

**Project Information**

<b>Project Name:</b>	#SMART18 ROUTE 29 WIDENING - PHASE II	<b>Federal Project#:</b>	NHPP-5A01(917)
<b>Project Number:</b>	0029-029-350, C501, D612, P101, R201	<b>Project Type:</b>	Construction
<b>UPC:</b>	110329	<b>Charge Number:</b>	UPC 99580 AU1 code 9958017119, 7XX activity code
<b>Route Number:</b>	29	<b>Route Type:</b>	Primary
<b>Project Limit--From:</b>	Union Mill Road (Rte 659)	<b>To:</b>	Buckley's Gate Drive
<b>Additional Project Description:</b>	The proposed project will widen Route 29 to a six lane facility to add capacity and improve geometrics, including intersection improvements and the installation of shared-used paths on both sides of the roadway.		
<b>Purpose And Need:</b>	The proposed widening will address capacity deficiencies to relieve traffic congestion and improve safety and operations. Shared-use paths will be provided to improve bicyclist and pedestrian access to existing facilities adjacent to the project's limits.		
<b>District:</b>	<b>City/County:</b>	<b>Residency:</b>	
Northern Virginia	Fairfax	Fairfax	

**Date CE level document approved by VA Division FHWA:**

**FHWA Contact:**

**Project in STIP:** Yes                      **In Long Range Plan?** Yes

**CE Category 23 CFR 771.117:** d

**Description of Category:** Additional actions which meet the criteria for a CE in the CEQ regulations (40 CFR §1508.4) and paragraph (a) of this section may be designated as CEs only after Administration approval unless otherwise authorized under an executed agreement pursuant to paragraph (g) of this section. The applicant shall submit documentation which demonstrates that the specific conditions or criteria for these CEs are satisfied and that significant environmental effects will not result.

**Logical Termini and Independent Utility:** Yes

**Next Phase of Funding Available?** Yes

**Comments:** The project involves widening Route (Rt) 29 from four to six lanes to enhance capacity and safety. Average Daily Traffic (ADT) on Rt 29 increases from 33,000 in existing 2017 conditions to 35,000 in interim (build) year 2023 conditions at an annual growth rate of 1.0%. In design year 2043, the ADT increases to 44,000 at an annual growth rate of 1.3%. The project will provide intersection improvements and install shared use paths (SUP) on both sides of the roadway for pedestrians and bicycles. The improvements are justifiable and are a reasonable expenditure of funds even if no additional transportation improvements are made. Therefore, the project has independent utility. The project termini are rational end points for environmental review that are considered logical.

**Typical Section:** The proposed typical section of Rt 29 eastbound and westbound consists of a closed section with three, 11-foot through lanes and a 10-foot SUP separated from the travel lanes by 8 feet. The eastbound and westbound directions will be separated by a 16 foot grass median.

**Structures:** The project utilizes the technical criteria of Part IIB for determining its post-development stormwater management design. It is anticipated that on-site water quality (BMP) facilities will be constructed to meet a minimum of 75% of the total pollutant removal requirement and that the remaining removal will be achieved through the purchase of nutrient credits. The widening of Route 29 will require replacement of the existing single 12'x8' box culvert which conveys Willow Springs Branch. A preliminary size assessment has determined that the replacement structure will most likely be a double 10'x8' box culvert. A Hydrologic and Hydraulic Analysis (H&HA) will be performed to make a final determination on culvert size and layout.

## SOCIO-ECONOMIC

**Minority/Low Income Populations:** Present with no impact    **Disproportionate Impacts to Minority/Low Income Populations:** No

**Source:** USA.com, Virginia Department of Transportation (VDOT) GIS, VDOT EJ Analysis, Right of Way - Stage 1 Relocation Assistance Report

**Existing or Planned Public Recreational Facilities:** Present with impacts

**Community Services:** Present with no impact

**Consistent with Local Land Use:** Yes

**Source:** Fairfax County Department of Transportation, Fairfax County Park Authority, Rinker Design Associates

**Existing or Planned Bicycle/Pedestrian Facilities** Present with impacts

**Source:** Fairfax County Department of Transportation, Fairfax County Park Authority

**Socio-Economic Comments:** Minority/low income populations are present within the general vicinity with no impacts since the project involves no families or persons displaced, no non-residential displacements, no disruption of community services, and no disruption of emergency services. VDOT Environmental Justice (EJ) Analysis is attached. Willow Pond Park is located in the project area. A SUP will be added/improved on both sides of Rt 29. Willow Pond Trail runs through the park from its eastern extent to Stringfellow Road. The paved trail is separated from Rt 29 by distances of 50 feet at the eastern end of the park up to 125 feet at the western end. Widening Rt 29 would remove a large portion of the park trail; however, the planned SUP would act as a functional equivalent. See Section 4(f) and Section 6(f) for more details. Fairfax Department of Fire and Rescue has no concerns about the project. Public school transportation buses will not be affected.

