



CONCEPT PLAN APPLICATION

Parcel Identifier Number (PIN): (A) 9870890971
 (B) 9871800325 Date: 9/27/2022
 (C) 9871809160

Section A: Project Information

Project Name: Town of Chapel Hill Transit Facility Expansion

Property Address: 6900 Millhouse Road Chapel Hill, NC Zip Code: 27516

Use Groups (A, B, and/or C): C Existing Zoning District: (A) MU-R-1
 (B) OI-1
 (C) MU-R-1

Project Description: Facility expansion for Town Transit. This will include surface parking, infrastructure for clean energy
 Vehicles, new operations center, and new access road.

Section B: Applicant, Owner and/or Contract Purchaser Information

Applicant Information (to whom correspondence will be mailed)

Name: Katy Fontaine

Address: 6900 Millhouse Road

City: Chapel Hill State: NC Zip Code: 27516

Phone: 919-969-4957 Email: kfontaine@townofchapelhill.org

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: Kathryn Fontaine Date: 9/27/2022

Owner/Contract Purchaser Information:

Owner Contract Purchaser

Name: Town of Chapel Hill

Address: 405 Martin Luther King Jr. Blvd

City: Chapel Hill State: NC Zip Code: 27514

Phone: 919-969-4957 Email: kfontaine@townofchapelhill.org

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: Kathryn Fontaine Date: 9/27/2022



Concept Plan Overview

Site Description	
Project Name	Town of Chapel Hill Transit Facility Expansion
Address	6900 Millhouse Road Chapel Hill, NC 27516
Property Description	Transit Operations Facility
Existing Land Use	(A) Transit bus yard and operations facility (B) Undeveloped property (C) Transit bus yard and operations facility
Proposed Land Use	Transit bus yard and operations facility
Orange County Parcel Identifier Numbers	(A) 9870890971 (B) 9871800325 (C) 9871809160
Existing Zoning	(A) MU-R-1 (B) OI-1 (C) MU-R-1
Proposed Zoning	(A) MU-R-1 (B) OI-1 (C) MU-R-1
Application Process	SUP Modification
Comprehensive Plan Elements	
Overlay Districts	N/A

Regulatory Land Use Intensity

Design/LUMO Standards		Requirement	Proposal	Status
Sec. 3.7	Use/Density	Use Group C	Transit bus yard and operations facility	
Sec 3.8	Net Land Area	N/A	10.09 acres	
Sec 3.8	Gross Land Area	N/A	11.06 acres	
Sec. 3.8	Dimensional Standards	Street - 0 Interior - 0 Solar - 0		
Sec. 3.8	Floor area	.076		
Sec. 4.5.6	Modification to Regulations		UNK	



Sec. 5.5	Recreation Space	N/A		
----------	------------------	-----	--	--

Site Design

	Design/LUMO Standards	Requirement	Proposal	Status
Landscape	Sec. 5.6	East	B/C	
	Sec. 5.6	North	B/C	
	Sec. 5.6	South	B/C	
	Sec. 5.6	West	B/C	
	Sec. 5.7	Tree Canopy	30%	30%
	Sec. 5.11	Lighting Plan (footcandles)	LUMO	
Environment	Sec. 3.6	Resource Conservation District	LUMO	
	Sec. 5.18	Jordan Riparian Buffer	LUMO	
	Sec. 5.3.2	Steep Slopes	LUMO	UNK
	Sec. 5.4	Stormwater Management	LUMO	
		Land Disturbance	LUMO	UNK
	Sec. 5.4	Impervious Surface	LUMO (70%)	
	Sec. 5.13	Solid Waste & Recycling	LUMO	UNK
Housing		Affordable Housing Proposal, if applicable	N/A	



Design/LUMO Standards		Requirement	Proposal	Status	
Access & Circulation	Sec. 5.8	Street Standards	LUMO	LUMO	
	Sec. 5.8	Vehicular Access	LUMO	Addition of secondary access point	
	Sec. 5.8	Bicycle Improvements	LUMO	LUMO	
	Sec. 5.8	Pedestrian Improvements	LUMO	LUMO	
	Sec. 5.8	Distance from bus stop	LUMO	LUMO	
	Sec. 5.8	Transit Improvements	LUMO	LUMO	
	Sec. 5.9	Vehicular Parking Spaces	Min - 1 per 350 sq ft of floor area Max – N/A	Addition of a minimum of 23 vehicular parking spaces	
	Sec. 5.9	Bicycle Parking Spaces	Min – 8 2 additional spaces per every 4000 sq ft of floor area	Addition of a minimum of two (2) bicycle parking spaces	
	Sec. 5.9	Parking Lot Standards	LUMO	LUMO	
Other		Homeowners Association	N/A		
	Sec. 5.5	Recreation Space	LUMO		
	Sec. 5.12	Utilities			
	Sec. 5.16	School Adequate Public Facilities	N/A		

Symbol	Meaning	Symbol	Meaning
	Meets Standard	M	Modification necessary
NA	Not Applicable	UNK	Not known at this time

Town of Chapel Hill Transit Facility Expansion

Over the last several years, Chapel Hill Transit has been working to improve the services we provide to the Town of Chapel Hill, Town of Carrboro, and University of North Carolina at Chapel Hill. The North South Bus Rapid Transit (NSBRT) project will allow for more frequent buses, shorter travel times, and more reliable service. Our Sustainable Transit initiative has led to the debut of our first three (3) battery electric buses and continued research to making our fleet zero-emissions. We also have eight (8) additional buses on order and are pursuing grant opportunities for further vehicles and other additional zero-emission opportunities, such as hydrogen fuel cells.

As we continue to grow and develop these projects, we have determined that our current facility and infrastructure do not meet our needs for the short or long term. Also, NSBRT will require an additional 16 electric articulated vehicles (60-foot) to operate, and our current lot does not have the space to accommodate them. The addition of more electric vehicles also requires charging infrastructure we do not currently have in place. As we finalize our solar feasibility study, new solar infrastructures and storage facilities may need to be installed. Additionally, with an increase in service, new vehicles, and changing technologies, space for running the operations, training, and maintenance functions will need to increase.

The Town currently owns a parcel to the west of our current bus yard, known as the Nunn property. This has long been identified as an expansion site for Transit. Our current Special Use Permit (SUP), which also includes the Public Works property/facility, would need to be modified to accommodate the potential changes to the site.

Currently, this property and the adjacent properties along Millhouse Road are being used for Town of Chapel Hill facilities:

- The Nunn property is mostly undeveloped land. The Town's Fire Department has been using a portion of the site as a temporary Live Fire Training Facility. There is also a storm water retention pond and stream on the property. Current plans do not have us disturbing either and we will comply with all stormwater and sedimentation/erosion control requirements.
- The property to the north of the project is the Town's Public Works Department facility and Town Operations Center.
- The properties to the east and south of the project are the Town's Transit Department facilities.

This project will be broken into several phases. Detailed plans and cost estimates will be developed with each phase and will depend on availability of federal and state grants.

Phase One:

Transit Bus Yard expansion including but not limited to the following:

- Fleet parking for approximately 30 65' buses and additional support vehicles. Potential room to expand parking if needed.

- Operator Skills Training Area for training new and current team members in a controlled environment. Will require approximately 100K square feet of space and can be combined with the fleet parking area.
- Infrastructure to support the electrification of the fleet, including charging locations.

Phase Two:

Transit Operations and Maintenance Center expansion including but not limited to the following:

- Operations Facility to include training rooms, Town meeting space, Transit Bus Simulator, fitness center, office space and storage.
- Maintenance Bays to include space for interior cleaning of vehicles, panel and decal replacement, and vehicle storage. This new space will allow for our current bays to remain available for repairs and preventative maintenance. Will require enough space for two to four 60' buses.
- Outdoor space for Team Members. As our Team Members spend many hours before, in between, and after shifts at our facility, having a designated space for them to gather and socialize would be beneficial to their overall wellness at work. This space could include greenspace, picnic tables, covered patio area, grilling appliances, and outdoor games.
- Connections to local greenways and trails. This would allow northbound access from the Transit Facility to the Public Works Facility, as well southbound towards the planned Carolina Donor Services connections and local trails.
- Storage area for power generated from on/off site solar.

Phase Three:

We are looking into the possibility of adding an access road with connections to Eubanks Park and Ride lot. Our current facility only has one (1) entrance and exit leading to Millhouse Road, which could cause issues if blocked or inaccessible for some reason. The access road would allow for a secondary entrance, which could additionally be used for BRT, deliveries, and local service to the Transit Facility (which currently does not exist), Carolina Donor Services, and Carolina Flex Park.

We are in the process of identifying federal funding sources to help with the cost of these efforts. Some of the work could also be included as part of the NSBRT project, as the current cost estimate includes some facility related costs.

Phase Four:

The Nunn Property is approximately 11.06 acres. The proposed Transit Facility expansion is estimated to use less than 4 acres of the property. As the Town owns the entire property, there is a potential to develop the western part into future public service facilities. Currently the property is being used as a temporary live fire training facility by the Orange County Fire Department. This property would include a facility and/or a parking lot.

We believe that this project will allow us to meet both short and long term needs. If our future needs change, this will provide us with the flexibility to make changes based on service updates and future technologies. The expansion plan has been reviewed and approved by the Chapel Hill Transit Partners committee.



