. *Liriodendron tulipifera*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Ilex opaca*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover: 5	
Herb Stratum (Plot size: 5)			
1. *Polystichum acrostichoides*	40	Yes	FACU
2. *Lonicera japonica*	40	Yes	FACU
3. *Dichondra micrantha*	20	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	=Total Cover	
50% of total cover: 50		20% of total cover: 20	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	25	x 3 =	75
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	160 (A)		515 (B)
Prevalence Index = B/A =			3.22

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Though the observed vegetation meets the criteria for hydrophytic vegetation, the sample point is not within a wetland.

SOIL

Sampling Point: SP-A6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed at this sample point

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A7

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 10-15

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.243199 Long: -77.278614 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A7 is in upland. Only one of the three indicators is present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A7

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Platanus occidentalis*	10	Yes	FACW
3. *Liriodendron tulipifera*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Ilex opaca*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover: 5	
Herb Stratum (Plot size: 5)			
1. *Polystichum acrostichoides*	40	Yes	FACU
2. *Lonicera japonica*	40	Yes	FACU
3. *Dichondra micrantha*	20	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	=Total Cover	
50% of total cover: 50		20% of total cover: 20	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	25	x 3 =	75
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	160 (A)		515 (B)
Prevalence Index = B/A =			3.22

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Though the observed vegetation meets the criteria for hydrophytic vegetation, the sample point is not within a wetland.

SOIL

Sampling Point: SP-A7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/3	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed at this sample point

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A8

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 10-15

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242370 Long: -77.278343 Datum: NAD83

Soil Map Unit Name: GsE - Galestown-Sassafras complex, 15-30% slopes NWI classification: R1UBV

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A8 is in upland. Only one of the three indicators is present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A8

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Platanus occidentalis*	10	Yes	FACW
3. *Betula nigra*	10	Yes	FACW
4.			
5.			
6.			
7.			
8.			
	30	=Total Cover	
50% of total cover: 15		20% of total cover: 6	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Fagus grandifolia*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	20	=Total Cover	
50% of total cover: 10		20% of total cover: 4	
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	90	Yes	FACU
2. *Sorghum bicolor*	30	Yes	FACU
3. *Schoenoplectus tabernaemontani*	10	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130	=Total Cover	
50% of total cover: 65		20% of total cover: 26	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57.1% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	130	x 4 =	520
UPL species	0	x 5 =	0
Column Totals:	180 (A)		610 (B)
Prevalence Index = B/A =			3.39

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Though the observed vegetation meets the criteria for hydrophytic vegetation, the sample point is not within a wetland.

SOIL

Sampling Point: SP-A8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/3	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Restrictive gravel layer

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed at this sample point

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024
Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A9
Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 10-15
Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242167 Long: -77.278315 Datum: NAD83
Soil Map Unit Name: Fs - Fresh water swamp NWI classification: R1UBV
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-A9 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Indicators of wetland hydrology observed. Saturation observed at 6 inches depth, water table observed at 10 inches depth.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A9

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liriodendron tulipifera*	20	Yes	FACU
2. *Platanus occidentalis*	20	Yes	FACW
3. *Acer rubrum*	20	Yes	FAC
4.			
5.			
6.			
7.			
8.			
	60	=Total Cover	
50% of total cover: 30		20% of total cover:	12

Sapling/Shrub Stratum (Plot size: 25)			
1. *Acer rubrum*	30	Yes	FAC
2. *Platanus occidentalis*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8

Herb Stratum (Plot size: 5)			
1. *Chasmanthium latifolium*	40	Yes	FAC
2. *Verbesina alternifolia*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	=Total Cover	
50% of total cover: 30		20% of total cover:	12

Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	110	x 3 =	330
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	160 (A)		470 (B)
Prevalence Index = B/A =			2.94

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL

Sampling Point: SP-A9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/4	100						Sandy loam
6-20	5Y 5/1	60	7.5YR 4/6	40	C	PL		Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024
Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A10
Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 10-15
Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242162 Long: -77.278351 Datum: NAD83
Soil Map Unit Name: Fs - Fresh water swamp NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A10 is in upland. Only one of the three indicators is present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A10

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Juniperus virginiana*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover: 5	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Acer rubrum*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10	=Total Cover	
50% of total cover: 5		20% of total cover: 2	
Herb Stratum (Plot size: 5)			
1. *Chasmanthium latifolium*	70	Yes	FAC
2. *Smilax rotundifolia*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	=Total Cover	
50% of total cover: 40		20% of total cover: 16	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	110	x 3 =	330
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	115 (A)		350 (B)

Prevalence Index = B/A = 3.04

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Though observed vegetation meets the criteria for hydrophytic vegetation, the sample point is not within a wetland.

