SCIARABBA
engineering+design

September 29, 2025

Mr. John Zepko
Director of Planning & Code Enforcement
Town of Lansing
29 Auburn Road
Lansing, NY 14882

RE: S.E.E. Associates
164 Auburn Road
Proposed Office Building
John Zepko Project Review Letter Dated 8-25-25

Dear John,

S.E.E. Associates is in receipt of your review letter dated August 25, 2025. You provided this letter following a developer's conference which was suggested by the Planning Board at their July 28, 2025, meeting. The developer's conference was held on August 5, 2025, and attended by you, Dean Shea – Planning Board Chairman, Eric Eisenhut – S.E.E. Associates, and myself. I have included the items from your review letter below as *italicized text* and have provided our responses in **bold** text.

1. *The application materials (NY CRIS Map & SEAF) show the project area falls within an area of potential archeological sensitivity. The applicant should provide a Letter of No Impact from the NYS Historic Preservation Office. See also §270-27 H. (12) of the zoning code.*
A letter of No Impact was received from the NYS Historic Preservation Office on September 26, 2025, and is attached to this letter.

2. *The applicant should submit a Parcel Jurisdictional Determination Request to the NYS DEC to determine if an area meets the criteria for classification as a regulated freshwater wetland and/or adjacent area under the Freshwater Wetlands Act. If a positive parcel JD is received a wetland delineation or wetland permits may be required. The results of this communication to the NYS DEC should be provided to the Planning Board. See also §270-27 H. (12) of the zoning code.*
Delta Engineers, Architects, & Surveyors completed a wetland delineation on September 3, 2025, and summarized their findings in a delineation report dated September 26, 2025. The report indicates Wetlands are present along the western and southern property boundaries which may be under the jurisdiction of the NYSDEC and/or the US Army Corps of Engineers. The wetland boundaries and a 100' buffer were added to the revised site plans and demonstrate that the project will not impact the delineated wetlands nor the 100' buffer to the delineated wetlands.

3. *The applicant should provide AM/PM peak hour trips from the latest edition of the ITE Manual.*
   S.E.E. Associates submitted a Stage 1 Commercial Driveway application and sight distance calculations to the NYSDOT on September 18, 2025. The Stage 1 application requires an estimation of AM/PM peak hour trips based on similar development history, the ITE manual, or a Professional Engineer's estimate. A Professional Engineer's estimate was provided as part of the application. Based on that estimate, the NYSDOT has approved the driveway location and has not requested a trip generation based on the ITE manual. A copy of the Stage 1 application, sight distance calculations, and NYSDOT email approving the driveway location are attached to this letter.

4. Please provide a stormwater management plan that shows the quantity of and method by which stormwater will be attenuated. (§270-27 H. (1) and (2)).
   We presented a preliminary grading plan and calculations at the developer's conference for a stormwater attenuation basin to be located along the southern and western limits of the project. This basin will reduce runoff rates from the 1- and 10-year storms to below pre-developed conditions and reduce runoff from the 100-year storm by 8%. The basin has been further detailed on the revised drawing set, and a copy of the updated hydraulic calculations has been attached to this letter.

5. *§270-27 H. (5) requires provisions for parking facilities and sidewalks along public thoroughfares, unless applicant demonstrates that a sidewalk is not feasible due to site constraints. Please demonstrate how safe pedestrian and bicycle access and circulation have been accommodated. See also §270-27 H. (10).*
   There are no public sidewalks on NYS Rte 34 north of the property, nor across from the property, and the closest public sidewalk is located 2000' south of the property at the intersection of NYS Rte 34 and Louise Bement Lane. A sidewalk along the frontage of this project is not practical, nor safe, as it would have no connection to an adjoining walk or crosswalk. Even though there are no bike lanes along the highway, a bike rack has been added to the site plan as requested by the Planning Board at their June 23, 2025, meeting.

6. *Please provide a photometric lighting plan per the site plan application checklist § 270-40.7 and §270-27 H. (6) of the zoning code.*
   A photometric plan was prepared by Jademar Lighting and has been included in the revised drawing set.

7. *Please provide a landscaping plan per the site plan application checklist, § 270-40.1 and §270-27 H. (9). of the zoning code. Additional guidance can be found in §270 attachment 8 "Town of Lansing Buffer Chart".*
   Proposed plantings and a plant schedule were included on drawing C-103 "Site Plan and Details" as part of the original submission dated May 27, 2025. At the June 23, 2025, meeting the Planning Board requested additional plantings be added along the north property line to screen the parking lot from the neighbors to the north. They also requested low shrubs be

added to the berm located east of the parking lot. Drawing C-106 "Planting Plan and Details" has been added to the drawing set showing the additional plantings.

8. *Please show the method by which solid waste receptacles will be screened §270-27 H (15).*
   Due to the small size of the building, exterior dumpsters will not be necessary. Tenants will use individual toters for trash and recycling that will be stored indoors, then rolled out to the parking lot on pickup days. A 7' x 18' paved area for these toters has been located at the north end of the parking lot and screening plantings have been shown.

9. *Please show the location building mechanicals and provide adequate screening. §270-27 H (16) & (17).*
   Mini-split condensers will be used for heating and cooling and will be located in the rear of the building out of view of the general public as shown on drawing A-1 "Proposed Floor Plan". No screening is proposed.

10. *Provide a response to GML 239 Letter dated 3 July 2025.*
    George Breuhaus, Architect, has provided a response letter providing documentation of the four energy elements, and S.E.E. Associates has submitted the previously mentioned Stage 1 NYSDOT application. A copy of the Architect's letter and the email from the NYSDOT approving the driveway location are attached to this letter.

Attached to this letter are the following documents:

- New York State Parks, Recreation and Historic Preservation no impact letter
- Delta wetland delineation report
- NYDOT stage 1 application
- Sciarabba Engineering sight distance calculations
- NYSDOT driveway location approval email
- HydroCAD attenuation basin calculations
- George Breuhause GML 239 response letter

We look forward to discussing these items with the Planning Board at the October 27, 2025, meeting.

Andrew J. Sciarabba, P.E.
Owner/Principal Engineer

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner Pro Tempore

September 26, 2025

ANDREW SCIARABBA
Sciarabba Engineering, PLLC
9664 Kingtown Road
TRUMANSBURG, NY, NY 14886

Re: SEQRA
164 Auburn Road Commercial Development
25PR08624

Dear ANDREW SCIARABBA:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project.

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above. If you have any questions, please contact Tamara Pilson at the following email address:

Tamara.Pilson@parks.ny.gov

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

ENGINEERS, ARCHITECTS, & SURVEYORS

327 West Fayette St, Suite 300
Syracuse, New York 13202
Tel: 315.695.7228
www.delta-eas.com

September 26, 2025

Eric Eisenhut
S.E.E. Associates
11 Dandyview Heights
Lansing, New York 14882

RE: Wetland Delineation at the 164 Auburn Road Site, Town of Lansing,
Tompkins County, New York. **Delta Project No.: 2025.428.001**

Dear Mr. Eisenhut:

Delta Engineers, Architects, Land Surveyors, & Landscape Architects, DPC (Delta) conducted a wetland delineation on one parcel (Tax Id No. 31.-1-15.21) located west of Auburn Road in the Towns of Lansing, Tompkins County, New York (Figure 1). The site is approximately 5.62 acres. Delta conducted this wetland delineation on September 3, 2025. The wetland delineation was conducted following the methods outlined in the U.S. Army Corps of Engineers (Corps) Manual (Environmental Laboratory 1987), the Corps Regional Supplement (2012) and the 1995 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetland Delineation Manual.

This report includes a review of the background information, a methods section, results, which include site ecology, wetlands, and a summary of our findings.

Background Information

The US Geologic Survey (USGS) topographic map (Figure 1) shows that the site is located west of Auburn Road. The site slopes to the west.

The NYS Freshwater Wetlands map (Figure 2) shows one area of informational freshwater wetland mapping encroaching on the site in the southwest corner.

The National Wetlands Inventory (NWI) map (Figure 3) prepared by the United States Fish and Wildlife Service (USFWS) shows one wetland (R4SBC-Riverine, Intermittent, Stream Bed, Seasonally Flooded) is mapped on the site. The NWI map is intended as an advisory map and is not intended as a map of regulated wetlands.

The Soil Survey map (Figure 4) obtained from the Tompkins County Soil Survey shows that the site contains one (1) mapped soil type. The soil type, drainage class, and hydric rating are shown in Table 1 below.

Table 1. Soil Type with Drainage Class and Hydric Rating

Soil Type	Drainage Class	Hydric Rating (%)
Ovid silt loam, 0 to 6 percent slopes (OaA)	Somewhat poorly drained	10

Ovid silt loam is identified as hydric soils due to minor components of the soil series being hydric soils.

The Surface Water Classification map (Figure 5) prepared by the NYSDEC shows two mapped surface waters on the site. The streams are identified as a tributary of Salmon Creek (Item No. 898-234), a Class C streams with C Standards. These streams are not regulated under NYSDEC Article 15 Protection of Waters. The mapped stream on the northern

portion of the site was not present during the site investigation. This tributary may have been relocated along Auburn Road.

Methods

Flagging of the wetlands on the site and the data collection at the boundaries were conducted by Delta on September 3, 2025. The boundaries were delineated using the federal criteria for vegetation, soils, and hydrology (Environmental Laboratory 1987, U.S. Army Corps of Engineers 2012, U.S. Army Corps of Engineers 2023, USDA NRCS 2024, and NYSDEC 1995).

Surveyor's ribbon was placed along the wetland boundaries based on observations of vegetation, soils, and hydrology conditions. Wetland flags were located by Delta EAS Survey crew.

To further support the wetland boundaries, data on the vegetation, the soils, and hydrology were obtained from sample plots located within the wetland boundaries. Delta sampled five (5) plots and one stream data point in and around the wetland and upland sides of the flagged wetland boundaries. The plot data were recorded on data sheets that comply with those used in the regional supplement (Corps 2012).

Vegetation data were collected in all sample plots. Ocular estimates of the percent areal cover by plant species for each vegetation layer (tree, shrub, and herbaceous) were recorded. The sample plots varied in size according to the vegetation layer being sampled. The sizes were: 30-foot radius for the tree layer, 15-foot radius for the shrub, and 5-foot radius for the herbaceous layer.

The presence of wetland vegetation was determined when more than 50 percent of the dominant species in a sample plot had an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC). The dominant species for each layer in a plot were determined by ranking the species in decreasing order of percent cover and recording those species which, was cumulatively totaled, immediately exceeded 50 percent of the total cover of that layer. Additionally, any plant species that comprised 20 percent or more of the total cover for each layer was considered to be a dominant species.

Plant species were identified primarily using the *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (Gleason and Cronquist 1991), *New Britton and Brown Illustrated Flora* (Gleason 1952), and *Gray's Manual of Botany* (Fernald 1950). Scientific nomenclature follows the *2022 National Wetland Plant List* (U.S. Army Corps of Engineers 2023), *A Checklist of New York State Plants* (Mitchell and Tucker 1997), and *Catalogue of the Vascular Plants of New York State* (Werier 2017). The indicator status for each plant species was determined using the *2022 National Wetland Plant List* (U.S. Army Corps of Engineers 2023).

Soil and hydrology data were collected in soil pits or soil borer holes to a minimum depth of 18 inches within each sample plot. Soil characteristics were noted along the soil profile at the depth specified by the Corps criteria (USDA NRCS 2024). Procedures for identifying hydric soils as outlined in the *Field Indicators of Hydric Soils in the United States* (USDA NRCS 2024) were also followed. Soil colors were determined by using the Munsell color chart. Primary and secondary indicators of hydrology were also noted at each sample plot. The wetland boundaries were refined based on intermediate soil borer holes along each transect.

Wetland areas are described in the wetland section. Data sheets for wetlands on the site are included in Appendix A. Photographs of the wetlands on the site are included in Appendix B.

Site Ecology

The site consists of old field and scrub-shrub cover types (Figure 6). The old field contained European buckthorn (*Rhanmnus cathartica*), Morrow's honeysuckle (*Lonicera morowii*) in the shrub layer and, hedge bedstraw (*Gallium mollugo*), brown knapweed (*Centaurea jacea*), narrow leaf goldenrod (*Euthamia graminfolia*), tall goldenrod (*Solidago altissma*), Canada Goldenrod (*Solidago canadensis*) and rough goldenrod (*Solidago rugosa*) in the herbaceous layer. The scrub-shrub areas contained box elder (*Acer negundo*) in the tree layer. The shrub layer was dominated by

Morrow's honeysuckle and box elder. The herbaceous layer was dominated by black raspberry (*Rubus occidentalis*) and rough goldenrod.

Wetlands and Waters

Delta located three (3) wetland/water on the site while conducting the wetland delineation (Figure 7). Delta identified these areas as Wetland A, Wetland B, and Swale 2. Wetland determination data sheets are found in Appendix A and photographs are shown in Appendix B. The location of the plots and photograph locations are shown on Figure 8.

Table 2. Wetlands Summary

Wetland [(a)]	Wetland Classification/Flow Regime [(b)]	Jurisdiction[(c)]
Wetland A	Scrub-shrub (PSS)	Jurisdictional (Federal and State)
Wetland B	Emergent (PEM)	Jurisdictional (Federal and State)
Swale 2	Intermittent	Jurisdictional (Federal and State)

(a) Wetlands/waters delineated by Delta on September 3, 2025.
(b) Flow Regime observed by Delta on September 3, 2025.
(c) Assumed jurisdiction based on map resource information and the field review by Delta.

Wetland A

Wetland A was a shrub/scrub wetland. Wetland A is approximately 0.08 acres (3749 sq ft) of wetlands on the site.

The shrub layer was dominated by European buckthorn and box elder. The herbaceous layer contained moneywort (*Lysimachia nummularia*), rough goldenrod and late goldenrod (*Solidago gigantea*).

Soil present in Wetland A was mapped as Ovid silt loam, 0 to 6 percent slopes (Figure 4). Soil sample displayed the Redox Dark surface (F6) Hydric Soil Indicator.

Wetland hydrology was indicated by Drainage Patterns (B10), Geomorphic Position (D2), Microtopographic Relief (D4) and FAC-Neutral Test (D5).

Jurisdiction would need to be determined by the NYSDEC and Corps.

Wetland B

Wetland B was an emergent wetland. Wetland B is approximately 0.23 acres.

Shrub present in this layer was European buckthorn. The herbaceous layer contained Reed canary grass (*Phalaris arundinacea*), rough goldenrod, narrowleaf goldenrod, tall goldenrod and wild carrot (*Daucus carota*).

Soil present in Wetland B was mapped as Ovid silt loam, 0 to 6 percent slopes (Figure 4). Soil sample displayed the Depleted Matrix (F3) Hydric Soil Indicator.

Wetland hydrology was indicated by Drainage Patterns (B10), Geomorphic Position (D2), and FAC-Neutral Test (D5).

Jurisdiction would need to be determined by the NYSDEC and Corps.

Swale 2

Swale 2 was an intermittent drainage swale located along a portion of the western boundary. Swale 2 is approximately 0.03 acres and approximately 186 feet long and ranges in width from 6 to 10 feet wide.

No vegetation was present in bed of the swale.

The substrate of the swale was silt loam.

Wetland hydrology was indicated by Water Marks (B1), Drainage Patterns (B10), and Geomorphic Position (D2).

Jurisdiction would need to be determined by the NYSDEC and Corps.

Summary

Delta was contracted to delineate the wetlands on a 5.62-acre site located on west side of Auburn Road in the Towns of Lansing (Tax Id No 31.-1-15.21), Tompkins County, New York.

Delta reviewed available background information maps prior to the field review. The NYSDEC freshwater wetlands mapping shows one informational freshwater wetland mapped on site. The NWI map shows one a riverine wetland along the south boundary of the site. One soil was mapped on the site: Ovid silt loam, 0 to 6 percent slopes (OaA) and is considered a hydric soil.

Delta delineated two wetlands (Wetland A and Wetland B) areas and a drainage swale (Swale 2) on the site. All delineated areas could be jurisdictional by the US Army Corps of Engineers and NYS Department of Environmental Conservation. The US Army Corps of Engineers and NYS Department of Environmental Conservation would have to make the final decision on their extent of jurisdiction.

I trust this letter report is sufficient for your needs currently. If you have any questions or need additional information, please contact me.

Respectfully,

DELTA ENGINEERS, ARCHITECTS, LAND SURVEYORS, & LANDSCAPE ARCHITECTS, DPC

Stephen L. Sheridan

Director of Ecological Services

Enc.

REFERENCES

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

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FIGURES

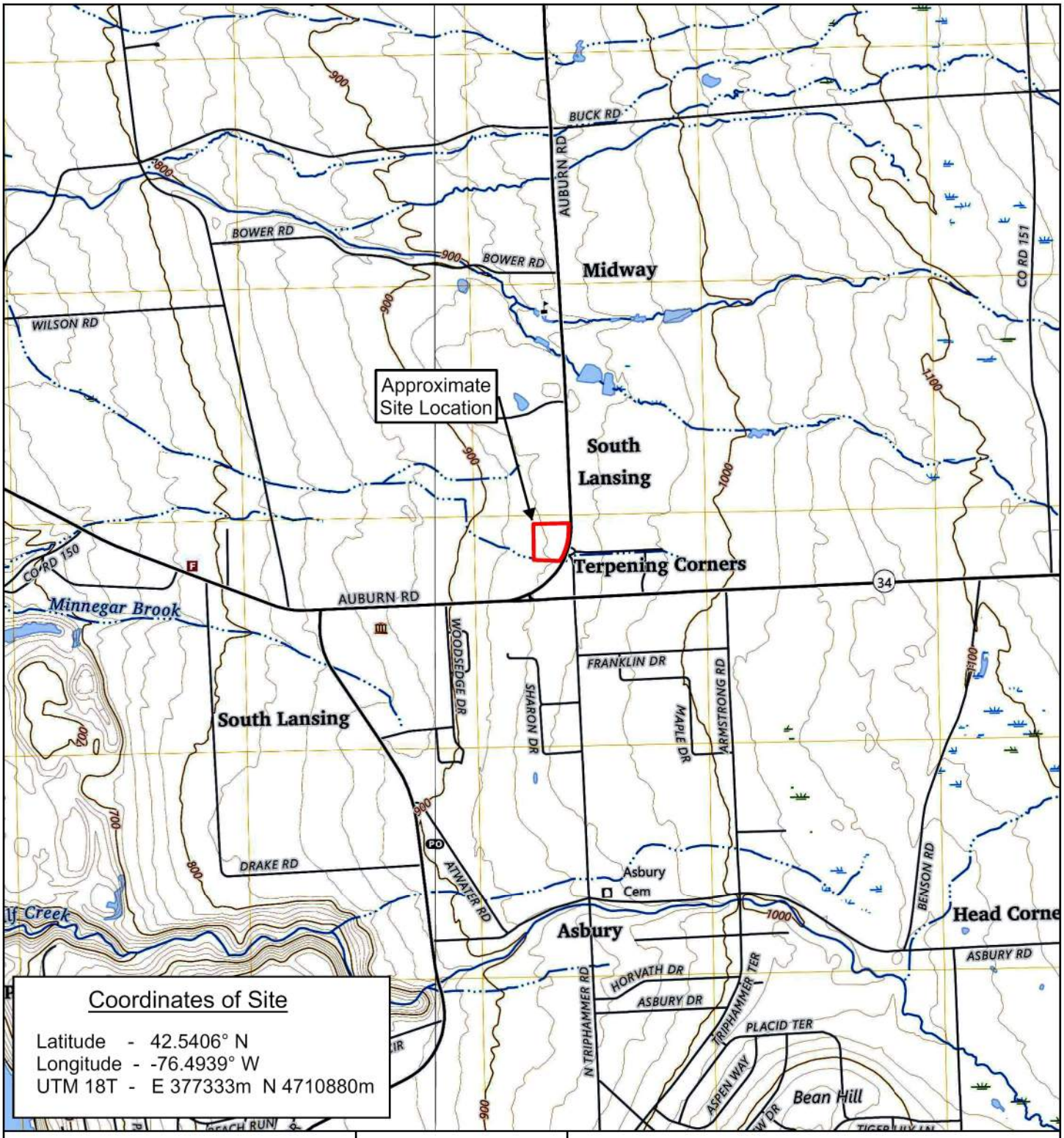
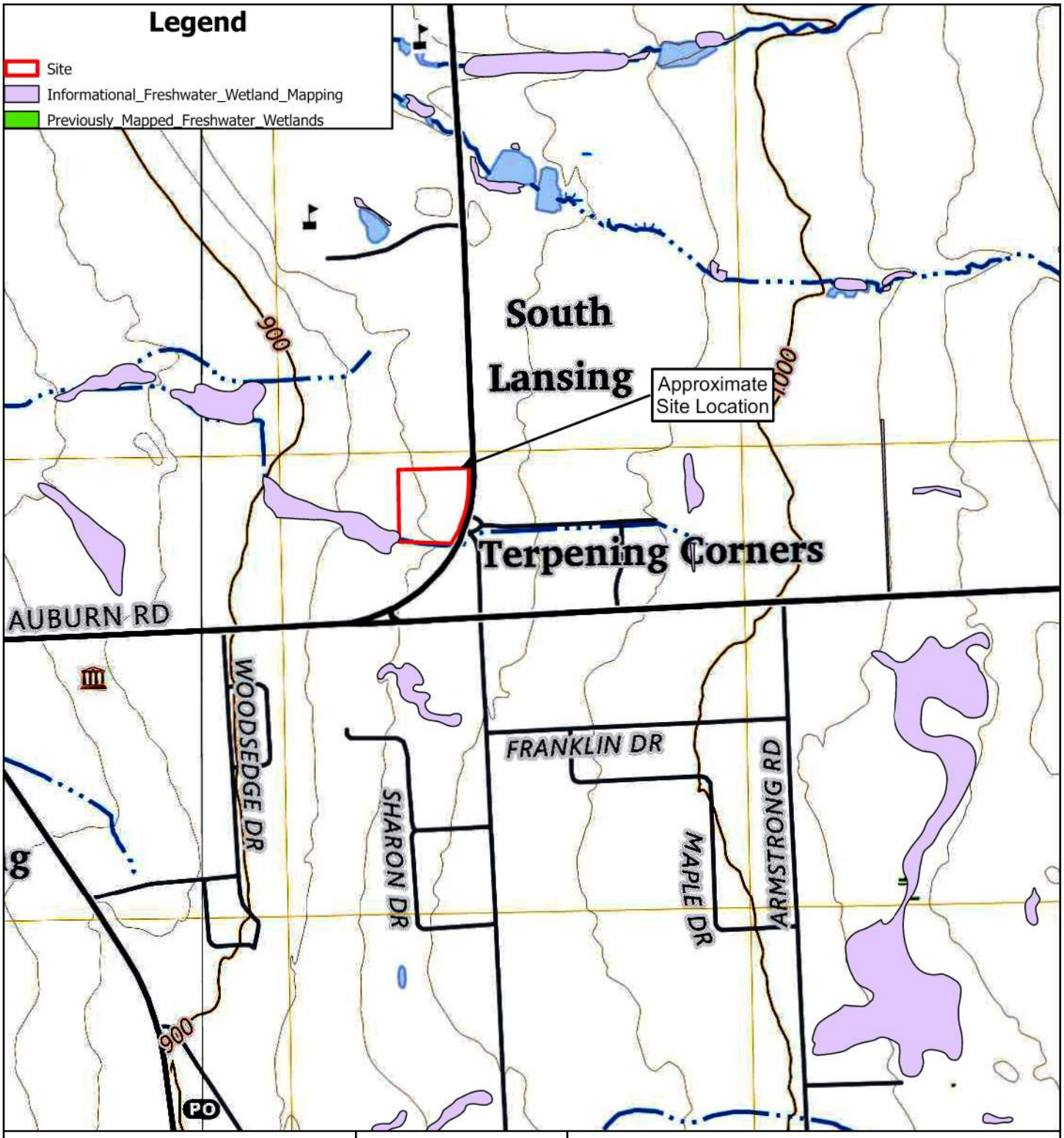


