

3.4 HISTORIC RESOURCE FINDINGS FOR UNDERGROUND ALTERNATIVE 02

3.4.1 053-0276 - Washington and Old Dominion Railroad Historic District

The Washington and Old Dominion Railroad Historic District is intersected by Underground Alternative 02 at a roughly perpendicular angle, crossing approximately 0.06 mile of the resource's length south and east of I-66. Underground Alternative 02 would proceed north of I-66 using an HDD, whose entry point is proposed within the Washington and Old Dominion Railroad Historic District. The location of the temporary workspace associated with the HDD within the district is shown in Figure 3.4.1-1. No tree clearing is proposed at the temporary HDD workspace where Underground Alternative 02 intersects the district east of I-66 and north of Idylwood Substation (Figure 3.4.1-2).

No trees would be removed within the district, either from the temporary HDD workspace usage, or from the open-trench installation of the buried line to the south. Likewise, no trees would be removed outside the district boundary within view of the resource. The nearest area where trees would be removed along Underground Alternative 02 would be on the north side of Idylwood Park, north of I-66 and well outside the viewshed of the resource. The direct construction impacts to 053-0276 would leave no visible evidence post-construction. As a result, impacts to the resource from Underground Alternative 02 are considered to be **Minimal**.

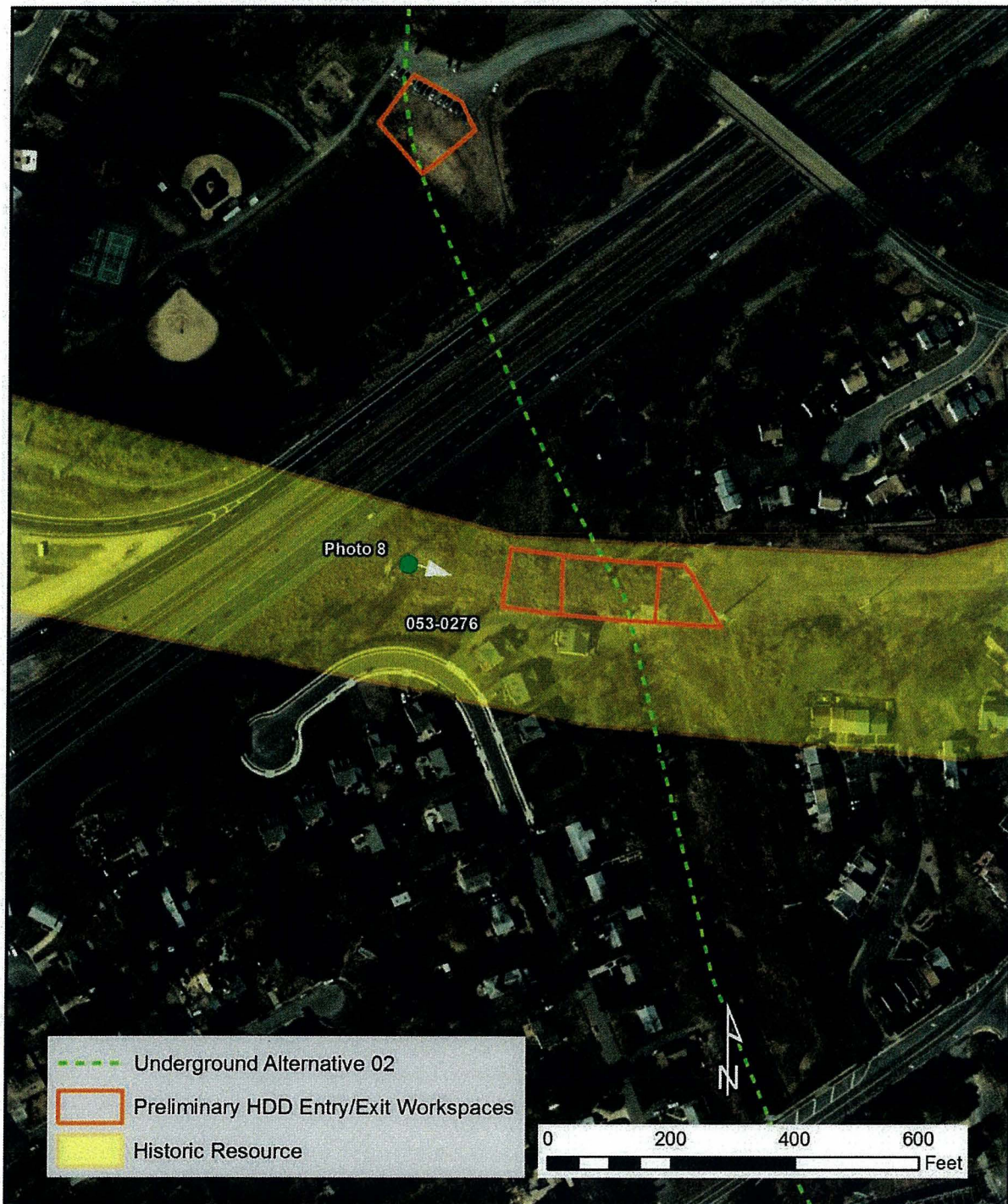


Figure 3.4.1-1. Aerial photograph depicting land use and the temporary HDD workspace east of I-66 and north of Idylwood substation, photo view 8, Underground Alternative 02 for 053-0276.

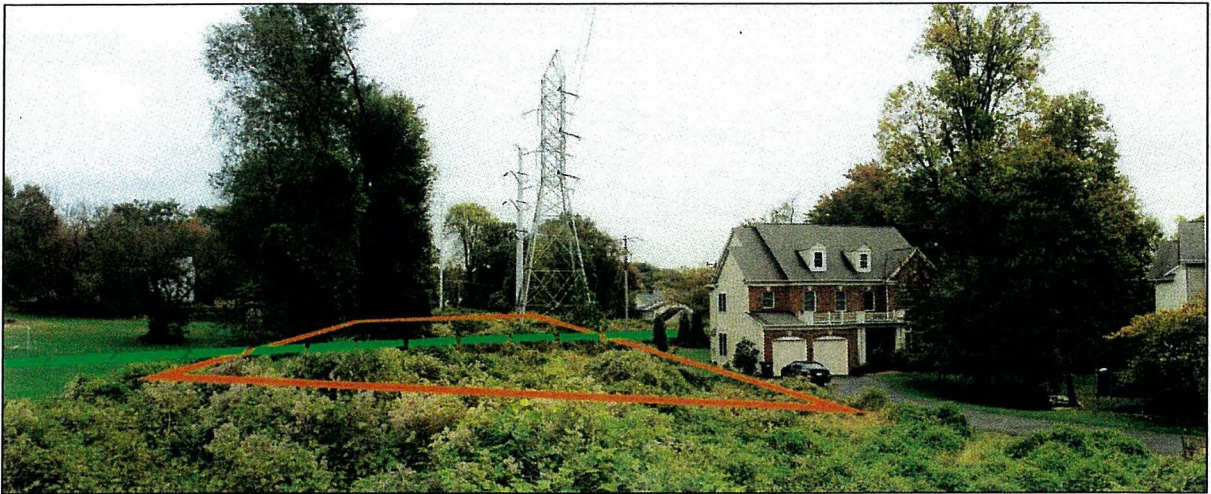


Figure 3.4.1-2. Photograph illustrating the route of Underground Alternative 02 showing the temporary HDD workspace east of I-66 and north of Idylwood substation, with no tree removal within 053-0276 (Photo view 8).

