

# Appendix C

## **Alternative 1 (modified) Jurisdictional Feature Impact Areas**

Tables 16-18 show impacts to jurisdictional features in Impact Areas.

**Alternative 1 (modified) Jurisdictional Feature Impact Areas**

Tables 16-18 show impacts to jurisdictional features in Impact Areas.

**Table 16: Alternative 1 (modified) Stream Impact Areas**

Stream ID (per 2019 NRTR)	Impact (linear feet)	Stream Name	Classification	Best Use Classification	Bankfull Width (ft)	Depth (in)
<b>Impact Area B</b>						
<b>SS</b>	<b>129</b>	UT to Rocky River	Perennial	C	6	1-6
<b>ST</b>	<b>315</b>	UT to Rocky River	Perennial	C	4-8	6-12
<b>Impact Area C</b>						
<b>SR</b>	<b>375</b>	UT to Rocky River	Intermittent/Perennial	C	3	0-6
<b>Impact Area D</b>						
<b>SBA</b>	<b>188</b>	UT to Rocky River	Perennial	C	10-12	1-18
<b>Impact Area G</b>						
<b>SQ</b>	<b>164</b>	UT to Coddle Creek	Intermittent	C	5-6	6
<b>Impact Areas J/L</b>						
<b>SPC</b>	<b>114</b>	UT to Afton Run	Intermittent/Perennial	C	4	2-4
<b>Impact Area N</b>						
<b>SCA</b>	<b>202</b>	UT to Afton Run	Intermittent	C	2	0-6
<b>Impact Area O</b>						
<b>SPE</b>	<b>162</b>	UT to Irish Buffalo Creek	Perennial	C	15-20	3-6
<b>Impact Area P</b>						
<b>SBY</b>	<b>28</b>	UT to Irish Buffalo	Intermittent	C	2-3	0-2
<b>Impact Area Q</b>						
<b>SBZ</b>	<b>40</b>	UT to Irish Buffalo	Intermittent	C	2-4	0-4
<b>Impact Area S</b>						
<b>SDA</b>	<b>442</b>	UT to Irish Buffalo Creek	Intermittent/Perennial	C	2-3	1-3
<b>SCF</b>	<b>184</b>	UT to Irish Buffalo Creek	Perennial	C	8-10	1-3

**Table 16: Alternative 1 (modified) Stream Impact Areas (continued)**

Stream ID (per 2019 NRTR)	Impact (linear feet)	Stream Name	Classification	Best Use Classification	Bankfull Width (ft)	Depth (in)
Impact Area U						
<b>SDC</b>	<b>5</b>	UT to Irish Buffalo Creek	Perennial	C	4-6	2-4
<b>SCH</b>	<b>203</b>	UT to Irish Buffalo Creek	Perennial	C	5-7	6-18
<b>SHW</b>	<b>136</b>	UT to Irish Buffalo Creek	Intermittent	C	3-4	1-4
<b>Total</b>	<b>2,687</b>					

**Table 17: Alternative 1 (modified) Open Water Impact Areas**

Open Water ID (per 2019 NRTR)	Impact (acres)
Impact Area E	
<b>OWB</b>	<b>0.05</b>
Impact Area F	
<b>Coddle Creek Reservoir</b>	<b>0.28</b>
<b>Total</b>	<b>0.33</b>

**Table 18: Alternative 1 (modified) Wetland Impact Areas**

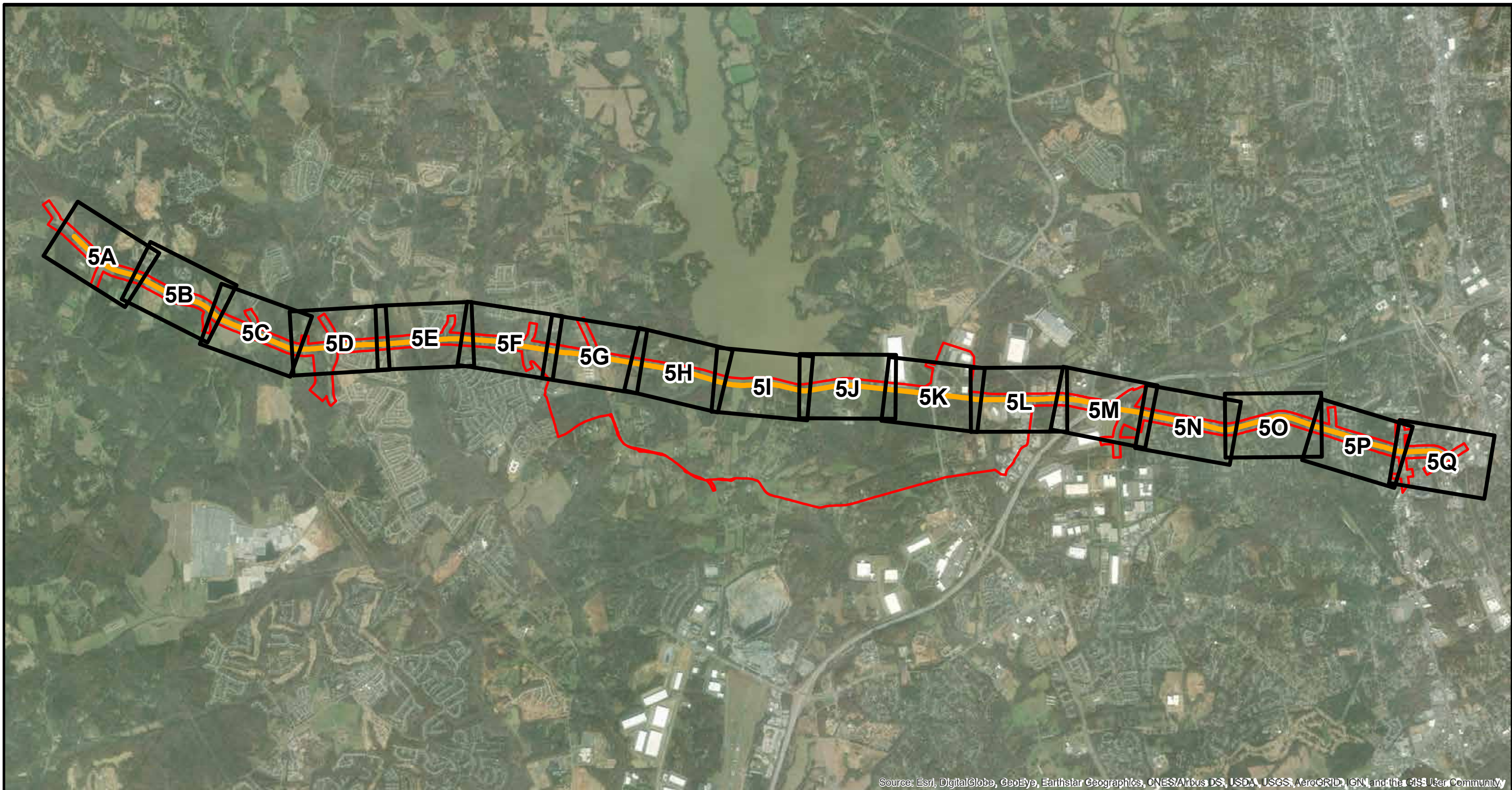
Wetland ID (per 2019 NRTR)	Impact (acres)	NC WAM Classification	NC WAM Rating	Hydrologic Classification
Impact Area A				
<b>WO</b>	<b>0.11</b>	Headwater Forest	High	Riparian
<b>WG</b>	<b>0.08</b>	Headwater Forest	Low	Riparian
Impact Area B				
<b>WM</b>	<b>0.23</b>	Riverine Swamp Forest	WM-1 High	Riparian
Impact Area C				
<b>WI</b>	<b>0.08</b>	Bottomland Hardwood Forest	Medium	Riparian
Impact Area G				
<b>WZC</b>	<b>0.01</b>	Headwater Forest	High	Riparian
Impact Area H				
<b>WAV</b>	<b>0.04</b>	Headwater Forest	Low	Riparian
Impact Area I				
<b>WCA</b>	<b>0.03</b>	Headwater Forest	Low	Riparian
Impact Area K				
<b>WPH-2</b>	<b>&lt; 0.01</b>	Headwater Forest	Low	Riparian
Impact Area L				
<b>WPG-2</b>	<b>&lt; 0.01</b>	Basin Wetland	Low	Riparian
Impact Area M				
<b>WPC-2</b>	<b>0.02</b>	Bottomland Hardwood Forest	Medium	Riparian
Impact Area Q				
<b>WDD-2</b>	<b>&lt; 0.01</b>	Headwater Forest	High	Riparian
Impact Area R				
<b>WDF</b>	<b>0.01</b>	Basin Wetland	Medium	Non-Riparian
Impact Area T				
<b>WPA-2</b>	<b>0.01</b>	Headwater Forest	Low	Riparian
<b>Total</b>	<b>0.62</b>			






# Appendix D

**Alternative 1 (modified) Jurisdictional Features Impact Maps and Photos**

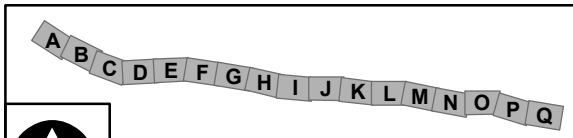




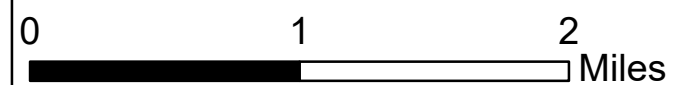
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

-  Page Number
-  Alternative 1 (modified)
-  Study Area

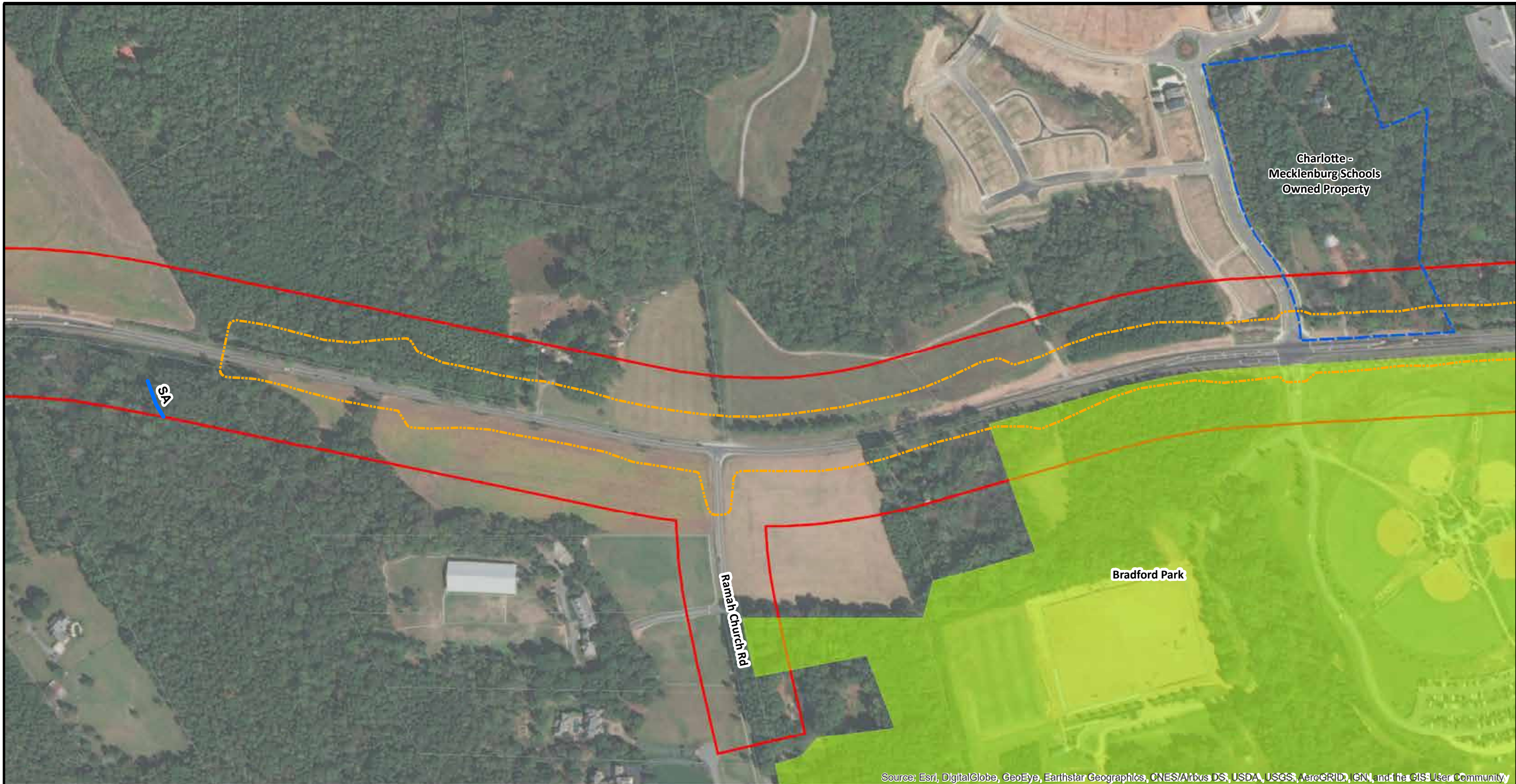
**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019