Figure 1. NYS DOT Topographic Map

Site Location

West Groton and Ludlowville Quadrangles 2023

Delta File: 2025.428.001-Fig1\9-22-25



N

0 500 1,000

US Feet

Scale: 1:12,000

Figure 2. NYS Freshwater Wetlands Map

NYS Department of Environmental Conservation
cugir.mannlib.cornell.edu
Tompkins County

Delta File: 2025.428.001-Fig2\9-22-25

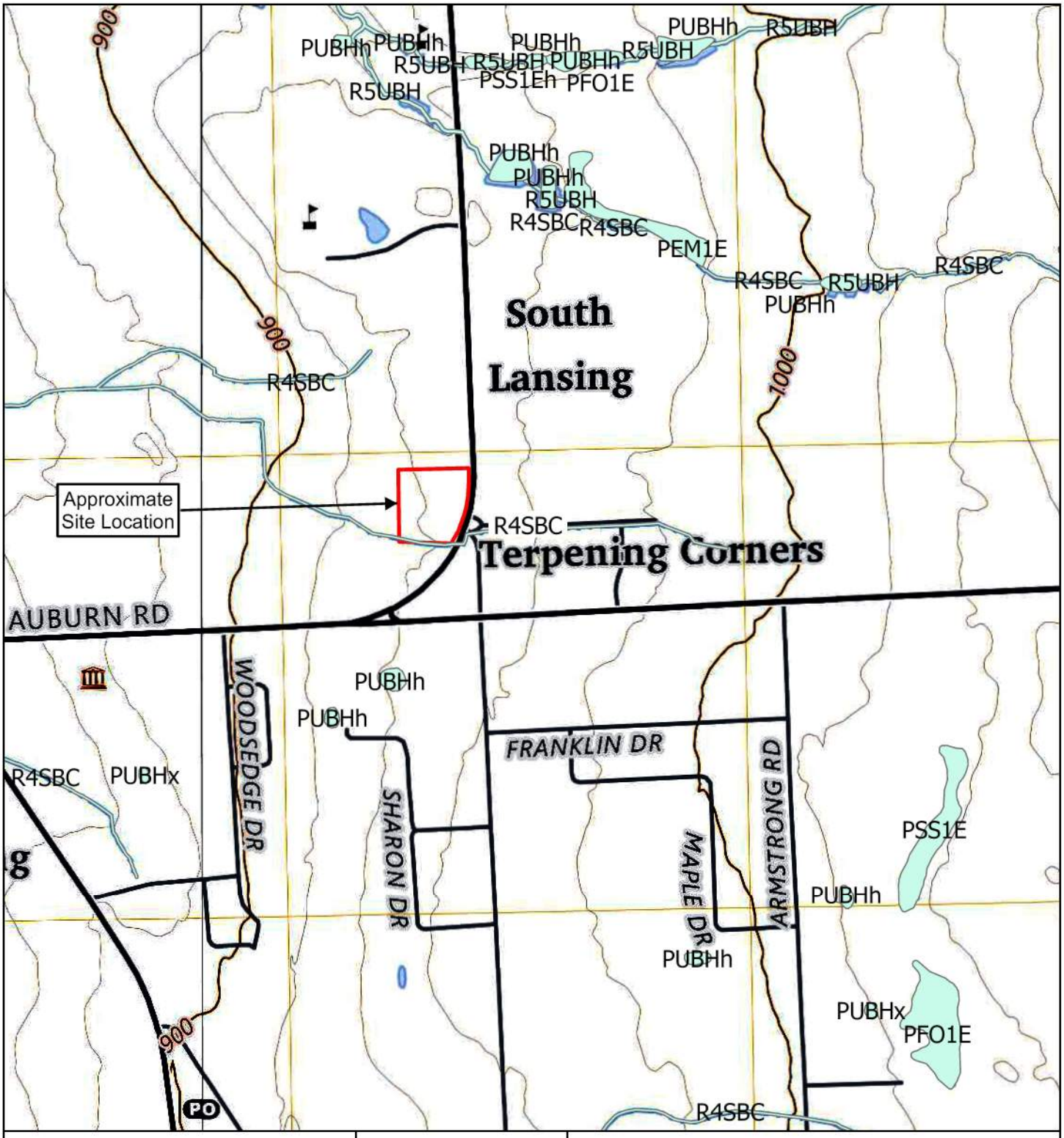


Figure 3. National Wetlands Inventory Map

U.S. Fish & Wildlife Service
www.fws.gov/nwi
West Groton and
Ludlowville Quadrangles
2023

Delta File: 2025.428.001-Fig3\9-23-25

N

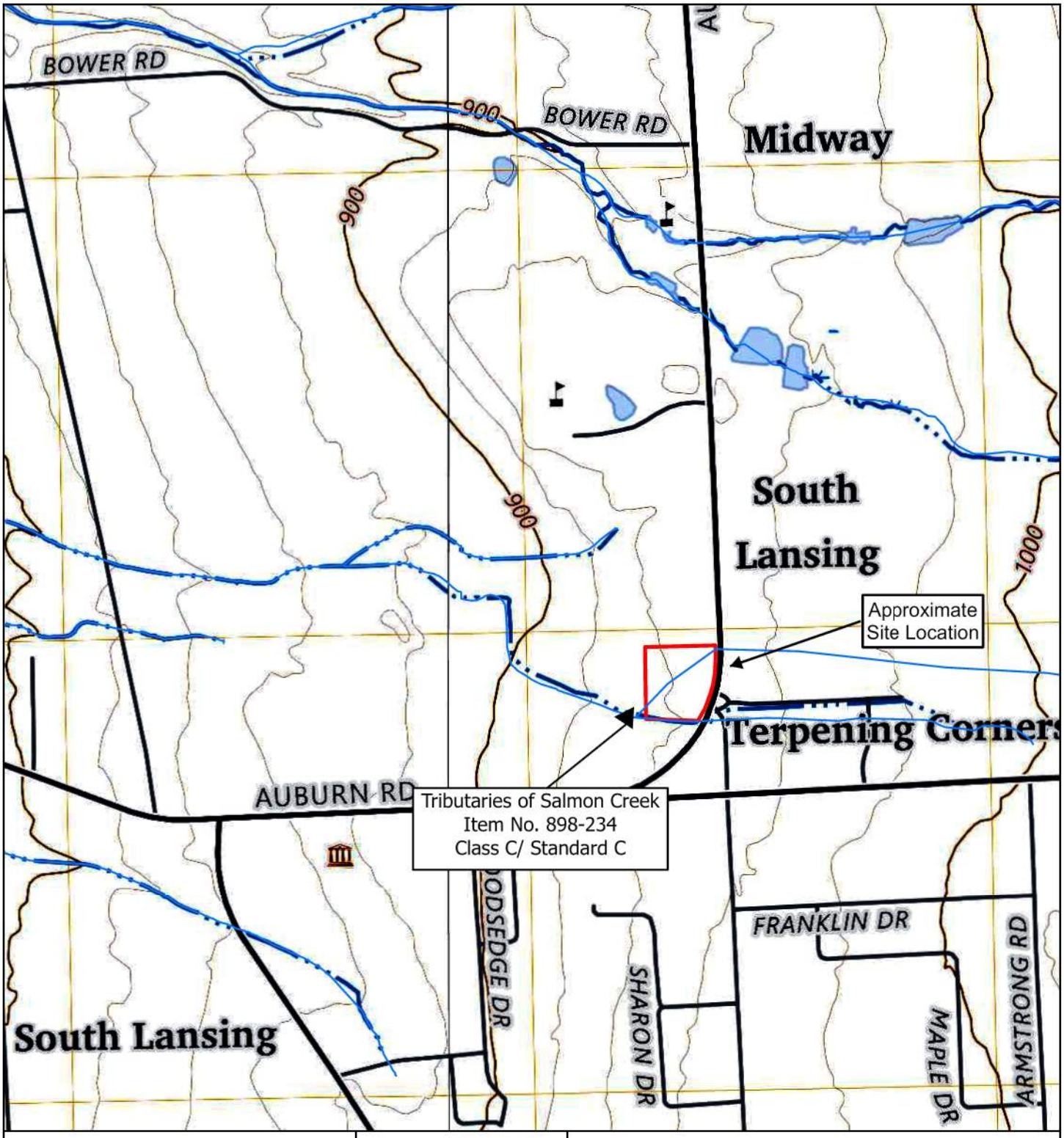
0 100 200
US Feet

Scale: 1:2,400

Figure 4. Soil Survey
Natural Resource Conservation Service
Soil Survey Geographic Database
(NRCS SSURGO)

Tompkins County
2024

Delta File: 2022.119.056-Fig3.mxd\12-29-24



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US Feet

Scale: 1:12,000

N

Title 6 NYCRR, Chapter X
Article 14, Part 898 (2022)

Maps (K-14sw and K-13se)

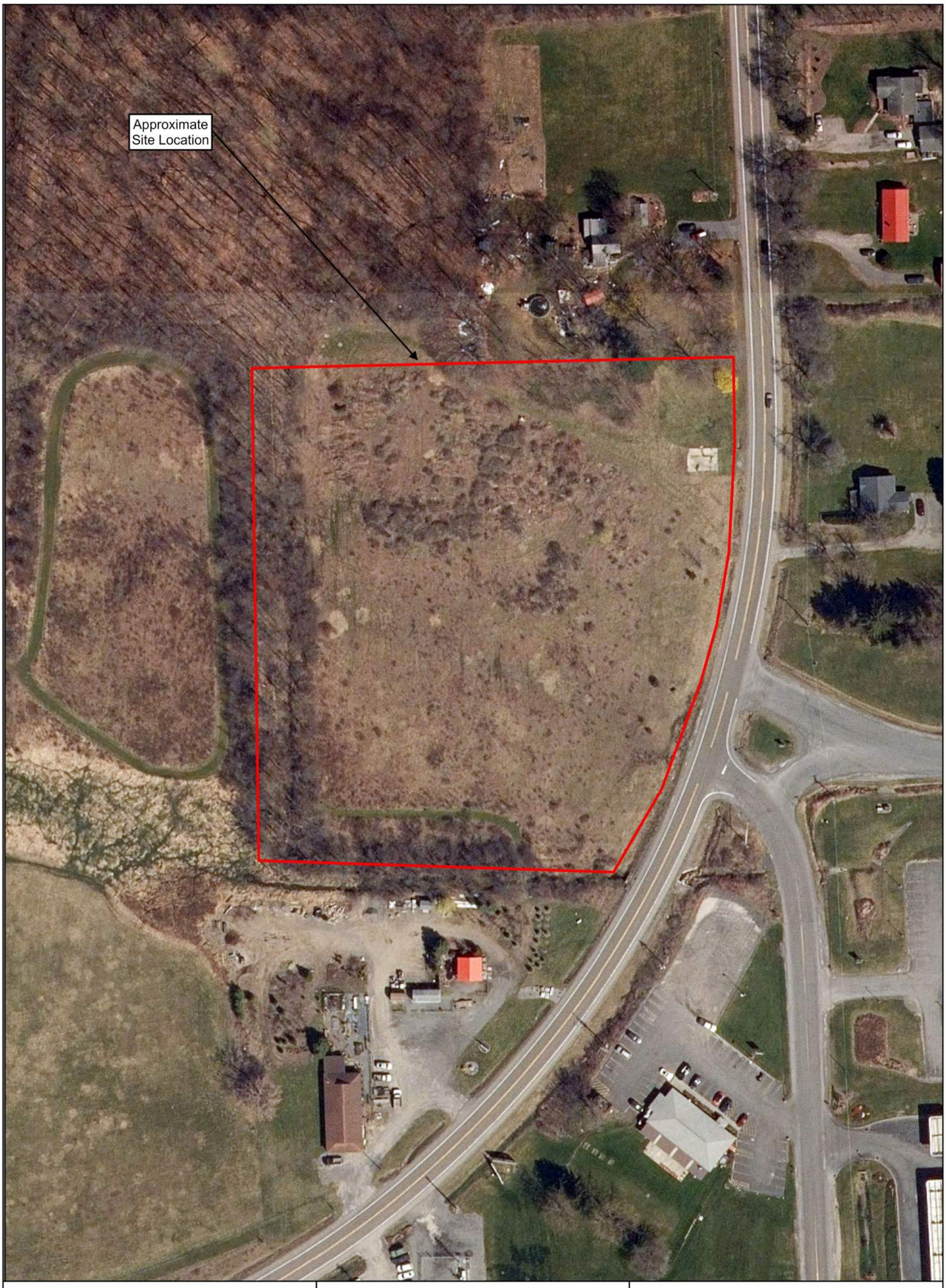
Figure 5. Surface Water Classification Map

NYS DEC

West Groton and
Ludlowville Quadrangle

Prepared by Delta Engineers Architects & Land Surveyors

Delta File: 2025.428.001-Fig5\9-23-25



N

0 50 100

US Feet

Scale: 1:1,200

Aerial Photograph obtained
from NYS GIS Clearinghouse
2023

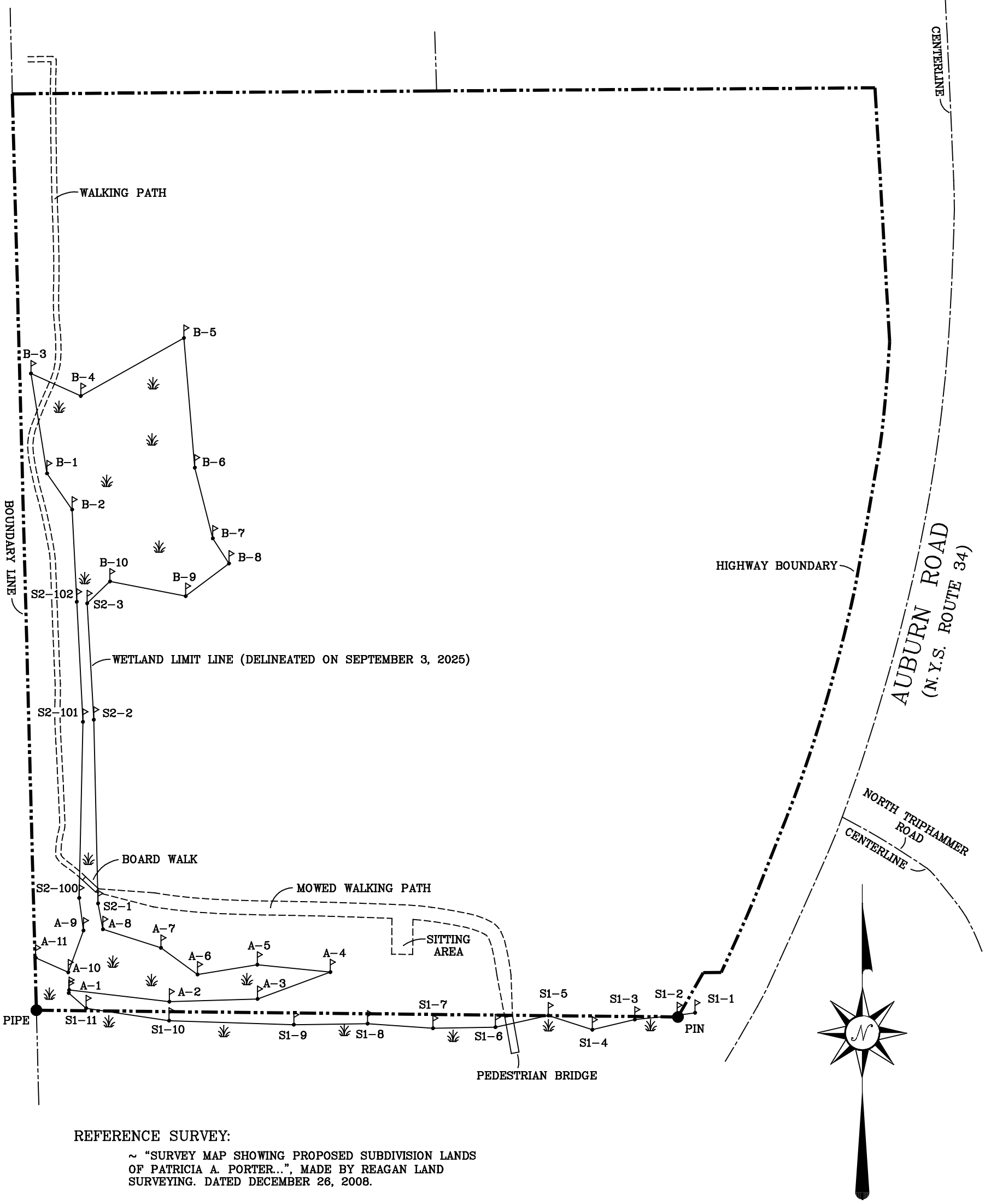
Figure Prepared by
Delta Engineers,
Architects & Land Surveyors

Figure 6.

**Aerial Photograph
of Site**

Delta File: 2025.428.001-Fig6-Aerial\9-2-25

SURVEY OF DELINEATED WETLANDS
LANDS OF
SEE ASSOCIATES HOLDINGS, LLC
TOWN OF LANSING ~ COUNTY OF TOMPKINS
STATE OF NEW YORK
TAX MAP NO.: 31.-1-15.21
REFERENCE DEED: INSTR. NO. 2021-00352



REFERENCE SURVEY:

~ "SURVEY MAP SHOWING PROPOSED SUBDIVISION LANDS OF PATRICIA A. PORTER...", MADE BY REAGAN LAND SURVEYING. DATED DECEMBER 26, 2008.