CHAPEL HILL TRANSIT
Town of Chapel Hill
6900 Millhouse Road
Chapel Hill, NC 27514-2401

phone (919) 969-4900 fax (919) 968-2840
www.townofchapelhill.org/transit

TO: Town of Chapel Hill Planning Department
FROM: Katy Fontaine, Chapel Hill Transit Project Manager
RE: Statement of Compliance for Chapel Hill Transit Facility Expansion
DATE: 9/27/2022

Statement of Compliance with the Comprehensive Plan

Chapel Hill Transit's Facility Expansion will be built in compliance with the Town's Comprehensive Plan. It is applicable to all six themes outlined in Chapel Hill 2020.

A Place for Everyone

Chapel Hill is a place for everyone. One of the goals to achieve this is having a welcoming and friendly community that provides all people with access to opportunities. Chapel Hill Transit is able to provide that access with safe and reliable transportation. Expanding our current transit facility to provide infrastructure for new battery electric vehicles, space to train new and current staff members, and a secondary entrance and exit will allow us to continue to provide the Chapel Hill community with access to all opportunities.

Community Prosperity and Engagement

Chapel Hill strives to promote a safe, vibrant, and connected community. As our community continues to attract new people to area, Chapel Hill Transit works to connect these people to our local businesses and institutions for their continued success. With the additional vehicles in our fleet and the upcoming North South Bus Rapid Transit route that would be supported by our facility expansion, we'll be able to move more people around our community and continue to support the new entrepreneurs and start-up businesses that reside here.

Getting Around

The theme of getting around is the primary function of Chapel Hill Transit. Our goal as an organization is to provide safe and reasonable access to our community. The electrification of our fleet and the supporting infrastructure will help support the Town's goals of promoting air quality, sustainability, and energy conservation. The building of the new Operations and Maintenance Center will allow for increased support and resources for our transportation system.

Good Places, New Spaces

Chapel Hill Transit's facility expansion will follow the development process and strategy that is consistent with both the Chapel Hill 2020 comprehensive plan and Town/University interests. The addition of an access road with connections to Eubanks Road would allow for connections not only to Chapel Hill Transit, but the newly developed Carolina Donor Services and Carolina Flex Park. The road would include a multi-use path which would allow pedestrian access to these services and to the existing trails. As part of the facility expansion, Chapel Hill Transit is interested in creating outdoor space for our Team Members. This could be used for small gatherings and provide opportunities for staff to connect with each other.

Nurturing Our Community

One of the goals of nurturing our community is to reduce the carbon footprint of all Town-owned or managed services and properties. As part of our design process for the expanded Transit Facility, we will work to ensure that the new Transit and Operations Center meets development standards. Additionally, with the of installation of new infrastructure to support the electrification of our fleet, we will be able to continue our effort to produce zero-emissions and meet Town goals.

Town and Gown Collaboration

The partnership between the Town and the University has been critical in the success of Chapel Hill Transit. We strive to encourage the continued growth and success of those who live in and use the resources in our community. As Chapel Hill Transit continues to expand its services in the future, we will continue to be able to provide access to arts, culture, and intellectual pursuits, as well as access to health-care centers, public services, and active lifestyle opportunities.

Statement of Compliance with Design Guidelines

Chapel Hill Transit's Facility Expansion will be built in compliance with the Town's Design Guidelines. The expansion will be designed, arranged, and constructed in a safe, orderly, energy-efficient, and visually harmonious manner, and will reflect the basic character of the site and its immediate surroundings.

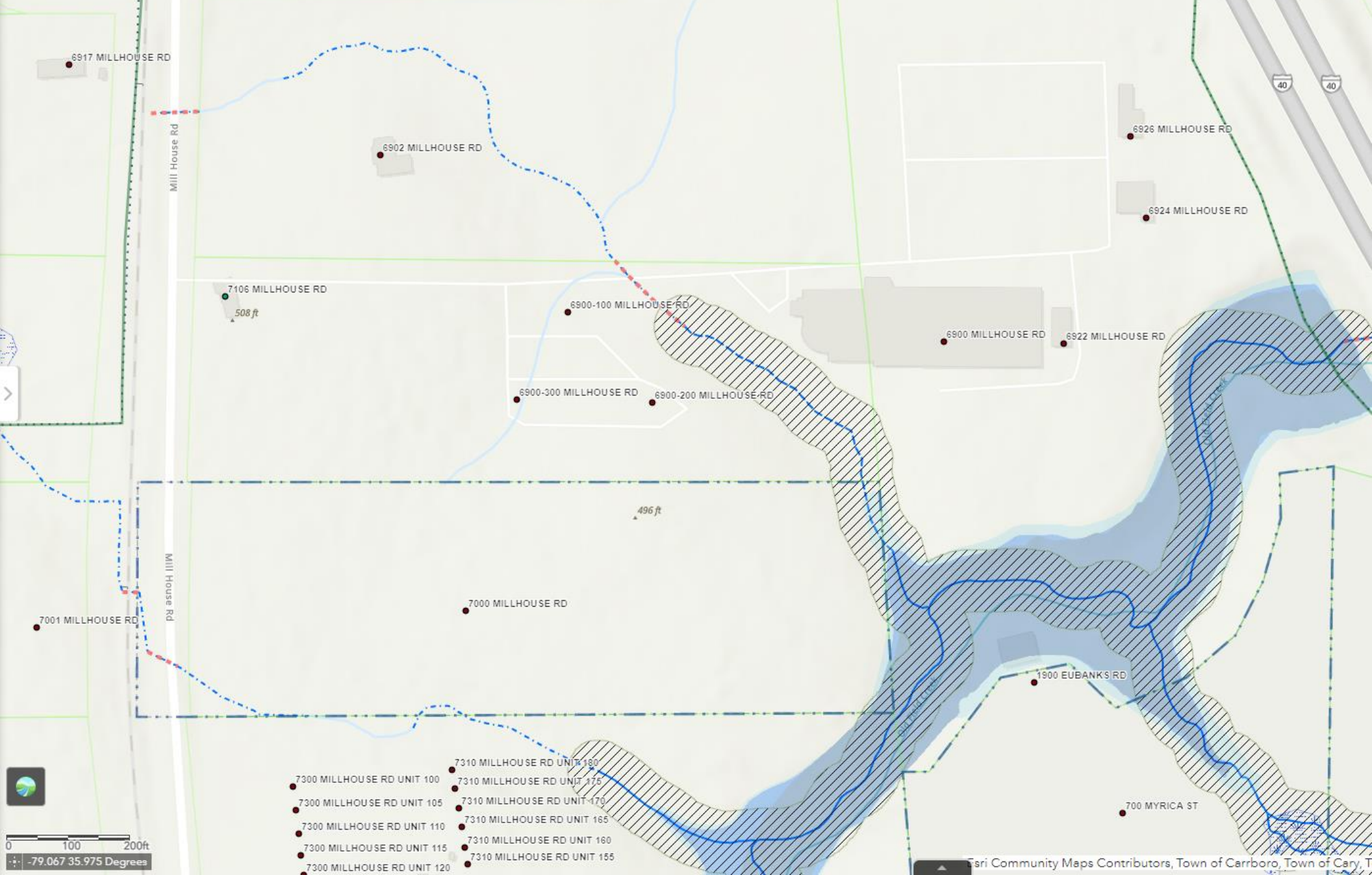
Landscape buffers will be designed in accordance with our design manual and with the use of best practices to provide appropriate transitions between the public service facilities and street scapes and adjacent land uses.

Vehicular connectivity will be provided via the new access road and a traffic circle will be constructed to avoid dead-ends. Pedestrian connections will be provided along the new road and connect to the existing trails.

Stormwater management facilities, water, sewer, and other utilities will be provided in accordance with the applicable guidelines, standards and regulations.

Name	Address 1	City, State, Zip
CAROLINA DONOR SERVICES	909 EAST ARLINGTON BLVD	GREENVILLE, NC 27858
CARRAWAY STORAGE LP	1420 E 7TH ST	CHARLOTTE, NC 28204
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MLK JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHAPEL HILL TOWN OF	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
CHIP ORANGE INC	405 JONES FERRY RD	CARRBORO, NC 27510
GBL PROPERTY LLC	6805 MILLHOUSE RD	CHAPEL HILL, NC 275164658
GREEN CUBE INVESTMENTS LLC	50051 GOVERNORS DR	CHAPEL HILL, NC 27517
HILLTOP MHP CHAPEL HILL NC LLC	75 W TOWNE RIDGE PKWY	SANDY, UT 84070
JAMES E NICHOLS AND CONNIE B NICHOLS TRUST	525 ETHEL JEAN LN	CHAPEL HILL, NC 27516
KIRSCHNER CORNELIUS GEORGE	2322 WAVERLY DR	WILMINGTON, NC 28403
MERRITT CP1 LLC	2066 LORD BALTIMORE DR	BALTIMORE, MD 21244
MORRIS JOHN B III TRUSTEE	194 FINLEY GOLF COURSE RD	CHAPEL HILL, NC 27517
NICHOLS JAMES TRUSTEE	525 ETHEL JEAN LN	CHAPEL HILL, NC 27516
NICHOLS JAMES TRUSTEE	525 ETHEL JEAN LN	CHAPEL HILL, NC 27516
NICHOLS TREY R	2107 CLYDE RD	CHAPEL HILL, NC 27516
NR EDGE APARTMENTS PROPERTY OWNER LLC	1819 WAZEE ST	DENVER, CO 80202
NR EDGE PROPERTY OWNER LLC	3015 CARRINGTON MILL BLVD	MORRISVILLE, NC 27560
NR EDGE PROPERTY OWNER LLC	3015 CARRINGTON MILL BLVD	MORRISVILLE, NC 27560
NR EDGE PROPERTY OWNER LLC	3015 CARRINGTON MILL BLVD	MORRISVILLE, NC 27560
NR EDGE PROPERTY OWNER LLC	3015 CARRINGTON MILL BLVD	MORRISVILLE, NC 27560
NR EDGE PROPERTY OWNER LLC	3015 CARRINGTON MILL BLVD	MORRISVILLE, NC 27560
OPTIMAL VENTURES LLC	194 FINLEY GOLF COURSE RD	CHAPEL HILL, NC 27517
ORANGE COUNTY	PO BOX 8181	HILLSBOROUGH, NC 27278
ORANGE COUNTY	PO BOX 8181	HILLSBOROUGH, NC 27278
ORANGE COUNTY	PO BOX 8181	HILLSBOROUGH, NC 27278
RALCAR CORP	55 GLENDALE PARKWAY NE	ATLANTA, GA 30328
SCHENLEY KATHLEEN S	6714 MILLHOUSE RD	CHAPEL HILL, NC 27516
TOWN OF CHAPEL HILL	405 MARTIN LUTHER KING JR BLVD	CHAPEL HILL, NC 27514
TRAN FAMILY TRUST	504 SPENCER CREST CT	CARY, NC 27513

