



ENVIRONMENTAL CONSULTING •  
ENGINEERING • NATURAL RESOURCE SERVICES



## **AQUATIC RESOURCE DELINEATION**

### **5550 STORY ROAD SITE ±45 ACRES**

HIRAM, PAULDING COUNTY, GEORGIA  
CONTOUR PROJECT NO: CE21PEA:18

#### PREPARED FOR:

### **DAVID PEARSON COMMUNITIES, INC.**

2000 FIRST DRIVE, SUITE 400  
MARIETTA, GEORGIA 30062

#### PREPARED BY:

### **CONTOUR ENVIRONMENTAL, LLC**

4462 BRETTON COURT, SUITE 14  
ACWORTH, GEORGIA 30101

OCTOBER 5, 2021



# CONTOUR ENVIRONMENTAL, LLC

ENVIRONMENTAL CONSULTING / ENGINEERING / NATURAL RESOURCE SERVICES

October 5, 2021

**Mr. Matt Frey, P.L.S., Director of Land Development**  
**David Pearson Communities, Inc.**  
2000 First Drive, Suite 400  
Marietta, Georgia 30062  
Office: 770-321-5032 / Cell: 770-294-1974  
[matt@davidpearsoncommunities.com](mailto:matt@davidpearsoncommunities.com)

RE: Report of Aquatic Resource Delineation  
**5550 Story Road Site ±45 Acres**  
**Hiram, Paulding County, Georgia**  
Project Number: CE21PEA:18

Dear Mr. Frey,

Contour Environmental, LLC has completed the authorized Aquatic Resource Delineation on the above referenced site. This report briefly summarizes the findings and recommendations.

#### General Site Description:

The site consists of a ±45-acre tract of land located to the west of Hiram Lithia Springs Road SW, south of Birchhaven Trace, west of Redwood Forest Run, and northwest of Story Road in Hiram, Paulding County, Georgia. The central site coordinates are latitude 33.863990 north and longitude -84.716245 west. The site property is currently undeveloped and wooded containing a diversity of mature hardwood and softwood tree species with moderate undergrowth. Story Road bisects the southeastern portion of the property. The surrounding land use consists of both undeveloped wooded land and residential development. The nearest named waterbody is Powder Springs Creek located approximately 0.68-mile northeast of the site property. The site is in the Middle Chattahoochee River-Lake Harding Watershed - Hydrologic Unit Code (HUC) 03130002. A Site Map is depicted on the USGS topographic map (Figure 1).

#### Description of Site Soils:

According to the USDA NRCS *Web Soil Survey of Paulding County, Georgia*, soils mapped at the site property consist of Appling sandy loam, 2 to 6 percent slopes (AmB); Appling sandy loam, 6 to 10 percent slopes (AmC); Appling sandy loam 10 to 15 percent slopes (AmD); Chewacla soils, wet variants (Csw); Cecil sandy loam, 2 to 6 percent slopes, moderately eroded (CYB2); Helena sandy loams, 2 to 10 percent slopes (HYC); Pacolet sandy clay loam, 6 to 10 percent slopes, severely eroded (PgC3); and Wilkes sandy loam, clayey subsoil variant, 6 to 15 percent slopes (WvD). Soil descriptions are listed below.

The **Appling** series consists of very deep, well drained, moderately permeable soils on ridges and side slopes of the Piedmont uplands. They are deep to saprolite and very deep to bedrock. They formed in residuum weathered from felsic igneous and metamorphic rocks of the Piedmont uplands. Slopes range from 0 to 25 percent. Near the type location, mean annual precipitation is 45 inches and mean annual temperature is 60 degrees F.

The **Chewacla** series consists of very deep, moderately permeable, somewhat poorly drained soils on flood plains. They formed in recent alluvium washed largely from soils formed in residuum from schist, gneiss, granite, phyllite, and other metamorphic and igneous rocks. Slopes range from 0 to 2 percent.

The **Cecil** series consists of very deep, well drained moderately permeable soils on ridges and side slopes of the Piedmont uplands. They are deep to saprolite and very deep to bedrock. They formed in residuum weathered from felsic, igneous and high-grade metamorphic rocks of the Piedmont uplands. Slopes range from 0 to 25 percent. Mean annual precipitation is 48 inches and mean annual temperature is 59 degrees F. near the type location.

The **Helena** series consists of very deep, moderately well drained, slowly permeable soils that formed in residuum weathered from a mixture of felsic, intermediate, or mafic igneous or high-grade metamorphic rocks, such as aplitic granite or granite gneiss that is cut by dykes of gabbro and diorite or mixed with hornblende schist or hornblende gneiss. These soils are on broad ridges and toeslopes of the Piedmont uplands. Slope is dominantly between 2 to 10 percent but ranges from 0 to 15 percent. Near the type location, mean annual precipitation is 46 inches, and mean annual temperature is 61 degrees F.