SOIL

Sampling Point: SP-A10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/4	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024
Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A11
Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 0-2
Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.241821 Long: -77.278491 Datum: NAD83
Soil Map Unit Name: Fs - Fresh water swamp NWI classification: PEM1/SS1R
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-A11 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 9
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 1

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Indicators of wetland hydrology observed. Saturation observed at 1 inch depth, water table observed at 9 inches depth.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A11

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	30	Yes	FACW
2. *Acer rubrum*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	50	=Total Cover	
50% of total cover: 25		20% of total cover:	10
Herb Stratum (Plot size: 5)			
1. *Chasmanthium latifolium*	90	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	=Total Cover	
50% of total cover: 45		20% of total cover:	18
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	150	x 3 =	450
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	180 (A)		510 (B)
Prevalence Index = B/A =			2.83

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL Sampling Point: SP-A11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y 5/2	70	7.5YR 4/6	30	C	PL		Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A12

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242047 Long: -77.279181 Datum: NAD83

Soil Map Unit Name: Sa - Sand and gravel pits NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A12 is in upland. None of the three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of wetland hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A12

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Liriodendron tulipifera*	20	Yes	FACU
3. *Platanus occidentalis*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
	45	=Total Cover	
50% of total cover: 23		20% of total cover:	9
Sapling/Shrub Stratum (Plot size: 25)			
1. *Acer rubrum*	20	Yes	FAC
2. *Ilex opaca*	10	Yes	FAC
3. *Fagus grandifolia*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	20	Yes	FACU
2. *Polystichum acrostichoides*	20	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8
Woody Vine Stratum (Plot size: 15)			
1. *Smilax rotundifolia*	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	=Total Cover	
50% of total cover: 10		20% of total cover:	4

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	70	x 3 =	210
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	145 (A)		500 (B)

Prevalence Index = B/A = 3.45

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is not present at this sample point.

SOIL

Sampling Point: SP-A12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100						Sandy loam
8-18	10YR 4/4	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A13

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.242022 Long: -77.279213 Datum: NAD83

Soil Map Unit Name: Sa - Sand and gravel pits NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A13 is in upland. None of the three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of wetland hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A13

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Liriodendron tulipifera*	20	Yes	FACU
3. *Platanus occidentalis*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
	45	=Total Cover	
50% of total cover: 23		20% of total cover:	9
Sapling/Shrub Stratum (Plot size: 25)			
1. *Acer rubrum*	20	Yes	FAC
2. *Ilex opaca*	10	Yes	FAC
3. *Fagus grandifolia*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8
Herb Stratum (Plot size: 5)			
1. *Poa pratensis*	20	Yes	FACU
2. *Polystichum acrostichoides*	20	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8
Woody Vine Stratum (Plot size: 15)			
1. *Smilax rotundifolia*	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	=Total Cover	
50% of total cover: 10		20% of total cover:	4

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	70	x 3 =	210
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	145 (A)		500 (B)

Prevalence Index = B/A = 3.45

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is not present at this sample point.

SOIL

Sampling Point: SP-A13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100						Sandy loam
8-18	10YR 4/4	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024
Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-A14
Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0-2
Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.240887 Long: -77.278157 Datum: NAD83
Soil Map Unit Name: Fs - Fresh water swamp NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Sample point SP-A14 is in upland. Only one of the three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No indicators of wetland hydrology observed.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-A14

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Betula nigra*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	30	=Total Cover	
50% of total cover: 15		20% of total cover: 6	
Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Betula nigra*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	20	=Total Cover	
50% of total cover: 10		20% of total cover: 4	
Herb Stratum (Plot size: 5)			
1. *Chasmanthium latifolium*	60	Yes	FAC
2. *Lonicera japonica*	10	No	FACU
3. *Smilax rotundifolia*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	=Total Cover	
50% of total cover: 40		20% of total cover: 16	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	90	x 3 =	270
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	130 (A)		370 (B)

Prevalence Index = B/A = 2.85

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Though observed vegetation meet the criteria for hydrophytic vegetation, the sample point is not within a wetland.