Find Street, Address or Parcel



0 100 200ft
-79.067 35.975 Degrees

Chapel Hill Transit Existing Conditions Map

Legend

- Transit Facility Parcels
- Orange County Parcels
- Durham County Parcels
- Chapel Hill Corporate Limits
- Jurisdictional Limits
- Streets
- Impervious Surfaces

Trails

- Paved Greenway
- Unpaved Greenway
- Sidepath
- Bike Lane
- Buffered Bike Lane
- Sharrows

Streams

- N/A
- ephemeral
- intermittent
- not-perennial
- perennial
- unknown
- Inlet Structures
- Stormwater Ditches
- Stormwater Lines
- Culverts
- Approximate Jordan Buffer

FEMA Floodplain Boundaries

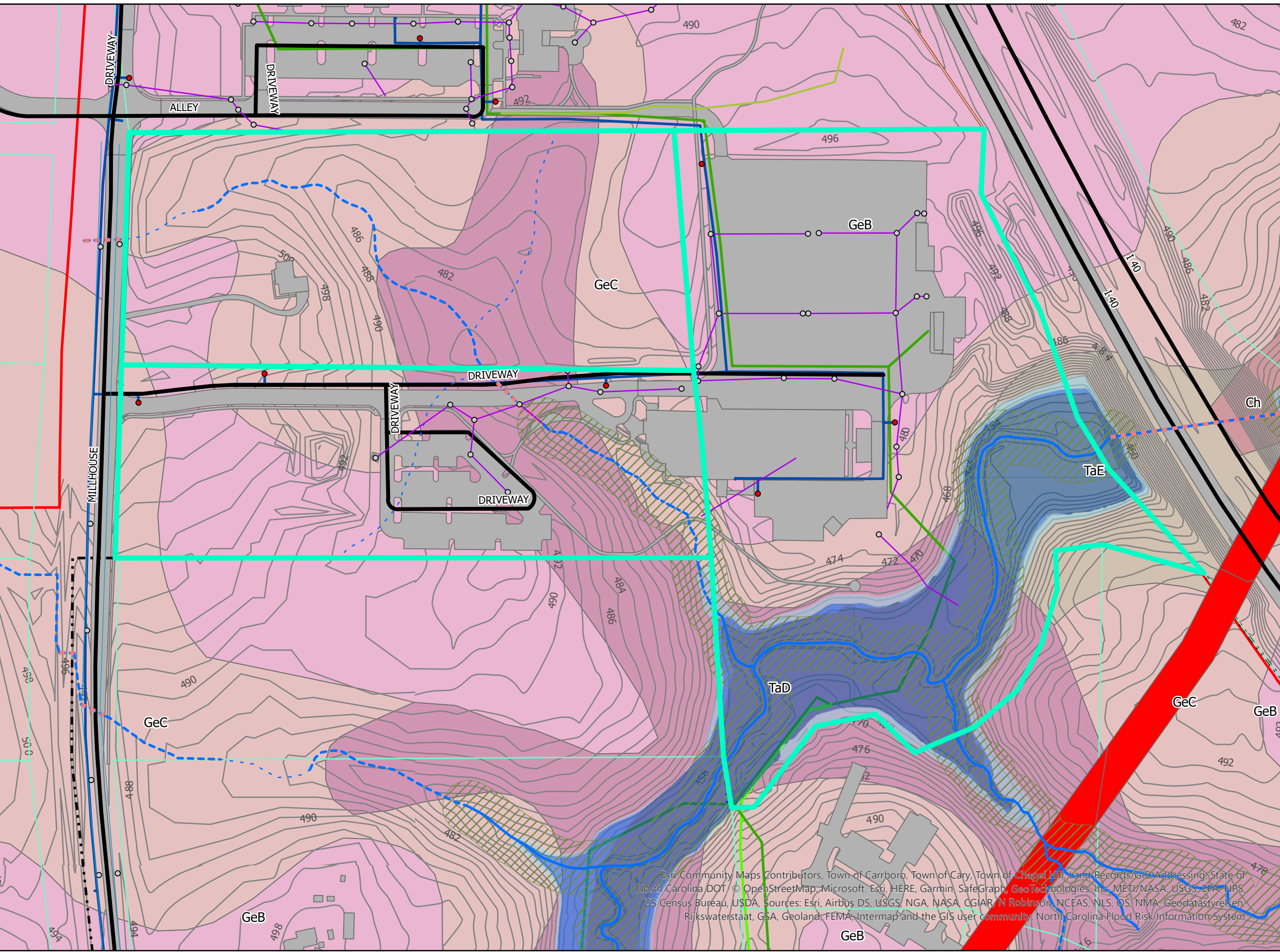
- Floodway
- 0.1% Chance Boundary
- 0.02% Chance Boundary
- Hydrants
- Water Lines
- Gravity Sewer Mains
- Pressurized Sewer Mains

Duke Transmission Easements

- Electric
- Gas

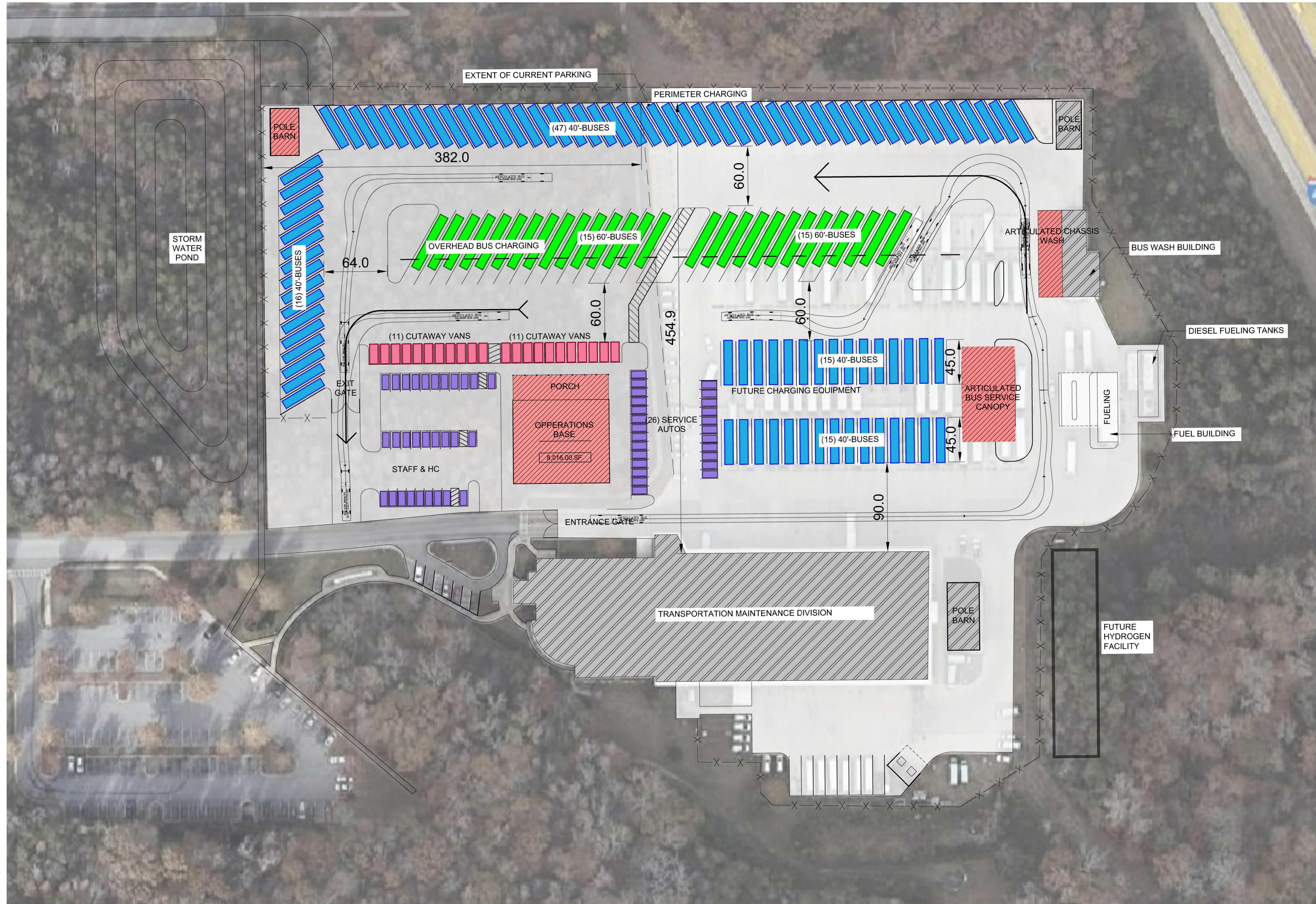
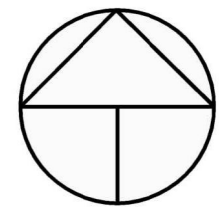
Soil Types