The **Pacolet** series consists of very deep, well drained, moderately permeable soils that formed in residuum weathered mostly from felsic igneous and metamorphic rocks of the Piedmont uplands. Slopes commonly are 15 to 25 percent but range from 2 to 60 percent.

The **Wilkes** series consists of shallow, well drained soils with moderately slow permeability. These soils formed in residuum weathered from intermediate and mafic crystalline rocks on uplands in the Piedmont. Near the type location, mean annual air temperature is 59 degrees F and mean annual precipitation is 45 inches. Slopes range from 4 to 60 percent.

A USDA Soil Survey map is attached as Figure 3.

#### Field Delineation Procedures:

The purpose of this delineation was to identify on-site *waters of the U.S. (WOTUS)*, and “buffered” state waters, which are subject to federal permitting authority under Section 404 of the Clean Water Act as well as the Erosion & Sedimentation Control Act of 1975, and Local Issuing Authority (LIA) ordinances that may apply.

*“Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. For regulatory purposes under the Clean Water Act, the term wetlands mean “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”*

Also for your reference, assessment methodology for determination of streams or “buffered” state waters included the following field indicators as primary criteria, not necessarily in this order:

- Defined bed and bank geomorphology;
- Natural wretsted vegetation within the channel;
- Evidence of sediment sorting within the bed of the channel;
- Presence of an ordinary or mean high water mark;
- Presence of extensive surface water flow or evidence of recent persistent flow;
- Evidence of active subsurface hydrological connection with surrounding streams;
- System must not be entirely confined and retained completely on the property owned by a single entity.

Contour Environmental assessed the site property for potential *waters of the U.S.* (WOTUS), as defined in the 1987 Corps of Engineers Wetland Delineation Manual, utilized the Routine Wetland Determination, Level 2 methodology. The wetland delineation fieldwork was completed on September 27, 2021 by Mr. Dana Spotts (President), Mr. Chris Szalwinski (Staff Biologist), and Mr. Andrew Riess (Staff Scientist), all qualified and certified wetland delineators.

#### Federal Regulatory Information Overview:

The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 404 of the CWA specifically prohibits the discharge of dredged or fill material into waters of the U.S. (including wetlands, surface water bodies, and drainage channels) without U.S. Army Corps of Engineers (USACE) authorization. The discharge of soil and other fill materials, riprap, backfill, dredged material, or other such material into jurisdictional areas requires a permit pursuant to Section 404 of the CWA.

An integral part of the USACE regulatory program is the concept of general permits for minor activities within waters of the United States, including wetlands. General permits are designed to relieve some of the administrative burden associated with permit processing for both the applicant and regulatory agencies. These permits are based on site-specific activity and/or project location. Nationwide permits (NWP) are a form of general permits issued by the USACE and are commonly used throughout the United States. If conditions that qualify an activity for authorization under one of the several NWPs are met, the specified activity may be able to proceed without a complex Individual Section 404 Permit (IP) or Regional Permit (RP).

For certain NWPs, Pre-Construction Notification (PCN) is required. The PCN process requires the applicant to submit project information to the USACE, including a delineation of aquatic resources boundaries for wetlands and other waters of the U.S., amount of aquatic resources area to be impacted, and background information. The PCN process is designed to be a 45-day review and natural resource agency comment solicitation period. After the review period, a response as to whether the permit is granted or denied is issued by the USACE.

The general acreage threshold limit currently imposed by the USACE Nationwide Permit program is **0.05 acre of stream channel** and **0.50-acre of wetland (or total area of aquatic resources impact)**. If greater than 0.05 acre of stream channel or 0.50-acre of jurisdictional wetland is anticipated to be impacted by the proposed development, a more complex federal permit known as a Section 404 Individual Permit (IP) under the Clean Water Act would likely be required to be obtained prior to commencing site work. The IP process, depending on controversy and opposition encountered, may require 12 to 15 months to complete.

#### Findings, Conclusions, and Recommendations:

Results of this delineation identified the following aquatic resources on the site property:

**Open Water 1 (OW1):** Consists of an open water pond/impoundment with man-made earthen dam located in the southwestern portion of the site property. OW1 flows north through the earthen dam and into W1 (described below) in the southwestern portion of the site property. OW1 is classified as PUBHh (*Palustrine, Unconsolidated Bottom, permanently flooded, Diked/Impounded*). **OW1 totals 0.402 acre.**

