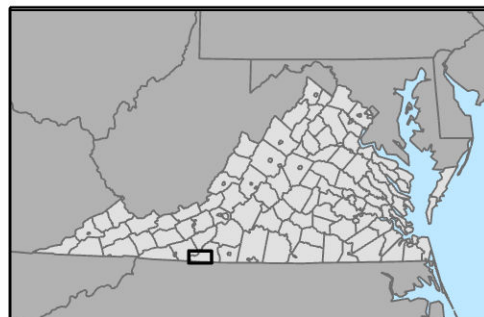
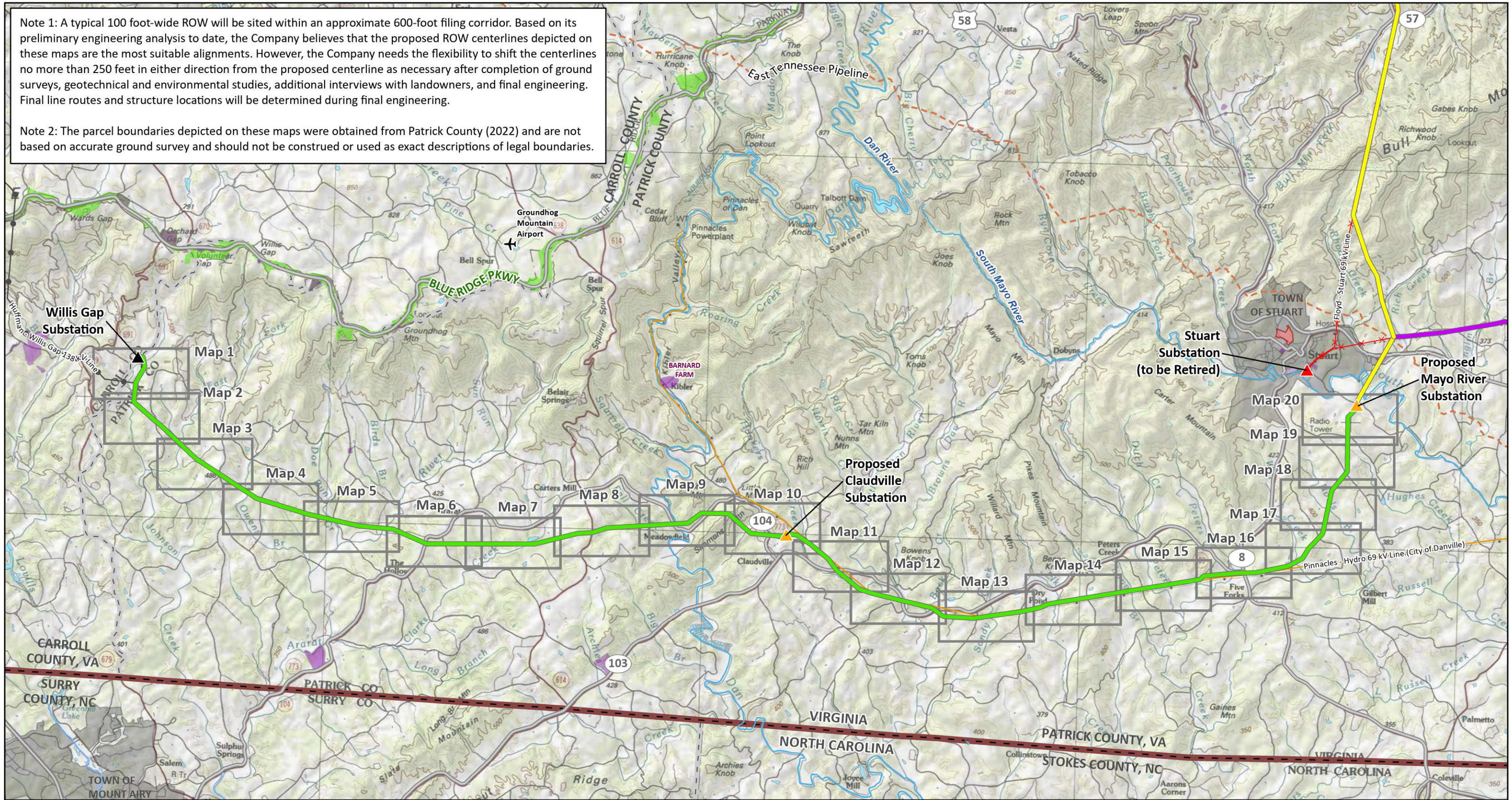


Note 1: A typical 100 foot-wide ROW will be sited within an approximate 600-foot filing corridor. Based on its preliminary engineering analysis to date, the Company believes that the proposed ROW centerlines depicted on these maps are the most suitable alignments. However, the Company needs the flexibility to shift the centerlines no more than 250 feet in either direction from the proposed centerline as necessary after completion of ground surveys, geotechnical and environmental studies, additional interviews with landowners, and final engineering. Final line routes and structure locations will be determined during final engineering.

Note 2: The parcel boundaries depicted on these maps were obtained from Patrick County (2022) and are not based on accurate ground survey and should not be construed or used as exact descriptions of legal boundaries.



