

VDOT

I-495 Express Lanes Northern Extension Environmental Assessment Appendices

February 2020

**Appendix A: Section 4(f) and 6(f) Technical Memorandum
(Visualization Booklet Attachment to Section 4(f) & 6(f)
Technical Memorandum is Included as a Separate Volume)**



ENVIRONMENTAL ASSESSMENT

Section 4(f) and Section 6(f) Technical Memorandum

February 2020



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(Attached by reference as a separate volume)

1.0 INTRODUCTION

The Virginia Department of Transportation (VDOT), in coordination with the Federal Highway Administration (FHWA) as the lead federal agency, is evaluating an extension of the Interstate 495 (I-495) Express Lanes along approximately three miles of I-495, also referred to as the Capital Beltway, from their current northern terminus in the vicinity of the Old Dominion Drive overpass to the George Washington Memorial Parkway (GWMP) in the McLean area of Fairfax County, Virginia. Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, and in accordance with FHWA regulations¹, an Environmental Assessment (EA) is being prepared to analyze the potential social, economic, and environmental effects associated with the improvements being evaluated.

The purpose of this Section 4(f) and Section 6(f) Technical Memorandum is to identify Section 4(f) and Section 6(f) properties within the study area and to evaluate potential impacts that could result from implementation of the Build Alternative. Information in this report provides an overview of the regulatory context, methods used to identify existing resources, potentially affected resources identified within the study area, and potential impacts to Section 4(f) and Section 6(f) properties associated with the implementation of the Build Alternative. The findings of this technical report support discussions presented in the EA.

1.1 PROJECT TERMINI

The project includes an extension of the existing Express Lanes from their current northern terminus south of the Old Dominion Drive Overpass to the GWMP. Although the GWMP provides a logical northern terminus for this study, additional improvements are anticipated to extend approximately 0.3 miles north of the GWMP to provide a tie-in to the existing road network in the vicinity of the American Legion Memorial Bridge (ALMB). The project also includes access ramp improvements and lane reconfigurations along portions of the Dulles Toll Road and the Dulles International Airport Access Highway, on either side of the Capital Beltway, from the Spring Hill Road Interchange to the Route 123 interchange. The proposed improvements entail new and reconfigured express lanes ramps and general purpose lanes ramps at the Dulles Interchange and Route 123/I-495 interchange ramp connections.

¹ NEPA and FHWA's regulations for Environmental Impact and Related Procedures can be found at 42 USC § 4332(c), as amended, and 23 CFR § 771, respectively.

1.2 STUDY AREA

In order to assess and document relevant resources that may be affected by the proposed project, the study area for this EA extends beyond the immediate area of the proposed improvements described above. The study area for the EA includes approximately four miles along I-495 between the Route 123 interchange and the ALMB up to the Maryland state line. The study area also extends approximately 2,500 feet east along the GWMP. Intersecting roadways and interchanges are also included in the study area, as well as adjacent areas within 600 feet of the existing edge of pavement, as shown in **Figure 1**. The study area boundary is a buffer around the road corridor that includes all natural, cultural, and physical resources that must be analyzed in the EA. It does not represent the limits of disturbance (LOD) of the project nor imply right-of-way take or construction impact, but rather extends beyond the project footprint to tie into the surrounding network, including tying into future network improvements.

1.3 LIMIT OF DISTURBANCE

Potential impacts to natural resources described in the following sections of this technical report have been calculated using a conceptual level design of the Build Alternative. The footprint for this conceptual level of design is referred to as the LOD. The LOD accommodates roadway improvements, drainage, stormwater management facilities, utilities, erosion and sediment control, noise control measures, construction methods, and temporary construction easements.

Impact values presented for the evaluated resources represent the worst-case scenarios and assume complete direct impact to the resource occurring in the LOD. As design progresses, measures may be taken to avoid and minimize impacts to environmental resources to the maximum extent practicable. Recommendations for potential minimization and mitigation measures for unavoidable adverse impacts are provided under the Build Alternative sections of each resource that is discussed in this report. At this time, it is not possible to anticipate the exact locations of each proposed activity; impacts outside of the existing study area will be reviewed and documented through future NEPA re-evaluations.

1.4 PURPOSE AND NEED

The purpose and need for the extension of Express Lanes on I-495 between Route 267 and the GWMP is to:

- Reduce congestion;
- Provide additional travel choices; and
- Improve travel reliability.

A detailed description of the purpose and need for the proposed project can be found in Chapter 1.0 of the EA.



Figure 1. I-495 Express Lanes Northern Extension Project Limits

2.0 ALTERNATIVES

Two alternatives are being considered in the EA: the No Build Alternative and the Build Alternative, described below. Additional information on the Build Alternative is included in the *I-495 Alternatives Technical Memo* (VDOT, 2020).

2.1 NO BUILD ALTERNATIVE

Under the No Build Alternative, the Express Lanes would not be extended beyond the current northern terminus at Old Dominion Drive. There would be no change to existing access points, and I-495 would remain in its present configuration. VDOT would continue maintenance and repairs of the existing roadway, as needed, with no substantial changes to current capacity or management activities.

2.2 BUILD ALTERNATIVE

The Build Alternative would extend the existing four I-495 Express Lanes from their current terminus between the I-495/Route 267 interchange and the Old Dominion Drive Overpass north approximately 2.3 miles to the GWMP.

Additional improvements are anticipated to extend approximately 0.3 miles north of the GWMP to tie into the existing road network in the vicinity of the ALMB. The Build Alternative would retain the existing number of general purpose (GP) lanes within the study area.

Direct access ramps would be provided from the I-495 Express Lanes to the Dulles Toll Road and the GWMP. Access would also be provided between the I-495 GP and Express Lanes at the Route 267 interchange: from northbound GP lanes to northbound Express Lanes, and from southbound Express Lanes to southbound GP lanes, located within the current interchange footprint. These connections have been accounted for in the LOD and are described in more detail in the *I-495 Alternatives Technical Memo* (VDOT, 2020a) and the *I-495 Traffic and Transportation Technical Report* (VDOT, 2020b).

The Build Alternative includes an approximately 3.1-mile 10-foot-wide shared-use path, consistent with the Fairfax County Countywide Trails Plan Map (FCDPZ, 2018), that is not provided under the existing condition.

3.0 SECTION 4(F) DOCUMENTATION

Under provisions of Section 4(f) of the US Department of Transportation Act of 1966 (49 USC § 303(c)), FHWA may approve the use of land from publicly owned public parks or recreation areas, publicly owned wildlife or waterfowl refuges, or historic sites that are listed on, or eligible for listing on, the National Register of Historic Places (NRHP) for federal-aid highway projects if it determines that there is no feasible and prudent avoidance alternative and the action includes all possible planning to minimize harm to the property.

FHWA also may approve the use of land from such properties if it determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact, as defined in 23 CFR § 774.17, on the property.

A “use” of Section 4(f) property occurs: (1) When land is permanently incorporated into a transportation facility, (2) When there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose, or (3) When there is a constructive use of a Section 4(f) property.

3.1 SECTION 4(F) PROPERTIES

Eight Section 4(f) properties have been identified in the study area associated with the I-495 NEXT Project. Two of the Section 4(f) properties, the George Washington Memorial Parkway and Scott’s Run Nature Preserve, are anticipated to be impacted by the Build Alternative. These properties, as well as the six remaining Section 4(f) properties that would not be impacted by the I-495 NEXT Project are summarized in the text below.

