



# Exhibit B.7.12

WATERSHED PROTECTION DEPARTMENT

P.O. Box 548  
Pittsboro, NC 27312  
PHONE: (919) 545-8394

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May 11, 2021

Soil & Environmental Consultants, PA  
Mr. Bob Zarzecki  
8412 Falls of Neuse Road, Suite 104  
Raleigh, NC 27615

Project Name: Herndon Farms Subdivision Parcel #s 2752, 18896, 18897, 18750, 18909, 93852

Location: US 15/501 & Oak Island Road, Chatham County

Subject Features: Three (3) intermittent streams, one (1) perennial stream, and one (1) wetland

Date of Determination: April 7, 2021

### **Explanation:**

The site visit was completed on April 7, 2021 by Drew Blake with Chatham County Watershed Protection and Bob Zarzecki of Soil and Environmental Consultants, PA (S&EC), and James Lastinger of the US Army Corps of Engineers, on Parcel #s 2752, 18896, 18897, 18750, 18909, 93852 that are located within the Jordan Lake watershed. S&EC personnel completed a previous site visit which resulted in the identification of three (3) intermittent streams (streams S1, S2 & S3), one (1) potential wetland, and one (1) non-jurisdictional pond on the property. S&EC submitted a request for Chatham County to complete a formal review to determine if the features would be subject to riparian buffers according to Section 304 of the Chatham County Watershed Protection Ordinance.

All points of origin, stream type transitions, and wetland boundaries were reviewed and agreed to in the field by all parties in attendance. An intermittent to perennial stream type transition was added along S1 at the southern property line.

### **Required Riparian Buffers:**

S2, S3, and a portion of S1 were identified as intermittent streams and will therefore require a 50-ft buffer from the top of bank landward on both sides of the features. The perennial portion of S1 will require a 100-ft buffer from the top of bank landward on both sides of the feature if the transition point is confirmed to be located within the subject property. All jurisdictional wetlands will require a 50-ft buffer proceeding landward from the flagged wetland boundary. The “non-jurisdictional pond” was confirmed as non-jurisdictional due to the pond not being located within a natural drainage way and not fed by an intermittent or perennial stream nor directly discharges into an intermittent or perennial stream. The non-jurisdictional pond will not require a buffer.

### **Impacts to Riparian Buffers:**

Impacts to the riparian buffers may require a Riparian Buffer Authorization depending on the size and scope of the impacts. Please refer to Section 304 (j)(3) of the Chatham County Watershed Protection Ordinance to determine if your impacts will require a Riparian Buffer Authorization. If you determine that a Riparian



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Buffer Authorization is required please contact Drew Blake to receive the required application and submittal instructions.

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by Chatham County, on parcels outside of the Jordan Lake watershed, may submit a request for appeal in writing to the Watershed Review Board. A request for a determination by the Watershed Review Board shall be made in accordance with Section 304 of the Chatham County Watershed Protection Ordinance. Landowners or affected parties that dispute a determination made by Chatham County, on parcels inside the Jordan Lake watershed, shall submit a request for appeal in writing to NC DWR, 401 & Buffer Permitting Unit, 1650 Mail Service Center, Raleigh, NC 27669-1650 attention of the Director of the NC Division of Water Quality.

Should this project result in any direct impacts to surface water features (i.e., crossing and/or filling streams or wetlands) additional reviews may be necessary. Additionally, a Section 404/401 Permit may be required. Any inquiries regarding Section 404/401 permitting should be directed to the Division of Water Resources (Central Office) at (919)-807-6364 and the US Army Corp of Engineers (Raleigh Regulatory Field Office) at (919)-554-4884.

