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

August 30, 2022

Mr. Joshua Harvey
Soil & Environmental Consultants, PA
8412 Falls of Neuse Road, Suite 104
Raleigh, North Carolina 27615

Project Name:	Parks at Meadowview, Parcel #'s 10893, 83997, 61935, 5983, 85239, 85043, 5909, 5912, 89724, 89725, 89728, 89727
Location:	5430 NC-87, Pittsboro, NC 27312, Chatham County
Subject Features:	Five (5) intermittent stream segments, nine (9) perennial stream segments, eleven (11) ephemeral stream segments and forty two (42) potential wetlands.
Date of Determination:	June 30, 2022

Explanation:
The site visit was completed on June 30, 2022, by Drew Blake with Chatham County Watershed Protection and Steven Ball of Soil & Environmental Consultants, PA. (S&EC), on Parcel #'s 10893, 83997, 61935, 5983, 85239, 85043, 5909, 5912, 89724, 89725, 89728, 89727 that is located within the Dry Creek Haw River watershed. S&EC personnel completed a previous site visit which resulted in the identification of five (5) intermittent stream segments, nine (9) perennial stream segments, eleven (11) ephemeral stream segments and forty-two (42) 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 site visit resulted in the removal of one ephemeral stream segment and the relocation of the perennial start point for Feature B was moved upstream approximately 300-ft. Both updates are depicted on Wetland Sketch Map, Post Chatham County that was provided by S&EC.

Required Riparian Buffers:
All ephemeral stream segments will require a 30-ft buffer from the top of bank landward on both sides. All intermittent stream segments will require a 50-ft buffer from the top of bank landward on both sides. All perennial stream segments will require a 100-ft buffer from the top of bank landward on both sides. All perennial stream segments that have mapped floodplains will require the riparian buffer to extend to the limits of the mapped floodplain if it is more restrictive than the required riparian buffer. A 50-ft buffer will be required on all wetlands from the flagged boundary landward.

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,

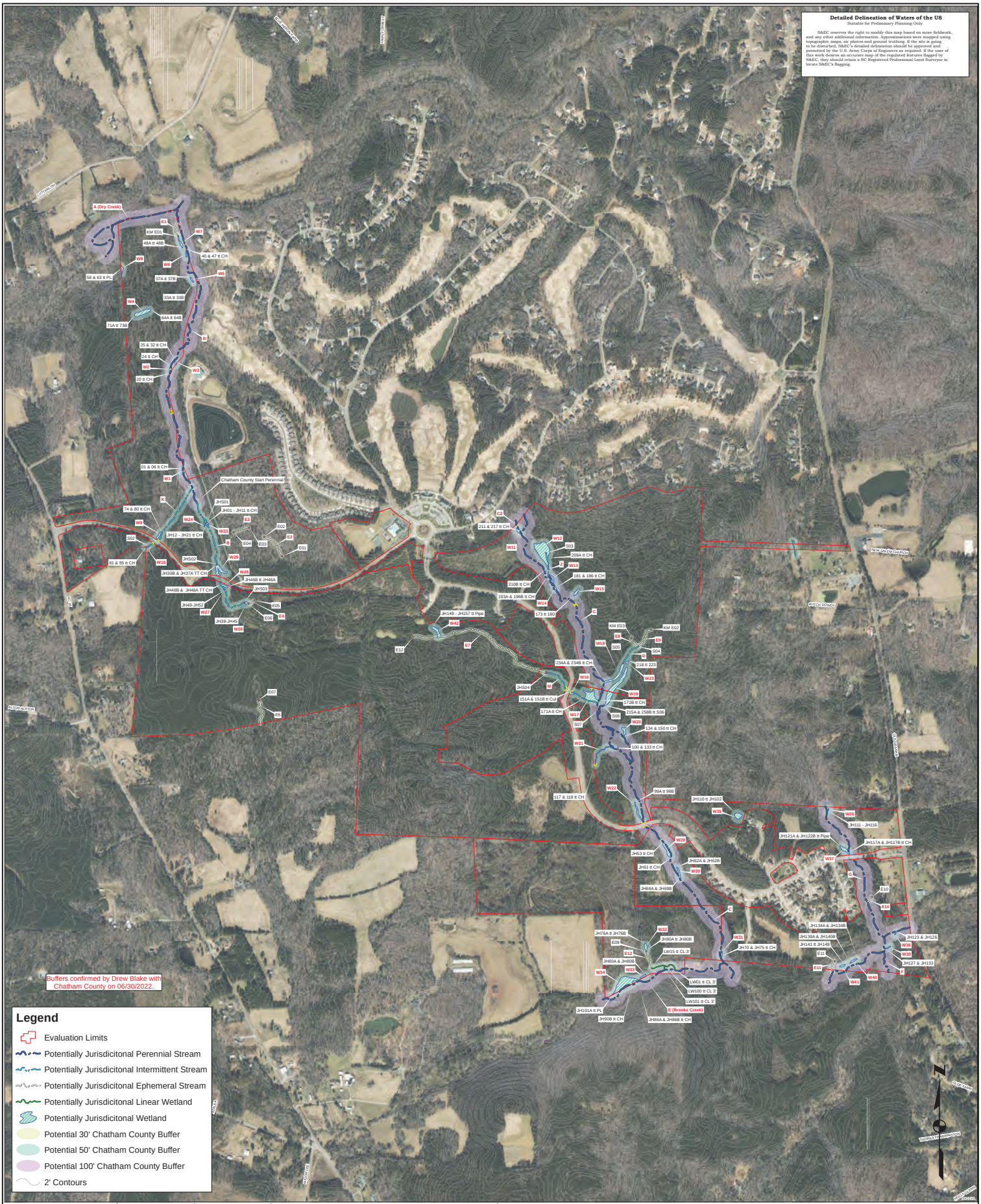
Drew Blake

Drew Blake
Assistant Director, CESSWI

Enclosures:

- Figure 1: USGS Topographic Map – Completed by S&EC
- Figure 2: NRCS Soil Survey – Completed by S&EC
- Figure 3: Wetland Sketch 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
- Site Photographs – provided by S&EC

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



Project No. **8682.W6**	**Scale:** **1" = 400'**	NC OneMap Wake County GIS	Wetland Sketch Map (Post Chatham County)
Project Mgr.: **Steven Ball**	**09/20/2021**	**Prepared by: JH**	**Parks of Meadowview Chatham County, NC**

