

DOMINION ENERGY VIRGINIA

**Idylwood-Tysons 230 kV Single Circuit Underground
Transmission Line**

**Tysons Substation Rebuild
And Related Transmission Facilities**

Overhead Route Descriptions and Analysis

**Attachment B
Figures**

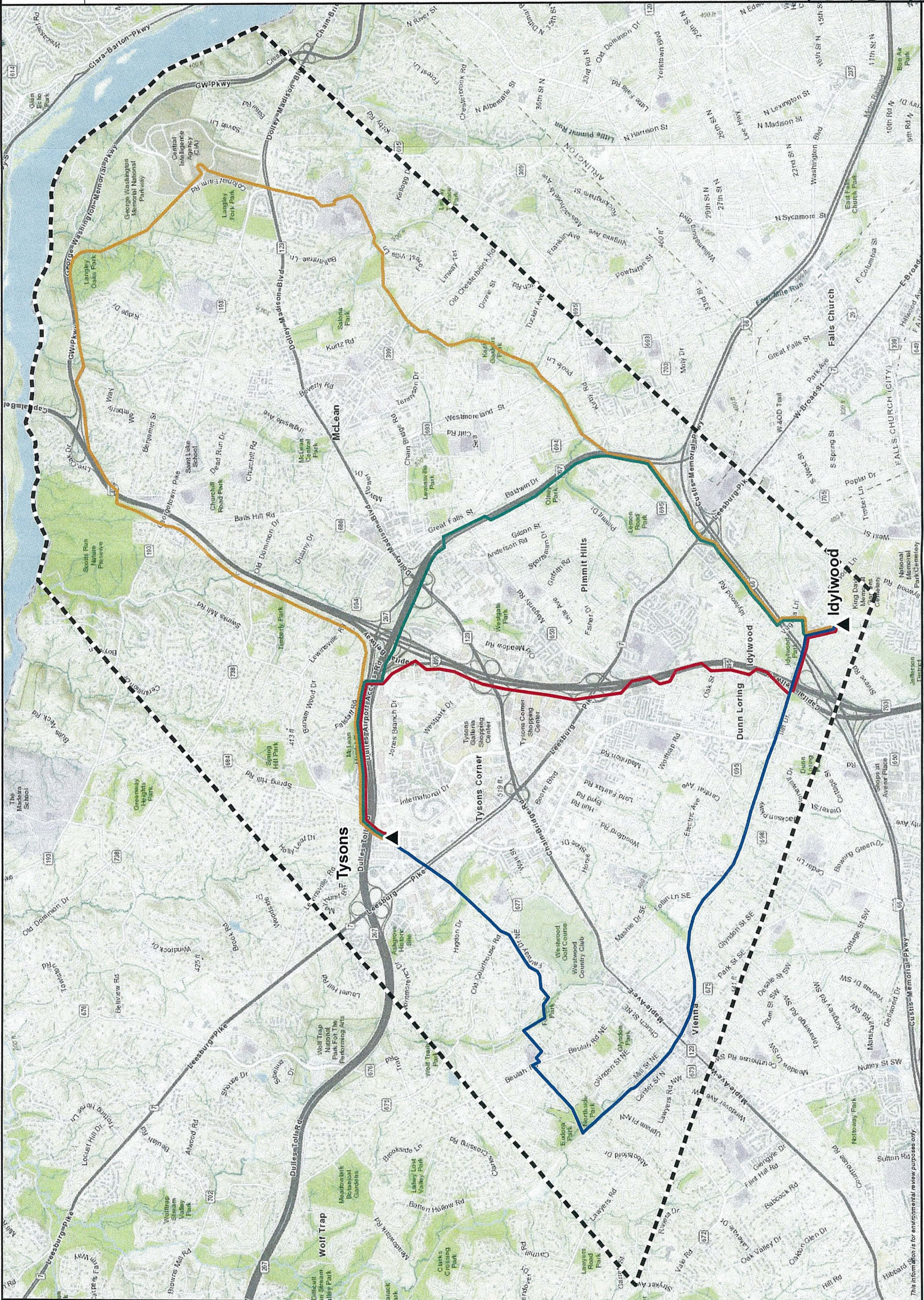
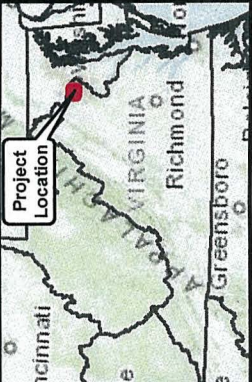


Appendix A
Attachment B
Figure 2.1-1
Overview Map
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Study Area



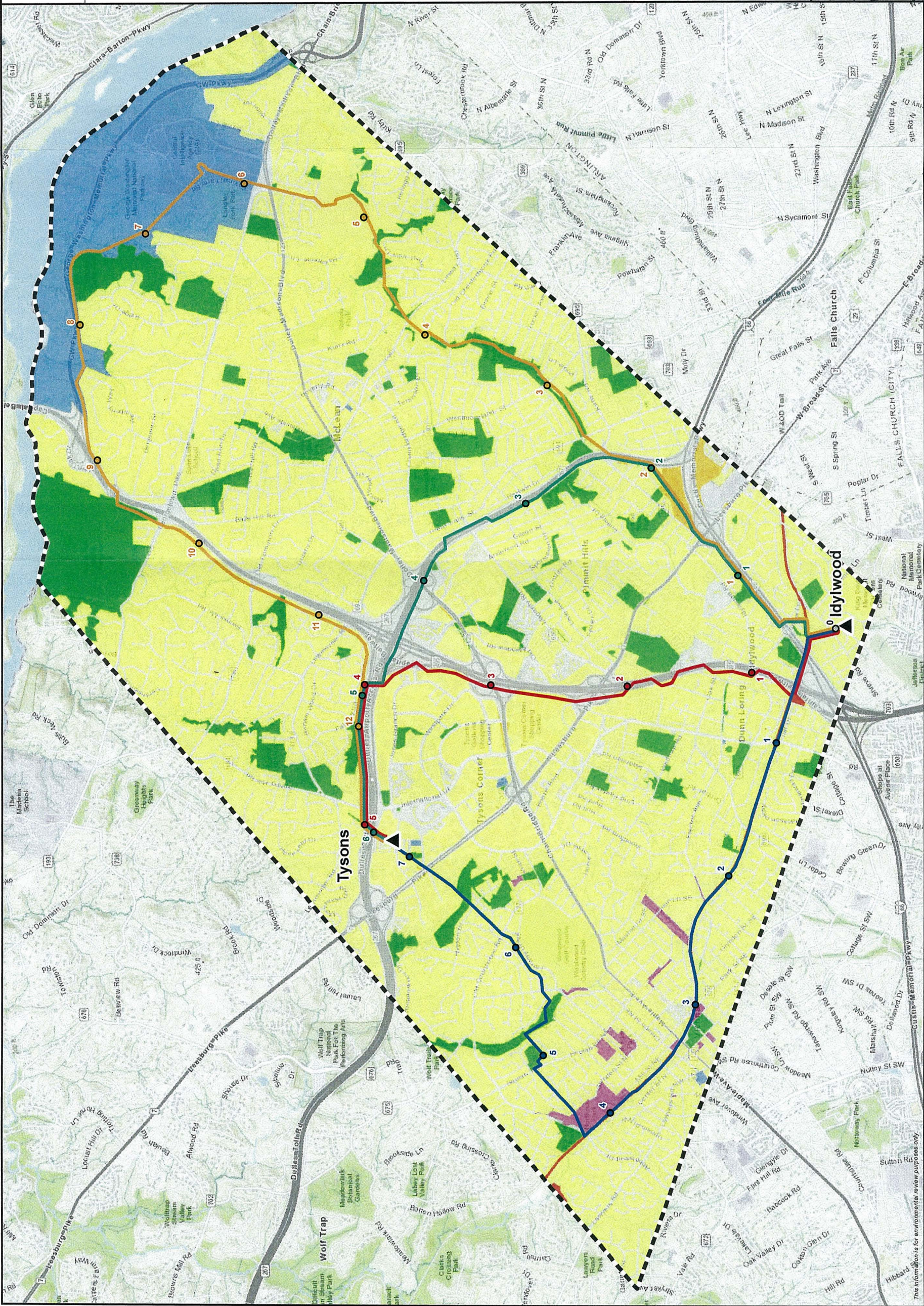
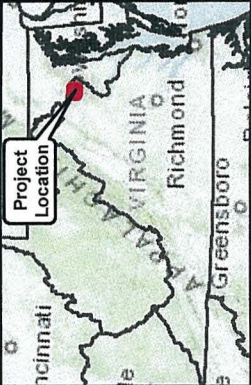
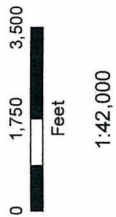
1:42,000