Respectfully,

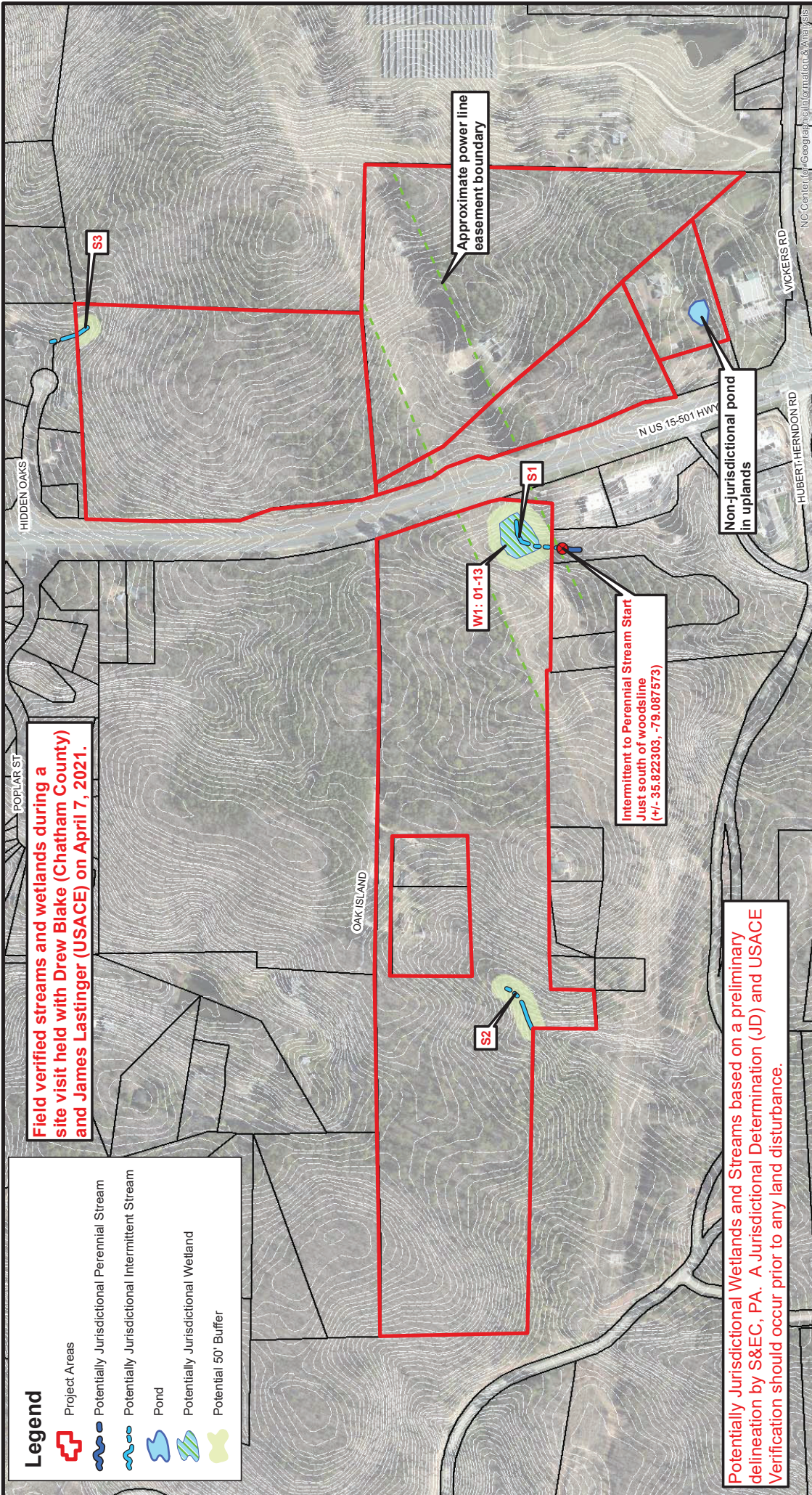
Drew Blake  
Senior Watershed Specialist, CESSWI

Enclosures:

- Figure 1: Topographic Map & Potential Waters of the US– Completed by S&EC
- Figure 2: NRCS Soil Survey – Completed by S&EC
- Figure 3: USGS Topographic Map – Completed by S&EC
- S&EC Stream ID Forms
- S&EC Wetland Data Form
- Major Subdivision Riparian Buffer Application
- Authorized Agent Form
- Authorization to Enter Property Form

cc: Rachael Thorn, Director, Chatham County Watershed Protection Department  
Kimberly Tyson, Planner II/Subdivision Administrator, Chatham County Planning Department  
Angela Plummer, Planner II/Zoning Administrator, Chatham County Planning Department  
Jason Sullivan, Director, Chatham County Planning Department





**Field verified streams and wetlands during a site visit held with Drew Blake (Chatham County) and James Lastinger (USACE) on April 7, 2021.**

