CHATHAM COUNTY
NORTH CAROLINA

WATERSHED PROTECTION DEPARTMENT

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

Fax: (919) 542-2698 ● E-mail: drew.blake@chathamcountync.gov ● Website: www.chathamcountync.gov

June 21, 2021

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

Project Name:	Pyewacket Subdivision Parcel # 90267
Location:	Jones Ferry Road, Chatham County
Subject Features:	Six (6) intermittent stream segments, seven (7) perennial stream segments, and fourteen (14) wetlands
Date of Determination:	March 22, 2021

Explanation:
The site visit was completed on March 22, 2021 by Drew Blake with Chatham County Watershed Protection and Kevin Murphrey of Soil and Environmental Consultants, PA (S&EC), on Parcel # 90267 that is located within the Jordan Lake watershed. S&EC personnel completed a previous site visit which resulted in the identification of three (3) ephemeral stream segments (S01, S04, S07), six (6) intermittent stream segments (streams S02, S03, S06, S08, S11, S12), seven (7) perennial stream segments (A, B, C, D, N, O, P) and fourteen (14) potential wetlands 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. The three ephemeral segments were removed as they lacked a well-defined channel and scored less than 10 points.

The following features were located within Orange County: Streams G, I, and J and Wetland 9

Required Riparian Buffers:
Portions of Stream D, L, M, N, and P as well as the entire segment of stream K 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. Features A, B, C, O, as well as portions of features D, N, and P were identified as perennial streams and will therefore require a 100-ft buffer from the top of bank landward on both sides of the features. All jurisdictional wetlands will require a 50-ft buffer proceeding landward from the flagged wetland boundary. Please refer to the attached streams and wetlands spreadsheets for more information.

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

Drew Blake
Senior Watershed Specialist, CESSWI

Enclosures:

- Figure 1: Wetland Sketch Map– Completed by S&EC
- Figure 2: NRCS Soil Survey – Completed by S&EC
- Figure 3: USGS Topographic Map – Completed by S&EC
- Figure 4: Stream and Wetland Survey Map
- S&EC Stream ID Forms
- USACE Notification of Jurisdictional Determination
- Site Photographs
- Major Subdivision Riparian Buffer Application
- Authorized Agent Form
- Authorization to Enter Property Form

cc: Warren Mitchell, P.E.
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

Note: For Orange County buffers, depending on slope value the buffer may be 65'

Legend

- Orange/Chatham County Line
- Evaluation Area
- Potentially Jurisdictional Wetland
- Potentially Jurisdictional Perennial Stream
- Potentially Jurisdictional Intermittent Stream
- Potentially Jurisdictional Ephemeral Stream
- Potentially Jurisdictional Linear Wetland
- Potential 50' Orange County Buffer
- Potential 30' Chatham County Buffer
- Potential 50' Chatham County Buffer
- Potential 100' Chatham County Buffer
- 2' Orange County Contours
- 2' Chatham County Contours

Per site visit with James Lastinger of the USACE on 03/05/2021

Features outlined in green are to be considered Non-JD Excluded Features and will be included in the AJD.

Per site visit with Drew Blake of Chatham County 03/22/2021

99B TT PL
99A TT PL
G
W9
DP2
117A & 118A TT CH
S16
S13
DP1
I
148A & 148B TT CH
S14
J
G
S17
S15
LW3 - LW7
S12
W8
88 TT CH
89 TT CH
65 TT PL
C
W11
W10
D
W13
W12
67 & 68 TT PL
S09
98 TT CH
K
S11
170 & 174 TT PL
LW1 & LW2
L
S08
S10
160 TT 169
64A TT 64B
168 TT 175
155A & 159B TT CH
W7
57A TT 57B
W6
48 & 56 TT PL
W5
DP3 (Upland)
S02
S18
M
P
S03
S06
200 TT 206
W14
W4
35 & 47 TT CH
W1
W3
B
01 & 08 TT CH
S05
A
N
O
17 & 34 TT CH
29 & 30 TT CH
09 & 16 TT CH
W2

Detailed Delineation of Waters of the US
Suitable for Preliminary Planning Only

S&EC reserves the right to modify this map based on more fieldwork, and any other additional information. Approximations were mapped using topographic maps, air photos and ground truthing. If the site is going to be disturbed, S&EC's detailed delineation should be approved and permitted by the U.S. Army Corps of Engineers as required. If the user of this work desires an accurate map of the regulated features flagged by S&EC, they should retain a NC Registered Professional Land Surveyor to locate S&EC's flagging.