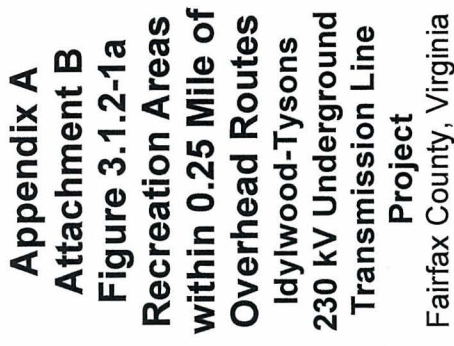




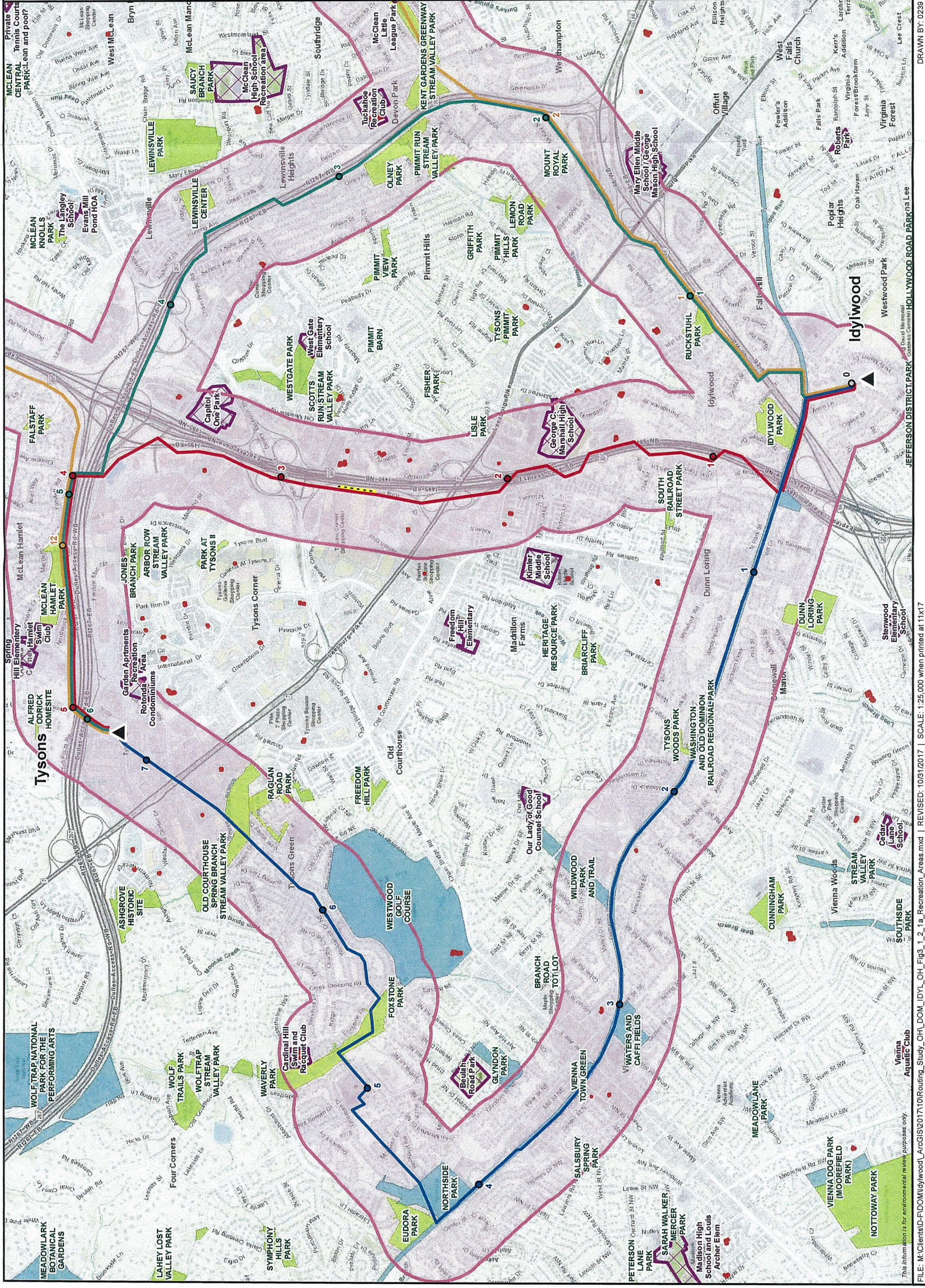
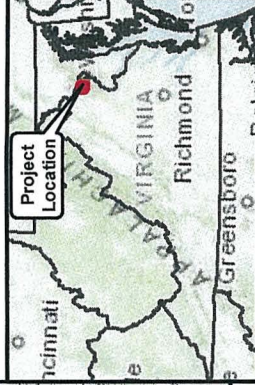
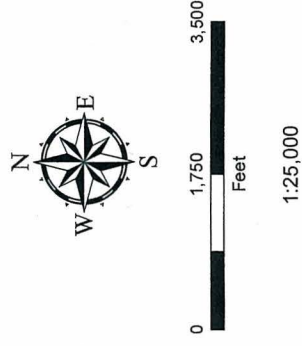
Appendix A
Attachment B
Figure 3.1.1-1
Land Ownership
in Study Area
Idylwood-Tyson's
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

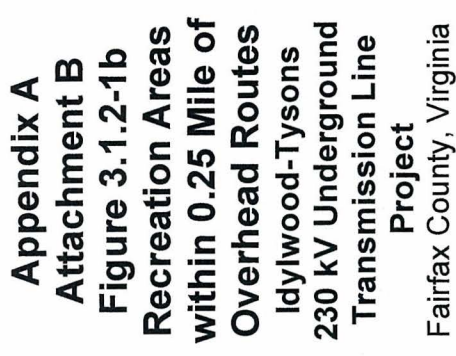
- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Study Area
- Milepost
- Land Ownership
- City
- Commonwealth of Virginia
- County
- Federal
- NOVA Parks
- Private
- WMATA



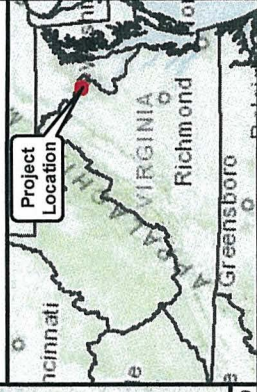
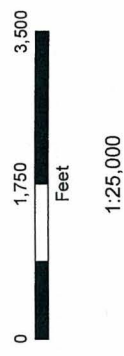


-
- Legend:
- Overhead Route 01
 - Overhead Route 02
 - Overhead Route 03
 - Overhead Route 04
 - Existing Substation
 - Milepost
 - Route 0.25 Mile Buffer
 - Tyson's Corner Center
 - Pedestrian/Bike Trail
 - Recreation Area
 - Fairfax Community Pool
 - Fairfax County Park
 - Other Park





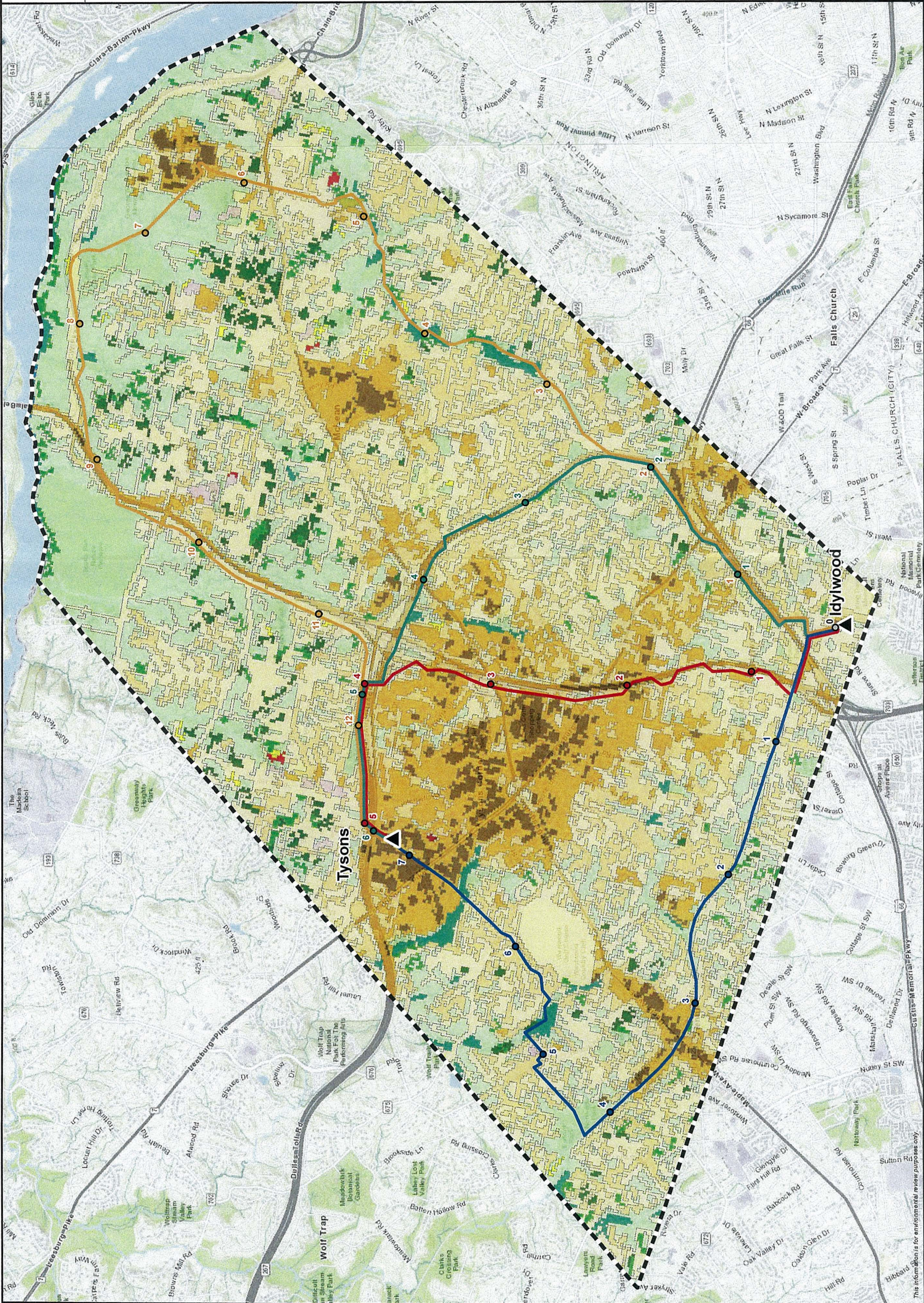
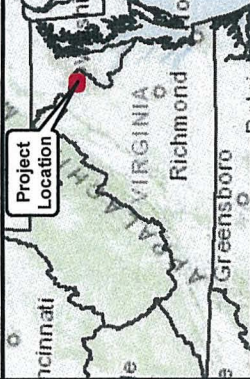
-