SOIL

Sampling Point: SP-A14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 4/4	100						Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Restrictive gravel layer

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Hydric soils were not observed.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region
See ERDC/EL TR-10-20; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Farley Vale City/County: King George Sampling Date: 1/23/2024

Applicant/Owner: Farley Vale, LLC State: VA Sampling Point: SP-B1

Investigator(s): J. Walker, B. Umphlett Section, Township, Range: n/a

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): none Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 133A Lat: 38.240804 Long: -77.278561 Datum: NAD83

Soil Map Unit Name: Fs - Fresh water swamp NWI classification: PFO1S

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Sample point SP-B1 is in a wetland. All three indicators are present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum Moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 10
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 3

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Indicators of wetland hydrology observed. Saturation observed at 3 inches depth, water table observed at 10 inches depth.

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-B1

Tree Stratum (Plot size: 25)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2. *Fraxinus pennsylvanica*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	55	=Total Cover	
50% of total cover: 28		20% of total cover:	11

Sapling/Shrub Stratum (Plot size: 25)			
1. *Fraxinus pennsylvanica*	30	Yes	FACW
2. *Acer rubrum*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	50	=Total Cover	
50% of total cover: 25		20% of total cover:	10

Herb Stratum (Plot size: 5)			
1. *Chasmanthium latifolium*	60	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	=Total Cover	
50% of total cover: 30		20% of total cover:	12

Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	120	x 3 =	360
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	165 (A)		450 (B)
Prevalence Index = B/A =			2.73

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (If observed, list morphological adaptations below.)
Hydrophytic vegetation is present at this sample point.

SOIL Sampling Point: SP-B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	2.5Y 5/2	70	7.5YR 4/6	30	C	PL		Sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Barrier Islands 1 cm Muck (S12) **(MLRA 153B, 153D)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 149A, 153C, 153D)**
- ___ Very Shallow Dark Surface (F22) **(MLRA 138, 152A in FL, 154)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Coast Prairie Redox (A16) **(outside MLRA 150A)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, T)**
- ___ Anomalous Bright Floodplain Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22) **(outside MLRA 138, 152A in FL, 154)**
- ___ Barrier Islands Low Chroma Matrix (TS7) **(MLRA 153B, 153D)**
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Hydric soils were observed at this sample point.

Appendix C – Site Photographs

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	1
Location:	SP-A1
Direction:	East
Date:	1/23/2024
Comments:	

Sample point SP-A1 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	2
Location:	SP-A2
Direction:	East
Date:	1/23/2024
Comments:	

Sample point SP-A2 (wet).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	3
Location:	SP-A3
Direction:	East
Date:	1/23/2024

Comments:

Sample point SP-A3 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	4
Location:	SP-A4
Direction:	West
Date:	1/23/2024

Comments:

Sample point SP-A4 (wet) looking towards SP-A3 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	5
Location:	SP-A6
Direction:	South
Date:	1/23/2024

Comments:

Sample point SP-A6 (dry) looking towards SP-A5 (wet) and SP-A7 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	6
Location:	SP-A8
Direction:	East
Date:	1/23/2024

Comments:

Sample point SP-A8 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	7
Location:	SP-A10
Direction:	East
Date:	1/23/2024

Comments:

Sample point SP-A10 (dry) looking towards SP-A9 (wet).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	8
Location:	SP-A11
Direction:	North-East
Date:	1/23/2024

Comments:

Sample point SP-A11 (wet).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	9
Location:	SP-A12
Direction:	South
Date:	1/23/2024
Comments:	

Sample point SP-A12 (dry).

Client:	Robert B. Ball, Jr	**Project:**	1202751
Site Name:	7460 Cady's Mill Road	**Site Location:**	Hanover, Virginia

Image ID:	10
Location:	SP-A13
Direction:	North-East
Date:	1/23/2024
Comments:	

Sample point SP-A13 (dry) looking towards SP-A12 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	11
Location:	SP-A14
Direction:	East
Date:	1/23/2024
Comments:	

Sample point SP-A14 (dry).