**Figure 5**

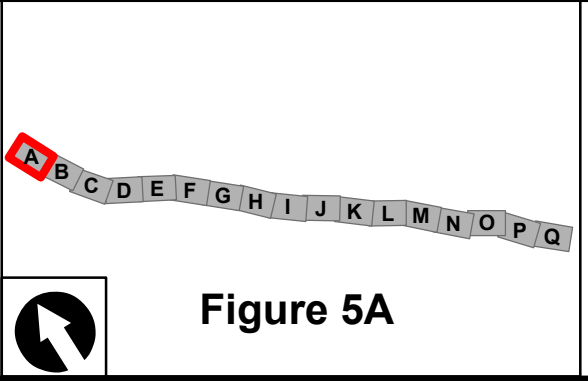






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

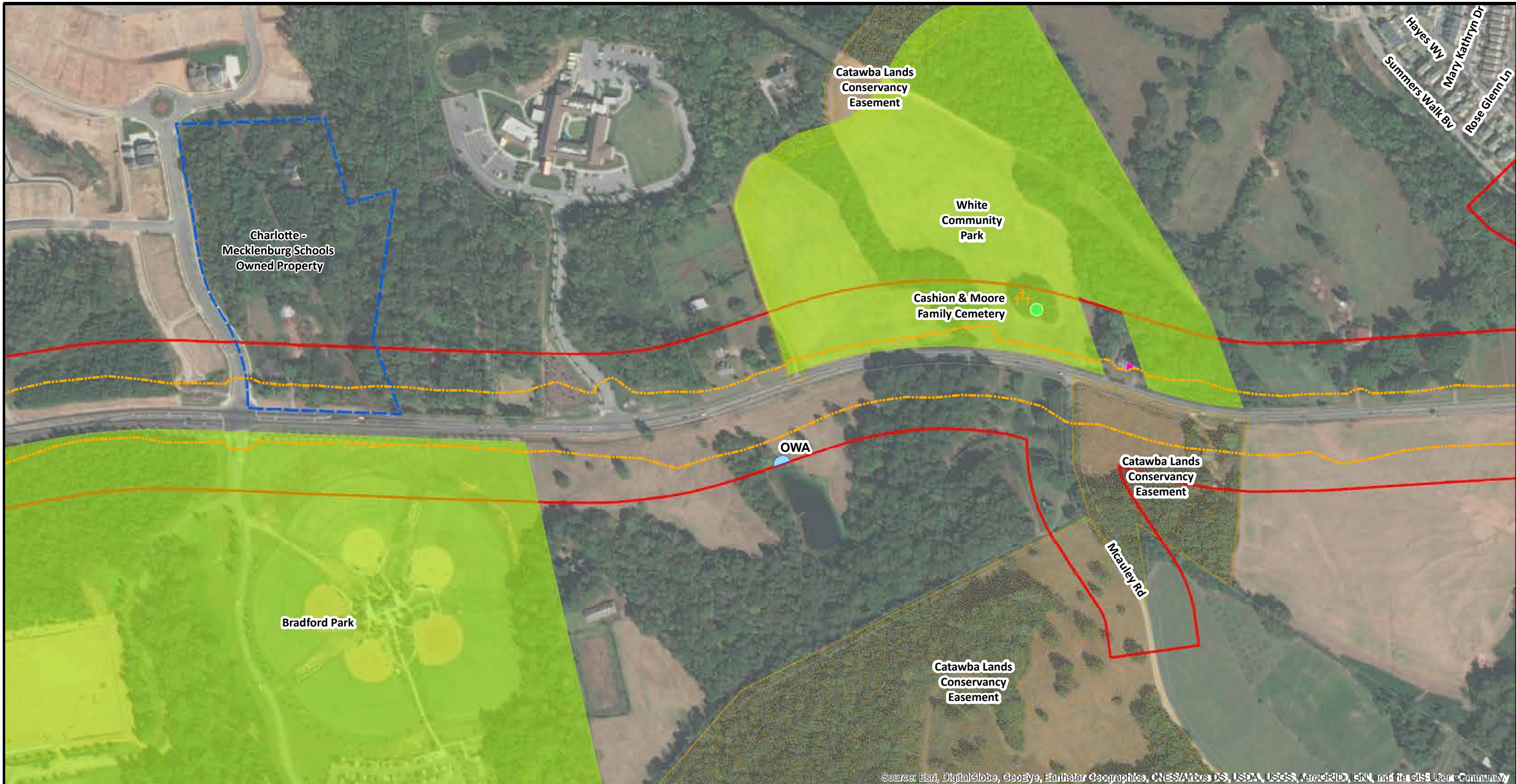
Alternative 1 (modified) <i>(Impacts based on slope stakes + 25')</i>	HazMat	Eligible Historic Properties	Delineated Wetlands
Study Area	Schools	Park & Recreational Space	Water Supply Watershed
<b>Impact Area</b>	Cemeteries	VAD Parcels	Impacted Wetlands
Preliminary Major Hydraulic Crossing	Places of Worship	Conservation Easements	Impacted Streams
Planned Greenways	Local Landmarks	Delineated Streams	Impacted Open Waters
		Delineated Open Waters	Bridge Alignment with Bents



**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
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 November 2019

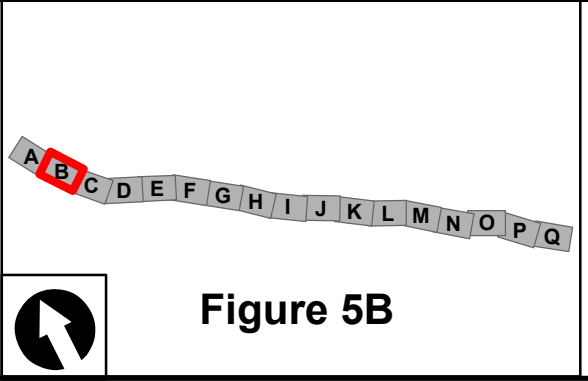
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Alternative 1 (modified) <i>(Impacts based on slope stakes + 25')</i>	HazMat	Eligible Historic Properties	Delineated Wetlands
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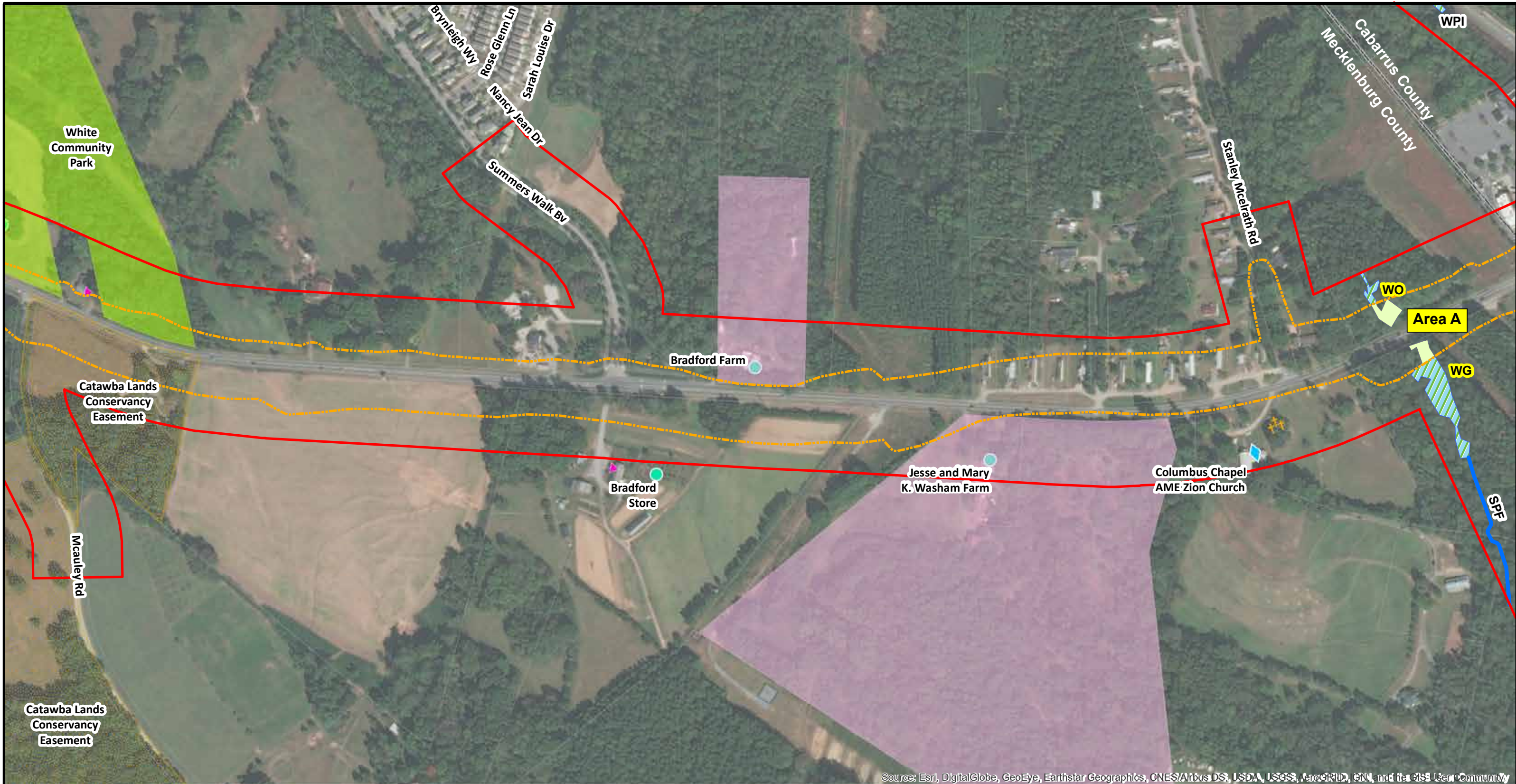


