Amy Harvey

From: Maurice Jones

Sent: Wednesday, October 07, 2020 4:38 PM

To: Allen Buansi; Amy Ryan; Hongbin Gu; Jess Anderson; Karen Stegman; Michael Parker; Pam

Hemminger; Tai Huynh; Town Council

Cc: Flo Miller; Mary Jane Nirdlinger; Ross Tompkins; Lance Norris; Jeanne Brown; Amy Harvey

Subject: FW: Revised Municipal Services Center: Concept Design Presentation

Attachments: 9880-25-0693, 9880-15-7586 stream determ 9-22-2020.pdf; MSCrevisedRCD.tif

Mayor and Council,

Just wanted to pass along some additional information pertaining to the MSC Concept Plan discussion.

All the Best, Maurice

From: Mary Jane Nirdlinger <mnirdlinger@townofchapelhill.org>

Sent: Wednesday, October 7, 2020 4:17 PM

To: Maurice Jones <mjones@townofchapelhill.org>; Ross Tompkins <rtompkins@townofchapelhill.org>

Cc: JABE HUNTER < JHUNTER@townofchapelhill.org>

Subject: Revised Municipal Services Center: Concept Design Presentation

Maurice,

Tonight, our design team will share a revised concept layout with the Council showing the RCD limits, which have shifted based on our stream determination (attached).

Mary Jane



Mary Jane Nirdlinger, AICP | she/her/hers (What's this?) | Assistant Town Manager | Town of Chapel Hill 405 Martin Luther King Jr. Blvd | Chapel Hill, NC 27514

Phone: 919-968-2739 Cell: 919-619-4956

In keeping with the NC Public Records Act, e-mails, and all attachments, may be released to others upon request for inspection and copying without prior notification.



PUBLIC WORKS DEPARTMENT STORMWATER MANAGEMENT DIVISION

405 Martin Luther King, Jr. Blvd. Chapel Hill, NC 27514-5705 Telephone (919) 969-7246 Fax (919) 969-7276 www.townofchapelhill.org

September 28, 2020

Mr. Raymond Bentley Ruggles Dewberry 2610 Wycliff Road Raleigh, NC 27607 bruggles@dewberry.com

RE: Stream Determination for 101-111 Weaver Dairy Road Extension, Chapel Hill, NC

(Town of Chapel Hill Fire Station 4 & Fire Training Center)

PINs 9880-25-0693 & 9880-15-7586

Dear Mr. Ruggles:

As requested, the Town Public Works Department has performed a stream determination for the property identified on the attached forms. This determination indicates whether different types of streams (perennial, intermittent, and/or ephemeral) or perennial waterbodies are present on the property in question or on nearby properties. These streams and their classifications are shown on the accompanying area map. Stream segments regulated by the Town's Jordan Lake Watershed Riparian Buffer regulations are highlighted. Locations of all features on the map are approximate and must be field surveyed for precise location.

This stream determination information is used to determine the location and extent of the Resource Conservation District (RCD) and Jordan Lake Watershed Riparian Buffers. Specific land use regulations and restrictions apply within the boundaries of these protected areas. If you are considering any kind of work on this property, including clearing vegetation, paving, grading, or building, please consult with the Town Planning Department to determine the possible extent of the Resource Conservation District (RCD) and Jordan Lake Watershed Riparian Buffer on this property and the applicable corresponding regulations.

This stream determination will remain in effect for five years from the date of the site visit, after which a new stream determination with site visit will be required.

In accordance with the Town's procedures, you may appeal this administrative decision to the Town Manager. If you wish to do so, you must file your written appeal accompanied by any materials you believe support your appeal, within **30 days** of receipt of this letter.

If you have questions regarding stream determinations, please contact me at (919) 969-7202 or aweakley@townofchapelhill.org. If you have questions regarding the Town's Resource Conservation District (RCD) or the Jordan Watershed Riparian Buffer regulations, please contact the Planning Department at (919) 968-2728, or view information online at: http://www.townofchapelhill.org/stormwater.

