

INTERSTATE 395 EXPRESS LANES

NORTHERN EXTENSION

CULTURAL RESOURCES

TECHNICAL MEMORANDUM | SEPTEMBER 2016



ExpressLanes



INTERSTATE 395 EXPRESS LANES NORTHERN EXTENSION

Cultural Resources Background Research and Conclusions Technical Memorandum

City of Alexandria, and Arlington and Fairfax Counties
Project Number: 0395-969-205, P101; UPC: 108313
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September 14, 2016 Errata
to
Interstate 395 Express Lanes Northern Extension
Cultural Resources Technical Memorandum

Technical corrections to the *Interstate 395 Express Lanes Northern Extension Cultural Resources Technical Memorandum* include:

Page	Location	Change
9	Section 1.3 Conclusion 1 st paragraph, line 10	“Based upon preliminary design, the proposed project could impact up to approximately 5.91 acres of historic resource property for the construction of noise barriers.”
9	Section 1.3 Conclusion 1 st paragraph, line 13 and 14	“Approximately 2.41 acres would be outside of the VDOT right of way and would be located within historic districts (3.5 acres of potential impact are within VDOT right of way).”

CULTURAL RESOURCES BACKGROUND RESEARCH AND CONCLUSIONS TECHNICAL MEMORANDUM

1. INTRODUCTION

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration, is preparing an Environmental Assessment (EA) for the I-395 Express Lanes Project (Northern High Occupancy Toll [HOT] Lanes) to extend the I-95 Express Lanes in Alexandria, Arlington, and Fairfax Counties, Virginia. The proposed improvements include the expansion and conversion of the two existing reversible high occupancy vehicle (HOV) lanes on I-395 to three managed HOT lanes. The conversion of the existing I-395 HOV Lanes to HOT lanes will be accomplished by reconstructing the existing shoulders to full strength pavement, resurfacing the existing travel way, and re-striping the reversible roadway to provide three managed HOT lanes. The HOT lanes would be dedicated for use by qualifying HOV-3 vehicles (three or more vehicle occupants), which would continue to travel for free, and non-HOV traffic, which would be permitted to travel on the facility by paying a toll. The project is being developed as the result of a public-private partnership between VDOT and 95 Express Lanes, LLC (95 Express). Under the provisions of the Public-Private Transportation Act (PPTA) of 1995, 95 Express will build, operate, and provide routine maintenance on the lanes under the ownership and oversight of VDOT.