NC Center for Geographic Information & Analysis

Wetland Sketch Map

Project No. 14504.W1	**Scale:** 1 = 200'	Jones Ferry Merrit Property Chatham & Orange County, NC
Project Mgr.: SB	05/13/2021	**Prepared by:** KM

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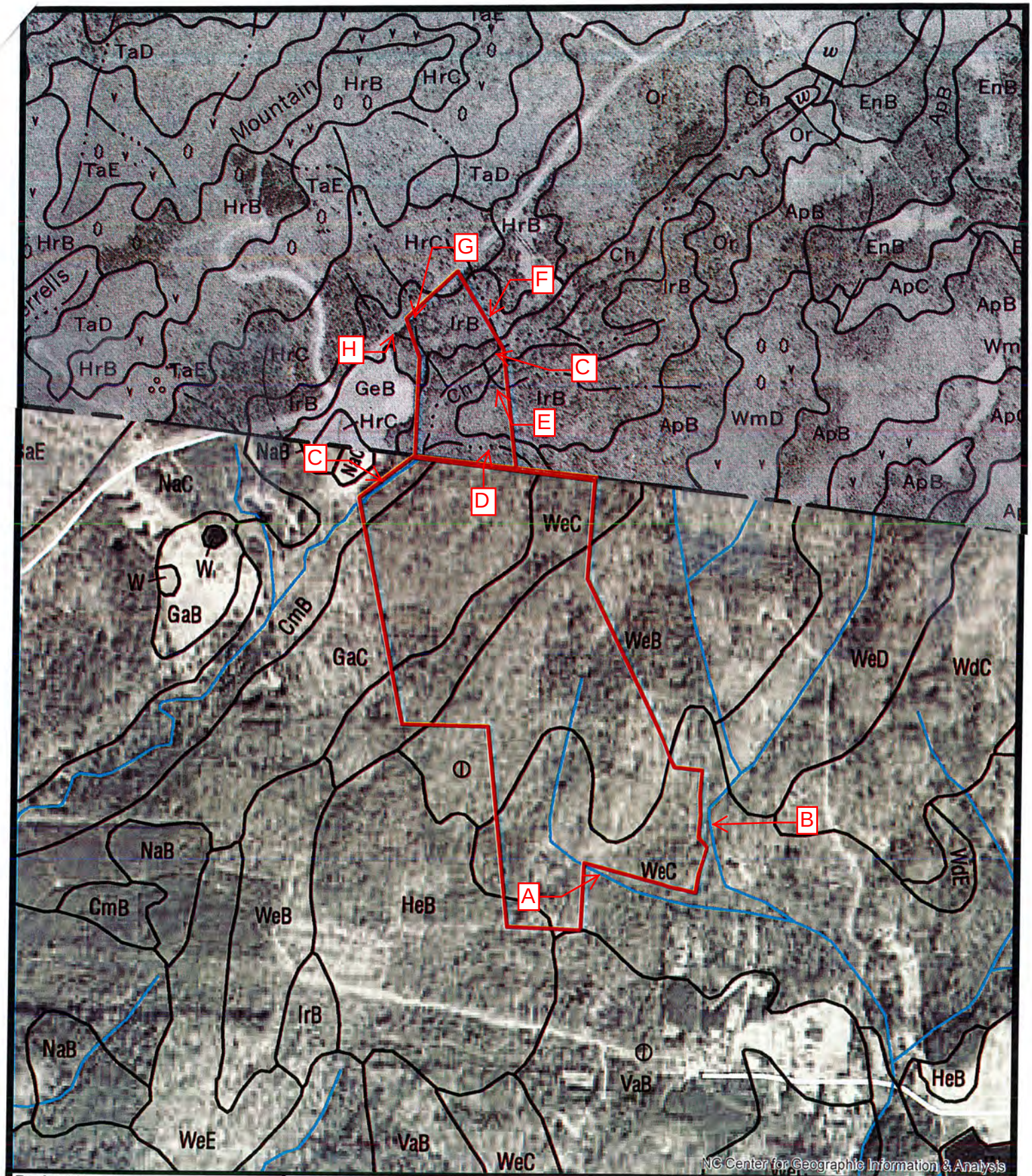
sandec.com

0 200 400 800
Feet



Project Number:	14504.W1
Project Manager:	SB
Scale:	1" = 1000'
Date:	11/11/2020

Map Title:

Figure 2: Soil Survey

Jones Ferry
Merritt Property
Chatham & Orange County, NC

Source: Chatham Co Sheet 4
Orange Co Sheet 31

0 1,000 2,000
Feet

N

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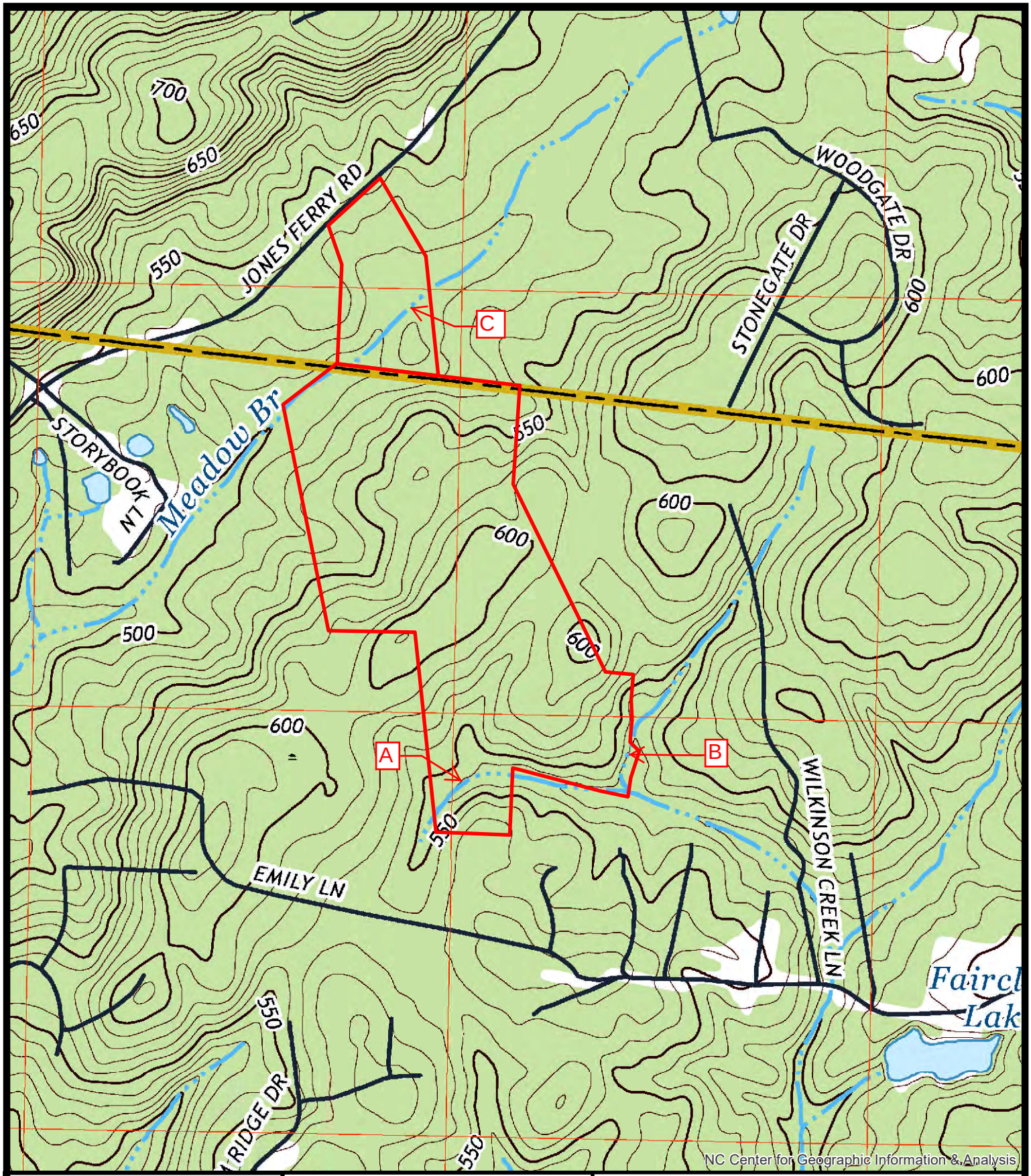

Project Number:	14504.W1
Project Manager:	SB
Scale:	1" = 1000'
Date:	11/11/2020

Map Title:

Figure 1 - USGS Map
Jones Ferry
Merritt Property
Chatham & Orange County, NC

Source: USGS Bynum, NC Quad

0 1,000 2,000
Feet

N

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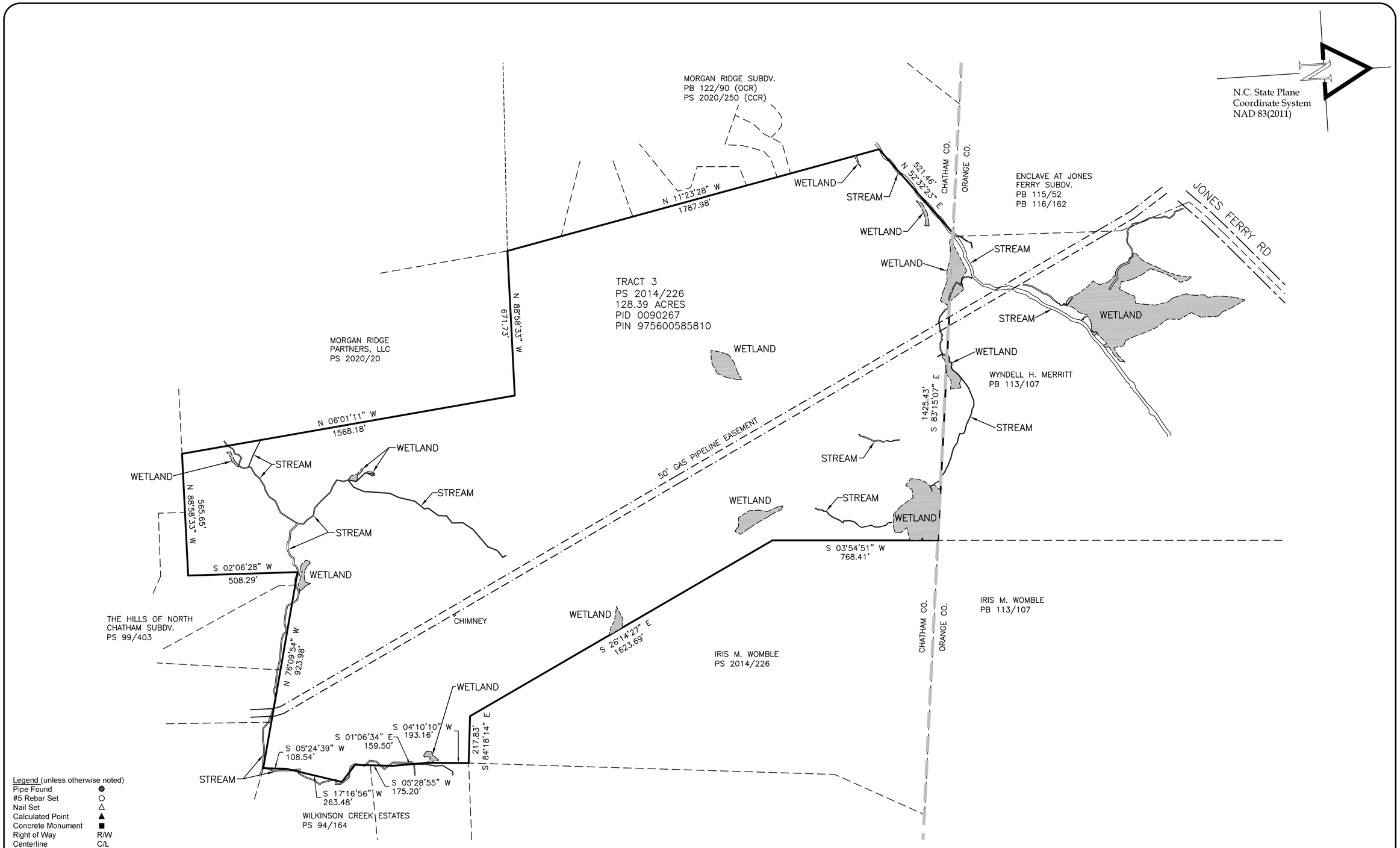