Appendix A
Attachment B
Figure 3.1.4-1
Existing Land
Cover in
Study Area
Idylwood-Tyson's
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Study Area
- Milepost
- Land Cover Category
- Developed, High Intensity
- Developed, Medium Intensity
- Developed, Low Intensity
- Developed, Open Space
- Cultivated Crops
- Hay/Pasture
- Herbaceous
- Barren Land
- Deciduous Forest
- Mixed Forest
- Evergreen Forest
- Shrub/Scrub
- Woody Wetlands
- Emergent Herbaceous Wetlands
- Open Water



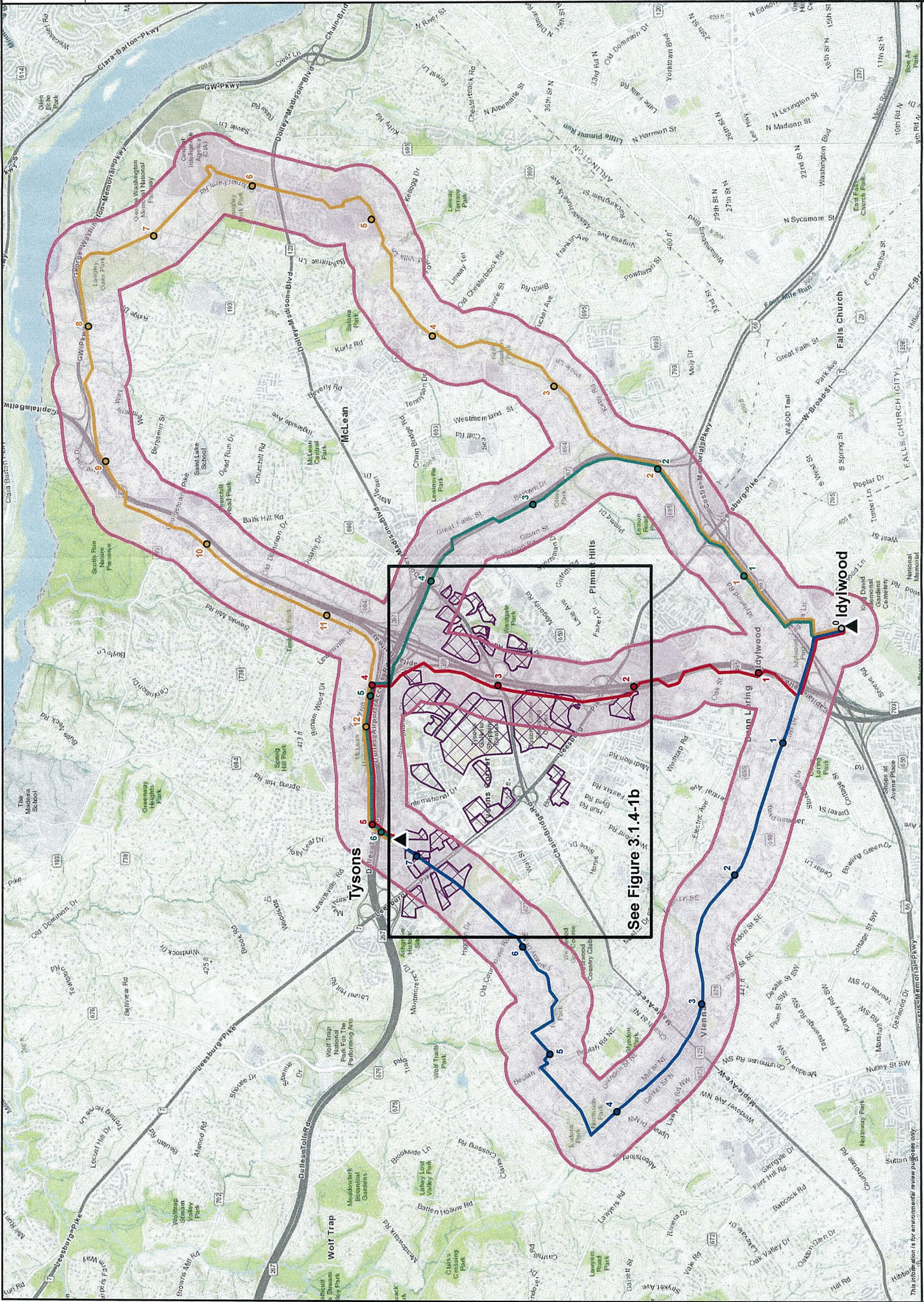
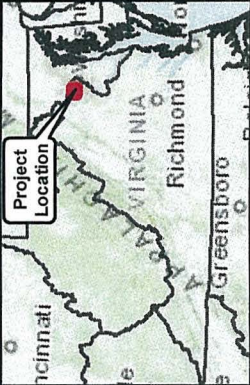


Appendix A
Attachment B
Figure 3.1.5-1a
Planned
Developments
within 0.25 Mile of
Overhead Routes
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- Route 0.25 Mile Buffer
- Planned Development



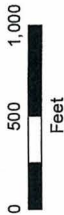
1:42,000



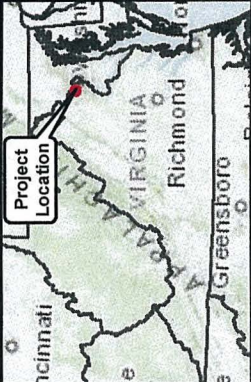


Appendix A
Attachment B
Figure 3.1.5-1b
Planned
Developments
within 0.25 Mile of
Overhead Routes
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- Route 0.25 Mile Buffer
- Planned Development



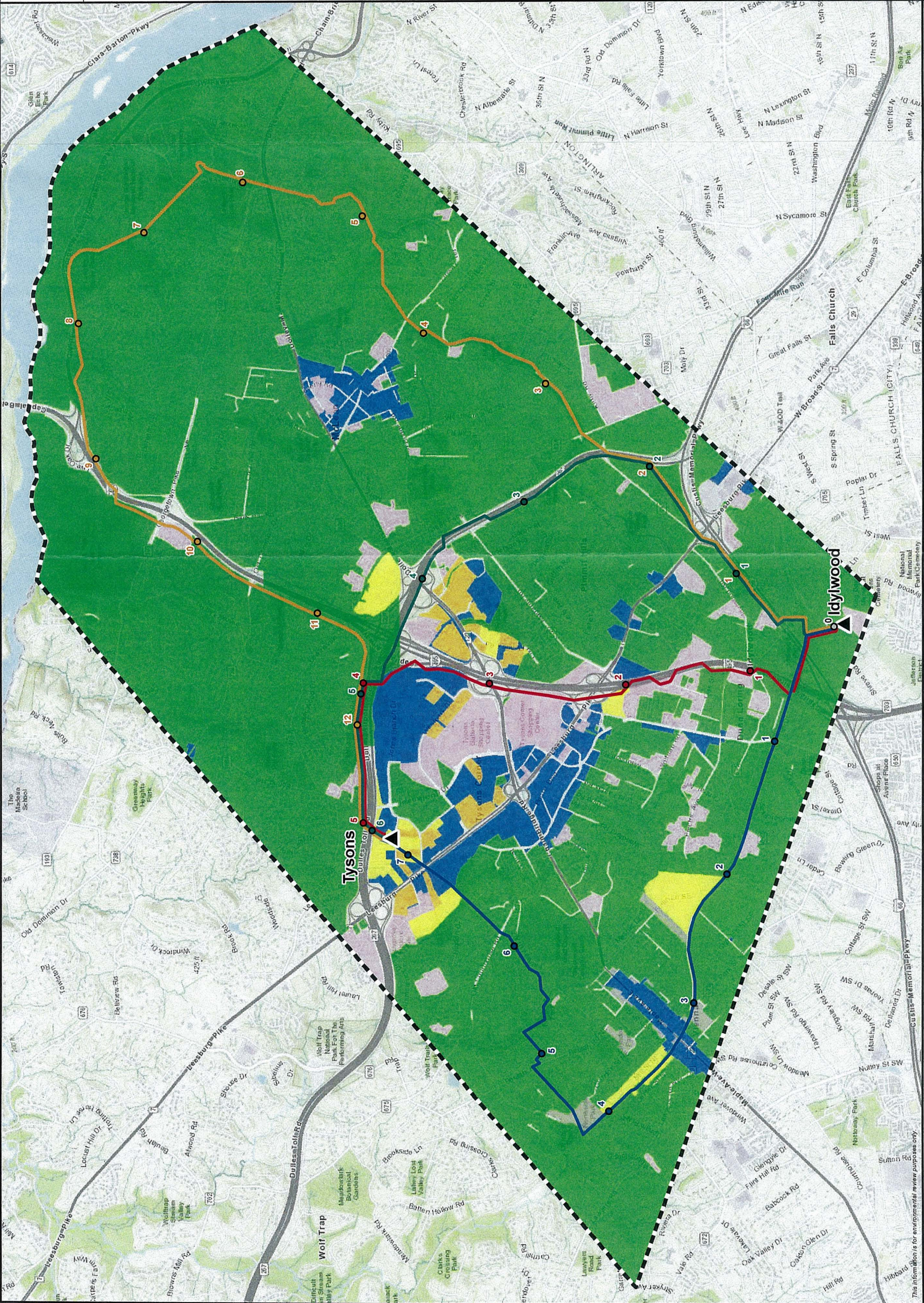
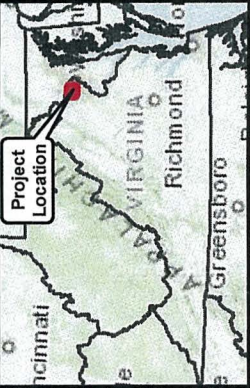
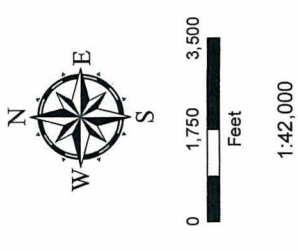
1:12,000