Sincerely,

Allison Schwarz Weakley Stormwater Analyst

AllisonWeakley



PUBLIC WORKS DEPARTMENT STORMWATER MANAGEMENT DIVISION

405 Martin Luther King, Jr. Blvd. Chapel Hill, NC 27514-5705 Telephone (919) 969-7246 Fax (919) 969-7276 www.townofchapelhill.org

STREAM DETERMINATION SITE VISIT RESULTS

Property Information						
Parcel ID Number (PIN)	Address / Location Description					
9880-25-0693 & 9880-15-7586	101-111 Weaver Dairy Road Extension, Chapel Hill Town of Chapel Hill Fire Station 4 & Fire Training Center					
These are the results of a site visit to the property(ies) listed above for a stream determination conducted on <u>9/22/2020</u> by Town Staff:						
☐ No perennial, intermittent, or ephemeral streams or perennial waterbodies were identified on or near the property(ies) in question.						
Perennial, intermittent, or ephemeral streams, or perennial waterbodies, were identified on or near the property(ies) in question and are shown on the attached map(s).						
A map showing water features, their Town flow classifications, presence of Jordan Watershed Riparian Buffers, and their <u>approximate</u> locations is attached. <i>Note that Resource Conservation District (RCD) buffers may also apply but are not shown.</i> Origins or breakpoints that have been flagged in the field are marked on the map. Stream classification forms and additional site visit notes and maps are also attached.						
Other conditions exist which may affect the location of the Resource Conservation District (RCD) or Jordan Watershed Riparian Buffer:						
FEMA floodzone is mapped in the area. Precise location of the Base Flood Elevation and associated RCD must be determined by a field survey commissioned by the owner or a representative.						
Segments of perennial or intermittent stream are piped in the area, as shown on the map. These segments do not have an associated Jordan Watershed Riparian Buffer, but do have an associated buffer if the RCD applies.						

Possible Jurisdictional Wetlands have been identified in the area. A formal review by a professional certified in Jurisdictional Wetland Delineation is recommended if impacts to

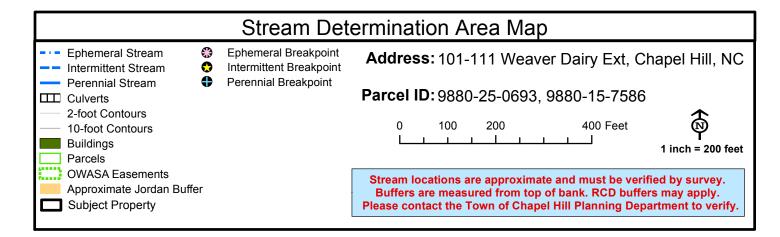
Allison Weakley

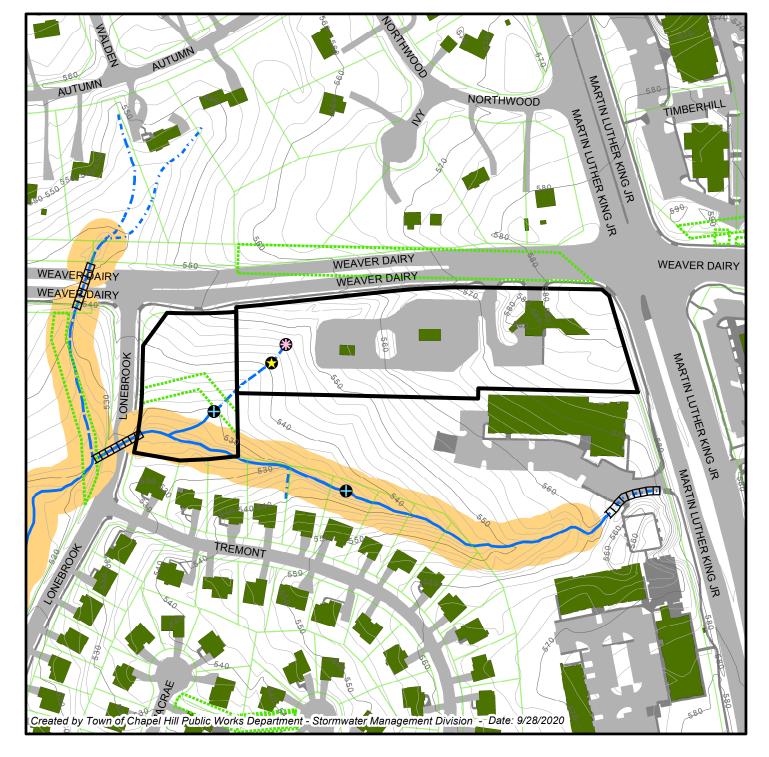
Town Staff Signature

9/28/2020

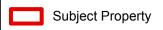
Date

wetlands are anticipated.