**Legend**

- Project Areas
- Potentially Jurisdictional Perennial Stream
- Potentially Jurisdictional Intermittent Stream
- Pond
- Potentially Jurisdictional Wetland
- Potential 50' Buffer

**Potentially Jurisdictional Wetlands and Streams based on a preliminary delineation by S&EC, PA. A Jurisdictional Determination (JD) and USACE Verification should occur prior to any land disturbance.**

**Intermittent to Perennial Stream Start  
Just south of woodsline  
(+/- 35.822303, -79.087573)**

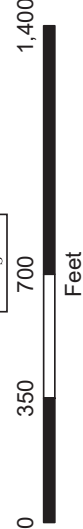
**Non-jurisdictional pond  
in uplands**

**Approximate power line  
easement boundary**

**Topographic Map & Potential Waters of the U.S.**  
Herndon Farms  
Chatham County, NC

Source:  
NC OneMap  
Chatham County GIS

Drawn by:  
JL



Project No.  
13862.W1

Project Mgr.:  
BZ

Scale:  
1" = 350'

4/15/2021



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samlr.com

NC Center for Geographic Information & Analysis





Project No.  
13862.W1

Project Mgr.:  
BZ

Scale:  
1" = 500'

10/13/2020



0 500 1,000 2,000

Feet

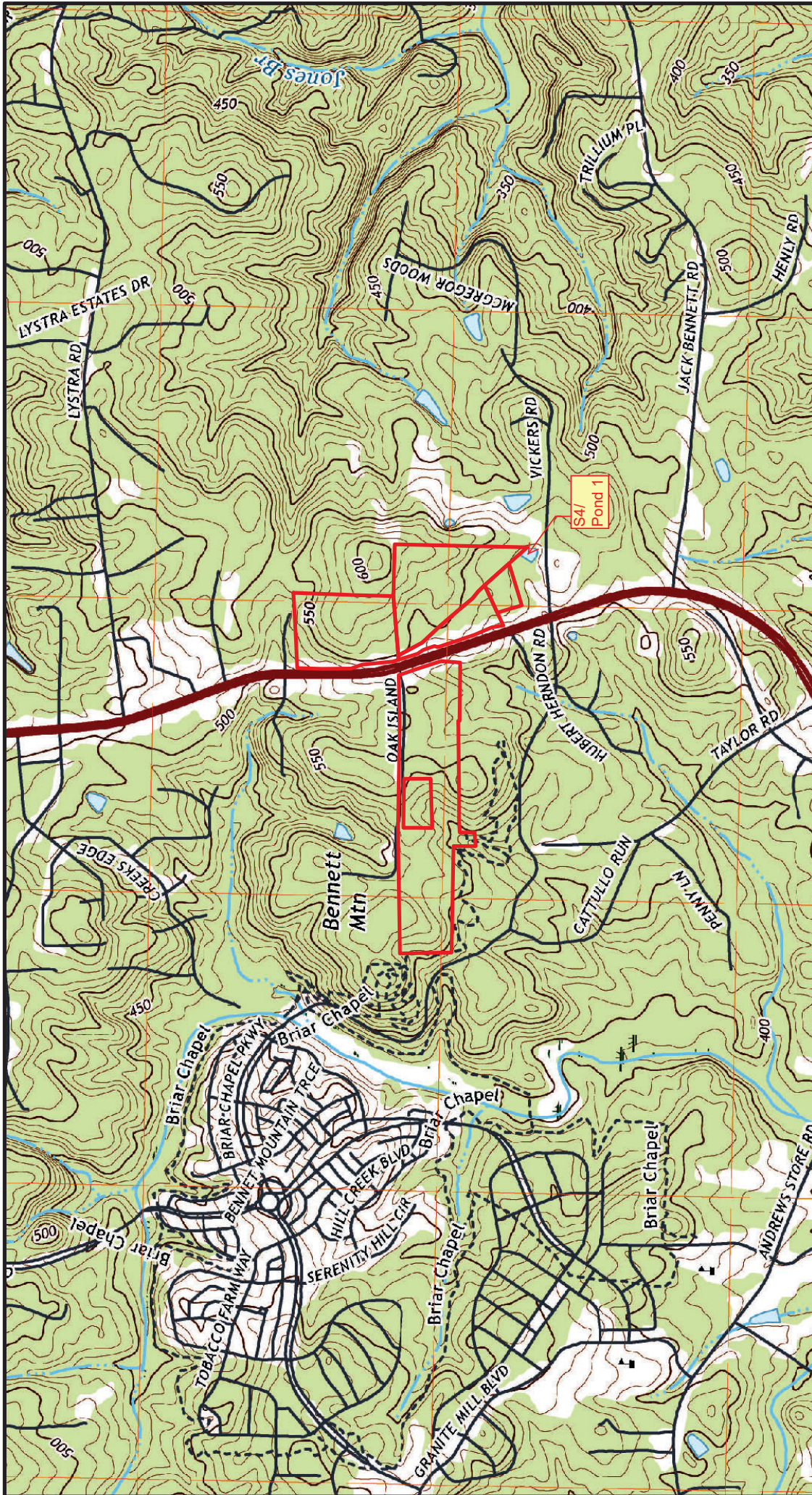
**Soil Survey Map**  
Herndon Farms  
Chatham County, NC