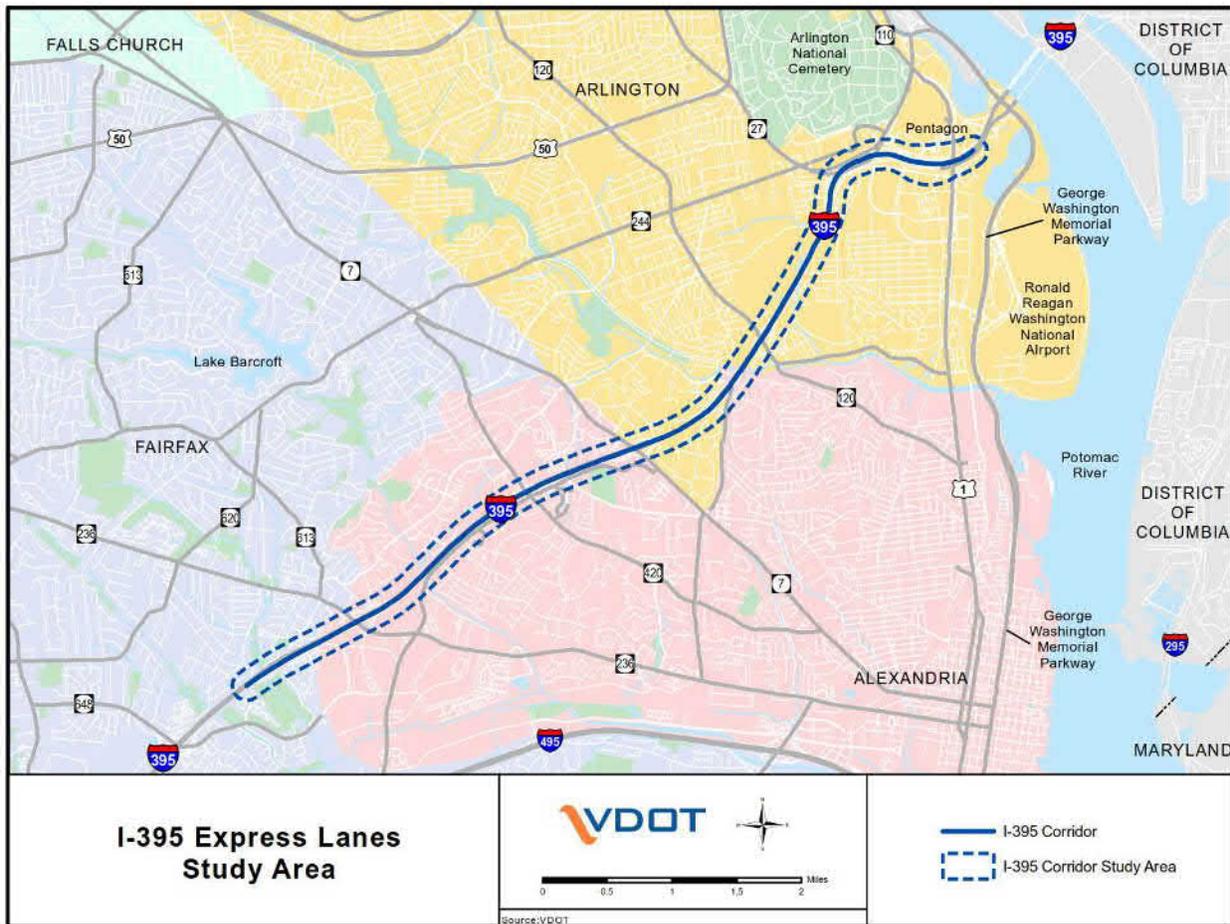
The study area for the I-395 Express Lanes Project encompasses approximately eight miles of the I-395 corridor from Turkeycock Run in Fairfax County to the vicinity of Eads Street near the Pentagon in Arlington County, as shown in **Figure 1-1**. Transition areas extending slightly beyond these termini are included in order to connect the proposed improvements with the existing facility. Additional signage, maintenance of traffic, and noise barrier activities are anticipated to occur beyond the study area. Crossroads and interchange areas are included in the study area, as well as lands adjacent to the corridor¹. Additionally, traffic control devices and maintenance of traffic activities might occur beyond the study area.

The following interchanges along I-395 are located within the study area, moving south to north:

- Turkeycock Run;
- Duke Street/Little River Turnpike (Route 236);
- Seminary Road (Route 420);
- King Street (Route 7);
- Shirlington Road;
- Glebe Road (Route 120);
- Washington Boulevard (Route 27); and
- Eads Street near the Pentagon.

¹ The study area is approximately 600 feet to either side of the existing corridor for a distance of eight miles and was established to identify the full extent of environmental resources and their relevance to the project. Specific potential environmental consequences resulting from the expansion and conversion of the two existing reversible High Occupancy Vehicle (HOV) lanes on I-395 to three managed HOT lanes are documented in **Chapter 3.0, Environmental Consequences** of the EA.

Figure 1-1: Study Area



VDOT first conducted cultural resource studies for the I-395 Express Lanes Project in 2006. The following management summary describes previous studies as they relate to the currently proposed project. The conclusions of the previously-completed surveys remain valid and provide adequate basis for concluding the Section 106 review process for the current project.

1.1 Previous Studies

Dovetail Cultural Resources Group I, Inc. (Dovetail), and Thunderbird Archaeology Associates, Inc. (now a division of Wetland Studies and Solutions, Inc.) [TAA] conducted architectural and archaeological surveys, between 2006 and 2008, for the proposed I-95/I-395 High Occupancy Vehicle/Bus/High Occupancy Toll (HOV/Bus/HOT) Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties, and the City of Alexandria, Virginia. The studies considered the approximately 36-mile long project area extending northeast along I-95 from the vicinity of Garrisonville Road in Stafford County and continuing along I-395 to the vicinity of the Eads Street Interchange in Arlington County. However, only the southern 28 miles of the project, from Garrisonville Road in Stafford County to Edsall Road in Fairfax County, were constructed. The currently-proposed I-395 Express Lanes Project will complete the northernmost eight-mile section of that project, from Edsall Road in Fairfax County to the Eads Street Interchange in Arlington County. Thus, the following summaries of the results of the 2006-2008 surveys focus attention on those resources recorded within the study limits of the I-395 Express Lanes Project.