Proposed APCo Substation	Existing Transmission Line to be Retired	Natural Gas Pipeline	Historic District (VDHR)
Existing APCo Substation to be Retired	Existing APCo Transmission Line (115 kV - 230 kV)	Stream (NHD)	Architectural Resource (VDHR)
Existing APCo Substation	Existing Non-APCo Transmission Line	River (NHD)	Town Boundary
Component 1 Proposed Route	Airport	Waterbody (NHD)	County Boundary
Component 2 Proposed Route	Highway	Local Conservation Land	State Boundary
Component 3 Proposed Route		Blue Ridge Parkway National Parkway	Map Tile

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 1.5 3 Miles

INDEX

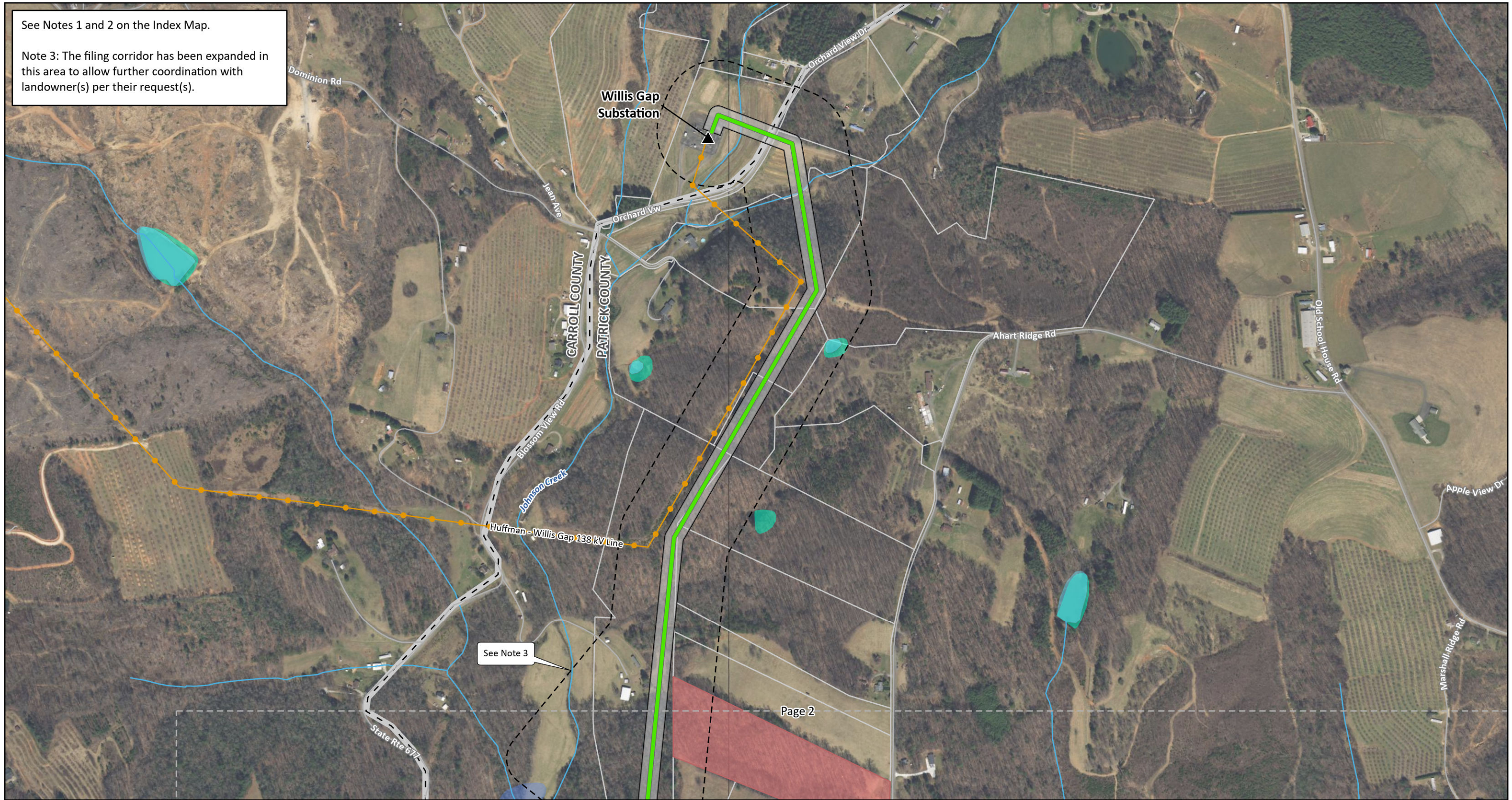
**Exhibit 7:
Component 1
GIS Constraints Map**

APPALACHIAN POWER
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.

Note 3: The filing corridor has been expanded in this area to allow further coordination with landowner(s) per their request(s).



Existing APCo Substation	Road	Floodplain
Component 1 Proposed Route (Single-Circuit)	Stream (NHD)	Local Conservation Land
Huffman - Willis Gap 138 kV Line	County Boundary	Parcel Boundary (See Note 2)
Proposed Right-of-Way (100')	Waterbody (NHD)	Map Tile
Filing Corridor (See Note 1)	Wetland (NWI)	

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 1 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