**Wetland 1 (W1) / Intermittent Stream 1 (I1): / Perennial Stream 1 (P1):** W1 consists of a forested/emergent wetland located within the southwestern portion of the site property. W1 begins off-site to the southwest draining on-site northeast and into I1. Hydrophytic vegetation and low chroma/hydric soils were present throughout this wetland. Furthermore, this wetland appears to be influenced by seasonal groundwater fluctuation. W1 drains into I1 and is classified as PFO6B/PEM2B (*Palustrine, Forested, Deciduous, Saturated*) / (*Palustrine, Emergent, Nonpersistent, Saturated*). **W1 totals 0.228 acre.** I1 consists of bed and bank of a northeasterly trending intermittent stream channel located within the western,

central, and northern portions of the site property. I1 begins at a small “head-cut” northwest of W1 (described above) where it flows northeast and into W5 (described below) where it loses bed and bank characteristics. I1 regains bed and bank morphological characteristics continuing north flowing into W6 (described below) where it once again loses bed and bank characteristics for a short reach. I1 regains bed and bank characteristics flowing north/northeast and eventually transitions into P1 just off-site to the north of the northern property boundary. Using the guidelines within RGL 05-05, physical characteristics that occur within I1 include: bed and bank, water staining, destruction of terrestrial vegetation, vegetation absent, leaf litter that is disturbed/washed away, and depositions. I1 averages approximately 2 to 3 feet in width and is classified as R4SB (*Riverine, Intermittent, Streambed*). **I1 totals 1,302.63 linear feet (lf).** P1 consists of the bed and bank of an unnamed northeasterly trending perennial stream channel that appears to be located just off-site north of the northern property boundary. P1 begins at the base of an embedded metal culvert that appears to be located off site flowing northeasterly and continuing away from the site property. Using the guidelines within RGL 05-05, physical characteristics that occur within P1 include, bed and bank, water staining, changes in character of the soil, destruction of terrestrial vegetation, wracking, vegetation absent, sediment sorting, leaf litter that is disturbed or washed away, scour, and depositions. P1 averages approximately 3 to 5 feet in width with substrate consisting of sand, silt, and gravel. P1 is classified as R3UB (*Riverine, Upper Perennial, and Unconsolidated Bottom*). **P1 totals 173.84 lf.**

**Wetland 2, Wetland 4, Wetland 5, and Wetland 6 (W2, W4, W5 & W6):** W2, W4, W5, and W6 consists of four [4] forested wetlands located within the riparian zone of I1 in the west-central portions of the site property. Hydrophytic vegetation and low chroma/hydric soils were present throughout these wetlands. Furthermore, these wetlands appear to be influenced by seasonal groundwater fluctuation. These wetlands drain into I1 (previously described) and are classified as PFO6B (*Palustrine, Forested, Deciduous, Saturated*). **W2 totals 0.028 acre. W4 totals 0.005 acre. W6 totals 0.003 acre.**

**Wetland 3 (W3) / Intermittent Stream 2 (I2):** W3 consists of a forested wetland located within the central portion of the site property. W3 drains northwest and into I2. Hydrophytic vegetation and low chroma/hydric soils were present throughout this wetland. Furthermore, this wetland appears to be influenced by seasonal groundwater fluctuation. W3 is classified as PFO6B (*Palustrine, Forested, Deciduous, Saturated*). **W3 totals 0.097 acre.** I2 consists of bed and bank of a short reach of northwesterly trending intermittent stream channel located within the central portion of the site property. I2 begins at a small “head-cut” where it flows northwesterly for a short reach before turning into surface wash/overland flow draining into W4 (previously described). Using the guidelines within RGL 05-05, physical characteristics that occur within I2 include: bed and bank, water staining, destruction of terrestrial vegetation, vegetation absent, leaf litter that is disturbed/washed away, and depositions. I1 averages approximately 1.5 to 2 feet in width and is classified as R4SB (*Riverine, Intermittent, Streambed*). **I2 totals 38.19 lf.**

**Wetland 7 (W7) / Intermittent Stream 3 (I3):** W7 consists of a forested and scrub-shrub wetland located within the northwestern portion of the site property. Hydrophytic vegetation and low chroma/hydric soils were present throughout this wetland. Furthermore, this wetland appears to be influenced by seasonal groundwater fluctuation. W7 drains into I3 and is classified as PFO6B / PSS6B (*Palustrine, Forested, Deciduous, Saturated*) / (*Palustrine, Scrub Shrub, Deciduous, Saturated*). **W7 totals 0.109 acre.** I3 consists of bed and bank of an easterly trending intermittent stream channel located within the northern portion of the site property. I3 begins at a subtle “head-cut” where it flows in an easterly direction and forms a confluence with I1 (previously described) in the northern portion of the site property. Using the guidelines within RGL 05-05, physical characteristics that occur within I3 include: bed and bank, water staining, destruction of terrestrial vegetation, vegetation absent, leaf litter that is disturbed/washed away, and depositions. I3 averages approximately 2 to 3 feet in width and is classified as R4SB (*Riverine, Intermittent, Streambed*). **I3 totals 487.12 lf.**

**Wetland 8 (W8):** W8 consists of a forested wetland located within the riparian zone of I1 in the northeastern portion of the site property. Hydrophytic vegetation and low chroma/hydric soils were present throughout this wetland. Furthermore, this wetland appears to be influenced by seasonal groundwater fluctuation. W8

drains north and into I1 (previously described) and is classified as PFO6B (*Palustrine, Forested, Deciduous, Saturated*). **W8 totals 0.049 acre.**

All aquatic resources described above are direct components of the Middle Chattahoochee-Lake Harding River Watershed (HUC 03130002); therefore, consist of *waters of the U.S. (WOTUS)*, and regulated under Section 404 of the Clean Water Act (CWA). Furthermore, the on-site stream channels (I1, I2, I3, and P1) consist of “buffered” State Waters requiring protective buffer setbacks as per GA EPD requirements and locally administered under local issuing authority (LIA) ordinances. Refer to Appendix A for photographic documentation of the delineated aquatic resources on the site property.

