



PROJECT INFORMATION		
Project Name:	Franconia Third Track	
Location:	Fairfax County, Virginia	
Project Limit-From:	Approximately one mile north of the Franconia-Springfield VRE Station (~CFP 98.8)	
Project Limit-To:	Approximately 400 feet north of Furnace Road, just north of the Occoquan River (~CFP 90.08)	
Project Description:	The Franconia Third Track Project (the "Project") would add a third mainline track through approximately 8 miles of an existing railroad right-of-way that currently contains two railroad tracks. The Project would: shift tracks to increase speed through curves; replace two existing two-track bridges and add two new rail bridges; and add a new passenger rail bypass with an elevated bridge to remove conflicts between freight and passenger trains. The Franconia-Springfield VRE Station, the Lorton VRE Station, and the Amtrak Auto Train Station are located within the 8-mile area proposed for a third mainline track. Additionally, north of the Franconia-Springfield Station, the Project would realign three existing tracks for approximately ³ / ₄ of a mile to accommodate station improvements. All proposed improvements are within existing CSXT and/or VDOT right-of-way. The Project is solely an infrastructure improvement project and does not include additional passenger rail service.	

Date CE level document approved by VA Division FHWA: 01/13/2020 (See Attachment A)

FHWA Contact: John Simkins (Planning, Environment, Realty and Freight Team Leader)

Project in STIP: Yes (See Attachment B) In Long Range Plan? Yes

Logical Termini and Independent Utility: Yes

Next Phase of Funding Available? Yes. Next phase is engineering design completion followed by construction. DRPT anticipates the Project being designed and constructed in several phases, as funding becomes available; the Project will be funded in accordance with Virginia's STIP.

CE Citation: 23 CFR 771.116(c)(12), 23 CFR 771.116(c)(17), and 23 CFR 771.117(h)

Comments:

<u>Background</u>: The Virginia Department of Rail and Public Transportation (DRPT), in coordination with the Federal Railroad Administration (FRA), the Virginia Department of Transportation (VDOT), CSX Transportation (CSXT), Amtrak, and Virginia Railway Express (VRE), is advancing the Washington, D.C. to Richmond Southeast High Speed Rail project (DC2RVA). DC2RVA includes additional track and other rail structural improvements plus additional passenger train service on the existing 123-mile rail corridor between Washington, D.C. and Richmond, Virginia. DRPT completed a Tier II Environmental Impact Statement (EIS) and subsequent Record of Decision (ROD) in September 2019 and has since completed preliminary engineering (30% design). The ROD for DC2RVA provides clearance under the National Environmental Policy Act (NEPA) for additional passenger service along the entire corridor and rail improvements with the exception of the 8.72-mile portion of corridor between Franconia and Occoquan in Fairfax County, Virginia.

In 2009, DRPT and CSXT constructed 12 miles of third mainline track between the Potomac River and the Franconia-Springfield VRE Station, terminating the third track just north of the station. In 2015, DRPT identified the Project area and the need to advance and separate an 8-mile portion of third mainline track from Franconia to just north of the Occoquan River from the ongoing longer-term DC2RVA EIS. The Project's 8-mile portion of the rail corridor is one of the most heavily traveled parts of the DC2RVA corridor, carrying rail traffic from CSXT, Amtrak, and VRE trains and serving the Franconia-Springfield VRE Station, the Lorton VRE Station, and the Amtrak Auto Train Station. The proposed eight miles of additional mainline track would extend the existing third track further south, establishing 20 continuous miles of triple-tracked rail corridor south of Washington, D.C. where commuter, intercity passenger, and freight rail share overburdened infrastructure.

On September 24, 2015, FRA issued a NEPA class of action letter that supported advancing the Franconia Third Track Project separately from, but compatible with, DC2RVA. FRA determined the NEPA class of action to be a Categorical Exclusion (CE) with documentation. A draft CE document was prepared and submitted to FRA; however, subsequent discussions between FRA and DRPT regarding potential funding sources led DRPT to approach FHWA for finalization of the NEPA process. On January 13, 2020, FHWA signed the NEPA Concurrence Form for preparation of a CE for the Franconia Third Track Project per 23 CFR 771.116(c)(12), 23 CFR 771.116(c)(17), and 23 CFR 771.117(h).

<u>Project Area:</u> The Project is located in Fairfax County, Virginia as shown in **Figure 1**. **Figure 2** depicts specific Project improvements. As shown in that figure, the Project area limits include roughly 8 miles of adding a third main track and roughly ³/₄ of a mile of shifting existing tracks (at the north end). The limits of the proposed rail improvements extend from approximately one mile north of the Franconia-Springfield VRE Station (CFP* 98.8) to approximately 400 feet north of Furnace Road (CFP 90.08), which is just north of the Occoquan River. Improvements north of CFP 98.8 and south of CFP 90.08 are included as part of DC2RVA.

*Note that CSXT uses the abbreviation "CFP" in lieu of the more common "MP" for milepost.

<u>Purpose and Need</u>: The purpose and need of the project is to improve passenger and freight service performance in a crowded rail corridor.

<u>Proposed Infrastructure Improvements</u>: The proposed infrastructure improvements are described below, from north to south. The Project is solely an infrastructure project and does not include additional passenger rail service. At the end of this section, Figure 3 illustrates the typical three-track section, Figure 4 illustrates the typical grade-separated bypass structure, and Figure 5 illustrates the new rail bridges over Route 1 and Newington Road that are being proposed as part of these improvements and are described below.

- The existing three tracks between the curves at CFP 98.8 to CFP 98.0 would be shifted slightly west within the existing rightof-way to avoid impacts to the Franconia-Springfield Parkway bridge as well as to accommodate the increase in the track centers required for a new island platform (to be constructed by VRE) at the Franconia-Springfield VRE Station.
- The Project would add a new third track on the east side from CFP 98.0 to just south of the Franconia-Springfield VRE Station. The new third track would pass the station on the east, and accommodate an expanded east side platform (the east side platform would become a center platform with construction of the third track, with platform modifications to be designed and constructed by VRE). In addition, the Project would modify the pedestrian bridge or construct a tunnel at Franconia-Springfield Station to accommodate pedestrian access on the east side (VRE will design and construct the means of vertical access).
- Modifying existing curves to make the appropriate transition, a new track would be added on the west side starting just past where the WMATA tracks end and extending south onto a new two-track passenger rail bypass on an elevated structure, approximately 1,700 feet in length between CFP 97.2 and 96.3. The elevated bypass structure would allow passenger trains to cross between the west side and east side without occupying the existing two main tracks. The bypass would be designed for passenger and commuter trains only, and would be built to hold two tracks, with only one track added as part of the Project.
- The Project would add a new third track on the east side from CFP 96.3 to approximately CFP 91.0. A new railroad bridge with capacity for two tracks would be added to the east side at the existing railroad bridge over Newington Road. The new bridge and the track would be raised and expanded to accommodate improved roadway underpass geometry beneath the bridge (road improvements are not part of the Project). Initially, two tracks would be active on the new bridge, and rail traffic would be routed onto the new bridge. The existing rail bridge over Newington Road would then be removed, and a new two-track bridge with raised track to accommodate improved roadway underpass geometry would be constructed. Rail traffic would then be routed back onto the replacement bridge, and one track removed from the new bridge, maintaining a three-track rail corridor.
- Tracks would be aligned at the Lorton VRE Station to accommodate a longer side platform on the east side and a center
 platform on west side. The platform modifications at the Lorton Station would be designed and constructed by VRE and are not
 part of the Project.
- A new rail bridge would be added over Pohick Creek on the east side of the existing bridge. The new bridge would have capacity for two tracks, but only one track would be added as part of the Project.
- The new third track on the east would extend past Amtrak's Lorton Auto Train Station. A new rail bridge with capacity for two tracks would be constructed over Lorton Road (Route 642) on the east side of the existing bridge, but only one track would be added as part of the Project. The new third track would continue on the east side of the corridor until approximately CFP 91.0.
- The Project would add a new track on the west side between approximately CFP 91.0 and 90.0. A new railroad bridge with capacity for two tracks would be added to the west side at the existing railroad bridge over U.S. Route 1. The new bridge and the track would be raised and expanded to accommodate improved roadway underpass geometry beneath the bridge (road improvements are not part of the Project). Initially, two tracks would be active on the new bridge, and rail traffic would be routed onto the new bridge. The existing rail bridge over U.S. Route 1 would then be removed, and a new two-track bridge with raised track to accommodate improved road underpass geometry would be constructed. Rail traffic would then be routed back onto the replacement bridge, and one track removed from the new bridge, maintaining a three-track rail corridor.

- At CFP 90.08, any new track or other rail improvements would align with the rail improvements described in the DC2RVA Final EIS and ROD, including a new third track on the east extending from CFP 90.08 south to Woodbridge Station (not part of the Project).
- The new third track centerline would typically be placed 15 feet from the existing near track centerline along the corridor; the distance between the new track and the existing tracks would expand to accommodate the bypass, other new bridges, and station platforms.
- In addition to the new third track, the two existing tracks would also be shifted to the east or west through curves to transition the new third track from the east side of existing tracks to the west side and back to the east side, and improve speed and performance.
- Existing track speed in most of the Project area is 70 mph for passenger service and 60 mph for freight. Project track speeds will be determined during final design, but are anticipated to be 75 to 80 mph for passenger service and remain at 60 mph for freight on the three mainline tracks. The tracks on the bypass would be passenger only, with a design speed between 70 to 80 mph (to be determined during final design).
- The Project's track alignments will be coordinated with VRE's platform improvement projects at the Franconia-Springfield VRE Station and Lorton VRE Station. At the Franconia-Springfield Station, tracks would be aligned to accommodate expansion of the east side platform to become a center platform with construction of the third track. At the Lorton VRE Station, tracks would be aligned to accommodate a 700-foot side platform on the east side, and an identically-sized center platform on west side, with room for both platforms to increase in length. Platform improvements are being designed and constructed by VRE, and are not part of the Project.
- All new bypass and bridge structures would be built to accommodate two tracks, although only one track would be added as
 part of the Project. New crash walls would be constructed at the Pohick Road highway bridge and the Franconia-Springfield
 Parkway highway bridge to accommodate the reduced horizontal clearance (less than 10 feet) resulting from the construction of
 the third track.

Additional work included as part of the proposed Project includes:

- Extending the existing culverts along the alignment to accommodate the new third mainline track.
- Installing additional 36- to 48-inch culverts, as required for drainage, under the rail line along the entire eight-mile corridor.
- Modifications to the Lorton Interlocking.
- Signal and communication facilities.

<u>Ability to Meet Purpose and Need</u>: The Project would meet the purpose and need by adding capacity (e.g., a third mainline track) and reducing an existing bottleneck caused by conflicting at-grade passenger train movements between main tracks.

- (1) Adds Capacity: The existing two mainline tracks in the Project corridor have a combined daily peak volume of 66 trains: 20 Amtrak trains, 16 VRE trains, and 30 CSXT trains. The two main tracks are inter-operational and carry both passenger (Amtrak and VRE) and freight (CSXT) trains all with varying schedules, speeds, lengths, and operational requirements. All VRE trains stop at VRE's Franconia-Springfield and Lorton Stations within the Project area and are served by platforms with one edge on the outside of the eastern track. During VRE train station stops, the eastern track is blocked. The number of daily trains, the inter-operations of passenger, commuter, and freight trains, and the frequent stops by VRE's commuter trains create a congested rail corridor. The Project addresses this existing congestion by adding a third main track for almost 8 miles, extending through VRE's two stations and past the Amtrak Autotrain station as well. The new third main track would also benefit future expansion of rail service.
- (2) Reduces Bottleneck: VRE trains and some Amtrak trains are served by station/platform combinations that require them to be on the east side of the corridor south of Franconia, but on the west side of the corridor north of Franconia. The east to west movement of passenger trains currently occurs at-grade and creates a bottleneck in the corridor. The bottleneck occurs because crossing trains are required to slow down, move through an interlocking track, and occupy both main tracks simultaneously, which blocks all other train movements. The Project addresses the existing bottleneck by adding a grade-separated bypass to carry the new third track from one side of the corridor to the other on an elevated structure. With the bypass, passenger trains would be separated and able to cross over the main tracks without interfering with trains on the main tracks.

The Project would provide the infrastructure necessary to allow separation of freight and passenger rail movements to occur and would generally reduce congestion and increase capacity in the corridor – allowing for more efficient and reliable movement of passenger rail service as well as freight traffic. By constructing a third mainline track, the Project would create a continuous corridor with three interoperable mainline tracks for nearly 20 miles between the Potomac River and the Occoquan River. The Project provides a discrete set of improvements that can stand alone without requiring other improvements on adjacent sections of the rail corridor.

Attachments: A: Signed NEPA Concurrence Form (January 13, 2020)

- B: STIP/TIP Documentation
- C: Aerial Mapbook with Permanent and Temporary Limits of Disturbance (LOD)
- D: Coordination with DHR
- E: Coordination with US Fish and Wildlife Service (USFWS)
- F: Noise and Vibration Assessment

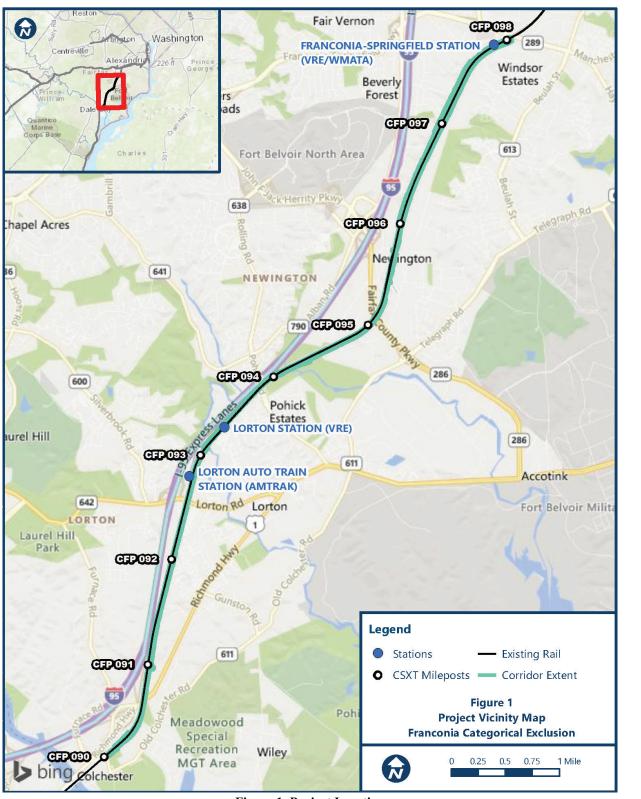


Figure 1. Project Location

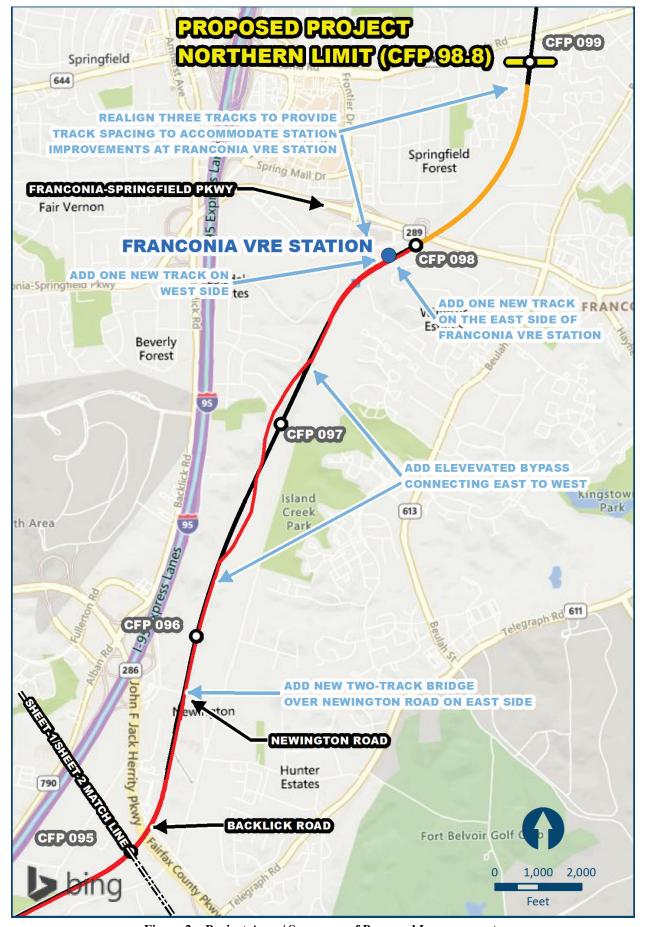


Figure 2a. Project Area / Summary of Proposed Improvements

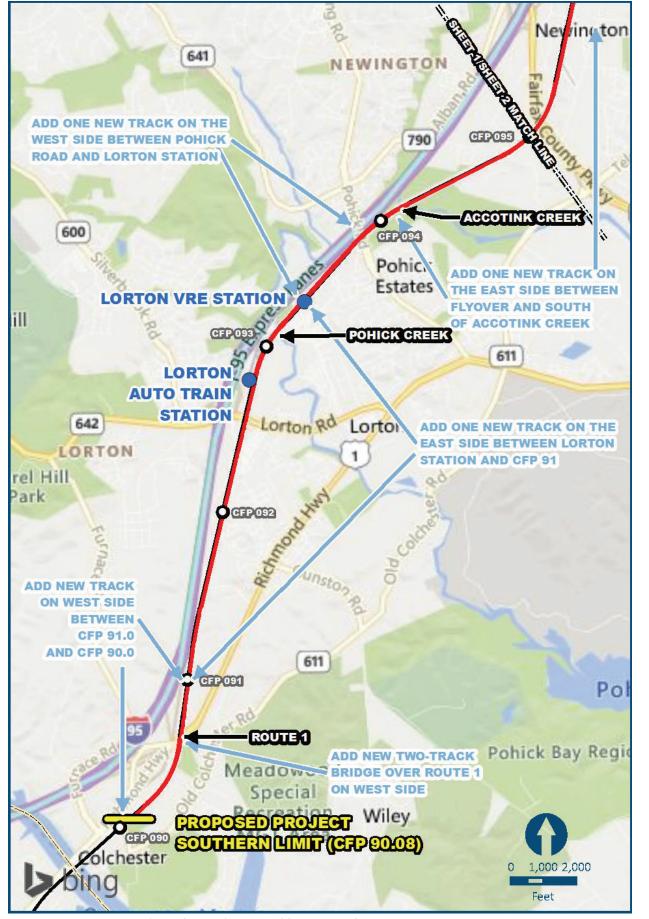


Figure 2b. Project Area / Summary of Proposed Improvements

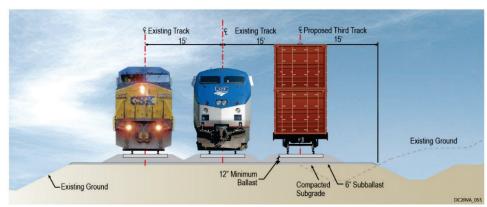


Figure 3. Proposed Three-Track Typical Section



Figure 4. Proposed Typical Bypass (Looking South) Note that only one track would be added to the bypass as part of the Project. Rendering prepared by Kimley-Horn Inc (2019)

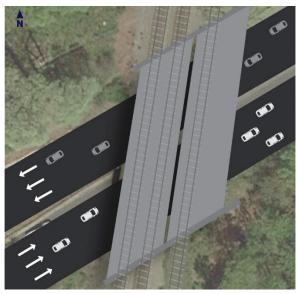


Figure 5. Proposed Typical Route 1 and Newington Road Improvements Figure from VDOT's CSX Bridges over Route 1 and Route 877 Conceptual Bridge Replacements Feasibility Study Report (February 2019). Note that only one track would be added on the new bridges as part of the Project.

RIGHT-OF-WAY AND RELOCATIONS

Right-of-way required? No	Acreage Amount: N/A
Residential Relocations: No	Number: 0
Commercial Relocations: No	Number: 0
Non-Profit Relocations: No	Number: 0

Source: Fairfax County Parcel Boundaries and Zoning Data (2015); CSX Bridges over Route 1 and Route 877 - Conceptual Bridge Replacement Feasibility Study Report (2019); Conceptual Bypass Design Drawings (2019); Project LOD (see Attachment C)

Septic Systems, Wells, or Public Water Supplies: Present Impacts: Yes

Source: Comprehensive Environmental Data and Reporting System (CEDAR) – Virginia Department of Health (VDH) (2018)

Hazardous Materials: Present Impacts: Yes (5 sites, see table below)

Source: Environmental Protection Agency (EPA) Facility Register Service (FRS) Database (2016)

Right-of-way and Relocations Comments:

<u>*Right-of-way:*</u> All Project improvements (as enumerated in the Project Description and Proposed Improvements sections) are located within existing CSXT and/or VDOT right-of-way. CSXT has continuous right-of-way on the ground and VDOT has aerial right-of-way over/under CSXT at roadway crossings. For the at-grade rail improvements, DRPT estimated the typical maximum limits of disturbance (LOD) distance to be 75 feet from centerline of existing track on either the east or west side depending on placement of the third track. Where the distance from centerline of existing track to edge or right-of-way is less than 75 feet, DRPT assumed the LOD as the actual right-of-way. In these areas, DRPT assumed, based on previous similar DC2RVA design that the proposed at-grade rail improvements can be refined during final design to remain within existing right-of-way by use of retaining walls or other minimization measures. The proposed bypass is also located within existing right-of-way, as detailed on the plan/profile drawings separately prepared by Kimley-Horn Inc. (dated July 17, 2019).

For the improvements related to the two new rail bridges (Newington Road and Route 1), DRPT used the proposed LOD indicated in VDOT's CSX Bridges over Route 1 and Route 877 - Conceptual Bridge Replacement Feasibility Study Report (February 2019), which included both permanent limits (which were within existing right-of-way) and temporary construction limits. The temporary construction limits shown in the 2019 VDOT report are primarily located on the back side of the industrial properties on the east side of the existing rail corridor at the Newington Road crossing (i.e., the Gunston/Newington Industrial Park properties. Temporary construction limits are also located on the west of Fort Belvoir) and over a portion of the parking lots of the Northern Virginia Auto Recycling property (north of the Route 1 crossing) and the Quality Moving Services property (south of the Route 1 crossing). Similar to the at-grade rail improvements, DRPT assumes the bridge improvements can be refined during final design to further minimize impacts, such as use of a retaining wall.

DRPT estimated additional areas of temporary LOD in locations where the existing right-of-way extended beyond the abovereferenced 75 feet. DRPT assumes that temporary areas would be used for access, staging, and construction-related purposes. **Attachment C** shows the locations of temporary LOD outside of existing right-of-way, the total area of which is 1.8 acres.

Relocations: DRPT anticipates no permanent property acquisition for the Project.

<u>Septic Systems, Wells, or Public Water Supplies:</u> The closest public surface water supply intake is the Occoquan Reservoir, which is located upstream of the Project and separated by a dam (over two miles upstream from the CSXT crossing of the Occoquan River, south of the Project LOD). There are two private wells within 100 feet of the permanent LOD (located south of the Lorton Road overpass), and one public groundwater source within a mile of the LOD (a drilled well at the FX Yacht Club, which is located on the Occoquan River, south of the Project LOD). There are no anticipated impacts to water quality as a result of the Project.

<u>Hazardous Materials</u>: There are five sites with recordings of hazardous materials in the permanent LOD, as shown in the table below (with adjacent property information noted therein for reference). DRPT will comply with the requirements for solid and hazardous wastes and hazardous materials specified by the Virginia Department of Environmental Quality (DEQ) during construction and will remediate existing sources of contaminants where disturbed by construction activities in accordance with federal, state, and local requirements. Before the construction of the Project, thorough site investigations will be conducted to determine whether any of the sites are actually contaminated, and, if so, the nature and extent of that contamination. All solid waste material resulting from clearing and grubbing, demolition, or other construction operations will be removed and disposed of according to regulations. Any additional hazardous materials discovered during construction of the Project will be removed and disposed of in compliance with all applicable federal, state, and local regulations. All necessary remediation will be conducted in compliance with applicable federal, state, and local environmental laws and will be coordinated with EPA, Virginia DEQ, and other federal or state agencies as necessary.

Owner/ Property (Adjacent to LOD)	Petroleum Release Site	Leaking Storage Tank	RCRA Generator
7001 Newington Road	\checkmark		
WMATA/ 7901 Cinder Bed Road	\checkmark		
Potomac Valley Brick / 8306 Cinder Bed Road	\checkmark		
Mims Street LLC / 8100 Mims Street	\checkmark	\checkmark	\checkmark
AAAACO LLP / 10212 Richmond Highway	\checkmark		
TOTAL	5	1	1

SOCIO-ECONOMIC

Minority/Low Income Populations: Present

Disproportionate Impacts to Minority/Low Income Populations: No

Source: DC2RVA Tier II EIS and ROD (2019)

Consistent with Local Land Use: Yes

Source: Fairfax County Comprehensive Plan (2017); DC2RVA Tier II EIS and ROD (2019)

Community Services: Not Present

Existing or Planned Public Recreational Facilities: Present; No Impact

Existing or Planned Bicycle/Pedestrian Facilities: Existing Present: No Impact

Source: Fairfax County, VA Open Geospatial Data (2019); Aerial Imagery

Socio-Economic Comments:

<u>Title IV and Environmental Justice</u>: Analysis to determine the presence of and impact to Environmental Justice populations was conducted for the 123-mile DC2RVA corridor, inclusive of the 8 miles from Franconia to Occoquan, in accordance with Title VI of the Civil Rights Act of 1964, Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and U.S. DOT Order 5610.2. As part of DC2RVA, FRA and DRPT identified these populations through the use of US Census data, National Center for Education Statistics data, and information from public involvement and outreach activities; EPA concurred with the analysis approach on September 16, 2015. In the DC2RVA Tier II Draft and Final EIS, FRA and DRPT performed analysis across all of the potential environmental effects to Environmental Justice populations (residential relocations, community cohesion, relocations of community facilities, access to community facilities, changes in response times for emergency services, and noise and vibration impacts) and determined that DC2RVA would not have disproportionate adverse effects on Environmental Justice populations in comparison to other Build Alternatives evaluated as part of those documents. In the ROD for DC2RVA, FRA determined that DC2RVA is consistent with the requirements of Executive Order 12898. Because the Project is within the same area as the DC2RVA area, the proposed improvements would not cause additional environmental effects to Environmental Justice populations, and there are no emergency services or local schools that would be impacted by the proposed improvements. Additionally, the Project would result in a safer and less congested railroad network, which would provide better access and mobility to all communities and populations; therefore, no further Environmental Justice analysis is required.

<u>Public Recreational Facilities</u>: While several public recreational facilities are located adjacent to the railroad corridor, such as Loisdale Park west of the right-of-way near the bypass or Mason Neck West Park east of the right-of-way south of Route 1, the facilities are located outside of the right-of-way.

Land Use: The Project is consistent with the Fairfax County Comprehensive Plan goal to "have a land use pattern which increases transportation efficiency, encourages transit use, and decreases automobile dependency" (per Countywide Objective 6 in the Fairfax County Comprehensive Plan). There is no permanent land use conversion associated with the Project as all improvements are continuing an existing use and are located within the existing CSXT and/or VDOT right-of-way (see Right-of-way and Relocations section, above).

<u>Bicycle/Pedestrian Facility</u>: The following bicycle/pedestrian facilities are within and/or traverse the permanent LOD of the Project, primarily as part of a roadway facility. Project improvements would maintain all existing (or future planned, at that time) bicycle and pedestrian facilities, and detail the specifics as part of final design.

- Trail connecting east side of Franconia-Springfield Metro Station to Barry Road
- Multiuse path on Backlick Road overpass (east side of roadway)
- Sidewalk on Pohick Road overpass (east side of roadway)
- Bicycle lane and sidewalk on both sides of Lorton Road (railroad overpass)

CULTURAL RESOURCES/SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT DETERMINATION

Phase I Architecture Conducted	⊠ Complete (as part of DC2RVA Tier II EIS and additional studies conducted as part of the Franconia Third Track project, as provided in Attachment D)
Phase II Architecture Conducted	⊠ Complete (as part of DC2RVA Tier II EIS)
Phase I Archaeology Conducted	☑ Complete (as part of DC2RVA Tier II EIS)
Phase II Archaeology Conducted	□Complete (N/A)

Name of Historic Property: RF&P Railroad Corridor (500-0001) /Resource includes the ~8 miles of track within the Franconia *Third Track Project area*] DHR Concurrence Date: July 22, 2020

Section 106 Effect Determination: Adverse Effect

Name of Historic Property: Old Colchester Road, Potomac Path, King's Highway (029-0953) /Resource is within the APE of the Franconia Third Track Project] DHR Concurrence date: July 22, 2020

Section 106 Effect Determination: No Effect

Name of Historic Property: Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043) [Resource is within the APE of the Franconia Third Track Project]

Section 106 Effect Determination: No Adverse Effect

DHR Concurrence date: July 22, 2020

Source: Section 106 Evaluation from the DC2RVA Tier II EIS and additional studies conducted as part of the Franconia Third Track Project (see Attachment D for documentation of additional studies)

Section 106 MOA Execution Date: DC2RVA Section 106 MOA executed on 7/16/2019; Amendment ongoing

Cultural Resource Comments:

DRPT and FRA conducted cultural resource identification and evaluation studies of historic properties in consultation with the Virginia Department of Historic Resources (DHR) for the 123-mile DC2RVA corridor, inclusive of the 8 miles from Franconia to Occoquan. However, the DC2RVA Section 106 consultation did not include the improvements to the two new bridges (Newington Road and U.S. Route 1) or the new elevated bypass structure that are part of the current undertaking that have been added since the DC2RVA cultural resource review. The presence of newly designed elevated structures requires a 1,000-foot area of potential effects (APE); a 500-foot APE was included in the original study. Accordingly, DRPT conducted additional architectural survey (summarized below and detailed in a report provided in Attachment D).

Through the original DC2RVA studies and the additional research within the elevated structure APE, it was determined that there are three historic properties in the 8-mile long project area, as listed above, and that the Project would have an adverse effect on one of these resources: the RF&P Railroad Corridor (500-0001). A Memorandum of Agreement (MOA) outlining stipulations to mitigate adverse effects to the RF&P Railroad Corridor due to DC2RVA was executed in July 2019. Stipulation I.B of the DC2RVA MOA states that design changes associated with the DC2RVA project or associated projects are permitted as long as the modifications are reviewed by the DHR and the previous effect determinations are not modified and the mitigation stipulations remain appropriate for the undertaking. The impacts to the RF&P Railroad Corridor from the Franconia Third Track Project mirror those of the larger DC2RVA project.

The DHR reviewed the Project impacts to the RF&P Railroad Corridor as part of the Franconia Third Track Project and concurred that the current mitigation stipulations set forth in the DC2RVA MOA are appropriate as presented; the DHR concurrence letter, dated July 22, 2020, is provided in Attachment D. An amendment to the DC2RVA MOA is being prepared, inclusive of FHWA as an invited signatory. The mitigation stipulations will be carried out prior to commencing construction on the Franconia Third Track Project.

Cultural resource studies have thus been completed, and full documentation is provided in Attachment D.

SECTION 4(f) AND SECTION 6(f)

Use of Section 4(f) Property: Yes, one property

Name of Resource: RF&P Railroad Corridor (500-0001)

Type of Resource: Individually Eligible Historic Property

De Minimis: No

Type of Use: Permanent Incorporation

Section 4(f) Evaluation Attached: The DC2RVA Final Section 4(f) Evaluation and Record of Decision are available on the Project website: www.DC2RVARail.com

Conversion of Section 6(f) Property: No Acres of Conversion: None

Source: Final Section 4(f) Evaluation from the DC2RVA Tier II EIS and ROD (2019)

Section 4(f) Comments:

Determination of use was conducted by DRPT for the 123-mile DC2RVA corridor, inclusive of the 8 miles from Franconia to Occoquan. There were no Section 4(f) uses of any publicly owned parks, recreation areas, wildlife and waterfowl refuges in the Franconia Third Track Project area, and the proposed bridge/bypass improvements do not require further Section 4(f) analysis as there are no such resources present in that area of the Project LOD.

Similarly, for historic properties, DRPT found no use of the historic properties located within the Franconia Third Track Project area, other than the RF&P Railroad Corridor. The entire RF&P Railroad Corridor (500- 0001) is a National Register of Historic Properties (NRHP) -eligible property. As part of the DC2RVA Section 4(f) Evaluation, DRPT determined that construction would result in removal or large-scale modifications to several contributing elements to the railroad district and several bridges along the corridor, resulting in a use (permanent incorporation) of this historic property. FRA approved the use of the RF&P Railroad Corridor, including the portion within the Franconia Third Track Project limits, in the DC2RVA Final Section 4(f) Evaluation and ROD. The DC2RVA Section 4(f) Evaluation did not include the two bridge replacements (Newington Road and U.S. Route 1) or the new elevated bypass bridge that are part of the current undertaking and that have added since the DC2RVA review. The two bridge replacements and the bypass are an exception to the requirement for Section 4(f) approval per 23 CFR 774.13(a)(2).

Section 6(f) Comments:

None.

NATURAL RESOURCES

Are Waters of the U.S. (WOUS) present? Yes

Surface Water Name(s): Long Branch, Accotink Creek, Pohick Creek, and Giles Run, plus multiple small unnamed streams and tributaries

Total Linear Feet of Impact: 2,600 feet in permanent LOD

Source: Delineated WOUS, DC2RVA Field Surveys (2015-2016)

Federal Threatened or Endangered Species:

Terrestrial: Northern Long-eared Bat (Myotis septentrionalis) - Threatened - No effect

Aquatic: None

Plants: Small Whorled Pogonia (Isotria medeoloides) - Threatened - No effect

Critical Habitat: None

Source: USFWS Online Project Review Process, Consultation Code 05E2VA00-2020-SLI-1868. See Attachment E.

Source: Federal Emergency Management Agency (FEMA) (2018)

Tidal Waters/Wetlands: Not present

Wetlands: Present

Type: Palustrine emergent (PEM); Palustrine forested (PFO); Palustrine shrub (PSS); PEM-PFO; and PEM-PSS

Total Wetland Acres of Impact: 2.7 acres in permanent LOD

Source: Delineated WOUS, DC2RVA Field Surveys (2015-2016)

Are permits required? Yes

Natural Resource Comments:

<u>Waterways:</u> There are no navigable waterways crossed by the Project corridor. Four named streams (Long Branch, Accotink Creek, Pohick Creek, and Giles Run) as well as approximately 30 small and intermittent unnamed streams and tributaries cross the permanent and temporary LOD, as summarized in the table below. DRPT anticipates minimal encroachments on or impacts to these waterways. All streams are currently spanned on existing structures or are carried beneath the railbed via culverts. New/replacement bridges built to accommodate the third track would be designed to be compatible with clearances of existing bridges and to minimize hydraulic alterations, and existing culverts would be extended to accommodate the new third track.

Name	Permanent LOD (linear feet)	Temporary LOD (linear feet)
Long Branch	115	0
Accotink Creek	74	0
Pohick Creek	82	0
Giles Run	13	31
Unnamed small/intermittent streams and tributaries	2,376	137
TOTAL	2,660	168

<u>Wildlife, including Federal Threatened and Endangered Species:</u> The majority of the LOD is existing railroad corridor with the fringes classified as either upland forest or urban/developed land habitat. DRPT completed USFWS's online project review process for the Project (Consultation Code 05E2VA00-2020-SLI-1868), which included obtaining an Official Species List that included two species: the Northern Long-eared Bat (*Myotis septentrionalis*) and the Small Whorled Pogonia (*Isotria medeoloides*). The Official Species List noted no Critical Habitat for either species in the project area. Additionally, as prescribed by the online step-by-step project review process, DRPT assessed the Rusty Patched Bumble Bee (*Bombus affinis*), which has a historic range in Fairfax County, and the bald eagle (*Haliaeetus leucocephalus*), which is protected by the Bald and Golden Eagle Protection Act. DRPT concluded a No Effect determination for all noted species and their critical habitat. Documentation on these determinations and the signed self-certification letter were submitted to USFWS on May 22, 2020. **Attachment E** includes copies of these documents.

Additionally, according to the CEDAR database, several species of anadromous fish are found in two of the waterways: Accotink Creek (alewife and yellow perch) and Pohick Creek (alewife, blueback herring, and yellow perch). DRPT will ensure that best management practices for instream work will occur to minimize interruptions to anadromous movements of these species. Once completed, the proposed improvements would not cause any impediments or interruptions to anadromous movements.

<u>Floodplains</u>: The following table quantifies the amount of the permanent and temporary LOD that are within the 100-year floodplain. These encroachments would have no short-term or long-term impacts on the functional values of the associated floodplains, nor would they result in any measurable increase in backwater elevations of associated waterways.

Impact Type	100-Year Floodplain Impact (Acres)
Permanent LOD	3.9
Temporary LOD	1.1

<u>Wetlands:</u> The wetlands areas are summarized in the table below and show small areas of fragmented wetlands in the undeveloped portions of the existing CSXT right-of-way, and are reflected within the permanent and temporary LOD. Compensation for permanent loss of wetlands will be provided in accordance with conditions of the Nationwide Permit (see Permits text below).

Wetland Type	Permanent LOD (acres)	Temporary LOD (acres)
PEM/PFO	0.9	0
PSS	0.05	0
PEM/PSS	0.05	0
PEM	1.2	0.03
PFO	0.5	0.3
TOTAL	2.7	0.3

<u>Permits</u>: It is expected that the Project would qualify for the Nationwide Permit (Section 404) and no individual permits would be required. The Section 401 Water Quality Permit would be issued from DEQ as part of the Joint Section 404 Permit. A Section 402 Construction General Permit (CGP) may be needed for construction near and in streams. The Project will be coordinated with USACE and a permit application will be made at final design.

DRPT submitted a Virginia Coastal Zone consistency determination for the entire 123-mile DC2RVA corridor, including the 8-mile Franconia to Occoquan segment; on August 17, 2020, the DEQ completed its review of the DC2RVA federal consistency determination (FCD) and determined that it was consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management (CZM) Program.

AGRICULTURAL/OPEN SPACE

Open Space Easements: Present, No Impact

Agricultural/Forestal Districts: Not Present

Source: CEDAR – VDCR (2018)

Agricultural/Open Space Comments:

DRPT does not anticipate any permanent impacts to agricultural or open space easements. There is dedicated federal conservation land directly adjacent to the east side of the CSXT right-of-way, south of Newington Road in the Newington Industrial Park parcels that are managed by Fort Belvoir (US Department of the Army). Approximately 0.6 acres of this conservation land are located in the temporary construction LOD shown in VDOT's CSX Bridges over Route 1 and Route 877 - Conceptual Bridge Replacement Feasibility Study Report (2019). DRPT assumes that the conceptual bridge improvements can be refined during final design to further minimize impacts, such as use of best management practices during construction to limit site clearing or construction access impacts.

FARMLAND

NRCS Form CPA-106 Attached? No	If yes, rating: N/A	
If NRCS Form CPA-106 is not attached, check all that are	applicable:	
□ Land already in Urban use		
Entire Project in area not zoned agriculture		
\Box NRCS responded within 45 days		
□ NRCS Determined no prime or unique farmland in	n the project area	
Alternatives Analysis Required? No		
Source: Fairfax County Zoning Data (2015)		
Farmland Comments:		
There are no farmlands within the permanent or temporary LOD of the Project.		

INVASIVE SPECIES

Invasive Species in the project area? Unknown

Invasive Species Comments:

There is potential for invasive plant species to become established within 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.

DRPT does not anticipate temporary and/or permanent impacts from invasive species and commits to the implementation of Best Management Practices (BMPs) and other measures included in VDOT's standard construction specifications. For example, DRPT will ensure that standard VDOT seed mixes will be used.

