• PILOT • ENVIRONMENTAL • INC •

August 1, 2014

Mr. Garrett Hollingsworth
Strata Solar, LLC
50101 Governors Drive, Suite 280
Chapel Hill, North Carolina 27517

Reference: Wetland Delineation
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Paynes Road/Highway 64
Pittsboro, North Carolina
PEI Project No. 1055

Dear Mr. Hollingsworth:

Pilot Environmental, Inc. (PEI) is pleased to submit this report of the wetland delineation for the approximate 47.027 acre tract located north of Highway 64 at the intersection of Paynes Road in Pittsboro, Chatham County, North Carolina.

Background

Wetlands are defined by the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (EPA) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions." In order for an area to be classified as wetland, hydrophytic vegetation, hydric soils, and wetland hydrology indicators must be present.

Section 404 of the Clean Water Act regulates the discharge of dredge and fill materials into waters of the United States (lakes, rivers, ponds, streams, etc.), including wetlands. Waters of the United States include the territorial seas, navigable coastal and inland lakes, rivers and streams, intermittent streams, and wetlands. The EPA and the USACE jointly administer the Section 404 program. Section 401 of the Clean Water Act grants each state the authority to approve, condition, or deny any Federal permits that could result in a discharge to State waters.

Jurisdictional features include wetlands, open waters, ponds, lakes and perennial/intermittent streams. Jurisdictional features are regulated by the USACE and North Carolina Department of Environment and Natural Resources-Division of Water Resources (NCDENR-DWR). Permits are required prior to impacting any jurisdictional feature. The type of permit required is specific to the type, location and amount of impacts. Stormwater management plans and/or mitigation for proposed impacts could be a requirement of the permit approval process.

The findings and conclusions found in this report are our opinions based on field conditions encountered at the time of the site visit. Changes including, but not limited to, regulations, weather, timber/vegetation removal and usage/development of the site or nearby properties can alter the findings and opinions presented in this report. We recommend that this report only be used for preliminary planning purposes. Agency verifications, followed by a survey of jurisdictional features is required to determine the exact extent and locations of jurisdictional features for a period of up to five years following issuance of a USACE Jurisdictional Determination (JD) and/or NCDENR-DWR Site Determination Letter.

Scope of Services

PEI was contracted to perform a wetland delineation for the approximate 47.027 acre tract located north of Highway 64 at the intersection of Paynes Road in Pittsboro, Chatham County, North Carolina. The site is identified by the Chatham County Geographical Information Systems (GIS) as Parcel Identification Number (PIN) 971200034471. The site is being evaluated for the proposed development of the site with a solar farm. The scope of services included a delineation of jurisdictional features (streams, wetlands and other surface waters) located on the site. The site boundaries were not surveyed at the time of our field delineation.

PEI was also contracted to perform a Phase I Environmental Site Assessment (ESA) and a Limited National Environmental Policy Act (NEPA) Review in conjunction with the stream/wetland delineation. Details of these investigations are included in separate reports.

Literature Review

We reviewed the U.S. Geological Survey (USGS) Topographic Map, the U.S. Department of Agriculture (USDA) Soil Survey of Chatham County, the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM).

- The USGS Topographic Map (Drawing 1) identifies an unnamed tributary to Landrum Creek crossing the southwestern corner of the site. An additional unnamed tributary to Landrum Creek is located immediately adjacent to southeastern boundary. Other surface waters or wetlands are not shown on the site. However, drainage swales that could contain other surface waters or wetlands are depicted on the site.

- The USDA Web Soil Survey of Chatham County (Drawing 2) identifies the following mapping units on the site: Cid-Lignum Complex (CmB), Georgeville silt loam (GaC) and Georgeville silty clay loam (GeB2 and GeC2). The Cid series consists of moderately well to somewhat poorly drained, slowly permeable soils that occur on Piedmont uplands. The Georgeville series consists of well drained, moderately permeable soils that occur on piedmont uplands. The Lignum series consists of moderately well to somewhat poorly drained, moderately permeable soils that occur on piedmont uplands. The Cid-Lignum Complex soil mapping unit is identified on the Chatham County Hydric Soils List as having inclusions of hydric soil series. The remainder of the soil mapping units are not identified on the Chatham County Hydric Soils List.

  Additionally, the last published USDA Soil Survey of Chatham County (Drawing 2A) identifies unnamed tributaries to Landrum Creek on the along the southeastern and western site boundaries, consistent with streams shown on the USGS Topographic Map of the site.

- The USFWS NWI Map (Drawing 3) identifies a freshwater pond on the southern-central portion of the site. Other surface waters or wetlands are not shown on the site.

- The FEMA FIRM (Drawing 4) of the site identifies the site as an area that has been designated as Zone X, an area outside the 500 year floodplain.