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Streams

Stream Name	Latitude	Longitude	Approximate Length on Site (linear feet)	Flow Regime	Stream Form	Buffer Jurisdiction
E1	35.793533	-79.23846	350 LF	Ephemeral	1	30' Buffer
E2	35.782251	-79.234044	325 LF	Ephemeral	1	30' Buffer
E3	35.782808	-79.235604	250 LF	Ephemeral		30' Buffer
E4	35.780241	-79.235111	160 LF	Ephemeral	4	30' Buffer
E5	35.76408	-79.234718	300 LF	Ephemeral	5	30' Buffer
E7	35.778814	-79.224445	2250 LF	Ephemeral	7	30' Buffer
E8	35.778797	-79.218645	150 LF	Ephemeral	13	30' Buffer
E9	35.778866	-79.218193	400 LF	Ephemeral	13	30' Buffer
E10	35.769813	-79.208346	100 LF	Ephemeral	10	30' Buffer
E11	35.767461	-79.209832	120 LF	Ephemeral	10	30' Buffer
E12	35.767679	-79.217945	175 LF	Ephemeral		30' Buffer
B (Int)	35.78325	-79.237291	2097 LF	Intermittent	2	50' buffer
D intermittent	35.778453	-79.218803	303 LF	Intermittent	12	50' buffer
K Intermittent	35.783588	-79.238242	901LF	Intermittent	2	50' buffer
M intermittent	35.777417	-79.221645	756 LF	Intermittent	6	50' buffer
Z intermittent	35.781551	35.781551	98LF	Intermittent	12	50' buffer
A (Dry Creek) perennial	35.793945	-79.239053	794 LF	Perennial		100' buffer
B perennial	35.789091	-79.238326	1487 LF	Perennial	11	100' buffer
C perennial	35.774389	-79.218652	7958 LF	Perennial	3	100' buffer
C2 perennial	35.783009	-79.223241	273 LF	Perennial	3	100' buffer
C3 perennial	35.776576	-79.219992	90 LF	Perennial	3	100' buffer
C4 perennial	35.776404	-79.220167	46 LF	Perennial	3	100' buffer
E (Brooks Creek) perennial	35.76834	-79.207672	1752 LF	Perennial		100' buffer
F perennial	35.767786	-79.207664	313 LF	Perennial		100' buffer
G perennial	35.7708	-79.20865	1903 LF	Perennial	9	100' buffer

Wetlands

Latitude	Longitude	Total Approximate Size on Site (acres)	Data Form	Buffer Jurisdiction
35.784889	-79.238151	0.04		50' buffer
35.788421	-79.238706	0.03		50' buffer
35.788672	-79.238444	0.02		50' buffer
35.79044	-79.239846	0.21		50' buffer
35.791589	-79.237764	0.03		50' buffer
35.792536	-79.238009	0.03		50' buffer
35.792929	-79.238259	0.06		50' buffer
35.791988	-79.240766	0.04		50' buffer
35.78257	-79.239163	0.05		50' buffer
35.782149	-79.239665	0.006		50' buffer
35.782751	-79.223592	0.05		50' buffer
35.782123	-79.222712	0.8		50' buffer
35.781051	-79.222059	0.05		50' buffer
35.780715	-79.221997	0.02		50' buffer
35.780566	-79.221101	0.05		50' buffer
35.777018	-79.221241	0.04		50' buffer
35.776912	-79.22052	0.36		50' buffer
35.777687	-79.219249	0.22		50' buffer
35.777243	-79.219459	0.61		50' buffer
35.77572	-79.218972	0.07		50' buffer
35.775002	-79.220006	0.06		50' buffer
35.775002	-79.220006	0.06		50' buffer
35.778131	-79.218838	0.02		50' buffer
35.782907	-79.237181	0.008		50' buffer
35.781405	-79.236597	0.2		50' buffer
35.780791	-79.236314	0.05		50' buffer
35.780662	-79.236323	0.005		50' buffer
35.780184	-79.235364	0.02		50' buffer
35.771468	-79.217086	0.16		50' buffer
35.770706	-79.216594	0.06		50' buffer
35.767806	-79.214721	0.02		50' buffer
35.768038	-79.218043	0.06		50' buffer
35.767037	-79.218135	0.04		50' buffer
35.766898	-79.218925	0.67		50' buffer
35.772732	-79.214031	0.12		50' buffer
35.772929	-79.210162	0.01		50' buffer
35.771571	-79.209463	0.1		50' buffer
35.76857	-79.20721	0.01		50' buffer
35.768063	-79.207501	0.02		50' buffer
35.767613	-79.209036	0.03		50' buffer
35.767412	-79.209564	0.03		50' buffer
35.779275	-79.227135	0.13		50' buffer
35.767414	-79.217463	368		50' buffer
35.767313	-79.217221	55		50' buffer

S&EC

Soil & Environmental Consultants, PA

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September 27, 2021
S&EC Project No.: 8682.W6

To: True Homes, LLC
Attn: Rich Taylor
2649 Brekonridge Centre Drive, Suite 104,
Monroe, NC 28110

Re: Wetland Delineation and Stream Evaluation
Parks at Meadowview Property
Chatham County, NC

Mr. Taylor:

On September 02, 2021, S&EC personnel completed the wetland delineation and stream evaluation on the Parks at Meadowview Property in Chatham County, NC. You will find the attached report detailing our findings. Maps that further document the wetland and stream related site characteristics are also attached.

The next step in the wetland and stream verification process is to visit the site with the Army Corps of Engineers' agent for Chatham County. In addition, a site meeting must be conducted with an agent for Chatham County (for review of the revised Chatham County Watershed Ordinance). Furthermore, I am attaching a copy of our agent authorization form that you should complete and return; this will grant S&EC authority to correspond with the Corps on your behalf.

As you move forward in planning your development, S&EC personnel are available for site plan review and permit consultation services. Please contact S&EC if you have any questions related to wetland and stream regulations or if you need clarification of the attached report.