Client:	Farley Vale, LLC	**Project:**	1202756
Site Name:	12475 Farley Vale Drive	**Site Location:**	King George, Virginia

Image ID:	12
Location:	SP-B1
Direction:	South-East
Date:	1/23/2024
Comments:	

Sample point SP-B1 (wet).

Appendix D – Threatened and Endangered Species Information

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:
Project Code: 2024-0035017
Project Name: Farley Vale Dock

January 10, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

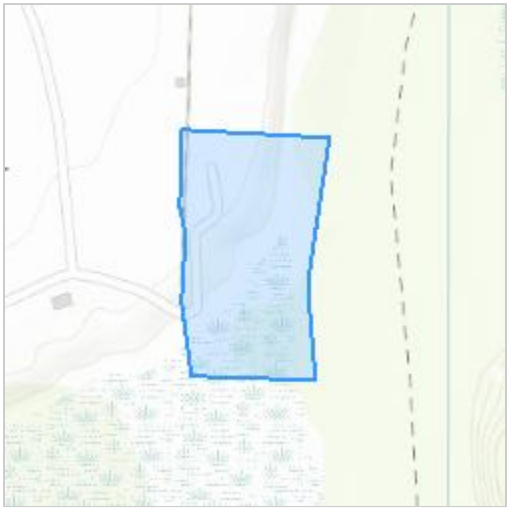
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

PROJECT SUMMARY

Project Code: 2024-0035017
Project Name: Farley Vale Dock
Project Type: Boatlift/Boathouse/Dock/Pier/Piles - Maintenance/Modificaton
Project Description: Applicant intends to maintenance dredge existing inlet channel and replace existing dock using the same footprint as previously permitted.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.24195,-77.27876412784028,14z



Counties: King George County, Virginia

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

CLAMS

NAME	STATUS
Yellow Lance *Elliptio lanceolata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4511	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Sensitive Joint-vetch *Aeschynomene virginica*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/855

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Joshua Walker
Address: 571 Southlake Blvd
City: Richmond
State: VA
Zip: 23236
Email jwalker@gesonline.com
Phone: 4436244348

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:
Project code: 2024-0035017
Project Name: Farley Vale Dock

January 10, 2024

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Technical assistance for 'Farley Vale Dock'

Dear Joshua Walker:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on January 10, 2024, for 'Farley Vale Dock' (here forward, Project). This project has been assigned Project Code 2024-0035017 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project is not reasonably certain to cause incidental take of the northern long-eared bat. Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Sensitive Joint-vetch *Aeschynomene virginica* Threatened
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Yellow Lance *Elliptio lanceolata* Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above. Note that if a new species is listed that may be affected by the identified action before it is complete, additional review is recommended to ensure compliance with the Endangered Species Act.

Next Step

Consultation with the Service is necessary. The project has a federal nexus (e.g., Federal funds, permit, etc.), but you are not the federal action agency or its designated (in writing) non-federal representative. Therefore, the ESA consultation status is incomplete and no project activities should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed.

As the federal agency or designated non-federal representative deems appropriate, they should submit their determination of effects to the Service by doing the following.

1. Log into IPaC using an agency email account and click on My Projects, click "Search by record locator" to find this Project using **116-136867822**. (Alternatively, the originator of the project in IPaC can add the agency representative to the project by using the Add Member button on the project home page.)
2. Review the answers to the Northern Long-eared Bat Range-wide Determination Key to ensure that they are accurate.
3. Click on Review/Finalize to convert the ‘not likely to adversely affect’ consistency letter to a concurrence letter. Download the concurrence letter for your files if needed.

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place before project implements any changes which are final or commits additional resources.