Field Delineation

PEI personnel conducted the field delineation on July 4, 2014. The site contains fields and wooded land. An agricultural structure is centrally located on the site. Ponds are not located on the site.

A stream is located on the western portion of the site. The stream originates off-site. The stream has a defined bed and banks, meanders, moderate substrate sorting and evidence of an ordinary high water mark. Standing water was observed in the deeper pools. Aquatic life consisting of crayfish and frogs were observed in the stream. Based on our field observations and the NCDENR-DWR Stream Identification Form, Version 4.11 (attached), the stream is classified as intermittent. The centerline of the stream was marked in the field with blue and white striped surveyor tape.

Wetlands are located in pockets adjacent to the stream on the western portion of the site and in drainage swales located on the eastern portion of the site. The wetland pocket located on the east-central portion of the site has a surface water connection to down-gradient wetlands by a non-jurisdictional channel. PEI rated the surface water connection channel a 15.5-ephemeral on the NCDENR-DWR Stream Identification Form, Version 4.11 (attached). Due to the non-jurisdictional hydrologic connection of this wetland pocket to other down-gradient jurisdictional features, this wetland pocket is considered jurisdictional/non-isolated by the USACE. The wetlands located on the site are separated from uplands by distinct breaks in topography,

vegetation and/or soils. USACE Wetland Determination Data Forms, supporting our opinions, are included as attachments. The boundaries of the wetlands were marked in the field with red and white striped surveyor tape.

Watershed Classification/Buffer Requirements

According to the NCDENR-DWR, the site is located in the Cape Fear River Basin in an area that has been designated as Class C. Based on the designated NCDENR-DWR classification of surface waters located on the site, mandatory vegetative buffers and/or development setbacks are not required by the NCDENR-DWR for surface waters located on the site.

PEI consulted with Ms. Natalie Landry of the Chatham County Planning Department to determine if Chatham County has buffer requirements that apply to jurisdictional features located on the site. Ms. Landry reported to PEI that if the site meets the following criteria: 1) the lot of land has existed since 2008; 2) sub-division of the lot is not proposed; and, 3) the lot is located outside the Lake Jordan Watershed, then 50 foot mandatory vegetative buffers are required adjacent to intermittent and perennial surface waters shown on the most recent version of the USGS Topographic Map. Therefore, based on PEI's knowledge of the site and understanding of the proposed project, a 50 foot mandatory vegetative buffer is required adjacent to the stream located on the western portion of the site by Chatham County.

According to the NCDENR-DWR Interactive Stormwater Map, the site is located in an area of jurisdiction identified as Local Permitting Authority. Therefore, we recommend consultation with Chatham County to determine if the site requires post construction vegetative buffers and/or development setbacks from surface waters for compliance with state and local stormwater requirements.

Agency Verification

The field delineation was verified in the field by Mr. Andrew Williams with the USACE on July 30, 2014. Ms. Natalie Landry with Chatham County accompanied Mr. Williams during the site visit. Ms. Cherri Smith the NCDENR-DWR did not attend the field verification. However Ms. Smith reported to PEI that features that were determined to be subject to Section 404 of the Clean Water Act would subsequently be subject to Section 401 of the Clean Water Act.

Mr. Williams agreed with the field delineation as depicted on the attached Drawing 5. Drawing 5 shows the approximate locations of the site, stream, wetlands, data points, surface water vegetative buffers and our flag numbers. Drawing 5 should only be used for preliminary planning purposes. We understand that our flags will be surveyed to determine the exact extent and location of jurisdictional features and subsequent vegetative buffers. Upon receipt of a wetland plat prepared by a N.C. Licensed Surveyor, PEI will review it and submit it to the USACE for final

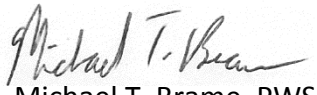
written concurrence. If a wetland plat is not provided, PEI can request that the USACE issue a jurisdictional determination (JD).

Closing

We appreciate the opportunity to provide our services to you. Please contact us at (336) 708-4997 if you have questions or require additional information.