Sincerely,
SOIL & ENVIRONMENTAL CONSULTANTS, PA

Steven Ball
Digitally signed by Steven Ball
DN: cn=Steven Ball, o, ou=S&EC, email=sball@sandec.com, c=US
Date: 2021.09.27 15:35:13 -04'00'

Joshua Harvey
Digitally signed by Joshua Harvey
Date: 2021.09.27 15:19:23 -04'00'

Steven Ball, RF, PWS
Project Manager

Joshua Harvey
Environmental Scientist

Attachments:
1) Wetland Delineation Report
2) USGS site vicinity map
3) NRCS Soil Survey
4) Wetland & Stream Sketch Map
5) Agent Authorization Form

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CHATHAM COUNTY BUFFER EVALUATION FOR THE PARKS AT MEADOWVIEW PROPERTY

On **SEPTEMBER 02, 2021**, S&EC personnel completed a Chatham County Buffer evaluation on the Parks at Meadowview Property (±693 acres). The site is located off Parks Meadow Drive in Chatham County, NC. Figure 1 and Figure 2 show the location of the site on a USGS topographic quadrangle and NRCS County Soil Survey, respectively.

EXECUTIVE SUMMARY

We have determined that some on-site features will likely require county buffer protection as well as be regulated by the USACE. The attached sketch map depicts the approximate location of each buffer area. The exact location of each delineated area should be surveyed with appropriate buffer widths established and incorporated into planning for the project.

SCOPE OF WORK

The Chatham County Buffer Evaluation was conducted according to guidelines referenced in the Chatham Watershed Protection Ordinance Section 304(E)10. Specifically, the ordinance directs evaluators to the "Field Procedures for Classification of Streams and Waterbodies, Chatham County, NC" (December 12, 2007), which "prescribes methodologies for establishing the location and extent of streams and water bodies in the field." Areas on the site that met the criteria for buffer protection were delineated in the field with numbered, orange S&EC logo flagging. It is important to note that some features described in this report may meet the criteria for jurisdictional wetlands or other Waters of the US regulated by the US Army Corps of Engineers (USACE) and/or the NC Division of Water Quality (NC-DWQ) under authority of the Clean Water Act (33 USC 1344).

RESULTS & RECOMMENDATIONS

The results of the Chatham County Buffer Evaluation are discussed below.

Chatham County Buffers:

We have determined that the following on-site areas meet the criteria for buffer protection as defined by the Chatham County Watershed Protection Ordinance. Please refer to the attached "Wetland Sketch Map" for specific flag numbers and approximate locations.

A number of jurisdictional features were observed during the site evaluation; the approximate locations of each are illustrated on the attached wetland sketch map.

Perennial Streams that would likely require a 100-foot buffer were identified on-site and are described below:

- Feature A (Dry Creek) is a wide perennial channel along the northern property boundary.
- Feature B (UT to Dry Creek) starts at flag S01 and will likely be considered perennial until its convergence with Feature A.

- Feature C (UT to Brooks Creek) starts off property to the north and is likely perennial until its convergence with Feature E.
- Feature C2 (UT to Brooks Creek) starts off property to the north and is likely perennial until its convergence with Feature C2.
- Feature C3 (UT Brooks Creek) starts at flag C3 and is believed to be perennial until its convergence with Feature C.
- Feature C4 (UT to Brooks Creek) starts at flag C4 and is believed to be perennial until its convergence with Feature C.
- Feature E (UT to Brooks Creek) starts off property to the west and is believed to be perennial throughout its extent.
- Feature G (UT to Brooks Creek) starts off property to the north and will likely be considered perennial until its convergence with Feature E.
- Feature F (UT to Brooks Creek) starts off property to the south as will likely be considered perennial until its convergence with Feature E.

Intermittent Streams that would likely require a 50-foot buffer were identified on-site and are described below:

- Feature B (UT to Dry Creek) starts at flag JHS03 and is believed to be intermittent until dissipating into wetland W25. This feature starts again at flag JHS02 and is believed to be intermittent until flag S01.
- Feature B2 (UT to Dry Creek) starts of flag JHS01 and is believed to be intermittent until its convergence with Feature B.
- Feature D (UT to Brooks Creek) starts at flag S04 and will likely be considered intermittent until dissipating into a wetland at flag S05.
- Feature G (UT to Brooks Creek) starts off property to the north and is believed to be intermittent throughout its extent.
- Feature M (UT to Brooks Creek) starts at flag JHS04 and is believed to be intermittent until its convergence with Feature C.
- Feature K (UT to Dry Creek) starts at flag S02 and is believed to be intermittent until its convergence with Feature B.
- Feature Z (UT to Brooks Creek) starts at flag S03 and is believed to be intermittent until its convergence with Feature C.

Ephemeral Streams that would likely require a 30-foot buffer were identified on-site and are described below:

- Feature E1 (UT to Dry Creek) starts at flag KM E01 and is believed to be ephemeral until its convergence with Feature B.
- Feature E2 (UT to Dry Creek) starts at flag E01 and is believed to be ephemeral until flag E02.
- Feature E3 (UT to Dry Creek) starts at flag E03 and is believed to be ephemeral until flag E04.
- Feature E4 (UT to Dry Creek) starts at flag E05 and is believed to be ephemeral until flag E06.
- Feature E5 (UT to Brooks Creek) starts at flag E07 and is believed to be ephemeral throughout its extent.

- Feature E6 (UT to Brooks Creek) starts at flag E08 and is believed to be ephemeral until its convergence with Feature E5.
- Feature E7 (UT to Brooks Creek) starts at flag E12 and is believed to be ephemeral until flag JHS04.
- Feature E8 (UT to Brooks Creek) starts at flag KM E03 and is believed to be ephemeral until flag S04.
- Feature E9 (UT to Brooks Creek) starts at flag KM E02 and is believed to be ephemeral until flag E04.
- Feature E10 (UT to Brooks Creek) starts at flag E10 and is believed to be ephemeral until its convergence with Feature G.
- Feature E11 (UT to Brooks Creek) starts at flag E11 and is believed to be ephemeral until its convergence with Feature E.
- Feature E12 (UT to Brooks Creek) starts at flag E09 and is believed to be ephemeral until flag LW15.

Wetland areas identified on-site would potentially require a 50-foot buffer.

- Wetlands on-site have been delineated and will need to be approved by the USACE. These wetlands will need to be surveyed and placed on a map for planning purposes. Please see attached sketch map for the locations and flag numbers of the wetlands identified on-site.

Surface waters on this site flow into Dry Creek & Brooks Creek in the Cape Fear River Basin, which have been classified in "Classification and NC DWQ Standards Applicable to Surface Waters and Wetlands of North Carolina" as WS-IV; NSW & WS-IV,B;NSW, respectively.