AIR QUALITY				
Carbon Monox	ide			
This project is lo	ocated in a CO:	Attainment Area	□ Maintenance .	Area
CO Hotspot Ana	alysis Required for NEPA?	No		
Source: <u>https</u>	<u>s://www3.epa.gov/airquality</u>	v/greenbook/anayo_va.htm	<u>l</u> for Fairfax Coun	ty
Ozone				
This project is lo	ocated in an Ozone:	□ Attainment Area		Maintenance Area (2008 standard)
		🛛 Nonattainment Area (2	2015 standard)	□ Early Action Compact Area
Source: <u>https</u>	://www3.epa.gov/airquality	y/greenbook/anayo_va.htm	<u>l</u> for Fairfax Coun	ty
Fine Particulat	e Matter (PM2.5)			
This project is lo	ocated in a PM2.5:	🛛 Attainment Area	□ Maintenance	Area
		□Nonattainment Area		
PM Hotspot Ana	alysis Required? No			
Source: <u>https://www3.epa.gov/airquality/greenbook/anayo_va.html</u> for Fairfax County				
Mobile Source	Air Toxics			
This project:	⊠ is exempt with no mea	ningful potential MSAT ef	fects	
	□ is one with low potential MSAT effects (attach qualitative MSAT analysis)			
□ is one with high potential MSAT effects (attach quantitative MSAT analysis)				
Source: DC2RVA Tier II EIS and ROD				
Air Quality Comments:				

The Franconia Third Track Project would not result in any long-term impacts to air quality as it is an infrastructure improvement, aimed at easing train operations in the Project corridor by reduce conflicting train movements, the Project does not increase rail/diesel engine or vehicle traffic, as a result, the Project is exempt from air quality conformity requirements.

Notwithstanding, the Project lies in an area that is currently in attainment or maintenance with all of the National Ambient Air Quality Standards (NAAQS), except for ozone (2015 standard). As part of the environmental review of DC2RVA Tier II EIS (which also included emissions from increased passenger service that are not part of the Franconia Third Track Project), FRA conducted a general conformity evaluation for air quality pursuant to 40 C.F.R. Part 51, Subpart W and 40 C.F.R. Part 93 Subpart B, as document in the DC2RVA ROD. FRA determined that DC2RVA-generated predicted annual pollutant emissions in nonattainment and/or maintenance areas were all below general conformity de minimis threshold values required and that no conformity determination was required. Additionally, the DC2RVA analyses indicated that increases in CO2 emissions associated with additional intercity passenger rail service are expected to be more than offset by reductions in CO2 emissions due to reduced use of other transportation modes, and similarly that regional MSAT emissions would decrease due to reductions in other transportation modes and implementation of EPA's vehicle and fuel regulations.

Construction-related activities can result in short-term increases in fugitive dust and equipment-related particulate emissions in and around the Project area. These potential air quality impacts would be short-term, occurring only while demolition and construction work is in progress and local conditions are appropriate. The potential for fugitive dust emissions is typically associated with building demolition, ground clearing, site preparation, grading, stockpiling of materials, on-site movement of equipment, and transportation of materials. The potential is greatest during dry periods, periods of intense construction activity, and during high wind conditions. Greenhouse gas (GHG) emissions would also be generated during construction. However, these emissions are likely to be relatively minor given the nature and size of the proposed improvements, and the limited duration of the construction activities. All construction would be performed in accordance with VDOT's Standard Road and Bridge Specifications and would assure the following DEQ air pollution regulations are adhered to: 9 VAC 5-130, Open Burning restrictions; and 9 VAC 5-50, Article 1, Fugitive Dust precautions.

NOISE AND VIBRATION

Noise and Vibration Analysis Attached:	🛛 Yes	□ No
Noise Barriers Under Consideration?	□ Yes	🛛 No

Source: Noise and Vibration Assessment for the Franconia Third Track Project (see Attachment F) Noise and Vibration Assessment from the DC2RVA Tier II EIS (2019)

Noise and Vibration Comments:

To evaluate noise and vibration from trains that travel at speeds of 90 miles per hour (mph) or lower, FRA endorses use of noise and vibration impact assessment methodologies published in the Federal Transit Administration's (FTA) "*Transit Noise and Vibration Impact Assessment*" manual (May 2018). Train speeds proposed on the DC2RVA corridor and within the Franconia Third Track Project limits are at or lower than 90 mph, therefore use of the FTA methods for evaluating Project-related noise and vibration are appropriate.

DRPT evaluated noise and vibration associated with construction and operation of the Franconia Third Track Project in two parts:

- Part 1 for the construction and operation of a third main track at existing grade plus the effects of increased passenger train service between Franconia and Occoquan in conjunction with DC2RVA.
- Part 2 for the construction and operation of the proposed elevated bypass structure, just south of the Franconia-Springfield VRE station.

The Part 1 evaluation is documented in the DC2RVA Tier II EIS and ROD. DRPT's noise and vibration impact assessments for the DC2RVA corridor evaluated the impacts of constructing an additional main track along the corridor, plus the effects of additional passenger train service in the future. DRPT's analyses, presented within the DC2RVA Tier II EIS, included the Franconia to Occoquan segment in order to fully assess the potential noise and vibration effects of the additional passenger service, even though the construction of a third track between Franconia and Occoquan was to be advanced as a separate Project. DRPT concluded there were no noise or vibration impacts in the Franconia to Occoquan segment from construction of a third track at existing grade and operation of additional passenger service.

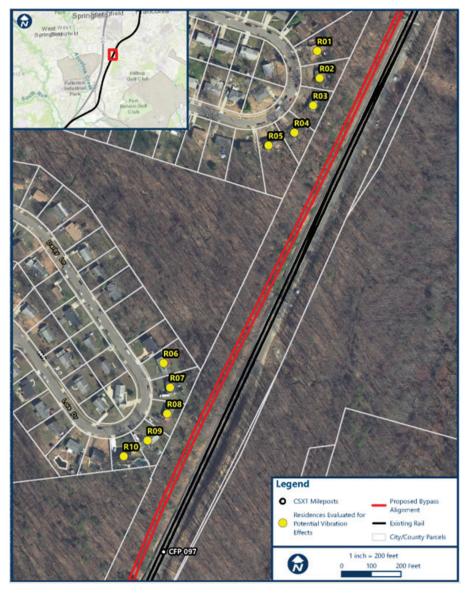
The Part 2 evaluation is provided in **Attachment F**, and focuses on the potential noise and vibration effects of passenger trains (both Amtrak passenger trains and VRE commuter trains), being routed onto an elevated bypass structure to allow trains to move across the existing two main tracks to avoid conflicts with freight trains. DRPT conducted the additional noise and vibration assessment to fully assess the potential effects of operating the trains on an above-grade structure. Train speed is a key factor in noise and vibration levels, and DRPT considered varying operating speeds (70, 75, and 80 mph) on the bypass for the analysis.

DRPT's analyses of the construction and operation of the proposed passenger train bypass indicate that:

- Noise impacts from train operations on the bypass are not projected to occur at any of the three speeds evaluated. Bypass construction noise levels could approach, but are not likely to exceed, temporary noise impact levels.
- Vibration impacts are projected to occur at three locations (nearby single-family residences, listed below and shown in the figure below) if the passenger trains on the bypass are operating at 80 mph, and only one location at lower speeds. The vibration impact is not projected to occur with passenger train speeds of 65 mph or less on the bypass.
 - The three potential locations of vibration impacts at 80 mph operating speeds along the bypass are: 6701 Jerome Street (R03); 6802 Darby Lane (R08); and 6800 Darby Lane (R09).
 - The one location that would also experience impacts at lower operating speeds is 6802 Darby Lane (R08).

Note that some of the vibration energy travels along the surface of the ground, and some of it travels through the ground. The vibration levels would be the highest at the nearest homes when trains are traveling at ground-level; vibration levels when trains are on the actual bypass structure would be lower due to the loss of energy that occurs when vibration travels through the structure.

DRPT will determine the passenger and commuter train operating speed on the bypass during final design, and will conduct additional vibration assessments (potentially including propagation measurements in the field) if the bypass is designed to accommodate passenger train speeds greater than 65 mph. In addition, DRPT will require construction noise best management practices and mitigation measures be included in the bypass's construction plans to ameliorate potential temporary disturbances from construction noise. Temporary construction vibration levels will be minimized in accordance with VDOT's Standard Road and Bridge Specifications.



VISUAL QUALITY

Visual Impacts to Mitigate: No

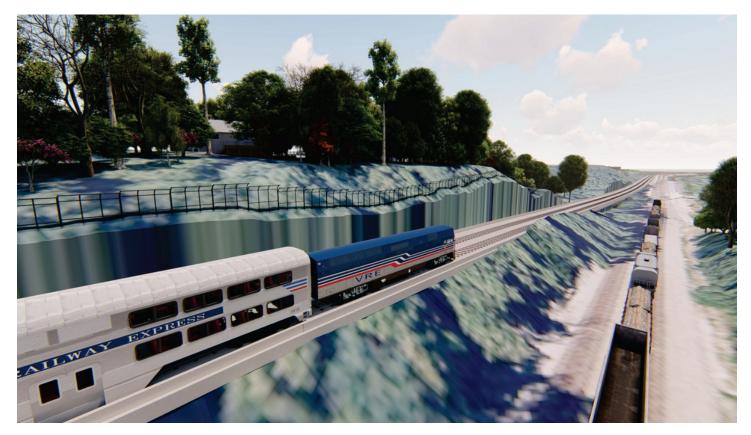
Sources: Visual Impact Assessment from the DC2RVA Tier II EIS and ROD (2019)

Renderings of the proposed passenger rail bypass as prepared for DRPT by Kimley-Horn Inc. (2019)

Visual Comments:

DRPT determined that the addition of an at-grade third rail would have a low visual impact along the corridor per the DC2RVA Tier II EIS analyses. DRPT found that the third rail elements are consistent with the existing visual elements in the landscape. The proposed bridge improvements over US Route 1 and Newington Road would be similar in kind to existing structures, such as line, form, texture, and color, and the improvements would blend with the existing visual character. Viewers are generally not very sensitive to these changes.

For the proposed elevated bypass structure, the shielding effects of the cut section/retaining wall and mature trees block the direct line of sight between the proposed elevated bypass and the closest residential properties along Darby Road, as shown in the renderings below. As such there would be no new visual intrusions to the viewsheds from these residences.



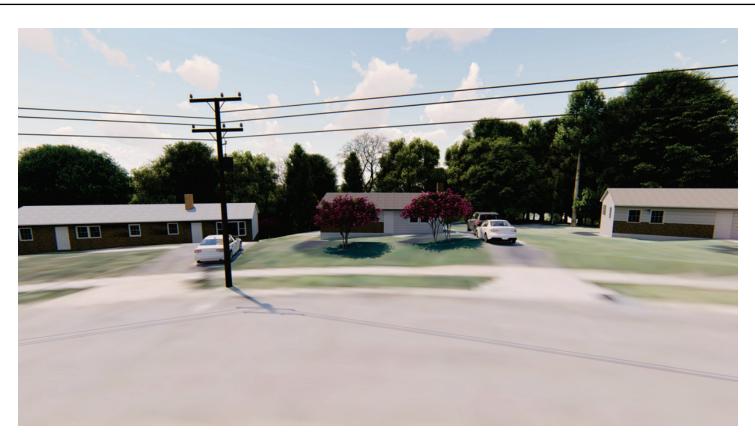
Looking north along rail corridor with bypass (Rendering by Kimley-Horn Inc, 2019)



Looking south along rail corridor with bypass (Rendering by Kimley-Horn Inc, 2019)



Looking east from Darby Lane, aerial view (Rendering by Kimley-Horn Inc, 2019)



Looking east from Darby Lane, street level view (Rendering by Kimley-Horn Inc, 2019)

ADDITIONAL BENEFITS

Energy Comments:

The proposed Project improvements support the proposed beneficial energy impacts, as documented in the DC2RVA Tier II EIS analyses for the 123-mile corridor inclusive of the approximate 8-mile Franconia Third Track Project.

Transportation/Operations Comments:

The Project would result in beneficial impacts to existing and future rail operations by reducing existing congestion and supporting the growth in the area and in the rail system. The Project would support an incremental improvement in the reliability of commuter and passenger rail service and would extend the existing third mainline track by 8 additional miles, establishing 20 continuous miles of three-track corridor.

The Project provides three mainline tracks through VRE's Franconia-Springfield and Lorton Stations, and along the Amtrak Autotrain Station. In addition, the Project provides a bypass to reduce passenger and freight train conflicts. The Project addresses recognized bottlenecks and congestion that are barriers to efficient passenger rail operations today with a discrete set of improvements for nearand long-term passenger rail benefits. The bottlenecks and congestion are attributed to a combination of limited infrastructure, a high volume of existing train traffic, and the unique operational characteristics of a shared-use system with freight (CSXT), intercity passenger (Amtrak), and commuter rail (VRE). The addition of a third mainline track and bypass coupled with additional crossovers and some minor curve realignments would reduce bottlenecks and congestion in the DC2RVA corridor by providing more opportunities for train overtakes. It would improve the safety, reliability and efficiency of the system. The Project would also be coordinated with VRE's Penta-Platform project which includes improvements at the Franconia-Springfield VRE Station and Lorton VRE Station which would result in improved conditions for passengers and station users at the platforms.

The two new bridges associated with the Project (Newington Road and Route 1) would improve the infrastructure and safety conditions of the transportation system of the area by eliminating existing structural limitations to future roadway improvements (however, those future roadway improvements are not part of the Project). All of these impacts would be beneficial. There would not be any permanent negative or adverse significant impacts to transportation.

Public Safety & Security Comments:

The Project would not result in any adverse impacts to public safety or security. Communities have grown and developed around the existing railroad right-of-way. This includes the roadway network, which has also developed around the railroad right-of-way and is used by residents, businesses, school transportation, and emergency services. Each of the operators (CSXT, Amtrak, and VRE) have strict safety procedures, including extensive safety training and certification, regarding access to the right-of-way. The Project corridor is grade separated from the area's roadway and transit network and there are no at-grade crossings in the Project area.

The Project will be designed in accordance with FRA regulations, industry standards, and CSXT requirements. The Project would also provide many benefits to the rail system in Northern Virginia by replacing older infrastructure, decreasing congestion, and grade-separating crossover movements that would provide a greater level of safety for all rail traffic.

CONSTRUCTION IMPACTS

DRPT anticipates minor short-term impacts that are temporary and occur only during construction. DRPT will ensure that VDOT's standard construction specifications are followed and appropriate Best Management Practices (BMPs) are utilized to minimize/mitigate temporary construction impacts to the maximum extent practicable.

DRPT anticipates that construction of the new rail bridges over the public roadways would result in short-term disruptions to the local roadways, however roadway traffic impacts would be minimized through a VDOT-approved Maintenance of Traffic plan which will be developed during final design. Temporary construction impacts could include:

- Rail Impacts Track closures and shifts could affect rail operations; construction of the additional track, infrastructure additions
 and modifications to control points would require a phased construction approach to maintain operations.
- Land Use and Access Temporary and localized detours, modifications to access and increases in truck traffic could be
 necessary to allow for equipment staging and construction. Project plans will address maintenance of traffic, construction
 staging, and phased implementation of improvements. All land use temporarily affected by construction activities will be
 returned to its original use after construction is complete.
- Air Quality Short-term increases in fugitive dust and equipment-related particulate emissions in and around the Project will be addressed through standard construction best management practices to minimize air quality effects during construction, including methods outlined in 9VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution (Air Regulations). The VDOT Road and Bridge Specifications also include provisions on fugitive dust control.
- Noise Localized noise levels would increase during construction. Typically, noise increases associated with construction
 equipment are temporary and progress linearly along the corridor. DRPT will restrict construction to daylight hours in the
 proximity of sensitive noise receptors to reduce the impact.
- Water Resources Construction could potentially result in short-term effects such as increased erosion and sedimentation, increases in turbidity from in-stream work, and increased stormwater runoff. All temporary and permanent impacts to water resources associated with the Project are regulated by the USACE and DEQ through Sections 404 and 401 of the Clean Water Act as well as by the Virginia Water Protection Program. DRPT will be responsible for ensuring that all federal, state, and local requirements for water resources are met by the Project contractors.
- Wildlife and Habitat Human activity and noise increases during construction could displace some species of wildlife, and clearing of land for the new main track would decrease some habitat. DRPT anticipates that construction would be monitored to adhere to a strict schedule with possible time of year restrictions to avoid disrupting the critical life cycles of both aquatic and terrestrial wildlife, which would be coordinated with the appropriate agencies during final design and construction. DRPT will also ensure measures are taken by Project contractors to limit the spread of invasive plant species and to provide temporary and permanent revegetation of cleared areas.

CUMULATIVE AND INDIRECT IMPACTS

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

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

Indirect (Secondary) impacts: No

Source: DRPT, VDOT, and VRE Planned Projects

<u>Cumulative and Indirect Impacts Comments:</u>

The Project takes place within the existing railroad corridor which is located in a heavily developed area of Fairfax County, parallel to I-95. Adverse impacts to sensitive and vulnerable natural resources in the area have occurred over time, first due to agricultural uses of the land and then to residential, commercial, industrial, institutional, and public infrastructure development; however, remaining natural resources have adapted to the railroad (i.e., drainage patterns, wildlife movements, habitats) and current regulatory requirements and planning practices are helping avoid or minimize the contribution of present and future actions to adverse cumulative effects. Impacts are a part of overall urban growth and development of the area.

The Project occurs within the CSXT and/or VDOT right-of-way included within both DC2RVA and the recently announced Transforming Rail in Virginia Program. As previously discussed, the DC2RVA Project includes rail capacity improvements along the corridor north and south of the Franconia Third Track Project and a gradual increase in passenger rail service frequency by passenger operators in the Project corridor. DC2RVA projected adding 9 new passenger trains (18 roundtrips), with timing subject to available capacity and future operating schedule. DC2RVA also includes addition of a third mainline track connecting to the southern terminus of the third track for Franconia Third Track Project, and extending south across the Occoquan River on a new bridge, through VRE's Woodbridge Station, and continuing south to connect to existing third track near Quantico. The timing for construction of this new DC2RVA third track south of the Franconia Third Track Project is uncertain, and dependent on available funding.

The Transforming Rail in Virginia Program enables Virginia to build 37 miles of track in the I-95 corridor incrementally (including the Project and a new two-track Potomac River crossing, known as Long Bridge) over the next ten years. Virginia is acquiring approximately one-half of the CSXT-owned railroad right-of-way between Washington, DC and Richmond, VA along the RF&P railroad corridor. Track within the right-of-way purchased by Virginia also becomes Virginia property. With the acquisition, Virginia has committed to a series of infrastructure improvements to the railroad right-of-way that would allow for doubling Amtrak state-supported and VRE Fredericksburg Line service, including the addition of VRE weekend service. Following the close of the transaction, Virginia would be able to provide one new roundtrip between Washington, DC and Norfolk, VA and one new roundtrip on VRE's Fredericksburg line. Service would be coordinated through Amtrak and VRE with start dates to be announced in 2021. Additional service would grow over the next decade incrementally as capacity improvements are completed within the right-of-way acquired by Virginia from CSXT (including elements of the Franconia Third Track Project). By 2030, Amtrak state-supported service and VRE Fredericksburg Line service would double (including new weekend service), with opportunities to expand further.

The Franconia Third Track Project design would accommodate VRE's planned improvements at the Franconia-Springfield and Lorton Stations as well as VDOT's Backlick Road Bridge Reconstruction project.

- VRE's Franconia-Springfield and Lorton Station improvements. The Franconia Third Track Project includes the construction of the third track through these stations. At the Franconia-Springfield Station, VRE's proposed improvements include lengthening the existing west platform adjacent to WMATA Metrorail and lengthening/widening the existing east platform to accommodate an eight-car consist. At the Lorton Station, VRE is adding a second, 700-foot-long island platform, across the tracks from the current platform. The Franconia Third Track Project is included in VRE's plans; any new or expanded VRE service in the corridor is dependent on additional actions and such service would be independently evaluated and approved.
- VDOT's Backlick Road Bridge reconstruction project. VDOT recently completed reconstruction of the Backlick Road bridge
 over the railroad tracks, near the Fairfax County Parkway. The improvements include a wider horizontal and vertical clearance
 under the bridge, which would support the addition of the third track proposed by the Franconia Third Track Project.

The foreseeable transportation projects listed above are all within the existing transportation corridor. As such, disruptive effects would be limited by containing construction within the existing rights-of-way, where possible. Consequences of the narrow linear nature of the Project presents a limited footprint of direct impacts and, therefore, a limited potential for expansive indirect impacts attributable to encroachment and alteration. Additionally, indirect effects would be limited because proposed improvements would modify an existing rail facility within which the locations of potential induced development are limited to station areas where development already is prevalent. When considered in the context of the Project setting, the nature and magnitude of the cumulative effects of the Project would be small in the context of the effects of past, present, and reasonably foreseeable future actions. The Project would not result in a significant contribution to cumulative impacts or cause significant indirect impacts.

PUBLIC INVOLVEMENT

Substantial Controversy on Environmental Grounds: No

Public Hearing: No

Other Public Involvement Activities: Yes

Public Involvement Comments:

The Draft Categorical Exclusion for the Project was posted on the DRPT website and made available for public review for 15 days, until September 18, 2020. No comments were received.

COORDINATION

State Agencies:

Virginia Department of Transportation

Virginia Department of Historic Resources

Virginia Department of Environmental Quality

Local Entity:

Fairfax County Department of Transportation

CONCLUSION

This Project meets the criteria for a Categorical Exclusion pursuant to 40 CFR 1508.4 and 23 CFR 771 and will not result in significant impacts to the human or natural environment.

Type of Hearing: N/A **Type of Involvement:** Public Review

Federal Agencies:

Federal Railroad Administration

ATTACHMENT A SIGNED NEPA CONCURRENCE

Franconia Third Track Project Categorical Exclusion TO: John Simkins, FHWA – Virginia DivisionFROM: Randy Selleck, DRPTDATE: 1/9/2020

NEPA DOCUMENTATION CONCURRENCE FORM

Project Name: Franconia 3rd Track

Project Limit -- From: Approximately one mile north of the Franconia-Springfield VRE station (CFP 98.8)

Project Limit -- To: Approximately 400 feet north of Furnace Road, just north of the Occoquan River (CFP 90.8)

County/City: Fairfax County

Background: The Virginia Department of Rail and Public Transportation (DRPT), in coordination with the Federal Railroad Administration (FRA), the Virginia Department of Transportation (VDOT), CSX Transportation (CSXT), Amtrak, and Virginia Railway Express (VRE), is advancing the Washington, D.C. to Richmond Southeast High Speed Rail project (DC2RVA). The DC2RVA Project includes additional track and other rail structural improvements plus additional passenger train service on the existing 123-mile rail corridor between Washington, D.C. and Richmond, Virginia. DRPT has completed a Tier II Environmental Impact Statement (EIS) and preliminary engineering (30% design) for the DC2RVA Project.

In 2015, DRPT identified the need to advance a third mainline track from Franconia to just north of the Occoquan River, separate from but compatible with the ongoing longer term DC2RVA Project. The purpose of the third mainline track is to provide additional capacity and relieve existing congestion in the crowded rail corridor. Consistent with this, the Franconia 3rd Track Project includes additional track and other rail structural improvements. The Franconia 3rd Track Project <u>does not</u> include additional passenger train service, but will accommodate future increases in passenger service envisioned in the DC2RVA Project. On September 24, 2015, FRA issued a NEPA class of action letter that supported advancing the 8-mile Franconia 3rd Track Project separately from, but compatible with, the DC2RVA Tier II EIS. FRA determined the NEPA class of action to be a Categorical Exclusion (CE), with documentation. A draft CE document was prepared and submitted to FRA; however, subsequent discussions between FRA and DRPT regarding potential funding sources led DRPT to approach FHWA for finalization of the environmental clearance process.

On September 5th, 2019, FRA signed the Record of Decision (ROD) for DC2RVA, which environmentally clears additional passenger service along the entire corridor and rail improvements for all but the 8-mile segment of corridor between Franconia (CFP 99.0) and Occoquan (CFP 90.8) in Fairfax County, Virginia.

Project Description: The proposed Franconia 3rd Track Project will primarily add a third mainline track to an existing two-track corridor, within the above referenced project limits, as well as:

Shifting existing tracks in certain locations to increase speeds through curves.

- Adding a new rail bridge with capacity for two tracks over Newington Road and replacing the existing two-track rail bridge, with both of the rail bridges and adjacent track raised to allow for improved road underpass geometry. Only one track will be added initially.
- Adding a new rail bridge with capacity for two tracks over U.S. Route 1 and replacing the existing two-track rail bridge, with both of the rail bridges and adjacent track raised to allow for improved road underpass geometry. Only one track will be added initially.
- Adding a new passenger rail bypass (flyover bridge), between CFP 98.8 and CFP 95.8, which removes conflicts between freight and passenger trains by allowing passenger trains to move from the west side of the corridor to the east side of the corridor without crossing the existing two main tracks. The flyover will have capacity for two tracks, but only one track will be added initially.

The proposed Franconia 3rd Track Project, shown in Figure 1, including the additional rail bridges and flyover, will be largely within existing CSXT right-of-way and/or VDOT right-of-way. The new rail bridges and flyover will be constructed with sufficient space for a future fourth track, although only three tracks are included within the current project. The proposed improvements will allow the rail system to operate, independent of additional improvements elsewhere, and do not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. DRPT and CSXT previously constructed 12 miles of third mainline track between the Potomac River and the Franconia-Springfield VRE Station in 2009, terminating the third track just north of the station. The proposed eight miles of additional mainline track will extend the third track further south, establishing 20 continuous miles of triple-tracked rail corridor south of Washington, DC. where commuter, intercity passenger, and freight rail share overburdened infrastructure.

Purpose and Need: Increase passenger and freight rail capacity, improve passenger service reliability, and decrease travel times for intercity passenger rail travel in the DC2RVA corridor.

Attachments:		
Мар		\boxtimes
Other		

Suggested Level of NEPA Document: Categorical Exclusion CE Category 23 CFR 771.117:

Description of Category:

CE (per 23 CFR 771.116(c)(12), 23 CFR 771.116(c)(17), and 23 CFR 771.117(h))

EA (23 U.S.C. §139 may apply to EAs on a case-by-case basis. The default assumption is that it will not apply to this EA. FHWA concurrence infers agr

Fiscal Constraint:

EIS

Project in STIP:NoIn Long Range Plan?YesLogical Termini and Independent Utility:YesNext Phase of Funding Available?Yes

Concurrence:	
John Dimking	1/13/2020
Federal Highway A	dministration

Comments:

Based on information gathered as part of the DC2RVA Tier II EIS and ROD, the draft FRA Categorical Exclusion Worksheet, and feasibility/design documentation¹ to date, the following preliminary conclusions can be made regarding potential impacts of the proposed project that may be identified during the NEPA process. The following is presented so as to align with the VDOT Form EQ-104 for Categorical Exclusions.

During development of the NEPA documentation, alternative alignments and the typical cross sections will be analyzed for opportunities to minimize potential environmental impacts.

RESOURCE	POTENTIAL PRESENCE / IMPACTS / COMMENTS
Land Use, Right-of-Way, and Relocations (Residential, Commercial, and Non-Profit)	The Project area consists largely of densely developed urban and suburban areas with residential, commercial, industrial, and recreation/open space areas. The potential impacts to land use would be limited to the immediate vicinity of the two new bridges, which could convert slivers of properties adjacent to the tracks to transportation use (see next bullet). Otherwise, no impacts to land use are anticipated.
	 The Project is predominantly within CSXT and VDOT right-of-way, except for: One location parallel to the tracks near the Franconia-Springfield Metro station, where approximately 0.2 acres of property will be needed from WMATA (may be acquired as an easement or as fee simple). The proposed two-track rail bridge over Newington Road, where approximately 2.1 acres of right-of-way would be required (based on VDOT feasibility study estimate). The proposed bridge over Route 1, where approximately 0.5 acres of right-of-way would be required (based on VDOT feasibility study estimate). No residential displacements are anticipated.
	Minor commercial property acquisition but no business displacements required for the two new bridges; includes an estimated seven parcels at Newington Road and one parcel at Route 1 (based on VDOT feasibility study estimates). The VDOT feasibility study notes that these minor acquisitions are in order to avoid impacts to other properties, and that impacts could be further minimized or eliminated during final design by providing retaining walls inside the CSX right-of-way.
Socio-Economic: Communities; Minority and Low-income	The Project does not impact community facilities or the access to any such facilities or services.
Populations; Environmental Justice; and Consistency with Local Land Use	The Project has no direct adverse impacts to Title VI nor Environmental Justice populations. The Project will result in a safer and less congested railroad network which would provide better access and mobility to all communities and populations.
	The Project is consistent with Fairfax County Comprehensive Plan to "have a land use pattern which increases transportation efficiency, encourages transit use, and decreases automobile dependency."

¹ CSX Bridges over Route 1 and Route 877 Conceptual Bridge Replacement Feasibility Study Report, VDOT, February 27, 2019

RESOURCE	POTENTIAL PRESENCE / IMPACTS / COMMENTS
Water Resources: Surface Waters; 100-Year Floodplains; Wetlands; Coastal	Some wetlands are present as are four small streams: Long Branch, Accotink Creek, Pohick Creek, and Giles Run). Anticipate minimal encroachment on/impacts to these water resources.
Zone Management Areas; Water	No anticipated impacts to floodplains or water quality.
Quality; and Required Permits	No navigable waterways are crossed by the project corridor.
	The linear transportation project is consistent with the established Virginia Coastal Zone Enforceable Policies. A consistency determination will be submitted for the entire 123-mile DC2RVA corridor, including the 8-mile Franconia to Occoquan segment.
	It is expected that the Project will qualify for the Nationwide Permit (Section 404) and no individual permits will be required. The Section 401 Water Quality Permit would be issued from DEQ as part of the Joint Section 404 Permit. A Section 402 Construction General Permit (CGP) may be needed for construction near and in streams. Project will be coordinated with USACE and a permit application will be made at final design.
Biological Resources/Threatened and Endangered Species	Project area consists of mostly developed sites typical of suburban developments that includes primarily residential and commercial uses, with few densely vegetated areas. Earlier data searches and surveys (from DC2RVA) suggest no protected species or habitat are anticipated to be within the Project area. Updated IPaC search will be performed to confirm.
Agricultural/ Forestal Districts and Open Space Easements	None known.
Farmland	None known.
Invasive Species	Do not anticipate temporary and/or permanent impacts from invasive species, with implementation of Best Management Practices (BMPs) and other measures included in VDOT's standard construction specifications.
Air Quality: Carbon Monoxide; Ozone; Fine Particulate Matter, and Mobile Source Air Toxics	No long-term operational impacts to air quality, per the DC2RVA Tier II EIS analyses (which also included emissions from increased passenger service that are not part of Franconia 3 rd Track Project). The project should satisfy requirements for a General Conformity determination and is included in the MWCOG conformity network.
	Short-term construction impacts are estimated to be minor and below the <i>de minimis</i> threshold.

RESOURCE	POTENTIAL PRESENCE / IMPACTS / COMMENTS					
Noise and Vibration	No anticipated operational impacts (i.e., causing levels to rise above the threshold levels for noise and/or vibration exposure of any sensitive receptors) for the at-grade track improvements, per the DC2RVA Tier II EIS analyses of existing and anticipated increases in passenger service for the 123-mile corridor. As noted previously, no new service is proposed as part of the Franconia 3 rd Track Project.					
	The CE will evaluate changes in noise and vibration exposure of any sensitive receptors in the vicinity of the new passenger train flyover. The analysis will be based on FTA/FRA noise assessment guidelines for passenger trains. If impact thresholds are approached or exceeded, noise abatement measures including noise walls (on the structure or adjacent right-of-way) will be considered. The CE will also include an FTA/FRA General Vibration Assessment to evaluate the potential for vibration effects associated with the proposed flyover. If impact thresholds are approached or exceeded, mitigation measures will be considered.					
	Temporary construction noise levels will be minimized through implementation of standard construction specifications.					
Energy	Beneficial impacts are anticipated, per the DC2RVA Tier II EIS analyses for the 123-mile corridor.					
Visual Quality	Low visual impact rating, based on evaluations of similar areas of additional mainline track in the DC2RVA Tier II EIS analyses.					
	No major visual intrusions based on renderings prepared for the proposed flyover, or from the two new bridge replacements over US Route 1 and Newington Road.					
Cultural Resources/Section 106	 Determination of effect on historic properties was conducted in consultation with the Virginia Department of Historic Resources for the 123-mile DC2RVA corridor, inclusive of the 8 miles from Franconia to Occoquan. The DC2RVA Tier II EIS Section 106 analysis identified three historic resources within the Area of Potential Effects (APE) of the 8-mile project corridor: Adverse Effect on the RF&P Railroad Corridor (500-0001) [Resource includes the 8 miles of Franconia 3rd Track] No Effect on the Old Colchester Road, Potomac Path, King's Highway (029-0953) [Resource is within the APE of the Franconia 3rd Track]. No Adverse Effect on the Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043) [Resource is within the APE of the Franconia 3rd Track]. Resolution of adverse effects to these historic resources are included in the final executed Section 106 Memorandum of Agreement (MOA) and ROD for the DC2RVA project. 					
	No additional consultation is anticipated for the two proposed bridges or the flyover.					
Section 4(f) and Section 6(f)	Determination of use was conducted for the 123-mile DC2RVA corridor, inclusive of the 8 miles from Franconia to Occoquan. There are no Section 4(f) uses of any publicly-owned parks, recreation areas, wildlife and waterfowl refuges. The entire Richmond, Fredericksburg, and Potomac Railroad (500-0001) is a NRHP-listed property and will have a "use" per Section 4(f).					
	No additional uses associated with the two proposed bridges or the flyover.					

RESOURCE	POTENTIAL PRESENCE / IMPACTS / COMMENTS					
Solid Wastes and Hazardous Material	Some potential presence of hazardous materials sites based on the industrial land uses that are adjacent to the two new bridges.					
	Otherwise, no anticipated impacts, per the DC2RVA Tier II analyses.					
Transportation Impacts	Beneficial impacts to existing and future rail operations.					
	Construction of new bridges would result in short-term disruptions to the local roadways, however roadway traffic impacts would be minimized through a VDOT-approved Maintenance of Traffic plan.					
	Note the new rail bridges eliminate existing structural limitations to future roadway improvements to US Route 1 and Newington Road; however, roadway improvements are not part of this project.					
Public Safety	Project will be designed in accordance with FRA regulations, industry standards, and CSXT requirements. Replacing older infrastructure and decreasing congestion will provide a greater level of safety for all rail traffic through the DC2RVA corridor, including transportation of hazardous materials.					
Indirect and Cumulative Impacts	Other projects in the area in addition to the DC2RVA Project include:					
	 VRE's Penta-Platform improvements VDOT's Backlick Road Bridge reconstruction project. 					
	The Project design will accommodate VDOT's Backlick Road Bridge reconstruction project and VRE's planned improvements at Franconia VRE Station.					
	Consequences of the narrow linear nature of the project presents a limited footprint of direct impacts and, therefore, a limited potential for expansive indirect impacts attributable to encroachment and alteration. Additionally, indirect effects would be limited because proposed improvements will modify an existing rail facility within which the locations of potential induced development are limited to station areas where development already is prevalent. When considered in the context of the Project setting, the nature and magnitude of the cumulative effects of the project would be small in the context of the effects of past, present, and reasonably foreseeable future actions.					
Construction Impacts	Minor short-term impacts anticipated during construction.					
	Application of appropriate BMPs and other measures included in VDOT's standard construction specifications will minimize/mitigate temporary construction impacts.					
Public Involvement	The Categorical Exclusion will be posted on the DRPT website and made available for public review for 15 days.					
	Appropriate notification will be published in local newspapers.					
Agency Coordination	Agency scoping and coordination will occur as appropriate as the CE is developed. Anticipated consultation/coordination to include: US Fish & Wildlife Service					
	 US Army Corps of Engineers 					
	 Virginia Department of Environmental Quality 					
	 Virginia Department of Game and Inland Fisheries Virginia Department of Transportation 					
	Virginia Department of Transportation					

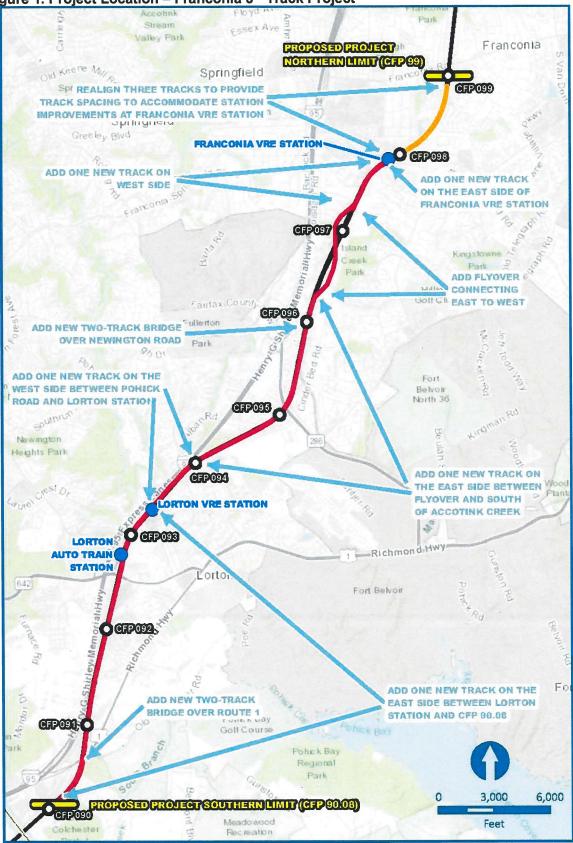


Figure 1. Project Location – Franconia 3rd Track Project

ATTACHMENT B STIP/TIP DOCUMENTATION

Franconia Third Track Project Categorical Exclusion



Federal Transit Administration

April 3, 2020

Mr. David Nigrelli Lead Financial Compliance Analyst Virginia Department of Rail and Public Transportation 600 East Main Street, Suite 2102 Richmond, VA 23219

Re: Amendment #17 to the Transit Section of the FY 2018-2021 STIP

Dear Mr. Nigrelli:

Your email dated March 30, 2020, requesting approval of Amendment #17 via the Virginia Department of Rail and Public Transportation (VDRPT) to the transit section of Virginia's FY 2018-2021 Statewide Transportation Improvement Program (STIP) has been reviewed.

REGION III

West Virginia

Delaware, District of

Columbia, Maryland,

Pennsylvania, Virginia,

STIP Amendment #17 is needed to incorporate one TIP amendment approved by the National Capital Region Transportation Planning Board (for addition of the Franconia to Occoquan 3rd Track project) on February 7, 2020 and four TIP amendments approved by the New River Valley Metropolitan Planning Organization (for various Blacksburg Transit project adjustments) on March 5, 2020. This amendment also includes a VDRPT adjustment to reflect changes to the statewide Section 5329 State Safety Oversight program amounts.

Based on our review of the information provided, FTA hereby approves this Amendment to the STIP. This approval does not constitute an obligation of Federal funds. FTA finalizes Federal funding for transit projects included in the STIP upon approval of a grant application. Ryan Long, Community Planner, of my staff is available at (215) 656-7051 or via email at ryan.long@dot.gov should you have any questions concerning this approval.