- ApB
- ApC
- Ch
- Cp
- EnB
- EnC
- GeB
- GeC
- GID
- HrB
- HrC
- HwB
- HwC
- IrB
- Lg
- TaD
- TaE
- W
- WmD



Esri Community Maps Contributors, Town of Carrboro, Town of Cary, Town of Chapel Hill, Land Records/GIS/Addressing, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, North Carolina Flood Risk Information System





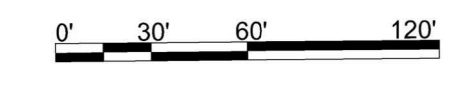
LEGEND

- DIRECTION OF CIRCULATION
- 60 FT ARTICULATED BUS
- 40 FT BUS
- CUTAWAY VAN
- SERVICE OR STAFF AUTO

PARKING SUMMARY

40' BUSES	93
60' ARTICULATED BUSES	30
CUTAWAY BUSES	22
AUTOMOBILES (BEHIND GATES)	26

1 | EXPANSION CONCEPT PLAN
Scale: 1" = 60'-0"



Town of Chapel
Hill Public Works

Future Public Service
Facility

Transit Facility
Expansion

Transit Facility
Access Road

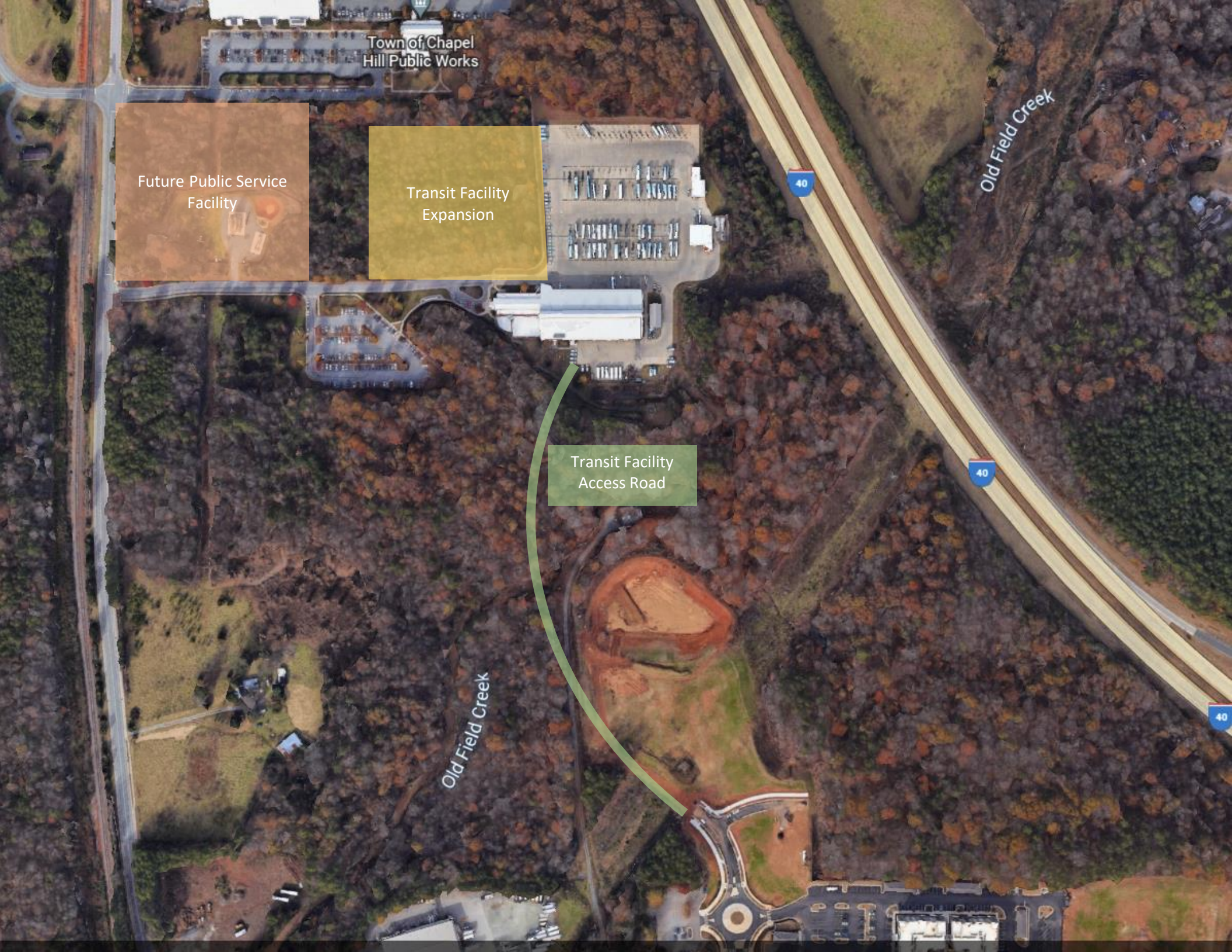
Old Field Creek

Old Field Creek

40

40

40










Chapel Hill Transit Existing Conditions Map

 Phase 1+2







 Phase 3

 Phase 4












Legend

-  Transit Facility Parcels
-  Orange County Parcels
-  Durham County Parcels
-  Chapel Hill Corporate Limits
-  Jurisdictional Limits
-  Streets
-  Impervious Surfaces








Trails

-  Paved Greenway
-  Unpaved Greenway
-  Sidepath
-  Bike Lane
-  Buffered Bike Lane
-  Sharrows



Streams

-  N/A
-  ephemeral
-  intermittent
-  not-perennial
-  perennial
-  unknown
-  Inlet Structures
-  Stormwater Ditches
-  Stormwater Lines
-  Culverts
-  Approximate Jordan Buffer

FEMA Floodplain Boundaries

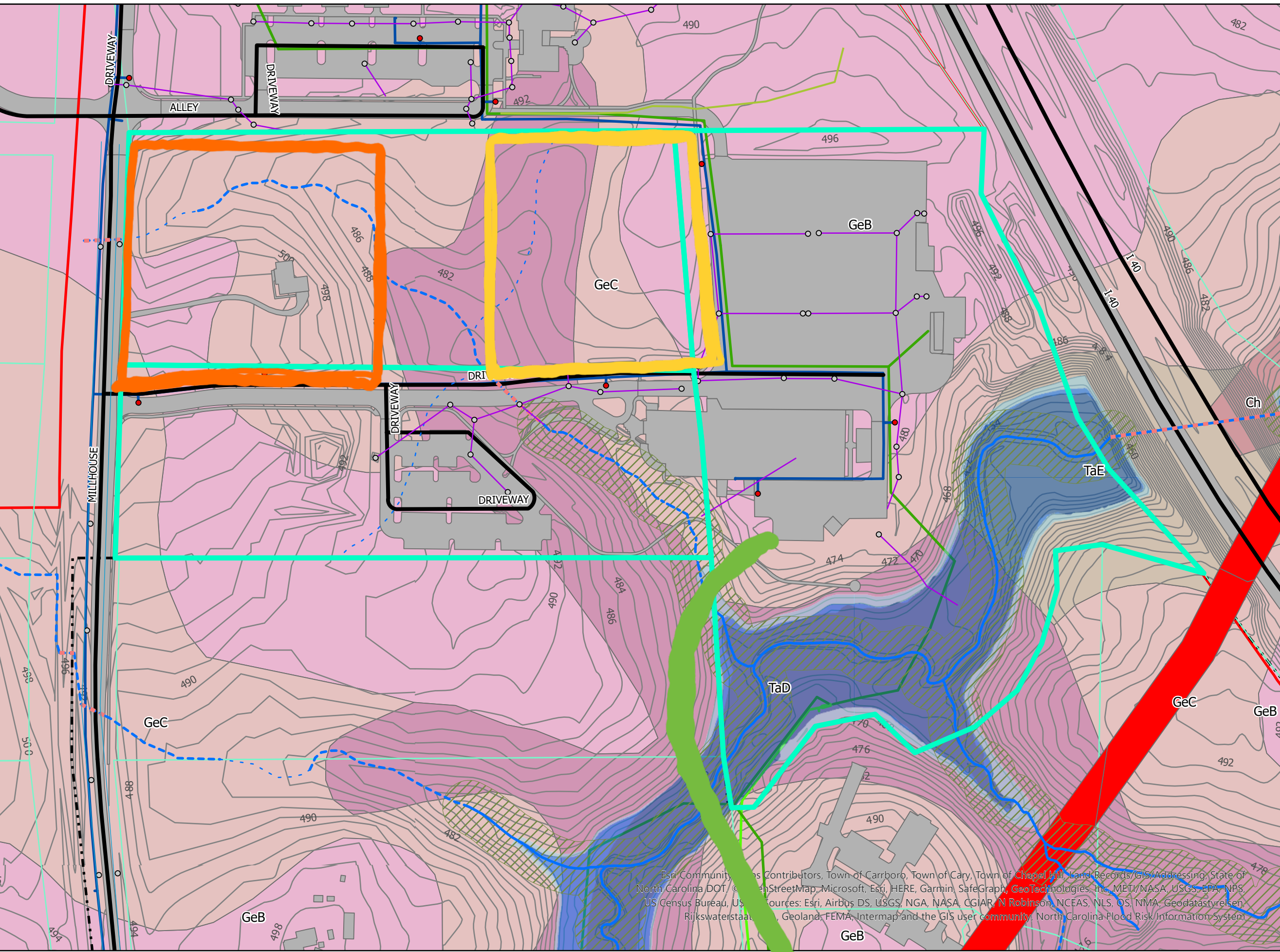
-  Floodway
-  0.1% Chance Boundary
-  0.02% Chance Boundary
-  Hydrants
-  Water Lines
-  Gravity Sewer Mains
-  Pressurized Sewer Mains