Legend (unless otherwise noted)

Pipe Found	●
#5 Rebar Set	○
Nail Set	△
Calculated Point	▲
Concrete Monument	■
Right of Way	R/W
Centerline	C/L
Property Line	P/L
Overhead Utilities	OHU
Total Distance	(T)
Property Line Surveyed	———
Property Line Tie	———
Deed or Plat Line	———
Right of Way Line	———
Overhead Utility Line	———
Utility Pole	⌀
Pole mounted area light	⌀
#5 Rebar Found	RF
State Plane Coordinates	SPC

Puckett Surveyors, PLLC
Professional Land Surveyors
FIRM LICENSE NO. (P-1168)

105 W Lake Rd
Creedmoor, N.C. 27522
P. 919.528.8900

File:21003

NORTH CAROLINA PROFESSIONAL SEAL L-3991 LAND SURVEYOR STEPHEN M. PUCKETT

PRELIMINARY PLAT
NOT FOR RECORDATION,
CONVEYANCES OR SALES

Wetland and Stream Map

Pyewacket Subdivision

June 3, 2021

Baldwin Township, Chatham County, N.C.

300 0 150 300 600

Graphic Scale (1"=300')

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

A

Date: 12/1/2020	**Project/Site:** Jones Farm Rd	**Latitude:** 35.8585584
Evaluator: SJEC-K.Murphree	**County:** Chatham	**Longitude:** -79.1498483
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 39	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 23)	Absent	Weak	Moderate	Strong
1[a]. 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)	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8.5)				
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 = 7.5)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 B

Date: 12/1/2020	**Project/Site:** Jones Farm	**Latitude:** 35.859847
Evaluator: SJEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.145803
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 33	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Pittsboro, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 17.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8.5)				
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 = 7)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 C

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.867726
Evaluator: SAEC - K. Murphrey	**County:** Chatham	**Longitude:** -79.152668
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 38	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 20)	Absent	Weak	Moderate	Strong
1[a]. 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)	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (9)				
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 = 9)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 (D(INT))

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.866932
Evaluator: SAEC- K. Murphrey	**County:** Chatham	**Longitude:** -79.149309
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 25	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8)				
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)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 D(Rev)

Date: 12/1/2020	Project/Site: JONES Ferry Rd	Latitude: 35.867131
Evaluator: SEC-K. Marrinucci	County: Chatham	Longitude: -79.152181
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 32.5	Stream Determination (circle one) Ephemeral Intermittent (Perennial)	Other Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 17)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (6.5)				
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 = 7)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 K

Date: 12/1/2020	**Project/Site:** JONES FERRY RD	**Latitude:** 35.866418
Evaluator: SJEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.150202
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19	**Stream Determination (circle one)** Ephemeral [Intermittent] Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (6.5)				
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 = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 L (EPh)

Date: 12/1/2020	**Project/Site:** JONES FERRY RD	**Latitude:** 35.86578
Evaluator: SdEC-K.Murphrey	**County:** Chatham	**Longitude:** -79.14911
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 8	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 3.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (1.5)				
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 = 3)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 L (INT)

Date: 12/1/2020	**Project/Site:** Jones Farm Rd	**Latitude:** 35.866133
Evaluator: SEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.149029
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 22.5	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (7)				
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)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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.

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Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 M (EPh)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.86141
Evaluator: SJEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.14914
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 6	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 1)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (2)				
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 = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 M(INT)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.861047
Evaluator: SJEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.149342
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 23	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (7)				
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 = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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.