Architectural Surveys

In May 2007 Dovetail conducted an architectural survey for the I-95/I-395 HOV/Bus/HOT Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties and the City of Alexandria, Virginia (Goff and Barile, 2007). The area of potential effects (APE) for architectural resources was defined as all areas within the viewshed of the proposed project where alterations to the setting and feeling of historic properties may occur. Following completion of a records review and background research, four known historic properties were identified in the vicinity of the northern eight-mile section of the project: the Pentagon (000-0072), the Alexandria Canal Path (44AX0028), Parkfairfax Historic District (100-0151), and the Fairlington Historic District (000-5772) (see **Figure 1-2**)³. Of these, only the Alexandria Canal and the Fairlington Historic District were subject to field reconnaissance; the Pentagon and Parkfairfax Historic District were determined to be outside the project APE as discussed below.

The Alexandria Canal operated in the mid-nineteenth century as an extension of the Chesapeake and Ohio Canal, effectively linking Alexandria to Cumberland, Maryland and providing a trade link to the western states and territories. The property was recorded by the Virginia Department of Historic Resources (VDHR) as an archaeological site in 1983. During the field reconnaissance, Dovetail determined that the portion of the Alexandria Canal within the APE had been destroyed. Dovetail did identify one relatively undisturbed area along the path of the Alexandria Canal, but this area was located outside of the APE, approximately 300 feet south of the I-395 between S. Fern Street and S. Eads Street. As this area was not within the APE, the eligibility of this resource for listing in the National Register of Historic Places (NRHP) was not evaluated.