Duke Transmission Easements

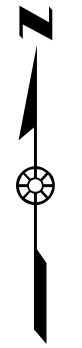
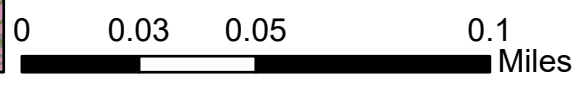
-  Electric
-  Gas

Soil Types

- ApB
- ApC
- Ch
- Cp
- EnB
- EnC
- GeB
- GeC
- GID
- HrB
- HrC
- HwB
- HwC
- IrB
- Lg
- TaD
- TaE
- W
- WmD



Esri Community Maps Contributors, Town of Carrboro, Town of Cary, Town of Chapel Hill, Land Records/GIS/Addressing, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USGS, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, Geoland, FEMA, Intermap and the GIS user community, North Carolina Flood Risk Information System





**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 27, 2022

Ms. Katy Fontaine
Town of Chapel Hill – Chapel Hill Transit
6900 Millhouse Road
Chapel Hill, NC 27516
kfontaine@townofchapelhill.org

**RE: Stream Determination for 6902 & 6900 Millhouse Road, Chapel Hill, NC
PINs 9871-80-0325, 9871-80-9160, 9870-89-0971**

Dear Ms. Fontaine:

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's 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 restrictions.

This stream determination will remain in effect for five years from the date of the last 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 this stream determination, please contact me at (919) 969-7202 or aweakley@townofchapelhill.org. If you have questions about the application of the Town's Resource Conservation District (RCD) or Jordan Watershed Riparian Buffer regulations to this property, please contact the Planning Department at planning@townofchapelhill.org or (919) 968-2728. You may also view information about buffer regulations online at: <http://www.townofchapelhill.org/stormwater>.

Sincerely,

A handwritten signature in black ink that reads "Allison Schwarz Weakley".

Allison Schwarz Weakley
Stormwater Analyst



**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
9871-80-0325, 9871-80-9160, 9870-89-0971	6902 & 6900 Millhouse Road, Chapel Hill

These are the results of a site visit to the property(ies) listed above for a stream determination conducted on 9/19/2022 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 approximate locations is attached. *Note that Resource Conservation District (RCD) buffers may also apply but are not shown. 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 wetlands are anticipated.

Allison Weasley

Town Staff Signature

9/27/2022

Date



**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 RECORDS REVIEW

Property Information	
Parcel ID Number (PIN)	Address / Location Description
9871-80-0325, 9871-80-9160, 9870-89-0971	6902 & 6900 Millhouse Road, Chapel Hill

After reviewing Town GIS information, USGS 1:24,000 Topographic maps, and County Soil Survey maps, I have determined:

No unclassified streams or waterbodies, streams or waterbodies identified as requiring a new classification or determination, or unidentified flowlines (possible streams) are shown within 150 feet of the property in question on the Town’s GIS, the USGS 1:24,000 Topographic map, or the County Soil Survey map for the area.

A Resource Conservation District boundary was set on a recorded final plat for the property in question, and there are no streams or waterbodies shown on the USGS 1:24,000 Topographic map or County Soil Survey within 150 feet of the property.

A stream determination has been completed for this property, a property uphill or upstream, or a nearby property as of September 19, 2017 or later, and that stream determination applies to this property. A copy of the documentation for the relevant site visit(s) is available upon request.
Relevant PIN(s): 9871-80-0325 (site visit 3-14-2019), 9871-80-9160, 9871-80-0325, 9870-89-0971 (site visit 6-24-2019)

A map showing water features, their Town flow classifications, presence of Jordan Watershed Riparian Buffers, and their approximate locations is attached. *Note that Resource Conservation District (RCD) buffers may also apply but are not shown. Origins or breakpoints that have been flagged in the field are marked on the map.*

Other conditions exist which may affect the location of the Resource Conservation District 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 wetlands are anticipated.

Alison Neasley

Town Staff signature

9/27/2022
Date

Stream Determination Area Map

Address: 6902 & 6900 Millhouse Road, Chapel Hill, NC

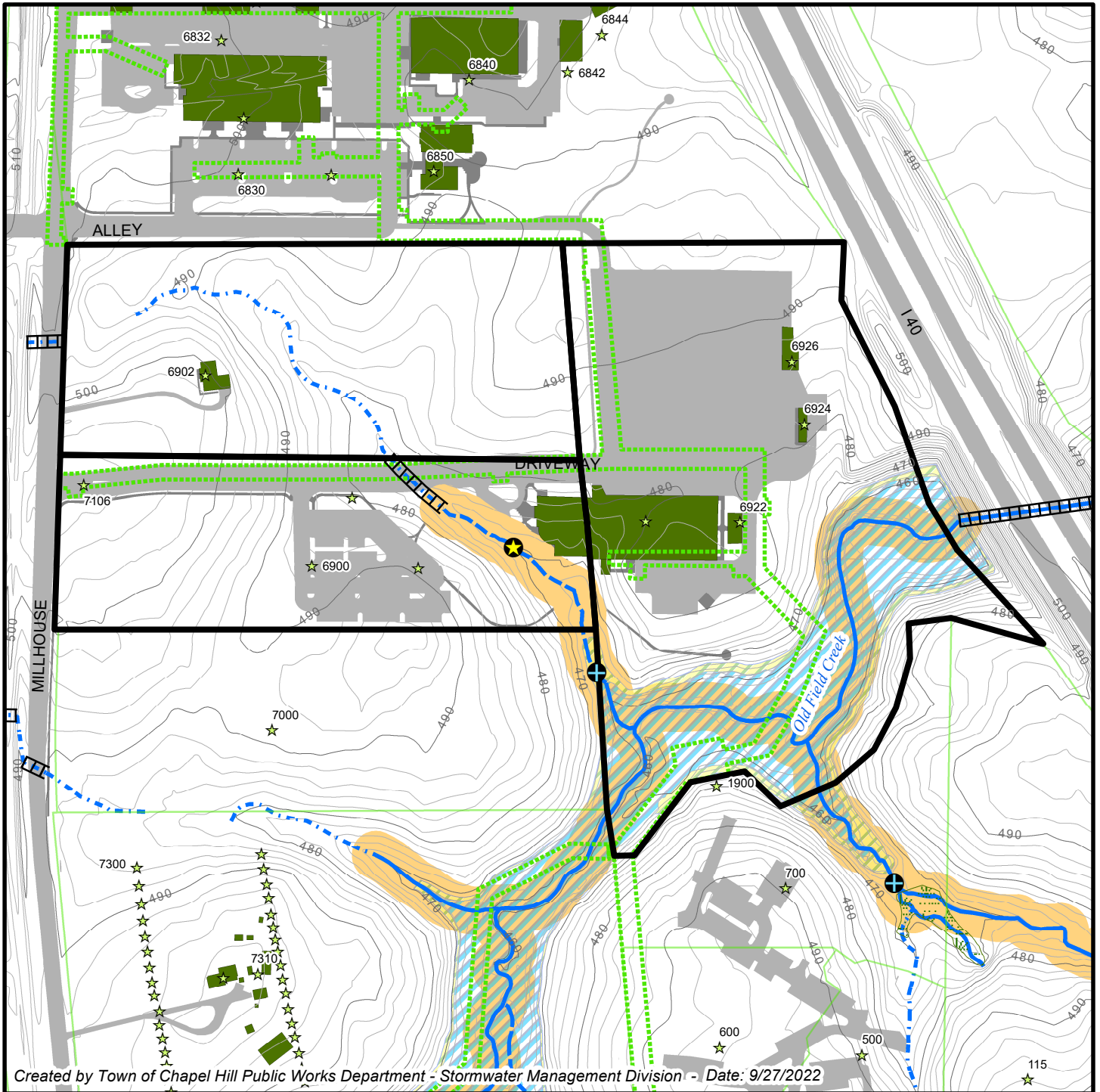
Parcel ID: 9871-80-0325, 9871-80-9160, 9870-89-0971

- Ephemeral Stream
 - Intermittent Stream
 - Perennial Stream
 - Possible Jurisdictional Wetlands
 - Culverts
 - 2-foot Contours
 - 10-foot Contours
 - Buildings
 - Parcels
 - OWASA Easements
 - ★ Addresses
 - Approximate Jordan Buffer
 - Subject Property
- 500-year Floodplain
 - 100-year Floodplain
 - ⊗ Ephemeral Breakpoint
 - ⊗ Intermittent Breakpoint
 - ⊗ Perennial Breakpoint


0 150 300 600 Feet



Stream locations are approximate and must be verified by survey. Buffers are measured from top of bank. RCD buffers are not shown but may apply. Please contact the Town of Chapel Hill Planning Department to verify all applicable buffers.