**Figure 5B**

**Jurisdictional Features Impacts Map**  
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 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019

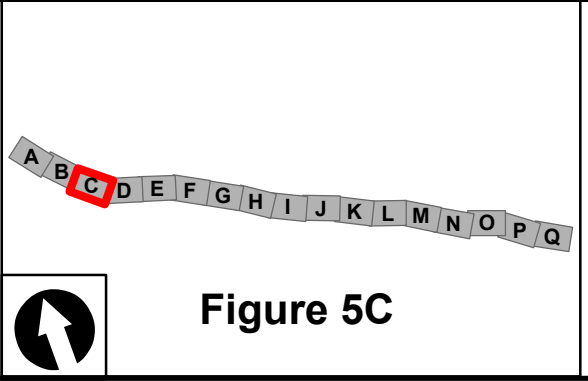
0 500 1,000 Feet





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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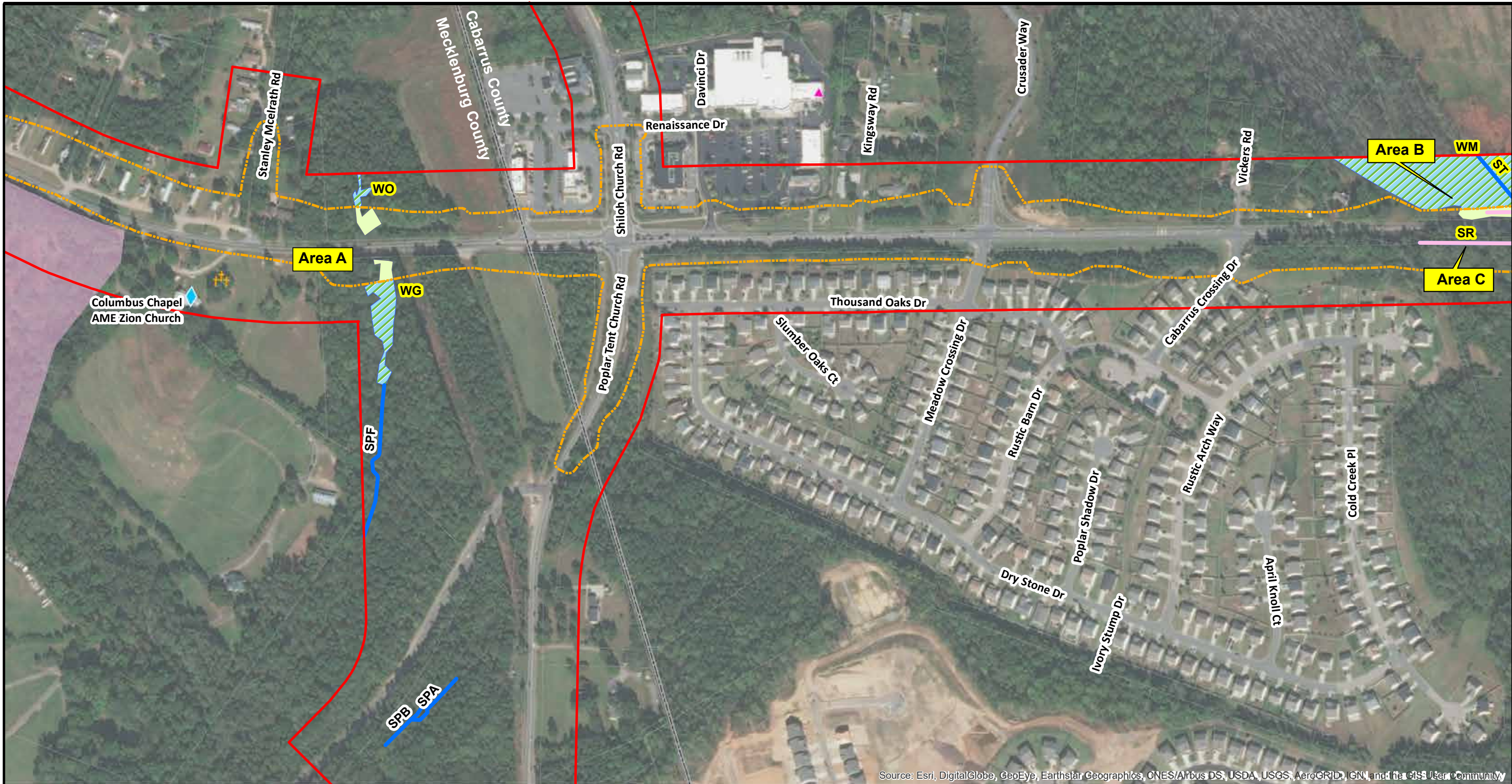


**Jurisdictional Features Impacts Map  
Alternative 1 (modified)**

R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
Mecklenburg and Cabarrus Counties  
November 2019

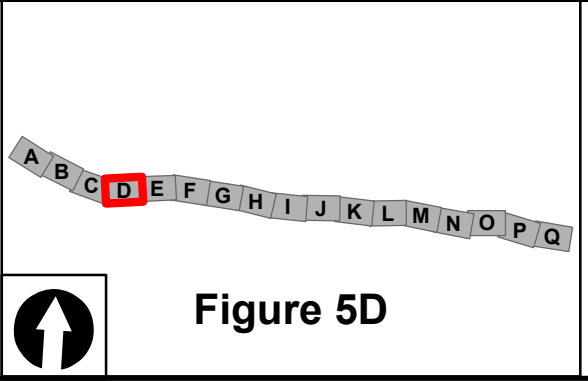
0 500 1,000 Feet





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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**Figure 5D**



Area A

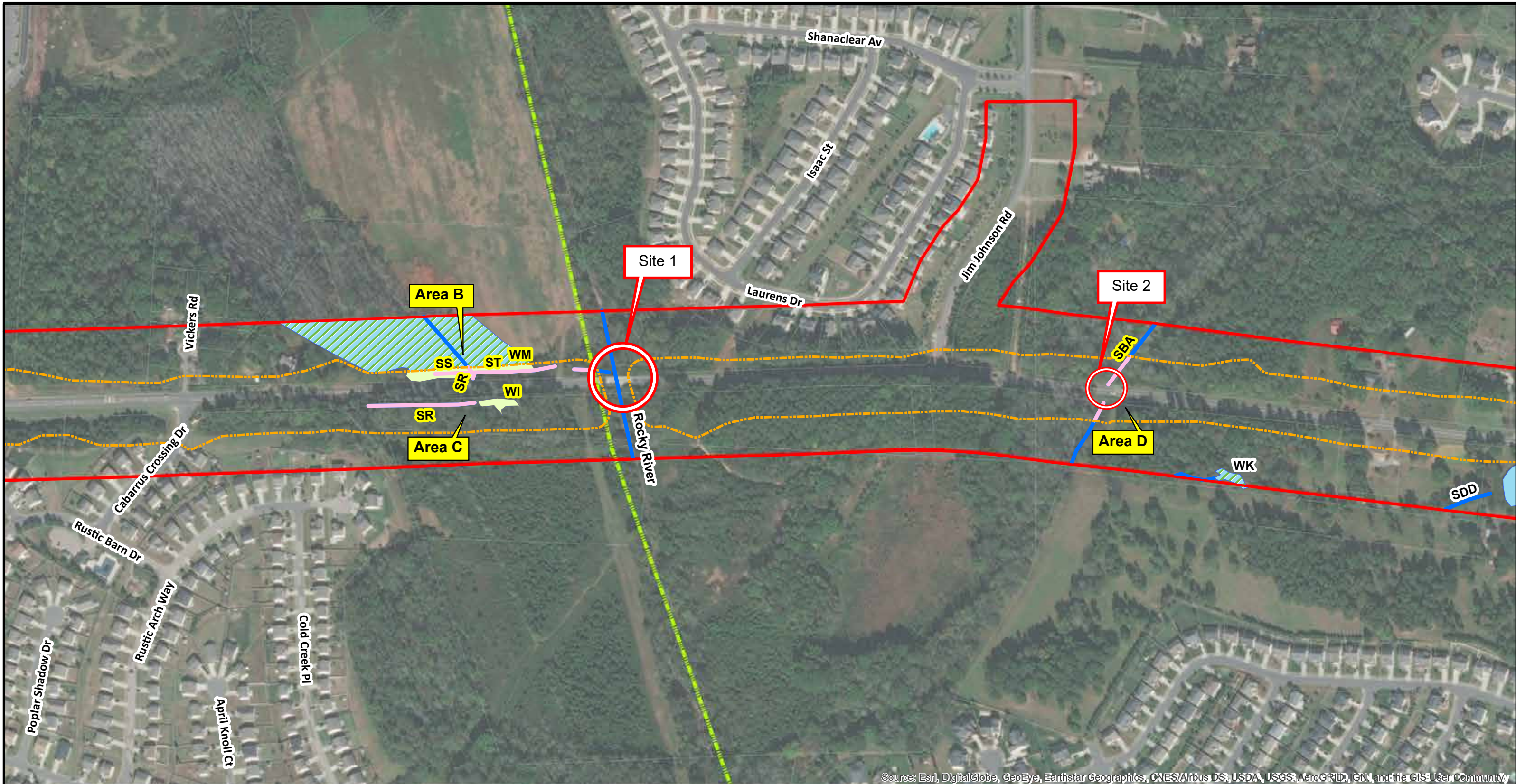
WO



WG

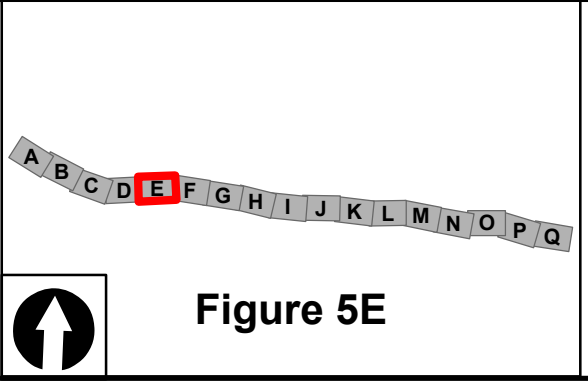






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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0 500 1,000 Feet