Sincerely,

Digitally signed by RYAN A LONG Date: 2020.04.03 16:23:40 -04'00'

Kathleen Zubrzycki Director, Office of Planning and Program Development

cc: Marie Berry, VDRPT Wendy Thomas, VDOT John Simkins, FHWA Virginia Division 1835 Market Street Suite 1910 Philadelphia, PA 19103 215-656-7100

TIP Project Index

Please provide search criteria below					
TIP ID:					
Project Name:	occoquan				
Agency ID:					
Facility:					
Facility From:					
Facility To:					
Search Clea	ar				

In order to change display order, please use header links

	-	06 Project		Francon	ia to Occoqua	n 3rd Track	Project			
Age	Agency ID: DRPT0			RPT002 Facility:					mond, Fredericksburg nac (RF&P) Subdivision	
Cor	nplete:				From:		1 mi. N. Franconia-Springfield VRE Station (CFP 98.8)			
					To:		Approximately 400' N. of Fu Rd, just N. of the Occoquan (CFP (90.08)			
F	Source d/Sta/Loc	Previous Funding	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Totals	
S	tate/Local 0/100/0	\$26,197 a	\$27,877 a	\$26,849 a	\$691 a				\$55,417	
		·	,	,	, , ,		Grand Total: \$55,417			
Add one the limit	mile north o Occoquan R	ely eight miles f the Franconia liver. Project in	a-Springfield V	/RE station to	approximatel	y 400 feet n	orth of Furna	ace Road, ju	st north of	
	Amen	Amendment\Admin. Mod. An			mendment Name		Approved		Resolution	
	Amendment		Add Now I	Add New Project						

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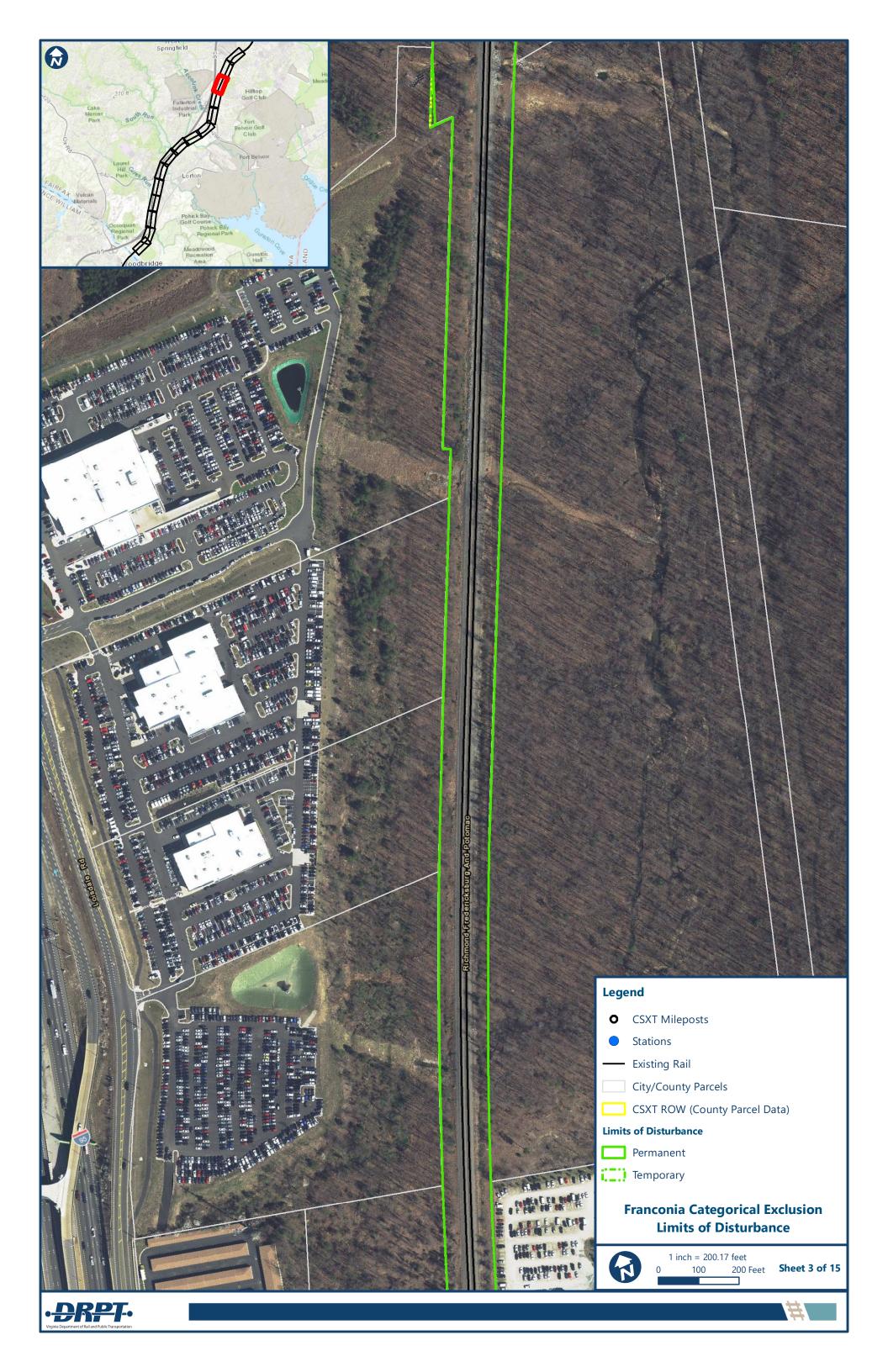
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ATTACHMENT C LIMITS OF DISTURBANCE MAPBOOK

Franconia Third Track Project Categorical Exclusion

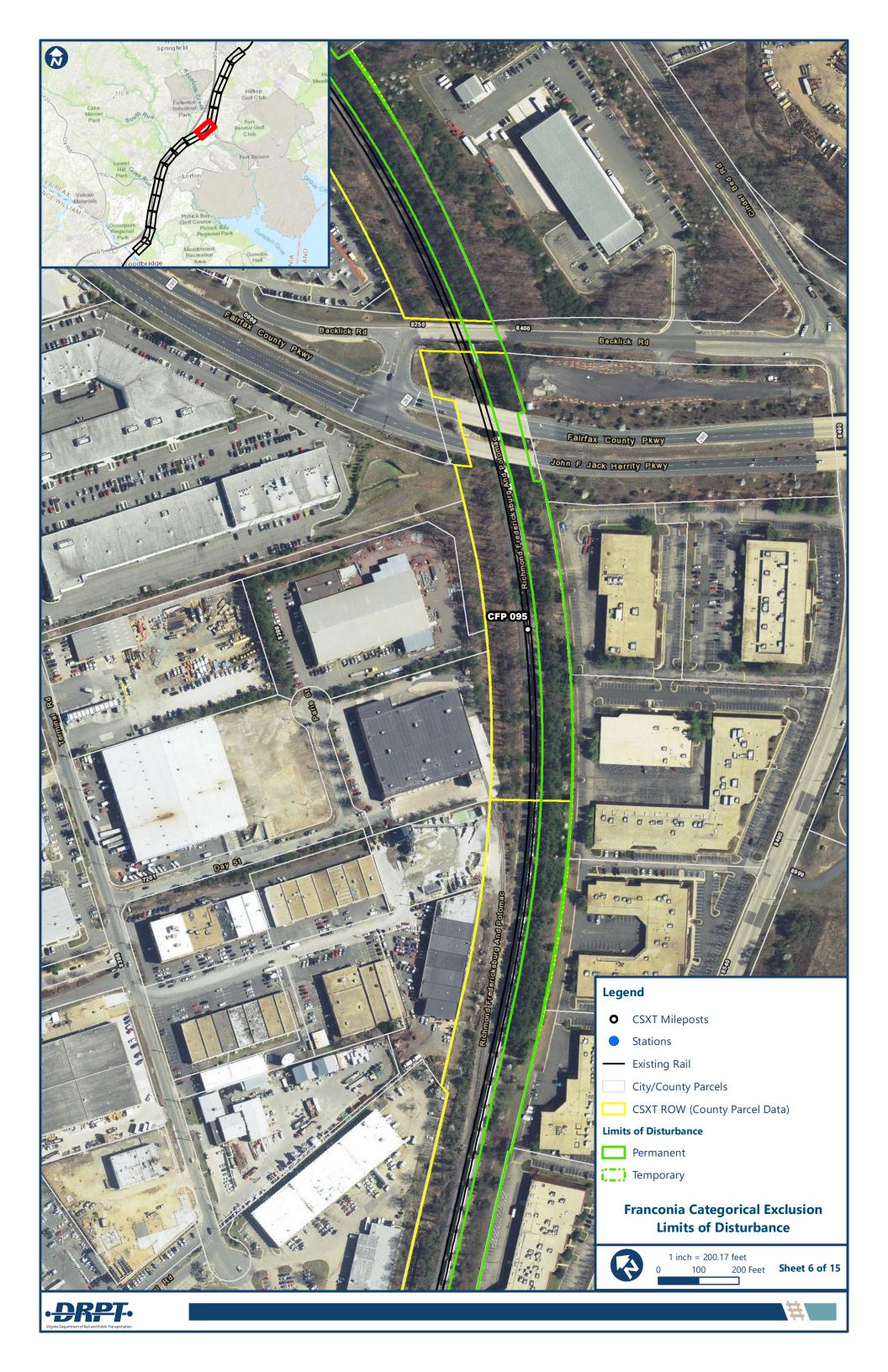


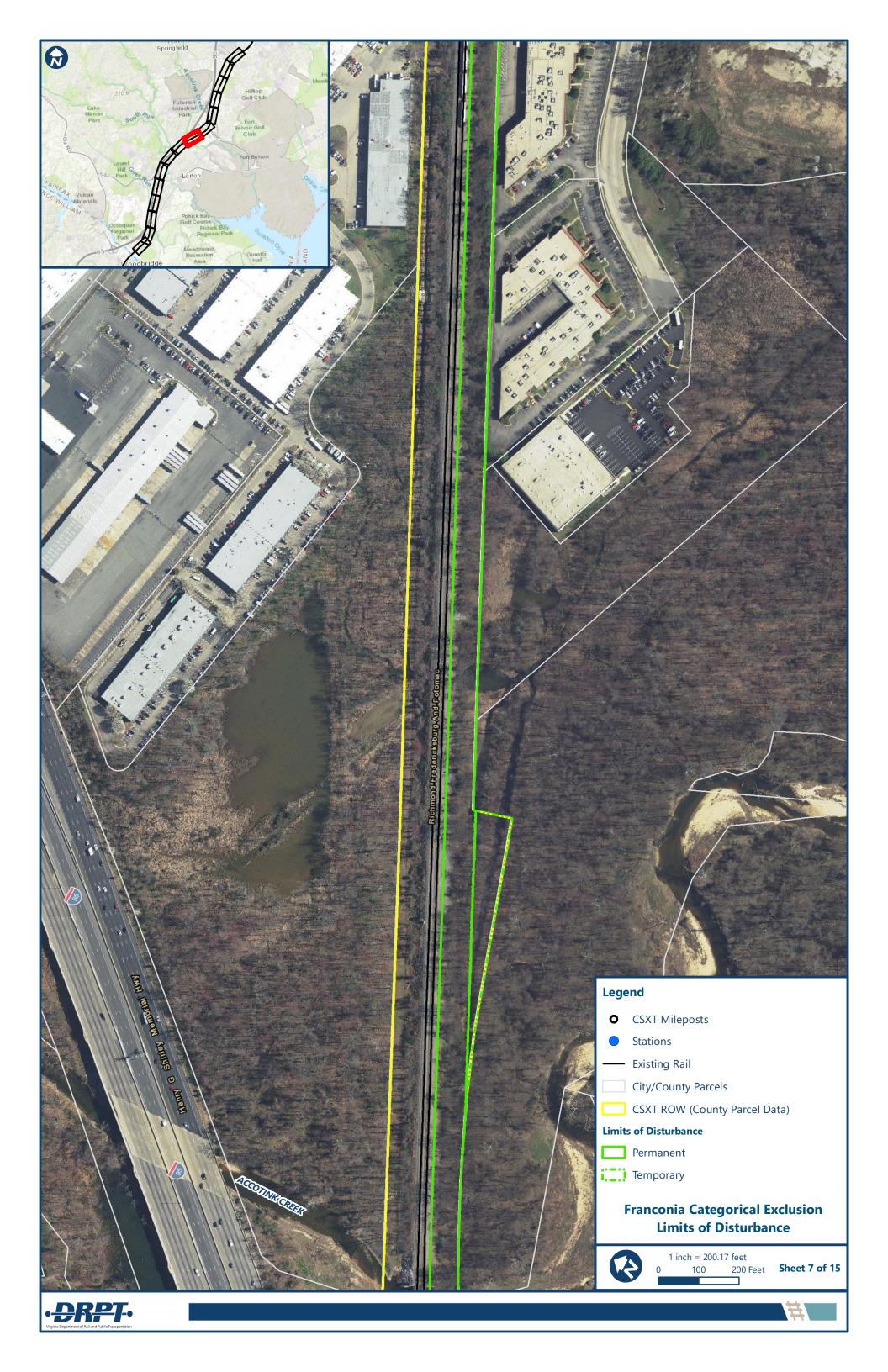




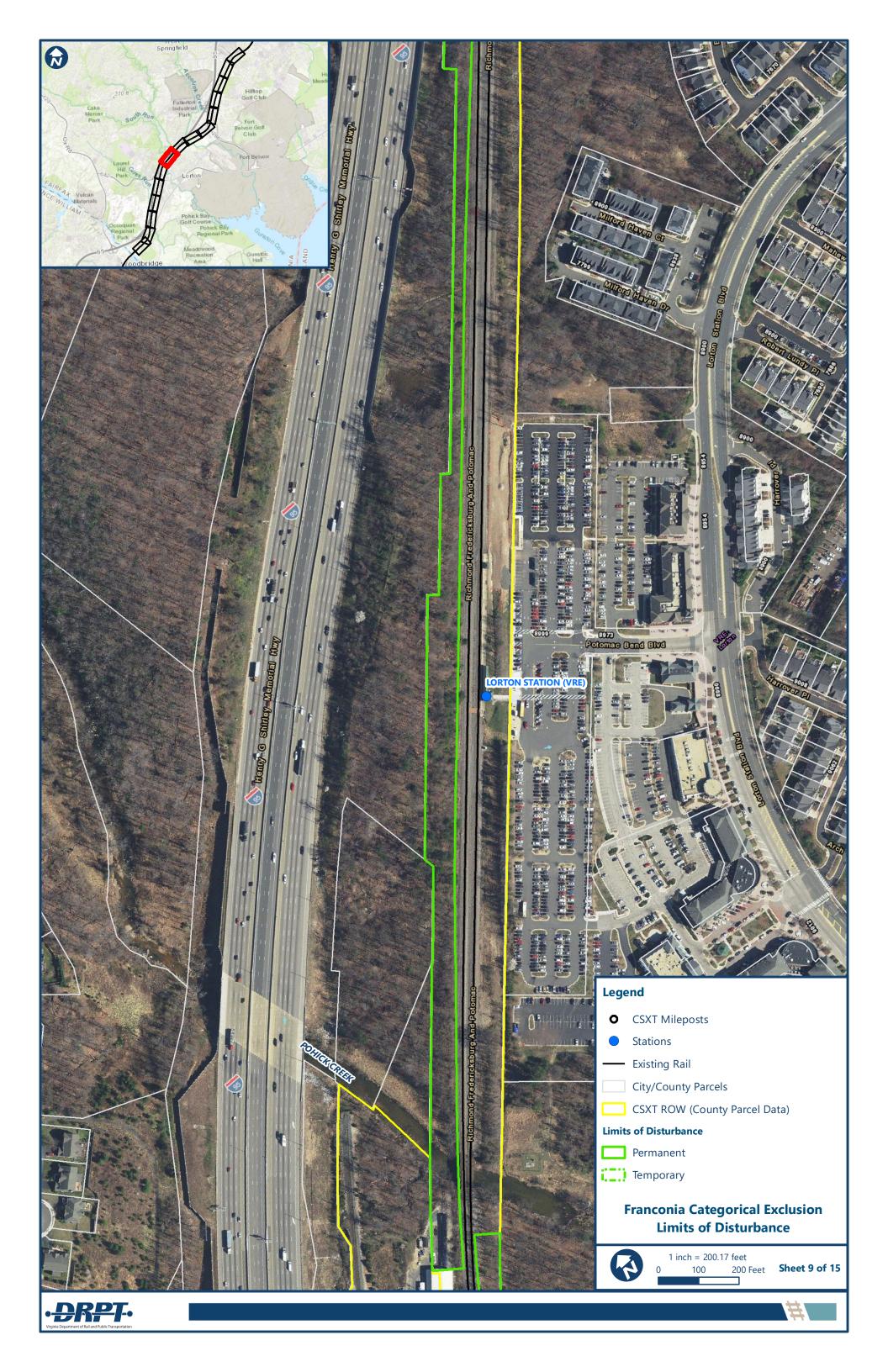


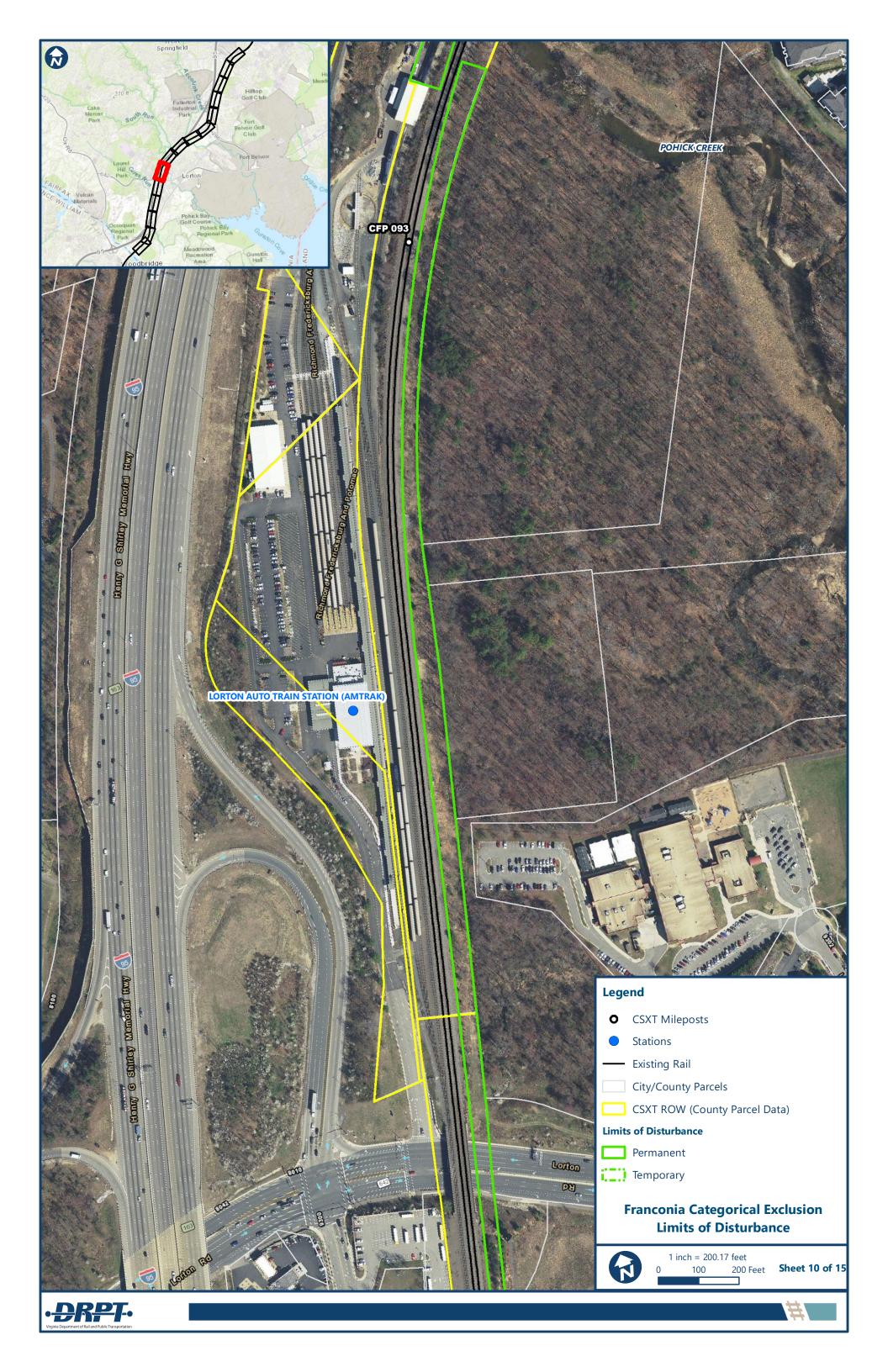


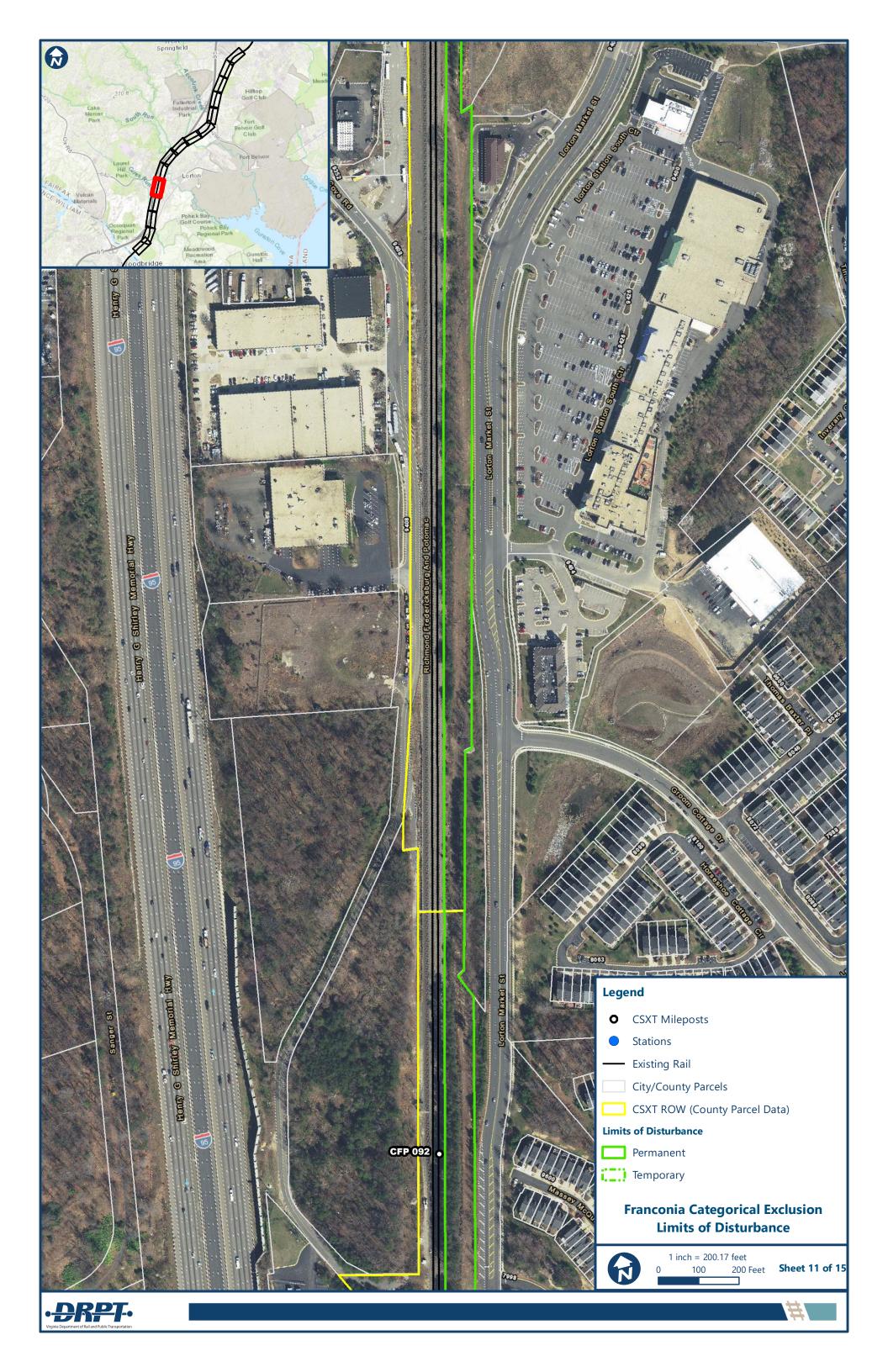


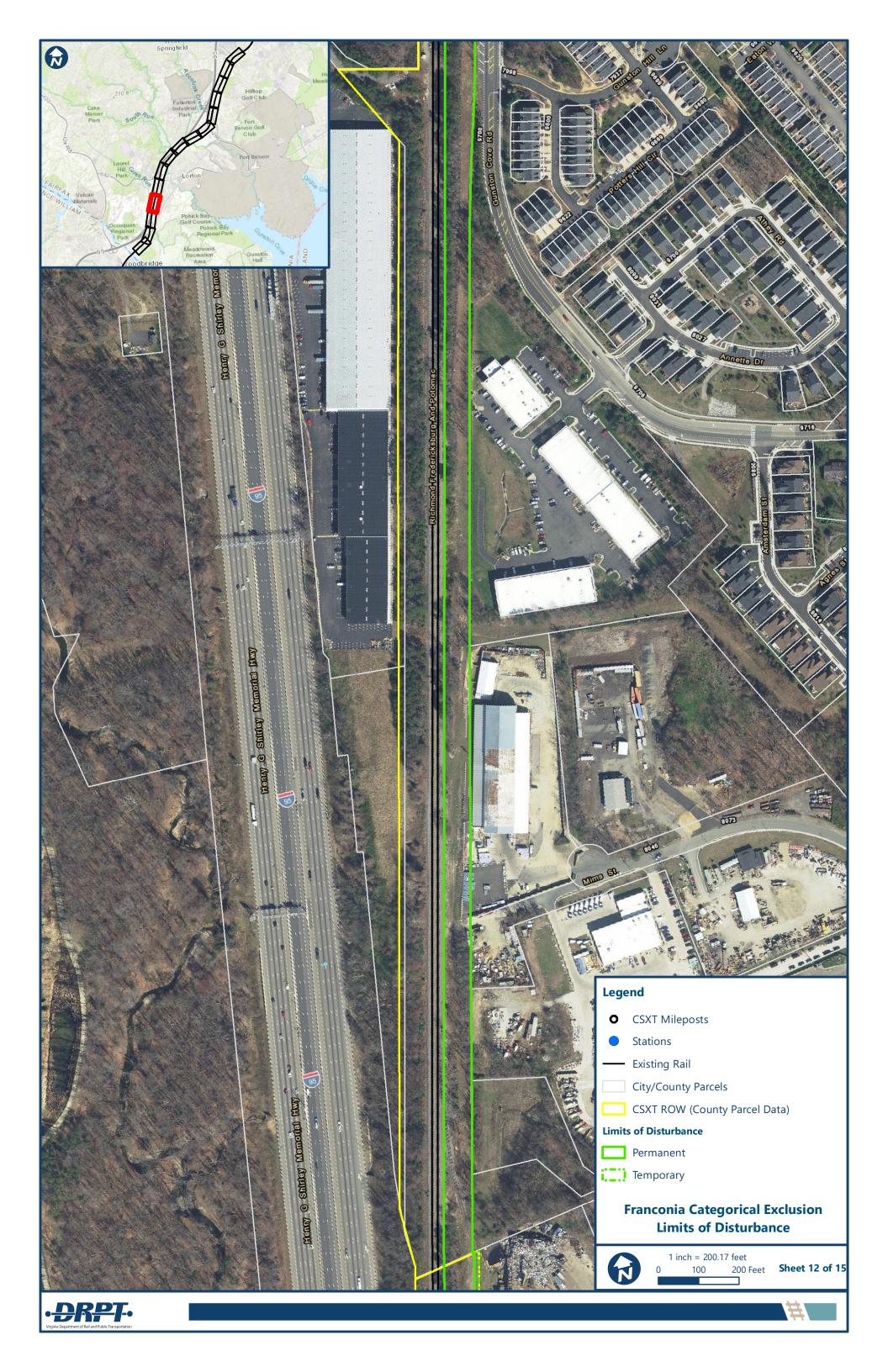






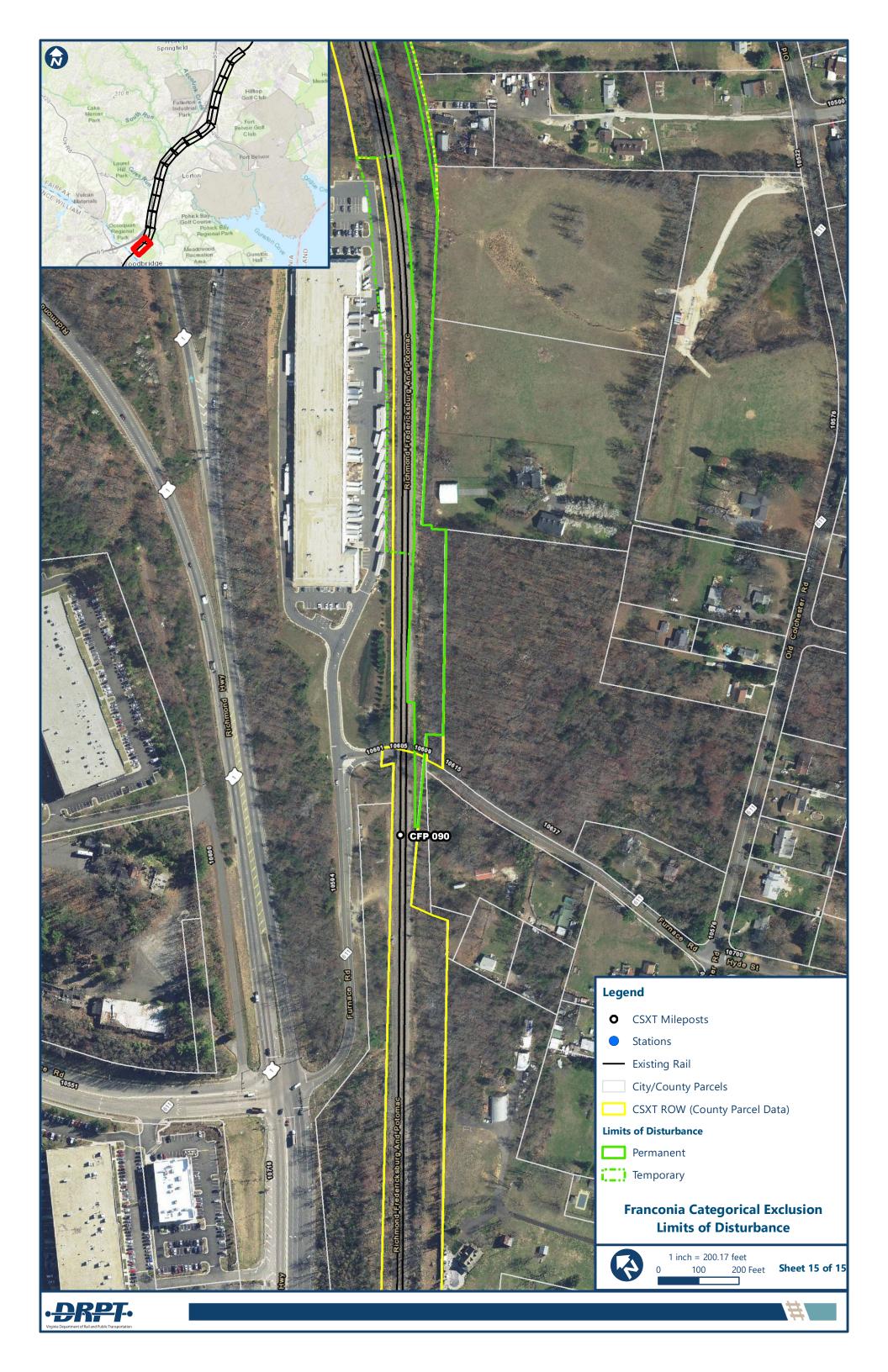












ATTACHMENT D COORDINATION WITH DHR

Franconia Third Track Project Categorical Exclusion



Knowing the Past—Building the Future

June 26, 2020

Marc Holma Division of Review and Compliance Department of Historic Resources 2801 Kensington Avenue Richmond, Virginia 22802

Re: Resource Eligibility and Project Effect/Franconia Third Track Portion of the Southeast High Speed Rail Project, Washington, D.C. to Richmond Segment DHR #2014-0666

Dear Marc:

As you know, cultural resource studies associated with the Southeast High Speed Rail (SEHSR) project have been ongoing for decades. Cultural resource coordination was done as part of the larger environmental study to comply with the National Environmental Policy Act (NEPA) and as stand-alone cultural resource investigations to comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA). The larger SEHSR project was divided into several smaller segments in the mid-2000s with two of these segments in Virginia. Work on the SEHSR Richmond to North Carolina State Line segment commenced in 2005 and was completed in 2017; the Washington, D.C. to Richmond, Virginia (DC2RVA) segment studies began in 2014 and were finished in 2019.

Since that time, it has been determined that an 8-mile long section of the DC2RVA project will be constructed separately from the remainder of the corridor. This 8-mile section is referred to as the Franconia Third Track project. The project is located between Franconia on the north and the Occoquan River on the south. Although this section is being constructed independently, the work still has ties to the DC2RVA infrastructure improvements; as such, it is being considered part of the DC2RVA undertaking for cultural resource purposes.

Most of the Franconia Third Track project area of potential effects (APE) for both archaeology and above-ground resources overlaps the corridor that was studied as part of DC2RVA. However, updated plans include an elevated bypass structure in the northern section of the Franconia Third Track project area. While the archaeological APE in this area is not modified through this action and was fully studied during DC2RVA, the architectural APE expands from 500 feet to 1,000 feet in this section of the project area. Since the expanded architectural APE has not been the subject of cultural resource study, additional architectural fieldwork and coordination were needed. The goals of the

architectural survey were to identify any above-ground resources over 45 years in age within the expanded architectural APE and to make recommendations on the National Register of Historic Places (NRHP) eligibility for all identified resources.

We are writing today to coordinate the eligibility of resources recorded in the expanded project APE and revisit the overall DC2RVA project effect. Enclosed please find one hard copy and one digital copy of the report entitled *Addendum Cultural Resource Studies Associated with the Franconia Third Track (DC2RVA) Project, Fairfax County, Virginia.* The report was authored by Adriana T. Moss, Kerri S. Barile, and Kevin McCloskey with Dovetail Cultural Resource Group. The report meets all standards set forth in both the Secretary of Interior's *Standards and Guidelines* (1983) and the Virginia Department of Historic Resource's (DHR) *Guidelines for Preparing Identification and Evaluation Reports* (2011). The report includes both the results of the expanded APE architectural study and a summary of previous DC2RVA cultural resource results in the 8-mile Franconia Third Track section to provide context for the effect evaluation.

Summary of DC2RVA Results

The project corridor was the subject of cultural resource studies from 2014 through 2019, during the DC2RVA project. Five sites were recorded in the archaeological APE—the same APE in use for the Franconia Third Track segment. The five sites include a historic domestic scatter (44FX0453), two prehistoric campsites (44FX0561 and 44FX0562), a multicomponent site (44FX2455) and King's Hill House (44FX2542). In October 2016, the DHR determined that the portions of all five sites within the archaeological APE have been repeatedly disturbed and, as such, these portions do not contribute to the overall eligibility of each site. These sites were not revisited during the current study as they have been previously evaluated for NRHP potential and are not considered historic properties in the archaeological APE.

Approximately 80 architectural resources were recorded along the current Franconia Third Track 8-mile corridor. Of the 80 architectural resources, the Richmond, Fredericksburg, & Potomac Railroad (500-0001), Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043), and Old Colchester Road, Potomac Path, King's Highway (029-0953) were determined eligible or potentially eligible for listing in the NRHP or retain its NRHP and Virginia Landmarks Registry (VLR) listing while the remainder, which comprise primarily post-World War II single-family dwellings, structures, and light industrial properties, were determined as not eligible. The resources evaluated during the DC2RVA study were not revisited during the current survey, and their previous eligibility determinations remain valid.

Survey Results of Expanded Architectural APE

During the current study, 99 architectural resources that meet the NRHP age threshold were identified within the expanded architectural APE for the Franconia Third Track project. Of the 99 architectural resources, as aforementioned, one (Richmond, Fredericksburg and

Potomac Railroad [500-0001]) has been determined to be eligible for the NRHP. Thirtysix other resources were previously determined to be not eligible for the NRHP during the DC2RVA project. The determination of eligibility on these 37 resources was made less than five years ago; as such, these resources were not revisited during the current work.

The remaining 62 resources were visited to ascertain NRHP eligibility. Six of these resources were previously recorded but not yet evaluated for the NRHP. Thus, they were revisited to render a NRHP recommendation. The Schaeffer Industrial Park (029-5959) located at 7817 Loisdale Road is an industrial property comprising 17 buildings constructed between around 1970 and 2010 that include an office building, warehouses, Ouonset huts, sign, gatehouse, and other industrial buildings. While this resource was determined to be not eligible for the NRHP in 2016, it was revisited during the current work to increase the property boundary. The remainder of the previously recorded resources surveyed during this effort include five single-family dwellings (029-6629 through 029-6633) constructed between circa 1930 and circa 1968. One dwelling (029-6629) appears to currently be utilized as a commercial property. These six previously recorded resources revisited during this effort frequently feature common modifications as well as indications of neglect, diminishing the resource's historic integrity. In addition, they do not possess sufficient architectural significance to be considered eligible for the NRHP and are not the known work of a master. It is recommended that they are not eligible for the NRHP under Criteria A–C. They were not evaluated under Criterion D.

Of the 56 architectural resources newly identified as part of the current survey, 54 are single-family dwelling located within the Loisdale Estates Historic District (029-5932)— a post-World War II, suburban, residential neighborhood constructed between 1952 and 1960 that was determined not eligible for the NRHP by DHR staff in 2016. It is recommended that none of these 54 resources (029-6697 through 029-6750) are eligible for the NRHP as individual resources under Criteria A–C. As the surrounding historic district was determined not eligible, these resources were not evaluated for their contribution to the district.

The two remaining newly recorded resources are industrial properties. Colbert Roofing Corporation at 7809 Loisdale Road (029-6751) features a circa-1949, one-story, Minimal Traditional-style dwelling turned office building and several light industrial outbuildings such as sheds and warehouses. Potomac Steel/Same Day Cabinets at 7801 Loisdale Road (029-6752) features a large one-story, combination warehouse and office building constructed around 1970 with Postmodern characteristics. Based on the investigation Dovetail does not find that the resources are eligible for the NRHP under Criteria A–C.

Finally, based on the criteria outlined above, Dovetail does not recommend that any of the 62 architectural resources recorded in the expanded APE are eligible for the NRHP.

Project Effect

In January 2019, the DHR determined that the DC2RVA project would have an adverse effect on historic properties. Since the Franconia Third Track project area was revisited due to plan modifications, project effect on historic properties within this 8-mile section of the DC2RVA project was re-evaluated. The regulations implementing Section 106 of the NHPA define an effect as an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register" [36CFR800.16(i)]. The effect is adverse when the alteration of a qualifying characteristic occurs in a "manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" [36 CFR800.5(a)].

Based on the current survey and a review of project results from the DC2RVA study, there are three historic properties in the APE of the Franconia Third Track section of the DC2RVA project (Table 1). Old Colchester Road, Potomac Path, King's Highway (029-0953) and Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043) are both located near the southern terminus of the Franconia Third Track project area (Figure 1, p. 8). Construction plans have not been modified in this area since the resources were evaluated for impacts during the DC2RVA project; the Franconia Third Track work will mirror the DC2RVA impacts. During the DC2RVA effect evaluation, it was determined that the project would have no effect on Old Colchester Road and no adverse effect on Colchester Arms. Because there have been no changes to the project plans in this area or modifications to the resource boundaries since this evaluation, it is recommended that the project will continue to have no effect on Old Colchester Road and no adverse effect on Colchester Arms.

DHR #	Resource Name	Resource Address	Eligibility Determination
029-0043	Colchester Arms/ Fairfax Arms	10712 Old Colchester Road	NRHP Listing/ VLR Listing (1979); DHR Concurrence 2016
029-0953	Old Colchester Road/Potomac Path/King's Highway	Old Colchester Road	Potentially Eligible (2012); DHR Concurrence 2016
500-001	Richmond, Potomac and Fredericksburg Railroad	Current CSX railroad corridor	DHR Eligible (2018)

Table 1: Historic Properties in the Franconia Third Track Segment of the SEHSR Project.

The Richmond, Fredericksburg, and Potomac Railroad (500-0001) is located along the existing CSX railroad tracks throughout the DC2RVA project corridor (Figure 1, p. 8). During an evaluation of project impacts as part of the DC2RVA effect evaluations, it was found that the project would have an adverse effect on this resource as the undertaking would remove or modify contributing resources and impact the resource's integrity of design, workmanship, materials, setting, feeling, and association. The current project includes similar design parameters as set forth during the DC2RVA cultural resource dialogues. In addition, an elevated bypass structure has been added to the project plans in

the northern segment of the Franconia Third Track project (Figure 3 and Figure 4, p. 10). This elevated bypass is located west of the current tracks within existing rail right-of-way and will require modifications to the historic rail alignment through the addition of new structural features in this area. As the Franconia Third Track section work will continue to diminish the integrity of design, workmanship, materials, setting, feeling, and association to this resource, it is recommended that the DC2RVA project will continue to have an adverse effect to the Richmond, Fredericksburg, and Potomac Railroad (500-0001).