If you have any questions regarding this letter or need further assistance, please contact the Virginia Ecological Services Field Office and reference Project Code 2024-0035017 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

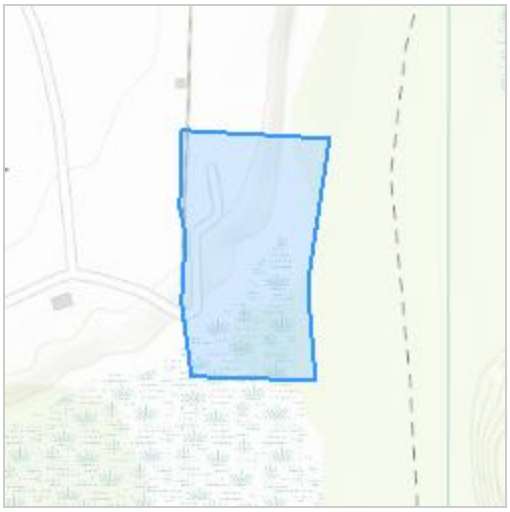
Farley Vale Dock

2. Description

The following description was provided for the project 'Farley Vale Dock':

> Applicant intends to maintenance dredge existing inlet channel and replace existing dock using the same footprint as previously permitted.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.24195,-77.27876412784028,14z



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of "may affect, but not likely to adversely affect" for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

   Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when white-nose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

   No

3. Does any component of the action involve construction or operation of wind turbines?

   Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   No

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

9. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the effects of any activities that would not occur but for the proposed action.

   If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

   Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of Effects of the Action can be found here: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

   No

10. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

    Automatically answered
    No

11. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

    No

12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
    (If unsure, answer "Yes.")

    Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    Yes

13. Will the action cause effects to a bridge?

    No

14. Will the action result in effects to a culvert or tunnel?

    No

15. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

    Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

    No

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats?**

    No

17. Will the action directly or indirectly cause construction of one or more new roads that are open to the public?

    Note: The answer may be yes when a publicly accessible road either (1) is constructed as part of the proposed action or (2) would not occur but for the proposed action (i.e., the road construction is facilitated by the proposed action but is not an explicit component of the project).

    No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic on one or more existing roads?

    Note: For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

    No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    No

20. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)?

    No

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

    No

22. Will the action include drilling or blasting?

    No

23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

    No

24. Will the proposed action involve the use of herbicides or pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

    No

25. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

    Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

26. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

    Note: Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

    No

28. Will the action result in the use of prescribed fire?

    No

29. Will the action cause noises that are louder than ambient baseline noises within the action area?

    Yes

30. Will the action cause noises during the active season in suitable summer habitat that are louder than anthropogenic noises to which the affected habitat is currently exposed? Answer 'no' if the noises will occur only during the inactive period.

    Note: Inactive Season dates for areas within a spring staging/fall swarming area can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas.

    Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

0

Will all potential northern long-eared bat (NLEB) roost trees (trees ≥3 inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

No

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

0

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees) ≥3 inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

Yes

Will all project activities by completed by April 1, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Joshua Walker
Address: 571 Southlake Blvd
City: Richmond
State: VA
Zip: 23236
Email jwalker@gesonline.com
Phone: 4436244348

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

VaFWIS Initial Project Assessment Report Compiled on 1/10/2024, 4:05:24 PM

Help

Known or likely to occur within a **2 mile radius around point 38.2411944 -77.2773889** in **033 Caroline County, 099 King George County, VA**

View Map of Site Location

481 Known or Likely Species ordered by Status Concern for Conservation (displaying first 24) (24 species with Status* or Tier I** or Tier II**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
040228	FESE	Ia	Woodpecker, red-cockaded	Picoides borealis		BOVA
050023	FESE	Ia	Bat, Indiana	Myotis sodalis		BOVA
050022	FEST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060003	FESE	Ia	Wedgemussel, dwarf	Alasmidonta heterodon		BOVA
010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes	BOVA,TEWaters
040110	FTSE	Ia	Rail, eastern black	Laterallus jamaicensis jamaicensis		BOVA
060029	FTST	IIa	Lance, yellow	Elliptio lanceolata		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050027	FPSE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
040385	ST	Ia	Sparrow, Bachman's	Peucaea aestivalis		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
100079	FC	IIIa	Butterfly, monarch	Danaus plexippus		BOVA
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA
010077		Ia	Shiner, bridle	Notropis bifrenatus		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	Tern, common	Sterna hirundo		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA
040140		IIa	Woodcock, American	Scolopax minor		BOVA
060071		IIa	Lampmussel, yellow	Lampsilis cariosa		BOVA
040203		IIb	Cuckoo, black-billed	Coccyzus erythropthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA,Habitat