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NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 N (EPH)

Date: 12/1/2020	**Project/Site:** JONES FERRY RD	**Latitude:** 35,86017
Evaluator: S&EC-K, MURPHREY	**County:** CHATHAM	**Longitude:** -79,15089
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 4.5	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** BYNUM, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (2)				
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 = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 N (INT)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.859526
Evaluator: SEC – K. Murphrey	**County:** Chatham	**Longitude:** -79.150248
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 22.5	**Stream Determination (circle one)** Ephemeral **Intermittent** Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (7.5)				
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 = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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.

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Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 N (Per)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.859014
Evaluator: SJEC-K.Murphrey	**County:** Chatham	**Longitude:** -79.149778
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 35	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 19)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (9)				
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 = 7)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 12/1/2020	**Project/Site:** Jones Perim Rd	**Latitude:** 35.858309
Evaluator: S&EC-K. Mcranney	**County:** Chatham	**Longitude:** -79.150809
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 33.5	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 18)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8.5)				
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 = 7)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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.

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Sketch:

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 P(INT)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.860348
Evaluator: SJEC - K. Murphy	**County:** Chatham	**Longitude:** -79.145716
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 21.5	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 8.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8)				
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 = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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.

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NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 P(Per)

Date: 12/1/2020	**Project/Site:** Jones Ferry Rd	**Latitude:** 35.860074
Evaluator: SEC-K. Murphrey	**County:** Chatham	**Longitude:** -79.145774
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 30	**Stream Determination (circle one)** Ephemeral Intermittent (Perennial)	**Other** Bynum, NC *e.g. Quad Name:*

A. Geomorphology (Subtotal = 13.5)	Absent	Weak	Moderate	Strong
1[a]. 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	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8.5)				
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 = 8)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (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:

Sketch:

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. **SAW-2021-00615** County: **Chatham** U.S.G.S. Quad: **NC- Bynum**

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Requestor: **Soil and Environmental Consultants**
Steven Ball
Address: **8412 Falls of Neuse Road, suite 105**
Raleigh, NC 27615
Telephone Number: **919-691-2114**
E-mail: **sball@sandec.com**

Size (acres) **19**
Nearest Waterway **Wilkinson Creek**
USGS HUC **03030002**
Nearest Town **Chapel Hill**
River Basin **Cape Fear**
Coordinates Latitude: **35.8585**
Longitude: **-79.1498**

Location description: **The project site is approximately 19 acres located adjacent to Jones Ferry Road, near the town of Chapel Hill, (Orange and Chatham County) North Carolina. The approved portion of this determination only applies to waters K, W5, W6, and W7 as depicted on the attached delineation map. The preliminary portion of this determination applies to all other waters as depicted on the attached delineation map.**

Indicate Which of the Following Apply:

A. Preliminary Determination

☒ There appear to be **waters, including wetlands** on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). The **waters, including wetlands** have been delineated, and the delineation has been verified by the Corps to be sufficiently accurate and reliable. The approximate boundaries of these waters are shown on the enclosed delineation map dated **3/5/2021**. Therefore this preliminary jurisdiction determination may be used in the permit evaluation process, including determining compensatory mitigation. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD will treat all waters and wetlands that would be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction.

☐ There appear to be **waters, including wetlands** on the above described project area/property, that may be subject to Section 404 of the Clean Water Act (CWA)(33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). However, since the **waters, including wetlands** have not been properly delineated, this preliminary jurisdiction determination may not be used in the permit evaluation process. Without a verified wetland delineation, this preliminary determination is merely an effective presumption of CWA/RHA jurisdiction over all of the **waters, including wetlands** at the project area, which is not sufficiently accurate and reliable to support an enforceable permit decision. We recommend that you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

B. Approved Determination

☐ There are Navigable Waters of the United States within the above described project area/property subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

☐ There are **waters, including wetlands** on the above described project area/property subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

☐ We recommend you have the **waters, including wetlands** on your project area/property delineated. As the Corps may not be able to accomplish this wetland delineation in a timely manner, you may wish to obtain a consultant to conduct a delineation that can be verified by the Corps.

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☐ The **waters, including wetlands** on your project area/property have been delineated and the delineation has been verified by the Corps. The approximate boundaries of these waters are shown on the enclosed delineation map dated **DATE**. We strongly suggest you have this delineation surveyed. Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

☐ The **waters, including wetlands** have been delineated and surveyed and are accurately depicted on the plat signed by the Corps Regulatory Official identified below on **DATE**. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

☒ There are no waters of the U.S., to include wetlands, present on the above described project area/property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344) **(Waters K, W5, W6, W7).** Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

☐ The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in **Morehead City, NC, at (252) 808-2808** to determine their requirements.

Placement of dredged or fill material within waters of the US, including wetlands, without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). Placement of dredged or fill material, construction or placement of structures, or work within navigable waters of the United States without a Department of the Army permit may constitute a violation of Sections 9 and/or 10 of the Rivers and Harbors Act (33 USC § 401 and/or 403). If you have any questions regarding this determination and/or the Corps regulatory program, please contact **James Lastinger at 919-554-4884 ext 32 or James.C.Lastinger@usace.army.mil**.