3.5 HISTORIC RESOURCE FINDINGS FOR UNDERGROUND ALTERNATIVE 03

3.5.1 053-0276 - Washington and Old Dominion Railroad Historic District

The Washington and Old Dominion Railroad Historic District is intersected by Underground Alternative 03 at a roughly perpendicular angle, crossing approximately 0.06 mile of the resource's length south and east of I-66. Underground Alternative 03 would proceed north of I-66 using an HDD, whose entry point is proposed within the Washington and Old Dominion Railroad Historic District. The location of the temporary workspace associated with the HDD within the district is shown in Figure 3.5.1-1. No tree clearing is proposed at the temporary HDD workspace where Underground Alternative 02 intersects the district east of I-66 and north of Idylwood Substation (Figure 3.5.1-2).

No trees would be removed within the district, either from the temporary HDD workspace usage, or from the open-trench installation of the buried line to the south. Likewise, no trees would be removed outside the district boundary within view of the resource. The nearest area where trees would be removed along Underground Alternative 03 would be on the north side of Idylwood Park, north of I-66 and well outside the viewshed of the resource. The direct construction impacts to 053-0276 would leave no visible evidence post-construction. As a result, impacts to the resource from Underground Alternative 03 are considered to be **Minimal**.

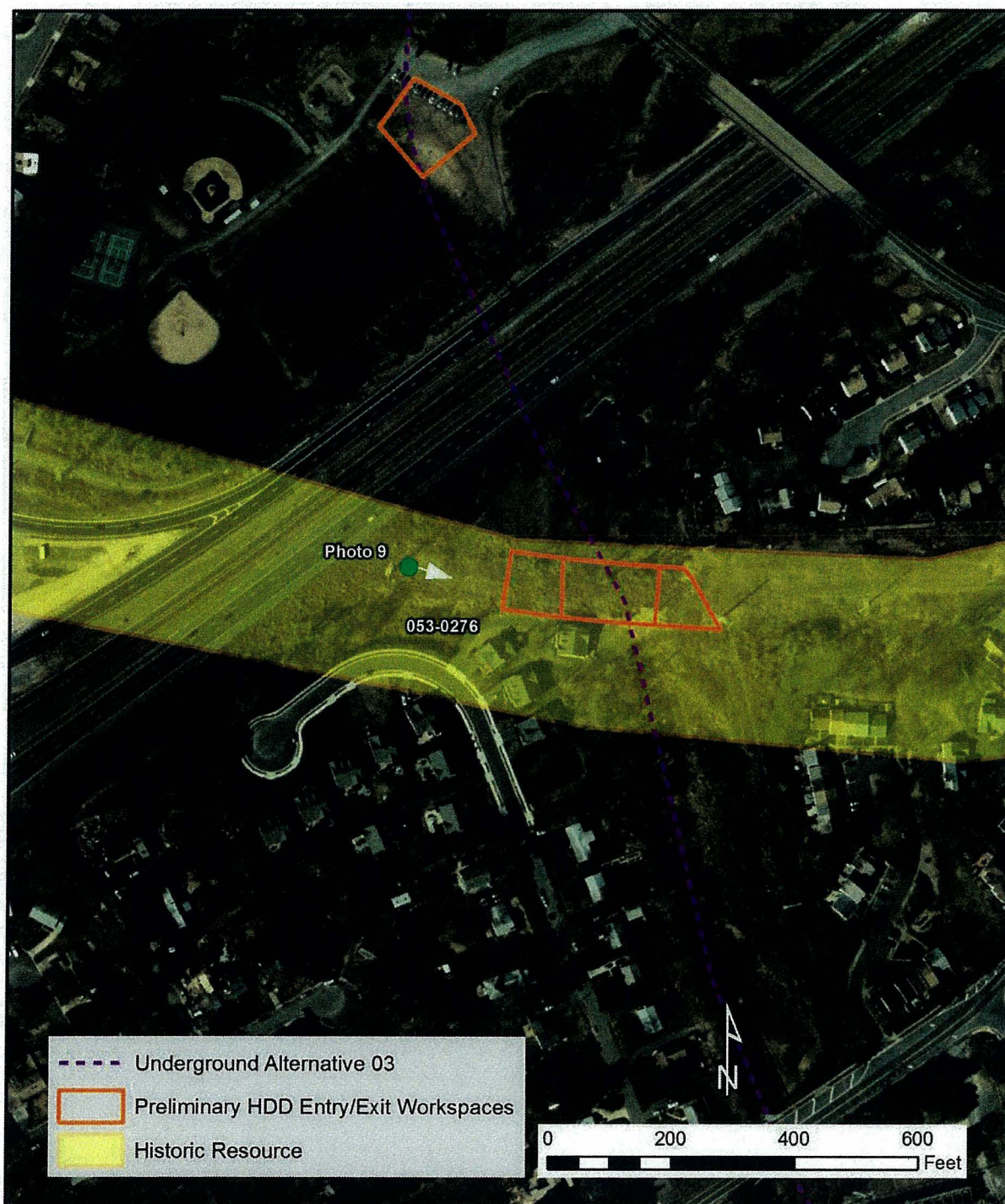


Figure 3.5.1-1. Aerial photograph depicting land use and the temporary HDD workspace east of I-66 and north of Idylwood substation, photo view 9, Underground Alternative 03 for 053-0276.