To view **All 481 species** View 481

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
Virginia Widlife Action Plan Conservation Opportunity Ranking:
a - On the ground management strategies/actions exist and can be feasibly implemented.;
b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

View Map of All Query Results from All Observation Tables

Bat Colonies or Hibernacula: **Not Known**

Anadromous Fish Use Streams (3 records)

View Map of All Anadromous Fish Use Streams

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE*	Highest Tier**	
C69	Rappahannock river 1	Confirmed	6		IV	Yes
C78	Ware Creek	Confirmed	2		IV	Yes
P10	Birchwood Run	Potential	0			Yes

Impediments to Fish Passage (3 records)

View Map of All Fish Impediments

ID	Name	River	View Map
4	HOLIDAY LAKE DAM	TR-RAPPAHANOCK RIVER	Yes
123	raised culvert	WARE CREEK	Yes
47	TAYLORS DAM	BIRCHWOOD RUN	Yes

Colonial Water Bird Survey (2 records)

View Map of All Query Results Colonial Water Bird Survey

Colony_Name	N Obs	Latest Date	N Species			View Map
			Different Species	Highest TE*	Highest Tier**	
Western Shore, Rappahannock Academy, King George	1	May 10 2013	1			Yes
Corbins Neck	1	May 20 2003	1			Yes

Displayed 2 Colonial Water Bird Survey

Threatened and Endangered Waters (23 Reaches - displaying first 20)

View Map of All Threatened and Endangered Waters

Stream Name	T&E Waters Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Rappahannock River (039581)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (041312)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (041604)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (045031)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (047236)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (047456)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (047894)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (049595)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (049953)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (051574)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (051653)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052246)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052266)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (052415)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (053573)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (054990)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (055884)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (056526)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Rappahannock River (057361)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (057636)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (058939)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (060842)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes
Rappahannock River (062474)	FESE	010032	FESE	Ib	Sturgeon, Atlantic	Acipenser oxyrinchus	Yes

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests (5 records)

View Map of All Query Results
Bald Eagle Nests

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
CA8201	4	Jan 1 1985	HISTORIC	Yes
CA9003	26	Apr 30 2008	Unknown	Yes
CA9201	1	Jan 1 1992	HISTORIC	Yes
CA9302	3	May 9 1994	HISTORIC	Yes
KG0301	10	Apr 30 2008	Unknown	Yes

Displayed 5 Bald Eagle Nests

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		IIb	Rail, king	Rallus elegans	Yes

Public Holdings: (2 names)

Name	Agency	Level

Pettigrew Wildlife Management Area	Va DGIF	
Fort AP Hill Military Reservation	U.S. Dept. of Army	Federal

Compiled on 1/10/2024, 4:05:24 PM I1622921.0 report=IPA searchType= R dist= 3218.688 poi= 38.2411944 -77.2773889

PixelSize=64; Anadromous=0.019894; BECAR=0.017088; Bats=0.017216; Buffer=0.061108; County=0.057315; Impediments=0.019802; Init=0.091007; PublicLands=0.023048; SppObs=0.273315; TEWaters=0.027469; TierReaches=0.020516; TierTerrestrial=0.034517; Total=0.832606; Tracking_BOVA=0.208398; Trout=0.019679