The stream on this site will likely be subject to buffer regulations administered by state and local authorities. A brief description of county buffers can be found in the regulations section of this report. The project engineer or planner should provide input toward the application of these regulations to the site plan during design and review.

All S&EC flags comprising the Chatham County Buffer Evaluation should be surveyed for use in site planning and county approval and permitting. The entire length of the stream feature was not flagged but will need to be survey located for the map**.** Stream features may be located either along the centerline (with channel widths noted at each survey point) or at the top-of-bank. S&EC delineation flag numbers should be shown on the survey.

Regulations

A short list of regulations that apply to buffer areas observed on the site are discussed below. Please be aware that other local, state, and federal regulations not included in this list may also apply. S&EC personnel are available to discuss these regulations as they apply to your project.

Chatham County Watershed Protection Ordinance

The Chatham County Watershed Protection Ordinance was revised February 20, 2012 to require stringent buffer requirements around surface water features in the County's jurisdiction. The ordinance requires all stream classifications to be conducted by a qualified professional who has

received documented certification of training in classifying streams and surface waters in North Carolina. Additionally, all wetland delineations must be conducted by a qualified professional who has at least 2 years of demonstrated experience in conducting wetland delineations in North Carolina under the Clean Water Act Sections 401 and 404 provisions. All field determinations of streams are subject to review and approval by the County.

The ordinance requires a one hundred (100') foot buffer along each side of perennial streams, or the full horizontal extent of the "Area of Special Flood Hazard 5" as most recently mapped by the North Carolina Floodplain Mapping Program, NC Division of Emergency Management, whichever is greater. Intermittent Streams require a fifty (50') foot riparian buffer along each side. Ephemeral Streams require a thirty (30') foot buffer along each side. Wetlands require a riparian buffer of fifty (50') feet from the delineated boundary, surrounding all features classified as wetlands and linear wetlands.

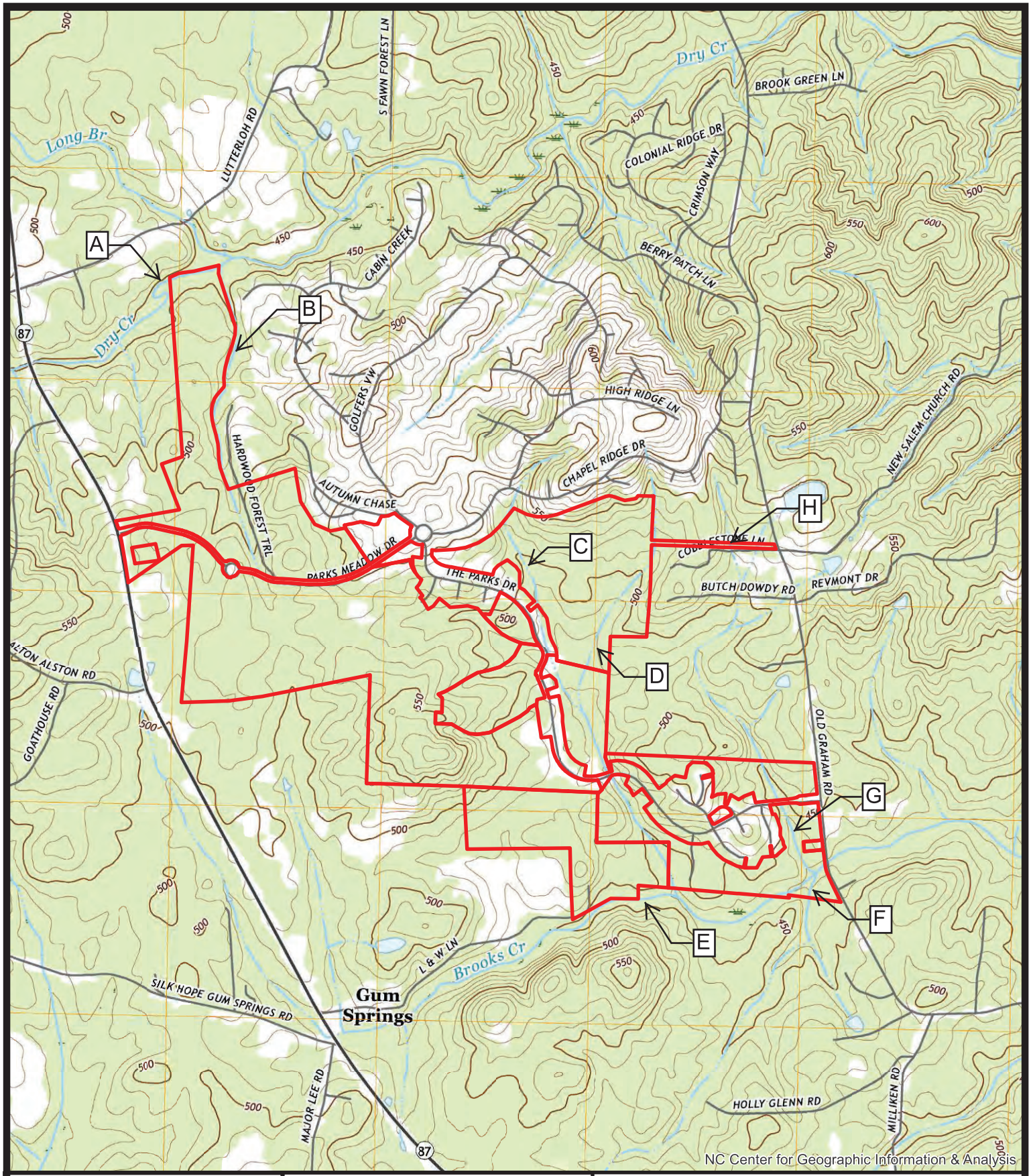
Before **any** land disturbance activities may begin, and in addition to any erosion control notification, the riparian buffer boundaries must be clearly flagged in the field and approved by county staff. Tree protection fencing, or other approved protective measures must be installed along the approved flagging lines.