Source:  
Chatham County GIS  
Chatham County Soil Survey Farrington Sheet

**S&EC**

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sunclear.com





Project No.  
13862.W1

Project Mgr.:  
BZ

Scale:  
1" = 1000'

10/13/2020



Source:  
Chatham County GIS  
2019 USGS Farrington, NC Quadrangle

**USGS Map**  
Herndon Farms  
Chatham County, NC



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sunde.com



**NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11**

**NC DWQ Stream Identification Form Version 4.11**

<b>Date:</b> February 17, 2021	<b>Project/Site:</b> Herndon Farms "S1"	<b>Latitude:</b> 35.822794
<b>Evaluator:</b> S&EC - B.Zarzecki	<b>County:</b> Chatham	<b>Longitude:</b> -79.086972
<b>Total Points:</b> <i>Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*</i> 24.5	<b>Stream Determination (circle one)</b> Ephemeral Intermittent Perennial	<b>Other:</b> Farrington, NC <i>e.g. Quad Name:</i>

A. Geomorphology (Subtotal = <u>12.5</u> )	Absent	Weak	Moderate	Strong
1 <sup>a</sup> Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

<sup>a</sup> artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = <u>6</u> )	Absent	Weak	Moderate	Strong
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = <u>6</u> )	Absent	Weak	Moderate	Strong
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

**Notes: Potential start stream at outlet of culvert from Hwy 15/501 (possibly next headcut down) Intermittent to Perennial origin most likely just within woodline south of project boundary.**

Sketch:

**NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11**

**NC DWQ Stream Identification Form Version 4.11**

<b>Date:</b> February 17, 2021	<b>Project/Site:</b> Herndon Farms "S2"	<b>Latitude:</b> 35.822978
<b>Evaluator:</b> S&EC - B.Zarzecki	<b>County:</b> Chatham	<b>Longitude:</b> -79.093244
<b>Total Points:</b> <i>Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*</i> 28.5	<b>Stream Determination (circle one)</b> Ephemeral Intermittent Perennial	<b>Other:</b> Farrington, NC <i>e.g. Quad Name:</i>

A. Geomorphology (Subtotal = 16)	Absent	Weak	Moderate	Strong
1 <sup>a</sup> Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

<sup>a</sup> artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 6.5)	Absent	Weak	Moderate	Strong
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 6)	Absent	Weak	Moderate	Strong
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

**Notes:** Intermittent stream origin at large headcut.

Sketch:

**NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11**

**NC DWQ Stream Identification Form Version 4.11**

<b>Date:</b> February 17, 2021	<b>Project/Site:</b> Herndon Farms "S3"	<b>Latitude:</b> 35.827344
<b>Evaluator:</b> S&EC - B.Zarzecki	<b>County:</b> Chatham	<b>Longitude:</b> -79.084649
<b>Total Points:</b> <i>Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*</i> 19.5	<b>Stream Determination (circle one)</b> Ephemeral Intermittent Perennial	<b>Other:</b> Farrington, NC <i>e.g. Quad Name:</i>

A. Geomorphology (Subtotal = <u>11.5</u> )	Absent	Weak	Moderate	Strong
1 <sup>a</sup> Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

<sup>a</sup> artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = <u>6</u> )	Absent	Weak	Moderate	Strong
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = <u>2</u> )	Absent	Weak	Moderate	Strong
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macroinvertebrates (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

\*perennial streams may also be identified using other methods. See p. 35 of manual.