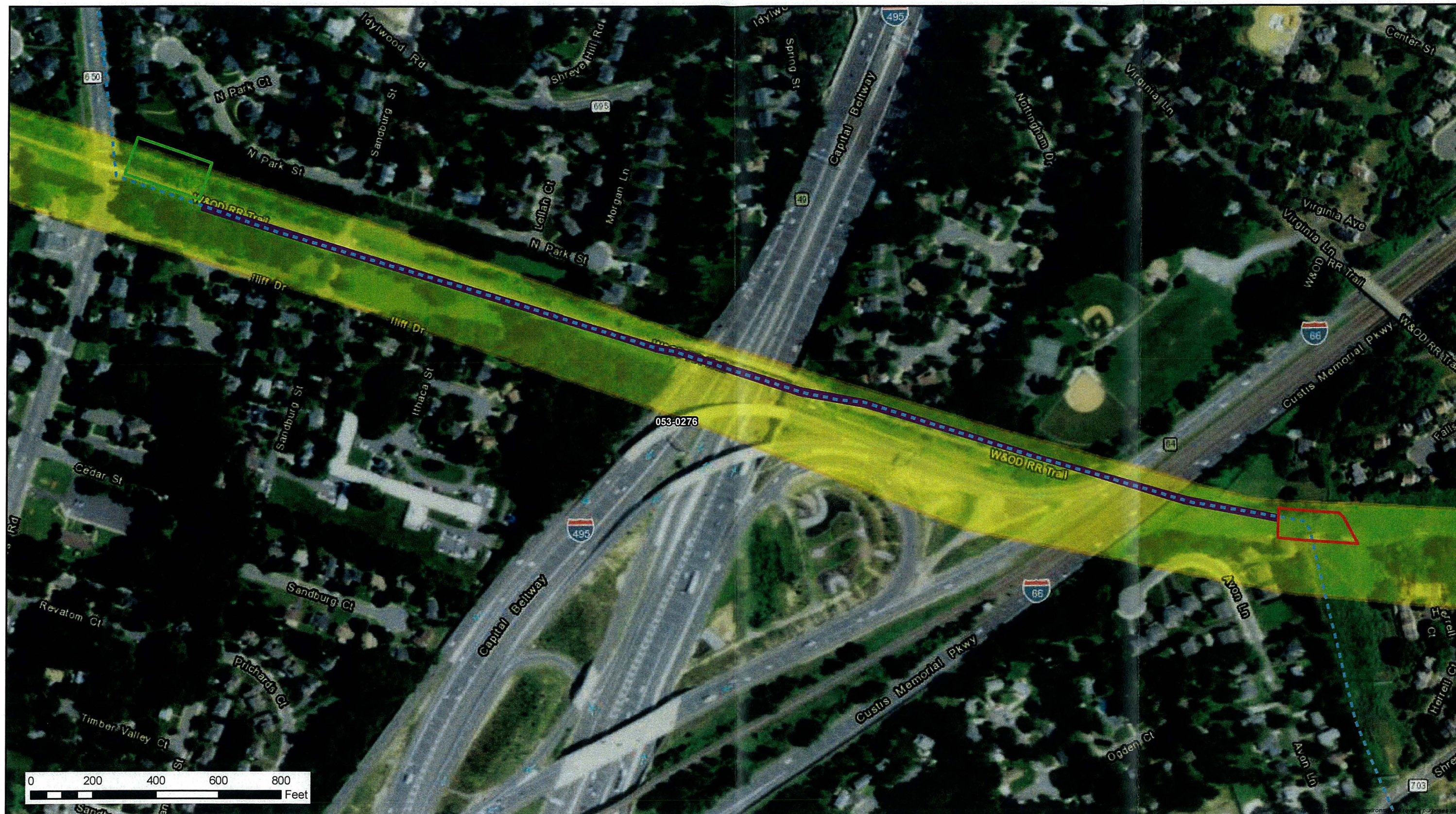


Figure 3.5.1-2. Photograph illustrating the route of Underground Alternative 03 showing the temporary HDD workspace east of I-66 and north of Idylwood substation with no tree removal within 053-0276 (Photo view 9).

3.6 HISTORIC RESOURCE FINDINGS FOR UNDERGROUND ALTERNATIVE 04

3.6.1 053-0276 - Washington and Old Dominion Railroad Historic District

The Washington and Old Dominion Railroad Historic District is intersected by Underground Alternative 04 for a distance of approximately 0.83 mile. The route of this underground alternative within the resource would be located directly adjacent to the Company's existing overhead transmission line right-of-way which currently extends through the district, and very little visible evidence of the line will exist within the district after construction. Portions of the line within the district will involve HDD, and those segments will leave no visible evidence post-construction (Figure 3.6.1-1). It is possible that a small area of trees and understory vegetation would be removed within the temporary HDD workspace located in the district immediately east of Gallows Road (Figures 3.6.1-2 and 3.6.1-3). The vegetation currently found within portions of the park is not consistent with the historic landscape of the district, when the active rail corridor was maintained as a cleared right-of-way. Thus, the potential small change to the landscape in a single location along the 45-mile-long historic district would not degrade the historic setting of the resource. Where Underground Alternative 04 extends north and south of the district, there would be no tree cutting in adjacent areas that would create viewshed impacts from within the district. No tree clearing is proposed at the temporary HDD workspace where Underground Alternative 04 intersects the district east of I-66 and north of Idylwood Substation (Figures 3.6.1-4 and 3.6.1-5). The direct construction impacts to 053-0276 would leave very little visible evidence post-construction and would not compromise the historic significance of a resource whose setting has changed considerably in modern times. As a result, impacts to the resource from Underground Alternative 04 are considered to be **Minimal**.



- Underground Alternative 04
- Historic Resource
- HDD Workspace
- HDD Workspace - Potential Tree Removal
- Underground Alternative 04
- Underground Drilling

Figure 3.6.1-1
Locations of HDD versus open-trench construction segments along 053-0276 for Underground Alternative 04
 Idylwood-Tysons 230 kV Underground
 Transmission Line Project
 Fairfax County, Virginia





Figure 3.6.1-2. Photograph illustrating the route of Underground Alternative 04 showing the temporary HDD workspace east of Gallows Road with minimal tree removal within 053-0276 (Photo view 10).

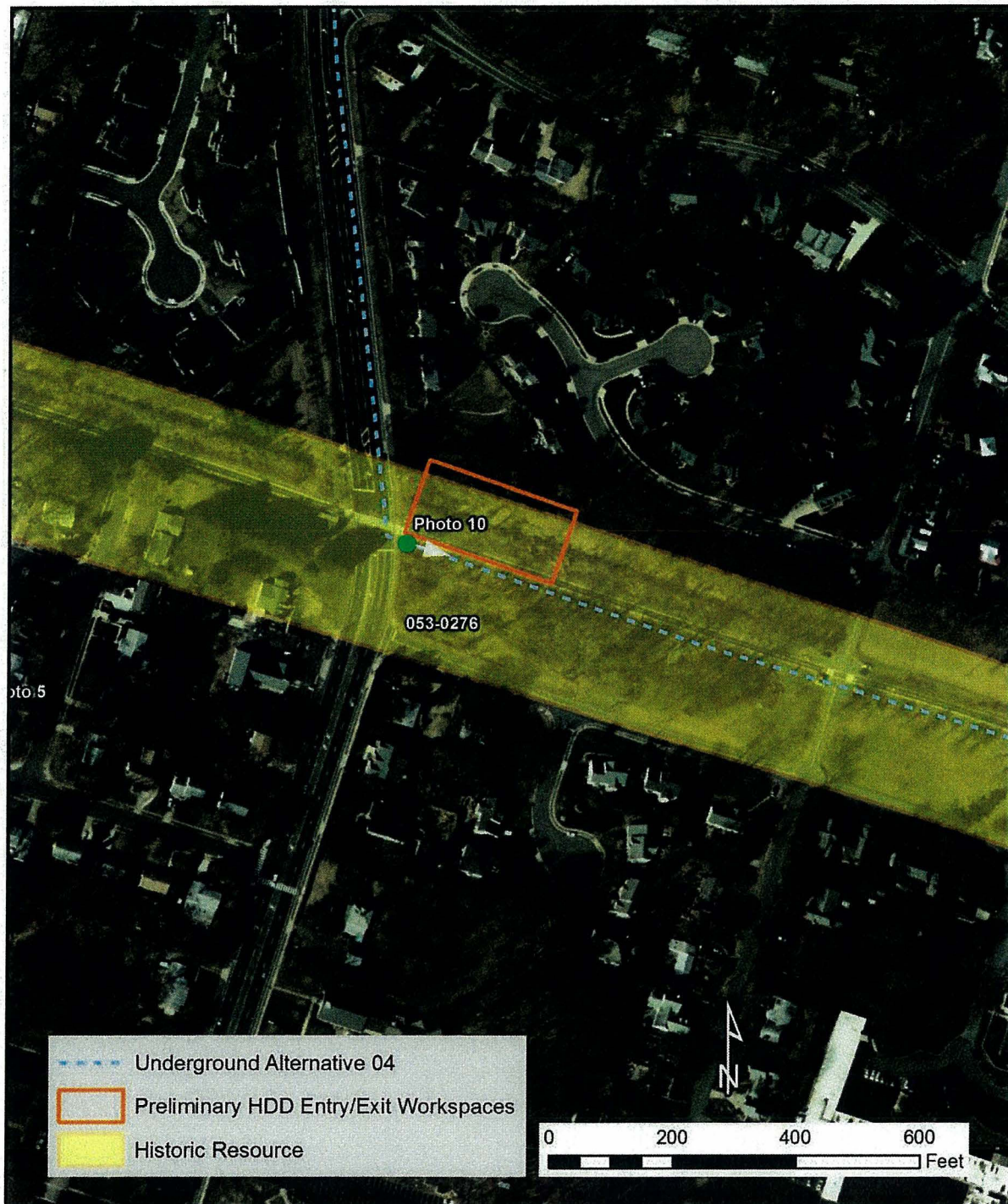


Figure 3.6.1-3. Aerial photograph depicting land use and the temporary HDD workspace, photo view 10, Underground Alternative 04 for 053-0276.