C. Basis For Determination: Basis For Determination: See the approved jurisdictional determination form and preliminary jurisdictional determination form dated 04/14/2021.

D. Remarks: None.

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information **(This information applies only to approved jurisdictional determinations as indicated in B. above)**

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers
South Atlantic Division
Attn: Phillip Shannin, Review Officer
60 Forsyth Street SW, Room 10M15
Atlanta, Georgia 30303-8801

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **06/13/2021**.
It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: James Lastinger

Date of JD: **04/14/2021** Expiration Date of JD: **04/13/2026**

SAW-2021-00615

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Copy furnished:

Property Owner:

	Wyndell Merritt
Address:	**10144 Pamunkey Drive**
	New Kent, VA 23124
Telephone Number:	**804-932-3015**
E-mail:	**huntpeck@msn.com**

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: **Soil and Environmental Consultants**, **Steven Ball**	File Number: **SAW-2021-00615**	Date: **04/14/2021**

Attached is:		See Section below
☐	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
☐	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
☐	PERMIT DENIAL	C
☒	APPROVED JURISDICTIONAL DETERMINATION	D
☒	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at or http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx or the Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: **District Engineer, Wilmington Regulatory Division** **Attn: James Lastinger** **Raleigh Regulatory Office** **U.S Army Corps of Engineers** **3331 Heritage Trade Drive, Suite 105** **Wake Forest, North Carolina 27587**	If you only have questions regarding the appeal process you may also contact: Mr. Phillip Shannin, Administrative Appeal Review Officer CESAD-PDO U.S. Army Corps of Engineers, South Atlantic Division 60 Forsyth Street, Room 10M15 Atlanta, Georgia 30303-8801 Phone: (404) 562-5137

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, **Attn: James Lastinger , 69 Darlington Avenue, Wilmington, North Carolina 28403**

For Permit denials, Proffered Permits and Approved Jurisdictional Determinations send this form to:

Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Phillip Shannin, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801
Phone: (404) 562-5137

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 04/14/2021
ORM Number: SAW-2021-00615
Associated JDs: SAW-2021-00165 (PJD)
Review Area Location[1]: State/Territory: NC City: Chapel Hill County/Parish/Borough: Chatham
Center Coordinates of Review Area: Latitude 35.8585 Longitude -79.1498

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
K	275	linear feet	N/A.	Stream K terminates into diffuse overland sheet flow, and does not contribute flow to an a(1) water in a typical year.
W5	0.03	acre(s)	(b)(1) Non-adjacent wetland.	Wetland W5 is completely surrounded by uplands
W6	0.26	acre(s)	(b)(1) Non-adjacent wetland.	Wetland W6 is completely surrounded by uplands
W7	0.19	acre(s)	(b)(1) Non-adjacent wetland.	Wetland W7 is completely surrounded by uplands

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- ☒ Information submitted by, or on behalf of, the applicant/consultant: JD request packet dated 1/27/2021
  This information is sufficient for purposes of this AJD.
  Rationale: N/A
- ☐ Data sheets prepared by the Corps: Title(s) and/or date(s).
- ☒ Photographs: Aerial and Other: aerial and site photos of features
- ☒ Corps site visit(s) conducted on: March 5, 2021
- ☐ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).
- ☐ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.
- ☒ USDA NRCS Soil Survey: Chatham County, sheet 4, Orange County, sheet 31
- ☒ USFWS NWI maps: USFWS NWI
- ☒ USGS topographic maps: 2019 Bynum Quad

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS/WBD/NHD data/maps	NHD dataset
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	LiDar
State/Local/Tribal Sources	N/A.
FEMA/FIRM maps	NC FIRM maps

B. Typical year assessment(s): APT ran for date of site visit indicated wetter than normal conditions, and no surface water flow contribution was observed within stream K.

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

C. Additional comments to support AJD: N/A or provide additional discussion as appropriate.

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 04/14/2021

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Soil and Environmental Consultants, Steven Ball, 8412 Falls of Neuse Road, suite 105, Raleigh, NC 27615

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: Wilmington District, Jones Ferry Road site, SAW-2021-00615

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: The project site is approximately 19 acres located adjacent to Jones Ferry Road, near the town of Chapel Hill, (Orange and Chatham County) North Carolina. The approved portion of this determination only applies to waters K, W5, W6, and W7 as depicted on the attached delineation map. The preliminary portion of this determination applies to all other waters as depicted on the attached delineation map.