**Notes: Marginal intermittent stream (barely makes 19 pts); Baseflow may be off given wet weather. Not on USGS or Soil Survey.**

Sketch:



## WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: HERNDON FARMS City/County: Chatham County Sampling Date: 2/17/2021  
 Applicant/Owner: Herndon Farms One, LLC (Attn: Travis Blake) State: NC Sampling Point: DP1  
 Investigator(s): S&EC- B. Zarzecki Section, Township, Range: Baldwin & Williams Townships  
 Landform (hillside, terrace, etc.): valley Local relief (concave, convex, none): Concave Slope (%): 0-2  
 Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.82275 Long: -79.087433 Datum: NAD 83  
 Soil Map Unit Name: Wedowee sandy loam (WeC) NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Wetland exists within maintained electric transmission line easement and appears to be regularly maintained with both mechanical and chemical/herbicide means.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input checked="" type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: DP1

Tree Stratum (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	=Total Cover		
50% of total cover: _____	20% of total cover: _____		

Sapling/Shrub Stratum (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	10	Yes	FAC
2. <u>Liquidambar styraciflua</u>	20	Yes	FAC
3. <u>Ilex opaca</u>	10	Yes	FACU
4. <u>Pinus taeda</u>	10	Yes	FAC
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
	50 =Total Cover		
50% of total cover: <u>25</u>	20% of total cover: <u>10</u>		

Herb Stratum (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Arundinaria gigantea</u>	50	Yes	FACW
2. <u>Juncus effusus</u>	20	Yes	FACW
3. <u>Rhus glabra</u>	20	Yes	UPL
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	90 =Total Cover		
50% of total cover: <u>45</u>	20% of total cover: <u>18</u>		

Woody Vine Stratum (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Smilax rotundifolia</u>	10	Yes	FAC
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	10 =Total Cover		
50% of total cover: <u>5</u>	20% of total cover: <u>2</u>		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>70</u>	x 2 = <u>140</u>
FAC species <u>50</u>	x 3 = <u>150</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>20</u>	x 5 = <u>100</u>
Column Totals: <u>150</u> (A)	<u>430</u> (B)
Prevalence Index = B/A = <u>2.87</u>	

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

   4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes       No   

Remarks: (Include photo numbers here or on a separate sheet.)



**SOIL**

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20	10YR 5/2	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10) (**LRR N**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- Thin Dark Surface (S9) (**MLRA 147, 148**)
- Loamy Mucky Mineral (F1) (**MLRA 136**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- Umbric Surface (F13) (**MLRA 122, 136**)
- Piedmont Floodplain Soils (F19) (**MLRA 148**)
- Red Parent Material (F21) (**MLRA 127, 147, 148**)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (**MLRA 147**)
- Coast Prairie Redox (A16) (**MLRA 147, 148**)
- Piedmont Floodplain Soils (F19) (**MLRA 136, 147**)
- Red Parent Material (F21) (**outside MLRA 127, 147, 148**)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?    Yes     No

Remarks:

This data sheet is revised from Eastern Mountains and Piedmont Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 8.0, 2016.



Date Received: 3/5/21 PL# RBMAJ 21-02

***Riparian Buffer Review Application***  
Surface Water Identification Request for  
**Major Subdivisions**

Tract Information

Parcel #: multiple, see attached Watershed District (and name of creek if known): Pokeberry Creek (WS-IV; NSW)

Property Owner: Travis M. Blake, James Bunn Riggsbee, & Herndon Farms One, LLC

Location/Physical Address of Tract: US 15/501 & Oak Island Road, Chapel Hill, Chatham County, NC

Driving Directions from Pittsboro: \_\_\_\_\_  
Drive north on Hwy 15/501 approximately 10 miles and turn left on Oak Island Road just after Briar Chapel Parkway.  
You'll need to do a U-turn so as not to cross the median in the highway. Property is south of Oak Island Road and east of 15/501.