Figure 3.6.1-4. Photograph illustrating the route of Underground Alternative 04 showing the temporary HDD workspace east of I-66 and north of Idylwood substation, with no tree removal within 053-0276 (Photo view 11).



Figure 3.6.1-5. Aerial photograph depicting land use and temporary HDD workspace east of I-66, and north of Idylwood substation, photo view 11, Underground Alternative 04 for 053-0276.

3.7 HISTORIC RESOURCE FINDINGS FOR UNDERGROUND ALTERNATIVE 05

3.7.1 053-0276 - Washington and Old Dominion Railroad Historic District

The Washington and Old Dominion Railroad Historic District is intersected by Underground Alternative 05 for a distance of approximately 0.83 mile. The route of this underground alternative within the resource would be located directly adjacent to the Company's existing overhead transmission line right-of-way, which currently extends through the district, and very little visible evidence of the line will exist within the district after construction. Portions of the line within the district will involve HDD, and those segments will leave no visible evidence post-construction (Figure 3.7.1-1). It is possible that a small area of trees and understory vegetation would be removed within the temporary HDD workspace located in the district immediately east of Gallows Road (Figures 3.7.1-2 and 3.7.1-3). The vegetation currently found within portions of the park is not consistent with the historic landscape of the district, when the active rail corridor was maintained as a cleared right-of-way. Thus, the potential small change to the landscape in a single location along the 45-mile-long historic district would not degrade the historic setting of the resource. Where Underground Alternative 05 extends north and south of the district, there would be no tree cutting in adjacent areas that would create viewshed impacts from within the district. No tree clearing is proposed at the temporary HDD workspace where Underground Alternative 05 intersects the district east of I-66 and north of Idylwood Substation (Figures 3.7.1-4 and 3.7.1-5). The direct construction impacts to 053-0276 would leave very little visible evidence post-construction and would not compromise the historic significance of a resource whose setting has changed considerably in modern times. As a result, impacts to the resource from Underground Alternative 05 are considered to be **Minimal**.

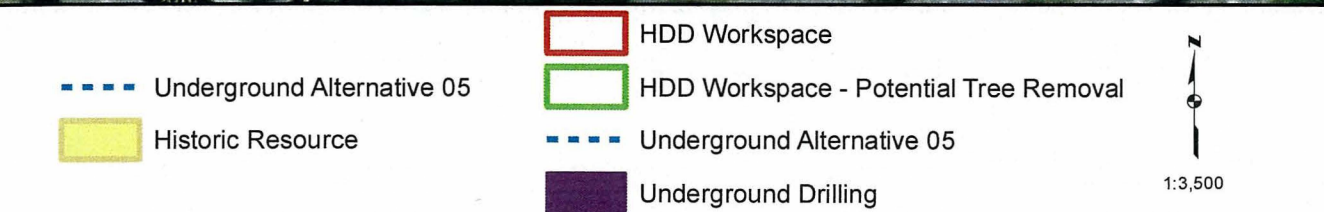


Figure 3.7.1-1
Locations of HDD versus open-trench construction segments along 053-0276 for Underground Alternative 05
 Idylwood-Tysons 230 kV Underground
 Transmission Line Project
 Fairfax County, Virginia

ERM

C:\Users\vincent.mace\Documents\ldlewood 7-17\Underground Lines\ldlewood Underground Tree Removal sheet 11-1.mxd | REVISED: 11/01/2017 | SCALE: 1:3,500

Dominion Energy

DRAWN BY: GIS



Figure 3.7.1-2. Photograph illustrating the route of Underground Alternative 05 showing the temporary HDD workspace east of Gallows Road with minimal tree removal within 053-0276 (Photo view 12).