Refer to Figure 2: Aquatic Resource Delineation Map. Boundaries of the on-site wetland (W1 through W8) were field marked with pink surveyor’s tape with black print. Additionally, the natural wretsted vegetation limits along both sides of the on-site stream channels (I1, I2, I3, and P1) were field marked with blue/white striped surveyor’s tape. All on-site aquatic resources were subsequently field located by Contour Environmental, LLC using a Trimble Geo Explorer 7x GPS unit.

Please be advised that a state buffer variance (regulated by the Georgia Environmental Protection Division under the Erosion and Sedimentation Act), required for activities encroaching into the vegetated buffer adjacent to streams within the state is not a Federal Section 404 permit; regulated by the USACE. The state buffer variance is an entirely separate process from that with the USACE. Likewise, a Section 404 permit is not a permit to encroach within the state-protected stream buffer, and receipt of a Section 404 permit does not make a buffer variance easier to obtain. During the plan routing process through the Local Issuing Authority (LIA), you may have been informed whether a stream buffer variance would be required for your project. Local agency representatives are the primary point of contact for final jurisdictional state waters determination as indicated in any formal guidance they may provide you during their site inspection. Therefore, we suggest submitting the enclosed materials in a request for an approved jurisdictional determination (AJD) to the USACE to best safeguard that any future site development will have the benefit of a final appraisal of the extent of regulated features present on the project property.

Closing:

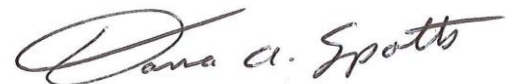
We appreciate the opportunity to provide our Natural Resource Consulting services to David Pearson Communities, Inc. If you have any questions regarding this report or if we may be of further service to you, please call our office at (678) 303-2600.