Area B

WM, ST, SS



ST, WM



ST - Perennial





Area C

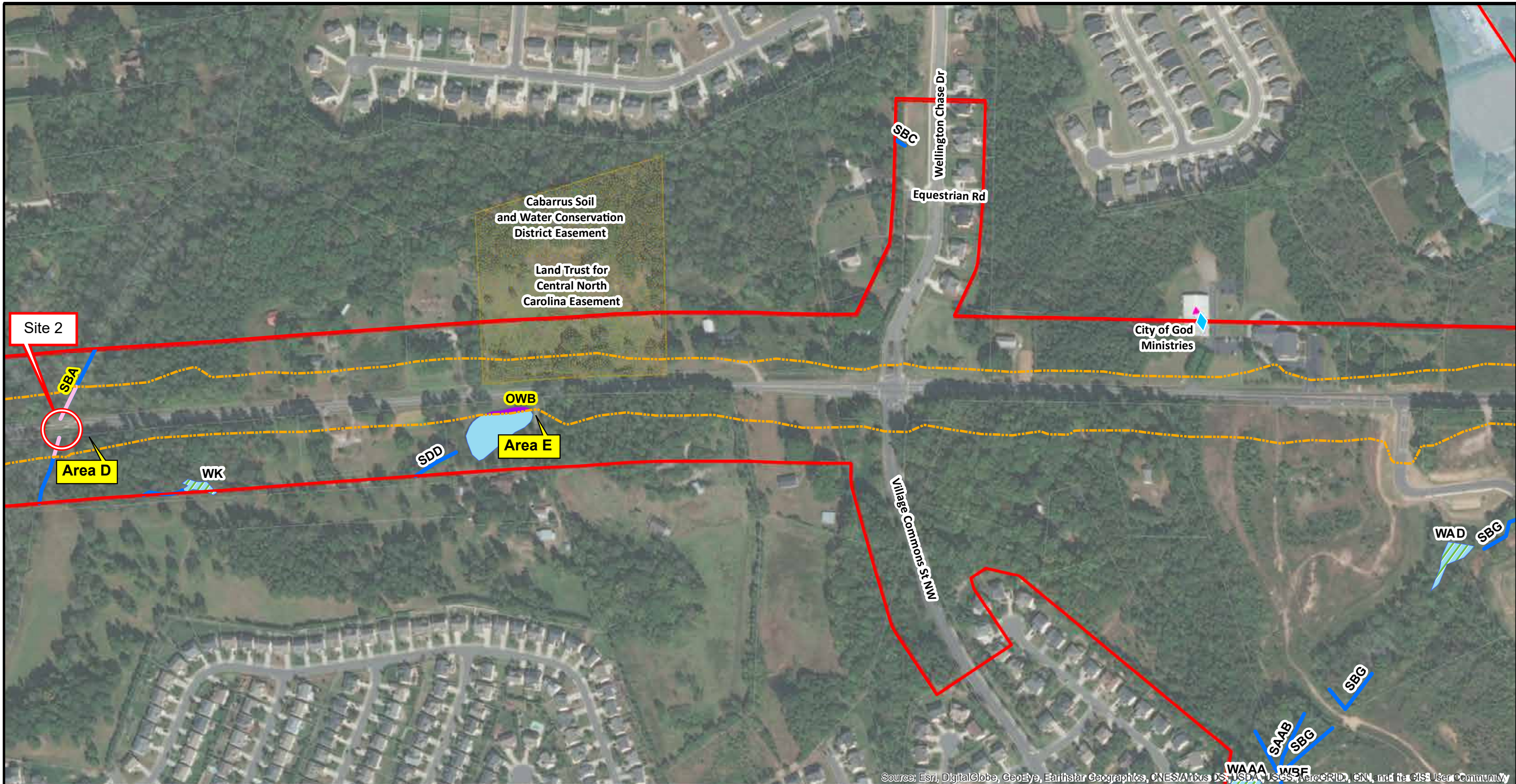




Major Hydraulic Crossing Site 1

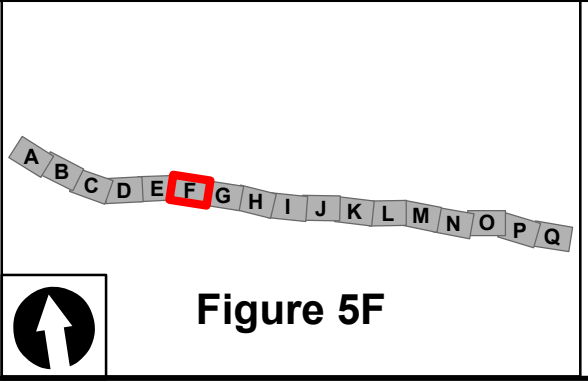






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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0 500 1,000 Feet



Area D / Major Hydraulic Crossing Site 2

SBA - perennial



SBA - perennial





Area E

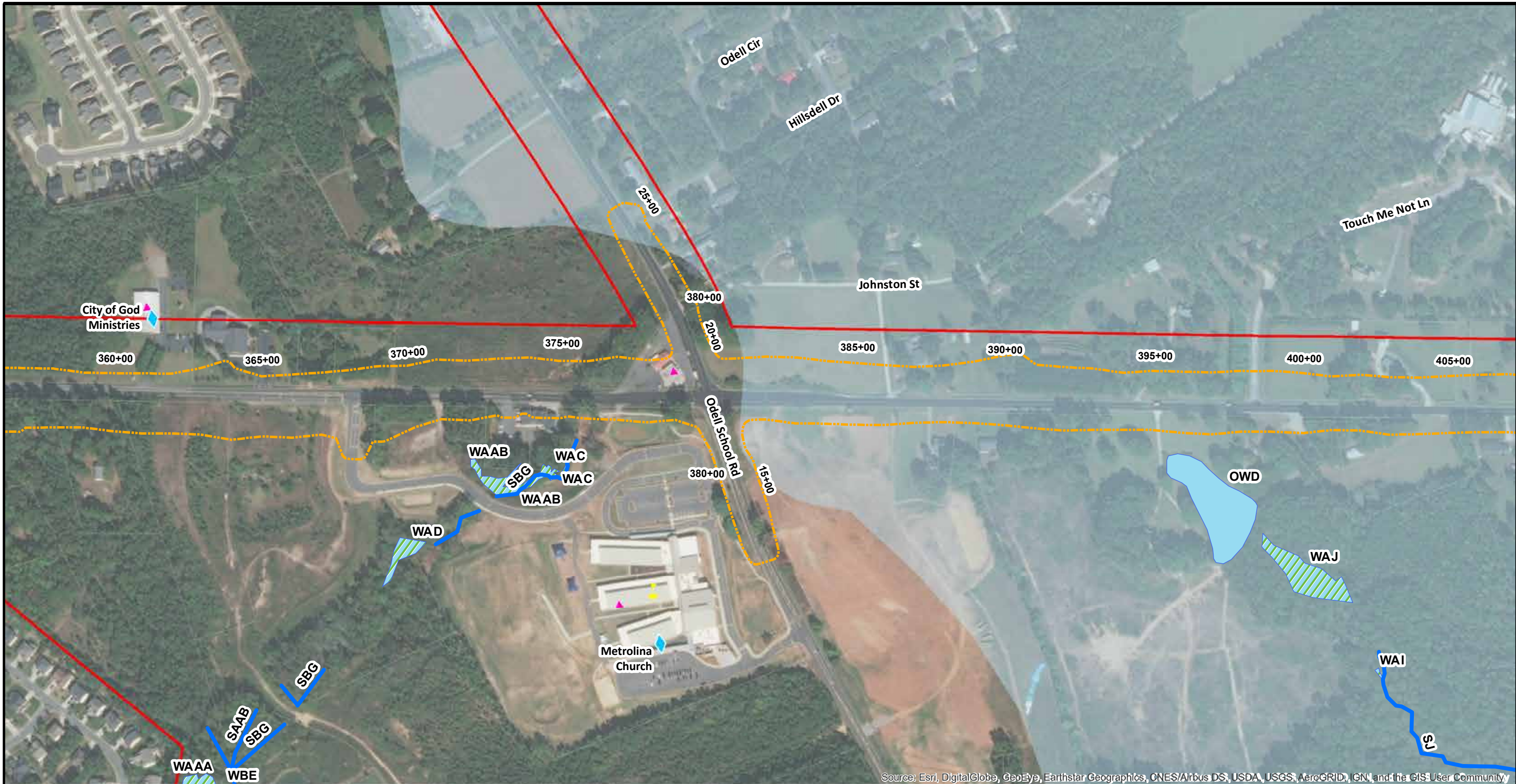


OWB

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© 2019 Google

Google Earth





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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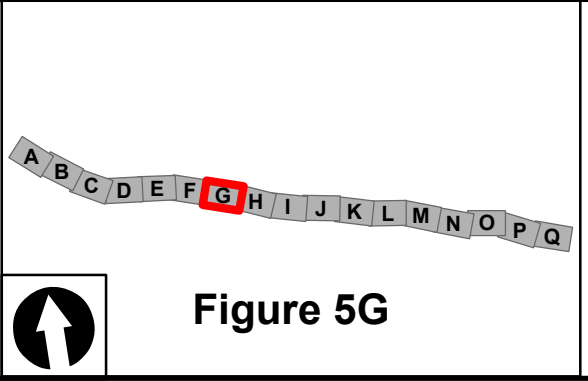
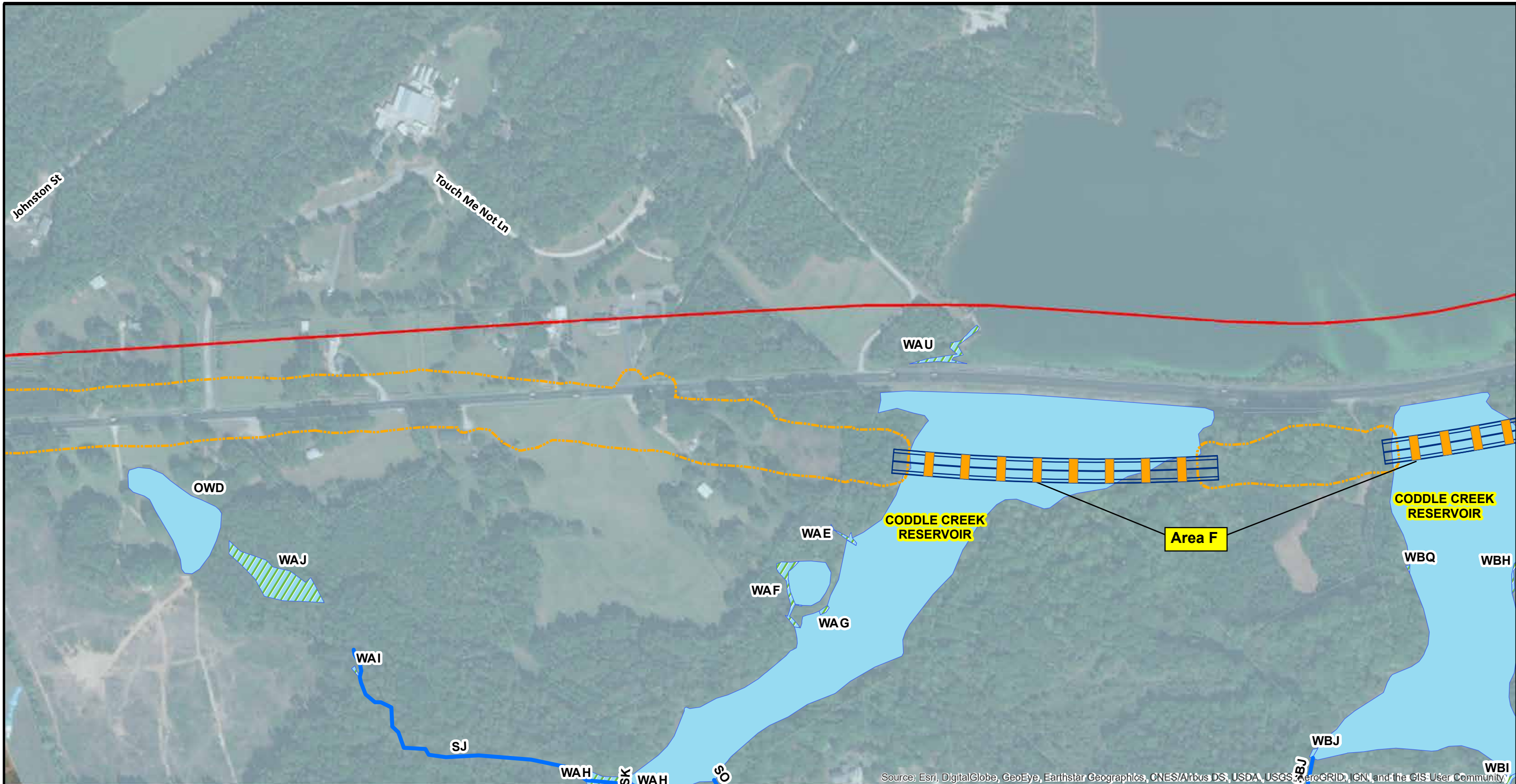