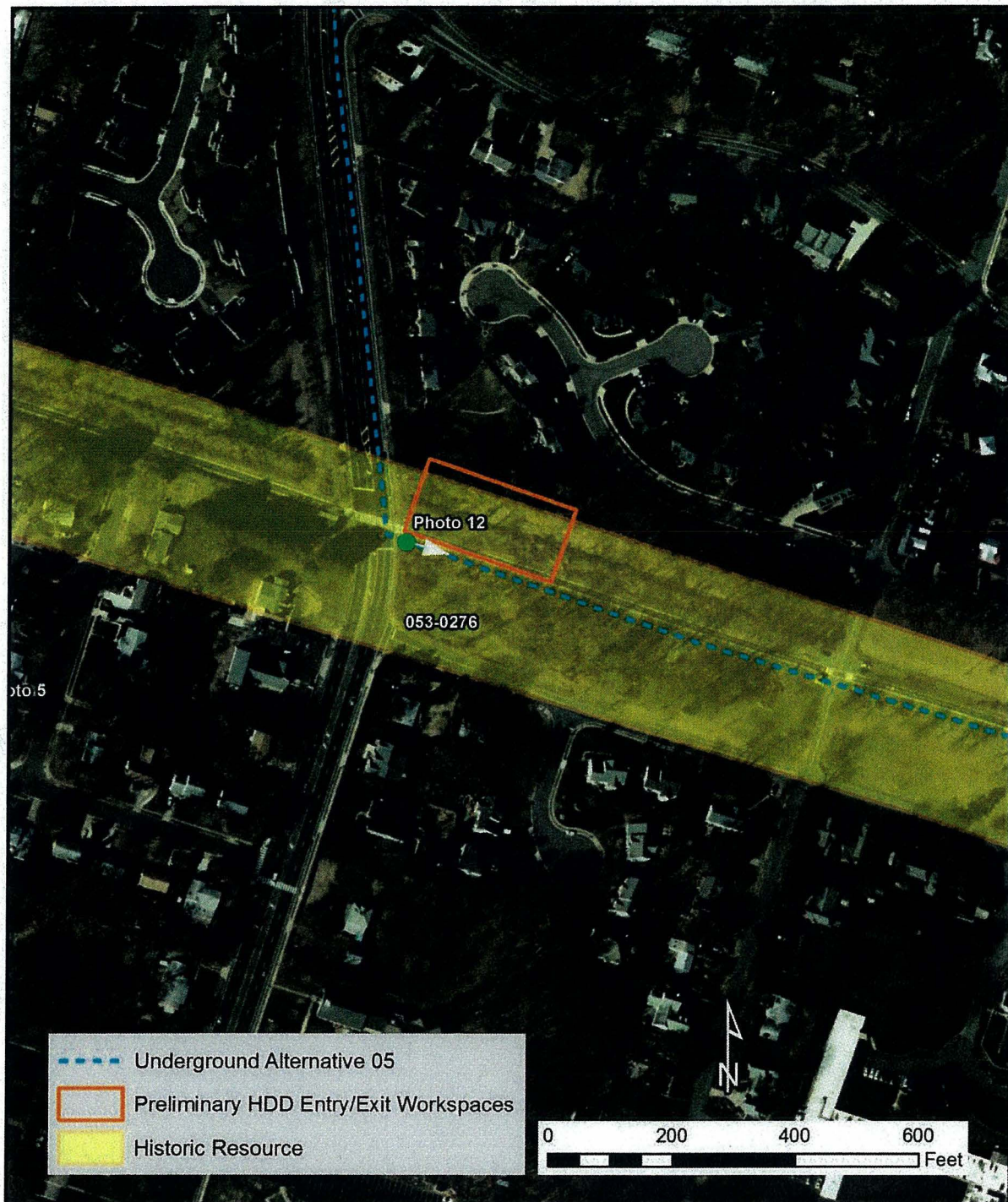


Figure 3.7.1-3. Aerial photograph depicting land use and the temporary HDD workspace, photo view 12, Underground Alternative 04 for 053-0276.

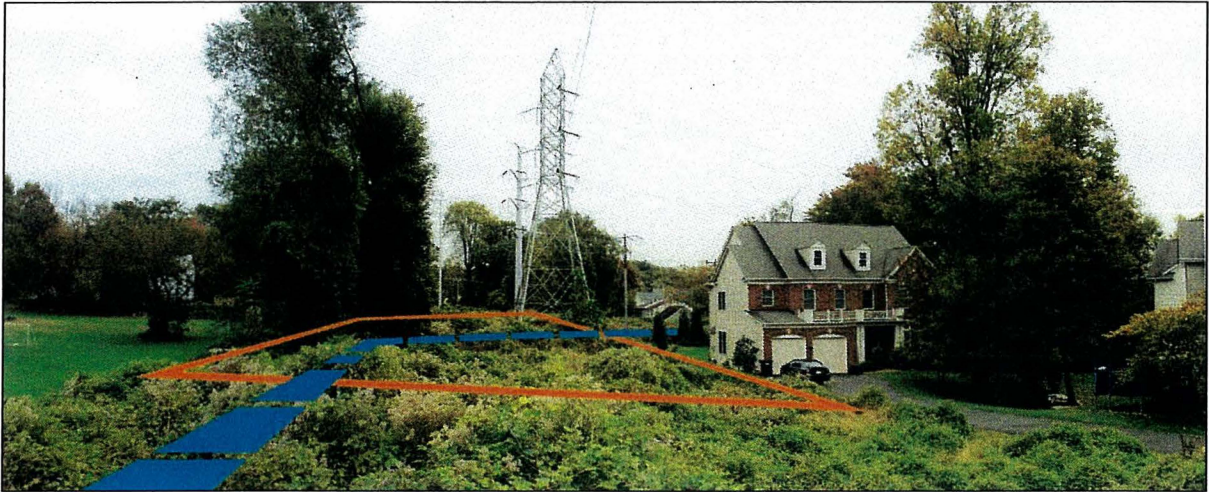


Figure 3.7.1-4. Photograph illustrating the route of Underground Alternative 05 showing the temporary HDD workspace east of I-66 and north of Idylwood substation, with no tree removal within 053-0276 (Photo view 13).

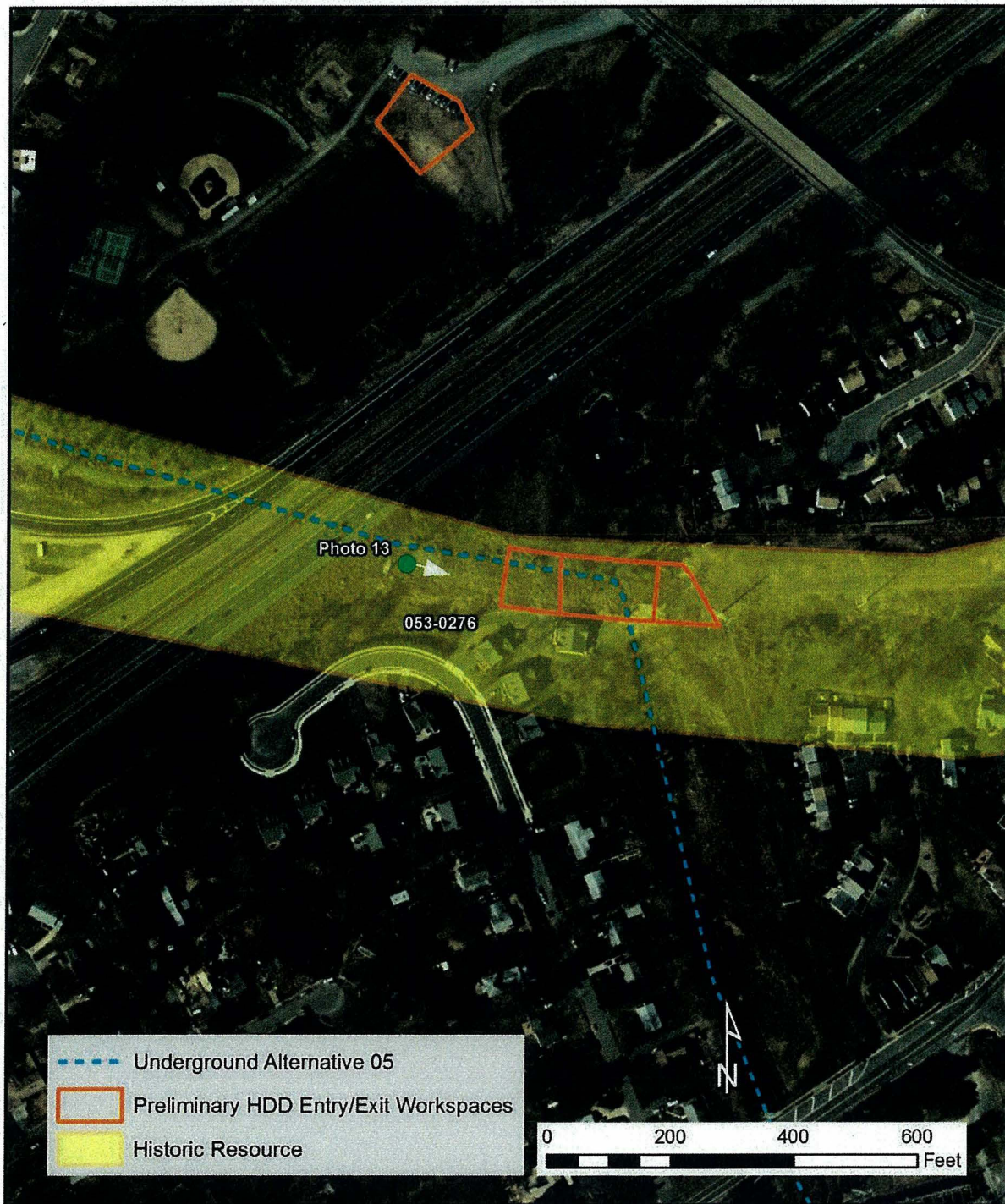


Figure 3.7.1-5. Aerial photograph depicting land use and the temporary HDD workspace east of I-66, and north of Idylwood substation, photo view 13, Underground Alternative 05 for 053-0276.