Sincerely,

**CONTOUR ENVIRONMENTAL, LLC**



Chris Szalwinski  
Staff Biologist

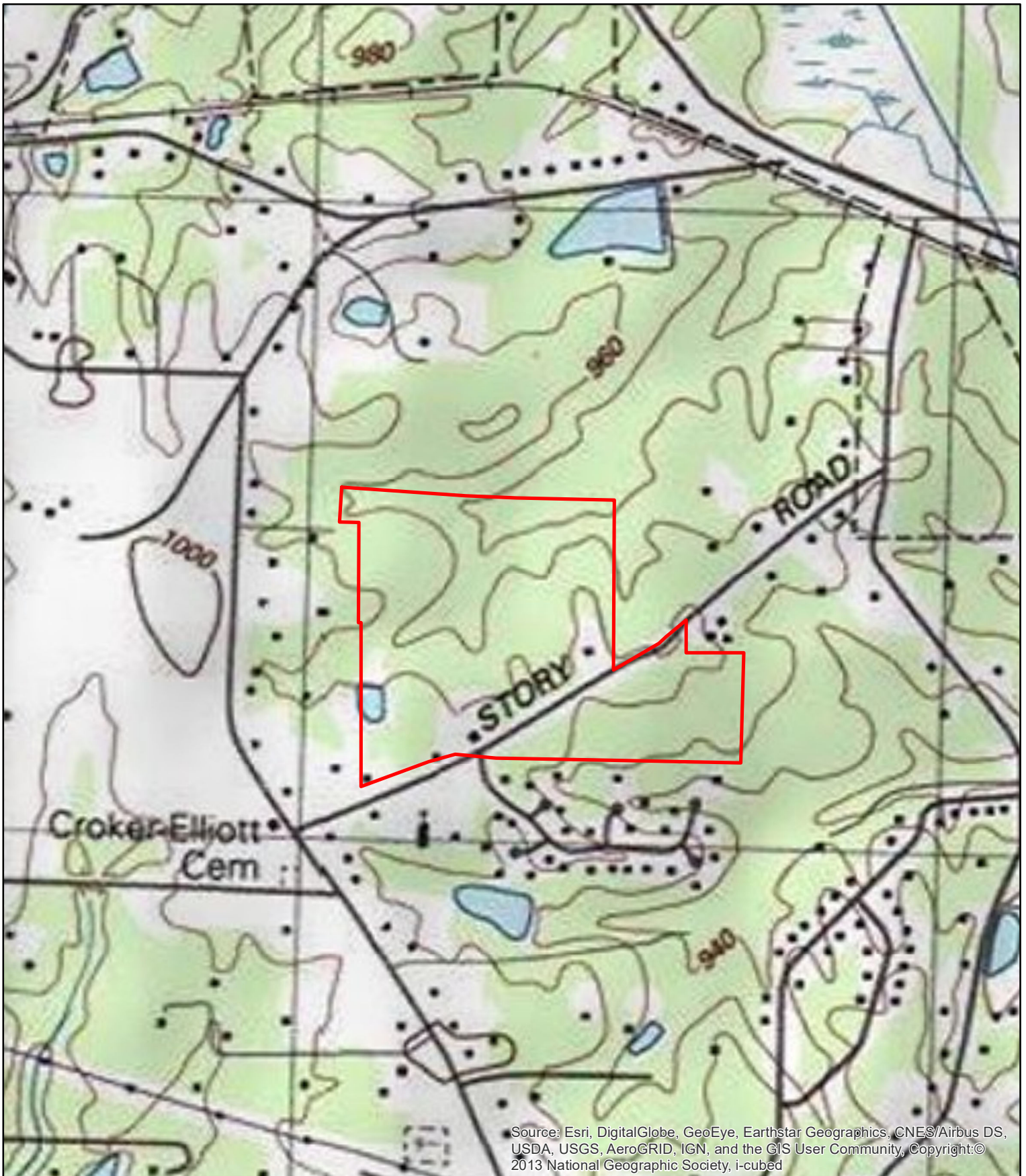


Dana A. Spotts, REPA, EP  
President

Attachments:

- Figure 1: USGS Topographic Map
- Figure 2: Aquatic Resource Delineation Map
- Figure 3: USDA Soil Survey Map
- Figure 4: NWI Map
- Figure 5: FEMA FIRM
- Appendix A: Site Photographs

**FIGURE 1:  
SITE LOCATION MAP**



Produced By:



Contour Environmental LLC  
 4462 Bretton Court NW, Suite 14  
 Acworth, Georgia 30101

**FIGURE 1: SITE LOCATION MAP**  
**7.5 MIN USGS TOPOGRAPHIC QUAD**

Story Road Site  
 Paulding County, Georgia  
 For  
 David Pearson Communities, Inc.  
 CE21PEA:18  
 October 5, 2021