CCB Mapping Portal

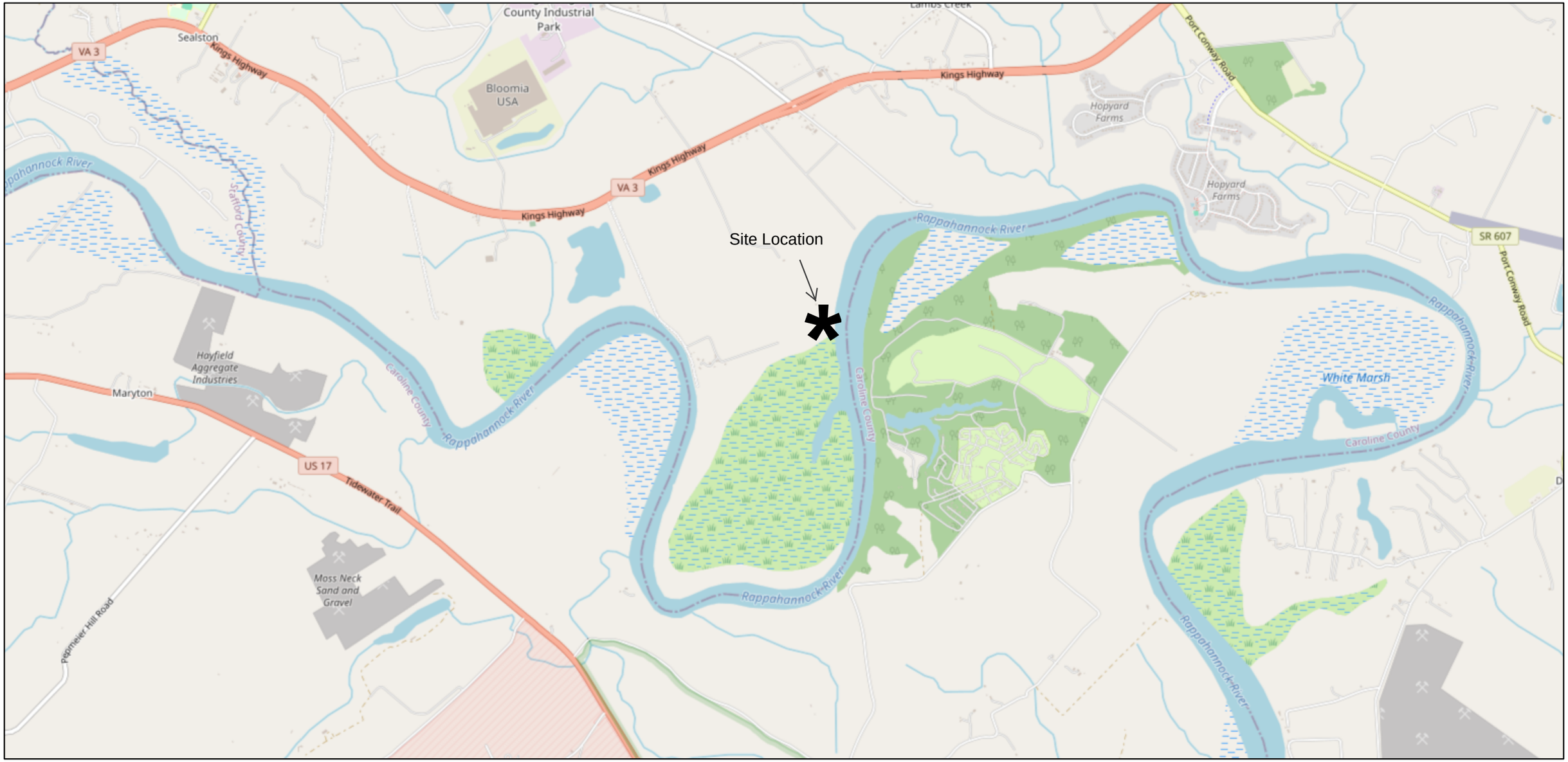
Layers: VA Eagle Nest Locator, VA Eagle Nest Buffers

Map Center [longitude, latitude]: [-77.28092193603514, 38.23703405145859]

Map Link:
https://ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&zoom=14&lat=38.23703405145859&lng=-77.28092193603514&legend=legend_tab_a78d6af8-e398-11e4-ad42-0e0c41326911&base=World+Imagery+%28ESRI%29

Report Generated On: 03/27/2024

NLEB Locations and Roost Trees



3/27/2024, 4:26:29 PM

1:36,112

0 0.33 0.65 1.3 mi

0 0.5 1 2 km

MYLU PESU Habitat

3/27/2024, 4:29:04 PM

1:36,112

0 0.33 0.65 1.3 mi

0 0.5 1 2 km

Dept. Game and Inland Fisheries

Submerged Aquatic Vegetation

Via Virginia Institute of Marine Science

Appendix E – Cultural Resource Information

Virginia Dept. of Historic Resources

V-CRIS

Virginia Cultural Resource Information System

Legend

- Architecture Labels
- Public View Architecture Points
- Public View Historic Districts
- County Boundaries