Figure 7.

Wetland Survey

LEGEND:

- ● EXISTING MONUMENT AS SHOWN
- ⚑ WETLAND FLAG
- WETLANDS

DATUM: STATE PLANE COORDINATE SYSTEM AT GRID
GROUND TO GRID SCALE FACTOR: 0.999898

DRAWING FILE: 25084.DWG
COORDINATE FILE: 21131.CRD

OWASCO LAND SURVEYING
52 HART DRIVE
FREEVILLE, NEW YORK 13068
PHONE: (607) 898-5051
email: owascols@outlook.com

JOB NO.: 25-084 SCALE: 1"=60'
DRAWN BY: BMK DATED: SEPT. 9, 2025

SIGNED: Brian M. Klumpp

STATE OF NEW YORK
BRIAN M. KLUMPP
NO. 050380
LICENSED LAND SURVEYOR

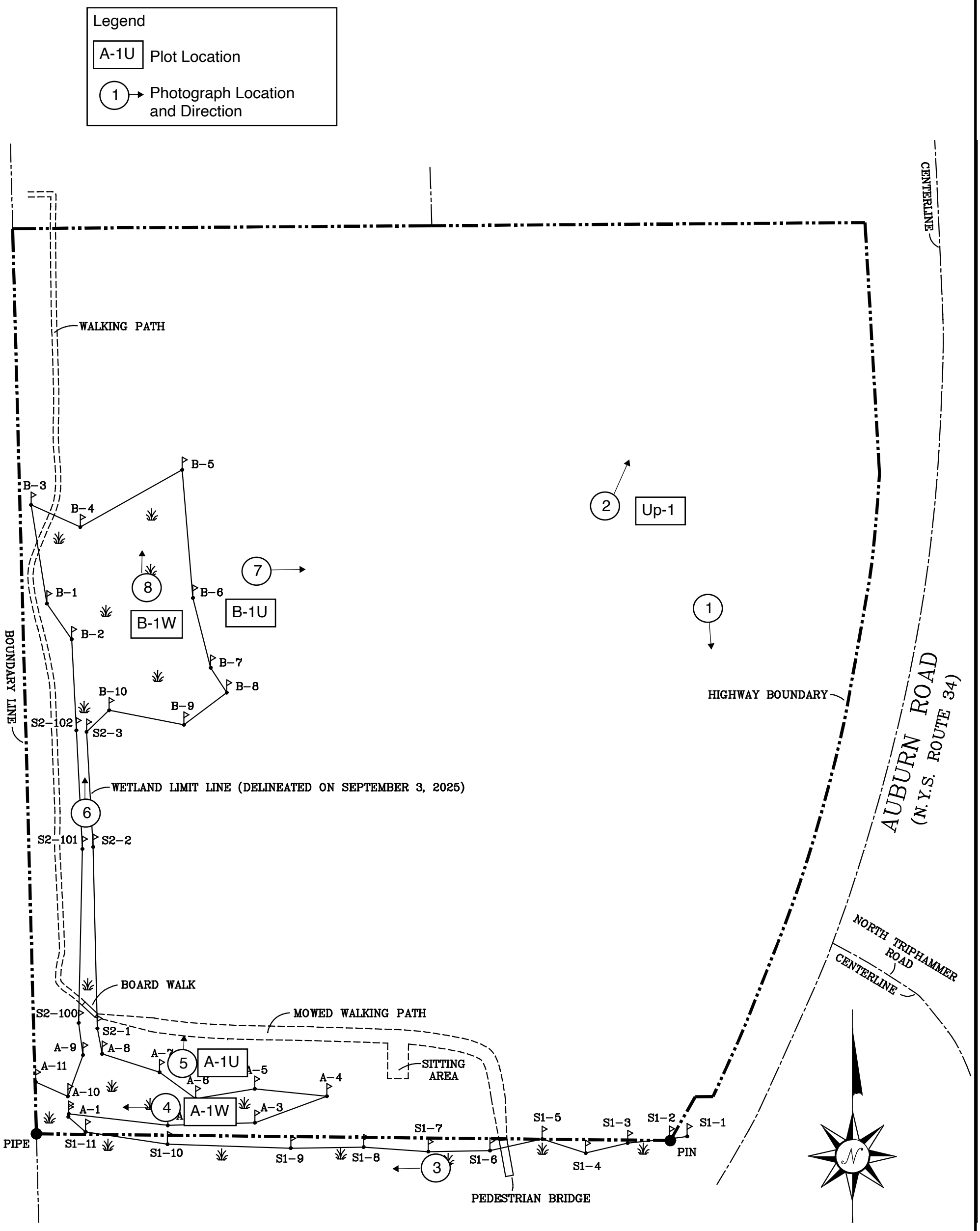


Figure prepared by Delta-EAS

Base figure provided by Owasco Land Surveying

Figure 8.

Plot and Photograph Locations on Wetland Survey

APPENDIX A – FIELD DATA SHEETS

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 164 Auburn Rd - Lansing City/County: Lansing/ Tompkins Sampling Date: 2025-09-03

Applicant/Owner: SEE Associates State: New York Sampling Point: A-1U

Investigator(s): S. Sheridan Section, Township, Range: 31.-1-15.21

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

Subregion (LRR or MLRA): R 140 Lat: 42.53997898 Long: -76.4944584 Datum: NAD83_2011

Soil Map Unit Name: Ovis silt loam, 0 to 6% slopes NWI classification: None

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ 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 ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Photo 8

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)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ 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)
- ___ 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 ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: A-1U

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer negundo	5	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Lonicera morrowii	30	✔	FACU
2. Acer negundo	15	✔	FAC
3. Rhus typhina	5		
4.			
5.			
6.			
7.			
	50	=Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Rubus occidentalis	55	✔	
2. Solidago rugosa	20	✔	FAC
3. Lysimachia nummularia	10		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	40	x 3 =	120
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	80 (A)		260 (B)

Prevalence Index = B/A = 3.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

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

SOIL

Sampling Point A-1U

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0 - 18	10YR 4/3	100					Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 18

Hydric Soil Present? **Yes** ___ **No** ✔

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 164 Auburn Rd - Lansing City/County: Lansing/ Tompkins Sampling Date: 2025-09-03

Applicant/Owner: SEE Associates State: New York Sampling Point: A-1W

Investigator(s): S. Sheridan Section, Township, Range: 31.-1-15.21

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

Subregion (LRR or MLRA): R 140 Lat: 42.539945 Long: -76.4945411 Datum: NAD83_2011

Soil Map Unit Name: Ovid silt loam, 0 to 6% slopes NWI classification: None

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ 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 ____	**Is the Sampled Area within a Wetland?** Yes ✔ No ____
Hydric Soil Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ✔	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

Photo 7

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)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ 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)
- ✔ 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 ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: A-1W

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Rhamnus cathartica	60	✔	FAC
2. Acer negundo	20	✔	FAC
3. Lonicera morrowii	5		FACU
4.			
5.			
6.			
7.			
	85	=Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Lysimachia nummularia	70	✔	FACW
2. Solidago rugosa	40	✔	FAC
3. Solidago gigantea	35	✔	FACW
4. Rhamnus cathartica	15		FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	160	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
		=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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	135	x 3 =	405
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	245 (A)		635 (B)

Prevalence Index = B/A = 2.59

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

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

SOIL

Sampling Point A-1W

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 11	10YR 3/1	95	10YR 3/3	5	D	M	Silt Loam	
11 - 18	10YR 4/1	90	10YR 4/6	10	D	M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✔ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: 18

Depth (inches): Rock

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 164 Auburn Rd - Lansing City/County: Lansing/ Tompkins Sampling Date: 2025-09-03

Applicant/Owner: SEE Associates State: New York Sampling Point: B-1U

Investigator(s): S. Sheridan Section, Township, Range: 31.-1-15.21

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

Subregion (LRR or MLRA): R 140 Lat: 42.5406446 Long: -76.4943476 Datum: NAD83_2011

Soil Map Unit Name: Ovid silt loam, 0 to 6% slopes NWI classification: None

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ 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 ✔	**Is the Sampled Area**
Hydric Soil Present?	Yes ✔	No ____	**within a Wetland?** **Yes** ____ **No** ✔
Wetland Hydrology Present?	Yes ____	No ✔	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

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)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ 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)
- ___ 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 ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

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

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: B-1U

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Rhamnus cathartica	33	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	33 =Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Solidago altissima	40	✔	FACU
2. Solidago canadensis	25	✔	FACU
3. Solidago rugosa	25	✔	FAC
4. Rubus occidentalis	10		
5. Rhamnus cathartica	5		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	=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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	63	x 3 =	189
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	128 (A)		449 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

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

SOIL

Sampling Point B-1U

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 4/1	95	10YR 4/4	5	D	M	Silt Loam	
5 - 11	10YR 4/2	83	10YR 4/4	7	D	M	Silt Loam	
5 - 11			10YR 6/6	10	C	M	Silt Loam	
-								
-								
-								
-								
-								
-								
-								
-								

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 164 Auburn Rd - Lansing City/County: Lansing/ Tompkins Sampling Date: 2025-09-03

Applicant/Owner: SEE Associates State: New York Sampling Point: B-1W

Investigator(s): S. Sheridan Section, Township, Range: 31.-1-15.21

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

Subregion (LRR or MLRA): R 140 Lat: 42.5405968 Long: -76.4944490 Datum: NAD83_2011

Soil Map Unit Name: Ovid silt loam, 0 to 6% slopes NWI classification: None

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ 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 ____	**Is the Sampled Area within a Wetland?** Yes ✔ No ____
Hydric Soil Present?	Yes ✔	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ✔	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)

GPS pt 40. Photos 11-14

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)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ 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)
- ✔ 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 ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

Wetland Hydrology Present? Yes ✔ No ____

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: B-1W

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Rhamnus cathartica	10	✔	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10 =Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	45	✔	FACW
2. Solidago rugosa	40	✔	FAC
3. Euthamia graminifolia	35	✔	FAC
4. Solidago gigantea	20		FACW
5. Daucus carota	5		UPL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	145 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	85	x 3 =	255
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	155 (A)		410 (B)

Prevalence Index = B/A = 2.64

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ___

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

SOIL

Sampling Point B-1W

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 7	10YR 4/1	85	10YR 4/6	10	C	M	Silt Loam	
0 - 7			10YR 6/2	5	D	M	Silt Loam	
7 - 11	2.5Y 6/2	100					Silt Loam	gravelly
-								
-								
-								
-								
-								
-								
-								
-								

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 11

Hydric Soil Present? **Yes** ✔ **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 164 Auburn Rd - Lansing City/County: Lansing/ Tompkins Sampling Date: 2025-09-03

Applicant/Owner: SEE Associates State: New York Sampling Point: Up1

Investigator(s): S. Sheridan Section, Township, Range: 31.-1-15.21

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

Subregion (LRR or MLRA): R 140 Lat: 42.5406680 Long: -76.4933106 Datum: NAD83_2011

Soil Map Unit Name: Ovid silt loam, 0 to 6% slopes NWI classification: None

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ 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 ✔	**Is the Sampled Area within a Wetland?** Yes ____ No ✔
Hydric Soil Present?	Yes ____	No ✔	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

Photos 1-4

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)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ 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)
- ___ 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 ✔	Depth (inches): ____
Water Table Present?	Yes ____	No ✔	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✔	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ✔

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

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: Up1

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Rhamnus cathartica	10	✔	FAC
2. Lonicera morrowii	5	✔	FACU
3.			
4.			
5.			
6.			
7.			
	15 =Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Galium mollugo	60	✔	FACU
2. Centaurea jacea	50	✔	FACU
3. Euthamia graminifolia	40	✔	FAC
4. Solidago rugosa	30		FAC
5. Daucus carota	20		UPL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	200 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	=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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	115	x 4 =	460
UPL species	20	x 5 =	100
Column Totals:	215 (A)		800 (B)

Prevalence Index = B/A = 3.72

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

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

SOIL

Sampling Point Up1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0 - 11	2.5Y 4/3	100					Silt Loam	gravel hard pan below
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**) Thin
- ___ Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: 11

Depth (inches): Gravel hardpan

Hydric Soil Present? **Yes** ___ **No** ✔

Remarks:

APPENDIX B – PHOTOGRAPHS

Photo 1.

Photo 2. Plot Up-1

Photo 3. Stream 1

fr

Photo 4. Plot A-1W

Photo 5. Plot A-1U

Photo 6. Swale2

Photo 7. Plot B-1U

Photo 8. Plot B-1W

PERM 33-COM (04/15)

New York State Department of Transportation

Commercial Access Highway Work Permit Application and Checklist

INSTRUCTIONS FOR USE

The PERM 33-COM Application and Checklist is used to apply for a Commercial Access Highway Work Permit. It is designed to provide applicants with step-by-step design guidance and other information needed to generate a complete and accurate plan submission at each stage of the permit review process. A complete and accurate plan submission will allow NYSDOT to review and approve the permit more quickly.

Applicants should complete the required section(s) of this application/checklist at each of the three stages of the review process, and it should be submitted along with plans to the appropriate Regional Permit Coordinator (RPC). The RPC will review the plan submission and notify the applicant when the submission is complete and ready to move into the next stage of review, or may respond with comments and recommendations that the applicant must address before resubmitting.

Contact information for Regional Permit Coordinators can be found at Regional Permit Coordinators.

Any exceptions to the standards or requirements identified here must be noted in the comments section, with any justification attached. The checklist must be printed and signed, and submitted with plans. It is recommended that applicants save the document on their computer to be updated with each submission.

Stage 1:	Initial Proposal Review	Questions 1.1 to 1.7	Pages 3-6
Stage 2:	Design Review	Questions 2.1 to 2.14	Pages 7-15
Stage 3:	Final Submission Review	Questions 3.1 to 3.10	Pages 16-19

EXPEDITED REVIEW FOR A COMMERCIAL ACCESS HIGHWAY WORK PERMIT

If your proposed commercial access project meets certain criteria, an Expedited Review of the application may be available. Go to www.dot.ny.gov/permits-expeditedreview to find out if your project meets the criteria necessary to be processed as an Expedited Review. If your project meets these criteria, contact the Regional Permit Coordinator for further guidance on developing your submission.

Review Stage *Applicant to check one*	**Date Submitted** *Applicant to identify date*	**Date Received** *NYSDOT to identify date*
☐ Initial Proposal Review		
☐ Design Review		
☐ Final Submission		

- OR -

☐ Expedited Review		

Stage 1: Initial Proposal Review

In the Initial Proposal Review, an applicant should provide the following basic information about the proposed project concept and scope. A face-to-face meeting with the applicant is typically held during this review, and a representative of the impacted municipality is invited to attend. Your NYSDOT Regional Permit Coordinator can provide answers to any questions concerning the driveway design and the permit review process.

Complete questions 1.1 through 1.7 and submit this application/checklist, along with plans to the Regional Permit Coordinator. The Department will review the submission and respond with comments and recommendations that need to be addressed before continuing to Stages 2 (Design Review) and 3 (Final Submission).

1.1 Contact Information

A.	**Name of Applicant**		
	Number and Street (mailing address)		
	City	Zip Code	
	Daytime phone	E-mail address	
B.	**Name of Property Owner** *(if different)*		☐ Same as Applicant
	Number and Street (mailing address)		
	City	Zip Code	
	Daytime phone	E-mail address	
C.	**Firm Name of Consultant** (*if applicable)*		☐ Agent for Applicant
	Contact Name		
	Number and Street (mailing address)		
	City	Zip Code	
	Daytime phone	E-mail address	

1.2 Property Location Information

Number and Street *(include State Route Number)*

City/Town/Village **Zip Code**

Nearest Cross Street with Distance and Direction:

Between State Highway Reference Markers:

to

NYSDOT Reference Marker Manual

Approximate Latitude and Longitude of Proposed Driveway:

Find Latitude and Longitude

Comment:

1.3 Project Name and Brief Description of Proposed Work

Project or Development Name

State Highway Number **Municipality**

Brief Description of Proposed Work

1.4 Anticipated Permit Type and Fees

Permit fees are payable at Final Submision (except 5a4).

Comment:

MINOR COMMERCIAL: Less than 100 vehicles/hour entering volume and no anticipated mitigation on state highway:

5a2 Minor Commercial - Permit Fee $550

5a2a Minor Commercial (Home Business) - Permit Fee $100

MAJOR COMMERCIAL: 100 + vehicles/hour entering volume and/or anticipated mitigation on state highway:

5a3 Major Commercial (<100K sq. ft. GBA) - Permit Fee $1,400

5a4 Major Commercial (100K sq. ft.+ GBA) - Permit Fee $2,000
$2,000 fee due at time of application, with balance of actual design review costs payable when billed.

SUBDIVISION STREET:

5a5 Permit Fee $900

1.5 Maps and Plans

The following maps and plan information should be submitted. Check all that are included with the Initial Proposal Review Submission:

Comment:

- ☐ Location map with subject property identified (Google or Bing mapping is suitable)
- ☐ Tax map showing the subject parcel and all parcels immediately adjacent to it
- ☐ Survey of property (a plat is acceptable)
  - ☐ Right-of-way acquisition or donation is anticipated
- ☐ Available record plans
- ☐ Limits and legal description of any easements on the property, as well as on any adjacent parcels, must be clearly depicted on the submitted plans.
- ☐ Initial Proposal Plan (sketch)

  It is recommended that this be shown on an aerial photo. The sketch should show the following, with labels:
  - proposed driveways
  - type of driveway (one-way or two-way)
  - existing and proposed parking areas
  - existing and proposed buildings
  - dimensions for building offsets from property lines
  - distances from proposed driveway(s) to any intersection within 1000 ft. (300 m)
  - distances to any other driveways within 500 ft. (150 m)
  - streets, roads and properties opposite the subject property

1.6	Traffic Impacts	
A.	**Briefly describe the type of development that will be served by the driveway(s):**	**Comment:**
B.	**Average Annual Daily Traffic (AADT) for the highway:** *AADT is available online through the* NYSDOT Traffic Data Viewer.	**Comment:**
C.	**Posted speed on state highway where entrance will be placed:**	**Comment:**
D.	**Number of one-way vehicular trips for the proposed driveway:** AM Peak Hour: : to : AM Peak Volume: PM Peak Hour: : to : PM Peak Volume: **If the proposed access is for retail use, please provide:** Saturday Peak Hour: : to : Saturday Peak Volume: *Trips generated should not be reduced by pass-by or other credits.*	**Comment:**
E.	**How was the number of vehicular trips determined?** ☐ Similar development history ☐ ITE *Trip Generation Manual* ☐ Estimate from a NYS Licensed Professional Engineer	**Comment:**
F.	**Is a Traffic Impact Study (TIS) required?** ☐ A TIS is not required ☐ A TIS is required, and is in progress ☐ A TIS is required, and is attached ☐ Not sure if a TIS is required, need more information *Guidance on how to determine if a Traffic Impact Study is needed, and what elements should be included, can be found at https://www.dot.ny.gov/CommercialHWP/traffic-impact.*	**Comment:**

1.7 Environmental Impact

A.	**State Environmental Quality Review (SEQR) Lead Agency:**	**Comment:**
B.	**SEQR Type** *Select one*: ☐ Type I ☐ Type II ☐ Unlisted	**Comment:**
C.	**SEQR Status:** *SEQR (State Environmental Quality Review) documentation must be complete before a permit will be issued.* ☐ The lead agency has not yet been notified of the action ☐ The lead agency has been notified of the action and the SEQR process is underway ☐ The SEQR process is complete and the lead agency has made a declaration (*Attach a copy of the determination, if available*) Highway Design Manual (HDM) Section 5A.2.1.3 – SEQRA Coordination	**Comment:**

ACKNOWLEDGMENT: I HEREBY REQUEST A HIGHWAY WORK PERMIT, AND DO ACKNOWLEDGE AND AGREE TO THE RESPONSIBILITIES OF PERMITTEE AND OTHER OBLIGATIONS SET FORTH IN THIS PERMIT AND WARRANT COMPLIANCE THEREWITH.

Eric Eisenhut — 9-18-25

APPLICANT SIGNATURE — DATE

Eric Eisenhut - Partner S.E.E. Associates

PRINTED APPLICANT NAME

STOP HERE for an Initial Proposal Review Stage Submission

Print this application/checklist, sign above and submit along with plans to the Regional Permit Coordinator. Save this document on your computer to update for future stage submissions.

S.E.E. Associates
164 Auburn Road
Commercial Development

NYSDOT Sight Distance Requirements and Measurements
9-17-25

Requirements
Must provide adequate Intersection and Stopping Sight Distance.