USGS 24K Topographic / County Soil Survey Maps



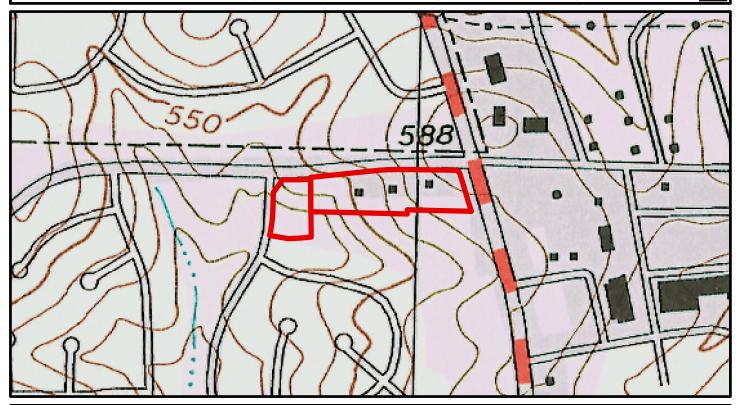
Address: 101-111 Weaver Dairy Ext, Chapel Hill, NC

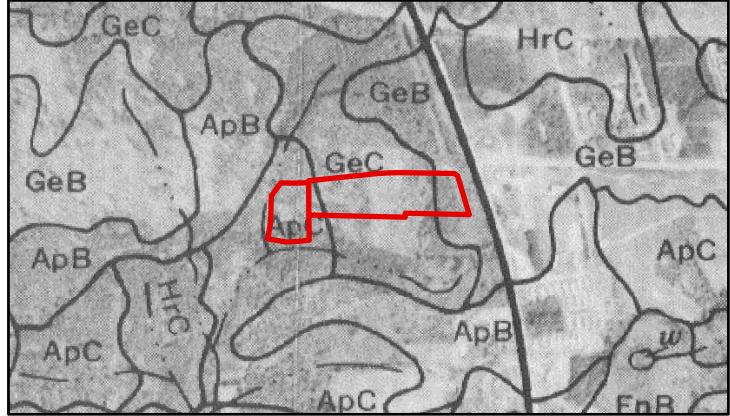
0 150 300 450 600 Feet

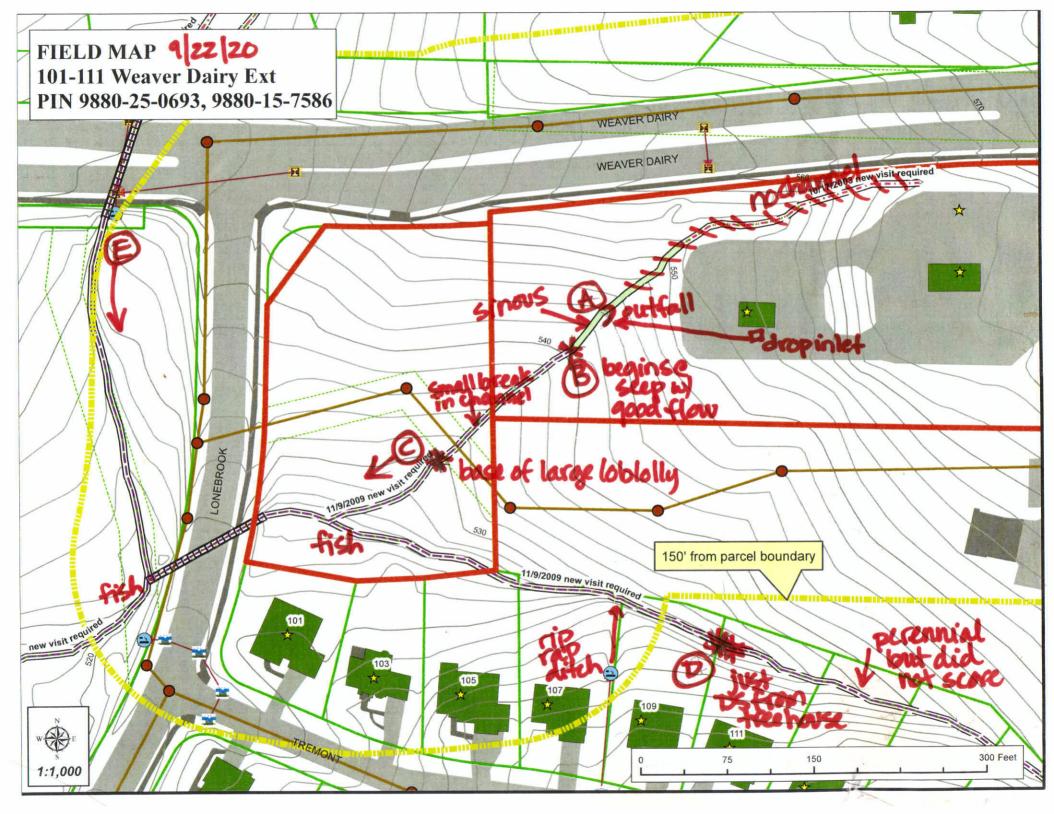
Parcel ID: 9880-25-0693 & 9880-15-7586

1 inch = 500 feet

Created by Town of Chapel Hill Public Works Department - Stormwater Management Division- 9/25/2020