- **George Washington Memorial Parkway (GWMP)**—The GWMP and its associated parks and trails are owned and operated by the National Park Service (NPS) and total 7,600 acres in size. The Parkway was listed on the NRHP in June 1995 under the Multiple Property documentation “Parkways of the National Capital Region, 1913 to 1965.” The Parkway is noteworthy for its landscape architecture and commemoration of George Washington. Approximately, 60 acres of the GWMP are within the study area and approximately 4.7 acres are within the LOD; therefore, Section 4(f) applies to impacts within the GWMP property.
- **Scott’s Run Nature Preserve**—Scott’s Run Nature Preserve is a 336-acre preserve located in McLean, north of Georgetown Pike and west of the I-495 corridor. The Preserve is operated by the Fairfax County Park Authority (FCPA) and is a publicly owned and publicly accessible recreational area. Approximately 25 acres of the Preserve fall within the study area and approximately 3.21 acres are within the LOD; therefore, Section 4(f) applies to impacts within the Preserve.
- **Georgetown Pike Road Bed**— Portions of the Georgetown Pike (Route 193) road bed are listed on the NRHP. Approximately, 10 acres of the entire Georgetown Pike corridor is within the study area and the LOD but is not within the boundaries of the NRHP nomination and therefore consideration under Section 4(f) is not necessary.
- **McLean Hamlet Park**—McLean Hamlet Park is an 18-acre neighborhood park that is owned and maintained by the FCPA. Approximately, 16 acres of McLean Hamlet Park property are located within the study area; however, none of the McLean Hamlet Park property falls within the LOD and therefore consideration under Section 4(f) is not necessary.
- **Potomac Natural Heritage Trail**—The Potomac Natural Heritage Trail is within the boundary of the NRHP listed GWMP but is not independently listed on the NRHP. The trail is a component of the Potomac Heritage National Scenic Trail (PHT), an over 830-mile network of locally managed trails on both sides of the Potomac River between its mouth at the Chesapeake Bay and the Allegheny Highlands in the upper Ohio River Basin. This trail network’s primary purpose is non-motorized recreation. Approximately, 6,372 linear feet of the Potomac Natural Heritage Trail are within the study area and 4,661 feet of the Potomac Natural Heritage Trail falls within the LOD. The Potomac Heritage Trail has been identified as a Section 4(f) resource, but the project improvements have been designed to avoid impacts to the resource.

- **Preserve at Scotts Run Homeowners Association Parcel** – Located between Old Dominion Drive and Lewinsville Road.
 - Preserve at Scotts Run Conservation Easement- Following purchase of the parcel by the Preserve at Scotts Run Homeowners Association, a Deed of Gift of Easement was established on the property for The McLean Land Conservancy, Inc. that was subsequently transferred to the Northern Virginia Conservation Trust (Nonprofit, Non-Governmental Organization) on December 19, 2013. Approximately 7.69 acres of the conservation easement is within the study area with 7.56 of those acres encompassed within the LOD. Due to the conservation easement being privately owned, it is not subject to Section 4(f).
 - Scotts Run Trail- The FCPA has also acquired an easement within The Preserve at Scotts Run Homeowners Association parcel for the future “Scotts Run Trail” as identified on Fairfax County’s Trail Buddy website (Fairfax County, 2020b). Approximately 3,061 linear feet of the trail are within the study area, and approximately 1,568 linear feet are within the LOD. The Scotts Run Trail has been identified as a Section 4(f) resource, but the project improvements have been designed to avoid impacts to the resource.
- **Timberly Park**—Timberly Park, owned and maintained by FCPA, is a 23-acre community park located in McLean, west of I-495 and south of Old Dominion Drive. Approximately, 4.5 acres of Timberly Park property are located within the study area; however, none of the Timberly Park property falls within the LOD and therefore consideration under Section 4(f) is not necessary.

Table 3-1. Identified Potential Section 4(f) Properties Within the Study Area

Identified Section 4(f) Properties within the Study Area	Official with Jurisdiction	Type of Facility	Section 4(f) Use
George Washington Memorial Parkway	National Park Service	National Register of Historic Places Listed - Recreational Driving and Scenic Parkway, with Attached Park and Trail Facilities	Yes- Anticipated <i>de minimis</i> determination under Section 4(f)
Potomac Heritage Trail	National Park Service	Recreational	No
Scott's Run Nature Preserve	Fairfax County Park Authority	Regional Park	Yes- Anticipated <i>de minimis</i> determination and temporary occupancy under Section 4(f)
Scotts Run Trail	Fairfax County Park Authority (Privately owned within the Preserve at Scotts Run Homeowners Association Parcel)	Trail	No
Preserve at Scotts Run Conservation Easement	Owned by Preserve at Scotts Run Homeowners Association/ Northern Virginia Conservation Trust	Conservation Easement	No
Georgetown Pike Road Bed	VDOT	National Register of Historic Places Listed - Historic Road	No
McLean Hamlet Park	Fairfax County Park Authority	Local Park	No
Timberly Park	Fairfax County Park Authority	Local Park	No

Source: Fairfax County Property Map, 2018; VDHR V-CRIS GIS Data, 2018

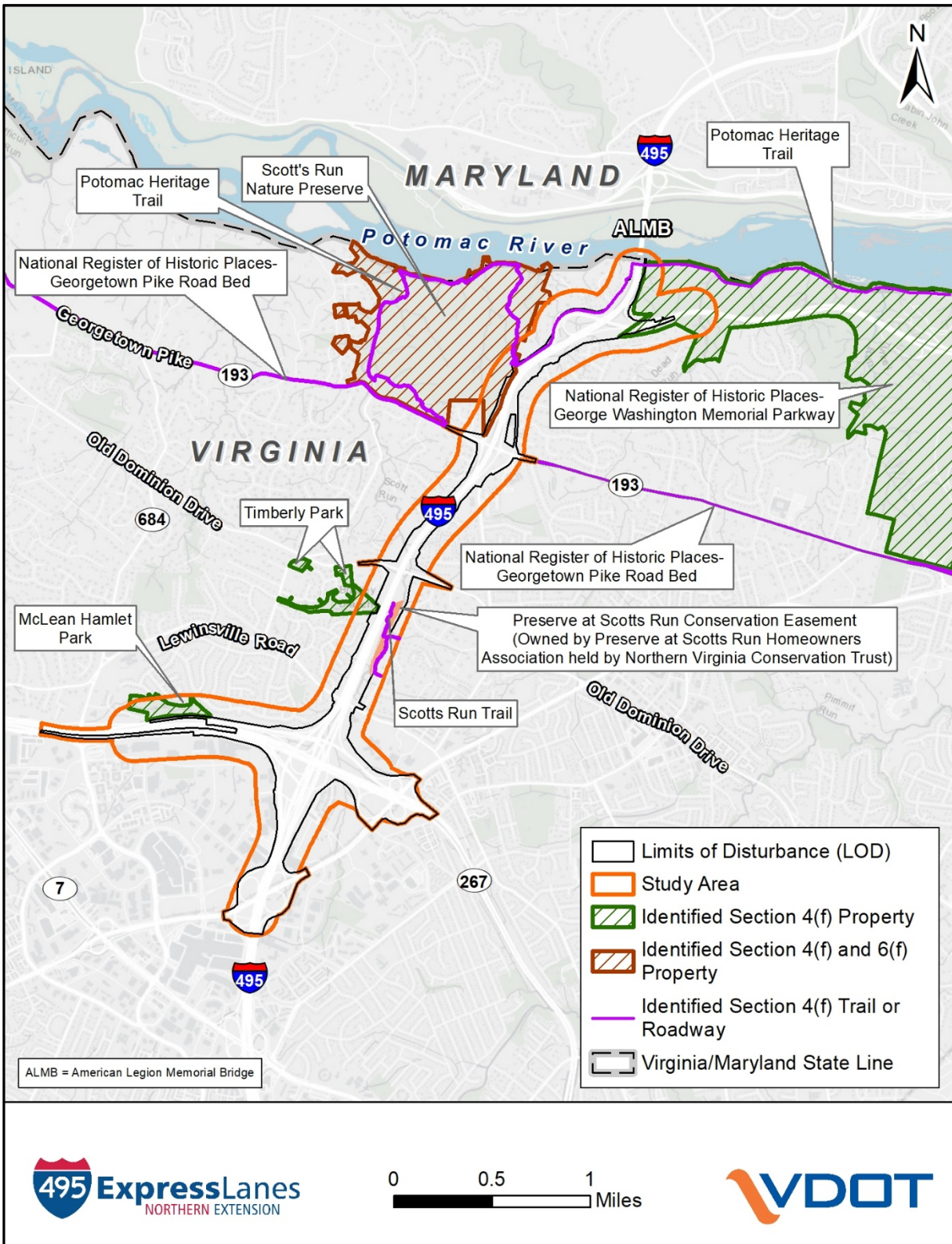


Figure 2. Identified Section 4(f)/6(f) Resources

3.2 SECTION 4(F) PROPERTIES

Two Section 4(f) protected properties, the GWMP and the Scott's Run Nature Preserve, are anticipated to be impacted by the I-495 NEXT Project. The text below describes each of these resources.

3.2.1 George Washington Memorial Parkway

Description of the Section 4(f) property: The GWMP is an NRHP listed property designed to protect and preserve cultural and natural resources along the Potomac River (see Figure 3 and Figure 4). It was originally developed as a memorial to George Washington, providing a connection to various aspects of his life and other historic sites from Mount Vernon to Great Falls (National Park Foundation, 2019). Its 7,600 acres also provide habitat for local wildlife including at least 81 species that are considered rare, threatened, or endangered in Virginia or Maryland (NPS, 2019). The Parkway is an east-west route that connects to I-495 just south of the ALMB, overlapping the study area.

