

REPORT OF

WETLAND DELINEATION & STATE WATERS REVIEW

ON THE

**SUNSHINE ESTATES
JOE ROBERTS ROAD
LAND LOT 137, 2nd DISTRICT
COWETA COUNTY, GEORGIA**

PREPARED FOR:

**MS. SAVINA MARTINEZ
134 HOOD PARK DRIVE
NEWNAN, GEORGIA 30265**

**JUNE 25, 2020
AES PROJECT NO. 220325.1**

June 25, 2020

Ms. Savina Martinez
134 Hood Park Drive
Newnan, Georgia 30262

RE: Report of Wetland Delineation & State Waters Review
Sunshine Estates
Joe Roberts Road
Land Lot 137, 2nd District
Coweta County, Georgia
AES Project No. 220325.1

Dear Ms. Martinez:

Applied Environmental Sciences, Inc. has completed a Wetland Delineation & State Waters Review on the above-referenced site. This report contains the results of our investigation and general information regarding U.S. Army Corps of Engineers and/or Georgia EPD permitting guidelines.

We appreciate the opportunity to be of service to you on this project and look forward to working with you in the future. Please contact us at your convenience if you have any questions or if we can be of continued service.

Sincerely,

APPLIED ENVIRONMENTAL SCIENCES, INC.



M. Brannon Miles
President

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1.0 PROJECT PURPOSE AND LOCATION

Applied Environmental Sciences, Inc. (AES) was contracted by Savina Martinez to perform a delineation of wetlands and other waters for the Sunshine Estates Tract. This property is hereinafter referred to as the Project Site or the Property. The investigation included a review of potential Georgia Waters of the State intended to identify stream channels and/or areas of open water on the Project Site which should require an undisturbed buffer.

According to provided property information, the Project Site consists of a 61.746-acre land parcel located to the south of Joe Roberts Road in Coweta County, Georgia (see Figure 1). The Project Site is currently undeveloped and partially-wooded. The Project Site is located within the Piedmont Physiographic Province of Georgia. Drainage across the Project Site is generally to the south toward the New River.

2.0 METHODOLOGIES

2.1 Wetland Delineation

The purpose of the wetland delineation was to identify potential Federal waters, including wetlands, on the Project Site. In order for an area to qualify as wetland, physical evidence of: (1) wetland vegetation, (2) wetland hydrology, and (3) hydric soils must be present. The criteria used to determine these parameters in the field are found in the **U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual**, and applicable Regional Supplements. The definition for other Waters of the U.S., found at 33 CFR Section 328.3(a)(3), was used to delineate stream channels and open waters which do not meet the criteria for wetlands, but are under the authority of the USACE as Waters of the U.S.

2.2 State Waters Review

The Erosion and Sedimentation Act of Georgia prohibits land disturbing activities within the 25-foot buffer along Waters of the State. Certain activities, such as road and utility line crossings, are typically exempt. The Georgia Environmental Protection Division (EPD) provides for a variance process for non-exempt activities within the buffer. The purpose of the state waters review was to identify potential Georgia Waters of the State located on the Project Site and determine which of those waters should require a stream buffer.

The criteria used for the review is detailed in Section 391-3-7.01 (v) of Chapter 391-3-7 of the Georgia Erosion and Sediment Act, Revised January, 2005. The criteria defined in the EPD Erosion and Sediment Control Manual, Revised January, 2005 was utilized to determine which areas on the Project Site require a state waters buffer. The definition utilized is as follows: “a “Stream Bank” means the confining cut of a stream channel and is usually identified as the point where the normal stream flow has wrested the vegetation. For non trout waters, the normal stream flow is any stream flow that consists solely of base flow or consists of both base flow and direct runoff during any period of the year. Base flow results from ground water that enters the stream channel through the soil. This includes spring flows into streams. Direct runoff is the water entering stream channels promptly after rainfalls or snow melts.”

As a supplemental tool for the review, potential streams and drainage features were evaluated using the current version of the intermittent stream evaluation method developed by the North Carolina Division of Water Quality (NCDWQ). The NCDWQ Stream Classification Method and associated guidance manual is a scoring method developed to distinguish ephemeral channels from intermittent streams.