3.8 HISTORIC RESOURCE FINDINGS FOR UNDERGROUND ALTERNATIVE 06

3.8.1 029-0035 - Spring Hill Farm

The location of the no-longer-extant Spring Hill farm is approximately 0.95 mile north of Underground Alternative 06. Due to the distance, intervening infrastructure and vegetation, and because the resource is no longer extant (see Figure 3.2.1-1), the impact assessment for the former resource from Underground Alternative 06 is considered to be **None**.

3.8.2 053-0276 - Washington and Old Dominion Railroad Historic District

The Washington and Old Dominion Railroad Historic District is intersected by Underground Alternative 06 for a distance of approximately 0.83 miles. The route of this underground alternative within the resource would be located directly adjacent to the Company's existing overhead transmission line right-of-way, which currently extends through the district . and very little visible evidence of the line will exist within the district after construction. Portions of the line within the district will involve HDD, and those segments will leave no visible evidence post-construction (Figure 3.8.1-1). It is possible that a small area of trees and understory vegetation would be removed within the temporary HDD workspace located in the district immediately east of Gallows Road (Figures 3.8.1-2 and 3.8.1-3). The vegetation currently found within portions of the park is not consistent with the historic landscape of the district, when the active rail corridor was maintained as a cleared right-of-way. Thus, the potential small change to the landscape in a single location along the 45-mile-long historic district would not degrade the historic setting of the resource. Where Underground Alternative 06 extends north and south of the district, there would be no tree cutting in adjacent areas that would create viewshed impacts from within the district. No tree clearing is proposed at the temporary HDD workspace where Underground Alternative 06 intersects the district east of I-66 and north of Idylwood Substation (Figures 3.8.1-4 and 3.8.1-5). The direct construction impacts to 053-0276 would leave very little visible evidence post-construction and would not compromise the historic significance of a resource whose setting has changed considerably in modern times. As a result, impacts to the resource from Underground Alternative 06 are considered to be **Minimal**.



Figure 3.8.1-1
Locations of HDD versus open-trench construction segments along 053-0276 for Underground Alternative 06
 Idylwood-Tysons 230 kV Underground
 Transmission Line Project
 Fairfax County, Virginia



Figure 3.8.1-2. Photograph illustrating the route of Underground Alternative 06 showing the temporary HDD workspace east of Gallows Road with minimal tree removal within 053-0276 (Photo view 14).

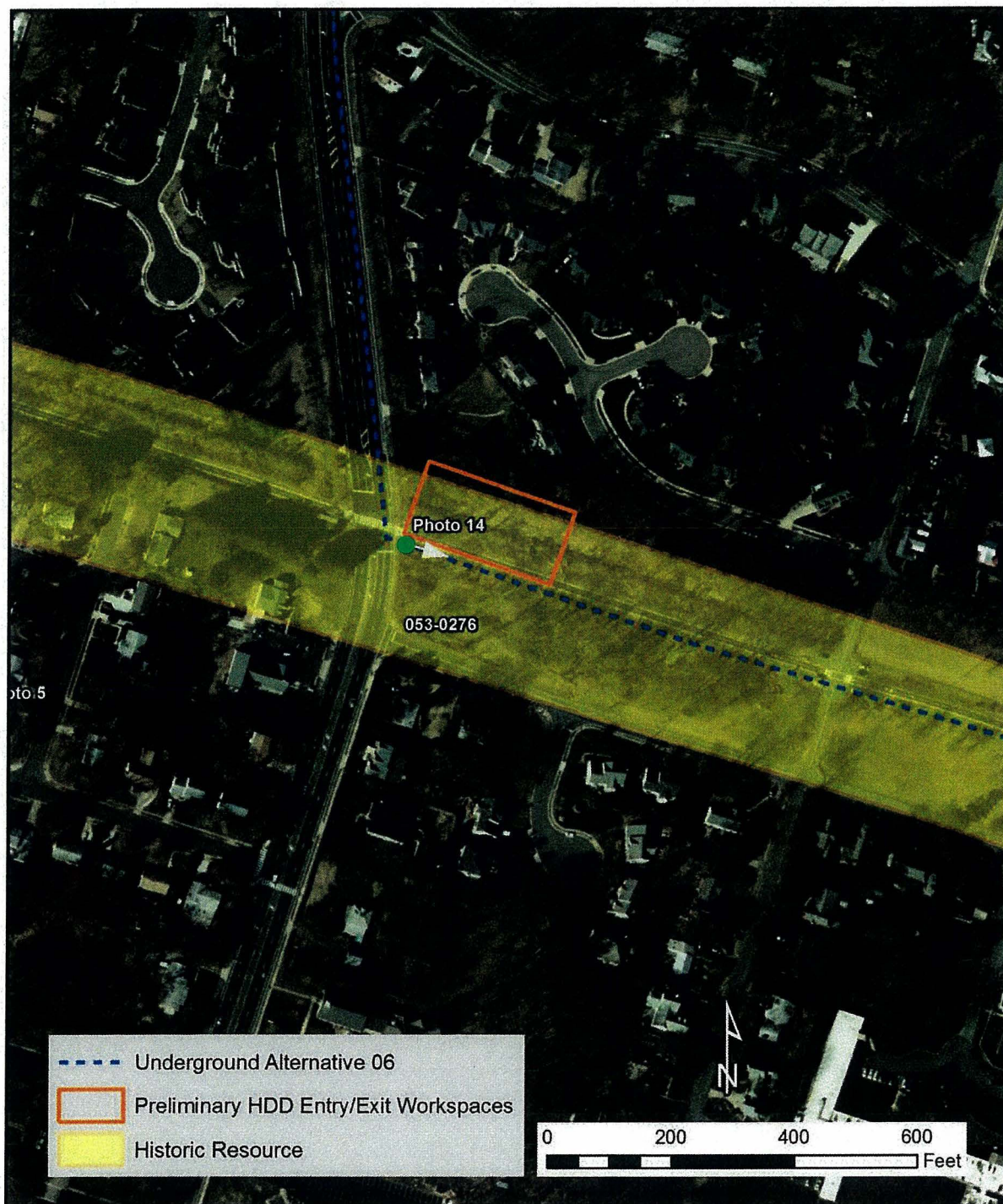


Figure 3.8.1-3. Aerial photograph depicting land use and the temporary HDD workspace , photo view 14, Underground Alternative 06 for 053-0276.



Figure 3.8.1-4. Photograph illustrating the route of Underground Alternative 06 showing temporary HDD workspace east of I-66 and north of Idylwood substation, with no tree removal within 053-0276 (Photo view 15).