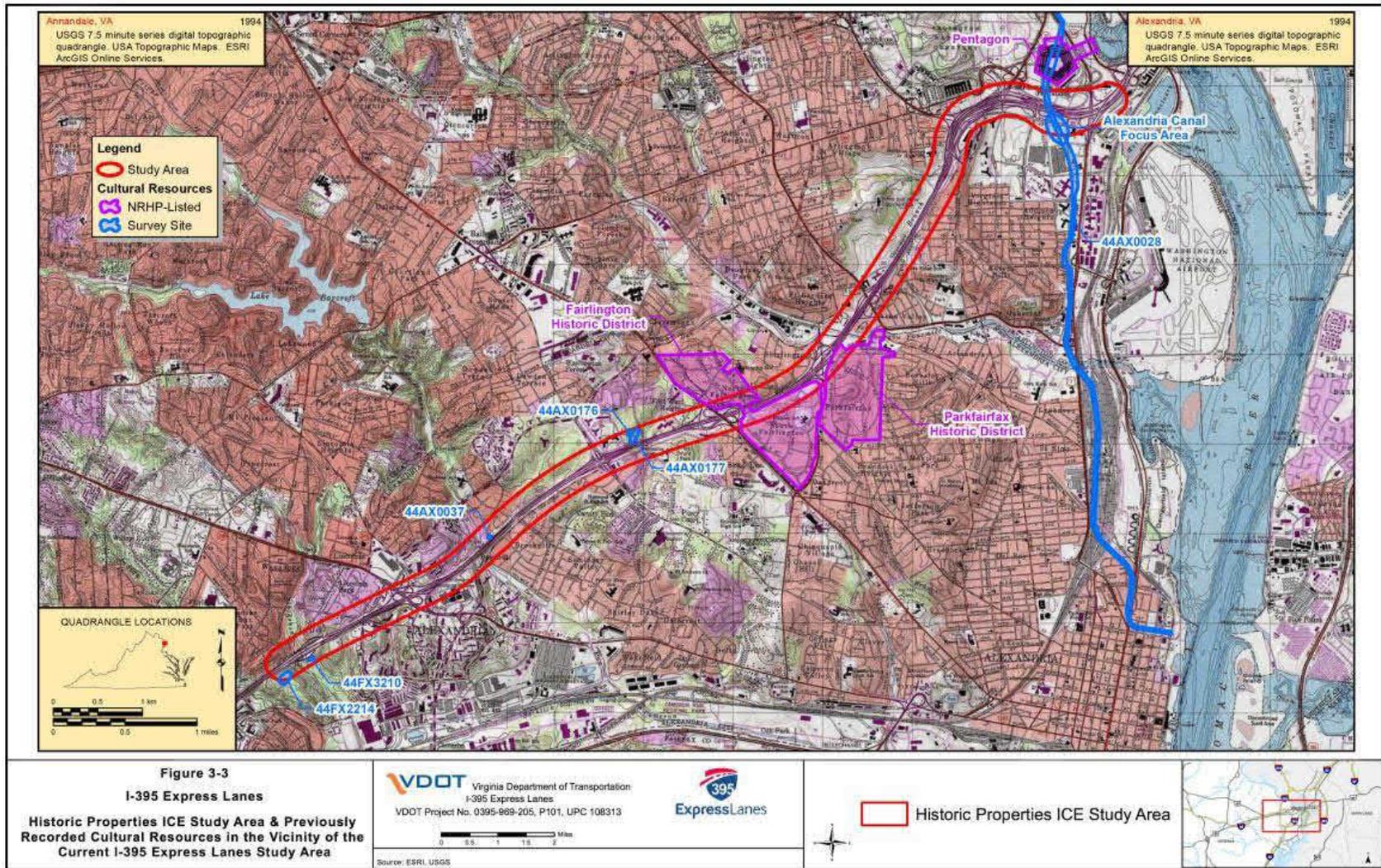
The Fairlington Historic District is a 1940s garden apartment complex that straddles the interstate at S. Abingdon Street, just east of the King Street (Route 7) Interchange. The district was listed in the NRHP in 1999. During the field reconnaissance, Dovetail found that the district remains eligible for listing in the NRHP. Topography and vegetative cover effectively screened the individual resources within the district from view of the project. In a letter dated August 5, 2008, VDHR concurred with VDOT's conditional finding of No Adverse Effect for I-395 portion of the proposed project, pending review of the design and placement of noise barriers in the vicinity of the Fairlington Historic District, should noise barriers be determined to be necessary (Marc Holma to Helen Ross, August 5, 2008).

The Pentagon was constructed between 1941 and 1943, and is the home of the U.S. Department of Defense. The Pentagon sits north of I-395 between S. Washington Boulevard and Jefferson Davis Highway. The iconic building is listed in the NRHP and designated a National Historic Landmark (NHL). During the 2007 investigations, Dovetail concluded:

While the boundaries of the resource are located adjacent to the I-395 corridor, its principal resource stands over 800 feet (243.8 m) from the I-395 roadbed. Since the project's scope of work for this location involves minor modifications only within the existing VDOT ROW, Dovetail architectural historians determined that the resource is not within the project APE due to its distance from the undertaking, existing modifications and the limited scope of work for this area. As such, a formal architectural survey was not completed on this resource during the current project (Goff and Barile 2007:14).

³ Additional resources were surveyed and identified by others after the cultural resources analysis for this EA was completed. To be conservative, the potential impacts associated with these potential historic properties have been included in this EA. Additional coordination with the VDHR and DC SHPO will be conducted based on further design when more detail is available regarding the need for and design of noise barriers in the vicinity of the historic resources.

Figure 1-2: Identified Cultural Resources within the APE



The Parkfairfax Historic District is located directly northeast of the Fairlington Historic District near the N. Quaker Lane Interchange. The Parkfairfax Historic District is a 1940s garden apartment complex that was listed in the NRHP in 1999.

During the 2007 investigations, Dovetail concluded, “Because work in the area near the Parkfairfax Historic District will be confined to restriping existing pavement in the center of the I-395 corridor and no construction will occur outside of the median, it was determined that the resource is not within the APE” (Goff and Barile 2007: 17). Thus, like the Pentagon, the Parkfairfax Historic District was not subject to formal architectural survey.