Ownership and type of Section 4(f) property: The GWMP and its associated recreational facilities are owned and operated by the NPS. The GWMP is listed on the NRHP and is therefore considered to be a Section 4(f) property.

Features and functions: The GWMP is used for scenic travel from the border of Virginia and Maryland at the ALMB into Washington D.C. with historical, natural, and recreational areas (National Park Foundation, 2019). The Park has more than 25 sites associated with George Washington's life, and provides views of the Potomac River and the NRHP-listed Potomac Palisades. The Parkway has trails for hiking and biking; several parks with softball diamonds, basketball courts and grass fields; and the Dyke Marsh Wildlife Preserve that is used for canoeing, kayaking, and wildlife viewing (NPS, 2019).

Access: The GWMP is approximately 24.9 miles long and is open to the public. It was originally set aside by Congress as a "comprehensive park, parkway, and playground system of the National Capital" (NPS, 2019). Access to the Parkway itself is available from I-495 to the north and from Route 235 to the south.

There are several parks within the GWMP including Fort Hunt Park, Jones Point Park, Turkey Run Park, and Lady Bird Johnson Park which are all open to the public. The Dyke Marsh Wildlife Preserve is accessible by foot or boat. The Mount Vernon Trail is an 18-mile paved trail within the GWMP that connects various regional trails including the Potomac Heritage Trail. All of these parks and other recreational areas are accessible by foot, car, and in some cases public transportation.

Relationship to other similarly used land in the vicinity: The GWMP is unique compared to other parks in the vicinity due to its size and opportunity for recreational activities while also providing extensive habitat for local wildlife. There are other parks in the immediate study area owned by the FCPA which are also open to the public and have some similar features including sports fields and trails, but do not front the Potomac River to the same extent. The GWMP is similar to Scott's Run Nature Preserve, Clara Barton Parkway, Great Falls Park, and River Bend Park, as they all have trails through similar landscapes along the Potomac River and habitat for rare plants and animals.

Clauses affecting ownership: Land within the GWMP is owned by the NPS. No known clauses affect ownership of this public property.

Unusual characteristics: GWMP has no known unusual characteristics other than those that qualify it for listing on the NRHP and consideration under Section 4(f) of the US Department of Transportation Act of 1966.

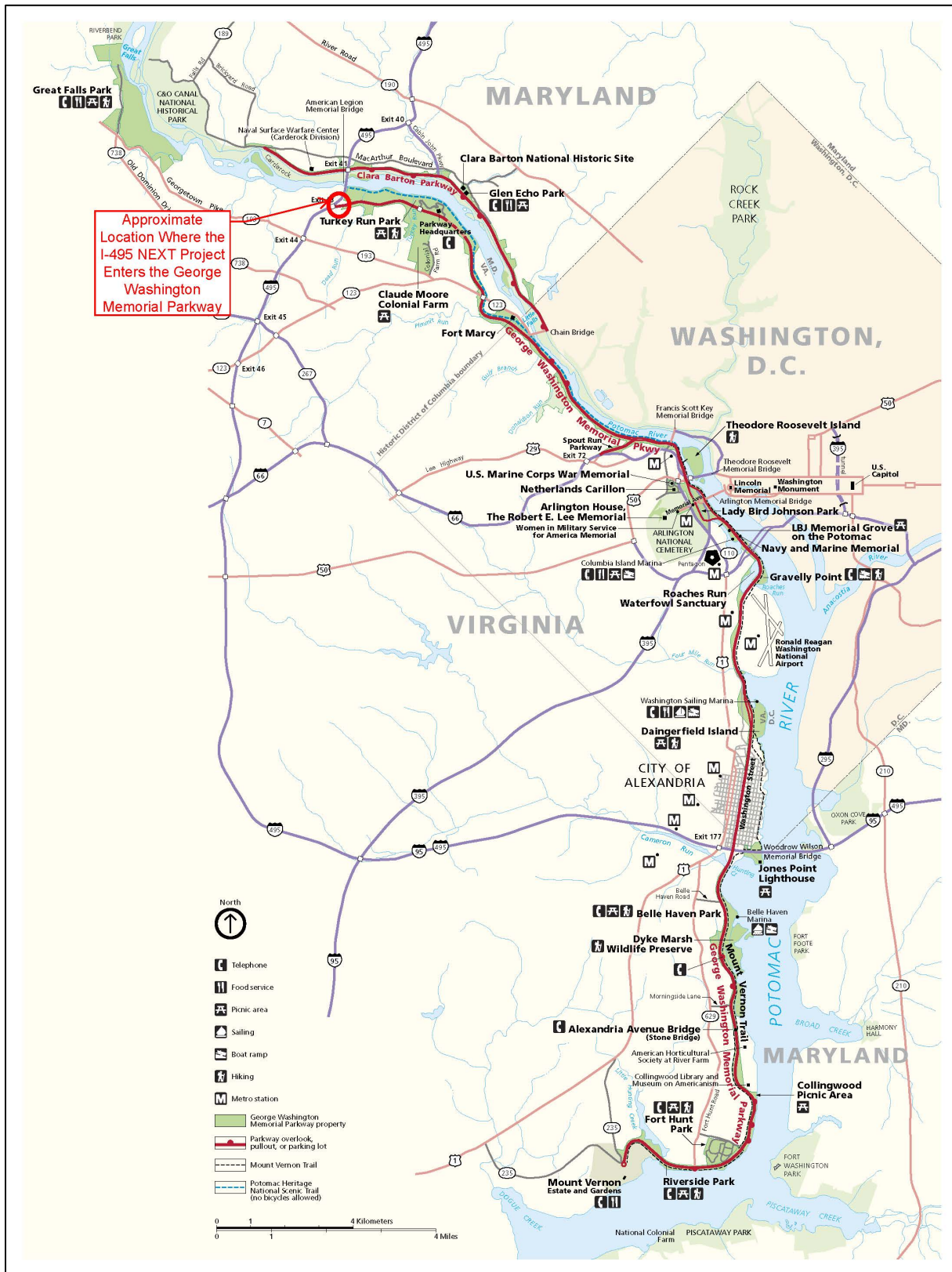


Figure 3. George Washington Memorial Parkway-National Park Service Map



Figure 4. George Washington Memorial Parkway within the Study Area and LOD

3.2.2 Scott's Run Nature Preserve

Description of the Section 4(f) property: Scott's Run Nature Preserve is an approximately 336-acre preserve located in McLean, north of Georgetown Pike and west of the I-495 corridor. Approximately 25 acres of the Preserve fall within the study area (see Figure 5).

Ownership and type of Section 4(f) property: The Preserve is operated by the FCPA and is a publicly owned and publicly accessible recreational area; therefore, it is considered to be a Section 4(f) property. In addition, the Preserve as noted in Fairfax County land records was acquired with Land and Water Conservation Funds; therefore, Section 6(f) also applies (see Section 4.0). Virginia Electric Power Company (now Dominion Energy) holds an easement along the portion of the Preserve that abuts existing I-495 (see Figure 6).

Features and functions: The Preserve is predominantly made up of natural woods, bluffs, and hiking trails. The recreational activities within the Preserve include walking, hiking, bird watching, wildlife viewing, educational programming, and other similar activities. Scotts Run stream flows from near Tysons Corner Shopping Center, through the adjacent Scotts Run Stream Valley Park, through the Preserve itself, over a small waterfall – Scott's Run Falls – and into the Potomac River. The Potomac Gorge is also a part of Scott's Run Nature Preserve, which features diverse landscapes, rare plants and animals, and one of the rarest biological ecosystems in the mid-Atlantic. The only building facilities that exist within the Preserve are informational signs at the entrance and occasionally along the trails.

Access: The Preserve is a publicly accessible recreational area with two available entrances, both from Georgetown Pike and featuring small parking lots that lead to trailheads within the Preserve. One entrance sits alongside the stream, and the other has trails leading to the bluffs above the Potomac River (Fairfax County, 2020a).

Relationship to other similarly used land in the vicinity: In comparison to other parks in the vicinity, Scott's Run Nature Preserve is most similar to the GWMP, as they both feature trails and opportunities to experience similar landscapes and wildlife habitat. It is different from other parks nearby, and from other parks in the county that are owned by FCPA, due to its lack of facilities such as sports fields, a visitors' center, or restrooms.