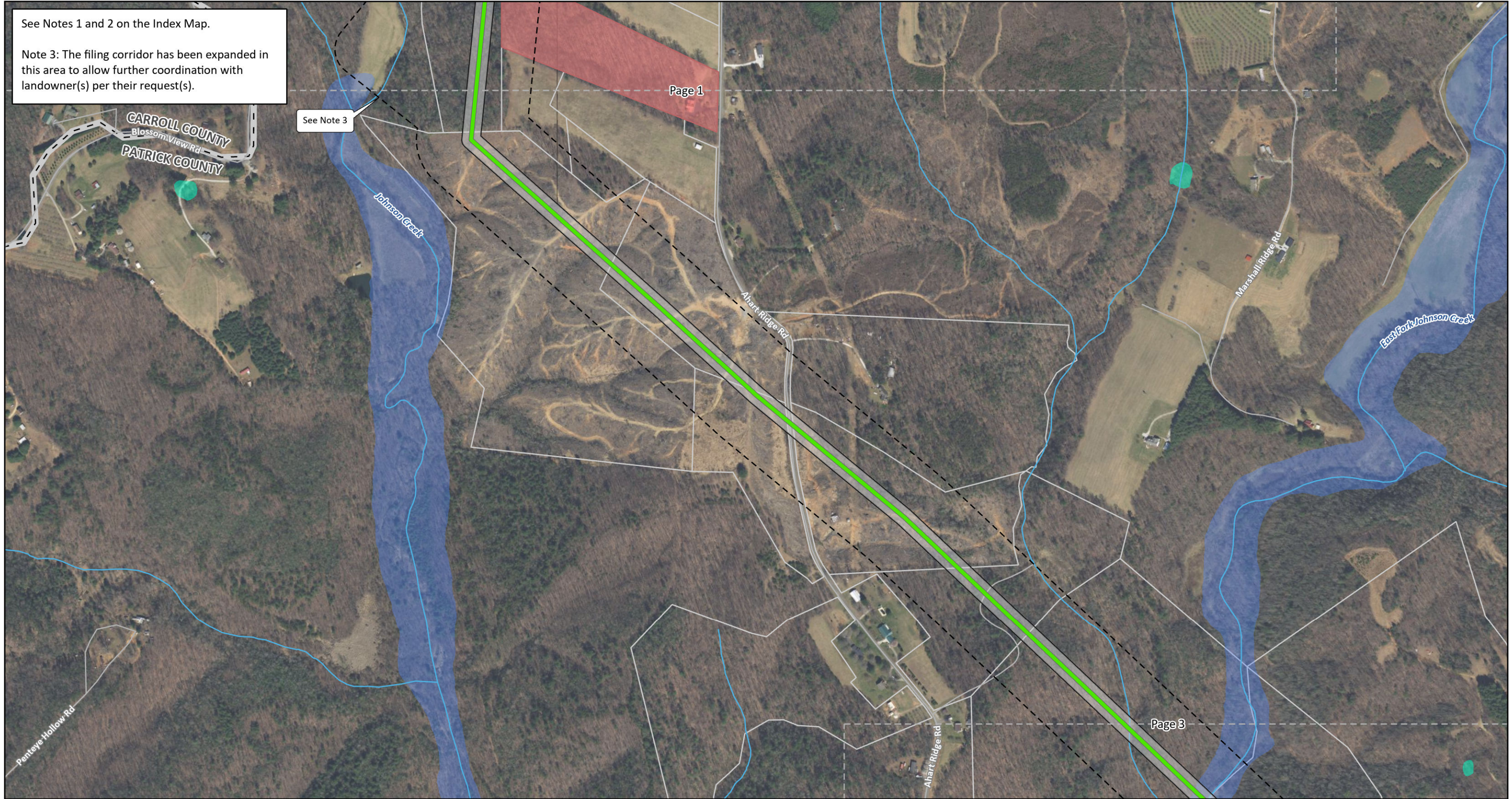
See Notes 1 and 2 on the Index Map.

Note 3: The filing corridor has been expanded in this area to allow further coordination with landowner(s) per their request(s).

See Note 3

Page 1

Page 3



Component 1 Proposed Route (Single-Circuit)	Wetland (NWI)
Proposed Right-of-Way (100')	Floodplain
Filing Corridor (See Note 1)	Local Conservation Land
Road	Parcel Boundary (See Note 2)
Stream (NHD)	Map Tile
County Boundary	

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 2 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

Appalachian Power
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Proposed Right-of-Way (100')	Waterbody (NHD)
Filing Corridor (See Note 1)	Wetland (NWI)
Cemetery	Floodplain
Place of Worship	Parcel Boundary (See Note 2)
Road	Map Tile

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
 Feet

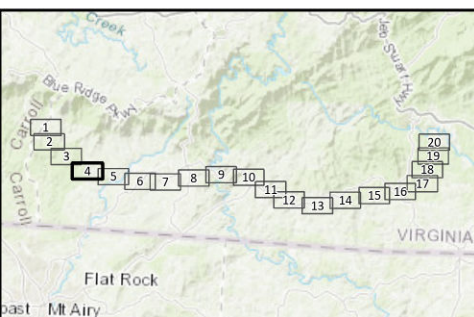
Map 3 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

An AEP Company

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Waterbody (NHD)
Proposed Right-of-Way (100')	Wetland (NWI)
Filing Corridor (See Note 1)	Parcel Boundary (See Note 2)
Road	Map Tile
Stream (NHD)	