Intersection Site Distance
Per Highway Design Manual (HDM) Chapters 5 and 7
PERM 33-COM for Commercial Driveways points to:
HDM Section 5.9.5 - Intersection Sight Distances and
HDM Appendix 5C - Intersection Sight Distance Charts

HDM Section 5.9.5 - Intersection Sight Distances

5.9.5 Intersection Sight Distance

Each intersection has the potential for several different types of vehicular conflict. Providing sight distance at intersections allows drivers to perceive potentially conflicting vehicles. Intersection sight distance should allow drivers sufficient time to stop or adjust their spee d, as needed, to avoid a collision in the intersection. The driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection, including traffic control devices, and sufficient lengths along the intersecting highway to permit the driver to anticipate and avoid potential collisions. Sight distance also allows the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or cross it. Sufficient sight distance for motor vehicles also provides sight distances for bicyclists and pedestrians.

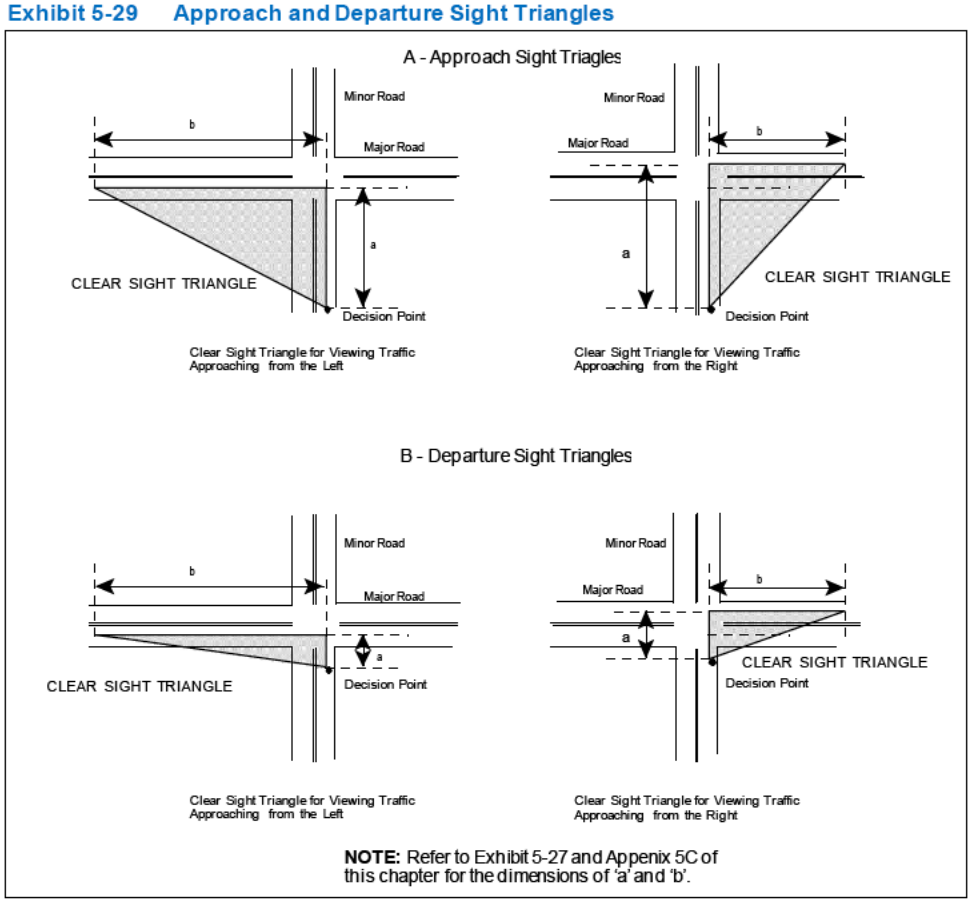
Note: If the Intersection Sight Distance cannot be met, consideration should be given to adding warning signs or signaling.

5.9.5.1 Sight Triangles

Each quadrant of an intersection should contain a triangular area free of obstructions that might block an approaching driver's view of potentially conflicting vehicles and the presence of pedestrians. These areas are known as clear sight triangles. The intersection sight distance is measured along the "a" and "b" legs of the sight triangle, not the hypotenuse.

The dimensions of the legs of the sight triangles depend on the design speeds of the intersecting roadways and the type of traffic control used at the intersectio n. Two types of clear sight triangles are considered in intersection design, approach sight triangles and departure sight triangles. The length of the legs of this triangular area, along both intersecting roadways, should be such that the drivers can see any potentially conflicting vehicles in sufficient time to slow or stop before colliding within the intersection. Exhibit 5-29 depicts typical approach and departure sight triangles.

Exhibit 5-29 Approach and Departure Sight Triangles



NOTE: Refer to Exhibit 5-30 and Appendix 5C of this chapter for the dimensions of 'a' and 'b'.

Approach Sight Triangle - The vertex of the sight triangle on a minor-road approach (or an uncontrolled approach) represents the decision point for a minor-road driver. The decision point is the location at which the minor-road driver should begin to brake and stop if another vehicle is present on an intersecting approach. Although desirable at high-volume intersections, approach sight triangles like those shown in Exhibit 5-29-A are not needed for intersection approaches controlled by stop signs or traffic signals.

Departure Sight Triangle - A second type of clear sight triangle provides sight distance sufficient for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. Departure sight triangles shown in Exhibit 5-29-B should be provided for stop-controlled and some signalized intersection approaches as discussed in Case D - Intersections with Traffic Signal Control.

The profiles of the intersecting roadways should be designed to provide recommended sight distances for drivers on the intersection approaches. Within a sight triangle, any object that would obstruct the driver's view should be removedor lowered, if practical. Particular attention should be given to the evaluation of clear sight triangles at interchang e ramps/crossroad intersections where features such as bridge railings, piers, and abutments are potential sight obstructions. The determination of whether an object constitutes a sight obstruction should consider both the horizontal and vertical alignment of both intersecting roadways, the motorist eye height, and the object height, as shown below:

Vehicle Type	Eye Height	Object Height
Passenger Car	3.5 ft (1080 mm)	3.5 ft (1080 mm)
Single Unit or Combination Truck	7.6 ft (2330 mm)	1.5

5.9.5.2 Intersection Movements

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection. Exhibit 5-30 provides a quick reference to the procedures for intersection sight distance. Detailed procedures for determining intersection sight distance follow.

5.9.5.3 Intersection Sight Distance Design Guidance

Intersection skew is more of a concern at unsignalized intersections than signalized ones. A traffic signal should not, however, be installed to compensate for intersection skew unless the Regional Transportation Systems Operations Engineer determines that it is warranted (refer to Section 5.9.7). Sight lines between the intersecting highways, even at signalized intersections, are a concern because of right-turn-on-red, flashing signal operation, and power failure.

The intersection sight distance values may be adjusted for intersections skewed at an angle of less than 60 degrees. This adjustment can be made by assuming a greater number of lanes being crossed.

The sight distance of intersections adjacent to bridges can be obstructed or severely limited by bridge railing or approach guide railing. In such cases, sight distance may be improved by relocating the intersection, offsetting the railing by providing a wider shoulder on the bridge and approach or, if practicable, changing to an alternative railing design which optimizes sight distance. Ramp terminal intersections should be designed in the same manner as any other at-grade intersection with the corresponding traffic control.

Exhibit 5-30 Intersection Sight Distance Quick Reference

Traffic Control & Maneuver		Traffic Control & Maneuver	Appendix 5C Tables	How to Use Tables in Appendix 5C of this Chapter
Class A - Intersection with no control		approach	A & G	Use table distances for "a" dimension on minor approach legs and "b" dimension on major approaches. Adjust for grade on all approaches using Table G. There are no correction factors for vehicle type.
Class B - Intersection with stop control on the minor road	Case B1- Left turn from the minor road	departure*	B1	Use table to determine "b" dimension along major road. The "a" dimension is half the receiving travel lane width, plus any median, plus the lane widths being crossed, plus a minimum of 14.5' (4.4 m) for the distance between the driver's eye and edge of traveled way. No adjustment for grade.
	Case B2 - Right turn from the minor road	departure	B23	Use table to determine "b" dimension along major road. The "a" dimension is half the receiving travel lane width plus a minimum of 14.5' (4.4 m) for the distance between the driver's eye and edge of traveled way. No adjustment for grade.
	Case B3 - Crossing maneuver from the minor road	departure*	B23	Use table to determine "b" dimension along major road. The "a" dimension is the distance from the middle of the furthest lane crossed to the outside edge of the traveled way nearest the stopped vehicle plus a minimum of 14.5' (4.4 m) for the distance between the driver's eye and edge of traveled way. No adjustment for grade.
Case C - Intersections with yield control on the minor road	Case C1 - Crossing maneuver from the minor road	approach*	C1 & G	Use table to determine the "a" dimension along the minor road and the "b" dimension along undivided major roads. Use Table G to adjust for grade. For divided roadways, the "b" dimension is based on case B3 for wide medians and B1 for narrow medians.
	Case C2 - Left or right turn from the minor road	approach*	C2	Use table to determine "b" dimension along major road. Use 80' (25 m) for the "a" dimension on the minor road assuming the vehicle enters the intersection at a turning speed of 10 mph (16 km/h) and for left turns, the major road is only 2 lanes wide. (Note that if a stop is occurs, the distance "b" based on cases B1, B2, or B3 result in lower values and, therefore, do not need to be checked.) No adjustment for grade.
Case D - Intersections with traffic signal control		8' (2.4 m) from the stop bar on all approaches	Normally none	First vehicle stopped on one approach should be viewable by first vehicle stopped on all others. Permissive left turners should have sufficient sight distance to select gaps. For flashing yellow, use cases B1 and B2 for the minor road approaches. For approaches with right-turn-on-red, use case B2.
Case E - Intersections with all-way stop control		8' (2.4 m) from the stop bar on all approaches	Normally none	First vehicle stopped on one approach should be viewable by first vehicle stopped on all others.
Case F - Left turns from the major road		departure	F	Applies to intersections and left turns into driveways. Check at three-legged intersections and driveways on horizontal curves or crest vertical curves. The "b" dimension is along the major roadway travel lanes being crossed. The "a" dimension is from the eye of the turning motorist to the middle of the furthest travel lane being crossed. Use case B3 when the median width can store the design vehicle length plus 6' (2 m).

Commercial driveway will be a Class B – Intersection with stop control. **Use Appendix 5C Table 5C-3 for left turns and Table 5C-4 for right turns.**

HDM Appendix 5C - Intersection Sight Distance Charts

APPENDIX 5C
INTERSECTION SIGHT DISTANCE CHARTS

Table 5C-3 Design Intersection Sight Distance (in feet) - Case B1 - Left Turn From Stop

Design speed (mph)	Passenger Car Lanes Crossed			Single-Unit Truck Lanes Crossed			Combination Truck Lanes Crossed		
	1	2	3	1	2	3	1	2	3
15	170	180	190	210	225	245	255	270	285
20	225	240	250	280	300	325	340	360	380
25	280	295	315	350	375	405	425	450	475
30	335	355	375	420	450	485	510	540	570
35	390	415	440	490	525	565	595	630	665
40	445	475	500	560	600	645	680	720	760
45	500	530	565	630	675	725	765	810	855
50	555	590	625	700	750	805	850	900	950
55	610	650	690	770	825	885	930	990	1045
60	665	710	750	840	900	965	1015	1080	1140
65	720	765	815	910	975	1045	1100	1170	1235
70	775	825	875	980	1050	1125	1185	1260	1330

Table 5C-4 Design Intersection Sight Distance (in feet) - Case B2 - Right Turn From Stop and - Case B3 - Crossing Maneuver

Design Speed (mph)	Passenger Car Case B2-- Lane Entered Case B3 – Lanes Crossed			Single-Unit Truck Case B2-- Lane Entered Case B3 – Lanes Crossed			Combination Truck Case B2-- Lane Entered Case B3 – Lanes Crossed		
	1	2	3	1	2	3	1	2	3
15	145	155	170	190	205	220	235	250	265
20	195	210	225	250	275	295	310	330	350
25	240	260	280	315	340	365	390	415	440
30	290	310	335	375	410	440	465	495	525
35	335	365	390	440	475	510	545	580	615
40	385	415	445	500	545	585	620	660	700
45	430	465	500	565	610	655	695	745	790
50	480	515	555	625	680	730	775	825	875
55	530	570	610	690	745	805	850	910	965
60	575	620	665	750	815	875	930	990	1050
65	625	670	720	815	880	950	1005	1075	1140
70	670	725	775	875	950	1020	1085	1155	1225

Driveway

- Left Turn (Table 5C-3) Design Speed = 55 MPH Therefore Intersection Sight Distance is 610 ft. **Required Intersection Sight Distance Looking North = 610 ft**
- Right Turn (Table 5C-4) Design Speed = 55 MPH Therefore Intersection Sight Distance is 530 ft. **Required Intersection Sight Distance Looking South = 530 ft**

Stopping Site Distance

Per Highway Design Manual (HDM) Chapters 5 and 7
PERM 33-COM for Commercial Driveways points to:
HDM Exhibit 7-7 – Minimum Stopping Sight Distances and
HDM Appendix 5B - Vertical Highway Alignment Sight Distance Charts

HDM Exhibit 7-7 – Minimum Stopping Sight Distances

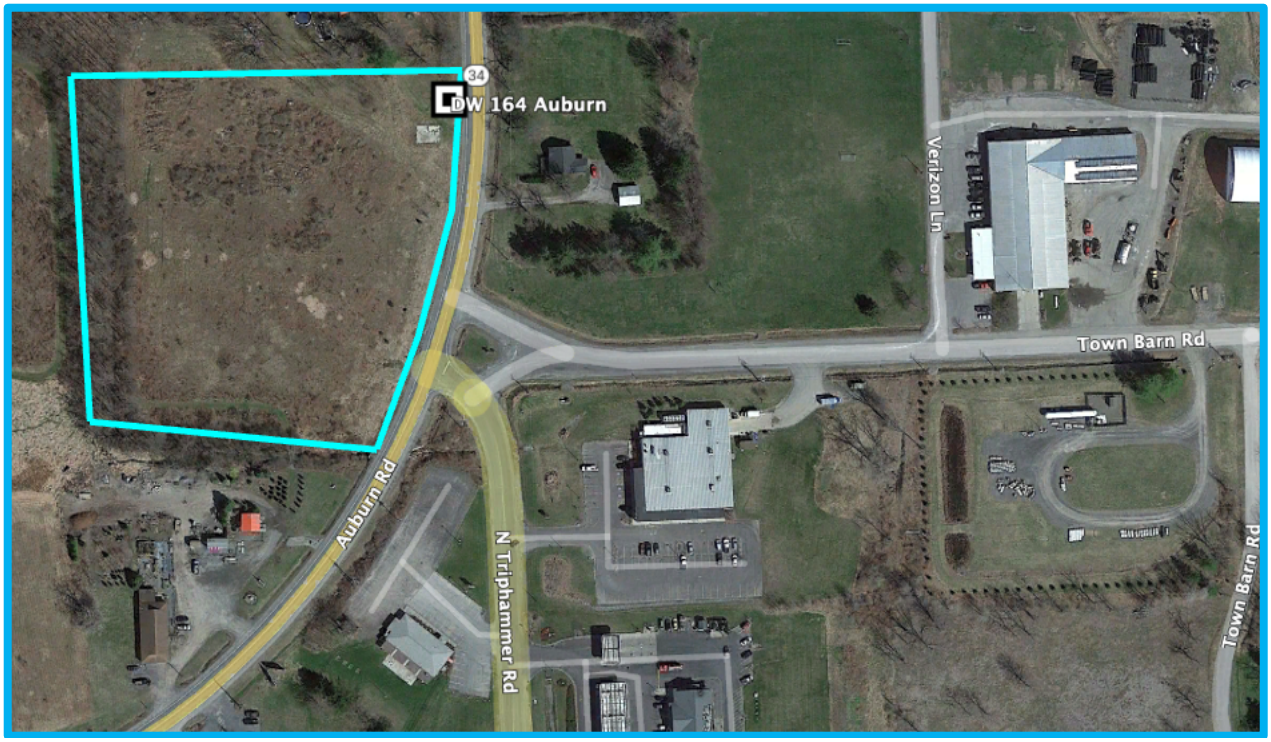
Exhibit 7-7 Minimum Stopping Sight Distance (SSD)

Horizontal SSD				Vertical SSD		
Recommended Speed or Design Speed, whichever is lower (mph)	Minimum Horizontal SSD (ft)			Design Speed (mph)	Is there an operational or safety problem associated with poor sight distances, or is the AADT greater than 1500 vpd with major hazards hidden from view (e.g. intersections, sharp horizontal curves or narrow bridges)?	Minimum Vertical SSD based on Design Speed minus 20 mph (NHS Values) (ft) [1]
	NHS	Non-NHS Rural	Non-NHS Urban			
20	115	105	95	All	NO	No Minimum Value
25	155	140	130	25		21
30	200	180	165	30		46
35	250	225	205	35		80
40	305	280	245	40		115
45	360	335	295	45		155
50	425	390	-	50	YES	200
55	495	455	-	55		250
60	570	525	-	60		305

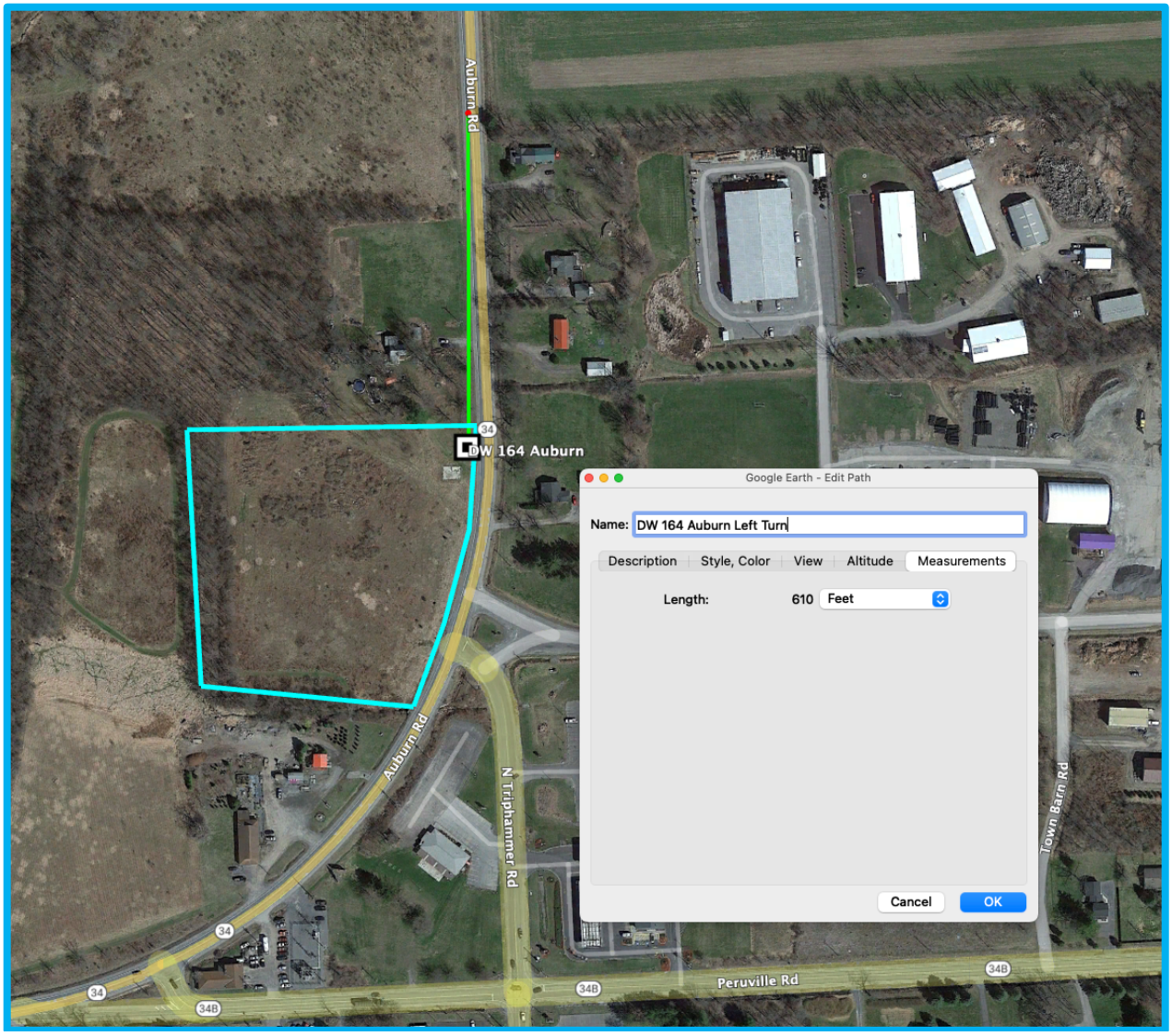
Notes:
1. The minimum values are based on AASHTO's "A Policy on the Geometric Design of Highways and Streets," 2011.