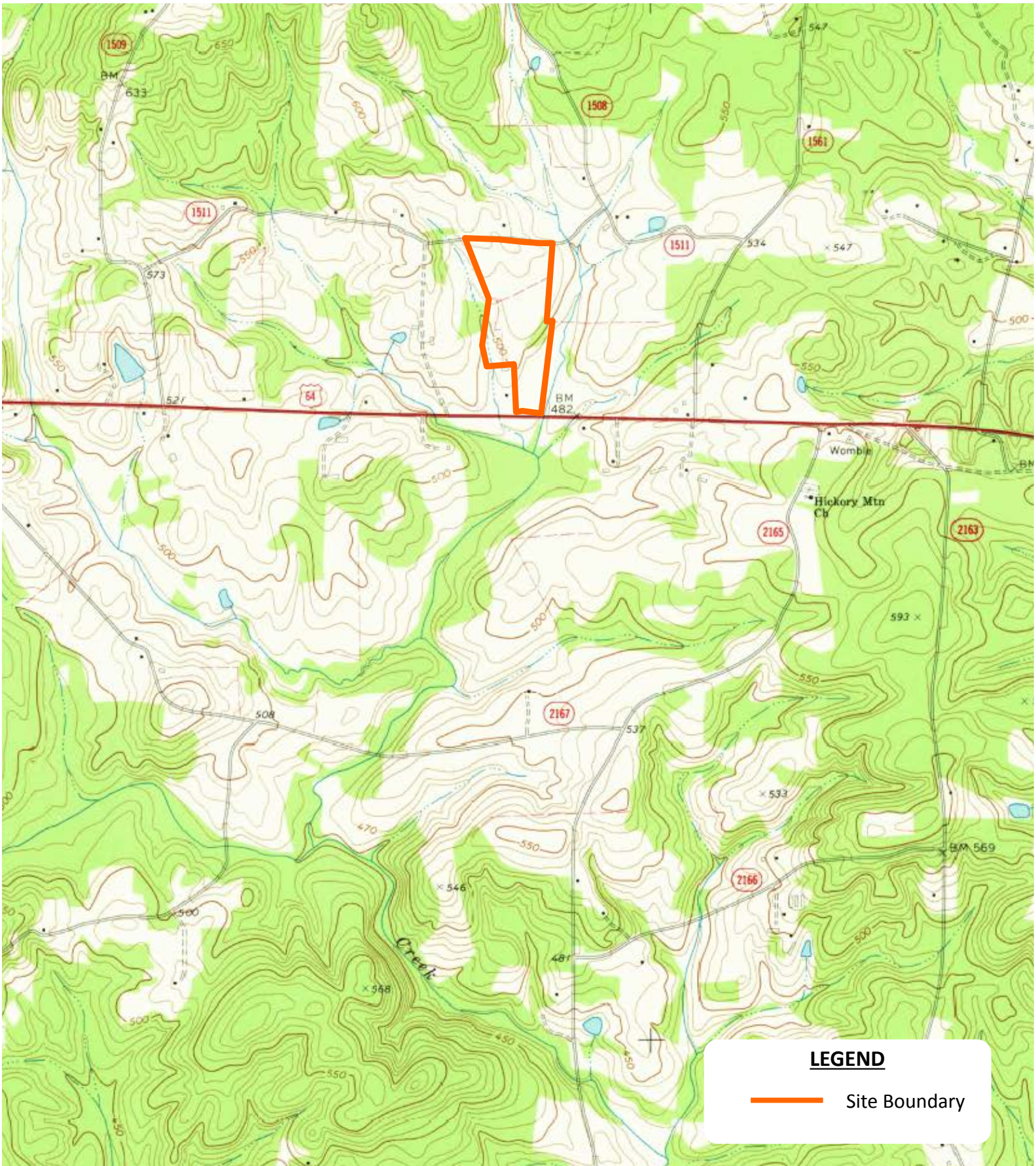
Sincerely,

Bradley S. Luckey
Project Manager



Michael T. Brame, PWS
Principal

Attachments: Drawing 1 – USGS Topographic Map
Drawing 2 – USDA Web Soil Map
Drawing 2A – USDA Published Soil Map
Drawing 3 – NWI Map
Drawing 4 – FEMA FIRM
Drawing 5 – Wetland Flag Map
Wetland Determination Data Forms
NCDENR-DWR Stream Identification Forms, Version 4.11



Drawing 1

USGS Topographic Map
Siler City NE, NC Quadrangle
SCALE: 1" = 2,000'