3.0 DELINEATION RESULTS

AES personnel completed the Wetland Delineation and State Waters Review on June 25, 2020. The delineation and review were conducted by determining the respective wetland boundaries on-site and marking the boundaries with pink numbered flagging. The flagging was then located using a *Trimble Geo 7X* Global Positioning System (GPS). Also, the head-of-stream for all streams originating on-site and select top-of-bank locations were also flagged and GPS-located. The GPS-located boundaries were subsequently post-processed for accuracy and plotted onto the provided property survey to produce the attached Site Plan. Jurisdictional areas identified on the Project Site are depicted on the attached Figure 5 and consist of the following:

- ◆ **Three Perennial Streams (Stream S1, S2 & S3)**
- ◆ **Two Wetland Areas (Wetlands W1 and W2)**
- ◆ **One Impoundment (Pond P1)**

Stream S1 consists of an unnamed perennial tributary of the New River located on the southern portion of the Project Site. Stream S1 begins at the outlet structure for Pond P1. After commencement, Stream S1 trends generally southward before exiting along the southern property boundary. Stream S2 consists of an unnamed perennial tributary of the New River located on the southern portion of the Project Site. Stream S2 begins at an on-site plunge-pool feature. After commencement, Stream S2 trends generally eastward before merging with Stream S1. Stream Ss consists of an unnamed perennial tributary of the New River located on the western portion of the Project Site. Stream S3 begins at an on-site plunge-pool feature. After commencement, Stream S3 trends generally eastward before entering Pond P1. Pond P1 consists of an approximately seven-acre impoundment located on the western portion of the property. Wetland W1 consists of an approximately 1.67-acre pocket of beaver swamp wetlands located on the northwestern portion of the Project Site. Wetland W2 consists of an approximately 0.65-acre pocket of forested and emergent wetlands located in on the southern portion of the Project Site.

4.0 DISCUSSION

In our opinion, Streams S1, S2, S3 and Pond P1 meet the definition of Waters of the U.S. and would likely be under the authority of the USACE. In addition, because the streams exhibit evidence of base flow and wrested vegetation lines, and Pond P1 exhibits an ordinary-high water mark, these features should also be considered Georgia State Waters and should require undisturbed buffers. The identified on-site wetland areas (Wetlands W1 and W2) exhibit the three required wetland parameters and should be considered jurisdictional to the USACE.

As of the issuance date of this report, a final development plan for the Project Site has not been reviewed. Therefore, a detailed permitting strategy cannot be accurately formulated at this time. The sections below provide general information on Federal and State permitting requirements, if impacts to the on-site jurisdictional areas are proposed.

4.1 Federal Permitting Requirements

Impacts to Waters of the U.S., including streams and wetlands, can be authorized through USACE Nationwide and Individual Permits. Generally, impacts to less than 300-linear feet of stream channel and less than 0.50-acres of wetlands may be authorized under USACE Nationwide Permits. USACE Nationwide Permits require a 45-day review period after submittal to the USACE. Impacts to greater than

300-linear feet of stream channel or 0.50-acre of wetlands require a USACE Individual Permit. USACE Individual permits typically take 7 to 13-months for approval.

Wetland impacts of greater than 0.10-acre or stream channel impacts of greater than 100-lf require compensatory mitigation, per USACE permit guidelines. Typically, compensatory mitigation is accomplished through the purchase of wetland and/or stream channel credits from an approved commercial mitigation bank. The purchase of credits allows for restoration or enhancement of wetlands or streams elsewhere within the same watershed as the impact site, and is intended to satisfy the USACE policy of “no net loss.”

The amount of credits required to offset losses on-site is calculated using formulas contained in the USACE Standard Operating Procedure (SOP) for compensatory mitigation. Mitigation costs are highly site-dependent, but generally equate to \$300.00-\$650.00 per linear foot of stream channel impacted and between \$60,000.00 - \$75,000.00 per acre of wetlands impacted. Additional terms and conditions apply to the use of all USACE permits. Therefore, it is critical to project success to formulate a site-specific permitting strategy within the development planning stage.