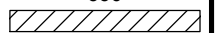
**LEGEND**

 Property Boundary

N



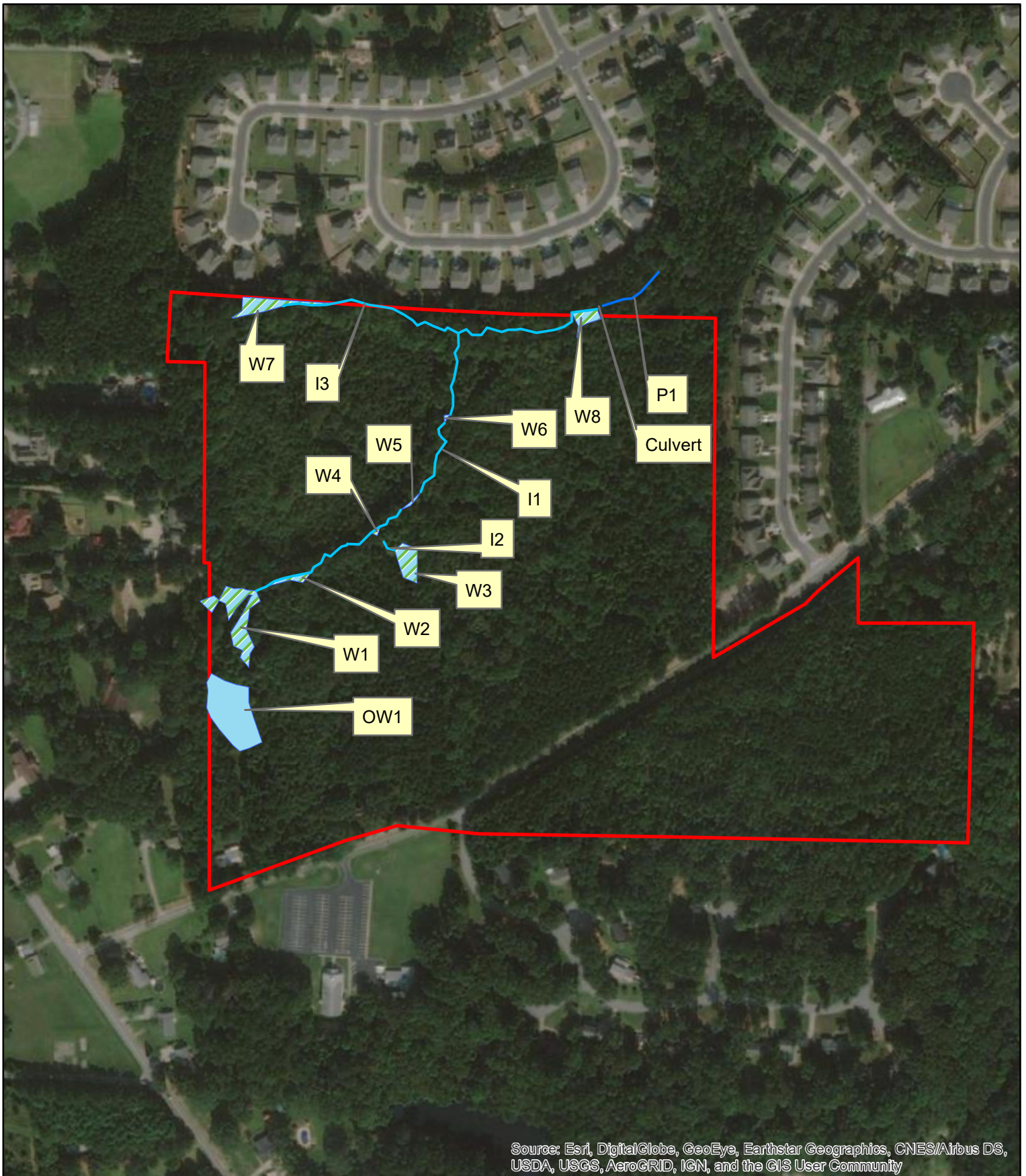
660



Feet



**FIGURE 2:**  
**AQUATIC RESOURCE DELINEATION MAP**



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

Produced By:








Contour Environmental LLC  
4462 Bretton Court NW, Suite 14  
Acworth, Georgia 30101

**FIGURE 2: AQUATIC RESOURCE  
DELINEATION MAP**

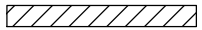
Story Road Site  
Paulding County, Georgia  
For  
David Pearson Communities, Inc.  
CE21PEA:18  
October 5, 2021

**LEGEND**

-  Property Boundary
-  Perennial Stream
-  Intermittent Stream
-  Open Water
-  Wetland

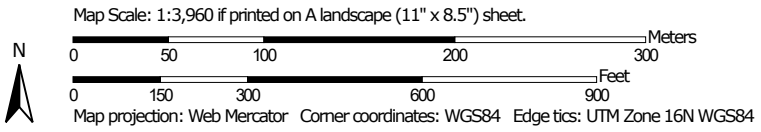


330  
Feet



**FIGURE 3:**  
**USDA SOIL SURVEY MAP**

Soil Map—Cobb County, Georgia




## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cobb County, Georgia

Survey Area Data: Version 11, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

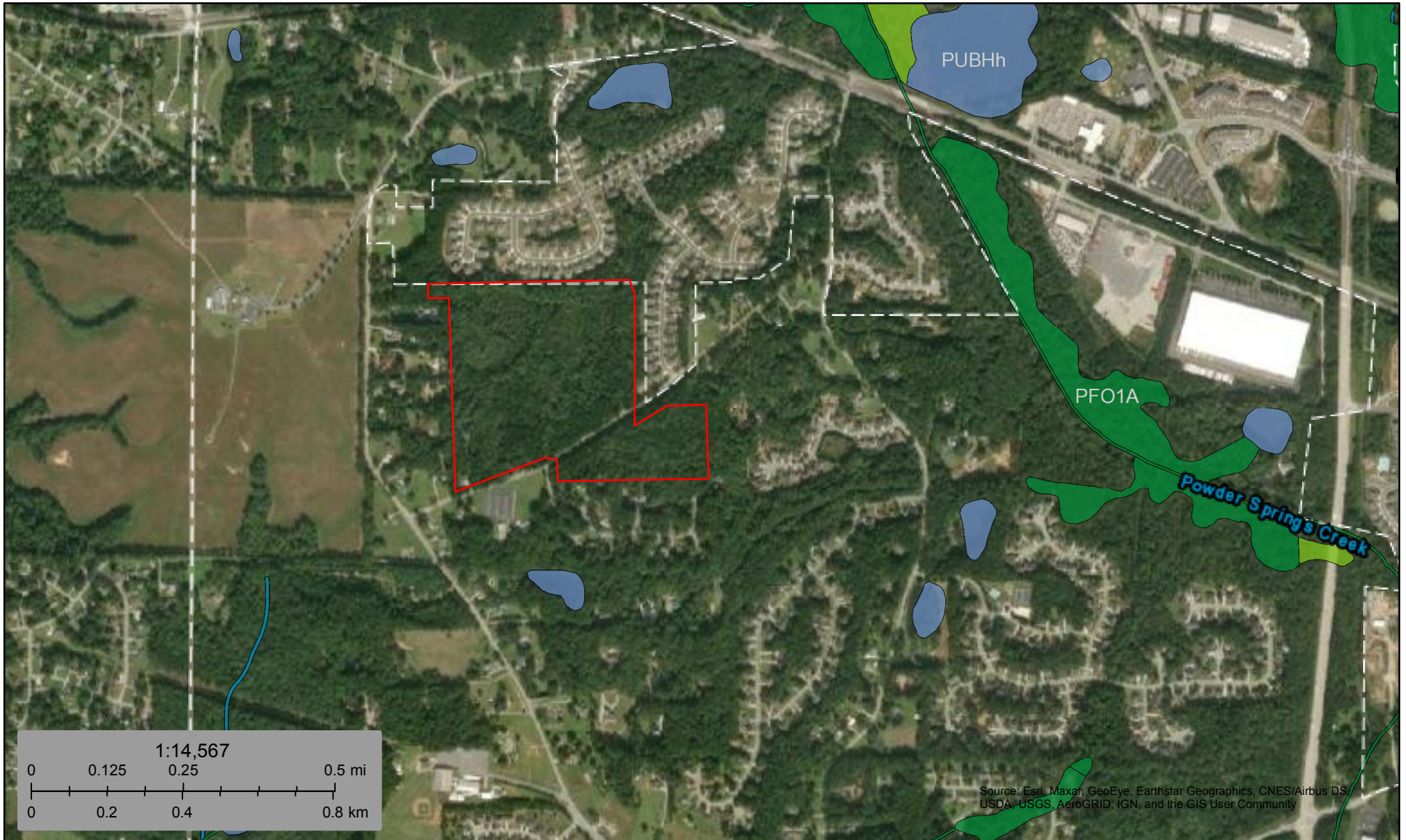
Date(s) aerial images were photographed: Apr 10, 2019—Dec 29, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AmB	Appling sandy loam, 2 to 6 percent slopes	5.9	11.9%
AmC	Appling sandy loam, 6 to 10 percent slopes	24.3	48.9%
AmD	Appling sandy loam, 10 to 15 percent slopes	4.6	9.2%
Csw	Chewacla soils, wet variants	0.1	0.3%
CYB2	Cecil sandy loam, 2 to 6 percent slopes, moderately eroded	6.8	13.8%
HYC	Helena sandy loam, 2 to 10 percent slopes	3.4	6.9%
PgC3	Pacolet sandy clay loam, 6 to 10 percent slopes, severely eroded	0.9	1.9%
WvD	Wilkes sandy loam, clayey subsoil variant, 6 to 15 percent slopes	3.5	7.1%
<b>Totals for Area of Interest</b>		<b>49.7</b>	<b>100.0%</b>