Figure 5G

**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019

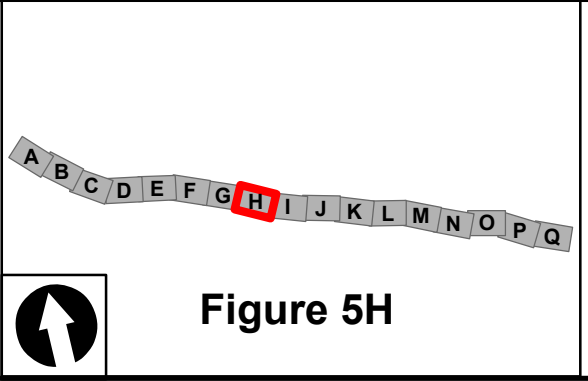
0 500 1,000 Feet





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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**Jurisdictional Features Impacts Map  
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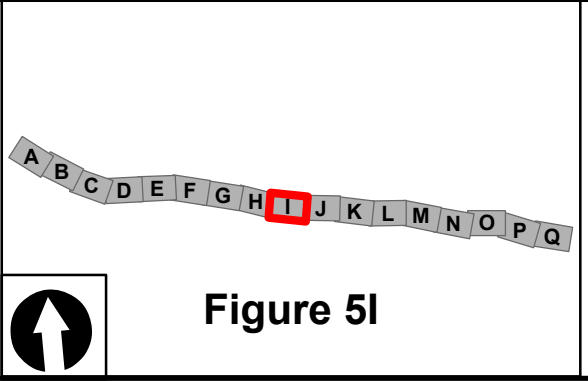
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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0 500 1,000 Feet



Area F

Coddle Creek Reservoir



Coddle Creek Reservoir





**Major Hydraulic Crossing Site 3**









**Area G**

SQ – beside WZB



SQ – beside WZB



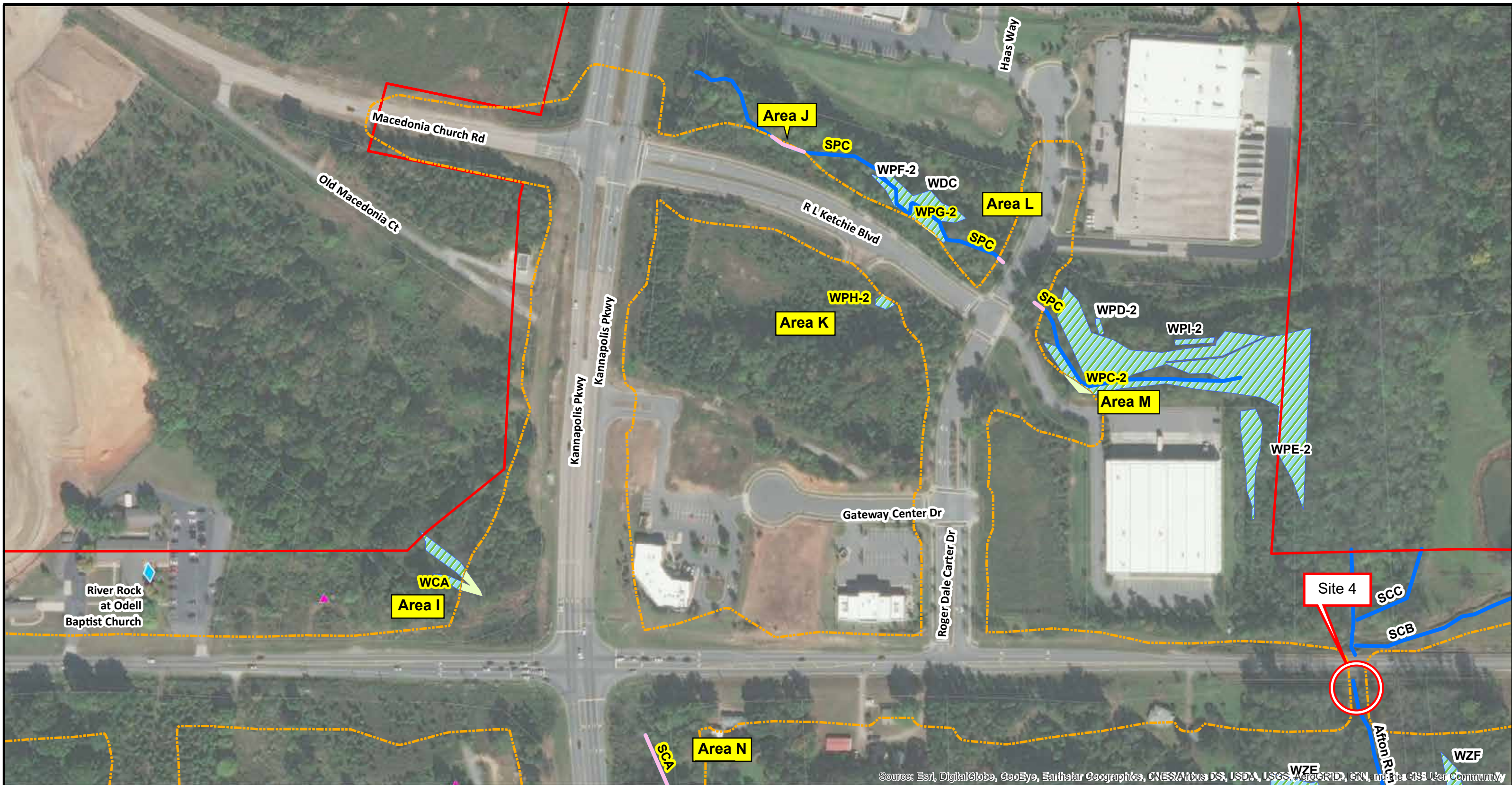


Area H

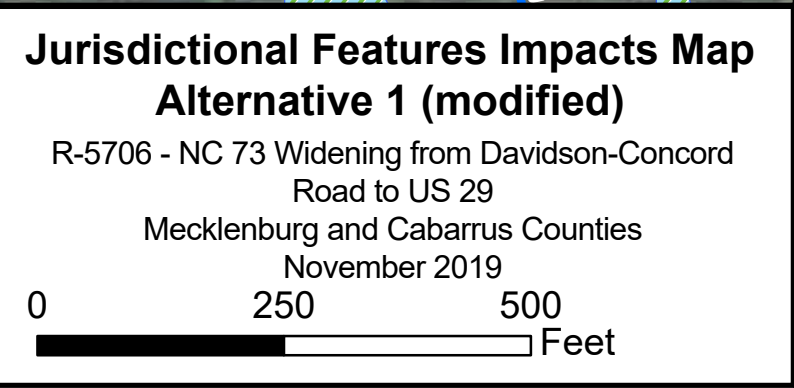
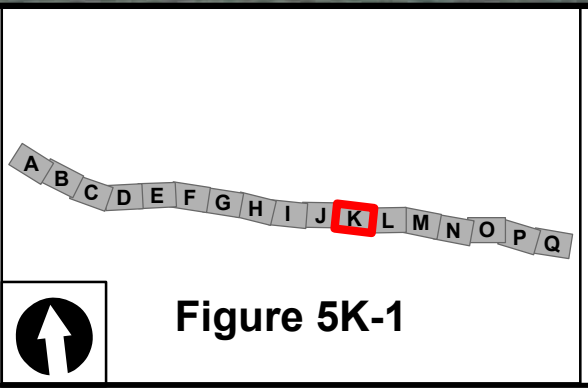
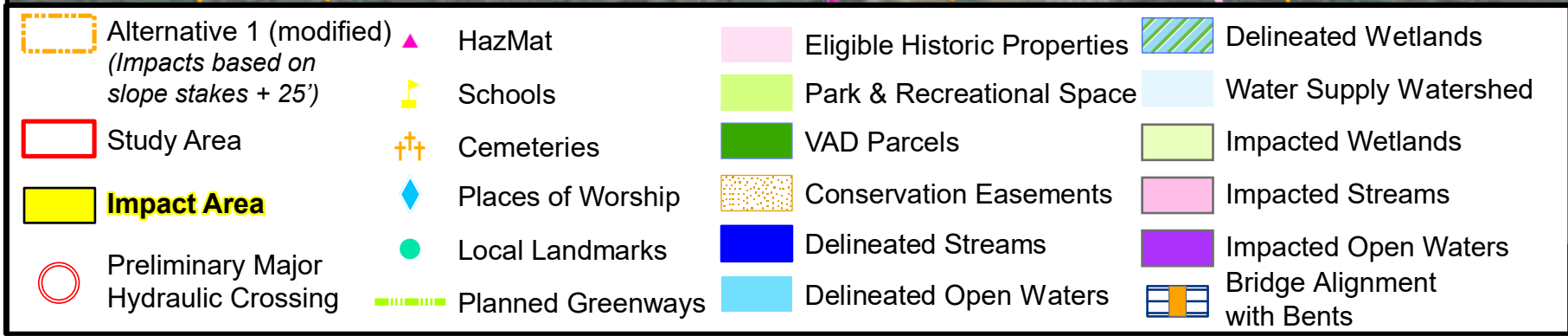
WAV