### SECTION 4(f) and SECTION 6(f)

**Use of 4(f) Property:** Yes

**4(f) Evaluations:**

Selected Evaluation(1):

**Acres of Use:** 2.79

**Type of Use:** Permanent

**Type of Resource:** Public Park

**Name of Resource:** Willow Pond Park

**Comments:** Acres of Use: 1.245 fee Right of Way, 1.545 permanent easement    Acres Not a Use; 0.030 temporary easement

**De Minimis:** Yes

• The officials with jurisdiction have concurred that the transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

**Source:** Fairfax County Park Authority (FCPA) Section 4(f): Significance Determination, Temporary Occupancy & De Minimis Impacts Preliminary Concurrence

**6(f) Conversion:** No        **Acres of Conversion:**

**4(f) Comments:** Willow Pond Park is a 62 acre park owned by FCPA. Fee Right of Way (RW), permanent and temporary easement will be taken from the park for the project primarily in a strip north of Rt 29 and east of Stringfellow Road. Based on VDOT's assurance to utilize the proposed mitigation outlined in VDOT's January 9, 2019, letter and based on the discussion and action items described in the attached March 18, 2019, FCPA Meeting Summary, FCPA provides preliminary Section 4(f) concurrence.

**6(f) Comments:** There are no 6(f) resources located within the project footprint.

### CULTURAL RESOURCES

**Section 106 Effect Determination:** NO EFFECT

**Name of Historic Property:** N/A

**DHR Concurrence date:** 10/04/2018

**MOA/PA Execution Date:** None

**Cultural Resource Comments:** About 16 examples of early to mid 20th century residential and commercial architecture line both sides of Rt 29. VDOT conducted a Phase I architectural survey to identify historic properties within the project's Area of Potential Effect. A Phase I archaeological survey was also conducted for this project.

## NATURAL RESOURCES

**Are Waters of the U.S. present?** Yes

**Linear Feet of Impact:** Approximately 2502

**Federal Threatened or Endangered Species:**

Northern Long-Eared Bat (*Myotis septentrionalis*)-Federal:FT-May affect, Likely to adversely Effect

**100 Year Floodplain:** Present with no impact    **Regulatory Floodway Zone:** Present with no impact    **Zone Code:** A

**Public Water Supplies:** Not Present

**Are any tidal waters/wetlands present?** No

**Wetlands:** Present with impacts

**Tidal Acres of Impact:**

**Tidal Wetland Type:** None

**Are any Non-Tidal Wetlands Present?** Yes

**Non Tidal Acres of Impact:** 0.27

**Non Tidal Wetland Type:** Emergent

**Total Wetland Acres of Impacts:** 0.27

**Are water quality permits required?** Yes

**Natural Resource Comments:** Waters of the U.S. impact totals stated above are based on Public Hearing conceptual design. Four different single and complete crossings will be proposed with the project result of construction activities associated with roadway widening and adequate outlet protection of stormwater management facilities. It is anticipated that additional avoidance and minimization measures will be incorporated as the design progresses which will change the impacts to Waters of the US for the project prior to permit acquisition for the project. Permit types and any required mitigation impacts will be determined during the water quality permit acquisition process. The project is within the Little Rocky Run Stream Conservation Unit (SCU) watershed, but does not propose any direct impacts to the resource within the designated SCU limits. The Department of Conservation Resource (DCR) does not anticipate impacts to any associated natural heritage resources within the database search radius. According to DCR the current activity will not affect any documented state-listed plants or insects. The northern long-eared bat is the only species identified in a GIS search for federally listed threatened or endangered species within the vicinity of the project. There are no known hibernacula or summer roost trees within the a 5 miles radius of the project. The project is relying upon the findings of the 1/5/2016 Programmatic Biological Opinion for Final 4(d) Rule on the Northern Long-Eared Bat and Activities Exempted from Take Prohibitions to fulfill our project-specific section 7 responsibilities.