202009220942

NC DWQ Stream Identification Form Version 4.11 Project/Site: Latitude: 2 9/12 Date: Longitude: 79.000 eu & Meumani County: **Evaluator: Total Points:** Stream Determination (circle one) Stream is at least intermittent e.g. Quad Name: Ephemeral Intermittent Perennial if ≥ 19 or perennial if ≥ 30* Weak Moderate Strong Absent A. Geomorphology (Subtotal = 0 1 1a. Continuity of channel bed and bank 2 3 0 1 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, 3 2 0 1 ripple-pool sequence 3 2 0 1 4. Particle size of stream substrate 2 3 0 1 5. Active/relict floodplain 3 1 0 6. Depositional bars or benches 3 2 1 0 7. Recent alluvial deposits 3 2 0 8. Headcuts 1 1.5 0.5 0 9. Grade control 1.5 1 0 (0.5) 10. Natural valley Yes = 3 No = 0) 11. Second or greater order channel artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 3 0 1 12. Presence of Baseflow 3 2 0 13. Iron oxidizing bacteria 0 1.5 1 0.5 14. Leaf litter 1 1.5 0.5 0 15. Sediment on plants or debris 1.5 a 0.5 0 16. Organic debris lines or piles Yes = 3No = 017. Soil-based evidence of high water table? C. Biology (Subtotal = 0) 3 18. Fibrous roots in streambed 0 2 3 19. Rooted upland plants in streambed 2 3 0 1 20. Macrobenthos (note diversity and abundance) 3 2 0 21. Aquatic Mollusks

26. Wetland plants in streambed

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

Chataba

Notes:

22. Fish

23. Crayfish

25. Algae

24. Amphibians

Feature begins e pipe outfall (from fire-training center). Lots of broken glass deposited in channel /flow path.