Clauses affecting ownership: Land within Scott's Run Nature Preserve is owned by the FCPA with an existing easement held by Virginia Electric Power Company (now Dominion Energy) for the portion of the Preserve that abuts existing I-495. No known clauses affect ownership of this property.

Unusual characteristics: Scott's Run Nature Preserve has no known unusual characteristics other than those that qualify the property for consideration under Section 4(f) of the US Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation

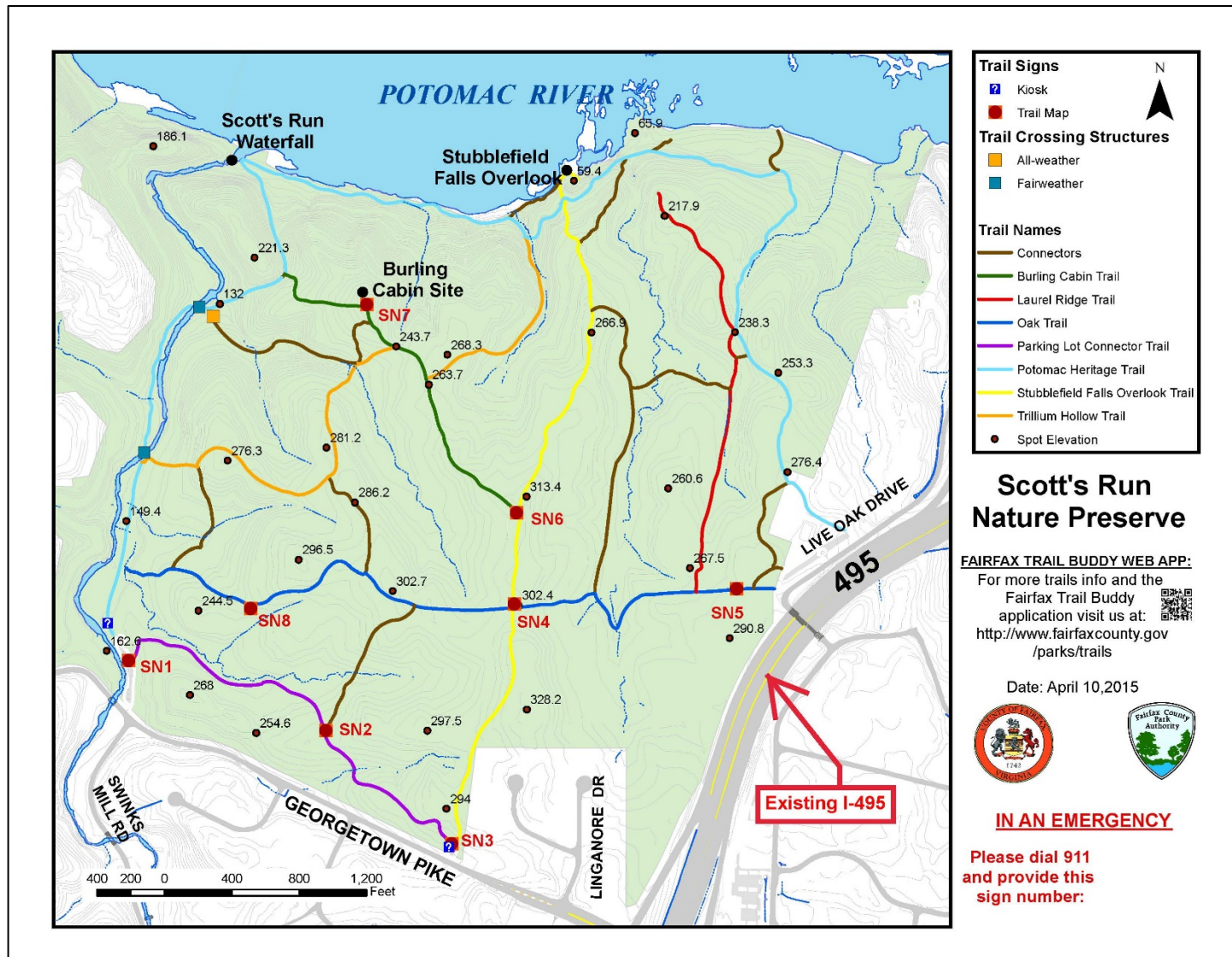


Figure 5. Scott's Run Nature Preserve Trail Map- Fairfax County Trial Buddy Website



Figure 6. Existing Virginia Electric Power Company (now Dominion Energy) Easement within the Scott's Run Nature Preserve

The Build Alternative would require the use of land from both the GWMP and the Scott's Run Nature Preserve, and the Section 4(f) impacts are anticipated to be considered *de minimis* under 23 CFR 774.17 or, in the case of temporary impacts, qualify as an Section 4(f) exception (23 CFR 774.13). Because the impacts are anticipated to be considered *de minimis* or temporary in nature, avoidance alternatives or analysis of least overall harm are not anticipated to be required.

3.2.3 Potential Section 4(f) De Minimis Impacts

A *de minimis* impact is one that will not adversely affect the features, attributes, or activities qualifying the property upon which the impact occurs for protection under Section 4(f) (23 CFR 774.17).

Before FHWA can make a *de minimis* impact determination for parks, recreation areas and refuges such as the Scott's Run Nature Preserve, the following coordination must be undertaken:

- Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement will be satisfied in conjunction with the public hearings and the public review/comment period following publication of the EA.
- The Official(s) with Jurisdiction (OWJ) over the properties must be informed of FHWA's intent to make a *de minimis* impact determination. The OWJ for Scott's Run Nature Preserve is FCPA.
- Following the opportunity for public review and comment as indicated above, the OWJ over the property must concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).

FHWA can only make *de minimis* impact determination for a historic property like the GWMP, if the following conditions are met:

- Written concurrence on a Section 106 finding of "no adverse effect" or "no historic properties affected" must be received from the Virginia State Historic Preservation Officer (SHPO).
- The SHPO must be informed of FHWA's intent to make a *de minimis* impact determination based on their concurrence in the finding of "no adverse effect" or "no historic properties affected."
- The Section 106 consulting parties must be consulted.

Accordingly, the public and the OWJ over both the Scott's Run Nature Preserve (i.e., FCPA) and the George Washington Memorial Parkway (i.e., NPS and SHPO) are hereby notified that FHWA intends to make a *de minimis* impact determination with respect to the proposed project's use of both the properties.

3.2.4 Temporary Occupancy

A temporary occupancy of a Section 4(f) property is not considered a Section 4(f) use if the occupancy meets the following conditions (23 CFR 774.13):

- The duration of the occupancy is less than the time needed for construction of the project and there would be no change in ownership.
- The scope of the work is minor, i.e., both the nature and magnitude of the changes to the property are minimal.
- There are no anticipated permanent adverse physical impacts, and there is no interference with the protected activities, features, or attributes of the property on either a temporary or permanent basis.

- The land is fully restored, i.e., the property is returned to a condition which is at least as good as that which existed prior to the project.

There must be documented agreement of the OWJ over the Section 4(f) property regarding the above conditions. Based on the preliminary design, the temporary occupancy of the Scott's Run Nature Preserve is anticipated to meet the conditions.

3.2.5 Trails and Bike Facilities

Section 4(f) does not apply to trails, paths, bikeways, and sidewalks (see 23 CFR 774.13(f)(3)(4)) that occupy a transportation right-of-way without limitation to any specific location within the right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained, and these facilities are part of the local transportation system which function primarily for transportation.

The following trails, paths, bikeways, and sidewalks were identified within the study area:

- Oak Trail – approximately 71 feet within LOD
- Live Oak Trail and Sidewalk – approximately 4,241 feet within LOD
- Balls Hill Road – approximately 2,579 feet within LOD
- Benjamin Street – approximately 56 feet within LOD
- Georgetown Pike – approximately 660 feet within LOD
- Lewinsville Road – approximately 730 feet within LOD
- Westpark Drive – approximately 540 feet within LOD
- Beltway and Tysons Old Meadow – approximately 3,086 feet within the LOD
- Jones Branch Drive Bridge – approximately 1,110 feet within the LOD
- Jones Branch Connector – approximately 314 feet within the LOD
- Old Dominion Drive – approximately 1,384 feet within the LOD

As the portions of these facilities are within the study area and are located within the transportation right-of-way, as there is no known easement (or other instrument) requiring the facilities to be in their specific location and the existing continuity and use of the trails will be maintained in all proposed actions, the aforementioned provision is applicable with respect to the permanent impact of the proposed action. Additionally, as these facilities would remain open and operational during construction, the aforementioned exception is also applicable to any temporary (construction) impacts related to the proposed action. VDOT typically maintains safe pedestrian access where it currently exists on roadway projects, and project-specific maintenance of traffic plans would be developed accordingly.