Archaeological Surveys

In 2006-2007, TAA conducted a Phase I archaeological survey for the proposed I-95/I-395 HOV/Bus/HOT Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties and the City of Alexandria, Virginia (Buchanan et al. 2007). The APE for archaeological resources was defined as the corridor directly impacted by construction of the project, which varied in width from 100 feet to 1,400 feet. The majority of the APE was previously disturbed by the construction of I-95/I-395. In the northern eight-mile section of the project, the majority of the areas requiring archaeological survey were bump-outs where flyover ramps or associated facilities such as park and ride lots were planned. The 2006-2007 survey identified two previously recorded sites and one newly recorded site within this northern eight-mile section.

The Alexandria Canal (Site 44AX0028), was found to be destroyed within the APE. Site 44FX2214 consisted of a prehistoric camp and a nineteenth century dwelling site, but was found to be destroyed within the APE. Site 44FX3210 was a low-density assemblage of nineteenth century artifacts that may represent a field scatter or may be peripheral refuse associated with a dwelling outside of the APE. The site is not eligible for listing in the NRHP. Later in 2007 and 2008, TAA completed three addendum reports examining additional areas. These additional survey efforts did not identify any other archaeological sites within the northern eight-mile section of the APE (Mullen and Carrol 2007; Hutson 2008; Hutson and Mullen 2008).

During the search of the VDHR database, Virginia Cultural Resource Information System (V-CRIS), three additional sites were identified - Sites 44AX0037, 44AX0176 and 44AX0177, described below.

Site 44AX0037 was recorded in 1980 by an unknown investigator associated with the Alexandria Archaeology Research Museum. Site 44AX0037 consisted of a small cluster of large and small flakes. Based on the site’s projected mapping in V-CRIS, Site 44AX0037 was apparently destroyed by the original construction of the HOV Lanes in the late 1980s.

Prehistoric Site 44AX0177 was surveyed, tested, and excavated in the mid-1990s for the Stonegate development project (Gardner et. al 1995a). Adjacent historic period Site 44AX0176 was also excavated (Gardner et. al 1995b, 1996). International Archaeological Consultants conducted the earlier Phase I and II investigations for sites 44AX0177 and AX0176 but Gardner et. al 1995a reported that no report was ever produced for the Phase I and II studies. Portions of Site 44AX0177 and nearby Site 44AX0176 were subjected to data recovery excavations and thus no further archaeological investigations by TAA were needed as Section 106 Consultation had been concluded for Sites 44AX0176 and 44AX0177.

1.2 Current Project

Information presented in the previous survey reports described above provides adequate basis for assessing the potential effects of the currently-proposed I-395 Express Lanes Project to historic properties. A review of the National Park Service's NRHP map shows that there have been no new NRHP listings in the vicinity of the proposed project since completion of the original surveys. Current project plans call for all improvements to be largely within current I-395 right of way and will include reconstructing the existing shoulders to full strength pavement, resurfacing the existing travel way, and re-striping the reversible roadway to provide three managed HOT lanes. Given that most work will occur in previously-disturbed areas and that the outer footprint of the interstate will be largely unchanged, the project's potential to affect historic properties is low.

Architectural Resources

The APE for Dovetail's 2007 architectural survey included the viewshed for improvements to the I-395 corridor between Turkeycock Run in Fairfax County and S. Eads Street near the Pentagon in Arlington County. The report does not include detailed mapping depicting the exact extent of the APE considered, thus the new APE may be larger than the original APE, particularly the area extending beyond S. Eads Street to the east and northeast. The area is defined by an elaborate network of roads and ramps accessing I-395, the Pentagon, and other local amenities, with buildings dating from the mid-twentieth century to the present. V-CRIS identifies three resources in this area that were surveyed after Dovetail's 2007 report:

- VDHR # 000-4385 is a switching station for the Richmond, Fredericksburg, & Potomac Railroad Spur Line. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor (VDHR 2016). A review of available aerial and street-view photographs indicates that the building has been demolished and has been replaced by a modern office building.
- VDHR # 000-9727 is an office building at 400 Army Navy Drive. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor (VDHR 2016). The building sits over 300 feet south of I-395 and over 150 feet east of S. Eads Street. The existing setting includes a busy four-lane frontage road, clear view of the interstate, and surrounding development including twentieth to twenty-first century high-rise buildings with associated surface parking lots.
- VDHR # 029-5470 is the Washington, Arlington, and Falls Church Electric Railway. While the full railway corridor is mapped in V-CRIS, only a portion located in Fairfax was previously surveyed. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor (VDHR 2016). Given the extent of dense twentieth and twenty-first century development in this area, the possibility that any remnants of the railway corridor remain within the APE is highly unlikely.