0

0

0

0

0.5

0.5

0.5

1.5

1.5

1.5

1.5

1

1

1

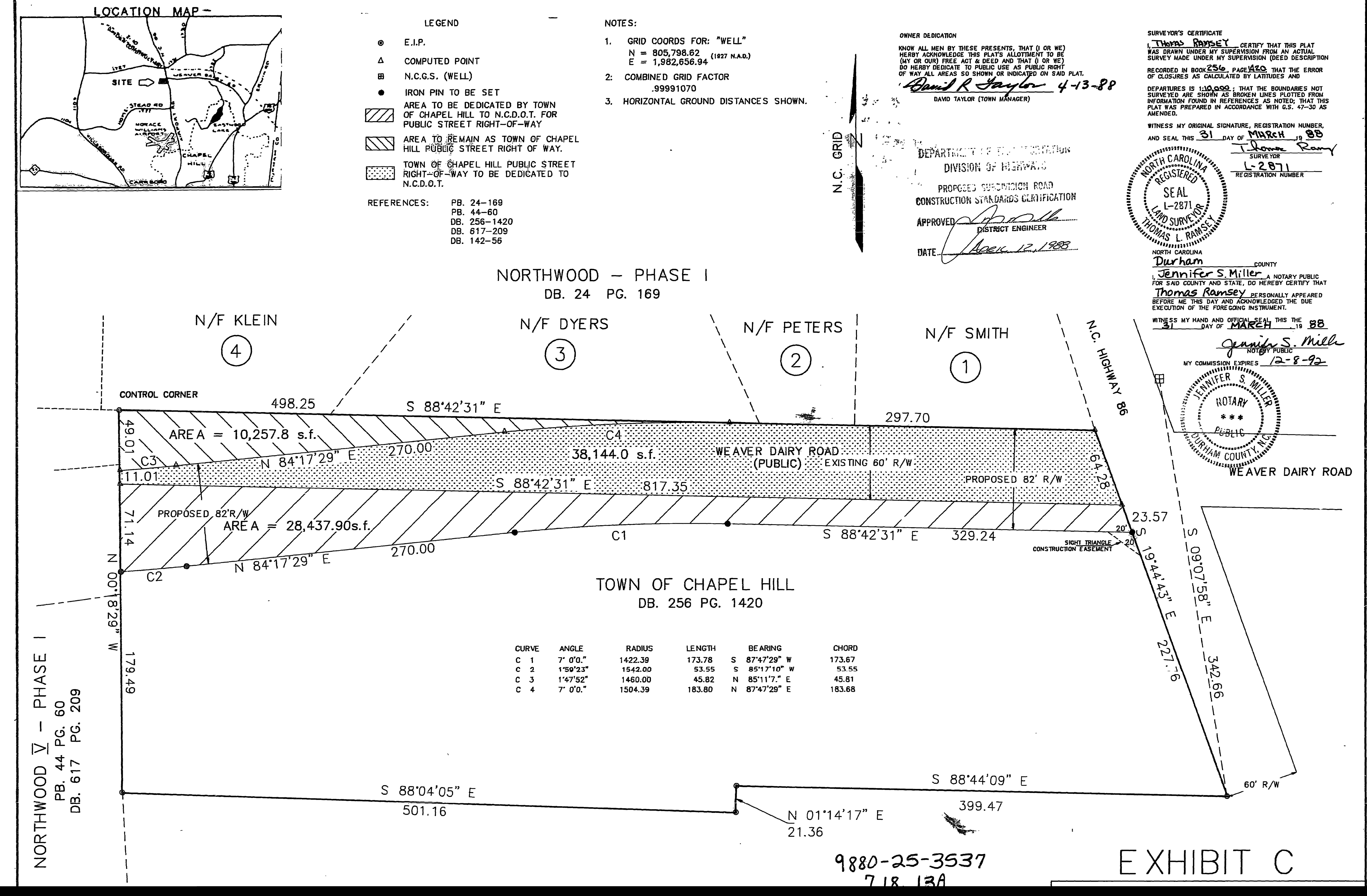
FACW = 0.75; OBL = 1.5 Other = 0

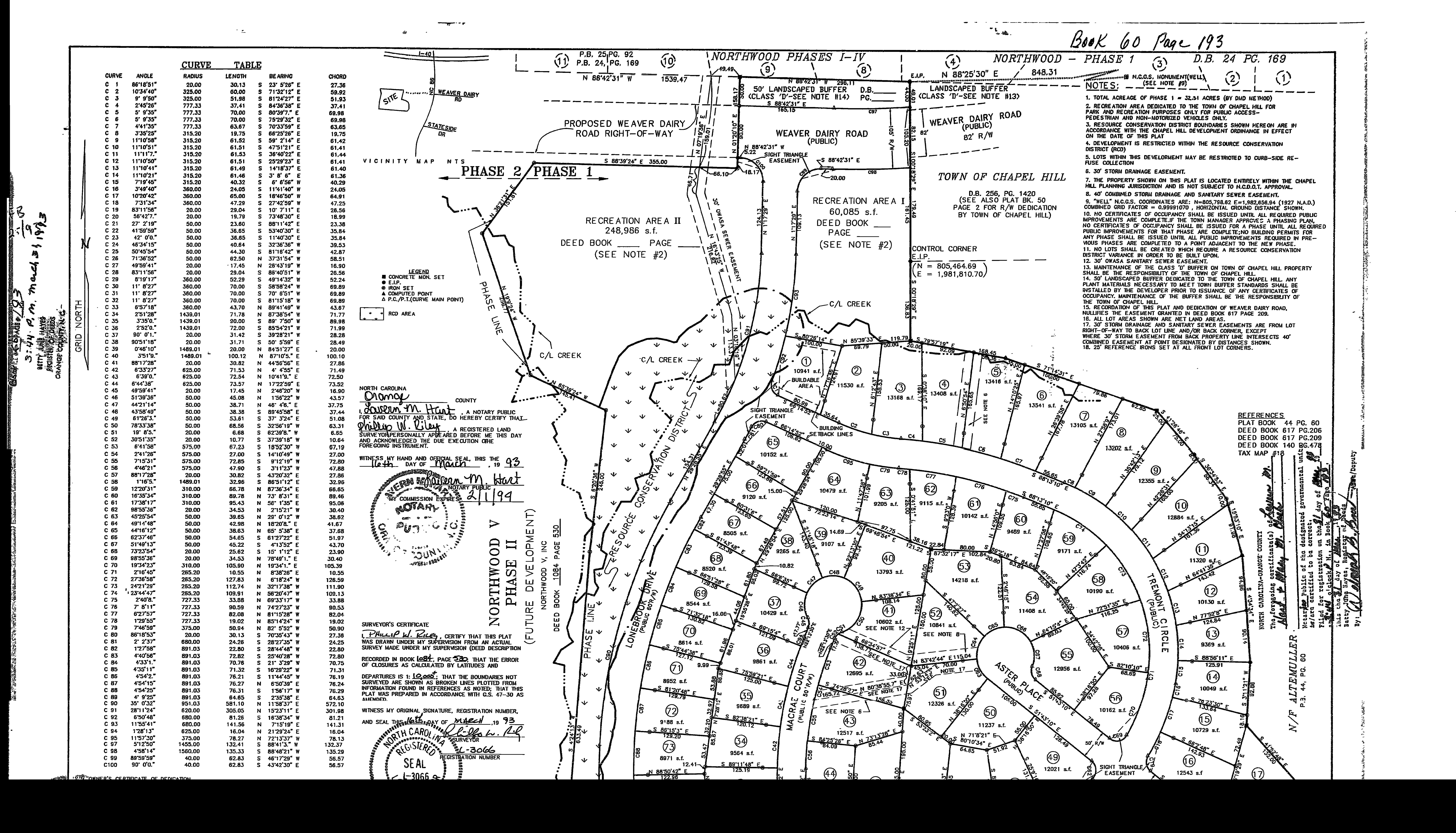
NC DWO Stream Identification Form Version 4.11 01-11 Weaver Project/Site: Latitude: Date: Longitude: County: Evaluator: orange **Total Points:** Stream Determination (circle one) Other Stream is at least intermittent e.g. Quad Name: Ephemeral Intermittent Perennial if ≥ 19 or perennial if ≥ 30* Absent Weak Moderate Strong A. Geomorphology (Subtotal = 2 1a. Continuity of channel bed and bank 0 2 3 2. Sinuosity of channel along thalweg 1) 0 3. In-channel structure: ex. riffle-pool, step-pool, (1) 2 3 0 ripple-pool sequence 2 3 4. Particle size of stream substrate 0 1 2 3 0 1 5. Active/relict floodplain 2 3 0 1 6. Depositional bars or benches 3 2 1 7. Recent alluvial deposits 0 3 2 0 8. Headcuts 0.5 1.5 0 1 9. Grade control $(0.5) \rightarrow$ 1.5 0 1 10. Natural valley Yes = 3 No = 011. Second or greater order channel artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 2 3 0 12. Presence of Baseflow 1 (2 3 0 13. Iron oxidizing bacteria 0 0.5 1.5 1 14. Leaf litter 1 1.5 0 0.5 15. Sediment on plants or debris 0.5 1 1.5 0 16. Organic debris lines or piles Yes = 3 17. Soil-based evidence of high water table? No = 0C. Biology (Subtotal = 31 (2) 0 18. Fibrous roots in streambed 1 0 19. Rooted upland plants in streambed 3 2 2 3 0 (1) 20. Macrobenthos (note diversity and abundance) 0 2 3 21. Aquatic Mollusks 1.5 0.5 0 22. Fish 0.5 1.5 23. Crayfish 0 1.5 0) 0.5 1 24. Amphibians 1.5 (0.5) 0 25. Algae FACW = 0.75; OBL = 1.5 Other = 0 26. Wetland plants in streambed on banks *perennial streams may also be identified using other methods. See p. 35 of manual. repalleous divina Sketch: Feature begins a grade control/seep (flagged).