3.2.6 Identified Section 4(f) Impacts

George Washington Memorial Parkway

Recreational Area Impacts

The GWMP is a public land holding that contains a variety of land uses including recreation in the form of trails, parks and scenic vistas. No identified recreational areas (trails, parks or scenic vistas) within the GWMP would be impacted by the I-495 NEXT Project.

The area in which an easement is likely to be acquired as a result of the I-495 NEXT Project abuts existing highway right-of-way with no public access and has a primary use as transportation. The Design-Build contractor will be required to keep access to the GWMP open at all times.

Historic Impacts

As noted above, Section 4(f) requirements may be met if FHWA determines that the use of the property will have a *de minimis* impact. In the case of the I-495 NEXT Project, the GWMP is listed on the NRHP and is therefore subject to the requirements of Section 4(f) as an historic site. In order for FHWA to make such a determination for historic resources, the following conditions must be met:

- Written concurrence on a Section 106 finding of “no adverse effect” or “no historic properties affected” must be received from the SHPO. – As shown on Figure 7, the Build Alternative is expected to acquire an easement from the GWMP to allow for project elements to tie in to the existing parkway footprint. The amount of easement is yet to be determined and will be based on-going coordination efforts with the NPS. Exact easements amounts will be included within the FHWA NEPA decision document.

The area from which the easement would be acquired abuts the existing GWMP eastbound lanes and incorporates the removal of vegetation necessary for the construction of the tie-in and fly-over ramps (located outside the GWMP boundary) associated with the I-495 NEXT Project. Additionally, in various locations along the existing GWMP, VDOT proposes to add new express lane tolling signage.

Where appropriate, existing I-495 guide signage would be consolidated to reduce the overall number of signs appearing in one area of the GWMP, while in some locations new guide signs would be added to the existing viewshed. Views of the Potomac River and Potomac Palisades will be maintained with no impact to existing viewsheds. Equipment access on GWMP land, if necessary, will use temporary crossings within the previously-disturbed roadway footprint of the existing parkway, the equipment will be removed as soon as work within the GWMP property is completed, and the area will be returned to its original condition. Minor changes in noise levels due to closer proximity of highway right-of-way and visual quality due to vegetation clearing could occur. Access to the GWMP would not be impacted by the proposed project and would remain as it currently exists. The Design-Build contractor will be required to keep access to the GWMP open at all times.

The SHPO concurred with the National Register eligibility recommendations proposed by VDOT on August 14, 2019 and November 20, 2019. VDOT continues coordination with the NPS and the SHPO to reach a consensus on the project’s effect on historic resources. VDOT believes that the proposed undertaking will not diminish the setting and feeling of the only historic resource identified during the course of the fieldwork for this project, the GWMP. Therefore, consistent with 36 CFR §800.5.b of the NHPA, VDOT anticipates that the undertaking will have no adverse effect, with conditions to avoid adverse effects, on the GWMP.

- The SHPO must be informed of FHWA’s intent to make a *de minimis* impact determination based on their concurrence in the finding of “no adverse effect” or “no historic properties affected.” VDOT’s letter to the SHPO will inform them of FHWA’s intent to make a *de minimis* determination based on their concurrence with the “no adverse effect” finding.
- The Section 106 consulting parties must be consulted – VDOT is currently coordinating with the SHPO and the NPS. A final determination of effects will be made after the identification of a preferred alternative in the FHWA environmental decision document.

Coordination

Coordination began with scoping letters being sent to both the SHPO and the NPS on 06/25/2018. Additional coordination (including as part of the Section 106 review process) is on-going and will continue.

A detailed list of these coordination meetings with both the NPS and the SHPO is outlined below. This Section 4(f) and Section 6(f) Technical Memorandum, as an appendix to the EA, is being sent to the NPS and the SHPO as the OWJs over the GWMP for review and comment.

- 04/4/2019 - VDOT introduced the project's initial conceptual design to the NPS.
- 06/24/2019 - VDOT presented the traffic sensitivity analysis for the GWMP interchange ramps.
- 08/21/2019 - VDOT presented potential preliminary signing options for the proposed GWMP guide signs and express lane toll pricing signs.
- 10/16/2019 - VDOT provided the SHPO with a status update on the on-going coordination efforts with the NPS.
- 10/21/2019 - VDOT presented minimization and mitigation to the proposed signage and footprint impacts, by: (1) relocating and consolidating signs with existing and future signage associated with Maryland's project; (2) optimizing alignment and proposed grading elements. VDOT committed to prepare visualizations for NPS review and comment depicting options to reduce the project's footprint and impacts to NPS land.
- 12/12/2019 - VDOT presented a revised signage plan and three options illustrating different impacts to tree canopy where the I-495 NEXT Project ties into the GWMP. NPS requested additional visualizations of these options.
- 01/23/2020 - VDOT presented visualizations for three concepts that were presented on 12/12/2019. NPS requested two additional visualizations. NPS also requested that a tree survey be conducted where currently I-495 ties into the existing eastbound GWMP lanes.
- 02/06/2020 - VDOT prepared a final package of signage plans and visualizations of the proposed options along the GWMP (see Appendix A). This package also included a table and corresponding site plan that depicts the results of the NPS-requested tree survey.

Efforts to Minimize Harm and Mitigate Impacts

Based on on-going coordination efforts with the NPS and SHPO, the following measures to minimize harm and mitigate impacts to the GWMP have been identified:

- On-going design minimization efforts to reduce the project's physical project footprint and impervious surface area within the GWMP boundary.
- Continued collaboration with the NPS on potential enhancements to the visitor's "sense of arrival" including potentially relocating the GWMP entrance sign to a more prominently visible location within the park.
- Preparation of several preliminary design concepts and viewshed visualizations of potential projects impacts at the park boundary interface. This information was provided to the NPS in meetings on 12/12/2019 and 1/23/2019 and refined for submittal on 02/06/2020; the potential concepts and visualizations are included for review in Appendix A of this document.

- Completion of a tree survey in the vicinity of the eastbound GWMP lanes, with a commitment to minimize impacts to mature and healthy trees, and to restore vegetation disturbed by construction (including the use of native seed mix and re-planting of trees per NPS's tree replacement ratio of 1:1).
- On-going efforts to consolidate/reduce existing I-495 guide signage within the westbound lanes of the GWMP.
- Replacement of guide signing for the GWMP on the Capital Beltway to include new sign elements with brown backgrounds.
- Location of the Virginia toll signing outside of the park boundary.