Through this recommendation, it is suggested that the DC2RVA project will continue to have an adverse effect on historic properties. Mitigation set forth in the project Memorandum of Agreement (MOA) ratified in July 2019 to resolve adverse effects to the Richmond, Fredericksburg, and Potomac Railroad (500-0001) remain valid. No MOA modifications are recommended.

We invite your agency to concur with these recommendations within 30 days of receipt of this letter by signing the signature block below. If you have questions about these effect recommendations or cultural resource studies for this project in general, please do not hesitate to contact me at (540) 899-9170/kbarile@dovetailcrg.com or Katherine Youngbluth at (804) 971-0046/ katherine.youngbluth@drpt.virginia.gov.

Sincerely,

Kerri S. Barile, Ph.D. President

The Virginia Department of Historic Resources (DHR) concurs that the following 62 resources are not eligible for the National Register of Historic Places as individual resources and do not contribute to a historic district:

000 ((00	
029-6629	House, 7813 Cinder Bed Road
029-6630	House, 7819 Cinder Bed Road
029-6631	House, 7801 Cinder Bed Road
029-6632	House, 7123 Barry Road
029-6633	House, 7127 Barry Road
029-6697	House, 6826 Dyer Court
029-6698	House, 6821 Lois Drive
029-6699	House, 6819 Lois Drive
029-6700	House, 6817 Lois Drive
029-6701	House, 6813 Lois Drive
029-6702	House, 6811 Lois Drive
029-6703	House, 6809 Lois Drive
029-6704	House, 6810 Lois Drive
029-6705	House, 6812 Lois Drive
029-6706	House, 6814 Lois Drive
029-6707	House, 6816 Lois Drive
029-6708	House, 6818 Lois Drive
029-6709	House, 6820 Lois Drive
029-6710	House, 7402 Conway Court
029-6711	House, 7404 Conway Court
029-6712	House, 7403 Conway Court
029-6713	House, 6829 Darby Lane
029-6714	House, 6827 Darby Lane
029-6715	House, 6823 Darby Lane
029-6716	House, 6819 Darby Lane
029-6717	House, 6817 Darby Lane
029-6718	House, 6815 Darby Lane
029-6719	House, 6816 Darby Lane
029-6720	House, 6818 Darby Lane
029-6721	House, 6820 Darby Lane
029-6722	House, 6822 Darby Lane
029-6723	House, 6824 Darby Lane
029-6724	House, 6826 Darby Lane
029-6725	House, 6828 Darby Lane
029-6726	House, 6807 Jerome Street
029-6727	House, 6805 Jerome Street
029-6728	House, 6803 Jerome Street
029-6729	House, 6801 Jerome Street
029-6730	House, 6717 Jerome Street
029-6731	House, 6715 Jerome Street
029-6732	House, 6713 Jerome Street

029-6733	House, 6712 Jerome Street	
029-6734	House, 6714 Jerome Street	
029-6735	House, 6716 Jerome Street	
029-6736	House, 6800 Jerome Street	
029-6737	House, 6802 Jerome Street	
029-6738	House, 6804 Jerome Street	
029-6739	House, 6801 Ruskin Street	
029-6740	House, 6719 Ruskin Street	
029-6741	House, 6717 Ruskin Street	
029-6742	House, 6715 Ruskin Street	
029-6743	House, 6713 Ruskin Street	
029-6744	House, 6711 Ruskin Street	
029-6745	House, 6710 Ruskin Street	
029-6746	House, 6712 Ruskin Street	
029-6747	House, 6714 Ruskin Street	
029-6748	House, 6716 Ruskin Street	
029-6749	House, 6718 Ruskin Street	
029-6750	House, 6720 Ruskin Street	
029-6751	Colbert Roofing Corporation, 7809 Loisdale Road	
029-6752	Potomac Steel/Same Day Cabinets, 7801 Loisdale Road	
500-0001-0015 Culvert, CSX Tracks, west of Cinder Bed Road		

They also concur that the Franconia Third Track segment of the DC2RVA project would have no effect on Old Colchester Road, Potomac Path, King's Highway (029-0953).

They further concur that the project would have no adverse effect on Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043).

The DHR concurs that the project will have an adverse effect on Richmond, Fredericksburg, and Potomac Railroad (500-0001).

Lastly, they concur that the DC2RVA project will continue to have an adverse effect on historic properties. Mitigation set forth in the July 2019 Memorandum of Agreement on the DC2RVA project remains valid.

Julie Langan State Historic Preservation Officer Date

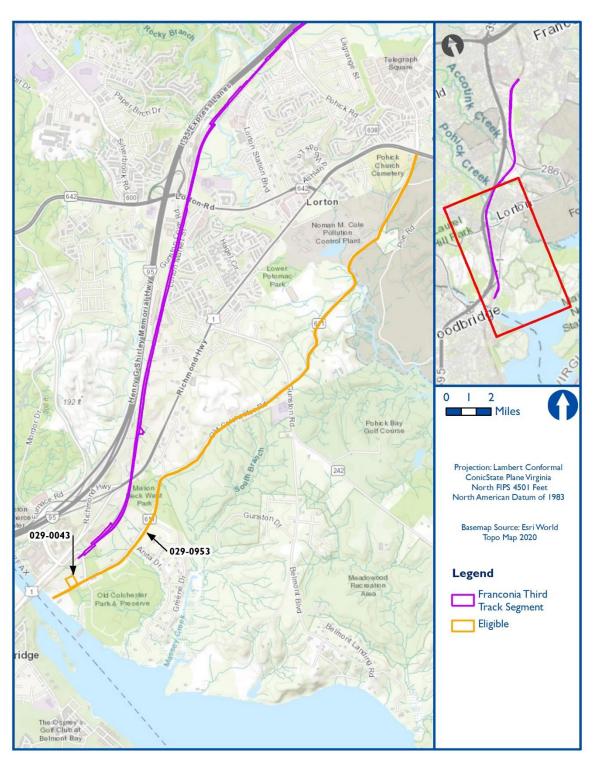


Figure 1: Location of Old Colchester Road, Potomac Path, King's Highway (029-0953) and Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043), in Gold, in Relation to Franconia Third Track Section of the DC2RVA Project, in Purple.

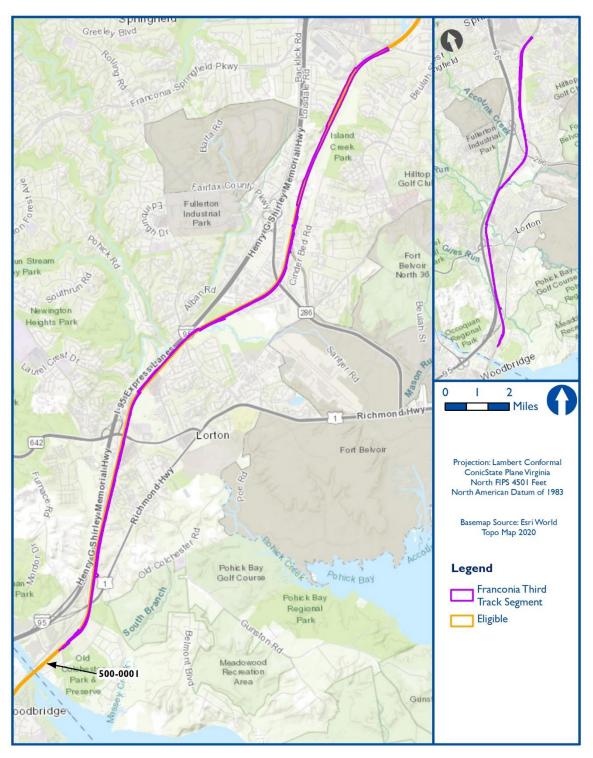


Figure 2: Location of the Richmond, Fredericksburg, and Potomac Railroad (500-0001), in Gold, in Relation to Franconia Third Track Section of the DC2RVA Project, in Purple.



Figure 3: Original Rail Alignment (Left) and Proposed Elevated Bypass (Right) in the Northern Section of the Franconia Third Track Section, Looking South.

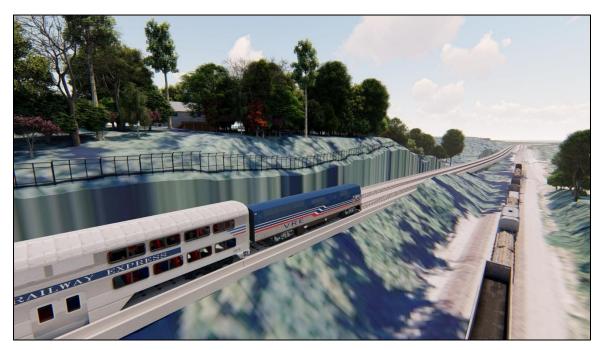


Figure 4: Detail of the Elevated Bypass (Left) and the Original Rail Alignment (Right), Looking North. The Loisdale Historic District (not eligible) is on the left.

The Virginia Department of Historic Resources (DHR) concurs that the following 62 resources are not eligible for the National Register of Historic Places as individual resources and do not contribute to a historic district:

020 6620	House 7912 Cinder Ded Deed
029-6629	House, 7813 Cinder Bed Road House, 7819 Cinder Bed Road
029-6630 029-6631	House, 7801 Cinder Bed Road
	-
029-6632	House, 7123 Barry Road
029-6633	House, 7127 Barry Road
029-6697	House, 6826 Dyer Court
029-6698	House, 6821 Lois Drive
029-6699	House, 6819 Lois Drive
029-6700	House, 6817 Lois Drive
029-6701	House, 6813 Lois Drive
029-6702	House, 6811 Lois Drive
029-6703	House, 6809 Lois Drive
029-6704	House, 6810 Lois Drive
029-6705	House, 6812 Lois Drive
029-6706	House, 6814 Lois Drive
029-6707	House, 6816 Lois Drive
029-6708	House, 6818 Lois Drive
029-6709	House, 6820 Lois Drive
029-6710	House, 7402 Conway Court
029-6711	House, 7404 Conway Court
029-6712	House, 7403 Conway Court
029-6713	House, 6829 Darby Lane
029-6714	House, 6827 Darby Lane
029-6715	House, 6823 Darby Lane
029-6716	House, 6819 Darby Lane
029-6717	House, 6817 Darby Lane
029-6718	House, 6815 Darby Lane
029-6719	House, 6816 Darby Lane
029-6720	House, 6818 Darby Lane
029-6721	House, 6820 Darby Lane
029-6722	House, 6822 Darby Lane
029-6723	House, 6824 Darby Lane
029-6724	House, 6826 Darby Lane
029-6725	House, 6828 Darby Lane
029-6726	House, 6807 Jerome Street
029-6727	House, 6805 Jerome Street
029-6728	House, 6803 Jerome Street
029-6729	House, 6801 Jerome Street
029-6730	House, 6717 Jerome Street
029-6731	House, 6715 Jerome Street
029-6732	House, 6713 Jerome Street

Marc Holma June 26, 2020

029-6733	House, 6712 Jerome Street
029-6734	House, 6714 Jerome Street
029-6735	House, 6716 Jerome Street
029-6736	House, 6800 Jerome Street
029-6737	House, 6802 Jerome Street
029-6738	House, 6804 Jerome Street
029-6739	House, 6801 Ruskin Street
029-6740	House, 6719 Ruskin Street
029-6741	House, 6717 Ruskin Street
029-6742	House, 6715 Ruskin Street
029-6743	House, 6713 Ruskin Street
029-6744	House, 6711 Ruskin Street
029-6745	House, 6710 Ruskin Street
029-6746	House, 6712 Ruskin Street
029-6747	House, 6714 Ruskin Street
029-6748	House, 6716 Ruskin Street
029-6749	House, 6718 Ruskin Street
029-6750	House, 6720 Ruskin Street
029-6751	Colbert Roofing Corporation, 7809 Loisdale Road
029-6752	Potomac Steel/Same Day Cabinets, 7801 Loisdale Road
500-0001-001	5 Culvert, CSX Tracks, west of Cinder Bed Road

They also concur that the Franconia Third Track segment of the DC2RVA project would have no effect on Old Colchester Road, Potomac Path, King's Highway (029-0953).

They further concur that the project would have no adverse effect on Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043).

The DHR concurs that the project will have an adverse effect on Richmond, Fredericksburg, and Potomac Railroad (500-0001).

Lastly, they concur that the DC2RVA project will continue to have an adverse effect on historic properties. Mitigation set forth in the July 2019 Memorandum of Agreement on the DC2RVA project remains valid.

ma Julie/Langan

State Historic Preservation Officer

<u>ZZ July 2020</u> Date 2014-0666

ADDENDUM CULTURAL RESOURCE STUDIES ASSOCIATED WITH THE FRANCONIA THIRD TRACK (DC2RVA) PROJECT, FAIRFAX COUNTY, VIRGINIA

DHR File No. 2014-0666

by

Adriana T. Moss, Kerri S. Barile, and Kevin McCloskey

Prepared for

HDR

Prepared by

DOVETAIL CULTURAL RESOURCE GROUP

June 2020

Addendum Cultural Resource Studies Associated with the Franconia Third Track (DC2RVA) Project, Fairfax County, Virginia

DHR File No. 2014-0666

by

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ABSTRACT

On behalf of the Virginia Department of Rail and Public Transportation (DRPT) and HDR, Dovetail Cultural Resource Group (Dovetail) conducted cultural resource studies for the Franconia Third Track project in Fairfax County, Virginia. Planning associated with improvements to the existing rail system in this area have been ongoing for almost 20 years. Commencing with a Tier 1-level planning study in 2002, the goal has been to identify solutions to rail bottlenecks in northern Virginia. Tier 2-level environmental studies commenced in 2014 as part of the Washington, D.C., to Richmond, Virginia (DC2RVA) high speed rail project. Cultural resource studies were part of the DC2RVA environmental work (Virginia Department of Historic Resources [DHR] File #2014-0666). The cultural resource study process was completed in 2019. Since that time, an 8-mile long segment of the rail corridor has been removed from the DC2RVA project and is being constructed independently. This 8-mile area is referred to as the Franconia Third Track project and the construction area of this undertaking is defined as the project area in this document. It is the subject of a Categorical Exclusion-level environmental study. The work will entail subsurface disturbances to the rail corridor and involve new above-ground visual elements. The archaeological area of potential effects (APE), defined as the limits of disturbance of the project, was fully studied as part of the previous DC2RVA initiative. While most of the Franconia Third Track architectural APE (primarily defined as a 500-foot wide area from the rail center line) was studied as part of DC2RVA, updated plans include an elevated bypass in one section. This action necessitated an expanded architectural APE from a 500-foot wide corridor to 1,000 feet in that particular area of the proposed elevated bypass and thus obligated additional architectural survey. This report includes a summary of the previous DC2RVA cultural resource studies on the 8-mile corridor and the results of the architectural survey in the expanded architectural APE.

No new archaeological survey was needed within the archaeological APE. Five sites have been previously recorded within the APE: a historic domestic scatter (44FX0453), two prehistoric campsites (44FX0561 and 44FX0562), a multicomponent site (44FX2455) and King's Hill House (44FX2542). During the DC2RVA coordination, DHR determined that the portions of all five sites in the archaeological APE do not contribute to site eligibility.

During the current study, 99 architectural resources were identified within the architectural APE for the Franconia Third Track project, including 43 previously recorded resources and 56 newly recorded resources that meet the age specification. Of the 43 previously recorded resources, one (500-0001) was determined to be eligible for the NRHP by DHR staff. Dovetail **recommends that it should retain its previous eligibility determinations.** The remaining 98 architectural resources are **recommended as not eligible for NRHP listing.**

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INTRODUCTION

On behalf of the Virginia Department of Rail and Public Transportation (DRPT) and HDR, Dovetail Cultural Resource Group (Dovetail) conducted cultural resource studies for the Franconia Third Track project in Fairfax County, Virginia. Planning associated with improvements to the existing rail system in Virginia have been ongoing for almost 20 years. A Tier 1-level National Environmental Policy Act (NEPA) planning study was conducted in 2002 to identify solutions to rail bottlenecks regularly occurring in northern Virginia and to address issues with rail infrastructure. Based on this research, Tier 2-level environmental studies commenced in 2014 as part of the Washington, D.C., to Richmond, Virginia (DC2RVA) high speed rail project. This process involved an evaluation of multiple alternatives to seek solutions to the rail congestion and material issues in the northern portion of the state.

Cultural resource studies were part of the DC2RVA NEPA studies (Virginia Department of Historic Resources [DHR] File #2014-0666). Work included Phase I and II architectural and archaeological technical studies, coordination of resource eligibility and project effect, authoring a Memorandum of Agreement (MOA) to outline stipulations to mitigate adverse effects to historic properties, and intensive pubic and consulting party consultation. The cultural resource process was completed in 2019. Since that time, an 8-mile long segment of the rail corridor has been removed from the DC2RVA project construction and is being built independently. This 8-mile area is referred to as the Franconia Third Track project and the construction area of this undertaking is defined as the project area in this document. It is located between Franconia on the north and the Occoquan River on the south (Figure 1 and Figure 2, pp. 3–4). Environmental studies associated with this segment are ongoing to comply with NEPA, including the completion of a Categorical Exclusion-level document. Although this section is being constructed independently, the work still has ties to the DC2RVA infrastructure; as such, it is being considered part of the DC2RVA undertaking for cultural resource purposes. The archaeological APE as defined for the DC2RVA project includes the entire area of ground disturbing activities and staging areas for rail and road modifications (project limits of disturbance); the architectural APE is the entire area of ground-disturbing activities and staging areas plus any areas within the viewshed of the corridor where indirect affects to a resource's setting and feeling could occur, typically comprising a 500-foot wide corridor along all sides of the limits of disturbance, 1,000 feet near proposed overpasses, one city block in urban areas, and additional areas as warranted due to viewsheds and vistas.

Most of the Franconia Third Track project APE (archaeological and architectural) overlaps the corridor that was studied as part of DC2RVA. However, updated plans include an elevated bypass in the northern segment. While the archaeological APE in this area is not modified through this action, the architectural APE expands from 500 feet to 1,000 feet in this section of the project area. Since the expanded architectural APE has not been the subject of cultural resource study, additional architectural fieldwork and coordination are needed. The goals of the survey were to identify any resources over 45 years in age within the expanded architectural APE and to make recommendations on the National Register of Historic Places (NRHP) eligibility for all identified resources.

Given the parameters of the project, this report includes a summary of the previous DC2RVA cultural resource studies on this 8-mile corridor to identify historic properties in the APE and presents the results of the architectural survey in the expanded architectural APE. This addendum report is a companion document to Dovetail's reports for the original Phase I survey of the DC2RVA project in this area (Chase 2017; Klein et al. 2015; McCloskey et al. 2016, 2018; Manning et al. 2016; Staton et al. 2016). Historic context, a thorough background and literature review, and a detailed methodology for this study were included in the original report and are not duplicated here. An abbreviated background and literature review is presented to include resources and surveys recorded since 2016 as well as those not included in the previous background review that fall within 0.5 miles of the expanded project corridor, followed by a summary of previous studies and the architectural survey in the expanded APE.

The work was conducted in accordance with the National Environmental Policy Act of 1969, Section 106 of the National Historic Preservation Act, as amended, the Virginia Antiquities Act (Code of Virginia § 10.1-2300), and guidelines and regulations promulgated by the DHR. The current architectural survey was conducted by architectural historians Adriana Moss and Heather Staton. Dr. Kerri Barile served as the Principal Investigator. Dr. Barile, Ms. Moss, and Ms. Staton meet the standards established for architectural historians by the Secretary of the Interior (SOI).

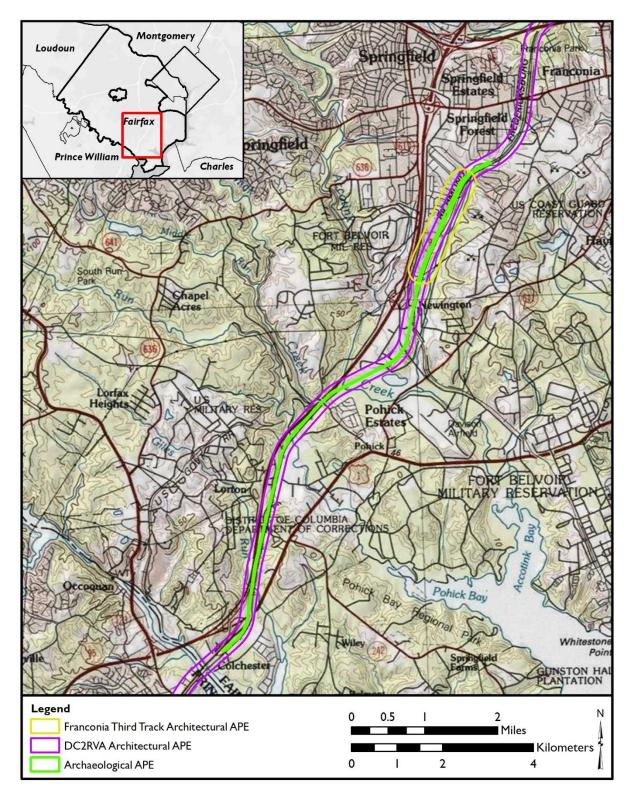


Figure 2: Location of Current Franconia Third Track Archaeological APE and Architectural APE and the Previous DC2RVA Architectural APE on Topographic Imagery (Esri 2018b).

PROJECT DESCRIPTION

The overall Franconia Third Track project is an 8-mile long corridor. The construction area of this undertaking is defined as the project area. The proposed improvements are located in Fairfax County, Virginia, between the Franconia Parkway (CFP 98) on the north end and just north of the Occoquan River (CFP 90) on the south end. Most of the Franconia Third Track project overlaps the corridor that was studied as part of DC2RVA (Figure 3, p. 6). However, updated plans include an elevated bypass in the northern segment of the Franconia Third Track project. While the archaeological APE in this area is not modified through this action, the architectural APE expands from 500 feet to 1,000 feet in this section. Since the expanded architectural APE has not been the subject of cultural resource study, additional fieldwork and coordination are needed. The goals of the survey were to identify any architectural resources over 45 years in age within the expanded architectural APE and to make recommendations on the NRHP eligibility for all identified resources.

The current survey work consists of the area between the 500-foot DC2RVA architectural APE originally surveyed during the DC2RVA high speed rail project and the current architectural APE of 1,000 feet in the northern segment where an elevated bypass is proposed in updated plans. During the survey, in accordance with DHR survey guidelines, Dovetail identified and provided NRHP-eligibility recommendations for all previously recorded resources and all previously unrecorded above-ground resources (buildings, districts, objects, or structures) that are 45 years of age or older within the architectural project area (DHR 2017). Any previously recorded resource that has received a formal NRHP eligibility evaluation from DHR staff and was surveyed within the last five years was not resurveyed during the current project (DHR 2017).

The proposed elevated bypass, however, does not affect the previous archaeological studies associated with the DC2RVA high speed rail project and no new archaeological survey work was needed as a part of the current project. This area is highly developed with residential, commercial, and light industrial properties, moderately populated, and is suburban in nature.

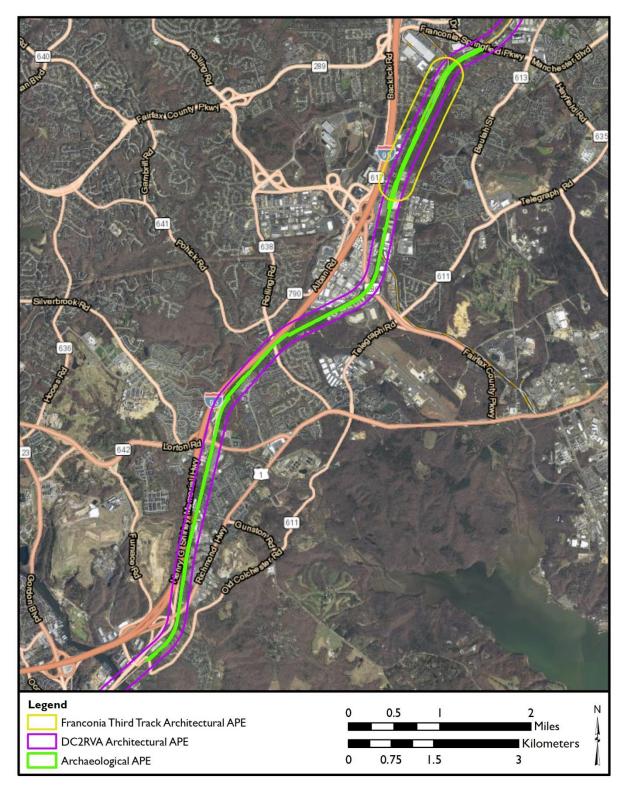


Figure 3: Location of Current Franconia Third Track Archaeological APE and Architectural APE and the Previous DC2RVA Architectural APE over Aerial Imagery (Virginia Geographical Information Network [VGIN] 2015).

HISTORIC BACKGROUND REVIEW

Prior to conducting fieldwork, the potential of the addendum project area to contain significant archaeological resources and NRHP-eligible architectural properties was assessed by searching the DHR site and survey file records. The background review information provided in this section of the addendum is intended to complement the data included in previous reports for this project, providing a summary of updated information not included therein (Chase 2017; Klein et al. 2015; McCloskey et al. 2016, 2018; Manning et al. 2016; Staton et al. 2016). During the previous DC2RVA project conducted between 2014 and 2016, Dovetail archaeologists conducted a background review within the DC2RVA direct APE only (Klein et al. 2015; McCloskey et al. 2016). However, DC2RVA project reports associated with architectural investigations featured a background review of cultural resource surveys and resources within 0.5 mile of the DC2RVA project corridor (Chase 2017; Manning et al. 2016; Staton et al. 2016). Therefore, this section will account for all of those cultural resources and reports found within 0.5 mile of the current Franconia Third Track project corridor that were not previously reviewed during the DC2RVA project.

Cultural Resource Surveys

There are 15 cultural resource surveys, including those related to the DC2RVA project, within 0.5 mile of the Franconia Third Track archaeological APE that were not previously reviewed during the DC2RVA background review. A reconnaissance-level archaeological survey was completed on the proposed drive-up facility and parking lot for the Division of Motor Vehicles, Franconia Branch in Franconia by Virginia Research Center for Archaeology in 1979 (Klein 1979). The survey identified several possible historic features; however, all were determined not eligible for the NRHP by DHR staff.

In 1982, Fairfax County Archaeology Survey conducted a reconnaissance-level survey of four alternatives for the Interstate 95 (I-95) and Route 1 bypass project area (Chatelain and Johnson 1982). During the effort, five prehistoric sites and three historic sites were identified across the four alternatives; however, they were all recommended not eligible for listing in the NRHP.

Soil Systems, Inc. conducted a cultural resource survey and evaluation of archaeological and architectural resources at Fort Belvoir, a 9,300-acre United States Army facility, in 1984 (LeeDecker et al. 1984). The archaeological survey comprised 1,400 acres including both survey areas specified by the project scope as well as areas selected according to a stratified random sampling design. During this effort, 34 newly identified prehistoric and historic archaeological sites, 18 isolated artifacts, and 204 architectural resources were surveyed and evaluated. For the below-ground sites, a site typology was constructed and a predictive model for site distribution was created based on environmental resource zones. During the architectural portion of the project, Soil Systems, Inc. identified three significant architectural resource concentration as well as one building of national significance, the Thermo-Con. House which was designed by Albert Kahn in 1948.

In 1991, Mid-Atlantic Archaeological Research (MAAR) Associates, Inc. led a Phase I archaeological survey at several locations within Fort Belvoir as part of the United States

Army's management obligations to record and assess its cultural resources in advance of future development plans (Polk and Thomas 1991). The effort identified 109 previously unrecorded prehistoric and historic archaeological sites, increasing the total of archaeological sites on the Fort Belvoir property to 244. A four-part plan was recommended in order to manage the identified archaeological sites and included an archaeological investigation on the remainder of the Fort Belvoir property, the development of a historic preservation plan, continued evaluation of archaeological resources as well as adequate curation of artifact collections, and general development plans should attempted to be coordinated with areas in the property of high disturbance.

MAAR continued their work at Fort Belvoir with another series of archeological studies in 1993 (Polk et al. 1993). This endeavor included a "development of historic contexts, a comprehensive disturbance assessment, Phase I surveys, evaluation studies, and historical resource preservation plans" (Polk et al. 1993:i). The study resulted in the identification of 166 archaeological prehistoric and historic sites in addition to the 135 previously recorded archaeological sites known. Prehistoric sites range from all periods of prehistoric occupation while the historic sites range from the earliest period of the third-quarter of the seventeenth century settlement to the first half of the twentieth century.

In 1994, Thunderbird Archeological Associates, Inc. (Thunderbird) studied four archaeological sites at the Phase I level during a survey of a portion of 26 acres of the Mt. Air property on behalf of the Van Metre Companies (Gardner and Davis 1994). The Mt. Air plantation house site and sites of the barn, cemeteries, and possible slave quarters are all in an area that was planned to be set aside for the county while the remainder of the 26 acres was intended for a townhome complex; this remaining area was the subject of archaeological survey. The survey identified a burned historic feature dating to the early- to mid-nineteenth century based on ceramic analysis was discovered near the eighteenth-century foundations of the burned home and a Phase II evaluation of the feature was recommended if the area was to be disturbed by the townhouse complex. A site previously known as 44FX0966 was divided into three archaeological sites during this effort: 44FX0966, 44FX2095, and 44FX2096. A Phase II evaluation was recommended for Site 44FX0966, while the remaining two were not recommended for further work.

Thunderbird conducted a Phase I archaeological survey and architectural assessment of a 20acre parcel near Lorton on behalf of Curry Development, Inc. in 1995 (Gardner and Snyder 1995). A brief architectural survey was completed on two buildings constructed on the property; one was constructed in 1828 but had a significant loss of historic integrity due to twentieth-century renovations and the other was constructed around 1934 with Colonial Revival-style elements. Two archaeological sites were identified during this effort: one site (44FX2166) consisted of historic refuse scatter dating to the mid-nineteenth century to the early-twentieth century while the other (44FX2167) was denoted as a prehistoric transient camp. No additional work was recommended on either of the archaeological sites and both architectural resources were recommended not eligible for listing in the NRHP.

In 2000, a Phase I archaeological survey of the Lorton Exchange Tract, a portion of the Lorton Correctional Complex, and an archaeological assessment of the Meadowood Farm Property was conducted by Archaeological Testing & Consulting, Inc. (Hill et al. 2000). The survey

was conducted prior to a proposed land exchange between Bureau of Land Management and Meadowood Farm owner. A total of 16 below-ground sites were identified in Lorton tract, and a Phase II archaeological investigation was recommended for 44FX2485 and 44FX2487 for possible prehistoric research value. The Meadowood Farm study area was investigated through historical and cultural resources research and recommended for an intensive Phase I archaeological survey due to the potential of prehistoric and historic sites.

On behalf of the Bureau of Land Management, Circa~ Cultural Resource Management, LLC (Circa) completed a Phase I archaeological survey of three planned recreation trails and a 1.7-acre trail head site located in the Meadowood Special Recreation Management Area (SRMA) on Mason Neck in 2007 (Levinthal et al. 2007). The survey resulted in one isolated find; no archaeological sites were identified.

Dovetail conducted a Phase I archaeological survey of the I-95 Defense Access Roads Ramps to Fort Belvoir's North Area on behalf of Parsons Transportation Group in 2009 (González and Carmody 2009). The project area included the proposed construction footprint of two single-lane access ramps from I-95 directly to the Army's Fort Belvoir North Area located in the Springfield area. During the survey, a total of 35 shovel test pits (STPs) were excavated across the project area identifying two previously recorded sites (sites 44FX0822 and 44FX0823); however, no artifacts and intact cultural features or deposits were uncovered.

In 2011, Thunderbird conducted a Phase I archaeological investigation of the approximately 22-acre Gunston Commerce Center property located on the north side of Furnace Road just east of its intersection with Mordor Drive (Sipe and Garzon-Oechsle 2011). Eight archaeological sites were previously recorded by Michael Johnson of the Fairfax County Park Authority the same year and one additional site was identified during the Thunderbird investigation. All nine of the archaeological sites were recommended as not eligible for the NRHP under Criterion D and no additional work was recommended.

Phase I and II archaeological investigations at the Rochambeau Campsite in the BLM Meadowood SRMA and nearby Phase I investigations at two trail routes, three bike path routs, and a meadow restoration area were conducted by Cultural Site Research & Management, Inc. (CRSM) in 2012 on behalf of the Bureau of Land Management (Comer 2020). Although the scope originally called for 5 acres to be surveyed, over 16 acres were subject to survey during this effort after it was found that the boundaries of the Rochambeau Campsite (44FX3446) located in Meadowood SRMA encompassed 13 acres. That site was examined at the Phase I and II levels and recommended to be eligible for the NRHP under Criterion D. The remaining six areas were only surveyed at the Phase I level and had negative results.

In 2015 and 2016, Thunderbird completed a Phase I archaeological investigation on behalf of Kettler, Inc. at the approximately 17.84-acre Giles Overlook property at the intersection of Lorton Road and Sanger Street (Smith 2016). Although no new archaeological sites were identified during this effort, four previously identified archaeological sites or portions thereof were examined. Two sites (44FX2651 and 44FX2646) were found to be either inaccurately mapped and not located within the survey area or so disturbed that no evidence of their existence was found. A portion of site 44FX2650 extended into the project area and it was found that it would be unlikely for intact cultural horizons or features to be present on that

portion of the site and no further work was recommended. The final site (44FX2645) was found to represent a low quantity refuse scatter dating to the turn of the twentieth century and was recommended not eligible for NRHP under Criterion D.

On behalf of the Virginia Department of Transportation Northern Virginia District, Commonwealth Heritage Group studied a 1.27-mile project area for the proposed extension of Frontier Drive from Franconia-Springfield Parkway to Loisdale Road adding Braided Ramps through Phase I cultural resource investigations in 2018 (Goode et al. 2018). The archaeological survey included a walkover of the 73.22-acre archaeological APE and the excavation of 34 STPs. No artifacts or subsurface features were identified. The architectural survey included four previously recorded and two newly identified above-ground resources. Only one resource was previously determined potentially eligible for the NRHP (500-0001) and was recommended to retain that status. The remainder of the above-ground resources were recommended as not eligible for NRHP listing.

Between 2014 and 2019, Dovetail conducted cultural resource investigations on the 123-mile DC2RVA project corridor that traverses the Commonwealth from Alexandria to just south of the City of Richmond (Chase 2016; Klein et al. 2015; McCloskey et al. 2016, 2018; Manning et al. 2016; Staton et al. 2016). This work included a Phase I archaeological survey, a Phase I architectural survey, and Phase II architectural investigations. Results of these efforts are further detailed in the chapter below (p. 13).

Archaeological Resources

At the time of the previous DC2RVA project, Dovetail archaeologists conducted a background review on the archaeological APE and five archaeological sites (Klein et al. 2015; McCloskey et al. 2016, 2018). For the purposes of the current effort, a review of all archaeological resources previously recorded within a 0.5-mile radius of the Franconia Third Track archaeological APE was conducted. As the DC2RVA project corridor overlaps with the Franconia Third Track archaeological APE, the five archaeological sites identified in the reports associated with that undertaking are not repeated in this background review; see the APE results summary for more details (p. 13).

One-hundred and eighty-two previously recorded archaeological sites are located within a 0.5mile radius of the archaeological APE (see Appendix A, p. 51). This includes 103 sites that are entirely prehistoric, 54 sites that are exclusively historic, 13 sites with both historic and prehistoric components, and 12 sites that do not have listed time periods. Of the 116 sites that have some prehistoric component, 88 are not listed with specified time periods. Eighteen of these sites have an archaic component, 13 have a woodland component, and two have a Paleoindian component. Of the 67 sites with historic components, one site is listed as dating to the contact period, including the seventeenth and early parts of the eighteenth centuries, 13 date to the eighteenth century, 31 include nineteenth century components, including five sites listed as dating to either the Civil War, or the third quarter of the century, and 35 sites are listed as including twentieth century components.

Of the 182 total sites within 0.5 miles of the archaeological APE 146 have not been formally evaluated for NRHP listing. A further 27 sites have been determined not eligible for NRHP

listing. Given the large overall number of sites in the project vicinity, the substantial majority of which have not been formally evaluated for NRHP potential, further discussion will focus on those sites determined eligible or potentially eligible for NRHP listing. Three sites within 0.5 miles of the archaeological APE have been determined eligible for NRHP listing. Site 44FX0457 is a prehistoric site spanning the Early Archaic through the Middle Woodland periods, originally identified by Karrell Archaeology services in 1980 (Koski-Karell 1981). A federal determination of eligibility was made in 1984. A data recovery was undertaken in 1992 in anticipation of the construction of the Route 29 Springfield Bypass, determining that prehistoric artifacts were recovered from plow zone contexts and that other better-preserved sites were present in the region (Pullins 1993). Site 44FX3194 is a multicomponent site and includes listed components from every prehistoric period. However, this appears to be an artifact of how site forms were filled out. As no diagnostics were recovered, every possible prehistoric period was included rather than selecting "prehistoric/unknown." The site is primarily an eighteenth-century historic site. Initially identified during a 2006 Phase I survey, a Phase II evaluation was performed in 2013 and 2014, identifying three grave shafts and an intact eighteenth-century foundation (Sperling et al. 2014). Fairfax County Archaeology recommended the site eligible, and DHR concurred. Site 44FX3446 includes the remains of Rochambeau's 1781 camp at Giles Run. This site was determined eligible after a 2011 Phase II evaluation that recovered artifacts from temporally undisturbed eighteenth-century contacts, as well as an intact subsurface feature (Comer 2012).

Six additional sites have been determined potentially eligible by DHR. This includes three prehistoric sites (44FX2185, 44FX2186, and 44FX2187) identified during Phase I survey in anticipation of the proposed Lorton pumpover project (Fidel 1996). All three sites produced lithic tools and debitage from intact prehistoric deposits. Two more prehistoric sites were identified in 2000 during a Phase I survey for the Lorton Exchange tract (Hill et al 2000). Both of these sites were subjected to Phase II evaluations in 2001 and data recoveries in 2002 (Gardner and Goode 2001, 2002). Both sites produced large amounts of lithic artifacts from intact deposits, including substantial numbers of diagnostic projectile points dating 44FX2485 to the Late Archaic and 44FX2487 to the Middle Archaic. Site 44FX3465 is the subsurface remains of a former house for guards at the Lorton Prison (029-0947). Although Phase I testing did not produce artifacts, and only identified those features visible on the ground surface, the site was recommended potentially eligible, as further testing was considered necessary to fully ascertain the conditions of the remains (Bowen 2009).

Architectural Resources

During the previous investigation related to the DC2RVA high speed rail project, Dovetail architectural historians conducted a background review encompassing a 0.5-mile radius of the DC2RVA high speed rail project corridor (Chase 2017; Manning et al. 2016; Staton et al. 2016). For the purposes of the current effort, a review of all architectural resources previously recorded since 2016 within a 0.5-mile radius of the Franconia Third Track project archaeological APE was conducted. As the DC2RVA direct APE overlaps with the Franconia Third Track project APE, the previously recorded architectural resources identified in the reports associated with that undertaking are not repeated in this document. For the background

review of the DC2RVA project corridor, please reference the companion documents published between 2016 and 2017 (Chase 2017; Manning et al. 2016; Staton et al. 2016).

Approximately 100 architectural resources have been identified within a 0.5-mile radius of the Franconia Third Track project area that have been surveyed since 2016 (see Appendix A, p. 51). Of those, one resource, the Fort Belvoir Military Railroad Historic Corridor (DHR #029-5724), is listed in the Virginia Landmark Register (VLR) and was determined potentially eligible for NRHP listing by DHR staff in 2016 under Criterion A for its historic associations with military and transportation, particularly its representation of historic military railroads.

Seventy-nine of the 100 architectural resources identified within a 0.5-mile radius of the current Franconia Third Track project area were determined to be not eligible for listing in the NRHP. Two resources are residential subdivisions known as the Loisdale Historic District (029-5932) and the Springfield Forest Subdivision (029-6249). Sixty-five of the 79 ineligible resources are single-family dwellings, 32 of which are located within the Loisdale Historic District (029-5932). Three were recorded as commercial buildings. The remainder of the 79 ineligible resources include seven structures associated with the NRHP-eligible Richmond, Fredericksburg, & Potomac Railroad Historic District (500-0001), two light industrial properties, and one office building.