Auburn Road is a Non-National Highway System (NHS) Rural roadway with a design speed of 55 MPH for the proposed driveway. Therefore, the Horizontal Stopping Sight Distance is 455 ft for the driveway. Auburn Road has limited sight distances due to the curve. Therefore, the Vertical Stopping Sight Distance is 250 feet for the driveway

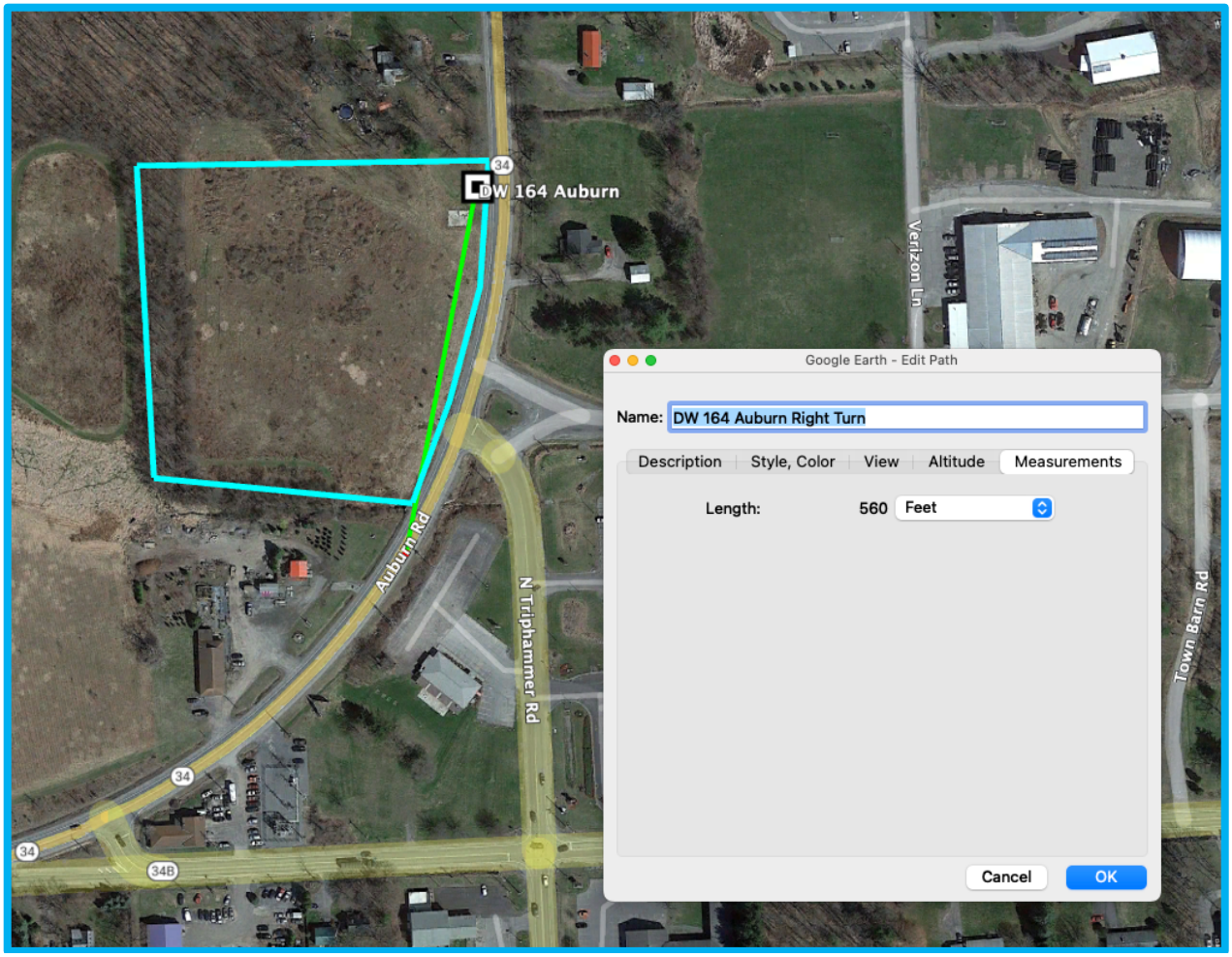
Driveway
Required Stopping Sight Distance Horizontal = 455 ft
Required Stopping Sight Distance Vertical = 250 ft



Sight Distances for Proposed Driveway in Location Shown Above
Measured in Field on 5-9-25 and Graphically Represented Below



Measured Sight Distance Looking North (Left Turn) = 610’



Measured Sight Distance Looking South (Right Turn) = 560'

Required Intersection Sight Distance Looking North (Left Turn) = 610 ft
Measured Intersection Sight Distance Looking North (Left Turn) = 610 ft

Required Intersection Sight Distance Looking South (Right Turn) = 530 ft
Measured Intersection Sight Distance Looking South (Right Turn) = 560 ft

Required Stopping Sight Distance Horizontal = 455 ft
Required Stopping Sight Distance Vertical = 250 ft
Measured Stopping Sight Distance Are the Same as Intersection Sight Distances 560 ft and 610 ft

<u>Driveway Meets/Exceeds Both Intersection and Stopping Sight Distances</u>

Subject: RE: Perm33-COM Office Space 164 SR 34 Lansing
Date: Friday, September 26, 2025 at 1:18:30 PM Eastern Daylight Time
From: Stevens, Richard D. (DOT) <Richard.Stevens@dot.ny.gov>
To: Andrew Sciarabba <ajs@sciarabbaengplus.com>
CC: Eric Eisenhut <eeisenhut20@gmail.com>
Attachments: image001.jpg

Andy,

We have completed review of your stage 1 submission. The proposed driveway location on your 9/18/2025 submission looks fine. Please proceed with a stage 2 submission at your earliest convenience. If the Town requires an official letter, I can work on that but it will likely be a few weeks.

Thank you
Rick

RICHARD STEVENS
Transportation Analyst/Permits

New York State Department of Transportation
333 E. Washington Street, Syracuse, NY 13202
(315) 428-4640 | richard.stevens@dot.ny.gov
www.dot.ny.gov

From: Andrew Sciarabba <ajs@sciarabbaengplus.com>
Sent: Thursday, September 18, 2025 2:36 PM
To: Stevens, Richard D. (DOT) <Richard.Stevens@dot.ny.gov>
Cc: Eric Eisenhut <eeisenhut20@gmail.com>
Subject: Perm33-COM Office Space 164 SR 34 Lansing

Rick,

In May of this year I submitted a Stage 1 Perm33-COM for the 164 Rte 34 (Auburn Road) project on behalf of SEE Associates. We wish to withdraw that submission and ask that you review this new submission for a single building and commercial driveway.

We are planning to submit documents for consideration of site plan approval to the Town of Lansing in mid-October and we hope to provide the Town an email indicating your

acceptance of the new driveway location in concept. We understand that if we get through the Stage 1 review process, we will need to submit the Stage 2 and 3 forms and materials prior to issuance of a formal permit.

I'm sure you are buried, so please let me know if receiving input on the driveway location by mid-October is realistic or not.

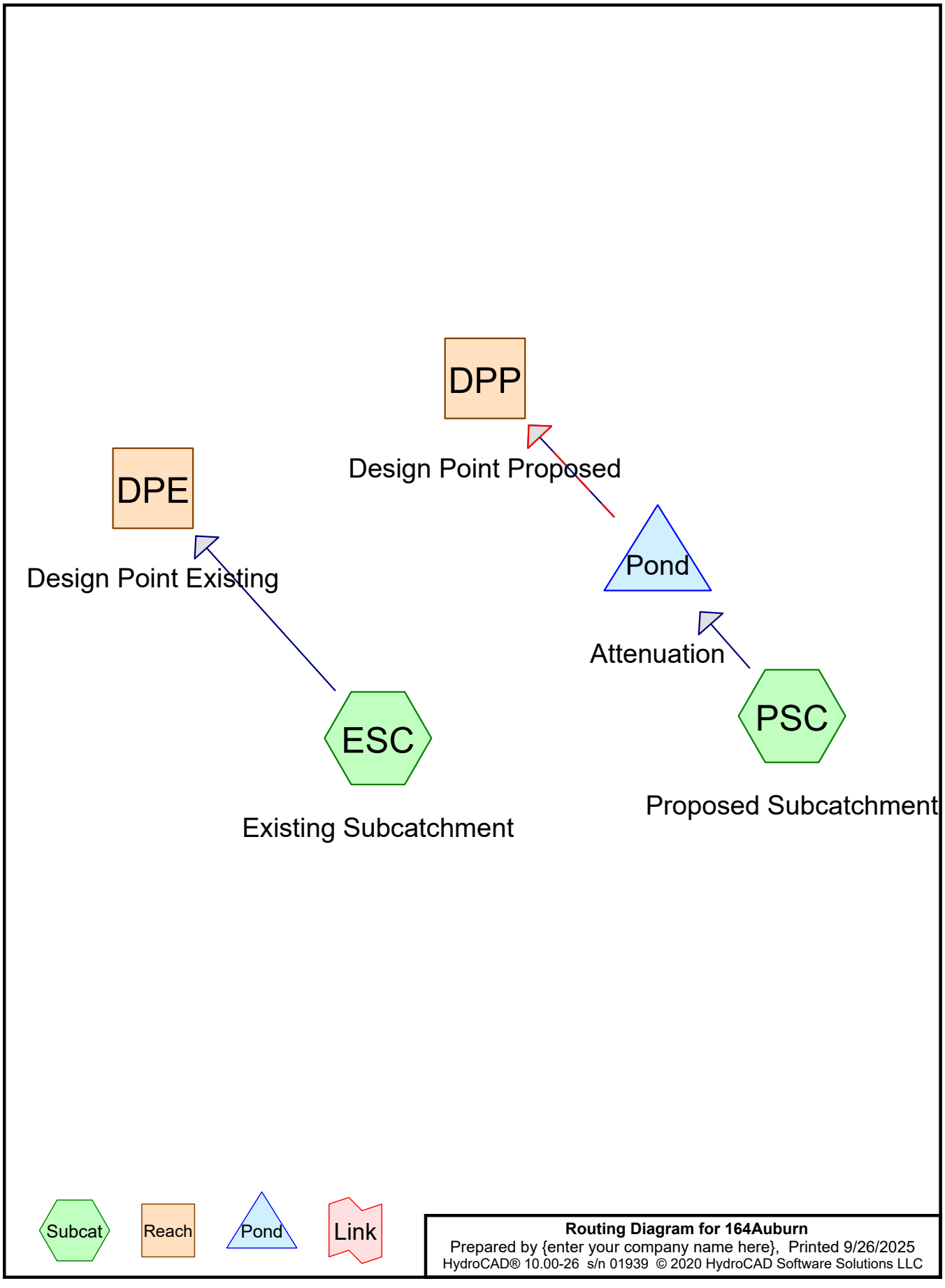
Best,

Andy

Andrew J. Sciarabba, P.E.
Owner/Principal Engineer

Sciarabba Engineering, PLLC
9664 Kingtown Road, Trumansburg, NY 14886

607-327-0578
ajs@sciarabbaengplus.com
www.sciarabbaengplus.com



Routing Diagram for 164Auburn
Prepared by {enter your company name here}, Printed 9/26/2025
HydroCAD® 10.00-26 s/n 01939 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.565	74	>75% Grass cover, Good, HSG C (PSC)
0.945	70	Brush, Fair, HSG C (ESC)
0.019	98	Existing Concrete Pad (ESC)
0.399	98	Paved parking & Roof, HSG C (PSC)
1.928	**77**	**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.565	0.000	0.000	0.565	>75% Grass cover, Good	PSC
0.000	0.000	0.945	0.000	0.000	0.945	Brush, Fair	ESC
0.000	0.000	0.000	0.000	0.019	0.019	Existing Concrete Pad	ESC
0.000	0.000	0.399	0.000	0.000	0.399	Paved parking & Roof	PSC
0.000	**0.000**	**1.909**	**0.000**	**0.019**	**1.928**	**TOTAL AREA**	

164Auburn

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	Pond	944.00	943.75	43.0	0.0058	0.013	4.0	0.0	0.0

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ESC: Existing Subcatchment Runoff Area=41,995 sf 1.96% Impervious Runoff Depth>0.22"
Flow Length=239' Tc=18.3 min CN=71 Runoff=0.19 cfs 0.018 af

Subcatchment PSC: Proposed Runoff Area=41,995 sf 41.38% Impervious Runoff Depth>0.67"
Flow Length=240' Tc=4.7 min CN=84 Runoff=1.29 cfs 0.054 af

Reach DPE: Design Point Existing Inflow=0.19 cfs 0.018 af
Outflow=0.19 cfs 0.018 af

Reach DPP: Design Point Proposed Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond Pond: Attenuation Peak Elev=1.37' Storage=2,226 cf Inflow=1.29 cfs 0.054 af
Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Total Runoff Area = 1.928 ac Runoff Volume = 0.072 af Average Runoff Depth = 0.45"
78.33% Pervious = 1.510 ac 21.67% Impervious = 0.418 ac

Summary for Subcatchment ESC: Existing Subcatchment

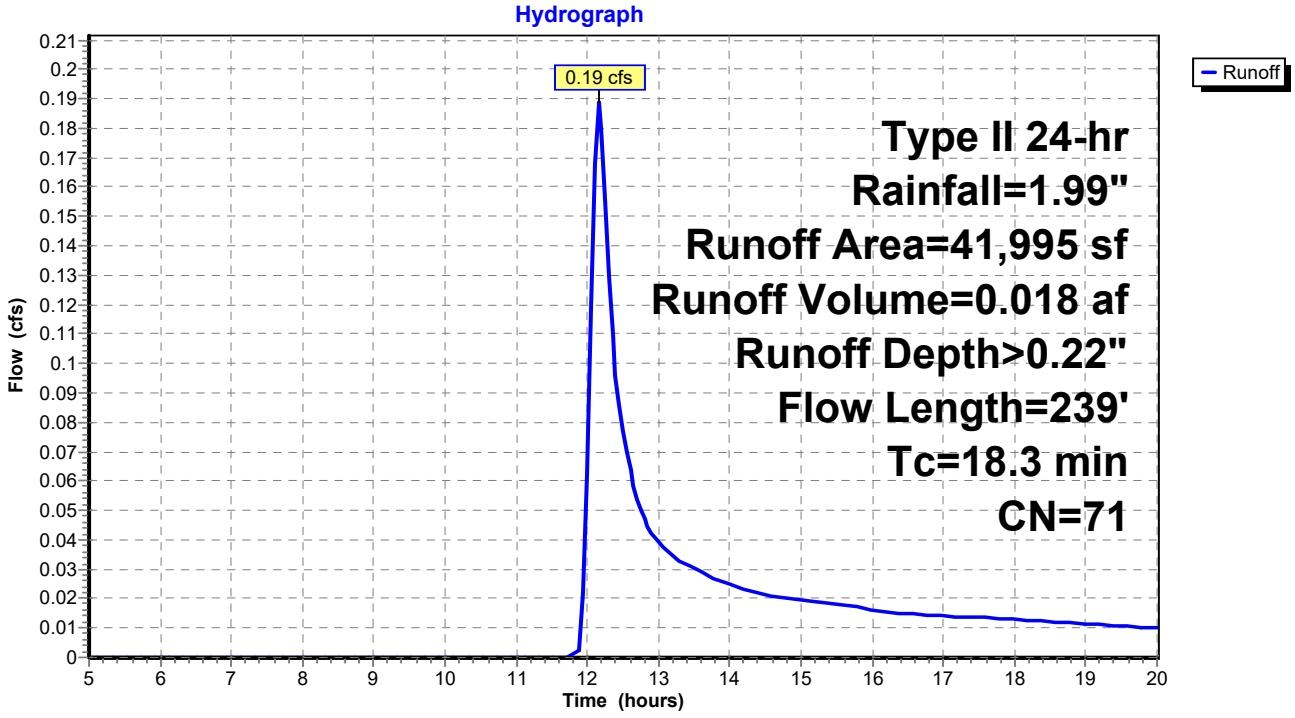
Runoff = 0.19 cfs @ 12.16 hrs, Volume= 0.018 af, Depth> 0.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=1.99"

	Area (sf)	CN	Description
	41,171	70	Brush, Fair, HSG C
*	824	98	Existing Concrete Pad
	41,995	71	Weighted Average
	41,171		98.04% Pervious Area
	824		1.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	100	0.0150	0.10		**Sheet Flow, First 100' Flowpath** Grass: Dense n= 0.240 P2= 2.70"
0.9	139	0.0330	2.72		**Shallow Concentrated Flow, Balance of Longest Flowpath** Grassed Waterway Kv= 15.0 fps
18.3	239	Total			

Subcatchment ESC: Existing Subcatchment



Summary for Subcatchment PSC: Proposed Subcatchment

[49] Hint: Tc<2dt may require smaller dt

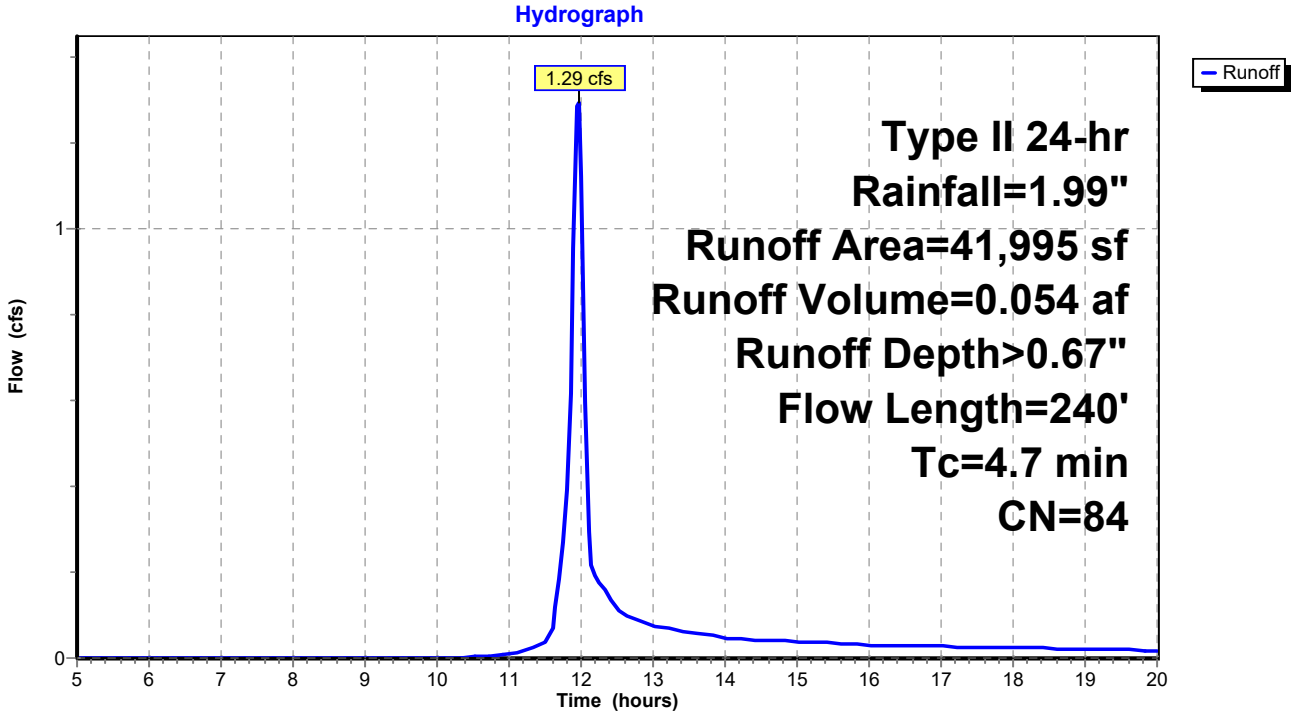
Runoff = 1.29 cfs @ 11.96 hrs, Volume= 0.054 af, Depth> 0.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=1.99"

	Area (sf)	CN	Description
*	17,377	98	Paved parking & Roof, HSG C
	24,618	74	>75% Grass cover, Good, HSG C
	41,995	84	Weighted Average
	24,618		58.62% Pervious Area
	17,377		41.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.1000	0.25		**Sheet Flow, First 100' Flowpath** Grass: Short n= 0.150 P2= 2.70"
1.2	60	0.0100	0.86		**Sheet Flow, Balance of 100' Flowpath** Smooth surfaces n= 0.011 P2= 2.70"
0.7	83	0.0100	2.03		**Shallow Concentrated Flow, Balance of Flow to Drain** Paved Kv= 20.3 fps
0.1	57	0.0520	11.98	191.67	**Trap/Vee/Rect Channel Flow, Balance of Longest Flowpath** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.030
4.7	240	Total			