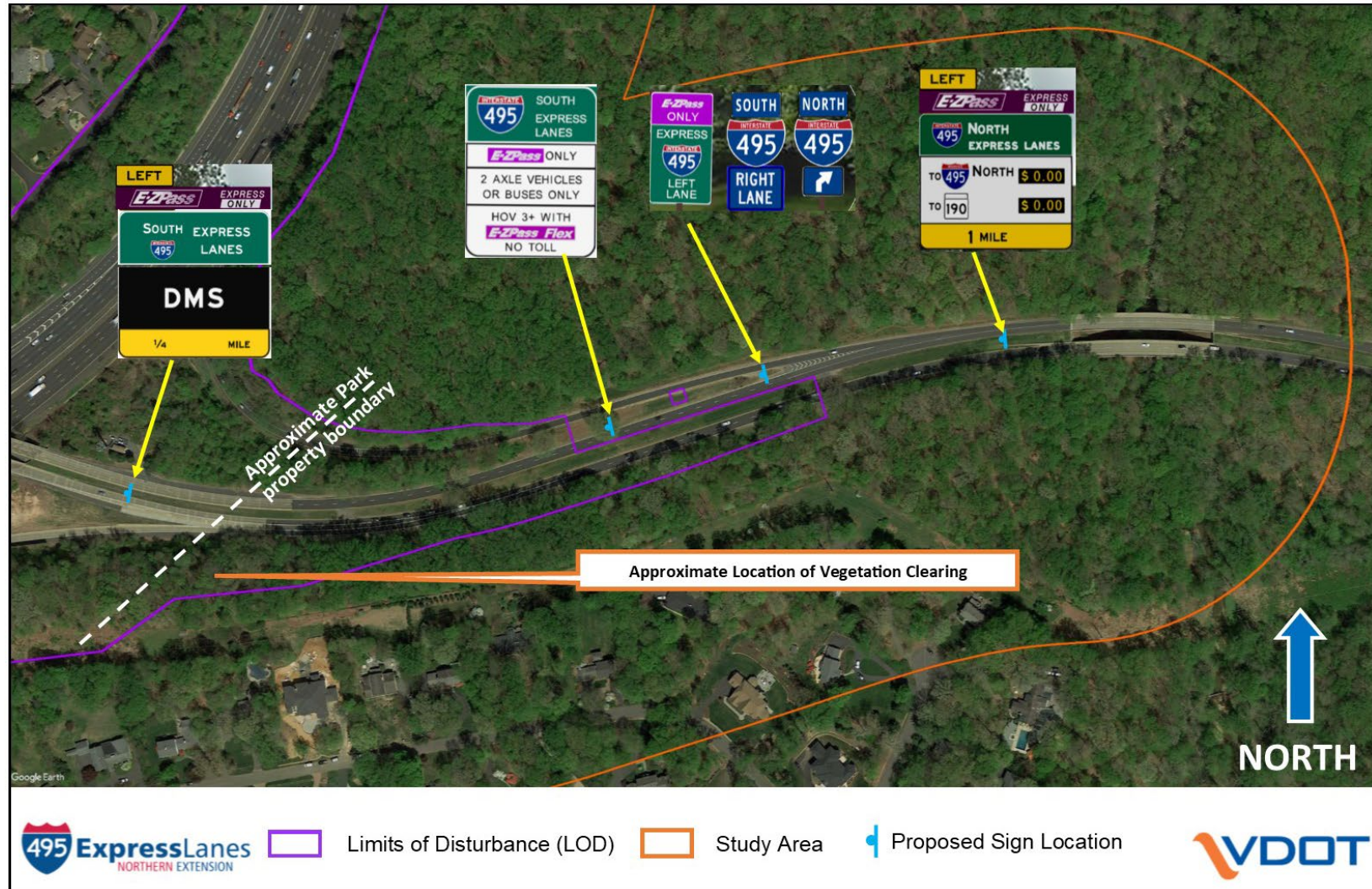


Figure 7. Section 4(f) Impacts Related to the George Washington Memorial Parkway

Scott's Run Nature Preserve

Impacts

Based on preliminary calculations, the proposed design for the project is anticipated to require permanent fee simple incorporation of up to approximately 1.20 acres of Preserve property, consisting of a strip of land along an existing noise barrier that does not contain any recreational features of the Preserve. A definitive calculation would be completed once more detailed design information is available.

As noted above, Section 4(f) requirements may be met if FHWA determines that the use of the property will have a *de minimis* impact. In order for FHWA to make such a determination for publicly owned parks, recreation areas, and wildlife or waterfowl refuges:

- The project must not adversely affect activities, features, or attributes of the Section 4(f) property – The proposed land take of approximately 1.20 acres of the Preserve is located adjacent to the existing noise barrier that runs along I-495 and would not adversely affect activities, features, or attributes of the Section 4(f) property (see Figure 8). Equipment access on Preserve land, if necessary, will use temporary crossings that will be removed as soon as work within the Preserve property is completed and the area will be returned to its original condition. No changes to the current trail system configuration within the Preserve are anticipated. Minor changes in noise levels due to closer proximity of highway right-of-way and visual quality due to vegetation clearing could occur. Access to the Preserve would not be impacted by the proposed project and would remain as it currently exists while the Preserve is open.
- There must be public notice and opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property that qualify the property for Section 4(f) protection – VDOT will offer the public an opportunity to review and comment on the effects of the proposed *de minimis* impact. This requirement will be satisfied in conjunction with the public hearings and the public review/comment period following publication of the EA.
- OWJ over the park must concur that the project will not adversely affect the activities, features, or attributes of the park – This concurrence will be sought prior to the approval by FHWA of the NEPA decision document.

Temporary Occupancy

Planning-level estimates indicate a temporary grading and construction easement not to exceed 2.01 acres would be needed for grading and construction access (see Figure 8). A definitive calculation will be completed when more detailed design information is available. According to FHWA's regulations implementing Section 4(f), a temporary occupancy of Section 4(f) land does not constitute "use" under Section 4(f) if the following conditions are met (23 CFR 774.13(d)):

- Duration (of the occupancy) must be temporary (i.e., less than the time needed for construction of the project) and there should be no change in ownership of the land – Occupancy, construction, and required access in Scott's Run Nature Preserve will take only as long as necessary, which will be less than the time needed to build the entire facility.

A temporary easement to permit construction within a portion of the park will be effective only for the time needed to perform the work within the park property and will not be used to provide staging or construction access to other portions of the project. There will be no change in ownership of the park land involved in the temporary construction easement.

- Scope of the work must be minor (i.e., both the nature and the magnitude of the changes are minimal) – Both the nature and the magnitude of the changes to the property will be minimal. Existing shrubs and grasses may be cleared. Temporary erosion and sediment controls will be installed and maintained throughout the duration of the construction to prevent soil erosion and to manage stormwater runoff. Areas that can support vegetation will be reseeded and/or planted with appropriate ground cover.
- There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property that qualify the property for protection under Section 4(f), on either a temporary or permanent basis – The proposed temporary construction easement is not anticipated to have permanent adverse impacts nor permanent or temporary interference on the activities or purpose of Scott’s Run Nature Preserve. Land that is disturbed will be restored to its natural condition as soon as possible after construction is complete.
- The land being used must be fully restored (i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project) – The lands subject to any temporary construction easement will be returned to a natural condition which is at least as good as that which existed prior to project construction. The parkland will be revegetated with appropriate species and, if necessary, some hardened materials may be placed in areas where erosion is possible, and revegetation would be difficult due to shading.
- There must be a documented agreement from the FCPA regarding the above conditions – VDOT believes the proposed temporary occupancy of the Scott’s Run Nature Preserve does not constitute a use under Section 4(f) based on the above information. VDOT has requested that the FCPA concur in writing with this assessment prior to the approval by FHWA of the NEPA decision document

Table 3-2. Impacts Related to the Scott’s Run Nature Preserve

	Permanent Impacts (Acres)	Temporary Occupancy (Acres)
Proposed Right-of-Way Acquisition from Scott’s Run Nature Preserve (Section 4(f) Use)	0.30	None
Proposed Right-of-Way Acquisition from Virginia Electric Power Company Easement (Section 4(f) Use) *	0.90	None
Area Between Proposed Right-of-Way/Easement Limits and Limit of Disturbance (Proposed Non-Section 4(f) Use)	None	2.01
Total Section 4(f) Use of Scott’s Run Nature Preserve	1.20	None**
Remaining Existing Virginia Electric Power Company Easement (Non-Section 4(f) Use)	1.29	None
Proposed Additional Virginia Electric Power Company Easement (Non-Section 4(f) Use) ***	1.01	None

*The proposed right-of-way acquisition within the Virginia Electric Power Company easement (land that is owned by the FCPA) is land being converted to a transportation facility and is therefore subject to the requirements of Section 4(f).

** Pending concurrence from the FCPA.

*** This easement area is not being converted to a transportation facility and is not subject to the requirements of Section 4(f).

Note: Virginia Electric Power Company (now Dominion Energy)

Source: VDHR V-CRIS GIS Data, 2018

Coordination

Coordination that has occurred to-date is described below. Additional coordination activities are on-going and will continue, including the determination of whether any impacts will adversely impact the features, attributes, or activities that qualify the Scott's Run Nature Preserve for protection under Section 4(f).

- VDOT initiated coordination with the FCPA through scoping correspondence. Individual meetings have also been conducted with the FCPA and are detailed below. This Section 4(f) and Section 6(f) Technical Memorandum, as an appendix to the EA, is being sent to the Executive Director of the Fairfax County Park Authority for review and comment.
 - 04/09/2019 - VDOT provided with the FCPA with an introduction to the project including a project overview and project next steps.
 - 07/01/2019 - Coordination meeting held with FCPA to provide a project status update and present the preliminary impacts to the Scott's Run Nature Preserve as a result of the I-495 NEXT Project. This meeting also included an introduction of the potential Section 4(f) *de minimis* approach.
 - 12/20/2019 - VDOT met with representatives from Dominion Energy and the FCPA regarding potential impacts to the Virginia Electric Power Company (now Dominion Energy) easement and focused on strategies to minimize easement impacts in the preserve.
 - 02/06/2020 - Coordination meeting held with FCPA to provide a project status update and to present the revised impacts to the Scott's Run Nature Preserve as a result of the I-495 NEXT Project, including a draft Section 4(f) *de minimis* letter.