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

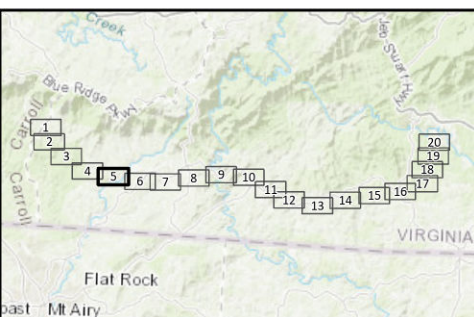
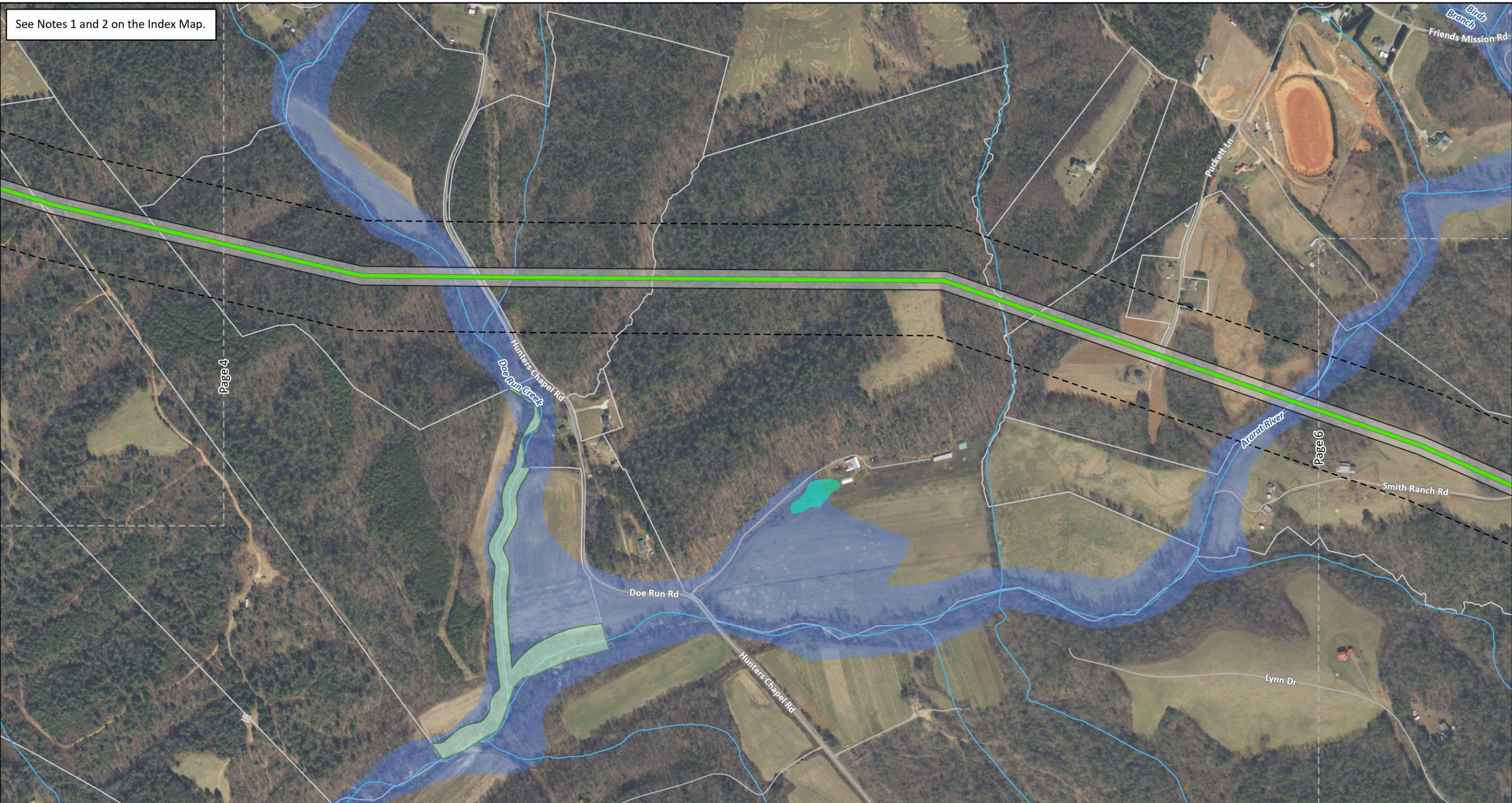
Map 4 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Wetland (NWI)
Proposed Right-of-Way (100')	Floodplain
Filing Corridor (See Note 1)	Federal Conservation Easement
Road	Parcel Boundary (See Note 2)
Stream (NHD)	Map Tile

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000 Feet

Map 5 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

APPALACHIAN POWER
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Proposed Right-of-Way (100')	Waterbody (NHD)
Filing Corridor (See Note 1)	Wetland (NWI)
Highway	Floodplain
Road	Parcel Boundary (See Note 2)
Recreation Trail	Map Tile