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: NC County: Chatham City: Chapel Hill
Center coordinates of site (lat/long in degree decimal format): Latitude: 35.8585 Longitude: -79.1498

Universal Transverse Mercator:

Name of nearest waterbody: Wilkinson Creek

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐Office (Desk) Determination. Date:

☒Field Determination. Date(s): March 5, 2021

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION

Site Number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resources in review area (acreage and linear feet, if applicable	Type of aquatic resources (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
A	35.858584	-79.149843	920 LF	Non-wetland	Section 404
B	35.859847	-79.145803	810 LF	Non-wetland	Section 404
C	35.867726	-79.152668	1,620 LF	Non-wetland	Section 404
D (Int)	35.866932	-79.149309	135 LF	Non-wetland	Section 404
D (Per)	35.867131	-79.152181	458 LF	Non-wetland	Section 404
G	35.870129	-79.153470	591 LF	Non-wetland	Section 404
I	35.869033	-79.151796	20 LF	Non-wetland	Section 404
J	35.868591	-79.152345	273 LF	Non-wetland	Section 404
L	35.866133	-79.149029	172 LF	Non-wetland	Section 404
M	35.861047	-79.149342	732 LF	Non-wetland	Section 404
N (Int)	35.859526	-79.150248	233 LF	Non-wetland	Section 404
N (Per)	35.859014	-79.149778	265 LF	Non-wetland	Section 404
O	35.858309	-79.150809	129 LF	Non-wetland	Section 404

P (Int)	35.860348	-79.145716	30 LF	Non-wetland	Section 404
P (Per)	35.860074	-79.145774	80 LF	Non-wetland	Section 404
W1	35.859645	-79.150299	0.01 Ac	Wetland	Section 404
W2	35.857915	-79.150889	0.01 Ac	Wetland	Section 404
W3	35.858812	-79.148950	0.07 Ac	Wetland	Section 404
W4	35.860122	-79.145854	0.04 Ac	Wetland	Section 404
W8	35.866664	-79.148972	0.68 Ac	Wetland	Section 404
W9	35.869693	-79.151852	2.50 Ac	Wetland	Section 404
W10	35.867428	-79.152789	0.27 Ac	Wetland	Section 404
W11	35.866603	-79.154502	0.04 Ac	Wetland	Section 404
W12	35.866353	-79.154772	0.02 Ac	Wetland	Section 404
W13	35.867144	-79.151457	0.28 Ac	Wetland	Section 404
LW1	35.867084	-79.151785	20 LF	Wetland	Section 404
LW2	35.867577	-79.153317	105 LF	Wetland	Section 404

1. The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre- construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction

in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply) Checked items are included in the administrative record and are appropriately cited:

☒Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: **attached**

☒Data sheets prepared/submitted by or on behalf of the PJD requestor. Datasheets:

☒Office concurs with data sheets/delineation report.

☐Office does not concur with data sheets/delineation report. Rationale:_____

☐Data sheets prepared by the Corps:_____

☐Corps navigable waters' study:

☒U.S. Geological Survey Hydrologic Atlas:

☒USGS NHD data:

☐USGS 8 and 12 digit HUC maps:

☒U.S. Geological Survey map(s). Cite scale & quad name: **Bynum Quad**

☒Natural Resources Conservation Service Soil Survey. Citation: **Chatham and Orange County**

☒National wetlands inventory map(s). Cite name: **USFWS**

☐State/local wetland inventory map(s):_____

☒FEMA/FIRM maps: **NC FIRM**

☐100-year Floodplain Elevation is:_____ (National Geodetic Vertical Datum of 1929)

☒Photographs: ☒ Aerial (Name & Date): **undated**

or ☒ Other (Name & Date): **site photos**

☐Previous determination(s). File no. and date of response letter:_____

☐Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

James Lastinger

Signature and date of Regulatory staff member completing PJD
04/14/2021

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

Note: For Orange County buffers, depending on slope value the buffer may be 65'

Legend

- Orange/Chatham County Line
- Evaluation Area
- Potentially Jurisdictional Wetland
- Potentially Jurisdictional Perennial Stream
- Potentially Jurisdictional Intermittent Stream
- Potentially Jurisdictional Linear Wetland
- Potential 50' Orange County Buffer
- Potential 50' Chatham County Buffer
- Potential 100' Chatham County Buffer
- 2' Orange County Contours
- 2' Chatham County Contours

Per site visit with James Lastinger of the USACE on 03/05/20201

Features outlined in green are to be considered Non-JD Excluded Features and will be included in the AJD.

99B TT PL
99A TT PL
G
W9
H
DP2
117A & 118A TT CH
S16
S13
DP1
I
S14
148A & 148B TT CH
J
G
S17
S15
LW3 - LW7
S12
W8
88 TT CH
89 TT CH
C
65 TT PL
W11
W10
D
W12
K
S09
67 & 68 TT PL
98 TT CH
LW1 & LW2
S11
170 & 174 TT PL
L
S08
S10
160 TT 169
64A TT 64B
168 TT 175
155A & 159B TT CH
W7
57A TT 57B
W6
48 & 56 TT PL
W5
S02
M
P
S06
S03
W4
35 & 47 TT CH
W1
W3
B
01 & 08 TT CH
S05
A
N
O
17 & 34 TT CH
29 & 30 TT CH
09 & 16 TT CH
W2

Detailed Delineation of Waters of the US
Suitable for Preliminary Planning Only

S&EC reserves the right to modify this map based on more fieldwork, and any other additional information. Approximations were mapped using topographic maps, air photos and ground truthing. If the site is going to be disturbed, S&EC's detailed delineation should be approved and permitted by the U.S. Army Corps of Engineers as required. If the user of this work desires an accurate map of the regulated features flagged by S&EC, they should retain a NC Registered Professional Land Surveyor to locate S&EC's flagging.