Thus, based on available information, there are no known historic properties located outside of the APE previously evaluated by Dovetail but within the APE for the existing project that could be affected by the currently-proposed I-395 Express Lanes Project.

For the four identified historic properties (000-0072, 44AX0028, 100-0151, 000-5772) located in the vicinity of the currently-proposed project, the determinations of effect made following the 2007 Dovetail survey investigations remain appropriate:

The Alexandria Canal Path (44AX0028) has been destroyed within the direct APE. While portions of the canal path located outside of the direct APE have not been formally evaluated for listing in the NRHP, the resource is of such a nature that improvements within existing VDOT right of way have no potential to visually affect the site, particularly given the extent of landscape change in the vicinity since the canal's period of significance. Thus, the proposed project will have No Effect on this site.

The Pentagon (000-0072) was not located in the APE for the previously-proposed project. As part of the currently-proposed I-395 Express Lanes Project, modifications are proposed to the Eads Street Interchange to address existing capacity deficiencies and improve transit access to the Pentagon Transit Center and Pentagon Reservation. Improvements may include temporary and permanent construction easements or minor improvements for the placement of signs and noise barriers within the Pentagon parking lot. Even though these improvements may be visible from the Pentagon, these improvements will be far removed from the NHL boundary for the Pentagon, which includes only the building footprint, the river terrace to the northeast, and the mall terrace to the north-northwest. Furthermore, any improvements made in the immediate vicinity of the Pentagon would be in keeping with the more ambitious plans, assessed in the Pentagon Reservation Master Plan Update EA (AECOM and Timmons Group, 2014), that aims to, among other goals, improve transportation to, and circulation within, the site. As described in the EA all development outlined in the plan will conform to existing exterior design standards meant to manage change within the NHL property. As such, the EA concludes that "the Master Plan Update's short-term and long-term impacts to historic resources are anticipated to be negligible" (AECOM and Timmons Group, 2014:4-9). Given that the currently-proposed project may include improvements that implement a very small component of the circulation improvements assessed in the Pentagon Reservation Master Plan Update EA, these improvements will have No Effect on the qualities of the Pentagon that make this resource eligible for listing in the NRHP and designation as a NHL.

The Fairlington Historic District (000-5772) straddles the interstate and is within the APE for the currently-proposed project. As previously noted, VDHR and VDOT previously agreed to a conditional finding of No Adverse Effect for the northern segment of the previously-proposed project, pending review of the design and placement of noise barriers in the vicinity of the Fairlington Historic District, should noise barriers be determined necessary (Marc Holma to Helen Ross, August 5, 2008). Based upon preliminary design, property from the Historic District could be required for noise barriers. As currently proposed, the construction of noise barriers would not adversely affect any of the qualities of the Fairlington Historic District that make this resource eligible for listing in the NRHP. VDOT will coordinate the results, potential location(s), and design of noise barriers should they become a component of the undertaking. All other improvements near the district are expected to occur within the median of I-395 and will have minimal visual effect on the historic property. Thus, until more detail is available regarding the need for and design of noise barriers in the vicinity of the Fairlington Historic District, a conditional finding of No Adverse Effect remains appropriate.