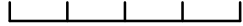


USGS 24K Topographic / County Soil Survey Maps

 Subject Property

Address: 6902 & 6900 Millhouse Road, Chapel Hill, NC

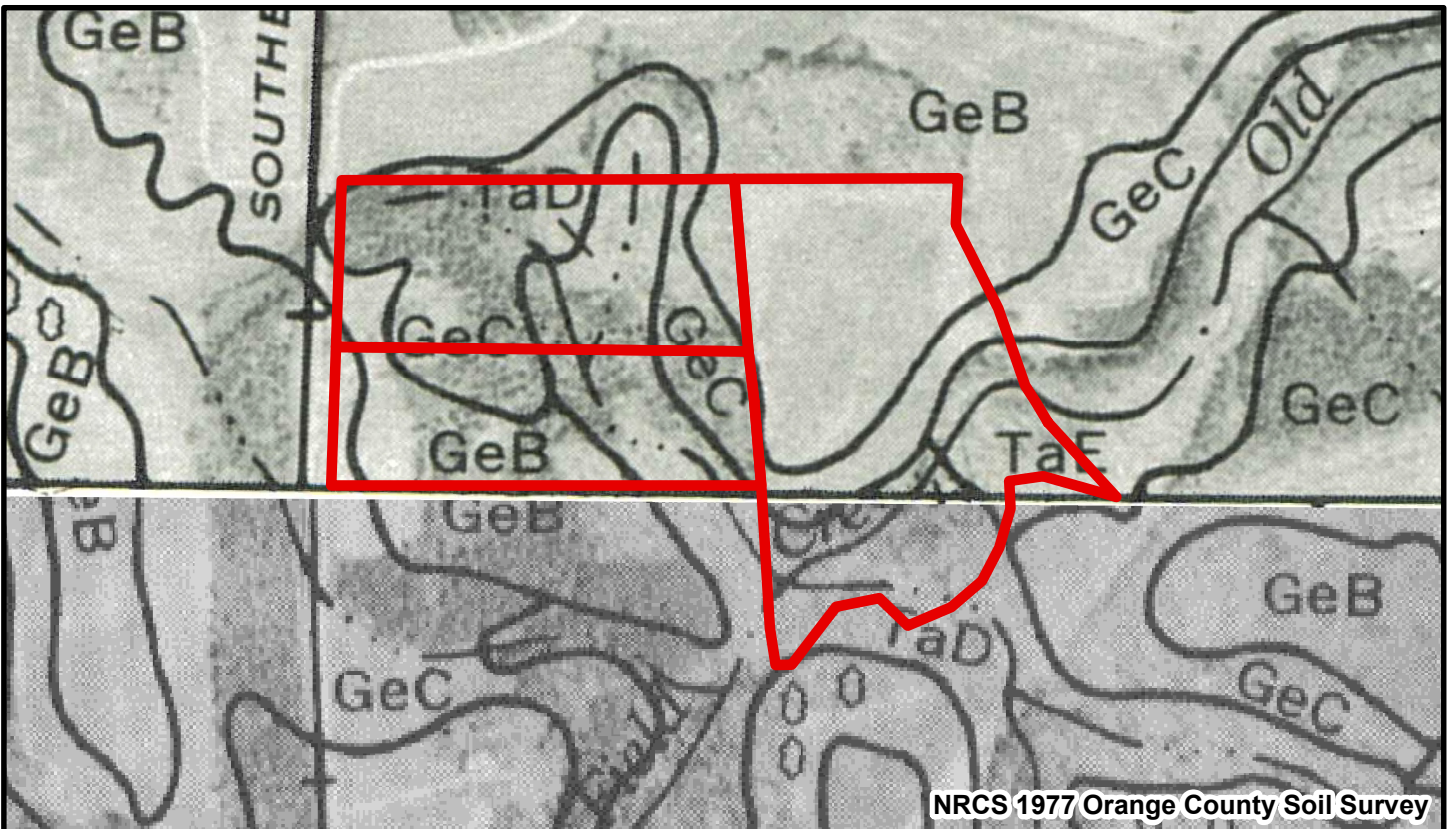
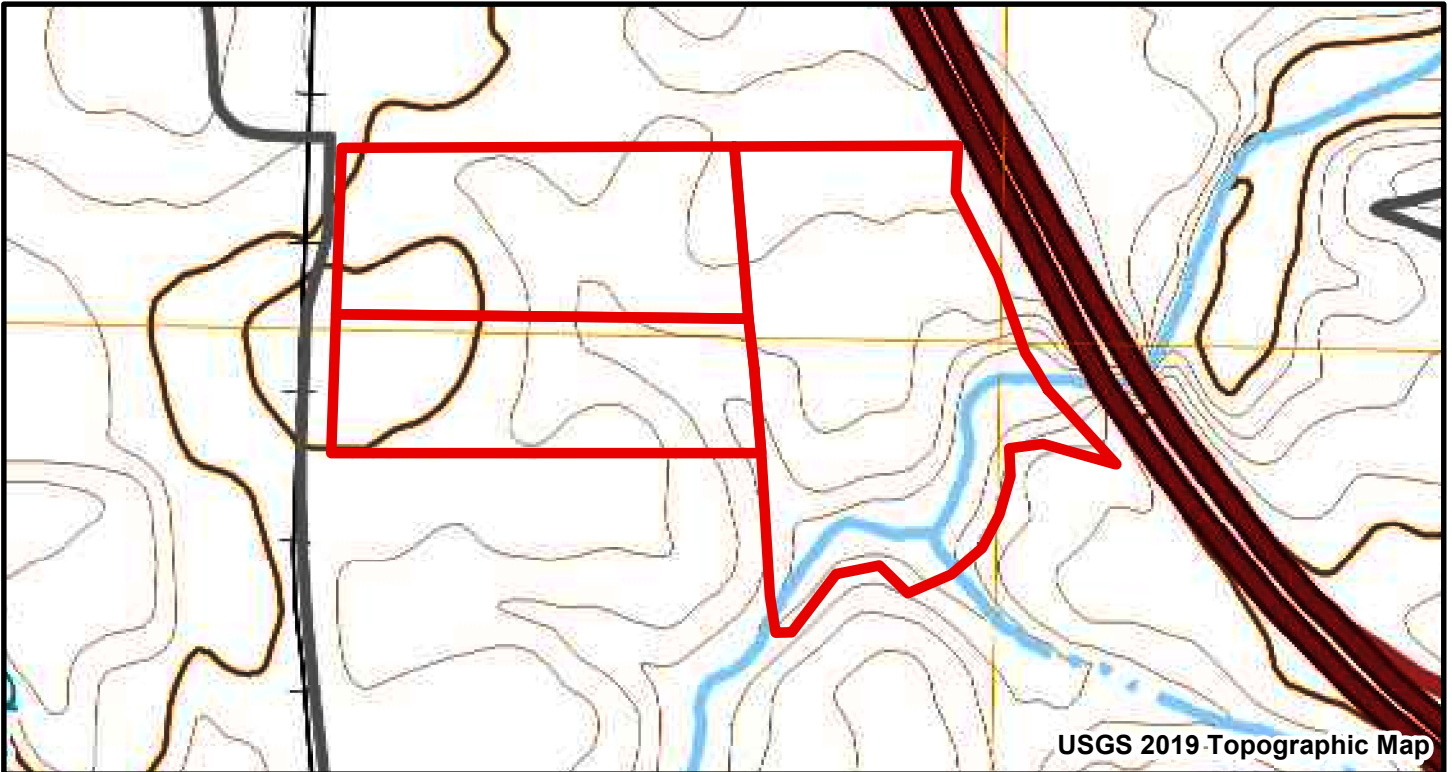
0 150 300 450 600 Feet



Parcel ID: 9871-80-0325, 9871-80-9160, 9870-89-0971

1 inch = 500 feet

Created by Town of Chapel Hill Public Works Department - Stormwater Management Division- 9/27/2022