NC DWQ Stream Identification Form Version 4.11 Feature						
Date: 9 22 20	Project/Site:	Dainy Ext	Latitude: 35,9631			
Evaluator: Weakley & Meymann	County: Orange		Longitude: _ 79, 0613			
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	Stream Determination (circle one) Ephemeral Intermittent Perennial		Other e.g. Quad Name:			
A. Geomorphology (Subtotal = 12)	Absent	Weak	Moderate	Strong		
1a. 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	e(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		= 3			
^a artificial ditches are not rated; see discussions in manual						
B. Hydrology (Subtotal = 9.5)		1	(2)	3		
12. Presence of Baseflow active flow	0	1				
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	Yes	1.5		
17. Soil-based evidence of high water table?	No	0 = 0	res	-3)		
C. Biology (Subtotal = 85)				0		
18. Fibrous roots in streambed	3	(2)	1	0		
19. Rooted upland plants in streambed WICKOSHED	DUM 3	(-2)	1	0		
20. Macrobenthos (note diversity and abundance)	1	(1)	2	3		
21. Aquatic Mollusks	Total Control	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 ON DAN CS FACW = 0.75; OBL = 1.5 Other = 0						
*perennial streams may also be identified using other methods. See p. 35 of manual.						
Notes: fadpoles abundant, crayfish, comphidae dragontly						
Sketch: Feature begins a base of large loblolly (flagged)						
on W side of sewer easement.						