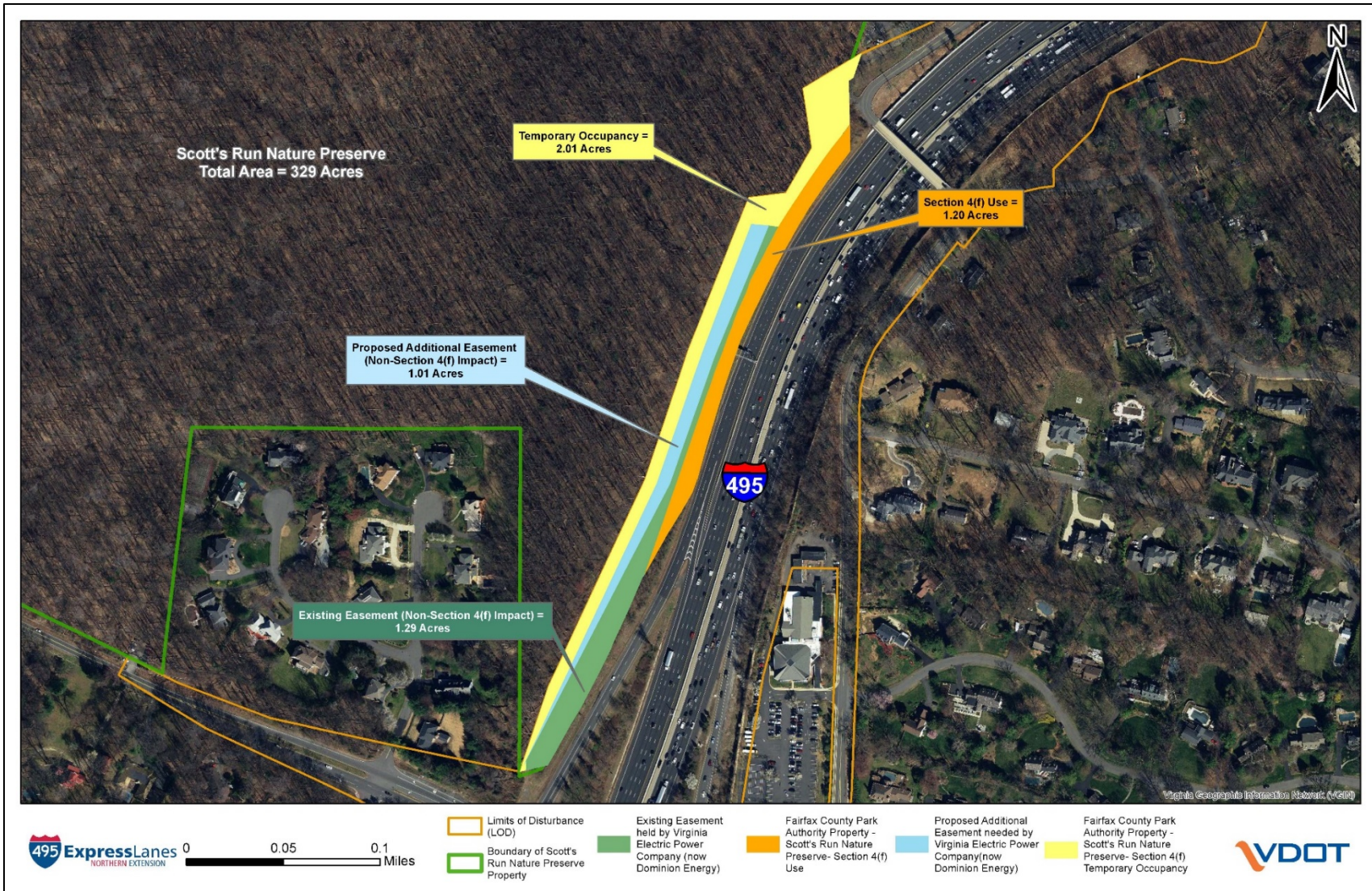


Figure 8. Section 4(f) Impacts Related to Scott's Run Nature Preserve

Efforts to Minimize Harm and Mitigate Impacts

VDOT will adhere to the following minimization efforts and mitigation measures for Scott's Run Nature Preserve:

- Avoid impacts to the recreational use of the property so that the project will not adversely affect activities, features, or attributes of the Preserve.
- Stabilize areas of land disturbance within Scott's Run Nature Preserve as a result of the I-495 NEXT Project using a native seed mix, as specified by FCPA.
- Minimize potential encroachment into Scott's Run Nature Preserve by staying within utility easement, to the extent possible, within the boundaries of the Preserve.
- As part of the overall design for the I-495 NEXT Project, the Build Alternative includes an approximately 3.1-mile, 10-foot-wide shared use path, consistent with the *Fairfax County Countywide Trails Plan Map* (FCDPZ, 2018) that could provide improved local access to the Preserve trail system (see Figure 9). The path is proposed to begin near the south end of the project corridor at Timberly Lane near Lewinsville Road and continue north along the west side of I-495 behind the proposed noise barrier. The path would continue underneath Old Dominion Drive with a spur in the southeast quadrant of the grade separation to access Old Dominion Drive near Dominion Court. The path would also have a spur to the existing Helga Place/Linganore Drive intersection just west of the Georgetown Pike interchange. The path is proposed to then cross I-495 on the south side of the proposed Georgetown Pike bridge and turn north at the Balls Hill Road intersection. The path would then continue along the west side of Balls Hill Road to the GWMP interchange where it may connect in the future to a proposed pedestrian crossing of the Potomac River adjacent to the ALMB. The path would also provide access to the existing sidewalk on Live Oak Drive which crosses I-495 just south of the GWMP interchange.