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000

 Feet

Map 6 of 20

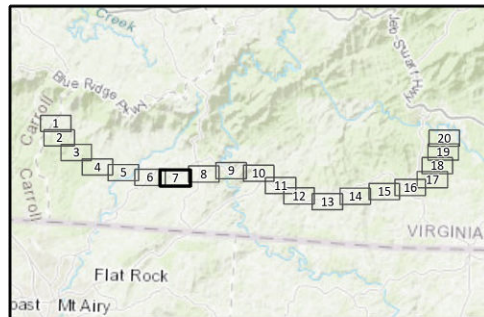
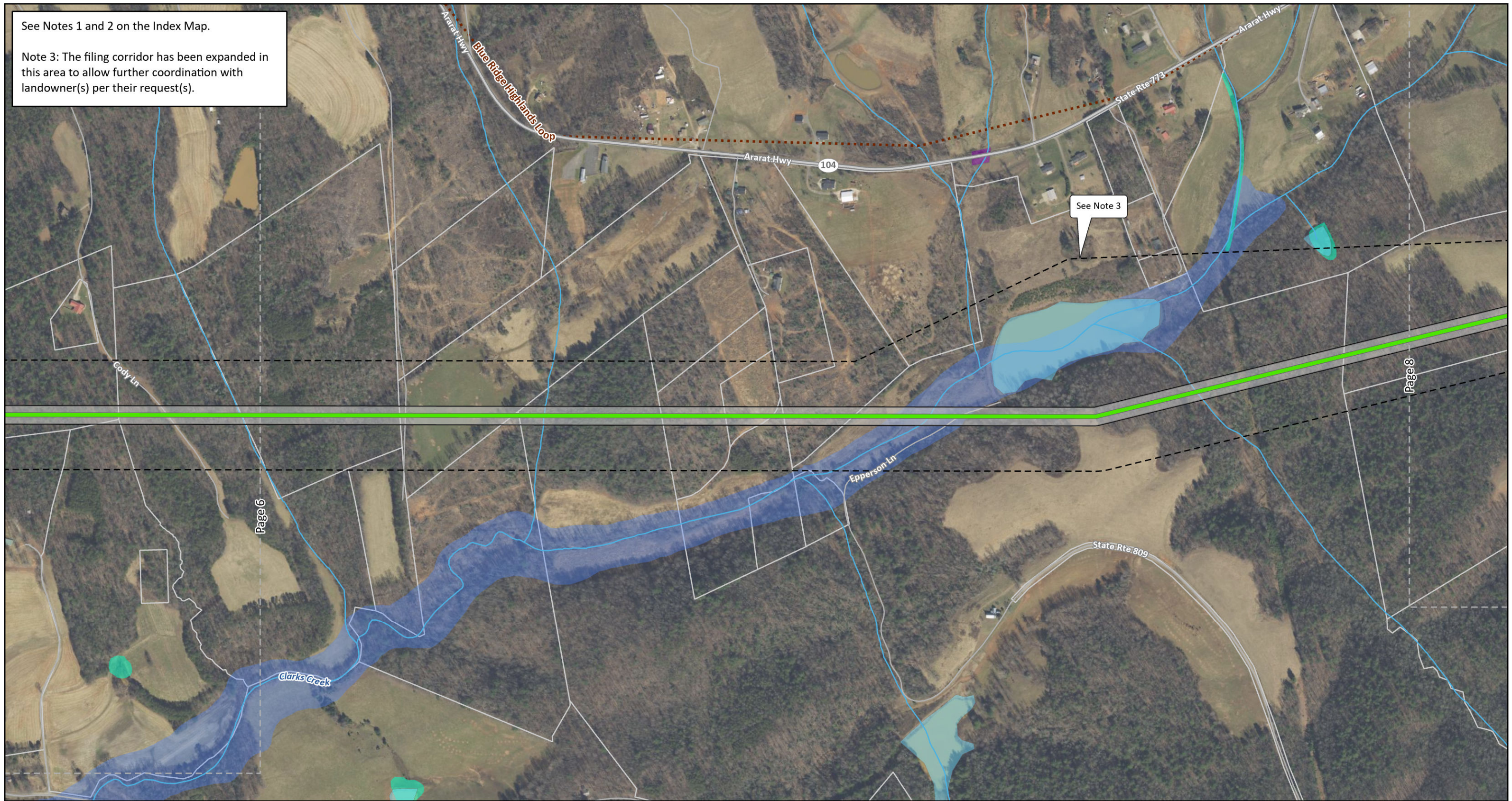
Exhibit 7:
Component 1
GIS Constraints Map

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

An AEP Company

See Notes 1 and 2 on the Index Map.

Note 3: The filing corridor has been expanded in this area to allow further coordination with landowner(s) per their request(s).



Component 1 Proposed Route (Single-Circuit)	Waterbody (NHD)
Proposed Right-of-Way (100')	Wetland (NWI)
Filing Corridor (See Note 1)	Floodplain
Highway	Architectural Resource (VDHR)
Road	Parcel Boundary (See Note 2)
Recreation Trail	Map Tile
Stream (NHD)	

Carroll & Patrick Counties, Virginia
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0 500 1,000
 Feet

Map 7 of 20

Exhibit 7:
Component 1
GIS Constraints Map

Stuart Area Transmission Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Proposed Right-of-Way (100')	Waterbody (NHD)
Filing Corridor (See Note 1)	Wetland (NWI)
Highway	Parcel Boundary (See Note 2)
Road	Map Tile
Recreation Trail	

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 8 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Proposed Right-of-Way (100')	River (NHD)
Filing Corridor (See Note 1)	Floodplain
Populated Place	Architectural Resource (VDHR)
Highway	Parcel Boundary (See Note 2)
Road	Map Tile

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000

 Feet

Map 9 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

See Notes 1 and 2 on the Index Map.



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Proposed APCo Substation	Cemetery	Wetland (NWI)
Component 1 Proposed Route (Single-Circuit)	Highway	Floodplain
Existing Non-APCo Transmission Line	Road	Architectural Resource (VDHR)
Proposed Right-of-Way (100')	Stream (NHD)	Parcel Boundary (See Note 2)
Filing Corridor (See Note 1)	Waterbody (NHD)	Map Tile

Carroll & Patrick Counties,
Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

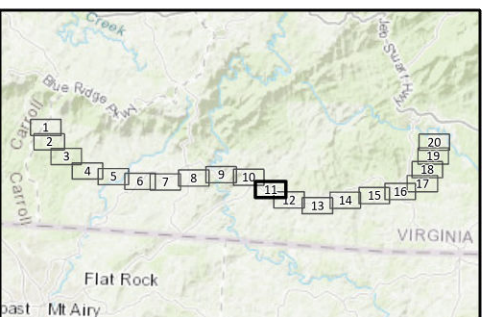
Map 10 of 20

Exhibit 7: Component 1 GIS Constraints Map

Stuart Area Transmission
Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap
Transmission Improvements