Of the 100 previously recorded above-ground resources located within 0.5 mile of the current project archaeological APE, 20 were not formally given an NRHP eligibility determination by DHR staff. Nineteen of those are single-family dwellings and one is a playground.

RESULTS OF THE CULTURAL RESOURCE SURVEY

As aforementioned, cultural resource studies were part of the DC2RVA NEPA process (DHR File #2014-0666). Work included Phase I and II architectural and Phase I archaeological technical studies, coordination of resource eligibility and project effect, authoring a MOA to outline stipulations to mitigate adverse effects to historic properties, and intensive pubic and consulting party consultation. The cultural resource process was completed in 2019. The archaeological APE as defined for the DC2RVA high speed rail project included the entire area of ground disturbing activities and staging areas for rail and road modifications (project limits of disturbance); the architectural APE was the entire area of ground-disturbing activities and staging areas of the DC2RVA corridor where indirect affects to a resource's setting and feeling could occur, typically comprising a 500-foot wide corridor along all sides of the limits of disturbance, 1,000 feet near proposed overpasses, one city block in urban areas, and additional areas as warranted due to viewsheds and vistas.

Because the footprint of the Franconia Third Track project completely overlaps with the DC2RVA archaeological APE, no further archaeological work was needed as part of this effort. A summary of the previous studies is presented below. Most of the corridor also received an architectural survey, and this work is summarized below. One segment contains a new elevated bypass, which increases the architectural APE in that segment. This area needed additional survey. The architectural investigation of the Franconia Third Track project thus involved a reconnaissance-level survey of all previously recorded resources and previously unrecorded above-ground resources over 45 years in age within the architectural APE of the new segment.

Previous DC2RVA Project Results

The entire Franconia Third Track project archaeological APE was surveyed during the DC2RVA archaeological survey. The corridor was first the subject of a Phase IA predictive model, followed by a Phase IB subsurface investigation. The northern 6.5 miles of the current corridor were included in Phase IB survey Segment 3, while the southern 1.5 miles were a portion of Segment 4. The corridor was studied through a pedestrian reconnaissance of the APE followed by the excavation of systematic shovel test pits in areas with the potential for intact soils (McKloskey et al. 2016). After a preferred alternative for the DC2RVA project was selected, additional Phase IB archaeological studies were conducted within the APE (McKloskey et al. 2018).

During the survey, it was found that the majority of the corridor was disturbed due to modern development, installation of utilities, and recent modifications to the rail system. No new archaeological sites were found within the DC2RVA archaeological APE. Five previously recorded sites were revisited during the work; none had been previously evaluated for NRHP potential (Table 1, p. 14). Site 44FX0453 is recorded on the east side of the tracks just north of Newington. It is an early-twentieth century domestic site recorded in 1980 and revisited in 1988. Sites 44FX0561 and 44FX0562 are also east of the tracks and are located north of Newington. They were recorded in 1982. Both are small prehistoric artifact scatters with no diagnostic artifacts noted during the original survey. Sites 44FX2455 and 44FX2542 are both

multicomponent sites located just north of the Occoquan River. Site 44FX2455 was recorded based on information obtained from the property owner. It is a multicomponent site spanning the prehistoric period with a small early-twentieth century component. The only named site in the current project archaeological APE is King's Hill House (44FX2542). Recorded in 2001, the site is multicomponent and contains prehistoric artifacts spanning from the Paleoindian through the Late Woodland period; it also has a twentieth-century component. The site was recommended as potentially eligible for the NRHP under Criterion D when it was recorded in 2001, but an evaluation has not been rendered.

The NRHP eligibility of all five sites were examined during the DC2RVA project. It was found that the portion of all sites within the DC2RVA archaeological APE has been disturbed, and no intact soils were noted within the site boundaries in the DC2RVA archaeological APE. As such, it was recommended that the portion of each site located in the DC2RVA archaeological APE did not contribute to the overall eligibility of each resource. The DHR concurred with this recommendation.

Table 1: Archaeological Sites Located within the Franconia Third Track Project Archaeological APE Surveyed During the DC2RVA High Speed Rail Project. While King's Hill is eligible, the portion in the APE does not contribute to the site's eligibility thus it is not a historic property in the APE.

Site #	Name/Description	Period	Eligibility
44FX0453	Domestic Scatter	Early 20 th c	Unevaluated; portion of site in APE does not contribute to eligibility of site, 2016
44FX0561	Campsite	Prehistoric, unknown	Unevaluated; portion of site in APE does not contribute to eligibility of site, 2016
44FX0562	Campsite	Prehistoric, unknown	Unevaluated; portion of site in APE does not contribute to eligibility of site, 2016
44FX2455	Campsite; Domestic	Paleoindian-Late Woodland; Early- 20 th c	Unevaluated; portion of site in APE does not contribute to eligibility of site, 2016
44FX2542	King's Hill House	Paleoindian-Late Woodland; Early- 20 th c	Recommended Potentially Eligible under Criterion D in 2001; portion of site in APE does not contribute to eligibility of site, 2016

During the DC2RVA project, almost 2,300 architectural resources were surveyed at the reconnaissance level (Chase 2017; Manning et al. 2016; Staton et al. 2016). The northern 6.5 miles of the current corridor were included in Phase I survey of segment known as Franconia to Lorton, while the southern 1.5 miles were a portion of the segment known as Lorton to Powells Creek. Approximately 80 of the architectural resources that were surveyed during that project are located along the current Franconia Third Track 8-mile corridor (Table 2, p. 15). Of those, the Richmond, Fredericksburg, & Potomac Railroad (500-0001), Colchester Arms, Fairfax Arms, 10712 Old Colchester Road (029-0043), and Old Colchester Road, Potomac Path, King's Highway (029-0953) were determined eligible or potentially eligible for listing in the NRHP or retain its NRHP and VLR listing while the remainder, which comprise primarily post-World War II single-family dwelling, structures, and light industrial properties, were determined as not eligible.

Table 2: Architectural Resources Located within the Franconia Third Track Project APE Surveyed During the DC2RVA High Speed Rail Project. Note, resources highlighted in *blue* denote those resources that are potentially eligible, eligible, or NRHP/VLR Listed.

DHR #	Resource Name	Resource Address	Eligibility Determination
029-0043	Colchester Arms/ Fairfax Arms	10712 Old Colchester Road	NRHP Listing/ VLR Listing (1979); DHR Concurrence 2016
029-0953	Old Colchester Road/Potomac Path/King's Highway	Old Colchester Road	Potentially Eligible (2012); DHR Concurrence 2016
029-5876	GSA Warehouse Property, Parr- Franconia Warehouse, Franconia- Springfield Parkway	Franconia-Springfield Parkway	DHR Staff: Not Eligible, 2016
029-5917	House, 10428 Old Colchester Road	10428 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5918	House, 10430 Old Colchester Road	10430 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5919	House, 10520 Old Colchester Road	10520 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5920	House, 10624 Old Colchester Road	10624 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5921	House, 10632 Old Colchester Road	10632 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5925	House, 10608 Furnace Road	10608 Furnace Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5926	House, 10600 Furnace Road	10600 Furnace Road - Alt Route 611	DHR Staff: Not Eligible, 2016
029-5927	House/Commercial, 10301 Richmond Highway	10301 Richmond Highway - Alt Route 1	DHR Staff: Not Eligible, 2016
029-5928	Commercial Building, 9920 Richmond Highway	9920 Richmond Highway - Alt Route 1	DHR Staff: Not Eligible, 2016
029-5929	Commercial Building, 8100 Mims Street	8100 Mims Street	DHR Staff: Not Eligible, 2016
029-5932	Loisdale Estates Historic District	Loisdale Road	DHR Staff: Not Eligible, 2016
029-5932-0001	House, 6801 Lois Drive	6801 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0002	House, 6803 Lois Drive	6803 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0003	House, 6804 Lois Drive	6804 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0004	House, 6805 Lois Drive	6805 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0005	House, 6807 Lois Drive	6807 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0006	House, 6808 Lois Drive	6808 Lois Drive	DHR Staff: Not Eligible, 2016
029-5932-0007	House, 6800 Darby Lane	6800 Darby Lane	DHR Staff: Not Eligible, 2016
029-5932-0008	House, 6802 Darby Lane	6802 Darby Lane	DHR Staff: Not Eligible, 2016

DHR #	Resource Name	Resource Address	Eligibility Determination
			DHR Staff: Not
029-5932-0009	House, 6803 Darby Lane	6803 Darby Lane	Eligible, 2016
020 5022 0010			DHR Staff: Not
029-5932-0010	House, 6804 Darby Lane	6804 Darby Lane	Eligible, 2016
029-5932-0011	House, 6806 Darby Lane	6806 Darby Lane	DHR Staff: Not
029 3932 0011	House, 6666 Darby Lane		Eligible, 2016
029-5932-0012	House, 6808 Darby Lane	6808 Darby Lane	DHR Staff: Not
			Eligible, 2016
029-5932-0013	House, 6809 Darby Lane	6809 Darby Lane	DHR Staff: Not Eligible, 2016
			DHR Staff: Not
029-5932-0014	House, 6811 Darby Lane	6811 Darby Lane	Eligible, 2016
			DHR Staff: Not
029-5932-0015	House, 6814 Darby Lane	6814 Darby Lane	Eligible, 2016
020 5022 0016			DHR Staff: Not
029-5932-0016	House, 6701 Jerome Street	6701 Jerome Street	Eligible, 2016
029-5932-0017	House, 6703 Jerome Street	6703 Jerome Street	DHR Staff: Not
027-3732-0017	House, 0705 Jerome Street	6765 Jerome Street	Eligible, 2016
029-5932-0018	House, 6704 Jerome Street	6704 Jerome Street	DHR Staff: Not
	,		Eligible, 2016
029-5932-0019	House, 6705 Jerome Street	6705 Jerome Street	DHR Staff: Not Eligible, 2016
			DHR Staff: Not
029-5932-0020	House, 6707 Jerome Street	6707 Jerome Street	Eligible, 2016
			DHR Staff: Not
029-5932-0021	House, 6708 Jerome Street	6708 Jerome Street	Eligible, 2016
029-5932-0022	House, 6709 Jerome Street	6709 Jerome Street	DHR Staff: Not
029-3932-0022	House, 0709 Jeronie Street	6709 Jerome Street	Eligible, 2016
029-5932-0023	House, 6710 Jerome Street	6710 Jerome Street	DHR Staff: Not
02) 5)52 0025		ovio seronie succe	Eligible, 2016
029-5932-0024	House, 6711 Jerome Street	6711 Jerome Street	DHR Staff: Not
			Eligible, 2016 DHR Staff: Not
029-5932-0025	House, 6700 Ruskin Street	6700 Ruskin Street	Eligible, 2016
			DHR Staff: Not
029-5932-0026	House, 6702 Ruskin Street	6702 Ruskin Street	Eligible, 2016
020 5022 0027	U	CTO2 D al in Stand	DHR Staff: Not
029-5932-0027	House, 6703 Ruskin Street	6703 Ruskin Street	Eligible, 2016
029-5932-0028	House, 6704 Ruskin Street	6704 Ruskin Street	DHR Staff: Not
029 3932 0020		or or Ruskin Street	Eligible, 2016
029-5932-0029	House, 6706 Ruskin Street	6706 Ruskin Street	DHR Staff: Not
			Eligible, 2016 DHR Staff: Not
029-5932-0030	House, 6707 Ruskin Street	6707 Ruskin Street	Eligible, 2016
			DHR Staff: Not
029-5932-0031	House, 6708 Ruskin Street	6708 Ruskin Street	Eligible, 2016
020 5022 0022	Hanna (700 Dath Street	(700 Derel 10 Street	DHR Staff: Not
029-5932-0032	House, 6709 Ruskin Street	6709 Ruskin Street	Eligible, 2016
	Industrial Building, 8207		DHR Staff: Not
029-5933	Backlick Road, R E Lee Electric	8207 Backlick Road	Eligible, 2016
	Company		-
029-5934	House, 7113 Barry Road	7113 Barry Road	DHR Staff: Not
		-	Eligible, 2016

DHR #	Resource Name	Resource Address	Eligibility Determination
029-5935	House, 6496 Windham Avenue	6496 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5936	House, 6497 Windham Avenue	6497 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5937	House, 6500 Windham Avenue	6500 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5938	House, 6505 Windham Avenue	6505 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5939	House, 6512 Windham Avenue	6512 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5940	House, 6516 Windham Avenue	6516 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5941	House, 6524 Windham Avenue	6524 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5942	House, 6531 Windham Avenue	6531 Windham Avenue	DHR Staff: Not Eligible, 2016
029-5943	House, 6423 Melia Street	6423 Melia Street	DHR Staff: Not Eligible, 2016
029-5944	House, 6425 Fleet Drive	6425 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5945	House, 6431 Fleet Drive	6431 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5946	House, 6501 Fleet Drive	6501 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5947	House, 6505 Fleet Drive	6505 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5948	House, 6509 Fleet Drive	6509 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5949	House, 6513 Fleet Drive	6513 Fleet Drive	DHR Staff: Not Eligible, 2016
029-5950	House, 6251 Wills Street	6251 Wills Street	DHR Staff: Not Eligible, 2016
029-5951	House, 6263 Wills Street	6263 Wills Street	DHR Staff: Not Eligible, 2016
029-5952	House, 6274 Wills Street	6274 Wills Street	DHR Staff: Not Eligible, 2016
029-5953	House, 6278 Wills Street	6278 Wills Street	DHR Staff: Not Eligible, 2016
029-5954	House, 6282 Wills Street	6282 Wills Street	DHR Staff: Not Eligible, 2016
029-5955	House, 6283 Wills Street	6283 Wills Street	DHR Staff: Not Eligible, 2016
029-5956	House, 6286 Wills Street	6286 Wills Street	DHR Staff: Not Eligible, 2016
029-5957	House, 6289 Wills Street	6289 Wills Street	DHR Staff: Not Eligible, 2016
029-5958	House, 6290 Wills Street	6290 Wills Street	DHR Staff: Not Eligible, 2016
029-5959	Quonset Hut, 7821-A Loisdale Drive	7821-A Loisdale Drive	DHR Staff: Not Eligible, 2016
500-0001-0015	Culvert, CSX Tracks, west of Cinder Bed Road	Cinder Bed Road	DHR Staff: Not Eligible, 2017

DHR #	Resource Name	Resource Address	Eligibility Determination
500-0001-0016	Bridge, CSX Tracks over Newington Road	Newington Road	DHR Staff: Not Eligible, 2017
500-0001-0017	Bridge, CSX Tracks over Accotink Creek	Accotink Creek	DHR Staff: Not Eligible, 2017
500-0001-0018	Bridge, CSX Tracks over Pohick Creek	Pohick Creek	DHR Staff: Not Eligible, 2017
500-0001-0019	Culvert, CSX Tracks over creek, west of Lorton Market Street	Lorton Market Street	DHR Staff: Not Eligible, 2017
500-0001-0020	Culvert, CSX Tracks over Giles Run	Giles Run	DHR Staff: Not Eligible, 2017
500-0001-0021	Bridge, CSX Tracks over Route 1	Route 1 - Alt Richmond Highway	DHR Staff: Not Eligible, 2017

Previously Recorded Architectural Resources in Elevated Bypass Area

Previously Recorded Architectural Resources Not Resurveyed

The current architectural study involved only the area where the new elevated bypass resulted in an expanded APE. Of the 99 total above-ground resources identified within the architectural APE in this area, there are 38 previously recorded architectural resources that have been given a formal NRHP eligibility determination by DHR staff within the last five years; therefore, they were not revisited during this effort according to DHR guidelines (DHR 2007) (Table 3; Figure 4–Figure 8, pp. 20–24). However, one of the 38 resources (029-5959) was resurveyed in order to expand its resource boundaries and is detailed in the following section of this chapter.

The 37 previously recorded architectural resources that were not revisited during this effort comprise one government property (029-5876), one post-war residential neighborhood (029-5932), 33 single-family dwellings located within the post-war residential neighborhood, one railroad historic district (500-0001), and one railroad structure (500-0001-0015). The Richmond, Fredericksburg, & Potomac Railroad Historic District (500-0001), was determined eligible for listing in the NRHP under Criterion A for transportation by DHR staff in 2018. The remainder of the 37 resources were determined not eligible for NRHP listing. In accordance with DHR guidelines, these 37 resources were not resurveyed during this project. Dovetail recommends that these 37 resources retain their previous eligibility determinations.

Table 3: Previously Recorded Architectural Resources Within the Architectural APE Not Resurveyed During this Effort. Note, resources highlighted in *blue* denote those resources that are recommended as potentially eligible, eligible, or NRHP/VLR Listed.

DHR #	Name/ Address	Date	Previous Eligibility Determination	Dovetail Eligibility Recommendation
029-5876	General Services Administration Warehouse Property, Parr- Franconia Warehouse, 6810 Loisdale Road	1953	Not Eligible, 2016	Remains Not Eligible

DHR #	Name/ Address	Date	Previous Eligibility Determination	Dovetail Eligibility Recommendation
029-5932	Loisdale Estates Historic District	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0001	House, 6801 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0002	House, 6803 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0003	House, 6804 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0004	House, 6805 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0005	House, 6807 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0006	House, 6808 Lois Drive	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0007	House, 6800 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0008	House, 6802 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0009	House, 6803 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0010	House, 6804 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0011	House, 6806 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0012	House, 6808 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0013	House, 6809 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0014	House, 6811 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0015	House, 6814 Darby Lane	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0016	House, 6701 Jerome Street	1959	Not Eligible, 2016	Remains Not Eligible
029-5932-0017	House, 6703 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0018	House, 6704 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0019	House, 6705 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0020	House, 6707 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0021	House, 6708 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0022	House, 6709 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0023	House, 6710 Jerome Street	1959	Not Eligible, 2016	Remains Not Eligible
029-5932-0024	House, 6711 Jerome Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0025	House, 6700 Ruskin Street	1959	Not Eligible, 2016	Remains Not Eligible
029-5932-0026	House, 6702 Ruskin Street	1959	Not Eligible, 2016	Remains Not Eligible
029-5932-0027	House, 6703 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0028	House, 6704 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0029	House, 6706 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0030	House, 6707 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0031	House, 6708 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5932-0032	House, 6709 Ruskin Street	1958	Not Eligible, 2016	Remains Not Eligible
029-5934	House, 7113 Barry Road	1958	Not Eligible, 2016	Remains Not Eligible
500-0001	Richmond, Fredericksburg, & Potomac Railroad Historic District	ca. 1837– 1943	Eligible, 2018	Remains Eligible
500-0001-0015	Culvert, CSX Tracks, west of Cinder Bed Road	ca. 1960	Not Eligible, 2017	Remains Not Eligible

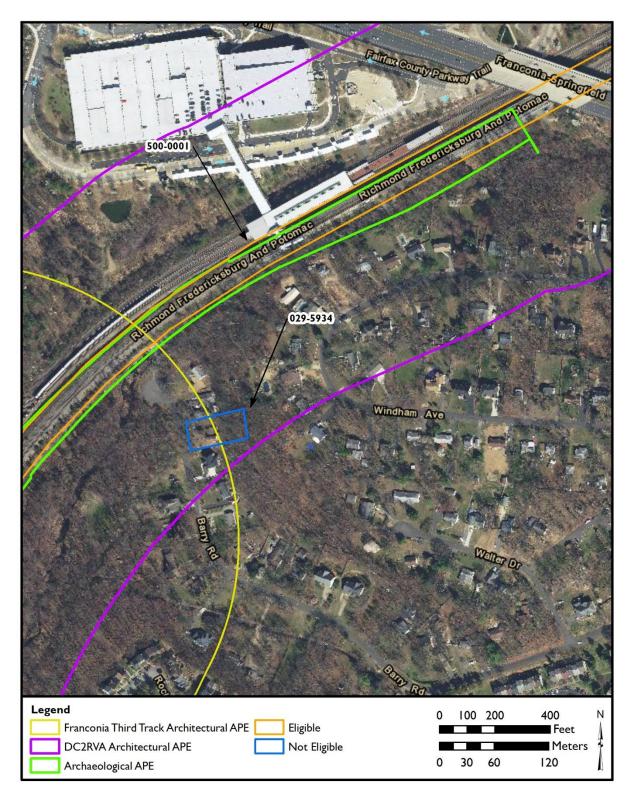


Figure 4: Previously Recorded Architectural Resources Not Resurveyed During the Current Franconia Third Track Project, Map 1 of 5 (VGIN 2015).



Figure 5: Previously Recorded Architectural Resources Not Resurveyed During the Current Franconia Third Track Project, Map 2 of 5 (VGIN 2015).

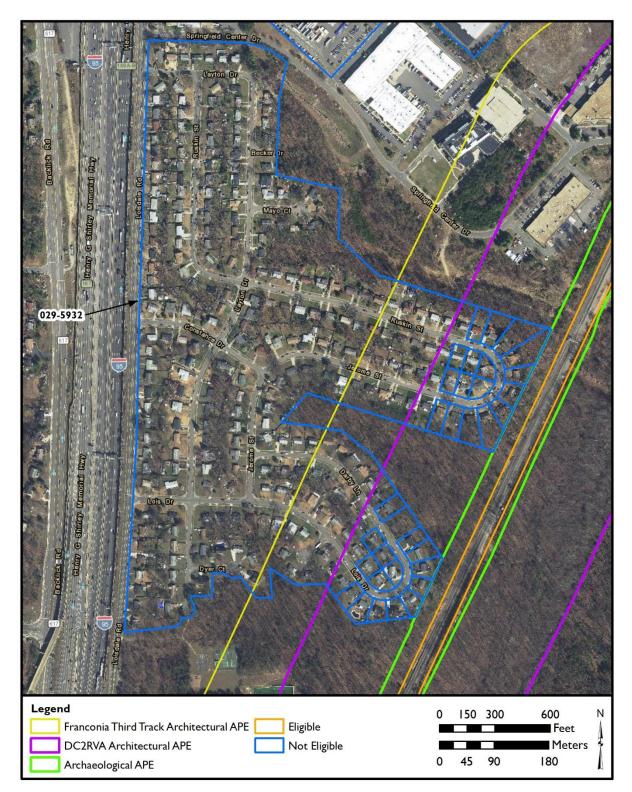


Figure 6: Previously Recorded Architectural Resources Not Resurveyed During the Current Franconia Third Track Project, Map 3 of 5 (VGIN 2015).

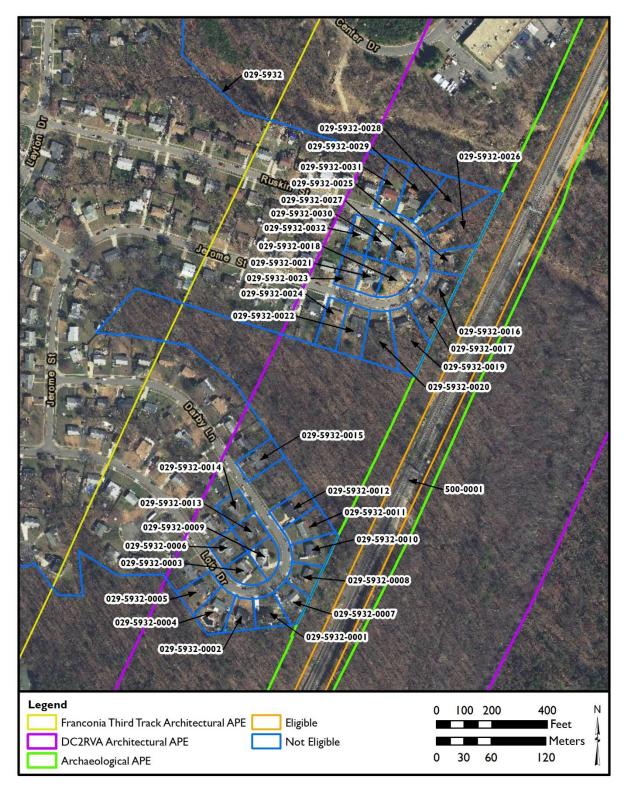


Figure 7: Previously Recorded Architectural Resources Not Resurveyed During the Current Franconia Third Track Project, Map 4 of 5 (VGIN 2015).

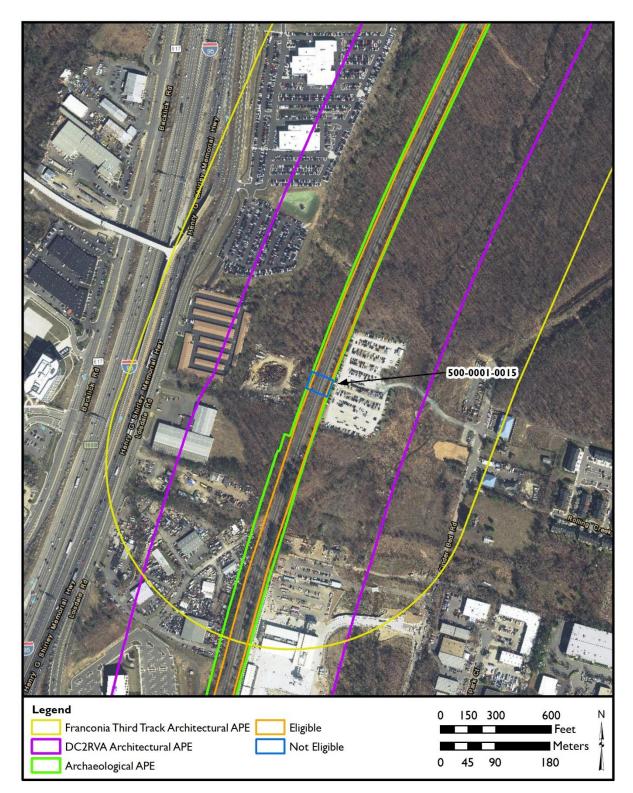


Figure 8: Previously Recorded Architectural Resources Not Resurveyed During the Current Franconia Third Track Project, Map 5 of 5 (VGIN 2015).

Previously Recorded Architectural Resources Resurveyed

Six previously recorded resources were revisited during the current effort. Five resources were previously recorded but not formally evaluated by DHR staff for NRHP eligibility. One additional resource (029-5959) was given an NRHP eligibility determination in 2016; however, during this effort it was determined that the resource boundaries should be expanded and therefore was resurveyed (Table 4, p. 26; Figure 9 and Figure 10, pp. 27–28). The Schaeffer Industrial Park (029-5959) located at 7817 Loisdale Road is an industrial property comprising 17 buildings constructed between around 1970 and 2010 that include an office building, warehouses, Quonset huts, sign, gatehouse, and other industrial buildings. Most buildings are clad in brick veneer or pressed metal and feature very minimal ornamentation.

The remainder of the previously recorded resources surveyed during this effort include five single-family dwellings (029-6629–029-6633) constructed between circa 1930 and circa 1968. One dwelling (029-6629) appears to currently be utilized as a commercial property. They are between one and two stories in height, three to four bays wide, and were constructed in the Minimal Traditional and Ranch styles with several feature minimal Colonial Revival-style elements. Cladding includes brick veneer, siding (vinyl or weatherboard), or a combination thereof. The dwellings are covered by a side-gabled roof and typically feature a chimney either piercing the roof slope or appended to a side elevation. Primary entrances feature single-leaf doors and windows were primarily wood- or vinyl-framed double-hung-sash units and picture or bay units. Buildings are entered via a stoop or an entry porch. It was not uncommon to observed small-scale additions appended to a side elevation. Associated outbuildings include sheds and garages.

The six previously recorded resources revisited during this effort frequently feature common modifications as well as indications of neglect, diminishing the resource's historic integrity. In addition, the dwellings do not possess sufficient architectural significance to be considered eligible for the NRHP and is not the known work of a master. As such, the six properties are **recommended not eligible for individual listing under Criterion C.** They have no known association with a significant event or person and, as such, the six resources are **recommended not eligible for individual listing Criteria A and B. As architectural resources, the six resources were not evaluated under Criterion D.**

DHR #	Name/Address	Date	Previous Eligibility Determination	Current Eligibility Recommendation	Photograph
029-5959	Schaeffer Industrial Park, 7817 Loisdale Drive	ca. 1970	Not Eligible, 2015	Boundaries Expanded; Remains Not Eligible	
029-6629	House, 7813 Cinder Bed Road	ca. 1945	Not Evaluated	Not Eligible	
029-6630	House, 7819 Cinder Bed Road	ca. 1930	Not Evaluated	Not Eligible	
029-6631	House, 7801 Cinder Bed Road	ca. 1930	Not Evaluated	Not Eligible	
029-6632	House, 7123 Barry Road	ca. 1952	Not Evaluated	Not Eligible	
029-6633	House, 7127 Barry Road	ca. 1968	Not Evaluated	Not Eligible	

Table 4: Previously Recorded Architectural Resources Resurveyed Within the Architectural APE.

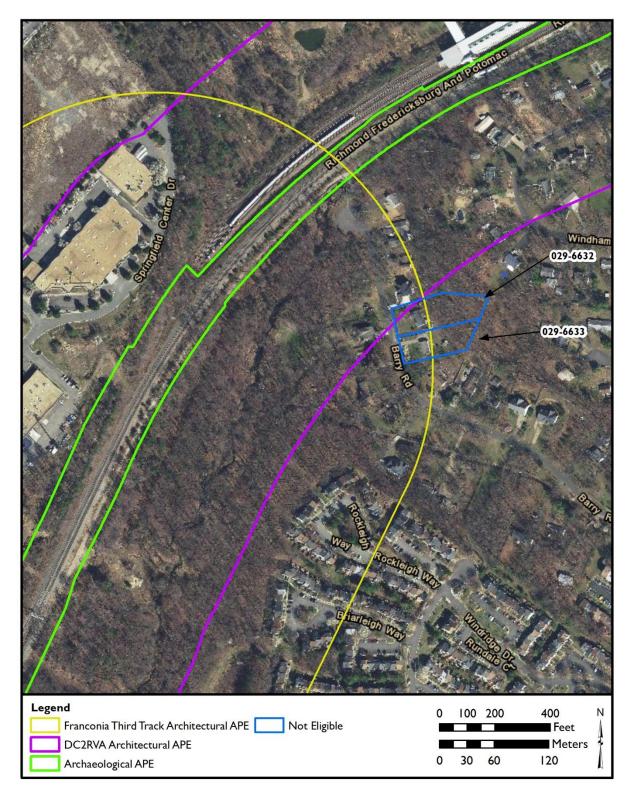


Figure 9: Previously Recorded Architectural Resources Surveyed During the Current Franconia Third Track Project, Map 1 of 2 (VGIN 2015).

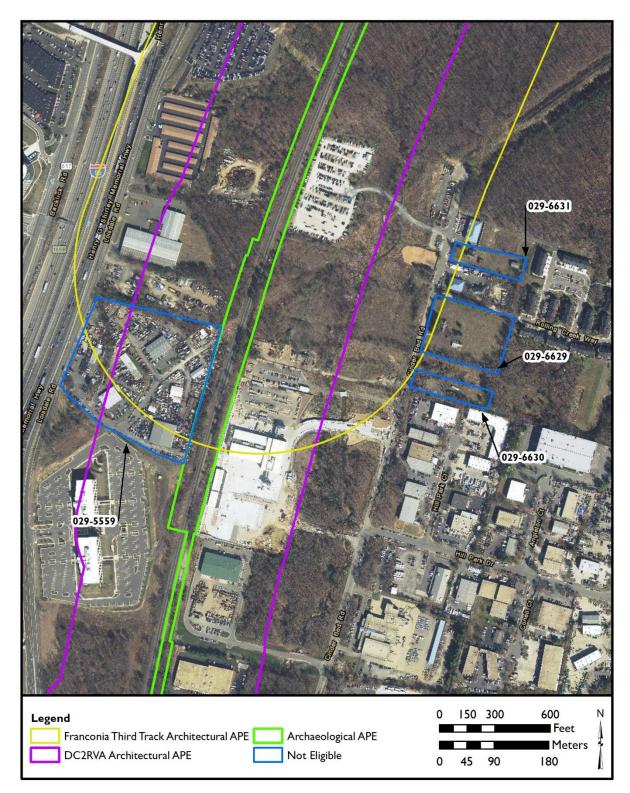


Figure 10: Previously Recorded Architectural Resources Surveyed During the Current Franconia Third Track Project, Map 2 of 2 (VGIN 2015).

Newly Recorded Resources in Elevated Bypass Area

Fifty-six of the architectural resources were newly identified as part of the current survey (Table 4, p. 26; Figure 11 and Figure 12, pp. 40–41). Fifty-four (029-6697–029-6750) of those are single-family dwelling located within the Loisdale Estates Historic District (029-5932), a post-World War II, suburban, residential neighborhood constructed between 1952 and 1960 that was determined not eligible for the NRHP by DHR staff in 2016. These dwellings are typically one story in height, four to six bays wide, and constructed in the Ranch style around 1958. The buildings feature a continuous and sometimes raised foundation typically clad in a brick veneer. Cladding of the structural system includes a brick veneer which occasionally was combined with siding such as vinyl or aluminum. The houses all are covered by a side-gabled roof sheathed in asphalt shingles and typically feature a brick-clad chimney either appended to a side elevation or piercing the roof slope. Occasionally, the chimney would be appended to the façade. It was rare to observe a metal-clad chimney or metal flue.

Primary entrances were off centered on the façade and filled with a single-leaf door made of wood, metal, or fiberglass and metal storm door. They were typically accessed by an entry stoop clad in brick, but occasionally a house featured a partial-width, one-story porch covered by a shed roof. Windows include metal- or vinyl-framed sliding; vinyl- or wood-frame doublehung-sash; and vinyl-, metal-, or wood-framed bay or picture units. It was not uncommon for windows to be flanked by fixed shutters. Smaller-scale additions extending from the rear elevation were not uncommon. Some dwellings feature a carport or an enclosed carport covered by a roof extending from the core of the building on a side elevation. Typical outbuildings associated with these dwellings include one-story sheds. The dwellings frequently feature modifications, such as replacement fenestration or rear additions, diminishing the resource's historic integrity. In addition, the dwellings do not possess sufficient architectural significance to be considered eligible for the NRHP and is not the known work of a master. As such, the 54 dwellings are recommended not eligible for individual listing under Criterion C. They have no known association with a significant event or person and, as such, the 54 dwellings are recommended not eligible for individual listing Criteria A and B. As architectural resources, the 54 dwellings were not evaluated under Criterion D. Since the Loisdale Estates Historic District was determined to be not eligible for the NRHP, none of the resources were evaluated for contributing status to the district.

The two remaining resources (029-6751 and 029-6752) are industrial properties. Colbert Roofing Corporation at 7809 Loisdale Road (029-6751) features a circa-1949, one-story, Minimal Traditional-style dwelling turned office building and several light industrial outbuildings such as sheds and warehouses. Potomac Steel/Same Day Cabinets at 7801 Loisdale Road (029-6752) features a large one-story, combination warehouse and office building features a brick veneer and detailing around fenestration and is covered by a flat roof. The buildings do not possess sufficient architectural significance to be considered eligible for the NRHP and is not the known work of a master. As such, they are **recommended not eligible for individual listing Under Criterion C.** They have no known association with a significant event or person and, as such, the two industrial properties are **recommended not eligible for individual listing Criteria A and B.** As architectural resources, the two industrial properties were not evaluated under Criterion D.

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6697	House, 6826 Dyer Court	ca. 1958	Not Eligible	
029-6698	House, 6821 Lois Drive	ca. 1958	Not Eligible	
029-6699	House, 6819 Lois Drive	ca. 1958	Not Eligible	
029-6700	House, 6817 Lois Drive	ca. 1958	Not Eligible	
029-6701	House, 6813 Lois Drive	ca. 1958	Not Eligible	
029-6702	House, 6811 Lois Drive	ca. 1958	Not Eligible	

Table 5: Newly Recorded Resources Surveyed During the Current Project.

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6703	House, 6809 Lois Drive	ca. 1958	Not Eligible	
029-6704	House, 6810 Lois Drive	ca. 1958	Not Eligible	
029-6705	House, 6812 Lois Drive	ca. 1958	Not Eligible	
029-6706	House, 6814 Lois Drive	ca. 1958	Not Eligible	
029-6707	House, 6816 Lois Drive	ca. 1958	Not Eligible	
029-6708	House, 6818 Lois Drive	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6709	House, 6820 Lois Drive	ca. 1958	Not Eligible	
029-6710	House, 7402 Conway Court	ca. 1958	Not Eligible	
029-6711	House, 7404 Conway Court	ca. 1958	Not Eligible	
029-6712	House, 7403 Conway Court	ca. 1958	Not Eligible	
029-6713	House, 6829 Darby Lane	ca. 1958	Not Eligible	
029-6714	House, 6827 Darby Lane	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6715	House, 6823 Darby Lane	ca. 1958	Not Eligible	
029-6716	House, 6819 Darby Lane	ca. 1958	Not Eligible	
029-6717	House, 6817 Darby Lane	ca. 1958	Not Eligible	
029-6718	House, 6815 Darby Lane	ca. 1958	Not Eligible	
029-6719	House, 6816 Darby Lane	ca. 1958	Not Eligible	
029-6720	House, 6818 Darby Lane	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6721	House, 6820 Darby Lane	ca. 1958	Not Eligible	
029-6722	House, 6822 Darby Lane	ca. 1958	Not Eligible	
029-6723	House, 6824 Darby Lane	ca. 1958	Not Eligible	
029-6724	House, 6826 Darby Lane	ca. 1958	Not Eligible	
029-6725	House, 6828 Darby Lane	ca. 1958	Not Eligible	
029-6726	House, 6807 Jerome Street	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6727	House, 6805 Jerome Street	ca. 1958	Not Eligible	
029-6728	House, 6803 Jerome Street	ca. 1958	Not Eligible	
029-6729	House, 6801 Jerome Street	ca. 1958	Not Eligible	
029-6730	House, 6717 Jerome Street	ca. 1958	Not Eligible	
029-6731	House, 6715 Jerome Street	ca. 1958	Not Eligible	
029-6732	House, 6713 Jerome Street	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6733	House, 6712 Jerome Street	ca. 1958	Not Eligible	
029-6734	House, 6714 Jerome Street	ca. 1958	Not Eligible	
029-6735	House, 6716 Jerome Street	ca. 1958	Not Eligible	
029-6736	House, 6800 Jerome Street	ca. 1958	Not Eligible	
029-6737	House, 6802 Jerome Street	ca. 1958	Not Eligible	
029-6738	House, 6804 Jerome Street	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6739	House, 6801 Ruskin Street	ca. 1958	Not Eligible	
029-6740	House, 6719 Ruskin Street	ca. 1958	Not Eligible	
029-6741	House, 6717 Ruskin Street	ca. 1958	Not Eligible	
029-6742	House, 6715 Ruskin Street	ca. 1958	Not Eligible	
029-6743	House, 6713 Ruskin Street	ca. 1958	Not Eligible	
029-6744	House, 6711 Ruskin Street	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6745	House, 6710 Ruskin Street	ca. 1958	Not Eligible	
029-6746	House, 6712 Ruskin Street	ca. 1958	Not Eligible	
029-6747	House, 6714 Ruskin Street	ca. 1958	Not Eligible	
029-6748	House, 6716 Ruskin Street	ca. 1958	Not Eligible	
029-6749	House, 6718 Ruskin Street	ca. 1958	Not Eligible	
029-6750	House, 6720 Ruskin Street	ca. 1958	Not Eligible	

DHR #	Name/Address	Date	Eligibility Recommendation	Photograph
029-6751	Colbert Roofing Corporation, 7809 Loisdale Road	ca. 1949	Not Eligible	
029-6752	Potomac Steel/Same Day Cabinets, 7801 Loisdale Road	ca. 1970	Not Eligible	

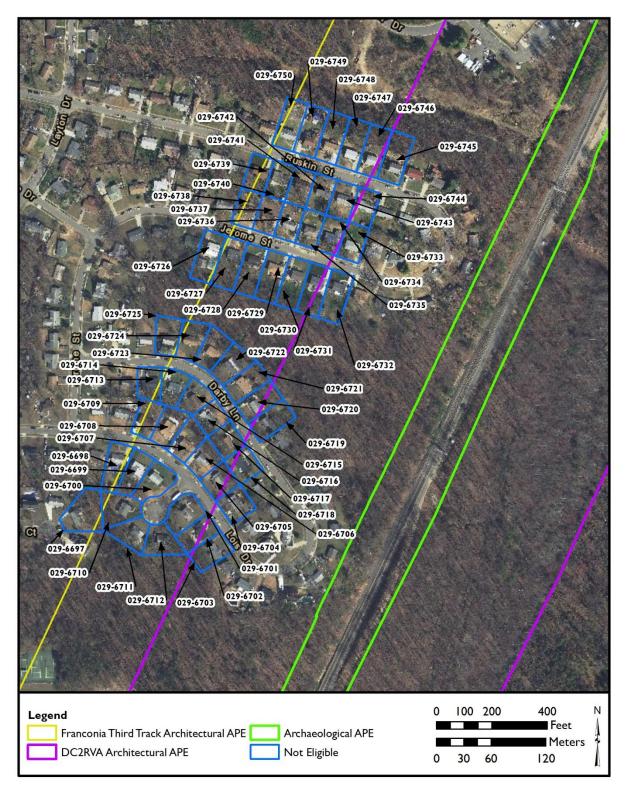


Figure 11: Newly Recorded Architectural Resources Surveyed During the Current Franconia Third Track Project, Map 1 of 2 (VGIN 2015).