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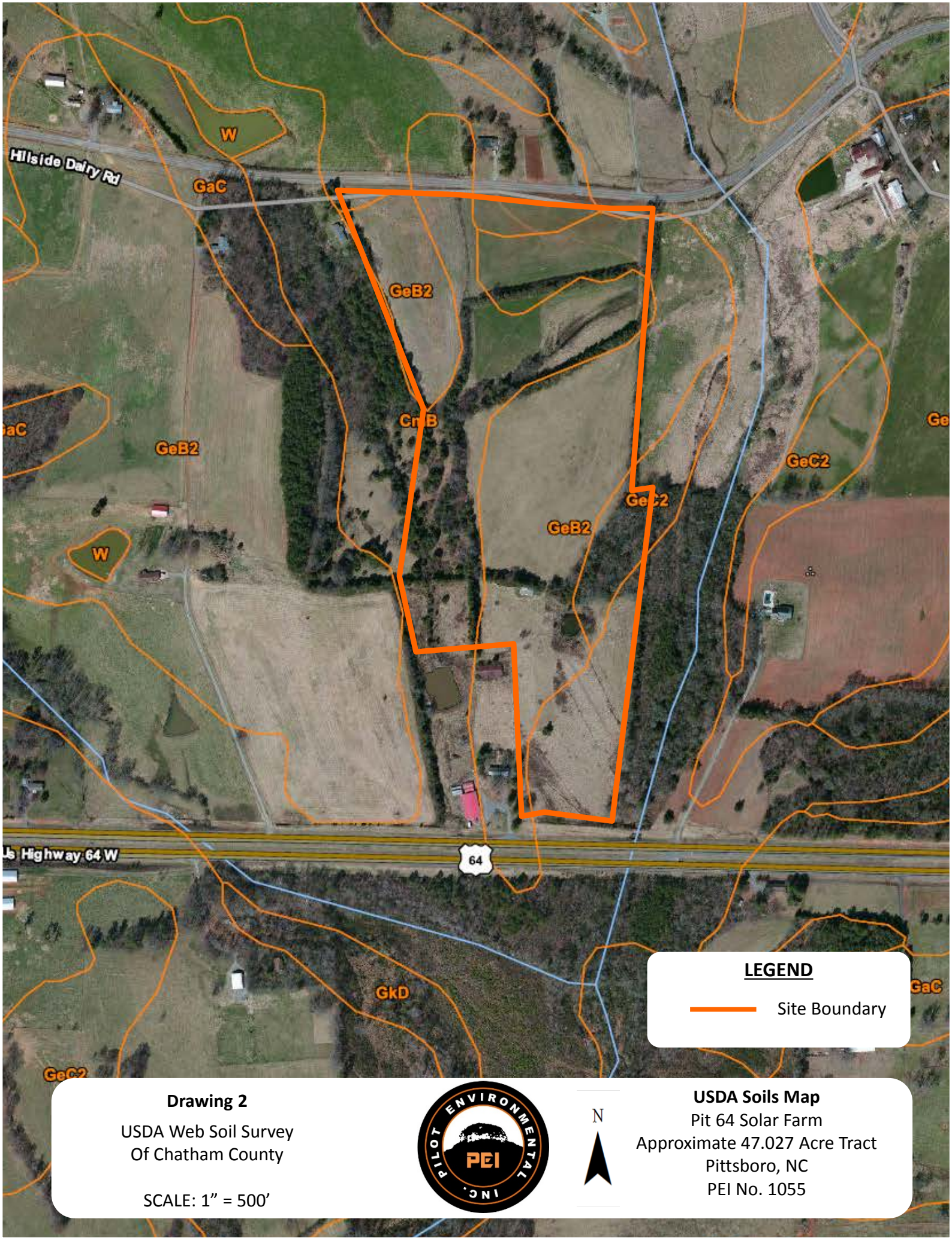
N