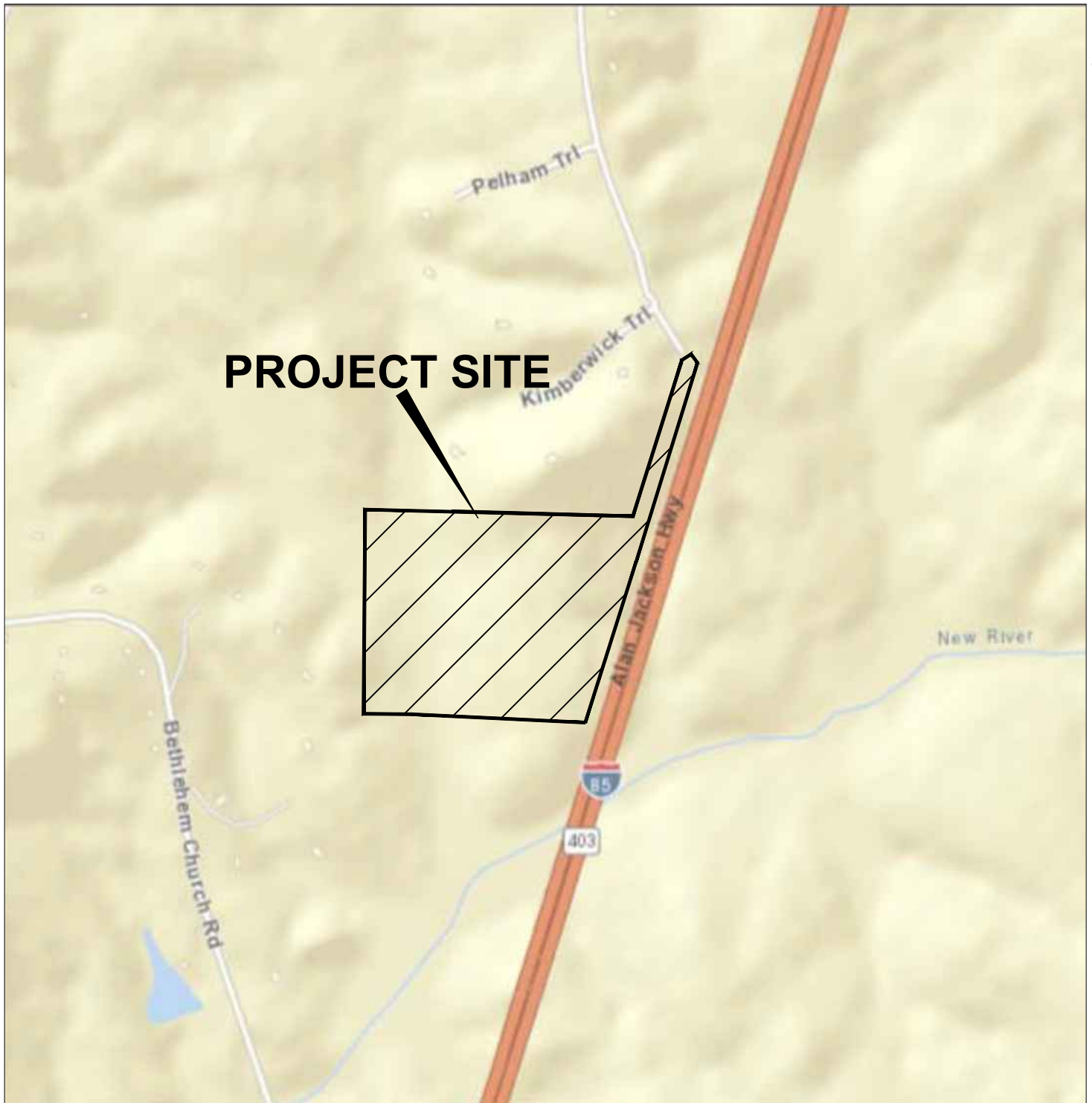
4.2 State Permitting Requirements

The Georgia Erosion & Sedimentation Act prohibits land disturbing activities within the 25-foot buffer adjacent to Georgia Waters of the State. The EPD does provide for a variance process for buffer encroachment for certain activities. Typically, road and utility line crossings are exempt from the variance process if they are constructed perpendicular to a buffered stream channel.

5.0 LIMITATIONS

The results of this delineation are based on AES’ professional opinion and understanding of current Federal and State regulations. Only the USACE and/or Georgia EPD and/or Local Issuing Authority (LIA) have authority to make official determinations of jurisdiction.

APPLIED ENVIRONMENTAL SCIENCES, INC.