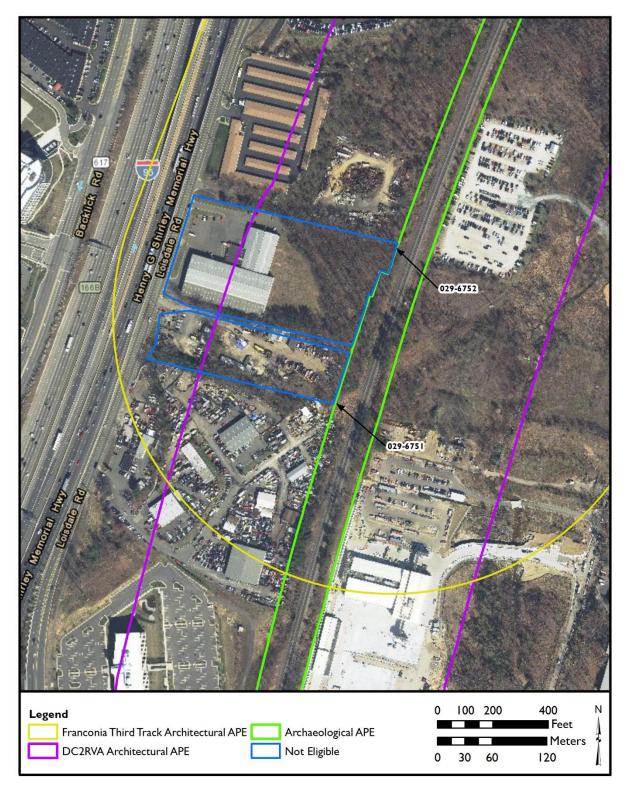


Figure 12: Newly Recorded Architectural Resources Surveyed During the Current Franconia Third Track Project, Map 2 of 2 (VGIN 2015).

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SUMMARY AND RECOMMENDATIONS

On behalf of the DRPT and HDR, Dovetail conducted cultural resource studies for the Franconia Third Track project in Fairfax County, Virginia, in May 2020. Planning associated with improvements to the existing rail system in this area have been ongoing for almost 20 years. Commencing with a Tier 1-level planning study in 2002, the goal has been to identify solutions to rail bottlenecks in northern Virginia. Tier II-level environmental studies commenced in 2014 as part of the DC2RVA high speed rail project. Cultural resource studies were part of the DC2RVA environmental work (DHR File #2014-0666). The cultural resource process was completed in 2019. Since that time, an 8-mile long segment of the rail corridor has been removed from the DC2RVA project and is being constructed independently, referred to as the Franconia Third Track project. While most of the Franconia Third Track area was studied as part of DC2RVA, updated plans include an elevated bypass in one section. This action necessitated an expanded architectural APE in the elevated bypass area and thus additional architectural survey. This addendum report includes a summary of the previous DC2RVA cultural resource studies on this 8-mile corridor and the results of the architectural survey in the expanded architectural APE and is a companion document to Dovetail's reports for the original Phase I survey of the DC2RVA project in this area (Chase 2017; Klein et al. 2015; McCloskey et al. 2016; Manning et al. 2016; Staton et al. 2016).

As the Franconia Third Track archaeological APE and the DC2RVA archaeological APE, are the same, no further archaeological work was needed. The portions of all five previously recorded sites in the archaeological APE do not contribute to overall site eligibility (44FX0453, 44FX0561, 44FX0562, 44FX2455, and 44FX2542), as determined by DHR

During the current study, 99 architectural resources were identified within the architectural APE for the Franconia Third Track project, including 43 previously recorded resources and 56 newly recorded resources that meet the age specifications. Of the 43 previously recorded resources, five were not formally evaluated by DHR staff for NRHP eligibility while 38 were given an NRHP eligibility determination by DHR staff within the last five years; and therefore, were not revisited during this effort. However, one resource with an eligibility determination provided within the last five years (029-5959) was resurveyed due to necessitating a resource boundary expansion.

Of the resources with a previous eligibility determination within the last five years that were not resurveyed during this effort, one resource, the Richmond, Fredericksburg, & Potomac Railroad Historic District (500-0001), was determined to be eligible for the NRHP by DHR staff. The remainder of the 37 resources were determined not eligible for NRHP listing. In accordance with DHR guidelines, these 37 resources were not resurveyed during this project. Dovetail **recommends that they retain their previous eligibility determinations.**

Of the remaining 62 resources of the 99 architectural resources that were surveyed during this effort, six were previously surveyed and 56 were newly identified as part of this effort. The 62 architectural resources **are recommended as not eligible for NRHP listing** (Table 6, p. 44).

Table 6: Summary of Architectural Resources and Recommendations Within the Architectural APE. Note, resources highlighted in *blue* denote those resources that are recommended as potentially eligible, eligible, NRHP or VLR Listed.

DHR #	Name/Address	Eligibility Recommendation
029-5876	General Services Administration Warehouse Property, Parr-Franconia Warehouse, 6810 Loisdale Road	Remains Not Eligible
029-5932	Loisdale Estates Historic District	Remains Not Eligible
029-5932-0001	House, 6801 Lois Drive	Remains Not Eligible
029-5932-0002	House, 6803 Lois Drive	Remains Not Eligible
029-5932-0003	House, 6804 Lois Drive	Remains Not Eligible
029-5932-0004	House, 6805 Lois Drive	Remains Not Eligible
029-5932-0005	House, 6807 Lois Drive	Remains Not Eligible
029-5932-0006	House, 6808 Lois Drive	Remains Not Eligible
029-5932-0007	House, 6800 Darby Lane	Remains Not Eligible
029-5932-0008	House, 6802 Darby Lane	Remains Not Eligible
029-5932-0009	House, 6803 Darby Lane	Remains Not Eligible
029-5932-0010	House, 6804 Darby Lane	Remains Not Eligible
029-5932-0011	House, 6806 Darby Lane	Remains Not Eligible
029-5932-0012	House, 6808 Darby Lane	Remains Not Eligible
029-5932-0013	House, 6809 Darby Lane	Remains Not Eligible
029-5932-0014	House, 6811 Darby Lane	Remains Not Eligible
029-5932-0015	House, 6814 Darby Lane	Remains Not Eligible
029-5932-0016	House, 6701 Jerome Street	Remains Not Eligible
029-5932-0017	House, 6703 Jerome Street	Remains Not Eligible
029-5932-0018	House, 6704 Jerome Street	Remains Not Eligible
029-5932-0019	House, 6705 Jerome Street	Remains Not Eligible
029-5932-0020	House, 6707 Jerome Street	Remains Not Eligible
029-5932-0021	House, 6708 Jerome Street	Remains Not Eligible
029-5932-0022	House, 6709 Jerome Street	Remains Not Eligible
029-5932-0023	House, 6710 Jerome Street	Remains Not Eligible
029-5932-0024	House, 6711 Jerome Street	Remains Not Eligible
029-5932-0025	House, 6700 Ruskin Street	Remains Not Eligible
029-5932-0026	House, 6702 Ruskin Street	Remains Not Eligible
029-5932-0027	House, 6703 Ruskin Street	Remains Not Eligible
029-5932-0028	House, 6704 Ruskin Street	Remains Not Eligible
029-5932-0029	House, 6706 Ruskin Street	Remains Not Eligible
029-5932-0030	House, 6707 Ruskin Street	Remains Not Eligible
029-5932-0031	House, 6708 Ruskin Street	Remains Not Eligible
029-5932-0032	House, 6709 Ruskin Street	Remains Not Eligible
029-5934	House, 7113 Barry Road	Remains Not Eligible
029-5959	Schaeffer Industrial Park, 7817 Loisdale Drive	Remains Not Eligible

DHR #	Name/Address	Eligibility Recommendation
029-6629	House, 7813 Cinder Bed Road	Not Eligible
029-6630	House, 7819 Cinder Bed Road	Not Eligible
029-6631	House, 7801 Cinder Bed Road	Not Eligible
029-6632	House, 7123 Barry Road	Not Eligible
029-6633	House, 7127 Barry Road	Not Eligible
029-6697	House, 6826 Dyer Court	Not Eligible
029-6698	House, 6821 Lois Drive	Not Eligible
029-6699	House, 6819 Lois Drive	Not Eligible
029-6700	House, 6817 Lois Drive	Not Eligible
029-6701	House, 6813 Lois Drive	Not Eligible
029-6702	House, 6811 Lois Drive	Not Eligible
029-6703	House, 6809 Lois Drive	Not Eligible
029-6704	House, 6810 Lois Drive	Not Eligible
029-6705	House, 6812 Lois Drive	Not Eligible
029-6706	House, 6814 Lois Drive	Not Eligible
029-6707	House, 6816 Lois Drive	Not Eligible
029-6708	House, 6818 Lois Drive	Not Eligible
029-6709	House, 6820 Lois Drive	Not Eligible
029-6710	House, 7402 Conway Court	Not Eligible
029-6711	House, 7404 Conway Court	Not Eligible
029-6712	House, 7403 Conway Court	Not Eligible
029-6713	House, 6829 Darby Lane	Not Eligible
029-6714	House, 6827 Darby Lane	Not Eligible
029-6715	House, 6823 Darby Lane	Not Eligible
029-6716	House, 6819 Darby Lane	Not Eligible
029-6717	House, 6817 Darby Lane	Not Eligible
029-6718	House, 6815 Darby Lane	Not Eligible
029-6719	House, 6816 Darby Lane	Not Eligible
029-6720	House, 6818 Darby Lane	Not Eligible
029-6721	House, 6820 Darby Lane	Not Eligible
029-6722	House, 6822 Darby Lane	Not Eligible
029-6723	House, 6824 Darby Lane	Not Eligible
029-6724	House, 6826 Darby Lane	Not Eligible
029-6725	House, 6828 Darby Lane	Not Eligible
029-6726	House, 6807 Jerome Street	Not Eligible
029-6727	House, 6805 Jerome Street	Not Eligible
029-6728	House, 6803 Jerome Street	Not Eligible
029-6729	House, 6801 Jerome Street	Not Eligible
029-6730	House, 6717 Jerome Street	Not Eligible
029-6731	House, 6715 Jerome Street	Not Eligible

DHR #	Name/Address	Eligibility Recommendation
029-6732	House, 6713 Jerome Street	Not Eligible
029-6733	House, 6712 Jerome Street	Not Eligible
029-6734	House, 6714 Jerome Street	Not Eligible
029-6735	House, 6716 Jerome Street	Not Eligible
029-6736	House, 6800 Jerome Street	Not Eligible
029-6737	House, 6802 Jerome Street	Not Eligible
029-6738	House, 6804 Jerome Street	Not Eligible
029-6739	House, 6801 Ruskin Street	Not Eligible
029-6740	House, 6719 Ruskin Street	Not Eligible
029-6741	House, 6717 Ruskin Street	Not Eligible
029-6742	House, 6715 Ruskin Street	Not Eligible
029-6743	House, 6713 Ruskin Street	Not Eligible
029-6744	House, 6711 Ruskin Street	Not Eligible
029-6745	House, 6710 Ruskin Street	Not Eligible
029-6746	House, 6712 Ruskin Street	Not Eligible
029-6747	House, 6714 Ruskin Street	Not Eligible
029-6748	House, 6716 Ruskin Street	Not Eligible
029-6749	House, 6718 Ruskin Street	Not Eligible
029-6750	House, 6720 Ruskin Street	Not Eligible
029-6751	Colbert Roofing Corporation, 7809 Loisdale Road	Not Eligible
029-6752	Potomac Steel/Same Day Cabinets, 7801 Loisdale Road	Not Eligible
500-0001	Richmond, Fredericksburg, & Potomac Railroad Historic District	Remains Eligible
500-0001-0015	Culvert, CSX Tracks, west of Cinder Bed Road	Remains Not Eligible

REFERENCES

Bowen, Chris

2009 Phase I Archaeological Survey of Sections of the Noman Cole Water Re-Use Line, Fairfax County, Virginia. Prepared for Greeley and Hansen LLC and the Planning and Design Division Department of Public Works and Environmental Services Fairfax County. Versar, Inc. Springfield, Virginia.

Chase, Kristine A.

2017 Architectural Reconnaissance Survey for the Washington, D.C., to Richmond, Virginia High Speed Rail Project: Rosslyn to Alexandria (ROAF) through Buckingham Branch/Hospital Wye (BBHW) Segments. DC2RVA Project Team, Richmond, Virginia.

Chatelain, Edward R., and Michael F. Johnson

1982 I-95–Rt. 1 Bypass. Fairfax County Archaeological Survey, Fairfax.

Comer, Douglas

2012 Phase I and II Archaeological Investigations at the Rochambeau Campsite in the BLM Meadowood Special Recreation Management Area (SRMA) and Nearby Phase I Investigations at Two Trail Routes and a Meadow Restoration Area. Cultural Site Research Management. Baltimore, Maryland.

Esri

- 2018a World Topo. Electronic document, http://services.arcgisonline.com/arcgis/ services, accessed June 2020.
- 2018b United States Geological Survey. Electronic document, http://services.arcgisonline.com/arcgis/services, accessed June 2020.

Fidel, Stuart

1996 Phase I Archeological Survey of the Proposed Lorton Pumpover Project, Fairfax County, Virginia. John Millner Associates Inc., Alexandria, Virginia.

Gardner, William M., and Jeff Davis

1994 Phase I Archeological Reconnaissance of a Portion of the Mt. Air Property, Fairfax County, Virginia. Thunderbird Archeological Associates, Inc., Woodstock, Virginia.

Gardner, William M., and Charles E. Goode

- 2001 Phase II Archeological Investigations af 44FX2485 and 44FX2487, Lorton Exchange Tract, Fairfax County, Virginia. Thunderbird Archeological Associates, Inc., Woodstock, Virginia.
- 2002 Phase III Archeological Data Recovery Investigations of 44FX2485 and 44FX2487, Fairfax County, Virginia. Thunderbird Archeological Associates, Inc., Woodstock, Virginia.

Gardner, William M., and Kimberly A. Snyder

1995 A Phase I Archeological Resources Reconnaissance and Architectural Assessment of a 20 Acre Parcel Near Lorton, Fairfax County, Virginia. Thunderbird Archeological Associates, Inc., Woodstock, Virginia.

Goode, Cynthia V., Charles E. Goode, and Sarah G. Traum

- 2018 Cultural Resources Survey for the Frontier Drive Extension and Braided Ramps Project, Springfield, Fairfax County, Virginia. Commonwealth Heritage Group, Inc., Alexandria, Virginia.
- González, Marco A., and Michael L. Carmody
 - 2009 Phase I Archaeological Survey of the I-96 Defense Access Road Ramps to Fort Belvoir's North Area, Fairfax County, Virginia. Dovetail Cultural Resource Group I, Inc., Fredericksburg, Virginia.
- Hill, Phillip J., Cynthia L. Pfanstiehl, et al.
 - 2000 A Phase I Archeological Survey of the Lorton Exchange Tract and an Archeological Assessment of the Meadowood Farm Property: Two Study Areas Located in Fairfax County, Virginia (2 Vol.). Archaeological Testing & Consulting, Inc., Silver Spring, Maryland.

Klein, Mike, Emily Calhoun, Marco González, and Earl E. Proper

2015 Archaeological Background Review and Predictive Model for the Washington, D.C., to Richmond, Virginia High Speed Rail Corridor. DC2RVA Project Team, Richmond, Virginia.

Klein, Terry H.

1979 Archaeological Reconnaissance Survey: Proposed Drive-up Facility and Parking Lot for the Division of Motor Vehicles, Franconia Branch, Franconia, Virginia. Virginia Research Center for Archaeology, Williamsburg.

Koski-Karell

- 1981 Springfield Bypass & Extension, Fairfax County, Virginia: Technical Report: Cultural Resources, Vol. I. Karell Archaeological Services, Washington, D.C.
- LeeDecker, Charles H., Charles D. Cheek, Amy Friedlander, and Teresa E. Ossim
 1984 Cultural Resource Survey and Evaluation at Fort Belvoir, Virginia. Soil Systems, Inc., Alexandria, Virginia.

Levinthal, Aaron, Dawn M. Frost, and Carol D. Tyrer

2007 Phase I Archaeological Survey of Three Trails Meadowood Special Reserve Recreation Management Area, Fairfax County, Virginia. Circa~ Cultural Resource Management, LLC, Williamsburg, Virginia.

McCloskey, Kevin, Earl Proper, Curtis McCoy, Emily Calhoun, Morgan MacKenzie, and Joseph Blondino

2016 Phase IB Archaeological Survey for the Washington, D.C., to Richmond, Virginia High Speed Rail Project: Rosslyn to Alexandria (ROAF) through Buckingham Branch/Hospital Wye (BBHW) Segments. DC2RVA Project Team, Richmond, Virginia.

McCloskey, Kevin, Emily Calhoun, Kerry González, and Mike Klein

2018 Phase IB Archaeological Survey for the Washington, D.C., to Richmond, Virginia High Speed Rail Project: Preferred Alternative Limits of Disturbance. DC2RVA Project Team, Richmond, Virginia.

Manning, M. Chris, Earl Proper, Adriana Lesiuk, and Heather Dollins Staton

2016 Architectural Reconnaissance Survey for the Washington, D.C., to Richmond, Virginia High Speed Rail Project: Franconia to Lorton (FRLO) Segment, Fairfax County. DC2RVA Project Team, Richmond, Virginia.

Polk, II, Harding, and Ronald A. Thomas

- 1991 Phase I Investigations of Various Development Sites and Training Areas, Fort Belvoir, Virginia: Volumes I and II. Mid-Atlantic Archaeological Research Associates, Inc., Williamsburg, Virginia.
- Polk, II, Harding, Jerome D. Traver, and Ronald A. Thomas
 - 1993 A Phase I Survey of Fort Belvoir, Virginia: Volumes I and II. Mid-Atlantic Archaeological Research Associates, Inc., Williamsburg, Virginia.
- Pullins, Stevan C.
 - 1993 Phase III Archaeological Data Recovery for Mitigation of Adverse Effects to Site 44FX457; Proposed Route 29, Springfield Bypass Project, Fairfax County, Virginia. William and Mary Center for Archaeological Research, Williamsburg, Virginia.

Sipe, Boyd, and Andres Garzon-Oechsle

2011 Phase I Archaeological Investigation: Gunston Commerce Center Property, Fairfax County, Virginia. Thunderbird Archeology, Gainesville, Virginia.

Smith, Jeremy

2016 Phase I Archaeological Investigation: Giles Overlook, Fairfax County, Virginia. Thunderbird Archeology, Gainesville, Virginia.

Sperling, Christopher, Elizabeth Peebles, and Megan Veness

2014 2014 Archaeological Survey of the Enyedi Property, Old Colchester Park and Preserve. Lorton, Fairfax County, Virginia. Fairfax County Park Authority, Fairfax, Virginia.

Staton, Heather Dollins, M. Chris Manning, and Adriana Lesiuk

2016 Architectural Reconnaissance Survey for the Washington, D.C., to Richmond, Virginia High Speed Rail Project: Lorton to Powells Creek (LOPC) Segment, Prince William and Fairfax Counties. DC2RVA Project Team, Richmond, Virginia. Virginia Department of Historic Resources (DHR)

2017 *Guidelines for Conducting Historic Resources Survey in Virginia.* Virginia Department of Historic Resources, Richmond.

Virginia Geographic Information Network (VGIN)

2015 VBMP Most Recent Imagery Service – WGS Web Mercator (VGIN). Electronic document, http://services.arcgisonline.com/arcgis/services, accessed June 2020.

APPENDIX A: BACKGROUND REVIEW TABLES

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Table of Archaeological Resources within a 0.5-Mile Radius of the Franconia Third Track Project Archaeological APE. Note: Temporal designations are presented as they appear in the Virginia Cultural Resource Information System (VCRIS) records and were not altered for report consistency.

DHR #	Туре	Period	Eligibility Determination
44FX0028	Camp	Early Archaic	Not Evaluated
44FX0119	Dwelling, single	Early National Period, Antebellum Period	Not Evaluated
44FX0453	Camp, temporary, Dwelling, single, Farmstead	Antebellum Period, Civil War, Reconstruction and Growth	Not Evaluated
44FX0454	Mill	Unknown	Not Evaluated
44FX0455	Dwelling, single, Railroad	19th Century: 2nd half, 20th Century: 1st half	Not Evaluated
44FX0456	Railroad	19th Century: 3rd quarter	Not Evaluated
44FX0457	Camp, Lithic workshop	Early Archaic, Middle Archaic, Late Archaic, Early/Middle Woodland	Federal Det. of Eligibility (1984)
44FX0549	Camp	Late Woodland	Not Evaluated
44FX0561	Camp, temporary	Pre-Contact	Not Evaluated
44FX0562	Camp, temporary	Pre-Contact	Not Evaluated
44FX0567	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0568	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0717	Barn, Lithic scatter	Early Archaic, Middle Archaic, Late Woodland, 18th Century: 2nd half	Not Evaluated
44FX0722	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0821	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0822	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0823	Camp, temporary	Unknown	Not Evaluated
44FX0824	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0825	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0826	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0827	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0828	Camp, temporary, Lithic quarry	Early Archaic	Not Evaluated
44FX0829	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX0832	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0841	Mound, burial	Prehistoric/Unknown	Not Evaluated
44FX0886	Unknown	20th Century: 1st half	Not Evaluated
44FX0887	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0888	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0889	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0890	Unknown	Prehistoric/Unknown	Not Evaluated
44FX0965	Unknown	19th Century: 2nd half, 20th Century: 1st quarter	Not Evaluated
44FX1059	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1060	Unknown	Unknown	Not Evaluated
44FX1102	Camp	Historic/Unknown, Prehistoric/Unknown	Not Evaluated
44FX1103	Camp, Other	Late Archaic, Early Woodland, Middle Woodland, Late Woodland, 18th Century: 4th quarter, 20th Century	Not Evaluated
44FX1104	Farmstead	19th Century: 2nd half	Not Evaluated
44FX1105	Camp	Prehistoric/Unknown	Not Evaluated
44FX1106	Camp	Prehistoric/Unknown	Not Evaluated

DHR #	Туре	Period	Eligibility Determination
44FX1107	Camp	Historic/Unknown, Pre-Contact	Not Evaluated
44FX1108	Camp, Trash scatter	Prehistoric/Unknown, 19th Century: 4th quarter, 20th Century: 1st quarter	Not Evaluated
44FX1109	Camp	Prehistoric/Unknown	Not Evaluated
44FX1110	Camp	Prehistoric/Unknown	Not Evaluated
44FX1111	Trash scatter	20th Century: 1st quarter	Not Evaluated
44FX1112	Camp	Prehistoric/Unknown	DHR Staff: Not Eligible (2008)
44FX1138	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1139	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1167	Cemetery	19th Century, 20th Century	Not Evaluated
44FX1168	Cemetery	20th Century	Not Evaluated
44FX1169	Cemetery	19th Century: 4th quarter, 20th Century	Not Evaluated
44FX1109	Cemetery	19th Century: 4th quarter, 20th Century	Not Evaluated
44FX1491	Unknown	Unknown	Not Evaluated
44FX1491 44FX1548	Unknown	Unknown	Not Evaluated
44FX1548	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1549 44FX1551	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1603	Cemetery	19th Century: 4th quarter	Not Evaluated
44FX1605	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX1606	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX1607	Other	19th Century: 2nd/3rd quarter	Not Evaluated
44FX1608	Earthworks	19th Century: 3rd quarter	Not Evaluated
44FX1614	Unknown	Unknown	Not Evaluated
44FX1615	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1955	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX1991	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1992	Unknown	Prehistoric/Unknown	Not Evaluated
44FX1993	Camp, temporary	Historic/Unknown, Prehistoric/Unknown	Not Evaluated
44FX1996	Artifact scatter, Farmstead	Pre-Contact, Reconstruction and Growth, World War I to World War II	Not Evaluated
44FX2005	Camp, temporary	Prehistoric/Unknown	Not Evaluated
44FX2006	Unknown	Unknown	Not Evaluated
44FX2007	Unknown	20th Century	Not Evaluated
44FX2016	Other	Pre-Contact	Not Evaluated
44FX2043	Other	Prehistoric/Unknown, 20th Century	Not Evaluated
44FX2067	Camp	Prehistoric/Unknown	Not Evaluated
44FX2068	Camp	Prehistoric/Unknown	Not Evaluated
44FX2069	Farmstead	19th Century, 20th Century	Not Evaluated
44FX2070	Camp	Prehistoric/Unknown	Not Evaluated
44FX2071	Camp	Prehistoric/Unknown	Not Evaluated
44FX2072	Camp	Prehistoric/Unknown	Not Evaluated
44FX2074	Camp	Prehistoric/Unknown	Not Evaluated
44FX2075	Camp	Middle Archaic	Not Evaluated
44FX2076	Camp	Middle Archaic, Late Archaic, Early/Middle Woodland, Late Woodland	Not Evaluated
44FX2077	Camp	Paleo-Indian, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, Late Woodland	Not Evaluated
44FX2078	Camp	Prehistoric/Unknown	Not Evaluated
44FX2079	Camp	Prehistoric/Unknown	Not Evaluated
44FX2080	Camp	Late Archaic	Not Evaluated

DHR #	Туре	Period	Eligibility Determination
44FX2081	Camp	Prehistoric/Unknown	Not Evaluated
44FX2082	Camp	Early Archaic, Middle Archaic, Late Archaic, Early/Middle Woodland	Not Evaluated
44FX2083	Camp	Prehistoric/Unknown	Not Evaluated
44FX2084	Camp	Prehistoric/Unknown	Not Evaluated
44FX2085	Camp	Prehistoric/Unknown	Not Evaluated
44FX2086	Camp	Prehistoric/Unknown	Not Evaluated
		19th Century: 2nd half, 20th Century: 1st	DHR Staff: Not
44FX2166	Dwelling, single	half	Eligible (1996)
44FX2183	Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (1997)
44FX2184	Lithic scatter	Late Woodland	DHR Staff: Not Eligible (1997)
44FX2185	Lithic scatter	Prehistoric/Unknown	DHR Staff: Potentially Eligible (1997)
44FX2186	Lithic scatter	Prehistoric/Unknown	DHR Staff: Potentially Eligible (1996)
44522107	Camp, temporary,	Late Archaic, Early Woodland, Middle	DHR Staff: Potentially
44FX2187	Lithic workshop	Woodland	Eligible (1997)
44FX2191	Lithic scatter	Prehistoric/Unknown	DHR Staff: Not
			Eligible (1997)
44FX2192	Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (1997)
44FX2218	Camp	Prehistoric/Unknown	Not Evaluated
44FX2221	Dwelling, single	19th Century: 1st half, 20th Century: 1st half	Not Evaluated
44FX2222	Trash pit	20th Century: 1st half	Not Evaluated
44FX2371	Camp	Prehistoric/Unknown	Not Evaluated
44FX2399	Dwelling, single	19th Century, 20th Century	Not Evaluated
44FX2476	Camp, base, Quarry	Prehistoric/Unknown	DHR Staff: Not Eligible
44FX2477	Camp, base, Quarry	Prehistoric/Unknown	DHR Staff: Not Eligible (2001)
44FX2478	Camp, base, Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (2001)
44FX2479	Camp, base, Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (2001)
44FX2480	Camp, base, Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (2001)
44FX2481	Camp, Lithic scatter	Unknown	DHR Staff: Not Eligible (2001)
44FX2482	Camp, Lithic scatter	Prehistoric/Unknown	DHR Staff: Not
44FX2483	Agricultural field, Other	20th Century	Eligible (2001) DHR Staff: Not Eligible (2001)
44FX2484	Camp, Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (2001)
44FX2485	Camp, Lithic scatter	Late Archaic	DHR Staff: Potentially Eligible (2001)
44FX2487	Camp, base, Lithic workshop	Middle Archaic	DHR Staff: Potentially Eligible (2001)

DHR #	Туре	Period	Eligibility Determination
-			DHR Staff: Not
44FX2488	Camp, Lithic scatter	Prehistoric/Unknown	Eligible (2001)
			DHR Staff: Not
44FX2489	Camp, Lithic scatter	Prehistoric/Unknown	Eligible (2001)
44FX2492	Camp	Unknown	Not Evaluated
44FX2493	Camp	Late Archaic Period	Not Evaluated
44FX2494	Camp	Prehistoric/Unknown	Not Evaluated
44FX2524	Unknown	Unknown	Not Evaluated
44FX2531	Camp	Prehistoric/Unknown	Not Evaluated
44FX2532	Camp	Prehistoric/Unknown	Not Evaluated
44FX2532 44FX2533	Camp	Prehistoric/Unknown	Not Evaluated
44672333	Camp	Fieldstoric/ Ulikilowii	DHR Staff: Not
44FX2543	Unknown	Historic/Unknown	Eligible (2002)
			DHR Staff: Not
44FX2544	Road	Historic/Unknown	Eligible (2002)
			DHR Staff: Not
44FX2545	Dwelling, single	20th Century: 2nd/3rd quarter	Eligible (2002)
44FX2556	Camp	Prehistoric/Unknown	Not Evaluated
H1 M2550	Camp	Reconstruction and Growth, World War I to	DHR Staff: Not
44FX2557	Railroad bed	World War II, The New Dominion	Eligible (2019)
44FX2599	Unknown	Historic/Unknown	Not Evaluated
44FX2603	Camp	Prehistoric/Unknown	Not Evaluated
44FX2604	Camp	Prehistoric/Unknown	Not Evaluated
44FX2605	Camp	Prehistoric/Unknown	Not Evaluated
44FX2608	Camp	Prehistoric/Unknown	Not Evaluated
44FX2644	Camp	Indeterminate	Not Evaluated
441 A2044	Camp	Pre-Contact, Reconstruction and Growth,	Not Evaluated
44FX2645	Artifact scatter,	World War I to World War II, The New	Not Evaluated
441 ⁷ A2043	Camp	Dominion, Post Cold War	
		Indeterminate, Pre-Contact, 18th Century:	
44FX2646	Camp	4th quarter	Not Evaluated
44FX2647	Camp	Indeterminate	Not Evaluated
44FX2648	Camp	Indeterminate	Not Evaluated
44FX2649	Camp	Indeterminate	Not Evaluated
44FX2650	Camp	Pre-Contact	Not Evaluated
44FX2651	Camp	Pre-Contact	Not Evaluated
44FX2664	Camp	Indeterminate	Not Evaluated
44FX2810	Unknown	Prehistoric/Unknown	Not Evaluated
44FX2810 44FX2828	Trash scatter	20th Century: 2nd quarter	Not Evaluated
44FX2828 44FX2917	Farmstead	19th Century: 2nd quarter	Not Evaluated
44FX2917 44FX3008	Mill	19th Century	Not Evaluated
44FX3008 44FX3009	Lithic quarry	Prehistoric/Unknown	Not Evaluated
44FX3009 44FX3073	Dwelling, single	Prehistoric/Unknown, 19th Century	Not Evaluated
	6, 6	Historic/Unknown, Prehistoric/Unknown	
44FX3074 44FX3129	Camp, temporary	· · · · · · · · · · · · · · · · · · ·	Not Evaluated
	Road	18th Century (1700 - 1799) Prehistoric/Unknown	Not Evaluated
44FX3139	Camp		Not Evaluated
44FX3140	Camp	Prehistoric/Unknown	Not Evaluated
44FX3155	Trash scatter	19th Century: 4th quarter	Not Evaluated

DHR #	Туре	Period	Eligibility Determination
44FX3194	Artifact scatter, Cemetery, Dwelling, single	Paleo-Indian, Early Archaic Period, Middle Archaic Period, Late Archaic Period, Early Woodland, Middle Woodland, Late Woodland, Contact Period, Colony to Nation, Early National Period, Antebellum Period, Civil War, Reconstruction and Growth, World War I to World War II, The New Dominion, Post Cold War	DHR Evaluation Committee: Eligible (2018)
44FX3195	Trash scatter	20th Century	Not Evaluated
44FX3200	Dwelling, single	18th Century: 4th quarter, 19th Century: 1st half	Not Evaluated
44FX3202	Unknown	Unknown	Not Evaluated
44FX3203	Unknown	Unknown	Not Evaluated
44FX3204	Dwelling, single, Lithic scatter	Early Woodland, Late Woodland, 18th Century: 4th quarter, 19th Century: 1st quarter, 20th Century	Not Evaluated
44FX3230	Trash scatter	Historic/Unknown	Not Evaluated
44FX3275	Trash scatter	20th Century	Not Evaluated
44FX3446	Camp, temporary	Prehistoric/Unknown, 18th Century: 2nd half	DHR Staff: Eligible (2012)
44FX3446- 0001	Camp, temporary	18th Century: 4th quarter	Not Evaluated
44FX3446- 0002	Camp, temporary	18th Century: 4th quarter	Not Evaluated
44FX3446- 0003	Camp, temporary	18th Century: 4th quarter	Not Evaluated
44FX3460	Farmstead, Other	Prehistoric/Unknown, 19th Century: 4th quarter, 20th Century: 1st quarter	Not Evaluated
44FX3461	Camp, Farmstead	Prehistoric, 19th Century, 20th Century	Not Evaluated
44FX3465	Prison	20th Century: 2nd/3rd quarter	DHR Staff: Potentially Eligible (2009)
44FX3615	Other	Late Woodland	DHR Staff: Not Eligible (2011)
44FX3616	Other	Late Archaic	DHR Staff: Not Eligible (2011)
44FX3620	Trash scatter	20th Century: 1st half	Not Evaluated
44FX3621	Camp	Late Archaic	DHR Staff: Not Eligible (2011)
44FX3622	Other, Trash scatter	Prehistoric/Unknown, 20th Century: 1st half	DHR Staff: Not Eligible (2011)
44FX3624	Lithic scatter	Prehistoric/Unknown	Not Evaluated
44FX3625	Dwelling, single	20th Century	DHR Staff: Not Eligible (2011)
44FX3626	Lithic scatter	Prehistoric/Unknown	DHR Staff: Not Eligible (2011)
44FX3629	Trash scatter	19th Century: 4th quarter, 20th Century: 1st half	Not Evaluated
44FX3670	Cemetery	19th Century: 2nd half	Not Evaluated
44FX3729	Park	Early Woodland	Not Evaluated
44FX3732	Artifact scatter	Pre-Contact	Not Evaluated
44FX3768	Dwelling, single	The New Dominion	Not Evaluated
44FX3841	Dwelling, single, Outbuilding	World War I to World War II, The New Dominion, Post Cold War	Not Evaluated

Previously Recorded Architectural Properties within a 0.5-Mile Radius of the Franconia Third Track Project Archaeological APE. Note: Names and addresses are presented as they appear in the VCRIS records and were not altered for report consistency.