## AGRICULTURAL/OPEN SPACE

**Open Space Easements:** Not Present

**Agricultural/Forestal Districts:** Not Present

**Source:** Project Definition Form

**Agricultural/Open Space Comments:** No agricultural/forestall or open space easements are present in the project area based on a VDOT Comprehensive Environmental Data and Reporting System (CEDAR) Geographic Information System (GIS) database search. The Virginia Outdoors Foundation (VOF) states there are no existing or proposed VOF open-space easements within the immediate vicinity of the project.

## FARMLAND

**NRCS Form CPA-106 Attached?** No

**NRCS Form CPA-106 not attached because:**

**Land already in Urban use.**

**Alternatives Analysis Required?** No

**Source:** Natural Resource Conservation Service

**Farmland Comments:** Per NRCS, this project is committed to urban use. Care must be taken to minimize the erosion and sedimentation.

## INVASIVE SPECIES

**Invasive Species in the project area?** Unknown

**There is potential for invasive species to become established along the limits of disturbance of the project during and following construction. Section 244.02(c) of VDOT's Road and Bridge Specifications (2016) includes provisions intended to control noxious weeds (which includes non-native and invasive species).**

**While rights-of-ways are at risk from invasive species colonization from adjacent properties, implementing the above provisions would reduce or minimize potential for introduction, proliferation, and spread of invasive species. Additionally, the implementation of best management practices for erosion/sediment control and abatement of pollutant loading would minimize indirect impacts to adjoining communities and habitat by reducing excess nutrient loads that could encourage invasive species proliferation.**

**Invasive Species Comments:** Based on site visits by VDOT, invasive species are likely present in the project area. DCR has only general information about the distribution of invasives. Many invasive species are adapted to take advantage of soil disturbances and poor soil conditions. Non native invasive plants are found throughout Virginia; therefore, the potential exists for some VDOT projects to further the establishment of invasive species. Minimizing soil disturbance will help to inhibit the establishment of invasive species.

## AIR QUALITY

### Air Quality Status and Regional Conformity

Jurisdiction Description: This project is located within a Marginal 8-hour Ozone Nonattainment area, and a volatile organic compounds (VOC) and nitrogen oxides (NOx) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC and NOx. In addition, the following VDEQ air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-130, Open Burning restrictions; 9 VAC 5-45, Article 7, Cutback Asphalt restrictions; and 9 VAC 5-50, Article 1, Fugitive Dust precautions.

✓ This project is modeled properly for conformity in the 2016 LRP.

Project is included in the MWCOG Air Quality Conformity Analysis of the 2016 CLRP Amendment and the FY 2017-2022 TIP App B-35, Con ID 731.

### Carbon Monoxide

CO Microscale Analysis Required for NEPA? No

✓ The proposed project meets the criteria specified in the current FHWA-VDOT "Programmatic Agreement for Project Level Air Quality Analyses for Carbon Monoxide" and therefore a project-specific analysis for CO is not required.

The worst-case intersection within the project limits occurs at the Route 29/Route 645 Intersection which has the highest volume of traffic. Since Route 29 intersects Route 645 at a skewed angle of less than 90 degrees and greater than 60 degrees it would fall under the 2009 Programmatic Agreement as incorporated by reference in the 2016 Programmatic Agreement for projects involving a skewed intersection. The 2043 forecast design year traffic of 44,000 vpd is well below the threshold levels established in the agreement. Modeling using "worst-case" parameters has been conducted for these thresholds and it has been determined that projects, such as this one, for which the thresholds would not be exceeded would not significantly impact air quality and would not cause or contribute to a new violation, increase the frequency or severity of an existing violation, or delay timely attainment of the National Ambient Air Quality Standards for carbon monoxide.

### Particulate Matter

This project is located in: A PM2.5 Attainment Area

PM Hotspot Analysis Required? No

The final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in Fine Particulate Matter (PM2.5) nonattainment and maintenance areas was published on March 10, 2006. This project is located in a PM2.5 attainment area and therefore no further discussion of PM2.5 is necessary.

### Mobile Source Air Toxics

This project requires: No further discussion of MSAT

✓ The project qualifies for a categorical exclusion under 23 CFR 771.117.