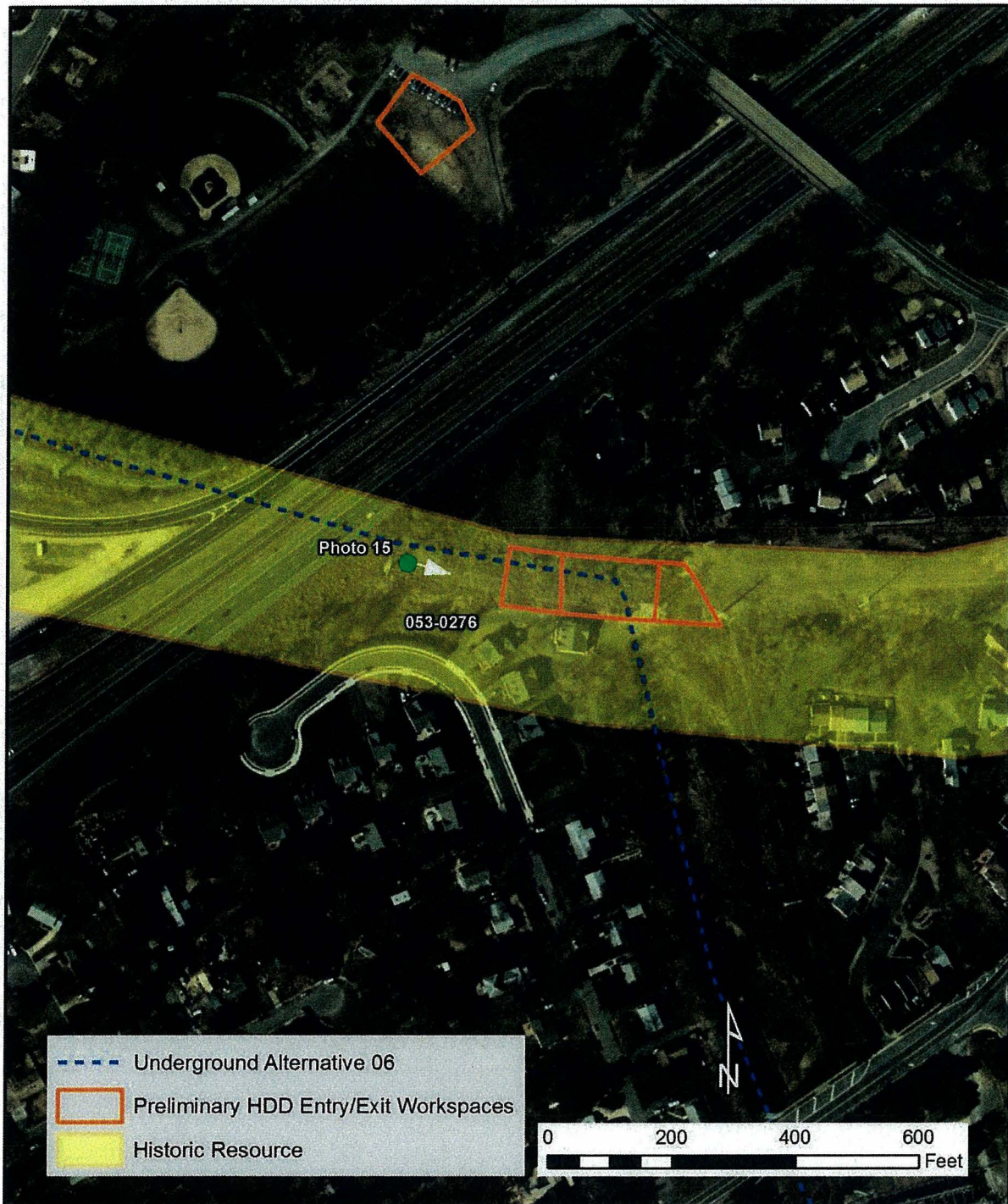


Figure 3.8.1-5. Aerial photograph depicting land use and the temporary HDD workspace east of I-66, and north of Idylwood substation, photo view 15, Underground Alternative 06 for 053-0276.

3.9 ARCHAEOLOGY FINDINGS

Four known archaeological sites are located in the right-of-way of the underground alternatives (see Table 2.2-1). None have been evaluated in terms of potential eligibility for the NRHP. None of the sites are within proposed greenfield right-of-way, and all have been subject to disturbance to some degree. The underground lines will all be newly built, although portions of each will fall within existing transmission line corridors or road right-of-way. The known sites that would be affected by each alternative are discussed below, along with reconnaissance-level information about the resource's condition. A confident determination about the nature of archaeological deposits at each site and impacts from prior land use activities must await field investigations during the survey of the approved alternative.

3.9.1 Underground Alternative 01

One archaeological site, 44FX0043, falls within the right-of-way for Underground Alternative 01. The site has not been evaluated for NRHP eligibility. 44FX0043, the Fairfax County Courthouse site, has historic components dating to the eighteenth century and prehistoric components dating to the Late Archaic and Early Woodland periods. A field visit to 44FX0043 indicates that it has likely been destroyed in its entirety by construction of an office complex and parking garage. For the proposed undertaking, Dominion Energy Virginia will utilize a maximum 30-foot-wide right-of-way for all of the underground alternatives. It is unlikely that intact archaeological deposits associated with 44FX0043 exist within the proposed right-of-way for Underground Alternative 01.

3.9.2 Underground Alternative 02

Two archaeological sites fall within the right-of-way for Underground Alternative 02. 44FX0043 is the multicomponent Fairfax County Courthouse site described above. A field visit to 44FX0043 indicates that it has likely been destroyed by construction of an office complex and parking garage, and it is unlikely that intact archaeological deposits associated with 44FX0043 exist within the proposed right-of-way for Underground Alternative 02. The other known archaeological site within the proposed right-of-way for Underground Alternative 02 is 44FX0045, a historic-period domestic site dating to the late eighteenth century through twentieth centuries; it has not been evaluated for NRHP eligibility. A field visit to 44FX0045 indicates that much of the site is no longer extant, as the Curtis Memorial Parkway was built over it. The northern and eastern portions of the site, which fall within Idylwood Park, may still be intact. For the proposed undertaking, the transmission line right-of-way is 30 feet. Archaeological investigations would be needed to assess the nature and integrity of archaeological deposits associated with 44FX0045 in the proposed right-of-way for Underground Alternative 02.

3.9.3 Underground Alternative 03

Three archaeological sites fall within the right-of-way for Underground Alternative 03. 44FX0043 is the multicomponent Fairfax County Courthouse site described above. A field visit to 44FX0043 indicates that it has likely been destroyed by construction of an office complex and parking garage, and it is unlikely that intact archaeological deposits associated with 44FX0043 exist within the proposed right-of-way for Underground Alternative 03. 44FX0045 is the historic-period domestic site described above. A field visit to 44FX0045 indicates that much of the site has been destroyed by construction of Curtis Memorial Parkway; however, the northern and eastern portions of the site, which fall within Idylwood Park, may still be intact. Archaeological investigations would be needed to assess the nature and integrity of archaeological deposits

associated with 44FX0045 in the proposed right-of-way for Underground Alternative 03. The third site, 44FX2364, also has not been evaluated for the NRHP. It is an early twentieth century streetcar line. A field visit to the site indicates that it has been paved with asphalt and is now being used as a walking/running trail. It is unclear whether intact deposits are preserved below the trail surfacing, and whether such deposits are significant; archaeological investigations may be needed to evaluate 44FX2364 if Underground Alternative 03 is pursued.