DHR #	Resource Name	Resource Address	Eligibility Determination
029-5724	Fort Belvoir Military Railroad Historic Corridor	16th Street, 21st Street, Capels Road, Dalrymple Road, Lowen Road	VLR Listing (2016)
029-5917	House, 10428 Old Colchester Road	10428 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5918	House, 10430 Old Colchester Road	10430 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5919	House, 10520 Old Colchester Road	10520 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5920	House, 10624 Old Colchester Road	10624 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5921	House, 10632 Old Colchester Road	10632 Old Colchester Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5925	House, 10608 Furnace Road	10608 Furnace Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5926	House, 10600 Furnace Road	10600 Furnace Road - Alt Route 611	DHR Staff: Not Eligible (2016)
029-5927	House/Commercial, 10301 Richmond Highway	10301 Richmond Highway - Alt Route 1	DHR Staff: Not Eligible (2016)
029-5928	Commercial Building, 9920 Richmond Highway	9920 Richmond Highway - Alt Route 1	DHR Staff: Not Eligible (2016)
029-5929	Commercial Building, 8100 Mims Street	8100 Mims Street	DHR Staff: Not Eligible (2016)
029-5932	Loisdale Estates Historic District	Loisdale Road	DHR Staff: Not Eligible (2016)
029-5932-0001	House, 6801 Lois Drive	6801 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0002	House, 6803 Lois Drive	6803 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0003	House, 6804 Lois Drive	6804 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0004	House, 6805 Lois Drive	6805 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0005	House, 6807 Lois Drive	6807 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0006	House, 6808 Lois Drive	6808 Lois Drive	DHR Staff: Not Eligible (2016)
029-5932-0007	House, 6800 Darby Lane	6800 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0008	House, 6802 Darby Lane	6802 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0009	House, 6803 Darby Lane	6803 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0010	House, 6804 Darby Lane	6804 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0011	House, 6806 Darby Lane	6806 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0012	House, 6808 Darby Lane	6808 Darby Lane	DHR Staff: Not Eligible (2016)

DHR #	Resource Name	Resource Address	Eligibility Determination
029-5932-0013	House, 6809 Darby Lane	6809 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0014	House, 6811 Darby Lane	6811 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0015	House, 6814 Darby Lane	6814 Darby Lane	DHR Staff: Not Eligible (2016)
029-5932-0016	House, 6701 Jerome Street	6701 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0017	House, 6703 Jerome Street	6703 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0018	House, 6704 Jerome Street	6704 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0019	House, 6705 Jerome Street	6705 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0020	House, 6707 Jerome Street	6707 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0021	House, 6708 Jerome Street	6708 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0022	House, 6709 Jerome Street	6709 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0023	House, 6710 Jerome Street	6710 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0024	House, 6711 Jerome Street	6711 Jerome Street	DHR Staff: Not Eligible (2016)
029-5932-0025	House, 6700 Ruskin Street	6700 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0026	House, 6702 Ruskin Street	6702 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0027	House, 6703 Ruskin Street	6703 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0028	House, 6704 Ruskin Street	6704 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0029	House, 6706 Ruskin Street	6706 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0030	House, 6707 Ruskin Street	6707 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0031	House, 6708 Ruskin Street	6708 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5932-0032	House, 6709 Ruskin Street	6709 Ruskin Street	DHR Staff: Not Eligible (2016)
029-5933	Industrial Building, 8207 Backlick Road , R E Lee Electric Company	8207 Backlick Road	DHR Staff: Not Eligible (2016)
029-5934	House, 7113 Barry Road	7113 Barry Road	DHR Staff: Not Eligible (2016)
029-5935	House, 6496 Windham Avenue	6496 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5936	House, 6497 Windham Avenue	6497 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5937	House, 6500 Windham Avenue	6500 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5938	House, 6505 Windham Avenue	6505 Windham Avenue	DHR Staff: Not Eligible (2016)

DHR #	Resource Name	Resource Address	Eligibility Determination
029-5939	House, 6512 Windham Avenue	6512 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5940	House, 6516 Windham Avenue	6516 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5941	House, 6524 Windham Avenue	6524 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5942	House, 6531 Windham Avenue	6531 Windham Avenue	DHR Staff: Not Eligible (2016)
029-5943	House, 6423 Melia Street	6423 Melia Street	DHR Staff: Not Eligible (2016)
029-5944	House, 6425 Fleet Drive	6425 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5945	House, 6431 Fleet Drive	6431 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5946	House, 6501 Fleet Drive	6501 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5947	House, 6505 Fleet Drive	6505 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5948	House, 6509 Fleet Drive	6509 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5949	House, 6513 Fleet Drive	6513 Fleet Drive	DHR Staff: Not Eligible (2016)
029-5950	House, 6251 Wills Street	6251 Wills Street	DHR Staff: Not Eligible (2016)
029-5951	House, 6263 Wills Street	6263 Wills Street	DHR Staff: Not Eligible (2016)
029-5952	House, 6274 Wills Street	6274 Wills Street	DHR Staff: Not Eligible (2016)
029-5953	House, 6278 Wills Street	6278 Wills Street	DHR Staff: Not Eligible (2016)
029-5954	House, 6282 Wills Street	6282 Wills Street	DHR Staff: Not Eligible (2016)
029-5955	House, 6283 Wills Street	6283 Wills Street	DHR Staff: Not Eligible (2016)
029-5956	House, 6286 Wills Street	6286 Wills Street	DHR Staff: Not Eligible (2016)
029-5957	House, 6289 Wills Street	6289 Wills Street	DHR Staff: Not Eligible (2016)
029-5958	House, 6290 Wills Street	6290 Wills Street	DHR Staff: Not Eligible (2016)
029-5959	Quonset Hut, 7821-A Loisdale Drive	7821-A Loisdale Drive	DHR Staff: Not Eligible (2016)
029-5961	House, 6421 Fleet Drive	6421 Fleet Drive	Not Evaluated
029-5962	House, 6259 Fogle Street	6259 Fogle Street	Not Evaluated
029-5963	House, 6257 Fogle Street	6257 Fogle Street	Not Evaluated
029-5964	House, 6255 Fogle Street	6255 Fogle Street	Not Evaluated
029-5965	House, 6253 Fogle Street	6253 Fogle Street	Not Evaluated
029-5966	House, 6249 Fogle Street	6249 Fogle Street	Not Evaluated
029-5967	House, 6251 Fogle Street	6251 Fogle Street	Not Evaluated
029-5968	House, 6252 Fogle Street	6252 Fogle Street	Not Evaluated
029-5969	House, 6254 Fogle Street	6254 Fogle Street	Not Evaluated

DHR #	Resource Name	Resource Address	Eligibility Determination
029-5970	House, 6256 Fogle Street	6256 Fogle Street	Not Evaluated
029-5971	House, 6258 Fogle Street	6258 Fogle Street	Not Evaluated
029-5972	House, 6260 Fogle Street	6260 Fogle Street	Not Evaluated
029-5973	House, 6262 Fogle Street	6262 Fogle Street	Not Evaluated
029-6248	Blair Building, Office building, 7001 Loisdale Road	7001 Loisdale Road	DHR Staff: Not Eligible (2018)
029-6249	Springfield Forest Subdivision	Franconia Road - Alt Route 644, Greenleaf Street, Inwood Drive, Kalmia Street	DHR Staff: Not Eligible (2018)
029-6525	Harry Lattimore Playground, House, 9518 Richmond Highway , Lorton Community Action Center, Lorton Library, Murphy House	9518 Richmond Highway - Alt 1	Not Evaluated
029-6629	House, 7813 Cinder Bed Road	7813 Cinder Bed Road	Not Evaluated
029-6630	House, 7819 Cinder Bed Road	7819 Cinder Bed Road	Not Evaluated
029-6631	House, 7801 Cinder Bed Road	7801 Cinder Bed Road	Not Evaluated
029-6632	House, 7123 Barry Road	7123 Barry Road	Not Evaluated
029-6633	House, 7127 Barry Road	7127 Barry Road	Not Evaluated
029-6634	House, 6536 Windham Avenue	6536 Windham Avenue	Not Evaluated
500-0001-0015	Culvert, CSX Tracks, west of Cinder Bed Road	Cinder Bed Road	DHR Staff: Not Eligible (2017)
500-0001-0016	Bridge, CSX Tracks over Newington Road	Newington Road	DHR Staff: Not Eligible (2017)
500-0001-0017	Bridge, CSX Tracks over Accotink Creek	Accotink Creek	DHR Staff: Not Eligible (2017)
500-0001-0018	Bridge, CSX Tracks over Pohick Creek	Pohick Creek	DHR Staff: Not Eligible (2017)
500-0001-0019	Culvert, CSX Tracks over creek, west of Lorton Market Street	Lorton Market Street	DHR Staff: Not Eligible (2017)
500-0001-0020	Culvert, CSX Tracks over Giles Run	Giles Run	DHR Staff: Not Eligible (2017)
500-0001-0021	Bridge, CSX Tracks over Route 1	Route 1 - Alt Richmond Highway	DHR Staff: Not Eligible (2017)

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APPENDIX B: QUALIFICATIONS OF PRINCIPAL INVESTIGATOR

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YEARS EXPERIENCE

With this firm: 13 With other firms: 13

EDUCATION

PhD/Anthropology & Architectural History, 2004

MA/Anthropology, 1999

MCert/Museum Management, 1999

BA/Historic Preservation, 1994

REGISTRATIONS/QUALIFICATIONS

Registered Professional Archaeologist

Secretary of Interior Standards Qualified as Archaeologist, Architectural Historian, and Historian

PUBLICATIONS/PRESENTATIONS/COMMITTEES

Board Member and Conference Committee Chair/American Cultural Resources Association (2013–present)

Co-Editor/Bulletin of the Archaeological Society of Delaware (2011-present)

Member/Fredericksburg Architectural Review Board (2010–present)

Co-Chair/Council of Virginia Archaeologists Award's Committee (2010–present)

Fredericksburg: The Official Guide (Editor, 2013)

A Woman in a War-Torn Town: The Journal of Jane Howison Beale, 1850–1862 (Editor, 2011)

Tectonics in the Piedmont; Environmental Archaeology on the Colonial Virginia Frontier. *Historical Archaeology* (2010)

City of Fredericksburg Historic Preservation Plan (Primary author, Adopted 2010)

Household Chore and Households Choices: Theorizing the Domestic Sphere in Historical Archaeology (2004)

KERRI S. BARILE, PHD, RPA President/Principal Investigator

EXPERIENCE

Dr. Barile has over 25 years of professional experience in the fields of archaeology, architectural history, historic research, and cultural resource management (CRM). She has directed the excavation of a wide array of archaeological sites in Virginia, Delaware, Maryland, West Virginia, Texas, South Carolina, and North Carolina, among others, and has recorded and researched an abundance of historic buildings, structures, districts, and objects. She has written and contributed to over 250 CRM reports. In addition to CRM experience, Dr. Barile has taught university courses in historic preservation and preservation law, architectural history, and archaeology. She has also published numerous professional articles and papers on her studies, including articles in Historical Archaeology and several National Register of Historic Places nominations.

SAMPLE PROJECTS

Principal Investigator/AT&T Replacement Line Study (Columbus, Ohio, to Parkersburg, West Virginia). Cultural resource background review and coordination for an approximately 138-mile utility line.

Principal Investigator/Marriott Data Recovery (Fredericksburg, Virginia). Intensive archival research and archaeological data recovery on an eighteenth-century tavern and nineteenth-century carriage shop site in historic core. Included development of museum displays and many public talks.

Principal Investigator/Winchester Historic District NRHP Nomination (City of Winchester, Virginia).NRHP nomination for expansion to district to include 20th-century resources.

Principal Investigator/Ellis-Bell Archaeological Site (Fredericksburg, Virginia). Phase III archaeological study and archival research of 1830s kiln site.

Principal Investigator/Historic Tudor Place and Gardens (Washington, D.C.). All phases of cultural resource studies and preservation planning on a dozen archaeological and architectural projects throughout the historic plantation. Received the DC Excellence in Historic Preservation Award for this work.

Principal Investigator/Shops at Dakota Crossing/HUD Cultural Resource Studies and SHPO Coordination (Washington, D.C.). Phase I and Phase II cultural resource investigations, coordination of resource eligibility, and authorship of Memorandum of Agreement.

Principal Investigator/Southeast High Speed Rail Corridor Study (Raleigh, North Carolina, to Washington D.C.). Cultural resource studies and multi-state project effect coordination for 200+-mile long rail corridor.

Principal Investigator/ESNG Jennersville and Parkesburg Project (Chester County, Pennsylvania). Cultural resource studies and SHPO coordination for new 10-mile gas line in Pennsylvania.

ATTACHMENT E SECTION 7 COORDINATION WITH USFWS

Franconia Third Track Project Categorical Exclusion

USFWS – ONLINE PROJECT REVIEW PROCESS, BY STEP

Background. The Virginia Department of Rail and Public Transportation (DRPT), in coordination with the Federal Railroad Administration (FRA), the Virginia Department of Transportation (VDOT), CSX Transportation (CSXT), Amtrak, and Virginia Railway Express (VRE), is advancing the Washington, D.C. to Richmond Southeast High Speed Rail project (DC2RVA). DC2RVA includes additional track and other rail structural improvements plus additional passenger train service on the existing 123-mile rail corridor between Washington, D.C. and Richmond, Virginia. To date for DC2RVA, DRPT has completed a Tier II Environmental Impact Statement (EIS) and subsequent Record of Decision (ROD). In 2015, DRPT identified the need to advance a third mainline track approximately 8 miles from Franconia to just north of the Occoquan River, separate from but compatible with the ongoing longer term DC2RVA – the Franconia Third Track Project. Therefore, the ROD for DC2RVA provided clearance under NEPA for additional passenger service along the entire corridor and rail improvements for all but the approximate 8-mile portion of corridor between Franconia and Occoquan in Fairfax County, Virginia. DRPT is currently preparing a Categorical Exclusion for the Franconia Third Track Project. As part of that, DRPT is preparing this project review process for submittal to the US Fish and Wildlife Service (USFWS), per their online step-by-step guidance.¹ This documentation is prepared prior to their involvement.

The outcome of the Online Project Review Process is a **Species Conclusion Table (provided under separate cover)** and backup documentation to submit to the Virginia Field Office of USFWS for Section 7 Consultation.

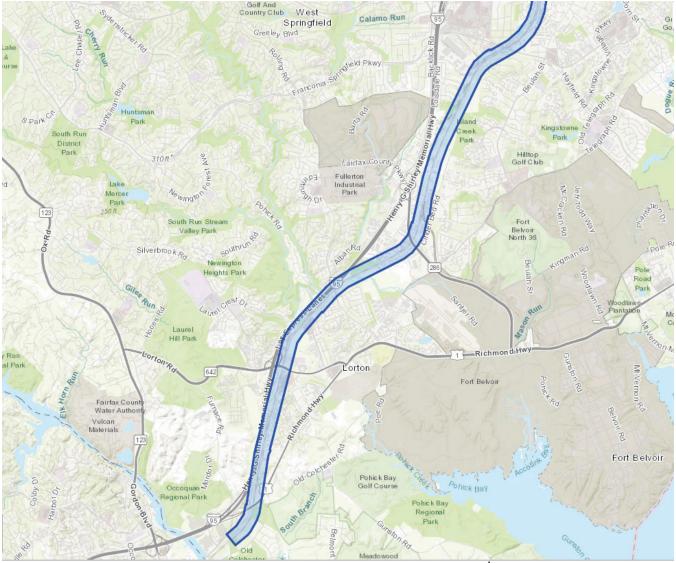
Project Description. The Franconia Third Track Project will primarily add a third mainline track through approximately 8 miles of an existing two-track corridor and, within those limits, will: shift tracks to increase speed through curves; replace two existing two-track bridges and add two new adjacent rail bridges; and add a new passenger rail bypass with an elevated bridge to remove conflicts between freight and passenger trains. The Franconia-Springfield VRE Station, the Lorton VRE Station, and the Amtrak Auto Train Station are located within the 8-mile area proposed for a third mainline track. Additionally, north of the Franconia-Springfield Station, the proposed project will realign three existing tracks for approximately ³/₄ of a mile to accommodate station improvements. The project does not include additional passenger rail service. All project improvements are located within existing CSXT/VDOT right-of-way.

The limits of the proposed improvements extend from approximately one mile north of the Franconia-Springfield VRE station to approximately 400 feet north of Furnace Road, just north of the Occoquan River in Fairfax County, Virginia, connecting to the DC2RVA project at each end.

¹ <u>https://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html</u>

The action area for consultation under the Endangered Species Act for the Franconia Third Track Project encompasses a 1,000-foot linear corridor, centered on the existing rail alignment. In accordance with 50 CFR §402.02, this action area is not limited to the permanent limits of disturbance of the project improvements, but rather includes all areas to be potentially affected directly or indirectly by the action.

This action area is shown in the figure below (screenshot from the USFWS online system, see Step 2).



Action Area Franconia Third Track Project

STEP 2 - OFFICIAL SPECIES LIST

Step 2 is using USFWS's online Information, Planning and Consultation system (IPaC)² to determine if any listed, proposed or candidate species may be present in the defined action area. DRPT obtained an Official Species List from the IPaC system on February 5, 2020 for the Franconia Third Track action area, and was updated on May 14, 2020 and on August 18, 2020 with no change to species or critical habitat. Copies of all IPaC official species lists are included in the **Step 2 Attachment**.

The IPaC system provided species lists by:

Virginia Ecological Services Field Office 6669 Short Lane Gloucester, VA 23061-4410 (804) 693-6694

The official species list for the Franconia Third Track Project action area included the following 2 federally-listed threatened or endangered species. There were no proposed or candidate species identified.

Species	Status
Northern Long-eared Bat Myotis septentrionalis	Threatened
Small Whorled Pogonia Isotria medeoloides	Threatened
Critical Habitat	None

Additionally, this step of the Online Project Review Process notes 15 counties and 6 cities in Virginia that are in the historical range of the Rusty Patched Bumble Bee (*Bombus affinis* – Endangered). The Franconia Third Track Project is located in Fairfax County, which is included on this list. Accordingly, this species is included in subsequent Online Project Review Process steps for Areas 1, 2, and 6.

The Virginia Field Office encourages all agencies to fulfill their Section 7(a)(1) duties by carrying out voluntary conservation measures for the Rusty Patched Bumble Bee, which are listed in Step 2.

DRPT commits to check IPaC every 90 days until the project is implemented, per USFWS guidance, to ensure that listed, proposed, or candidate species information for the action area is current. If any changes to the species list occur, DRPT will complete this process for the newly identified species.

² https://ecos.fws.gov/ipac/

Franconia Third Track Project – USFWS Online Project Review Process Documentation

Data maintained by the Virginia Department of Game and Inland Fisheries (VDGIF) and the Virginia Department of Conservation and Recreation (VDCR) were reviewed, as documented in the "References" section below.

Results of this state data review are included in the suitable habitat determinations (see Step 4) and resulting determinations in the species conclusion table.

STEP 4 - SUITABLE HABITAT

Step 4 - Suitable Habitat of the Virginia Field Office Project Review Process is to determine whether listed/proposed/candidate species may occur based on the habitat present within the action area for each listed species. The following pages address whether suitable habitat for each of the nine species may be present within each area of the project corridor based on review of species habitat information and occurrence data maintained by the VDGIF and VDCR combined with review of aerial photography and land cover data. Habitat observations during prior field surveys (as documented in the Natural Resources Technical Report of the DC2RVA Tier II Draft EIS) are also noted, as appropriate.

Based on this information, the "Conclusion" column of the Species Conclusion Table was filled in for all identified species in each area, per the possible conclusions as listed in the Online Project Review Process:

Possible Conclusions
Species not present
No suitable habitat present
No critical habitat present
Suitable habitat present, species not present
Species present
Potential habitat present and no current survey conducted

Potential Presence for: Northern Long-eared Bat (Myotis septentrionalis)

Status: Threatened

Description: Northern long-eared bat is a medium-sized (3 to 3.7 inches) bat generally associated with oldgrowth forests composed of trees 100 years old or older. It relies on intact interior forest habitat, with low edge-to-interior ratios (VDCR, 2014); however, it has been found within city limits. They are frequently found between the shrub layer and the canopy. Males and nonreproductive females tend to prefer caves, while reproductive females roost under tree bark in spring and summer (VDGIF, 2014). This species prefers to hibernate in very high humidity caves with little or no air flow (USFWS, 2015).

Franconia Third Track Project: the regulatory agencies generally agree that this species can be found throughout Virginia. However, the closest known hibernaculum or maternity roosts are more than 100 miles away from the project area (VDGIF, 2019b). Additionally, no hibernacula and/or roosting trees were observed during prior DC2RVA field surveys. DRPT commits to the voluntary conservation measures for this species (Step 7b).

Overall, the Project does not include purposeful taking of northern long-eared bats; will not affect caves or mines where the species are known to hibernate or alter the entrance or environment of a hibernaculum; and any tree removal associated with the Project will not remove a known occupied maternity roost tree or occur within 150 feet of a known occupied maternity roost tree, or within 0.25 mile of a known hibernaculum. DRPT utilized the assisted determination key for the NLEB 4(d) rule that is provided online in the IPaC regulatory review process for this species, and has received a consistency letter documenting no effect --- see Step 7b.

Potential Presence for: Rusty Patched Bumble Bee (Bombus affinis)

Status: Threatened

Description: Historically, the rusty patched bumble bee was broadly distributed across the eastern United States, Upper Midwest, and southern Quebec and Ontario in Canada. Since 2000, this bumble bee has been reported from only 13 states and 1 Canadian province: Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin and Ontario, Canada (USFWS, 2020). Survival and successful recruitment require floral resources (for food) from early spring through fall, undisturbed nest sites in proximity to foraging resources, and overwintering sites for the next year's queens (USFWS, 2019).

Franconia Third Track Project: Historically, rusty patched bumble bee was documented in the Middle Potomac-Anacostia-Occoquan (02070010) and Lower Potomac (02070011) watersheds; however, this species is believed to now be extirpated within these watersheds (VDCR, 2020a). Currently, the rusty patched bumble bee is not known to occur outside of Bath, Clarke, Fauquier, Highland, and Loudoun counties (USFWS, 2020) – and the proposed project occurs in Fairfax County.

Potential Presence for: Small Whorled Pogonia (Isotria medeoloides)

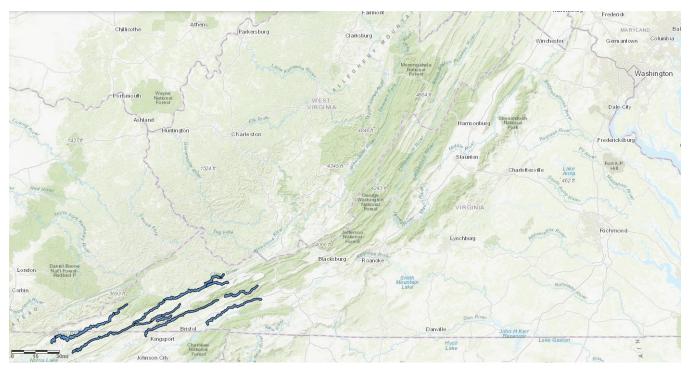
Status: Threatened

Description: Small whorled pogonia is a small (up to 12 inches tall) orchid, with five to six leaves in a whorl near the top of the stem, under greenish-yellow flowers that bloom from May, in the southern part of its range, to mid-June in the northern part of its range. It requires damp woods and is generally found on acidic, sloping, fragipan soils in 'second growth' or successional forest communities. This species can be found in deciduous and evergreen forests. Small whorled pogonia is listed as federally threatened, endangered in Virginia, and imperiled globally (VDCR, 2014). The small whorled pogonia occurs on upland sites in mixed-deciduous or mixed deciduous/coniferous forests that are generally in second- or third-growth successional stages. Characteristics common to small whorled pogonia sites include sparse to moderate groundcover in the species' microhabitat, a relatively open understory canopy, and proximity to features that create long persisting breaks in the forest canopy. Soils at most sites are highly acidic and nutrient poor, with moderately high soil moisture values. Light availability could be a limiting factor for this species (USFWS, 1992).

Franconia Third Track Project: There are records of this species occurring in the Accotink Creek-Gunston Cove (020700100402) and Accokeek Creek (020700110204) watersheds (VDCR, 2020b), which are crossed by the action area. However, the proposed improvements are located entirely within existing CSXT/VDOT right-of-way, which does not provide quality Small Whorled Pogonia habitat.

As documented in Step 5 of the USFWS Online Project Review Process, Federally Designated Critical Habitat occurs within: Bland, Lee, Scott, Smyth, Russell, Tazewell, Washington, Wise, and Wythe Counties in Virginia (as shown in the figure below).

As the project action area does not occur within these counties, it is determined to no critical habitat is present and the project will have no effect on critical habitat.



Critical Habitat in Virginia Accessed 11 February 2020 <u>http://fws.maps.arcgis.com/apps/Viewer/index.html?appid=f6e84e675ba1461b8ae6a351adea1429</u>

The bald eagle (*Haliaeetus leucocephalus*) is protected by the Bald and Golden Eagle Protection Act. The bald eagle nesting (breeding) season in Virginia is from December 15 through July 15.

The Center for Conservation Biology (CCB) mapping portal³ was used to determine the location of active bald eagles nests, roosts, and their buffers, using their aerial-based World Imagery (ESRI) mapping. Mapping from the CCB documenting this is provided in the **Step 6 Attachment**.

There are no bald eagle roosts and no active bald eagle nests, or their buffer zones, in the project action area.

³ <u>https://ccbbirds.org/maps/#eagles</u>. Accessed 04 March 2020.

STEP 7a - DETERMINATIONS

The example table provided in Step 7a (copied below) was used to complete the "ESA Section 7 Determination" column in the Species Conclusion Table, using the Conclusions from Step 4.

Per the Online Project Review Process directions, the "Notes/Documentation" column was used to explain rationale for determinations (particularly those that do not align with the below table), provide sources, and describe any measures proposed to avoid or minimize or mitigate potential impacts.

Possible Conclusions	\rightarrow	ESA Section 7 Determination
Species not present	\rightarrow	No effect
No suitable habitat present	\rightarrow	No effect
No critical habitat present	\rightarrow	No effect
Suitable habitat present, species not present	\rightarrow	Not likely to adversely affect
Species present	\rightarrow	May affect
Potential habitat present and no current survey conducted	\rightarrow	May affect

STEP 7b - Northern Long-eared Bat (NLEB) Determinations

DRPT utilized the assisted determination key for the NLEB 4(d) rule that is provided online in the IPaC regulatory review process for this species and received a consistency letter for the Project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Northern Long-eared Bat. A copy of the consistency letter is provided in the **Step 7b Attachment**. This letter acknowledges no effect to the species, as indicated in the Species Conclusion Table.

Notwithstanding, DRPT commits to the voluntary conservation measures as described in Step 7b of the Online Project Review Process, as needed during the design and construction process for the project:

- Perform NLEB surveys according to the most recent summer survey guidelines.
- Conduct tree removal activities outside of the NLEB pup season (June 1-July 31) and/or the active season (April 15-September 15).
- Avoid clearing suitable spring staging and fall swarming habitat within a 5-mile radius of known or assumed NLEB hibernacula during the spring staging and fall swarming season (April 1-May 14 and August 16-November 15).
- Manage forests to ensure a continual supply of snags and other suitable maternity roosts trees.
- Conduct prescribed burns outside of the pup season (June 1-July 31) and/or the active season (April 1-October 31). Avoid high-intensity burns (causing tree scorch higher than NLEB roosting heights) during the summer maternity season to minimize direct impacts to NLEB.
- Perform bridge repair, retrofit, maintenance, and/or rehabilitation work outside of the NLEB active season (April 15-September 15) in areas where NLEB are known to roost on bridges or where such use is likely.
- Do not use military smoke and obscurants within forested suitable NLEB habitat during the pup season (June 1-July 31) and/or the active season (April 15-September 15).
- Minimize use of herbicides and pesticides. If necessary, spot treatment is preferred over aerial application.
- Evaluate the use of outdoor lighting during the active season and seek to minimize light pollution by angling lights downward or via other light minimization measures.
- Participate in actions to manage and reduce the impacts of WNS on NLEBs. Actions needed to investigate and manage WNS are described in a national plan the Service developed in coordination with other state and Federal agencies.

STEP 8 - PROJECT REVIEW PACKAGE

Since the ESA section 7 determination for all species, including the NLEB under the final 4(d) rule and critical habitat, is "no effect", DRPT has printed the Self-Certification Letter (see the **Step 8 Attachment**). Per the guidance for non-federal agencies for the self-certification to be valid, DRPT submitted a copy of the letter and the project review package to the Virginia Field Office of USFWS on May 22, 2020.

A copy of this documentation and all referenced attachments is also retained in the project records for inclusion as an attachment to the CE.

REFERENCES

United States Fish and Wildlife Service (USFWS).

- 1992. Small Whorled Pogonia (*Isotria medeoloides*) Recovery Plan–First Revision. November 13, 1992. New England Field Office, Concord, NH. <u>http://ecos.fws.gov/docs/recovery_plan/921113b.pdf</u>.
- 2014. ECOS (Environmental Conservation Online System)–Species Profile: Small Whorled Pogonia (*Isotria medeoloides*). Accessed December 2014 and January 2015.
- 2015. Northern Long-eared Bat (*Myotis septentrionalis*) Fact Sheet. <u>https://www.fws.gov/midwest/Endangered/mammals/nleb/nlebFactSheet.html</u> Updated April 2015. Accessed February 13, 2020.
- 2019. Draft Recovery Plan for Rusty Patched Bumble Bee (Bombus affinis). September 2019.
- 2020. ECOS (Environmental Conservation Online System)–Species Profile: Rusty-patched Bumble Bee (*Bombus affinis*). <u>https://ecos.fws.gov/ecp/</u>. Accessed February 2020.

Virginia Department of Conservation and Recreation (VDCR).

- 2014. Online Encyclopedia of Life-species search: Northern Long-eared Bat (*Myotis septentrionalis*), Small Whorled Pogonia (*Isotria medeoloides*). <u>http://explorer.natureserve.org/</u>. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. <u>http://explorer.natureserve.org/</u>. Accessed October 2014–January 2015. Last updated March 2014.
- 2020a. Online Encyclopedia of Life-species search: Rusty-patched Bumble Bee (*Bombus affinis*). NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. <u>http://explorer.natureserve.org/</u>. Accessed February 2020. Last updated March 2019.
- 2020b. Nature Serve Explorer-Subwatershed Query-PL30 Accotink Creek-Gunston Cove, PL48 (Lower) Occoquan River-Belmont Bay, PL58 - Accokeek Creek. <u>http://explorer.natureserve.org/</u> Online search conducted February 13, 2020.

Virginia Department of Game and Inland Fisheries (VDGIF).

- 2014. Virginia Fish and Wildlife Information Services (VaFWIS) Species Information Report (Occurrence, Habitat) – Northern Long-eared Bat (*Myotis septentrionalis*). <u>http://www.vafwis.org/fwis/?Menu=Home.__By+Name</u>. Accessed October 22, 2014.
- 2019a Wildlife Environmental Review Map Service (WERMS). Last updated 8/27/2019. Accessed February 2020.
- 2019b NLEB Roost and Hibernacula Map. Accessed February 2020. <u>https://dgif-</u> virginia.maps.arcgis.com/apps/webappviewer/index.html?id=32ea4ee4935942c092e41ddcd19e5ec5

Step 2 Attachment

Official IPaC Species Lists



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 http://www.fws.gov/northeast/virginiafield/



In Reply Refer To: Consultation Code: 05E2VA00-2020-SLI-1868 Event Code: 05E2VA00-2020-E-05065 Project Name: Franconia 3rd Track February 05, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number 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
- USFWS National Wildlife Refuges and Fish Hatcheries

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

Consultation Code:	05E2VA00-2020-SLI-1868
Event Code:	05E2VA00-2020-E-05065
Project Name:	Franconia 3rd Track
Project Type:	TRANSPORTATION
Project Description:	The proposed project will primarily add a third mainline rail track through 8 miles of an existing two-track corridor, as well as: shifting tracks to increase speed through curves; replacing two existing two-track bridges and adding two new adjacent rail bridges; and adding a new passenger rail bypass (flyover bridge) to remove conflicts between freight and passenger trains. The project does not include additional passenger rail service. On January 13, 2020, FHWA signed the NEPA Concurrence Form for preparation of a Categorical Exclusion for the Franconia 3rd Track Project.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/38.72384444264843N77.20143946640115W</u>



Counties: Fairfax, VA

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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. <u>NOAA Fisheries</u>, 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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species.	Threatened
Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	

Flowering Plants

NAME Small Whorled Pogonia *Isotria medeoloides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

STATUS

Threatened

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



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 http://www.fws.gov/northeast/virginiafield/



In Reply Refer To: Consultation Code: 05E2VA00-2020-SLI-1868 Event Code: 05E2VA00-2020-E-10653 Project Name: Franconia 3rd Track May 14, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/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.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number 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
- USFWS National Wildlife Refuges and Fish Hatcheries

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

Consultation Code:	05E2VA00-2020-SLI-1868
Event Code:	05E2VA00-2020-E-10653
Project Name:	Franconia 3rd Track
Project Type:	TRANSPORTATION
Project Description:	The proposed project will primarily add a third mainline rail track through 8 miles of an existing two-track corridor, as well as: shifting tracks to increase speed through curves; replacing two existing two-track bridges and adding two new adjacent rail bridges; and adding a new passenger rail bypass (flyover bridge) to remove conflicts between freight and passenger trains. The project does not include additional passenger rail service. All project improvements are located within existing CSXT/VDOT right-of- way. On January 13, 2020, FHWA signed the NEPA Concurrence Form for preparation of a Categorical Exclusion for the Franconia 3rd Track Project.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/38.72384444264843N77.20143946640115W</u>



Counties: Fairfax, VA

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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. <u>NOAA Fisheries</u>, 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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species.	Threatened
Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	

Flowering Plants

NAME Small Whorled Pogonia *Isotria medeoloides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

STATUS

Threatened

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



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 http://www.fws.gov/northeast/virginiafield/



In Reply Refer To: Consultation Code: 05E2VA00-2020-SLI-1868 Event Code: 05E2VA00-2020-E-15532 Project Name: Franconia 3rd Track August 18, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/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.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number 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
- USFWS National Wildlife Refuges and Fish Hatcheries

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

Consultation Code:	05E2VA00-2020-SLI-1868
Event Code:	05E2VA00-2020-E-15532
Project Name:	Franconia 3rd Track
Project Type:	TRANSPORTATION
Project Description:	The proposed project will primarily add a third mainline rail track through 8 miles of an existing two-track corridor, as well as: shifting tracks to increase speed through curves; replacing two existing two-track bridges and adding two new adjacent rail bridges; and adding a new passenger rail bypass (flyover bridge) to remove conflicts between freight and passenger trains. The project does not include additional passenger rail service. All project improvements are located within existing CSXT/VDOT right-of- way. On January 13, 2020, FHWA signed the NEPA Concurrence Form for preparation of a Categorical Exclusion for the Franconia 3rd Track Project.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/38.72384444264843N77.20143946640115W</u>



Counties: Fairfax, VA

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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. <u>NOAA Fisheries</u>, 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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species.	Threatened
Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	

Flowering Plants

NAME Small Whorled Pogonia *Isotria medeoloides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

STATUS

Threatened

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



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 http://www.fws.gov/northeast/virginiafield/



April 07, 2021

In Reply Refer To: Consultation Code: 05E2VA00-2021-SLI-3056 Event Code: 05E2VA00-2021-E-08794 Project Name: Franconia Project

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.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq*.), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number 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
- USFWS National Wildlife Refuges and Fish Hatcheries

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

Consultation Code:	05E2VA00-2021-SLI-3056
Event Code:	05E2VA00-2021-E-08794
Project Name:	Franconia Project
Project Type:	TRANSPORTATION
Project Description:	The Virginia Department of Rail and Public Transportation (DRPT), in
	coordination with the Federal Railroad Administration (FRA), the
	Virginia Department of Transportation (VDOT), CSX Transportation
	(CSXT), Amtrak, and the Virginia Railway Express (VRE), is advancing
	the Washington, D.C. to Richmond Southeast High Speed Rail project
	(DC2RVA). DC2RVA includes additional track and other rail structural
	improvements plus additional passenger train service on the existing 123-
	mile rail corridor between Washington, D.C. and Richmond, Virginia.
	DRPT completed the Tier II Environmental Impact Statement (EIS) and
	subsequent Record of Decision (ROD), as well as associated preliminary
	engineering, for the DC2RVA project in September 2019. At that time,
	FRA and DRPT developed an incremental approach to implement final
	design and construction of portions of the DC2RVA project as funding
	becomes available for any portion within the 123-mile corridor. As part of
	programmatic consultation for DC2RVA with the US Fish and Wildlife
	Service (USFWS) for Section 7 of the Endangered Species Act (ESA) of
	1973, as amended, DRPT committed to continue Section 7 consultation as
	any portion of the DC2RVA corridor was funded and advanced to final
	design and construction.
Project Location:	

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@38.72384445,-77.20145333493144,14z</u>



Counties: Fairfax County, Virginia

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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. <u>NOAA Fisheries</u>, 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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	Threatened
Flowering Plants NAME	STATUS

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

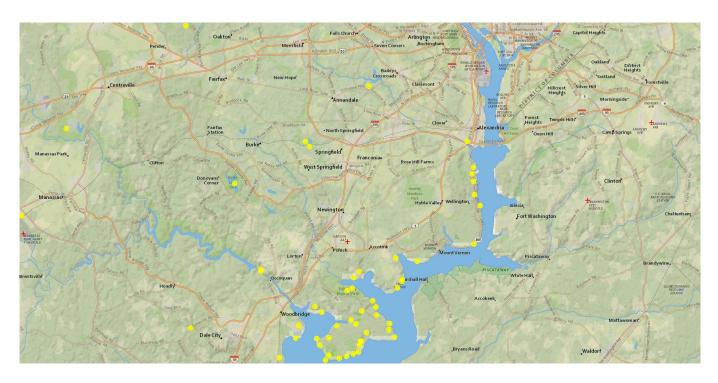
THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Step 6 Attachment

Center for Conservation Biology (CCB) Mapping for Bald Eagles



CCB Mapping Portal



Layers: VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roosts, Eagle Roost Buffers, Eagle Roost Polygons

Map Center [longitude, latitude]: [-77.15663909912108, 38.7323933028728]

Map Link:

 $\label{eq:https://ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roosts&layer=Eagle+Roost+Polygons&zoom=12&lat=38.7323933028728&lng=-77.15663 909912108&legend=legend_tab_4ca7337c-cord-11e5-93bc-0ecfd53eb7d3&base=NatGeo+World+Map+%28ESRI%29$

Report Generated On: 03/05/2020

The Center for Conservation Biology (CCB) provides certain data online as a free service to the public and the regulatory sector. CCB encourages the use of its data sets in wildlife conservation and management applications. These data are protected by intellectual property laws. All users are reminded to view the <u>Data Use Agreement</u> to ensure compliance with our data use policies. For additional data access questions, view our <u>Data Distribution Policy</u>, or contact our Data Manager, Marie Pitts, at mlpitts@wm.edu or 757-221-7503.

Report generated by The Center for Conservation Biology Mapping Portal.

To learn more about CCB visit <u>ccbbirds.org</u> or contact us at info@ccbbirds.org

Step 7b Attachment

NLEB Determination



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 http://www.fws.gov/northeast/virginiafield/



IPaC Record Locator: 605-20643033

March 05, 2020

Subject: Consistency letter for the 'Franconia 3rd Track' project (TAILS 05E2VA00-2020-R-1868) under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Franconia 3rd Track** (Proposed Action) may rely on the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action will have <u>no effect</u> on the endangered Indiana bat (*Myotis sodalis*) or the threatened Northern long-eared bat (*Myotis septentrionalis*). If the Proposed Action is not modified, **no consultation is required for these two species.**

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

• Small Whorled Pogonia, *Isotria medeoloides* (Threatened)

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

Franconia 3rd Track

Description

The proposed project will primarily add a third mainline rail track through 8 miles of an existing two-track corridor, as well as: shifting tracks to increase speed through curves; replacing two existing two-track bridges and adding two new adjacent rail bridges; and adding a new passenger rail bypass (flyover bridge) to remove conflicts between freight and passenger trains. The project does not include additional passenger rail service. All project improvements are located within existing CSXT/VDOT right-of-way. On January 13, 2020, FHWA signed the NEPA Concurrence Form for preparation of a Categorical Exclusion for the Franconia 3rd Track Project.

Determination Key Result

Based on the information you provided, you have determined that the Proposed Action will have no effect on the endangered Indiana bat and/or the threatened Northern long-eared bat. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for these two species.

Qualification Interview

1. Is the project within the range of the Indiana bat^[1]?

[1] See <u>Indiana bat species profile</u> Automatically answered No

2. Is the project within the range of the Northern long-eared bat^[1]?

[1] See <u>Northern long-eared bat species profile</u> **Automatically answered** *Yes*

- 3. Which Federal Agency is the lead for the action?B) Federal Railroad Administration (FRA)
- 4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting. *No*

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/ rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

- 7. Is the project located **within** a karst area? *No*
- 8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's <u>summer survey guidance</u> for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

No

- 9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation? *Yes*
- 10. Does the project include slash pile burning? *No*
- 11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)? *Yes*
- 12. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current <u>summer survey guidance</u> for our current definitions of suitable habitat. *No*

- 13. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)
 - No
- 14. Will the project involve the use of **temporary** lighting *during* the active season? *No*
- 15. Will the project install new or replace existing **permanent** lighting? *No*
- 16. Does the project include percussives or other activities (not including tree removal/ trimming or bridge/structure work) that will increase noise levels above existing traffic/ background levels?

Yes

17. Will the activities that use percussives (**not including tree removal/trimming or bridge**/ **structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates. *No*

18. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

- 19. Will the project raise the road profile **above the tree canopy**? *No*
- 20. Is the location of this project consistent with a No Effect determination in this key? Automatically answered

Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

21. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge is more than 1,000 feet from the nearest suitable habitat and is therefore considered unsuitable for use by bats

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 02, 2019. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should <u>only</u> be used to verify project applicability with the Service's <u>February</u> 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is <u>not</u> intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.



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 http://www.fws.gov/northeast/virginiafield/



IPaC Record Locator: 012-100990628

April 07, 2021

Subject: Consistency letter for the 'Franconia Project' project (no current TAILS record) under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Longeared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Franconia Project** (Proposed Action) may rely on the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action will have <u>no effect</u> on the endangered Indiana bat (*Myotis sodalis*) or the threatened Northern long-eared bat (*Myotis septentrionalis*). If the Proposed Action is not modified, **no consultation is required for these two species.**

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

• Small Whorled Pogonia *Isotria medeoloides* Threatened

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

Franconia Project

Description

The Virginia Department of Rail and Public Transportation (DRPT), in coordination with the Federal Railroad Administration (FRA), the Virginia Department of Transportation (VDOT), CSX Transportation (CSXT), Amtrak, and the Virginia Railway Express (VRE), is advancing the Washington, D.C. to Richmond Southeast High Speed Rail project (DC2RVA). DC2RVA includes additional track and other rail structural improvements plus additional passenger train service on the existing 123-mile rail corridor between Washington, D.C. and Richmond, Virginia. DRPT completed the Tier II Environmental Impact Statement (EIS) and subsequent Record of Decision (ROD), as well as associated preliminary engineering, for the DC2RVA project in September 2019. At that time, FRA and DRPT developed an incremental approach to implement final design and construction of portions of the DC2RVA project as funding becomes available for any portion within the 123-mile corridor. As part of programmatic consultation for DC2RVA with the US Fish and Wildlife Service (USFWS) for Section 7 of the Endangered Species Act (ESA) of 1973, as amended, DRPT committed to continue Section 7 consultation as any portion of the DC2RVA corridor was funded and advanced to final design and construction.

Determination Key Result

Based on the information you provided, you have determined that the Proposed Action will have no effect on the endangered Indiana bat and/or the threatened Northern long-eared bat. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for these two species.

Qualification Interview

1. Is the project within the range of the Indiana bat^[1]?

[1] See <u>Indiana bat species profile</u> Automatically answered No

2. Is the project within the range of the Northern long-eared bat^[1]?

[1] See <u>Northern long-eared bat species profile</u> Automatically answered *Yes*

3. Which Federal Agency is the lead for the action?

B) Federal Railroad Administration (FRA)

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of nonconstruction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/ rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's <u>summer survey guidance</u> for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

No

9. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

Yes

10. Does the project include slash pile burning?

No

- 11. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)? *Yes*
- 12. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current <u>summer survey guidance</u> for our current definitions of suitable habitat. *No*

13. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

- 14. Will the project involve the use of **temporary** lighting *during* the active season? *No*
- 15. Will the project install new or replace existing **permanent** lighting? *No*
- 16. Does the project include percussives or other activities (not including tree removal/ trimming or bridge/structure work) that will increase noise levels above existing traffic/ background levels?