The Parkfairfax Historic District (100-0151) abuts the interstate and is within the APE for the currently-proposed project. The district was considered to be outside of the APE for the previously-proposed project because all work within the vicinity of this resource would occur within the existing median, thus posing minimal potential to visually or otherwise affect the qualities of the historic district. Thus, the potential effects of noise barriers to the Parkfairfax Historic District were not addressed by VDHR and VDOT in their previously agreed upon finding of conditional No Adverse Effect. However, for the current project,

conclusions reached with the Fairlington Historic District would be similar for the Parkfairfax Historic District. Thus, similar to the Fairlington discussion above, based upon preliminary design, property from the Historic District could be required for noise barriers. As currently proposed, the construction of noise barriers would not adversely affect any of the qualities of the Fairlington Historic District that make this resource eligible for listing in the NRHP. VDOT will coordinate the results, potential location(s), and design of noise barriers should they become a component of the undertaking. Additional project improvements near the district are expected to occur within the median of I-395, thus these improvements will have minimal visual effect on the historic property. Until more detail is available regarding the need for and design of noise barriers in the vicinity of the Parkfairfax Historic District, it appears that the currently-proposed project will result in a finding of No Adverse Effect, as the I-395 Express Lanes Project has no potential to affect the significant qualities of the Parkfairfax Historic District.

Archaeological Resources

Previous archaeological studies did not identify any eligible resources within the APE for the current project. It appears that between the additional review of V-CRIS and TAA's archaeological survey and addenda, the current APE including areas extending to the northernmost end of the study area and areas in the Pentagon parking lot have been evaluated and the currently proposed I-395 Express Lanes Project has no potential to affect significant archaeological sites.

1.3 Conclusion

VDOT proposes to construct the I-395 Express Lanes Project to extend the I-95 Express Lanes in the City of Alexandria, and Arlington, and Fairfax Counties, Virginia. The project area was subject to architectural and archaeological surveys in 2006-2008 as part of the I-95/I-395 HOV/Bus/HOT Lanes Project. The 2007 architectural survey identified four historic properties in the APE—the Pentagon (000-0072), the Alexandria Canal Path (44AX0028), Parkfairfax Historic District (100-0151), and the Fairlington Historic District (000-5772)—in the vicinity of the currently proposed I-395 Express Lanes Project. Given the locations of these properties and the nature of the proposed project, the I-395 Express Lanes Project will have No Effect on the Alexandria Canal and the Pentagon. Since the Fairlington and Parkfairfax Historic Districts are adjacent to the Interstate, there is potential for visual effects to the districts. Additionally, minor right of way and/or easements could be required for the construction of noise barriers. Based upon preliminary design, the proposed project could impact up to approximately 5.96 acres of historic resource property for the construction of noise barriers. As currently proposed, the project will not impact any of the qualities of the districts that make the districts eligible for listing in the NRHP. Approximately 5.06 acres would be outside of the VDOT right of way and would be located within historic districts (0.9 acres of potential impact are within VDOT right of way). This estimate is based on a conservative estimate of the right of way width required to construct and maintain the barriers (approximately 30 feet). During the final design noise analysis, barrier locations would be refined and may be shifted to be fully located within the VDOT right of way. VDHR and the DC SHPO have reviewed the undertaking within VDOT right of way in accordance with the NHPA and determined that the project will have a No Adverse Effect on historic properties. Additional coordination with VDHR and the DC SHPO will be conducted based on further design details².

² Minor right of way impacts may occur to several historic properties as a result of noise barriers. If right of way impacts occur, the Section 4(f) use would likely be considered a *de minimis* impact as discussed in **Chapter 3.0, Environmental Consequences** of the EA.

The 2006-2008 archaeological surveys identified two previously-recorded sites (44AX0028 and 44FX2214) and one newly-recorded site (44FX3210) within the area included in the currently-proposed I-395 Express Lanes Project. A recent review of V-CRIS identified three additional previously recorded sites (44AX0037, 44AX00176 and 44AX00177). The five previously recorded sites were found to be destroyed within the APE, and 44FX3210 was determined not eligible for listing in the NRHP. Thus, the I-395 Express Lanes Project will not affect any NRHP-eligible archaeological sites, and no further archaeological work is recommended for the proposed project.

2. ACRONYMS

APE	Area of Potential Effect
EA	Environmental Assessment
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
NHL	National Historic Landmark
NRHP	National Register of Historic Places
PPTA	Public-Private Transportation Act
TAA	Thunderbird Archaeology Associates, Inc.
V-CRIS	Virginia Cultural Resource Information System
VDHR	Virginia Department of Historic Resources
VDOT	Virginia Department of Transportation

3. REFERENCES

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