**FIGURE 4:**  
**NATIONAL WETLAND INVENTORY (NWI) MAP**



September 27, 2021

### Wetlands

- |                                |                                   |                 |
|--------------------------------|-----------------------------------|-----------------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland       | Lake            |
| Estuarine and Marine Wetland   | Freshwater Forested/Shrub Wetland | Freshwater Pond |
|                                |                                   | Riverine        |
|                                |                                   | Other           |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

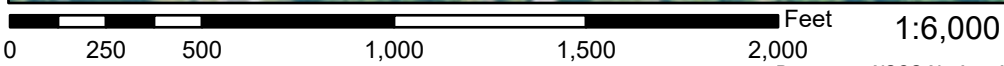
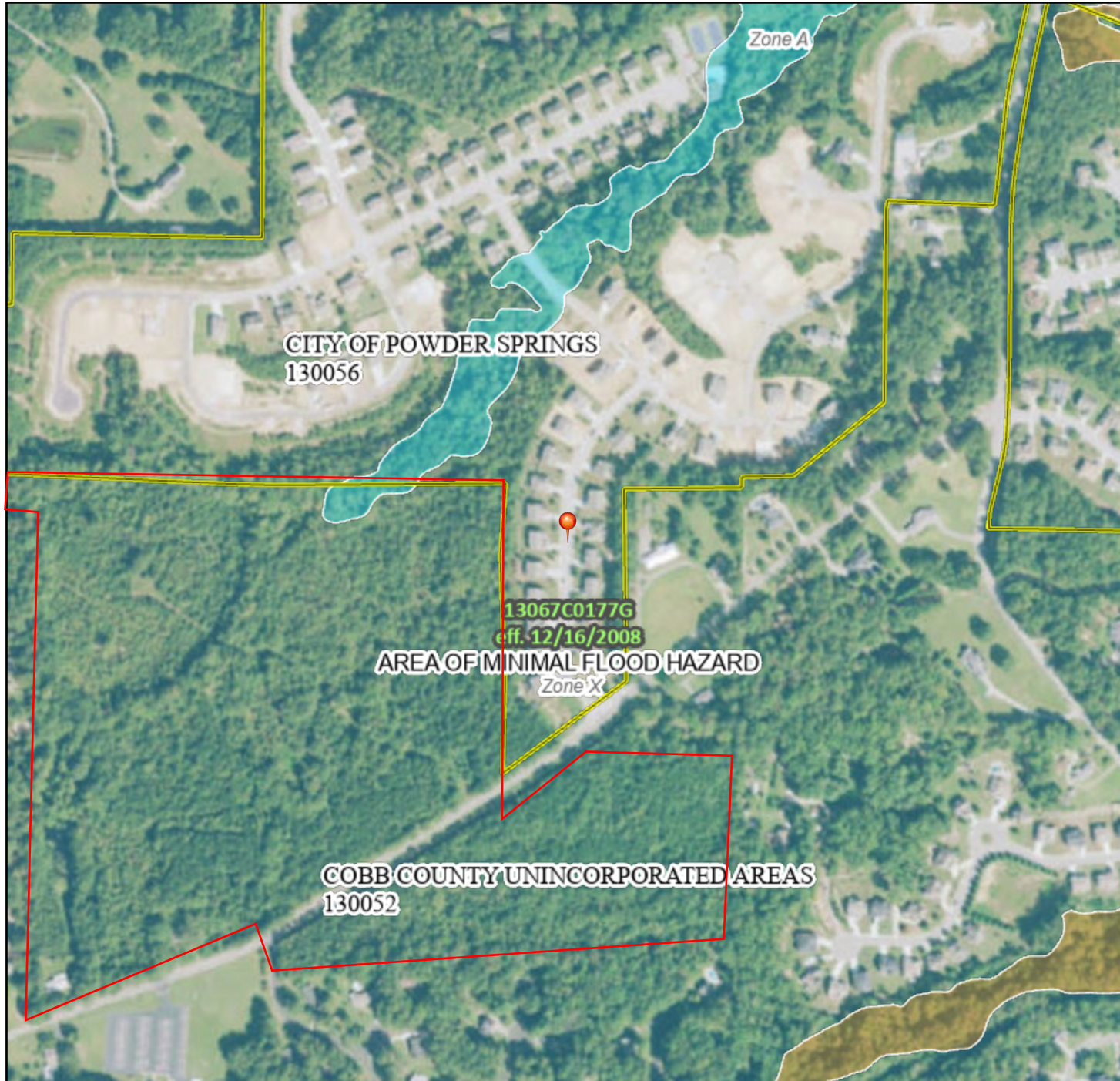