Appendix A
Attachment B
Figure 3.1.6-1
Zoning Categories
in Study Area
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

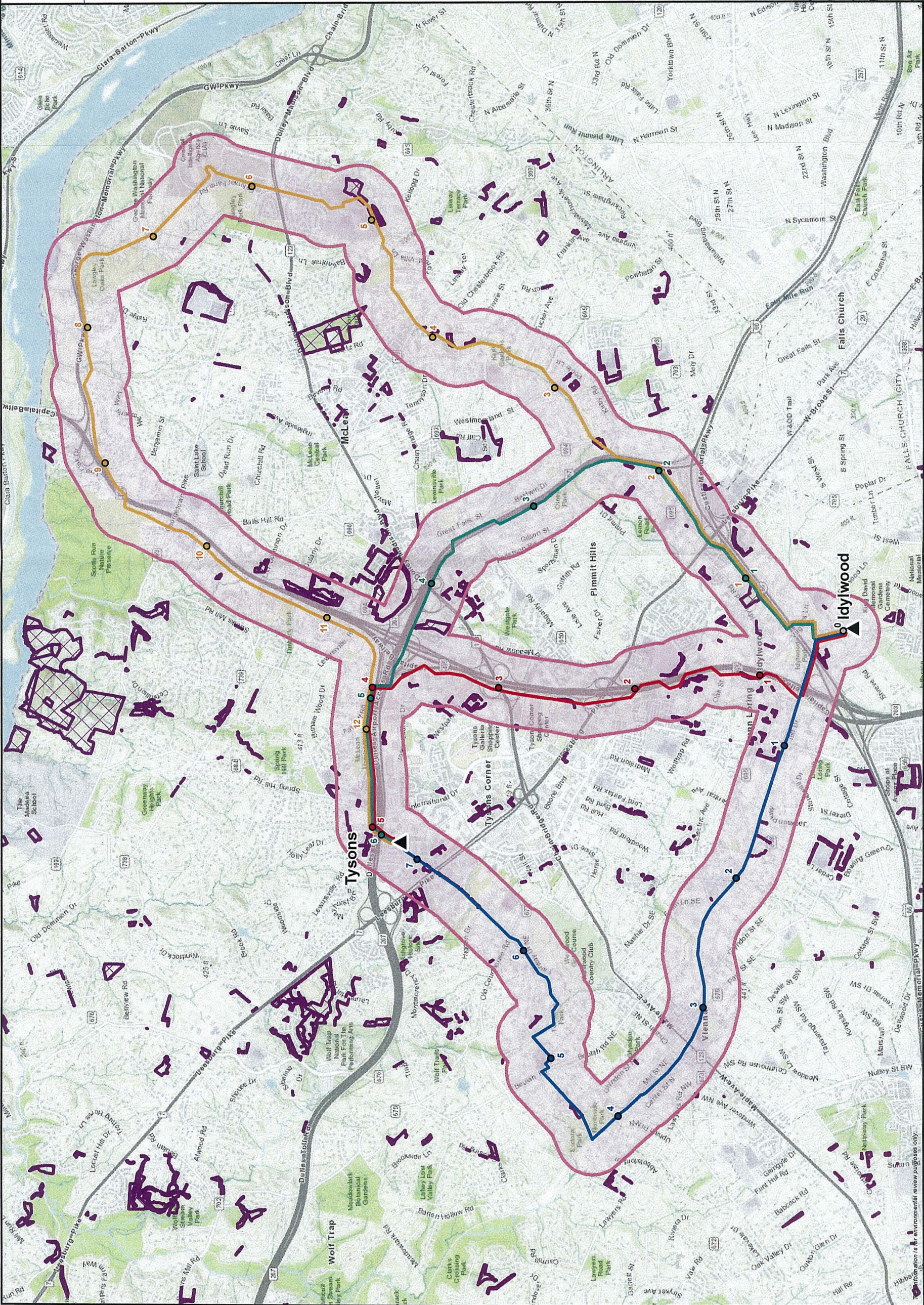
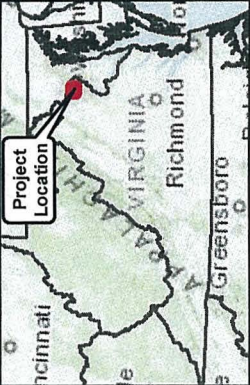
- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Study Area
- Milepost
- Zoning Type
- Residential
- Commercial
- Industrial
- Planned Units
- Tyson
- Other





Appendix A
Attachment B
Figure 3.1.7-1
Conservation
Easements
within 0.25 Mile of
Overhead Routes
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- Route 0.25 Mile Buffer
- Fairfax County
- Conservation Easement



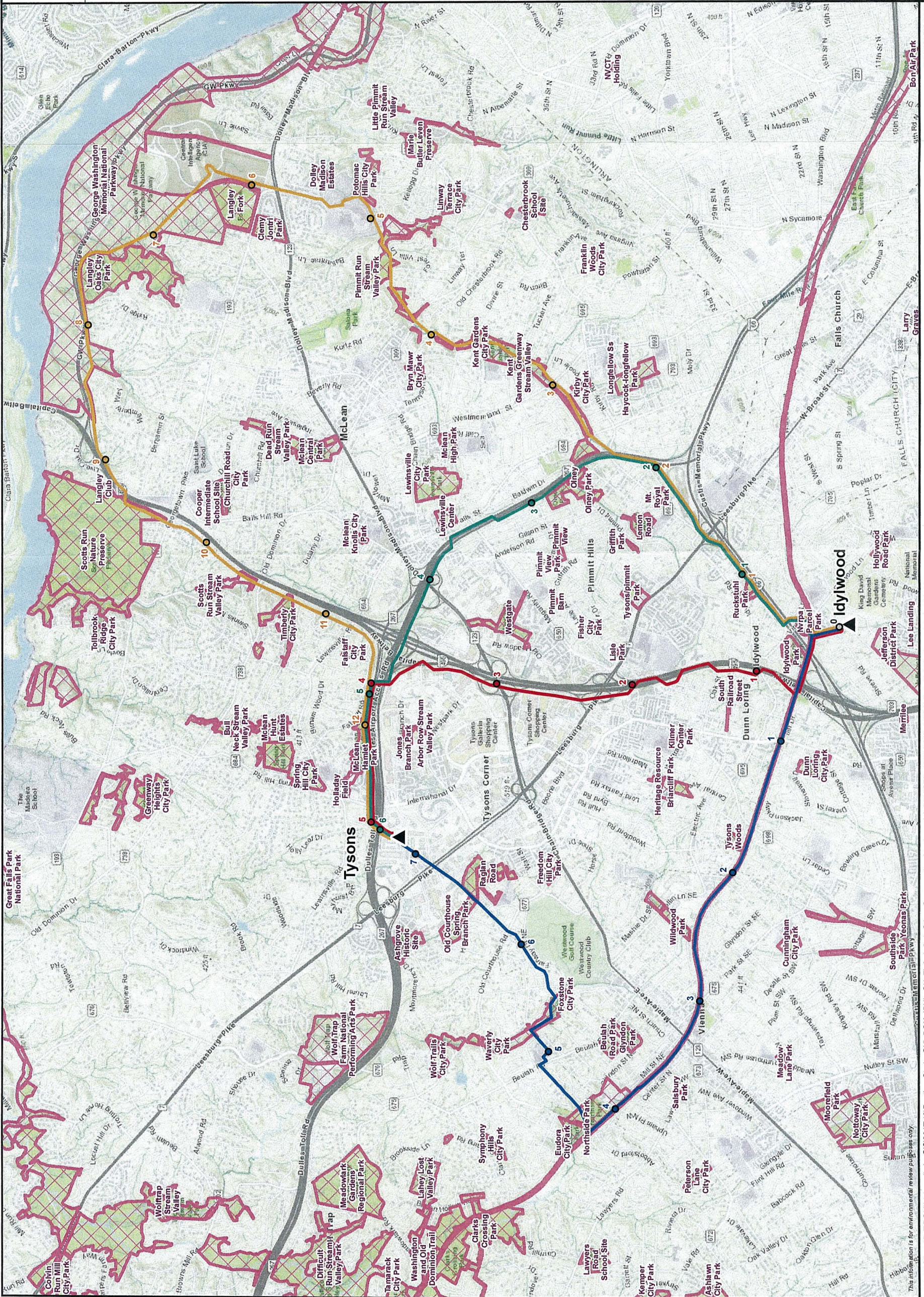
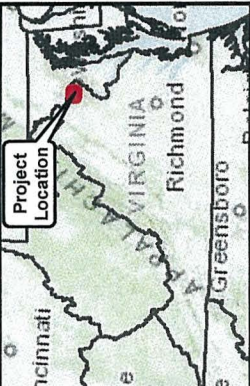