Yes

17. Will the activities that use percussives (**not including tree removal/trimming or bridge**/ **structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

No

18. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage, rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

19. Will the project raise the road profile **above the tree canopy**?

No

20. Is the location of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the project action area is not within suitable Indiana bat and/or NLEB summer habitat and is outside of 0.5 miles of a hibernaculum.

21. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge is more than 1,000 feet from the nearest suitable habitat and is therefore considered unsuitable for use by bats

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 29, 2020. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should <u>only</u> be used to verify project applicability with the Service's <u>February</u> 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is <u>not</u> intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

Step 8 Attachment

Self Certification Letter



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Virginia Field Office 6669 Short Lane Gloucester, VA 23061

Date: March 5, 2020

Self-Certification Letter

Project Name: Franconia 3rd Track Project

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- "no effect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- "may affect, not likely to adversely affect" determinations for proposed/listed species and/or proposed/designated critical habitat.

Applicant

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html. If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

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Cindy Schulz Field Supervisor Virginia Ecological Services

Enclosures - project review package



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Virginia Field Office 6669 Short Lane Gloucester, VA 23061

Date: 4/7/21

Self-Certification Letter

Project Name: Franconia

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

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- "may affect, not likely to adversely affect" determinations for proposed/listed species and/or proposed/designated critical habitat.

VERSION 3.1

Applicant

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

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Sincerely,

lynthia & Schuly

Cindy Schulz Field Supervisor Virginia Ecological Services

Enclosures - project review package

Franconia Third Track Project

Species Conclusion Table

Date: Official Species List Obtained February 5, 2020, Updated May 14, 2020 and August 18, 2020 and April 7, 2021

Species / Resource Name	Conclusion	ESA Section 7 Determination	Notes / Documentation
Northern Long-eared Bat <i>Threatened</i>	No effect	No effect	Per Step 7b: Per the assisted determination key for the NLEB 4(d) rule available from the online IPaC regulatory review process, received a consistency letter showing no effect. Notwithstanding, DRPT commits to the voluntary conservation
Rusty Patched Bumble Bee Endangered	Species not present	No effect	measures for this species. Per Step 4 Habitat Assessment: Species not known to occur in project county. Notwithstanding, DRPT commits to the voluntary conservation measures for this species (see Step 2).
Small Whorled Pogonia Threatened	No suitable habitat present	No effect	Per Step 4 Habitat Assessment: There are records of this species occurring in the Accotink Creek-Gunston Cove and Accokeek Creek watersheds, which are crossed by the project area. However, the existing CSXT/VDOT right-of-way does not provide quality Small Whorled Pogonia habitat.
Critical Habitat	No critical habitat present	No effect	Per Official Species List (Step 2).
Bald Eagle	Species not present	No effect	 Per Step 6 Bald Eagles: There are no bald eagle roosts and no active bald eagle nests, or their buffer zones, in the project action area. Notwithstanding, DRPT commits to developing and implementing appropriate mitigation measures for threatened and endangered species, including Time of Year (TOY) construction restrictions specific for the bald eagle.

ATTACHMENT F NOISE AND VIBRATION ASSESSMENT

Franconia Third Track Project Categorical Exclusion

Noise and Vibration Assessment Franconia Third Track Project

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1. SUMMARY

DRPT evaluated noise and vibration associated with construction and operation of the Franconia Third Track Project in two parts:

- In Part 1, DRPT evaluated the effects of construction and operation of a third main track at existing grade plus the effects of increased passenger train service between Franconia and Occoquan in conjunction with the DC2RVA Project.
- In Part 2, DRPT evaluated the effects of the construction and operation of an elevated structure, or bypass, to carry passenger trains from one side of the corridor to the other without crossing the existing two main tracks. The bypass will be located just south of the Franconia-Springfield VRE station.

The Federal Railroad Administration (FRA) has noise and vibration impact assessment methods for trains (FRA 2012). These methodologies are appropriate to evaluate noise and vibration from trains that travel at speeds of 90 miles per hour (mph) or higher. For train speeds lower than 90 mph, FRA endorses use of noise and vibration impact assessment methodologies published by the Federal Transit Administration (FTA 2018). Train speeds proposed on the DC2RVA project corridor and within the Franconia to Occoquan third track segment are at or lower than 90 mph, therefore DRPT evaluated project-related noise and vibration using FTA methods.

DRPT's Part 1 evaluation is documented in the DC2RVA Environmental Impact Statement and Record of Decision. DRPT's noise and vibration impact assessments for the DC2RVA corridor evaluated the impacts of constructing an additional main track along the 123-mile corridor, plus the effects of additional passenger train service in the future. DRPT's analyses, presented within the DC2RVA EIS, included the Franconia to Occoquan segment in order to fully assess the potential noise and vibration effects of the additional passenger service, even though the construction of a third track between Franconia and Occoquan was advanced as a separate project. DRPT concluded there were no noise or vibration impacts in the Franconia to Occoquan segment from construction of a third track at existing grade and operation of additional passenger service.

DRPT's Part 2 evaluation is presented below, and is focused on the potential noise and vibration effects of existing passenger trains (both Amtrak passenger trains and VRE commuter trains) being routed onto an elevated bypass to allow trains to move across the existing two main tracks. DRPT conducted the additional noise and vibration assessment to fully assess the potential effects of operating the existing trains on an elevated structure. Train speed is a key factor in noise and vibration levels, and DRPT considered varying operating speeds (70, 75, and 80 mph) on the bypass. Based on the Part 2 assessment, DRPT concluded that noise impacts from passenger train operations on the bypass are not projected to occur at any of the speeds evaluated. Bypass construction noise levels could approach, but are not likely to exceed, temporary noise impact levels. DRPT also determined that vibration impacts are projected to occur at 30 mph, and only one location at 75 and 70 mph. DRPT also determined the projected vibration impacts would occur when the passenger trains are approaching the elevated portion of the bypass, but not yet on the elevated structure – that is, the vibration would be transmitted through the ground, not

through the structure. There is no vibration impact projected when a passenger train operates at a speed of 65 mph or less while on the bypass.

DRPT will determine the passenger and commuter train operating speed on the bypass during final design, and will conduct additional vibration assessment (potentially including propagation measurements in the field) if the bypass is designed to accommodate passenger train speeds greater than 65 mph. In addition, DRPT will require construction noise best management practices and mitigation measures be included in the bypass's construction plans to ameliorate potential temporary disturbances from construction noise.

2. BACKGROUND - FUNDAMENTALS OF ACOUSTICS

Noise is unwanted or undesirable sound. Sound travels through the air as waves of tiny air pressure fluctuations caused by vibration. The intensity or loudness of a sound is an effect of how much the sound pressure fluctuates. The magnitude of fluctuation above and below the static atmospheric pressure is the amplitude of the sound wave. Additionally, sound is quantified on the logarithmic decibel scale for convenience. Because of the logarithmic nature of the decibel unit, when two identical noise sources are added together, the resulting increase is 3 dB (not the arithmetic sum of the two noise levels).

Most sounds consist of a broad range of sound frequencies, from low frequencies to high frequencies. The average human ear does not perceive all frequencies equally. Therefore, the A-weighting scale was developed to approximate the way the human ear responds to sound levels; it mathematically applies less "weight" to frequencies we do not hear well, and applies more "weight" to frequencies we do hear well. Typical A-weighted noise levels for various types of sound sources are summarized in Figure 1.

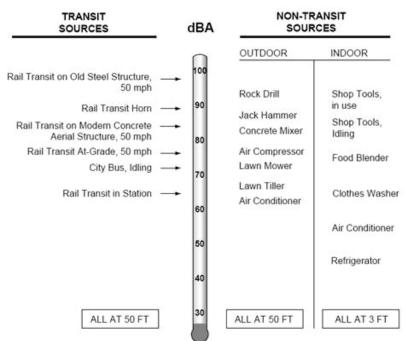


Figure 1: Typical Noise Levels

Source: Transit Noise and Vibration Impact Assessment (FTA 2018)

2.1 Noise Descriptors

The equivalent average sound level (L_{eq}) is often used to describe sound levels that vary over time, usually a one-hour period. It is a mean energy-based average noise level. The L_{eq} is often described as the constant sound level that is an equivalent exposure level to the actual time-varying sound level over the period (hour). Using twenty-four consecutive 1 hour L_{eq} values it is possible to calculate a daily cumulative noise exposure. A common community noise rating is the Day-Night Average Sound Level (L_{dn}). The L_{dn} is the 24-hour L_{eq} but includes a 10 dBA penalty on noise that occurs during the nighttime hours (between 10 p.m. and 7 a.m.) where sleep interference might be an issue. The 10 dBA penalty makes the L_{dn} useful when assessing noise in residential areas, or land-uses where overnight sleep occurs. Both FTA (2018) and FRA (2012) utilize the L_{dn} descriptor to evaluate transit noise at residential properties.

2.2 Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Displacement, in the case of a vibrating floor, is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement, and acceleration is the rate of change of the speed. The response of humans, buildings, and equipment to vibration is normally described using velocity or acceleration. Velocity will be used in describing ground-borne vibration.

Ground-borne vibration (GBV) can be a serious concern for residents or at facilities that are vibration-sensitive, such as laboratories or recording studios. The effects of GBV include perceptible movement of building floors, interference with vibration-sensitive instruments, rattling of windows, and shaking of items on shelves or hanging on walls. Additionally, GBV can cause the vibration of room surfaces resulting in ground-borne noise (GBN). GBN is typically perceived as a low-frequency rumbling sound.

2.3 Vibration Descriptors

Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is used to evaluate the potential for building damage. It is defined as the maximum instantaneous peak of the vibration signal. PPV is not considered the appropriate measurement for evaluating the human response to vibration. RMS is used to evaluate human response because it takes some time for the human body to respond to vibration signals. The RMS of a signal is the square root of the average of the squared amplitude of the signal. For sources such as trucks or motor vehicles, PPV levels are typically 6 to 14 dB higher than RMS levels. FRA and FTA use the abbreviation "VdB" for vibration dBs for RMS and PPV to reduce the potential for confusion with sound dBs (FRA 2012).

Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors, L_{eq} and L_{max} can be used to describe the equivalent vibration and the maximum vibration level observed during a single vibration measurement interval. Figure 2 illustrates common vibration sources and the human and structural responses to ground-borne vibration. As shown in Figure 2, the threshold of perception for human response is approximately 65 VdB; however, human response to vibration is not usually significant unless the vibration exceeds 70 VdB.

In contrast to airborne noise, neither GBV nor GBN is an everyday experience for most people. The background vibration level in residential areas is usually 50 VdB or lower which is well below the threshold of perception for humans. Levels at which vibration interferes with sensitive instrumentation can be much lower than the threshold of human perception, such as for medical imaging equipment or extremely high-precision manufacturing. Most perceptible indoor vibration is caused by sources within a building, such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible GBV are construction equipment, steel-wheeled trains, and traffic on rough roads; though in most soils, GBV dissipates very rapidly, and it is not a common environmental concern.

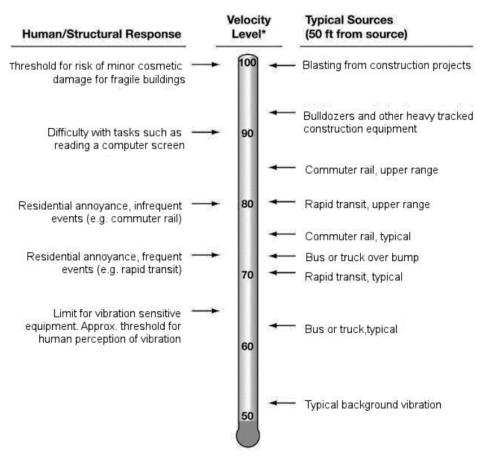


Figure 2 - Typical Levels of Ground-borne Vibration

* RMS Vibration Velocity Level in VdB relative to 10⁻⁶ inches/second

Source: FTA 2018

2.4 Existing Noise Levels

In accordance with FTA and FRA noise assessment methodologies, DRPT measured existing noise levels for the DC2RVA EIS. Existing noise levels were measured for a continuous 24-hour period at a residence close to the proposed bypass alignment, and those results are used in this analysis. Table 1 presents the measured L_{dn} from the DC2RVA EIS.

Location ID	Address	Measurement Type	Ldn (dBA)
ML06	6701 Jerome St	24-hr.	75

DRPT used the measured L_{dn} value of 75 dBA to determine the noise impact threshold, and to evaluate the potential for noise impacts associated with passenger trains on the bypass alignment.

2.5 Vibration Study Area

The first step in DRPT's vibration assessment consisted of identifying the vibration screening distances. Only certain land uses are considered vibration sensitive, and FTA guidance establishes three sensitive-use categories that resemble the noise land use categories but differ in a few important respects:

- Vibration Category 1–High Sensitivity: Where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance, such as electron microscopes, high-resolution lithographic equipment, and magnetic resonance imaging devices.
- Vibration Category 2–Residential: Where people sleep, including hotels and hospitals.
- Vibration Category 3–Institutional: Where vibration has potential to interfere with activities within the building, but there is not particularly vibration-sensitive equipment present, such as schools, places of worship, quiet offices, and other institutions.

Table 2 presents the vibration screening distances for the three vibration land use categories for conventional passenger and commuter railroad projects.

Table		Citering D	istances				
		Distance from ROW or Property					
			Line (feet)				
Vibration Vibration Vibr							
		Category	Category	Category			
Type of Project		1	2	3			
Conventional	Commuter						
Railroad		600	200	120			
Conventional	Commuter	1 600	2 200	3 120			

Table 2 Vibration Screening Distances

Source: FTA 2018

Using GIS technology, DRPT identified Vibration Category 2 land uses (single-family residences) within the screening distance of 200 feet from the bypass. DRPT then performed a General Vibration Assessment for the three single-family residences within 200 feet of the bypass.

3. ENVIRONMENTAL CONSEQUENCES

In this section, DRPT describes potential bypass-related noise and vibration effects and identifies mitigation measures to offset bypass-related impacts. These analyses evaluated noise and vibration from the existing passenger and commuter trains anticipated to operate on the proposed bypass alignment. The assessment addresses both operational and construction noise and vibration effects from the proposed bypass alignment.

3.1 Noise

3.1.1 Noise Impact Criteria

According to FRA (2012) and FTA (2018), noise-sensitive land uses are divided into one of three categories:

- Category 1: Land where quiet is an essential element (e.g., amphitheaters and concert pavilions). This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks (NHLs) with significant outdoor use.
- Category 2: Residences and buildings where people sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
- Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls, fall into this category. Places for meditation or study associated with cemeteries, monuments, and museums. Certain historical sites, parks, and recreational facilities are also included.

There are no Category 1 or 3 receptors within the screening distances of the proposed bypass alignment; therefore DRPT's analyses focused on the Category 2 receptors (residences), and used the L_{dn} descriptor.

Figure 3 from the FTA guidance manual shows the noise impact criteria used by both FTA and FRA, which are based on the land use category and the existing noise exposure in the area. No impact indicates projected noise levels are unlikely to cause annoyance. A moderate noise impact is a noise level increase that is noticeable to most people, yet generally not enough to cause adverse reactions. A severe noise impact is a noise level increase that could cause annoyance to a significant percentage of people. FTA guidance requires consideration and adoption of noise impacts are projected to occur, FTA assumes that mitigation measures will be implemented to reduce project noise levels below impact thresholds, unless there are truly extenuating circumstances which prevent it. In the context of environmental review under NEPA, severe noise impacts are considered significant impacts.

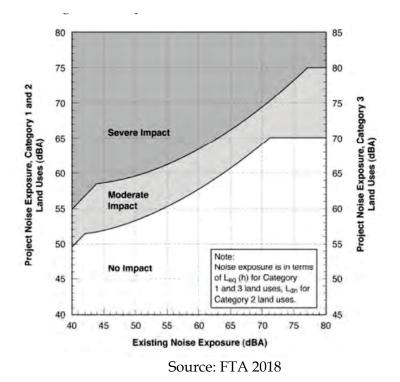


Figure 3 - FTA/FRA Noise Impact Thresholds

3.1.2 Noise Impact Assessment Methodology

The FRA and FTA noise impact assessment methodologies applied by DRPT include the following basic components:

- 1. Identify noise-sensitive land uses
- 2. Measure existing outdoor noise levels
- 3. Measure train specific noise source levels
- 4. Define impact thresholds based on measured existing noise levels
- 5. Calculate Project-related outdoor noise levels using identified train and operations characteristics
- 6. Determine if Project-related noise levels exceed FRA and FTA defined noise impact thresholds.

DRPT's train noise calculations utilized the FTA General Noise Assessment methods as implemented in the Cadna-A acoustical modeling software. A digital topographic map of the proposed bypass and cut sections was imported into Cadna-A. Ground absorption was assumed to be zero to account for the rocky cut section and retaining wall, resulting in conservative estimates in train noise at the nearest residences. The proposed alignment was imported into Cadna-A, and the train characteristics shown in Table 3 below were entered into the FTA module in Cadna-A.

Sound Exposure Level (SEL) is an acoustical descriptor that contains all acoustical energy associated with a single event such as the passing of a locomotive or railcar, or a locomotive horn use event. SEL values are used as the noise emission terms in the train noise models; they are expressed in units of dBA (A-weighted decibel). This Part 2 analysis utilized the same SEL values as those that were used in Part 1 as reported in the DC2RVA EIS. Characteristics of the passenger trains that were used by DRPT in the noise analysis are shown in Table 3, and were derived from data in the DC2RVA EIS. Trains using the proposed bypass were modeled at three different speeds (70, 75, and 80 mph) which span the range of likely operating conditions.

		VRE	Northeast
	Amtrak Long Distance	Commuter	Regional
	Passenger Trains	Trains	Passenger Trains
Throttle Setting	8	8	8
SEL For Locomotives			
(dBA)	97	97	97
SEL For Railcar (dBA)	82	82	82
Locomotives	2	1	1
Railcars	11	7	8
Total Trains/Day	2	16	10
Daytime Trains	2	12	10
Nighttime Trains	0	4	0
	70	70	70
Train Speed	75	75	75
	80	80	80
Northbound Daytime	2	6	5
Locomotive	Σ	0	5
Northbound Nighttime	0	2	0
Locomotive	0	<u> </u>	0
Southbound Daytime	2	6	5
Locomotive	_		-
Southbound Night	0	2	0
Locomotive			
Northbound Daytime Railcars	11	42	40
Northbound Nighttime Railcars	0	14	0
Southbound Daytime			
Railcars	11	42	40
Southbound Nighttime			
Railcars	0	14	0

Table 3: Train Characteristics used in the Noise Analysis

Noise-sensitive land uses along the bypass alignment were identified by DRPT according to FRA and FTA land use categories. DRPT reviewed land use data from several sources, including GIS databases, digital aerial photographs, and field surveys that were performed for the DC2RVA EIS. The location coordinates of the residences nearest the proposed bypass alignment were imported into Cadna-A, and the software performed the FTA General Noise Assessment calculations. Cadna-A also calculated the shielding effects of the cut sections and retaining walls.

3.1.3 Noise Analysis Results

Table 4 presents results of DRPT's General Noise Assessment.

Residence	Existing	Projected Ldn (dBA) by Trains Speed			No Impact	Moderate Impact	Severe Impact	T i
(Receiver) ID	Ldn (dBA)	70 mph	75 mph	80 mph	(Ldn in dBA)	Threshold (Ldn in dBA)	Threshold (Ldn in dBA)	Impact Yes or No?
R01	75	56	56	57	<66	66-74	>74	No
R02	75	53	54	54	<66	66-74	>74	No
R03	75	53	54	54	<66	66-74	>74	No
R04	75	56	56	57	<66	66-74	>74	No
R05	75	55	55	55	<66	66-74	>74	No
R06	75	57	57	58	<66	66-74	>74	No
R07	75	56	57	57	<66	66-74	>74	No
R08	75	56	56	56	<66	66-74	>74	No
R09	75	57	57	57	<66	66-74	>74	No
R10	75	58	58	58	<66	66-74	>74	No

 Table 4: General Noise Assessment Results

Noise analysis results indicate that the project, as modeled, will not cause or contribute to either moderate or severe noise impacts at the nearest residential locations modeled in this analysis. The shielding effects of the cut section/retaining wall block the direct line of sight (the path sound travels) between the proposed alignment and the nearest homes, reducing projected noise levels at the nearest noise-sensitive land uses. No additional assessment or noise mitigation is necessary.

3.1.4 Construction Noise

Construction of the proposed rail improvements would likely result in a temporary increase in noise levels. Equipment used to move soil and other earthen materials, and pile driving are often the loudest construction noise sources.

Table 5 presents typical equipment used for different phases of railroad construction with typical noise levels, quantities, and estimated utilizations for each type of equipment used. The table shows the sound power level (SWL) used to determine sound pressure levels (SPL) at different distances. The distances in the table below are based on flat terrain between the noise source and a receiver at the stated distance; therefore the distances are conservative overestimates of

construction noise that may occur where the proposed bypass alignment is in a cut section (the areas closest to Category 2 land uses).

Phase	Equipment	#	Hours	Utiliza- tion	SWL/	Total SWL	SPL dista	(dBA nce (ft	,
			/day	tion	unit	SVVL	100	500	1000
	Off-Highway Trucks	4	6	50%	124	127	108	94	88
	Rubber Tired Dozers	3	8	67%	122	125	106	92	86
	Rubber Tired Loaders	2	6	50%	121	121	102	88	82
	Tractors/Loaders /Backhoes	3	5	42%	118	119	100	86	80
	Trenchers	2	4	33%	117	115	96	82	76
	2	4		5 00/	101	110	100	0.6	
-	Cranes	1	6	50%	121	118	100	86	80
-	Dumper/Tender	2	4	33%	110	108	89	75	69
	Off-Highway Trucks	2	6	50%	124	124	105	91	85
	Rubber Tired Dozers	3	8	67%	122	125	106	92	86
	Rubber Tired Loaders	2	6	50%	121	121	102	88	82
	Tractors/Loaders /Backhoes	3	5	42%	118	119	100	86	80
Γ	Trenchers	2	6	50%	117	117	98	84	78
	Welders	3	6	50%	114	116	97	83	77
	Excavators	2	8	67%	120	121	102	88	82
	Graders	1	8	67%	120	118	100	86	80
	Off-Highway Trucks	4	8	67%	124	128	109	95	89
	Off-Highway Trucks	1	4	33%	123	118	100	86	80
Earthwork	Rollers	2	6	50%	117	117	98	84	78
	Rubber Tired Dozers	1	8	67%	122	120	101	87	81
	Rubber Tired Loaders	2	6	50%	121	121	102	88	82
Γ	Scrapers	2	8	67%	123	125	106	92	86

 Table 5: Estimated Construction Equipment Noise Levels

Phase	Equipment	#	Hours	Utiliza-	SWL/	Total	SPL dista	(dBA nce (ft	
	• •		/day	tion	unit	SWL	100	500	1000
	Signal Boards	3	8	67%	106	109	90	76	70
	Tractors/Loaders /Backhoes	3	6	50%	118	119	101	87	81
		ĩ	T						
	Cranes	1	7	58%	121	119	100	86	80
	Excavators	2	8	67%	120	121	102	88	82
	Forklifts	3	8	67%	117	120	102	88	82
	Generator Sets	1	8	67%	117	115	97	83	77
D · 1	Graders	1	8	67%	120	118	100	86	80
Bridge Constructio	Pavers	2	8	67%	119	120	101	87	81
n for	Paving Equipment	2	8	67%	119	120	101	87	81
Elevated	Rollers	2	8	67%	117	118	99	85	79
Track	Rubber Tired Dozers	1	8	67%	122	120	101	87	81
	Scrapers	2	8	67%	123	125	106	92	86
	Tractors/Loaders /Backhoes	2	8	67%	118	119	100	86	80
	Welders	1	8	67%	114	113	94	80	74
	Paving Equipment	2	8	67%	119	120	101	87	81
	Excavators	2	8	67%	120	121	102	88	82
	Forklifts	3	8	67%	117	120	102	88	82
	Generator Sets	1	8	67%	117	115	97	83	77
	Graders	1	8	67%	120	118	100	86	80
Retaining Walls	Rubber Tired Dozers	1	8	67%	122	120	101	87	81
	Rubber Tired Loaders	2	7	58%	121	121	103	89	83
	Scrapers	2	8	67%	123	125	106	92	86
	Tractors/Loaders /Backhoes	3	7	58%	118	120	101	87	81
	Cranes	1	7	58%	121	119	100	86	80
	Forklifts	3	8	67%	117	120	102	88	82
Signals	Generator Sets	1	8	67%	117	115	97	83	77
	Tractors/Loaders /Backhoes	2	8	67%	118	119	100	86	80

 Table 5: Estimated Construction Equipment Noise Levels

Phase	Equipment	#	Hours /day	Utiliza- tion	SWL/ unit	Total SWL	SPL dista	(dBA nce (ft	,
			Juay	tion	unn	SVVL	100	500	1000
	Welders	1	8	67%	114	113	94	80	74
		-				T			
	Air Compressors	1	6	50%	117	114	95	81	75
	Cranes	1	7	58%	121	119	100	86	80
	Forklifts	3	8	67%	117	120	102	88	82
	Generator Sets	1	8	67%	117	115	97	83	77
Track Installation	Track Laying Machine	1	8	67%	129	128	109	95	89
mstanation	Track Tamper	1	8	67%	121	119	100	86	80
	Track Stabilizer	1	8	67%	126	124	106	92	86
	Tractors/Loaders /Backhoes	2	8	67%	118	119	100	86	80
	Welders	1	8	67%	114	113	94	80	74
			•						
	Cranes	1	7	58%	121	119	100	86	80
	Forklifts	3	8	67%	117	120	102	88	82
Signal	Generator Sets	1	8	67%	117	115	97	83	77
Work	Tractors/Loaders /Backhoes	2	8	67%	118	119	100	86	80
	Welders	1	8	67%	114	113	94	80	74
						-			
	Air Compressors	1	6	50%	117	114	95	81	75
	Cranes	1	7	58%	121	119	100	86	80
	Forklifts	3	8	67%	117	120	102	88	82
Install	Generator Sets	1	8	67%	117	115	97	83	77
Track and Sub ballast	Track Laying Machine	1	8	67%	129	128	109	95	89
Over	Track Tamper	1	8	67%	121	119	100	86	80
Bridge and	Track Stabilizer	1	8	67%	126	124	106	92	86
at-Grade	Ballast Regulator	1	8	67%	119	118	99	85	79
	Tractors/Loaders /Backhoes	2	8	67%	118	119	100	86	80
	Welders	1	8	67%	114	113	94	80	74
Einel C. J	Cranes	1	7	58%	121	119	100	86	80
Final Cut- Over and	Forklifts	3	8	67%	117	120	102	88	82
	Generator Sets	1	8	67%	117	115	97	83	77

 Table 5: Estimated Construction Equipment Noise Levels

Phase	Equipment	#	Hours	Utiliza-	SWL/ unit	Total	SPL dista	(dBA nce (ft	,
			/day tion	tion	unit	SWL	100	500	1000
Removal of Turnouts	Tractors/Loaders /Backhoes	3	7	58%	118	120	101	87	81
	Welders	1	8	67%	114	113	94	80	74

 Table 5: Estimated Construction Equipment Noise Levels

Source: HDR Engineering, Inc.

DRPT determined the results presented in the table above conservatively over-estimate actual expected construction noise levels by assuming that all of the equipment (i.e., all of the dump trucks, or all of the pickup trucks) operate at the same location. Typically, construction equipment is spread throughout the construction work zone. Given the linear nature of the Project and relatively confined width of the railroad right-of-way, DRPT finds it is unlikely that all equipment would operate next to each other in the same (stationary) location for one hour.

On this basis, construction noise levels in the table above over-estimate noise levels for construction phases that would utilize more than one piece of equipment. In all other cases, the results are assumed by DRPT to be within 3 dB of likely construction noise levels assuming that the equipment has been properly maintained and the mufflers are in good condition, and there is a direct line-of-sight between the equipment and a receiver outside the ROW.

The FRA and FTA do not have standardized criteria for construction; however, FTA suggests reasonable criteria that can be used for assessment purposes. The criteria for residential land uses are 1-hour L_{eq} of 90 dBA during the day and 80 dBA during the night (FTA 2018).

Construction noise analysis results shown in the table above indicate the total combined noise for all equipment types and construction phases may exceed the 90 dBA threshold at the Category 2 land uses closest to the proposed bypass alignment. Therefore, construction noise best management practices will be implemented during the bypass construction phase, including: maintaining all equipment in a good state of repair; using original equipment manufacturer, or better mufflers on all equipment, and; limiting nighttime construction activity. These best management practices will be implemented in the areas closest to the Category 2 land uses.

3.2 Vibration

In this section, DRPT describes potential vibration effects of passenger trains operating on the proposed bypass and identifies mitigation measures to offset projected impacts. DRPT assessed vibration effects based on the methods and criteria included in the *High Speed Ground Transportation Noise and Vibration Impact Assessment* guidance manual (FRA 2012) and the *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) for the assessment in the speed regime range that the passenger trains would likely operate on the bypass.

3.2.1 Vibration Impact Criteria

The FRA and FTA vibration impact criteria are identical and were used by DRPT to predict future vibration impacts from train operations on the bypass. There are separate criteria for both

ground-borne vibration (GBV) and ground-borne noise (GBN). Ground-borne noise is often masked by airborne-noise; therefore, ground-borne noise criteria are primarily applied to subway operations in which airborne noise is negligible. The basis for evaluating rail vibration impact thresholds is the highest expected RMS vibration levels for repeated vibration events from the same source. As presented in Table 6, the thresholds are differentiated between vibration sensitive land uses and the frequency of the events.

Land Use Category	GBV II	mpact Levels 1 μin/s)	(VdB re	GBN Impact Levels (dBA re 20 µPa)							
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³	Frequent Events ¹	Occasional Events ²	Infrequent Events ³					
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB 4	65 VdB 4	65 VdB 4	N/A ⁵	N/A ⁵	N/A ⁵					
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA					
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA					

TABLE 6: GROUND-BORNE VIBRATION (GBV) AND GROUND-BORNE NOISE(GBN) IMPACT CRITERIA FOR GENERAL ASSESSMENT

Source: FRA 2012.

Table Notes:

1. Frequent Events is defined as more than 70 vibration events of the same kind per day.

2. Occasional Events is defined as between 30 and 70 vibration events of the same kind per day.

3. Infrequent Events is defined as fewer than 30 vibration events of the same kind per day.

4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

5. Vibration-sensitive equipment is not sensitive to ground-borne noise.

Train frequency on the proposed bypass falls into the infrequent category, and this assessment is focused on Category 2 land uses; therefore the vibration impact threshold is 80 VdB. Ground-borne noise was not evaluated because the proposed alignment is not below-grade.

3.2.2 Vibration Prediction Methodology

DRPT implemented the following general steps in the vibration assessment:

- 1. Establish the study area and identify vibration-sensitive land-uses.
- 2. Evaluate the traffic conditions and set corresponding impact thresholds.
- 3. Select the base generalized vibration curve and apply appropriate adjustments.
- 4. Determine the propagation from project-related vibration sources to the impact thresholds.
- 5. Identify receptors anticipated to experience vibration impacts.

The study area includes the residential land uses closest to where the bypass alignment is in a cut section. The vibration prediction begins with selection of a generalized base curve, depending upon the mode considered in the project. These curves represent typical ground-surface vibration as a function of distance from the source, based upon many ground-borne vibration measurements of numerous transit sources.

Figure 4 shows the generalized ground surface vibration curves suitable for assessing passenger trains on the bypass alignment. These curves similarly represent the upper range of the measurement data from equipment in good condition. The top curve represents trains that are powered by diesel-electric locomotives, and that is representative of the trains on the proposed bypass alignment.

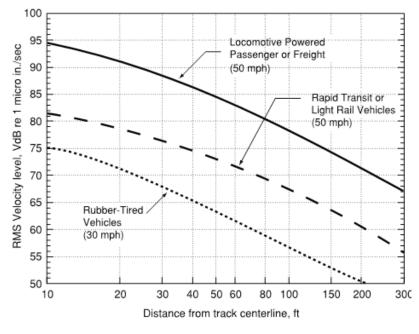


FIGURE 4: FTA GENERALIZED GROUND SURFACE VIBRATION CURVES

Source: FTA 2018.

The base curves can be adjusted to account for project-specific vibration factors which differ from the conditions of the base curve. Adjustment parameters are given in the FRA and FTA guidance

and include train speed, wheel and rail type and condition, and type of track support system, among other adjustments. The adjustment parameters are based on typical vibration spectra, and are given as generalized single numbers to be applied to the base curve.

The adjustments are arithmetically added to the reference vibration curve and the resulting levels are compared to the impact thresholds. In this analysis, the reference speed of 50 mph was adjusted to 80, 75, and 70 mph to assess the range of likely operating speeds.

Soil types and other subsurface conditions affect GBV. For example, GBV can propagate more efficiently in areas where the soil is characterized by stiff shallow clay, or where there is shallow bedrock. The vibration assessment performed by DRPT for the DC2RVA EIS briefly reviewed publicly available and reasonably obtainable soils and geologic data for the purpose of evaluating where GBV might propagate very efficiently. Based on this limited review, most of the soils in the corridor consist of coarse-grained unconsolidated deposits, which include regions with mixed combinations of gravel, sand, and silt. There are also limited areas of fine-grained unconsolidated deposits, which include alluvium, clay, or mud, although some of the clay or mud is mixed with sand. The coarse-grained unconsolidated deposits, which make up the majority of the soils along the alignment, as well as most of the fine-grained unconsolidated deposits generally propagate GBV less efficiently than highly efficient soils such as stiff clay. However, the soils data are relatively coarse and may not identify highly localized soil-type differences or geologic features; therefore DRPT did not apply an adjustment for efficient propagation through soils nor any other adjustments to the vibration propagation calculations.

3.2.3 Vibration Impact Assessment

Table 7 presents the vibration screening distances for conventional commuter rail projects.

	Land Use		
	Category 1	Category 2	Category 3
Screening Distance (feet)	600	200	120

 Table 7. Vibration Screening Distances

Source: FTA 2018

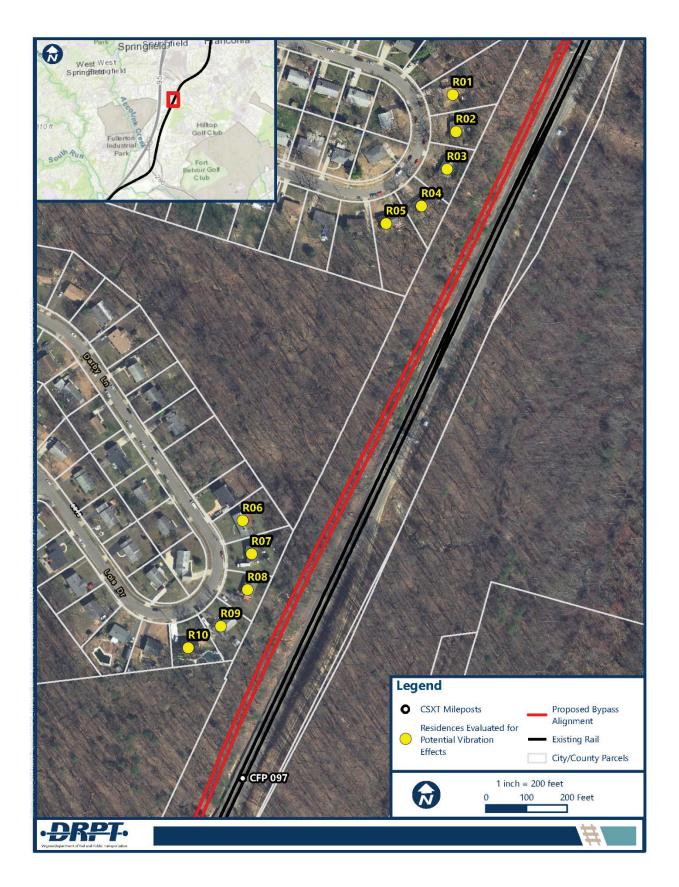
As part of the vibration analysis, DRPT did not identify any Category 1 or 3 receptors within the screening distances of the proposed bypass alignment; however Category 2 land uses (single-family residences) were identified by DRPT within the screening distance. DRPT performed a General Vibration Assessment on the Category 2 land uses. Using GIS technology, DRPT measured the distances between the closest Category 2 land uses and the proposed bypass alignment, and evaluated the potential for vibration impacts. Table 8 summarizes the results of DRPT's General Vibration Assessment for the Category 2 land uses at different train speeds. Residences within the distance from track to impact for each speed are considered by DRPT to be potentially affected by vibration.

Distance	Distanco	80 mph		75 mph		70 mph	
Residence (Receiver) ID	from Track to Residence (feet)	Distance from Track to Impact (feet)	Potential Vibration Impact?	Distance from Track to Impact (feet)	Potential Vibration Impact?	Distance from Track to Impact (feet)	Potential Vibration Impact?
R01	189	129	No	122	No	115	No
R02	143	129	No	122	No	115	No
R03	124	129	Yes	122	No	115	No
R04	141	129	No	122	No	115	No
R05	201	129	No	122	No	115	No
R06	192	129	No	122	No	115	No
R07	135	129	No	122	No	115	No
R08	106	129	Yes	122	Yes	115	Yes
R09	127	129	Yes	122	No	115	No
R10	177	129	No	122	No	115	No

Table 8: General Vibration Assessment Results

DRPT's General Vibration Assessment shows a potential vibration impact at three residences (R03, R08, and R09) when trains operate at 80 mph on the bypass. When trains operate at 75 and 70 mph, there is a potential vibration impact at only one residence (R08). DRPT found no vibration impacts at any residence when trains operated at 65 mph. Train speed on the bypass has yet to be determined, and will be evaluated during final design. If the bypass is designed for trains to operate at speeds higher than 65 mph, DRPT will conduct an additional vibration assessment during final design to evaluate the projected vibration impact in more detail. Results of the additional detailed vibration assessment will determine if mitigation is necessary and practicable, and if so, what the mitigation could consist of.

Locations of the 10 residences are shown in the map on the following page.



3.2.4 Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction can respond to these vibrations with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds, and perceptible vibrations at moderate levels, and slight damage at the highest levels.

Ground vibrations from construction activities do not often reach the levels that can damage structures, but they can reach the range of perceptible vibration or audible sound in buildings very close to the site; *construction activities very close to a building can also cause damage to the building*. A possible exception is the case of fragile buildings where special care must be taken to avoid damage. The construction vibration criteria include special consideration for fragile buildings. Table 9 presents the damage criteria as published by the FRA, using units of Peak Particle Velocity (PPV) expressed in inches per second.

Building Category	Description	Damage Criteria, PPV (inch/second)
Ι	Reinforced concrete, steel, or timber (no plaster)	0.5
Ш	Engineered concrete and masonry (no plaster)	0.3
III	Non-engineered timber and masonry buildings	0.2
IV	Buildings extremely susceptible to vibration damage	0.12

TABLE 9: CONSTRUCTION VIBRATION DAMAGE CRITERIA

Source: FRA 2012

DRPT plans to continue to evaluate the potential for construction vibration effects from bypass construction during the engineering and construction design phases of the project.

Table 10 presents peak particle velocities associated with typical construction equipment, as published by FTA. These vibration emission levels and factors represent a conservatively high usage as DRPT does not anticipate that all of this machinery would be used at any one particular location at the same time.

Equipment		PPV (inch/second) at 25 feet	Approx. Lv ¹ at 25 feet
Pile Driver (impact)	upper range	1.518	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.17	93
Clam shovel drop		0.202	94
Hydromill	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.21	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

TABLE 10: CONSTRUCTION EQUIPMENT PPV

Source: FTA 2018.

Table Notes:

1. RMS velocity in decibels (VdB) re 1 micro-inch/second.

4. **REFERENCES**

Federal Railroad Administration. 2012. *High Speed Ground Transportation Noise and Vibration Impact Assessment*. Washington, D.C.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Washington, D.C.