Subdivision Name (if applicable): Herndon Farms

Owner's/Agent Contact Information (Agent: Consultant, Real Estate Agent, Surveyor, Other) Circle one

Name: Soil & Environmental Consultants, PA - Bob Zarzecki

Contact Phone Numbers: (h) n/a (w) (919)846-5900 (c) (919)270-2068

E-mail: bzarzecki@sandec.com

Mailing Address: 8412 Falls of Neuse Rd., Suite 104, Raleigh, NC 27615

Do you wish to be contacted prior to Chatham County staff visiting the property?  Yes  No

How much notice is required prior to arrival onsite? 1 week preferred, but 1st available

How would you like to receive the completed review letter? (Please check one of the following)

- I would like to pick up the completed Riparian Buffer Review at the County Office
- I would like the completed Riparian Buffer Review mailed to me
- I would like the completed Riparian Buffer Review e-mailed to me

Please include the following items with this request

- Completed consultant findings report including the following:
  - GIS generated or hand drawn sketch of surface water features found onsite (Buffer Plan Sheet)  
No smaller than 1"=60' and paper size 11"x17" or larger
  - NCDWQ Stream Identification Forms, Version 4.11, Wetland Determination Data Form –





*Riparian Buffer Review Application*  
Surface Water Identification Request

Eastern Mountains and Piedmont Region, digital photographs, notes, sketches, etc.

- NRCS map with property boundary depicted
- USGS map with property boundary depicted
- Statement of Credentials (Training Certificate for NCDWQ/NC State University Surface Waters Classification course, 2 years of jurisdictional wetland delineation according to the Eastern Mountains and Piedmont Regional Supplement to the 1987 US Corps of Engineers Wetland Delineation Manual)
- Signed Right to Enter Property Form
- Signed Owner's Agent Designation Form
- Fee (make checks payable to Chatham County) **\$100 per feature confirmed onsite**

*Feature is defined as any surface water that is subject to Chatham County Riparian Buffers (streams, wetlands, ponds)*

Total Number of Features: 4 Total Paid: \$ 400.00

I have read and understand the regulations of the Watershed Protection Ordinance, Section 304, and I agree to adhere to these associated policies and guidelines herein.

Owner/Agent Signature: \_\_\_\_\_ Date: March 5, 2021



# CHATHAM COUNTY

## AUTHORIZED AGENT FOR FORM

### PROPERTY LEGAL DESCRIPTION:

LOT NO. A; N2-63; N2-64; N2-64A; PARCEL ID (PIN) 9775-00-34-0427; 9775-03-44-4270; 9775-04-54-0411; PARCEL SIZE 33.67 ac; 6.3 ac; 25.47 ac; 18.35 ac;

STREET ADDRESS: US 15/501, Chapel Hill, Chatham County, NC 27517

9775-00-34-0427; 9775-03-44-4270; 9775-04-54-0411; 9775-01-45-4512;

Please print:

Property Owner: James Bunn Riggsbee

Property Owner: \_\_\_\_\_

The undersigned owner(s) of the above described property, do hereby authorize

Bob Zarzecki, of Soil & Environmental Consultants, PA  
(Contractor / Agent) (Name of consulting firm if applicable)

to act on my/our behalf and take all actions, I/we could have taken if present, necessary for the processing, issuance and acceptance of reviews, inspections, or permits and any and all standard and special conditions attached to these approvals. The activities authorized include the following (**Check all that apply**):

Check here for all of the below options.

- Building Permit
- Zoning Compliance Permits
- Floodplain Determination
- Soil Erosion & Sedimentation Control Permit
- Permits to install, repair, evaluate, or expand onsite wastewater system(s)
- Evaluation/inspection/permitting of a private drinking water well(s).
- Riparian Buffer Review pursuant to §304 of the Chatham Co. Watershed Protection Ordinance.
- Other: \_\_\_\_\_

Property Owner's Address (if different than property above):