USGS Topographic Map
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055



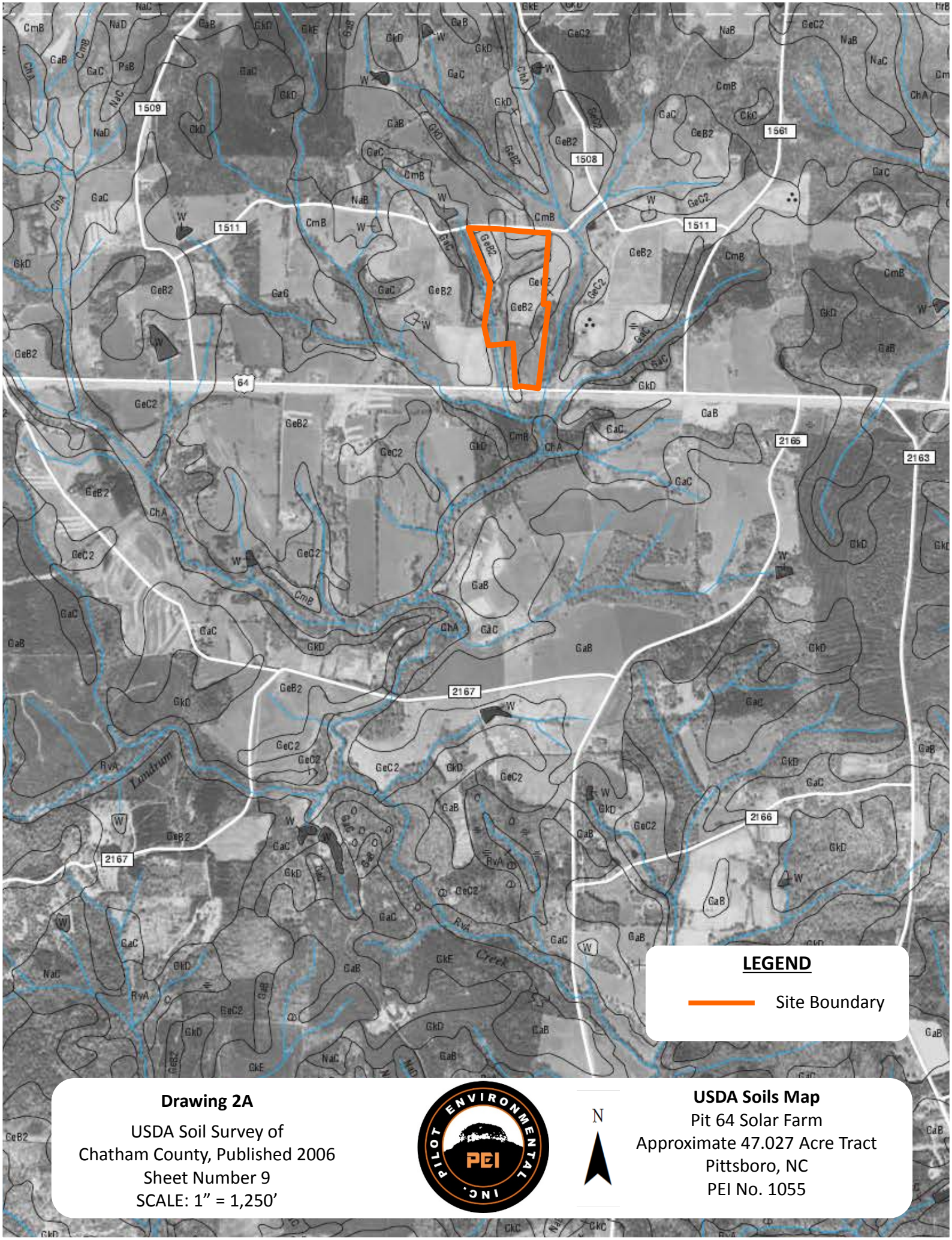
Drawing 2

USDA Web Soil Survey
Of Chatham County

SCALE: 1" = 500'

N

USDA Soils Map
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055