Appendix A
Attachment B
Figure 3.1.8-1
Other Conservation
Lands Crossed by
Overhead Routes
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- VDCR Conservation Lands



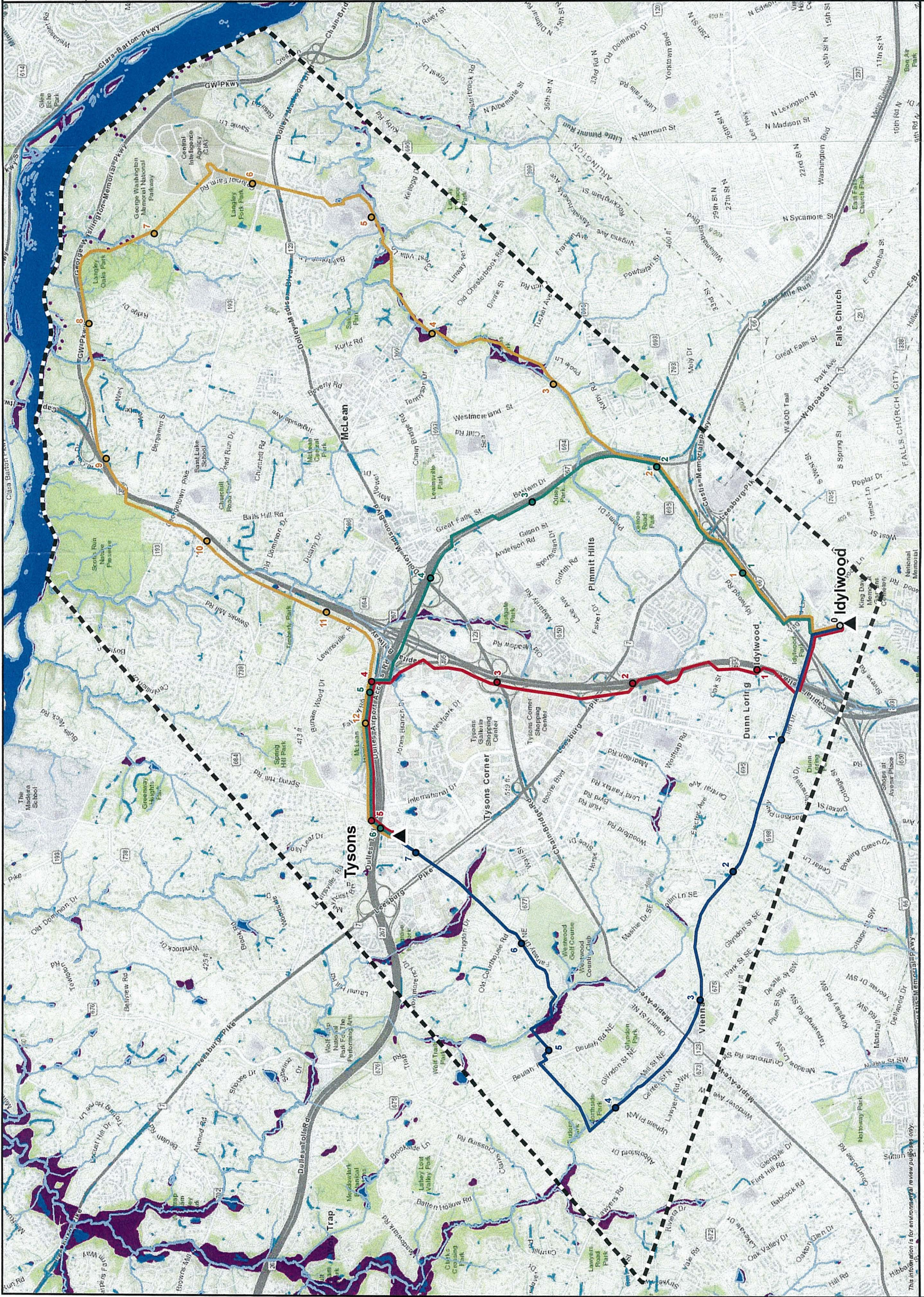
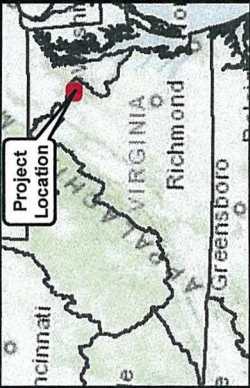
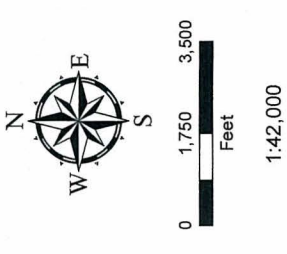
1:42,000





Appendix A
Attachment B
Figure 3.2.1-1
Wetlands and
Waterbodies
in Study Area
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- Study Area
- Fairfax County
- Perennial Stream
- Fairfax County
- Water Polygon
- NWI Wetland



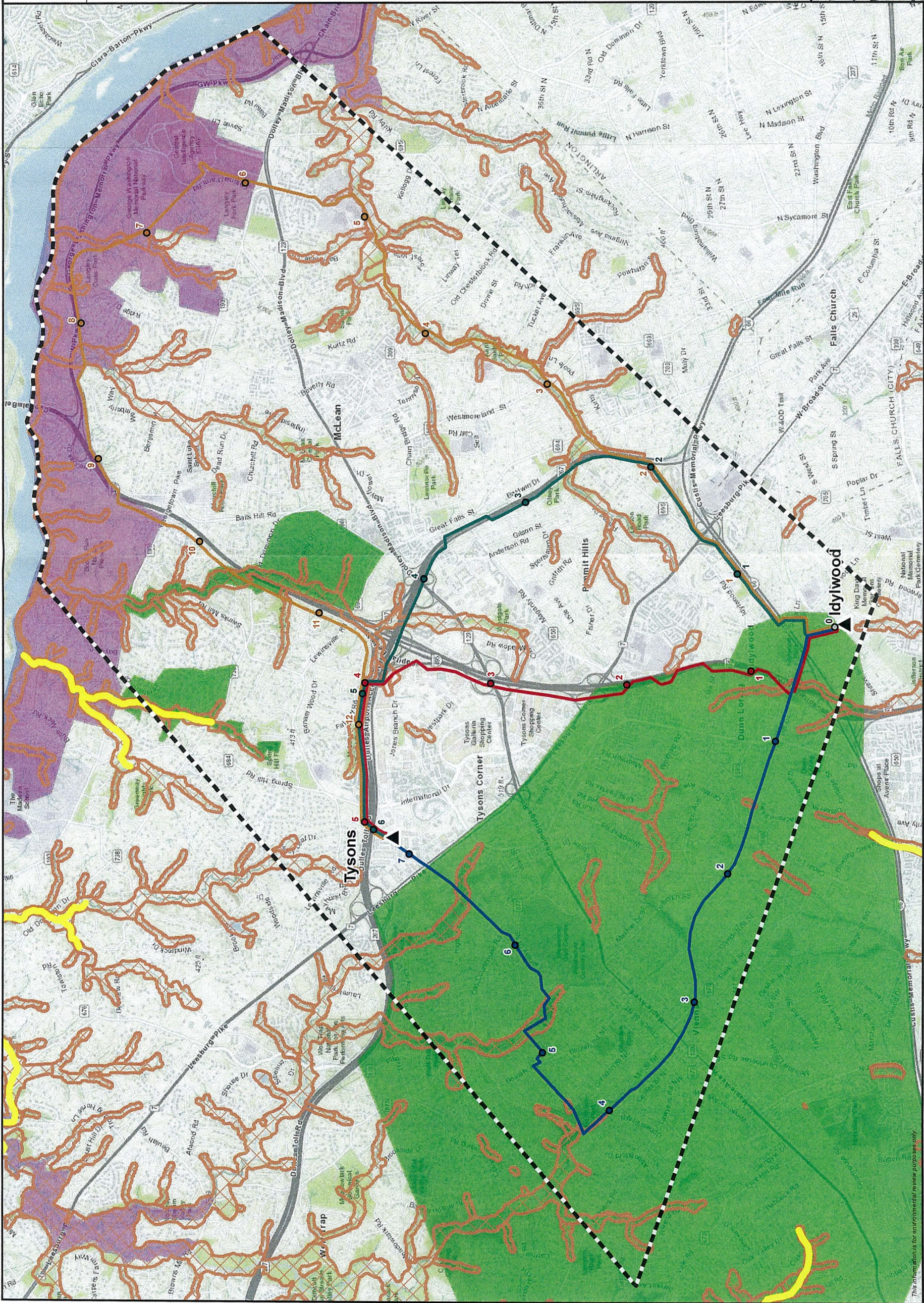
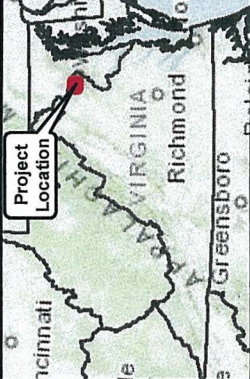