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GRAPHIC SCALE: 1" = 1,000'

SCALE: 1" = 1,000' STUDY TYPE: WETLAND DELINEATION & GEORGIA EPD STATE WATERS REVIEW

DATE: 6-25-20

CHECKED BY: MBM

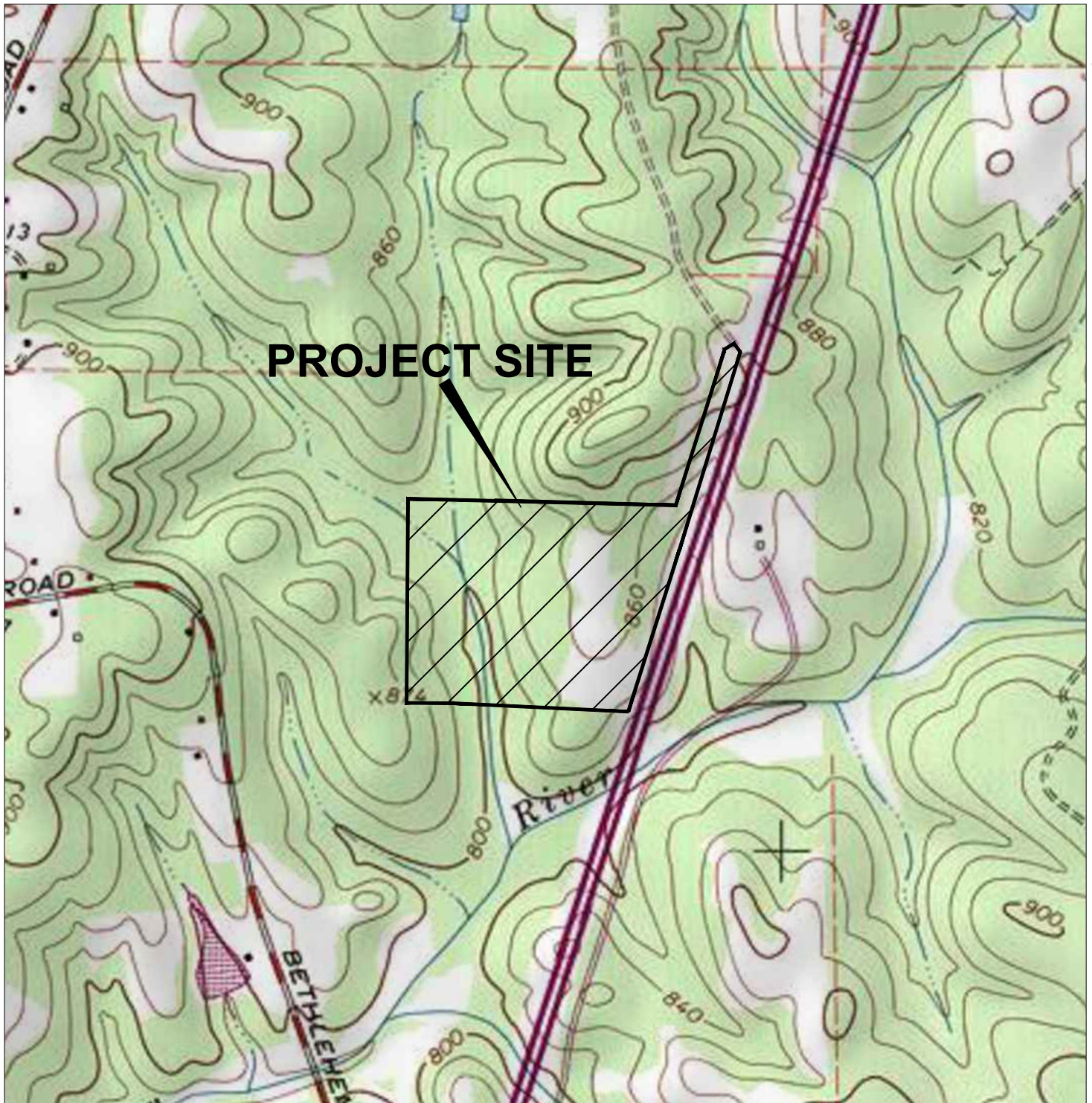
DRAWN BY: JBS

AES JOB No.: 220325.1

FIGURE 1: SITE LOCATION MAP
Sunshine Estates
Land Lot 137, 2nd District
Coweta County, Georgia
CLIENT: Savina Martinez