NC Center for Geographic Information & Analysis

Wetland Sketch Map

Project No. 14504.W1	Scale: 1 = 200'	Jones Ferry Merrit Property Chatham & Orange County, NC
Project Mgr.: SB	03/15/2021	Prepared by: KM

S&EC
Soil & Environmental Consultants, PA
8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467
sandec.com

0 200 400 800
Feet

Representative Photos for

Jones Ferry Road (S&EC Project# 14504)

Feature A & N Confluence

Feature B_Perennial

Feature C_Perennial

Feature M_Ephemeral

S01_Ephemeral

S02_Ephemeral/Intermittent break

S06_Intermittent/Perennial break

S07_Ephemeral

S09_Feature L dissipates into W8

W1


S
180
SW
210
240
W
270
NW
300
330
249°W (T) 35.858047°, -79.150593° ±72ft 547ft
01 Dec 2020, 10:21:53

W3

W4

W5

W6

W13

CHATHAM COUNTY
NORTH CAROLINA

Watershed Protection Department
Website: www.chathamnc.org

Date Received: 2/26/21 PL# RBMAJ 21-01

Riparian Buffer Review Application
Surface Water Identification Request for
Major Subdivisions

Tract Information

Parcel #: 90267 Watershed District (and name of creek if known): WS-IV PA

Property Owner: Wyndell Merritt MD

Location/Physical Address of Tract: on Jones Ferry Road at Orange County Line

Driving Directions from Pittsboro: Head north on 15-501, take a left on Hamlets Chapel Road; Hamlets Chapel becomes Jones Ferry Road. Travel on Jones Ferry Road to the Chatham/Orange County Line. Go right into logging road across street from 3719 Jones Ferry Road

Subdivision Name (if applicable): pyewacket subdivision

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

Name: Steven Ball

Contact Phone Numbers: (h) _____ (w) 919-846-5900 (c) 919-691-2114

E-mail: sball@sandec.com

Mailing Address: 8412 Falls of Neuse Road 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? 2 days

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 –

Watershed Protection Department
Website: www.chathamnc.org

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: _____ Total Paid: $_____

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: Lyndell H. Merritt Date: 1/7/21

CHATHAM COUNTY

AUTHORIZED AGENT FOR FORM

PROPERTY LEGAL DESCRIPTION:

LOT NO. _____ PARCEL ID (PIN) 90267 PARCEL SIZE 128.39

STREET ADDRESS: Jones Ferry Rd

Please print:
Property Owner: _____

Property Owner: _____

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

Kevin Murphrey, 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):

Telephone: _____ E-mail: _____

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

_____ _____
Owner Authorized Signature Agent Authorized Signature

Date: _____ Date: _____

S&EC

Soil & Environmental Consultants, PA

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467
sandec.com

PROPERTY OWNER CERTIFICATION / AGENT AUTHORIZATION

Project Name/Description: Jones Ferry Merrit Property S&EC Project #14504.W1

Date: 12/10/2020

The Department of the Army
U.S. Army Corps of Engineers, Wilmington District
69 Darlington Avenue
Wilmington, NC 28403

Attn: _____ Field Office: Wilmington

I, the undersigned, a duly authorized owner of record of the property/properties identified herein, do authorize representatives of the Wilmington District, U.S. Army Corps of Engineers (Corps) and Soil & Environmental Consultants, PA (S&EC) staff (as my agent) to enter upon the property herein described for the purpose of conducting on-site investigations and issuing a determination associated with Waters of the U.S. subject to Federal jurisdiction under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. This document also authorizes S&EC (as my agent) to act on my behalf and take all actions necessary for the processing, issuance and acceptance of a permit or certification and any and all associated standard and special conditions. This notification supersedes any previous correspondence concerning the agent for this project.

NOTICE: This authorization, for liability and professional courtesy reasons, is valid only for government officials to enter the property when accompanied by S&EC staff. You should call S&EC to arrange a site meeting prior to visiting the site.

PARCEL INFORMATION:
Parcel Index Number(s) (PIN): 90267
Site Address: off Jones Ferry Road
City, County, State: Chapel Hill, Chatham County NC

PROPERTY OWNER INFORMATION:
Name: Wyndell Merritt
Address: 10144 Pamunkey Drive , New Kent, Va 23124
Phone No.: (804) 932-3015 Fax No.: ( ) Mobile No.: (804) 314-9685
Email: huntpeck@msn.com

WYNDELL H. MERRITT MD
Property Owner (please print)

1/17/21
Date

Wyndell H Merritt MD
Property Owner Signature

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

CHATHAM COUNTY
NORTH CAROLINA

Watershed Protection Department

P.O. Box 548
Pittsboro, NC 27312

Website: www.chathamnc.org

Authorization to Enter Property Form

Date: _____

PARCEL No. (AKPAR) 90267

I, (print name) Wyndell Merritt, 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.

Wyndell Merritt MD
(Print Owner's Name)

/s/ Wyndell H. Merritt MD 1/17/21
(Signature of Owner)
(Date)

_____
(Print Authorized Agent Name)

_____
(Signature of Authorized Agent)
(Date)