PO Box 2872, Cashiers, NC 28717-2872

Telephone: (828) 200-9611

E-mail: jimriggsbee@yahoo.com

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

M. Travis Riggsbee for James Bunn Riggsbee

Owner Authorized Signature

Date: 3/3/2021

Bob Zarzecki M. Travis Riggsbee Consultant, PA, Soil/Water Department

Agent Authorized Signature

Date: 3/3/2021





# CHATHAM COUNTY

## AUTHORIZED AGENT FOR FORM

### PROPERTY LEGAL DESCRIPTION:

LOT NO. A; N2-63; N2-64; N2-64A; PARCEL ID (PIN) 9775-00-34-0427; 9775-03-44-4270; 9775-04-54-0411; PARCEL SIZE 33.67 ac; 6.3 ac; 25.47 ac; 18.35 ac;

STREET ADDRESS: US 15/501, Chapel Hill, Chatham County, NC 27517

9775-00-34-0427; 9775-03-44-4270; 9775-04-54-0411; 9775-01-45-4512;

Please print:

Property Owner: James Bunn Riggsbee

Property Owner: \_\_\_\_\_

The undersigned owner(s) of the above described property, do hereby authorize

Bob Zarzecki, of Soil & Environmental Consultants, PA  
(Contractor / Agent) (Name of consulting firm if applicable)

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- Other: \_\_\_\_\_

Property Owner's Address (if different than property above):

PO Box 2872, Cashiers, NC 28717-2872

Telephone: (828) 200-9611

E-mail: jimriggsbee@yahoo.com

We hereby certify the above information submitted in this application is true and accurate to the best of our knowledge.

M. Travis Riggsbee for James Bunn Riggsbee

Owner Authorized Signature

Date: 3/3/2021

Bob Zarzecki M. Travis Riggsbee Consultant, PA, Soil/Water/Environment Department

Agent Authorized Signature

Date: 3/3/2021



### Authorization to Enter Property Form

Date: 3/2/2021

PARCEL No. (AKPAR) 2752; 18896; 18897; 18750

I, (print name) James Bunn Riggsbee, as owner of the property described above, or as a representative of the owner(s) do hereby convey permission to Chatham County staff to enter the property at their convenience to conduct a surface water identification (SWID) necessary to determine whether or not water features on my property are subject to the riparian buffer regulations described in Section 304 of the Chatham County Watershed Protection Ordinance. The SWID will be public record and on file at the Planning and Watershed Protection Departments, and may be requested in the future for review by interested parties.

I understand that stream delineations for the property listed above will be made by County staff only once and that if future subdivisions are proposed within this property boundary, it will require a surface water identification by a private consultant at the property owner's expense.

James Bunn Riggsbee  
(Print Owner's Name)

M. Travis Riggsbee For James Bunn Riggsbee  
(Signature of Owner)  
(Date)

S&EC, PA - Bob Zarzecki  
(Print Authorized Agent Name)

Bob Zarzecki  
(Signature of Authorized Agent)  
(Date)

Digitally signed by Bob Zarzecki  
DN: cn=Bob Zarzecki, o=S&E Environmental Consultants, PA,  
ou=Watershed Department, email=bzarzecki@sandec.com, c=US  
Date: 2021.03.03 08:36:11 -0500





### Authorization to Enter Property Form

Date: 3/2/2021

PARCEL No. (AKPAR) 18909; 93852;

I, (print name) Travis M. Blake & Herndon Farms One, LLC, as owner of the property described above, or as a representative of the owner(s) do hereby convey permission to Chatham County staff to enter the property at their convenience to conduct a surface water identification (SWID) necessary to determine whether or not water features on my property are subject to the riparian buffer regulations described in Section 304 of the Chatham County Watershed Protection Ordinance. The SWID will be public record and on file at the Planning and Watershed Protection Departments, and may be requested in the future for review by interested parties.

I understand that stream delineations for the property listed above will be made by County staff only once and that if future subdivisions are proposed within this property boundary, it will require a surface water identification by a private consultant at the property owner's expense.

M. Travis Blake  
(Print Owner's Name)

M. Travis Blake 3/2/2021  
(Signature of Owner)  
(Date)

S&EC, PA - Bob Zarzecki  
(Print Authorized Agent Name)

Bob Zarzecki  
(Signature of Authorized Agent)  
(Date)

Digitally signed by Bob Zarzecki  
DN: cn=Bob Zarzecki, o=S&E Environmental Consultants, PA,  
ou=Watershed Department, email=zarzecki@seecpa.com, c=US  
Date: 2021.03.03 08:37:03 -0500