Drawing 2A

USDA Soil Survey of
Chatham County, Published 2006
Sheet Number 9
SCALE: 1" = 1,250'

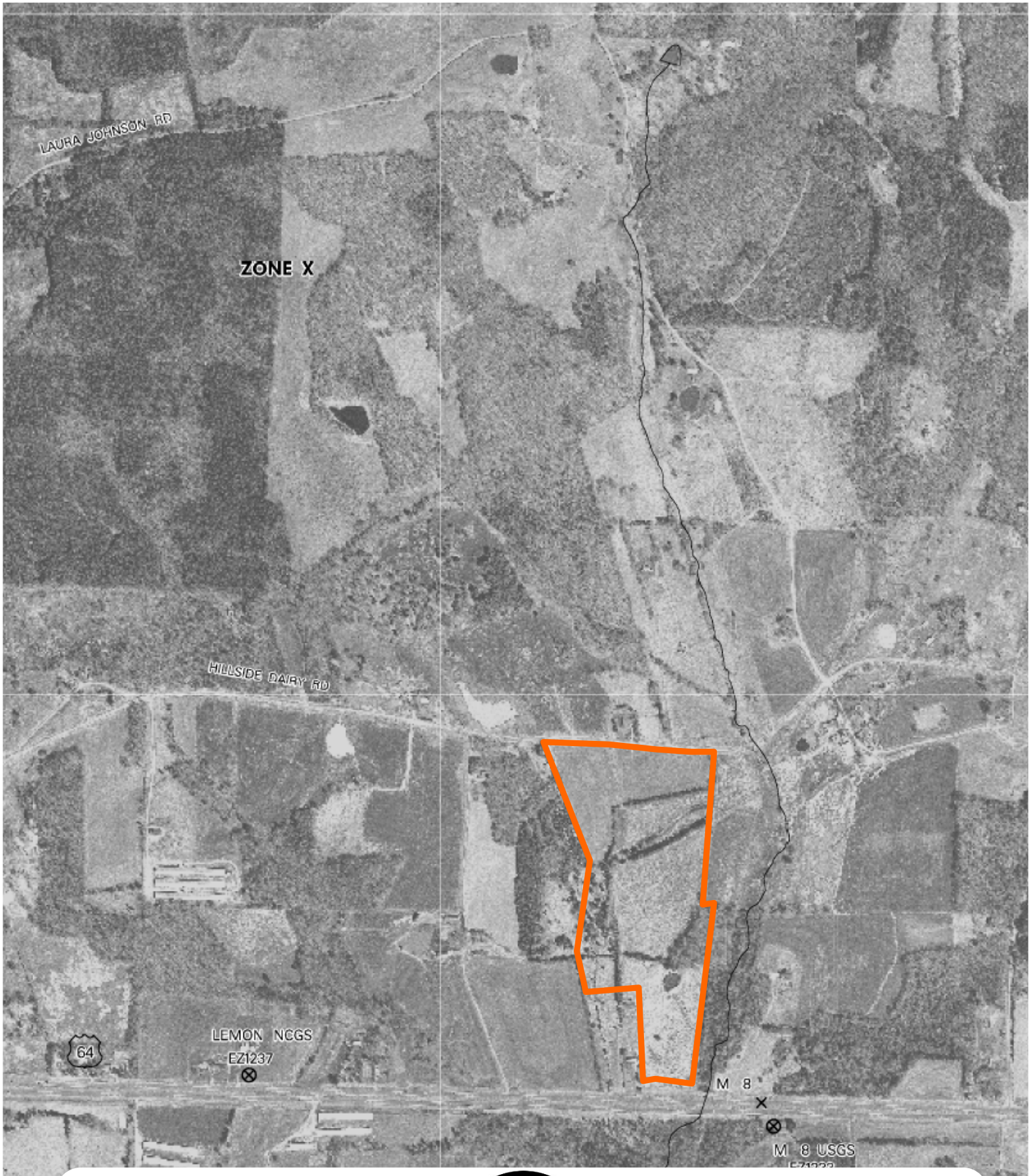
USDA Soils Map
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055