3.9.4 Underground Alternative 04

One archaeological site, 44FX0043, falls within Underground Alternative 04. 44FX0043 is the multicomponent Fairfax County Courthouse site described above. A field visit to 44FX0043 indicates that it has likely been destroyed by construction of an office complex and parking garage, and it is unlikely that intact archaeological deposits associated with 44FX0043 exist within the proposed right-of-way for Underground Alternative 04.

3.9.5 Underground Alternative 05

No archaeological sites fall within the right-of-way for this alternative.

3.9.6 Underground Alternative 06

One archaeological site, 44FX0540, falls within Underground Alternative 06. The site is a prehistoric lithic scatter, which has not been evaluated for the NRHP. A field visit indicates that an office complex, sidewalk, and street have been built over the site, likely destroying it in its entirety. For the proposed undertaking, the transmission line right-of-way is 30 feet. It is unlikely that intact archaeological deposits associated with 44FX0540 exist within the proposed right-of-way for Underground Alternative 06.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The pre-application analysis gathered information on archaeological and historic resources that qualify for consideration according to the DHR Guidelines for transmission line projects.

Four known archaeological sites are located in the right-of-way of the proposed underground alternatives. An assessment of the condition and research potential of those sites is contingent upon archaeological field investigations, which may be conducted at relevant sites once a preferred alternative is selected and a systematic archaeological survey of the right-of-way undertaken. Once an approved alternative has been selected and a systematic archaeological survey completed, Project planners will consult with DHR on potential impacts to archaeological sites that may be eligible for the NRHP.

Two above ground historic resources fall within the DHR tiers for the six alternatives under consideration. Portions of the Underground Alternatives 01, 04, 05, and 06 substantially overlap in the area of resource 053-0276. Furthermore, there is overlap south of the resource for all alternatives considered where the routes converge to enter Idylwood Substation. All of the proposed alternative will have direct impacts on 053-0276, but in the case of Underground Alternative 02 and 03, there will be no visual impacts post-construction. Underground Alternatives 01, 04, 05, and 06 would all have visual impacts on 053-0276, greatest in the case of Underground Alternative 01, but considered minimal in all cases. The visual impacts would, in no instance compromise the character-defining qualities that make 053-0276 eligible for the NRHP.

A comparison of the number of resources impacted to different degrees in each Project alternative is presented in Table 4.0-1. The specific resources affected under each alternative are covered in the sections that follow.

TABLE 4.0-1					
Idylwood-Tysons 230 kV Underground Transmission Line Project Comparison of Project Impacts on Historic Resources in the Study Area of the Proposed Underground Alternatives					
Route Alternative	Number of Considered Resources in Each Impact Category				
	None	Minimal	Moderate	Severe	Total
Underground Alternative Route 01	0	1	0	0	1
Underground Alternative Route 02	0	1	0	0	1
Underground Alternative Route 03	0	1	0	0	1
Underground Alternative Route 04	0	1	0	0	1
Underground Alternative Route 05	0	1	0	0	1
Underground Alternative Route 06	1	1	0	0	2

4.1 UNDERGROUND ALTERNATIVE 01 SUMMARY OF RESOURCE IMPACTS

There is one above-ground historic resource identified within the DHR tiers for Underground Alternative 01 (Table 4.1-1), the Project will have a **Minimal** impact on the resource.

TABLE 4.1-1				
Idylwood-Tysons 230 kV Underground Transmission Line Project Impacts to Historic Resources in DHR Tiers for Underground Alternative 01				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

4.2 UNDERGROUND ALTERNATIVE 02 SUMMARY OF RESOURCE IMPACTS

There is one above-ground historic resource identified within the DHR tiers for Underground Alternative 02 (Table 4.2-1), the Project will have a **Minimal** impact on the resource.

TABLE 4.2-1				
Idylwood-Tysons 230 kV Underground Transmission Line Project Impacts to Historic Resources in DHR Tiers for Underground Alternative 02				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

4.3 UNDERGROUND ALTERNATIVE 03 SUMMARY OF RESOURCE IMPACTS

There is one above-ground historic resource identified within the DHR tiers for Underground Alternative 03 (Table 4.3-1), the Project will have a **Minimal** impact on the resource.

TABLE 4.3-1 Idylwood-Tysons 230 kV Underground Transmission Line Project Impacts to Historic Resources in DHR Tiers for Underground Alternative 03				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

4.4 UNDERGROUND ALTERNATIVE 04 SUMMARY OF RESOURCE IMPACTS

There is one above-ground historic resource identified within the DHR tiers for Underground Alternative 04 (Table 4.4-1), the Project will have a **Minimal** impact on the resource.

TABLE 4.4-1 Idylwood-Tysons 230 kV Underground Transmission Line Project Impacts to Historic Resources in DHR Tiers for Underground Alternative 04				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

4.5 UNDERGROUND ALTERNATIVE 05 SUMMARY OF RESOURCE IMPACTS

There is one above-ground historic resource identified within the DHR tiers for Underground Alternative 05 (Table 4.5-1), the Project will have a **Minimal** impact on the resource.

TABLE 4.5-1 Idylwood-Tysons 230 kV Underground Transmission Line Project Impacts to Historic Resources in DHR Tiers for Underground Alternative 05				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

4.6 UNDERGROUND ALTERNATIVE 06 SUMMARY OF RESOURCE IMPACTS

There are two above-ground historic resources identified within the DHR tiers for Underground Alternative 06 (Table 4.6-1). One resource (029-0035) is no longer extant, so the Project would have **No Impact**. The other resource (053-0276) would be subject to **Minimal** impact from the Project.

TABLE 4.6-1				
Idylwood-Tysons 230 kV Underground Transmission Line Project				
Impacts to Historic Resources in DHR Tiers for Underground Alternative 06				
Buffer (miles)	Resource	Resource Category	Distance (miles)	Impact
0.5 to 1.0	029-0035 – Spring Hill Farm (no longer extant)	National Register Listed	0.95	None
0.0 (within right-of-way)	053-0276 – Washington and Old Dominion Railroad Historic District	National Register Eligible	0	Minimal

REFERENCES

- Barber, M. Fang, Robyn Osl, Sarah Meacham, Bradley Bowden, and Ashley Neville 2001. A Cultural Resources Survey of Improvements to the Capital Beltway (Route 495) in Fairfax County, Virginia. Gray and Pape, Inc. DHR Report Number FX-358.
- Chatelain, Edward R. n.d. Preliminary Cultural Resource Reconnaissance Report, Dulles Access Roadways from Route 7 to 1-495. Fairfax County Archaeology Survey. DHR Report Number FX-111.
- Fairfax County Tax Office 2017. Property records on file. <http://icare.fairfaxcounty.gov/ffxcare/search/commonsearch.aspx?mode=address>. Accessed October 15, 2017.
- Hellman, Susan 2017. Resource 029-0035 (Spring Hill Farm). Virginia Department of Historic Resources, Virginia Cultural Resource Information System. <http://dhr.virginia.gov/vcris/vcrisHome.htm>. Accessed July 31, 2017.
- Jolley, Robert L. 1987. A Phase I Archaeological Survey of a Section of Route 697, Fairfax County, Virginia. Virginia Department of Transportation. DHR Report Number FX-106.
- Schlupp, Carrie. 2016. Resource 053-0276 (Washington and Old Dominion Railroad).
- Virginia Department of Historic Resources, Virginia Cultural Resource Information System. <http://dhr.virginia.gov/vcris/vcrisHome.htm>. Accessed October 23, 2017.