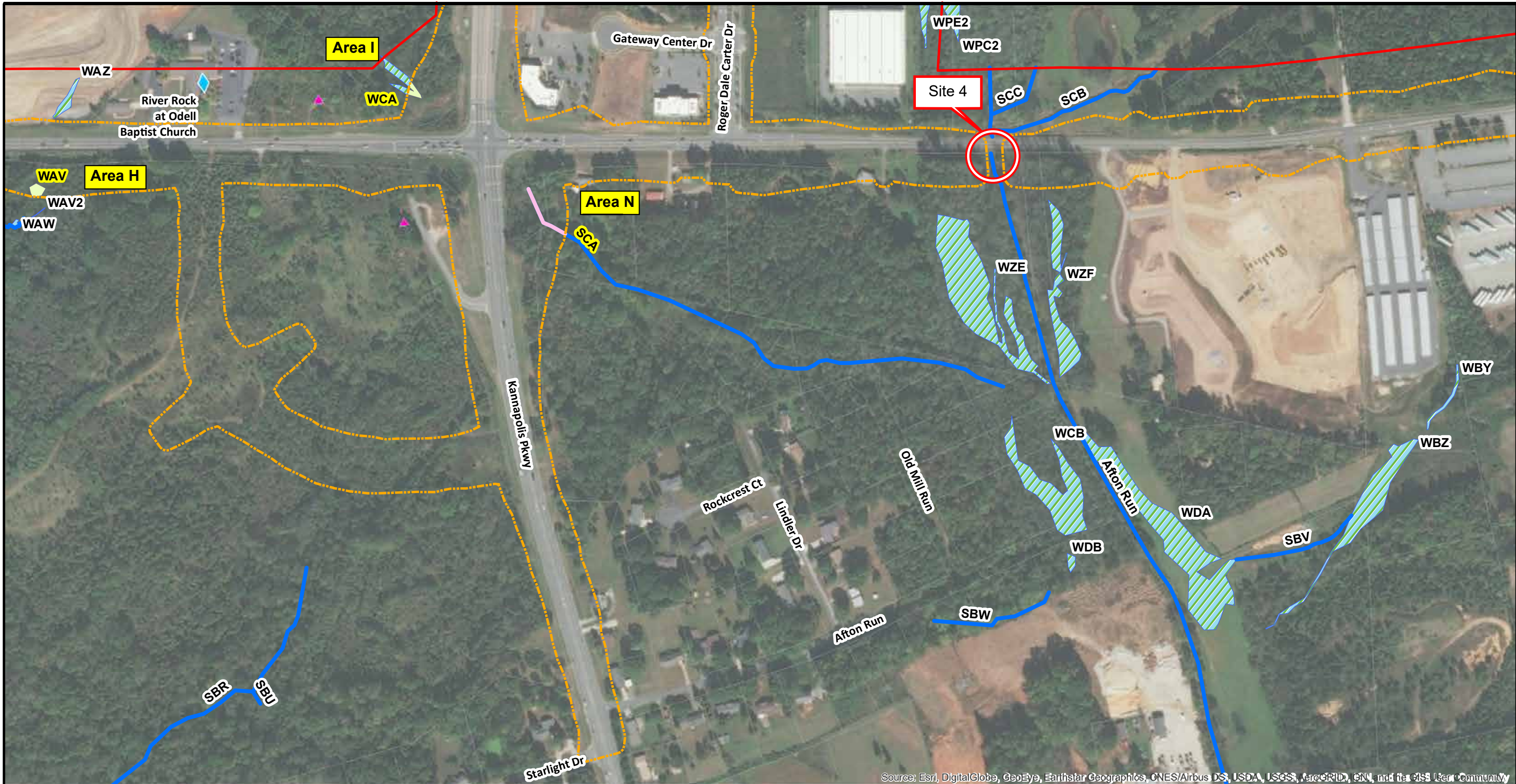




Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

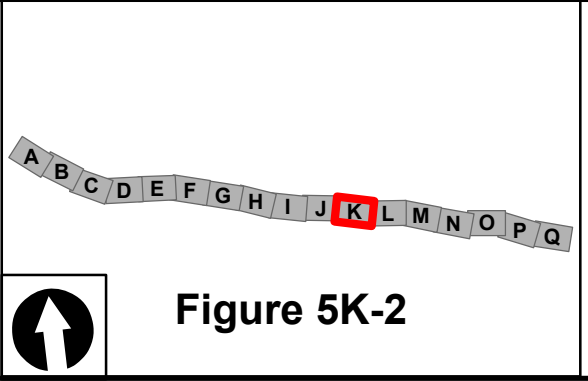






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0 500 1,000 Feet



Area I

WCA





SPC – Intermittent/Perennial

Areas J, L



2019/01/16



Area K

WPH-2





Area L

WPG-2



© 2019 Google

Google Earth



Area M





Area N

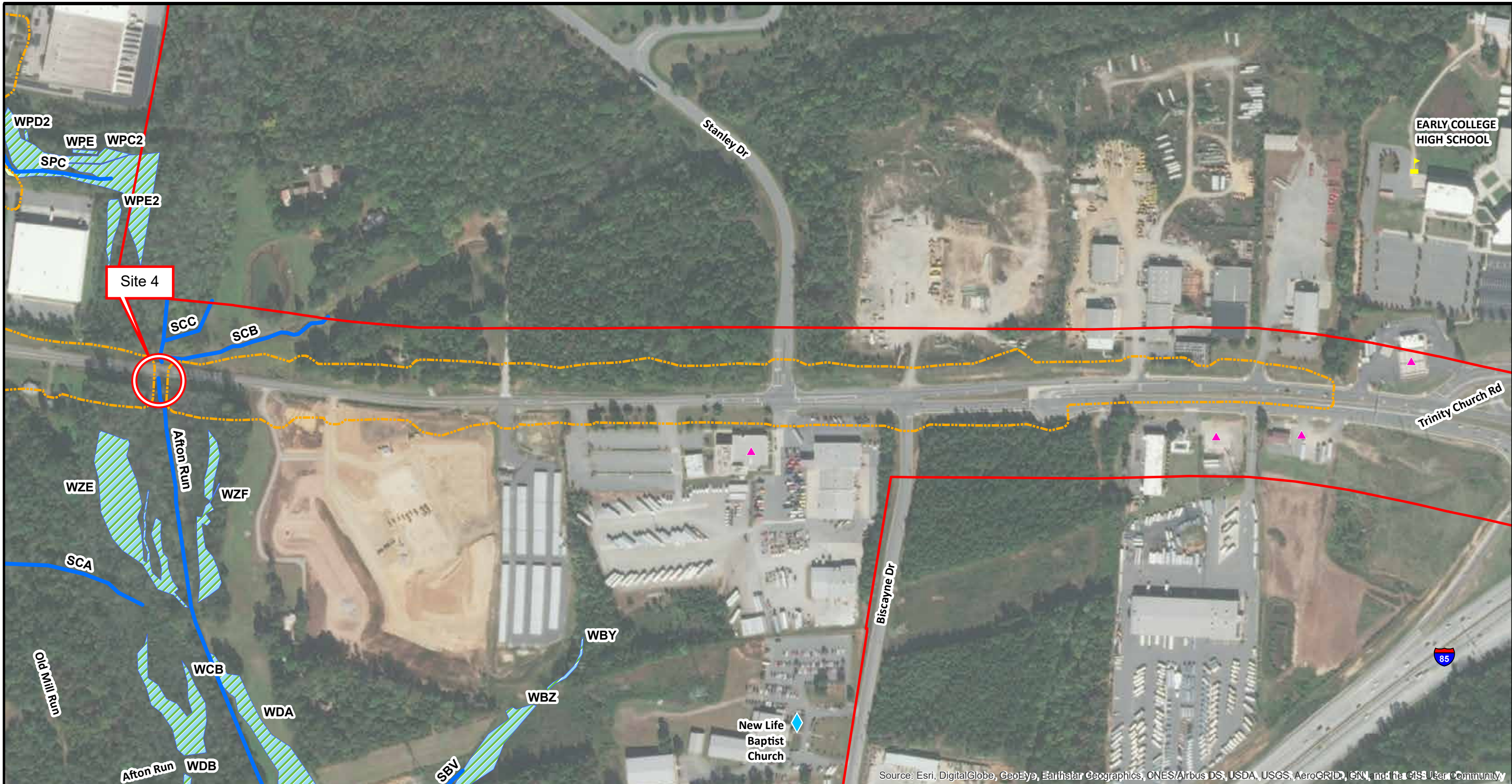


SCA



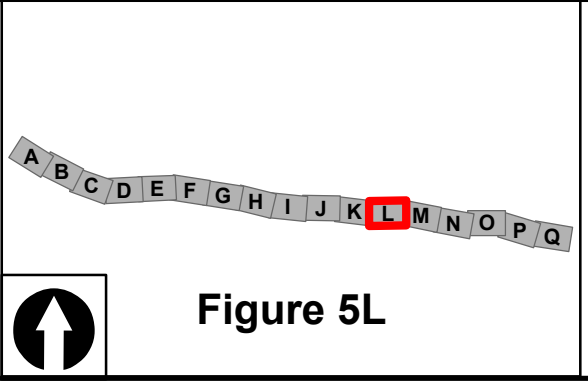
SCA – Upper terminus, just below culverts





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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0 500 1,000 Feet

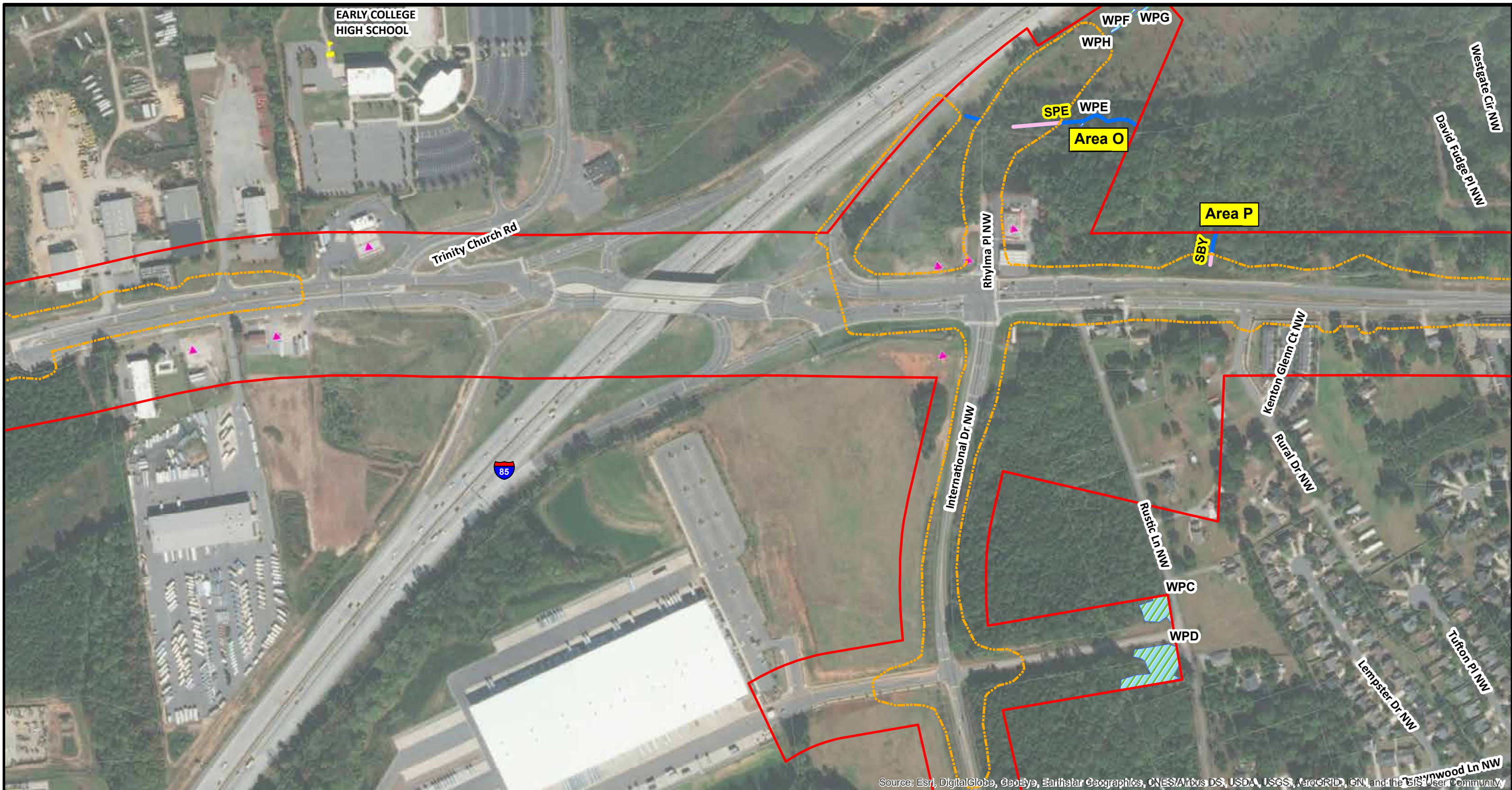


**Major Hydraulic Crossing Site 4**

Afton Run near McClenny Drive, perennial, adjacent to a horse pasture

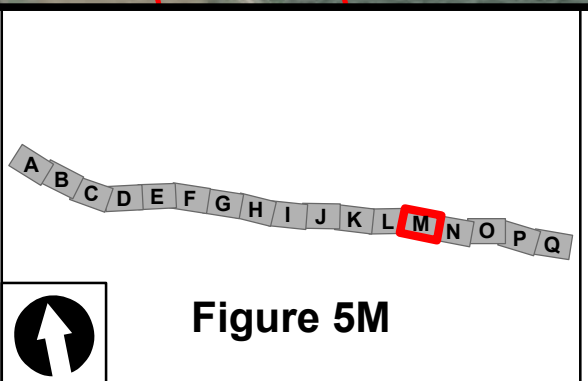






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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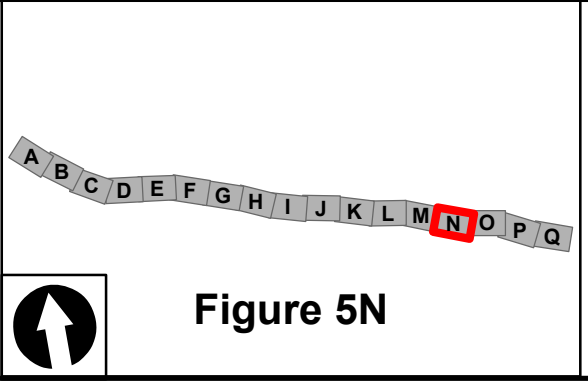
0                      500                      1,000  
 Feet