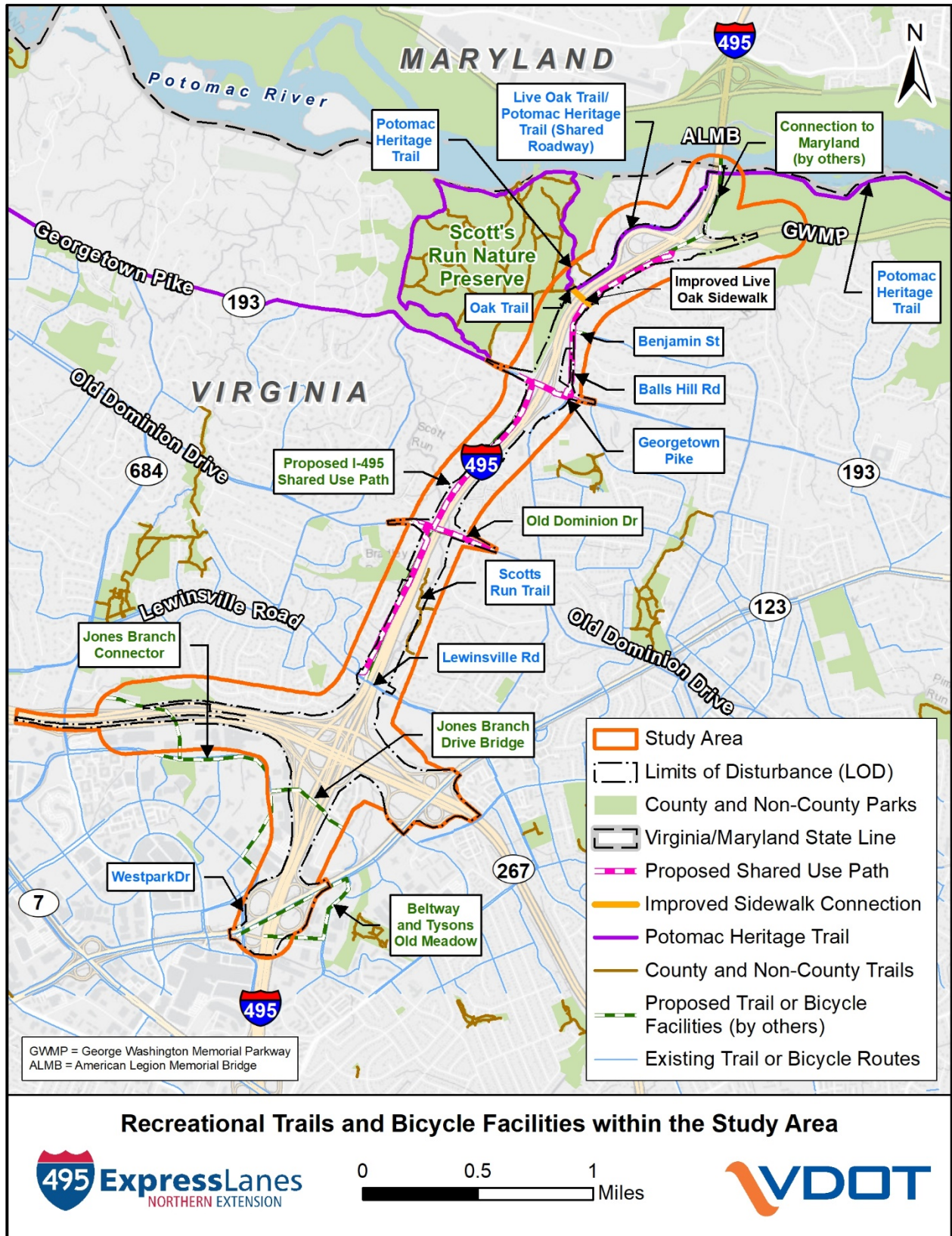


Figure 9. Proposed Shared Use Path

4.0 SECTION 6(F)

4.1 SECTION 6(F) RESOURCES

Section 6(f) of the U.S. Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-4 to 4601-11) preserves, develops, and assures the quality and quantity of outdoor recreation resources through purchase and improvement of recreational lands, wildlife and waterfowl refuges, and other similar resources. Section 6(f) contains provisions to protect and maintain the quality of federal, state, and local investments in parkland and/or recreational resources. The Act established a funding source for federal acquisition of park and recreation lands and matching grants to state and local governments for recreation planning, acquisition, and development. Once purchased using these funds, these lands are protected from conversion to uses other than public outdoor recreational uses. Any such conversion must be in accordance with an existing comprehensive statewide outdoor recreation plan and must be approved by the Secretary of the Interior. If a conversion occurs, the land must be replaced with other recreational properties of at least equal fair market value and with reasonably equivalent usefulness and location. The conversion requirements for Section 6(f) land are outlined in 36 CFR 59.3. The Section 6(f) conversion process is usually conducted jointly by the Virginia Department of Conservation and Recreation (VDCR) and the US Department of Interior (USDOI), National Park Service following the completion of the NEPA process.

4.2 SECTION 6(F) IMPACTS

The Scott's Run Nature Preserve (described in Section 3.2.2) was developed with money from the Land and Water Conservation Fund Act. Therefore, the park is afforded additional protection under Section 6(f) of the Act. Under the Build Alternative, a conversion of Section 6(f) land is anticipated to occur. The LOD would utilize approximately 3.21 acres of land from the Scott's Run Nature Preserve and is a worst-case estimate based on best available design information (see Figure 10).

Land that would be converted from the Scott's Run Nature Preserve abuts existing I-495 right-of-way and is currently wooded with no pedestrian or recreational use. Therefore, no changes to the current trail configuration within the Preserve is anticipated. Minor changes in noise levels and visual quality could occur. Access to the Preserve would not be impacted by the proposed project and will remain as it currently exists.

A search of available replacement land near the existing Scott's Run Nature Preserve will be conducted to replace the Section 6(f) property associated with the I-495 NEXT Project. Coordination activities initiated during the NEPA phase will be concluded during the construction phase by the Design Build Contractor.

4.2.1 Coordination

During early coordination efforts, as well as on-going Section 4(f) coordination activities, the FCPA noted that the Scott's Run Nature Preserve was acquired and developed with assistance from the LWCF and requested that VDOT facilitate the identification of Section 6(f) replacement land. As noted in Section 3.2.2, the Build Alternative would incorporate portions of the Scott's Run Nature Preserve to highway right-of-way. This conveyance of park land will constitute a "conversion of use" under Section 6(f) of the LWCF Act. Following issuance by FHWA of the NEPA decision document, the Design- Build Contractor selected for the project will assume coordination with the FCPA regarding the conversion of land and the identification of replacement land for the Scott's Run Nature Preserve.

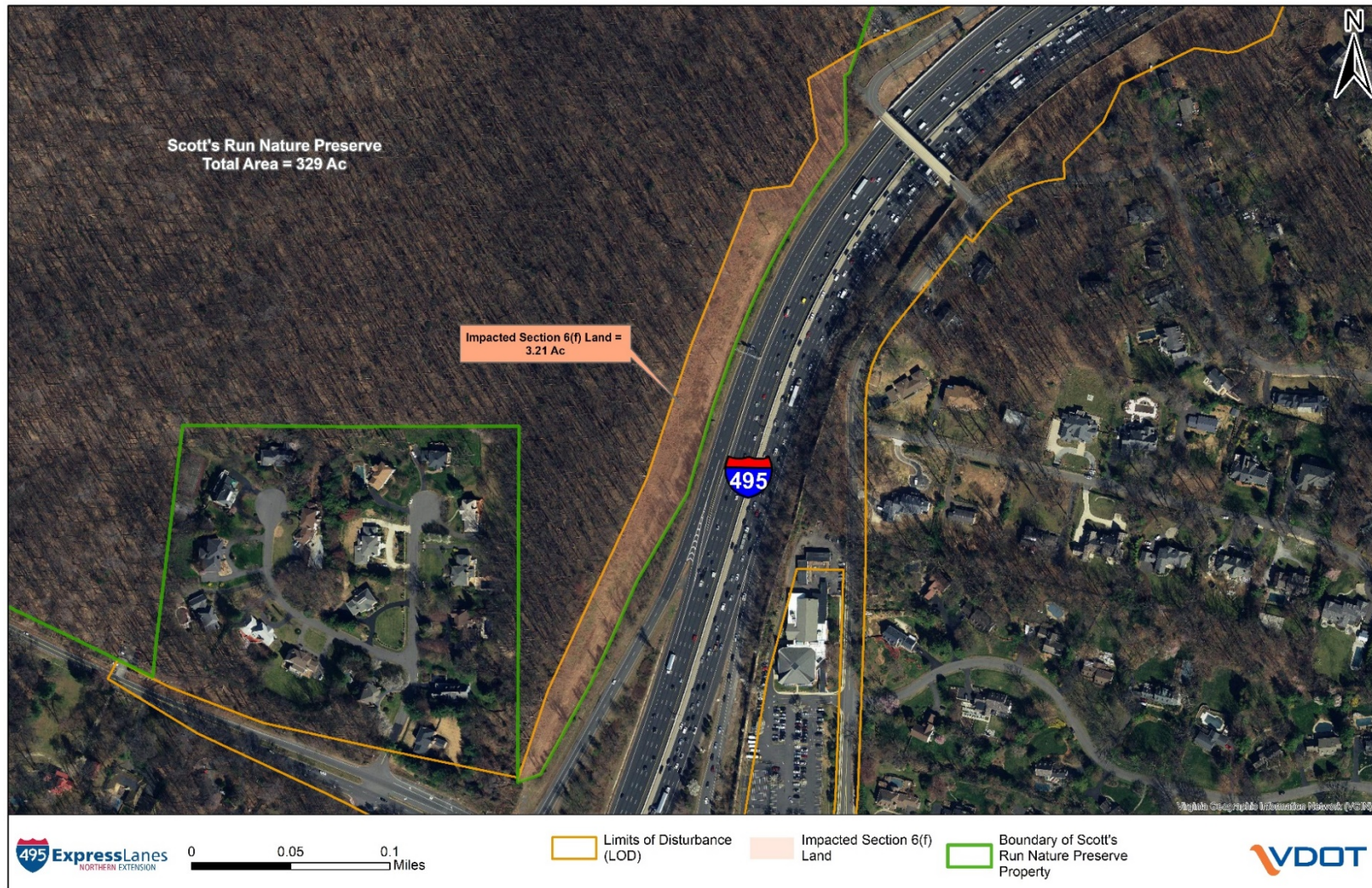


Figure 10. Section 6(f) Impacts Related to Scott's Run Nature Preserve

5.0 REFERENCES

- 6 U.S.C. 460(I)(8)(f). Section 6(f) of Land and Water Conservation Fund Act of 1965, as amended.
- 49 U.S.C. 303(c). Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended.
- 23 CFR Part 771.135. Environmental Impact and Related Procedures: Section 4(f) (49 U.S.C. 303). Federal Highway Administration.
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