Appendix A
Attachment B
Figure 3.2.3-1
Resource Protection
Areas and Areas of
Ecological
Significance
in Study Area
Idylwood-Tyson's
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Study Area
- Milepost
- Stream Conservation Unit
- Resource Protection Area
- Conservation Site
- General Location Area for
- Natural Heritage Resources



0 1,750 3,500
Feet
1:42,000





Appendix A
Attachment B
Figure 3.4.2-1

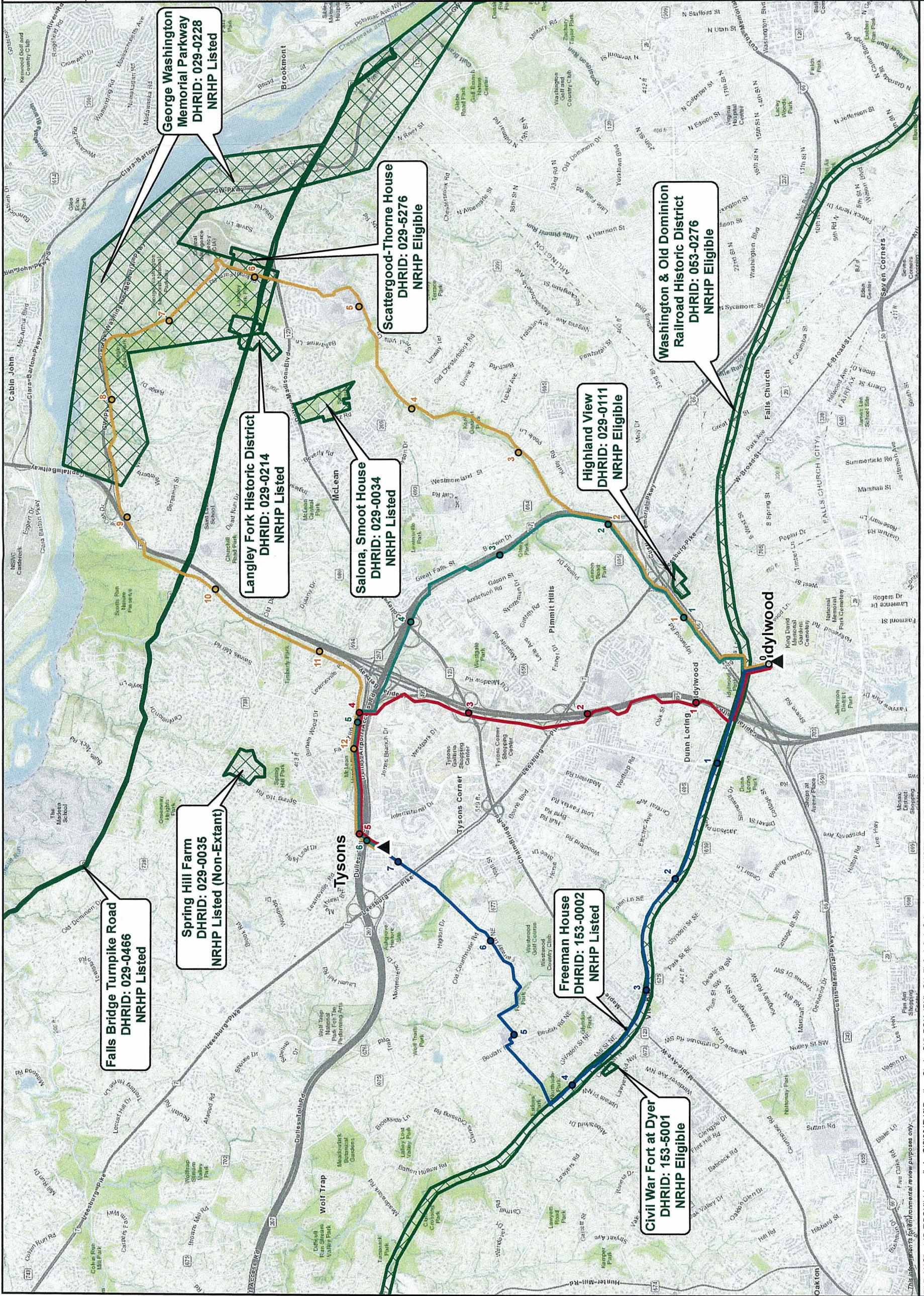
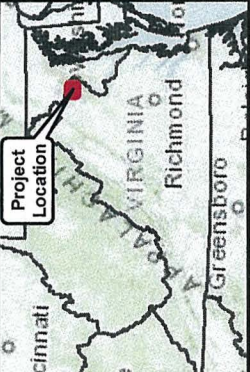
Cultural Resources
Near the
Project Area
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Existing Substation
- Milepost
- VDHR Architecture Resource



0 1,750 3,500
Feet

1:48,000



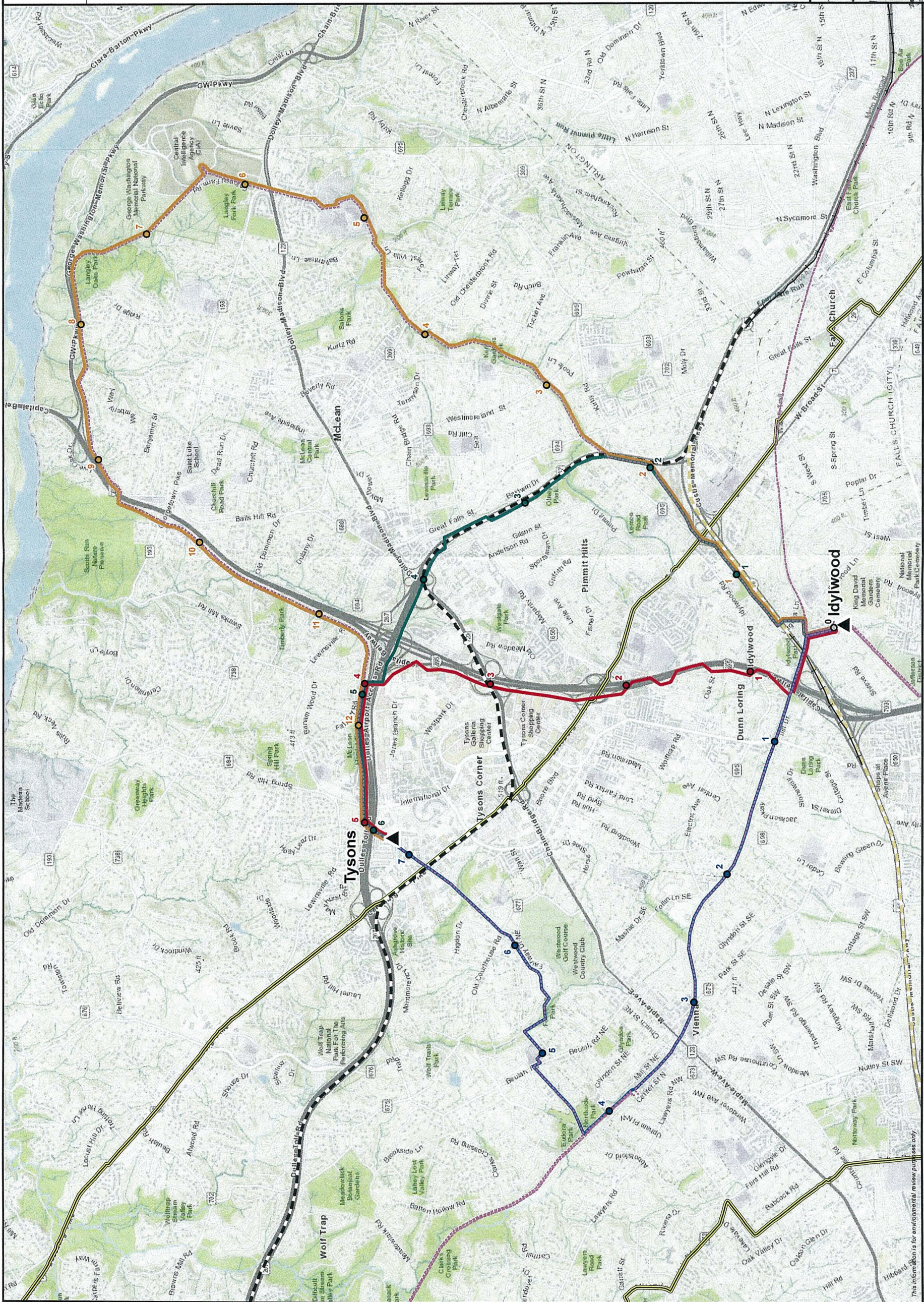
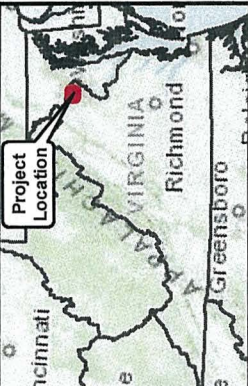