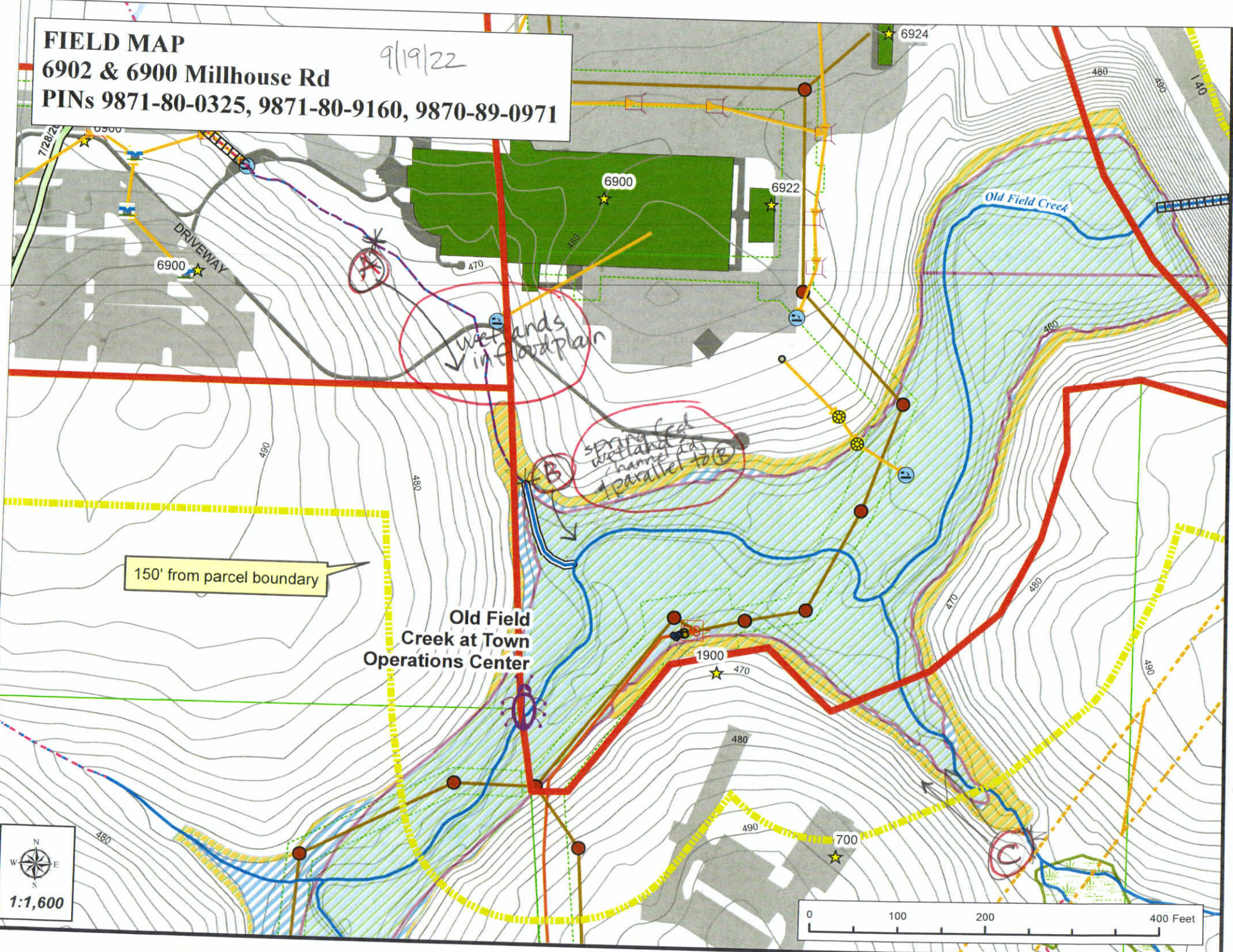


FIELD MAP

6902 & 6900 Millhouse Rd

PINs 9871-80-0325, 9871-80-9160, 9870-89-0971

9/19/22



150' from parcel boundary

Old Field
Creek at Town
Operations Center

N
W E
S
1:1,600

0 100 200 400 Feet

202209191018

NC DWQ Stream Identification Form Version 4.11

Feature (A)

Date: 9/19/22	Project/Site: 690246900 Millhouse Rd	Latitude: 35.9755
Evaluator: Weakley & Salat	County: Orange	Longitude: -79.0727
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 22.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 11.5)

	Absent	Weak	Moderate	Strong
1 ^a Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1) →	2	3
5. Active/relict floodplain <i>scoured, drift lines</i>	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 (Subtotal = 7)

12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	(1.5)	1	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles <i>in FP</i>	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. Macroinvertebrates (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0 <i>none</i>			

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

Notes:

Sketch: Feature begins e prominent headcut/grade control (flagged). Braided channel below paved trail then re-concentrates before breakpoint to Feature (B).

202209191035

NC DWQ Stream Identification Form Version 4.11

Feature (B)

Date: 9/19/22	Project/Site: 690296900 Millhouse Rd	Latitude: 35.9748
Evaluator: Weakley + Salat	County: Orange	Longitude: -79.0721
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 35.5	Stream Determination (circle one) Ephemeral Intermittent <u>Perennial</u>	Other e.g. Quad Name:

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 <i>gravel, cobble sand</i>	0	1	2	(3)
5. Active/relict floodplain <i>Scoured</i>	0	1	(2)	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits <i>some in FP</i>	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 (Subtotal = 10.5)

12. Presence of Baseflow <i>active flow throughout</i>	0	1	(2) →	3
13. Iron oxidizing bacteria <i>of GW from</i>	0	1	(2)	3
14. Leaf litter <i>leaves in bank</i>	(1.5)	1	0.5	0
15. Sediment on plants or debris <i>in FP</i>	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 9.5)

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

^a Perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: mosquito larvae, cricket frogs abundant, dragonfly, 3 larval salamanders, Tipula, crayfish, fish

Sketch: Feature begins @ prominent grade control (flagged)
Good flow despite drought!

↓

(A) Wetland seep w/ channel parallels main channel; confluence w/ (B) @ Old Field Creek. See photos.

202209191129

Feature (C)

NC DWQ Stream Identification Form Version 4.11

Date: 9/19/22	Project/Site: 6902+6900 Millhouse Rd	Latitude: 35.9736
Evaluator: Weakley & Salat	County: Orange	Longitude: -79.0701
Total Points: 37 <small>Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*</small>	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 16.5)

	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 <i>bedrock</i>	0	1	2	3
5. Active/relict floodplain <i>scouring very rocky</i>	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 (Subtotal = 12.5)

12. Presence of Baseflow <i>active flow throughout</i>	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 <i>lots of silt</i>	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. Macroinvertebrates (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed <i>Polygonum on bench</i>	FACW = 0.75; OBL = 1.5 Other = 0			

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

Notes: fish (1) in pool, larval salamander, dragonfly, caddisfly
← upr

Sketch: Feature begins @ edge of transmission line ROW & ends @ confluence w/ Old Field Cr.

→ New SCM @ Carraway Village discharges perpendicular to channel & is beginning to blow out portion of (R) bank - see photos.


6902 & 6900 Millhouse Rd

Sep 27, 2022



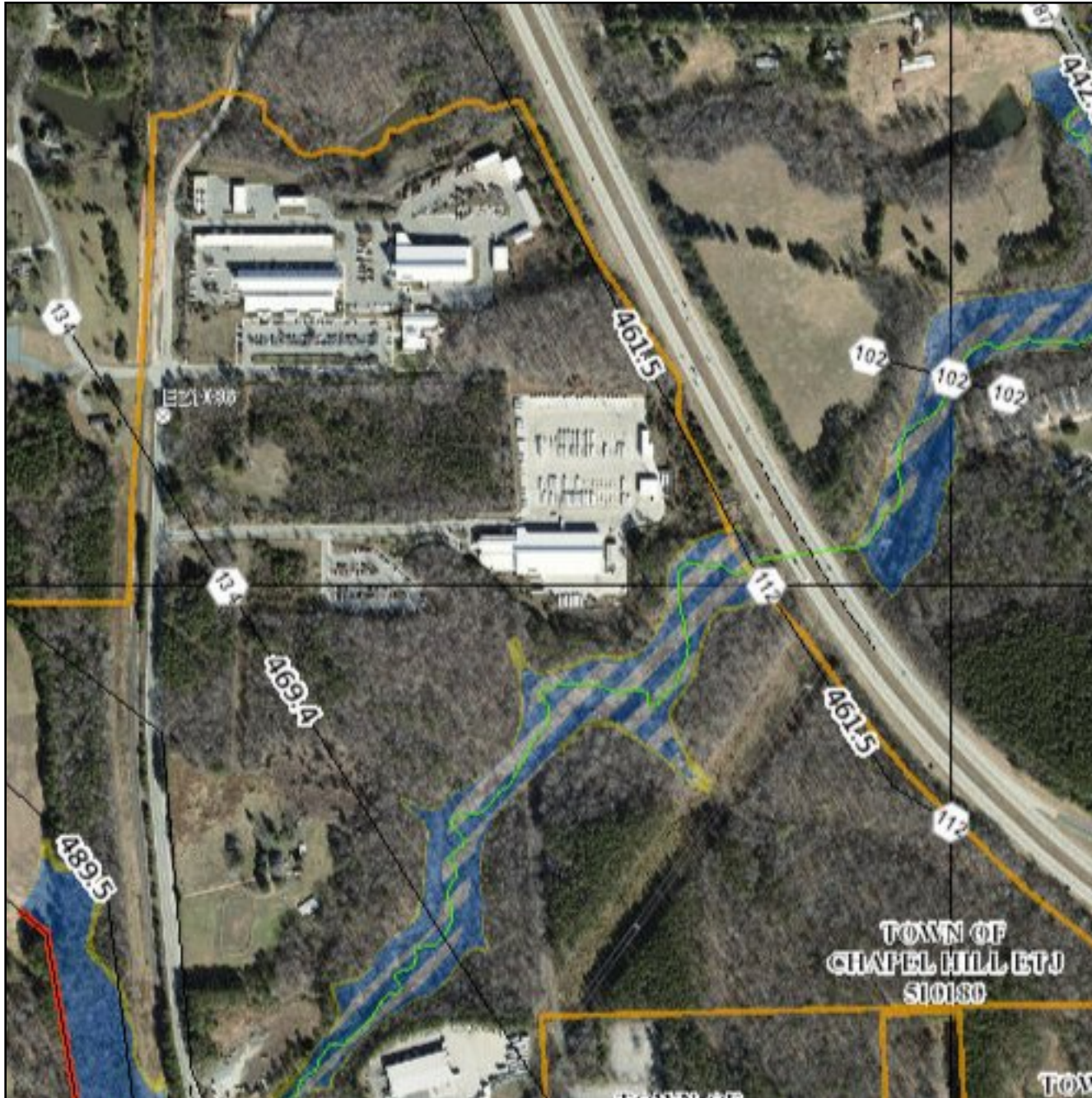
Source: Esri, Maxar, Earthstar Geographics, and the ©IS User Community

Legend

- | | |
|---|---|
|  Panels | Flood Hazard Areas |
|  Political Areas |  AE |
|  Stream Centerline |  Floodway (AE) |
|  Cross Sections |  0.2 % Chance Annual Flood Hazard |
|  Levee |  Future Conditions 1% Annual Chance Flood Hazard |

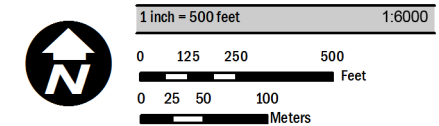
North Carolina Floodplain Mapping Program





	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Areas Determined to be Outside the 0.2% Annual Chance Flood Hazard Zone X
	Jurisdiction Boundary
	FIRM Panel Boundary

North Carolina State Plane Projection Feet (Zone 3200)
Datum: NAD 1983 (Horizontal), NAVD 1988 (Vertical)



FEMA National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

Panel(s): 9871, 9881, 9870, 9880

CONTAINS:

COMMUNITY	CID
ORANGE COUNTY	370342
TOWN OF CHAPEL HILL	370180

Notice to User: The Map Number(s) shown below should be used when placing map orders; the Community Number(s) shown above should be used on insurance applications for the subject community.