Drawing 3

USFWS NWI
Wetlands Mapper

SCALE: 1" = 575'

NWI Map
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055



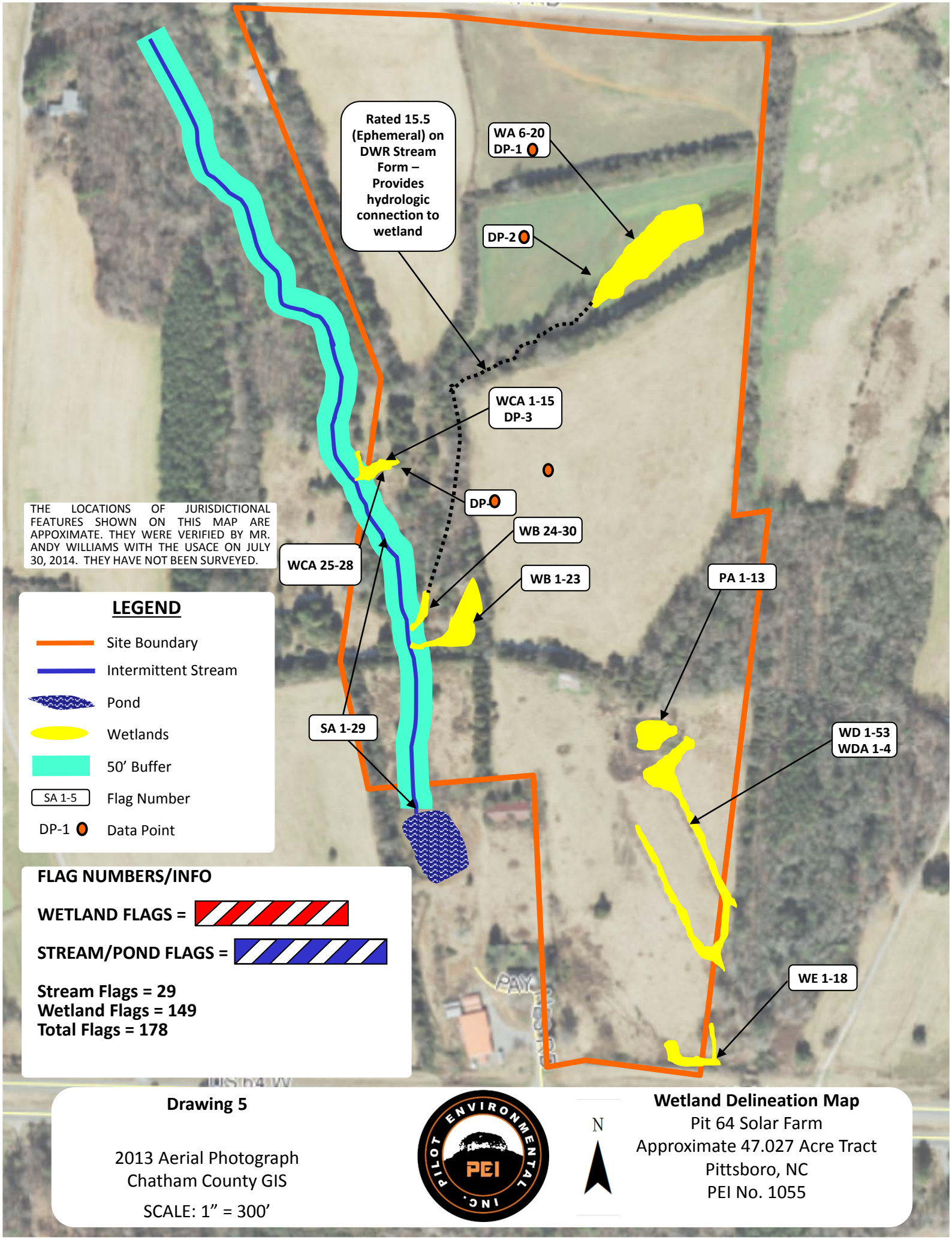
Drawing 4

FEMA FIRM Panel
Number 3710970200J,
Effective Date February 2, 2007
SCALE: 1" = 1,000'

PILOT ENVIRONMENTAL INC. PEI

N

FEMA FIRM
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055



Drawing 5

2013 Aerial Photograph
Chatham County GIS

SCALE: 1" = 300'

PILOT ENVIRONMENTAL INC. PEI

N

Wetland Delineation Map
Pit 64 Solar Farm
Approximate 47.027 Acre Tract
Pittsboro, NC
PEI No. 1055

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Pit 64 Farm City/County: Chatham Sampling Date: 7/4/14

Applicant/Owner: State: North Carolina Sampling Point: DP-1

Investigator(s): Luckey/Brame, PEI Section, Township, Range:

Landform (hillslope, terrace, etc.) Swale-Ag Field Local relief (concave, convex, none):

Slope (%): 2 Lat: Long: Datum:

Soil Map Unit Name: CmB NWI Classification:

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

Are Vegetation X, 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:
The three sampling criteria are present. Vegetation has been impacted from agricultural activities.

For wetlands flagged WA, WD, WDA and WE

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)

- X Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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):	>12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches):	>12"

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

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

Remarks:
Wetland hydrology indicators are present.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point DP-1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None Observed			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 30')			
1. None Observed			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		

Herb Stratum (Plot size: 30')			
1. Festuca arundinacea	50	Y	FACU
2. Juncus effuses	20	Y	FACW
3. Carex intumescens	20	Y	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. None Observed			
2.			
3.			
4.			
5.			
6.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (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 Test 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 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 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.)
Hydrophytic vegetation is present. Vegetation has been impacted from agricultural activities.

SOIL

Sampling Point: DP-1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	2.5Y 4/6	70					L	
0-9	2.5YR5/8	30					L	
9-16	2.5YR 72	90	2.5YR 5/8	10	C	RM	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated 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) **(LRR N, MLRA 147, 148)**
- ____ Sandy Gleyed Matrix (s4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Dark Surface (S7)
- ____ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ____ Thin Dark Suface (S9) **(MLRA 147, 148)**
- ____ 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 136, 122)**
- ____ Piedmont Floodplain Soils (F19) **(MLRA 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 (TF2)
- ____ Very Shallow Dark Surface (TF12)
- ____ 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:

Hydric soil indicators are present.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Pit 64 Farm City/County: Chatham Sampling Date: 7/4/14

Applicant/Owner: State: North Carolina Sampling Point: DP-2

Investigator(s): Luckey/Brame, PEI Section, Township, Range:

Landform (hillslope, terrace, etc.) Swale-Ag Field Local relief (concave, convex, none):

Slope (%): 2 Lat: Long: Datum:

Soil Map Unit Name: CmB NWI Classification:

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

Are Vegetation X, 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 within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The three sampling criteria are not present. Vegetation has been impacted from agricultural activities.

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)

- X 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):	>12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches):	>12"

Wetland Hydrology Present? Yes ____ No X

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

Remarks:
Wetland hydrology indicators are present.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point DP-2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. None Observed			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 30')			
1. None Observed			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		

Herb Stratum (Plot size: 30')			
1. Festuca arundinacea	50	Y	FACU
2. Sorghum halpenese	40	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1. None Observed			
2.			
3.			
4.			
5.			
6.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species	90	X 4 =	360
UPL species		X 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is > 50%

___ 3 - Prevalence Test 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 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 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.)
Hydrophytic vegetation is not present. Vegetation has been impacted from agricultural activities.