Appendix A
Attachment B
Figure 3.7-1
Existing Corridors
in Study Area
Idylwood-Tysons
230 kV Underground
Transmission Line
Project
Fairfax County, Virginia

- Overhead Route 01
- Overhead Route 02
- Overhead Route 03
- Overhead Route 04
- Milepost
- Existing Substation
- Existing Dominion Transmission Line
- Railroad
- WMATA Orange Line
- WMATA Silver Line
- Natural Gas Pipeline



1:42,000



DOMINION ENERGY VIRGINIA

**Idylwood-Tysons 230 kV Single Circuit Underground
Transmission Line
Tysons Substation Rebuild
And Related Transmission Facilities**

Overhead Route Descriptions and Analysis

**Attachment C
National Park Service Correspondence**



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
L3035C (GWMP)

JUL 26 2017

Mrs. Amanda Mayhew
Dominion Energy, Virginia
701 East Cary Street
Richmond, Virginia 23219

Dear Ms. Mayhew,

I am writing regarding Dominion Energy's proposed routes to utilize the existing #2029 single circuit, 230 kV electrical transmission line in Fairfax County, Virginia. You have met with members of my staff on July 6, 2017 to discuss this project, and I would like to thank you for taking the time to discuss the proposal.

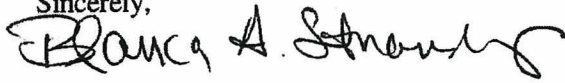
There are several proposed alternatives between the Idylwood area and Tysons Substation showing routes that would not cross the George Washington Memorial Parkway, a National Park Service (NPS) unit. It is the park's opinion that other feasible alternatives exist outside the NPS boundary. Therefore, the NPS does not support the alternative routed through the George Washington Memorial Parkway. The park has specific concerns with the following:

1. The "Overhead 01" route shown on your drawing entitled "Draft Overview Map, Idylwood To Tysons Project, Map for National Park Service" showing the pathway utilizing the existing #2029 route which is currently an 80' wide Right-of-Way and the proposal to increase the Right-of-Way to 100'.
2. The approximate 25' increase of pole height adding a visual impact to the park's cultural landscape with an increase to the number of lines and associated risk from trees outside the Right-of-way.
3. The additional four acres clearing required to make space for the additional circuit.

It is our hope that Dominion Energy will not pursue any alternative that places an action on National Park Service land.

If I can be of any further assistance, please contact Mr. Peter McCallum of my staff. Mr. McCallum can be reached by email at peter_mccallum@nps.gov, or by telephone on 703-419-6435.

Sincerely,



Alex Romero
Superintendent
George Washington Memorial Parkway

cc:

Commonwealth of Virginia
State Corporation Commission
Division of Energy Regulation
P.O. Box 1197
Richmond, Virginia 23218

Dominion Energy Virginia
701 East Cary Street, Richmond, VA 23219
Mailing Address:
P.O. Box 26666, Richmond, VA 23261
DominionEnergy.com



July 11, 2017

Mr. Alex Romero
George Washington Memorial Parkway Superintendent
700 George Washington Memorial Parkway
McLean, Virginia 22101

RE: Dominion Energy- Idylwood to Tysons Substation 230kV Electric Transmission Line

Dear Mr. Romero,

This letter is to follow up on discussions with Mr. Peter McCallum at the National Park Service (NPS) on July 6, 2017 regarding Dominion Energy's proposed Idylwood to Tysons 230 kV Electric Transmission Line Project located in Fairfax County. The project will connect the Company's Idylwood Substation off Shreve Road and Tysons Substation off Tyco Road. Mr. McCallum provided an overview of the permitting process for infrastructure projects on NPS land.

Dominion and its consultant ERM have been researching overhead and underground route alternatives to connect the two substations. Currently, there are three overhead routes and seven underground routes under consideration. Maps showing each of the routes are attached.

One of the proposed routes is to rebuild the existing single circuit electric transmission line through George Washington Parkway land (Overhead 1 on map) to a double circuit transmission line. The double circuit transmission line would require new structures (similar style to the existing structures), would require an increase in structure height and would require additional clearing to accommodate the two circuits. Currently, Dominion maintains the corridor at approximately 80 feet wide. The corridor to accommodate the double circuit lines would be widened to 100 feet, requiring approximately 4 acres of clearing. The new structures would be placed near existing structure locations and could increase in height by approximately 25 feet. Typical existing structure drawings and examples of possible new structure drawings are attached.

Dominion requests that the NPS review Overhead 1 Alternative and provide guidance as to under what circumstances that NPS would allow a double circuit on George Washington Memorial Park land. Dominion will use this information in determining the routes that will be presented to the State Corporation Commission in an application to be filed in the fall of this year. The next step in the Company's routing process is to present the overhead and underground routes at focus group meetings that will begin at the end of July.

Thank you for your time and attention to this matter. Your input will aid in the routing process and help Dominion to identify the route that best fits the area. Please contact me with any questions at 804.771.6145 or at amanda.m.mayhew@dominionenergy.com.

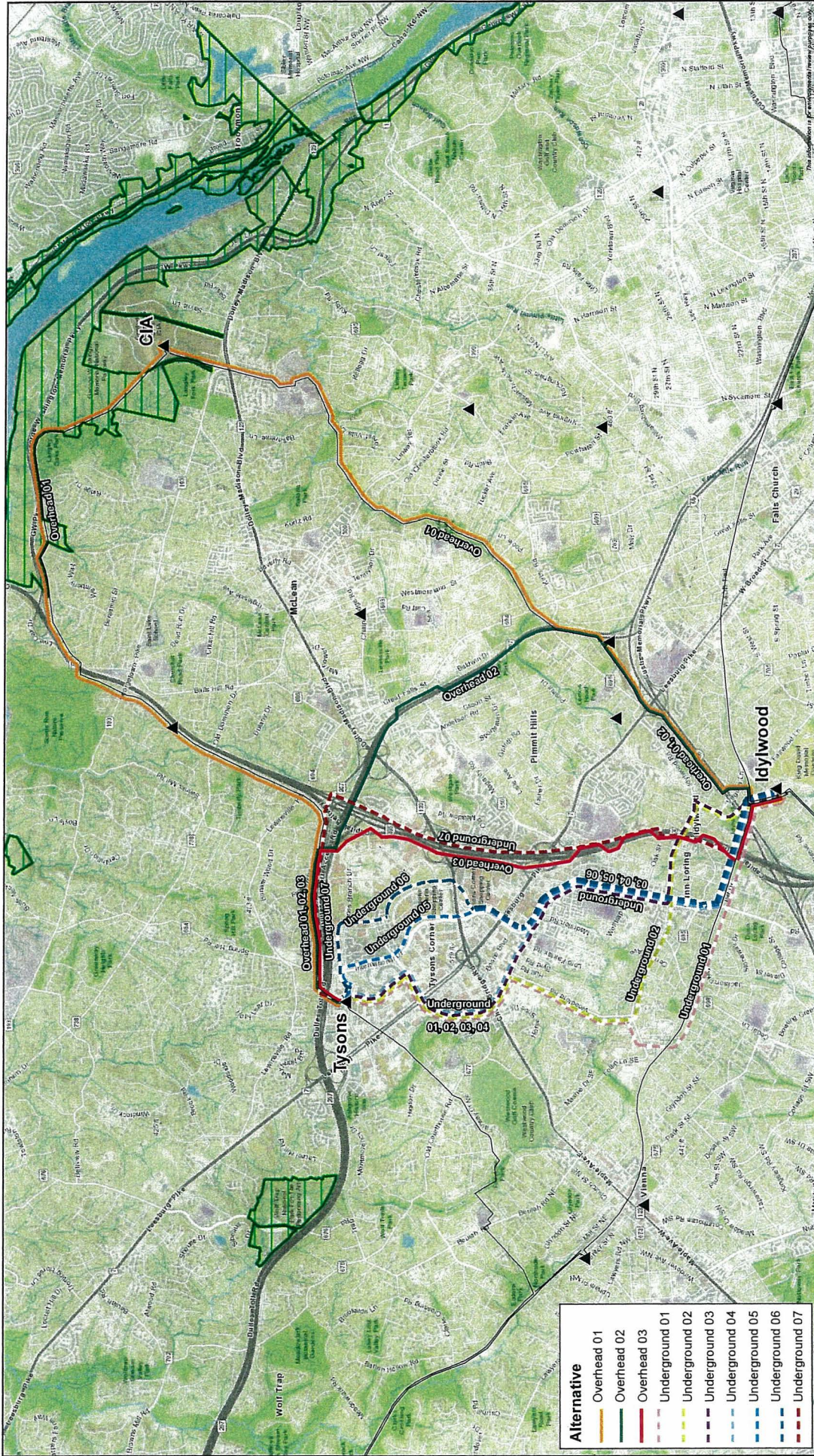
Sincerely,

A handwritten signature in blue ink, appearing to read "Amanda Mayhew". The signature is fluid and cursive, with the first name "Amanda" written in a larger, more prominent script than the last name "Mayhew".