An AEP Company

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Waterbody (NHD)
Existing Non-APCo Transmission Line	Wetland (NWI)
Proposed Right-of-Way (100')	Floodplain
Filing Corridor (See Note 1)	Architectural Resource (VDHR)
Highway	Parcel Boundary (See Note 2)
Road	Map Tile
Stream (NHD)	

Carroll & Patrick Counties,
Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 11 of 20

Exhibit 7: Component 1 GIS Constraints Map

An AEP Company

Stuart Area Transmission
Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap
Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Existing Non-APCo Transmission Line	Wetland (NWI)
Proposed Right-of-Way (100')	Floodplain
Filing Corridor (See Note 1)	Architectural Resource (VDHR)
Highway	Parcel Boundary (See Note 2)
Road	Map Tile

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
 Feet

Map 12 of 20

Exhibit 7:
Component 1
GIS Constraints Map

Stuart Area Transmission Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap Transmission Improvements

An AEP Company

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Existing Non-APCo Transmission Line	Waterbody (NHD)
Proposed Right-of-Way (100')	Wetland (NWI)
Filing Corridor (See Note 1)	Floodplain
Cemetery	Parcel Boundary (See Note 2)
Highway	Map Tile
Road	

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

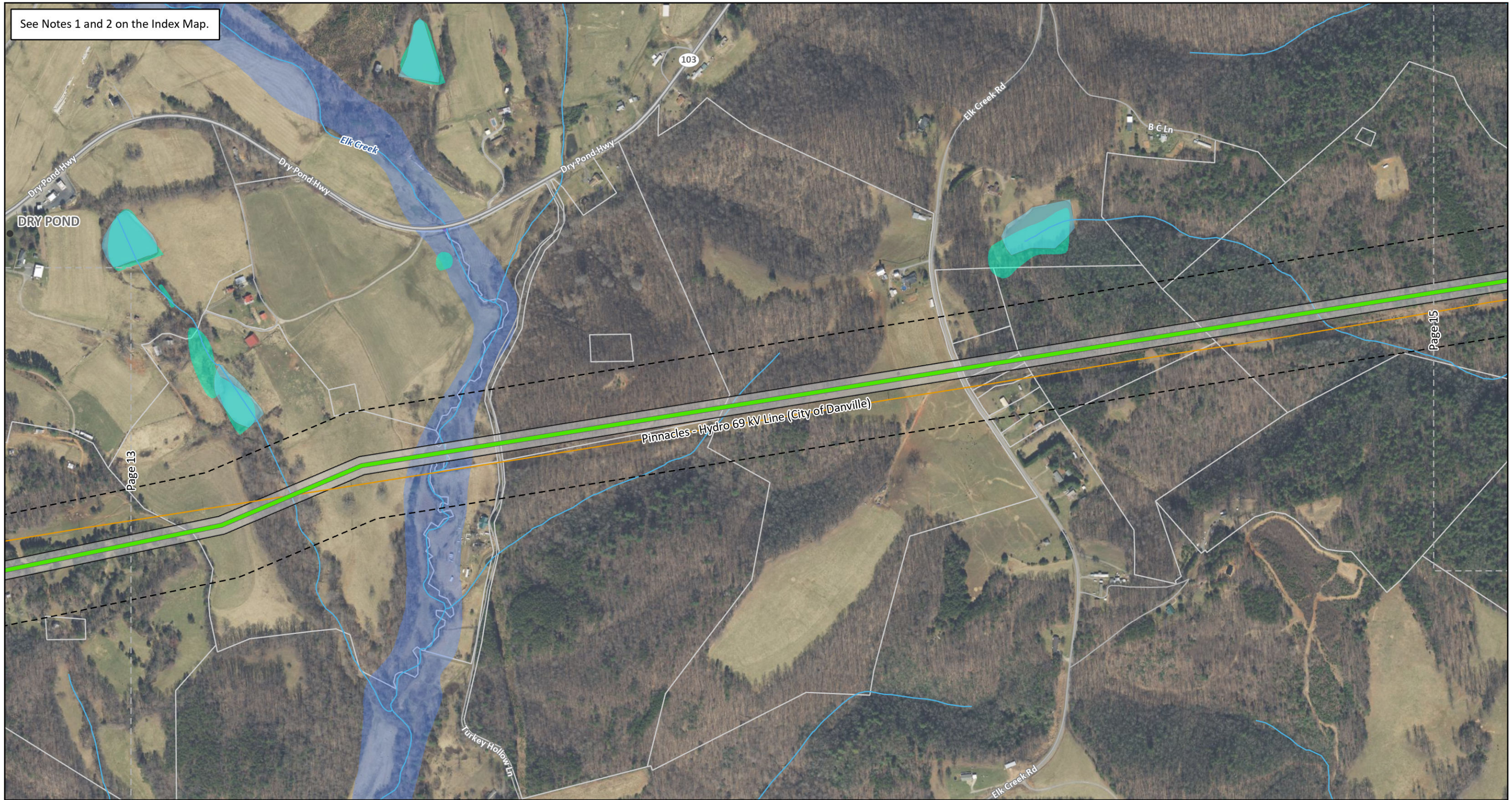
Map 13 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

APPALACHIAN POWER
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Highway	Floodplain
Existing Non-APCo Transmission Line	Road	Architectural Resource (VDHR)
Proposed Right-of-Way (100')	Stream (NHD)	Parcel Boundary (See Note 2)
Filing Corridor (See Note 1)	Waterbody (NHD)	Map Tile
Populated Place	Wetland (NWI)	