Limitations

Our evaluations, conclusions, and recommendations are based on project and site information available to us at the time of this report and may require modification if there are any changes in the project or site conditions, or if additional data about the project or site becomes available in the future. This report is intended for use by True Homes, LLC on this project. These findings are not intended or recommended to be suitable for reuse on extensions of the project or on any other project. Reuse on extensions of this project or on any other project shall be done only after written verification or adaptation by SOIL & ENVIRONMENTAL CONSULTANTS, PA, for the specific purpose intended.

CONCLUSION

The Chatham County Buffer Evaluation for Parks at Meadowview Property was completed by S&EC on September 02, 2021. This site contains buffered areas that require protection under the Chatham County Watershed Protection Ordinance as well as areas regulated by the USACE. Some activities such as utility crossings are allowed in the riparian buffer as prescribed under Section 304(F)10. Please have the buffer survey forwarded to our office upon completion for our verification and review.



Project Number: 8682.W6	**Map Title:** Figure 1 - USGS Map Parks at Meadowview Chatham County, NC
Project Manager: SB	
Scale: 1" = 2000'	
Date: 08/17/2021	**Source:** 2019 USGS Bynum Quad

0 2,000 4,000
Feet

N

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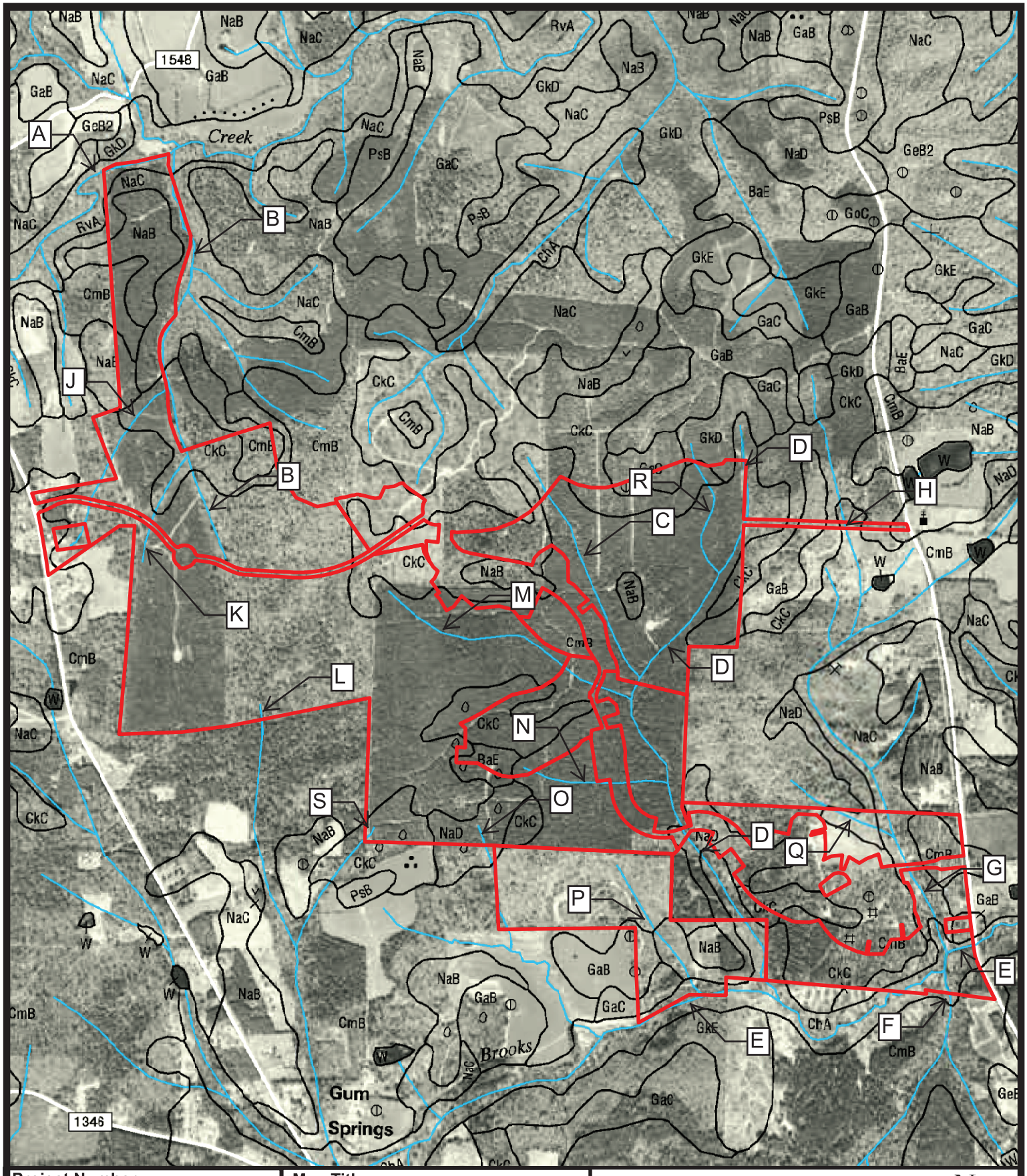

Project Number:	8682.W6
Project Manager:	SB
Scale:	1" = 1500'
Date:	08/17/2021

Map Title:

Figure 2 - Soil Survey

Parks at Meadowview
Chatham County, NC

Source: Chatham County Soil Survey Sheet Bynum

0 1,500 3,000
Feet

N

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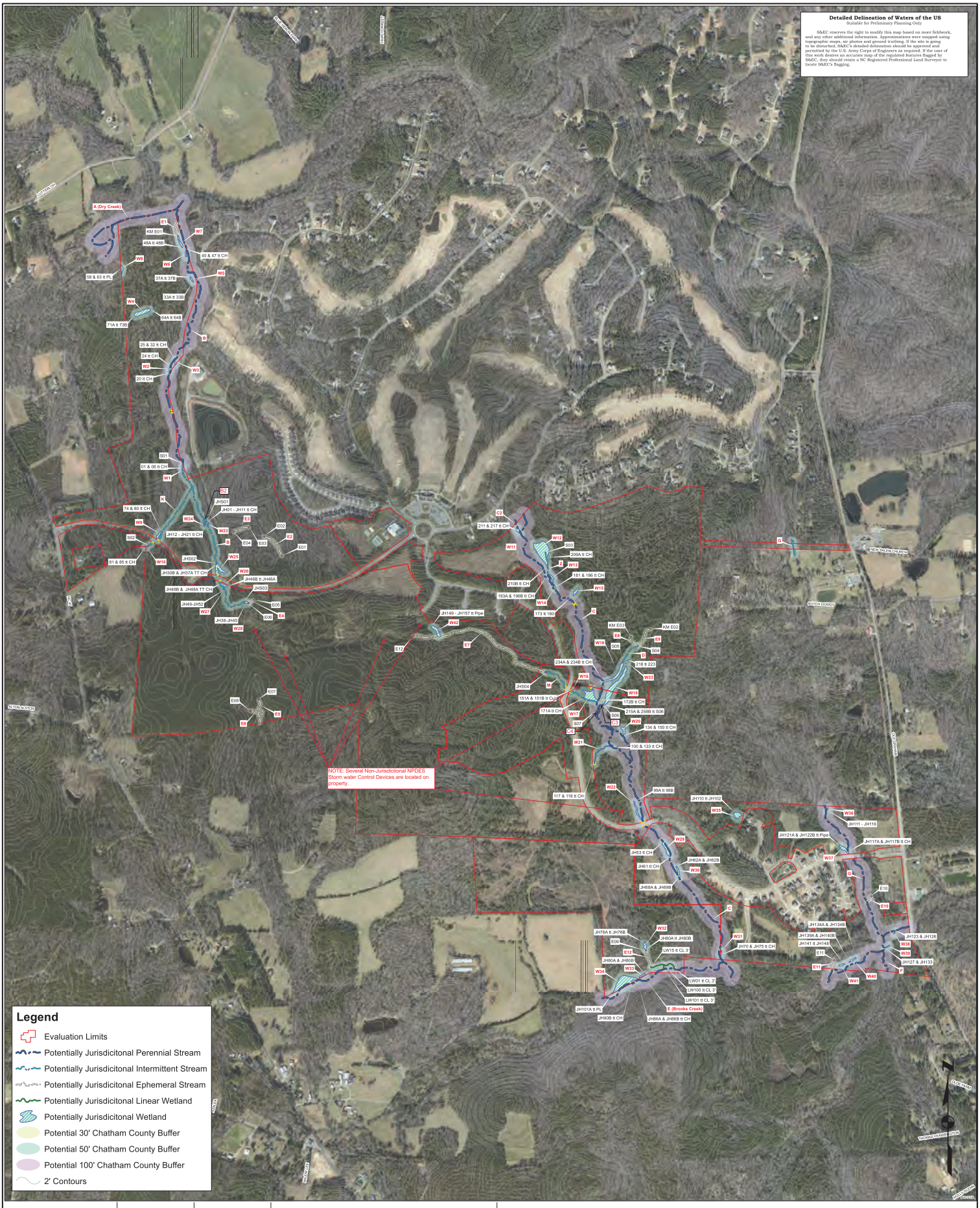

Project No. 8682.W6	Scale: 1" = 400'	NC OneMap Wake County GIS
Project Mgr.: Steven Ball	09/20/2021	Prepared by: JH

Wetland Sketch Map

Parks of Meadowview
Chatham County, NC

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PROPERTY OWNER CERTIFICATION / AGENT AUTHORIZATION

Project Name/Description: _____ S&EC Project #_____

Date: _____

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

Attn: _____ Field Office: _____

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): _____
Site Address: _____
City, County, State: _____

PROPERTY OWNER INFORMATION:
Name:
Address:
Phone No.: ( ) Fax No.: ( ) Mobile No.: ( )
Email:

_____ _____
Property Owner (please print) Date

_____
Property Owner Signature

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

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

SF1 - Feature E2

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.782235
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.234034
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name*: Bynum Quad

A. Geomorphology (Subtotal = 9)	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 = 4)				
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

SF2 - Feature B & K

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.780038
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.235980
Total Points: 22.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** *e.g. Quad Name:* Bynum Quad

A. Geomorphology (Subtotal = 9.5)	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 (5.5)				
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

SF3 - Feature C

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.771978
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.217509
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 31.5	**Stream Determination (circle one)** Ephemeral Intermittent **(Perennial)**	**Other** *e.g. Quad Name:* Bynum Quad

A. Geomorphology (Subtotal = 13)	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 = 10)				
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

SF4 - Feature E4

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.780192
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.235132
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 10.75	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name*: Bynum Quad

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 (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 = 4.75)				
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

SF5 - Feature E5 & E6

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.782235
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.234034
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 13	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name*: Bynum Quad

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 (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 = 4)				
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

SF6 - Feature M

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.777666
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.221856
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** **20.5**	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** *e.g. Quad Name:* Bynum Quad

A. Geomorphology (Subtotal = 9)	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 (5.5)				
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 = 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

SF7 - Feature E7

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.779067
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.224909
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 11	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name*: Bynum Quad

A. Geomorphology (Subtotal = 5.5)	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 = 4)				
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

SF8 - Feature G

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.782229
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.211648
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 23.5	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** *e.g. Quad Name:* Bynum Quad

A. Geomorphology (Subtotal = 8)	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 = 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:

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

SF9 - Feature G

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.772002
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.209392
Total Points: 31 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral Intermittent **Perennial**	**Other** *e.g. Quad Name*: Bynum Quad

A. Geomorphology (Subtotal = 14.5)	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:

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

SF10 - Features E10 & E11

NC DWQ Stream Identification Form Version 4.1

Date: 08/31/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.769758
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.208315
Total Points: 12.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name*: Bynum Quad

A. Geomorphology (Subtotal = 5.5)	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 = 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

SF11 - Feature B

NC DWQ Stream Identification Form Version 4.1

Date: 08/30/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.789070
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.238327
Total Points: 32.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral Intermittent **(Perennial)**	**Other** *e.g. Quad Name*: Bynum Quad

A. Geomorphology (Subtotal = 15.5)	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 (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 = 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:

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

SF12 - Feature D & Z

NC DWQ Stream Identification Form Version 4.1

Date: 09/02/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.778411
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.218804
Total Points: 20 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** *e.g. Quad Name:* Bynum Quad

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 (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

SF13 - Feature E8 & E9

NC DWQ Stream Identification Form Version 4.1

Date: 09/02/2021	**Project/Site:** Parks at Meadowview	**Latitude:** 35.778970
Evaluator: S&EC - Joshua Harvey & Mason Montgomery	**County:** Chatham	**Longitude:** -79.218121
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 11	**Stream Determination (circle one)** Ephemeral **Intermittent** **Perennial**	**Other** *e.g. Quad Name*: Bynum Quad