NC DWQ Stream Identification Form Version 4.11 Project/Site: Latitude: Date: Longitude: County: Evaluator: **Total Points:** Stream Determination (circle one) Other Stream is at least intermittent e.g. Quad Name: Ephemeral Intermittent Perennial if ≥ 19 or perennial if ≥ 30* Weak Moderate Strong Absent A. Geomorphology (Subtotal = 3 0 1a. Continuity of channel bed and bank 2 3 1)-> 2. Sinuosity of channel along thalweg | out (each 0 3. In-channel structure: ex. riffle-pool, step-pool, Model of 2 3 0 1 ripple-pool sequence 4. Particle size of stream substrate Sand grand 3 2 1 0 3 1 0 5. Active/relict floodplain 3 2 6. Depositional bars or benches 0 3 2 0 1) 7. Recent alluvial deposits 3 2 1 0 8. Headcuts 1.5 0.5 1 0 9. Grade control 1.5 1 0 0.5 10. Natural valley Yes = 3 No = 0 11. Second or greater order channel artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = (2) 3 0 1 12. Presence of Baseflow a China 2)9 3 0 1 13. Iron oxidizing bacteria 0 0.5 1.5 14. Leaf litter 1.5 1 0.5 0 15. Sediment on plants or debris 1.5 1 0 0.5 16. Organic debris lines or piles (Yes = 3 No = 017. Soil-based evidence of high water table? C. Biology (Subtotal = 0 2 18. Fibrous roots in streambed 0 3 2 19. Rooted upland plants in streambed 3 1 2 0 20. Macrobenthos (note diversity and abundance) 2 3 1 0 21. Aquatic Mollusks 1.5 1 0 0.5 22. Fish 1.5 0 0.5 1 23. Crayfish 1.5 0.5 1 0 24. Amphibians 1.5 0.5 0 25. Algae FACW = 0.75; OBL = 1.5 Other = 0 26. Wetland plants in streambed on banks *perennial streams may also be identified using other methods. See p. 35 of manual. tish in lower lange Salamander abundant Sketch:

Detri Alandon	Project/Site:	1-111 Weaver	Latitude: 35,9637	
Date: 9 22 20	Project/Site: Dain EXT			
Evaluator: Weakley & Meumann	County: Orange		Longitude:	
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral intermittent Perennial		Other e.g. Quad Name:	
A. Geomorphology (Subtotal = 9.5)	Absent	Weak	Moderate	Strong
1ª Continuity of channel bed and bank	0	1	2	(3)
Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool,			2	3
ripple-pool sequence	0	(1')	2	27.
Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain Ower reach	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 = 0	Yes	= 3
a artificial ditches are not rated; see discussions in manual				
B. Hydrology (Subtotal = 4+3)				
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)			= 3)
C. Biology (Subtotal =)				
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; OF	3L = 1.5 Other =	o none
*perennial streams may also be identified using other method	ls. See p. 35 of manu	al.		
Notes:				
1100001				
Sketch: Feature begins c pi	peoutfa lorook, I	ll Sof h Deep char	leaver t	airy







PUBLIC WORKS DEPARTMENT STORMWATER MANAGEMENT DIVISION

405 Martin Luther King, Jr. Blvd. Chapel Hill, NC 27514-5705 Telephone (919) 969-7246 Fax (919) 969-7276 www.townofchapelhill.org

REQUEST FOR STREAM DETERMINATION

Stream determinations provide information used to determine whether the Town's Resource Conservation District (RCD) or Jordan Watershed Riparian Buffer Protection regulations apply to a property. Town staff will typically conduct a field visit to classify streams on the property(ies) indicated below within two weeks of a request, depending on weather conditions, staff availability, and scope of the request. Please note that stream determinations cannot be conducted within 48 hours of a rain event. There is no fee for stream determinations conducted by Town staff.