SELECTED PANELS:

MAP NUMBER	EFFECTIVE DATE
3710987100K	11/17/2017
3710988100K	11/17/2017
3710987000K	11/17/2017
3710988000K	11/17/2017



FEMA: National Flood Insurance Program



Panel(s): 9871,9881,9870,9880

CONTAINS:

COMMUNITY	CID
ORANGE COUNTY	370342
TOWN OF CHAPEL HILL	370180

Notice to User: The Map Number(s) shown below should be used when placing map orders; the Community Number(s) shown above should be used on insurance applications for the subject community.

SELECTED PANELS:

MAP NUMBER	EFFECTIVE DATE
3710987100K	11/17/2017
3710988100K	11/17/2017
3710987000K	11/17/2017
3710988000K	11/17/2017

NOTES TO USERS

This is an official FIRMette of a portion of the effective panels listed in the Title Block shown on Page 1. The information represented on this FIRMette was extracted from the effective digital flood hazard data available at <http://fris.nc.gov/fris>.

Base flood elevation data, floodway, nonencroachment widths, information on certain areas no in the Special Flood Hazard Areas protected by flood control structures, and other pertinent data are available in the Flood Insurance Study (FIS) available at <http://fris.nc.gov/fris>. Users should be aware that flood elevations shown on this FIRMette represent elevations rounded to one tenth of a foot (0.1') and should be utilized in conjunction with data available in the FIS.

NOTES TO USERS

Base map information and geospatial data used to develop this FIRMette were obtained from various organizations, including the participating local community(ies), state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by the State in 2010. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map.

See geospatial metadata for the associated digital FIRMette for additional information about base map preparation. Base map features shown on this FIRMette, such as corporate limits, are based on the most up-to-date data available at the time of publication. Changes in the corporate limits may have occurred since this map was published. Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide format FIRM.

Flood elevations on this map are referenced to either or both the North American Vertical Datum of 1988 (NAVD 88) or National Geodetic Datum of 1929 (NGVD 29), and are labeled accordingly. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. To obtain current elevation, description, and/or location information for bench marks shown on this map, or for information regarding conversion between NGVD 29 and NAVD 88, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov/>.

MORE INFORMATION

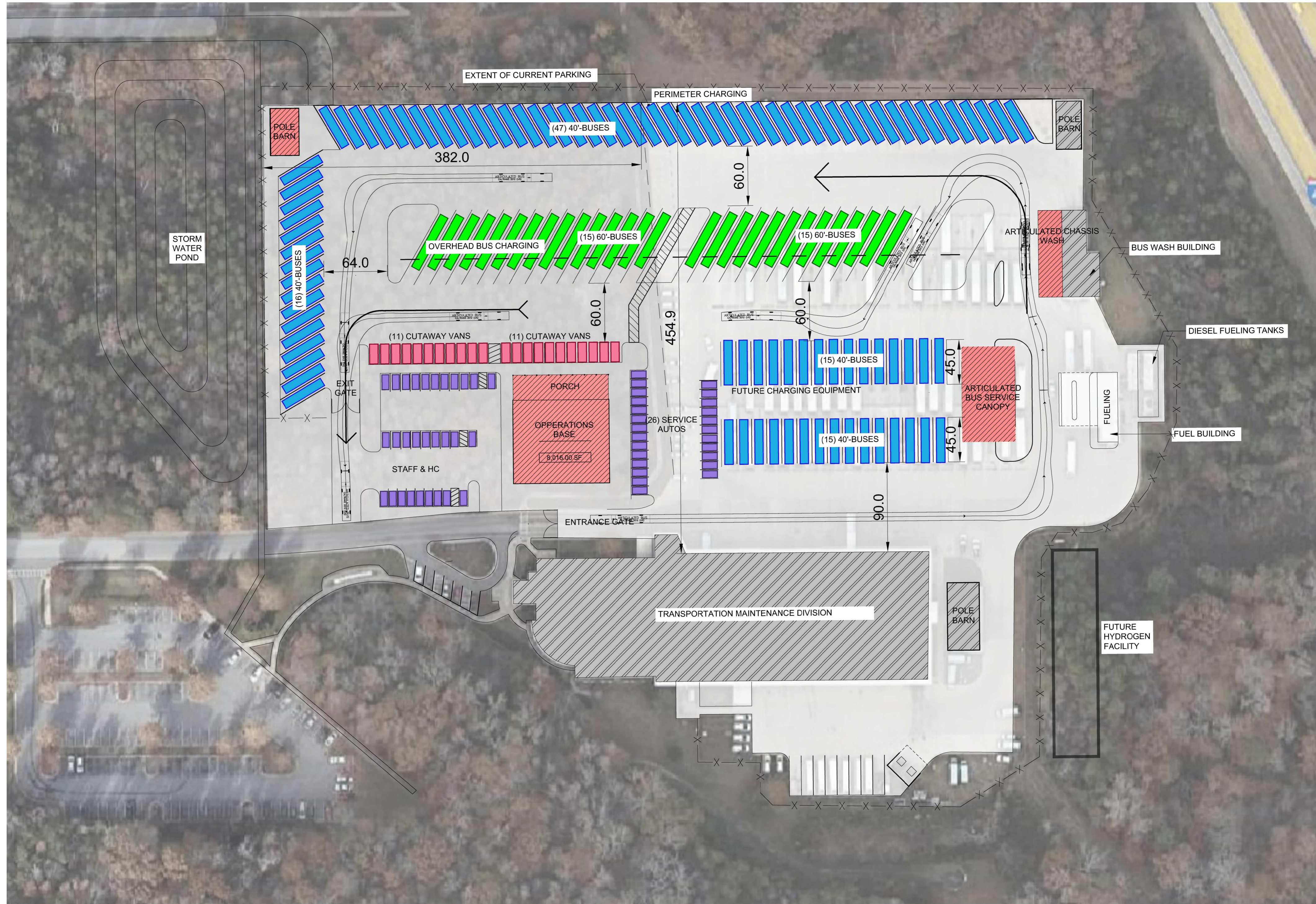
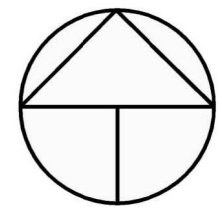
Letters of Map Amendment (LOMA)	1-877-336-2627 http://msc.fema.gov/
Letters of Map Revision (LOMR)	919-715-5711 www.ncfloodmaps.com
Flood Insurance Availability	
North Carolina Division of Emergency Management (NCDEM)	919-715-5711 http://www.nccrimecontrol.org/nfip
National Flood Insurance Program (NFIP)	1-877-638-6620 http://www.fema.gov/business/nfip
Questions about this FIRMette	1-877-336-2627 http://fema.gov

LEGEND

LEGEND

MAP REVISIONS

There are no map revisions for the selected area.



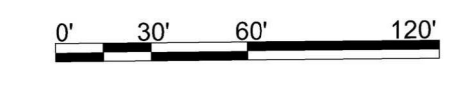
LEGEND

- DIRECTION OF CIRCULATION
- 60 FT ARTICULATED BUS
- 40 FT BUS
- CUTAWAY VAN
- SERVICE OR STAFF AUTO

PARKING SUMMARY

40' BUSES	93
60' ARTICULATED BUSES	30
CUTAWAY BUSES	22
AUTOMOBILES (BEHIND GATES)	26

1 EXPANSION CONCEPT PLAN
Scale: 1" = 60'-0"







**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: Katy Fontaine

Mailing Address: 6900 Millhouse Road

City, State, ZIP: Chapel Hill, NC 27516

Phone / FAX / Email: 919-969-4957 kfontaine@townofchapelhill.org

Check method(s) for report to be sent: US Mail Email FAX Call for pickup

Signature of property owner or designated legal agent granting permission to Town Staff to enter the property(ies) indicated below for purposes of a Stream Determination:

Kathryn Fontaine 09/01/2022
(Signature) (Date)

Owner Name(s): Katy Fontaine
(Please print)

Company Name (if applicable): Chapel Hill Transit

Property Information	
Fill in both columns, <u>or</u> fill in Parcel ID Number (PIN) and attach a site map indicating location.	
Parcel ID Number (PIN)	Address / Location Description
9871800325	6902 Millhouse Road (Property between Transit & PW)
9871809160	6900 Millhouse Road (Transit Facility closest to I-40)

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.



**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: Katy Fontaine

Mailing Address: 6900 Millhouse Road

City, State, ZIP: Chapel Hill, NC 27516

Phone / FAX / Email: 919-969-4957 kfontaine@townofchapelhill.org

Check method(s) for report to be sent: US Mail Email FAX Call for pickup

Signature of property owner or designated legal agent granting permission to Town Staff to enter the property(ies) indicated below for purposes of a Stream Determination:

Kathryn Fontaine 09/01/2022
(Signature) (Date)

Owner Name(s): Katy Fontaine
(Please print)

Company Name (if applicable): Chapel Hill Transit

Property Information	
Fill in both columns, <u>or</u> fill in Parcel ID Number (PIN) and attach a site map indicating location.	
Parcel ID Number (PIN)	Address / Location Description
9870890971	6900 Millhouse Road (Transit Employee lot, closest to Millhouse)

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.