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 (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 (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:

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Parks at Meadowview City/County: Chatham Sampling Date: 08/31/21

Applicant/Owner: True Homes, LLC State: NC Sampling Point: DP1_wet

Investigator(s): S&EC- Josh Harvey Section, Township, Range: Pittsboro

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.781340 Long: -79.236451 Datum: NAD 83

Soil Map Unit Name: CmB NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ True Aquatic Plants (B14)
- ____ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes X No ____

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_wet

Tree Stratum (Plot size: 30ft X 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Carpinus caroliniana*	5	No	FAC
3. *Pinus taeda*	10	Yes	FAC
4.			
5.			
6.			
7.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	
Sapling/Shrub Stratum (Plot size: 15ft X 15ft)			
1. *Ligustrum sinense*	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	15	=Total Cover	
50% of total cover: 8		20% of total cover: 3	
Herb Stratum (Plot size: 5ft X 5ft)			
1. *Juncus effusus*	20	Yes	FACW
2. *Carex lurida*	10	Yes	OBL
3. *Rubus argutus*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover: 7	
Woody Vine Stratum (Plot size: 30ft X 30ft)			
1. *Smilax rotundifolia*	10	Yes	FAC
2. *Vitis rotundifolia*	5	Yes	FAC
3.			
4.			
5.			
	15	=Total Cover	
50% of total cover: 8		20% of total cover: 3	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X **No** ___

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

SOIL

Sampling Point: DP1_wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/2	80	10YR 5/4	20	C	PL	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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)
- X 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[3]:

- ___ 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)

[3]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** X **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.

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

Project/Site: Parks at Meadowview City/County: Chatham Sampling Date: 08/31/21

Applicant/Owner: True Homes, LLC State: NC Sampling Point: DP2_Up

Investigator(s): S&EC- Josh Harvey Section, Township, Range: Pittsboro

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 2-4

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.781162 Long: -79.236109 Datum: NAD 83

Soil Map Unit Name: CmB NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X 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 ____	No X	**Is the Sampled Area**		
Hydric Soil Present?	Yes ____	No X	**within a Wetland?**	**Yes** ____	**No** X
Wetland Hydrology Present?	Yes ____	No X			

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: DP2_Up

Tree Stratum (Plot size: 30ft X 30ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Carpinus caroliniana*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover:	5
Sapling/Shrub Stratum (Plot size: 15ft X 15ft)			
1. *Ligustrum sinense*	25	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	25	=Total Cover	
50% of total cover: 13		20% of total cover:	5
Herb Stratum (Plot size: 5ft X 5ft)			
1. *Polystichum acrostichoides*	15	Yes	FACU
2. *Lonicera japonica*	15	Yes	FACU
3. *Rubus argutus*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35	=Total Cover	
50% of total cover: 18		20% of total cover:	7
Woody Vine Stratum (Plot size: 30ft X 30ft)			
1. *Smilax rotundifolia*	10	Yes	FAC
2. *Parthenocissus quinquefolia*	5	Yes	FACU
3.			
4.			
5.			
	15	=Total Cover	
50% of total cover: 8		20% of total cover:	3

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.9% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]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** X

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

SOIL

Sampling Point: DP2_Up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 4/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]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[3]:

- ___ 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)

[3]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** X

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.

County of Chatham, NC

08/18/2022

WP-22-357

On-site Riparian Buffer Review

Status: Active

Date Created: Jun 3, 2022

Applicant

Josh Harvey
jharvey@sandec.com
8412 Falls of Neuse Road
Raleigh, NC 27615
910-760-9622

Primary Location

0 VACANT
North Carolina 00000

Owner:

SRE NC LANDCO LLC
980 N MICHIGAN AVE STE 1700 CHICAGO , IL 60611-7503

Project Information

Review Type

Major Subdivision

Before continuing please complete a phone or email conversation with Paula Phillips of the Planning Department. (919) 542-8276 paula.phillips@chathamcountync.gov

If your project will result in a review of greater than 10 acres please contact a private consulting firm to complete the surface water determination. For stream determinations the consultant must have successfully completed the NCDWQ/NC State University Surface Waters Classification. For wetland delineations the consultant must demonstrate at least 2 years of experience delineating jurisdictional wetlands in accordance with the Eastern Mountains and Piedmont Regional Supplement to the 1987 US Corps of Engineers Wetland Delineation Manual. Please visit the Watershed Protection Department website for a list of consultants that regularly complete work within Chatham County.

If your project is a Major Subdivision please contact a private consulting firm to complete the surface water determination. For stream determinations the consultant must have successfully completed the NCDWQ/NC State University Surface Waters Classification. For wetland delineations the consultant must demonstrate at least 2 years of experience delineating jurisdictional wetlands in accordance with the Eastern Mountains and Piedmont Regional Supplement to the 1987 US Corps of Engineers Wetland Delineation Manual. Please visit the Watershed Protection Department website for a list of consultants that regularly complete work within Chatham County.

Number of Features Found

69

Feature is defined as any surface water that is subject to Chatham County Riparian Buffers (streams, wetlands, ponds). Include each stream type transition, with corresponding forms, and individual wetland in your total. Total is total features found before USACE or County site visit.

Date Field Work Was Completed

09/02/2021

Has USACE on-site review been scheduled or completed

--

A Minor Subdivision is the creation of 5 or less new lots. If the original tract is over 10 acres and the subdivision results in the total of that tract becoming

less than 10 acres then two lots have been created by default.