**FIGURE 5:**  
**FEMA - FLOOD INSURANCE RATE MAP (FIRM)**

# National Flood Hazard Layer FIRMette



84°43'6"W 33°52'7"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



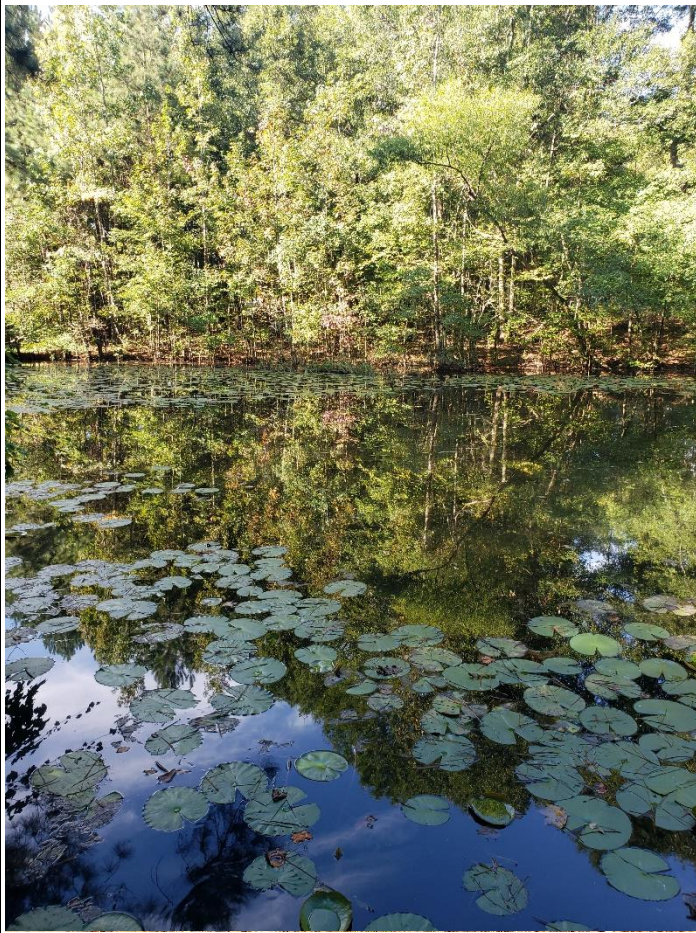
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/27/2021 at 4:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**APPENDIX A:**  
**SITE PHOTOGRAPHS**



**PHOTOGRAPH 1**

Open Water 1, facing southwest.



**PHOTOGRAPH 2**

Wetland 1, facing south.





**PHOTOGRAPH 3**

Intermittent Stream 1, facing northeast.



**PHOTOGRAPH 4**

Wetland 3, facing southeast.





**PHOTOGRAPH 5**

Intermittent Stream 2, facing southeast.



**PHOTOGRAPH 6**

Wetland 5, facing northeast.





**PHOTOGRAPH 7**

Wetland 6, facing north.



**PHOTOGRAPH 8**

Wetland 7, facing northwest.





**PHOTOGRAPH 9**

Intermittent Stream 3, facing west.



**PHOTOGRAPH 10**

Wetland 8, facing south.







**PHOTOGRAPH 11**

On Site Wetland Soil Profile.



**PHOTOGRAPH 12**

On Site Wetland Soil Profile.