Subcatchment PSC: Proposed Subcatchment



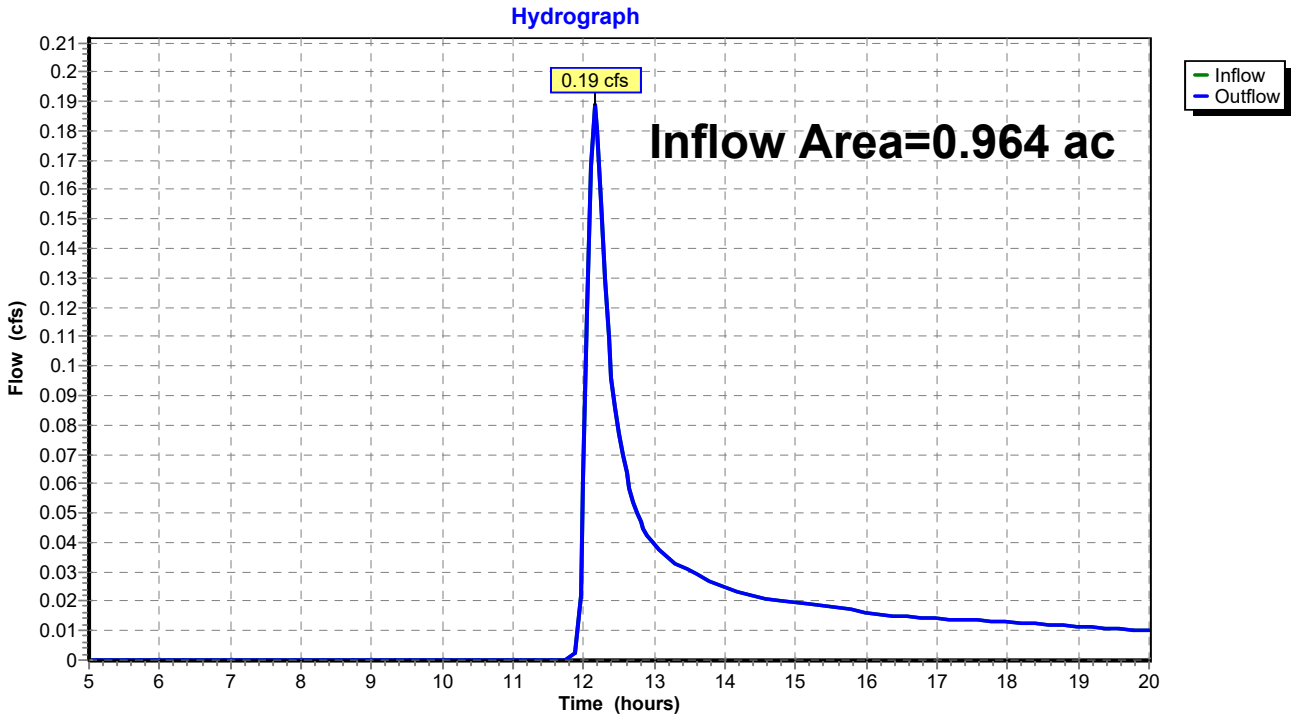
Summary for Reach DPE: Design Point Existing

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 1.96% Impervious, Inflow Depth > 0.22"
Inflow = 0.19 cfs @ 12.16 hrs, Volume= 0.018 af
Outflow = 0.19 cfs @ 12.16 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPE: Design Point Existing



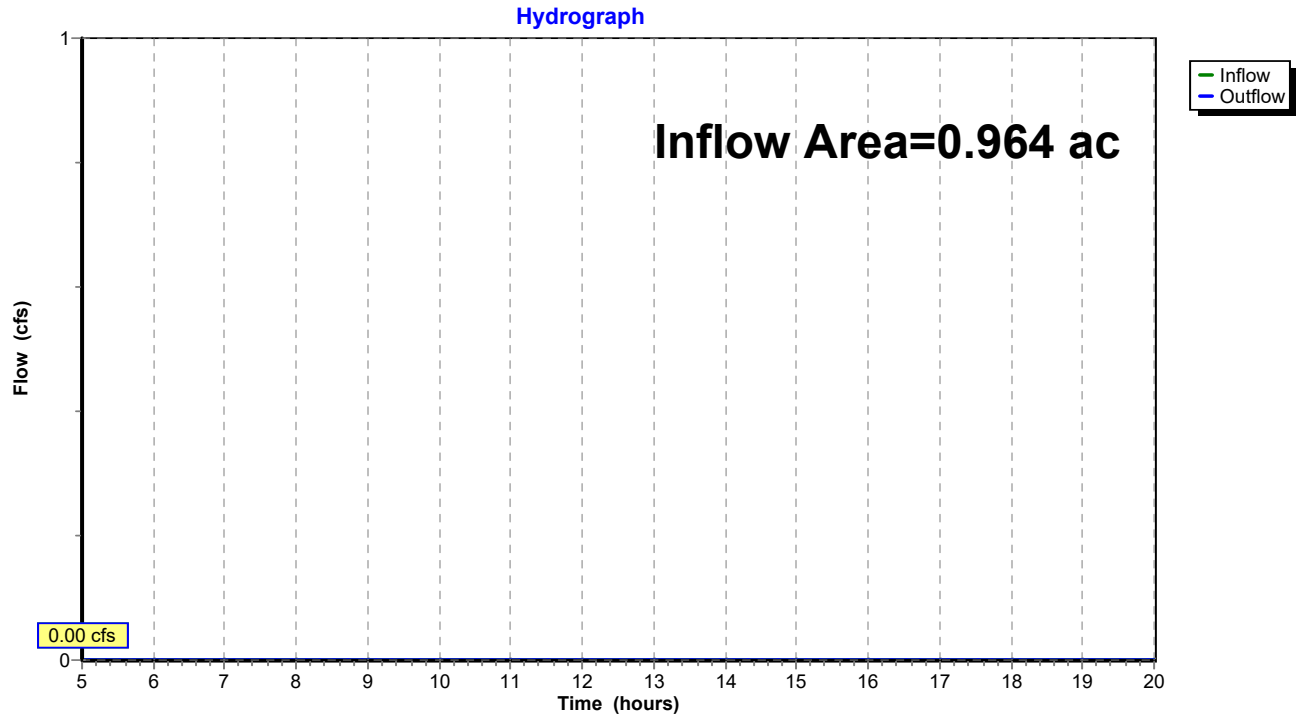
Summary for Reach DPP: Design Point Proposed

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth = 0.00"
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPP: Design Point Proposed



Summary for Pond Pond: Attenuation

[92] Warning: Device #1 is above defined storage
[92] Warning: Device #2 is above defined storage

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth > 0.67"
Inflow = 1.29 cfs @ 11.96 hrs, Volume= 0.054 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1.37' @ 20.00 hrs Surf.Area= 2,253 sf Storage= 2,226 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	3,994 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

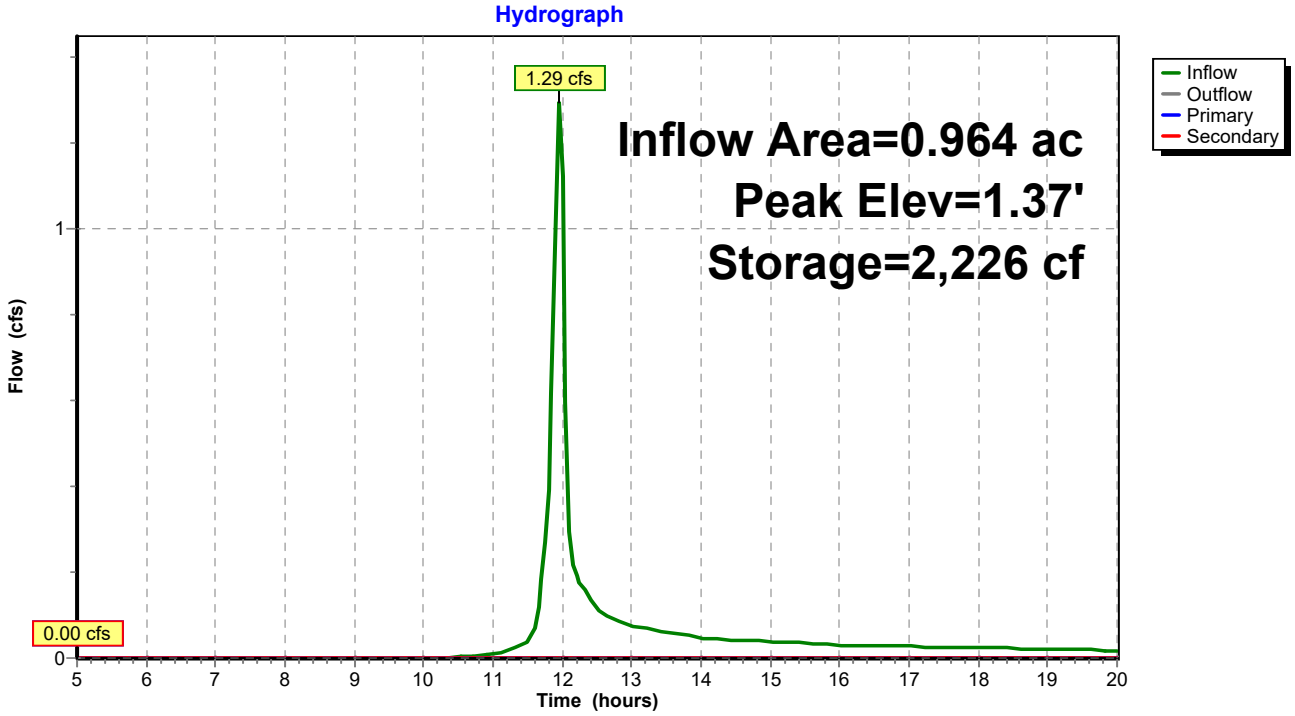
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,041	0	0
1.00	1,890	1,466	1,466
2.00	2,879	2,385	3,850
2.10	0	144	3,994

Device	Routing	Invert	Outlet Devices
#1	Secondary	944.65'	**12.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Primary	944.00'	**4.0" Round Culvert** L= 43.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 944.00' / 943.75' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
2=Culvert (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond Pond: Attenuation



164Auburn

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.565	74	>75% Grass cover, Good, HSG C (PSC)
0.945	70	Brush, Fair, HSG C (ESC)
0.019	98	Existing Concrete Pad (ESC)
0.399	98	Paved parking & Roof, HSG C (PSC)
1.928	**77**	**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.565	0.000	0.000	0.565	>75% Grass cover, Good	PSC
0.000	0.000	0.945	0.000	0.000	0.945	Brush, Fair	ESC
0.000	0.000	0.000	0.000	0.019	0.019	Existing Concrete Pad	ESC
0.000	0.000	0.399	0.000	0.000	0.399	Paved parking & Roof	PSC
0.000	**0.000**	**1.909**	**0.000**	**0.019**	**1.928**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	Pond	944.00	943.75	43.0	0.0058	0.013	4.0	0.0	0.0

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ESC: Existing Subcatchment Runoff Area=41,995 sf 1.96% Impervious Runoff Depth>0.89"
Flow Length=239' Tc=18.3 min CN=71 Runoff=1.05 cfs 0.072 af

Subcatchment PSC: Proposed Runoff Area=41,995 sf 41.38% Impervious Runoff Depth>1.71"
Flow Length=240' Tc=4.7 min CN=84 Runoff=3.24 cfs 0.137 af

Reach DPE: Design Point Existing Inflow=1.05 cfs 0.072 af
Outflow=1.05 cfs 0.072 af

Reach DPP: Design Point Proposed Inflow=0.33 cfs 0.046 af
Outflow=0.33 cfs 0.046 af

Pond Pond: Attenuation Peak Elev=944.65' Storage=3,994 cf Inflow=3.24 cfs 0.137 af
Primary=0.19 cfs 0.042 af Secondary=0.14 cfs 0.004 af Outflow=0.33 cfs 0.046 af

Total Runoff Area = 1.928 ac Runoff Volume = 0.209 af Average Runoff Depth = 1.30"
78.33% Pervious = 1.510 ac 21.67% Impervious = 0.418 ac

Summary for Subcatchment ESC: Existing Subcatchment

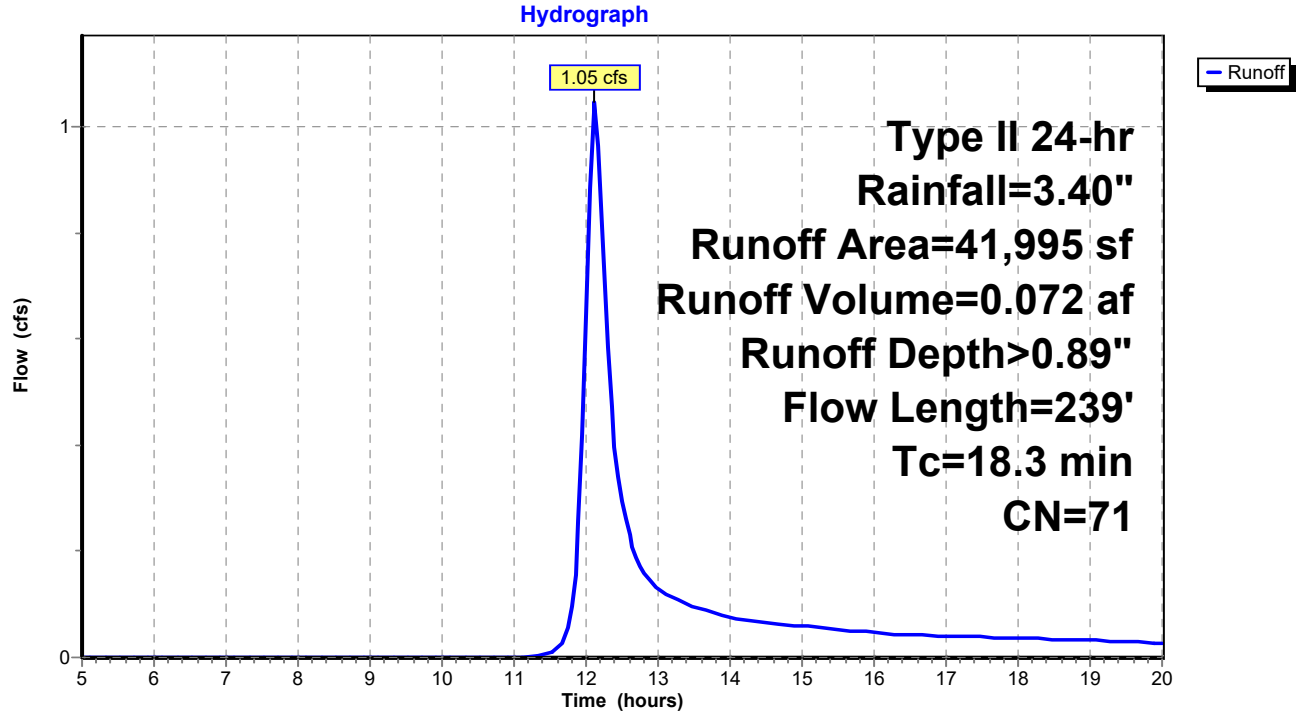
Runoff = 1.05 cfs @ 12.12 hrs, Volume= 0.072 af, Depth> 0.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=3.40"

	Area (sf)	CN	Description
	41,171	70	Brush, Fair, HSG C
*	824	98	Existing Concrete Pad
	41,995	71	Weighted Average
	41,171		98.04% Pervious Area
	824		1.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	100	0.0150	0.10		**Sheet Flow, First 100' Flowpath** Grass: Dense n= 0.240 P2= 2.70"
0.9	139	0.0330	2.72		**Shallow Concentrated Flow, Balance of Longest Flowpath** Grassed Waterway Kv= 15.0 fps
18.3	239	Total			

Subcatchment ESC: Existing Subcatchment



Summary for Subcatchment PSC: Proposed Subcatchment

[49] Hint: Tc<2dt may require smaller dt

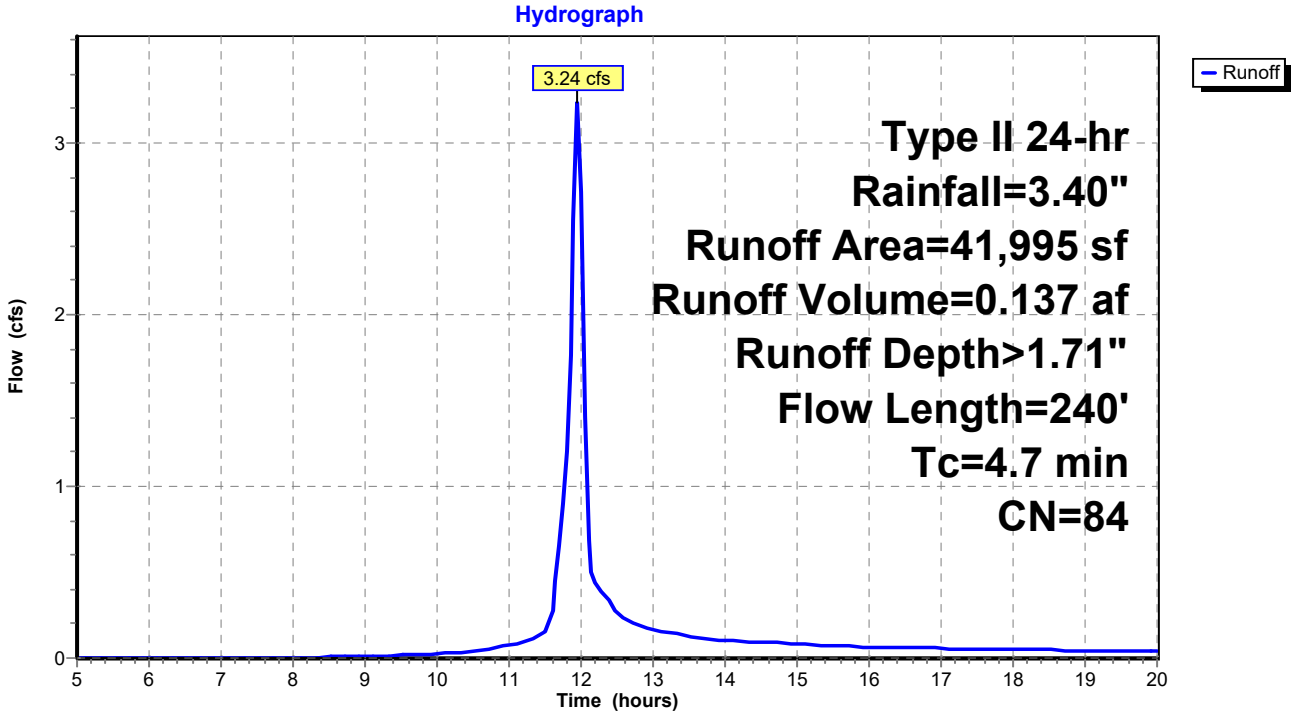
Runoff = 3.24 cfs @ 11.95 hrs, Volume= 0.137 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=3.40"

	Area (sf)	CN	Description
*	17,377	98	Paved parking & Roof, HSG C
	24,618	74	>75% Grass cover, Good, HSG C
	41,995	84	Weighted Average
	24,618		58.62% Pervious Area
	17,377		41.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.1000	0.25		**Sheet Flow, First 100' Flowpath** Grass: Short n= 0.150 P2= 2.70"
1.2	60	0.0100	0.86		**Sheet Flow, Balance of 100' Flowpath** Smooth surfaces n= 0.011 P2= 2.70"
0.7	83	0.0100	2.03		**Shallow Concentrated Flow, Balance of Flow to Drain** Paved Kv= 20.3 fps
0.1	57	0.0520	11.98	191.67	**Trap/Vee/Rect Channel Flow, Balance of Longest Flowpath** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.030
4.7	240	Total			