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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0 500 1,000 Feet



Area O





Area P

SBY - intermittent





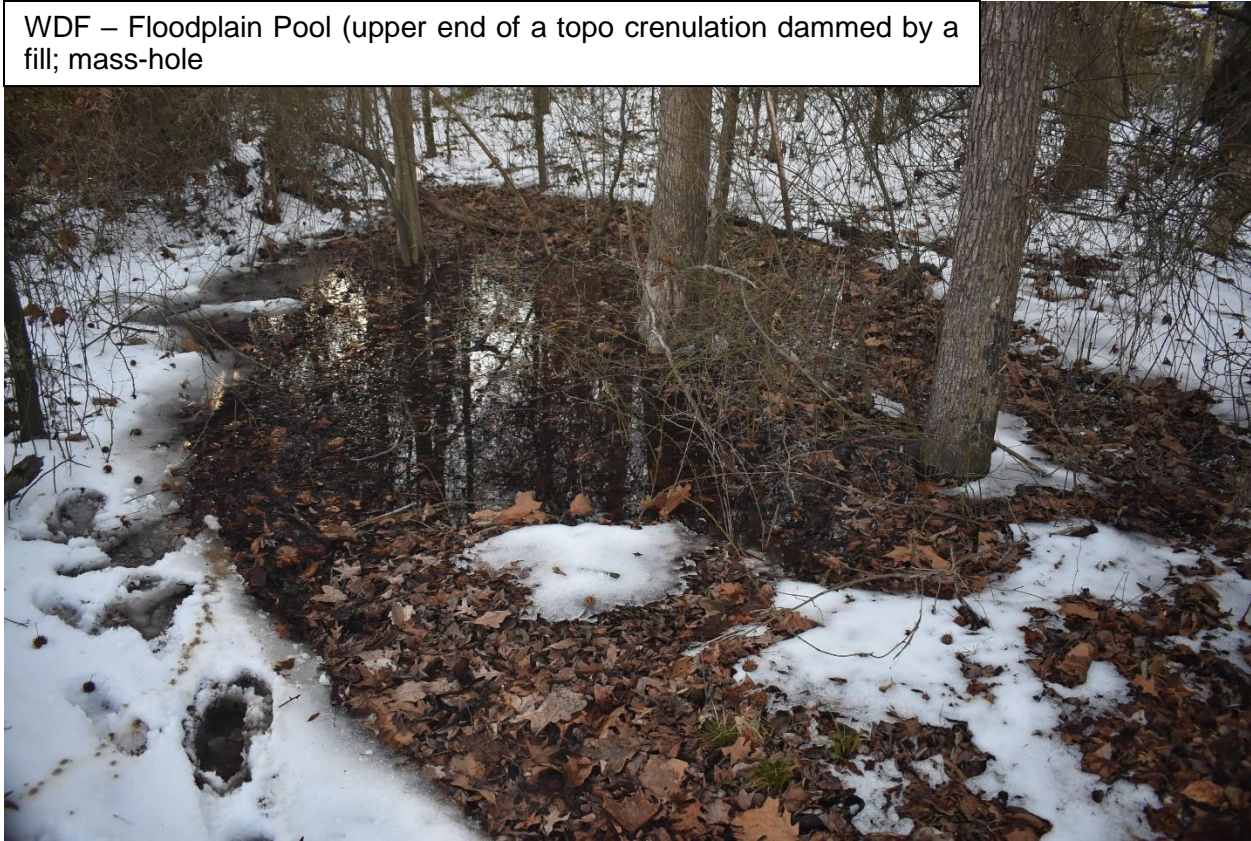
Area Q



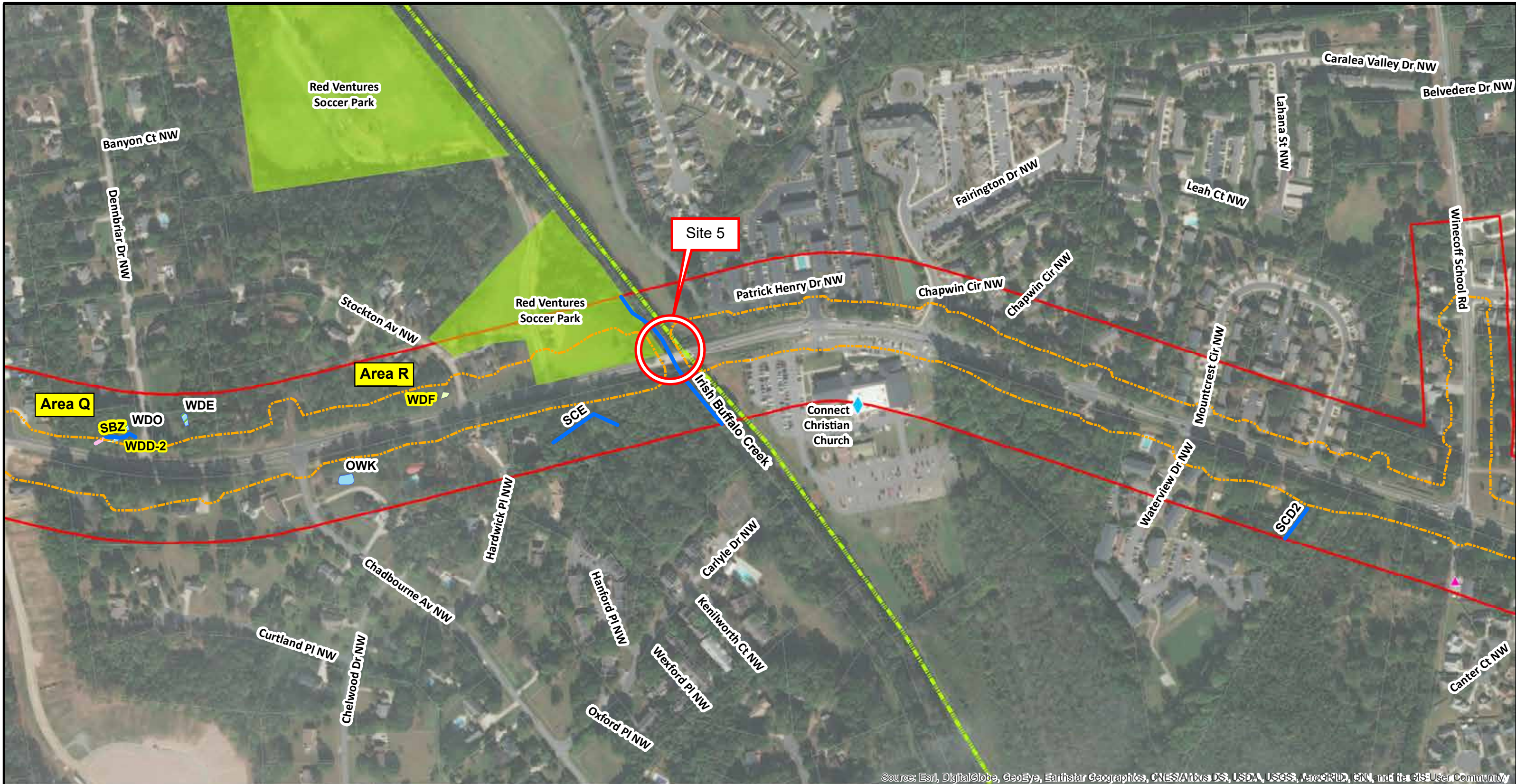


Area R

WDF – Floodplain Pool (upper end of a topo crenulation dammed by a fill; mass-hole

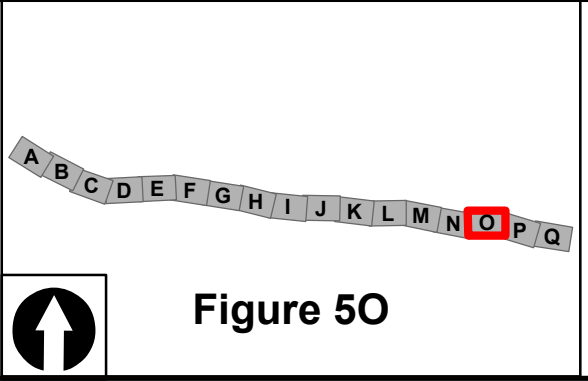






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Alternative 1 (modified) (Impacts based on slope stakes + 25')	HazMat	Eligible Historic Properties	Delineated Wetlands
Study Area	Schools	Park & Recreational Space	Water Supply Watershed
Impact Area	Cemeteries	VAD Parcels	Impacted Wetlands
Preliminary Major Hydraulic Crossing	Places of Worship	Conservation Easements	Impacted Streams
Planned Greenways	Local Landmarks	Delineated Streams	Impacted Open Waters
		Delineated Open Waters	Bridge Alignment with Bents