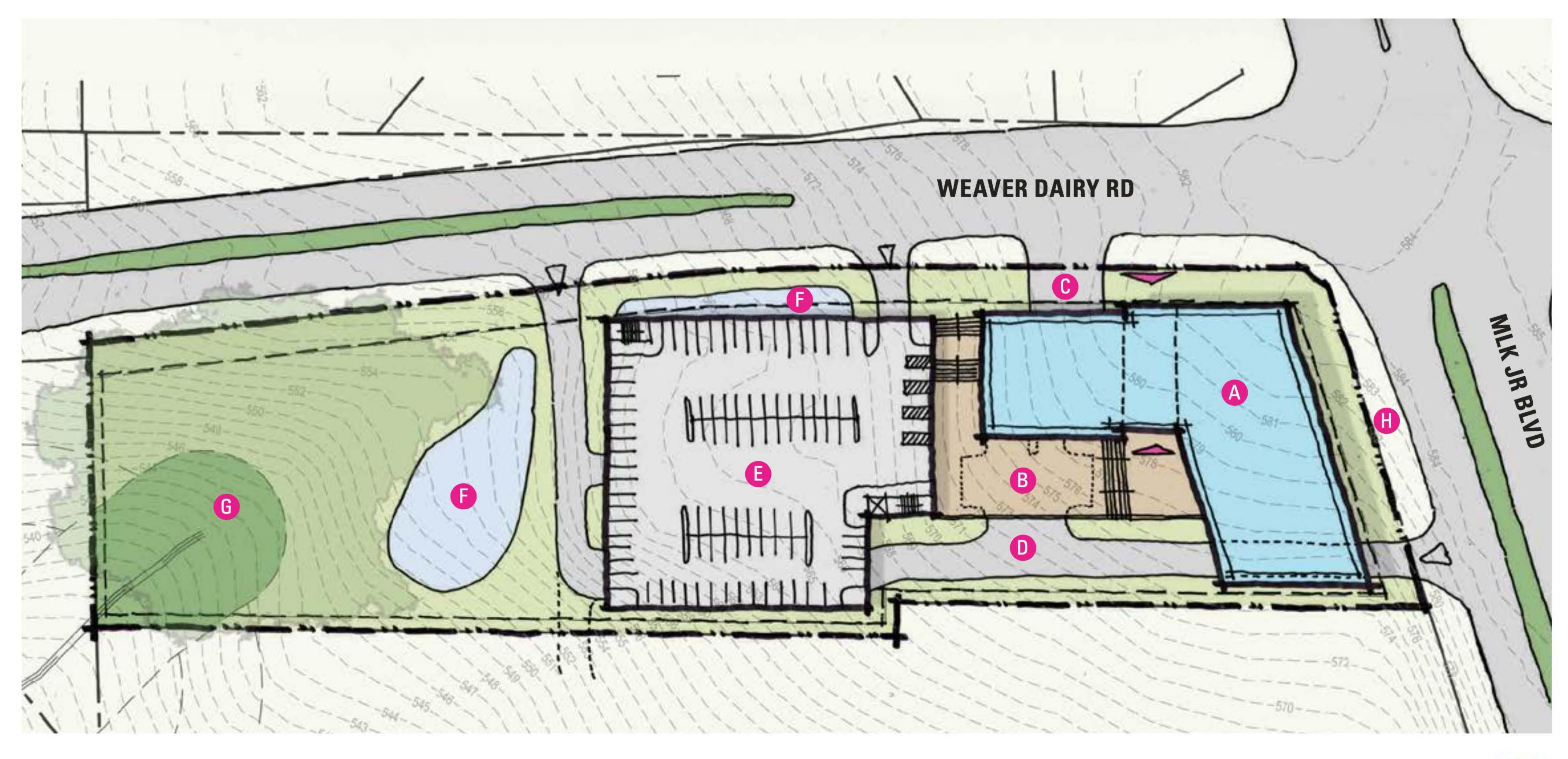
A stream determination report indicates the results of a stream classification. Stream classifications expire after five years. If a stream determination has been completed on or near the property(ies) listed below within the last five years, a site visit may not be required unless local hydrology has changed significantly or the stream classification has expired. If a site visit is not required, the stream determination will be based on a records review.

Requests may be emailed (aweakley@townofchapelhill.org), faxed, dropped off at Town Hall or the Stormwater Office, or mailed to the above address in care of the "Stormwater Analyst."

Requestor's Name:	Raymond Bentley Ruggles						
Mailing Address:	2610 Wycliff Rd						
City, State, ZIP:	Raleigh, NC 27607						
Phone / FAX / Emai	il: 984-833-4833 bruggles@dewberry.com						
Check method(s) fo report to be sent:	r □ US Ma	il 🏿 Email	☐ FAX	☐ Call for pickup			
	erty owner or design adicated below for p			ion to Town Staff to enter n:			
Mary	y Jane Virdlinger (Signature)		09/09/2020				
J	(Signature)		(Date)				
Owner Name(s):	Town of Chapel Hill						
(Please print) Company Name (if applicable):							
Company Name (ii a	аррпсаые).						
Property Informat	tion						
Fill in both columns, o	or fill in Parcel ID Numbe	r (PIN) and attach a site	e map indicating loc	ation.			
Parcel ID Number (PIN)		Address / Location Description					
9880250693 & 9880157586		405 Martin Luther King Jr Blvd (Fire Station and Training Facility)					

Where the **total area** of the property(ies) to visit is **over 3 acres**, please attach an as-built drawing or a topographic map with current landmarks.

CONCEPTUAL SITE PLAN





B Public Plaza

Fire Apparatus Bay Entry/Exit

Police Sallyport Entry (below plaza)

Two Story Table Top Parking
Stormwater Management

G RCD Buffer Area (50ft)

Mew Public Transit Stop (BRT)