Subcatchment PSC: Proposed Subcatchment



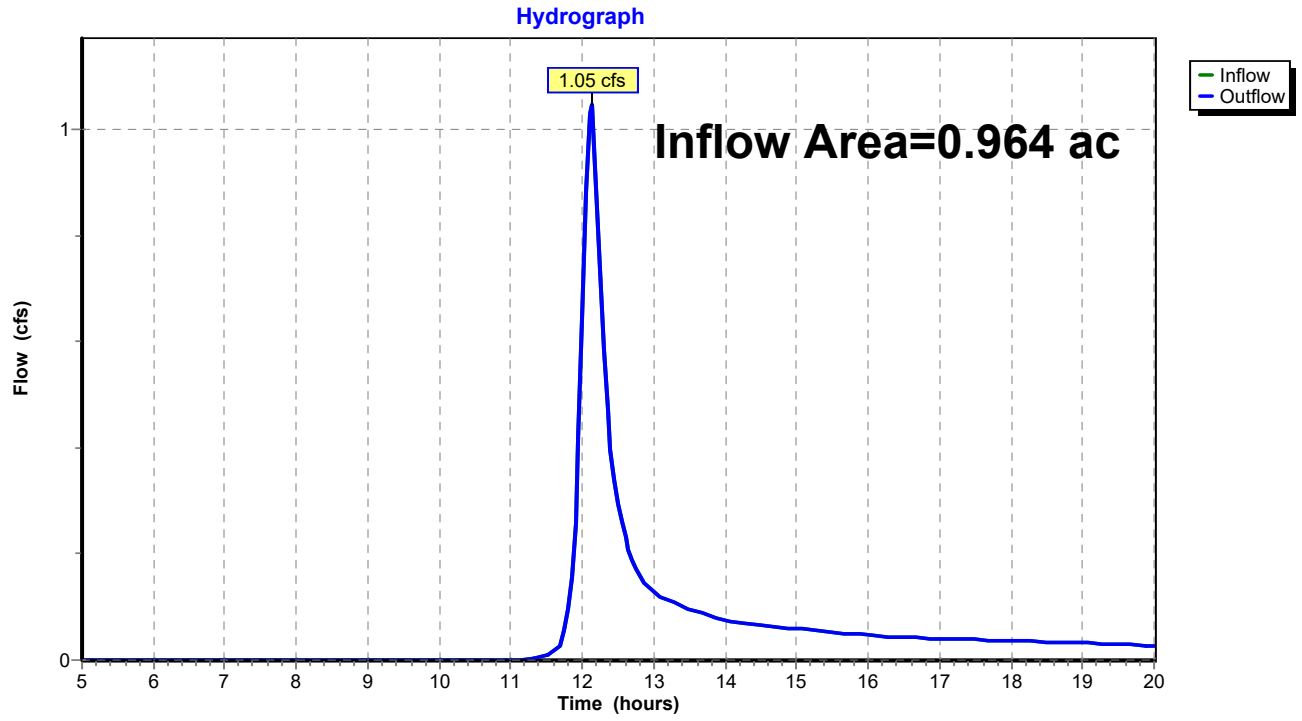
Summary for Reach DPE: Design Point Existing

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 1.96% Impervious, Inflow Depth > 0.89"
Inflow = 1.05 cfs @ 12.12 hrs, Volume= 0.072 af
Outflow = 1.05 cfs @ 12.12 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPE: Design Point Existing



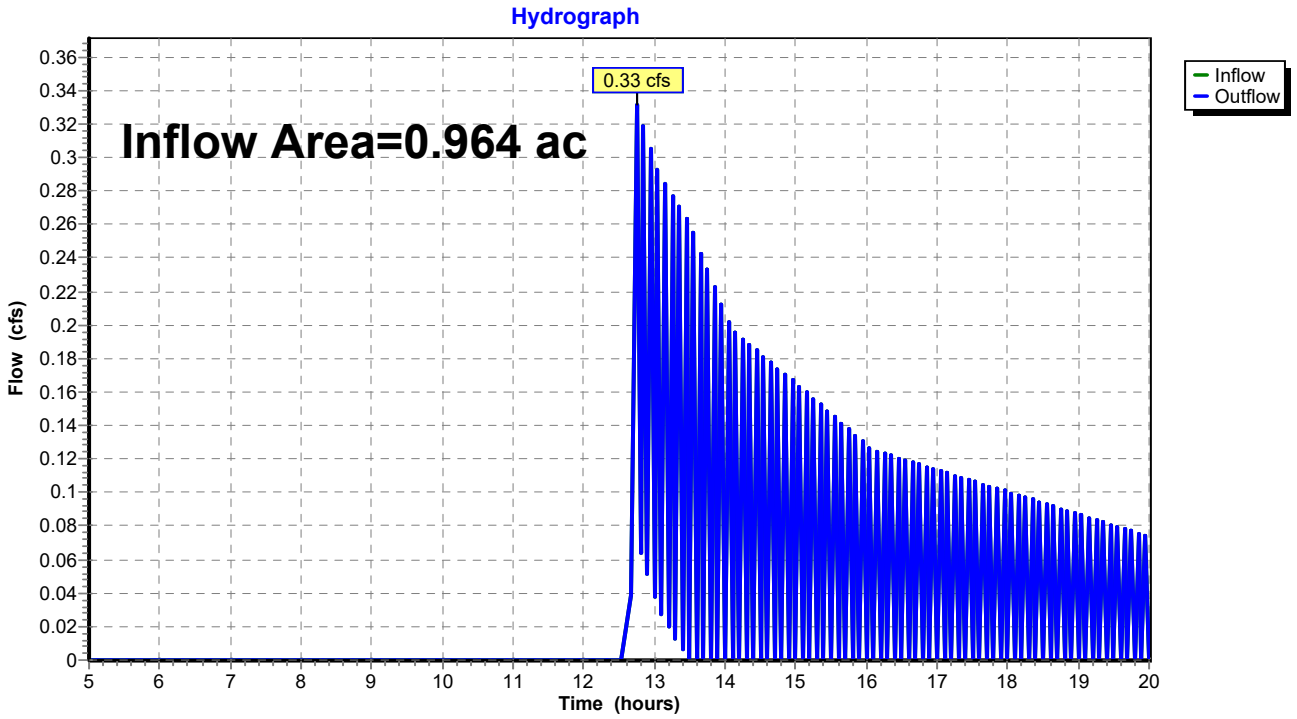
Summary for Reach DPP: Design Point Proposed

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth > 0.57"
Inflow = 0.33 cfs @ 12.75 hrs, Volume= 0.046 af
Outflow = 0.33 cfs @ 12.75 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPP: Design Point Proposed



Summary for Pond Pond: Attenuation

[92] Warning: Device #1 is above defined storage
[92] Warning: Device #2 is above defined storage
[93] Warning: Storage range exceeded by 942.55'
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=70)

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth > 1.71"
Inflow = 3.24 cfs @ 11.95 hrs, Volume= 0.137 af
Outflow = 0.33 cfs @ 12.75 hrs, Volume= 0.046 af, Atten= 90%, Lag= 47.8 min
Primary = 0.19 cfs @ 12.75 hrs, Volume= 0.042 af
Secondary = 0.14 cfs @ 12.75 hrs, Volume= 0.004 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 944.65' @ 12.75 hrs Surf.Area= 0 sf Storage= 3,994 cf

Plug-Flow detention time= 230.2 min calculated for 0.046 af (33% of inflow)
Center-of-Mass det. time= 142.4 min (924.3 - 781.9)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	3,994 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

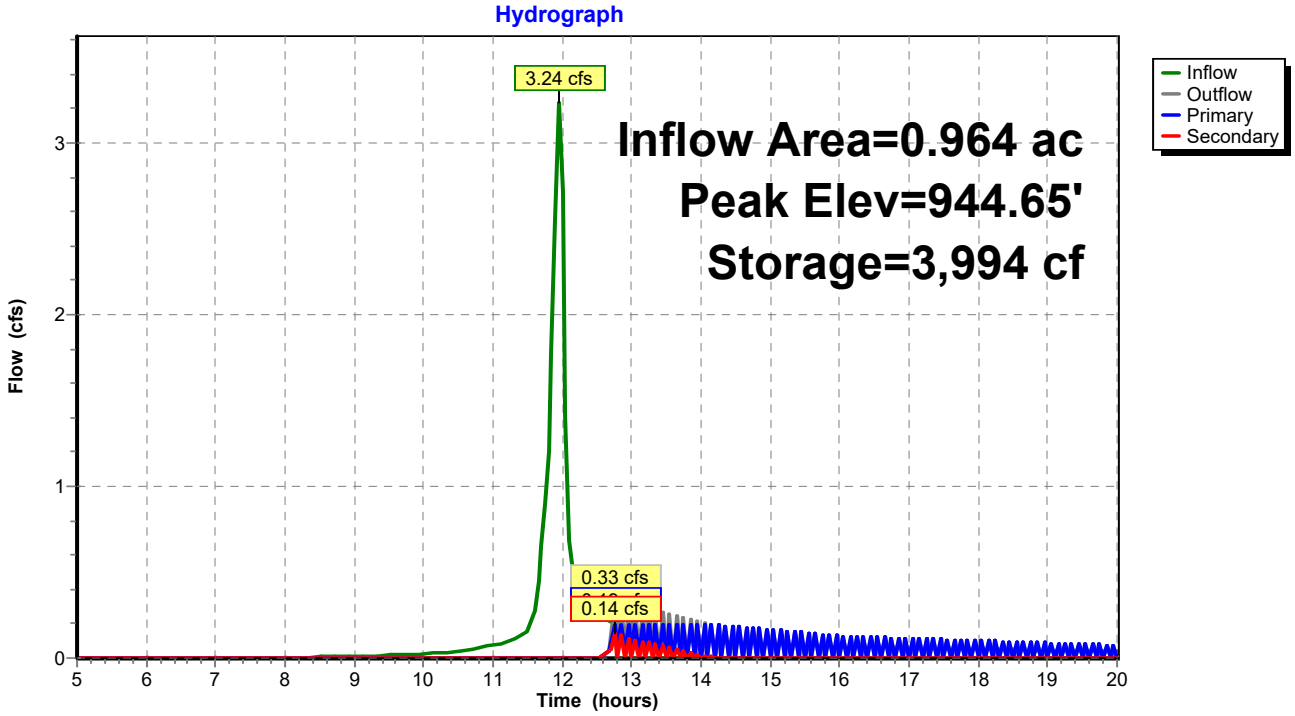
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,041	0	0
1.00	1,890	1,466	1,466
2.00	2,879	2,385	3,850
2.10	0	144	3,994

Device	Routing	Invert	Outlet Devices
#1	Secondary	944.65'	**12.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Primary	944.00'	**4.0" Round Culvert** L= 43.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 944.00' / 943.75' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf

Primary OutFlow Max=0.19 cfs @ 12.75 hrs HW=944.65' (Free Discharge)
↑—**2=Culvert** (Barrel Controls 0.19 cfs @ 2.17 fps)

Secondary OutFlow Max=0.00 cfs @ 12.75 hrs HW=944.65' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.08 fps)

Pond Pond: Attenuation



164Auburn

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.565	74	>75% Grass cover, Good, HSG C (PSC)
0.945	70	Brush, Fair, HSG C (ESC)
0.019	98	Existing Concrete Pad (ESC)
0.399	98	Paved parking & Roof, HSG C (PSC)
1.928	**77**	**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.565	0.000	0.000	0.565	>75% Grass cover, Good	PSC
0.000	0.000	0.945	0.000	0.000	0.945	Brush, Fair	ESC
0.000	0.000	0.000	0.000	0.019	0.019	Existing Concrete Pad	ESC
0.000	0.000	0.399	0.000	0.000	0.399	Paved parking & Roof	PSC
0.000	**0.000**	**1.909**	**0.000**	**0.019**	**1.928**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	Pond	944.00	943.75	43.0	0.0058	0.013	3.0	0.0	0.0

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment ESC: Existing Subcatchment Runoff Area=41,995 sf 1.96% Impervious Runoff Depth>2.52"
Flow Length=239' Tc=18.3 min CN=71 Runoff=3.09 cfs 0.203 af

Subcatchment PSC: Proposed Runoff Area=41,995 sf 41.38% Impervious Runoff Depth>3.77"
Flow Length=240' Tc=4.7 min CN=84 Runoff=6.83 cfs 0.303 af

Reach DPE: Design Point Existing Inflow=3.09 cfs 0.203 af
Outflow=3.09 cfs 0.203 af

Reach DPP: Design Point Proposed Inflow=6.29 cfs 0.213 af
Outflow=6.29 cfs 0.213 af

Pond Pond: Attenuation Peak Elev=944.70' Storage=3,994 cf Inflow=6.83 cfs 0.303 af
Primary=0.10 cfs 0.036 af Secondary=6.19 cfs 0.177 af Outflow=6.29 cfs 0.213 af

Total Runoff Area = 1.928 ac Runoff Volume = 0.506 af Average Runoff Depth = 3.15"
78.33% Pervious = 1.510 ac 21.67% Impervious = 0.418 ac

Summary for Subcatchment ESC: Existing Subcatchment

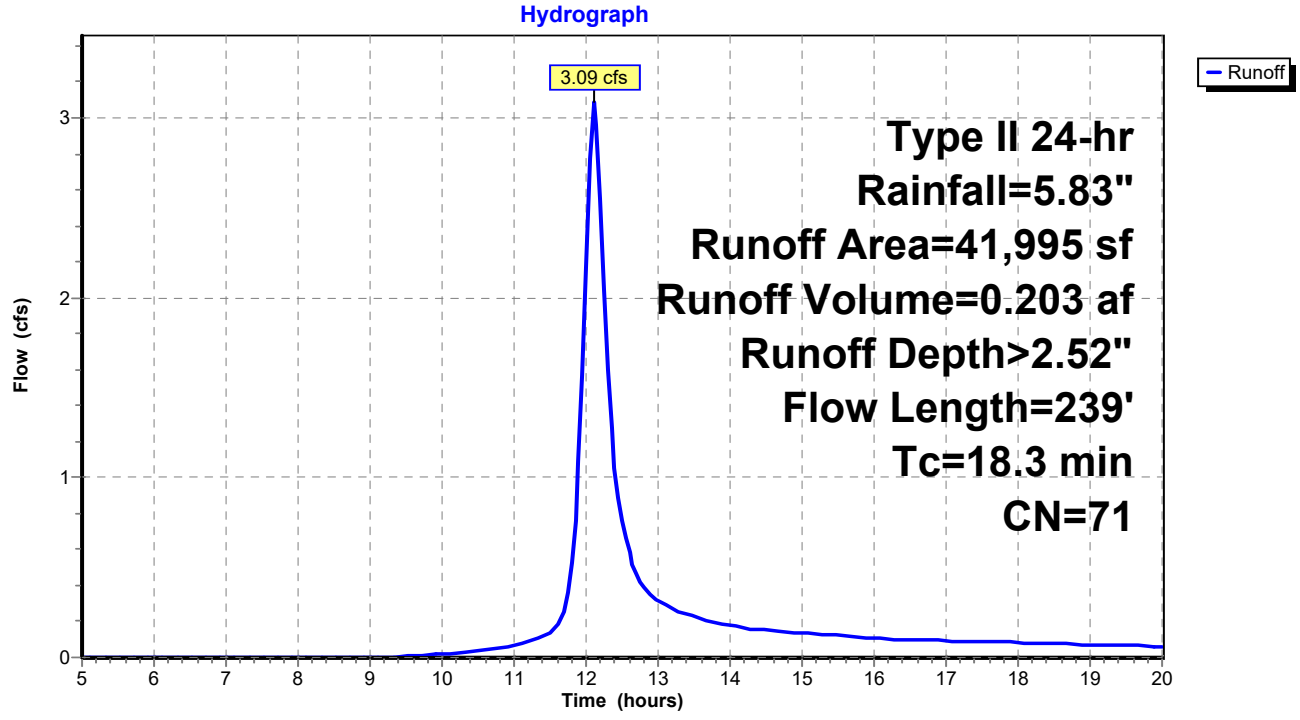
Runoff = 3.09 cfs @ 12.11 hrs, Volume= 0.203 af, Depth> 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=5.83"

	Area (sf)	CN	Description
	41,171	70	Brush, Fair, HSG C
*	824	98	Existing Concrete Pad
	41,995	71	Weighted Average
	41,171		98.04% Pervious Area
	824		1.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.4	100	0.0150	0.10		**Sheet Flow, First 100' Flowpath** Grass: Dense n= 0.240 P2= 2.70"
0.9	139	0.0330	2.72		**Shallow Concentrated Flow, Balance of Longest Flowpath** Grassed Waterway Kv= 15.0 fps
18.3	239	Total			

Subcatchment ESC: Existing Subcatchment



Summary for Subcatchment PSC: Proposed Subcatchment

[49] Hint: Tc<2dt may require smaller dt

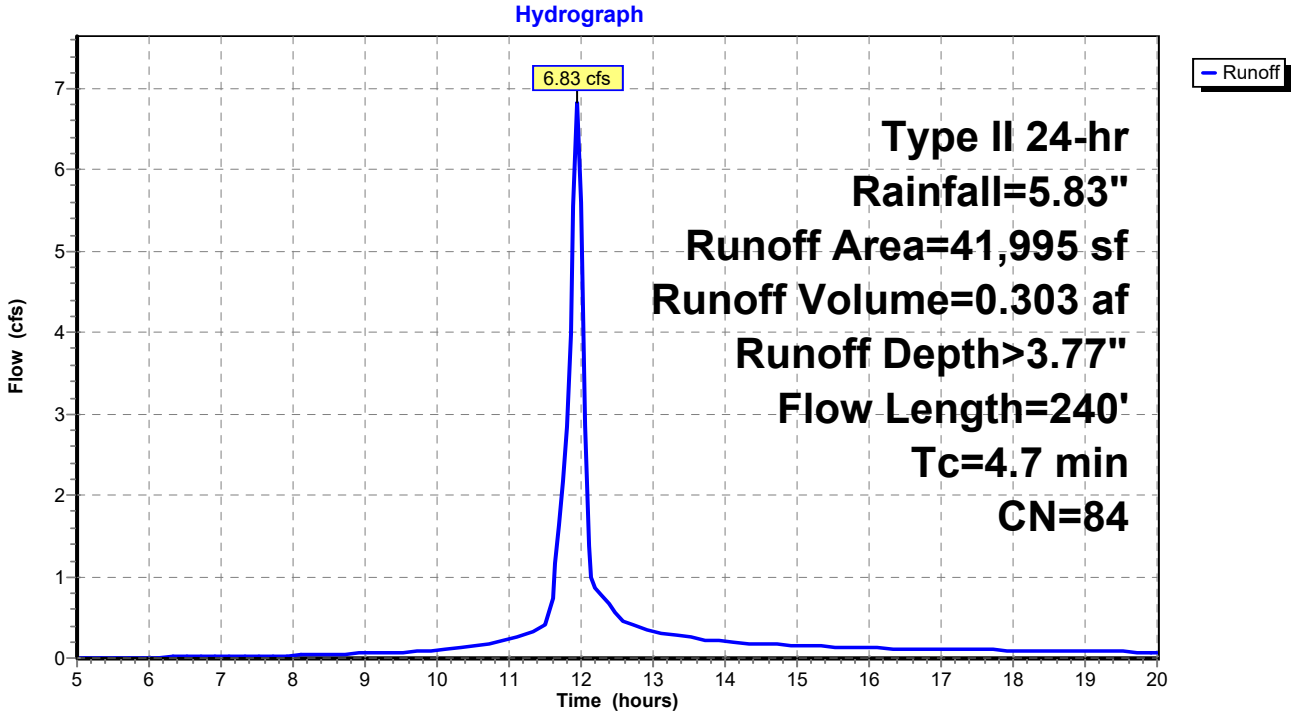
Runoff = 6.83 cfs @ 11.95 hrs, Volume= 0.303 af, Depth> 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr Rainfall=5.83"

	Area (sf)	CN	Description
*	17,377	98	Paved parking & Roof, HSG C
	24,618	74	>75% Grass cover, Good, HSG C
	41,995	84	Weighted Average
	24,618		58.62% Pervious Area
	17,377		41.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	40	0.1000	0.25		**Sheet Flow, First 100' Flowpath** Grass: Short n= 0.150 P2= 2.70"
1.2	60	0.0100	0.86		**Sheet Flow, Balance of 100' Flowpath** Smooth surfaces n= 0.011 P2= 2.70"
0.7	83	0.0100	2.03		**Shallow Concentrated Flow, Balance of Flow to Drain** Paved Kv= 20.3 fps
0.1	57	0.0520	11.98	191.67	**Trap/Vee/Rect Channel Flow, Balance of Longest Flowpath** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.030
4.7	240	Total			