This project is excluded from further analysis following FHWA's Interim Guidance Update on MSAT Analysis in NEPA dated October 18, 2016 for projects qualifying as a categorical exclusion under 23 CFR 771.117

## NOISE

**Noise Scoping Decision:** Type I - Noise study required

**Barriers Under Consideration?** Yes

**Noise Comments:** The Preliminary Noise Analysis identified noise impacts under the design year build conditions at a total of 44 receptors representing 43 residences and one trail. In an effort to mitigate the predicted noise impacts, a total of 10 barriers were evaluated throughout the project corridor. Six of these barriers were found to be feasible and reasonable at this time. A Final Design Noise Analysis based on detailed engineering information will be performed when more detailed information is available to verify the conclusions of the Preliminary Noise Analysis.

## RIGHT OF WAY AND RELOCATIONS

**Residential Relocations:** No

**Commercial Relocations:** No

**Non-Profit Relocations:** No

**Right of Way required?** Yes

**Fee Simple:** 4.2

**Temporary Easement:** 2.3

**Permanent Easement:** 7

**Utility Easement:**

**Amount of Right of Way Acreage:** 4.2

**Septic Systems or Wells:** Present with impacts

**Hazardous Materials:** Not Present

**Source:** Virginia Department of Health, Fairfax County Water Authority, VDOT Project Plans and RW Data Sheets, Right of Way - Stage 1 Relocation Assistance Report

**ROW and Relocations Comments:** No commercial, residential, or non profit organizations will be displaced by this project. There are currently two signs, both brick monument signs with electricity, and an abandoned house with shed(s) on the project. An orderly and satisfactory move cost estimate has been prepared if removal of personal property from the sheds is required. The assigned VDOT RW staff or fee consultants will address any required moving services. Country School House Well #1 is located within a one mile radius of the project site. Potential impacts to public water distribution systems must be verified by the local utility. The Fairfax County Water Authority does not have concerns about public water supply. A Phase II Hazardous Materials Investigation eliminated risk since it found no evidence of recognized environmental conditions and no further investigation is necessary.

## CUMULATIVE AND INDIRECT IMPACTS

**Present or reasonably foreseeable future projects (highway and non-highway) in the area:** Yes

**Impact same resources as the proposed highway project (i.e. cumulative impacts):** No

**Indirect (Secondary) impacts:** Yes

**Source:** VDOT NoVA Transportation Planning Section

**Cumulative and Indirect Impacts Comments:** Present or reasonably foreseeable future projects within a radius of inclusion of 1.5 miles include Rt 286, (Fairfax County Parkway) - Popes Head Road Interchange (VDOT UPC 111725), Fairfax Corner Commuter Parking Structure (VDOT UPC 112817), Rt 286, (Fairfax County Parkway) - Widen from 4 to 6 lanes (VDOT UPC 107937), Rt 28 - Widen from 4 to 6 lanes (VDOT UPC 108720), and Transform 66 Outside the Beltway (VDOT UPC 110741). Indirect impacts include increased economic growth due to better traffic circulation and urbanization. However, the intensity of the incremental impacts of the project are considered small, when viewed in the context of impacts from other past, present, and reasonably foreseeable future activities and would not rise to a level that would cause substantial cumulative or indirect impacts.

## PUBLIC INVOLVEMENT

**Substantial Controversy on Environmental Grounds:** No

**Source:** Fairfax County Department of Transportation

**Public Hearing:** Yes **Type of Hearing:** Design Public Hearing

**Other Public Involvement Activities:** Yes

**Type of Public Involvement:** A Public Information Meeting was held on Wednesday 10/10/18 from 6:30 PM to 8:30 PM at Colin L. Powell Elementary School.

**Public Involvement Comments:** Design Public Hearing is tentatively scheduled for June, 2019.

**COORDINATION**

**State Agencies:**

Department of Conservation and Recreation  
Department of Environmental Quality  
Department of Forestry  
Department of Game and Inland Fisheries  
Department of Health  
Virginia Marine Resources Commission  
Virginia Outdoors Foundation

**Federal Agencies:**

Natural Resources Conservation Service

**Local Entity:**

Fairfax County Health Department  
Fairfax County/City Planner  
Fairfax Economic Development Office  
Fairfax Office of Transportation  
Fairfax Fire and Rescue  
Fairfax Parks and Recreation  
Fairfax Public Works

**Other Coordination Entities:**

Northern Virginia Regional Park Authority

**This project meets the criteria for a Categorical Exclusion pursuant to 40 CFR 1508.4 and 23 CFR 771.117 and will not result in significant impacts to the human or natural environment.**