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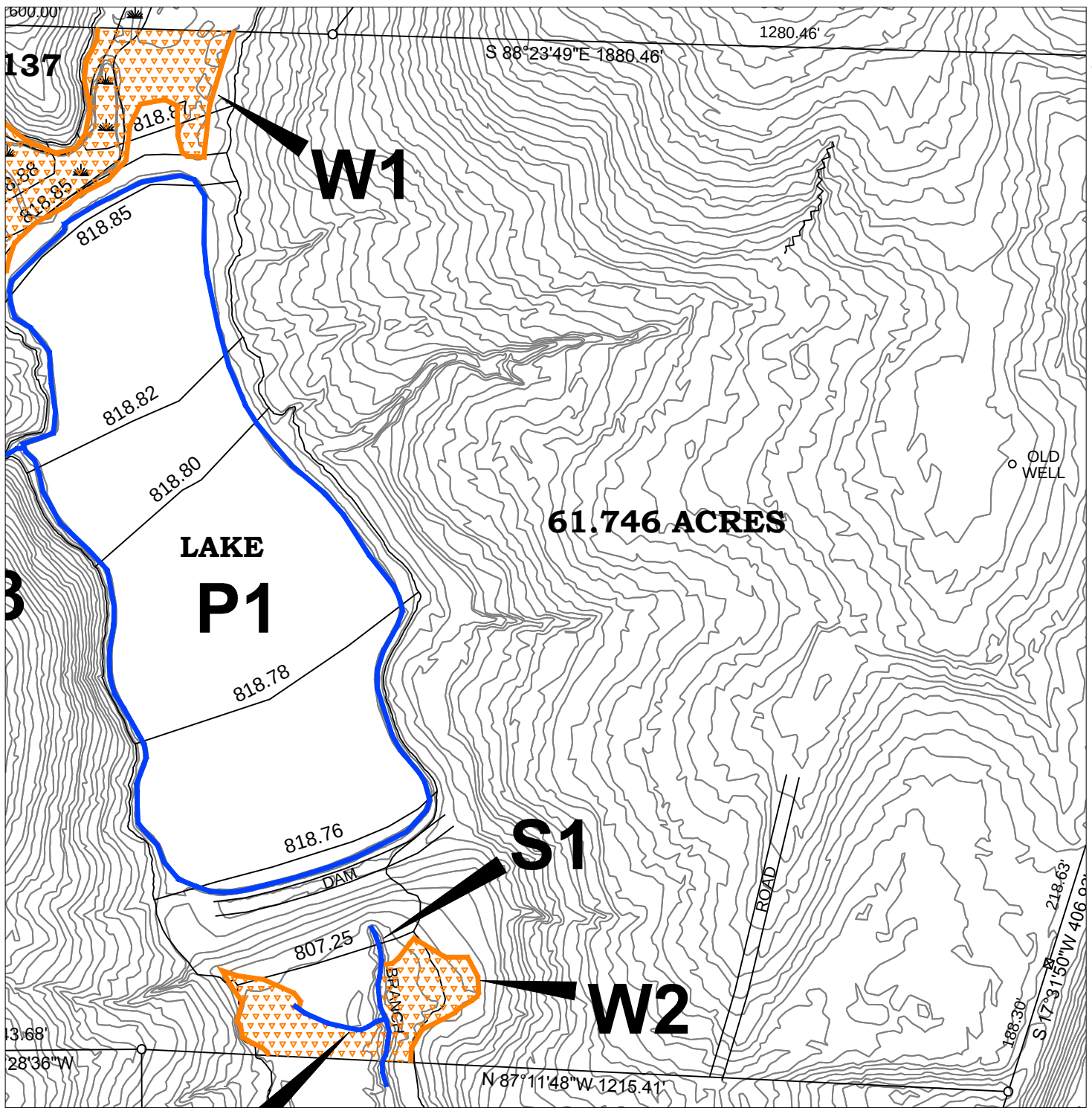
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DATE: 6-25-20 CHECKED BY: MBM DRAWN BY: JBS AES JOB No.: 220325.1

FIGURE 2: USGS TOPOGRAPHIC MAP
Sunshine Estates
Land Lot 137, 2nd District
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FIGURE 2: USGS TOPOGRAPHIC MAP Sunshine Estates Land Lot 137, 2nd District Coweta County, Georgia CLIENT: Savina Martinez		 Applied Environmental Sciences, Inc. 90-F Glenda Trace, #327 Newnan, Georgia 30265 (678) 262-4020 (678) 262-4024 (fax) www.aesciences.net		
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