Subcatchment PSC: Proposed Subcatchment



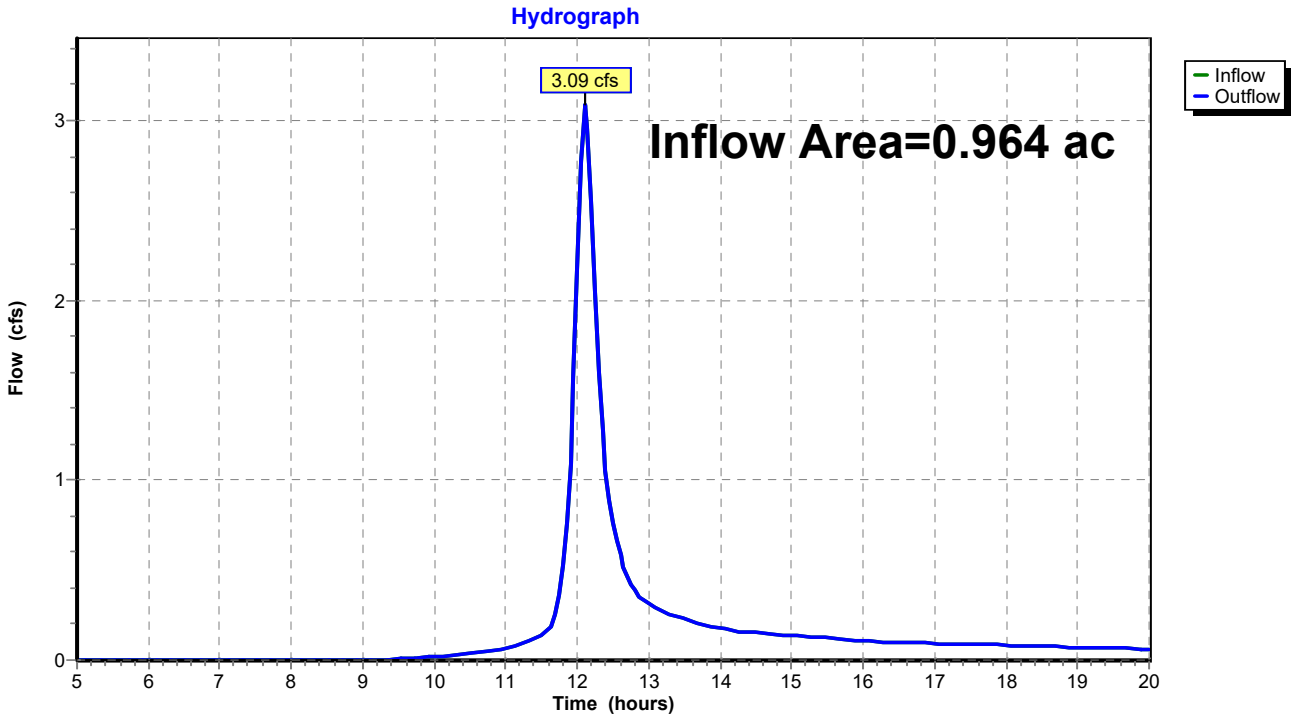
Summary for Reach DPE: Design Point Existing

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 1.96% Impervious, Inflow Depth > 2.52"
Inflow = 3.09 cfs @ 12.11 hrs, Volume= 0.203 af
Outflow = 3.09 cfs @ 12.11 hrs, Volume= 0.203 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPE: Design Point Existing



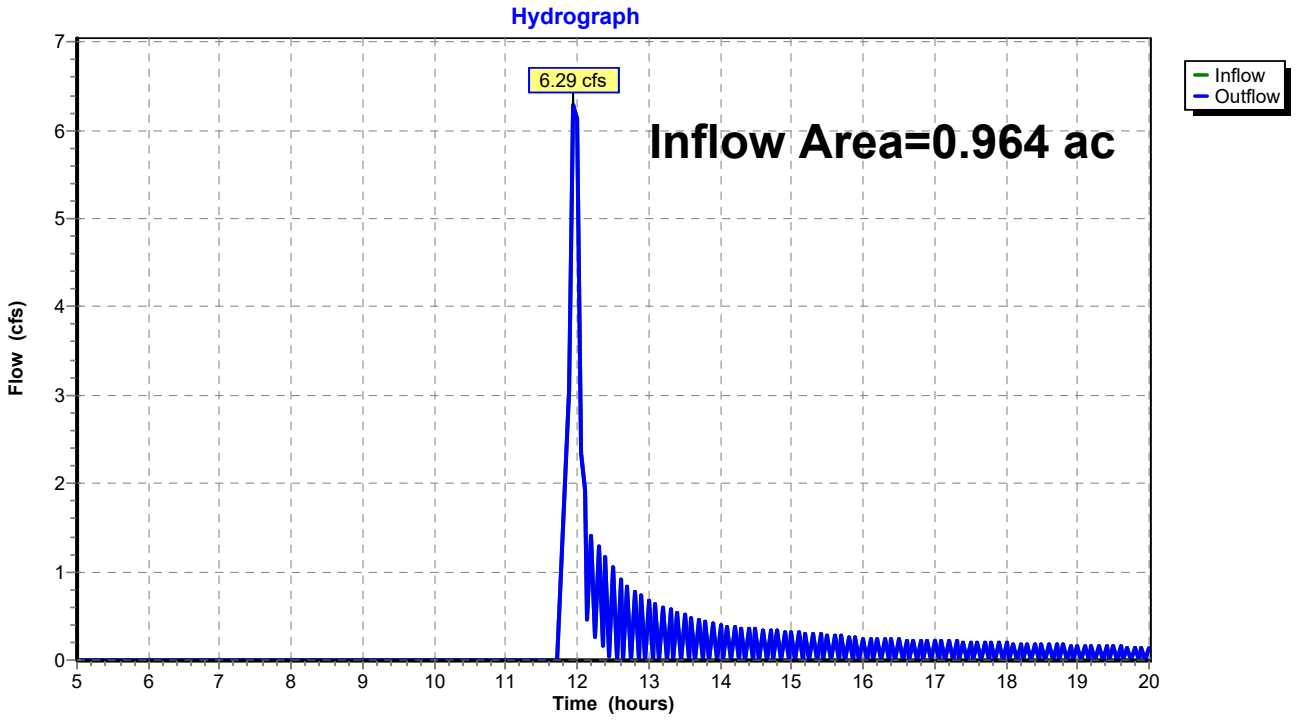
Summary for Reach DPP: Design Point Proposed

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth > 2.65"
Inflow = 6.29 cfs @ 11.95 hrs, Volume= 0.213 af
Outflow = 6.29 cfs @ 11.95 hrs, Volume= 0.213 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach DPP: Design Point Proposed



Summary for Pond Pond: Attenuation

[92] Warning: Device #1 is above defined storage
[92] Warning: Device #2 is above defined storage
[93] Warning: Storage range exceeded by 942.60'
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=76)

Inflow Area = 0.964 ac, 41.38% Impervious, Inflow Depth > 3.77"
Inflow = 6.83 cfs @ 11.95 hrs, Volume= 0.303 af
Outflow = 6.29 cfs @ 11.95 hrs, Volume= 0.213 af, Atten= 8%, Lag= 0.1 min
Primary = 0.10 cfs @ 11.95 hrs, Volume= 0.036 af
Secondary = 6.19 cfs @ 11.95 hrs, Volume= 0.177 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 944.70' @ 11.95 hrs Surf.Area= 0 sf Storage= 3,994 cf

Plug-Flow detention time= 108.0 min calculated for 0.212 af (70% of inflow)
Center-of-Mass det. time= 43.6 min (807.6 - 764.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	3,994 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

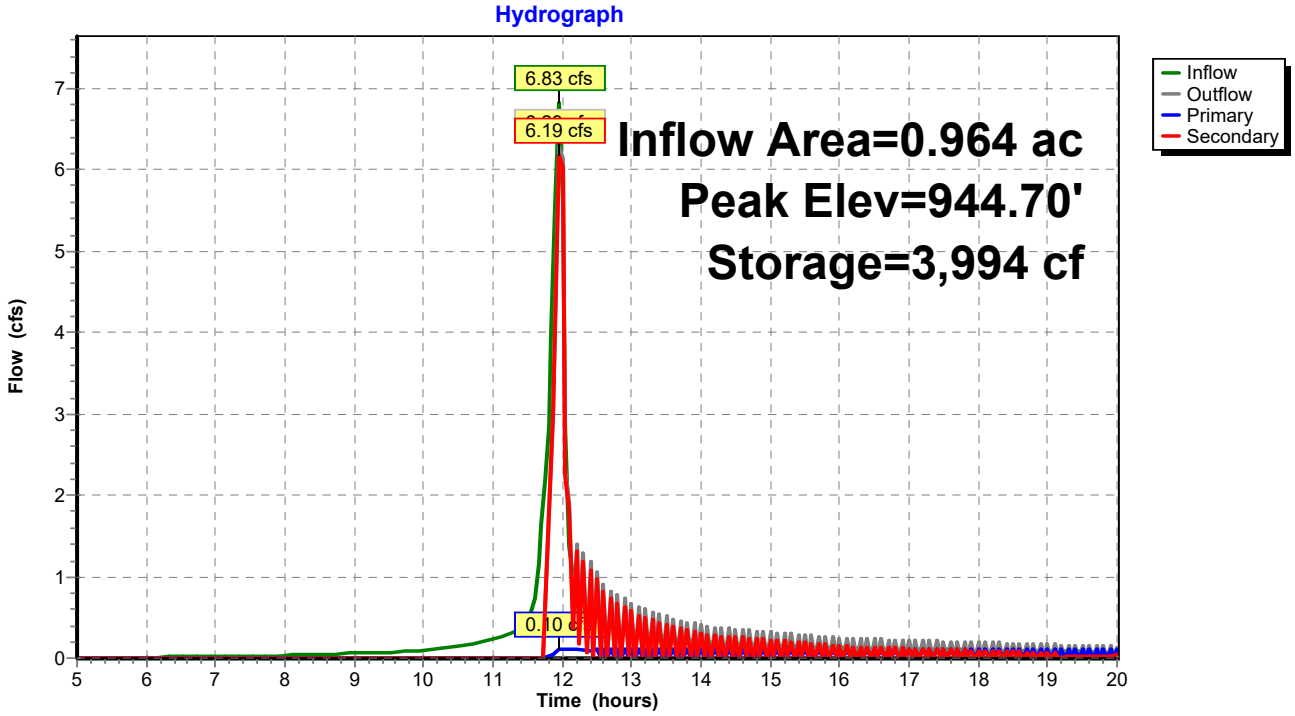
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,041	0	0
1.00	1,890	1,466	1,466
2.00	2,879	2,385	3,850
2.10	0	144	3,994

Device	Routing	Invert	Outlet Devices
#1	Secondary	944.65'	**12.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Primary	944.00'	**3.0" Round Culvert** L= 43.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 944.00' / 943.75' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 0.05 sf

Primary OutFlow Max=0.10 cfs @ 11.95 hrs HW=944.70' (Free Discharge)
↑—**2=Culvert** (Barrel Controls 0.10 cfs @ 2.08 fps)

Secondary OutFlow Max=0.32 cfs @ 11.95 hrs HW=944.70' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.32 cfs @ 0.53 fps)

Pond Pond: Attenuation



Existing Subcatchment (ESC)
Existing Site Conditions - Area = 41,995-SF (0.96-AC)

Surface Conditions & Soils:
100% OaA, Ovid - Hydrologic Soil Group (HSG) C

Runoff Curve Number = 74, Brush/Weed/Grass Mix, Fair Soils

Overland Stormwater Runoff - Longest Flowpath =239lf +/-
Sheet Flow, Dense Grass - 100 LF @ S = 1.5% avg +/-
Shallow Conc. Flow, Grassed Waterway - 139 LF @ S = 3.3% avg +/-

To Design Point - (DPE)

Runoff Rates and Volumes			
	1 yr	10 yr	100 yr
	1.99"/24 hr	3.40"/24 hr	5.83"/24 hr
Existing	0.190 cfs	1.050 cfs	3.090 cfs
	0.018 af	0.072 af	0.203 af
Proposed	0.000 cfs	0.330cfs	6.290 cfs (*6.830 cfs)
	0.000 af	0.046 af	0.213 af
			*Without Attenuation

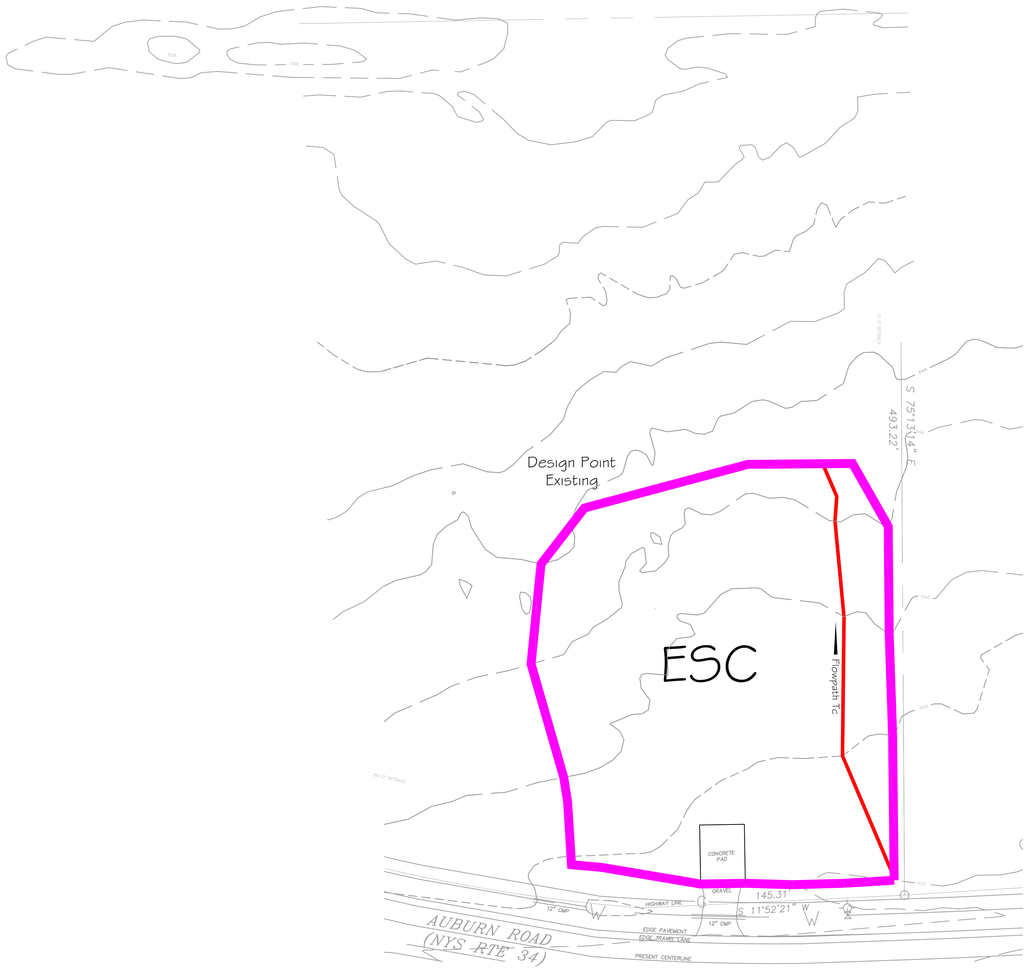
Proposed Subcatchment (PSC)
Proposed Site Conditions - Area = 41,995-SF (0.96-AC)

Surface Conditions & Soils:
100% OaA, Ovid - Hydrologic Soil Group (HSG) C

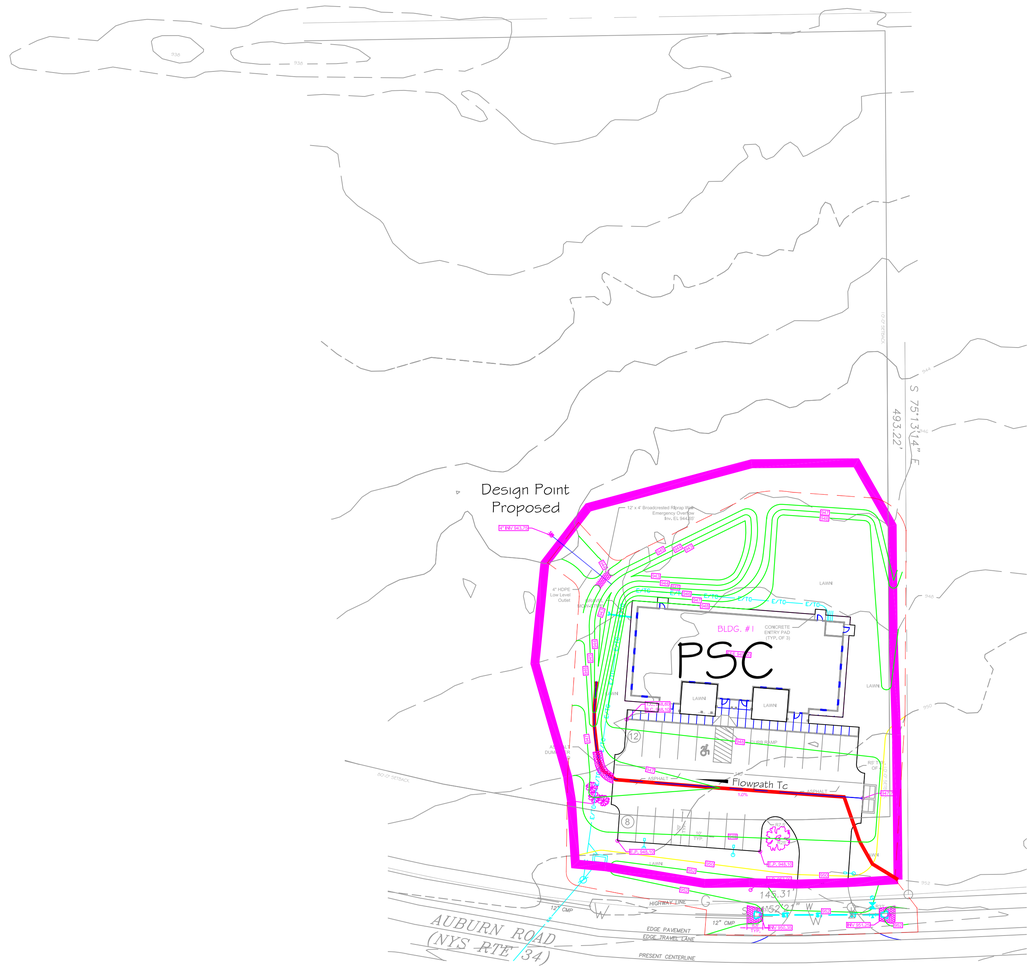
Runoff Curve Number = 98, Paved Drive & Rooftops, HSG C Soils
Runoff Curve Number = 74, Grass >75%, HSG C Soils

Overland Stormwater Runoff - Longest Flowpath = 240lf +/-
Sheet Flow, Short Grass - 40 LF @ S = 10.0% avg +/-
Sheet Flow, Smooth Surfaces - 60 LF @ S = 1.0% avg +/-
Shallow Conc. Flow, Paved - 83 LF @ S = 1.0% avg +/-
Trap/Vee- 57 LF @ S = 5.2% avg +/-

To Design Point - (DPP)



Existing Conditions



Proposed Conditions

40' 0' 40' 70'
SCALE: 1" = 40'-0"

rev.	date	description
1		
2		
3		
4		
5		

D:\Private Work\Mapped Storm\Sheet (100).dwg

HYDRAULIC AND HYDROLOGIC WORKSHEET

164 AUBURN ROAD
LANSING, NY

TOWN OF LANSING, LANSING, NEW YORK

drawn S.G.	checked
date Sept 26, 2025	scale 1" = 40'
project no.	
sheet no. HYD	

George W. Breuhaus, Architect
architecture, planning, space planning

September 24, 2025

Town of Lansing Planning
Auburn Road
Lansing, New York 14884
Attn: Mr. John Zepko

Re: Proposed 164 Auburn Road
Answer to County Planning Questions

Dear Mr. Zepko:

We offer the following responses to Tompkins County Planning questions:

1. **Energy Star:** We do not anticipate using Energy Star appliances since they would not be part of this Project which encompasses the “shell” building.
2. **Electric heat Pump:** We will use air source heat pumps to both heat and cool all tenant spaces. In addition, we will also include each tenant space with an ERV unit to provide ventilation air. The Meter room, that is part of the building shell, will be heated by electric baseboard heat.
3. **Solar Panels:** We do not anticipate installing solar panels as part of this Project. We will provide roof trusses, manufactured to accommodate the dead weight of the panels, for possible use in the future.
4. **Building Envelope:** We will meet or exceed NYS Energy Code requirements for insulation. In addition, we will install windows that exceed the Energy Code requirements. We will air seal all exterior walls. We will design vestibules at all tenant entrances.

Should you need further explanation, please call me to discuss.

Very Truly Yours,
George W. Breuhaus, Architect

George W. Breuhaus

South Hill Business Campus • 950 Danby Road • Suite 220 • Ithaca, New York 14850
Ph. 607-257-8348 • Fax 607-257-8349