**Figure 50**

**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019

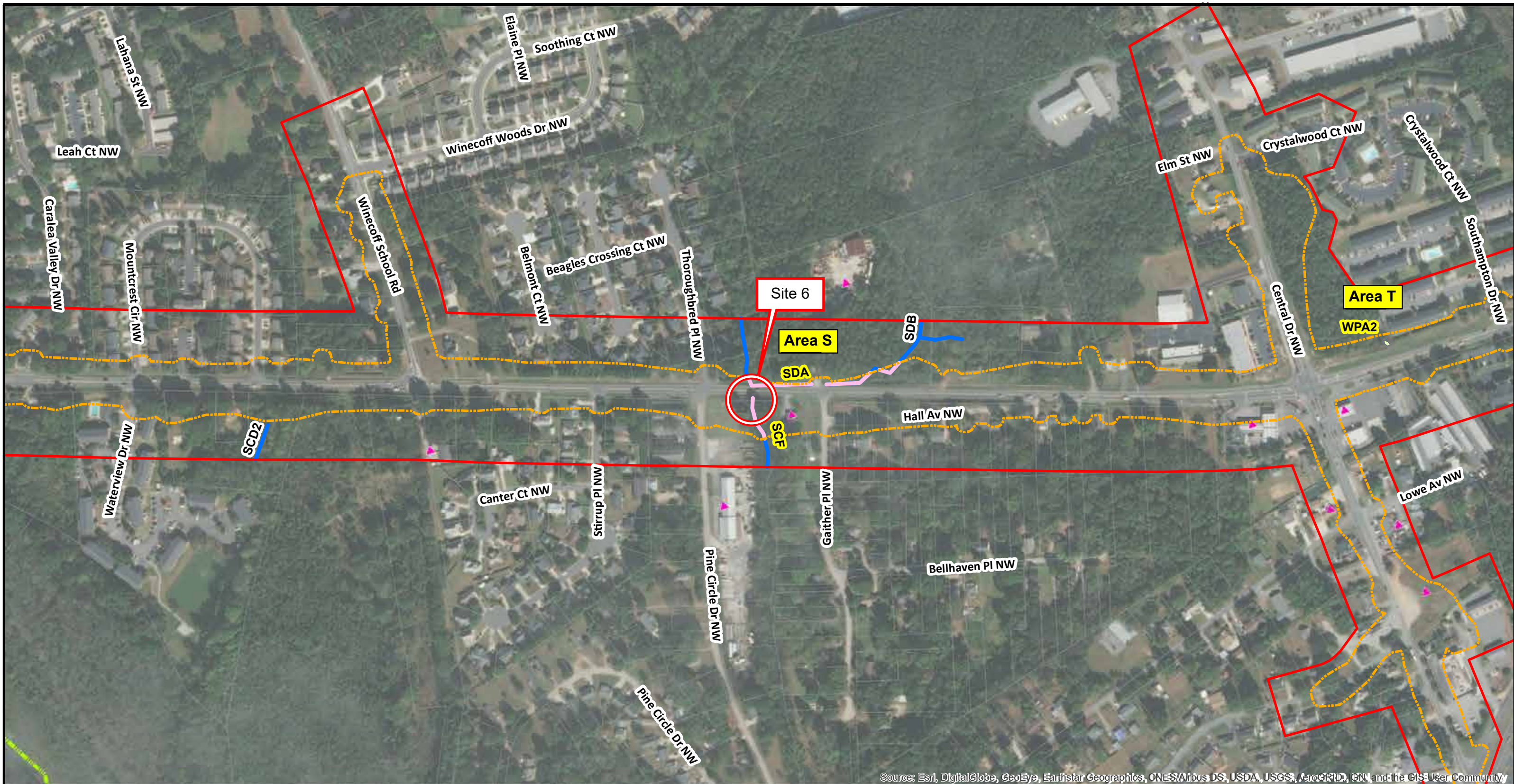


Major Hydraulic Crossing Site 5

Irish Buffalo Creek

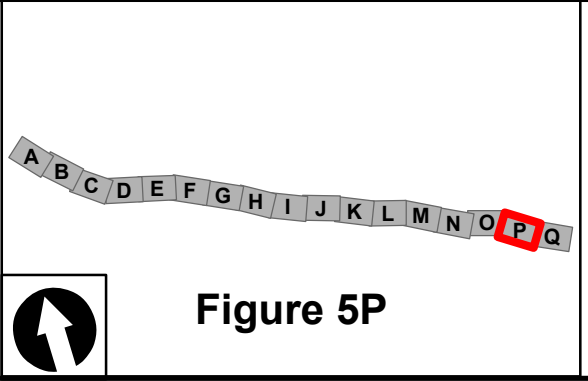






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Alternative 1 (modified) (Impacts based on slope stakes + 25')	HazMat	Eligible Historic Properties	Delineated Wetlands
Study Area	Schools	Park & Recreational Space	Water Supply Watershed
<b>Impact Area</b>	Cemeteries	VAD Parcels	Impacted Wetlands
Preliminary Major Hydraulic Crossing	Places of Worship	Conservation Easements	Impacted Streams
Planned Greenways	Local Landmarks	Delineated Streams	Impacted Open Waters
	Delineated Open Waters	Bridge Alignment with Bents	



**Figure 5P**

**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019

0 500 1,000 Feet



**Area S / Major Hydraulic Crossing Site 6**

SCF - perennial



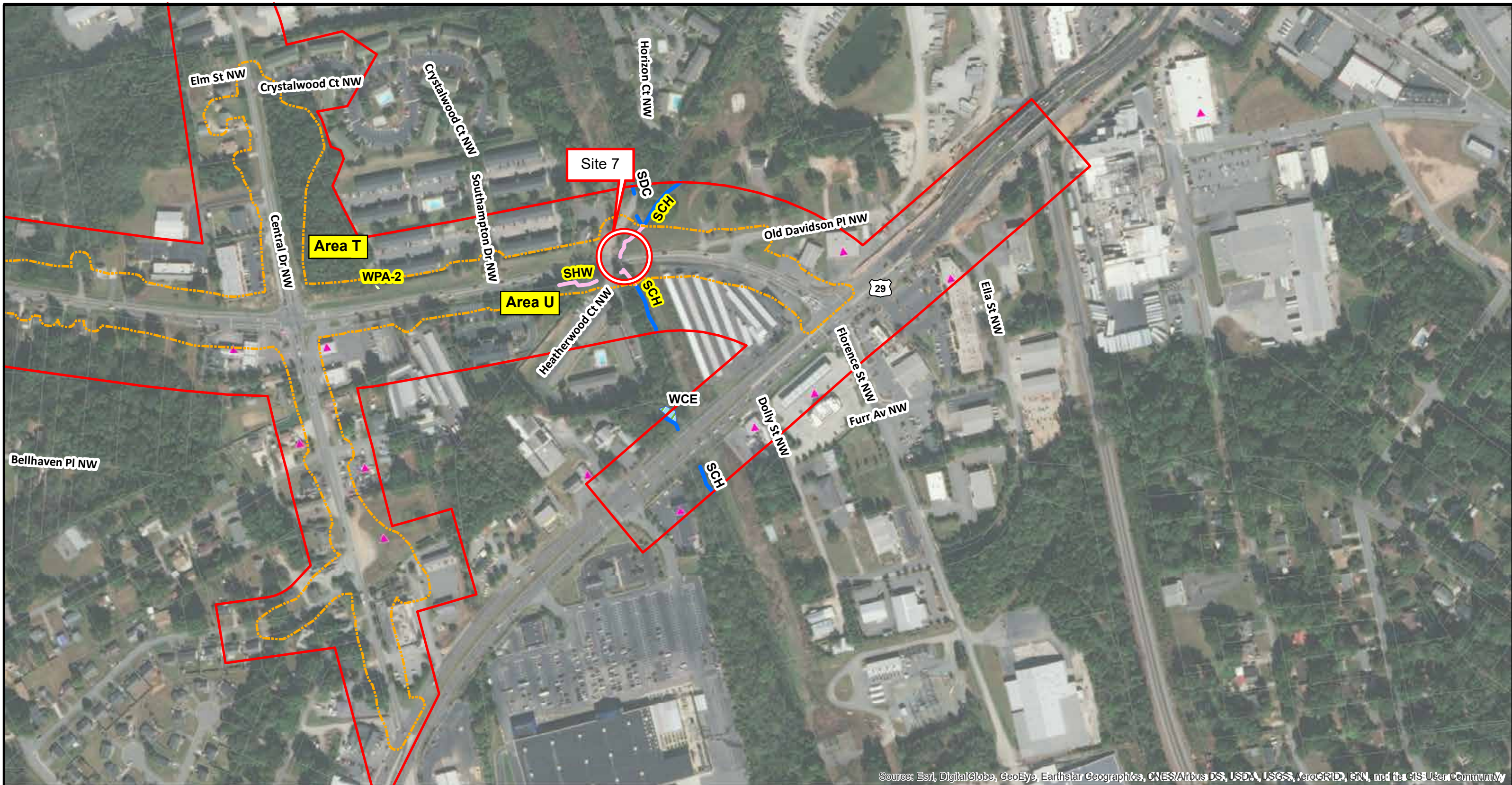
SDA - Confluence of SDA and SDB, perennial origin of SDA



SDA – intermittent origin at the confluence of three ephemeral channels

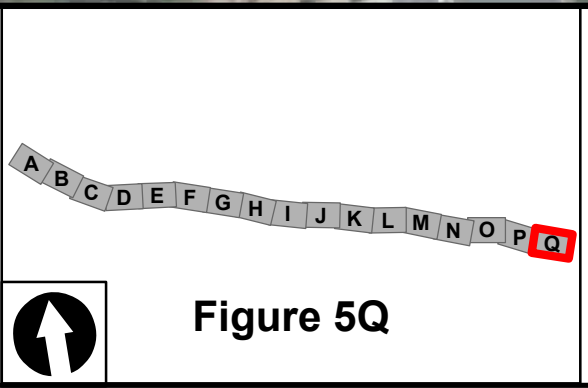






Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Alternative 1 (modified) <i>(Impacts based on slope stakes + 25')</i>	HazMat	Eligible Historic Properties	Delineated Wetlands
Study Area	Schools	Park & Recreational Space	Water Supply Watershed
<b>Impact Area</b>	Cemeteries	VAD Parcels	Impacted Wetlands
Preliminary Major Hydraulic Crossing	Places of Worship	Conservation Easements	Impacted Streams
Planned Greenways	Local Landmarks	Delineated Streams	Impacted Open Waters
		Delineated Open Waters	Bridge Alignment with Bents



**Jurisdictional Features Impacts Map**  
**Alternative 1 (modified)**  
 R-5706 - NC 73 Widening from Davidson-Concord Road to US 29  
 Mecklenburg and Cabarrus Counties  
 November 2019

0 500 1,000 Feet



Area T

WPA-2





Area U

SDC – confluence with SCH



SCH - origin below pipe manufacturing plant pond





Area U



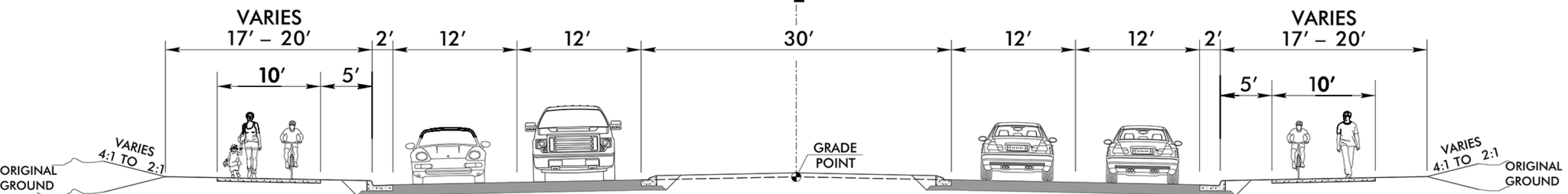


# Appendix E

## Typical Sections



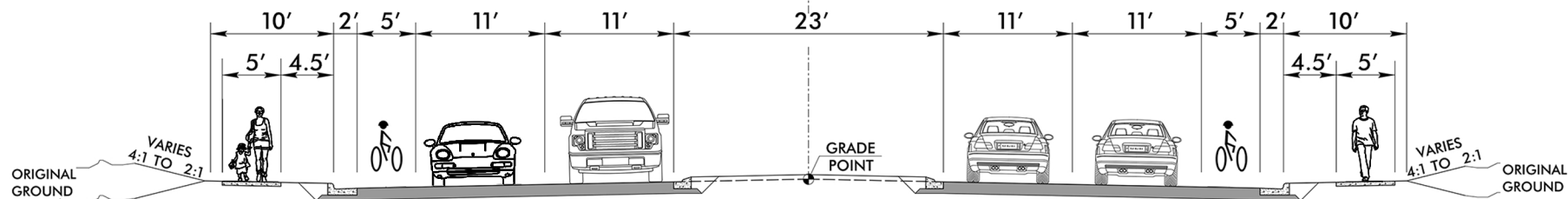
-NC. 73-



**R-5706**

DAVIDSON-CONCORD ROAD TO I-85

-NC. 73-



**R-5706**

I-85 TO U.S. 29 (CONCORD PARKWAY NORTH)