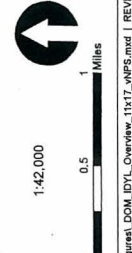
Amanda Mayhew
Senior Permitting Specialist

cc: Peter McCullum, Park Ranger, NPS

Enclosures



- Alternative**
- Overhead 01
 - Overhead 02
 - Overhead 03
 - Underground 01
 - Underground 02
 - Underground 03
 - Underground 04
 - Underground 05
 - Underground 06
 - Underground 07

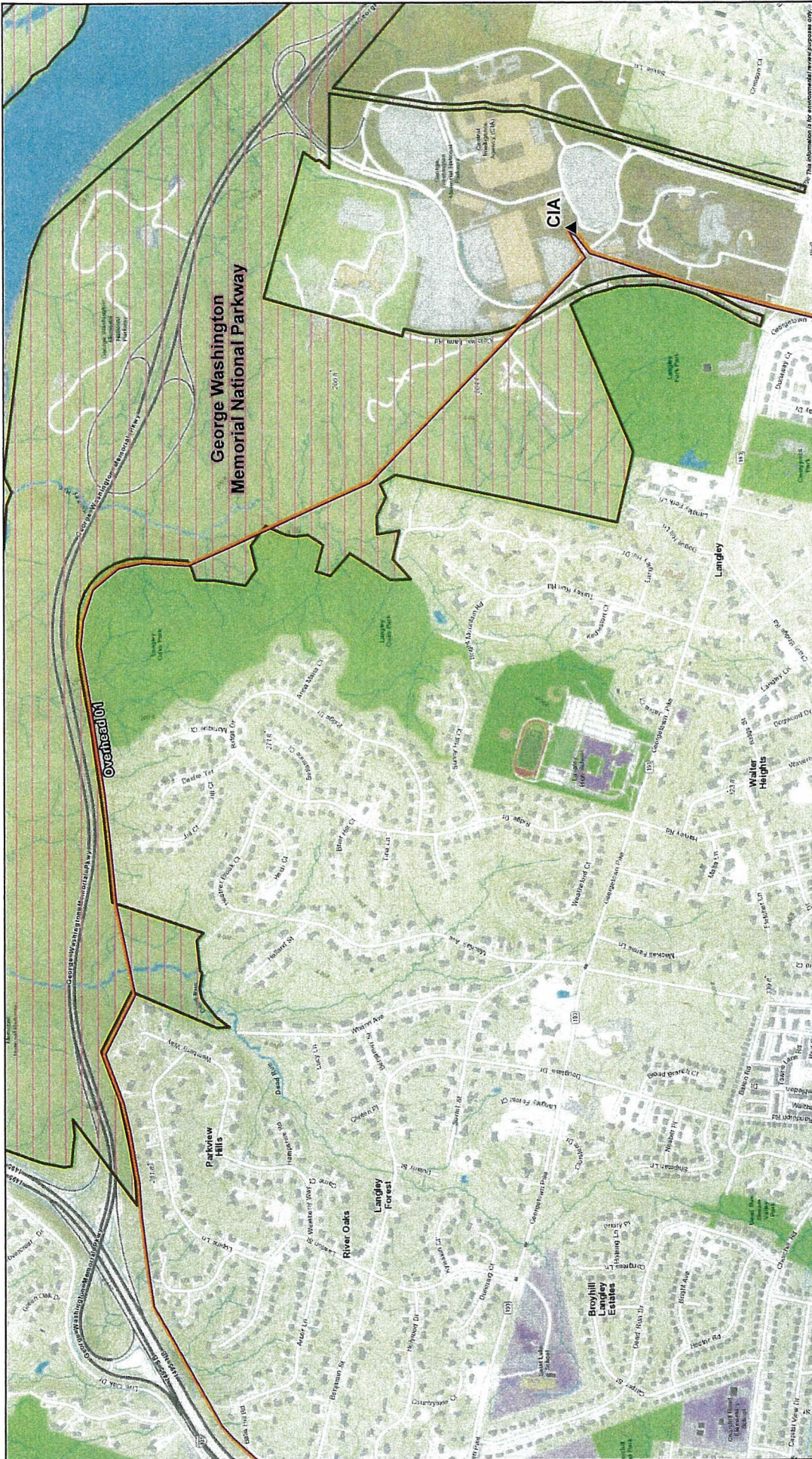


- ▲ Existing Dominion Substations
- Existing Dominion Transmission Line
- National Park Service



DRAFT
Overview Map
Idylwood to Tysons Project
Map for National Park Service
 Fairfax County, Virginia





DRAFT

Overhead 01 crossing of National Park Service Lands
Idylwood to Tysons Project
Map for National Park Service
 Fairfax County, Virginia

▲ Existing Dominion Substation

— Existing Dominion Transmission Line

— Overhead 01 Alternative

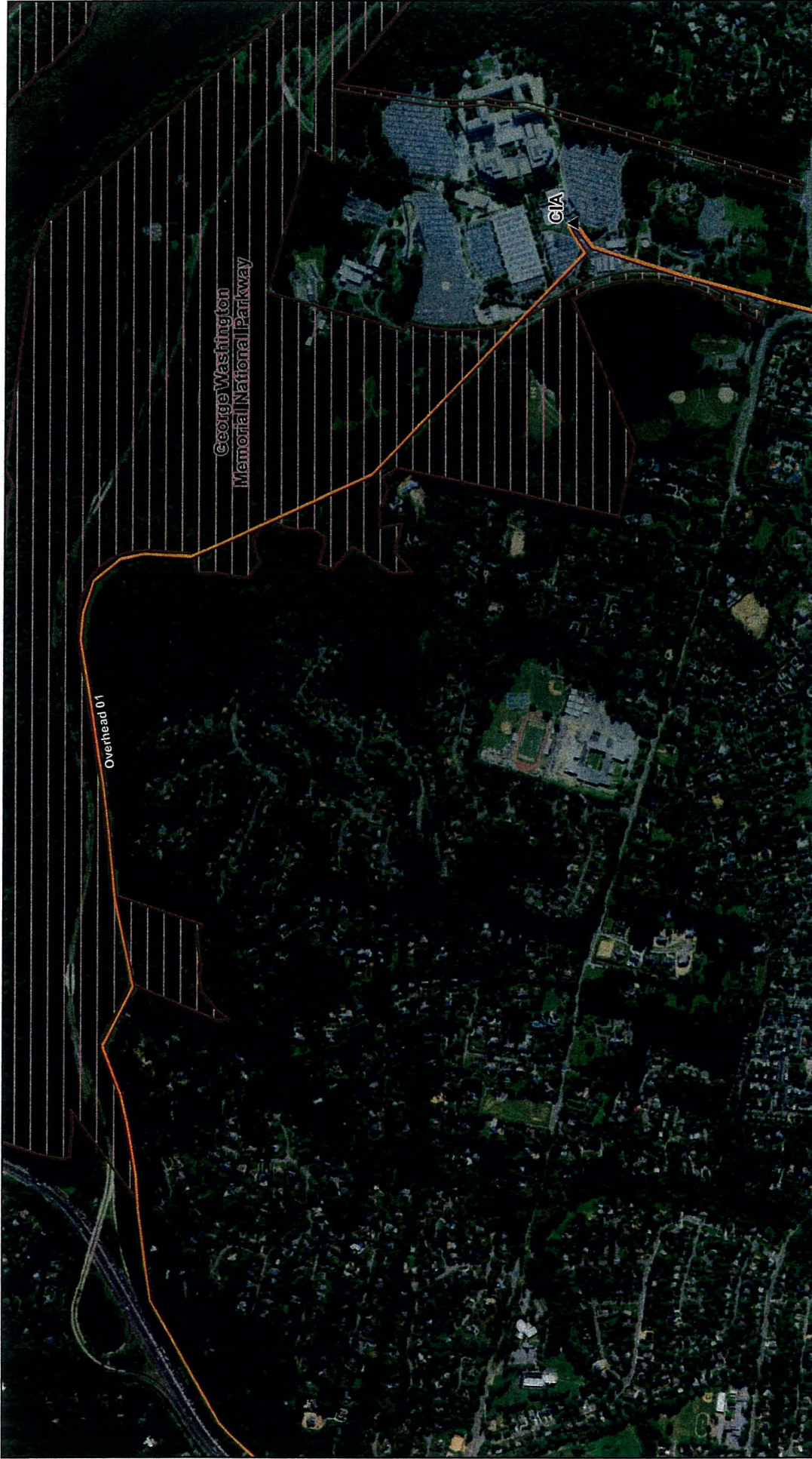
▭ National Park Service

1:10,800

0 450 900 Feet

FILE: M:\Clients\DC\DOM\Idylwood\ArcGIS\201706\Figures\DOM_IDYLWOOD_ZOOM_11x17_AWP5.mxd | REVISED: 06/20/2017 | SCALE: 1:10,800 when printed at 11x17

01010



Overhead 01 crossing of National Park Service Lands
Idylwood to Tysons Project
Map for National Park Service
 Fairfax County, Virginia

DRAFT

ERM

Existing Dominion Substation
 Existing Dominion Transmission Line
 Overhead 01 Alternative
 National Park Service

1:10,800

0 450 900 Feet

North Arrow

FILE: M:\Clients\DC\DOM\Tysons\Acad\201708\Figures\DOM_IDYLWOOD\Zoom_1x17_APS_Aerial.mxd | REVISED: 06/26/2017 | SCALE: 1:10,800 when plotted at 11x17

DOMINION ENERGY