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000

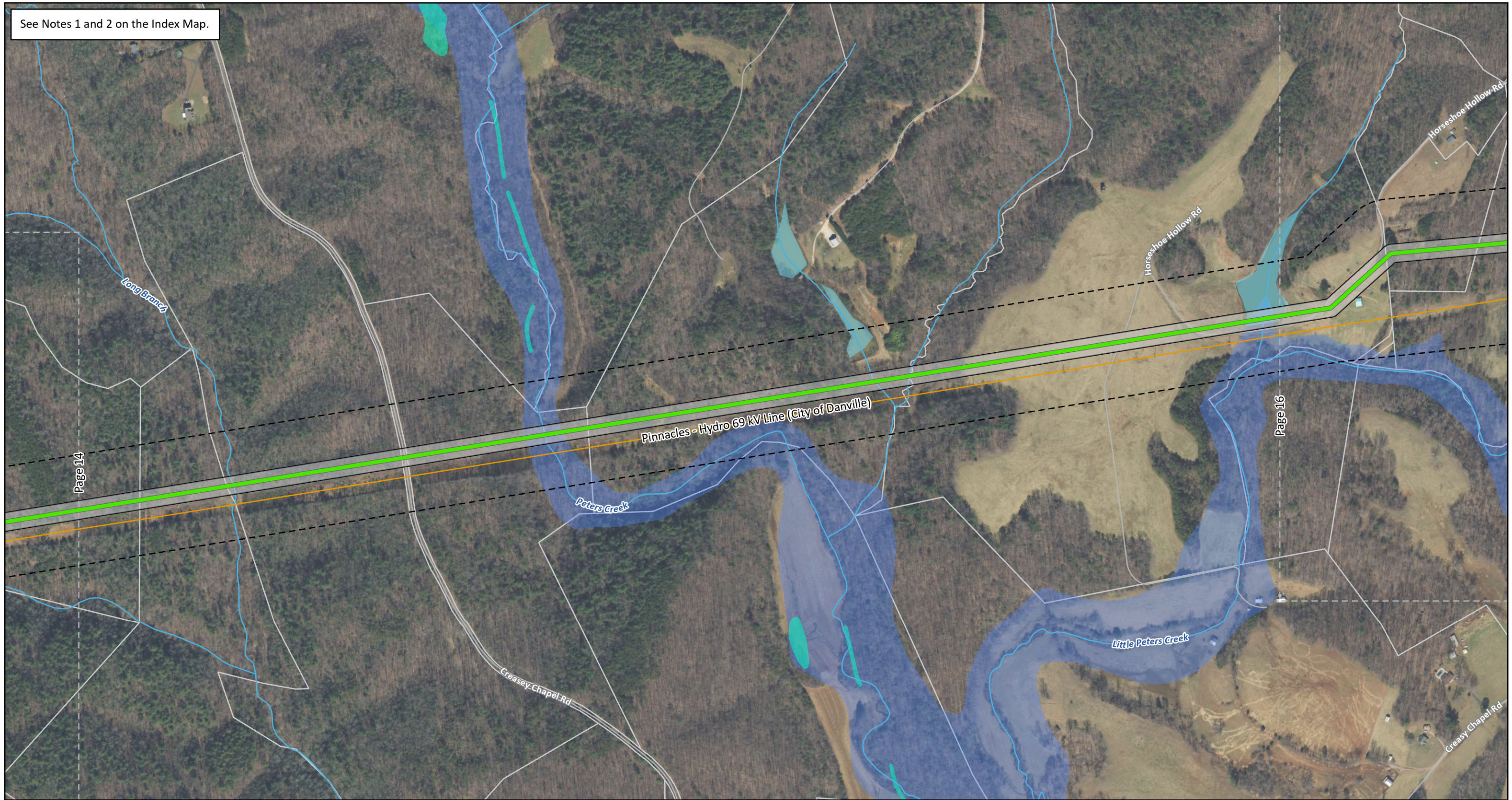
 Feet

Map 14 of 20

Exhibit 7:
Component 1
GIS Constraints Map

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Waterbody (NHD)
Existing Non-APCo Transmission Line	Wetland (NWI)
Proposed Right-of-Way (100')	Floodplain
Filing Corridor (See Note 1)	Parcel Boundary (See Note 2)
Road	Map Tile
Stream (NHD)	

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
 Feet
 Map 15 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

See Notes 1 and 2 on the Index Map.

Note 3: The filing corridor has been expanded in this area to allow further coordination with landowner(s) per their request(s).



Component 1 Proposed Route (Single-Circuit)	Populated Place	Waterbody (NHD)
Existing Non-APCo Transmission Line	Highway	Wetland (NWI)
Proposed Right-of-Way (100')	Scenic Route 8	Floodplain
Filing Corridor (See Note 1)	Road	Parcel Boundary (See Note 2)
Cemetery	Stream (NHD)	Map Tile

Carroll & Patrick Counties, Virginia

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0 500 1,000
Feet

Map 16 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

APPALACHIAN POWER
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Existing Non-APCo Transmission Line	Waterbody (NHD)
Proposed Right-of-Way (100')	Wetland (NWI)
Filing Corridor (See Note 1)	Parcel Boundary (See Note 2)
Road	Map Tile

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000

 Feet

Map 17 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Waterbody (NHD)
Proposed Right-of-Way (100')	Wetland (NWI)
Filing Corridor (See Note 1)	Parcel Boundary (See Note 2)
Road	Map Tile
Stream (NHD)	