Parcel Information

Parcel Number (s)
10893

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
SRE NC Landco, LLC

Location of Tract (address if applicable)
5534 NC 87 N

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
83997

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
CHAPEL RIDGE COMMUNITY ASSOC INC

Location of Tract (address if applicable)
1010 CHAPEL RIDGE RD

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
61935

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
SRE NC Landco, LLC

Location of Tract (address if applicable)
5430 NC 87 N

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)

Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
5983

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
PARKS AT MEADOWVIEW LLC

Location of Tract (address if applicable)
THE PARKS DR

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
N/A

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
85239

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
PARKS AT MEADOWVIEW LLC

Location of Tract (address if applicable)
THE PARKS DR

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
85043

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
PARKS AT MEADOWVIEW LLC

Location of Tract (address if applicable)
THE PARKS DR

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)

Watershed District

5909

Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
LASSITER MARTHA ELIZABETH & MARY JEANETTE

Location of Tract (address if applicable)
OLD GRAHAM RD

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
5912

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
SRE NC Landco, LLC

Location of Tract (address if applicable)
OFF OLD GRAHAM RD

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
89724

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
Parks at Meadowview, LLC

Location of Tract (address if applicable)
asd

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
89725

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
Parks at Meadowview, LLC

Location of Tract (address if applicable)
Parks Drive

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
89728

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
Parks at Meadowview, LLC

Location of Tract (address if applicable)
Parks Drive

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Parcel Number (s)
89727

Watershed District
Dry Creek Haw River

Is the property within the Jordan Lake Watershed
No

Property Owner Name
Parks at Meadowview, LLC

Location of Tract (address if applicable)
Off Parks Drive

Driving Directions from Pittsboro
Head North on NC-87. Turn Right on The Parks Way. Park at the first Roundabout.

Subdivision Name (if applicable)
--

Please describe access issues (provide gate codes, or information for scheduling site visit)
Stub road/gravel path/shoulder of road (several areas to park) (650 acre tract)

Applicants Information

Are you the Landowner or an Agent
Agent

Full Name
Joshua Harvey

Primary Phone Number
919-760-9622

Primary Email
jharvey@sandec.com

Mailing Address
8412 Falls of Neuse Road, Suite 104

City/State
NC

Zip Code
27615

How would you like to receive the completed review letter?

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.
☑

Statement of Understanding

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.

Name
Joshua Harvey

New Field
06/03/2022

Attachments

pdf 202204281624028732022.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 1:17 pm
pdf 202204281624028732222.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 1:25 pm
pdf SEC_Parks at Meadowview - Chatham County Report 2021 SB.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 12:46 pm
pdf SEC Parks at Meadowview Wetland Map 2022 JH.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 12:47 pm
pdf SEC Parks at Meadowview Stream Forms 2022.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 1:12 pm
pdf SS new.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 1:14 pm
pdf USGS.pdf
Uploaded by Josh Harvey on Jun 3, 2022 at 1:13 pm

History

Date	Activity
Jun 3, 2022 at 11:34 am	Josh Harvey started a draft of Record WP-22-357
Jun 3, 2022 at 1:25 pm	Josh Harvey submitted Record WP-22-357
Jun 3, 2022 at 1:25 pm	approval step Intake Approvalwas assigned to Drew Blake on Record WP-22-357
Jun 14, 2022 at 12:05 pm	Drew Blake approved approval step Intake Approval on Record WP-22-357
Jun 15, 2022 at 4:21 pm	Drew Blake added a guest: jward@truehomesusa.com to Record WP-22-357
Jun 15, 2022 at 4:26 pm	Drew Blake added a guest: sball@sandec.com to Record WP-22-357
Jun 16, 2022 at 2:15 pm	completed payment step Major Subdivision Riparian Buffer Review Fee on Record WP-22-357
Jun 16, 2022 at 2:15 pm	changed the deadline to Jun 30, 2022 on approval step Field Review on Record WP-22-357
Jun 16, 2022 at 2:15 pm	approval step Field Reviewwas assigned to Drew Blake on Record WP-22-357
Jun 16, 2022 at 2:15 pm	changed the deadline to Jun 30, 2022 on approval step Field Review on Record WP-22-357

Timeline

Label		Status	Activated	Completed	Assignee	Due Date
✓	Intake Approval	Complete	Jun 3, 2022 at 1:25 pm	Jun 14, 2022 at 12:05 pm	Drew Blake	-
$	Major Subdivision Riparian Buffer Review Fee	Paid	Jun 14, 2022 at 12:05 pm	Jun 16, 2022 at 2:15 pm	-	-
✓	Field Review	Active	Jun 16, 2022 at 2:15 pm	-	Drew Blake	06/29/2022

Label	Status	Activated	Completed	Assignee	Due Date
Major Subdivision Riparian Buffer Confirmation Report	Inactive	-	-	-	-

CHATHAM COUNTY

AUTHORIZED AGENT FOR FORM

PROPERTY LEGAL DESCRIPTION: 10893, 83997, 61935, 5983, 85239, 85043, 5909,

LOT NO. _____ PARCEL ID (PIN) 5912, 89724, 89725, 89727, 89728 PARCEL SIZE ± 695 acres

STREET ADDRESS: 5430 NC-87, Pittsboro, NC 27312

Please print:
Property Owner: SRE NC Landco, LLC

Property Owner: Parks at Meadowview, LLC

LASSITER MARTHA ELIZABETH & MARY JEANETTE

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

Joshua Harvey (Contractor / Agent), of Soil & Environmental Consultants, P.A. (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
Date: 1-20-22

Joshua Harvey Digitally signed by Joshua Harvey Date: 2022.06.03 13:24:50 -04'00'
_____
Agent Authorized Signature
Date: _____

Revised 10/2017

Watershed Protection Department

P.O. Box 548
Pittsboro, NC 27312

Website: www.chathamnc.org

Authorization to Enter Property Form

Date: 06/03/2022

PARCEL No. (AKPAR) 10893, 83997, 61935, 5983, 85239, 85043, 5909, 5912, 89724, 89725, 89727, 89728

I, (print name) _____, 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.

Charles Kellogg for SRE NC Landco, LLC
(Print Owner's Name)

(Signature of Owner)
(Date) 1/20/22

Joshua Harvey S: EC
(Print Authorized Agent Name)

Digitally signed by Joshua Harvey
Date: 2022.06.03 13:17:08 -04'00'

(Signature of Authorized Agent)
(Date)

Job #: 8682.W6
August 10, 2022

Site Photos for the Parks at Meadowview Property
Chatham County, NC

Photo 1: Feature A

Photo 2: Feature B (Perennial)

Photo 3: Feature B (Intermittent)

Photo 4: Feature C

Photo 5: Feature D

Photo 6: Feature E

Photo 7: Feature F

Photo 8: Feature G

Photo 9: Feature M

Photo 10: Feature K

Photo 11: Feature Z

Photo 12: Feature E1

Photo 13: Feature E2

Photo 14: Feature E3

Photo 15: Feature E4

Photo 16: Feature E5

Photo 17: Feature E7

Photo 18: Feature E10

Photo 19: Feature E11

Photo 20: Feature E12