N

Feet

0 200 400 600 800

1:9,028 / 1"=752 Feet

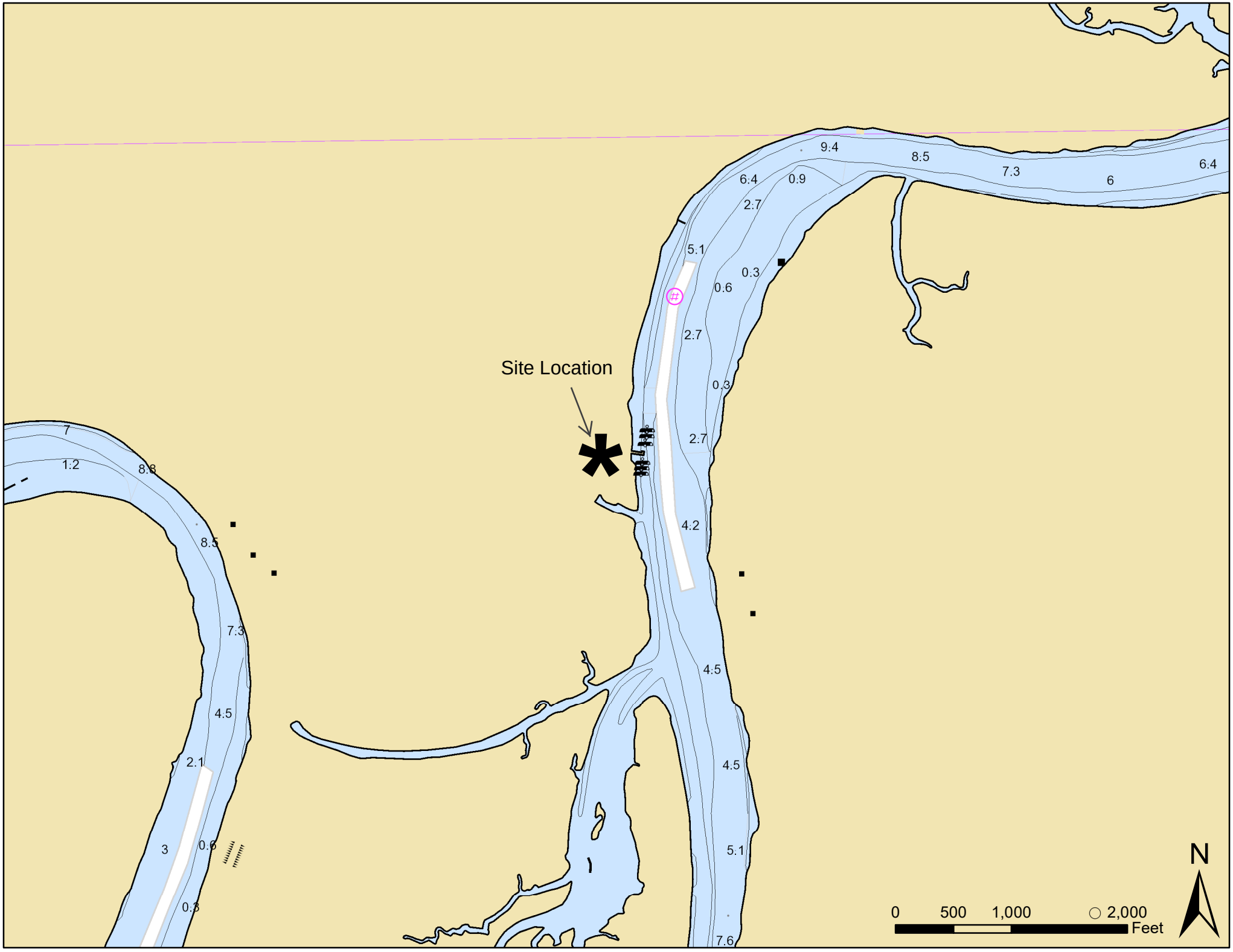
Title:

Date: 5/10/2024

DISCLAIMER:Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions.The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.

Notice if AE sites:Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.

Appendix F – Navigational Chart


Site Location
9.4
8.5
7.3
6
6.4
6.4
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5.1
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2.7
0.3
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