Carroll & Patrick Counties, Virginia
 Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000

 Feet

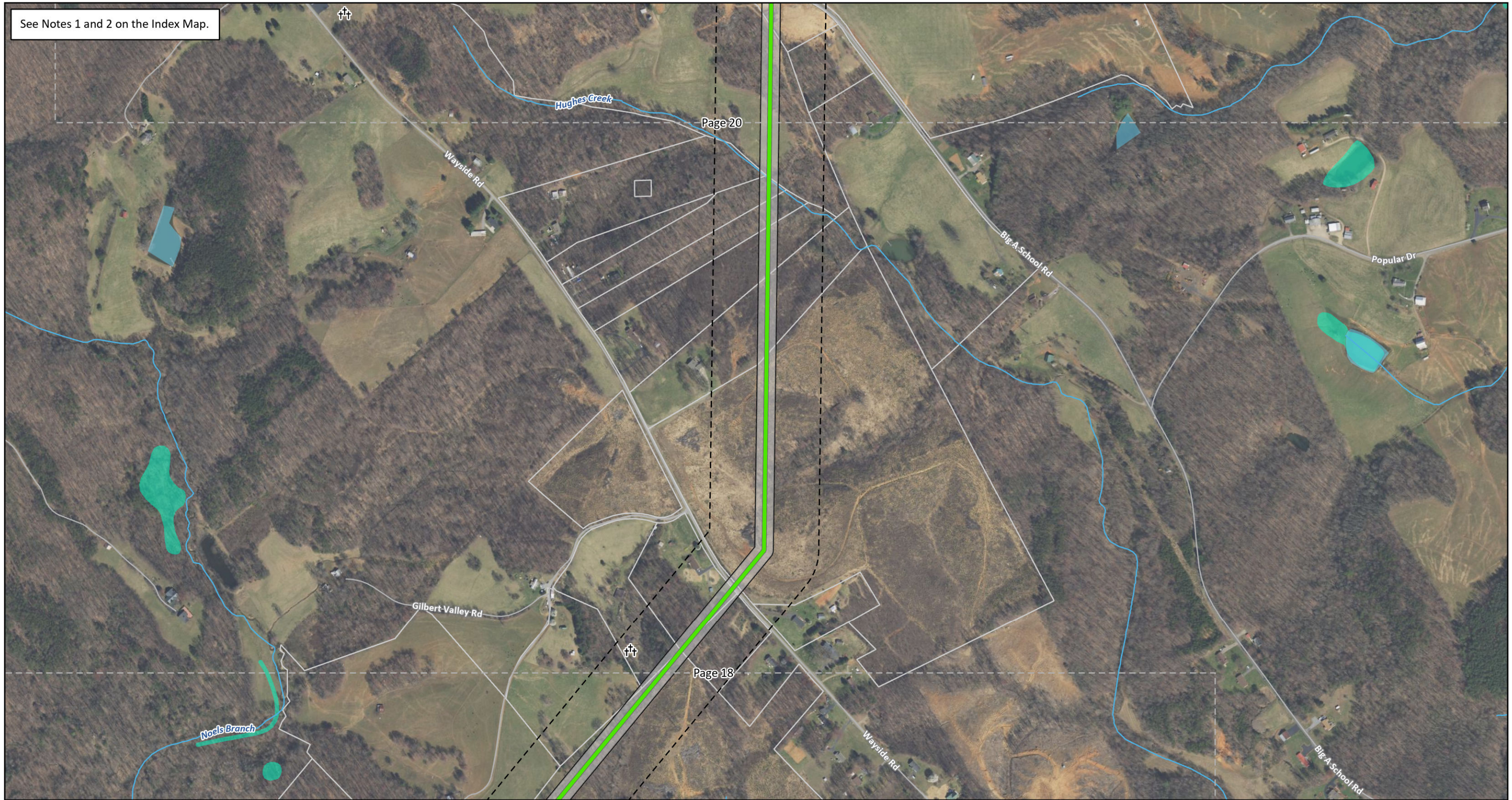
Map 18 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission
 Improvements Project:
 Component 1:
 Mayo River (Stuart) to Willis Gap
 Transmission Improvements

See Notes 1 and 2 on the Index Map.



Component 1 Proposed Route (Single-Circuit)	Stream (NHD)
Proposed Right-of-Way (100')	Waterbody (NHD)
Filing Corridor (See Note 1)	Wetland (NWI)
Cemetery	Parcel Boundary (See Note 2)
Road	Map Tile

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 19 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements

See Notes 1 and 2 on the Index Map.



Proposed APCo Substation	Cell Tower (FCC)	Wetland (NWI)
Component 1 Proposed Route (Single-Circuit)	Road	Floodplain
Component 2 Proposed Route (Double Circuit)	South Mayo River (Scenic River)	Town Boundary
Proposed Right-of-Way (100')	Stream (NHD)	Parcel Boundary (See Note 2)
Filing Corridor (See Note 1)	River (NHD)	Substation Site Parcel
Cemetery	Waterbody (NHD)	Map Tile

Carroll & Patrick Counties, Virginia

Date: 5/22/2023; Author: elundy; Project: 158529

0 500 1,000
Feet

Map 20 of 20

**Exhibit 7:
Component 1
GIS Constraints Map**

APPALACHIAN POWER
An AEP Company

Stuart Area Transmission Improvements Project:
Component 1:
Mayo River (Stuart) to Willis Gap Transmission Improvements