SOIL

Sampling Point: DP-2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	2.5YR 5/3	90	2.5YR 5/8	10	C	RM	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated 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) **(LRR N, MLRA 147, 148)**
- ____ Sandy Gleyed Matrix (s4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Dark Surface (S7)
- ____ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ____ Thin Dark Suface (S9) **(MLRA 147, 148)**
- ____ 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 136, 122)**
- ____ Piedmont Floodplain Soils (F19) **(MLRA 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 (TF2)
- ____ Very Shallow Dark Surface (TF12)
- ____ 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:

Hydric soil indicators are not present.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Pit 64 Farm City/County: Chatham Sampling Date: 7/4/14

Applicant/Owner: State: North Carolina Sampling Point: DP-3

Investigator(s): Luckey/Brame, PEI Section, Township, Range:

Landform (hillslope, terrace, etc.) Swale Local relief (concave, convex, none):

Slope (%): 2 Lat: Long: Datum:

Soil Map Unit Name: CmB NWI Classification:

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

Are Vegetation X, 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:
The three sampling criteria are present. Vegetation has been impacted due to agricultural activities.

Comprehensive of wetland types flagged as WB, WC and WCA

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)
- 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)
- X 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):	>12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches):	>12"

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

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

Remarks:
Wetland hydrology indicators are present.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point DP-3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	15	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30')			
1. Quercus phellos	2	Y	FACW
2. Diospyros virginiana	2	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	4	= Total Cover	
Herb Stratum (Plot size: 30')			
1. Eulalia viminea	20	Y	FAC
2. Juncus effuses	20	Y	FACW
3. Carex intumescens	20	Y	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. Lonicera japonica	2	Y	FAC
2.			
3.			
4.			
5.			
6.			
	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (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 Test 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 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 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.)
Hydrophytic vegetation is present. Vegetation has been impacted from agricultural activities.

SOIL

Sampling Point: DP-3

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/3	90					L	
0-6	10YR 3/6	10					L	
6-16	2.5Y 5/1	80	7.5YR 4/6	20	C	RM	CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated 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) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (s4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Suface (S9) **(MLRA 147, 148)**
- ___ 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 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 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 (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ 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:

Hydric soil indicators are present.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Pit 64 Farm City/County: Chatham Sampling Date: 7/4/14

Applicant/Owner: State: North Carolina Sampling Point: DP-4

Investigator(s): Luckey/Brame, PEI Section, Township, Range:

Landform (hillslope, terrace, etc.) Swale Local relief (concave, convex, none):

Slope (%): 2 Lat: Long: Datum:

Soil Map Unit Name: CmB NWI Classification:

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

Are Vegetation X, 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 ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
The three sampling criteria are not present. Vegetation has been impacted due to agricultural activities.

Comprehensive of wetland types flagged as WB, WC and WCA

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): >12"
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): >12"

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

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

Remarks:
Wetland hydrology indicators are not present.

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point DP-4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Nyssa sylvatica	10	Y	FAC
2. Ulmus Americana	5	N	FACW
3. Juniperus virginiana	10	Y	FACU
4. Ulmus alata	10	Y	FACU
5.			
6.			
7.			
8.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30')			
1. Ligustrum sinsense	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	

Herb Stratum (Plot size: 30')			
1. Eulalia viminea	50	Y	FAC
2. Rubus betulifolius	15	N	FAC
3. Vernonia noveboracensis	20	Y	FAC
4. Boehmeria cylindrica	5	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1. Toxicodendron radicans	10	Y	FAC
2.			
3.			
4.			
5.			
6.			
	10	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 72 (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 Test 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 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 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.)
Hydrophytic vegetation is present. Vegetation has been impacted from agricultural activities.

SOIL

Sampling Point: DP-4

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/3	90					L	
0-4	10YR 3/3	10					L	
4-16	10YR 5/4	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated 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) **(LRR N, MLRA 147, 148)**
- ____ Sandy Gleyed Matrix (s4)
- ____ Sandy Redox (S5)
- ____ Stripped Matrix (S6)
- ____ Dark Surface (S7)
- ____ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ____ Thin Dark Suface (S9) **(MLRA 147, 148)**
- ____ 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 136, 122)**
- ____ Piedmont Floodplain Soils (F19) **(MLRA 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 (TF2)
- ____ Very Shallow Dark Surface (TF12)
- ____ 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:

Hydric soil indicators are not present.

NC DWQ Stream Identification Form Version 4.11

Date: 7/4/14	**Project/Site:** Pit 64 Farm	**Latitude:**
Evaluator: Brame, PEI	**County:** Guilford	**Longitude:**
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15.5	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

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 (Subtotal = 2.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 3.5)				
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 DWQ Stream Identification Form Version 4.11

Date: 7/4/14	**Project/Site:** Pit 64 Farm	**Latitude:**
Evaluator: Brame, PEI	**County:** Guilford	**Longitude:**
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 22.5	**Stream Determination (circle one)** Ephemeral (Intermittent) Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10.5)	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 (Subtotal = 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 = 5.5)				
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: