TOWN OF AMHERST, NY –
AMHERST CENTRAL PARK

DRAFT SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT

October 12, 2023

Prepared for:
Town of Amherst, NY
5583 Main Street,
Williamsville, NY

Prepared by:
Stantec Consulting Services Inc.
61 Commercial Street, Suite 100
Rochester, NY, 14614

Project Number: 195602832

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Acronyms / Abbreviations

AADT	Average Annual Daily Traffic
ACP	Amherst Central Park
asl	Above sea level
BCP	Brownfield Cleanup Program
BMP	Best Management Practices
Comprehensive Plan	Town of Amherst Bicentennial Comprehensive Plan
DGEIS	Draft Generic Environmental Impact Statement
DSGEIS	Draft Supplemental Generic Environmental Impact Statement
EAF	Environmental Assessment Form
ECDPW	Erie County Department of Public Works
EDI	Earth Dimensions, Inc.
EGSI	Empire Geo-Services, Inc.
EIS	Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FGEIS	Final Generic Environmental Impact Statement
FSGEIS	Final Supplemental Generic Environmental Impact Statement
GB	General Business Zoning District
GBNRTC	Greater Buffalo-Niagara Regional Transportation Council
GEIS	Generic Environmental Impact Statement
ITE	Institute of Transportation Engineers
JD	Jurisdictional Determination
LWRP	Local Waterfront Revitalization Program
LOS	Level of Service
Mensch	Mensch Capital Partners LLC
MFR-7	Multifamily Residential Zoning District-Seven
MS4	Municipal Separate Stormwater Serwer System
NFTA	Niagara Frontier Transportation Authority
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
Property	An approximately 170.5± acre parcel located at 772 North Forest Road and 385 & 391 Maple Road
PUD	Planned Unit Development
RBIP	Regional Bikeway Implementation Plan

RC	Recreation Conservation Zoning District
SEQR / SEQRA	New York State Environmental Quality Review / Act
SF	Square feet
SGEIS	Supplemental Generic Environmental Impact Statement
SPDES	State Pollution Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
TDM	Travel Demand Model
TIS	Traffic Impact Study
TMCs	Turning Movement Counts
TND	Traditional Neighborhood Development Zoning District
Town	Town of Amherst
UPK	Universal Pre-Kindergarten
USACE / ACOE	United State Army Corps of Engineers
USGS	United States Geological Survey
WCC	Westwood Country Club

1.0 Introduction and Project Background

This Draft Supplemental Generic Environmental Impact Statement ("DSGEIS") has been prepared by the Town of Amherst ("Town") to evaluate adoption of a conceptual development plan for a planned unit development ("PUD") for the conversion of an approximately 170.5± acre parcel located at 772 North Forest Road and 385 & 391 Maple Road ("Property") to a community park to include cultural, recreational and civic public spaces ("Amherst Central Park", "Park").

The Property was formerly the location of the Westwood County Club (WCC) and was the subject of a Generic Environmental Impact Statement (GEIS) in 2017 to evaluate a private development proposed by the owner, at that time Mensch Capital Partners LLC (Mensch). The action in the GEIS, known as the "Westwood Neighborhood", proposed a mixed use development including 41 single-family residences, 83 patio homes, 310 attached townhomes and apartments, and 212 multi-family residential units in mixed use buildings, as well as a mix of commercial uses including shops, restaurants, businesses and offices, a four-story hotel, and senior living components (assisted and independent living apartments). The proposed action included the following re-zoning requests:

- 134.79± acres from Recreation Conservation Zoning District ("RC") to Traditional Neighborhood Development Zoning District ("TND");
- 5.13± acres from RC to Multifamily Residential Zoning District Seven ("MFR-7"); and
- 1.16± acres from RC to General Business Zoning District ("GB").

The GEIS was reviewed by the Town Board as Lead Agency over a period spanning July 2014 to December 2017, including three amended submittals. The Final Generic Environmental Impact Statement (FGEIS) was issued in November 2017, and the GEIS Findings issued by the Lead Agency in December 2017 certified that:

- The requirements of 6 NYCRR Part 617 had not been met; and
- Adverse impacts would not be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.
- The action would not achieve a balance between the protection of the environment and the need to accommodate social and economic considerations.

The GEIS Findings Statement was based on a number of considerations, notably:

- Insufficient sanitary sewer capacity and significant constraints on increasing that capacity.
- Traffic impacts associated with new commercial development in an area not previously planned for such development.

- Extensive new roadway and signal construction to address traffic impacts.
- Impacts associated with wetlands, hardwood swampland, floodplains, and Ellicott Creek.
- Conversion of land zoned RC to higher-density uses as housing and commercial development.
- Incompatibility of the proposed uses with surrounding neighborhoods.
- Loss of open space.
- A protracted construction period for roadways; infrastructure; and multiple patio and single-family homes, townhomes, apartments, and completion of mixed use and office buildings.

Based on the Lead Agency's GEIS Findings Statement, the Westwood Neighborhood application (sometimes referred to herein as the "Mixed Use Project") was denied. The Property was subsequently sold to the Town. With the original GEIS analysis and supporting studies as a foundation, the Town initiated a public planning process to re-examine the needs and purpose for the Property and to develop a new alternative action that would better serve the community.

1.1 Description of the Proposed Action

The proposed action is an adoption of a conceptual development plan for a PUD for the conversion of the Property from a private golf course to a community park to include cultural, recreational and civic public spaces. In 2018 the Town Board approved a charter for the Local Waterfront Revitalization Program (LWRP), which included the Amherst Central Park project. The Town then formed a Waterfront Advisory Committee and pursued completing the NYS Department of State (NYSDOS) LWRP originally started in 1999. The Town decided to expand the LWRP along the newly designated inland waterway Ellicott Creek. The Town reviewed the draft JLWRP and used it as a basis for the updated LWRP Plan adopted by the Town Board in 2023 and currently is in the process to be adopted by the NYSDOS. As a result of the LWRP, the Town has held a series of public, stakeholder and committee meetings since 2018. The Amherst Central Park project is a major project in Section IV of the LWRP plan as a majority of the Property is bisected by Ellicott Creek. The planning for the Park design started in early 2018 as a result of the LWRP process. The Town has held public meetings and received comments on the ACP Park since the first public LWRP meeting in December 2018.

Following significant public engagement and input during the Town's review of the Westwood Neighborhood application, the Town engaged in a series of workshop meetings with Dover, Kohl & Partners and identified stakeholder groups to discuss the purpose, need, and projected plan for the potential development of the Property as a public park.

Throughout the process, the Town and its consultants conducted small group stakeholder meetings with local businesses, property owners, real estate brokers, representatives from neighborhood associations and other stakeholders. Typically, interviews were conducted without staff involvement, in order to ensure that stakeholders could freely share their insights about issues and opportunities. The consultant then

prepared a summary of the interviews. Participants in these meetings included town committees, citizen groups, and others with an interest or expertise in recreation, the arts, and other areas, as well as representatives from local resident/community groups and businesses. The meetings were held as brainstorming sessions to develop a plan for the Amherst Central Park.

The following is a partial list of the various meetings held by the Town to discuss the creation of the Amherst Central Park:

- LWRP Waterfront Advisory Committee Meeting Site Visit at Westwood - August 24, 2018
- LWRP First Public Meeting – December 3, 2018
- University Student Presentations for the Park Design – May 13, 2019 (Amherst Central Park)
- Arts & Culture Committee – June 6, 2019
- Senior Housing Committee – June 11, 2019
- Indoor Facility Committee – June 25, 2019
- Golf Committee – July 9, 2019
- Second LWRP Public Meeting on LWRP Projects – July 10, 2019
- Park Committee – August 16, 2019
- Maple Road Committee – August 26, 2019
- Getzville neighborhood meeting – September 12, 2019 (Amherst Central Park planning)
- LWRP Waterfront Advisory Committee Meeting – Projects/Section IV – September 18, 2019
- Village of Williamsville LWRP – October 24, 2019
- Public Meeting Ellicott Creek neighborhood meeting – November 5, 2019
- Dover-Kohl Park Design Workshop – June 29 - July 2, 2020
- Amherst Central Park Task Force meetings –2020 to 2021 present
- Village of Williamsville LWRP meeting – March 2, 2021
- Public Meeting – LWRP 3rd and Final Public Meeting – February 28, 2023

In order to develop the Property into the proposed Amherst Central Park, the Town Board proposes to create a PUD for the Property to govern the implementation of the conceptual development plan shown in Figure 1. A higher resolution version of the plan is provided in Appendix A. The proposed conceptual development plan is the product of the multi-year participatory planning process described above, which involved municipal leaders, residents, community stakeholders and consultants. The plan proposes a multi-use park featuring natural resources, and a community center for activities related to environmental education, fine arts, active and passive recreation, and historic preservation. The full PUD application, as amended, is attached as Appendix B.

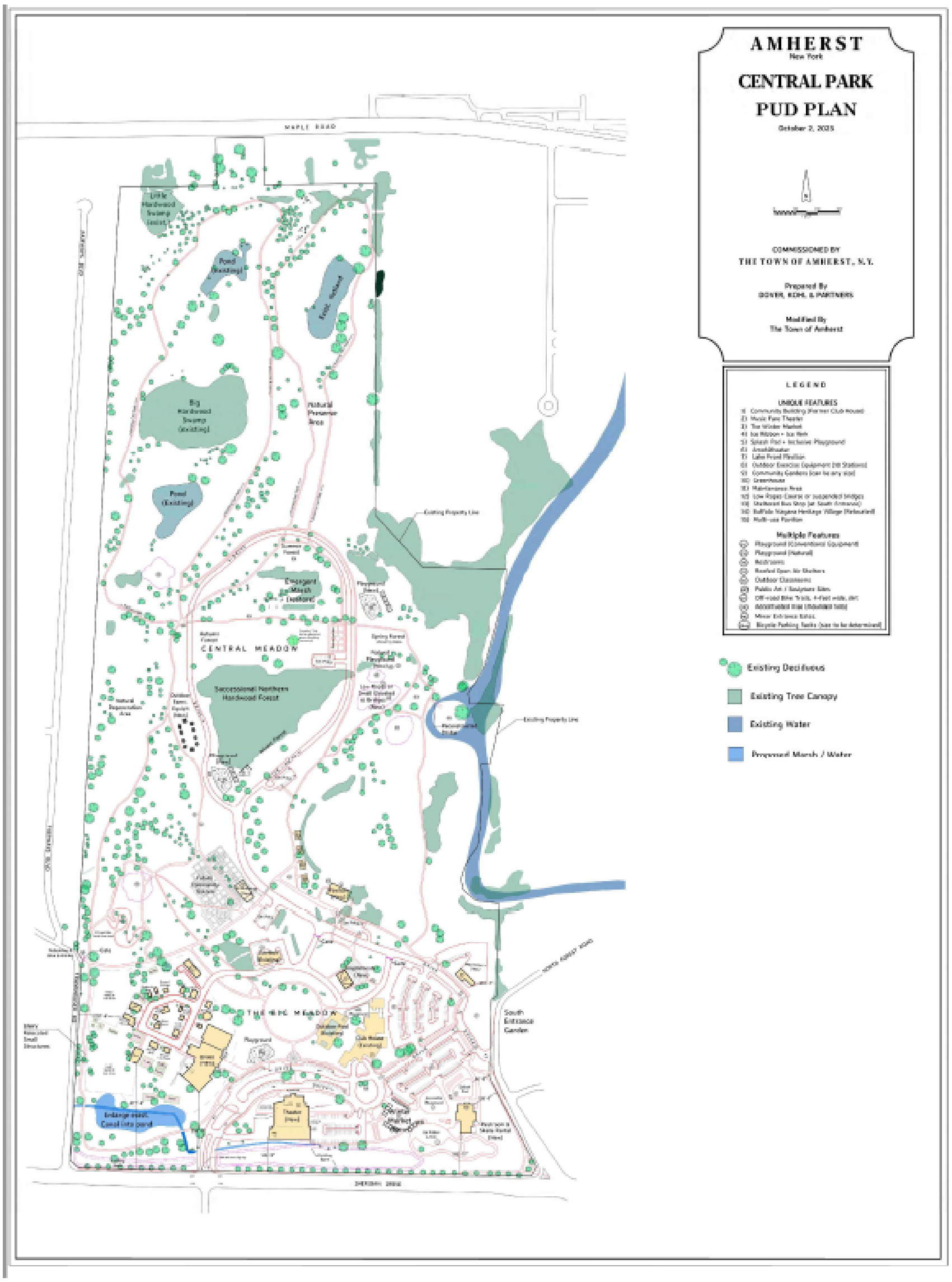


Figure 1 **Amherst Central Park Planned Unit Development Conceptual Plan**

The PUD Conceptual Development Plan (sometimes referred to herein as the "PUD Plan") includes the following features:

- Ice Ribbon and Ice Rink, approximately 25,000 SF
- Inclusive Playground, approximately 12,500 SF
- Splash Pad, approximately 6,100 SF
- Public Plaza, approximately 20,000 sf, including a Winter Market, approximately 5,000 SF (buildings)
- Renovation of the former clubhouse into a Community Building, approximately 2,500 SF addition to existing (approximately 44,500 SF total at completion, including basement and all floors), to provide services including space for a Universal Pre-Kindergarten (UPK) program
- Outdoor Amphitheater, approximately 3,300 SF
- Community Theater Building, approximately 31,600 SF
- New building for the Buffalo Niagara Heritage Village Museum – approximately 36,000 SF, as well as relocation of historical buildings associated with the museum, totaling approximately 20,000 SF
- Enhancement of an existing wetland as a decorative pond and associated onsite mitigation (if required) and filling or modification of non-regulated wetlands
- Ancillary park improvements such as playgrounds, gardens/greenhouses, pedestrian access/pathways, educational kiosks and access drives as shown conceptually on the PUD Plan
- Construction of required mechanical buildings, public restrooms, parking lots, and supportive utilities such as storm sewers and stormwater management features, sanitary sewers, water, fiber optic cables, electric and natural gas service

The northern portion of the Property is slated for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas.

Amherst Central Park Facilities Improvements Review Process for the PUD

The Town is developing the Park pursuant to the Planned Unit Development (PUD) Process set forth in Section 6-9 of the Zoning Code, as the Property is in excess of 30 acres. As set forth in Zoning Code 6-9-1, the purpose of the PUD Process is to permit coordinated development that allows flexibility to respond to market demands. Pursuant to Zoning Code 6-9-2, the Town Board intends to adjust the regulations, standards and criteria of the Zoning Ordinance as part of the PUD Process for the Amherst Central Park to implement the Conceptual Development Plan and future improvements that are not part of the Conceptual Development Plan. Figure 2 below sets forth the process for developing, approving and implementing the improvements in Amherst Central Park.

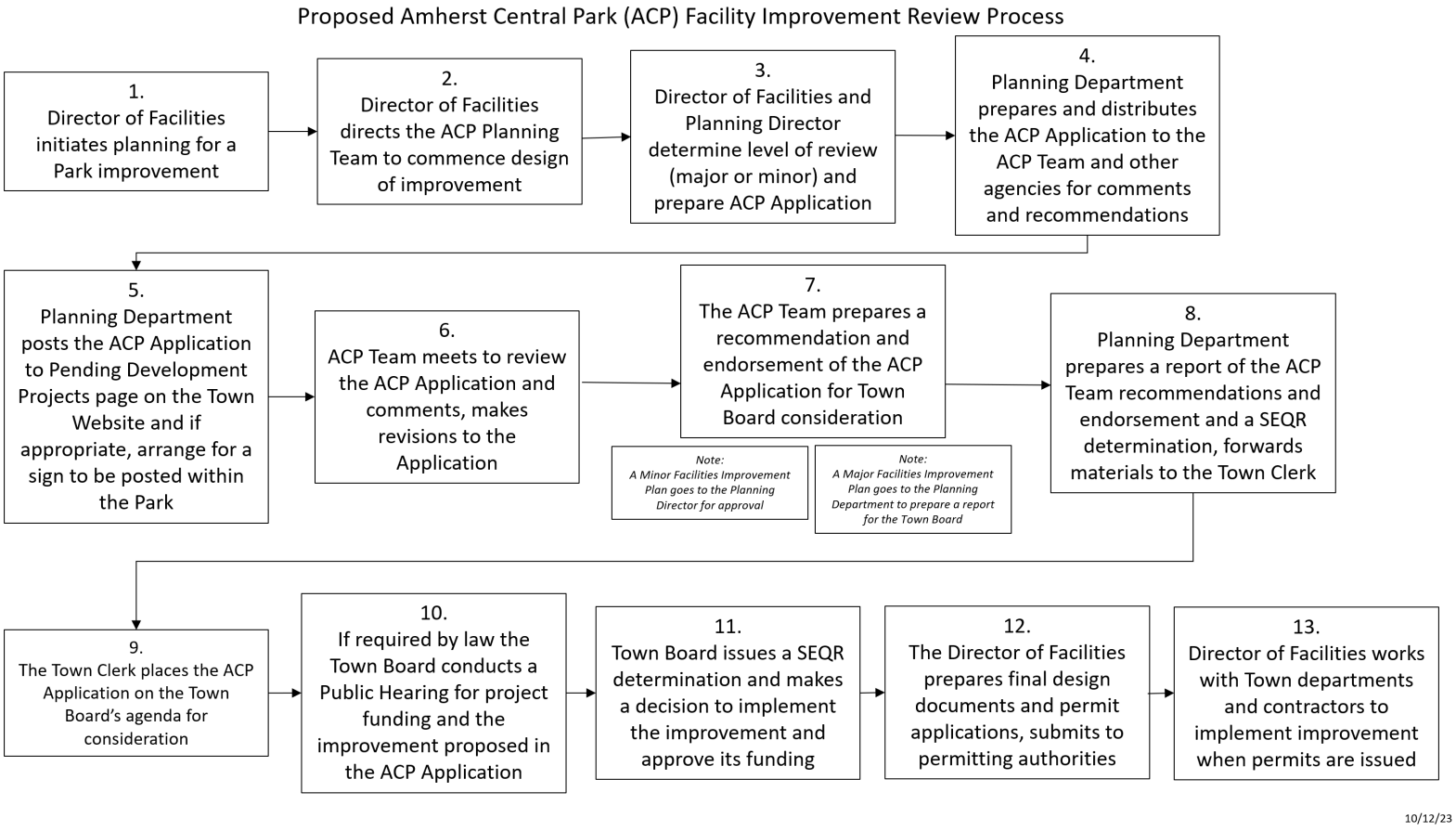


Figure 2 Proposed Amherst Central Park Facilities Improvements Review Process

The ACP Facility Improvement Review Process depicted above is set forth in more detail below.

As part of the development of the Amherst Central Park, the Town Board will establish an ACP Planning Team, which will include, but not be limited to, the Director of Facilities, the Town Engineer, Town Architect, Building Commissioner, Planning Director, and Police/Fire Representative.

1. The Director of Facilities will initiate planning for a Park improvement, which may commence through his or her own initiative; through specific direction by the Town Board; through implementation of projects previously approved by the Board or set forth in the Town's Capital Improvement Program (CIP).

2. Once the concept has been initiated, the Director of Facilities will direct the ACP Planning Team to commence planning and design of the improvement.

3. The Director of Facilities will work with the Planning Director to determine the level of review necessary (major or minor) and prepare a Facilities Improvement Plan application ("ACP Application") for the ACP Planning Team to review.

4. The Planning Department will prepare and distribute the ACP Application to the ACP Planning Team, and other agencies as appropriate, for comments and recommendations.

5. The Planning Department will post the ACP Application to its Pending Development Projects page on the Town Website and, if appropriate, arrange to post a sign with notice of the improvement within the Park.

6. The ACP Planning Team will meet to review the ACP Application and comments received, and, if necessary, make revisions to the ACP Application based upon the comments received.

7. The ACP Planning Team will prepare a recommendation and endorsement in support of the ACP Application for consideration by the Town Board.

8. The Planning Department prepares a report of the ACP Team recommendations and endorsement and a SEQR determination, forwards materials to the Town Clerk

9. The Town Clerk will place the ACP Application on the Town Board's agenda for consideration.

10. If required by law, the Town Board will conduct a Public Hearing for project funding and the improvement proposed in the ACP Application.

11. The Town Board will issue a SEQRA determination and make a decision whether to proceed with approving and implementing the improvement set forth in the ACP Application and its funding.

12. The Director of Facilities will prepare final design documents and appropriate permitting applications, submits materials to the permitting authority.

13. Director of Facilities will work with appropriate Town Departments and contractors to implement the improvement once the permitting authorities issue the necessary permits.

1.2 Purpose and Need

The Town's purpose for Amherst Central Park is to structure, design and create an exemplary multi-use park with broad year-round appeal. Its range of activity will draw from natural resources, environmental sciences, the fine arts, recreation, and historic preservation, each with leadership intent. The future Amherst Central Park is an opportunity to create a beautiful natural community resource for the enjoyment of people of all ages.

The following improvements for the Park were identified through the public involvement process:

- Providing a place for people to connect and interact in a shared environment;
- Providing environmental, civic, cultural, and recreational benefits to residents and visitors to the Town; and
- Providing a premier community asset to serve as a safe and inclusive space for individuals of all ages to play, learn, reflect, gather, engage and enjoy in perpetuity.
- Retain the character and aesthetic features of the existing landscape and bisecting waterway.

Additional needs, including some identified in the GEIS but highlighted and re-examined in light of the findings on the Mixed Use Project, are embedded in the Town's existing zoning, Comprehensive Plan and Amherst LWRP Plan, discussed below.

1.2.1 ZONING

The Property envisioned for the Amherst Central Park is zoned as Recreation Conservation (RC), a district whose purpose is to provide for public, private, and civic uses related to recreation and conservation. Planning for the Amherst Central Park is specifically focused on supporting these uses.

The Town's Bicentennial Comprehensive Plan also recommends the Property be used for recreation, open space and greenways. The Property is a component of the LWRP, given its location along Ellicott Creek. The Amherst Central Park is a featured project for recreation and waterfront enhancement in the Town.

1.2.2 TOWN OF AMHERST BICENTENNIAL COMPREHENSIVE PLAN

The Town first adopted its comprehensive plan in January of 2007, and most recently amended it in 2020. The Town of Amherst Bicentennial Comprehensive Plan ("Comprehensive Plan") is the official document that serves as a guide to the long-range physical development of the community. The Comprehensive Plan is organized into a series of elements that cover community functions such as Land Use,

Transportation and Infrastructure. Each element describes a set of goals, objectives and policies that are designed to achieve that aspect of the Vision Statement. The following summarizes the Amherst Central Park's conformance with the Comprehensive Plan.

Vision Statement

The Vision Statement identifies three fundamental attributes that will sustain the exceptional quality of life for local residents. These attributes are as follows; livability, community character, shared direction.

- Livability: This attribute encompasses healthy neighborhoods, outstanding public facilities and services, and an active community life. The Amherst Central Park responds to this planning objective by providing an expansive area specifically designated for recreation and open space.

- Community character: A key aspect of this attribute is preservation of natural and cultural resources and maintenance of green space. The Amherst Central Park responds to this planning objective by including features for publicly accessible recreational improvements for the Town's residents while preserving and enhancing a significant portion of the Property as open space. The original WCC Clubhouse will be preserved in the Park.

- Shared Direction: This attribute outlines the need for intergovernmental cooperation. The Amherst Central Park is consistent with this goal by relocating portions of the Buffalo Niagara Heritage Village Museum to the Park and providing a resource for local schools.

Land Use and Policies Goals, Objectives and Policies

One of the top initiatives outlined in the Comprehensive Plan is aesthetic/community character. The Town aims to be "renowned for the beauty, character, and environmental quality of the Town." The Amherst Central Park aims to support this key initiative, and subsequently the Town vision, through land use policies that enhance existing open space by development of unique cultural improvements. Specific policies addressed by the Amherst Community Park include:

- Policy 3-7 of the Comprehensive Plan expresses the need to "protect and retain the identity of special places through design guidelines" including important community resources such as a major park, public or private buildings or open space, or an educational campus. The Amherst Central Park responds to this goal with a conceptual development plan, which was prepared with extensive community input, and a PUD process designed to implement the plan. The plan specifically addresses development of a major park, including public buildings, open space, and an educational campus.

- Redevelopment and Revitalization of Underutilized, Obsolete, and Vacant Properties for Economically Viable Uses: Policy 3-9 of the Comprehensive Plan acknowledges that as the Town matures and market conditions evolve, some developed properties may no longer be economically viable as a result of changing economic conditions. The Comprehensive Plan recognizes that existing public and semi-public land uses, including golf courses and other

recreational facilities, may require revitalization in the event that their continued operation becomes difficult due to changing demographic, economic, or social trends. The redevelopment of these areas is identified as requiring careful planning that maintains the essential character of the site while accommodating significant changes in use and density. The Amherst Central Park responds to this goal with a conceptual plan developed through a SEQR review and a "hard look" consideration of the initial mixed use alternative and subsequent assessment of additional potential viable redevelopment options for the Property.

Open Space Preservation

- Policy 3-14 of the Comprehensive Plan encourages the acquisition of public open space consistent with development of the Town open space, recreation, and greenway network and prioritizes protection of valuable natural and cultural resources. The Policy specifies that open space values are enhanced by the presence of significant natural (e.g., water resources and habitat areas) or cultural (e.g., recognized historic sites) resources.

Natural and Cultural Resources

- Policy 4-1 of the Comprehensive Plan establish greenway corridors along streams as part of a town-wide open space system.
- Policy 4-5 of the Comprehensive Plan supports protection of designated wetlands and implement best management practices to maintain Town owned wetland areas. Work with regulatory agencies to encourage permitted wetland mitigation of an equal or higher level of function and quality to be located near impacted areas or within the Town.
- Policy 4-13 of the Comprehensive Plan supports the cultural, visual and performing arts as part of the Education Key Initiative.

1.3 Outline for this SGEIS

The following sections of this DSGEIS are organized as follows:

Section 2 describes the process of the SGEIS preparation and review.

Section 3 summarizes the project alternatives, including the No Action Alternative

Section 4 presents an evaluation of the affected environmental resources along with direct potential impacts and mitigations.

Section 5 discusses potential indirect and cumulative impacts.

Section 6 sets thresholds for future related actions should the conceptual plan for the PUD be adopted.

2.0 Supplemental Environmental Review

This section of the DSGEIS describes the steps in required coordinated environmental review of the proposed Central Park Alternative pursuant to the SEQR Act.

2.1 Supplemental Environmental Review

The PUD Plan is subject to review under the SEQR Act. A supplement to the FGEIS (SGEIS) is required because, pursuant to 6 NYCRR 617.10(d)(4), "[t]he [Amherst Central Park] was not addressed or was not adequately addressed in the Generic EIS and the subsequent action may have one or more significant adverse environmental impacts." Because this is a change to the project that was the subject of the GEIS, 6 NYCRR 617.9(a)(7)((i)(a) requires that a supplement to the GEIS be limited to the specific significant adverse environmental impacts not addressed or adequately addressed in the GEIS. The Town has prepared Parts 1, 2 and 3 of the Environmental Assessment Form (EAF) for the Central Park Project and issued a Positive Declaration. The following four potential significant adverse environmental impacts were identified in the Part 3 EAF that will be addressed in a supplement to the GEIS.

1. Impact on land
2. Impact on surface water
3. Impact on transportation
4. Impact on human health

While this DSGEIS will address the four items requiring further analysis, it also discusses the potentially small impacts identified in the EAF, as well as the positive impacts associated with the Amherst Central Park.

2.2 Steps in the Environmental Review of the SGEIS

The Town prepared a GEIS and associated GEIS Findings in 2017 for the Property[1]. Because the proposed use of the Property as the Amherst Central Park was not contemplated in the 2017 GEIS, it is necessary to prepare a supplement to these reports.

The projected sequence for review of the SGEIS is:

- Town Board accepts this DSGEIS as complete for review and public comment.

[1] Town of Amherst's Projects and Initiatives page, available online at https://www.amherst.ny.us/content/projects.php?dept_id=dept_15&proj_id=proj_09&neworder=00.

- After the close of the public comment period, the Town Board will issue a Notice of Completion of the Final Supplemental Generic Environmental Impact Statement (FSGEIS); and
- After waiting the requisite ten (10) days, the Town Board will issue a Supplemental Findings Statement for the Amherst Central Park.

2.3 Description of Required Approvals and Permits

The approval needed for the pending PUD Application is limited to the Town Board. A list of anticipated approvals and permits that will be needed to implement the PUD Conceptual Development Plan are listed below in Table 1:

Table 1 Required Approvals and Permits for the Amherst Central Park

Agency	Description of Permit or Approval Required
Town of Amherst	
Town of Amherst Town Board	• ACP Application
Town of Amherst Building Department	• Building permits
Town of Amherst Engineering	• Notice of Intent State Pollution Discharge Elimination System ("SPDES") General Permit for Construction Activities; waterline and sewer extension approvals (through Erie County Department of Health)
Erie County	
Department of Public Works	• Highway Work Permit
Department of Environment and Planning	• NYS General Municipal Law Section 239
State of New York	
NYS Department of Environmental Conservation	• Enforcement of SPDES • Water Quality Certification (wetlands)
NYS Department of Transportation	• Highway Work Permit
Federal	
U.S. Army Corps of Engineers	• Clean Water Act Section 404

2.4 Project Schedule

The Town anticipates that the implementation of the Amherst Central Park will occur over the course of a 10-year period (June 2024-June 2034). Construction will begin with improvements within the southern portion of the Property, which will include the most intensive development of recreation, community, and civic facilities.

3.0 Analysis of Alternatives

Five alternative actions, including the PUD, are evaluated in this DSGEIS:

- No Action. Under this Alternative, the Property would remain in its existing condition.
- Amherst Central Park. Under this Alternative, the Property would be developed as a public park. Benefits, potential impacts, and mitigation are discussed in this DSGEIS.
- Mixed Use Project (Westwood Neighborhood). This Alternative was examined in the GEIS. While the SEQRA Findings for this alternative ultimately led to a denial of the requested application, the Property information and analysis developed for the GEIS contributes to an understanding of the Property and this Alternative provides a point of comparison for other proposed Alternatives.
- Alternative Sites. This Alternative addresses the potential availability of additional sites within the Town where the purpose and needs identified in this DSGEIS could be accomplished.
- Alternative Uses. This Alternative assesses whether uses other than the Mixed Use Project or Amherst Central Park could meet the purpose and needs identified in this DSGEIS.

3.1 No Action

Under this Alternative, the Property would remain in its existing condition. While open space could be maintained and opportunities for passive recreational use could exist, none of the proposed improvements would be provided.

Specifically, improvements planned for recreational and educational use such as the theaters, outdoor market, classrooms, inclusive playground, splash pad and ice skating ribbon would not be constructed. As a result, major goals of the park planning process and Town Comprehensive Plan would not be met.

3.2 Amherst Central Park

With this alternative, the 170.5± acre Property would be converted from the former private golf course into the Amherst Central Park community space. The Park would include cultural, recreational and civic public spaces, as outlined above in Section 1.1. The northern portion of Property is slated for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas.

3.3 Mixed-Use Project

As noted in Section 1.0, this Alternative was previously evaluated in depth. The Town, as Lead Agency, found that this Alternative did not avoid or minimize adverse impacts to the maximum extent practicable

nor achieve a balance between the protection of the environment and the need to accommodate social and economic considerations.

However, this Alternative provides a point of comparison for the Amherst Central Park Alternative. As discussed further in Section 4.0, the Amherst Central Park Alternative avoids or greatly reduces the following adverse impacts identified for the Mixed Use Alternative:

- Insufficient sanitary sewer capacity and significant constraints on increasing that capacity.
- Traffic impacts associated with new commercial development in an area not previously planned for such development.
- Extensive new roadway and signal construction to address traffic impacts.
- Impacts associated with wetlands, hardwood swampland, floodplains, and Ellicott Creek.
- Conversion of land zoned RC to higher-density uses as housing and commercial development.
- Incompatibility of the proposed uses with surrounding neighborhoods.
- Loss of open space.
- A protracted construction period for roadways; infrastructure; and multiple patio and single-family homes, townhomes, apartments, and completion of mixed use and office buildings.

3.4 Alternative Sites

While some of the proposed improvements in the Amherst Central Park could be provided in other areas of the Town, there is no other parcel or combination of parcels owned by the Town that would offer a suitable combination of location, existing natural beauty, overall location, and potential for a cohesive, comprehensive park plan that would be comparable to the proposed Amherst Central Park. This Alternative is therefore not further evaluated in this DSGEIS.

3.5 Alternative Uses of the Property

As set forth in the GEIS, the full development of the Property for mixed use commercial and/or residential purposes would result in significant impacts related to traffic, utility infrastructure, and community character. Industrial uses of the site would result in similar impacts. A significantly less intense residential development would reduce traffic and infrastructure impacts relative to the Mixed Use Alternative but would be inconsistent with existing zoning and the Town Comprehensive Plan. None of these alternative uses would meet the Purpose and Need identified in this SGEIS. This Alternative is therefore not further evaluated in this DSGEIS.

4.0 Affected Environmental Resources, Impacts, and Mitigation

4.1 Introduction

This section of the DSGEIS is broken into subsections discussing resources for which potential medium to large impacts were identified in the Full Environmental Assessment Form for the Amherst Central Park, which include Impacts to Land, Surface Water, Transportation, and Human Health. For existing conditions of other resources, refer to the Draft Generic Environmental Impact Statement (DGEIS)[2].

Within each of the resources subsections, the following details are discussed below:

- A description of the existing environmental conditions on the Property and vicinity;
- A discussion of the potential environmental impacts and benefits that will occur as a result of the redevelopment of the Property in manner consistent with the Conceptual Development Plan for Amherst Central Park. The SEQRA Regulations require that a DSGEIS include a statement and evaluation of the potential adverse environmental impacts resulting from a proposed project at a level of detail that reflects the severity of the impacts and the likelihood of their occurrence.[3] The evaluation of identified potential adverse impacts in this DSGEIS includes descriptions of short-term impacts likely to result from site preparation and other construction activities over the anticipated 10-year build-out period for the Amherst Central Park, as well as long-term impacts that will result from the redevelopment of the Property as a public park; and
- A discussion of the mitigation measures proposed by the Town for purpose of minimizing identified adverse environmental impacts to the maximum extent practicable.

4.2 Project Benefits

The development of the Property as the Amherst Central Park presents the potential for benefits to the following environmental resources:

Aesthetic Resources

The Amherst Central Park is integrated within the existing landscape of the former Westwood Country Club site. The majority of land development or built infrastructure will take place near the existing clubhouse and parking lot area adjacent to a NYS arterial roadway. This area of major development is approximately within 45 acres. This 45-acre area is predominantly flat and has been disturbed by

[2] DGEIS for the proposed Westwood Multi-Use Development. Available online at https://www.amherst.ny.us/content/projects.php?dept_id=dept_15&proj_id=proj_09&neworder=00.
[3] See 6 NYCRR Part 617.9(b)(5)(iii).

development. The balance of the Property, 125.5 acres will remain intact. The Town will preserve the approximate 15 acres of mature forested areas and over 115 acres of meadow in the northern portion of the Property. The Town will be altering the linear wetland near the proposed theater building but will be adding more surface water features to the southwest portion of the Property. The Town will not disturb the jurisdictional wetland of Ellicott Creek. The majority of the Property will retain its aesthetic character.

Open Space and Recreation

The Town will preserve the majority of the northern portion of the Property. The approximate 15 acres of mature forested areas and over 115 acres of meadow will be preserved. The majority of the physical dimensions of the Property will be considered passive park recreation. The exception to this passive recreation will be the active recreation and cultural components in the southern approximate 45 acres.

Consistency with Community Plans

Town of Amherst Recreation and Parks Master Plan[4]

- The Park supports the following:
    - Goal #3 Objective 3.2 - Develop new recreation amenities and opportunities for residents with a focus on expanding trails and opportunities for walking and biking.
    - Action 3.2.c - Pursue opportunities to create new sidewalks and pathways that connect the places people live, work, shop, and play in Amherst. Seek to enhance opportunities for residents to safely walk and bike for exercise, leisure, and transportation purposes.

Town of Amherst Local Waterfront Revitalization Program[5]

- Section II Vision – The Park supports the Town vision within the locally adopted Local Waterfront Revitalization Program Plan (2023). The Town of Amherst LWRP will guide the Town's waterfront actions to achieve the community's vision of a healthy and culturally vibrant waterfront. "*This LWRP celebrates the beauty and uniqueness of the extensive waterfront along Tonawanda Creek/Erie Canal and Ellicott Creek, and the local history and the community's desire to build upon existing strengths for the future. The key will be to balance Amherst's character and uniqueness with new and renewed development that can contribute to the vibrancy and resilience of the community."* As a result of analyzing the existing conditions of the Amherst WRA and engaging the community on opportunities in the Amherst WRA, the Town identified the following goals for its local waterfront revitalization plan: increase public access to Town waterways, enhance amenities at existing public parks

[4] Town of Amherst Recreation and Parks Master Plan (April 2018), available online at https://www.amherst.ny.us/pdf/planning/parks/master_plan/180418_master_plan.pdf.
[5] Town of Amherst Local Waterfront Revitalization Program (September 2023), available online at https://www.amherst.ny.us/pdf/planning/lwrp/220901_draft_lwrp.pdf.

adjacent to the waterways, create new public parks and expand the greenway corridor along the waterways, encourage appropriate economic development opportunities, promote public safety, improve the quality of the Town's water resources, improve the existing shoreline conditions, highlight the scenic and aesthetic beauty of the Town's waterways, and enhance historic and cultural components within the LWRP boundary, and foster environmental education and stewardship.

- Section II – Map II-9 in the Inventory and Analysis identifies scenic views in and around the Property.
- Section IV – Identifies Amherst Central Park a project and focal point of the Waterfront Revitalization Area.

Consistency with Community Character

Figure 6 of the Town's Comprehensive Plan, Land Use and Development section[6] identifies the Property as Recreation, Open Space and Greenways. The Property is consistent with the Land Use in the Comprehensive Plan. The Property is zoned Recreation Conservation. The Amherst Central Park will not be subject to a rezoning or Comprehensive Plan amendment.

4.3 Impacts Assessed as None/Small

As set forth in the Part 2 of the FEAF, the development of the Amherst Central Park identified potential impacts to certain resources. For the following resources, additional analysis identifies the impacts as none or small.

Groundwater

Based on a review of NYSDEC data, the Property is not underlain by any mapped principal or primary aquifers. Given the history of pesticide use on the former golf course, the FEAF identifies the potential for contaminants to have been introduced to groundwater. However, groundwater at and in the vicinity of the Property is not used for public drinking water supply and the existing soil contamination will be addressed as described in Section 4.7. Construction of the Amherst Central Park is therefore not anticipated to have any adverse impacts on groundwater resources or groundwater quality.

Flood Hazard Zones

Given the location of the Property adjacent to Ellicott Creek, the FEAF identifies the potential for flooding impacts. Certain areas within the eastern portion of the Property are located within the 100-year flood hazard zones associated with Ellicott Creek, as designated by the Federal Emergency Management

[6] Town of Amherst Bicentennial Comprehensive Plan - Land Use and Development Section, available online at https://www.amherst.ny.us/pdf/planning/compplan/2020/210226_3.pdf.

Agency ("FEMA"). The map provided in Appendix D illustrates the current location of the 100-year and 500-year flood hazard zones on the eastern portion of the Property.

The Amherst Central Park has been planned to avoid long-term potential adverse impacts to the Ellicott Creek floodplain by primarily locating structures outside the 100-year and 500-year flood hazard areas. While the Park will involve the construction of a pavilion, four outdoor classrooms, low ropes or small elevated bridges, a natural playground, and the reconstruction of a bridge within the flood hazard areas associated with Ellicott Creek, these are not occupied structures and would be designed to be resistant to flood damage and/or easily repaired. Outside of these development areas, the Park within the flood hazard zones will be maintained as vegetated open space and will be resilient and easily restored in the event of future potential flood damage. Construction of the Amherst Central Park is therefore not anticipated to have any adverse impacts related to flood hazard zones.

Sanitary Sewer

The Amherst Central Park improvements are estimated to generate up to 80,000 gallons/day of sanitary wastewater, primarily from recreational water features, i.e. splash pad spray and backwash water for swimming pool. Wastewater will be treated at the Town of Amherst Water Pollution Control Facility (WPCF), which has existing capacity to convey and treat these uses. In contrast, projected average usage for the Mixed Use Alternative in the GEIS, 245,000 gallons/day, was approximately three times greater than the Park average use, with peak hourly flow rates up to approximately 1,000,000 gallons/day. The projected sewer flow rates exceeded the sanitary system flow capacities and were a key basis for the denial of the Westwood Neighborhood (Mixed Use) application.

Historic and Archeological Resources

The Property is contiguous to an eligible historic/archaeological site located at 829 North Forest Road. Per the Cultural Resource Information System, this neighboring site is listed due to the presence of a farmhouse that was built in the 1840s. The farmhouse represents a rare example of a brick farmhouse with Greek revival influences. However, no impacts to the farmhouse due to development of the Amherst Central Park are anticipated. The Property was assessed for potential archaeological impacts through Phase I and II testing during preparation of the GEIS. No impacts were identified, and the NYS Office of Parks, Recreation, and Historic Properties (OPRHP) issued its concurrence with that finding. There are no historic or archaeological sites or resources present on the Property. Therefore, historic and archaeological impacts due to development of the Amherst Central Park are anticipated to range from none to small.

Noise, Odor, and Light

Activities at the proposed Amherst Central Park may result in an increase in noise, odors, or outdoor lighting during construction and operation. During the construction period, heavy equipment may be used onsite between the hours of 7am and 7pm Monday through Friday. Although it is anticipated that there would be construction noise during this period, the Town intends to keep the natural buffers intact between land uses, so as to dampen potential noise impacts. Further, the noise impacts stemming from

these vehicles would cease at the conclusion of construction and would not occur during operation of the Park.

Operational noise will be limited to levels typical of public parks. Entertainment events including music, museum events, and other public gatherings will be managed by scheduling and Town oversight such that potential impacts are anticipated to be small.

The Amherst Central Park will have appropriate lighting for parking lots and streets which, in addition to screening by landscaping will limit offsite impacts. Therefore, associated impacts are anticipated to be small.

As part of the design plan for the Amherst Central Park, it is proposed that the Buffalo Niagara Heritage Village Museum would relocate its outdoor living displays to the Amherst Central Park. These displays may include livestock and poultry which could produce odors and noise. The Town will place these displays approximately 150 feet from the nearest occupied structures to the west of the Park and will maintain them such that potential impacts due to odors and noise are anticipated to be small.

The Amherst Central Park is Town owned and will be operated by the Town. As such, potential noise and odor impacts will be limited to conform to the Town of Amherst Town Code. Examples of pertinent code requirements include:

- Per the Town Code, Section 145[7], people are not allowed to be in or on Town recreation areas between 10pm and 6am without written permission from the Recreation Commission.
- Per Section 138[8] of the Town Code, unreasonable noise is unlawful within areas of which the Town has jurisdiction.

4.4 Physical Alteration of Land Surface

4.4.1 EXISTING CONDITIONS

As noted in the DGEIS, the Property is located within the Erie-Ontario Lake Plain physiographic province of New York. No unique landforms or geological formations exist on or in the vicinity of the Property. Topography on the Property averages approximately 600 feet above sea level (“asl”). In general, the topography gradually drops approximately 10-13 feet in elevation from south to north across the Property. Overall, the topography of the Property is relatively level, with the exception of previous modifications resulting from the construction, operation, and maintenance of the former private golf course. In addition, Ellicott Creek meanders along portions of the eastern boundary of the Property.

---

[7] Town of Amherst, NY Town Code, Chapter 145, available online at https://ecode360.com/13278923#13278923.
[8] Town of Amherst, NY Town Code, Chapter 138, available online at https://ecode360.com/13278808#13278808.

An analysis of geology and soils on the Property was performed by Empire Geo-Services, Inc. ("EGSI") in 2014 (Refer to the DGEIS, Appendix I, page 99 "Geotechnical Evaluation Report"[9]). Additional information regarding the Property physical setting and soil types identified onsite can be found in the DGEIS Section 4.1. An evaluation of contamination identified in soils onsite and potential associated impacts on the Amherst Central Park Alternative is provided in Section 4.7, Human Health.

The results of the geotechnical investigation indicated that a majority of the on-site soils would be suitable for the initially proposed Mixed Use Alternative, but that in some locations, poor surface soil drainage, exacerbated by perched or trapped groundwater in the topsoil and fill layers, could make site preparation work (e.g., topsoil stripping and sub-grade activities) difficult, particularly during wet conditions. During wet weather conditions, construction activities increase the potential for soil erosion and sedimentation impacts. These conditions are presumed to be similar at present, given that no major site change have occurred since the survey was completed in 2014.

In order to address identified potential wet soil conditions during construction, the 2014 Geotechnical Report recommended implementation of certain typical construction practices for wet sites, including: improving drainage prior to excavation, installing suitable base material and geotextile beneath haul roads, proof-rolling exposed subgrades and filling and grading sufficiently in advance of final subgrade preparation to allow for settlement.

While the scale and density of the Mixed Use Alternative would have been significantly greater than the Amherst Central Park development, similar construction practices may be required in wet areas. Design of the park structures and foundations will be prepared by licensed professionals to meet current NYS Building Code and Town standards, including evaluation of soils based on the 2014 report and on additional site-specific investigations as needed.

4.4.2 POTENTIAL IMPACTS

The following sections discuss the potential impacts to land on the three viable alternatives discussed in Section 3.0.

No Action Alternative

In the No Action Alternative, no impacts would occur and no mitigations would be necessary.

Mixed Use Alternative

In the Mixed Use Alternative, 145.08 acres of land would be disturbed. Given implementation of required stormwater management practices and adherence to NYS Building Code and Town of Amherst Codes, no substantial physical adverse impacts to land were anticipated, however the extent of soil disturbance,

[9] Second Revised DGEIS for the Westwood Neighborhood (dated October 2015) Appendix I, available online at https://www.amherst.ny.us/pdf/planning/westwood/appendix-I.pdf.

construction, and removal of existing vegetation would be substantially greater than for the Amherst Central Park Alternative.

Amherst Central Park

In the Amherst Central Park Alternative, a far smaller amount of physical land alteration would occur, totaling approximately 25± acres. Given implementation of required stormwater management practices and adherence to NYS Building Code and Town of Amherst Codes, no substantial physical adverse impacts to land are anticipated. As noted, the extent of physical alteration to land would be substantially less than for the Mixed Use Alternative.

4.4.3 MITIGATION MEASURES

Given adherence to stormwater regulations and code requirements, no substantial impacts due to physical alteration of the land surface were identified. Therefore no mitigation measures are required.

4.5 Surface Water

4.5.1 EXISTING CONDITIONS

The Property lies within the Tonawanda Creek Watershed, a major tributary watershed to the Niagara River / Lake Erie Watershed. Tonawanda Creek, which forms the Town's northern boundary with Niagara County, flows to the west and drains large portions of the Town. Portions of Tonawanda Creek have been historically channelized as part of the Erie Canal. Ellicott Creek, which extends along portions of the eastern boundary of the Property, is the largest tributary of Tonawanda Creek and flows northwest through the Town. Ellicott Creek discharges into a channelized section of Tonawanda Creek, near where Tonawanda Creek flows into the Niagara River.

In order to identify and evaluate water resources present on the Property for the DGEIS, Earth Dimensions, Inc. (EDI) was retained to prepare a wetland delineation and evaluation report, dated September 2012 (refer to the DGEIS, Appendix I, page 2 "Wetland Delineation Report"[9]). The wetland delineation identified 11 wetlands on the Property, totaling approximately 7.417± acres.

In light of proposed PUD and regulatory developments since the 2012 delineation and subsequent Joint Determination, the Town contracted with EDI to prepare an updated wetland delineation report and joint Jurisdictional Determination (JD) request to the Army Corps of Engineers (ACOE) and NYSDEC.

The Town of Amherst retained EDI to complete a wetland delineation report (Wetland and Waterbodies Delineation Report, dated June 12, 2023) that would allow the U.S. Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) to determine their jurisdictional authority on the Property, pursuant to Section 404 of the Clean Water Act and Articles 15 (Protection of Waters) and 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law. A preliminary review of available information pertaining to vegetation, soils, and hydrology at the Property was implemented prior to conducting a field investigation at the site. Sources of information

included the United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS), National Wetland Inventory (NWI), and NYSDEC Freshwater Wetland maps. The USGS, NRCS and NWI maps indicate the potential for wetlands under federal jurisdiction.

The preliminary data review revealed that ACOE may have jurisdiction over wetlands at the Property. The evidence consisted of potential federally regulated wetlands on the NWI map (Figure 2 in the wetland report) and hydric soils and soils with possible hydric inclusions depicted within the project area as shown on the NRCS map (Figure 3 in the wetland report). The preliminary data review indicated that NYSDEC has jurisdiction over Ellicott Creek as depicted on the NYSDEC Resource Mapper (Figure 4 in the wetland report). Therefore, it was considered necessary to perform a field investigation at the Property in order to determine the presence of federal and state protected wetlands. The methods specified in the ACOE Wetlands Delineation Manual (January 1987) and Northcentral and Northeast Regional Supplement Version 2.0 (January 2012) were employed during the field investigation. Procedures, results, and conclusions of the wetland delineation study are presented in the report attached as Appendix C. One additional wetland was identified onsite, compared to the September 2012 wetland delineation and evaluation report.

The identified wetlands, their acreage and type are as follows:

Table 2 Wetland Summary

Wetland Identification #	Total Acreage On-site	Wetland Type (Cowardin)	Wetland Type (Reschke)
Wetland 1	0.74±	PSS1B	Scrub-shrub swamp
Wetland 2	0.60±	POW	Golf Course Pond
Wetland 3	0.34±	PSS1B	Scrub-shrub
Wetland 4	1.09±	POW	Golf Course Pond
Wetland 5	2.63±	PFO1B	Hardwood Swamp
Wetland 6	0.94±	POW	Golf Course Pond
Wetland 7	0.02±	PSS1B	Scrub-shrub
Wetland 8	0.22±	PSS1B	Scrub-shrub
Wetland 9	0.93±	PSS1B	Scrub-shrub
Wetland 10	2.25±	PEM1H/R2UB1	Emergent Marsh/Perennial Stream
Wetland 11	0.33±	PEM1C	Shallow Emergent Marsh
Wetland 12	0.17±	POW	Golf Course Pond

Cowardin Wetland Classifications:

- Palustrine Scrub-Shrub Broad-Leaved Deciduous Saturated (PSS1B),
- Palustrine Forested Broad-Leaved Deciduous Saturated (PFO1B),
- Palustrine Emergent Persistent Seasonally Flooded (PEM1C),
- Palustrine Emergent Persistent Permanently Flooded (PEM1H),
- Riverine Lower Perennial Unconsolidated Bottom Cobble-Gravel (R2UB1),
- Palustrine Open Water Wetlands (POW).[10]

[10] Classification of Wetlands and Deepwater Habitats of the United States, Cowardin et al. 1979. https://www.fws.gov/wetlands/Documents/Wetlands-and-Deepwater-Habitats-Classification-chart.pdf

Table 3 Stream and Drainage Summary

Stream Identification #	Waterway	DEC Class	Linear Feet Onsite	Highwater Width (Ft)	Flow Regime	Substrate	Classification (Cowardin)
Stream 1	Ellicott Creek	B	1723	50-75	Perennial	Gravel, Cobble	R2UB1
Stream 2	UNT	N/A	252	2	Ephemeral	Silt, Organic	R4SB7
Stream 3	UNT	N/A	1155	6-8	Intermittent	Silt, Organic	R4SB7

Cowardin Wetland Classifications: Riverine Lower Perennial Unconsolidated Bottom Cobble-Gravel (R2UB1), Riverine Intermittent Streambed Vegetated (R4SB7).[10]

Table 4 Waterbody Summary

Identification #	Acreage On-site	Classification (Cowardin)	Type (Reschke)
Pond 1	0.60±	POW	Golf Course Pond
Pond 2	1.09±	POW	Golf Course Pond
Pond 3	0.94±	POW	Golf Course Pond
Pond 4	0.17±	POW	Golf Course Pond

4.5.2 POTENTIAL IMPACTS

No Action Alternative

In the No Action Alternative, no impacts would occur to regulated or non-regulated wetlands and no mitigation would be required. However, none of the proposed Amherst Central Park improvements would be implemented and the Town-identified purpose and needs would not be met.

Mixed Use Alternative

In the Mixed Use Alternative, approximately 4.17± acres of non-regulated wetlands and Ellicott Creek (a state-regulated water body) would be impacted. This Alternative required construction of a 5-acre stormwater management “lake” which would permanently replace varied wetland types (emergent marsh, scrub-shrub, and forested wetlands) with open water managed for stormwater treatment and retention.

Amherst Central Park Alternative

The Wetland Delineation Report prepared by EDI identifies the delineated wetlands as isolated waters not connected to other waters of the United States and therefore, in EDI’s opinion, the wetlands are non-jurisdictional in terms of federal wetland regulations. The wetlands and waters that have been delineated

are subject to a renewed Jurisdictional Determination (JD) from the Army Corps of Engineers due to the length of time that has passed, over 5 years, since the previous JD.

The Amherst Central Park concept includes the filling in of an approximately 0.17± acre wetland located along the southern edge of the Property, approximately a 95% reduction in impacts to non-regulated wetlands compared to the Mixed Use Alternative. Wetland W11 would be altered to be a decorative pond. During the construction of the Amherst Central Park, the filling and/or modification of the on-site non-jurisdictional wetlands would result in direct and permanent impacts to the water quality of those resources. However, the small non-jurisdictional wetlands that will be impacted are not regulated by the USACE or the NYSDEC and these impacts will be isolated to each specific non-jurisdictional wetland.

The Town will use Best Management Practices ("BMPs"), to be implemented pursuant to the Stormwater Pollution Prevention Plan ("SWPPP"), to prevent erosion and sedimentation into Ellicott Creek and other off-site locations. For example, areas of disturbed soils and spoil piles will be protected with appropriate erosion and sedimentation controls in order to avoid the potential for sedimentation into Ellicott Creek. Therefore no substantial impacts to stormwater are anticipated.

In addition, appropriate spill prevention and control procedures will be implemented during construction of the Amherst Central Park. Therefore, no impacts due to spills are anticipated.

Further, in the long-term, the Amherst Central Park is expected to contribute to an improvement in localized water quality through improved stormwater runoff management and infiltration control. The stormwater management practices will be maintained to preserve water quality, as well as for visual appeal and wildlife habitat. The stormwater management system will be designed to convey treated run-off into Ellicott Creek, maintaining flows and water quality in that waterway. The preservation of natural areas adjacent to Ellicott Creek also will serve to filter run-off and to preserve riparian vegetation, which also acts to control erosion through root system stabilization of the soil.

4.5.3 MITIGATION MEASURES

The canal feature located in the southwestern portion of the Property and identified in the Amherst Central Park Plan for expansion into a larger pond may be subject to federal and state permitting if that water is connected to other waters. The outlet of the canal feature and discharge location of those waters would be identified to determine any regulatory requirements, which could include enhancement of other wetlands onsite, offsite mitigation, or other mitigation as required by the ACOE and/or NYSDEC.

In comparison to the Mixed Use Alternative, loss of existing wetlands for the Park Alternative would be 95% less. While mitigation for impacts to regulated wetlands may be required, the total area anticipated to require mitigation would be less for the Park Alternative.

4.6 Transportation

4.6.1 EXISTING CONDITIONS

The Town's transportation system includes a network of roads as well as bicycle and pedestrian paths and public transportation.

4.6.1.1 Vehicular Transportation

Overall, the Town has a well-developed road network, consisting of interstate highways, state and county arterial and collector roads and local streets. The Amherst Central Park is located between Maple Road (County Route 192, a minor arterial) and Sheridan Drive (New York State Route 324, a principal arterial road), west of North Forest Road and east of Frankhauser Road and Fairways Boulevard (local streets).

In preparation of the DGEIS for the Mixed Use Development, the Project Sponsor commissioned SRF Associates to prepare a Traffic Impact Study ("TIS") (refer to the DGEIS, Appendix Volume III, "Traffic Impact Study" and Appendix Volume IV "Revised Traffic Impact Study"). In its findings on the FGEIS, the Town concluded that the information in the 2017 TIS was insufficient to determine that mitigation for the substantial increase in traffic was sufficient.

In order to identify and evaluate the potential traffic impacts of the proposed Amherst Central Park, the Town contracted C&S Engineers, Inc (C&S) to prepare a TIS. The TIS report, dated October, 2023, is provided as Appendix E.

The study area for the 2023 TIS consisted of Sheridan Drive (NYS Route 324) and North (N.) Forest Road, with the following 5 existing intersections:

1. Sheridan Drive / Harlem Road (NYS Route 240),
2. Sheridan Drive / I-290 Ramps,
3. Sheridan Drive / Frankhauser Road,
4. Sheridan Drive / Fenwick Road,
5. Sheridan Drive / N. Forest Road.

The following section summarizes the existing traffic conditions, as described in detail in the 2023 TIS prepared by C&S.

Existing Roadway Network

Sheridan Drive (NYS Route 324) is classified as an urban principal arterial roadway under the jurisdiction of NYSDOT. Within the study area, motorists travel east and west using two travel lanes in each direction, a shared left turning lane with dedicated left turn lanes at intersections. Harlem Road (NYS Route 240)

forms a T-junction with Sheridan Drive at the western end of the study area and North Forest Road intersects Sheridan Drive at the eastern end of the study area. Interstate 290 contains an exit and entrance ramp onto Sheridan Drive. Additionally, there are several minor intersections with Sheridan Drive such as: Sunrise Boulevard, Cranburne Lane, Frankhauser Road, and Fenwick Road. Apart from Frankhauser Road, these are all unsignalized intersections and primarily serve residential areas. Sheridan Drive primarily contains three travel lanes in each direction with a center turn lane from the western end of the study area to the area of the I-290 ramps. From the ramps, it runs with two travel lanes and a center turn lane to the eastern end of the study area. There are no existing bicycle accommodations along any road in the study area. Both Sheridan Drive and North Forest Road have sidewalks along both sides of the street near the proposed site.

Table 5 Street Network Information (Interstate Ramps and Local Roads)

Street	Jurisdiction	Functional Class	AADT	Speed Limit
Sheridan Drive (NYS Route 324)	NYSDOT	Urban Principal Arterial	36,681	45 mph
Harlem Road (NYS Route 240)	NYSDOT	Urban Minor Arterial	11,530	35 mph
Interstate 290 (WB entrance ramp)	NYSDOT	Urban Principal Arterial Interstate	8,301	-
Interstate 290 (WB exit ramp)	NYSDOT	Urban Principal Arterial Interstate	6,985	-
Sunrise Boulevard	Town of Amherst	Urban Local	-	30 mph
Cranburne Lane	Town of Amherst	Urban Local	-	30 mph
Frankhauser Road	Town of Amherst	Urban Local	-	30 mph
Fenwick Road	Town of Amherst	Urban Local	-	30 mph
North Forest Road	Erie County	Urban Principal Arterial & Urban Minor Arterial	9,583	35 mph

Existing Traffic Conditions in the Project Vicinity

Turning movement counts (TMCs) were collected for intersections within the study area. The data was collected on Thursday, September 21, 2023 from 3:00 PM to 6:00 PM and Saturday, September 23, 2023 from 11:00 AM to 2:00 PM. The study area weekday afternoon peak hour is 4:30 PM to 5:30 PM and the Saturday midday peak hour is 12:00 PM to 1:00 PM. A Level of Service (LOS) analysis was conducted for the intersections. The LOS for the signalized intersections were classified with a rating from ‘A’ to ‘F’, with ‘A’ representing the best conditions and ‘F’ the worst.

Accident History / Investigation

A collision analysis was conducted by C&S to evaluate the collision history of signalized intersections of Sheridan Drive at Frankhauser Road and Sheridan Drive at North Forest Road. Collision data was

compiled, from January 2018 through December 2022. As detailed in the TIS, a total of 79 collisions were documented with 17 collisions at the Frankhauser Road intersection and 62 collisions at the North Forest Road intersection. Of these, 39% were reportable with injuries.

4.6.1.2 Bicycle and Pedestrian Circulation

There is no existing infrastructure for bicycling in the study area.

Sidewalks exist along both sides of Sheridan Drive for the entire length that is contained within the study area. Sidewalks are non-continuous along N. Forest Road. There are signalized crosswalks at the intersections of Sheridan Drive and Harlem Road, Sheridan Drive and Interstate 290 ramps, Sheridan Drive and Frankhauser Road, and Sheridan Drive and N. Forest Road. Marked crosswalks exist along Sheridan Drive at the intersections of Sunrise Boulevard, Cranburne Lane, and Fenwick Road. See the TIS in DSGEIS Appendix E (Figure 3 in Appendix A of the TIS) for the Pedestrian, Bicycle and Transit Map.

Bicycle and pedestrian networks, sidewalk and trails were analyzed within the Town of Amherst Bicentennial Comprehensive Plan Inventory and Analysis Report ("Inventory Report").[11] The Inventory Report makes reference to the Greater Buffalo-Niagara Regional Transportation Council ("GBNRTC") Regional Bikeway Implementation Plan ("RBIP") for the Buffalo-Niagara region. However, this plan has been updated with the new Bike Buffalo Niagara Regional Bicycle Master Plan 2020. This plan identifies the potential for establishing and preserving major regional connections with bicycle facilities. Within the plan the existing conditions were assessed and priorities were established based on the analysis. The regional plan provides design guidelines and treatment options for creating multi-modal corridors. Projects are listed in this report as areas to focus available funding sources on.

4.6.1.3 Public Transit

There is an existing operating bus line of the Niagara Frontier Transportation Authority (NFTA) present along Sheridan Drive, the 49 East Amherst line. There are 4 Bus stops in the study area. They are located at the intersections of Frankhauser Road and N. Forest Road.

4.6.2 POTENTIAL IMPACTS

No Build Condition

Historical traffic data was reviewed within the study area; there was an overall decrease in traffic volumes from 2011 to 2019. Based on the GBNRTC's regional Travel Demand Model (TDM), projections of future trip production and attraction for the no build condition anticipates a status quo condition with a small

[11] See Town of Amherst Bicentennial Comprehensive Plan. Inventory and Analysis Report. December 5, 2001. Available online at http://www.amherst.ny.us/pdf/planning/compplan/iar.pdf.

reduction in traffic of 1% - 2% in the future. Any growth in the area is due to other proposed developments; no background growth rate is proposed to analyze the future no-build condition.

Westwood Mixed-Use Neighborhood Project

The Westwood Mixed Use Neighborhood TIS was completed in 2017 by SRF Associates. The proposed site for this traffic study is the same site as the Amherst Central Park. The proposed site development proposed in the Westwood Mixed Use project included a variety of residential single family and multi-family homes, office spaces, mixed use commercial and residential building, a hotel, a senior living facility, a community center, and a public park. Trip generation projections competed for this study used the ITE Trip Generation Manual, 9th Edition and the peak generation trips ranged between 407 to 698 (over AM/PM and entering/existing trips).

Amherst Central Park

As detailed below, estimated trips generated by the Amherst Central Park ranged from 82 to 262, substantially less than the estimated trips generated by the previously proposed Westwood Mixed Use Neighborhood. The impact to the nearby neighborhood and roadways by the Amherst Central Park will be less than a proposed Mixed Use neighborhood.

The Property is proposed with a variety of improvements for public use, some of which include pedestrian and bike trails, community building, pavilions, playgrounds, theaters, ice skating rink, winter market, historic village, and more. The Property is bounded by Maple Road to the north, Sheridan Drive to the south and residential neighborhoods to the east and west. There are two proposed access points to the park, one at the existing Westwood Country Club driveway from N. Forest Road, and the other on Sheridan Drive at the intersection with Fenwick Road. The development of the Property is estimated to be a phased buildout with a phase one completion within the next 5 years and a phase 2 completion in the next 10 years.

C&S reviewed the uses set forth in the Conceptual Development Plan to develop estimates for trip generation. A combination of the ITE's Trip Generation Manual, seating capacity assumptions based on architectural standards, and historic attendance data were used to determine trips for the Amherst Central Park. It is unlikely that all facilities will be peaking and running events that coincide with one another. To not overestimate the trip generation, but also use a conservative approach, the major generators of the park were used to estimate the trip generation. Assumptions for the trip generation are as follows:

- Not all facilities will be at capacity or running programs and events at the same time on the same day.
- The facilities that are expected to be the major generators were used for the trip generation (community building and music theater).
- The community building is expected to have a Universal Pre-Kindergarten (UPK) program. This program is expected to peak slightly earlier in the day from the PM peak of the street network,

and also the music theater. Some trips were accounted for during the PM peak, to account for other community activities in the center, and late pick up/teacher departure for the UPK program.

- It is assumed that the music theater will offer evening performances. Seating capacity for the music theater was estimated using architecture standards based on the square footage of the facility. Vehicle occupancy rate was assumed to be 2.3 attendees/vehicle based on ITE Standards.
- It is assumed that there will still be some background trips using other facilities in the park such as the playground, splashpad, trails, etc. These background trips are accounted for in the trip generation.
- It is assumed that the park will create the most trips during the PM Peak (4:30-5:30 pm)and Saturday Midday Peak (12:00-1:00 pm).

Trip generation for the PM Peak and Saturday Peak was calculated and is outlined in Table 6 below.

Table 6 Trip Generation

Park Facility	ITE Land Use Code	PM Peak Trips			Saturday Midday / Peak Trips		
		Entering	Exiting	Total	Entering	Exiting	Total
Park	411 Public Park	18	15	33	33	34	61
Community Building	495 Recreational Community Center	40	46	86	36	31	67
Theater	N/A	70	17	87	70	17	87
Ice Rink/Ribbon	465 Ice Skating Rink	31	26	57	60	53	113
Peak Hour Trips		**159**	**104**	**263**	**200**	**128**	**328**

Trip distribution was based on existing traffic patterns in the study area. The main entrance of the Park is proposed to be off of Sheridan Drive, across from Fenwick Road. It was assumed the majority of the trips (70%) will be entering and exiting from the main entrance, and 30% will use the entrance on N. Forest Road.

Sheridan Drive has an approximate 50% split of traffic distributed between eastbound and westbound for both peak hours. Therefore, the overall study area distribution is 50% are coming to and from the east, and 50% are coming to and from the west. The more localized distribution is traffic distributed between the I-290 ramps, Harlem Road, and N. Forest Road.

A capacity analysis of the study area intersections was also completed. Based on the capacity analysis for the build condition, the proposed site has minor impacts on the level of service experienced at the study area intersections. Levels of service have remained the same at all the signalized intersections. (LOS D or better). The intersection of Sheridan Drive and Fenwick Road is the location of a proposed site driveway. The addition of the site driveway and the added volume from the site have impacted the level of service for the movements at the intersection. The minor approaches at this intersection are operating at

a LOS f for both the PM peak hour and the Saturday midday peak hour with long delays and queues. However, it is common for minor streets and left turns to have poor levels of service to benefit the level of service on the mainline in high traffic volume areas.

4.6.3 MITIGATION MEASURES

Mixed Use Alternative

Mitigation measures proposed for the Mixed Use Alternative included the following:

- Installation of a new traffic signal at the proposed full access public roadway to Sheridan Drive, at the time the roadway connection is completed. The signal should be coordinated with the existing traffic signal network along Sheridan Drive to the west of the Project Site.
- Installation a new traffic signal at the proposed full access public roadway connection to Maple Road when the roadway connection is completed.
- The proposed full access public roadway that will connect to Sheridan Drive should be designed to provide two lanes of exiting traffic and two lanes of entering traffic to both facilitate traffic movements and to achieve the desired alignment with Fenwick Road. The throat length of the driveway should be designed to accommodate vehicle queues exiting the site and reduce vehicle blockages of internal circulation roadways; therefore a minimum uninterrupted throat length of 200 feet is recommended by SRF Associates.
- Internal sidewalks should form an inter-connected network allowing users to actively walk amongst the various land use components to be included in the mixed use neighborhood. Additionally, internal paved recreational paths should be designed and installed to encourage bicycle use.
- The southern portion of the proposed mixed use neighborhood consisting of the commercial, higher density residential and the four-story hotel component should incorporate bicycle parking and related facilities into the design. Such facilities should include bike racks and consideration can be given to providing bike lockers, shower and changing facilities within one or more of the proposed buildings.
- Transportation demand management (“TDM”) strategies should be considered and implemented when practical to reduce off-site vehicular trips.
- Consideration should be given to reducing the number of parking spaces constructed on- site given the mixed use nature of the proposed neighborhood, potential for non-vehicular trips, and the potential for shared parking between non-competing uses.

The GEIS noted that traffic related mitigation measures on highways in the vicinity of the Project Site that are subject to the jurisdiction of the New York State Department of Transportation (“NYSDOT”) and the Erie County Department of Public Works (“ECDPW”) including but not limited to Sheridan Drive, which is

a NYS Highway and Maple Road, which is an Erie County Highway, including the timing of such mitigation measures, will be subject to the review and approval of these involved agencies.

The Town, in its Findings, noted that additional mitigation could be required.

Amherst Central Park Alternative

Mitigation is not necessary for the existing signalized intersections in the study area, as the proposed site has little impact on the levels of service at those intersections. Mitigation at the proposed site driveway on Sheridan Drive is recommended. A signal warrant analysis was conducted at the proposed site driveway. Based on the analysis, the expected volumes at the intersection did not warrant a new traffic signal. It is recommended that a traffic signal still be considered at the Amherst Central Park driveway on Sheridan Drive due to the long delays and vehicle queues expected at the site driveway and at Fenwick Road located across from the driveway. Refer to Appendix E for the signal warrant analysis.

Providing multi-modal access to Amherst Central Park should also be considered given the residential nature of the area and proposed amenities at the park. Of particular concern is providing a safe crossing of Sheridan Drive from the neighborhood immediately south of the park. If the traffic signal is installed at the Amherst Central Park driveway on Sheridan Drive, pedestrian signals should be included across all four legs. If the signal is not installed, consideration should be given to a High Intensity Activated Crosswalk (HAWK) signal or Rectangular Rapid Flashing Beacon (RRFB) with a center refuge median.

Transit access can be improved to Amherst Central Park as well. Working with NFTA, a dedicated bus stop could be provided along Sheridan Drive at the (proposed) signalized intersection with the site driveway. If the traffic signal is not installed, a dedicated bus stop could be added within the Park.

The recommended mitigation is substantially less in scope than mitigation required for the Mixed Use Alternative.

4.7 Human Health

4.7.1 EXISTING CONDITIONS

As noted in the FEAF, the Property was used as a golf course and has evidence of soil contaminants as a result of past use of herbicides/pesticides (refer to the DGEIS, Appendix Volume IV, page 76 of pdf, "Phase 2 Environmental Site Assessment"). A comprehensive environmental assessment of the Property revealed the presence of contamination in soils at the site that exceed New York State Department of Environmental Conservation ("NYSDEC") Soil Cleanup Objectives for commercial, passive and active remediation land use. The prior owner of the Property sought to enter into the Brownfield Cleanup Program (BCP) on February 26, 2015 and a Brownfield Cleanup Agreement was established with the NYSDEC dated March 10, 2015. The Project Site was assigned under site code C915291. After the Property was transferred to the Town, the Brownfield Cleanup Agreement was terminated, effective April 2023. Prior to purchasing the Property, the Town met with NYSDEC Region 9 Representatives to plan appropriate NYSDEC oversight of anticipated construction and development activities for the development of the Amherst Central Park.

4.7.2 POTENTIAL IMPACTS

Regardless of the Alternative selected, adequate control measures will be in place to ensure that any contaminated soils are managed in accordance with applicable laws and be protective of the environment and human health.

No Action Alternative

In the No Action Alternative, the nature and extent of the required control measures would be minimized, as the Property would remain undeveloped and limited to passive use.

Mixed Use Alternative

In the Mixed Use Alternative, the private owner intended to enter the Brownfield Cleanup Program to conduct the necessary remediation under control by the NYSDEC.

Amherst Central Park Alternative

A voluntary order with NYSDEC is currently being negotiated and will be executed prior to intrusive activities at the Property.

The Town will be managing any contaminated soils generated as part of the development of the Amherst Central Park in accordance with all applicable environmental laws and in accordance with NYSDEC requirements. In terms of short-term potential environmental impacts related to disturbance of the contaminated soils onsite, the Town will implement specific provisions for protection of workers and residents through prescribed environmental safety and health controls. These measures will include: construction practices to limit fugitive dust; site-specific practices for excavating, storing and disposing of

potentially contaminated soils to avoid surface water or groundwater exposure; and, monitoring of site conditions and community air quality during the development, in coordination with NYSDEC. In terms of long-term impacts, the remediation of the Property would provide a significant positive environmental impact by removing the potential for long-term human, environmental, and surface/groundwater exposure to the existing contamination.

4.7.3 MITIGATION MEASURES

Management and off-site disposal of any soils will be under the direction and regulatory control of NYSDEC to mitigate potential impacts to public health.

5.0 Other Impacts

5.1 Cumulative Impacts

Based upon consultation with the Town's Planning Department, there are no submitted applications for projects in the vicinity of the Property requiring discretionary approvals and/or permits that would result in the necessity for consideration to be given to the potential cumulative impacts of more than the potential adverse environmental impacts associated with the proposed Amherst Central Park Alternative.

However, development of the Amherst Central Park would result in cumulative benefits associated with the proximity of new improvements to the existing Audubon Park and the contribution of the Park toward achieving Town goals for development of parks and path networks according to the Open Space plan.

5.2 Unavoidable Adverse Impacts

As is the case with any development project, the proposed development of the Amherst Central Park will result in certain unavoidable short-term and long-term adverse impacts. The unavoidable adverse environmental impacts associated with the Amherst Central Park that would result from construction activities that will be relatively short-term and will include noise impacts resulting from construction equipment and construction related traffic, which will be much less than the anticipated unavoidable impacts discussed in the GEIS with regard to the Mixed Use Alternative.

The long-term unavoidable impacts resulting from the proposed Amherst Central Park will likewise be much less than those anticipated for the project discussed in the GEIS, but may include:

- Changes in the character and use of the Property, resulting from a change in land use from a vacant former private country club and golf course to a Park. As discussed in Section 4.2, many of the anticipated changes will be beneficial.
- Changes of the existing drainage patterns on the Property.
- Changes in lighting levels on the Property.
- Increases in traffic volumes on roadways in the vicinity of the Property;

The Town believes the Amherst Central Park will adequately address these changes and will result overall in positive community character impacts and other planning objectives outlined in the Comprehensive Plan, and discussed in Sections 1.2 and 4.2.

5.3 Irreversible and Irretrievable Commitments

Irreversible and irretrievable commitments resulting from the Amherst Central Park Alternative should be much less than those anticipated for the Mixed Use Alternative discussed in the GEIS, but may include:

- The use of resources including materials to be used for infrastructure improvements, buildings, etc. that are part of the Amherst Central Park; and
- The loss of existing vegetation and the associated loss of wildlife habitat on those portions of the Property to be developed in the Amherst Central Park.

The Town believes the Amherst Central Park Alternative will entail minimal use of resources and will result in long term preservation of environmental resources onsite.

5.4 Growth-Inducing Aspects of the Project

The Amherst Central Park will not result in any direct or potentially significant growth inducing impacts. The Property is located within a developed portion of the Town that is currently served by a full complement of utilities including sanitary sewer lines, water lines and other existing utility infrastructure, which have adequate capacity to service the Amherst Central Park. The increases in traffic volumes associated with the Amherst Central Park volumes on the roadway network in the vicinity of the Property have been properly accounted for within the 2023 TIS.

The Property is located within a developed portion of the Town that is presently served by a full complement of utilities, which have adequate capacity in the vicinity of the Property. The required water and sanitary sewer extensions will not exceed the designed capacity of the existing systems and will not induce additional development.

In contrast, the Mixed Use Alternative would require far more extensive water connections and would exceed existing sanitary sewer capacity. By design, the Mixed Use Alternative would induce substantially more growth in residential and commercial development compared to the Park Alternative.

6.0 Thresholds for Future Environmental Review of Related Actions

6.1 Introduction

This section of the DSGEIS provides information regarding the manner by which the Lead Agency and involved agencies will evaluate the potential environmental impacts of "future related actions" (sometimes referred to herein as "improvements") within the Amherst Central Park. The purpose of the Supplemental Findings Statement issued by the Lead Agency should set forth specific conditions or criteria under which future improvements not included in Appendix A will be undertaken or approved, including requirements for any subsequent compliance with SEQRA.[12]

6.2 SEQRA Compliance for Future Related Actions

The establishment of thresholds for the future environmental review of related improvements in the Amherst Central Park that are not set forth in Appendix A is an important component of this SGEIS. Examples of possible future related actions (aka improvements) may include development in the northern section of the Property in a manner that is not entirely consistent with the approved Conceptual Development Plan in Appendix A. This may occur given that the layout of the improvements as depicted on the Conceptual Development Plan is conceptual in nature. Instead, the layout as depicted on the Conceptual Development Plan is meant to depict the anticipated components of the Amherst Central Park and the maximum potential development that could occur without the need for additional environmental review(s) pursuant to SEQRA. The precise layout of improvements will be the subject of a ACP Application process for this Town-owned PUD. The future improvements will be reviewed in accordance with the process established in the PUD application.

The thresholds for environmental review for future improvements not included in Appendix A are intended to provide a framework for the Lead Agency and interested agencies to utilize to ensure compliance with the procedural and substantive requirements of SEQRA.

When future improvements are proposed within Amherst Central Park, the Town will take a step-wise approach to review under SEQRA:

- If the proposed improvement is a SEQRA Type II Action, no additional review is required.

[12] See 6 NYCRR Part 617.10(d). The same subsection of the SEQRA Regulations also states that a Findings Statement issued by a lead agency may include thresholds and criteria for supplemental EISs to reflect specific significant impacts, such as site-specific impacts, that were not adequately addressed or analyzed in the generic EIS.

- If the proposed improvement is a SEQRA Type I Action, a new Supplemental EIS or SGEIS will likely be required.
- If the proposed improvement is a SEQRA Unlisted Action, the Town will assess whether the potential environmental impacts associated with the improvement have been adequately addressed within the SGEIS, and the Supplemental Findings Statements.

In making this determination, the Lead Agency will need to determine whether the ACP Application is consistent with this SGEIS and Supplemental Findings to be issued. Specifically,

1. If the Town determines that the future improvement will be carried out in conformance with the thresholds established in the SGEIS or Supplemental Findings Statement, then no further SEQRA compliance will be required;
2. If the Town determines that the future improvement was adequately addressed in the SGEIS but not adequately addressed in the Supplemental Findings Statement, then an amended Supplemental Findings Statement must be prepared;
3. If the Town determines that the future improvement is not addressed, or not adequately addressed, in the SGEIS, but it will not result in any significant adverse environmental impact, then a negative declaration must be prepared; or
4. If the Town determines that the future improvement is not addressed, or is not adequately addressed, in the SGEIS and may have one or more significant adverse environmental impacts, then a supplement to the SGEIS must be prepared.[13]

6.3 Thresholds for the Development of the Property

The following thresholds have been established for Amherst Central Park. If a future related action or improvements are not consistent with the thresholds as provided below, the Town will need to conduct an environmental review of the future improvement.

1. The Property will be developed consistent with the PUD Application, which represents the maximum anticipated development of the Amherst Central Park.
2. As discussed above, the Amherst Central Park will include the following construction:
    - Ice Ribbon and Ice Rink, approximately 25,000 SF
    - Inclusive Playground, approximately 12,500 SF
    - Splash Pad, approximately 6,100 SF

[13] See 6 NYCRR Part 617.10(d).

- Public Plaza, approximately 20,000 SF including a Winter Market, approximately 5,000 SF (buildings)
- Renovation of the former clubhouse into a Community Building, approximately 2,500 SF addition to existing (approximately 44,500 SF total at completion, including basement and all floors), to provide services including space for a Universal Pre-Kindergarten (UPK) program
- Outdoor Amphitheater, approximately 3,300 SF
- Community Theater Building, approximately 31,600 SF
- New building for the Buffalo Niagara Heritage Village Museum – approximately 36,000 SF, as well as relocation of historical buildings associated with the museum, totaling approximately 20,000 SF
- Enhancement of an existing wetland as a decorative pond and associated onsite mitigation (if required) and filling or modification of non-regulated wetlands
- Ancillary park improvements such as playgrounds, gardens/greenhouses, pedestrian access/pathways, educational kiosks and access drives as shown conceptually on the PUD plan
- Construction of required mechanical buildings, public restrooms, parking lots, and supportive utilities such as storm sewers and stormwater management features, sanitary sewers, water, fiber optic cables, electric and natural gas service

3. Amherst Central Park will be developed in a manner that is consistent with the approved Conceptual Development Plan in accordance with the procedures set forth in the PUD Application for this Town-owned Amherst Central Park PUD.

4. Amherst Central Park will be developed and utilized in accordance with mitigation measures as contained in the Supplemental Findings Statements to be issued by the Town Board, in its capacity as the designated Lead Agency.

The thresholds for the environmental review of future improvements will be included in the Supplemental Findings Statement to be issued by the Town Board at the conclusion of the pending environmental review of the proposed Amherst Central Park pursuant to SEQRA.

APPENDICES

Appendix A Amherst Central Park PUD Conceptual Plan

AMHERST
New York

CENTRAL PARK
PUD PLAN

October 2, 2023

COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.

Prepared By
DOVER, KOHL & PARTNERS

Modified By
The Town of Amherst

LEGEND

UNIQUE FEATURES

1) Community Building (Former Club House)
2) Music Fare Theater
3) The Winter Market
4) Ice Ribbon + Ice Rink
5) Splash Pad + Inclusive Playground
6) Amphitheater
7) Lake Front Pavilion
8) Outdoor Exercise Equipment (10 Stations)
9) Community Gardens (can be any size)
10) Greenhouse
11) Maintenance Area
12) Low Ropes Course or suspended bridges
13) Sheltered Bus Stop (at South Entrance)
14) Buffalo Niagara Heritage Village (Relocated)
15) Multi-use Pavilion

Multiple Features

- (PG) Playground (Conventional Equipment)
- (PN) Playground (Natural)
- (RR) Restrooms
- (SH) Roofed Open Air Shelters
- (OC) Outdoor Classrooms
- (AP) Public Art / Sculpture Sites
- (BT) Off-road Bike Trails, 4-feet wide, dirt
- (AR) Accentuated Rise (mounded hills)
- (MG) Minor Entrance Gates.
- (Bikes) Bicycle Parking Racks (size to be determined)

Existing Deciduous

Existing Tree Canopy

Existing Water

Proposed Marsh / Water

Appendix B Amherst Central Park Complete Application and EAF

TOWN OF AMHERST PLANNING DEPARTMENT

Application for Planned Unit Development (PUD) Review

For Official Use

File #: _____ **Acreage** _____ **Fee $** _____

Address Verified by Assessor's Office _____ VERIFIED BY DATE

Materials Received by Planning Department _____ RECEIVED BY DATE

Fee Paid to Town Clerk _____ RECEIVED BY DATE

PUD Plan Review fees to be determined

To Be Completed By Applicant

Petitioner:

Name: Town of Amherst Town Board

Address: Town of Amherst

5583 Main Street

Williamsville (city) NY (state) 14221 (zip code)

Phone: 716-631-7051 Fax: _____

E Mail: planningemail@amherst.ny.us

Representative (Architect, Engineer, Landscape Architect, Surveyor, or Attorney)**:**

Name: Daniel C. Howard, AICP, Planning Director

Address: Town of Amherst

5583 Main Street

Williamsville, (city) NY (state) 14221 (zip code)

Phone: 716-631-7051 Fax: _____

E Mail: dhoward@amherst.ny.us

Project Location (must be verified by Town Assessor's Office)**:**

Address: 772 North Forest, 385 Maple Road, 391 Maple Road

Williamsville, NY

SBL No(s): 68.01-1-1.2, 55.18-4-9 & 55.18-4-10

Project Name: Amherst Central Park

Project Description:

Adoption of a conceptual development plan for a planned unit development for the conversion of a former private golf course to a community park to include cultural, recreational and civic public spaces on an approximately 170.5 +/- acre parcel (see attached description)

If this petition is an amendment to a previously approved site plan, please describe the proposed changes (include type and size of existing structures and number of existing parking spaces):

	existing	proposed	total
Gross Floor Area (non-residential):	13,411 sf	175,077 sf	188,488 sf
Gross Floor Area Residential:	0	0	0
Number of Residential Units:	0	0	0
Number of Parking Spaces:	240	323	563

Acreage of Parcel: 170.5 +/- acres

(list each parcel separately)

Frontage on Public Roads: 1823.97 feet Sheridan Drive, 887.89 feet North Forest Road

(list each road separately) & 110 feet Maple Road

Existing Zoning District(s) RC- Recreation Conservation

X:\Current_Planning\Application Forms 2021\PUD Application Packet_2023.docx
REVISED July 2023

Conceptual Development Plan for Amherst Central Park Planned Unit Development

The Town of Amherst Conceptual Development Plan for the Amherst Central Park Planned Unit Development (PUD Plan) proposes the development of a Town Park on 170.55 acres of land on the former Westwood County Club property located at 772 North Forest Road and 385 & 391 Maple Road ("Property"). The future Amherst Central Park is an opportunity to create a beautiful natural community resource for the enjoyment of people of all ages. The Park will provide a place for people to connect and interact in a shared environment and brings intrinsic environmental, civic, and recreation benefits to residents and visitors to the Town.

Background

In November 2017 the Town Board, acting as the Lead Agency, issued a Final Generic Environmental Impact Statement ("FGEIS") for the proposed development of a 170 acre the former Westwood Country Club ("Property"). The FGEIS was prepared in response to an application submitted by the then-owner of the Property, requesting approval to rezone it from Recreation Conservation (RC) District to Traditional Neighborhood Development District (TND), Multi-Family Residential District 7 (MFR-7) and General Business District (GB). The "Westwood Neighborhood Rezoning Application" involved 130 town homes, 180 multi-family residential units, 26 larger patio homes, 57 smaller patio homes, 41 single-family homes, 104 senior independent living units, 130 hotel rooms and finally 212 multi-family residential units in mixed-use buildings.

Following preparation of the FGEIS, the Town Board issued its State Environmental Quality Review (SEQR) Findings Statement on December 11, 2017, and concluded that:

> Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the Project does not avoid or minimize adverse environmental impacts to the maximum extent practicable, and that adverse impacts will not be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.

The rezoning application was denied.

Since that time, the Town of Amherst has purchased the property and through planning and public input has prepared a proposed Conceptual Development Plan for the Amherst Central Park. The Town Board has prepared an Application for the Property to be subject to a Planned Unit Development to implement the Conceptual Development Plan.

The Amherst Central Park PUD Plan

The proposed Town of Amherst Central Park PUD Plan is the product of a multi-year participatory planning process involving municipal leaders, residents, community stakeholders and consultants. The Plan proposes a multi-use park featuring natural resources, a community center for activities related to environmental education, fine arts, active and passive recreation, and historic preservation. The Park will provide a place for people to connect and interact in a shared environment and brings intrinsic environmental, civic, and recreation benefits to residents and visitors to the Town.

The area envisioned for the Amherst Central Park has been designated for recreation and open space uses as proposed in the PUD Plan for a long time. As a former Country Club, the Property included golf, tennis, swimming and civic uses associated with its Clubhouse. Recommended as Recreation, Open Space, and Greenways in the Town's Bicentennial Comprehensive Plan (Figure 6), and a component of the Amherst Local Waterfront Revitalization Program (LWRP) Plan (Section 4), the Park, with its location along Ellicott Creek is a featured project for recreation and waterfront enhancement in the Town.

Figure 1 illustrates the proposed Conceptual Development Plan for the PUD. Initial work will begin in the southern portion of the Property. Using an existing entrance with access to North Forest Road and a proposed entrance to Sheridan Drive, the Plan proposes the following features moving from the southeast to the southwest portion of the parcel:

- Parking Lot Restoration and Expansion,
- Ice Ribbon and Ice Rink, approximately 24,400 SF
- Inclusive Playground, approximately 12,400 SF – adjacent to the Ice Ribbon and Ice Rink area
- Splash Pad, approximately 6,100 SF – adjacent to the Inclusive Playground
- Mechanical Building to support the Ice Ribbon and Splash Pad with Public Restrooms
- Public Plaza – to feature a Winter Market and host a variety of community and economic driving events
- Renovated Community Building (the Former Clubhouse) to include publicly accessible amenities along with a portion of the building to become a universal Pre-Kindergarten site for the Williamsville School District,
- Outdoor Amphitheater
- Community Theater Building, approximately 31,000 SF to accommodate a prospective tenant, Musical Fare
- Buffalo Niagara Heritage Village Museum area to include a new building, themed playground and the relocated historical buildings (to be relocated from their current site under professional direction), and
- Supportive utilities such as sanitary sewers, water, electric and natural gas service.

The northern portion of Amherst Central Park is planned for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas. From the southern portion, moving to the north, a proposed main loop drive provides access to features such as maintained trails and bike paths, natural playgrounds, and a variety of community gardens and tree plantings.

Supplemental Environmental Review

The PUD Plan is subject to review under the SEQR Act. A supplement to the FGEIS (SGEIS) is required because, pursuant to 6 NYCRR 617.10(d)(4), "[t]he subsequent proposed action was not addressed or was not adequately addressed in the Generic EIS and the subsequent action may have one or more significant adverse environmental impacts." The Town has prepared a Part 1 Environmental Assessment Form for the Central Park Project, as well as a proposed Part 2 and Part 3 for consideration by the Town Board. There are four potential significant adverse environmental impacts that should be addressed in a supplement to the FGEIS. The following are the four impacts:

1. Impact on land

2. Impact on surface water
3. Impact on transportation
4. Impact on human health

The Town Board will prepare a Supplement FGEIS for the four items requiring further analysis. It should be noted that in light of the prior SEQRA analysis for the Property, and public outreach, the Town Board may decide to waive scoping for the preparation of the Supplemental FGEIS. As part of the planned unit development process, both the Planning Board and the Town Board will be holding public hearings on the PUD Plan Application.

Amherst Central Park Facility Improvements Review Process

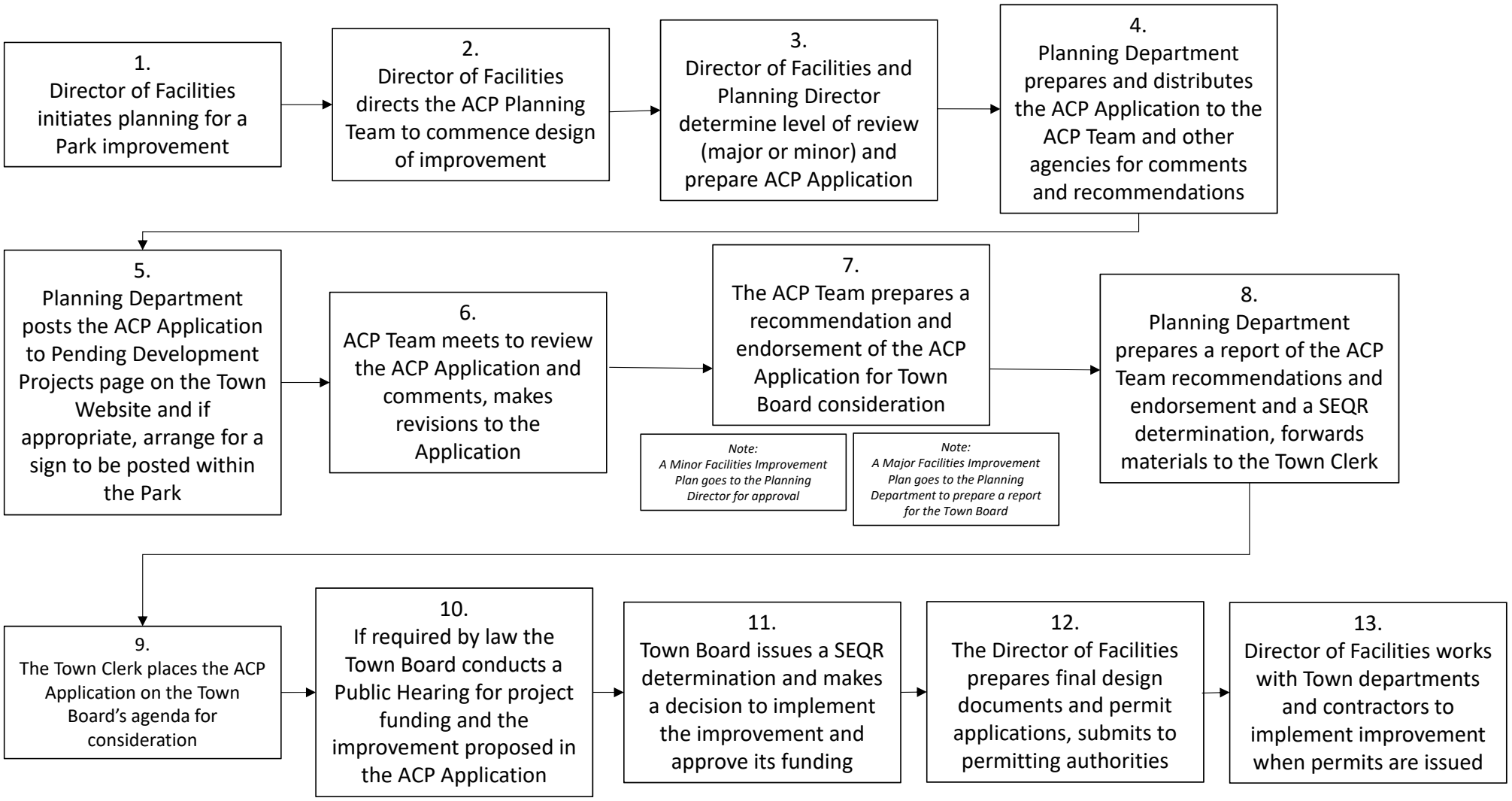
The Town is developing the Park pursuant to the Planned Unit Development (PUD) Process set forth in Section 6-9 of the Zoning Code, as the Property is in excess of 30 acres. As set forth in Zoning Code 6-9-1, the purpose of the PUD Process is to permit coordinated development that allows flexibility to respond to market demands. Pursuant to Zoning Code 6-9-2, the Town Board intends to adjust the regulations, standards and criteria of the Zoning Ordinance as part of the PUD Process for the Amherst Central Park to implement the Conceptual Development Plan and future improvements that are not part of the Conceptual Development Plan. Figure 2 on the following page sets forth the process for developing, approving and implementing the improvements in Amherst Central Park.

As part of the development of the Amherst Central Park, the Town Board will establish an Amherst Central Park (ACP) Planning Team, which will include, but not be limited to, the Director of Facilities, the Town Engineer, Town Architect, Building Commissioner, Planning Director, and Police/Fire Representative.

The Amherst Central Park (ACP) Facility Improvement Review Process depicted in figure 2 is described in more detail below.

1. The Director of Facilities will initiate planning for a Park improvement, which may commence through his or her own initiative; through specific direction by the Town Board; through implementation of projects previously approved by the Board or set forth in the Town's Capital Improvement Program (CIP).
2. Once the concept has been initiated, the Director of Facilities will direct the ACP Planning Team to commence planning and design of the improvement.
3. The Director of Facilities will work with the Planning Director to determine the level of review necessary (major or minor) and prepare a Facilities Improvement Plan application ("ACP Application") for the ACP Planning Team to review.
4. The Planning Department will prepare and distribute the ACP Application to the ACP Planning Team, and other agencies as appropriate, for comments and recommendations.

Proposed Amherst Central Park (ACP) Facility Improvement Review Process



10/11/23

Figure 2

5. The Planning Department will post the ACP Application to its Pending Development Projects page on the Town Website and, if appropriate, arrange to post a sign with notice of the improvement within the Park.

6. The ACP Planning Team will meet to review the ACP Application and comments received, and, if necessary, makes revisions to the ACP Application based upon the comments received.

7. The ACP Planning Team will prepare a recommendation and endorsement in support of the ACP Application for consideration by the Town Board.

8. The Planning Department prepares a report of the ACP Team recommendations and endorsement and a SEQR determination, forwards materials to the Town Clerk.

9. The Town Clerk will place the ACP Application on the Town Board's agenda for consideration.

10. If required by law, the Town Board will conduct a Public Hearing for project funding and the improvement proposed in the ACP Application.

11. The Town Board will issue a SEQRA determination and makes a decision whether to proceed with approving and implementing the improvement set forth in the ACP Application and its funding.

12. The Director of Facilities will prepare final design documents and appropriate permitting applications, submits materials to the permitting authority.

13. Director of Facilities will work with appropriate Town Departments and contractors to implement the improvement once the permitting authorities issue the necessary permits.

AMHERST
New York

CENTRAL PARK
Concept Plan

October 2, 2023

COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.

Prepared By
DOVER, KOHL & PARTNERS

Modified By
The Town of Amherst

LEGEND

UNIQUE FEATURES
1) Community Building (Former Club House)
2) Music Fare Theater
3) The Winter Market
4) Ice Ribbon + Ice Rink
5) Splash Pad + Inclusive Playground
6) Amphitheater
7) Lake Front Pavilion
8) Outdoor Exercise Equipment (10 Stations)
9) Community Gardens (can be any size)
10) Greenhouse
11) Maintenance Area
12) Low Ropes Course or suspended bridges
13) Sheltered Bus Stop (at South Entrance)
14) Buffalo Niagara Heritage Village (Relocated)
15) Multi-use Pavilion

Multiple Features
- (PC) Playground (Conventional Equipment)
- (PN) Playground (Natural)
- (RR) Restrooms
- (SH) Roofed Open Air Shelters
- (OC) Outdoor Classrooms
- (ART) Public Art / Sculpture Sites
- (BT) Off-road Bike Trails, 4-feet wide, dirt
- (AR) Accentuated Rise (mounded hills)
- (MG) Minor Entrance Gates.
- (Bikes) Bicycle Parking Racks (size to be determined)

Existing Deciduous

Existing Tree Canopy

Existing Water

Proposed Marsh / Water

MAPLE ROAD
FAIRWAYS BLVD
Little Hardwood Swamp (exist.)
Pond (existing)
Exist. Wetland
Big Hardwood Swamp (existing)
Natural Preserve Area
Existing Cart Path >>>>
Pond (Existing)
Existing Property Line
DRIVE
Summer Forest
Emergent Marsh (restore)
<<< Existing Path
Playground (New)
Autumn Forest
CENTRAL MEADOW
Founders' Tree (to be planted at groundbreaking ceremony)
Flower garden
Spring Forest -flowering trees-
Sm Prkg
Natural Playground (New)
Low Ropes or Small Elevated Bridges (New)
Successional Northern Hardwood Forest
Natural Regeneration Area
Outdoor Exerc. Equip't (New)
Winter Forest
Playground (New)
DRIVE — one way →
Reconstructed Bridge
Existing Property Line
Future Community Garden
Greenhouse (New)
Proposed Stormwater Retention
Pavilion (New)
Off-road Bike Trails (One-Way)
Pedestrian & Bike Entrance
Gate
Pavilion (Existing)
Amphitheater (New)
Maintenance (New)
100'-7"
NORTH FOREST ROAD
FRANKHAUSER RD
Field 2 44062 SF 1.01 Acres
Hoover House
Blacksmith Shop
Brewer's Cottage
School
Fiber Arts
Village Store
Elliott House
Trinity Church
Bandstand
202'-4"
THE BIG MEADOW
UPK Playground
Outdoor Pool (Existing)
Club House (Existing)
South Entrance Garden
BNHV Relocated Small Structures
Field 1 56792 SF 1.30 Acres
Playground
BNHV (New)
Theater (New)
Winter Market (New)
Splash Pad
Accessible Playground
86'-8"
118'-1"
Restroom & Skate Rental (New)
Ice Ribbon & Rink
186'-11"
477'-4"
Enlarge exist. Canal into pond
356'-6"
146'-9"
ACP Entrance Signage
Existing Berm
SHERIDAN DRIVE

AMHERST
New York

CENTRAL PARK
Existing 100 Yr. Floodplain

October 2, 2023

COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.

Prepared By
DOVER, KOHL & PARTNERS

Modified By
The Town of Amherst

MAPLE ROAD

FAIRWAYS BLVD

Little Hardwood Swamp (exist.)

Pond (existing)

Exist. Wetland

Existing Cart Path

Big Hardwood Swamp (existing)

Natural Preserve Area

Pond (Existing)

EXISTING 100 YR. FLOODPLAIN

Existing Property Line

DRIVE

Summer Forest

Emergent Marsh (restore)

Playground (New)

Autumn Forest

Founders' Tree (to be planted at groundbreaking ceremony)

Flower Garden

CENTRAL MEADOW

Sm Prkg

Spring Forest -flowering trees-

Natural (New) Playground

Low Ropes Course (New)

Small Elevated

Reconstructed Bridge

Existing Property Line

Successional Northern Hardwood Forest (New)

Natural Regeneration Area

Outdoor Exerc. Equip't

Winter Forest

Playground (New)

DRIVE — one way

Sm Prkg

EXISTING 100 YR. FLOODPLAIN

EXISTING 100 YR. FLOODPLAIN

Community Garden

Greenhouse (New)

Pavilion (New)

Sm Prkg

Sm Prkg

Off-road Bike Trails (One-Way)

Gate

Pedestrian & Bike Entrance

Pavilion (Existing)

Service Lane

Gate

Amphitheater (New)

Gate

DRIVE

Maintenance (New)

NORTH FOREST ROAD

FRANKHAUSER RD

Field 2
44062 SF
1.01 Acres

Corn, Beans, Squash

Blacksmith Shop

Wheelchair Barrier

School

Sewer's Cabin

Barn

Fiber Arts

Village Store

Bandstand

Hoover House

Victory Garden

Elliot House

Trinity Church

THE BIG MEADOW

UPK Playground

Outdoor Pool (Existing)

Club House (Existing)

South Entrance Garden

Playground

Bigelow Home

Schmitt Log House

BNHV (New)

Field 1
56792 SF
1.30 Acres

Grapes

Veg.

Pumpkin

Apples

Peaches

DRIVE

DRIVE

DRIVE

DRIVE

Splash Pad

Accessible Playground

Winter Market (New)

Restroom & Skate Rental (New)

Ice Ribbon & Rink

MAIN ENTRANCE

UPPER LEVEL EXITS

GARDEN / PATIO OUTDOOR SPACE

RETAINING WALL

Theater (New)

LOWER LEVEL DELIVERIES

STAFF ENTRY

EMER. EXIT

Enlarge exist. Canal into pond

Existing Berm

ACP Entrance Signage

Existing Berm

SHERIDAN DRIVE

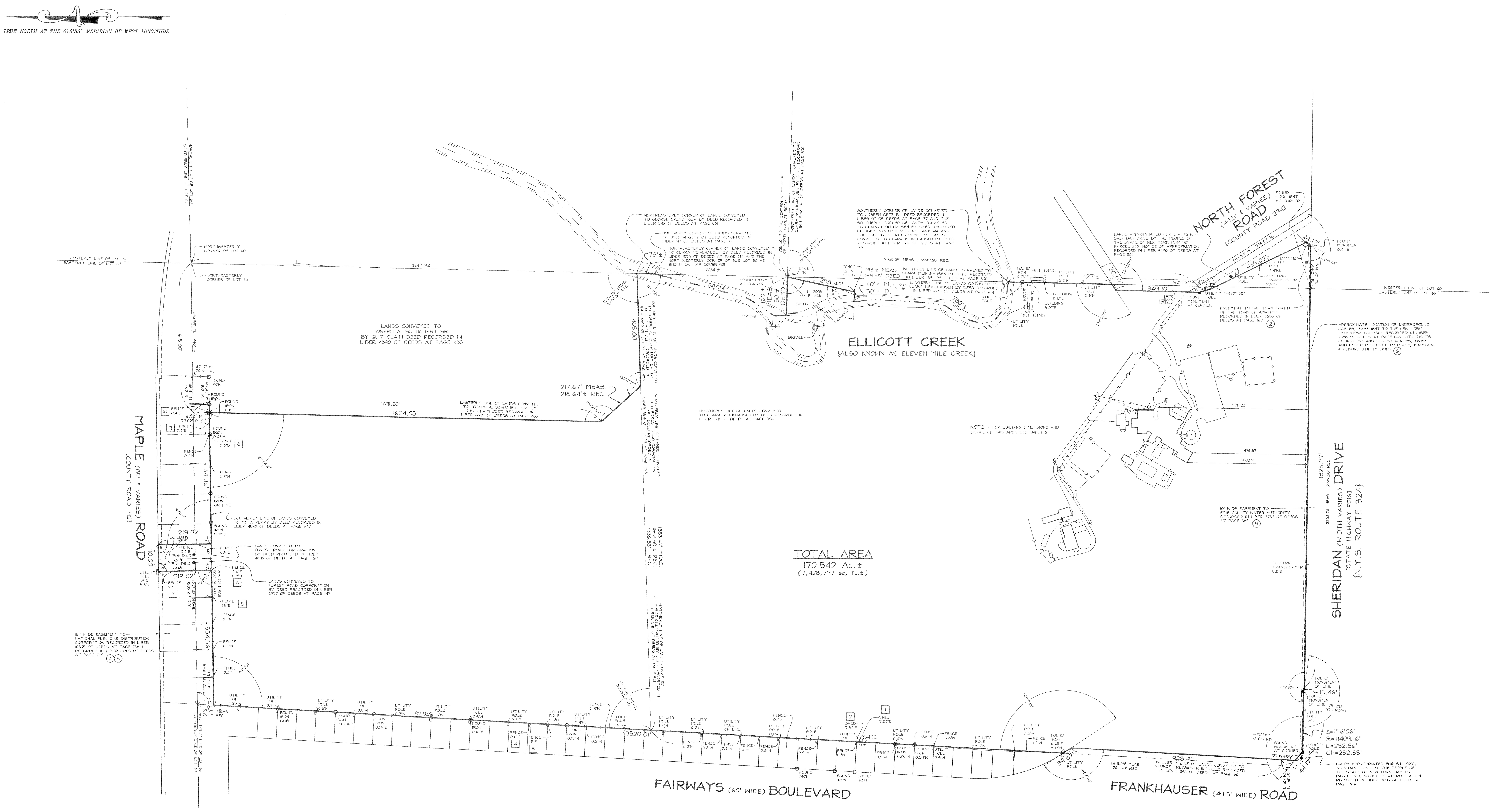


TABLE OF EASEMENTS

Public Abstract Corporation Search No. 2051-102026
Public Abstract Corporation Search No. 2051-109796

1. Easement to the Town of Amherst recorded in Liber 200 of Deeds at page 400 does not affect subject premesis the easement lies in Lot 60 North of Ellicott Creek.
2. Easement to the Town Board of the Town of Amherst recorded in Liber 8285 of Deeds at page 167 does affect subject premesis and is shown hereon.
3. Easement to The New York Telephone Company recorded in Liber 10274 of Deeds at page 842 does affect subject premesis and is shown hereon.
4. Easement to National Fuel Gas Distribution Corporation recorded in Liber 10305 of Deeds at page 758 does affect subject premesis and is shown hereon.
5. Easement to National Fuel Gas Distribution Corporation recorded in Liber 10305 of Deeds at page 759 does affect subject premesis and is shown hereon.
6. Easement to The New York Telephone Company recorded in Liber 7088 of Deeds at page 665 does affect subject premesis and is shown hereon.
7. Temporay easement to the Town of Amherst recorded in Liber 9251 of Deeds at page 101 released no later then the 31 of June, 1984 and does not affect subject premesis.
8. Easement to The New York Telephone Company recorded in Liber 9843 of Deeds at page 147 does affect subject premesis and is shown hereon.
9. Easement to Erie County Water Authority recorded in Liber 7759 of Deeds at page 585 does affect subject premesis and is shown hereon.

TABLE OF ENCROACHMENTS

1. NEIGHBORS SHED ENCROACHES ONTO SUBJECT PROPERTY 7.37' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
2. NEIGHBORS SHED ENCROACHES ONTO SUBJECT PROPERTY 7.82' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
3. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 1.5' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
4. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 0.6' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
5. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 1.5' SOUTH OF THE NORTHERLY LINE OF SUBJECT PROPERTY.
6. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 2.6' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
7. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 2.6' EAST OF THE WESTERLY LINE OF SUBJECT PROPERTY.
8. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 0.6' SOUTH OF THE NORTHERLY LINE OF SUBJECT PROPERTY.
9. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 0.6' SOUTH OF THE NORTHERLY LINE OF SUBJECT PROPERTY.
10. NEIGHBORS FENCE ENCROACHES ONTO SUBJECT PROPERTY 0.4' SOUTH OF THE NORTHERLY LINE OF SUBJECT PROPERTY.

GRAPHIC SCALE

160 0 80 160 320 640

(IN FEET)
1 inch = 160 ft.

SURVEYOR'S CERTIFICATE
ALTA/ACSM LAND TITLE SURVEY
of
772 North Forest Road, 385 Maple Road and 391 Maple Road
Amherst, New York
prepared for
Westwood Country Club

TO:
Forest Rd. Corporation/Westwood County Club,
Ticor Title Insurance Company,

This is to certify that this map or plat and the survey on which it is based were made in accordance with "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA, ACSM and NSPS in 1999, and includes Items 4, 7(a), 8, 10, 11(a), and 14 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA, NSPS and ACSM and in effect on the date of this certification, undersigned further certifies that the Positional Uncertainties resulting from the survey measurements made on the survey do not exceed the allowable Positional Tolerance.

Kevin P. Clough, RLS

Kevin P. Clough, R.L.S.
Corporate License No. 020
Within the State of NY
Nussbaumer & Clarke, Inc.
3556 Lake Shore Road
Buffalo, NY 14219
Phone: 716-827-8000 Ext. 236
Fax: 716-826-7958

Date of Survey: July 19, 2005
Date of Last Revision: February 7, 2006
Date Printed: February 7, 2006

NOTE: UNAUTHORIZED ALTERATIONS OR ADDITIONS TO ANY SURVEY, DRAWING, DESIGN, SPECIFICATION, PLAN, OR REPORT IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
COPYRIGHT © 2005, NUSSBAUMER & CLARKE, INC.

A.L.T.A. SURVEY
FOR
WESTWOOD COUNTY CLUB

PART OF LOT(S) 60 & 66
TOWNSHIP 12 RANGE 7
TOWN OF AMHERST
COUNTY OF ERIE STATE OF NEW YORK

Nussbaumer & Clarke, Inc.
Engineers and Surveyors
3556 Lake Shore Road
Buffalo, New York 14219-1494
(716) 827-8000
www.nussclarke.com

DRAWN BY: K.P.C./C.D.S	REV. FEB. 6, 2006 FEB. 7, 2006	SHEET NO. 1 OF 2
DATE: JULY 19, 2005	JOB NO. 05J2-0262	
SCALE: 1" = 160'	DWG. NO. T-710-1	

NIAGARA FRONTIER LAND SURVEYORS Association Inc. 1960 MEMBER

X:\05\05J2-0200\05J2-0262.DWG 02-07-06 K.P.C.

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Amherst Central Park		
Project Location (describe, and attach a general location map): Property located at 772 North Forest Road, 385 & 391 Maple Road		
Brief Description of Proposed Action (include purpose or need): Adoption of a conceptual development plan for a planned unit development for the conversion of a former private golf course to a community park to include cultural, recreational and civic public spaces on an approximately 170.5 +/- acre parcel.		
Name of Applicant/Sponsor: Town of Amherst	Telephone: (716) 631-7051 E-Mail:	
Address: 5583 Main Street		
City/PO: Williamsville	State: NY	Zip Code: 14221
Project Contact (if not same as sponsor; give name and title/role): Daniel C. Howard, AICP, Planning Director	Telephone: (716) 631-7051 E-Mail: dhoward@amherst.ny.us	
Address: 5583 Main Street		
City/PO: Williamsville	State: NY	Zip Code: 14221
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☑Yes ☐No	Town Board	October 2023
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Planning Board (PUD recommendation)	TBD
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Amherst Building Department - Construction permits	TBD
e. County agencies ☑Yes ☐No	Erie County Dept of Environment and Planning 239GML & ECDPW - ROW permits	October 2023
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDOT - ROW permit NYSDEC - SPDES and wetland permits	TBD
h. Federal agencies ☑Yes ☐No	US Army Corps of Engineers -CWA 404	TBD

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS Heritage Areas:West Erie Canal Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
RC- Recreation Conservation

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☑ Yes ☐ No
If Yes,
i. What is the proposed new zoning for the site? no zoning district change, however, adjustments are proposed as part of the PUD application

C.4. Existing community services.

a. In what school district is the project site located? Williamsville Central School

b. What police or other public protection forces serve the project site?
Town of Amherst Police Department

c. Which fire protection and emergency medical services serve the project site?
Snyder Fire District, Millard FIllmore Suburban Hospital

d. What parks serve the project site?
Town of Amherst Audubon Golf Course, Town of Amherst Northtown Center (Ice Rink) & Recreation Complex (Athletic Fields), Town of Amherst Par 3 Golf Course, Town of Amherst Ellicott Creek Trailway (bike path and tennis courts)

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Mixed - Recreation, Civic, Community Facility, Commercial

b. a. Total acreage of the site of the proposed action? 170.5 acres
b. Total acreage to be physically disturbed? 17+/- acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 170.5 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☑ Yes ☐ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated TBD
- Anticipated commencement date of phase 1 (including demolition) June month 2024 year
- Anticipated completion date of final phase June month 2034 year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:
The southern portion of the project site will be completed first, which will have the most intensive development with recreation, community and civic facilities.

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 11+/-new plus 20 +/- relocated structures

ii. Dimensions (in feet) of largest proposed structure: 40 height; 150 width; and 200 length

iii. Approximate extent of building space to be heated or cooled: 30,000 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☑ Yes ☐ No

If Yes,

i. Purpose of the impoundment: creation of decorative pond

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☑ Surface water streams ☐ Other specify:

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: 937.79 million gallons; surface area: 0.96 acres

v. Dimensions of the proposed dam or impounding structure: 3 height; 450+/- length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

excavation of existing town drainage way

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☑ Yes ☐ No
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i .What is the purpose of the excavation or dredging? Removal of soil for buildings and pond construction

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): TBD
- Over what duration of time? TBD

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. Will there be onsite dewatering or processing of excavated materials? □ Yes □ No If yes, describe. removal of existing natural soil strata and historical soil fill material from golf course construction. Management and off site disposal of any soils will be under the appropriate oversight of NYS DEC. ☐ ☑

iv.

v. What is the total area to be dredged or excavated? TBD acres

vi. What is the maximum area to be worked at any one time? TBD acres

vii. What would be the maximum depth of excavation or dredging? TBD feet

viii. Will the excavation require blasting? ☐ Yes ☑ No

ix. Summarize site reclamation goals and plan:

site to be reclaimed for passive and active recreation.

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☑ Yes ☐ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): see isolated wetlands and unregulated tributaries in the delineation report prepared by Earth Dimensions, Inc. dated June12, 2023

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

The Town will alter the wetlands identified as wetland W11 and W12 to accommodate the location of a theater and museum building. Tributary 3 will be also be altered. These water bodies will be altered to accommodate stormwater detention and a decorative pond.

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☑ Yes ☐ No

If Yes, describe: construction of a decorative pond may disturb existing sediments in tributary 3

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☑ No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

Disturbed area will be reclaimed to a decorative pond in the southwest corner of the initial project area.

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No

If Yes:

i. Total anticipated water usage/demand per day: 100,000 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑ Yes ☐ No

If Yes:

- Name of district or service area: Town of Amherst/ECWA Lease Management Area
- Does the existing public water supply have capacity to serve the proposal? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No
- Do existing lines serve the project site? ☑ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☑ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: building service lines and a new main extension will be constructed to service the buildings.
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑ No

If, Yes:

- Applicant/sponsor for new district: N/A
- Date application submitted or anticipated: N/A
- Proposed source(s) of supply for new district: N/A

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No

If Yes:

i. Total anticipated liquid waste generation per day: 80,000 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): sanitary wastewater will be generated, including splash pad spray to drain system and backwash water for swimming pool

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑ Yes ☐ No

If Yes:

- Name of wastewater treatment plant to be used: Town of Amherst Wastewater Treatment Plant #16
- Name of district: Town of Amherst Consolidated Sewer District
- Does the existing wastewater treatment plant have capacity to serve the project? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☑ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: A sanitary main extension will be constructed to service the site with individual laterals for each new occupied buildings.

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:

- Applicant/sponsor for new district: N/A
- Date application submitted or anticipated: N/A
- What is the receiving water for the wastewater discharge? N/A

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

N/A

vi. Describe any plans or designs to capture, recycle or reuse liquid waste:

N/A

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑ Yes ☐ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 16.85 acres (impervious surface)

_____ Square feet or 170.5 acres (parcel size)

ii. Describe types of new point sources. The creation of new parking lots, impervious park spaces, paved pathways, Town facilities, landscaped/ manicured lawn spaces and park/access roads.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Site runoff will be captured and treated in source proximity before being conveyed through a piped tiered system to a storm detention pond for additional treatment and attenuation. Ultimately, runoff will be discharged to Ellicott Creek.

- If to surface waters, identify receiving water bodies or wetlands: Ellicott Creek, Wetland W11 and tributary 3
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☑ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☑Yes ☐No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☑Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing 240 Proposed 563 Net increase/decrease + 323

iv. Does the proposed action include any shared use parking? ☑Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

The project site consists of improving the entry off of North Forest Road and adding a driveway along Sheridan Drive.

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☑Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☑Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☑Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

TBD

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

National Grid (grid/local utility)

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7am to 7pm
- Saturday: 7am to 7pm
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: available 24 hours
- Saturday: available 24 hours
- Sunday: available 24 hours
- Holidays: available 24 hours

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Heavy equipment will be used on site during construction during 7am to 7pm Monday through Friday.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: The intent is to keep natural buffers intact between land uses.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

The project will consist of parking lot and street lighting as per Town of Amherst Engineering road standards and Zoning Code requirements per Chapter 203-7-3.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☑ Yes ☐ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

The proposed Buffalo Niagara Heritage Village museum will have outdoor living displays ,which may include livestock and poultry. Such displays will be 150'+/- from the nearest occupied structures to the west of the project site.

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☑ Yes ☐ No

If Yes:

i. Describe proposed treatment(s):

During operation, pesticide use may include routine rodent baiting associated with food service operations.
During operation, limited herbicide use may be utilized to control invasive weed growth.

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☑ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: building materials waste tons per TBD (unit of time)
- Operation : refuse/food wastes tons per TBD (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: TBD
- Operation: source separation of recyclables

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: TBD
- Operation: Solid waste landfill

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

Unknown if hazardous waste will be generated as part of construction remediation activities. If yes, hazardous materials will be disposed of at a hazardous waste facility with concurrence of NYSDEC.

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Municipal Facility, Recreation and Utilities

ii. If mix of uses, generally describe:

The project site was operated as a private golf course surrounded predominantly by residential housing. The Town's Highway Department is located to the east and the Town Audubon and Par 3 golf courses are located to the north of the property. Within close proximity are commercial land uses.

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	8.66	25.51	16.85
• Forested	14.97	14.97	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	136.66	109.21	-27.45
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	3.34	4.3	+0.96
• Wetlands (freshwater or tidal)	10.26	10.09	-0.17
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Maplemere Elementary School

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☑ Yes ☐ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

soil contaminates have been identified on the site associated with the use of herbicides and pesticides when operated as a golf course by prior owners.

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☑ Yes – Environmental Site Remediation database — Provide DEC ID number(s): C915291

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): C915291, C915207

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

Brownfield site C915291 was terminated from the NYS Brownfield Program in April 2023 by notice of the transfer of the Property to the Town of Amherst. Adjacent site C915207 is "completed" per the NYSDEC Site Registry.

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >80 inches feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Odessa (silt loam)	38 %
Claverack (loamy fine)	18 %
Cosad (loamy fine sand)	15 %

d. What is the average depth to the water table on the project site? Average: 0.5-1.5 feet

e. Drainage status of project site soils:
☐ Well Drained: _____% of site
☑ Moderately Well Drained: 90 % of site
☑ Poorly Drained 10 % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 100 % of site
☐ 10-15%: _____% of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 837-25 Ellicott Creek Classification B
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☑ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____
Name - Pollutants - Uses:Ellicott Creek, Lower, and tribs – Nutrients;Silt/Sediment – Aquatic Life

i. Is the project site in a designated Floodway? ☑ Yes ☐ No

j. Is the project site in the 100-year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500-year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:
i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site:
deer, rabbits, squirrels, mice
turkeys
red fox, coyotes

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation): _____
ii. Source(s) of description or evaluation: _____
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:
i. Species and listing (endangered or threatened): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:
i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No
If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No
If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site? _____
ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name: _____
ii. Basis for designation: _____
iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☑ Archaeological Site ☑ Historic Building or District

ii. Name: Eligible property:829 NORTH FOREST RD, AMHERST

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Daniel C. Howard, AICP Date October 2, 2023

Signature _____ Title Planning Director

PRINT FORM

EAF Mapper Summary Report

Friday, August 18, 2023 2:08 PM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	Remediaton Sites:C915291, NYS Heritage Areas:West Erie Canal Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Yes - Digital mapping data for Spills Incidents are not available for this location. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Yes
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Yes
E.1.h.i [DEC Spills or Remediation Site - DEC ID Number]	C915291
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	C915291, C915207
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	837-25
E.2.h.iv [Surface Water Features - Stream Classification]	B
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters

E.2.h.v [Impaired Water Bodies]	Yes
E.2.h.v [Impaired Water Bodies - Name and Basis for Listing]	Name - Pollutants - Uses:Ellicott Creek, Lower, and tribs – Nutrients;Silt/Sediment – Aquatic Life
E.2.i. [Floodway]	Yes
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:829 NORTH FOREST RD, AMHERST
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Agency Use Only [If applicable]

Project : ACP - PUD Application

Date : 10/2/2023

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes"** to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No"** to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land

Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)

☐ NO ☑ YES

If "Yes", answer questions a - j. If "No", move on to Section 2.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☑	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☑	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☑	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☑
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☑	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☑	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☑	☐
h. Other impacts: _____ _____		☐	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑ NO ☐ YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	□	□
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	□	□
c. Other impacts: _____ _____		□	□

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☐ NO ☑ YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☑
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☑	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☑	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☑	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☑
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☑	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☑	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☑	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☑	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☑	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☑	☐

l. Other impacts: _____ _____		☐	☐

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)

☐ NO ☑ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☑	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☑	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☑	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☑	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☑	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☑	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☑	☐
h. Other impacts: _____ _____		☐	☐

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2)

☐ NO ☑ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☑	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☑	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☑	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☑	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☑	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☑	☐

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. ☑ NO ☐ YES
(See Part 1. D.2.f., D.2.h, D.2.g)
If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑ NO ☐ YES
If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	□	□
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	□	□
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	□	□
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	□	□
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	□	□
j. Other impacts: _____ _____		□	□

8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	□	□
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	□	□
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	□	□
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	□	□
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	□	□
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	□	□
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	□	□
h. Other impacts: _____		□	□

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	 ☐ ☐	 ☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	 ☐ ☐	 ☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

☐ NO ☑ YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	☑	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☑	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	☑	☐

d. Other impacts: _____ _____		☐	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☑	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☑	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☑	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	□	□
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	□	□
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	□	□
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	□	□
e. Other impacts: _____ _____		□	□

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	□	□
c. Other impacts: _____ _____		□	□

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☐ NO ☑ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☑	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☑
c. The proposed action will degrade existing transit access.	D2j	☑	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☑	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☑
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	□	□
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	□	□
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	□	□
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	□	□
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☑ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☑	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☑	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☑	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☑	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☑	☐
f. Other impacts: _____ _____		☐	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☐ NO ☑ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☑	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☑
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☑	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☑	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☑	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☑
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☑	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☑
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☑	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☑	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☑	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☑	☐
m. Other impacts: _____ _____		☐	☐

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES

(See Part 1. C.1, C.2. and C.3.)

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES

(See Part 1. C.2, C.3, D.2, E.3)

If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

1. Impact on Land - The proposed conversion of the former golf course to a community park may involve the excavation and removal of more than 1000 tons of soil from the 170.5 +/- acre site.

2. Impact of Surface Water - The construction of a 0.96+/- acre decorative pond within an existing unnamed tributary may disturb existing bottom sediments of such tributary. Additionally, a 0.17 +/- acre isolated wetland will be filled to accommodate a parking area.

3. Impact on Transportation - The proposed action will result in the construction of paved parking for 500 or more vehicles and the proposed action may alter the present pattern of movement of people or goods.

4. Impact on Human Health - The project site has evidence of soil contaminants as a result of past use of herbicides/pesticides. Adequate control measures will be in place to ensure that any contaminated soils are managed in accordance with applicable laws and be protective of the environment and human health.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☑ Type 1 ☐ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the Town of Amherst Town Board as lead agency that:

☐ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☑ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Amherst Central Park

Name of Lead Agency: Town of Amherst

Name of Responsible Officer in Lead Agency: Brian J. Kulpa

Title of Responsible Officer: Town Supervisor

Signature of Responsible Officer in Lead Agency: Date: October 2, 2023

Signature of Preparer (if different from Responsible Officer) Date: October 2, 2023

For Further Information:

Contact Person: Daniel C. Howard, AICP, Planning Director

Address: 5583 Main Street, Williamsville, New York 14221

Telephone Number: 716-631-7051

E-mail: dhoward@amherst.ny.us

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

Appendix C Wetland and Waterbodies Delineation Report

Wetland and Waterbodies Delineation Report

for

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

Town of Amherst

Erie County, New York

for

Town of Amherst

EARTH DIMENSIONS, INC.
Soils Investigations • Wetland Delineations

June 12, 2023
EDI Project Code: **W1I09d**

REPORT SUMMARIZING
THE RESULTS OF
A WETLAND DELINEATION SURVEY OF

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

Prepared for Submission to:

U.S. ARMY CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207

Prepared By:

EARTH DIMENSIONS, INC.
1091 JAMISON ROAD
ELMA, NEW YORK 14059

Prepared For:

JEFFREY SZATKOWSKI
TOWN OF AMHERST PLANNING DEPARTMENT
5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
JSZATKOWSKI@AMHERST.NY.US
(716) 631-7051

REPORT DATE: June 12, 2023

EDI PROJECT CODE: W1I09d

PROJECT INFORMATION

Project Name	Amherst Central Park - 772 North Forest Road
Street Address	772 North Forest Road, 385 Maple Road, 391 Maple Road
SBL Number	68.01-1-1.2; 55.18-4-9; 55.18-4-10
Town	Amherst
County	Erie
State	New York
Latitude/Longitude (NAD83)	42.98375°N, -78.77276°W
Investigation Area	170± Acres
USGS 7.5 Minute Topographical Map	Buffalo NE Quadrangle
Waterway	Ellicott Creek
Hydrologic Unit Code	04120104
Date of Delineation	June 5 & 6, 2023
Consultant	Earth Dimensions, Inc. 1091 Jamison Road Elma, New York 14059
Point of Contact	Scott Livingstone (716)655-1717 slivingstone@earthdimensions.com
Engineer	N/A
Property Owner	Town of Amherst
Authority	Section 404, Article 15
Permit/Letter Being Requested	Jurisdictional Determination

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Town of Amherst has proposed the development of a 170± acre parcel located along the north side of Sheridan Drive and south side of Maple Road in the Town of Amherst, County of Erie, and State of New York. The Town of Amherst has retained Earth Dimensions, Inc. (EDI) to complete a wetland delineation report that would allow the U.S. Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) to determine their jurisdictional authority over the investigation area, pursuant to Section 404 of the Clean Water Act and Articles 15 (Protection of Waters) and 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law. The proposed project does not qualify for Bipartisan Infrastructure Law (BIL) funding.

A preliminary review of available information pertaining to vegetation, soils, and hydrology in the project area was implemented prior to conducting a field investigation at the site. Sources of information included the United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS), National Wetland Inventory (NWI), and NYSDEC Freshwater Wetland maps. The USGS, NRCS and NWI maps indicate the potential for wetlands under federal jurisdiction.

EDI applied methodology specified by the Corps of Engineers Wetlands Delineation Manual (January 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0 (January 2012) to perform a delineation of Federal jurisdictional wetlands within the site. EDI identified twelve (12) wetland areas totaling 10.26± acres within the investigation area. Ellicott Creek also runs along the eastern limits of the investigation area. The identification number of the wetlands, their acreage and boundary flags are as follows:

TABLE 1: WETLAND SUMMARY

Wetland Identification #	Geographic Center (WGS84)		Boundary Flag #	Total Acreage On-site	Wetland Type (Cowardin)	Wetland Type (Reschke)
	Latitude	Longitude				
Wetland 1	42.99044	-78.77465	W1-1 through W1-20	0.74±	PSS1B	Scrub-shrub swamp
Wetland 2	42.98971	-78.77370	W2-1 through W2-22	0.60±	POW	Golf Course Pond
Wetland 3	42.98921	-78.77396	W3-1 through W3-15	0.34±	PSS1B	Scrub-shrub
Wetland 4	42.98930	-78.77195	W4-1 through W4-16	1.09±	POW	Golf Course Pond
Wetland 5	42.98782	-78.77423	W5-1 through W5-37	2.63±	PFO1B	Hardwood Swamp
Wetland 6	42.98674	-78.77458	W6-1 through W6-14	0.94±	POW	Golf Course Pond
Wetland 7	42.98584	-78.77297	W7-1 through W7-4	0.02±	PSS1B	Scrub-shrub
Wetland 8	42.98569	-78.77232	W8-1 through W8-8	0.22±	PSS1B	Scrub-shrub
Wetland 9	42.98439	-78.77364	W9-1 through W9-25	0.93±	PSS1B	Scrub-shrub
Wetland 10	42.98405	-78.76966	W10-1 through W10-55	2.25±	PEM1H/ R2UB1	Emergent Marsh/ Perennial Stream
Wetland 11	42.97857	-78.77402	W11-1 through W11-30	0.33±	PEM1C	Shallow Emergent Marsh
Wetland 12	42.97880	-78.77200	W12-1 through W12-11	0.17±	POW	Golf Course Pond
Total Wetland Acreage:				10.26±		

TABLE 2: STREAM & DRAINAGE SUMMARY

Stream Identification #	Geographic Center (WGS84)		Waterway	DEC Class	Linear Feet On-site	Highwater Width (Ft)	Flow Regime	Substrate	Classification (Cowardin)
	Latitude	Longitude							
Stream 1	42.98364	-78.76937	Ellicott Creek	B	1723 feet	50-75	Perennial	Gravel, Cobble	R2UB1
Stream 2	42.98338	-78.77022	UNT	N/A	252 feet	2	Ephemeral	Silt, Organic	R4SB7
Stream 3	42.97902	-78.77471	UNT	N/A	1155 feet	6-8	Intermittent	Silt, Organic	R4SB7

TABLE 3: WATERBODY SUMMARY

Identification #	Flag #	Geographic Center (WGS84)		Acreage On-site	Classification (Cowardin)	Type (Reschke)
		Latitude	Longitude			
Pond 1	W2-1 through W2-22	42.98973	-78.77372	0.60±	POW	Golf Course Pond
Pond 2	W4-1 through W4-16	42.98940	-78.77190	1.09±	POW	Golf Course Pond
Pond 3	W6-1 through W6-14	42.98671	-78.77458	0.94±	POW	Golf Course Pond
Pond 4	W12-1 through W12-11	42.97879	-78.77198	0.17±	POW	Golf Course Pond

SECTION I: INTRODUCTION

The Town of Amherst has proposed the development of a 170± acre parcel on the north side of Sheridan Drive and South Side of Maple Road in the Town of Amherst, County of Erie, and State of New York. The project has been given the name Amherst Central Park - 772 North ForestRoad and is located on USGS 7.5-minute quadrangle map indexed as Buffalo NE (Figure 1). The field work was completed on June 5 & 6, 2023 using a handheld Trimble TDC650 GPS to locate wetland and drainage boundaries.

The Town of Amherst has retained Earth Dimensions, Inc. (EDI) to complete a wetland delineation study at this site. The investigation was designed to facilitate a determination of the extent of USACE and NYSDEC jurisdiction over the project area pursuant to Section 404 of the Clean Water Act and Articles 15 (Protection of Waters) and 24 (Freshwater Wetlands) of the New York State Environmental Conservation Law.

EDI has performed a wetland delineation study at the site under guidelines specified by the *Corps of Engineers Wetlands Delineation Manual*, dated January 1987 (referred to hereafter as the Corps Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region version 2.0* (January 2012) (referred to hereafter as the Northcentral and Northeast Regional Supplement). The purpose of this report is to present EDI's methods, results, conclusions and recommendations with respect to the Amherst Central Park - 772 North Forest Road project site.

SECTION II: SITE DESCRIPTION

The Amherst Central Park - 772 North Forest Road project area is comprised of a 170± acre irregular shaped investigation area on the north side of Sheridan Drive, the south side of Maple Road, and on the west side of North Forest Road which is outlined on Figure 1 and depicted on the Wetland Delineation Map included in Appendix A (Figure 6). The site was formerly the Westwood Country Club, an 18-hole golf course facility with a large clubhouse and several outbuildings. The facility closed in 2014.

The natural topography of the Amherst Central Park - 772 North Forest Road site is flat to gently sloping. The upland within the investigation area consisted of successional northern hardwoods, successional shrubland, mown lawn, and old field communities. The wetland areas were found to consist of shallow emergent marsh, hardwood swamp, golf course ponds, and scrub-shrub swamp communities. The vegetative communities of the investigation area are described according to *Ecological Communities of New York State* (Edinger et al. 2014).

SECTION III: PRELIMINARY DATA REVIEW

A. SUMMARY OF FINDINGS

Several sources of information may be reviewed to facilitate the completion of a wetland delineation study. In some cases, it is even possible to make a preliminary office wetland determination based upon available vegetation, soils, and hydrologic information for a project area. EDI completed a preliminary review of several data sources at the onset of this study. The results of the review are summarized as follows:

1. USGS 7.5 MINUTE TOPOGRAPHICAL MAP

Figure 1 depicts the Amherst Central Park - 772 North Forest Road project site on the Buffalo NE quadrangle map. The figure depicts the flat to gently sloping topography of the site. Several ponds are shown on the map and Ellicott Creek flows north through the eastern portion of the investigation area.

2. USFWS NATIONAL WETLANDS INVENTORY MAP

The National Wetlands Inventory (NWI) map obtained from the USFWS Wetland Mapper http://www.fws.gov/wetlands/Data/Mapper.html displays two (2) wetland types, PUBHx, and R2UBH within the investigation area. The wetlands can be decoded as:

[P] Palustrine, [UB] Unconsolidated bottom, [H] Permanently flooded, [x] Excavated

[R] Riverine, [2] Lower perennial, [UB] Unconsolidated bottom, [H] Permanently flooded

3. NATURAL RESOURCES CONSERVATION SERVICE SOILS MAP

Figure 3 presents the project area outlined on a copy of the Erie County Soil Survey map from the National Cooperative Soil Survey. As shown on that figure, the site has the following soil types:

Soil Conservation Service Legend

Map Unit Symbol	Map Unit Name	Hydric Rating
CrA	Claverack loamy fine sand, 0 to 3% slopes	5
Cv	Cosad loamy fine sand	10
La	Lakemont silt loam, 0 to 3% slopes	95
Od	Odessa silt loam, 0 to 3% slopes	5
SaA	Schoharie silt loam, 0 to 3% slopes	0

SaB	Schoharie silt loam, 3 to 8% slopes	0
Te	Teel silt loam	5
Ut	Urban land-Odessa complex, 0 to 3% slopes	5
W	Water	0

Claverack Series: The Claverack series consists of very deep, moderately well drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level to sloping soils in shallow deltas on lake plains. Slope ranges from 0 to 15 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 40 inches.

Cosad Series: The Cosad series consists of very deep, somewhat poorly drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level soils on lake plains. Slope ranges from 0 to 8 percent. Mean annual temperature is 48 degrees F. and mean annual precipitation is 40 inches.

Lakemont Series: The Lakemont series consists of deep, poorly drained and very poorly drained soils of lake plains. They are nearly level soils formed in very slowly permeable reddish colored clayey lacustrine sediments. Slope ranges from 0 to 3 percent. Permeability is moderately slow in the surface and very slow in the subsoil sand substratum. Mean annual temperature is about 48 degrees F. and mean annual precipitation is about 34 inches.

Odessa Series: The Odessa series consists of very deep, somewhat poorly drained soils formed in red, clayey lacustrine deposits. These soils are in moderately low areas on lake plains and valley terraces. Slope ranges from 0 to 20 percent. Mean annual temperature is 8 degrees C (46 degrees F), and mean annual precipitation is 995 mm (39 in).

Schoharie Series: The Schoharie series consists of very deep, moderately well drained soils formed in clayey lacustrine sediments. They are on glacial lake plains and uplands mantled with lake sediments. Saturated hydraulic conductivity is moderately high or high in the mineral surface and subsurface and low through moderately high in the subsoil and substratum. Slope ranges from 0 through 60 percent. Mean annual temperature is 48 degrees F, and mean annual precipitation is 39 inches.

Teel Series: The Teel series consists of very deep, moderately well drained soils on floodplains. They formed in nearly level, silty alluvial deposits. Permeability is moderate throughout the solum. Slope ranges from 0 to 3 percent. Mean annual temperature is 49 degrees F, and mean annual precipitation is 37 inches.

Urban land Series: Refers to soils in areas of high population density in the largely built environment. These soils can be significantly changed human-transported materials, human-altered materials, or minimally altered or intact “native” soils. Soils in urban areas exhibit a wide variety of conditions and properties and may have impervious surfaces, such as buildings and pavement.

The U.S. Department of Agriculture's National Technical Committee for Hydric Soils Criteria has developed a list of soils that often display hydric soil characteristics. Hydric soil typically forms in places of the landscape where surface water periodically collects for some time and/or where groundwater discharges sufficient to create waterlogged or anaerobic soils. Such anaerobic soils can support the growth and survival of hydrophytic vegetation that is tolerant of such conditions. The Hydric Rating indicates the proportion of map units that meets the criteria for hydric soils. Soil units are designated as "hydric," "predominantly hydric," "partially hydric," "predominantly nonhydric," or "nonhydric" depending on the hydric rating of its respective components. "Hydric" means that all components listed for a given map unit are rated as being hydric. "Predominantly hydric" means components that comprise 66 to 99 percent of the map unit are rated as hydric. "Partially hydric" means components that comprise 33 to 66 percent of the map unit are rated as hydric. "Predominantly nonhydric" means components that comprise up to 33 percent of the map unit are rated as hydric. "Nonhydric" means that none of the components are rated as hydric. Wetland hydrologic conditions, hydric soils, and hydrophytic vegetation are the three criteria of a wetland.

4. NYSDEC Freshwater Wetlands Map

The NYSDEC Freshwater Wetlands map obtained from the online NYSDEC Environmental Resource Mapper displays no state jurisdictional Freshwater Wetlands within or adjacent to the investigation area. However, the mapper does display a class B stream (Ellicott Creek) along the eastern limits of the investigation area.

B. RESULTS OF AGENCY INFORMATION REVIEW

The preliminary data review revealed that the Corps may have jurisdiction over wetlands at the project location. The evidence consisted of potential federally regulated wetlands on the NWI map (Figure 2) and hydric soils and soils with possible hydric inclusions depicted within the project area as shown on the NRCS map (Figure 3). The preliminary data review indicated that NYSDEC has jurisdiction over a Ellicott Creek as depicted on the NYSDEC Resource Mapper (Figure 4). Therefore, it was considered necessary to perform a field investigation at the site in order to determine the presence of federal and state protected wetlands. The methods specified in the Corps of Engineers Wetlands Delineation Manual (January 1987) and Northcentral and Northeast Regional Supplement Version 2.0 (January 2012) were employed during the field investigation. Procedures, results, and conclusions of the wetland delineation study are presented in the remainder of this report.

SECTION IV: FIELD INVESTIGATION PROCEDURES

WETLANDS:

Step 1

EDI applied methodology specified by the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region to perform a delineation of Federal jurisdictional wetlands within the site. EDI used the Level 2 Routine Determination method (on-site inspection necessary) since insufficient information was available for making a determination for the entire project area. This methodology is consistent with Part IV, Section D of the Corps Manual.

Step 2

EDI's initial evaluation of the project area revealed that no atypical situations existed. If an atypical situation had existed, EDI would have used methodology outlined in Part IV, Section F of the Corps manual and/or Section 5 of the Northcentral and Northeast Supplement.

Step 3

EDI made the determination that normal environmental conditions were present, as the area was not lacking hydrophytic vegetation or hydrologic indicators due to annual, seasonal or long-term fluctuations in precipitation, surface water, or groundwater levels. The Northcentral and Northeast Supplement defines the growing season as beginning when one of the following indicators of biological activity are evident in a given year: (1) above-ground growth and development of vascular plants and/or (2) soil temperature measured at 12" below ground surface reaches 41ºF. The end of the growing season is defined as the point at which deciduous species lose their leaves or the last herbaceous plants cease flowering and their leaves become dry or brown, whichever comes latest.

Step 4

In order to accurately identify the limits of various vegetative communities and extent of wetlands on-site, a routine determination method was used. As depicted in Appendix A and included in Appendix B, forty-six (46) data points were used to characterize the site.

Step 5

The plant community inhabiting each observation point was characterized in accordance with methods specified in the Northcentral and Northeast Regional Supplement. Dominant plant species were identified within four vegetative strata (i.e. herb, sapling/shrub, tree and liana (woody vines) at each sampling point. The Northcentral and Northeast Regional Supplement defines the vegetative strata in the following manner:

Herb – A non-woody individual of a macrophytic species. Seedlings of woody plants (including vines) that are less than 3.28 feet in height are considered to be herbs.

Sapling/Shrub – A layer of vegetation composed of woody plants < 3.0 inches in diameter at breast height but greater than 3.28 feet in height, exclusive of woody vines.

Tree – A woody plant > 3.0 inches in diameter at breast height, regardless of height (exclusive of woody vines)

Liana – A layer of vegetation in forested plant communities that consist of woody vines greater than 3.28 feet in height.

As outlined in the manual, the quadrant sizes used for the vegetative strata were (i) a 3.28-foot radius for herbs; (ii) a ten-foot radius for saplings/shrubs and woody vines; and (iii) a 30-foot radius for trees. Dominant plant species were estimated using aerial coverage methods. Dominant species are defined in the Corps Manual as the most abundant plant species that when ranked in descending order of abundance and cumulatively totaled immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure.

The wetland indicator status (OBL, FACW, FAC, FACU, or UPL) listed for each identified species by the U.S. Fish and Wildlife Service in the National List of Plant Species that Occur in Wetlands: Northeast (Region 1) was recorded. The U.S. Fish and Wildlife wetland indicator status listings are defined as follows:

OBL – Plants that occur almost always (estimated probability >99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability < 1 percent) in nonwetlands.

FACW – Plants that occur usually (estimated probability >67 percent to 99 percent) in wetlands, but also occur (estimated probability 1 percent to 33 percent) in nonwetlands.

FAC – Plants with a similar likelihood (estimated probability 33 percent to 67 percent) of occurring in both wetlands and nonwetlands.

FACU – Plants that occur sometimes (estimated probability 1 percent to <33 percent) in wetlands but occur more often (estimated probability >67 percent to 99 percent) in nonwetlands.

UPL – Plants that occur rarely (estimated probability < 1 percent) in wetlands but occur almost always (estimated probability >99 percent) in nonwetlands under natural conditions.

The plant community data was summarized on the data forms provided in the Northcentral and Northeast Regional Supplement included in this report as Appendix B.

Step 6

Plant data from each observation point were tested against the hydrophytic vegetation criterion specified in the Corps Manual and Northcentral and Northeast Regional Supplement. The Northcentral and Northeast Regional Supplement identifies a four-tiered approach for making a determination of whether or not the hydrophytic vegetation criteria is met for a sample plot. Indicator 1 (Rapid Test for Hydrophytic Vegetation) was first applied to determine if all dominant species across all strata are rated OBL and/or FACW. If Indicator 1 did not meet the hydrophytic vegetation criteria, Indicator 2 was then applied (dominance test); if greater than 50% of all plant species across all strata were rated OBL, FACW, or FAC, the hydrophytic vegetation criteria was considered met. In rare cases, when Indicators 1 and 2 did not meet the hydrophytic vegetation criteria but soils and hydrology criteria were met, Indicators 3 (Prevalence Index) and 4 (Morphological Adaptations) were used to make a final determination. All observation points that met the hydrophytic vegetation criterion were considered potential wetlands. Soils were then characterized.

Step 7

The Corps Manual specifies that soils need not be characterized (and are assumed hydric soils) at sampling points meeting the hydrophytic vegetation criterion if: (i) all dominant plant species have an indicator status of OBL, or (ii) all dominant species have an indicator status of OBL and/or FACW, and the wetland boundary is abrupt (at least one dominant OBL species must be present). All observation points sampled during this field investigation were examined directly for soil and hydrologic characteristics.

Step 8

At observation points requiring a soil evaluation, soil borings were performed by an EDI Soil Scientist using methods specified in the Northcentral and Northeast Regional Supplement. Soil pits were dug using a tile spade. Testpits were generally dug to a depth of 20 inches below ground surface. Soils were examined for any of the hydric soil indicators, as outlined in the Field Indicators of Hydric Soils in the United States. A determination was made as to whether or not the hydric soil criterion was met. Soils data was recorded on the data forms included in Appendix B of this report.

Step 9

EDI's Soil Scientist examined hydrologic indicators using methods specified by the Northcentral and Northeast Regional Supplement at each observation point. The wetland hydrology criterion was met if: (i) one or more primary field indicators was materially present, (ii) available hydrologic records provided necessary evidence, or (iii) two or more secondary indicators were present. Results were recorded on data forms taken from the Corps Manual and are included in this report as Appendix B.

Step 10

A wetland determination was made for every observation point. If a sample plot met the hydrophytic vegetation, hydric soil, and wetland hydrology criteria, the area was considered to be wetland.

Step 11

Based on the results of the transected data, wetland boundaries were established for each identified wetland using survey ribbon labeled “wetland delineation” and numbered consecutively along each wetland boundary. As outlined in the Corps Manual, the placement of flags was based on the limits of areas where all three parameters were met. Wetland flags were labeled W1-1 through W1-20, W2-1 through W2-22, W3-1 through W3-15, W4-1 through W4-16, W5-1 through W5-37, W6-1 through W6-14, W7-1 through W7-4, W8-1 through W8-8, W9-1 through W9-25, W10-1 through W10-55, W11-1 through W11-30, and W12-1 through W12-11.

STREAMS & DRAINAGES:

The federally regulated Ordinary High Water (OHW) mark of streams within the Project area were delineated utilizing the definitional criteria as presented in Title 33, Code of Federal Regulations, Part 328, and the USACE Regulatory Guidance Letter 05-05 – Guidance on Ordinary High Water Mark Identification. Each stream is categorized in regard to its flow regime as perennial, intermittent, or ephemeral, as defined by the USACE. The Ordinary High Water (OHW) mark for each stream is surveyed using the handheld Garmin GPSmap 62s. Each stream is assigned a letter designation, and survey points are numbered consecutively. Substrate characteristics and water depth are noted. Streams classified as AA, A, B, C, C(t), C(ts) and D in the State of New York are regulated by NYSDEC under Article 15 Use and Protection of Waters. Streams are given classifications which designate the level of protection afforded to each waterbody. Class AA and A are assigned to sources of drinking water. Class B streams are best suited for swimming and other contact recreation, but not drinking water. Class C streams identify waters that support fishing and non-contact activities. A classification with (t) designated a stream with the potential to support trout populations. A classification of (ts) identifies waters that may support trout spawning. Class D waters are the lowest classification and are often highly imperiled.

SECTION V: RESULTS AND CONCLUSIONS

Earth Dimensions, Inc. (EDI) has completed a wetland delineation study at the Amherst Central Park - 772 North Forest Road site located in the Town of Amherst, County of Erie, and State of New York. A field investigation was conducted by a Soil Scientist and a Wetland Ecologist from EDI. The wetland delineation study identified twelve (12) wetlands totaling 10.26± acres present within the Amherst Central Park - 772 North Forest Road site. In addition, a 1723 linear foot portion of Ellicott Creek, a Class B stream, along with two other UNT's, were identified. Four golf course ponds were identified within the investigation area, which were identified as W2, W4, W6, and W12.

Figure 5 depicts the vegetative communities as they existed at the time of the investigation. The uplands within the investigation area were comprised of successional northern hardwoods, successional shrubland, mown lawn, and successional old field communities. The wetland areas were found to consist of shallow emergent marsh, hardwood swamp, golf course ponds, and scrub-shrub swamp communities. The vegetative communities of the investigation area are described according to Ecological Communities of New York State (Edinger et al. 2014).

The successional northern hardwood community was dominated by the following species: white oak (*Quercus alba*), white ash (*Fraxinus americana*), common buckthorn (*Rhamnus cathartica*), and poison ivy (*Toxicodendron radicans*).

The successional old field community was dominated by the following species: Kentucky bluegrass (*Poa pratensis*), black locust (*Robinia pseudoacacia*), pin oak (*Quercus palustris*), orchard grass (*Dactylis glomerata*), crack willow (*Salix fragilis*), common buckthorn (*Rhamnus cathartica*), eastern cottonwood (*Populus deltoides*), red maple (*Acer rubrum*), white ash (*Fraxinus americana*), silver maple (*Acer saccharinum*), sugar maple (*Acer saccharum*), red pine (*Pinus resinosa*), perennial rye (*Lolium perenne*), white spruce *(Picea glauca*), white oak (*Quercus alb*a), American sycamore (*Platanus occidentalis*), teasel (*Dipsacus fullonum*), and American arborvitae (*Thuja occidentalis*).

The successional shrubland community was dominated by the following species: common buckthorn (*Rhmanus cathartica*), stinging nettle (*Urtica dioica*), summer grape (*Vitis aestivalis*), crack willow

(*Salix fragilis*), white ash (*Fraxinus americana*), lesser celandine (*Ranunculus ficaria*), and Virginia creeper (*Parthenocissus quinquefolia*).

The mown lawn community was dominated by the following species: Kentucky bluegrass (*Poa pratensis*).

Wetland W1 is a 0.74± acre scrub-shrub swamp dominated by green ash (*Fraxinus pennsylvanica*), common buckthorn (*Rhamnus cathartica*), fox sedge (*Carex vulpinoidea*), and panicled bulrush (*Scirpus microcarpus*). Soils within wetland W1 are mapped as Schoharie silt loam and had a topsoil color of 7.5YR4/1 with 15% 7.5YR5/8 mottles and a subsoil color of 7.5YR5/4 with 10% 7.5YR5/6 and 7.5YR5/1 mottles. The texture is silty clay and silty clay loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W1 included Water-Stained Leaves (B9).

Wetland W2 is a 0.60± acre golf course pond dominated by black willow (*Salix nigra*), and hybrid cattail (*Typha x glauca*). Soils within wetland W2 are mapped as Odessa silt loam and had a topsoil color of 10YR3/1 with 5% 10YR5/8 mottles and a subsoil color of 10YR5/4 with 7% 10YR5/8 mottles. The texture is silt loam and silty clay loam. This soil fits the NRCS F3 indicator (Depleted Matrix) and F6 indicator (Redox Dark Surface). Hydrology indicators present in Wetland W2 included surface water (A1), high water table (A2), saturation (A3), Water Marks (B1), Inundation Visible on Aerial Imagery (B7), and Water-Stained Leaves (B9).

Wetland W3 is a 0.34± acre scrub-shrub swamp dominated by silver maple (*Acer saccharinum*), white willow (*Salix alba*), pin oak (*Quercus palustris*), blunt broom sedge (*Carex tribuloides*), and reed canarygrass (*Phalaris arundinacea*). Soils within wetland W3 are mapped as Schoharie silt loam and had a topsoil color of 10YR5/2 with 20% 10YR5/8 mottles and a subsoil color of 7.5YR5/4 with 10% 10YR5/6 and 7.5YR5/1 mottles. The texture is silty clay and silt loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W3 included Water Marks (B1) and Water-Stained Leaves (B9).

Wetland W4 is a 1.09 ± acre golf course pond dominated by pussy willow (*Salix discolor*), hybrid cattail (*Typha x glauca*), and reed canarygrass (*Phalaris arundinacea*). Soils within wetland W4 are mapped as Odessa silt loam and had a subsoil color of 7.5YR6/1 with 10% 7.5YR5/6 mottles and

no topsoil was present. The texture is silty clay and silty clay loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W4 included surface water (A1), high water table (A2), saturation (A3), Water Marks (B1), Algal Mat or Crust (B4), Inundation Visible on Aerial Imagery (B7), and Water-Stained Leaves (B9).

Wetland W5 is a 2.63± acre hardwood swamp dominated by swamp white oak (*Quercus bicolor*), pin oak (*Quercus palustris*), silver maple (*Acer saccharinum*), green ash (*Fraxinus pennsylvanica*), fowl mannagrass (*Glyceria striata*), kentucky bluegrass (*Poa pratensis*), and poison ivy (*Toxicodendron radicans*). Soils within wetland W5 are mapped as Schoharie silt loam and had a topsoil color ranging from 7.5YR3/1-10YR3/1 with 2-3% 7.5YR5/8-10YR5/8 mottles and a subsoil color ranging from 7.5YR6/1-10YR6/1 with 3-5% 7.5YR5/8-10YR5/8 mottles. The texture is fine sandy loam, silty clay loam, and silt loam. This soil fits the NRCS F3 indicator (Depleted Matrix) and F6 indicator (Redox Dark Surface). Hydrology indicators present in Wetland W5 included Water-Stained Leaves (B9).

Wetland W6 is a 0.94± acre golf course pond dominated by soft stem bulrush (*Schoenoplectus tabernaemontani)*, and creeping bentgrass (*Agrostis stolonifera*). Soils within wetland W6 are mapped as Schoharie silt loam and had a topsoil color of 7.5YR5/1 with 7% 7.5YR5/6 mottles and a subsoil color of 7.5YR5/4 with 15% 7.5YR5/6 mottles. The texture is silty clay. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indcators present in Wetland W6 included surface water (A1), high water table (A2), saturation (A3), Water Marks (B1), Inundation Visible on Aerial Imagery (B7), and Water-Stained Leaves (B9).

Wetland W7 is a 0.02± acre scrub-shrub swamp dominated by swamp white oak (*Quercus bicolor*), common buckthorn (*Rhamnus cathartica*), pin oak (*Quercus palustris*), and fowl mannagrass (*Glyceria striata*). Soils within wetland W7 are mapped as Odessa silt loam and had a topsoil color of 7.5YR3/1 with 15% 7.5YR5/8 mottles and a subsoil color of 7.5YR5/4 with 10% 7.5YR5/6 mottles. The texture is silty clay and silty clay loam. This soil fits the NRCS F6 indicator (Redox Dark Surface). Hydrology indicators present in Wetland W7 included Water-Stained Leaves (B9).

Wetland W8 is a 0.22± acre scrub-shrub swamp dominated by pin oak (*Quercus palustris*), red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), troublesome sedge (*Carex molesta*), and tall goldenrod (*Solidago gigantea*). Soils within wetland W8 are mapped as Schoharie silt loam and

had a topsoil color of 10YR4/2 with 15% 10YR5/8 mottles and a subsoil color of 7.5YR5/4 with 20% 7.5YR5/6 mottles. The texture is silty clay and silt loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W8 included Water-Stained Leaves (B9).

Wetland W9 is a 0.93± acre scrub-shrub swamp dominated by eastern cottonwood (*Populus deltoides*), common buckthorn (*Rhamnus cathartica*), eastern woodland sedge (*Carex blanda*), and summer grape (*Vitis aestivalis*). Soils within wetland W9 are mapped as Cosad loamy fine sand and had a topsoil color of 10YR4/1 with 10% 10YR5/8 mottles and a subsoil color of 10YR5/2 with 15% 10YR5/8 mottles. The texture is silt loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W9 included Water-Stained Leaves (B9).

Wetland W10 is a 2.25± acre portion of Ellicott Creek and an overflow channel to the creek dominated by black willow (*Salix nigra*), common buckthorn (*Rhamnus cathartica*), pussy willow (*Salix discolor*), common arrowhead (*Sagittaria latifolia*), and creeping jenny (*Lysimachia nummularia*). Soils within wetland W10 are mapped as water and had a topsoil color of 10YR2/1 with 2% 10YR5/8 mottles and no subsoil. The texture is mucky loam. This soil fits the NRCS F6 indicator (Redox Dark Surface). Hydrology indicators present in Wetland W10 included saturation (A3), Inundation Visible on Aerial Imagery (B7), and Water-Stained Leaves (B9).

Wetland W11 is a 0.33± acre shallow emergent marsh/perennial stream dominated by hybrid cattail (*Typha x glauca).* Soils within wetland W11 are mapped as Odessa silt loam and had a topsoil color of 7.5YR3/1 with 7% 7.5YR5/8 mottles and a subsoil color of 7.5YR5/4 with 5% 7.5YR5/6 mottles. The texture is silty clay and silty clay loam. This soil fits the NRCS F3 indicator (Depleted Matrix) and F6 indicator (Redox Dark Surface). Hydrology indicators present in Wetland W11 included Water Marks (B1) and Water-Stained Leaves (B9).

Wetland W12 is a 0.17± acre golf course pond dominated by American bur-reed (*Sparganium americanum*), and soft stem rush (*Schoenoplectus tabernaemontani*). Soils within wetland W12 are mapped as Claverack loamy fine sand and had a topsoil color of 10YR2/1 with no mottles and a subsoil color of 10YR6/1 with 3% 10YR5/8 mottles. The texture is muck and silty clay loam. This soil fits the NRCS F3 indicator (Depleted Matrix). Hydrology indicators present in Wetland W12 included surface water (A1), high water table (A2), saturation (A3), Inundation Visible on Aerial Imagery (B7) and Water-Stained Leaves (B9).

Stream 1 is identified as Ellicott Creek and flows northerly through the eastern limits of the site. This perennial channel is identified as a Class B stream by NYSDEC standards. The substrate consists of gravel and cobble, with moderately vegetated banks. Within the project area, Stream 1 is approximately 50-75 feet wide (100 feet at OHWM) with an average water depth of 2-4 feet. EDI utilizes office and field observations to determine stream classifications. Stream 1 was identified as a perennial channel due to it being represented as a solid blue line on the USGS Topography Map (Figure 1), a defined bed and bank, and a lack of vegetation within the stream.

Stream 2 is identified as UNT to Ellicott Creek and had no flow at the time of the site investigation. This ephemeral channel is not identified by NYSDEC standards. The substrate consists of silt and organics, with heavily vegetated banks. Within the project area, Stream 2 is approximately 2 feet wide (3 feet at OHWM). EDI utilizes office and field observations to determine stream classifications. Stream 2 was identified as an intermittent channel due to it not being represented as on the USGS Topography Map (Figure 1), having no defined bed and bank, and heavy vegetation within the stream.

Stream 3 is identified as UNT to Ellicott Creek and had no flow during the time of the site investigation. This intermittent channel is not identified by NYSDEC standards. The substrate consists of silt and organics, with heavily vegetated banks. Within the project area, Stream 3 is approximately 6-8 feet wide (8 feet at OHWM). EDI utilizes office and field observations to determine stream classifications. Stream 3 was identified as an intermittent channel due to it not being represented as on the USGS Topography Map (Figure 1).

Pond 1 was identified as an old golf course pond. The substrate consisted of organic, and silt and the pond was heavily vegetated along the banks. Pond 1 is identified as PUBHx by NWI standards. Pond 1 is approximately 0.60± acres and has an average depth of 4-8 feet.

Pond 2 was identified as an old golf course pond. The substrate consisted of organic, and silt and the pond is heavily vegetated along the banks. Pond 2 is identified as PUBHx by NWI standards. Pond 2 is approximately 1.90± acres and has an average depth of 4-8 feet.

Pond 3 was identified as an old golf course pond. The substrate consisted of organic, and silt and the pond is heavily vegetated along the banks. Pond 3 is identified as PUBHx by NWI standards. Pond 3 is approximately 0.94± acres and has an average depth of 4-8 feet.

Pond 4 was identified as an old golf course pond. The substrate consisted of organic, and silt and the pond is heavily vegetated along the banks. Pond 4 is not identified by NWI standards. Pond 1 is approximately 0.17± acres and has an average depth of 4-8 feet.

A map which depicts the site boundaries and the location of all observation points established during the field survey is included as Figure 6 in Appendix A of this report. Data forms are included as Appendix B. Appendix C includes representative photographs of the project area. Appendix D notes the references used during the preparation of this report and during the field investigation. Appendix E provides the names, addresses and phone numbers of the survey personnel involved in the wetland delineation study.

SECTION VI: RECOMMENDATIONS

Twelve (12) wetland areas, including four ponds, and three (3) streams were identified during the course of a field investigation based upon the three-parameter technique (vegetation, soils, and hydrology) outlined in the Corps Manual and Northcentral and Northeast Regional Supplement. On May 25, 2023, the U.S. Supreme Court ruled in the Sackett v EPA case. As of the completion of this report, the USACE Buffalo District is awaiting guidance from EPA and USACE Headquarters on the implementation of this ruling relative to determining the jurisdictional status of various features. It is EDI's professional opinion that Stream 1 (Ellicott Creek) is regulated by the USACE under Section 404 of the Clean Water Act, and Article 15 of New York Conservation Law. USACE and NYSDEC approach their regulatory analyses by first considering avoidance of wetlands and minimization of wetland losses. EDI recommends the following:

(1) Submit this report to USACE and NYSDEC with a request for a wetland boundary confirmation and jurisdictional determination.

(2) If no impacts are proposed to federally regulated wetlands, or Ellicott Creek based on the outcome of the jurisdictional determination, it is the professional opinion of EDI that the project may proceed without the need for a Section 404, or Article 15 Permit.

(3) If any federally jurisdictional wetland impacts or impacts to the bed or banks of Ellicott Creek are proposed, it is EDI's recommendation that a Joint Application for Permit and supporting documentation be submitted to the USACE and NYSDEC with a request for a Section 404 Permit, Section 401 Water Quality Certification and/or Article 15 Permit.

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

APPENDIX A - FIGURES

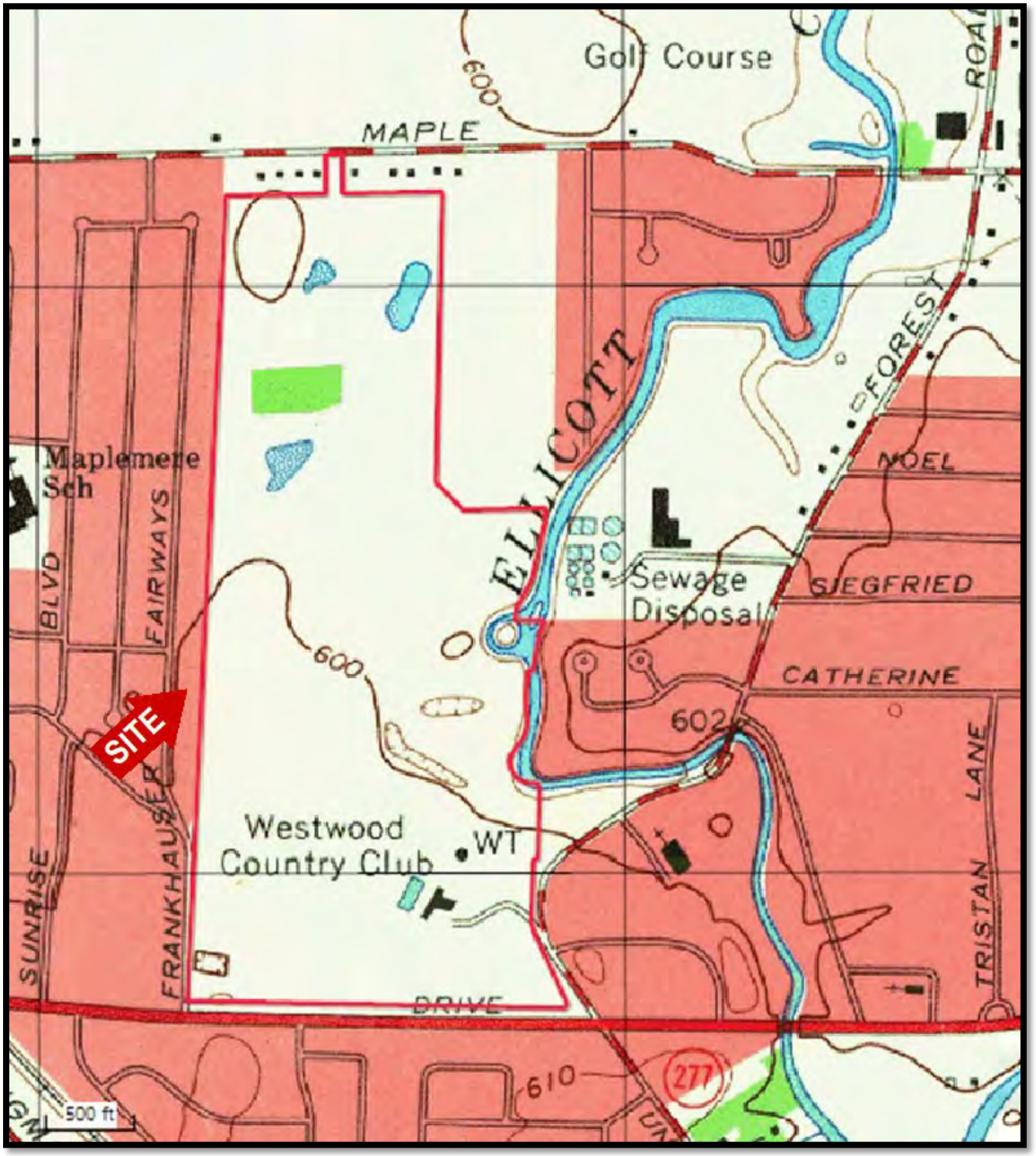


FIGURE 1: USGS 7.5 MINUTE TOPOGRAPHICAL MAP

Buffalo NE Quadrangle / U.S. Geological Survey

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

EARTH DIMENSIONS, INC.

FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

http://www.fws.gov/wetlands/data/mapper.HTML (Visited 5/23/23)

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

FIGURE 3: NRCS SOIL SURVEY MAP

http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (Visited 5/23/23)

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York
Survey Area Data: Version 22, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2020—Jul 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrA	Claverack loamy fine sand, 0 to 3 percent slopes	5	30.2	17.8%
Cv	Cosad loamy fine sand	10	25.9	15.2%
La	Lakemont silt loam, 0 to 3 percent slopes	95	4.0	2.4%
Od	Odessa silt loam, 0 to 3 percent slopes	5	64.4	37.9%
SaA	Schoharie silt loam, 0 to 3 percent slopes	0	2.3	1.4%
SaB	Schoharie silt loam, 3 to 8 percent slopes	0	23.5	13.8%
Te	Teel silt loam	5	10.3	6.1%
Ut	Urban land-Odessa complex, 0 to 3 percent slopes	5	7.5	4.4%
W	Water	0	1.9	1.1%
Totals for Area of Interest			**170.1**	**100.0%**

FIGURE 4: NYSDEC ENVIRONMENTAL RESOURCE MAPPER

https://gisservices.dec.ny.gov/gis/erm/ (Visited 5/23/23)

Amherst Central Park – 772 North Forest Road

Town of Lancaster, Erie County, New York

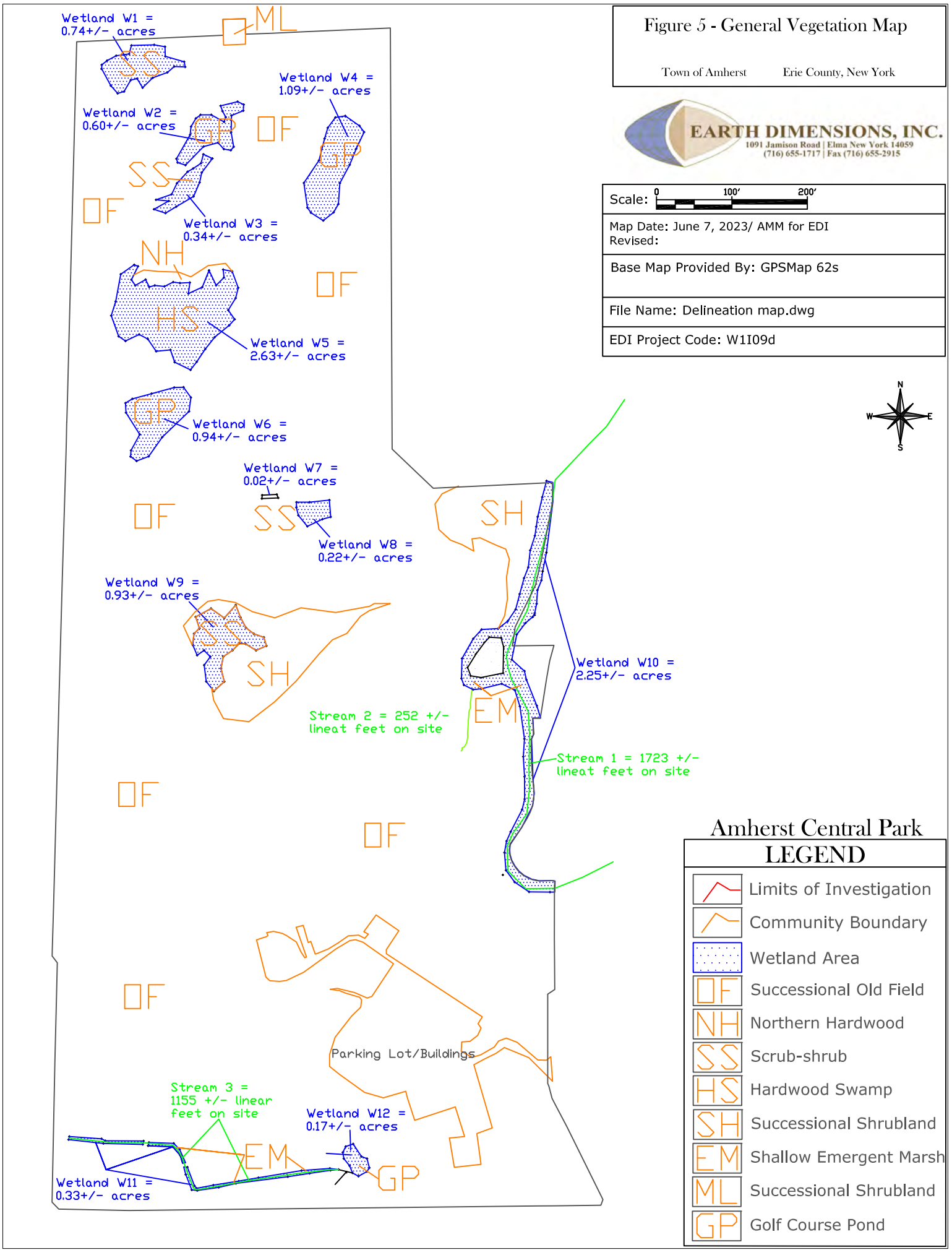


Figure 5 - General Vegetation Map

Town of Amherst Erie County, New York

EARTH DIMENSIONS, INC.
1091 Jamison Road | Elma New York 14059
(716) 655-1717 | Fax (716) 655-2915

Scale: 0 100' 200'

Map Date: June 7, 2023/ AMM for EDI
Revised:

Base Map Provided By: GPSMap 62s

File Name: Delineation map.dwg

EDI Project Code: W1I09d

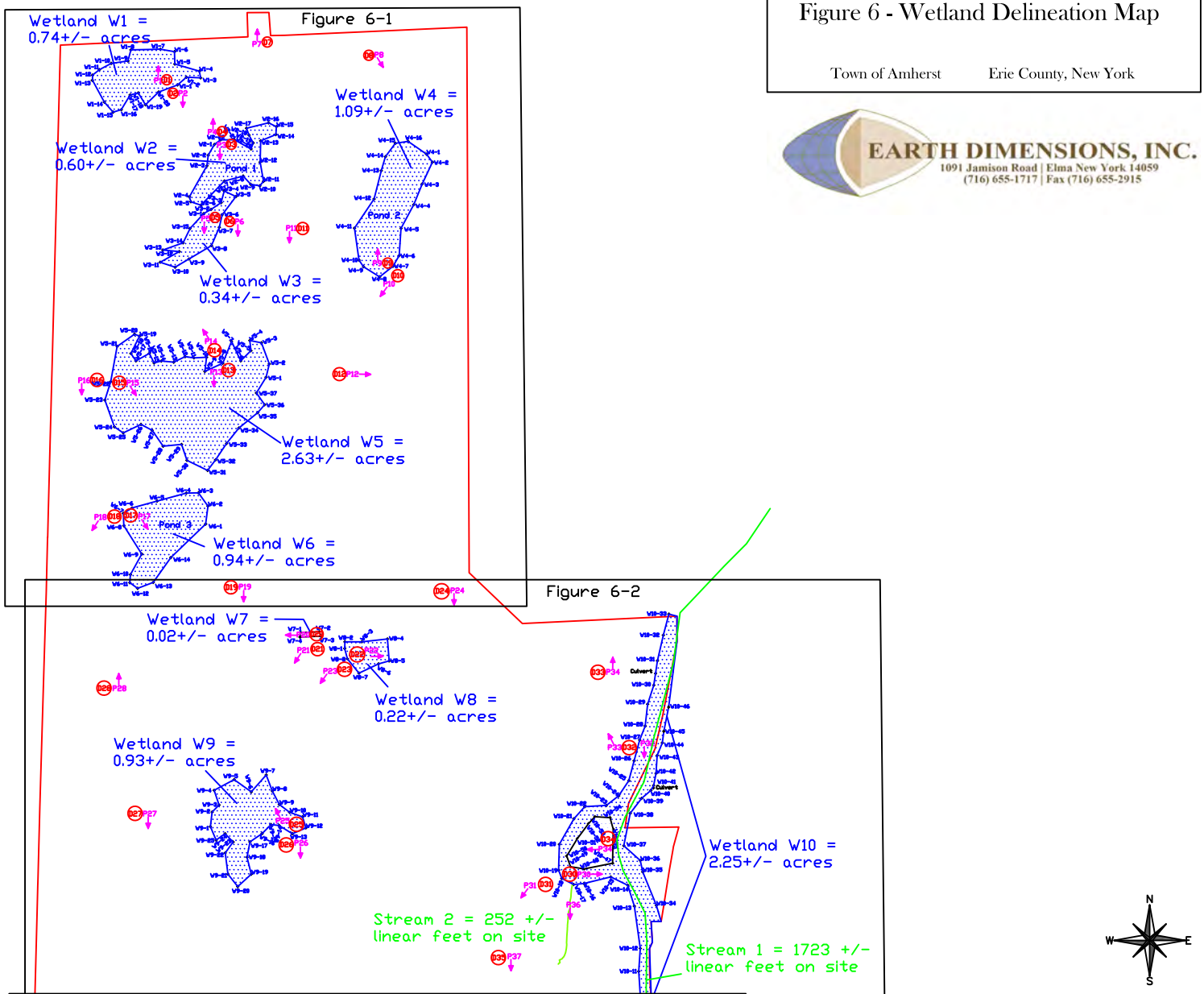
Amherst Central Park LEGEND

- Limits of Investigation
- Community Boundary
- Wetland Area
- OF — Successional Old Field
- NH — Northern Hardwood
- SS — Scrub-shrub
- HS — Hardwood Swamp
- SH — Successional Shrubland
- EM — Shallow Emergent Marsh
- ML — Successional Shrubland
- GP — Golf Course Pond

Figure 6 - Wetland Delineation Map

Town of Amherst Erie County, New York

EARTH DIMENSIONS, INC.
1091 Jamison Road | Elma New York 14059
(716) 655-1717 | Fax (716) 655-2915



Amherst Central Park

LEGEND

- Limits of Investigation
- Streams
- W1-1 Wetland Boundary Flag
- Wetland Area
- P1 Photo Location
- D1 Data Point Location

Scale: 0 100′ 200′

Map Date: June 7, 2023/ AMM for EDI
Revised:

Base Map Provided By: GPSMap 62s

File Name: Delineation map.dwg

EDI Project Code: W1I09d

Figure 6-1

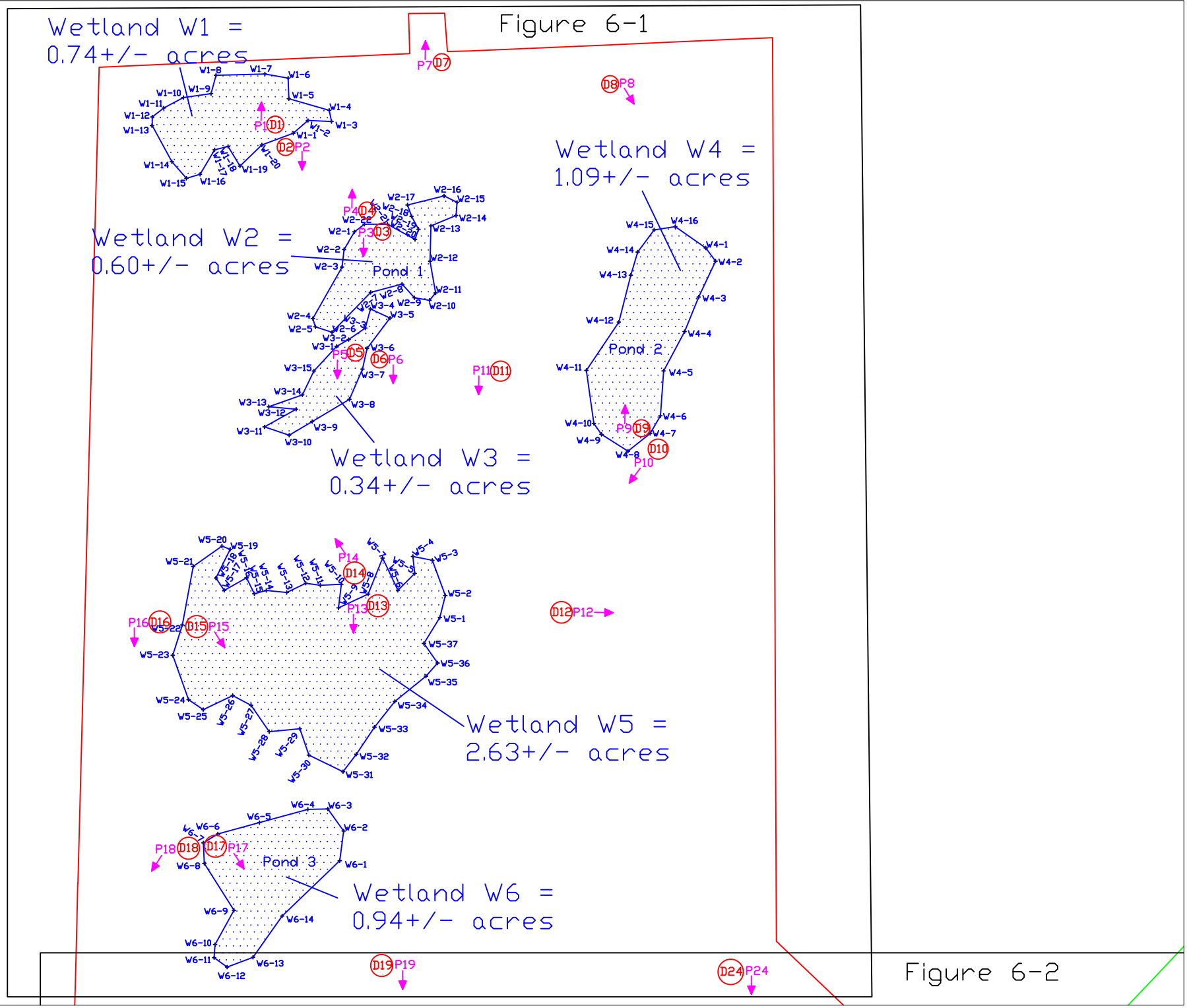


Figure 6-2

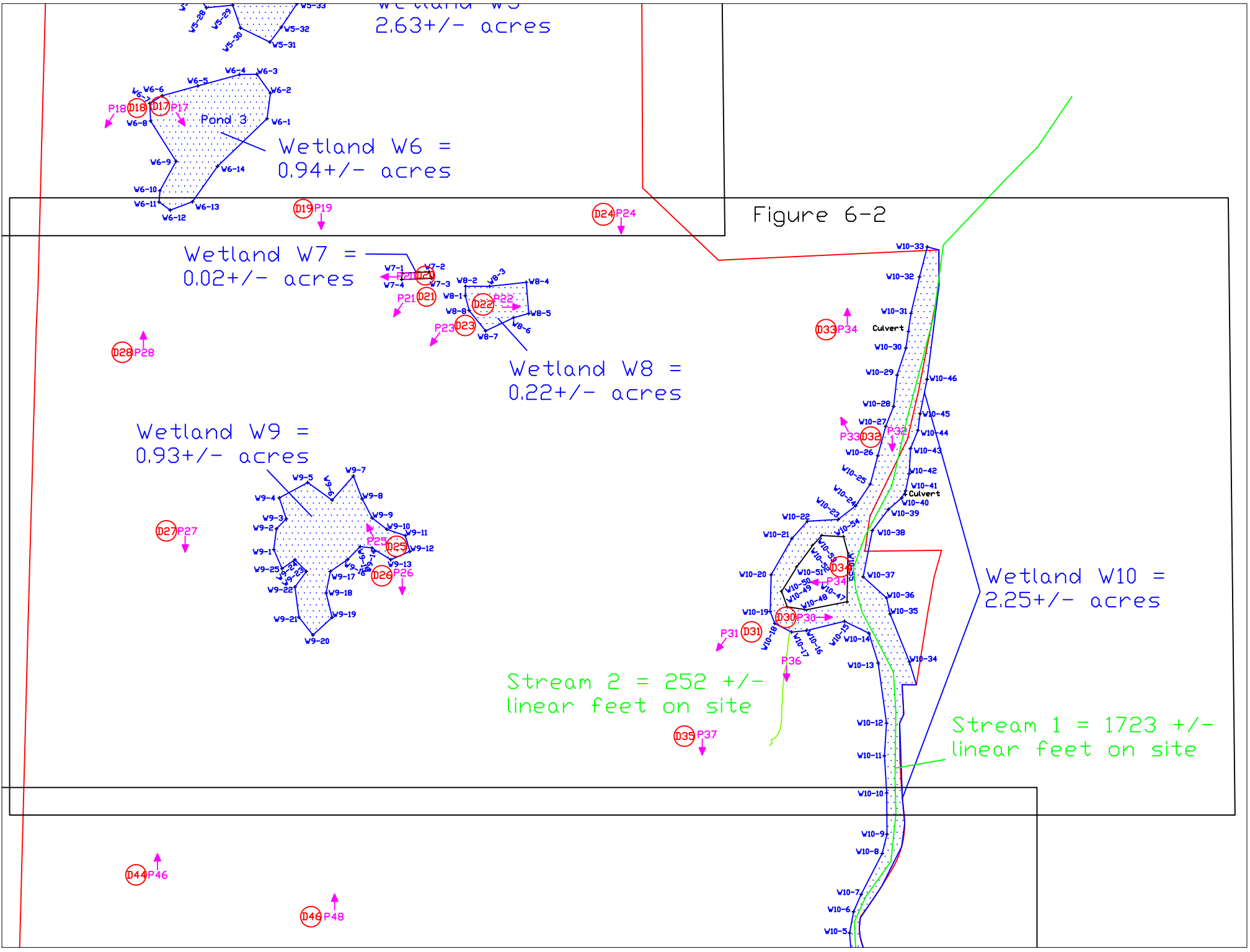

Wetland W5 =
2.63+/- acres
Pond 3
Wetland W6 =
0.94+/- acres
Wetland W7 =
0.02+/- acres
Wetland W8 =
0.22+/- acres
Wetland W9 =
0.93+/- acres
Wetland W10 =
2.25+/- acres
Culvert
Culvert
Stream 2 = 252 +/-
linear feet on site
Stream 1 = 1723 +/-
linear feet on site

Figure 6-2

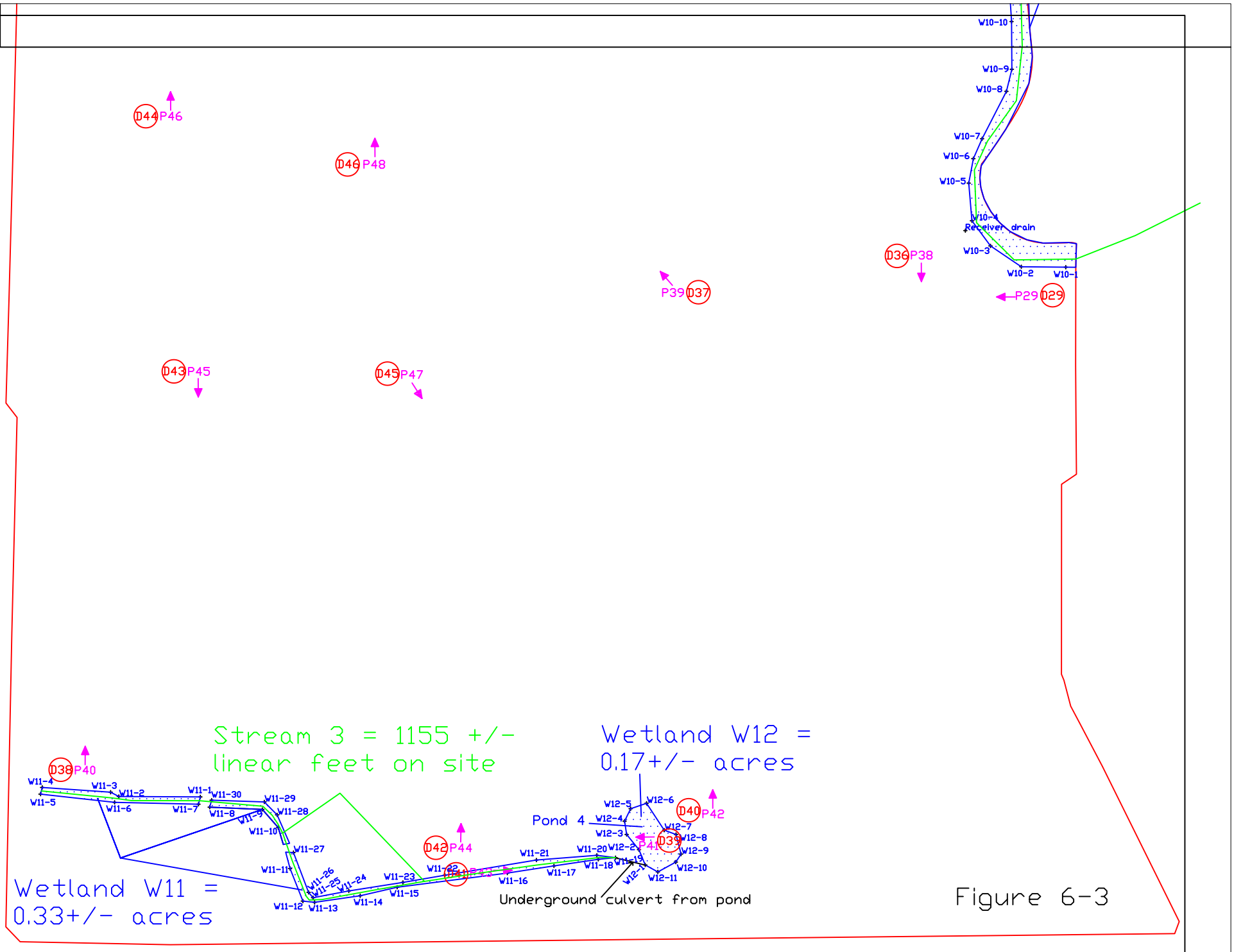

D44P46
D46P48
D43P45
D45P47
P39D37
D36P38
P29D29
W10-10
W10-9
W10-8
W10-7
W10-6
W10-5
W10-4
Receiver drain
W10-3
W10-2
W10-1
Stream 3 = 1155 +/-
linear feet on site
Wetland W12 =
0.17+/- acres
D38P40
D42P44
Pond 4
D40P42
D39P41
Underground culvert from pond
Wetland W11 =
0.33+/- acres

Figure 6-3

FIGURE 7: DRAINAGE MAP

https://streamstats.usgs.gov/ss/ (Visited 5/23/23)

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

FIGURE 8: SITE AERIAL PHOTOGRAPH

https://gis.erie.gov/Html5Viewer133/index.html?viewer=ErieCountyNY.HTML5_2_11_0

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

Figure 9: Aerial Photo With Wetlands

GoogleEarth.com (Visited 5/24/23)

Amherst Central Park

Town of Amherst, Erie County, New York

Figure 10: Soils Map With Wetlands

GoogleEarth.com (Visited 5/24/23)

Amherst Central Park

Town of Amherst, Erie County, New York

FIGURE 11: FEMA MAP

https://www.fema.gov/flood-maps (Visited 5/23/23)

Amherst Central Park - 772 North Forest Road

Town of Amherst, Erie County, New York

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

APPENDIX B – DATA SHEETS

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D1

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): DEPRESSION Local relief (concave, convex, none): CONCAVE Slope (%): <1

Subregion (LRR or MLRA) LRRL Lat: 42.990839 °N Long: -78.77443 °W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 0-3% SLOPES NW I classification: PSS

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: W1

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

• W1-1 → W1-20 (CLOSED)

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)
- X 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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D1

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	3	N	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	3 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus cathartica	20	Y	FAC
2. Fraxinus pennsylvanica	15	Y	FACW
3.			
4.			
5.			
6.			
7.			
	35 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Scirpus microcarpus	40	Y	OBL
2. Carex vulpinoidea	30	Y	OBL
3. Carex tribuloides	10	N	FACW
4. Rhamnus cathartica	10	N	FAC
5. Juncus effusus	10	N	OBL
6. Poa pratensis	5	N	FACU
7. Fraxinus pennsylvanica	5	N	FACW
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is < 3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Scrub-Shrub Swamp

Hydrophytic Vegetation Present? Yes ✓ No

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

Photo # P1 **Direction of Photo** N

Project Code: W1I09d

SOIL

Sampling Point: D1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR4/1	85	7.5YR5/8	15	C	M	SiCl	
5-20	7.5YR5/4	80	7.5YR5/6	10	C	M	SiC	
			7.5YR5/1	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D2

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.99030°N Long: -78.77429°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% SLOPES NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Robinia pseudoacacia	15	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACU
2. Lolium perenne	15	N	FACU
3. Phalaris arundinacea	10	N	FACW
4. Dactylis glomerata	10	N	FACU
5. Taraxacum officinale	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	130 (A)		500 (B)

Prevalence Index = B/A = 3.85

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No x

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

Photo # P2 **Direction of Photo** S

Project Code: W1I09d

SOIL

Sampling Point: D2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR5/4	100					SiCl	
4-20	7.5YR5/4	100					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D3

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): POND Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.989890°N Long: -78.77383°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NW I classification: PEM

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W2

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

- W2-1 → W2-22 (CLOSED)
- FORMER GOLF COURSE POND

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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 W ater 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 X	No ____	Depth (inches): 1-6+11
Water Table Present?	Yes X	No ____	Depth (inches): INUNDATED
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): INUNDATED

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D3

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Salix nigra	10	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Typha x glauca	75	Y	OBL
2. Eleocharis palustris	10	N	OBL
3. Phragmites australis	5	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- X 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 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.

Community Type: Golf Course Pond

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P3 **Direction of Photo** S

- Pond 1

Project Code: W1l09d

SOIL

Sampling Point: D3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR3/1	95	10YR5/8	5	C	M	SiL	
4-20	10YR5/1	93	10YR5/8	7	C	M	SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D4

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98991°N Long: -78.77387°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% SLOPES NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

- UPLAND SUCCESSIONAL FIELD
- Possibly FORMER SAND TRAP IN ABANDONED COUNTRY CLUB

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D4

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	85	Y	FACW
2. Achillea millefolium	20	N	FACU
3. Dactylis glomerata	10	N	FACU
4. Daucus Carota	5	N	FACU
5. Centaurea Stoebe	5	N	NI
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	125	x 4 =	500
UPL species	0	x 5 =	0
Column Totals:	125 (A)		500 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P4 **Direction of Photo** N

Project Code: W1I09d

SOIL Sampling Point: D4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR5/4	100					1fS	Likely fill
14-20	7.5YR5/2	100					Sl	Likely fill

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No Y

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D5

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98927°N Long: -78.77395°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% SLOPES NWI classification: PSS

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W3

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

• W3-1 → W3-15 (CLOSED)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- X 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 X	Depth (inches): N/A
Water Table Present?	Yes ____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Saccharinum	15	Y	FACW
2. Salix alba	15	Y	FACW
3. Quercus palustris	5	N	FACW
4.			
5.			
6.			
7.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Acer Saccharinum	40	Y	FACW
2. Quercus palustris	25	Y	FACW
3. Fraxinus pennsylvanica	10	N	FACW
4.			
5.			
6.			
7.			
	75	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	30	Y	FACW
2. Carex tribuloides	15	Y	OBL
3. Lythrum Salicaria	10	N	OBL
4. Carex praegracilis	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- X 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 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.

Community Type: Scrub-shrub swamp

Hydrophytic Vegetation Present? Yes ____ No ____

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

Photo # P5 **Direction of Photo** S

Project Code: W1I09d

SOIL

Sampling Point: D5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR5/2	80	10YR5/8	20	C	M	SiL	
8-20	7.5YR5/4	90	10YR5/6	10	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D6

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 5

Subregion (LRR or MLRA) LRRL Lat: 42.98926°N Long: -78.77378°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% Slopes NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D6

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	5	Y	FACW
2. Populus deltoides	3	N	FAC
3.			
4.			
5.			
6.			
7.			
	8 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	60	Y	FACW
2. Dactylis glomerata	25	Y	FACU
3. Dipsacus fullonum	10	N	FACW
4. Vicia cracca	10	N	NI
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	3	x 3 =	9
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	123 (A)		479 (B)

Prevalence Index = B/A = 3.89

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No X

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

Photo # P6 **Direction of Photo** S

Project Code: W1I09d

SOIL

Sampling Point: D6

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR4/4	100					SiCl	
5-20	7.5YR5/4	100					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D7

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.99069°N Long: -78.77328°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A
Wetland Hydrology Present?	Yes _____	No X	

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

UPLAND MOWN LAWN

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D7

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Centaurea stoebe	20	N	NI
3. Lotus corniculatus	15	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Mown lawn

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P7 **Direction of Photo** N

Project Code: W1I09d

SOIL

Sampling Point: D7

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR4/2	100					SiCl	
4-20	7.5YR4/4	100					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D8

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): NONE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.99054°N Long: -78.77212°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH WILLOWS

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D8

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix fragilis	55	Y	FAC
2. Populus deltoides	10	N	FAC
3.			
4.			
5.			
6.			
7.			
	65	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus Cathartica	5	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Dactylis glomerata	30	Y	FACU
3. Phalaris arundinacea	5	N	FACW
4. Rhamnus Cathartica	5	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	75	x 3 =	225
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	180 (A)		635 (B)

Prevalence Index = B/A = 3.53

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No X

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

Photo # P8 **Direction of Photo** SE

Project Code: W1I09d

SOIL

Sampling Point: D8

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR4/1	100					Sil	
7-20	7.5YR5/4	75	7.5YR5/6	10	C	M	Sicl	
			7.5YR5/1	15	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D9

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98883°N Long: -78.77200°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NWI classification: POW

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W4

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

- W4-1-W4-16 (CLOSED)
- FORMER GOLF COURSE POND

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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 W ater 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 X	No ____	Depth (inches): 8-24+"
Water Table Present?	Yes X	No ____	Depth (inches): INUNDATED
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): INUNDATED

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D9

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Salix discolor	10	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Typha x glauca	30	Y	OBL
2. Phalaris arundinacea	20	Y	FACW
3. Agrostis stolonifera	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- X 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 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.

Community Type: Golf Course Pond

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # 09 **Direction of Photo** N

- Pond 2

Project Code: W1l09d

SOIL

Sampling Point: D9

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20"	7.5YR 6/1	90	7.5YR 5/6	10	C	M	S.C	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D10

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.98879 °N Long: -78.77199 °W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D10

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	15	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Fraxinus americana	3	N	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	3	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	10	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	6	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	113	x 4 =	452
UPL species	0	x 5 =	0
Column Totals:	128 (A)		497 (B)

Prevalence Index = B/A = 3.88

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes _____ No X

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

Photo # P10 **Direction of Photo** SW

Project Code: W1I09d

SOIL

Sampling Point: D/O

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 4/2	100					Sil+	
9-20	7.5YR 5/4	85	7.5YR 5/6	15	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D11

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98914°N Long: -78.77294°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NW I classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D11

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	15	Y	FAC
2. Fraxinus americana	10	Y	FACW
3. Acer saccharinum	5	N	FACW
4. Robinia pseudoacacia	5	N	FACU
5.			
6.			
7.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Dactylis glomerata	20	N	FACU
3. Lolium perenne	15	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	15	x 3 =	45
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	140 (A)		535 (B)

Prevalence Index = B/A = 3.82

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No X

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

Photo # P11 **Direction of Photo** S

- Tree line within old field

Project Code: W1I09d

SOIL

Sampling Point: D11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 4/2	100					S, L	
8-20	7.5YR 5/4	90	7.5YR 5/6	10	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D12

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98795°N Long: -78.77260°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH ROW OF ARBORVITAE

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D12

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Robinia pseudoacacia	25	Y	FACU
2. Acer saccharinum	15	Y	FACW
3.			
4.			
5.			
6.			
7.			
	40	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Thuja occidentalis	50	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	50	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Lolium perenne	30	Y	FACU
3. Dactylis glomerata	15	N	FACU
4. Centaurea stoebe	5	N	NI
5. Dipsacus fullonum	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	45	x 2 =	90
FAC species	0	x 3 =	0
FACU species	145	x 4 =	580
UPL species	0	x 5 =	0
Column Totals:	190 (A)		670 (B)

Prevalence Index = B/A = 3.53

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No ^

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

Photo # P12 **Direction of Photo** E

- Tree line within old field

Project Code: W1l09d

SOIL

Sampling Point: D12

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR5/3	100					S; l	
11-20	10YR5/4	100					l	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D13

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98806°N Long: -78.77392 Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% SLOPES NWI classification: PFO

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	If yes, optional Wetland Site ID: W5

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

• W5-1 → W5-37 (CLOSED)

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)
- X 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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D13

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus bicolor	35	Y	FACW
2. Quercus palustris	25	Y	FACW
3. Acer Saccharinum	25	Y	FACW
4. Fraxinus pennsylvanica	5	N	FACW
5.			
6.			
7.			
	90	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Fraxinus pennsylvanica	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Glyceria striata	20	Y	OBL
2. Toxicodendron radicans	15	Y	FAC
3. Fraxinus pennsylvanica	10	N	FACW
4. Solidago gigantea	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence 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 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.

Community Type: Hardwood Swamp

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P13 **Direction of Photo** S

Project Code: W1I09d

SOIL

Sampling Point: D13

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR3/1	97	10YR5/8	3	C	M	S.L-	
5-20	10YR6/1	97	10YR5/8	3	C	M	FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D14

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONVEX Slope (%): 15

Subregion (LRR or MLRA) LRRL Lat: 42.98814°N Long: -78.77398°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% slopes NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND WOODS

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D14

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus alba	20	Y	FACU
2. Fraxinus americana	20	Y	FACU
3. Quercus bicolor	10	N	FACW
4. Quercus palustris	5	N	FACW
5.			
6.			
7.			
	55	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus cathartica	30	Y	FAC
2. Fraxinus americana	5	N	FACU
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Rhamnus cathartica	10	Y	FAC
2. Toxicodendron radicans	10	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	50	x 3 =	150
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	110 (A)		360 (B)

Prevalence Index = B/A = 3.27

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 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.

Community Type: Successional Northern Hardwoods

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P14 **Direction of Photo** NE

Project Code: W1I09d

SOIL

Sampling Point: D14

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR4/4	100					L	
7-20	10YR5/4	100					L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D15

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98793°N Long: -78.77508°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% slopes NWI classification: PFO

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W5

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

• W5-1 → W5-37 (CLOSED)

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)
- X 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 X	Depth (inches): N/A
Water Table Present?	Yes ____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D15

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus Palustris	40	Y	FACW
2. Acer Saccharinum	15	Y	FACW
3. Quercus bicolor	10	N	FACW
4.			
5.			
6.			
7.			
	65	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	40	Y	FACU
2. Centaurea Stoebe	10	N	NI
3. Carex Vulpinoidea	10	N	OBL
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is < 3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Hardwood Swamp

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P15 **Direction of Photo** E

Project Code: W1I09d

SOIL

Sampling Point: 015

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR3/1	98	7.5YR5/8	2	C	PL	S.L	
9-20	7.5YR4/1	95	7.5YR5/8	5	C	M	S.C.L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D16

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): NONE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98796°N Long: -78.77529°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% Slopes NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D16

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACW
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	10	N	FACU
4. Centaurea stoebe	10	N	NI
5. Taraxacum officinale	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # Pl6 **Direction of Photo** S

Project Code: W1109d

SOIL

Sampling Point: D16

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR4/2	100					S, L	
9-20	10YR5/4	70	10YR5/6	20	C	M	S, C	
			10YR5/1	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D17

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): POND Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.986970°N Long: -78.77501°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% slopes NWI classification: POW

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W6

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

- W6-1-W6-17 (CLOSED)
- FORMER GOLF COURSE POND

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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 X	No ____	Depth (inches): 6-24"
Water Table Present?	Yes X	No ____	Depth (inches): INUNDATED
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): INUNDATED

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D17

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Schoenoplectus tabernaemontani	30	Y	OBL
2. Agrostis stolonifera	20	Y	FACW
3. Carex vulpinoidea	15	N	OBL
4. Phalaris arundinacea	15	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [x] 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 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.

Community Type: Golf Course Pond

Hydrophytic Vegetation Present? Yes X No

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

Photo # P17 **Direction of Photo** SE

Pond 3

Project Code: W1l09d

SOIL Sampling Point: D17

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR5/1	93	7.5YR5/6	7	C	M	SiC	
9-20	7.5YR5/4	85	7.5YR5/6	15	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D18

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98687°N Long: -78.77508°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1l09d

VEGETATION : Use scientific names of plants. Sampling Point: D18

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACU
2. Lolium perenne	15	N	FACU
3. Daucus carota	15	N	FACU
4. Dipsacus fullonum	10	N	FACW
5. Centaurea stoebe	5	N	NL
6. Lotus corniculatus	5	N	FACU
7.			
8.			
9.			
10.			
11.			
12.			
	125 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	120 (A)		480 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P18 **Direction of Photo** SW

Project Code: W1I09d

SOIL

Sampling Point: D18

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

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

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D19

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.98625°N Long: -78.77392°N Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D19

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Picea glauca	20	Y	FACU
2. Robinia pseudoacacia	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	80	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	10	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	150	x 4 =	600
UPL species	0	x 5 =	0
Column Totals:	150 (A)		600 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P19 **Direction of Photo** S

- Tree line through old field

Project Code: W1I09d

SOIL

Sampling Point: D19

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR4/2	100						
12-20	10YR5/4	70	10YR5/6	15	C	M		
			10YR5/2	15	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D20

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98583°N Long: -78.77296°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NWI classification: PSS

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	Yes X No ____
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____	If yes, optional Wetland Site ID:	W7

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

• W7-1 → W7-4 (CLOSED)

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)
- X 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 X	Depth (inches): N/A
Water Table Present?	Yes ____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D20

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus bicolor	10	Y	FACW
2. Quercus palustris	10	Y	FACW
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus Cathartica	30	Y	FAC
2. Fraxinus pennsylvanica	10	N	FACW
3. Quercus palustris	10	N	FACW
4. Salix discolor	5	N	FACW
5.			
6.			
7.			
	55	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Glyceria striata	15	Y	OBL
2. Rhamnus Cathartica	15	Y	FAC
3. Carex vulpinoidea	5	N	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	35	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is < 3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Scrub-Shrub Swamp

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P20 **Direction of Photo** W

Project Code: W1l09d

SOIL

Sampling Point: D20

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR3/1	85	7.5YR5/8	15	C	M	Silt	
6-20	7.5YR5/4	90	7.5YR5/6	10	C	M	Sicl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D21

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.985740°N Long: -78.772990°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% Slopes NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D21

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus alba	10	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACU
2. Dactylis glomerata	15	N	FACU
3. Lolium perenne	10	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P21 **Direction of Photo** SW

Project Code: W1109d

SOIL

Sampling Point: D21

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR4/2	100					SiCl	
7-20	7.5YR5/4	90	7.5YR5/6	10	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: DZZ

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): CONCAVE Slope (%): 0

Subregion (LRR or MLRA) LRRL Lat: 42.98566°N Long: -78.77250°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NWI classification: PFO

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	Yes X No ____
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____	If yes, optional Wetland Site ID:	W8

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

• W8-1 → W8-2 (CLOSED)

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)
- X 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 X	Depth (inches): N/A
Water Table Present?	Yes ____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D92

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	7	Y	FACW
2. Acer rubrum	5	Y	FAC
3.			
4.			
5.			
6.			
7.			
	12	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Quercus palustris	45	Y	FACW
2. Fraxinus pennsylvanica	20	Y	FACW
3. Rhamnus cathartica	5	N	FAC
4.			
5.			
6.			
7.			
	70	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Agrostis gigantea	35	Y	FACW
2. Carex molesta	25	Y	FACW
3. Poa pratensis	15	N	FACU
4. Toxicodendron radicans	10	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- x 2 - Dominance Test is >50%
- ___ 3 - Prevalence 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 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.

Community Type: Scrub-shrub Swamp

Hydrophytic Vegetation Present? Yes x No ___

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

Photo # P92 **Direction of Photo** E

Project Code: W1l09d

SOIL

Sampling Point: D22

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	85	10YR 5/8	15	C	M	Si L	
6-20	7.5YR 5/4	80	7.5YR 5/6	20	C	M	Si C	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

MARGINAL HYDRIC SOIL

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D23

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98560°N Long: -78.77257°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D23

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Acer rubrum	12	Y	FAC
2. Robinia pseudoacacia	10	Y	FACU
3. Rhamnus cathartica	5	N	FAC
4.			
5.			
6.			
7.			
	27	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	40	Y	FACU
2. Glechoma hederacea	15	N	FACU
3. Lolium perenne	15	N	FACU
4. Centaurea stoebe	5	N	NL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	17	x 3 =	51
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	122 (A)		461 (B)

Prevalence Index = B/A = 3.78

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # 923 **Direction of Photo** SW

Project Code: W1I09d

SOIL

Sampling Point: D23

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR4/3	90	10YR5/6	10	C	M	l	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: DZ4

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.98618°N Long: -78.77144°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% slopes NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X N/A
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

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

UPLAND SUCCESSIONAL FIELD

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W11U9d

VEGETATION : Use scientific names of plants. Sampling Point: D24

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Saccharum	15	Y	FACU
2. Aesculus hippocastanum	3	N	NI
3. Acer rubrum	3	N	FAC
4.			
5.			
6.			
7.			
	21	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	55	Y	FACU
2. Dactylis glomerata	30	Y	FACU
3. Taraxacum officinale	15	N	FACU
4. Lolium perenne	10	N	FACU
5. Glechoma hederacea	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

__ 1 - Rapid Test for Hydrophytic Vegetation

__ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is < 3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes _____ No X

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

Photo # P24 **Direction of Photo** S

- Tree line within old field

Project Code: W1I09d

SOIL

Sampling Point: DZ4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR4/2	100					l	
6-20	10YR4/4	100					l	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D25

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): NONE Slope (%): 2-1

Subregion (LRR or MLRA) LRRL Lat: 42.98424°N Long: -78.77828°N Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NWI classification: PFO

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W9

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

• W9-1 → W9-25 (CLOSED)

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)
- X 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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes X No ____

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D25

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus cathartica	70	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	70	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Rhamnus cathartica	25	Y	FAC
2. Carex blanda	20	Y	FAC
3. Toxicodendron radicans	10	N	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1. Vitis aestivalis	20	Y	FACU
2.			
3.			
4.			
	20	= 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is < 3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Scrub-shrub swamp

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P25 **Direction of Photo** NW

Project Code: W1I09d

SOIL

Sampling Point: DZ5

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR4/1	90	10YR5/8	10	C	M	S.L	
5-20	10YR5/2	85	10YR5/8	15	C	M	S.L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D26

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Fill PAD Local relief (concave, convex, none): CONVEX Slope (%): 5

Subregion (LRR or MLRA) LRRL Lat: 42.984240°N Long: -78.773240°W Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NWI classification: N/D

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND FILL PAD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D26

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus Cathartica	20	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Urtica dioica	60	Y	FAC
2. Rhamnus cathartica	20	Y	FAC
3. Centaurea Stoebe	5	N	NI
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. Vitis aestivalis	40	Y	FACW
2.			
3.			
4.			
	40 = 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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	140 (A)		460 (B)

Prevalence Index = B/A = 3.23

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 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.

Community Type: Successional Shrubland

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # D26 **Direction of Photo** S

SOIL Sampling Point: D26

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

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

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

OLD TOPSOIL PILE

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-5-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D27

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKEPLAIN Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98441°N Long: -78.77495°W Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D27

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	15	Y	FACW
2. Robinia pseudoacacia	15	Y	FACU
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	65	Y	FACU
2. Dactylis glomerata	20	N	FACU
3. Trifolium repens	10	N	FACU
4. Taraxacum officinale	10	N	FACU
5. Lolium perenne	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	125	x 4 =	500
UPL species	0	x 5 =	0
Column Totals:	140 (A)		530 (B)

Prevalence Index = B/A = 3.79

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P27 **Direction of Photo** S

- Tree line within old field

Project Code: W1l09d

SOIL

Sampling Point: D27

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR4/3	100					l	
6-20	10YR5/4	100					l	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ___ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.5.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D28

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.98542°N Long: -78.77529°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D28

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer saccharinum	15	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	70	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	15	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	130 (A)		490 (B)

Prevalence Index = B/A = 3.77

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P28 **Direction of Photo** N

- Tree line within old field

Project Code: W1l09d

SOIL

Sampling Point: D28

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR4/3	100					SiL	
5-20	7.5YR5/4	100					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D29

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.981430°N Long: -78.769210°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D29

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	60	Y	FACW
2. Dactylis glomerata	40	Y	FACU
3. Trifolium repens	15	N	FACU
4. Taraxacum officinale	10	N	FACU
5. Lotus corniculatus	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	130	x 4 =	520
UPL species	0	x 5 =	0
Column Totals:	130 (A)		520 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # 229 **Direction of Photo** W

Project Code: W1I09d

SOIL

Sampling Point: D29

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR4/2	100					Sil+	
6-20	7.5YR5/6	100					Sic	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1l09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6·6·2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D30

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): CONCAVE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.98381°N Long: -78.79026°W Datum: NAD83

Soil Map Unit Name: WATER NW I classification: PEM

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W55

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

- W1-1 → W1-55 (OPEN)
- ELLICOTT CREEK OVERFLOW CHANNEL

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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 X Depth (inches): N/A

Water Table Present? Yes ____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): SURFACE

Wetland Hydrology Present? Yes ____ No ____

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

Remarks:

Project Code: W1l09d

VEGETATION : Use scientific names of plants. Sampling Point: D30

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra	30	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus Cathartica	15	Y	FAC
2. Salix discolor	5	Y	FACW
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Sagittaria latifolia	35	Y	OBL
2. Lysimachia nummularia	20	Y	FACW
3. Lythrum salicaria	15	N	OBL
4. Typha x glauca	10	N	OBL
5. Glyceria striata	5	N	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	85	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= 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 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is < 3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of 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 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.

Community Type: Shallow Emergent Marsh

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P30 **Direction of Photo** E

- Stream bank

Project Code: WI09d

SOIL

Sampling Point: D30

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	98	10YR 5/8	2	C	M	mucky	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D31

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONVEX Slope (%): 20

Subregion (LRR or MLRA) LRRL Lat: 42.983730°N Long: -78.770430°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): N/A

Water Table Present? Yes ____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D31

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Dactylis glomerata	55	Y	FACU
2. Poa pratensis	40	Y	FACU
3. Lolium perenne	15	N	FACU
4. Phalaris arundinacea	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	120 (A)		460 (B)

Prevalence Index = B/A = 3.83

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P31 **Direction of Photo** SW

Project Code: W1I09d

SOIL

Sampling Point: D31

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/3	100					L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

APPEARS TO BE FILL MATERIAL

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D32

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): FloodPlain Local relief (concave, convex, none): CONVEX Slope (%): 5

Subregion (LRR or MLRA) LRRL Lat: 42.984492°N Long: -78.769438°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND WOODS

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1109d

VEGETATION : Use scientific names of plants. Sampling Point: D32

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix fragilis	15	Y	FAC
2. Fraxinus americana	10	Y	FACW
3.			
4.			
5.			
6.			
7.			
	25	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1. Rhamnus cathartica	35	Y	FAC
2. Fraxinus americana	20	Y	FACW
3.			
4.			
5.			
6.			
7.			
	55	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Ranunculus ficaria	50	Y	FACW
2. Parthenocissus quinquefolia	20	Y	FACU
3. Rhamnus cathartica	10	N	FAC
4. Ageratina altissima	10	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1. Vitis aestivalis	10	Y	FACU
2.			
3.			
4.			
	10	= 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: 7 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	60	x 3 =	180
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	180 (A)		560 (B)

Prevalence Index = B/A = 3.11

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 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.

Community Type: Successional shrubland

Hydrophytic Vegetation Present? Yes ____ No X

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

Photo # P33 **Direction of Photo** NW

- shrubland alongside Creek

SOIL Sampling Point: D32

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					SL	
5-20	10YR 4/4	100					SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L, M)**
- ___ 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)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6·6·2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D33

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Fill PAD Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.985460°N Long: -78.769780°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% NWI classification: N/A

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

Are Vegetation ____, Soil X or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND FILL PAD / SUCCESSIONAL FIELD

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): N/A

Water Table Present? Yes ____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants. Sampling Point: D33

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	45	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	20	Y	FACU
4. Vicia cracca	10	N	NI
5. Plantago aristata	5	N	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	95 (A)		370 (B)

Prevalence Index = B/A = 3.89

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P34 **Direction of Photo** N

Project Code: W1I09d

SOIL

Sampling Point: D 33

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 4/3	100					Sicl	Fill

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: HARD Fill

Depth (inches): 5"

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1109d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6·6·2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: Δ34

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Fill PAD Local relief (concave, convex, none): CONVEX Slope (%): 10

Subregion (LRR or MLRA) LRRL Lat: 42.98411°N Long: -78.76981°W Datum: NAD83

Soil Map Unit Name: SCHOHARIE SILT LOAM, 3-8% NW I classification: N/A

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

Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

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

- UPLAND FILL PAD
- FORMER ISLAND GOLF GREEN

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: W1l09d

VEGETATION : Use scientific names of plants. Sampling Point: D34

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Platanus occidentalis	15	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Dipsacus fullonum	70	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Poa pratensis	15	N	FACU
4. Ranunculus ficaria	10	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	135 (A)		490 (B)

Prevalence Index = B/A = 3.63

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes _____ No X

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

Photo # P35 **Direction of Photo** W

- old Island green from golf course

Project Code: W1109d

SOIL

Sampling Point: D34

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 4/3	100					Sil	Fill

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6·6·2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D35

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.96315°N Long: -78.77096°W Datum: NAD83

Soil Map Unit Name: Teel Silt Loam NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1l09d

VEGETATION : Use scientific names of plants. Sampling Point: D35

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix fragilis	15	Y	FAC
2. Acer Saccharum	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
	25	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Dactylis glomerata	60	Y	FACU
2. Poa pratensis	40	Y	FACU
3. Trifolium repens	15	N	FACU
4. Taxacodendron radicans	5	N	FAC
5. Dipsacus fullonum	5	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	130	x 4 =	520
UPL species	0	x 5 =	0
Column Totals:	150 (A)		580 (B)

Prevalence Index = B/A = 3.87

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes _____ No X

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

Photo # P37 **Direction of Photo** S

- Tree line within old field

SOIL

Sampling Point: D35

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR4/3	100					SiL	
7-20	10YR4/4	95	10YR5/6	5	C	M	SiL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D36

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.98166°N Long: -78.770190°W Datum: NAD83

Soil Map Unit Name: Teel Silt loam NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D36

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus resinosa	15	Y	FACU
2. Acer Saccharum	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Dactylis glomerata	70	Y	FACU
2. Poa pratensis	35	Y	FACU
3. Dipsacus fullonum	15	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	145	x 4 =	580
UPL species	0	x 5 =	0
Column Totals:	145 (A)		580 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P38 **Direction of Photo** S

- Tree line within old field

Project Code: W1l09d

SOIL

Sampling Point: D36

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5YR 4/2	100					L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-6-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D37

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): FILL PAD Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.981490°N Long: -78.771650°W Datum: NAD83

Soil Map Unit Name: CLAVERACK LOAMY FINE SAND, 0-3% NWI classification: N/A

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

Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

- UPLAND SUCCESSIONAL FIELD WITH TREES
- OLD FILL

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

VEGETATION : Use scientific names of plants.

Sampling Point: D37

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus resinosa	25	Y	FACU
2. Acer Saccharum	15	Y	FACU
3. Acer Saccharinum	5	N	FACW
4.			
5.			
6.			
7.			
	45	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	55	Y	FACU
2. Dactylis glomerata	35	Y	FACU
3. Taraxacum officinale	15	N	FACU
4. Rhamnus cathartica	5	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	5	x 3 =	15
FACU species	145	x 4 =	580
UPL species	0	x 5 =	0
Column Totals:	155 (A)		605 (B)

Prevalence Index = B/A = 3.90

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P39 **Direction of Photo** NW

Tree line within old field

Project Code: W1I09d

SOIL

Sampling Point: D37

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

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

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: HARD FILL

Depth (inches): 4"

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-6-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D38

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.979882° N Long: -78.776000° W Datum: NAD83

Soil Map Unit Name: LAKEMONT SILT LOAM, 0-3% NWI classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 X Depth (inches): N/A

Water Table Present? Yes ____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D38

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	15	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	65	Y	FACU
2. Dactylis glomerata	25	Y	FACU
3. Lolium perenne	10	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	120 (A)		480 (B)

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No b

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

Photo # P40 **Direction of Photo** N

Project Code: W1109d

SOIL

Sampling Point: A38

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5YR 4/2	100					grl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-6-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D39

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): POND Local relief (concave, convex, none): CONCAVE Slope (%): Ø

Subregion (LRR or MLRA) LRRL Lat: 42.978810°N Long: -78.771185°W Datum: NAD83

Soil Map Unit Name: CLAVERACK LOAMY FINE SAND, 0-3 NWI classification: POW

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	Yes X No ____
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____	If yes, optional Wetland Site ID: W12	

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

- W12-1 → W12-11 (CLOSED)
- FORMER GOLF COURSE POND

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X 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 X No ____	Depth (inches):	4-24"
Water Table Present?	Yes X No ____	Depth (inches):	Inundated
Saturation Present? (includes capillary fringe)	Yes X No ____	Depth (inches):	Inundated

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1I09d

VEGETATION : Use scientific names of plants.

Sampling Point: D39

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Sparganium americanum	30	Y	OBL
2. Schoenoplectus fluviatilis	25	Y	OBL
3. Lythrum salicaria	15	N	OBL
4. Carex tribuloides	10	N	FACW
5. Poa pratensis	10	N	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ✓ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 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 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.

Community Type: Golf Course Pond

Hydrophytic Vegetation Present? Yes ✓ No ___

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

Photo # P41 **Direction of Photo** W

- Pond 4

Project Code: W1109d

SOIL

Sampling Point: D39

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR2/1	100					muck	
1-20	10YR4/1	97	10YR5/8	3	C	M	Sicl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1109d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D40

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONVEX Slope (%): 15

Subregion (LRR or MLRA) LRRL Lat: 42.973879°N Long: -78.791809W Datum: NAD83

Soil Map Unit Name: CLAVERACK LOAMY FINE SAND, 0-3 NWI classification: N/A

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

Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD OVER FILL

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: W1109d

VEGETATION : Use scientific names of plants.

Sampling Point: D40

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACW
2. Lolium perenne	20	N	FACU
3. Dactylis glomerata	15	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = 4.0

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # PH2 **Direction of Photo** N

SOIL

Sampling Point: D40

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/2	100					S,L	FILL

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: HARD FILL

Depth (inches): 9"

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D41

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): CONCAVE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.97863°N Long: -78.77340°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% slopes NWI classification: PEM

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	Yes X No ____
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____	If yes, optional Wetland Site ID:	W11

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

* W11-1 → W11-24 (CLOSED)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X 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)
- X 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 X	Depth (inches): N/A
Water Table Present?	Yes ____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes X No ____

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

Remarks:

Project Code: W1109d

VEGETATION : Use scientific names of plants. Sampling Point: D41

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Typha x glauca	70	Y	OBL
2. Poa pratensis	20	N	FACU
3. Juncus effusus	10	N	OBL
4. Carex tribuloides	5	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- X 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 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.

Community Type: Shallow Emergent Marsh

Hydrophytic Vegetation Present? Yes X No ___

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

Photo # P43 **Direction of Photo** E

- Ditch channel

Project Code: W1109d

SOIL

Sampling Point: D41

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR3/1	93	7.5YR5/6	7	C	PL	SiL	
8-20	7.5YR5/1	95	7.5YR5/6	5	C	M	SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes X No ___

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D42

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 43.07874 Long: -78.77353°W Datum: NAD83

Soil Map Unit Name: ODESSA SILT LOAM, 0-3% SLOPES NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: W1109d

VEGETATION : Use scientific names of plants. Sampling Point: D42

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	50	Y	FACW
2. Dactylis glomerata	35	Y	FACU
3. Lolium perenne	10	N	FACU
4. Taraxacum officinale	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	105 (A)		410 (B)

Prevalence Index = B/A = 3.9

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # P44 **Direction of Photo** N

SOIL

Sampling Point: D42

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/2	100					SiCL	
6-20	7.5YR 5/4	100					SiC	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6-6-2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D43

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98119°N Long: -78.77518°W Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

SOIL

Sampling Point: D43

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100					silt	
8-20	10YR 5/4	80	10YR 5/6	10	C	M	silt	
			10YR 5/1	10	D	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D44

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): NONE Slope (%): 1

Subregion (LRR or MLRA) LRRL Lat: 42.982460°N Long: -78.77528°W Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: Wetsoil

VEGETATION : Use scientific names of plants. Sampling Point: D44

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer Saccharinum	20	Y	FACW
2. Pinus resinosa	10	Y	FACU
3. Fraxinus americanum	5	N	FACU
4.			
5.			
6.			
7.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	75	Y	FACU
2. Dactylis glomerata	20	N	FACU
3. Lolium perenne	20	N	FACU
4. Galium aparine	15	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	145	x 4 =	580
UPL species	0	x 5 =	0
Column Totals:	165 (A)		620 (B)

Prevalence Index = B/A = 3.76

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No N

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

Photo # P46 **Direction of Photo** N

Tree line within old field

SOIL

Sampling Point: D44

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR4/2	100					S-cl	
6-20	7.5YR5/4	100					S-c	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D45

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE Plain Local relief (concave, convex, none): CONVEX Slope (%): 2

Subregion (LRR or MLRA) LRRL Lat: 42.98111°N Long: -78.77369°N Datum: NAD83

Soil Map Unit Name: CLAVERACK LOAMY FINE SAND, 0-3 NWI classification: N/A

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

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 W ater Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): N/A
Water Table Present?	Yes _____	No X	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Project Code: WI09d

VEGETATION : Use scientific names of plants. Sampling Point: D45

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer saccharum	15	Y	FACU
2. Salix fragilis	10	Y	FAC
3. Acer rubrum	5	N	FAC
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5')			
1. Poa pratensis	80	Y	FACU
2. Dactylis glomerata	15	N	FACU
3. Lolium perenne	10	N	FACU
4. Taraxacum officinale	10	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	115	= Total Cover	

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	130	x 4 =	520
UPL species	0	x 5 =	0
Column Totals:	145 (A)		565 (B)

Prevalence Index = B/A = 3.90

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ____ No ____

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

Photo # PU7 **Direction of Photo** E

- Tree line within old field

SOIL

Sampling Point: D45

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR4/4	100					SiL	
7-20	10YR5/4	100					SiCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes ____ No X

Remarks:

Project Code: W1I09d

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Amherst Central Park Town/County: Amherst/Erie County Sampling Date: 6.6.2023

Applicant/Owner: Town of Amherst State: New York Sampling Point: D46

Investigator(s): Scott Livingstone & Alex Molik Section, Township, Range: 68.01-1-1.2

Landform (hillslope, terrace, etc.): LAKE PLAIN Local relief (concave, convex, none): CONVEX Slope (%): 3

Subregion (LRR or MLRA) LRRL Lat: 42.982180°N Long: -78.773940°W Datum: NAD83

Soil Map Unit Name: COSAD LOAMY FINE SAND NW I classification: N/A

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS : Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: N/A

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

UPLAND SUCCESSIONAL FIELD WITH TREES

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 X Depth (inches): N/A

Water Table Present? Yes ____ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes ____ No X

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

Remarks:

Project Code: WH09d

VEGETATION : Use scientific names of plants. Sampling Point: D46

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus palustris	30	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		

Herb Stratum (Plot size: 5')			
1. Poa pratensis	45	Y	FACU
2. Dactylis glomerata	20	N	FACU
3. Taraxacum officinale	20	N	FACU
4. Lotus corniculatus	15	N	FACU
5. Lolium perenne	10	N	FACU
6. Centaurea stoebe	10	N	NI
7.			
8.			
9.			
10.			
11.			
12.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 30')			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	140 (A)		500 (B)

Prevalence Index = B/A = 3.57

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 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.

Community Type: Successional old field

Hydrophytic Vegetation Present? Yes ___ No X

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

Photo # PH8 **Direction of Photo** N

- Tree line within old field

SOIL

Sampling Point: D46

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 4/4	100					S-l	
4-20	7.5YR 5/6	100					S-cl	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L, M**)
- ___ 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**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches): N/A

Hydric Soil Present? Yes _____ No X

Remarks:

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

APPENDIX C - SITE PHOTOGRAPHS

Photo 1 (6/5/23): Facing north. Depicts the scrub-shrub swamp community of W1at data point D1.

Photo 2 (6/5/23): Facing south. Depicts the successional old field community at data point D2.

Photo 3 (6/5/23): Facing south. Depicts the golf course pond of W2/Pond 1 at data point D3.

Photo 4 (6/5/23): Facing north. Depicts the successional old field community at data point D4.

Photo 5 (6/5/23): Facing south. Depicts the scrub-shrub swamp community of W3 at data point D5.

Photo 6 (6/5/23): Facing south. Depicts the successional old field community at data point D6.

Photo 7 (6/5/23): Facing north. Depicts the mown lawn community of data point D7.

Photo 8 (6/5/23): Facing southeast. Depicts the successional old field community at data point D8.

Photo 9 (6/5/23): Facing north. Depicts the golf course pond community of W4/Pond 2 at data point D9.

Photo 10 (6/5/23): Facing southwest. Depicts the successional old field community at data point D10.

Photo 11 (6/5/23): Facing south. Depicts the successional old field community at data point D11.

Photo 12 (6/5/23): Facing east. Depicts the successional old field community at data point D12.

Photo 13 (6/5/23): Facing south. Depicts the hardwood swamo community of W5 at data point D13.

Photo 14 (6/5/23): Facing north. Depicts the successional northern hardwood community at data point D14.

Photo 15 (6/5/23): Facing southeast. Depicts the hardwood swamp community of W5 at data point D15.

Photo 16 (6/5/23): Facing south. Depicts the successional old field community at data point D16.

Photo 17 (6/5/23): Facing southeast. Depicts the golf course pond community of W6/Pond 3 at data point D17.

Photo 18 (6/5/23): Facing southwest. Depicts the successional old field community at data point D18.

Photo 19 (6/5/23): Facing south. Depicts the successional old field community of data point D19.

Photo 20 (6/5/23): Facing west. Depicts the scrub-shrub swamp community of W7 at data point D20.

Photo 21 (6/5/23): Facing southwest. Depicts the successional old field community at data point D21.

Photo 22 (6/5/23): Facing east. Depicts the scrub-shrub swamp community of W8 at data point D22.

Photo 23 (6/5/23): Facing southwest. Depicts the successional old field community at data point D23.

Photo 24 (6/5/23): Facing south. Depicts the successional old field community at data point D24.

Photo 25 (6/5/23): Facing northwest. Depicts the scrub-shrub swamp community of data point D25.

Photo 26 (6/5/23): Facing south. Depicts the successional shrubland community at data point D26

Photo 27 (6/5/23): Facing south. Depicts the successional old field community at data point D27.

Photo 28 (6/5/23): Facing north. Depicts the successional old field community at data point D28.

Photo 29 (6/6/23): Facing west. Depicts the successional old field community at data point D29.

Photo 30 (6/6/23): Facing east. Depicts the shallow emergent marsh community of W10 at data point D30.

Photo 31 (6/6/23): Facing southwest. Depicts the successional old field community at data point D31.

Photo 32 (6/6/23): Facing south. Depicts stream 1.

Photo 33 (6/6/23): Facing northwest. Depicts the successional shrubland community at data point D32.

Photo 34 (6/6/23): Facing north. Depicts the successional old field community at data point D33.

Photo 35 (6/6/23): Facing west. Depicts the successional old field community at data point D34.

Photo 36 (6/6/23): Facing south. Depicts stream 2.

Photo 37 (6/6/23): Facing south. Depicts the sucessional old field community at data point D35.

Photo 38 (6/6/23): Facing south. Depicts the successional old field community at data point D36.

Photo 39 (6/6/23): Facing northwest. Depicts the successional old field community at data point D37.

Photo 40 (6/6/23): Facing north. Depicts the successional old field community at data point D38.

Photo 41 (6/6/23): Facing west. Depicts the golf course pond community of W12/Pond 4 at data point D39.

Photo 42 (6/6/23): Facing north. Depicts the successional old field community at data point D40.

Photo 43 (6/6/23): Facing east. Depicts the shallow emergent marsh community of W11/Stream 3 at data point D41.

Photo 44 (6/6/23): Facing north. Depicts the successional old field community at data point D42.

Photo 45 (6/6/23): Facing south. Depicts the successional old field community at data point D43.

Photo 46 (6/6/23): Facing north. Depicts the successional old field community at data point D44.

Photo 47 (6/6/23): Facing southeast. Depicts the successional old field community at data point D45.

Photo 48 (6/6/23): Facing north. Depicts the successional old field community at data point D46.

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

APPENDIX D - REFERENCES

INFORMATIONAL REFERENCES
USED BY EARTH DIMENSIONS INC.

Andrus, R.E. 1980. Sphagnaceae (Peat Moss Family) of New York State. Contributions to a Flora of New York State III, R.S. Mitchell (Ed.), Bulletin No. 442, New York State Museum, Albany, New York. 89 pp.

Benyus, J.M. 1989. The Field Guide to Wildlife Habitats of the Eastern United States. Fireside, Simon & Shuster, Inc., New York. 335 pp.

Britton, N.L., and H.A. Brown. 1970. An Illustrated Flora of the Northern United States and Canada, Volumes 1, 2, and 3. Dover Publications, Inc., New York. 2052 pp.

Brockman, C.F., R. Merrilees, and H.S. Zim. 1968. Trees of North America: A Field Guide to the Major Native and Introduced Species North of Mexico. Western Publishing, Inc. New York, New York. 280 pp.

Brown, L. 1979. Grasses: An Identification Guide. Peterson Nature Library. Houghton Mifflin Co., Boston. 240 pp.

Cobb, B. 1963. A Field Guide to the Ferns and Related Families. Houghton Mifflin Co., Boston. 281 pp.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. Laroe. 1979. Classification of Wetlands and Deep Water Habitats of the United States. U.S. Fish and Wildlife Service, Washington, D.C. FWS/OBS-79-31. 103 pp.

Eggers, S.D., and D.M. Reed. 1997. Wetland Plants and Plant Communities of Minnesota and Wisconsin. Second Edition. U.S. Army Corps of Engineers, St. Paul District, Minnesota. 263 pp.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mass. 100 pp. plus appendices.

Hotchkiss, N. 1970. Common Marsh Plants of the United States and Canada. U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife, Washington, D.C., Resource Publication 93.

Hurley, L.M. 1990. Field Guide to the Submerged Aquatic Vegetation of Chesapeake Bay. U.S. Fish and Wildlife Service, Chesapeake Bay Estuary Program, Annapolis, Maryland. 51 pp.

Knobel, E. 1977. Field Guide to the Grasses, Sedges, and Rushes of the United States. Dover publications, Inc., New York. 83 pp.

Little, E.L. 1980. The Audubon Society Field Guide to North American Trees (Eastern Region). Alfred A. Knopf, New York. 714 pp.

Magee, D.W. 1981. Freshwater Wetlands. University of Massachusetts Press, Clarence. 245 pp.

.

Mitchell, R.S., and G.C. Tucker. 1997. Revised Checklist of New York State Plants. Contributions to a Flora of New York State IV, R.S. Mitchell (Ed.). Bulletin No. 490, New York State Museum, Albany, New York. 400 pp.

Munsell Color Chart. (Munsell Color 1975).

National Wetland Inventory Maps. U.S. Department of the Interior, Fish and Wildlife Service, National Wetland Inventory, St. Petersburg, Florida. http://wetlandsfws.er.usgs.gov

Niering, W.C., and N.C. Olmstead. 1979. The Audubon Society Field Guide to North American Wildflowers (Eastern Region). Alfred A. Knopf, New York. 887 pp.

New York State Code of Rules and Regulations (NYCRR). 1989. Protected Native Plants. NYCRR Part 193.3, June, 1989. New York State Department of Environmental Conservation.

New York Natural Heritage Program. 2002. New York Rare Plant Status List, February, 1989. S.M. Young, (Ed.), New York State Department of Environmental Conservation and The Nature Conservancy publication. 26 pp.

New York State Department of Environmental Conservation Freshwater Wetlands Maps, NYSDEC Environmental Resource Mapper, http://www.dec.ny.gov/imsmaps/ERM/viewer.htm

Newcomb, L. 1977. Newcomb's Wildflower Guide. Little, Brown and Co., Boston. 490 pp.

Ogden, E.C. 1981. Field Guide to Northeastern Ferns. Contributions to a Flora of New York State III, R.S. Mitchell (Ed.), Bulletin No. 444, New York State Museum, Albany, New York. 122 pp.

Peattie, D.C. 1991. A Natural History of Trees of Eastern and North America. Houghton Mifflin Co., Boston. 606 pp.

Peterson, RT., and M. McKenny. 1968. A Field Guide to Wildflowers of Northeastern and Northcentral North America. Houghton Mifflin Co., Boston. 420 pp.

Petrides, G.A. 1972. A Field Guide to Trees and Shrubs. Houghton Mifflin Co., Boston. 428 pp.

Prescott, G.W. 1969. How to Know the Aquatic Plants. Second Edition. William C. Brown Co., Dubuque, Iowa. 171 pp.

Raynal, D.J., and D. J. Leopold. 1999. Landowner's Guide to State-Protected Plants of Forests in New York State. New York Center for Forestry Research and Development, SUNY-ESF, Syracuse, New York. 92pp.

Reed, Porter B. Jr. 1988. National List of Plant Species that Occur in Wetlands: Northeast (Region 1). U.S. Fish and Wildlife Service, Washington, D.C. Biol. Rept. 88 (26.1). 112 pp.

Reschke, C. 2002. Ecological Communities of New York State. New York Natural Heritage Program. NYSDEC, Latham, N.Y. (2nd Ed.) 136 pp.

Soil Conservation Service. 1975. Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys. U.S.D.A., Soil Conservation Service, U.S. Handbook 436.

Soil Conservation Service. 1988. New York Hydric Soils and Soils with Hydric Inclusions, revised July, 1988, Soil Conservation Service, Syracuse, New York, Technical Guide, Section II. 23 pp.

Simonds,R.L., and H.H. Tweedie. 1978. Wildflowers of the Great Lakes Region. Chicago Review Press, Chicago. 96 pp.

Symonds, G.W.D. 1958. The Tree Identification Book. Quill, New York. 272 pp.

Symonds, G.W.D. 1963. The Shrub Identification Book. William Morrow & Co., New York. 379 pp.

Tiner, R. W. Jr. 1988. A Field Guide to Nontidal Wetland Identification. Maryland Department of Natural Resources and U.S. Fish and Wildlife Service Cooperative Publication. Maryland Department of Natural Resources, Annapolis, Maryland. 283 pp. + 198 color plates.

United States Department and Agriculture & the Natural Resources Conservation Service (USDA, NRCS).Soil Conservation Service Soil Survey of Erie County, New York. U.S.D.A., Soil Conservation Service. 1986 http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

USDA, NRCS. 2009. The PLANTS Database (http://plants.usda.gov, 12/14/09). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

United States Geological Survey maps, Denver, Colorado. Buffalo NE Quadrangle.

U.S. Army Corps of Engineers. 2009. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-09-19. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Fish and Wildlife Service, A Wetlands and Deepwater Habitats Classification. May 3, 2002, http: //www.nwi.fws.gov/. June 16, 2002.

Zander, R.H., and G.J. Pierce. 1979. Flora of the Niagara Frontier Region. Bulletin of the Buffalo Society of Natural Sciences, Vol. 16 (Suppl. 2), Buffalo, New York. 110 pp

AMHERST CENTRAL PARK - 772 NORTH FOREST ROAD

APPENDIX E – PROJECT CONTACT DETAILS

PROJECT CONTACT DETAILS

Wetland Personnel:

Soils and Hydrology Sampling
Scott Livingstone, Senior Soil Scientist
Earth Dimensions, Inc.
1091 Jamison Road
Elma, New York 14059
(716) 655-1717
slivingstone@earthdimensions.com

Vegetation Sampling
Alex Molik, Ecologist
Earth Dimensions, Inc.
1091 Jamison Road
Elma, New York 14059
(716) 655-1717
alex@earthdimensions.com

Report Preparation
Alex Molik, Ecologist
Earth Dimensions, Inc.
1091 Jamison Road
Elma, New York 14059
(716) 655-1717
alex@earthdimensions.com

Client Contact:

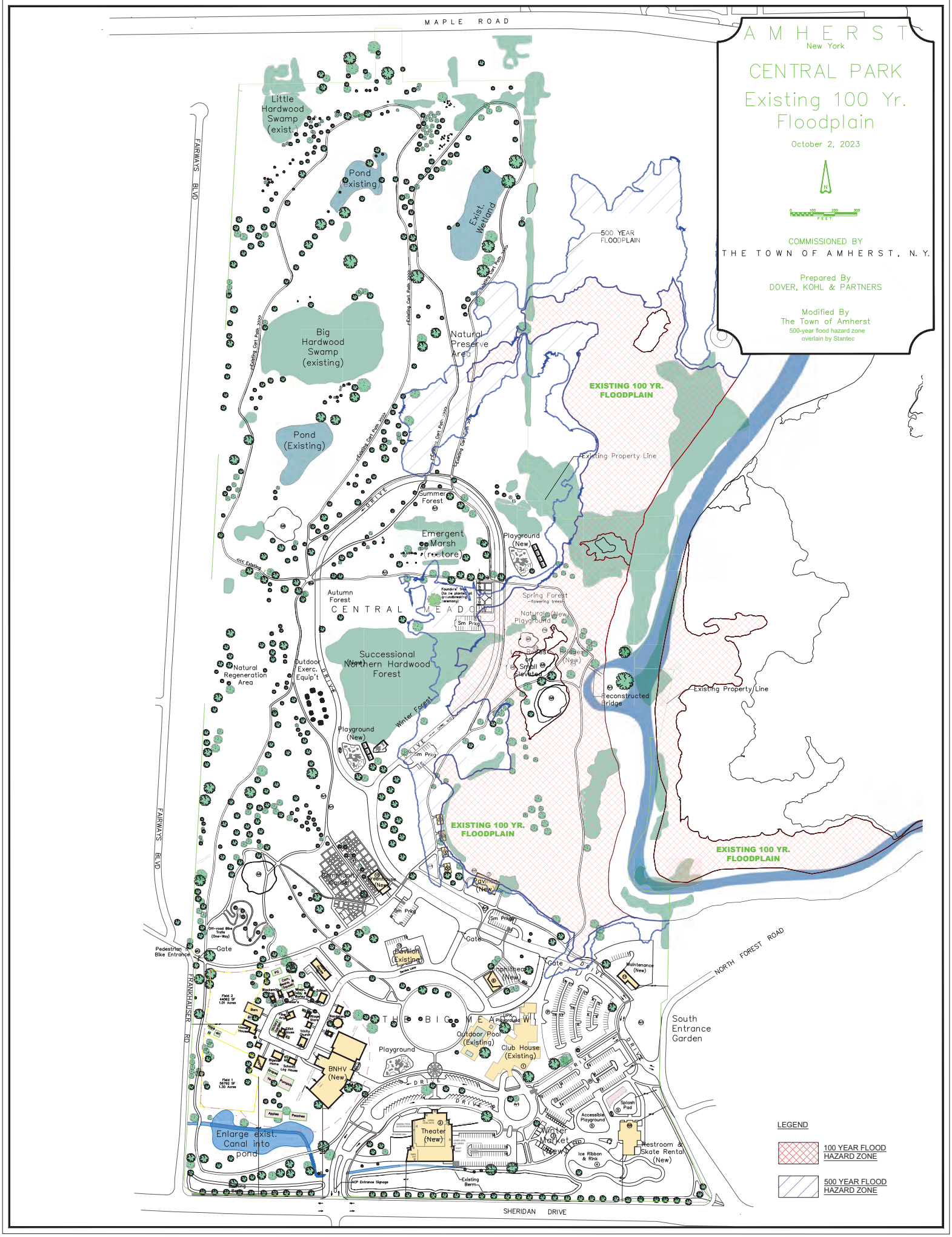
JEFFREY SZATKOWSKI
TOWN OF AMHERST PLANNING DEPARTMENT
5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
JSZATKOWSKI@AMHERST.NY.US
(716) 631-7051

Landowner Contact (If different from Client):

Town of Amherst
5583 Main Street
Williamsville, New York 14221
(716) 631-7000

.

Appendix D ACP Plan - Flood Hazard Zones


AMHERST
New York
CENTRAL PARK
Existing 100 Yr. Floodplain
October 2, 2023
COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.
Prepared By
DOVER, KOHL & PARTNERS
Modified By
The Town of Amherst
500-year flood hazard zone
overlain by Stantec
MAPLE ROAD
FAIRWAYS BLVD
FRANKHAUSER RD
NORTH FOREST ROAD
SHERIDAN DRIVE
Little Hardwood Swamp (exist.
Pond Existing
Exist. Wetland
500 YEAR FLOODPLAIN
Big Hardwood Swamp (existing)
Natural Preserve Area
EXISTING 100 YR. FLOODPLAIN
Pond (Existing)
Existing Property Line
Summer Forest
Emergent Marsh (restore)
Playground (New)
Autumn Forest
CENTRAL MEADOW
Spring Forest
Naturalized (New) Playground
Successional Northern Hardwood Forest
Natural Regeneration Area
Outdoor Exerc. Equip't
Reconstructed Bridge
Winter Forest
Playground (New)
Sm Prkg
Community Garden
Greenhouse (New)
Pavilion (New)
Pavilion Existing
Gate
Pedestrian Bike Entrance
Off-road Bike Trails (One-Way)
Amphitheater (New)
Maintenance (New)
South Entrance Garden
THE BIG MEADOW
Outdoor Pool (Existing)
Club House (Existing)
Playground
BNHV (New)
Enlarge exist. Canal into pond
Theater (New)
Winter Market (New)
Splash Pad
Accessible Playground
Restroom & Skate Rental (New)
Ice Ribbon & Rink
Existing Berm
LEGEND
100 YEAR FLOOD HAZARD ZONE
500 YEAR FLOOD HAZARD ZONE

Appendix E Traffic Impact Study, October 2023

C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203

Traffic Impact Study

Amherst Central Park
Town of Amherst, Erie County, New York

Prepared for:
Town of Amherst
Municipal Building
5583 Main Road
Williamsville, New York 14221

October 2023

Table of Contents

Appendices:

Executive Summary

The existing location of the Westwood Country Club in the Town of Amherst has been proposed to be redeveloped into a 171-acre Town park. The proposed Amherst Central Park will have a variety of amenities for the community, some of which include trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, a museum, and more. The proposed site is in the Town of Amherst, Erie County, New York, between Sheridan Drive and Maple Road and Frankhauser Road and N. Forest Road. There are two proposed site driveways at the southern end on Sheridan Drive and N. Forest Road. This Traffic Impact Study is part of a larger Environmental Impact Study for the proposed park.

Through an existing conditions inventory, collision analysis, and level of service analysis, the study area intersections were evaluated for potential improvements and mitigation. The analysis considered existing and build conditions during the afternoon weekday peak and the midday Saturday peak. The selected peak hours were chosen for analysis due to the expected recreational use of the site. The site generated trips were calculated using the ITE Trip Generation Manual and assumptions made based on seating capacity and expected attendance to events. Proposed site generated traffic volumes were distributed using existing traffic patterns.

The existing LOS at the study intersections is acceptable for a congested roadway network with the worst level of service at a LOS D. The proposed park-related generated traffic minimally impacts the LOS at the study intersections. A traffic signal is not warranted at the proposed site driveway on Sheridan Drive; however, a signal should be considered due to the long delays and queue expected at the site driveway.

1.0 Introduction

Study Purpose

The Town of Amherst has requested a Traffic Impact Study for the proposed Amherst Central Park. This park is proposed to contain a variety of amenities for public use, some of which include pedestrian and bike trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, and more. This Traffic Impact Study is part of a larger Environmental Impact Study for the proposed park. The primary purposes of this study are to identify and assess traffic generated by the proposed park, compare existing conditions of the nearby roadways to the expected fully built conditions and recommend mitigation measures required due to the traffic generated by the park development.

Study Area

The proposed site location is in the Town of Amherst, Erie County, New York, at the old Westwood Country Club site. The northern and southern site limits are Sheridan Drive and Maple Road. The eastern limit of the proposed park is a combination of N. Forest Road, Ellicott Creek, and the existing Audubon Par 3 Golf Course. The western site limits are along Frankhauser Road and Fairways Boulevard homes. There are two proposed site driveways to access Amherst Central Park. The main entrance to the proposed park is planned to be off of Sheridan Drive, across from Fenwick Road. The other proposed site driveway is located on N. Forest Road at the existing Westwood Country Club entrance driveway. The study area includes intersections between Harlem Road and N. Forest Road along Sheridan Drive. See Figure 1 for the Study Area Map.

Study Roadways:

1) Sheridan Drive (NYS Route 324)
2) N. Forest Road

Study Intersections:

1) Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)
2) Sheridan Drive (NYS Route 324) at I-290 Ramps
3) Sheridan Drive (NYS Route 324) at Frankhauser Road
4) Sheridan Drive (NYS Route 324) at Fenwick Road
5) Sheridan Drive (NYS Route 324) at N. Forest Road

Figure 1: Study Area Map

Methodology

Intersections

The study intersections were analyzed using SYNCHRO 11[1], which is a computer program that implements the methods presented in the 6th Edition Highway Capacity Manual[2]. SYNCHRO determines the Level of Service (LOS), which is defined in terms of Delay.

> Delay is a measure of driver discomfort, frustration, fuel consumption and lost travel time. Level of Service criteria are stated in terms of the control delay per vehicle for a 15-minute analysis period and range from "A" to "F". Level of Service A is representative of a movement that is free flowing with minimal delay, while LOS F generally represents long delays. LOS D is generally considered acceptable in urban environments.

The ranges of delay for each level of service, as contained in the 6th Edition Highway Capacity Manual, are shown in Table 1.

Table 1: Intersection Level of Service Criteria

Level of Service (LOS)	Unsignalized Intersections	Signalized Intersections	
	Delay (sec)	Delay (sec)	v/c ratio*
A	0-10	0-10	<1.0
B	> 10-15	> 10-20	<1.0
C	> 15-25	> 20-35	<1.0
D	> 25-35	> 35-55	<1.0
E	> 35-50	> 55-80	<1.0
F	over 50	over 80	≥1.0

* If the volume to capacity ratio is 1.0 or greater, the LOS is an F

2.0 Existing Conditions

Roadway Network

The study area is along Sheridan Drive (NYS Route 324), which is an east/west roadway mainly with 2 travel lanes in each direction and a shared left turning lane with dedicated left turn lanes at intersections. Harlem Road (NYS Route 240) forms a T-junction with Sheridan Drive at the western end of the study area and N. Forest Road intersects Sheridan Drive at the eastern end of the study area. Interstate 290 contains an exit and entrance ramp onto Sheridan Drive. Additionally, there are

[1] Synchro Studio 11, Traffic Signal Optimization and Simulation Modeling Software, Version 10, Trafficware Corporation, Albany, California, 2020.
[2] Highway Capacity Manual, Transportation Research Board, National Research Council, Washington D.C., 2016.

several minor intersections with Sheridan Drive such as: Sunrise Boulevard, Cranburne Lane, Frankhauser Road, and Fenwick Road. Apart from Frankhauser Road, these are all unsignalized intersections and primarily serve residential areas. Sheridan Drive primarily contains three travel lanes in each direction with a center turn lane from the western end of the study area to the area of the I-290 ramps. From the ramps, it runs with two travel lanes and a center turn lane to the eastern end of the study area. There are no existing bicycle accommodations along any road in the study area. Both Sheridan Drive and N. Forest Road have sidewalks along both sides of the street near the proposed site.

Table 2: Street Network Information

Street	Jurisdiction	Functional Classification	AADT	Speed Limit
Sheridan Drive (NYS Route 324)	NYSDOT	Urban Principal Arterial	36,681	45 mph
Harlem Road (NYS Route 240)	NYSDOT	Urban Minor Arterial	11,530	35 mph
Interstate 290 (WB entrance ramp)	NYSDOT	Urban Principal Arterial Interstate	8,301	-
Interstate 290 (WB exit ramp)	NYSDOT	Urban Principal Arterial Interstate	6,985	-
Sunrise Boulevard	Town of Amherst	Urban Local	-	30 mph
Cranburne Lane	Town of Amherst	Urban Local	-	30 mph
Frankhauser Road	Town of Amherst	Urban Local	-	30 mph
Fenwick Road	Town of Amherst	Urban Local	-	30 mph
North Forest Road	Erie County	Urban Principal Arterial & Urban Minor Arterial	9,583	35 mph

Capacity Analysis

Intersection Analysis

Turning movement counts (TMCs) were collected at the study area intersections through Tri-State Traffic Data. Data was collected on Thursday, September 21, 2023 from 3:00 PM to 6:00 PM and Saturday, September 23, 2023 from 11:00 AM to 2:00 PM. The study area weekday afternoon peak hour is 4:30 PM to 5:30 PM and the Saturday midday peak hour is 12:00 PM to 1:00 PM. Refer to Appendix A, Figure 4 for existing turning movement volumes. Table 3 below highlights the results of the level of service analysis for existing conditions.

Table 3: Intersection LOS Analysis - Existing Conditions

Approach		Weekday PM			Saturday Midday		
		LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS (Delay)	V/C	Queue
Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)							
Eastbound	*Thru*	D (37.9)	0.54	515	C (26.6)	0.35	314
	Right	A (2.7)	0.29	51	A (2.1)	0.31	46
Westbound	*Left*	D (40.0)	0.32	76	C (32.8)	0.39	85
	Thru	A (3.8)	0.34	169	B (10.7)	0.25	267
Northbound	*Left*	**E (69.1)**	**0.48**	**131**	**E (75.0)**	**0.54**	**129**
	Right	A (7.7)	0.67	96	A (4.6)	0.46	46
	Intersection	C (20.7)	-	-	B (19.7)	-	-
Sheridan Drive (NYS Route 324) at I-290 Ramps							
Eastbound	*Left*	**E (63.1)**	**0.87**	**343**	C (26.6)	0.49	213
	Thru	C (26.1)	0.46	525	B (15.2)	0.26	305
Westbound	*Thru/Right*	C (21.0)	0.91	637	B (10.5)	0.37	176
Northbound	*Left*	D (42.3)	0.25	173	D (52.6)	0.40	197
	Left/Right	C (29.1)	0.34	174	B (10.3)	0.35	74
	Right	C (28.5)	0.33	162	A (7.7)	0.33	58
	Intersection	C (27.3)	-	-	B (15.5)	-	-
Sheridan Drive (NYS Route 324) at Frankhauser Road							
Eastbound	*Left*	A (1.6)	0.09	m3	A (1.0)	0.04	3
	Thru	A (6.6)	0.55	217	A (2.7)	0.36	101
Westbound	*Thru/Right*	A (2.2)	0.54	116	A (1.7)	0.34	66
Southbound	*Left*	**F (85.3)**	**0.49**	**106**	**F (84.1)**	**0.42**	**89**
	Right	C (25.5)	0.21	34	C (28.8)	0.17	29
	Intersection	A (5.9)	-	-	A (4.0)	-	-
Sheridan Drive (NYS Route 324) at Fenwick Road							
Westbound	*Left*	c (15.7)	0.04	0.1	b (11.3)	0.03	0.1
Northbound	*Left/Right*	**e (35.7)**	**0.23**	**0.9**	c (21.0)	0.16	0.6
	Intersection	n/a			n/a		

*lowercase letters signify the HCM 6th edition Stop Control methodology was used

a: level-of-service

b: delay is measured in seconds

c: volume to capacity ratio

d: 95th queue length, measured in feet (queue length of stop controlled intersections measured in number of vehicles)

Table 3 continued

Approach		Weekday PM			Saturday Midday		
		LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS (Delay)	V/C	Queue
Sheridan Drive (NYS Route 324) at N. Forest Road							
Eastbound	*Left*	**E (64.8)**	**0.87**	**#404**	A (9.7)	0.40	115
	Thru	D (36.1)	0.75	727	B (19.6)	0.43	419
	Right	B (17.5)	0.35	208	A (5.4)	0.11	75
Westbound	*Left*	D (39.6)	0.69	168	B (13.0)	0.32	84
	Thru/Right	D (50.1)	0.86	755	C (22.4)	0.40	352
Northbound	*Left*	D (52.3)	0.65	209	D (51.9)	0.38	131
	Thru	**E (73.7)**	**0.81**	**#485**	**E (74.9)**	**0.64**	**270**
	Right	A (8.1)	0.35	64	A (7.8)	0.31	40
Southbound	*Left*	D (40.1)	0.24	61	D (48.2)	0.22	70
	Thru	**E (68.8)**	**0.69**	**262**	**E (71.1)**	**0.51**	**147**
	Right	C (26.9)	0.54	148	B (14.1)	0.53	75
Intersection		D (45.6)	-	-	C (27.0)	-	-

Based on the level of service analysis, the study intersections are operating at an acceptable LOS (LOS D or better). There are some intersection movements that are experiencing poor levels of service (LOS E or F), these movements are on the minor streets and at left turn movements with high opposing volumes. It is common for minor streets and left turns to have poor levels of service to benefit the level of service on the mainline in high traffic volume areas.

Pedestrian Conditions

Sidewalks exist along both sides of Sheridan Drive for the entire length that is contained within the study area. Sidewalks are non-continuous along N. Forest Road. There are signalized crosswalks at the intersections of Sheridan Drive and Harlem Road, Sheridan Drive and Interstate 290 ramps, Sheridan Drive and Frankhauser Road, and Sheridan Drive and N. Forest Road. Marked crosswalks exist along Sheridan Drive at the intersections of Sunrise Boulevard, Cranburne Lane, and Fenwick Road. See **Figure 3** in **Appendix A** for the Pedestrian, Bicycle and Transit Map.

Bicycle Conditions

There is no existing infrastructure for bicycling in the study area.

Transit Conditions

There is an existing operating bus line of the Niagara Frontier Transportation Authority (NFTA) present along Sheridan Drive, the 49 East Amherst line. There are 4 Bus stops in the study area. They are located at the intersections of Frankhauser Road and N. Forest Road.

Collision Analysis

A collision analysis was completed for the study area at signalized intersections along Sheridan Drive at Frankhauser Road and at N. Forest Road. There was a total of 79 collisions over a five-year period from January 2018 through December 2022 with 17 collisions at the Frankhauser Road intersection and 62 collisions at the N. Forest Road intersection. The most common type of collision was a rear end type, representing roughly half of all collisions. The listed cause for most of these collisions was following too closely. 39% of all collisions resulted in injuries. Detailed collision analyses are provided in Appendix B. Table 4 contains a summary of the predominant collision types at each intersection.

Table 4: Collision Analysis

Type of Collision	Number	Percentage
Sheridan Drive at Frankhauser Road		
Rear End	12	70%
Overtaking	0	0%
Right Angle	2	12%
Left Turn	2	12%
Other	1 (fixed object)	6%
Sheridan Drive at Fenwick Road		
Rear End	3	33%
Right Angle	4	44%
Other	2 (fixed object)	22%
Sheridan Drive at North Forest Road		
Rear End	29	47%
Overtaking	4	6%
Right Angle	10	16%
Left Turn	13	21%
Sideswipe	3	5%
Other	3 (fixed object)	5%

3.0 No Build Condition

Historical traffic data was reviewed within the study area; there was an overall decrease in traffic volumes from 2011 to 2019. Based on the GBNRTC's regional Travel Demand Model (TDM), projections of future trip production and attraction for the no build condition anticipates a status quo condition with a small reduction in traffic of 1% - 2% in the future. Any growth in the area is due to other proposed developments; no background growth rate is proposed to analyze the future no build condition.

4.0 Build Condition

Site Information

The site is proposed to contain a variety of amenities for public use, some of which include pedestrian and bike trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, a historic village, and more. The project site is bounded by Maple Road to the north, Sheridan Drive to the south and residential neighborhoods to the east and west. There are two proposed access points to the park, one at the existing Westwood Country Club driveway from N. Forest Road, and the other on Sheridan Drive at the intersection with Fenwick Road. Appendix A, Figure 2 contains the Amherst Central Park Planned Unit Development Conceptual Plan . The construction of this site is estimated to be a phased buildout with a phase one completion within the next 5 years and a phase 2 completion in the next 10 years.

Trip Generation

The proposed Amherst Central Park will consist of:

- 171-acre Park
- 44,500 SF Community Building
- 3,300 SF Amphitheater
- 31,600 SF Music Theater
- 25,000 SF Ice Skating Rink/Ribbon
- 5,000 SF Winter Market
- 52,200 SF Buffalo Niagara Heritage Village and Museum (relocated from northern Amherst)

A combination of the ITE's Trip Generation Manual, seating capacity assumptions based on architectural standards, and historic attendance data were used to determine trips for Amherst Central Park. It is unlikely that all facilities will be peaking and running events that coincide with one another. To not overestimate the trip generation, but also use a conservative approach, the major generators of the park were used to estimate the trip generation. Assumptions for the trip generation are as follows:

- Not all facilities will be at capacity or running programs and events at the same time on the same day
- The facilities that are expected to be the major generators were used for the trip generation (community building and music theater)
- The community building is expected to have a Universal Pre-Kindergarten (UPK) program. This program is expected to peak slightly earlier in the day from the PM peak of the street network, along with the music theater. Some trips were accounted for during the PM peak, to account for other community activities in the center, and late pick up/teacher departure for the UPK program.

- It is assumed that the music theater will offer evening performances. Seat capacity for the music theater was estimated using architecture standards based on the square footage of the facility. Vehicle occupancy rate was assumed 2.3 attendees/vehicle based on ITE Standards.
- It is assumed that there will still be some background trips using other facilities in the park such as the playground, splashpad, trails, etc. These background trips are accounted for in the trip generation.
- It is assumed that the park will create the most trips during the PM Peak (4:30-5:30pm) and Saturday Midday Peak (12:00-1:00pm).

Trip generation for the PM Peak and Saturday Peak was calculated, and is outlined in Table 5 below.

Table 5: Trip Generation

Park Facility	ITE Land Use Code	PM Peak Trips			Saturday Midday/Peak Trips		
		Entering	Exiting	Total	Entering	Exiting	Total
Park	411 Public Park	18	15	33	33	34	61
Community Building	495 Recreational Community Center	31	35	66	26	22	48
Theater	N/A	70	17	87	70	17	87
Ice Rink/Ribbon	465 Ice Skating Rink	18	15	33	35	31	66
	Peak Hour Trips	137	82	219	165	97	262

Trip Distribution

Trip distribution was based on existing traffic patterns in the study area. The main entrance of the park is proposed to be off of Sheridan Drive, across from Fenwick Road. It was assumed the majority of the trips (70%) will be entering and exiting from the main entrance, and 30% will use the entrance on N. Forest Road.

Sheridan Drive has an approximate 50% split of traffic distributed between eastbound and westbound for both peak hours. Therefore, the overall study area distribution is 50% coming to and from the east, and 50% coming to and from the west. The more localized distribution is traffic distributed between the I-290 ramps, Harlem Road, and N. Forest Road. See Appendix A, Figure 5 for the trip distribution in the study area.

Westwood Mix-Use Neighborhood TIS

The Westwood Mix-Use Neighborhood TIS was completed in 2017 by SRF Associates. The proposed site for this traffic study is the same site as Amherst Central Park. The proposed site development in the Westwood Mixed-Use Neighborhood included a variety of residential (single-family and multi-family) homes, office spaces, mixed-use commercial and residential buildings, a hotel, a senior living facility, a community center, and a public park. Trip generation competed for this study used ITE Trip Generation Manual, 9th Edition and the generation trips are shown in the following table.

The estimated trips generated by the proposed Amherst Central Park is less than the estimated trips generated by the previously proposed Westwood Mixed-Use Neighborhood. The impact to the nearby neighborhood and roadways by Amherst Central Park will be less than a proposed mixed-use development.

Table 6: Westwood Mixed-Use Neighborhood TIS Trip Generation

PARCEL	DESCRIPTION	SIZE	AM PEAK		PM PEAK	
			ENTER	EXIT	ENTER	EXIT
VII	Senior Housing	104 Units	7	14	14	12
VII	Assisted Living	200 Beds	18	10	19	25
I	Smaller Patio Homes	57 Units	6	13	12	12
IV	Multifamily Community Apartments	180 Units	18	74	76	41
II & III	Large Patio Homes (26) and Single Family Detached Housing (41)	67 Units	14	43	46	27
VI	Multi-family Building Apartments	89 Units	9	38	44	23
VI	Condominium Townhomes along Frankhauser Road	40 Units	4	21	19	9
VI	Hotel	130 Rooms	41	28	40	38
VI	Apartments	221 Units	22	90	90	49
VI	Commercial/Retail	166,000 SF	131	81	404	437
VI	Professional Office	264,800 SF	367	50	64	311
V	City Park	33 Acres of Land (6 Acres pond)	83	66	66	50
	Sub-total		***720***	***528***	***894***	***1034***
	Internal Trips		*-113*	*-101*	*-206*	*-238*
	Pass-by Trips		*0*	*0*	*-102*	*-98*
	Total New Trips		**607**	**427**	**586**	**698**

Capacity Analysis

Intersection Analysis

Refer to Appendix A Figure 7 for build turning movement volumes. Table 7 below highlights the results of the level of service analysis for build conditions compared to the existing conditions.

Table 7: Intersection LOS Analysis Existing versus Build Condition

Approach		Weekday PM						Saturday Midday					
		Existing			Build			Existing			Build		
		LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS (Delay)	V/C	Queue	LOS[a] (Delay)[b]	V/C[c]	Queue[d]
Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)													
Eastbound	*Thru*	D (37.9)	0.54	515	D (37.8)	0.55	532	C (26.6)	0.35	314	C (28.2)	0.38	342
	Right	A (2.7)	0.29	51	A (2.6)	0.29	50	A (2.1)	0.31	46	A (2.4)	0.31	50
Westbound	*Left*	D (40.0)	0.32	76	D (39.8)	0.33	m77	C (32.8)	0.39	85	C (30.7)	0.38	89
	Thru	A (3.8)	0.34	169	A (3.9)	0.34	169	B (10.7)	0.25	267	A (7.6)	0.26	214
Northbound	*Left*	**E (69.1)**	**0.48**	**131**	**E (68.9)**	**0.48**	**131**	**E (75.0)**	**0.54**	**129**	**E (74.4)**	**0.54**	**129**
	Right	A (7.7)	0.67	96	A (7.9)	0.68	100	A (4.6)	0.46	46	A (4.5)	0.48	46
	Intersection	C (20.7)	-	-	C (20.7)	-	-	B (19.7)	-	-	B (19.0)	-	-
Sheridan Drive (NYS Route 324) at I-290 Ramps													
Eastbound	*Left*	**E (63.1)**	**0.87**	**343**	**E (62.9)**	**0.87**	**343**	C (26.6)	0.49	213	C (31.1)	0.54	210
	Thru	C (26.1)	0.46	525	C (26.6)	0.48	547	B (15.2)	0.26	305	B (20.0)	0.29	360
Westbound	*Thru/Right*	C (21.0)	0.91	637	C (21.8)	0.93	654	B (10.5)	0.37	176	B (12.2)	0.42	129
Northbound	*Left*	D (42.3)	0.25	173	D (42.3)	0.25	173	D (52.6)	0.40	197	D (47.0)	0.34	197
	Left/Right	C (29.1)	0.34	174	C (29.8)	0.35	182	B (10.3)	0.35	74	B (12.1)	0.33	93
	Right	C (28.5)	0.33	162	C (29.5)	0.34	172	A (7.7)	0.33	58	B (11.4)	0.32	83
	Intersection	C (27.3)	-	-	C (27.8)	-	-	B (15.5)	-	-	B (18.0)	-	-
Sheridan Drive (NYS Route 324) at Frankhauser Road													
Eastbound	*Left*	A (1.6)	0.09	m3	A (1.7)	0.09	m2	A (1.0)	0.04	3	A (1.0)	0.04	3
	Thru	A (6.6)	0.55	217	A (7.4)	0.58	232	A (2.7)	0.36	101	A (3.0)	0.38	123
Westbound	*Thru/Right*	A (2.2)	0.54	116	A (2.0)	0.55	124	A (1.7)	0.34	66	A (1.7)	0.35	73
Southbound	*Left*	**F (85.3)**	**0.49**	**106**	**F (85.3)**	**0.49**	**106**	**F (84.1)**	**0.42**	**89**	**F (84.1)**	**0.42**	**89**
	Right	C (25.5)	0.21	34	C (25.5)	0.21	34	C (28.8)	0.17	29	C (28.8)	0.17	29
	Intersection	A (5.9)	-	-	A (6.2)	-	-	A (4.0)	-	-	A (4.1)	-	-

Table 7 continued

Approach		Weekday PM						Saturday Midday					
		Existing			Build			Existing			Build		
		LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS[a] (Delay)[b]	V/C[c]	Queue[d]	LOS (Delay)	V/C	Queue	LOS[a] (Delay)[b]	V/C[c]	Queue[d]
Sheridan Drive (NYS Route 324) at Fenwick Road and Site Driveway 1													
Eastbound	*Left*	n/a			c (16.7)	0.20	0.7	n/a			B (11.5)	0.14	0.5
Westbound	*Left*	c (15.7)	0.04	0.1	c (15.7)	0.04	0.1	b (11.3)	0.03	0.1	B (11.3)	0.03	0.1
Northbound	*Left/Right*	**e (35.7)**	**0.23**	**0.9**	**f (1247.6)**	**2.53**	**5.2**	c (21.0)	0.16	0.6	**f (148.7)**	**0.70**	**3**
Southbound	*Left/Right*	n/a			**f (901.4)**	**2.30**	**7.5**	n/a			**f (86.2)**	**0.66**	**3.4**
	Intersection	n/a			n/a			n/a			n/a		
Sheridan Drive (NYS Route 324) at N. Forest Road													
Eastbound	*Left*	**E (64.8)**	**0.87**	**#404**	**E (68.2)**	**0.89**	**#402**	A (9.7)	0.40	115	A (9.8)	0.43	123
	Thru	D (36.1)	0.75	727	D (36.3)	0.77	733	B (19.6)	0.43	419	C (20.4)	0.45	454
	Right	B (17.5)	0.35	208	B (17.1)	0.36	201	A (5.4)	0.11	75	A (6.2)	0.12	83
Westbound	*Left*	D (39.6)	0.69	168	D (44.1)	0.71	177	B (13.0)	0.32	84	B (14.1)	0.34	88
	Thru/Right	D (50.1)	0.86	755	D (53.1)	0.89	#825	C (22.4)	0.40	352	C (24.3)	0.43	385
Northbound	*Left*	D (52.3)	0.65	209	D (52.9)	0.68	219	D (51.9)	0.38	131	D (50.5)	0.39	137
	Thru	**E (73.7)**	**0.81**	**#485**	**E (75.3)**	**0.84**	**#539**	**E (74.9)**	**0.64**	**270**	**E (74.7)**	**0.67**	**288**
	Right	A (8.1)	0.35	64	A (8.1)	0.35	65	A (7.8)	0.31	40	A (7.5)	0.30	40
Southbound	*Left*	D (40.1)	0.24	61	D (40.9)	0.28	69	D (48.2)	0.22	70	D (47.6)	0.26	80
	Thru	**E (68.8)**	**0.69**	**262**	**E (67.8)**	**0.68**	**267**	**E (71.1)**	**0.51**	**147**	**E (69.1)**	**0.50**	**151**
	Right	C (26.9)	0.54	148	C (26.4)	0.53	148	B (14.1)	0.53	75	B (15.6)	0.52	83
	Intersection	D (45.6)	-	-	D (47.0)	-	-	C (27.0)	-	-	C (28.1)	-	-

*lowercase letters signify the HCM 6th edition Stop Control methodology was used

a: level-of-service

b: delay is measured in seconds

c: volume to capacity ratio

d: 95th queue length, measured in feet (queue length of stop controlled intersections measured in number of vehicles)

Based on the capacity analysis for the build condition, the proposed site has minor impacts on the level of service experienced at the study area intersections. Levels of service have remained the same at all the signalized intersections (LOS D or better). The intersection of Sheridan Drive and Fenwick Road is the location of a proposed site driveway. The addition of the site driveway and the added volume from the site have impacted the level of service for the movements at the intersection. The minor approaches at this intersection are operating at a LOS F for both the PM peak hour and the Saturday midday peak hour with long delays and queues.

5.0 Mitigation

Mitigation is not necessary for the existing signalized intersections in the study area; the proposed site has little impact on the levels of service at those intersections. Mitigation at the proposed site driveway on Sheridan Drive is recommended. A signal warrant analysis was conducted at the site driveway. Based on the analysis, the expected volumes at the intersection did not warrant a new traffic signal. It is recommended that a traffic signal still be considered at the Amherst Central Park driveway on Sheridan Drive due to the long delays and vehicle queues expected at the site driveway and at Fenwick Road located across from the driveway. Refer to Appendix E for the signal warrant analysis.

Providing multi-modal access to Amherst Central Park should also be considered given the residential nature of the area and proposed amenities at the park. Of particular concern is providing a safe crossing of Sheridan Drive from the neighborhood immediately south of the park. If the traffic signal is installed at the Amherst Central Park driveway on Sheridan Drive, pedestrian signals should be included across all four legs. If the signal is not installed, consideration should be given to a High Intensity Activated CrossWalK (HAWK) signal or Rectangular Rapid Flashing Beacon (RRFB) with a center refuge median.

Transit access can be improved to Amherst Central Park as well. Working with NFTA, a dedicated bus stop could be provided along Sheridan Drive at the (proposed) signalized intersection with the site driveway. If the traffic signal is not installed, a dedicated bus stop could be added within the Park.

6.0 Conclusion

The following are findings from this traffic impact study:

Existing:

- Intersections are operating at acceptable levels of service (LOS D or better) within the study area.
- The majority of collisions at intersections are rear ends.
- There are some multi-modal accommodations along Sheridan Drive in the study area. Bicycle accommodations are not present.

Build:

- The proposed Amherst Central Park on the 171-acre lot is expected to generate 219 new trips during the Weekday PM Peak, and 262 new trips during the Saturday Midday Peak.
- The trips generated by the proposed park are less than trip generated by the formerly proposed Westwood Mixed-Use Neighborhood development based on the TIS completed in 2017.
- The proposed park development is expected to have minimal impact on operations within the study area.
- The proposed site driveway on Sheridan Drive is expected to experience a poor level of service (LOS F).

Mitigation:

- Warrant was not met for a new traffic signal at the proposed driveway on Sheridan Drive.
- It is recommended that a traffic signal still be considered at the proposed site driveway due to long delays and queues on the minor approaches.
- Multi-modal and Transit access to Amherst Central Park should be improved.

Appendix A – Figures

AMHERST
New York

CENTRAL PARK
Concept Plan

October 2, 2023

N

0 100 200 300
FEET

COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.

Prepared By
DOVER, KOHL & PARTNERS

Modified By
The Town of Amherst

LEGEND

UNIQUE FEATURES
1) Community Building (Former Club House)
2) Music Fare Theater
3) The Winter Market
4) Ice Ribbon + Ice Rink
5) Splash Pad + Inclusive Playground
6) Amphitheater
7) Lake Front Pavilion
8) Outdoor Exercise Equipment (10 Stations)
9) Community Gardens (can be any size)
10) Greenhouse
11) Maintenance Area
12) Low Ropes Course or suspended bridges
13) Sheltered Bus Stop (at South Entrance)
14) Buffalo Niagara Heritage Village (Relocated)
15) Multi-use Pavilion

Multiple Features
- (PC) Playground (Conventional Equipment)
- (PN) Playground (Natural)
- (RR) Restrooms
- (SH) Roofed Open Air Shelters
- (OC) Outdoor Classrooms
- (ART) Public Art / Sculpture Sites
- (BT) Off-road Bike Trails, 4-feet wide, dirt
- (AR) Accentuated Rise (mounded hills)
- (MG) Minor Entrance Gates.
- (Bikes) Bicycle Parking Racks (size to be determined)

Existing Deciduous

Existing Tree Canopy

Existing Water

Proposed Marsh / Water

MAPLE ROAD
FAIRWAYS BLVD
Little Hardwood Swamp (exist.)
Pond (existing)
Exist. Wetland
Big Hardwood Swamp (existing)
Natural Preserve Area
Existing Cart Path >>>>
Pond (Existing)
Existing Property Line
DRIVE
Summer Forest
Emergent Marsh (restore)
<<< Existing Path
Playground (New)
Autumn Forest
CENTRAL MEADOW
Founders' Tree (to be planted at groundbreaking ceremony)
Flower garden
Spring Forest -flowering trees-
Sm Prkg
Natural Playground (New)
Low Ropes or Small Elevated Bridges (New)
Successional Northern Hardwood Forest
Natural Regeneration Area
Outdoor Exerc. Equip't (New)
Winter Forest
Playground (New)
DRIVE — one way →
Reconstructed Bridge
Existing Property Line
Future Community Garden
Greenhouse (New)
Proposed Stormwater Retention
Pavilion (New)
Off-road Bike Trails (One-Way)
Pedestrian & Bike Entrance
Gate
Pavilion (Existing)
Amphitheater (New)
Maintenance (New)
100'-7"
NORTH FOREST ROAD
FRANKHAUSER RD
Field 2 44062 SF 1.01 Acres
Hoover House
Blacksmith Shop
Brewer's Cottage
School
Fiber Arts
Village Store
Elliott House
Trinity Church
Bandstand
202'-4"
BNHV Relocated Small Structures
THE BIG MEADOW
UPK Playground
Outdoor Pool (Existing)
Club House (Existing)
South Entrance Garden
Playground
BNHV (New)
Field 1 56792 SF 1.30 Acres
Bigelow Home
Schmitt Log House
Barn
Garden
86'-8"
Splash Pad
Accessible Playground
118'-1"
Theater (New)
Winter Market (New)
Restroom & Skate Rental (New)
Ice Ribbon & Rink
186'-11"
477'-4"
Enlarge exist. Canal into pond
356'-6"
146'-9"
ACP Entrance Signage
Existing Berm
SHERIDAN DRIVE

Figure 2

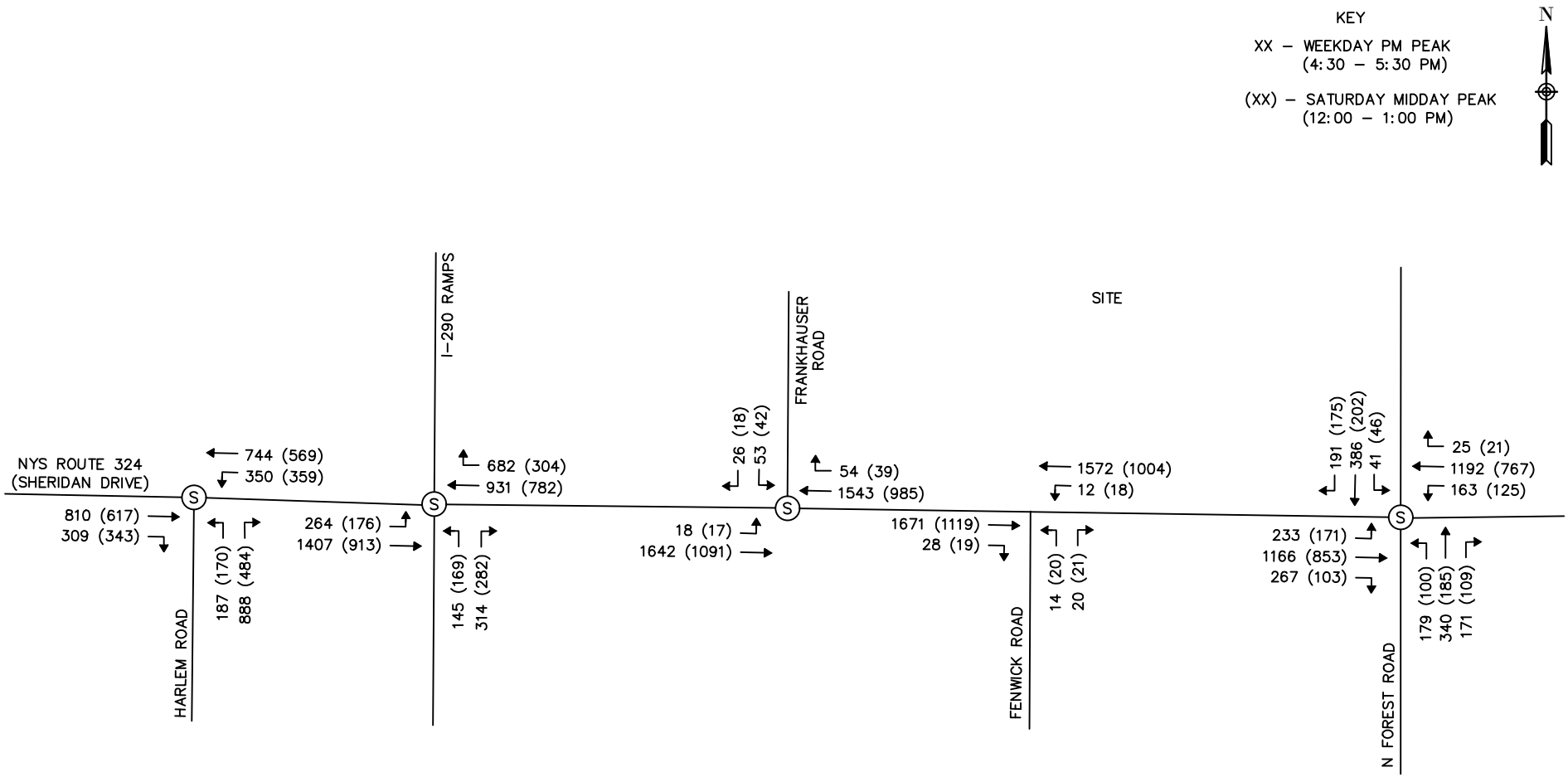
C&S COMPANIES®

Pedestrian, Bicycle, and Transit Map

Amherst Central Park Traffic Impact Study

Town of Amherst, Erie County, New York

Figure 3



Sep 29, 2023 – 10:36am
\\cscos.com\csfile\Eng\Project\H22 – Town of Amherst\H22.007 – 2021 Professional Svcs Term\H22.007.002 – Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\TMD Existing.dwg

NOT TO SCALE

C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

EXISTING (2023)
TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
ERIE COUNTY

Figure 4

Copyright ©

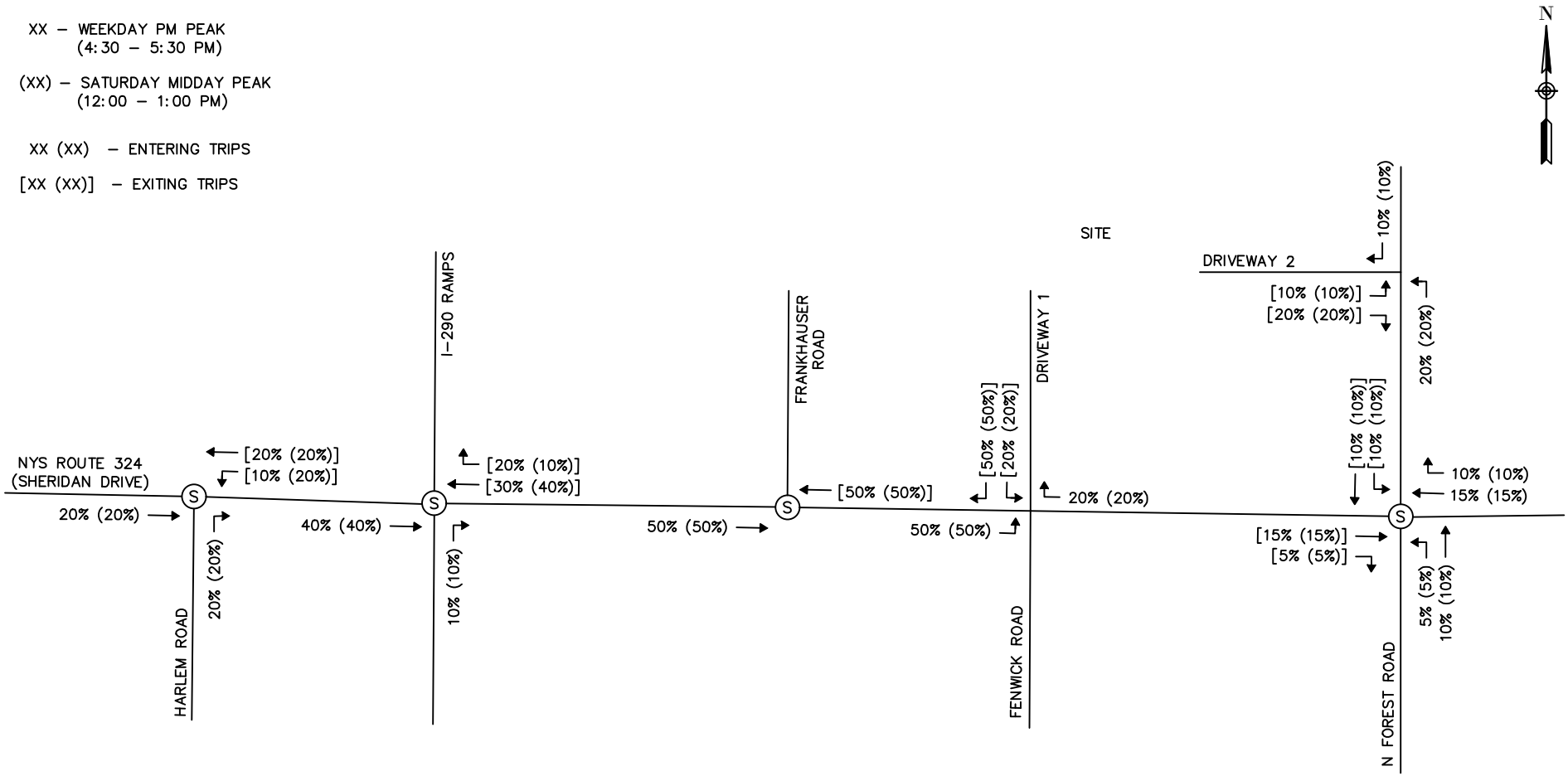
KEY

XX – WEEKDAY PM PEAK
(4:30 – 5:30 PM)

(XX) – SATURDAY MIDDAY PEAK
(12:00 – 1:00 PM)

XX (XX) – ENTERING TRIPS

[XX (XX)] – EXITING TRIPS



Oct 06, 2023 – 12:19pm
\\cscos.com\csfile\Eng\Project\H22 – Town of Amherst\H22.007 – 2021 Professional Svcs Term\H22.007.002 – Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\Trip Distribution.dwg

NOT TO SCALE

C&S COMPANIES

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

TRIP DISTRIBUTION
TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
ERIE COUNTY

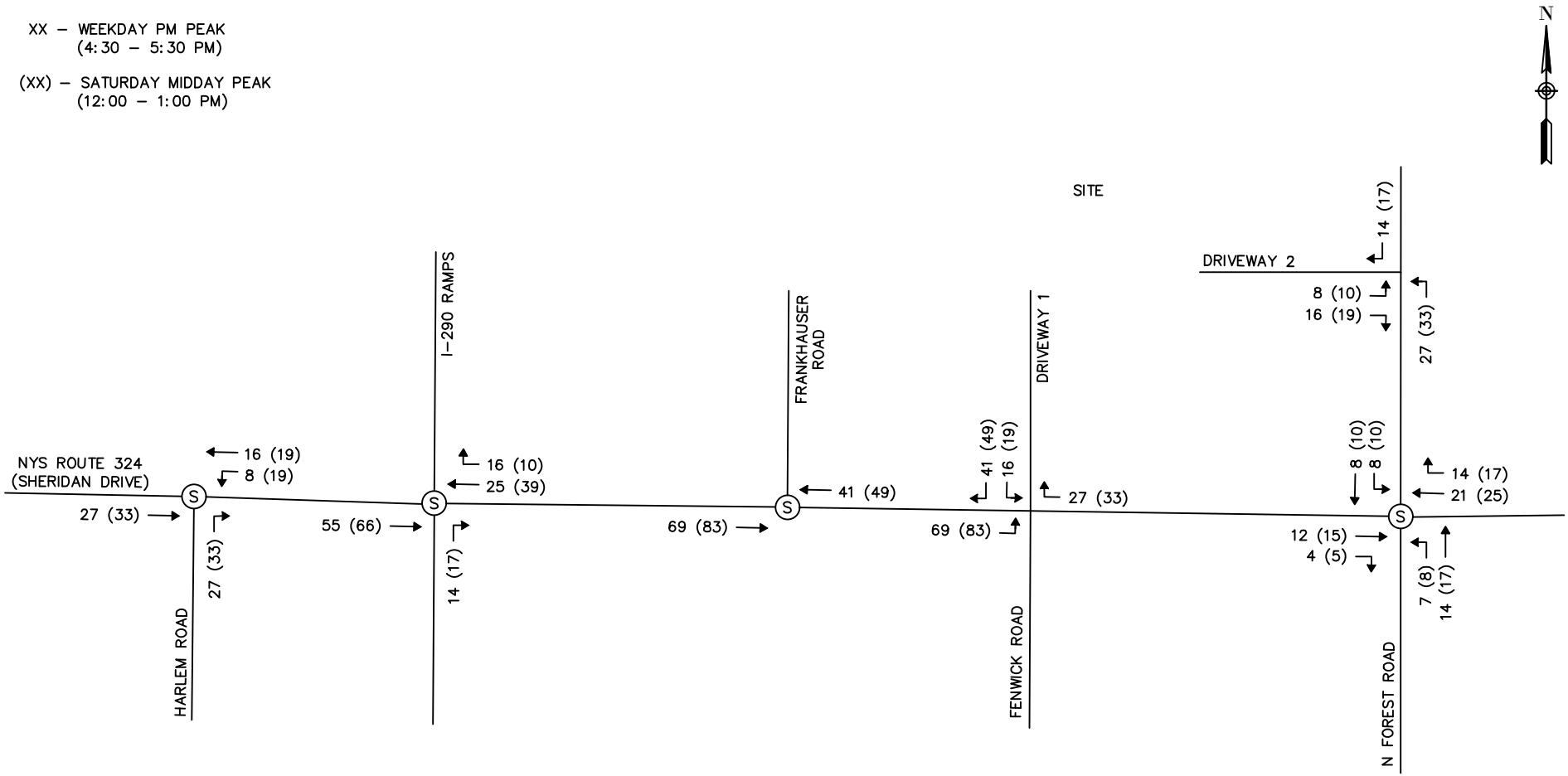
Figure 5

Copyright ©

KEY

XX – WEEKDAY PM PEAK
(4:30 – 5:30 PM)

(XX) – SATURDAY MIDDAY PEAK
(12:00 – 1:00 PM)



Oct 11, 2023 – 11:24am
\\cscos.com\csfile\Eng\Project\H22 – Town of Amherst\H22.007 – 2021 Professional Svcs Term\H22.007.002 – Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\Trip generation.dwg

NOT TO SCALE

C&S COMPANIES

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

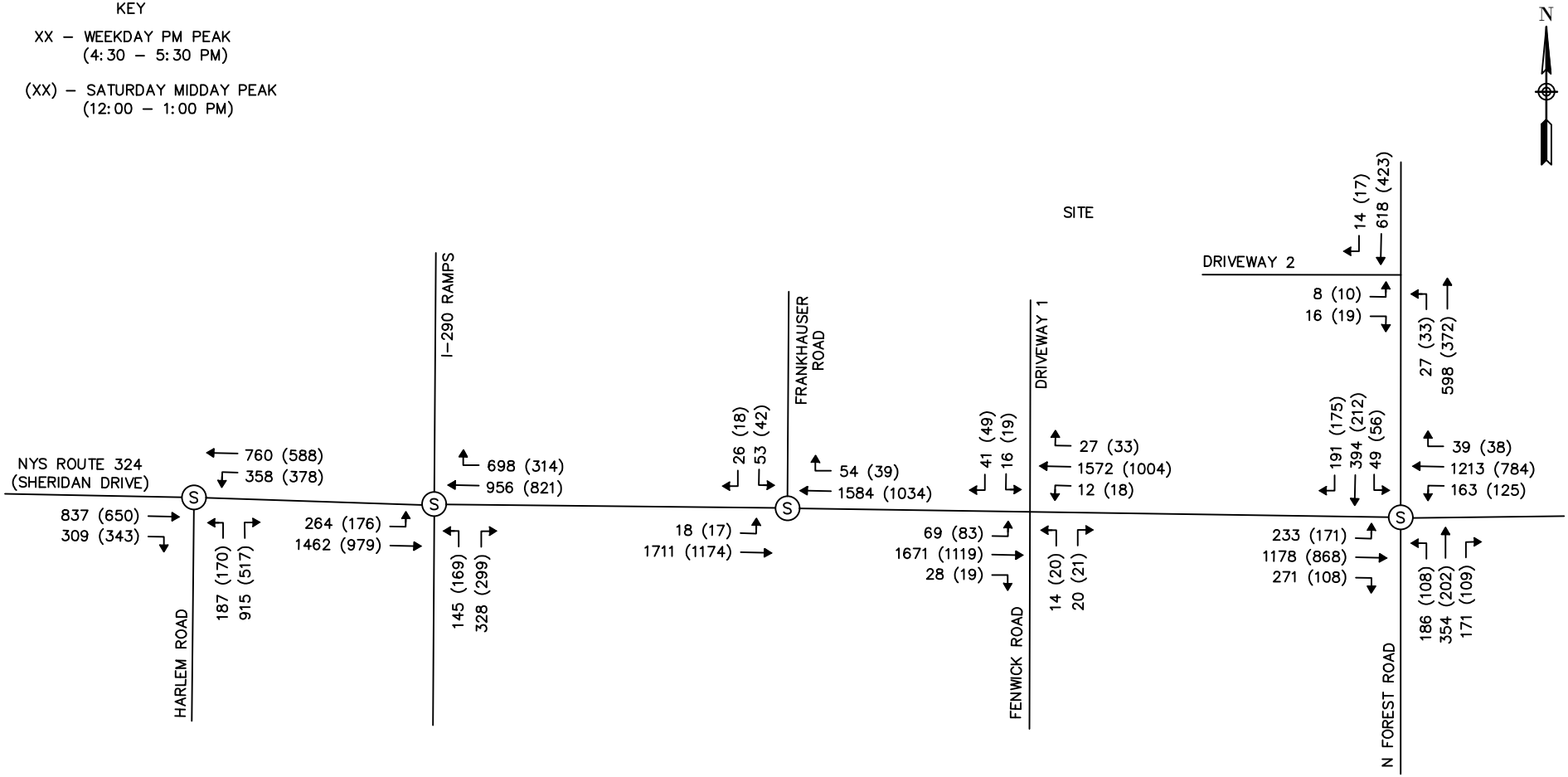
TRIP GENERATION
TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
ERIE COUNTY

Figure 6

Copyright ©



Oct 12, 2023 – 10:48am
\\cscos.com\csfile\Eng\Project\H22 – Town of Amherst\H22.007 – 2021 Professional Svcs Term\H22.007.002 – Amherst Central Park TIS\Planning–Study\Technical Information\Turning Movement Diagrams\TMD Build.dwg

NOT TO SCALE

C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

BUILD (2028)
TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
ERIE COUNTY

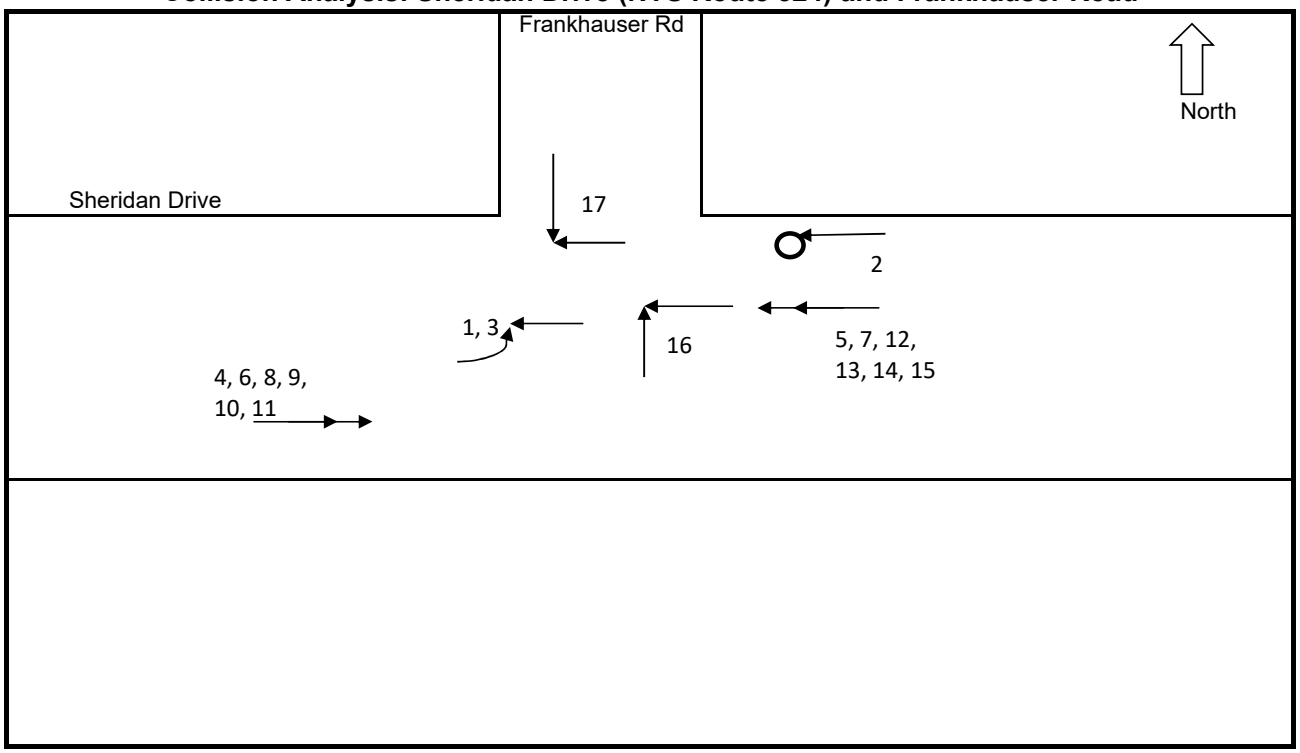
Figure 7

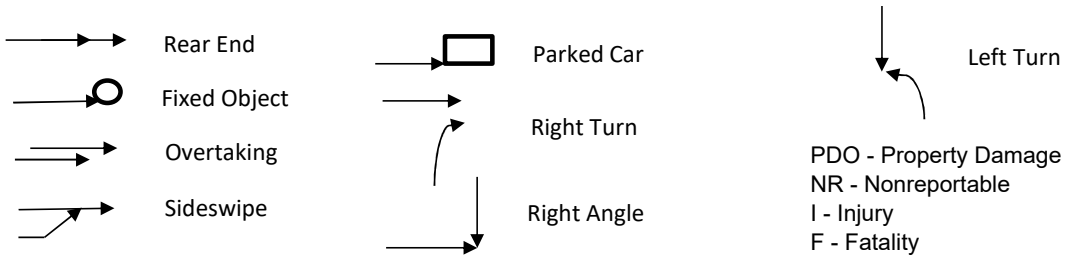
Copyright ©

Appendix B – Collision Data

Project	**Amherst Central Park TIS**	Sheet	**1 of 1**
	Crash Analysis	File #	**H22.007.002**
Prepared by	**A. Turner**	Date	**08/07/2023**
Checked by	**K. Wessel**	Date	**08/07/2023**

Collision Analysis: Sheridan Drive (NYS Route 324) and Frankhauser Road

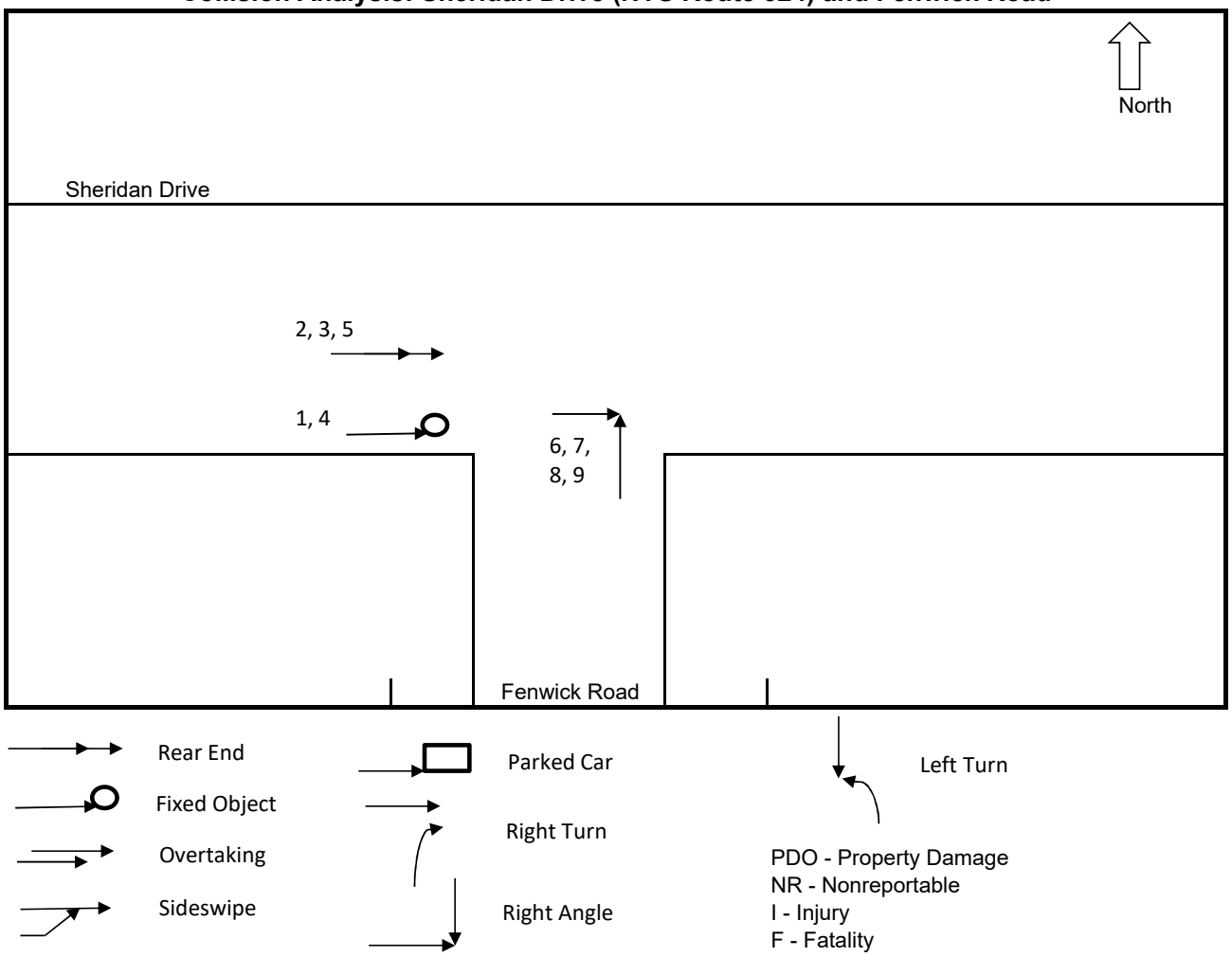




No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	3/29/2021	4:32 PM	Left Turn	Dry, Light	PDO	Traffic control devices disregarded
2	9/13/2020	11:05 AM	Fixed Object	Wet, Light	I	Driver inattention
3	9/17/2021	10:09 AM	Left Turn	Dry, Light	I	Traffic control devices disregarded
4	03/25/2022	11:51 AM	Rear End	Dry, Light	I	Following too closely
5	10/26/2021	3:32 PM	Rear End	Wet, Light	PDO	Cell phone (hand held), driver inattention
6	09/05/2019	11:47 AM	Rear End	Dry, Light	PDO	Following too closely
7	09/01/2019	1:01 PM	Rear End	Dry, Light	PDO	Unsafe speed
8	07/18/2019	5:32 PM	Rear End	Dry, Light	I	Following too closely
9	07/16/2019	5:28 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
10	07/13/2019	8:57 AM	Rear End	Dry, Light	PDO	Unsafe lane change
11	03/22/2019	9:25 PM	Rear End	Wet, Dark	PDO	Following too closely
12	10/02/2018	12:02 PM	Rear End	Wet, Light	PDO	Following too closely
13	07/10/2018	8:37 PM	Rear End	Dry, Dark	I	Alcohol involvement, unsafe speed
14	04/05/2018	5:22 PM	Rear End	Wet, Light	PDO	Following too closely, unsafe speed
15	02/02/2018	12:35 PM	Rear End	Dry, Light	PDO	Unsafe speed, driver inattention
16	04/07/2022	2:36 PM	Right Angle	Dry, Light	PDO	Unsafe lane change, passing or lane usage
17	09/26/2020	5:35 PM	Right Angle	Dry, Light	I	Traffic control devices disregarded, driver

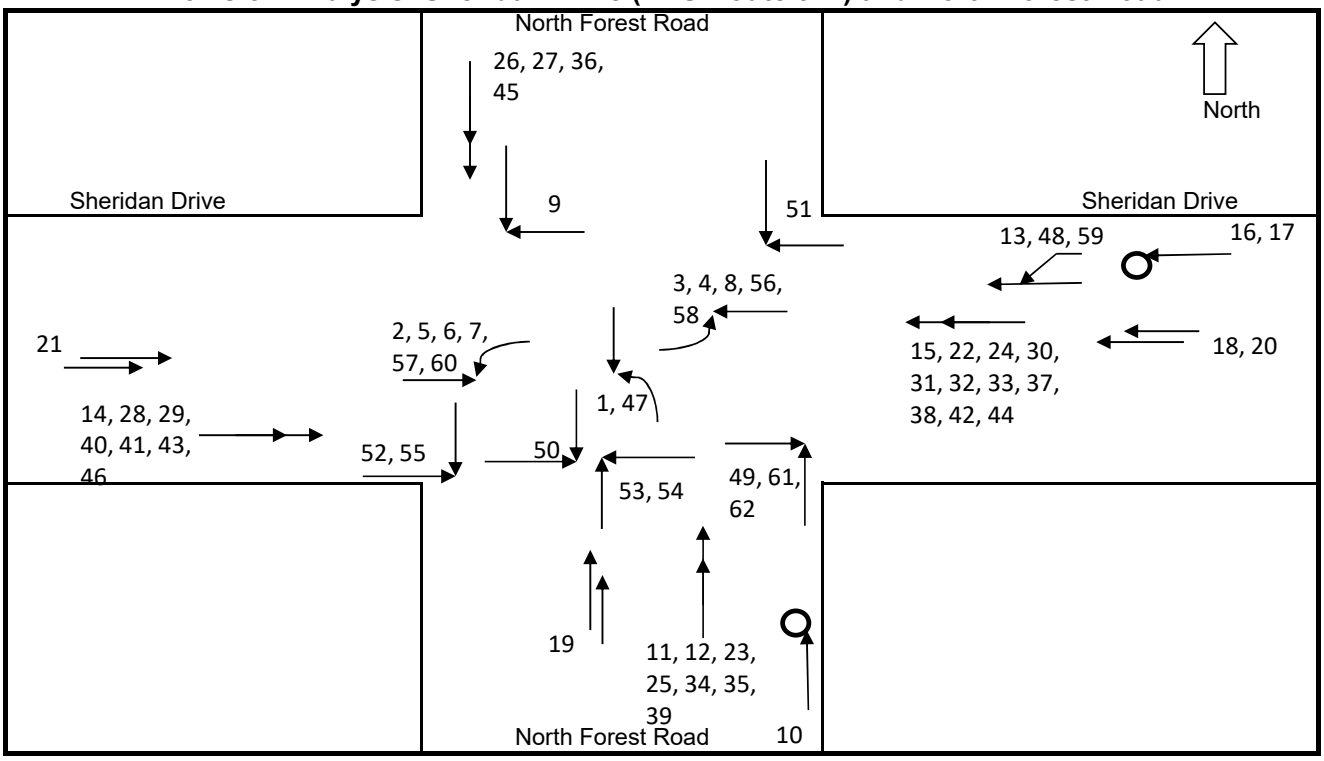
Project	**Amherst Central Park TIS**	Sheet	**1 of 1**
	Crash Analysis	File #	**H22.007.002**
Prepared by	**A. Turner**	Date	**08/07/2023**
Checked by	**K. Wessel**	Date	**08/07/2023**

Collision Analysis: Sheridan Drive (NYS Route 324) and Fenwick Road



No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	01/13/2018	6:44 PM	Fixed Object	Wet, Dark	PDO	Unsafe speed
2	12/08/2022	7:47 AM	Rear End	Dry, Dark	I	Driver inattention, following too closely
3	08/14/2019	3:30 PM	Rear End	Dry, Light	I	Following too closely
4	03/01/2018	9:12 PM	Fixed Object	Wet, Dark	PDO	unsafe speed, pavement slippery
5	01/27/2020	8:18 AM	Rear End	Wet, Light	PDO	unsafe speed
6	12/20/2022	2:26 PM	Right Angle	Slush, Light	I	driver inattention, failure to yield right of way
7	01/27/2020	7:55 AM	Right Angle	Snow, Light	PDO	passing or lane usage improperly, failure to yie
8	03/27/2019	8:02 AM	Right Angle	Dry, Light	PDO	failure to yield right of way
9	02/04/2018	4:55 PM	Right Angle	Wet, Dark	I	failure to yield right of way

Collision Analysis: Sheridan Drive (NYS Route 324) and North Forest Road



Rear End
Fixed Object
Overtaking
Sideswipe
Parked Car
Right Turn
Right Angle
Left Turn

PDO - Property Damage
NR - Nonreportable
I - Injury
F - Fatality

No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	01/09/2020	7:29 AM	Left Turn	Wet, Light	PDO	Failure to yield right of way
2	11/28/2022	8:01 AM	Left Turn	Dry, Light	I	Failure to yield right of way, driver inattention, t
3	10/19/2022	12:10 PM	Left Turn	Wet, Light	I	Traffic control devices disregarded
4	07/07/2022	4:28 PM	Left Turn	Dry, Light	I	Traffic control devices disregarded
5	10/13/2021	3:46 PM	Left Turn	Dry, Light	I	Driver inattention, failure to yield right of way
6	12/11/2018	6:12 PM	Left Turn	Wet, Dark	I	Traffic control devices disregarded, failure to
7	10/15/2018	7:12 AM	Left Turn	Wet, Dark	PDO	Failure to yield right of way
8	5/18/2018	1:22 PM	Left Turn	Dry, Light	I	Failure to yield right of way
9	04/04/2021	9:40 PM	Right Angle	Dry, Dark	PDO	Traffic control devices disregarded
10	02/19/2022	5:30 AM	Fixed Object	Snow, Dark	PDO	N/A
11	09/08/2022	2:28 PM	Rear End	Dry, Light	I	Following too closely
12	05/21/2021	8:50 AM	Rear End	Dry, Light	PDO	N/A
13	12/21/2018	6:06 PM	Sideswipe	Wet, Dark	PDO	Unsafe lane change
14	03/23/2018	9:10 AM	Rear End	Dry, Light	PDO	Driver inattention, glare
15	01/15/2018	5:55 PM	Rear End	Wet, Dark	I	Following too closely
16	07/04/2022	10:49 PM	Fixed Object	Dry, Dark	I	Unsafe speed, driver inattention
17	04/08/2018	12:39 PM	Fixed Object	Dry, Light	PDO	Unsafe lane change, driver inattention

No.	Date	Time	Collision Type	Road Condition	Severity	Comment
18	09/17/2022	8:00 AM	Overtaking	Dry, Light	PDO	Unsafe speed
19	03/17/2022	6:34 AM	Overtaking	Dry, Dark	PDO	Unsafe lane change
20	08/04/2019	12:15 PM	Overtaking	Dry, Light	PDO	Unsafe lane change
21	07/25/2019	11:54 AM	Overtaking	Dry, Light	PDO	Unsafe lane change
22	12/22/2022	11:00 AM	Rear End	Unknown	PDO	Unsafe lane change
23	09/13/2022	5:55 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
24	6/13/2022	1:03 PM	Rear End	Dry, Light	PDO	Driver inattention
25	05/10/2022	1:45 PM	Rear End	Dry, Light	PDO	Alcohol involvement, unsafe speed
26	11/05/2021	1:15 PM	Rear End	Dry, Light	I	N/A
27	05/06/2021	2:45 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
28	11/03/2020	5:25 PM	Rear End	Dry, Dark	I	Driver inattention, following too closely
29	06/10/2020	7:40 PM	Rear End	Dry, Light	I	Following too closely, driver inattention
30	04/23/2020	8:24 AM	Rear End	Dry, Light	I	Driver inattention
31	03/09/2020	1:42 PM	Rear End	Dry, Light	I	Following too closely
32	11/10/2019	11:28 AM	Rear End	Dry, Light	PDO	Driver inattention
33	10/01/2019	7:20 PM	Rear End	Wet, Dark	PDO	Unsafe speed
34	09/16/2019	8:17 AM	Rear End	Dry, Light	PDO	Following too closely
35	08/02/2019	1:29 PM	Rear End	Dry, Light	I	Unsafe speed
36	12/25/2018	3:27 PM	Rear End	Wet, Light	PDO	Unsafe speed
37	11/01/2018	5:15 PM	Rear End	Wet, Dark	I	N/A
38	11/10/2018	11:56 PM	Rear End	Dry, Dark	I	Unsafe speed, driver inattention
39	10/04/2018	2:58 PM	Rear End	Dry, Light	PDO	Following too closely
40	10/02/2018	7:56 AM	Rear End	Wet, Light	PDO	Driver inattention, unsafe speed
41	06/22/2018	1:10 PM	Rear End	Dry, Light	I	Unsafe speed
42	04/08/2018	12:34 PM	Rear End	Dry, Light	PDO	Following too closely
43	03/07/2018	11:41 AM	Rear End	Wet, Light	I	Driver inattention, cell phone (hands free)
44	03/02/2018	11:51 AM	Rear End	Wet, Light	I	Driver inattention, following too closely
45	01/18/2018	9:02 AM	Rear End	Slush, Light	PDO	Following too closely, driver inattention
46	01/10/2018	3:10 PM	Rear End	Wet, Light	PDO	Following too closely
47	04/16/2022	12:48 PM	Left Turn	Dry, Light	PDO	Failure to yield right of way
48	01/31/2022	2:30 PM	Sideswipe	Dry, Light	PDO	Failure to yield right of way
49	10/07/2021	12:35 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
50	08/15/2021	8:34 PM	Right Angle	Dry, Light	I	Failure to yield right of way, traffic control devic
51	5/18/2021	4:49 PM	Right Angle	Dry, Light	PDO	Traffic control devices disregarded, failure to yi
52	04/21/2021	11:43 AM	Right Angle	Wet, Light	I	Fraffic control devices disregarded
53	01/29/2021	3:35 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
54	11/15/2020	5:20 PM	Right Angle	Wet, Dark	I	Traffic control device improper/non-working
55	10/19/2020	7:18 PM	Right Angle	Wet, Dark	I	Failure to yield right of way, traffic control devic
56	10/09/2020	5:20 PM	Left Turn	Dry, Light	PDO	Failure to yield right of way, unsafe speed
57	11/10/2019	11:39 AM	Left Turn	Dry, Light	PDO	Failure to yield right of way
58	10/01/2019	7:13 PM	Left Turn	Wet, Dark	I	Failure to yield right of way
59	08/26/2019	12:00 PM	Sideswipe	Dry, Light	PDO	Turning improper
60	12/15/2018	2:26 PM	Left Turn	Wet, Light	PDO	Failure to yield right of way
61	10/30/2018	2:00 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
62	04/01/2019	12:15 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way

Appendix C – Traffic Data

TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Frankhauser
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & Frankhauser
Latitude and Longitude	42.97821,-78.7765

	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.947

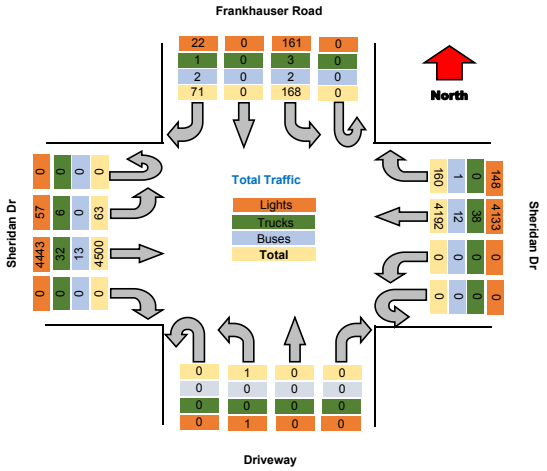
Turning Movement Data

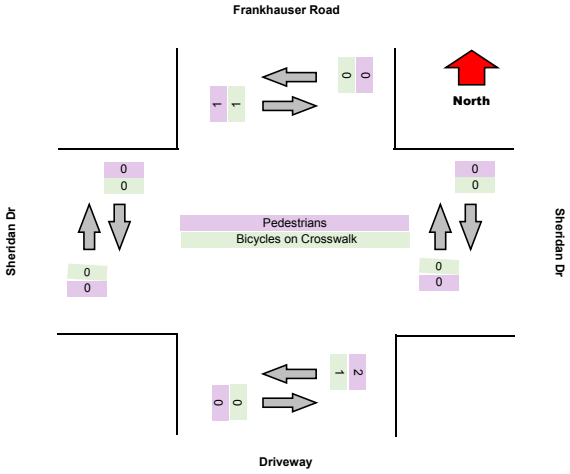
Leg	Frankhauser Road							Sheridan Dr							Driveway							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
3:00:00 PM	3	0	17	0	**20**	1	0	13	336	0	0	**349**	0	0	0	0	0	0	**0**	0	0	0	315	9	0	**324**	0	0	**693**
3:15:00 PM	5	0	17	0	**22**	0	0	14	346	0	0	**360**	0	0	0	0	0	0	**0**	1	0	0	379	5	0	**384**	0	0	**766**
3:30:00 PM	8	0	12	0	**20**	1	0	14	316	0	0	**330**	0	0	0	0	0	0	**0**	0	0	0	327	7	0	**334**	0	0	**684**
3:45:00 PM	9	0	10	0	**19**	0	0	9	322	0	0	**331**	0	0	0	0	0	0	**0**	0	0	0	368	4	0	**372**	0	0	**722**
Hourly Total	25	0	56	0	**81**	2	0	50	1320	0	0	**1370**	0	0	0	0	0	0	**0**	1	0	0	1389	25	0	**1414**	0	0	**2865**
4:00:00 PM	6	0	17	0	**23**	0	0	14	384	0	0	**398**	0	0	0	0	0	0	**0**	0	0	0	382	8	0	**390**	0	0	**811**
4:15:00 PM	4	0	18	0	**22**	0	0	21	300	0	0	**321**	0	0	0	0	0	0	**0**	0	0	0	381	5	0	**386**	0	0	**729**
4:30:00 PM	9	0	18	0	**27**	0	0	15	355	0	0	**370**	0	0	0	0	0	0	**0**	0	0	0	426	6	0	**432**	0	0	**829**
4:45:00 PM	6	0	6	0	**12**	0	0	15	400	0	0	**415**	0	0	0	0	1	0	**1**	1	0	0	422	1	0	**423**	0	0	**851**
Hourly Total	25	0	59	0	**84**	0	0	65	1439	0	0	**1504**	0	0	0	0	1	0	**1**	1	0	0	1611	20	0	**1631**	0	0	**3220**
5:00:00 PM	5	0	20	0	**25**	0	0	10	368	0	0	**378**	0	0	0	0	0	0	**0**	0	0	0	370	3	0	**373**	0	0	**776**
5:15:00 PM	6	0	9	0	**15**	0	0	14	420	0	0	**434**	0	0	0	0	0	0	**0**	0	0	0	424	8	0	**432**	0	0	**881**
5:30:00 PM	5	0	11	0	**16**	0	0	11	341	0	0	**352**	0	0	0	0	0	0	**0**	0	0	0	367	6	0	**373**	0	0	**741**
5:45:00 PM	5	0	13	0	**18**	0	0	10	304	0	0	**314**	0	0	0	0	0	0	**0**	1	0	0	339	1	0	**340**	0	0	**672**
Hourly Total	21	0	53	0	**74**	0	0	45	1433	0	0	**1478**	0	0	0	0	0	0	**0**	1	0	0	1500	18	0	**1518**	0	0	**3070**
Grand Total	71	0	168	0	**239**	2	0	160	4192	0	0	**4352**	0	0	0	0	1	0	**1**	3	0	0	4500	63	0	**4563**	0	0	**9155**
% Approach	29.7%	0.0%	70.3%	0.0%	**0.0%**	0.0%	0.0%	3.7%	96.3%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	98.6%	1.4%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	0.8%	0.0%	1.8%	0.0%	**2.6%**	0.0%	0.0%	1.7%	45.8%	0.0%	0.0%	**47.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	49.2%	0.7%	0.0%	**49.8%**	0.0%	0.0%	**0.0%**
Lights	22	0	161	0	**183**	0	0	148	4133	0	0	**4281**	0	0	0	0	1	0	**1**	0	0	0	4443	57	0	**4500**	0	0	**8965**
% Lights	31.0%	0.0%	95.8%	0.0%	**76.6%**	0.0%	0.0%	92.5%	98.6%	0.0%	0.0%	**98.4%**	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	**100.0%**	0.0%	0.0%	0.0%	98.7%	90.5%	0.0%	**98.6%**	0.0%	0.0%	**97.9%**
Trucks	1	0	3	0	**4**	0	0	0	38	0	0	**38**	0	0	0	0	0	0	**0**	0	0	0	32	6	0	**38**	0	0	**80**
% Trucks	1.4%	0.0%	1.8%	0.0%	**1.7%**	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	**0.9%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.7%	9.5%	0.0%	**0.8%**	0.0%	0.0%	**0.9%**
Buses	2	0	2	0	**4**	0	0	1	12	0	0	**13**	0	0	0	0	0	0	**0**	0	0	0	13	0	0	**13**	0	0	**30**
% Buses	2.8%	0.0%	1.2%	0.0%	**1.7%**	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	**0.3%**	0.0%	0.0%	**0.3%**
Pedestrians	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	2	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





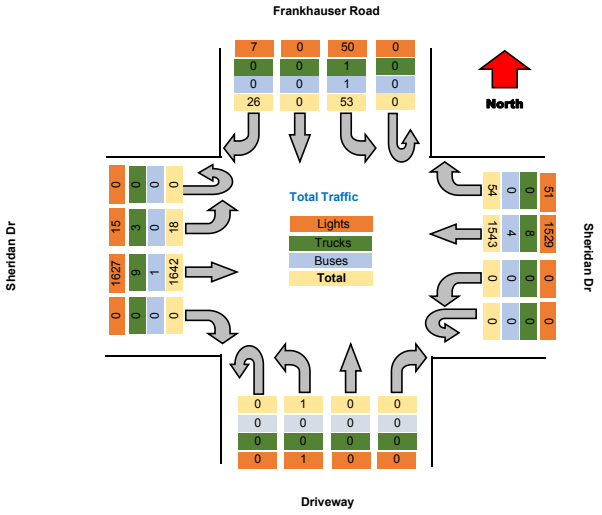
TSTData.com

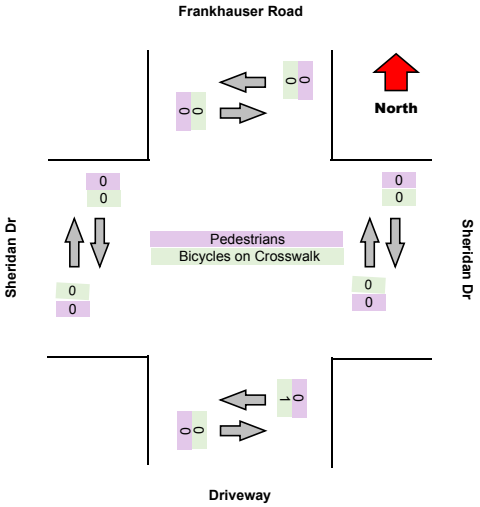
Summary

Turning Movement Peak Hour Data (PM)

4:30:00 PM

Leg	Frankhauser Road							Sheridan Dr							Driveway							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
4:30:00 PM	9	0	18	0	**27**	0	0	15	355	0	0	**370**	0	0	0	0	0	0	**0**	0	0	0	426	6	0	**432**	0	0	**829**
4:45:00 PM	6	0	6	0	**12**	0	0	15	400	0	0	**415**	0	0	0	0	1	0	**1**	1	0	0	422	1	0	**423**	0	0	**851**
5:00:00 PM	5	0	20	0	**25**	0	0	10	368	0	0	**378**	0	0	0	0	0	0	**0**	0	0	0	370	3	0	**373**	0	0	**776**
5:15:00 PM	8	0	9	0	**15**	0	0	14	420	0	0	**434**	0	0	0	0	0	0	**0**	0	0	0	424	8	0	**432**	0	0	**881**
Grand Total	26	0	53	0	**79**	0	0	54	1543	0	0	**1597**	0	0	0	0	1	0	**1**	1	0	0	1642	18	0	**1660**	0	0	**3337**
% Approach	32.9%	0.0%	67.1%	0.0%	**0.0%**	0.0%	0.0%	3.4%	96.6%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	98.9%	1.1%	0.0%	**0.0%**	0.0%	0.0%	
% Total	0.8%	0.0%	1.6%	0.0%	**2.4%**	0.0%	0.0%	1.6%	46.2%	0.0%	0.0%	**47.9%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	49.2%	0.5%	0.0%	**49.7%**	0.0%	0.0%	
PHF	0.722	0.000	0.663	0.000	**0.731**	0.000	0.000	0.900	0.918	0.000	0.000	**0.920**	0.000	0.000	0.000	0.000	0.250	0.000	**0.250**	0.000	0.000	0.000	0.964	0.563	0.000	**0.961**	0.000	0.000	**0.947**
Lights	7	0	50	0	**57**	0	0	51	1529	0	0	**1580**	0	0	0	0	1	0	**1**	0	0	0	1627	15	0	**1642**	0	0	**3280**
% Lights	26.9%	0.0%	94.3%	0.0%	**72.2%**	0.0%	0.0%	94.4%	99.1%	0.0%	0.0%	**98.9%**	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	**100.0%**	0.0%	0.0%	0.0%	99.1%	83.3%	0.0%	**98.9%**	0.0%	0.0%	**98.3%**
Trucks	0	0	1	0	**1**	0	0	0	8	0	0	**8**	0	0	0	0	0	0	**0**	0	0	0	9	3	0	**12**	0	0	**21**
% Trucks	0.0%	0.0%	1.9%	0.0%	**1.3%**	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.5%	16.7%	0.0%	**0.7%**	0.0%	0.0%	**0.6%**
Buses	0	0	1	0	**1**	0	0	0	4	0	0	**4**	0	0	0	0	0	0	**0**	0	0	0	1	0	0	**1**	0	0	**6**
% Buses	0.0%	0.0%	1.9%	0.0%	**1.3%**	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.2%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Frankhauser
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & Frankhauser
Latitude and Longitude	42.97821,-78.7765

	Start	End	PHF
PM Peak	2023-09-23 12:45:00	2023-09-23 13:45:00	0.922

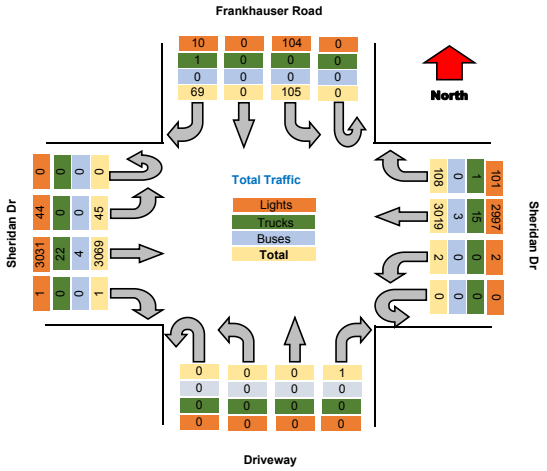
Turning Movement Data

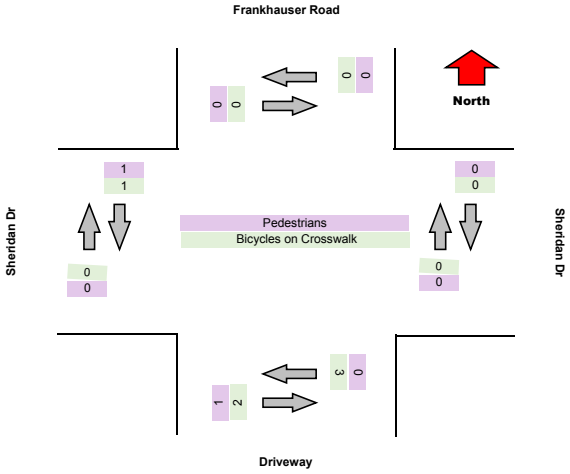
Leg	Frankhauser Road							Sheridan Dr							Driveway							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
11:00:00 AM	7	0	10	0	**17**	0	0	11	233	0	0	**244**	0	0	0	0	0	0	**0**	0	0	0	225	3	0	**228**	0	0	**489**
11:15:00 AM	5	0	11	0	**16**	0	0	12	267	0	0	**279**	0	0	0	0	0	0	**0**	0	1	0	245	4	0	**249**	0	1	**544**
11:30:00 AM	9	0	6	0	**15**	0	0	11	243	1	0	**255**	0	0	0	0	0	0	**0**	0	0	0	257	5	0	**262**	0	0	**532**
11:45:00 AM	8	0	7	0	**15**	0	0	10	239	0	0	**249**	0	0	1	0	0	0	**1**	0	0	0	250	4	0	**254**	0	0	**519**
Hourly Total	29	0	34	0	**63**	0	0	44	982	1	0	**1027**	0	0	1	0	0	0	**1**	0	1	0	977	16	0	**993**	0	1	**2084**
12:00:00 PM	4	0	6	0	**10**	0	0	10	236	1	0	**247**	0	0	0	0	0	0	**0**	1	1	0	274	3	0	**277**	0	0	**534**
12:15:00 PM	2	0	9	0	**11**	0	0	10	248	0	0	**258**	0	0	0	0	0	0	**0**	0	0	0	292	2	0	**294**	0	0	**563**
12:30:00 PM	6	0	11	0	**17**	0	0	11	243	0	0	**254**	0	0	0	0	0	0	**0**	2	1	0	249	6	0	**255**	0	0	**526**
12:45:00 PM	6	0	16	0	**22**	0	0	8	258	0	0	**266**	0	0	0	0	0	0	**0**	0	0	1	276	6	0	**283**	0	1	**571**
Hourly Total	18	0	42	0	**60**	0	0	39	985	1	0	**1025**	0	0	0	0	0	0	**0**	3	2	1	1091	17	0	**1109**	0	1	**2194**
1:00:00 PM	6	0	8	0	**14**	0	0	10	281	0	0	**291**	0	0	0	0	0	0	**0**	0	0	0	239	6	0	**245**	0	0	**550**
1:15:00 PM	4	0	6	0	**10**	0	0	5	235	0	0	**240**	0	0	0	0	0	0	**0**	0	0	0	240	1	0	**241**	0	0	**491**
1:30:00 PM	7	0	8	0	**15**	0	0	7	290	0	0	**297**	0	0	0	0	0	0	**0**	0	0	0	283	5	0	**288**	0	0	**600**
1:45:00 PM	5	0	7	0	**12**	0	0	3	246	0	0	**249**	0	0	0	0	0	0	**0**	0	0	0	239	0	0	**239**	0	0	**500**
Hourly Total	22	0	29	0	**51**	0	0	25	1052	0	0	**1077**	0	0	0	0	0	0	**0**	0	0	0	1001	12	0	**1013**	0	0	**2141**
Grand Total	69	0	105	0	**174**	0	0	108	3019	2	0	**3129**	0	0	1	0	0	0	**1**	3	3	1	3069	45	0	**3115**	0	2	**6419**
% Approach	39.7%	0.0%	60.3%	0.0%	**0.0%**	0.0%	0.0%	3.5%	96.5%	0.1%	0.0%	**0.0%**	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	98.5%	1.4%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	1.1%	0.0%	1.6%	0.0%	**2.7%**	0.0%	0.0%	1.7%	47.0%	0.0%	0.0%	**48.7%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	47.8%	0.7%	0.0%	**48.5%**	0.0%	0.0%	**0.0%**
Lights	10	0	104	0	**114**	0	0	101	2997	2	0	**3100**	0	0	0	0	0	0	**0**	0	0	1	3031	44	0	**3076**	0	0	**6290**
% Lights	14.5%	0.0%	99.0%	0.0%	**65.5%**	0.0%	0.0%	93.5%	99.3%	100.0%	0.0%	**99.1%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	100.0%	98.8%	97.8%	0.0%	**98.7%**	0.0%	0.0%	**98.0%**
Trucks	1	0	0	0	**1**	0	0	1	15	0	0	**16**	0	0	0	0	0	0	**0**	0	0	0	22	0	0	**22**	0	0	**39**
% Trucks	1.4%	0.0%	0.0%	0.0%	**0.6%**	0.0%	0.0%	0.9%	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	**0.7%**	0.0%	0.0%	**0.6%**
Buses	0	0	0	0	**0**	0	0	0	3	0	0	**3**	0	0	0	0	0	0	**0**	0	0	0	4	0	0	**4**	0	0	**7**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	1	0	0	0	0	**0**	0	1	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	3	2	0	0	0	0	**0**	0	1	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	66.7%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





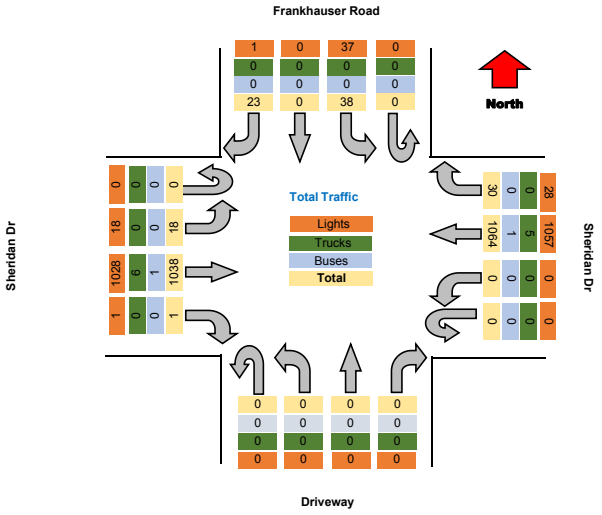
TSTData.com

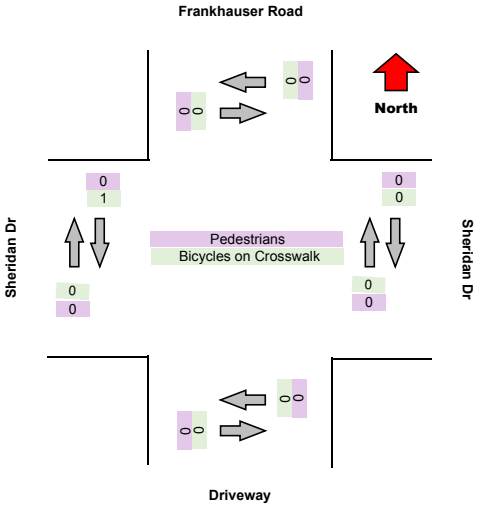
Summary

Turning Movement Peak Hour Data (PM)

12:45:00 PM

Leg	Frankhauser Road							Sheridan Dr							Driveway							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
12:45:00 PM	6	0	16	0	**22**	0	0	8	258	0	0	**266**	0	0	0	0	0	0	**0**	0	0	1	276	6	0	**283**	0	1	**571**
1:00:00 PM	6	0	8	0	**14**	0	0	10	281	0	0	**291**	0	0	0	0	0	0	**0**	0	0	0	239	6	0	**245**	0	0	**550**
1:15:00 PM	4	0	6	0	**10**	0	0	5	235	0	0	**240**	0	0	0	0	0	0	**0**	0	0	0	240	1	0	**241**	0	0	**491**
1:30:00 PM	7	0	8	0	**15**	0	0	7	290	0	0	**297**	0	0	0	0	0	0	**0**	0	0	0	283	5	0	**288**	0	0	**600**
Grand Total	23	0	38	0	**61**	0	0	30	1064	0	0	**1094**	0	0	0	0	0	0	**0**	0	0	1	1038	18	0	**1057**	0	1	**2212**
% Approach	37.7%	0.0%	62.3%	0.0%	**0.0%**	0.0%	0.0%	2.7%	97.3%	0.0%	0.0%	**0.0%**	0.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	**0.0%**	0.0%	0.0%	0.1%	98.2%	1.7%	0.0%	**0.0%**	0.0%	0.0%	
% Total	1.0%	0.0%	1.7%	0.0%	**2.8%**	0.0%	0.0%	1.4%	48.1%	0.0%	0.0%	**49.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	46.9%	0.8%	0.0%	**47.8%**	0.0%	0.0%	
PHF	0.821	0.000	0.594	0.000	**0.693**	0.000	0.000	0.750	0.917	0.000	0.000	**0.921**	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.250	0.917	0.750	0.000	**0.918**	0.000	0.000	**0.922**
Lights	1	0	37	0	**38**	0	0	28	1057	0	0	**1085**	0	0	0	0	0	0	**0**	0	0	1	1028	18	0	**1047**	0	0	**2170**
% Lights	4.3%	0.0%	97.4%	0.0%	**62.3%**	0.0%	0.0%	93.3%	99.3%	0.0%	0.0%	**99.2%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	100.0%	99.0%	100.0%	0.0%	**99.1%**	0.0%	0.0%	**98.1%**
Trucks	0	0	0	0	**0**	0	0	0	5	0	0	**5**	0	0	0	0	0	0	**0**	0	0	0	6	0	0	**6**	0	0	**11**
% Trucks	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	**0.6%**	0.0%	0.0%	**0.5%**
Buses	0	0	0	0	**0**	0	0	0	1	0	0	**1**	0	0	0	0	0	0	**0**	0	0	0	1	0	0	**1**	0	0	**2**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	**0**
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	1	**0**
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**





TRI-STATE TRAFFIC DATA STData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Fenwick Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & Fenwick Rd
Latitude and Longitude	42.97813, -78.77413

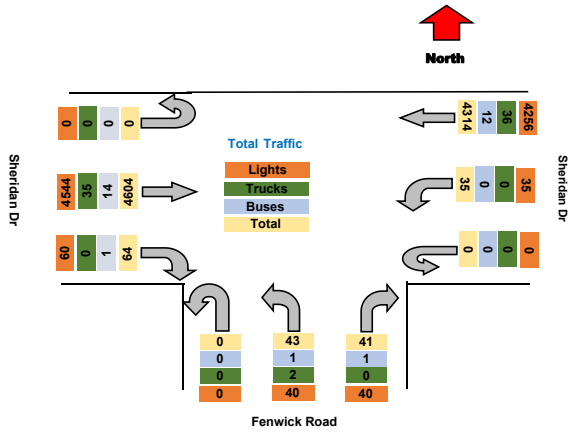
	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.9576

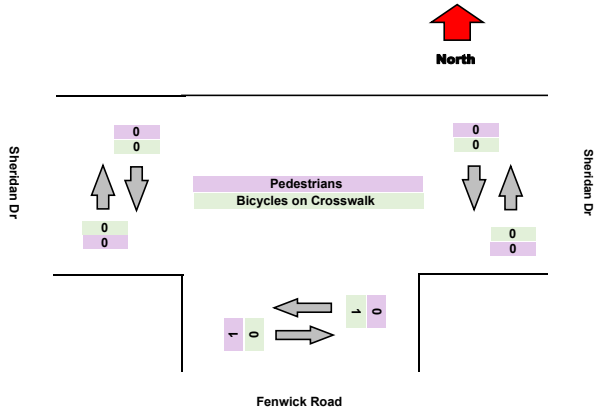
Turning Movement Data

Leg	Sheridan Dr						Fenwick Road						Sheridan Dr						
Direction	**Westbound**						**Northbound**						**Eastbound**						
Start Time	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
3:00:00 PM	358	2	0	**360**	0	0	3	6	0	**9**	0	0	4	328	0	**332**	0	0	**701**
3:15:00 PM	340	4	0	**344**	0	0	4	5	0	**9**	0	0	4	389	0	**393**	0	0	**746**
3:30:00 PM	336	4	0	**340**	0	0	1	3	0	**4**	0	1	5	331	0	**336**	0	0	**680**
3:45:00 PM	336	3	0	**339**	0	0	2	3	0	**5**	0	0	1	376	0	**377**	0	0	**721**
Hourly Total	1370	13	0	**1383**	0	0	10	17	0	**27**	0	1	14	1424	0	**1438**	0	0	**2848**
4:00:00 PM	390	1	0	**391**	0	0	3	0	0	**3**	0	0	7	392	0	**399**	0	0	**793**
4:15:00 PM	325	3	0	**328**	0	0	4	4	0	**8**	0	0	4	398	0	**402**	0	0	**738**
4:30:00 PM	356	4	0	**360**	0	0	8	2	0	**10**	0	0	4	444	0	**448**	0	0	**818**
4:45:00 PM	413	4	0	**417**	0	0	3	3	0	**6**	1	0	6	419	0	**425**	0	0	**848**
Hourly Total	1484	12	0	**1496**	0	0	18	9	0	**27**	1	0	21	1653	0	**1674**	0	0	**3197**
5:00:00 PM	386	3	0	**389**	0	0	3	3	0	**6**	0	0	8	382	0	**390**	0	0	**785**
5:15:00 PM	417	1	0	**418**	0	0	6	6	0	**12**	0	0	10	426	0	**436**	0	0	**866**
5:30:00 PM	345	4	0	**349**	0	0	2	6	0	**8**	0	0	4	377	0	**381**	0	0	**738**
5:45:00 PM	312	2	0	**314**	0	0	2	2	0	**4**	0	0	7	342	0	**349**	0	0	**667**
Hourly Total	1460	10	0	**1470**	0	0	13	17	0	**30**	0	0	29	1527	0	**1556**	0	0	**3056**
Grand Total	4314	35	0	**4349**	0	0	41	43	0	**84**	1	1	64	4604	0	**4668**	0	0	**9101**
% Approach	99.2%	0.8%	0.0%	**0.0%**	0.0%	0.0%	48.8%	51.2%	0.0%	**0.0%**	0.0%	0.0%	1.4%	98.6%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	47.4%	0.4%	0.0%	**47.8%**	0.0%	0.0%	0.5%	0.5%	0.0%	**0.9%**	0.0%	0.0%	0.7%	50.6%	0.0%	**51.3%**	0.0%	0.0%	**0.0%**
Lights	4256	35	0	**4291**	0	0	40	40	0	**80**	0	0	60	4544	0	**4604**	0	0	**8975**
% Lights	98.7%	100.0%	0.0%	**98.7%**	0.0%	0.0%	97.6%	93.0%	0.0%	**95.2%**	0.0%	0.0%	93.8%	98.7%	0.0%	**98.6%**	0.0%	0.0%	**98.6%**
Trucks	36	0	0	**36**	0	0	0	2	0	**2**	0	0	0	35	0	**35**	0	0	**73**
% Trucks	0.8%	0.0%	0.0%	**0.8%**	0.0%	0.0%	0.0%	4.7%	0.0%	**2.4%**	0.0%	0.0%	0.0%	0.8%	0.0%	**0.7%**	0.0%	0.0%	**0.8%**
Buses	12	0	0	**12**	0	0	1	1	0	**2**	0	0	1	14	0	**15**	0	0	**29**
% Buses	0.3%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.0%	2.3%	0.0%	**2.4%**	0.0%	0.0%	1.6%	0.3%	0.0%	**0.3%**	0.0%	0.0%	**0.3%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	1	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

Summary

Turning Movement Data Plot





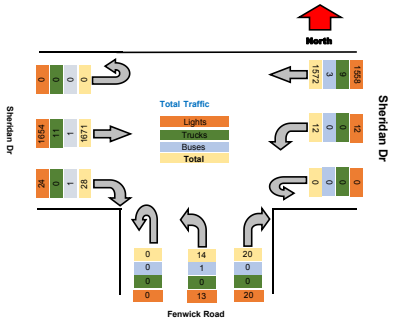
TRI-STATE TRAFFIC DATA STData.com

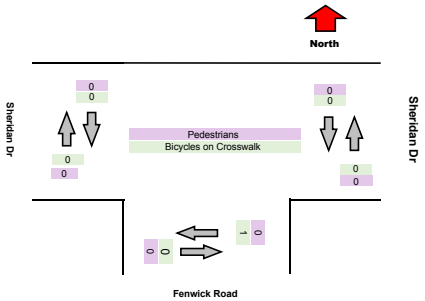
Summary

Turning Movement Peak Hour Data (PM)

4:30:00 PM

Leg	Sheridan Dr						Fenwick Road						Sheridan Dr						
Direction	Westbound						Northbound						Eastbound						
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
4:30:00 PM	356	4	0	**360**	0	0	8	2	0	**10**	0	0	4	444	0	**448**	0	0	**818**
4:45:00 PM	413	4	0	**417**	0	0	3	3	0	**6**	1	0	6	419	0	**425**	0	0	**848**
5:00:00 PM	386	3	0	**389**	0	0	3	3	0	**6**	0	0	8	382	0	**390**	0	0	**785**
5:15:00 PM	417	1	0	**418**	0	0	6	6	0	**12**	0	0	10	426	0	**436**	0	0	**866**
Grand Total	1572	12	0	**1584**	0	0	20	14	0	**34**	1	0	28	1671	0	**1699**	0	0	**3317**
% Approach	99.2%	0.8%	0.0%	**0.0%**	0.0%	0.0%	58.8%	41.2%	0.0%	**0.0%**	0.0%	0.0%	1.6%	98.4%	0.0%	**0.0%**	0.0%	0.0%	
% Total	47.4%	0.4%	0.0%	**47.8%**	0.0%	0.0%	0.6%	0.4%	0.0%	**1.0%**	0.0%	0.0%	0.8%	50.4%	0.0%	**51.2%**	0.0%	0.0%	
PHF	0.942	0.750	0.000	**0.947**	0.000	0.000	0.625	0.583	0.000	**0.708**	0.000	0.000	0.700	0.941	0.000	**0.948**	0.000	0.000	**0.958**
Lights	1558	12	0	**1570**	0	0	20	13	0	**33**	0	0	24	1654	0	**1678**	0	0	**3281**
% Lights	99.1%	100.0%	0.0%	**99.1%**	0.0%	0.0%	100.0%	92.9%	0.0%	**97.1%**	0.0%	0.0%	85.7%	99.0%	0.0%	**98.8%**	0.0%	0.0%	**98.9%**
Trucks	9	0	0	**9**	0	0	0	0	0	**0**	0	0	0	11	0	**11**	0	0	**20**
% Trucks	0.6%	0.0%	0.0%	**0.6%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.7%	0.0%	**0.6%**	0.0%	0.0%	**0.6%**
Buses	3	0	0	**3**	0	0	0	1	0	**1**	0	0	1	1	0	**2**	0	0	**6**
% Buses	0.2%	0.0%	0.0%	**0.2%**	0.0%	0.0%	0.0%	7.1%	0.0%	**2.9%**	0.0%	0.0%	3.6%	0.1%	0.0%	**0.1%**	0.0%	0.0%	**0.2%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TRI-STATE TRAFFIC DATA STData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Fenwick Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & Fenwick Rd
Latitude and Longitude	42.97813, -78.77413

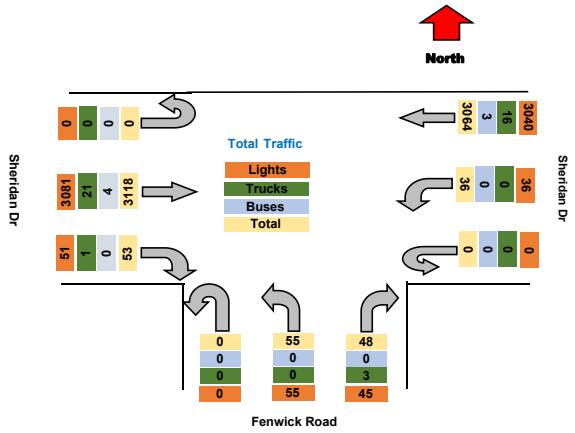
	Start	End	PHF
PM Peak	2023-09-23 12:00:00	2023-09-23 13:00:00	0.9553

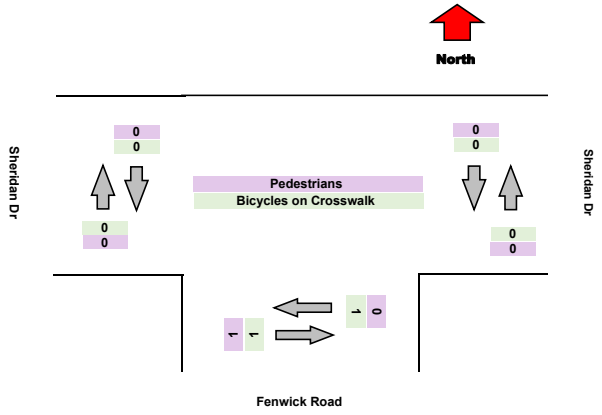
Turning Movement Data

Leg	Sheridan Dr						Fenwick Road						Sheridan Dr						
Direction	**Westbound**						**Northbound**						**Eastbound**						
Start Time	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
11:00:00 AM	233	4	0	**237**	0	0	2	4	0	**6**	0	0	4	232	0	**236**	0	0	**479**
11:15:00 AM	273	3	0	**276**	0	0	5	5	0	**10**	0	1	4	248	0	**252**	0	0	**538**
11:30:00 AM	260	3	0	**263**	0	0	2	6	0	**8**	0	0	4	260	0	**264**	0	0	**535**
11:45:00 AM	236	1	0	**237**	0	0	5	5	0	**10**	0	0	4	251	0	**255**	0	0	**502**
Hourly Total	1002	11	0	**1013**	0	0	14	20	0	**34**	0	1	16	991	0	**1007**	0	0	**2054**
12:00:00 PM	254	4	0	**258**	0	0	5	4	0	**9**	0	1	8	273	0	**281**	0	0	**548**
12:15:00 PM	240	6	0	**246**	0	0	7	6	0	**13**	0	0	1	301	0	**302**	0	0	**561**
12:30:00 PM	242	6	0	**248**	0	0	6	6	0	**12**	1	0	5	251	0	**256**	0	0	**516**
12:45:00 PM	268	2	0	**270**	0	0	3	4	0	**7**	0	0	5	294	0	**299**	0	0	**576**
Hourly Total	1004	18	0	**1022**	0	0	21	20	0	**41**	1	1	19	1119	0	**1138**	0	0	**2201**
1:00:00 PM	284	1	0	**285**	0	0	3	2	0	**5**	0	0	6	241	0	**247**	0	0	**537**
1:15:00 PM	246	2	0	**248**	0	0	5	4	0	**9**	0	0	3	239	0	**242**	0	0	**499**
1:30:00 PM	283	4	0	**287**	0	0	3	3	0	**6**	0	0	8	285	0	**293**	0	0	**586**
1:45:00 PM	245	0	0	**245**	0	0	2	6	0	**8**	0	0	1	243	0	**244**	0	0	**497**
Hourly Total	1058	7	0	**1065**	0	0	13	15	0	**28**	0	0	18	1008	0	**1026**	0	0	**2119**
Grand Total	3064	36	0	**3100**	0	0	48	55	0	**103**	1	2	53	3118	0	**3171**	0	0	**6374**
% Approach	98.8%	1.2%	0.0%	**0.0%**	0.0%	0.0%	46.6%	53.4%	0.0%	**0.0%**	0.0%	0.0%	1.7%	98.3%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	48.1%	0.6%	0.0%	**48.6%**	0.0%	0.0%	0.8%	0.9%	0.0%	**1.6%**	0.0%	0.0%	0.8%	48.9%	0.0%	**49.7%**	0.0%	0.0%	**0.0%**
Lights	3040	36	0	**3076**	0	0	45	55	0	**100**	0	0	51	3081	0	**3132**	0	0	**6308**
% Lights	99.2%	100.0%	0.0%	**99.2%**	0.0%	0.0%	93.8%	100.0%	0.0%	**97.1%**	0.0%	0.0%	96.2%	98.8%	0.0%	**98.8%**	0.0%	0.0%	**99.0%**
Trucks	16	0	0	**16**	0	0	3	0	0	**3**	0	0	1	21	0	**22**	0	0	**41**
% Trucks	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	6.3%	0.0%	0.0%	**2.9%**	0.0%	0.0%	1.9%	0.7%	0.0%	**0.7%**	0.0%	0.0%	**0.6%**
Buses	3	0	0	**3**	0	0	0	0	0	**0**	0	0	0	4	0	**4**	0	0	**7**
% Buses	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	1	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	1	1	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	50.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

Summary

Turning Movement Data Plot





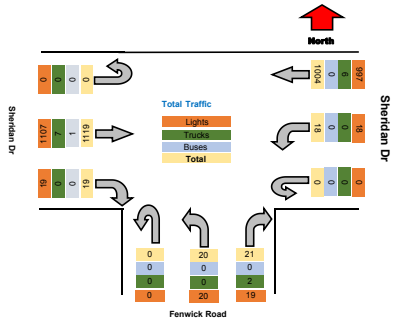
TRI-STATE TRAFFIC DATA STData.com

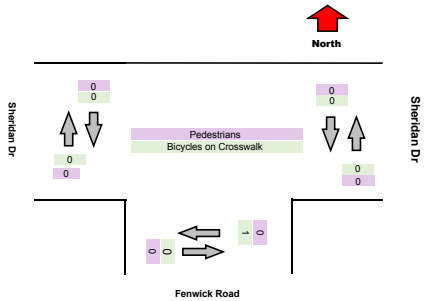
Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	Sheridan Dr						Fenwick Road						Sheridan Dr						
Direction	Westbound						Northbound						Eastbound						
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
12:00:00 PM	254	4	0	**258**	0	0	5	4	0	**9**	0	1	8	273	0	**281**	0	0	**548**
12:15:00 PM	240	6	0	**246**	0	0	7	6	0	**13**	0	0	1	301	0	**302**	0	0	**561**
12:30:00 PM	242	6	0	**248**	0	0	6	6	0	**12**	1	0	5	251	0	**256**	0	0	**516**
12:45:00 PM	268	2	0	**270**	0	0	3	4	0	**7**	0	0	5	294	0	**299**	0	0	**576**
Grand Total	1004	18	0	**1022**	0	0	21	20	0	**41**	1	1	19	1119	0	**1138**	0	0	**2201**
% Approach	98.2%	1.8%	0.0%	**0.0%**	0.0%	0.0%	51.2%	48.8%	0.0%	**0.0%**	0.0%	0.0%	1.7%	98.3%	0.0%	**0.0%**	0.0%	0.0%	
% Total	45.6%	0.8%	0.0%	**46.4%**	0.0%	0.0%	1.0%	0.9%	0.0%	**1.9%**	0.0%	0.0%	0.9%	50.8%	0.0%	**51.7%**	0.0%	0.0%	
PHF	0.937	0.750	0.000	**0.946**	0.000	0.000	0.750	0.833	0.000	**0.788**	0.000	0.000	0.594	0.929	0.000	**0.942**	0.000	0.000	**0.955**
Lights	997	18	0	**1015**	0	0	19	20	0	**39**	0	0	19	1107	0	**1126**	0	0	**2180**
% Lights	99.3%	100.0%	0.0%	**99.3%**	0.0%	0.0%	90.5%	100.0%	0.0%	**95.1%**	0.0%	0.0%	100.0%	98.9%	0.0%	**98.9%**	0.0%	0.0%	**99.0%**
Trucks	6	0	0	**6**	0	0	2	0	0	**2**	0	0	0	7	0	**7**	0	0	**15**
% Trucks	0.6%	0.0%	0.0%	**0.6%**	0.0%	0.0%	9.5%	0.0%	0.0%	**4.9%**	0.0%	0.0%	0.0%	0.6%	0.0%	**0.6%**	0.0%	0.0%	**0.7%**
Buses	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	1	0	**1**	0	0	**1**
% Buses	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.1%	0.0%	**0.1%**	0.0%	0.0%	**0.0%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	1	1	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & North Forest
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & North Forest
Latitude and Longitude	42.97808, -78.76788

	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.962

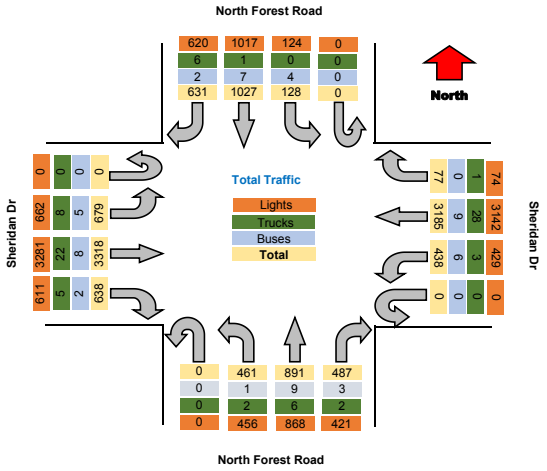
Turning Movement Data

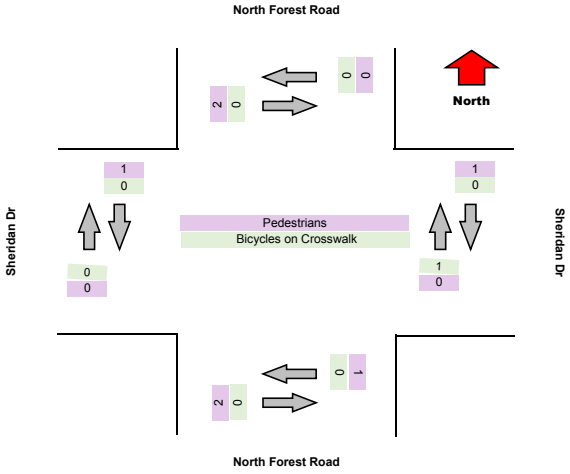
Leg	North Forest Road							Sheridan Dr							North Forest Road							Sheridan Dr							
Direction	**Southbound**							**Westbound**							**Northbound**							**Eastbound**							
Start Time	Right	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
3:00:00 PM	77	67	11	0	**155**	1	0	4	249	28	0	**281**	0	0	29	68	28	0	**125**	0	0	34	246	47	0	**327**	0	0	**888**
3:15:00 PM	65	87	13	0	**165**	1	0	5	220	47	0	**272**	0	0	46	67	39	0	**152**	0	0	39	274	60	0	**373**	0	0	**962**
3:30:00 PM	44	66	12	0	**122**	0	0	9	252	26	0	**287**	0	0	38	70	43	0	**151**	0	1	43	249	58	0	**350**	0	0	**910**
3:45:00 PM	61	101	9	0	**171**	0	0	9	240	34	0	**283**	0	0	32	49	35	0	**116**	0	0	55	264	61	0	**380**	0	0	**950**
Hourly Total	247	321	45	0	**613**	2	0	27	961	135	0	**1123**	0	0	145	254	145	0	**544**	0	1	171	1033	226	0	**1430**	0	0	**3710**
4:00:00 PM	60	92	13	0	**165**	0	0	7	286	30	0	**323**	0	0	47	95	36	0	**178**	0	0	56	258	51	0	**365**	0	0	**1031**
4:15:00 PM	31	77	11	0	**119**	0	0	10	280	43	0	**333**	0	0	42	61	31	0	**134**	0	0	77	295	60	0	**432**	0	0	**1018**
4:30:00 PM	46	113	8	0	**167**	0	0	8	265	42	0	**315**	0	1	49	93	38	0	**180**	0	1	81	268	67	0	**416**	0	0	**1078**
4:45:00 PM	51	94	10	0	**155**	0	0	4	308	32	0	**344**	0	0	51	92	52	0	**195**	0	0	67	322	49	0	**438**	0	1	**1132**
Hourly Total	188	376	42	0	**606**	0	0	29	1139	147	0	**1315**	0	1	189	341	157	0	**687**	0	1	281	1143	227	0	**1651**	0	1	**4259**
5:00:00 PM	42	83	12	0	**137**	0	0	7	321	44	0	**372**	0	0	35	71	40	0	**146**	0	0	52	286	64	0	**402**	0	0	**1057**
5:15:00 PM	52	96	11	0	**159**	0	0	6	298	45	0	**349**	1	0	36	84	49	0	**169**	1	0	67	290	53	0	**410**	0	0	**1087**
5:30:00 PM	53	77	11	0	**141**	0	0	3	245	28	0	**276**	0	0	55	69	41	0	**165**	0	0	30	301	53	0	**384**	0	0	**966**
5:45:00 PM	49	74	7	0	**130**	0	0	5	221	39	0	**265**	0	0	27	72	29	0	**128**	0	0	37	265	56	0	**358**	0	0	**881**
Hourly Total	196	330	41	0	**567**	0	0	21	1085	156	0	**1262**	1	0	153	296	159	0	**608**	1	0	186	1142	226	0	**1554**	0	0	**3991**
Grand Total	631	1027	128	0	**1786**	2	0	77	3185	438	0	**3700**	1	1	487	891	461	0	**1839**	1	2	638	3318	679	0	**4635**	0	1	**11960**
% Approach	35.3%	57.5%	7.2%	0.0%	**0.0%**	0.0%	0.0%	2.1%	86.1%	11.8%	0.0%	**0.0%**	0.0%	0.0%	26.5%	48.5%	25.1%	0.0%	**0.0%**	0.0%	0.0%	13.8%	71.6%	14.6%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	5.3%	8.6%	1.1%	0.0%	**14.9%**	0.0%	0.0%	0.6%	26.6%	3.7%	0.0%	**30.9%**	0.0%	0.0%	4.1%	7.4%	3.9%	0.0%	**15.4%**	0.0%	0.0%	5.3%	27.7%	5.7%	0.0%	**38.8%**	0.0%	0.0%	**0.0%**
Lights	620	1017	124	0	**1761**	0	0	74	3142	429	0	**3645**	0	0	421	868	456	0	**1745**	0	0	611	3281	662	0	**4554**	0	0	**11705**
% Lights	98.3%	99.0%	96.9%	0.0%	**98.6%**	0.0%	0.0%	96.1%	98.6%	97.9%	0.0%	**98.5%**	0.0%	0.0%	86.4%	97.4%	98.9%	0.0%	**94.9%**	0.0%	0.0%	95.8%	98.9%	97.5%	0.0%	**98.3%**	0.0%	0.0%	**97.9%**
Trucks	6	1	0	0	**7**	0	0	1	28	3	0	**32**	0	0	2	6	2	0	**10**	0	0	5	22	8	0	**35**	0	0	**84**
% Trucks	1.0%	0.1%	0.0%	0.0%	**0.4%**	0.0%	0.0%	1.3%	0.9%	0.7%	0.0%	**0.9%**	0.0%	0.0%	0.4%	0.7%	0.4%	0.0%	**0.5%**	0.0%	0.0%	0.8%	0.7%	1.2%	0.0%	**0.8%**	0.0%	0.0%	**0.7%**
Buses	2	7	4	0	**13**	0	0	0	9	6	0	**15**	0	0	3	9	1	0	**13**	0	0	2	8	5	0	**15**	0	0	**56**
% Buses	0.3%	0.7%	3.1%	0.0%	**0.7%**	0.0%	0.0%	0.0%	0.3%	1.4%	0.0%	**0.4%**	0.0%	0.0%	0.6%	1.0%	0.2%	0.0%	**0.7%**	0.0%	0.0%	0.3%	0.2%	0.7%	0.0%	**0.3%**	0.0%	0.0%	**0.5%**
Pedestrians	0	0	0	0	**0**	2	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	1	2	0	0	0	0	**0**	0	1	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	1	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





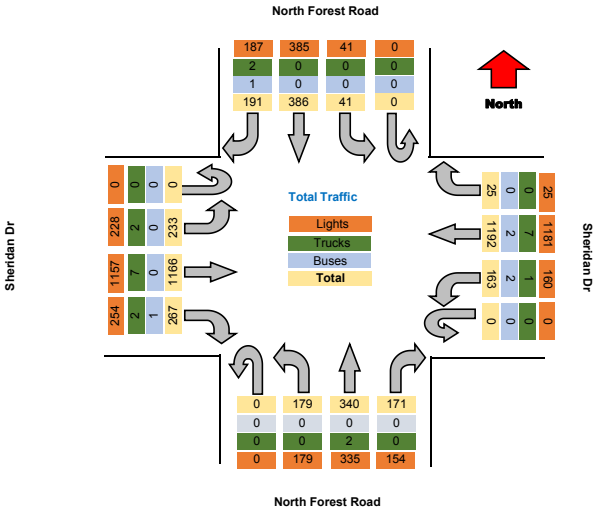
TSTData.com

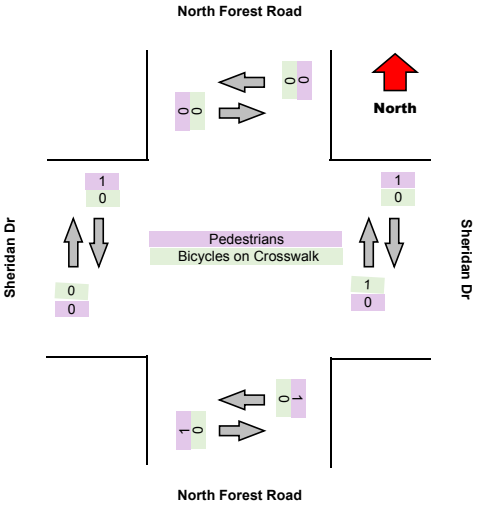
Summary

Turning Movement Peak Hour Data (PM)

4:30:00 PM

Leg	North Forest Road							Sheridan Dr							North Forest Road							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
4:30:00 PM	46	113	8	0	**167**	0	0	8	265	42	0	**315**	0	1	49	93	38	0	**180**	0	1	81	268	67	0	**416**	0	0	**1078**
4:45:00 PM	51	94	10	0	**155**	0	0	4	308	32	0	**344**	0	0	51	92	52	0	**195**	0	0	67	322	49	0	**438**	0	1	**1132**
5:00:00 PM	42	83	12	0	**137**	0	0	7	321	44	0	**372**	0	0	35	71	40	0	**146**	0	0	52	286	64	0	**402**	0	0	**1057**
5:15:00 PM	52	96	11	0	**159**	0	0	6	298	45	0	**349**	1	0	36	84	49	0	**169**	1	0	67	290	53	0	**410**	0	0	**1087**
Grand Total	191	386	41	0	**618**	0	0	25	1192	163	0	**1380**	1	1	171	340	179	0	**690**	1	1	267	1166	233	0	**1666**	0	1	**4354**
% Approach	30.9%	62.5%	6.6%	0.0%	**0.0%**	0.0%	0.0%	1.8%	86.4%	11.8%	0.0%	**0.0%**	0.0%	0.0%	24.8%	49.3%	25.9%	0.0%	**0.0%**	0.0%	0.0%	16.0%	70.0%	14.0%	0.0%	**0.0%**	0.0%	0.0%	
% Total	4.4%	8.9%	0.9%	0.0%	**14.2%**	0.0%	0.0%	0.6%	27.4%	3.7%	0.0%	**31.7%**	0.0%	0.0%	3.9%	7.8%	4.1%	0.0%	**15.8%**	0.0%	0.0%	6.1%	26.8%	5.4%	0.0%	**38.3%**	0.0%	0.0%	
PHF	0.918	0.854	0.854	0.000	**0.925**	0.000	0.000	0.781	0.928	0.906	0.000	**0.927**	0.000	0.000	0.838	0.914	0.861	0.000	**0.885**	0.000	0.000	0.824	0.905	0.869	0.000	**0.951**	0.000	0.000	**0.962**
Lights	187	385	41	0	**613**	0	0	25	1181	160	0	**1366**	0	0	154	335	179	0	**668**	0	0	254	1157	228	0	**1639**	0	0	**4286**
% Lights	97.9%	99.7%	100.0%	0.0%	**99.2%**	0.0%	0.0%	100.0%	99.1%	98.2%	0.0%	**99.0%**	0.0%	0.0%	90.1%	98.5%	100.0%	0.0%	**96.8%**	0.0%	0.0%	95.1%	99.2%	97.9%	0.0%	**98.4%**	0.0%	0.0%	**98.4%**
Trucks	2	0	0	0	**2**	0	0	0	7	1	0	**8**	0	0	0	2	0	0	**2**	0	0	2	7	2	0	**11**	0	0	**23**
% Trucks	1.0%	0.0%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.6%	0.6%	0.0%	**0.6%**	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.7%	0.6%	0.9%	0.0%	**0.7%**	0.0%	0.0%	**0.5%**
Buses	1	0	0	0	**1**	0	0	0	2	2	0	**4**	0	0	0	0	0	0	**0**	0	0	1	0	0	0	**1**	0	0	**6**
% Buses	0.5%	0.0%	0.0%	0.0%	**0.2%**	0.0%	0.0%	0.0%	0.2%	1.2%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	1	1	0	0	0	0	**0**	0	1	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	1	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & North Forest
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & North Forest
Latitude and Longitude	42.97808, -78.76788

	Start	End	PHF
PM Peak	2023-09-23 12:00:00	2023-09-23 13:00:00	0.987

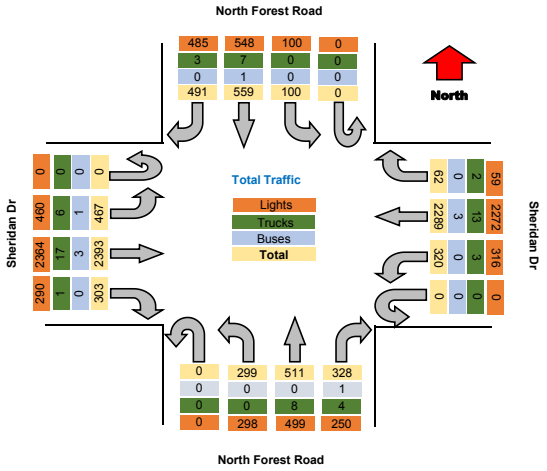
Turning Movement Data

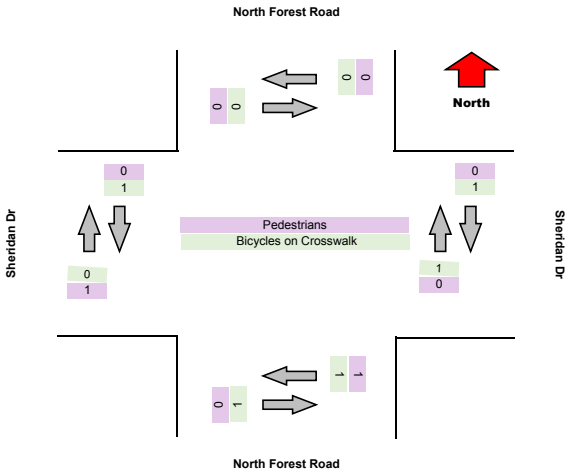
Leg	North Forest Road							Sheridan Dr							North Forest Road							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
11:00:00 AM	39	39	8	0	**86**	0	0	9	168	24	0	**201**	0	0	25	37	27	0	**89**	0	0	15	192	25	0	**232**	1	0	**608**
11:15:00 AM	41	34	8	0	**83**	0	0	6	209	23	0	**238**	0	0	33	32	20	0	**85**	0	0	26	188	36	0	**250**	0	0	**656**
11:30:00 AM	41	58	7	0	**106**	0	0	4	191	20	0	**215**	0	0	29	48	25	0	**102**	0	0	20	192	32	0	**244**	0	1	**667**
11:45:00 AM	43	40	12	0	**95**	0	0	6	169	24	0	**199**	0	0	33	47	22	0	**102**	0	0	23	207	46	0	**276**	0	0	**672**
Hourly Total	164	171	35	0	**370**	0	0	25	737	91	0	**853**	0	0	120	164	94	0	**378**	0	0	84	779	139	0	**1002**	1	1	**2603**
12:00:00 PM	45	53	14	0	**112**	0	0	3	188	31	0	**222**	0	0	30	44	25	0	**99**	0	1	21	212	36	0	**269**	0	0	**702**
12:15:00 PM	43	42	14	0	**99**	0	0	4	177	32	0	**213**	0	1	38	45	25	0	**108**	1	0	29	221	53	0	**303**	0	0	**723**
12:30:00 PM	44	54	12	0	**110**	0	0	7	195	34	0	**236**	0	0	22	49	23	0	**94**	1	0	29	201	38	0	**268**	0	0	**708**
12:45:00 PM	43	53	6	0	**102**	0	0	7	207	28	0	**242**	1	0	19	47	27	0	**93**	0	0	24	219	44	0	**287**	0	0	**724**
Hourly Total	175	202	46	0	**423**	0	0	21	767	125	0	**913**	1	1	109	185	100	0	**394**	2	1	103	853	171	0	**1127**	0	0	**2857**
1:00:00 PM	42	53	5	0	**100**	0	0	3	205	25	0	**233**	0	0	23	39	26	0	**88**	0	0	29	187	42	0	**258**	0	0	**679**
1:15:00 PM	34	38	2	0	**74**	0	0	7	178	22	0	**207**	0	0	22	43	27	0	**92**	0	0	35	172	36	0	**243**	0	0	**616**
1:30:00 PM	43	47	6	0	**96**	0	0	2	214	34	0	**250**	0	0	23	44	29	0	**96**	0	0	30	193	37	0	**260**	0	0	**702**
1:45:00 PM	33	48	6	0	**87**	0	0	4	188	23	0	**215**	0	0	31	36	23	0	**90**	0	0	22	209	42	0	**273**	0	0	**665**
Hourly Total	152	186	19	0	**357**	0	0	16	785	104	0	**905**	0	0	99	162	105	0	**366**	0	0	116	761	157	0	**1034**	0	0	**2662**
Grand Total	491	559	100	0	**1150**	0	0	62	2289	320	0	**2671**	1	1	328	511	299	0	**1138**	2	1	303	2393	467	0	**3163**	1	1	**8122**
% Approach	42.7%	48.6%	8.7%	0.0%	**0.0%**	0.0%	0.0%	2.3%	85.7%	12.0%	0.0%	**0.0%**	0.0%	0.0%	28.8%	44.9%	26.3%	0.0%	**0.0%**	0.0%	0.0%	9.6%	75.7%	14.8%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	6.0%	6.9%	1.2%	0.0%	**14.2%**	0.0%	0.0%	0.8%	28.2%	3.9%	0.0%	**32.9%**	0.0%	0.0%	4.0%	6.3%	3.7%	0.0%	**14.0%**	0.0%	0.0%	3.7%	29.5%	5.7%	0.0%	**38.9%**	0.0%	0.0%	**0.0%**
Lights	485	548	100	0	**1133**	0	0	59	2272	316	0	**2647**	0	0	250	499	298	0	**1047**	0	0	290	2364	460	0	**3114**	0	0	**7941**
% Lights	98.8%	98.0%	100.0%	0.0%	**98.5%**	0.0%	0.0%	95.2%	99.3%	98.8%	0.0%	**99.1%**	0.0%	0.0%	76.2%	97.7%	99.7%	0.0%	**92.0%**	0.0%	0.0%	95.7%	98.8%	98.5%	0.0%	**98.5%**	0.0%	0.0%	**97.8%**
Trucks	3	7	0	0	**10**	0	0	2	13	3	0	**18**	0	0	4	8	0	0	**12**	0	0	1	17	6	0	**24**	0	0	**64**
% Trucks	0.6%	1.3%	0.0%	0.0%	**0.9%**	0.0%	0.0%	3.2%	0.6%	0.9%	0.0%	**0.7%**	0.0%	0.0%	1.2%	1.6%	0.0%	0.0%	**1.1%**	0.0%	0.0%	0.3%	0.7%	1.3%	0.0%	**0.8%**	0.0%	0.0%	**0.8%**
Buses	0	1	0	0	**1**	0	0	0	3	0	0	**3**	0	0	1	0	0	0	**1**	0	0	0	3	1	0	**4**	0	0	**9**
% Buses	0.0%	0.2%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	1	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	1	0	0	0	0	**0**	1	1	0	0	0	0	**0**	0	1	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





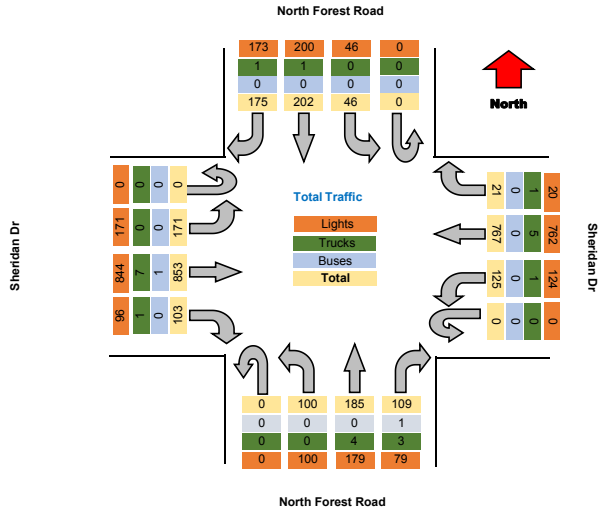
TSTData.com

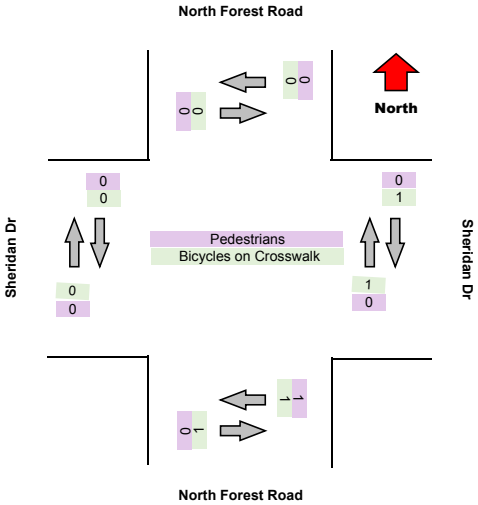
Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	North Forest Road							Sheridan Dr							North Forest Road							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
12:00:00 PM	45	53	14	0	**112**	0	0	3	188	31	0	**222**	0	0	30	44	25	0	**99**	0	1	21	212	36	0	**269**	0	0	**702**
12:15:00 PM	43	42	14	0	**99**	0	0	4	177	32	0	**213**	0	1	38	45	25	0	**108**	1	0	29	221	53	0	**303**	0	0	**723**
12:30:00 PM	44	54	12	0	**110**	0	0	7	195	34	0	**236**	0	0	22	49	23	0	**94**	1	0	29	201	38	0	**268**	0	0	**708**
12:45:00 PM	43	53	6	0	**102**	0	0	7	207	28	0	**242**	1	0	19	47	27	0	**93**	0	0	24	219	44	0	**287**	0	0	**724**
Grand Total	175	202	46	0	**423**	0	0	21	767	125	0	**913**	1	1	109	185	100	0	**394**	2	1	103	853	171	0	**1127**	0	0	**2857**
% Approach	41.4%	47.8%	10.9%	0.0%	**0.0%**	0.0%	0.0%	2.3%	84.0%	13.7%	0.0%	**0.0%**	0.0%	0.0%	27.7%	47.0%	25.4%	0.0%	**0.0%**	0.0%	0.0%	9.1%	75.7%	15.2%	0.0%	**0.0%**	0.0%	0.0%	
% Total	6.1%	7.1%	1.6%	0.0%	**14.8%**	0.0%	0.0%	0.7%	26.8%	4.4%	0.0%	**32.0%**	0.0%	0.0%	3.8%	6.5%	3.5%	0.0%	**13.8%**	0.0%	0.0%	3.6%	29.9%	6.0%	0.0%	**39.4%**	0.0%	0.0%	
PHF	0.972	0.935	0.821	0.000	**0.944**	0.000	0.000	0.750	0.926	0.919	0.000	**0.943**	0.000	0.000	0.717	0.944	0.926	0.000	**0.912**	0.000	0.000	0.888	0.965	0.807	0.000	**0.930**	0.000	0.000	**0.987**
Lights	173	200	46	0	**419**	0	0	20	762	124	0	**906**	0	0	79	179	100	0	**358**	0	0	96	844	171	0	**1111**	0	0	**2794**
% Lights	98.9%	99.0%	100.0%	0.0%	**99.1%**	0.0%	0.0%	95.2%	99.3%	99.2%	0.0%	**99.2%**	0.0%	0.0%	72.5%	96.8%	100.0%	0.0%	**90.9%**	0.0%	0.0%	93.2%	98.9%	100.0%	0.0%	**98.6%**	0.0%	0.0%	**97.8%**
Trucks	1	1	0	0	**2**	0	0	1	5	1	0	**7**	0	0	3	4	0	0	**7**	0	0	1	7	0	0	**8**	0	0	**24**
% Trucks	0.6%	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	4.8%	0.7%	0.8%	0.0%	**0.8%**	0.0%	0.0%	2.8%	2.2%	0.0%	0.0%	**1.8%**	0.0%	0.0%	1.0%	0.8%	0.0%	0.0%	**0.7%**	0.0%	0.0%	**0.8%**
Buses	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	1	0	0	0	**1**	0	0	0	1	0	0	**1**	0	0	**2**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	1	0	0	0	0	**0**	1	1	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	50.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TRI-STATE TRAFFIC DATA STData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Harlem Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & Harlem Rd
Latitude and Longitude	42.97858, -78.78386

	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.9815

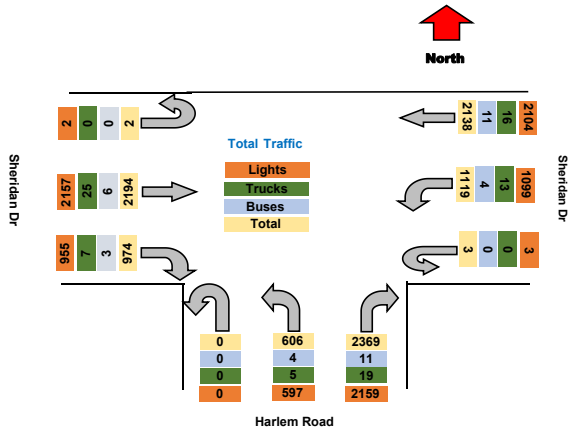
Turning Movement Data

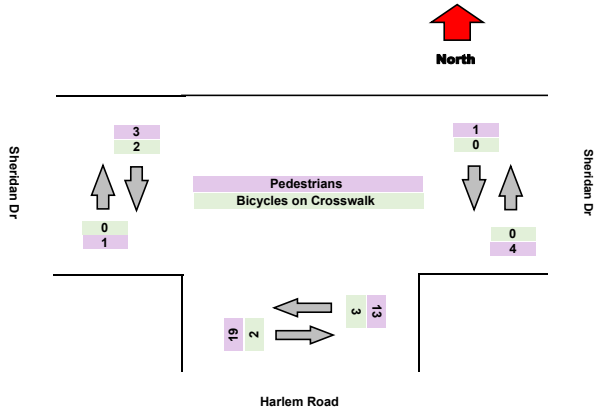
Leg	Sheridan Dr						Harlem Road						Sheridan Dr						
Direction	**Westbound**						**Northbound**						**Eastbound**						
Start Time	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
3:00:00 PM	188	106	0	**294**	0	0	170	59	0	**229**	1	0	101	165	0	**266**	0	0	**789**
3:15:00 PM	159	118	0	**277**	1	0	199	62	0	**261**	0	1	92	158	0	**250**	1	0	**788**
3:30:00 PM	169	77	1	**247**	0	0	164	58	0	**222**	0	1	102	177	0	**279**	0	0	**748**
3:45:00 PM	173	108	0	**281**	0	0	188	48	0	**236**	0	0	86	184	0	**270**	0	0	**787**
Hourly Total	689	409	1	**1099**	1	0	721	227	0	**948**	1	2	381	684	0	**1065**	1	0	**3112**
4:00:00 PM	182	95	1	**278**	0	1	200	54	0	**254**	0	0	76	184	0	**260**	0	1	**792**
4:15:00 PM	185	72	0	**257**	0	0	194	51	0	**245**	0	0	86	207	1	**294**	0	0	**796**
4:30:00 PM	182	79	1	**262**	0	0	248	43	0	**291**	0	16	76	209	0	**285**	0	2	**838**
4:45:00 PM	175	87	0	**262**	0	2	227	56	0	**283**	2	0	79	205	0	**284**	0	2	**829**
Hourly Total	724	333	2	**1059**	0	3	869	204	0	**1073**	2	16	317	805	1	**1123**	0	5	**3255**
5:00:00 PM	183	90	0	**273**	0	0	194	38	0	**232**	13	0	81	206	1	**288**	0	0	**793**
5:15:00 PM	204	94	0	**298**	0	0	219	50	0	**269**	0	3	73	190	0	**263**	0	0	**830**
5:30:00 PM	166	87	0	**253**	0	0	189	51	0	**240**	0	0	76	177	0	**253**	0	0	**746**
5:45:00 PM	172	106	0	**278**	0	1	177	36	0	**213**	0	0	46	132	0	**178**	0	0	**669**
Hourly Total	725	377	0	**1102**	0	1	779	175	0	**954**	13	3	276	705	1	**982**	0	0	**3038**
Grand Total	2138	1119	3	**3260**	1	4	2369	606	0	**2975**	16	21	974	2194	2	**3170**	1	5	**9405**
% Approach	65.6%	34.3%	0.1%	**0.0%**	0.0%	0.0%	79.6%	20.4%	0.0%	**0.0%**	0.0%	0.0%	30.7%	69.2%	0.1%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	22.7%	11.9%	0.0%	**34.7%**	0.0%	0.0%	25.2%	6.4%	0.0%	**31.6%**	0.0%	0.0%	10.4%	23.3%	0.0%	**33.7%**	0.0%	0.0%	**0.0%**
Lights	2104	1099	3	**3206**	0	0	2159	597	0	**2756**	0	0	955	2157	2	**3114**	0	0	**9076**
% Lights	98.4%	98.2%	100.0%	**98.3%**	0.0%	0.0%	91.1%	98.5%	0.0%	**92.6%**	0.0%	0.0%	98.0%	98.3%	100.0%	**98.2%**	0.0%	0.0%	**96.5%**
Trucks	16	13	0	**29**	0	0	19	5	0	**24**	0	0	7	25	0	**32**	0	0	**85**
% Trucks	0.7%	1.2%	0.0%	**0.9%**	0.0%	0.0%	0.8%	0.8%	0.0%	**0.8%**	0.0%	0.0%	0.7%	1.1%	0.0%	**1.0%**	0.0%	0.0%	**0.9%**
Buses	11	4	0	**15**	0	0	11	4	0	**15**	0	0	3	6	0	**9**	0	0	**39**
% Buses	0.5%	0.4%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.7%	0.0%	**0.5%**	0.0%	0.0%	0.3%	0.3%	0.0%	**0.3%**	0.0%	0.0%	**0.4%**
Pedestrians	0	0	0	**0**	1	4	0	0	0	**0**	13	19	0	0	0	**0**	1	3	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	**0.0%**	81.3%	90.5%	0.0%	0.0%	0.0%	**0.0%**	100.0%	60.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	3	2	0	0	0	**0**	0	2	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	18.8%	9.5%	0.0%	0.0%	0.0%	**0.0%**	0.0%	40.0%	**0.0%**

TRI-STATE TRAFFIC DATA STData.com

Summary

Turning Movement Data Plot





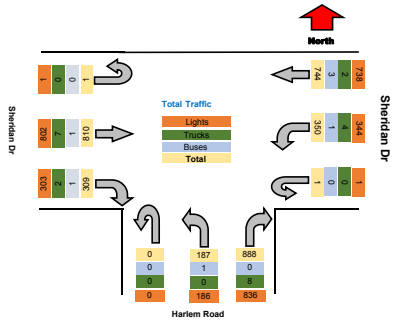
TRI-STATE TRAFFIC DATA STData.com

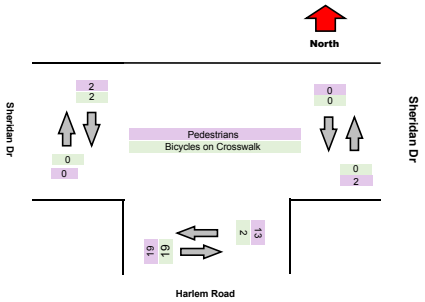
Summary

Turning Movement Peak Hour Data (PM)

4:30:00 PM

Leg	Sheridan Dr						Harlem Road						Sheridan Dr						
Direction	Westbound						Northbound						Eastbound						
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
4:30:00 PM	182	79	1	**262**	0	0	248	43	0	**291**	0	16	76	209	0	**285**	0	2	**838**
4:45:00 PM	175	87	0	**262**	0	2	227	56	0	**283**	2	0	79	205	0	**284**	0	2	**829**
5:00:00 PM	183	90	0	**273**	0	0	194	38	0	**232**	13	0	81	206	1	**288**	0	0	**793**
5:15:00 PM	204	94	0	**298**	0	0	219	50	0	**269**	0	3	73	190	0	**263**	0	0	**830**
Grand Total	744	350	1	**1095**	0	2	888	187	0	**1075**	15	19	309	810	1	**1120**	0	4	**3290**
% Approach	67.9%	32.0%	0.1%	**0.0%**	0.0%	0.0%	82.6%	17.4%	0.0%	**0.0%**	0.0%	0.0%	27.6%	72.3%	0.1%	**0.0%**	0.0%	0.0%	
% Total	22.6%	10.6%	0.0%	**33.3%**	0.0%	0.0%	27.0%	5.7%	0.0%	**32.7%**	0.0%	0.0%	9.4%	24.6%	0.0%	**34.0%**	0.0%	0.0%	
PHF	0.912	0.931	0.250	**0.919**	0.000	0.000	0.895	0.835	0.000	**0.924**	0.000	0.000	0.954	0.969	0.250	**0.972**	0.000	0.000	**0.982**
Lights	738	344	1	**1083**	0	0	836	186	0	**1022**	0	0	303	802	1	**1106**	0	0	**3211**
% Lights	99.2%	98.3%	100.0%	**98.9%**	0.0%	0.0%	94.1%	99.5%	0.0%	**95.1%**	0.0%	0.0%	98.1%	99.0%	100.0%	**98.8%**	0.0%	0.0%	**97.6%**
Trucks	2	4	0	**6**	0	0	8	0	0	**8**	0	0	2	7	0	**9**	0	0	**23**
% Trucks	0.3%	1.1%	0.0%	**0.5%**	0.0%	0.0%	0.9%	0.0%	0.0%	**0.7%**	0.0%	0.0%	0.6%	0.9%	0.0%	**0.8%**	0.0%	0.0%	**0.7%**
Buses	3	1	0	**4**	0	0	0	1	0	**1**	0	0	1	1	0	**2**	0	0	**7**
% Buses	0.4%	0.3%	0.0%	**0.4%**	0.0%	0.0%	0.0%	0.5%	0.0%	**0.1%**	0.0%	0.0%	0.3%	0.1%	0.0%	**0.2%**	0.0%	0.0%	**0.2%**
Pedestrians	0	0	0	**0**	0	2	0	0	0	**0**	13	19	0	0	0	**0**	0	2	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	**0.0%**	86.7%	100.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	2	0	0	0	0	**0**	0	2	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	13.3%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	**0.0%**





TRI-STATE TRAFFIC DATA STData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Harlem Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & Harlem Rd
Latitude and Longitude	42.97858, -78.78386

	Start	End	PHF
PM Peak	2023-09-23 12:00:00	2023-09-23 13:00:00	0.9702

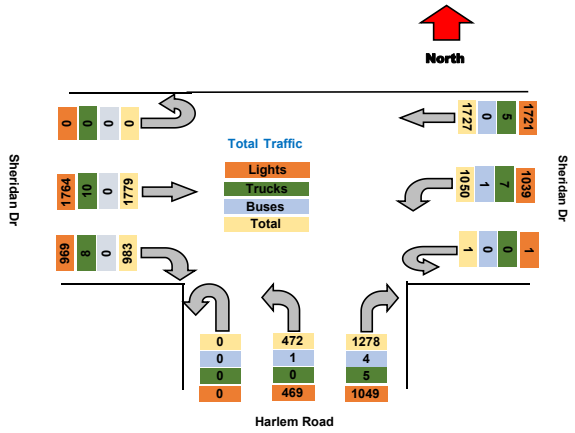
Turning Movement Data

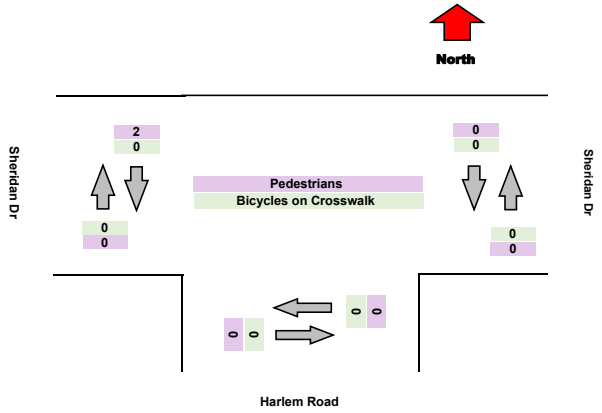
Leg	Sheridan Dr						Harlem Road						Sheridan Dr						
Direction	**Westbound**						**Northbound**						**Eastbound**						
Start Time	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
11:00:00 AM	137	75	1	**213**	0	0	110	15	0	**125**	0	0	80	137	0	**217**	0	0	**555**
11:15:00 AM	157	99	0	**256**	0	0	117	53	0	**170**	0	0	95	142	0	**237**	0	0	**663**
11:30:00 AM	105	89	0	**194**	0	0	119	51	0	**170**	0	0	66	150	0	**216**	0	0	**580**
11:45:00 AM	157	81	0	**238**	0	0	111	33	0	**144**	0	0	78	136	0	**214**	0	0	**596**
Hourly Total	556	344	1	**901**	0	0	457	152	0	**609**	0	0	319	565	0	**884**	0	0	**2394**
12:00:00 PM	141	94	0	**235**	0	0	126	32	0	**158**	0	0	99	163	0	**262**	0	0	**655**
12:15:00 PM	144	78	0	**222**	0	0	134	44	0	**178**	0	0	80	166	0	**246**	0	0	**646**
12:30:00 PM	157	94	0	**251**	0	0	111	45	0	**156**	0	0	79	135	0	**214**	0	0	**621**
12:45:00 PM	127	93	0	**220**	0	0	113	49	0	**162**	0	0	85	153	0	**238**	0	2	**620**
Hourly Total	569	359	0	**928**	0	0	484	170	0	**654**	0	0	343	617	0	**960**	0	2	**2542**
1:00:00 PM	168	90	0	**258**	0	0	81	30	0	**111**	0	0	83	169	0	**252**	0	0	**621**
1:15:00 PM	131	88	0	**219**	0	0	77	38	0	**115**	0	0	69	141	0	**210**	0	0	**544**
1:30:00 PM	148	87	0	**235**	0	0	107	44	0	**151**	0	0	91	162	0	**253**	0	0	**639**
1:45:00 PM	155	82	0	**237**	0	0	72	38	0	**110**	0	0	78	125	0	**203**	0	0	**550**
Hourly Total	602	347	0	**949**	0	0	337	150	0	**487**	0	0	321	597	0	**918**	0	0	**2354**
Grand Total	1727	1050	1	**2778**	0	0	1278	472	0	**1750**	0	0	983	1779	0	**2762**	0	2	**7290**
% Approach	62.2%	37.8%	0.0%	**0.0%**	0.0%	0.0%	73.0%	27.0%	0.0%	**0.0%**	0.0%	0.0%	35.6%	64.4%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	23.7%	14.4%	0.0%	**38.1%**	0.0%	0.0%	17.5%	6.5%	0.0%	**24.0%**	0.0%	0.0%	13.5%	24.4%	0.0%	**37.9%**	0.0%	0.0%	**0.0%**
Lights	1721	1039	1	**2761**	0	0	1049	469	0	**1518**	0	0	969	1764	0	**2733**	0	0	**7012**
% Lights	99.7%	99.0%	100.0%	**99.4%**	0.0%	0.0%	82.1%	99.4%	0.0%	**86.7%**	0.0%	0.0%	98.6%	99.2%	0.0%	**99.0%**	0.0%	0.0%	**96.2%**
Trucks	5	7	0	**12**	0	0	5	0	0	**5**	0	0	8	10	0	**18**	0	0	**35**
% Trucks	0.3%	0.7%	0.0%	**0.4%**	0.0%	0.0%	0.4%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.8%	0.6%	0.0%	**0.7%**	0.0%	0.0%	**0.5%**
Buses	0	1	0	**1**	0	0	4	1	0	**5**	0	0	0	0	0	**0**	0	0	**6**
% Buses	0.0%	0.1%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.2%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	2	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TRI-STATE TRAFFIC DATA STData.com

Summary

Turning Movement Data Plot





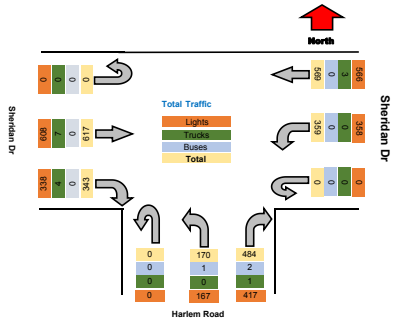
TRI-STATE TRAFFIC DATA STData.com

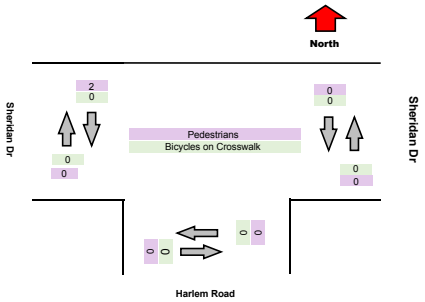
Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	Sheridan Dr						Harlem Road						Sheridan Dr						
Direction	Westbound						Northbound						Eastbound						
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
12:00:00 PM	141	94	0	**235**	0	0	126	32	0	**158**	0	0	99	163	0	**262**	0	0	**655**
12:15:00 PM	144	78	0	**222**	0	0	134	44	0	**178**	0	0	80	166	0	**246**	0	0	**646**
12:30:00 PM	157	94	0	**251**	0	0	111	45	0	**156**	0	0	79	135	0	**214**	0	0	**621**
12:45:00 PM	127	93	0	**220**	0	0	113	49	0	**162**	0	0	85	153	0	**238**	0	2	**620**
Grand Total	569	359	0	**928**	0	0	484	170	0	**654**	0	0	343	617	0	**960**	0	2	**2542**
% Approach	61.3%	38.7%	0.0%	**0.0%**	0.0%	0.0%	74.0%	26.0%	0.0%	**0.0%**	0.0%	0.0%	35.7%	64.3%	0.0%	**0.0%**	0.0%	0.0%	
% Total	22.4%	14.1%	0.0%	**36.5%**	0.0%	0.0%	19.0%	6.7%	0.0%	**25.7%**	0.0%	0.0%	13.5%	24.3%	0.0%	**37.8%**	0.0%	0.0%	
PHF	0.906	0.955	0.000	**0.924**	0.000	0.000	0.903	0.867	0.000	**0.919**	0.000	0.000	0.866	0.929	0.000	**0.916**	0.000	0.000	**0.970**
Lights	566	358	0	**924**	0	0	417	167	0	**584**	0	0	338	608	0	**946**	0	0	**2454**
% Lights	99.5%	99.7%	0.0%	**99.6%**	0.0%	0.0%	86.2%	98.2%	0.0%	**89.3%**	0.0%	0.0%	98.5%	98.5%	0.0%	**98.5%**	0.0%	0.0%	**96.5%**
Trucks	3	0	0	**3**	0	0	1	0	0	**1**	0	0	4	7	0	**11**	0	0	**15**
% Trucks	0.5%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.2%	0.0%	0.0%	**0.2%**	0.0%	0.0%	1.2%	1.1%	0.0%	**1.1%**	0.0%	0.0%	**0.6%**
Buses	0	0	0	**0**	0	0	2	1	0	**3**	0	0	0	0	0	**0**	0	0	**3**
% Buses	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.4%	0.6%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	2	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & I 290 Ramps
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & I 290 Ramps
Latitude and Longitude	42.97846,-78.78165

	Start	End	PHF
PM Peak	2023-09-21 16:15:00	2023-09-21 17:15:00	0.974

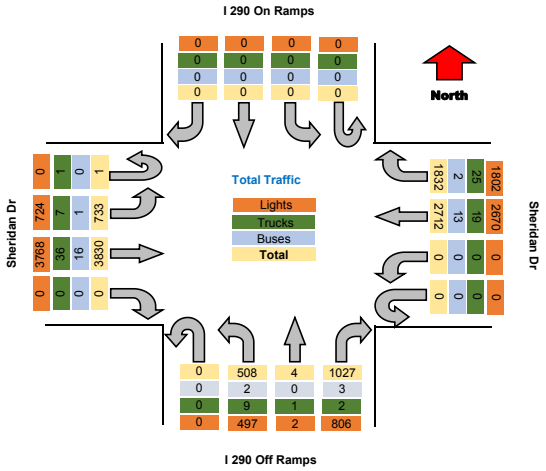
Turning Movement Data

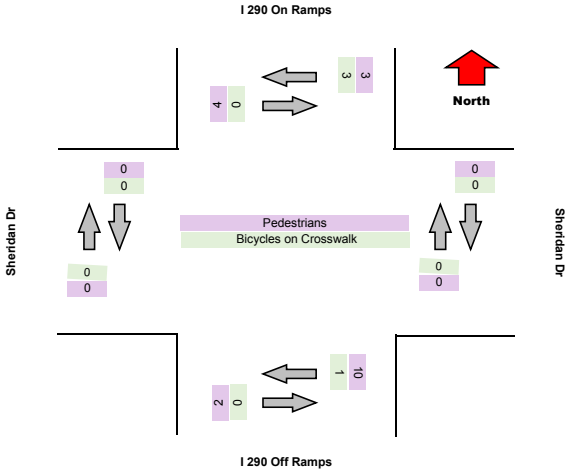
Leg	I 290 On Ramps							Sheridan Dr							I 290 Off Ramps							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
3:00:00 PM	0	0	0	0	**0**	1	1	145	240	0	0	**385**	0	0	86	0	50	0	**136**	0	0	0	283	57	0	**340**	0	0	**861**
3:15:00 PM	0	0	0	0	**0**	0	0	158	217	0	0	**375**	0	0	97	0	53	0	**150**	0	0	0	288	49	0	**337**	0	0	**862**
3:30:00 PM	0	0	0	0	**0**	1	1	142	209	0	0	**351**	0	0	81	0	47	0	**128**	0	0	0	297	69	0	**366**	0	0	**845**
3:45:00 PM	0	0	0	0	**0**	0	0	140	227	0	0	**367**	0	0	94	0	41	0	**135**	0	0	0	325	57	1	**383**	0	0	**885**
Hourly Total	0	0	0	0	**0**	2	2	585	893	0	0	**1478**	0	0	358	0	191	0	**549**	0	0	0	1193	232	1	**1426**	0	0	**3453**
4:00:00 PM	0	0	0	0	**0**	0	0	156	227	0	0	**383**	0	0	88	2	44	0	**134**	0	0	0	310	76	0	**386**	0	0	**903**
4:15:00 PM	0	0	0	0	**0**	0	0	146	225	0	0	**371**	0	0	91	0	39	0	**130**	0	0	0	362	59	0	**421**	0	0	**922**
4:30:00 PM	0	0	0	0	**0**	0	1	165	210	0	0	**375**	0	0	62	0	32	0	**94**	0	1	0	374	84	0	**458**	0	0	**927**
4:45:00 PM	0	0	0	0	**0**	0	2	166	257	0	0	**423**	0	0	76	0	40	0	**116**	3	0	0	353	47	0	**400**	0	0	**939**
Hourly Total	0	0	0	0	**0**	0	3	633	919	0	0	**1552**	0	0	317	2	155	0	**474**	3	1	0	1399	266	0	**1665**	0	0	**3691**
5:00:00 PM	0	0	0	0	**0**	0	0	197	227	0	0	**424**	0	0	87	0	33	0	**120**	8	0	0	348	71	0	**419**	0	0	**963**
5:15:00 PM	0	0	0	0	**0**	2	0	154	237	0	0	**391**	0	0	89	0	40	0	**129**	0	1	0	332	62	0	**394**	0	0	**914**
5:30:00 PM	0	0	0	0	**0**	0	0	160	242	0	0	**402**	0	0	85	0	38	0	**123**	0	0	0	305	49	0	**354**	0	0	**879**
5:45:00 PM	0	0	0	0	**0**	0	1	103	194	0	0	**297**	0	0	91	2	51	0	**144**	0	0	0	253	53	0	**306**	0	0	**747**
Hourly Total	0	0	0	0	**0**	2	1	614	900	0	0	**1514**	0	0	352	2	162	0	**516**	8	1	0	1238	235	0	**1473**	0	0	**3503**
Grand Total	0	0	0	0	**0**	4	6	1832	2712	0	0	**4544**	0	0	1027	4	508	0	**1539**	11	2	0	3830	733	1	**4564**	0	0	**10647**
% Approach	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	40.3%	59.7%	0.0%	0.0%	**0.0%**	0.0%	0.0%	66.7%	0.3%	33.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	83.9%	16.1%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	17.2%	25.5%	0.0%	0.0%	**42.7%**	0.0%	0.0%	9.6%	0.0%	4.8%	0.0%	**14.5%**	0.0%	0.0%	0.0%	36.0%	6.9%	0.0%	**42.9%**	0.0%	0.0%	**0.0%**
Lights	0	0	0	0	**0**	0	0	1802	2670	0	0	**4472**	0	0	806	2	497	0	**1305**	0	0	0	3768	724	0	**4492**	0	0	**10269**
% Lights	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	98.4%	98.5%	0.0%	0.0%	**98.4%**	0.0%	0.0%	78.5%	50.0%	97.8%	0.0%	**84.8%**	0.0%	0.0%	0.0%	98.4%	98.8%	0.0%	**98.4%**	0.0%	0.0%	**96.4%**
Trucks	0	0	0	0	**0**	0	0	25	19	0	0	**44**	0	0	2	1	9	0	**12**	0	0	0	36	7	1	**44**	0	0	**100**
% Trucks	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	1.4%	0.7%	0.0%	0.0%	**1.0%**	0.0%	0.0%	0.2%	25.0%	1.8%	0.0%	**0.8%**	0.0%	0.0%	0.0%	0.9%	1.0%	100.0%	**1.0%**	0.0%	0.0%	**0.9%**
Buses	0	0	0	0	**0**	0	0	2	13	0	0	**15**	0	0	3	0	2	0	**5**	0	0	0	16	1	0	**17**	0	0	**37**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	**0.4%**	0.0%	0.0%	**0.3%**
Pedestrians	0	0	0	0	**0**	4	3	0	0	0	0	**0**	0	0	0	0	0	0	**0**	10	2	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	50.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	90.9%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	3	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





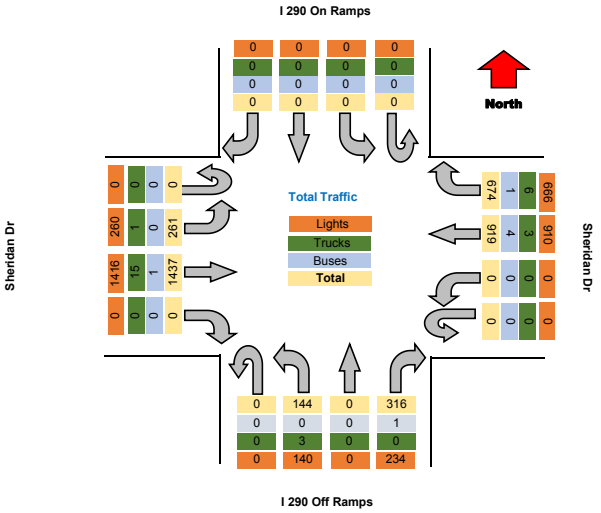
TSTData.com

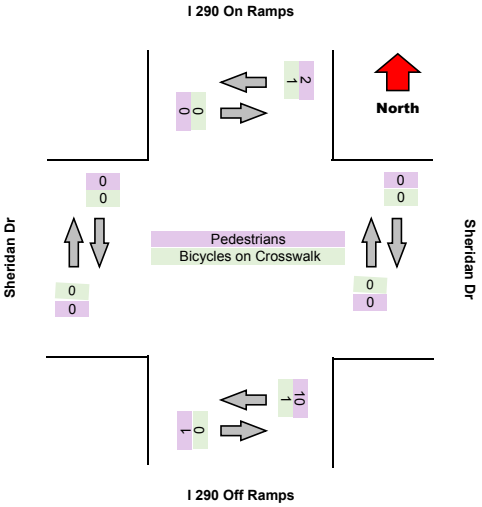
Summary

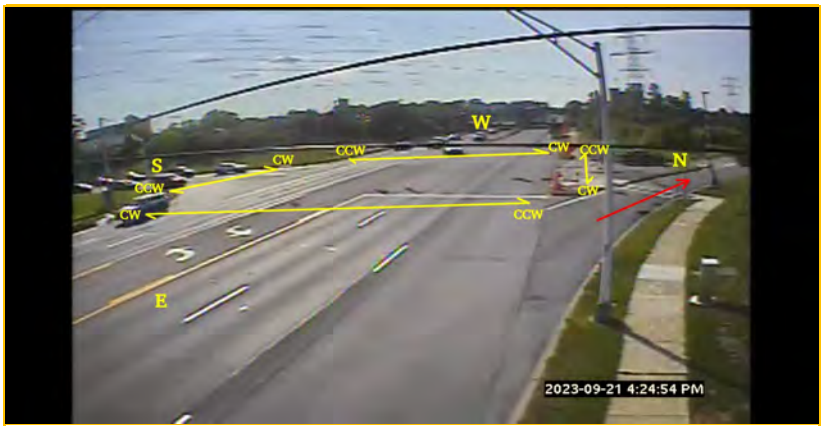
Turning Movement Peak Hour Data (PM)

4:15:00 PM

Leg	I 290 On Ramps							Sheridan Dr							I 290 Off Ramps							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
4:15:00 PM	0	0	0	0	**0**	0	1	146	225	0	0	**371**	0	0	91	0	39	0	**130**	0	0	0	362	59	0	**421**	0	0	**922**
4:30:00 PM	0	0	0	0	**0**	0	1	165	210	0	0	**375**	0	0	62	0	32	0	**94**	0	1	0	374	84	0	**458**	0	0	**927**
4:45:00 PM	0	0	0	0	**0**	0	2	166	257	0	0	**423**	0	0	76	0	40	0	**116**	3	0	0	353	47	0	**400**	0	0	**939**
5:00:00 PM	0	0	0	0	**0**	0	0	197	227	0	0	**424**	0	0	87	0	33	0	**120**	8	0	0	348	71	0	**419**	0	0	**963**
Grand Total	0	0	0	0	**0**	0	3	674	919	0	0	**1593**	0	0	316	0	144	0	**460**	11	1	0	1437	261	0	**1698**	0	0	**3751**
% Approach	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	**0.0%**	0.0%	0.0%	42.3%	57.7%	0.0%	0.0%	**0.0%**	0.0%	0.0%	68.7%	0.0%	31.3%	0.0%	**0.0%**	0.0%	0.0%	0.0%	84.6%	15.4%	0.0%	**0.0%**	0.0%	0.0%	
% Total	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	18.0%	24.5%	0.0%	0.0%	**42.5%**	0.0%	0.0%	8.4%	0.0%	3.8%	0.0%	**12.3%**	0.0%	0.0%	0.0%	38.3%	7.0%	0.0%	**45.3%**	0.0%	0.0%	
PHF	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.855	0.894	0.000	0.000	**0.939**	0.000	0.000	0.868	0.000	0.900	0.000	**0.885**	0.000	0.000	0.000	0.961	0.777	0.000	**0.927**	0.000	0.000	**0.974**
Lights	0	0	0	0	**0**	0	0	666	910	0	0	**1576**	0	0	234	0	140	0	**374**	0	0	0	1416	260	0	**1676**	0	0	**3626**
% Lights	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	98.8%	99.0%	0.0%	0.0%	**98.9%**	0.0%	0.0%	74.1%	0.0%	97.2%	0.0%	**81.3%**	0.0%	0.0%	0.0%	98.5%	99.6%	0.0%	**98.7%**	0.0%	0.0%	**96.7%**
Trucks	0	0	0	0	**0**	0	0	6	3	0	0	**9**	0	0	0	0	3	0	**3**	0	0	0	15	1	0	**16**	0	0	**28**
% Trucks	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.9%	0.3%	0.0%	0.0%	**0.6%**	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	**0.7%**	0.0%	0.0%	0.0%	1.0%	0.4%	0.0%	**0.9%**	0.0%	0.0%	**0.7%**
Buses	0	0	0	0	**0**	0	0	1	4	0	0	**5**	0	0	1	0	1	0	**2**	0	0	0	1	0	0	**1**	0	0	**8**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.3%	0.0%	0.7%	0.0%	**0.4%**	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	**0.1%**	0.0%	0.0%	**0.2%**
Pedestrians	0	0	0	0	**0**	0	2	0	0	0	0	**0**	0	0	0	0	0	0	**0**	10	1	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	90.9%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	1	0	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**







TSTData.com

Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & I 290 Ramps
Legs and Movements	All Processed Legs & Mover
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & I 290 Ramps
Latitude and Longitude	42.97846,-78.78165

	Start	End	PHF
PM Peak	2023-09-23 12:00:00	2023-09-23 13:00:00	0.984

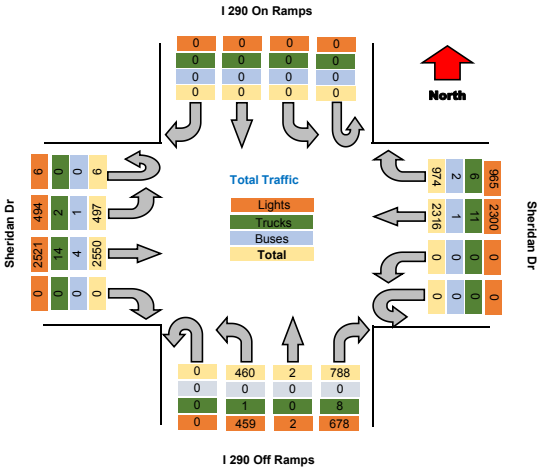
Turning Movement Data

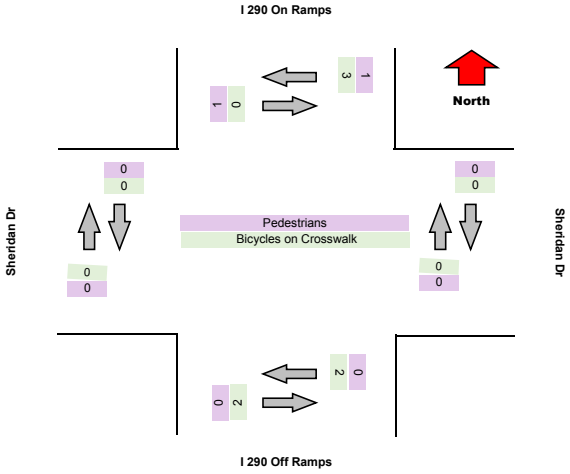
Leg	I 290 On Ramps							Sheridan Dr							I 290 Off Ramps							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
11:00:00 AM	0	0	0	0	**0**	0	0	72	188	0	0	**260**	0	0	38	0	33	0	**71**	0	0	0	203	40	0	**243**	0	0	**574**
11:15:00 AM	0	0	0	0	**0**	0	0	103	212	0	0	**315**	0	0	54	0	42	0	**96**	0	0	0	198	45	0	**243**	0	0	**654**
11:30:00 AM	0	0	0	0	**0**	0	1	75	180	0	0	**255**	0	0	57	0	32	0	**89**	0	0	0	231	47	2	**280**	0	0	**624**
11:45:00 AM	0	0	0	0	**0**	0	0	77	186	0	0	**263**	0	0	74	0	29	0	**103**	0	1	0	209	54	0	**263**	0	0	**629**
Hourly Total	0	0	0	0	**0**	0	1	327	766	0	0	**1093**	0	0	223	0	136	0	**359**	0	1	0	841	186	2	**1029**	0	0	**2481**
12:00:00 PM	0	0	0	0	**0**	0	0	64	186	0	0	**250**	0	0	74	1	45	0	**120**	0	0	0	220	68	1	**289**	0	0	**659**
12:15:00 PM	0	0	0	0	**0**	0	0	70	207	0	0	**277**	0	0	61	0	43	0	**104**	1	0	0	224	39	0	**263**	0	0	**644**
12:30:00 PM	0	0	0	0	**0**	1	0	80	193	0	0	**273**	0	0	70	0	44	0	**114**	1	1	0	228	42	2	**272**	0	0	**659**
12:45:00 PM	0	0	0	0	**0**	0	2	90	196	0	0	**286**	0	0	77	0	37	0	**114**	0	0	0	241	27	0	**268**	0	0	**668**
Hourly Total	0	0	0	0	**0**	1	2	304	782	0	0	**1086**	0	0	282	1	169	0	**452**	2	1	0	913	176	3	**1092**	0	0	**2630**
1:00:00 PM	0	0	0	0	**0**	0	0	84	197	0	0	**281**	0	0	65	1	30	0	**96**	0	0	0	190	41	1	**232**	0	0	**609**
1:15:00 PM	0	0	0	0	**0**	0	1	87	195	0	0	**282**	0	0	62	0	41	0	**103**	0	0	0	196	24	0	**220**	0	0	**605**
1:30:00 PM	0	0	0	0	**0**	0	0	86	202	0	0	**288**	0	0	81	0	36	0	**117**	0	0	0	230	48	0	**278**	0	0	**683**
1:45:00 PM	0	0	0	0	**0**	0	0	86	174	0	0	**260**	0	0	75	0	48	0	**123**	0	0	0	180	22	0	**202**	0	0	**585**
Hourly Total	0	0	0	0	**0**	0	1	343	768	0	0	**1111**	0	0	283	1	155	0	**439**	0	0	0	796	135	1	**932**	0	0	**2482**
Grand Total	0	0	0	0	**0**	1	4	974	2316	0	0	**3290**	0	0	788	2	460	0	**1250**	2	2	0	2550	497	6	**3053**	0	0	**7593**
% Approach	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	29.6%	70.4%	0.0%	0.0%	**0.0%**	0.0%	0.0%	63.0%	0.2%	36.8%	0.0%	**0.0%**	0.0%	0.0%	0.0%	83.5%	16.3%	0.2%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	12.8%	30.5%	0.0%	0.0%	**43.3%**	0.0%	0.0%	10.4%	0.0%	6.1%	0.0%	**16.5%**	0.0%	0.0%	0.0%	33.6%	6.5%	0.1%	**40.2%**	0.0%	0.0%	**0.0%**
Lights	0	0	0	0	**0**	0	0	965	2300	0	0	**3265**	0	0	678	2	459	0	**1139**	0	0	0	2521	494	6	**3021**	0	0	**7425**
% Lights	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	99.1%	99.3%	0.0%	0.0%	**99.2%**	0.0%	0.0%	86.0%	100.0%	99.8%	0.0%	**91.1%**	0.0%	0.0%	0.0%	98.9%	99.4%	100.0%	**99.0%**	0.0%	0.0%	**97.8%**
Trucks	0	0	0	0	**0**	0	0	6	11	0	0	**17**	0	0	8	0	1	0	**9**	0	0	0	14	2	0	**16**	0	0	**42**
% Trucks	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.6%	0.5%	0.0%	0.0%	**0.5%**	0.0%	0.0%	1.0%	0.0%	0.2%	0.0%	**0.7%**	0.0%	0.0%	0.0%	0.5%	0.4%	0.0%	**0.5%**	0.0%	0.0%	**0.6%**
Buses	0	0	0	0	**0**	0	0	2	1	0	0	**3**	0	0	0	0	0	0	**0**	0	0	0	4	1	0	**5**	0	0	**8**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.1%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	**0.2%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	1	1	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	25.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	3	0	0	0	0	**0**	0	0	0	0	0	0	**0**	2	2	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	75.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TSTData.com

Summary

Turning Movement Data Plot





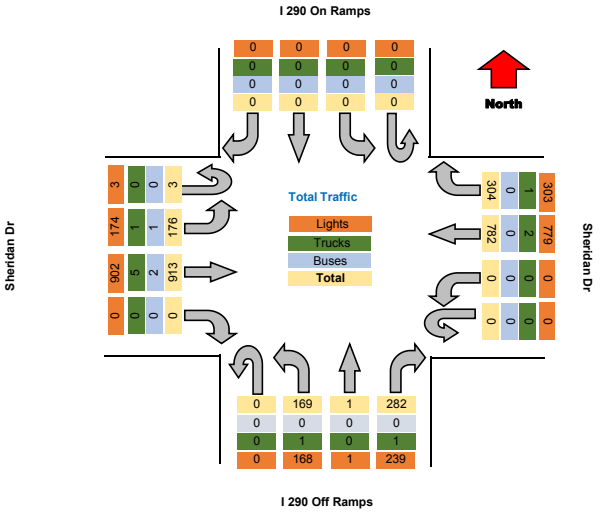
TSTData.com

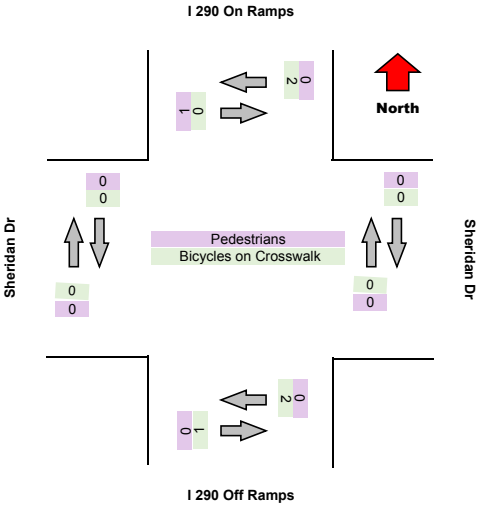
Summary

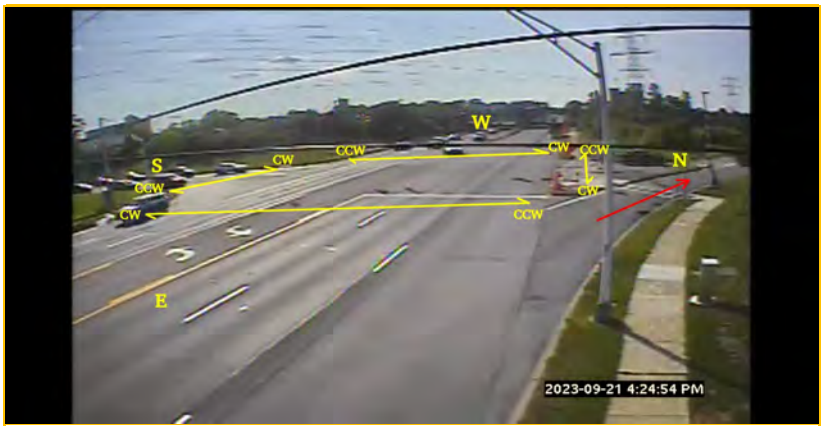
Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	I 290 On Ramps							Sheridan Dr							I 290 Off Ramps							Sheridan Dr							
Direction	Southbound							Westbound							Northbound							Eastbound							
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
12:00:00 PM	0	0	0	0	**0**	0	0	64	186	0	0	**250**	0	0	74	1	45	0	**120**	0	0	0	220	68	1	**289**	0	0	**659**
12:15:00 PM	0	0	0	0	**0**	0	0	70	207	0	0	**277**	0	0	61	0	43	0	**104**	1	0	0	224	39	0	**263**	0	0	**644**
12:30:00 PM	0	0	0	0	**0**	1	0	80	193	0	0	**273**	0	0	70	0	44	0	**114**	1	1	0	228	42	2	**272**	0	0	**659**
12:45:00 PM	0	0	0	0	**0**	0	2	90	196	0	0	**286**	0	0	77	0	37	0	**114**	0	0	0	241	27	0	**268**	0	0	**668**
Grand Total	0	0	0	0	**0**	1	2	304	782	0	0	**1086**	0	0	282	1	169	0	**452**	2	1	0	913	176	3	**1092**	0	0	**2630**
% Approach	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	**0.0%**	0.0%	0.0%	28.0%	72.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	62.4%	0.2%	37.4%	0.0%	**0.0%**	0.0%	0.0%	0.0%	83.6%	16.1%	0.3%	**0.0%**	0.0%	0.0%	
% Total	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	11.6%	29.7%	0.0%	0.0%	**41.3%**	0.0%	0.0%	10.7%	0.0%	6.4%	0.0%	**17.2%**	0.0%	0.0%	0.0%	34.7%	6.7%	0.1%	**41.5%**	0.0%	0.0%	
PHF	0.000	0.000	0.000	0.000	**0.000**	0.000	0.000	0.844	0.944	0.000	0.000	**0.949**	0.000	0.000	0.916	0.250	0.939	0.000	**0.942**	0.000	0.000	0.000	0.947	0.647	0.375	**0.945**	0.000	0.000	**0.984**
Lights	0	0	0	0	**0**	0	0	303	779	0	0	**1082**	0	0	239	1	168	0	**408**	0	0	0	902	174	3	**1079**	0	0	**2569**
% Lights	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	99.7%	99.6%	0.0%	0.0%	**99.6%**	0.0%	0.0%	84.8%	100.0%	99.4%	0.0%	**90.3%**	0.0%	0.0%	0.0%	98.8%	98.9%	100.0%	**98.8%**	0.0%	0.0%	**97.7%**
Trucks	0	0	0	0	**0**	0	0	1	2	0	0	**3**	0	0	1	0	1	0	**2**	0	0	0	5	1	0	**6**	0	0	**11**
% Trucks	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	**0.3%**	0.0%	0.0%	0.4%	0.0%	0.6%	0.0%	**0.4%**	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	**0.5%**	0.0%	0.0%	**0.4%**
Buses	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	2	1	0	**3**	0	0	**3**
% Buses	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	**0.3%**	0.0%	0.0%	**0.1%**
Pedestrians	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	**0**	0	2	0	0	0	0	**0**	0	0	0	0	0	0	**0**	2	1	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**







Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	1	6	81	89	16	1	0	0	0	0	0	0	0	0	0	194
07:00	4	22	145	115	10	1	0	0	0	0	0	0	0	0	0	297
08:00	1	62	228	142	11	1	0	0	0	0	0	0	0	0	0	445
09:00	1	38	187	110	11	0	0	0	0	0	0	0	0	0	0	347
10:00	3	45	230	113	6	0	0	0	0	0	0	0	0	0	0	397
11:00	2	39	230	110	5	2	0	0	0	0	0	0	0	0	0	388
12 PM	30	39	191	123	6	1	0	0	0	0	0	0	0	0	0	390
13:00	4	68	239	104	4	0	0	0	0	0	0	0	0	0	0	419
14:00	21	133	259	88	5	0	0	0	0	0	0	0	0	0	0	506
15:00	8	108	265	111	7	0	0	0	0	0	0	0	0	0	0	499
16:00	78	128	261	96	2	0	0	0	0	0	0	0	0	0	0	565
17:00	5	59	324	146	14	1	0	0	0	0	0	0	0	0	0	549
18:00	0	50	202	93	14	2	0	0	0	0	0	0	0	0	0	361
19:00	0	18	170	115	16	0	0	0	0	0	0	0	0	0	0	319
20:00	4	22	106	84	12	1	0	0	0	0	0	0	0	0	0	229
21:00	0	12	62	83	6	1	0	0	0	0	0	0	0	0	0	164
22:00	0	6	39	43	9	1	0	0	0	0	0	0	0	0	0	98
23:00	1	1	17	17	6	0	0	0	0	0	0	0	0	0	0	42
Total	163	856	3236	1782	160	12	0	0	0	0	0	0	0	0	0	6209

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/22/23	0	2	13	14	5	0	0	0	0	0	0	0	0	0	0	34
01:00	0	1	2	4	0	1	0	0	0	0	0	0	0	0	0	8
02:00	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	9
05:00	0	4	18	26	5	0	0	0	0	0	0	0	0	0	0	53
06:00	4	13	77	71	15	0	0	0	0	0	0	0	0	0	0	180
07:00	8	20	121	109	13	3	0	0	0	0	0	0	0	0	0	274
08:00	3	66	193	157	12	0	0	0	0	0	0	0	0	0	0	431
09:00	7	41	210	112	13	0	0	0	0	0	0	0	0	0	0	383
10:00	2	34	164	108	11	0	1	0	0	0	0	0	0	0	0	320
11:00	4	47	184	103	13	0	0	0	0	0	0	0	0	0	0	351
12 PM	10	45	194	131	14	0	0	0	0	0	0	0	0	0	0	394
13:00	12	68	234	128	13	0	0	0	0	0	0	0	0	0	0	455
14:00	13	82	277	103	7	0	0	0	0	0	0	0	0	0	0	482
15:00	24	134	244	112	13	1	0	0	0	0	0	0	0	0	0	528
16:00	31	115	227	121	11	0	0	0	0	0	0	0	0	0	0	505
17:00	11	65	240	135	9	1	0	0	0	0	0	0	0	0	0	461
18:00	2	35	201	111	12	0	0	0	0	0	0	0	0	0	0	361
19:00	0	24	145	110	9	1	0	0	0	0	0	0	0	0	0	289
20:00	0	13	102	59	12	0	0	0	0	0	0	0	0	0	0	186
21:00	8	4	78	66	5	1	0	0	0	0	0	0	0	0	0	162
22:00	0	3	61	37	7	0	0	0	0	0	0	0	0	0	0	108
23:00	0	2	46	50	7	1	0	0	0	0	0	0	0	0	0	106
Total	139	819	3040	1876	208	9	1	0	0	0	0	0	0	0	0	6092

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/23/23	0	5	28	22	7	0	0	0	0	0	0	0	0	0	0	62
01:00	0	2	10	15	1	0	0	0	0	0	0	0	0	0	0	28
02:00	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	10
03:00	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	0	4	11	0	0	0	0	0	0	0	0	0	0	0	15
05:00	1	1	6	11	2	0	0	0	0	0	0	0	0	0	0	21
06:00	0	4	20	22	8	1	0	0	0	0	0	0	0	0	0	55
07:00	0	5	44	48	6	0	0	0	0	0	0	0	0	0	0	103
08:00	1	12	80	80	16	1	0	0	0	0	0	0	0	0	0	190
09:00	0	12	112	90	9	2	0	0	0	0	0	0	0	0	0	225
10:00	3	25	126	126	8	0	0	0	0	0	0	0	0	0	0	288
11:00	5	31	172	98	11	1	0	0	0	0	0	0	0	0	0	318
12 PM	3	39	191	134	12	1	0	0	0	0	0	0	0	0	0	380
13:00	1	23	161	126	17	0	0	0	0	0	0	0	0	0	0	328
14:00	3	58	179	108	14	0	0	0	0	0	0	0	0	0	0	362
15:00	4	20	159	148	10	2	0	0	0	0	0	0	0	0	0	343
16:00	2	15	165	128	11	0	0	0	0	0	0	0	0	0	0	321
17:00	1	18	126	121	18	0	0	0	0	0	0	0	0	0	0	284
18:00	0	21	137	97	12	1	1	0	0	0	0	0	0	0	0	269
19:00	1	21	119	66	5	1	0	0	0	0	0	0	0	0	0	213
20:00	0	9	84	57	6	2	0	0	0	0	0	0	0	0	0	158
21:00	0	14	78	66	7	1	0	0	0	0	0	0	0	0	0	166
22:00	1	5	53	52	9	1	0	0	0	0	0	0	0	0	0	121
23:00	0	5	27	33	4	0	1	0	0	0	0	0	0	0	0	70
Total	26	347	2088	1666	194	14	2	0	0	0	0	0	0	0	0	4337

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/24/23	0	3	22	13	4	0	1	0	0	0	0	0	0	0	0	43
01:00	0	1	7	10	6	1	0	0	0	0	0	0	0	0	0	25
02:00	0	0	4	5	2	0	0	0	0	0	0	0	0	0	0	11
03:00	0	0	7	5	1	0	0	0	0	0	0	0	0	0	0	13
04:00	0	3	6	5	1	0	0	0	0	0	0	0	0	0	0	15
05:00	0	1	3	10	0	0	0	0	0	0	0	0	0	0	0	14
06:00	1	1	15	18	4	0	0	0	0	0	0	0	0	0	0	39
07:00	0	2	25	30	7	0	0	0	0	0	0	0	0	0	0	64
08:00	0	4	45	64	11	2	0	0	0	0	0	0	0	0	0	126
09:00	4	21	120	122	14	0	0	0	0	0	0	0	0	0	0	281
10:00	1	5	102	110	14	1	0	0	0	0	0	0	0	0	0	233
11:00	5	25	133	108	8	1	0	0	0	0	0	0	0	0	0	280
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	11	66	489	500	72	5	1	0	0	0	0	0	0	0	0	1144
Grand Total	339	2088	8853	5824	634	40	4	0	0	0	0	0	0	0	0	17782

Stats

15th Percentile :	25 MPH
50th Percentile :	28 MPH
85th Percentile :	33 MPH
95th Percentile :	34 MPH
Mean Speed(Average) :	29 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	14690
Percent in Pace :	82.6%
Number of Vehicles > 35 MPH :	678
Percent of Vehicles > 35 MPH :	3.8%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	4	11	55	144	21	0	0	0	0	0	0	0	0	0	0	235
07:00	33	46	278	234	22	0	0	0	0	0	0	0	0	0	0	613
08:00	50	53	196	238	23	0	0	0	0	0	0	0	0	0	0	560
09:00	1	23	248	171	17	0	0	0	0	0	0	0	0	0	0	460
10:00	7	30	194	154	10	0	0	0	0	0	0	0	0	0	0	395
11:00	3	20	230	174	8	0	0	0	0	0	0	0	0	0	0	435
12 PM	4	29	233	171	12	0	1	0	0	0	0	0	0	0	0	450
13:00	3	23	226	187	11	0	0	0	0	0	0	0	0	0	0	450
14:00	5	45	269	186	15	0	0	0	0	0	0	0	0	0	0	520
15:00	26	48	291	239	11	0	0	0	0	0	0	0	0	0	0	615
16:00	169	132	191	105	5	0	0	0	0	0	0	0	0	0	0	602
17:00	5	37	230	257	32	0	0	0	0	0	0	0	0	0	0	561
18:00	0	2	184	199	14	0	0	0	0	0	0	0	0	0	0	399
19:00	2	15	161	118	13	0	1	0	0	0	0	0	0	0	0	310
20:00	2	10	80	63	21	0	0	0	0	0	0	0	0	0	0	176
21:00	1	5	59	62	11	0	0	0	0	0	0	0	0	0	0	138
22:00	0	5	23	37	2	0	0	0	0	0	0	0	0	0	0	67
23:00	0	1	20	24	3	1	1	0	0	0	0	0	0	0	0	50
Total	315	535	3168	2763	251	1	3	0	0	0	0	0	0	0	0	7036

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/22/23	0	1	3	10	3	0	0	0	0	0	0	0	0	0	0	17
01:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	0	2	6	1	0	0	0	0	0	0	0	0	0	0	9
04:00	0	1	5	2	2	0	0	0	0	0	0	0	0	0	0	10
05:00	0	2	16	32	14	1	0	0	0	0	0	0	0	0	0	65
06:00	4	6	60	121	16	0	0	0	0	0	0	0	0	0	0	207
07:00	19	44	196	242	28	0	0	0	0	0	0	0	0	0	0	529
08:00	54	51	216	222	12	1	0	0	0	0	0	0	0	0	0	556
09:00	2	14	180	183	17	0	0	0	0	0	0	0	0	0	0	396
10:00	10	25	176	157	15	0	0	0	0	0	0	0	0	0	0	383
11:00	13	38	184	197	15	0	0	0	0	0	0	0	0	0	0	447
12 PM	2	21	206	180	12	1	0	0	0	0	0	0	0	0	0	422
13:00	2	30	253	205	8	0	0	0	0	0	0	0	0	0	0	498
14:00	9	43	284	174	9	0	0	0	0	0	0	0	0	0	0	519
15:00	57	62	294	187	12	0	0	0	0	0	0	0	0	0	0	612
16:00	96	105	209	156	15	0	0	0	0	0	0	0	0	0	0	581
17:00	5	20	277	207	16	0	0	0	0	0	0	0	0	0	0	525
18:00	0	5	127	180	30	0	0	0	0	0	0	0	0	0	0	342
19:00	0	11	142	136	12	0	0	0	0	0	0	0	0	0	0	301
20:00	1	13	89	75	8	1	0	0	0	0	0	0	0	0	0	187
21:00	3	8	62	59	8	0	0	0	0	0	0	0	0	0	0	140
22:00	0	7	32	46	13	1	0	0	0	0	0	0	0	0	0	99
23:00	0	2	21	30	4	1	0	0	0	0	0	0	0	0	0	58
Total	277	509	3037	2812	270	6	0	0	0	0	0	0	0	0	0	6911

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/23/23	0	1	9	20	2	0	0	0	0	0	0	0	0	0	0	32
01:00	0	2	3	10	1	0	0	0	0	0	0	0	0	0	0	16
02:00	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
03:00	0	1	2	3	3	0	0	0	0	0	0	0	0	0	0	9
04:00	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	10
05:00	0	0	7	10	3	0	0	0	0	0	0	0	0	0	0	20
06:00	0	1	25	34	9	1	0	0	0	0	0	0	0	0	0	70
07:00	0	2	50	78	16	1	0	0	0	0	0	0	0	0	0	147
08:00	1	5	53	145	27	3	0	0	0	0	0	0	0	0	0	234
09:00	2	4	110	163	26	0	0	0	0	0	0	0	0	0	0	305
10:00	5	15	131	210	18	2	0	0	0	0	0	0	0	0	0	381
11:00	1	14	177	154	19	1	0	0	0	0	0	0	0	0	0	366
12 PM	3	26	186	189	15	1	0	0	0	0	0	0	0	0	0	420
13:00	1	9	134	173	18	2	0	0	0	0	0	0	0	0	0	337
14:00	2	21	181	177	18	0	0	0	0	0	0	0	0	0	0	399
15:00	0	14	169	177	21	0	0	0	0	0	0	0	0	0	0	381
16:00	1	8	124	175	22	0	1	0	0	0	0	0	0	0	0	331
17:00	2	17	121	167	19	0	0	0	0	0	0	0	0	0	0	326
18:00	1	8	133	124	21	0	0	0	0	0	0	0	0	0	0	287
19:00	4	15	112	92	9	0	0	0	0	0	0	0	0	0	0	232
20:00	0	11	89	73	8	1	0	0	0	0	0	0	0	0	0	182
21:00	0	5	54	58	5	0	0	0	0	0	0	0	0	0	0	122
22:00	0	6	29	42	5	0	0	0	0	0	0	0	0	0	0	82
23:00	1	4	25	32	5	2	0	0	0	0	0	0	0	0	0	69
Total	24	189	1927	2313	294	15	1	0	0	0	0	0	0	0	0	4763

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/24/23	0	4	4	9	1	1	0	0	0	0	0	0	0	0	0	19
01:00	0	1	9	1	1	0	0	0	0	0	0	0	0	0	0	12
02:00	1	1	4	4	3	0	0	0	0	0	0	0	0	0	0	13
03:00	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	8
04:00	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	0	6	7	2	0	0	0	0	0	0	0	0	0	0	15
06:00	0	3	10	27	8	0	0	0	0	0	0	0	0	0	0	48
07:00	0	3	28	42	5	0	0	0	0	0	0	0	0	0	0	78
08:00	1	6	35	87	8	1	0	0	0	0	0	0	0	0	0	138
09:00	0	15	91	115	16	0	0	0	0	0	0	0	0	0	0	237
10:00	1	8	123	152	16	0	0	0	0	0	0	0	0	0	0	300
11:00	1	7	126	153	18	0	0	0	0	0	0	0	0	0	0	305
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	4	48	438	609	80	2	0	0	0	0	0	0	0	0	0	1181
Grand Total	620	1281	8570	8497	895	24	4	0	0	0	0	0	0	0	0	19891

Stats

15th Percentile :	25 MPH
50th Percentile :	29 MPH
85th Percentile :	33 MPH
95th Percentile :	34 MPH
Mean Speed(Average) :	30 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	17092
Percent in Pace :	85.9%
Number of Vehicles > 35 MPH :	923
Percent of Vehicles > 35 MPH :	4.6%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: North Forest Rd
Segment: 305' N of Morgan Pkwy
Date: 09/20/2023

GPS: 42.980024, -78.769195

Start	18-Sep-23		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	34	17	62	32	43	19	46	23
01:00	*	*	*	*	*	*	*	*	8	4	28	16	25	12	20	11
02:00	*	*	*	*	*	*	*	*	9	4	10	5	11	13	10	7
03:00	*	*	*	*	*	*	*	*	3	9	7	9	13	8	8	9
04:00	*	*	*	*	*	*	*	*	9	10	15	10	15	8	13	9
05:00	*	*	*	*	*	*	*	*	53	65	21	20	14	15	29	33
06:00	*	*	*	*	*	*	194	235	180	207	55	70	39	48	117	140
07:00	*	*	*	*	*	*	297	**613**	274	529	103	147	64	78	184	342
08:00	*	*	*	*	*	*	**445**	560	**431**	**556**	190	234	126	138	298	372
09:00	*	*	*	*	*	*	347	460	383	396	225	305	**281**	237	309	350
10:00	*	*	*	*	*	*	397	395	320	383	288	**381**	233	300	310	365
11:00	*	*	*	*	*	*	388	435	351	447	**318**	366	280	**305**	**334**	**388**
12:00 PM	*	*	*	*	*	*	390	450	394	422	**380**	**420**	*	*	388	431
01:00	*	*	*	*	*	*	419	450	455	498	328	337	*	*	401	428
02:00	*	*	*	*	*	*	506	520	482	519	362	399	*	*	450	479
03:00	*	*	*	*	*	*	499	**615**	**528**	**612**	343	381	*	*	457	**536**
04:00	*	*	*	*	*	*	**565**	602	505	581	321	331	*	*	**464**	505
05:00	*	*	*	*	*	*	549	561	461	525	284	326	*	*	431	471
06:00	*	*	*	*	*	*	361	399	361	342	269	287	*	*	330	343
07:00	*	*	*	*	*	*	319	310	289	301	213	232	*	*	274	281
08:00	*	*	*	*	*	*	229	176	186	187	158	182	*	*	191	182
09:00	*	*	*	*	*	*	164	138	162	140	166	122	*	*	164	133
10:00	*	*	*	*	*	*	98	67	108	99	121	82	*	*	109	83
11:00	*	*	*	*	*	*	42	50	106	58	70	69	*	*	73	59
Lane	0	0	0	0	0	0	6209	7036	6092	6911	4337	4763	1144	1181	5410	5980
Day	0		0		0		13245		13003		9100		2325		11390	
AM Peak	-	-	-	-	-	-	08:00	07:00	08:00	08:00	11:00	10:00	09:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	445	613	431	556	318	381	281	305	334	388
PM Peak	-	-	-	-	-	-	16:00	15:00	15:00	15:00	12:00	12:00	-	-	16:00	15:00
Vol.	-	-	-	-	-	-	565	615	528	612	380	420	-	-	464	536

Comb. Total	0	0	0	13245	13003	9100	2325	11390

ADT ADT 11,319 AADT 11,319

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 775' E of Fenwick, Rd
Date: 09/21/2023

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

GPS: 42.978048, -78.771207

EB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	3	0	2	18	64	150	191	97	22	9	0	0	0	0	0	556
07:00	77	77	78	110	183	285	238	117	20	0	1	0	0	0	0	1186
08:00	74	78	87	129	261	345	223	78	3	3	0	0	0	0	0	1281
09:00	0	0	5	36	145	377	350	134	29	4	0	0	0	0	0	1080
10:00	0	3	10	49	213	404	288	86	15	3	0	0	0	0	0	1071
11:00	2	4	6	72	221	368	235	84	11	2	0	0	0	0	0	1005
12 PM	1	4	19	56	275	370	265	78	16	2	0	0	1	0	0	1087
13:00	1	6	31	80	189	377	274	91	14	1	0	0	0	0	0	1064
14:00	1	2	35	128	326	402	248	57	3	0	0	0	0	0	0	1202
15:00	19	25	43	155	322	398	255	118	13	1	0	0	0	0	0	1349
16:00	139	123	186	297	362	279	121	50	3	2	1	0	0	0	0	1563
17:00	106	75	144	195	292	341	208	79	11	2	0	0	0	0	0	1453
18:00	0	0	9	23	143	325	288	152	26	2	1	0	0	0	0	969
19:00	0	0	1	30	116	237	252	98	13	4	0	0	0	0	0	751
20:00	0	1	2	26	112	164	152	65	20	1	0	0	0	0	0	543
21:00	0	0	1	11	53	150	127	65	11	1	1	0	0	0	0	420
22:00	0	0	0	3	13	82	84	46	7	2	0	1	0	0	0	238
23:00	0	0	0	2	10	28	48	39	10	0	1	0	0	0	0	138
Total	423	398	659	1420	3300	5082	3847	1534	247	39	5	1	1	0	0	16956

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 775' E of Fenwick, Rd
Date: 09/21/2023

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

GPS: 42.978048, -78.771207

EB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/22/23	0	0	0	0	1	8	22	20	4	0	1	0	0	0	0	56
01:00	0	0	0	1	1	7	14	9	2	1	0	1	0	0	0	36
02:00	0	0	0	0	1	2	7	9	2	2	0	0	0	0	0	23
03:00	0	0	0	0	2	8	8	8	0	0	0	0	0	0	0	26
04:00	0	0	0	0	0	10	19	14	2	0	0	0	0	0	0	45
05:00	0	0	0	2	11	31	69	54	13	1	0	0	0	0	0	181
06:00	0	0	1	12	51	169	193	90	24	4	0	0	0	0	0	544
07:00	33	38	64	108	195	301	219	130	31	4	0	0	0	0	0	1123
08:00	13	13	38	78	207	381	321	139	18	3	0	0	0	0	0	1211
09:00	0	1	2	35	182	310	333	128	15	1	0	0	0	0	1	1008
10:00	0	0	3	23	163	305	282	130	19	5	0	0	0	0	0	930
11:00	0	1	5	35	173	358	294	95	14	2	1	0	0	0	0	978
12 PM	0	0	0	42	185	389	311	118	16	4	0	0	0	0	0	1065
13:00	0	0	5	73	234	397	276	93	11	1	0	0	0	0	0	1090
14:00	4	6	23	77	266	436	277	73	7	2	0	0	0	0	0	1171
15:00	20	50	77	158	367	437	205	81	9	0	0	0	0	0	0	1404
16:00	25	36	105	199	379	323	205	80	6	6	0	0	0	0	0	1364
17:00	0	14	27	100	287	392	269	95	20	3	0	0	0	0	0	1207
18:00	0	0	8	49	169	295	273	121	27	2	0	1	0	0	0	945
19:00	1	0	4	21	112	233	210	95	17	2	0	0	0	0	0	695
20:00	0	0	4	17	73	193	145	73	9	3	1	0	0	0	0	518
21:00	1	0	1	9	63	168	145	53	5	1	0	0	0	0	0	446
22:00	0	0	0	7	23	104	113	51	13	3	0	0	0	1	0	315
23:00	0	0	0	1	11	77	95	62	6	0	0	0	0	0	0	252
Total	97	159	367	1047	3156	5334	4305	1821	290	50	3	2	0	1	1	16633

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 775' E of Fenwick, Rd
Date: 09/21/2023

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

GPS: 42.978048, -78.771207

EB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/23/23	0	0	0	2	13	25	48	29	7	2	0	0	0	0	0	126
01:00	0	0	1	0	4	11	16	18	2	0	0	0	1	0	0	53
02:00	0	0	0	0	2	7	18	1	0	0	0	0	0	0	0	28
03:00	0	0	0	0	3	7	10	7	0	0	0	0	0	0	0	27
04:00	0	0	0	0	0	10	14	10	4	0	0	0	0	0	0	38
05:00	0	0	0	1	7	16	29	24	5	3	0	0	0	0	0	85
06:00	0	0	0	3	15	52	78	50	13	2	0	0	0	0	0	213
07:00	0	0	0	7	17	98	121	75	20	3	1	1	0	0	0	343
08:00	0	0	0	21	86	193	182	132	24	2	0	0	0	0	0	640
09:00	0	0	0	12	79	252	249	109	21	3	1	0	0	0	0	726
10:00	0	0	2	37	163	300	289	93	16	1	0	0	0	0	0	901
11:00	0	0	1	22	153	377	273	127	14	1	0	0	0	0	0	968
12 PM	2	0	10	62	191	390	294	120	11	3	0	0	0	0	0	1083
13:00	0	0	2	29	166	352	308	115	15	4	0	1	0	0	0	992
14:00	0	0	11	47	202	392	268	110	14	0	0	0	0	0	0	1044
15:00	0	0	2	22	105	329	282	139	21	4	0	0	0	0	0	904
16:00	0	0	4	34	120	279	315	113	24	2	0	0	1	0	0	892
17:00	0	0	2	26	99	274	276	134	19	2	0	0	0	0	0	832
18:00	1	0	2	21	101	208	236	125	24	4	1	0	0	0	0	723
19:00	0	0	4	30	99	211	170	77	15	3	0	0	0	0	0	609
20:00	0	0	2	12	60	215	138	62	23	0	1	0	0	0	0	513
21:00	0	0	0	7	35	141	117	59	3	1	0	0	0	0	0	363
22:00	0	0	2	4	25	110	105	55	6	1	0	0	0	0	0	308
23:00	0	0	0	0	28	44	89	57	9	0	0	0	0	0	0	227
Total	3	0	45	399	1773	4293	3925	1841	310	41	4	2	2	0	0	12638

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 775' E of Fenwick, Rd
Date: 09/21/2023

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

GPS: 42.978048, -78.771207

EB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/24/23	0	0	0	0	10	26	41	25	9	1	0	0	0	0	0	112
01:00	0	0	0	0	7	16	26	16	2	0	0	0	0	0	0	67
02:00	0	0	0	0	1	4	13	17	2	1	0	0	0	0	0	38
03:00	0	0	0	0	0	9	14	5	0	1	0	1	0	0	0	30
04:00	0	0	0	0	1	7	12	9	1	1	0	0	0	0	0	31
05:00	0	0	0	0	4	16	25	31	6	0	1	0	0	0	0	83
06:00	0	0	0	1	8	27	47	37	6	3	1	0	0	0	0	130
07:00	0	0	0	1	12	61	87	39	9	4	1	0	0	0	0	214
08:00	0	0	0	4	20	101	155	61	14	6	0	0	0	0	0	361
09:00	2	0	0	4	59	206	218	101	17	6	1	1	0	0	0	615
10:00	0	0	0	10	103	223	196	106	21	2	0	0	0	0	0	661
11:00	0	0	4	8	79	235	266	146	19	4	0	0	0	0	0	761
12 PM	0	0	12	65	210	340	289	160	19	1	0	0	1	0	0	1097
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2	0	16	93	514	1271	1389	753	125	30	4	2	1	0	0	4200
Grand Total	525	557	1087	2959	8743	15980	13466	5949	972	160	16	7	4	1	1	50427

Stats

15th Percentile :	36 MPH
50th Percentile :	43 MPH
85th Percentile :	49 MPH
95th Percentile :	53 MPH
Mean Speed(Average) :	44 MPH
10 MPH Pace Speed :	41-50 MPH
Number in Pace :	29461
Percent in Pace :	58.4%
Number of Vehicles > 45 MPH :	20576
Percent of Vehicles > 45 MPH :	40.8%

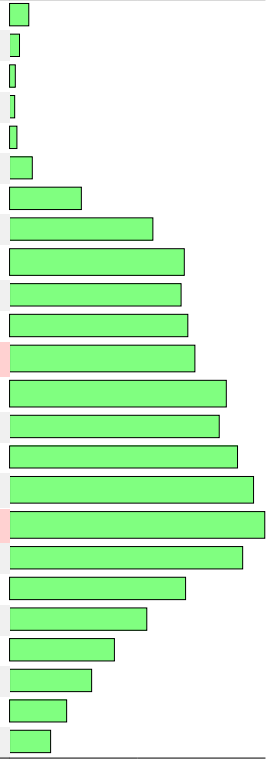
Location: Amherst, NY
Road Name: Sheridan Dr
Segment: 775' E of Fenwick Rd
Date: 09/21/2023

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

GPS: 42.978048, -78.771207

Start Time	Mon 18-Sep-23	Tue 19-Sep-23	Wed 20-Sep-23	Thu 21-Sep-23	Fri 22-Sep-23	Average Day	Sat 23-Sep-23	Sun 24-Sep-23	Week Average
12:00 AM	*	*	*	*	56	56	126	112	98
01:00	*	*	*	*	36	36	53	67	52
02:00	*	*	*	*	23	23	28	38	30
03:00	*	*	*	*	26	26	27	30	28
04:00	*	*	*	*	45	45	38	31	38
05:00	*	*	*	*	181	181	85	83	116
06:00	*	*	*	555	541	548	213	130	360
07:00	*	*	*	1186	1121	1154	343	214	716
08:00	*	*	*	**1279**	**1211**	**1245**	640	361	873
09:00	*	*	*	1078	1006	1042	724	615	856
10:00	*	*	*	1070	929	1000	900	661	890
11:00	*	*	*	1005	975	990	**968**	**758**	**926**
12:00 PM	*	*	*	1086	1065	1076	**1081**	**1097**	1082
01:00	*	*	*	1062	1088	1075	991	*	1047
02:00	*	*	*	1201	1169	1185	1043	*	1138
03:00	*	*	*	1347	**1404**	1376	902	*	1218
04:00	*	*	*	**1562**	1364	**1463**	892	*	**1273**
05:00	*	*	*	1452	1206	1329	831	*	1163
06:00	*	*	*	969	945	957	723	*	879
07:00	*	*	*	750	695	722	609	*	685
08:00	*	*	*	542	518	530	513	*	524
09:00	*	*	*	420	446	433	363	*	410
10:00	*	*	*	238	315	276	308	*	287
11:00	*	*	*	138	252	195	227	*	206
Day Total	0	0	0	16940	16617	16963	12628	4197	14895
% Avg. WkDay	0.0%	0.0%	0.0%	99.9%	98.0%				
% Avg. Week	0.0%	0.0%	0.0%	113.7%	111.6%	113.9%	84.8%	28.2%	
AM Peak	-	-	-	08:00	08:00	- 08:00	- 11:00	11:00	- 11:00	-	-
Vol.	-	-	-	1279	1211	- 1245	- 968	758	- 926	-	-
PM Peak	-	-	-	16:00	15:00	- 16:00	- 12:00	12:00	- 16:00	-	-
Vol.	-	-	-	1562	1404	- 1463	- 1081	1097	- 1273	-	-
Grand Total	0	0	0	16940	16617	16963	12628	4197	14895		



ADT ADT 14,794 AADT 14,794

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	0	1	0	1	23	133	208	128	23	4	0	1	0	0	0	522
07:00	0	0	0	9	88	371	427	190	28	8	4	1	0	0	0	1126
08:00	0	0	2	17	118	456	327	110	13	4	2	0	0	0	0	1049
09:00	0	0	0	10	84	384	384	113	20	2	1	0	0	0	0	998
10:00	0	0	0	4	133	356	320	98	24	2	1	0	0	0	0	938
11:00	1	0	3	27	141	387	317	100	16	3	0	0	0	0	0	995
12 PM	0	0	0	5	115	465	355	108	16	3	0	0	0	0	0	1067
13:00	1	0	0	20	125	446	326	101	13	1	0	0	0	0	0	1033
14:00	0	0	1	16	178	495	346	128	14	4	0	0	0	0	0	1182
15:00	0	2	6	18	168	500	390	151	19	5	3	0	0	0	0	1262
16:00	0	0	0	7	159	533	478	160	27	6	3	1	0	0	0	1374
17:00	0	0	10	25	115	484	504	200	24	4	0	1	0	0	0	1367
18:00	0	0	0	4	70	315	386	178	36	8	1	0	0	0	0	998
19:00	0	0	0	5	75	309	285	95	15	1	0	0	0	0	0	785
20:00	0	0	0	0	32	195	237	103	16	2	0	0	0	0	0	585
21:00	0	0	0	3	33	134	171	83	13	3	0	0	0	0	0	440
22:00	0	0	1	1	11	53	97	68	11	5	0	0	0	0	0	247
23:00	0	0	0	1	7	37	61	33	7	2	0	0	0	0	0	148
Total	2	3	23	173	1675	6053	5619	2147	335	67	15	4	0	0	0	16116

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/22/23	0	0	0	1	4	7	32	16	5	0	0	0	0	0	0	65
01:00	0	0	0	1	0	7	14	7	3	0	0	0	0	0	0	32
02:00	0	0	0	0	1	3	6	3	0	0	0	0	0	0	0	13
03:00	0	0	0	0	0	3	8	7	1	1	2	0	0	0	0	22
04:00	0	0	0	1	2	7	18	8	6	0	0	0	0	0	0	42
05:00	0	0	1	1	9	24	77	52	13	2	1	0	0	0	0	180
06:00	0	0	0	1	23	109	200	138	27	5	0	1	0	0	0	504
07:00	1	0	0	4	56	319	439	190	41	5	3	0	0	0	0	1058
08:00	0	0	1	23	85	356	385	166	29	0	0	0	0	0	0	1045
09:00	0	0	1	0	89	327	369	149	26	3	1	0	0	0	0	965
10:00	0	0	3	22	118	346	287	141	18	5	0	0	0	0	0	940
11:00	0	1	1	20	128	350	329	146	12	5	0	0	0	0	0	992
12 PM	0	0	0	8	119	428	354	127	22	1	0	0	0	0	0	1059
13:00	0	0	0	3	104	391	364	147	23	2	0	0	0	0	0	1034
14:00	0	0	0	12	164	464	417	138	19	6	0	0	0	0	0	1220
15:00	0	0	1	22	110	436	397	157	26	7	1	0	0	0	0	1157
16:00	0	0	0	16	142	485	456	164	42	7	0	0	0	0	0	1312
17:00	0	0	3	28	137	449	423	162	29	6	1	0	0	0	0	1238
18:00	0	0	0	16	86	291	387	177	30	3	1	0	0	0	0	991
19:00	0	0	0	7	95	240	285	92	14	6	1	1	0	0	0	741
20:00	0	0	0	17	90	181	176	61	10	2	2	0	0	0	0	539
21:00	1	0	2	13	71	181	141	45	4	0	0	0	0	0	0	458
22:00	0	0	0	4	12	85	111	92	24	5	0	0	0	0	0	333
23:00	0	0	0	1	8	56	80	44	15	0	0	0	0	0	0	204
Total	2	1	13	221	1653	5545	5755	2429	439	71	13	2	0	0	0	16144

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	Total
09/23/23	0	0	0	0	5	21	48	24	4	1	0	0	0	0	0	103
01:00	0	0	0	1	1	16	21	24	4	0	0	0	0	0	0	67
02:00	0	0	0	0	1	1	8	8	0	0	0	0	1	0	0	19
03:00	0	0	0	0	1	3	12	4	0	1	0	1	0	0	0	22
04:00	0	0	0	0	2	5	11	5	1	2	0	0	0	0	0	26
05:00	0	0	0	1	5	19	19	14	4	0	0	0	0	0	0	62
06:00	0	0	0	0	9	44	50	49	10	3	0	0	0	0	0	165
07:00	0	0	0	1	14	63	153	88	25	5	1	0	0	0	0	350
08:00	0	0	0	2	18	130	213	142	37	5	6	0	0	0	0	553
09:00	0	0	0	2	70	262	273	115	16	3	0	0	0	0	1	742
10:00	0	0	0	4	52	321	374	143	20	1	0	0	0	0	0	915
11:00	0	1	0	2	79	351	355	134	23	1	0	0	0	0	0	946
12 PM	0	0	1	3	84	348	372	134	13	4	1	0	0	0	0	960
13:00	0	0	0	0	60	344	394	170	27	2	1	0	0	0	1	999
14:00	0	0	0	3	73	326	378	165	31	3	1	0	0	0	0	980
15:00	1	0	0	5	56	318	359	173	32	5	0	0	0	0	1	950
16:00	0	0	0	5	41	284	371	143	27	3	1	0	0	0	0	875
17:00	0	0	0	0	53	279	355	158	31	2	2	0	0	0	0	880
18:00	0	0	0	0	37	246	302	134	30	7	1	2	0	0	0	759
19:00	0	0	0	7	53	206	228	124	14	2	0	0	0	0	0	634
20:00	0	0	0	2	48	150	202	92	15	2	2	0	0	0	0	513
21:00	0	0	0	4	33	128	176	64	6	1	0	0	0	0	0	412
22:00	0	0	0	2	10	86	106	62	17	1	1	0	0	0	0	285
23:00	0	1	0	2	13	53	85	51	12	2	0	0	0	0	0	219
Total	1	2	1	46	818	4004	4865	2220	399	56	17	3	1	0	3	12436

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/24/23	0	0	0	0	4	18	42	42	6	2	0	2	0	0	0	116
01:00	0	0	0	1	1	7	19	15	3	0	0	0	0	0	0	46
02:00	0	1	0	1	0	9	13	6	2	0	0	0	0	0	0	32
03:00	0	0	0	0	0	4	5	6	1	0	0	0	0	0	0	16
04:00	0	0	0	0	0	2	9	1	3	0	1	0	0	1	0	17
05:00	0	0	0	1	0	7	14	9	2	1	0	0	0	0	0	34
06:00	0	0	0	1	5	22	49	30	15	0	0	0	1	0	0	123
07:00	0	0	0	0	12	34	60	58	9	4	0	0	0	0	0	177
08:00	0	0	0	1	13	56	172	92	13	4	1	1	1	0	0	354
09:00	0	0	0	2	24	153	230	121	20	3	0	0	0	1	0	554
10:00	0	0	0	2	26	213	236	147	32	7	0	0	0	0	0	663
11:00	0	0	0	1	35	230	283	168	27	5	0	1	0	0	0	750
12 PM	20	23	17	37	72	268	264	141	12	3	0	1	0	0	0	858
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	20	24	17	47	192	1023	1396	836	145	29	2	5	2	2	0	3740
Grand Total	25	30	54	487	4338	16625	17635	7632	1318	223	47	14	3	2	3	48436

Stats

15th Percentile :	40 MPH
50th Percentile :	45 MPH
85th Percentile :	51 MPH
95th Percentile :	54 MPH
Mean Speed(Average) :	46 MPH
10 MPH Pace Speed :	41-50 MPH
Number in Pace :	34261
Percent in Pace :	70.7%
Number of Vehicles > 45 MPH :	26877
Percent of Vehicles > 45 MPH :	55.5%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320
"Serving Transportation Professionls Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/20/2023

GPS: 42.978249, -78.77159

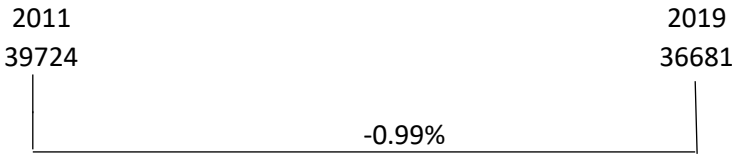
Start Time	Mon 18-Sep-23	Tue 19-Sep-23	Wed 20-Sep-23	Thu 21-Sep-23	Fri 22-Sep-23	Average Day	Sat 23-Sep-23	Sun 24-Sep-23	Week Average
12:00 AM	*	*	*	*	65	65	103	116	95
01:00	*	*	*	*	32	32	67	46	48
02:00	*	*	*	*	13	13	19	32	21
03:00	*	*	*	*	22	22	22	16	20
04:00	*	*	*	*	42	42	26	17	28
05:00	*	*	*	*	180	180	62	34	92
06:00	*	*	*	520	504	512	165	123	328
07:00	*	*	*	**1125**	**1057**	**1091**	350	177	677
08:00	*	*	*	1049	1043	1046	553	354	750
09:00	*	*	*	998	963	980	741	554	814
10:00	*	*	*	937	939	938	914	663	863
11:00	*	*	*	994	991	992	**946**	**750**	**920**
12:00 PM	*	*	*	1067	1059	1063	958	**857**	985
01:00	*	*	*	1033	1034	1034	**998**	*	1022
02:00	*	*	*	1182	1218	1200	980	*	1127
03:00	*	*	*	1259	1156	1208	949	*	1121
04:00	*	*	*	**1373**	**1310**	**1342**	875	*	**1186**
05:00	*	*	*	1367	1237	1302	879	*	1161
06:00	*	*	*	997	990	994	758	*	915
07:00	*	*	*	784	741	762	634	*	720
08:00	*	*	*	585	539	562	513	*	546
09:00	*	*	*	440	458	449	412	*	437
10:00	*	*	*	247	333	290	285	*	288
11:00	*	*	*	148	204	176	219	*	190
Day Total	0	0	0	16105	16130	16295	12428	3739	14354
% Avg. WkDay	0.0%	0.0%	0.0%	98.8%	99.0%				
% Avg. Week	0.0%	0.0%	0.0%	112.2%	112.4%	113.5%	86.6%	26.0%	
AM Peak	-	-	-	07:00	07:00	- 07:00	- 11:00	11:00	- 11:00	-	-
Vol.	-	-	-	1125	1057	- 1091	- 946	750	- 920	-	-
PM Peak	-	-	-	16:00	16:00	- 16:00	- 13:00	12:00	- 16:00	-	-
Vol.	-	-	-	1373	1310	- 1342	- 998	857	- 1186	-	-
Grand Total	0	0	0	16105	16130	16295	12428	3739	14354		

ADT ADT 14,226 AADT 14,226

Sheridan Drive - Harlem Road to N Forest Road

Year	Combined Volume	% Growth
2011	39724	
2019	36681	-0.99%

Niagara Falls Boulevard from Rt 290 to Maple Road



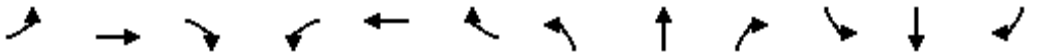
Appendix D – Synchro Reports

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations								
Traffic Volume (vph)	810	309	350	744	187	888		
Future Volume (vph)	810	309	350	744	187	888		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3539	1583	3433	3539	3433	2787		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3539	1583	3433	3539	3433	2787		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		315				817		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	827	315	357	759	191	906		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	827	315	357	759	191	906		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		30.3	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		2.7	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	69.7	95.3	51.3	102.4	18.6	44.0		
Actuated g/C Ratio	0.44	0.60	0.32	0.64	0.12	0.28		
v/c Ratio	0.54	0.29	0.32	0.34	0.48	0.67		
Control Delay	37.9	2.7	40.0	3.4	69.1	7.5		
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.2		
Total Delay	37.9	2.7	40.0	3.8	69.1	7.7		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
LOS	D	A	D	A	E	A		
Approach Delay	28.2			15.4	18.4			
Approach LOS	C			B	B			
90th %ile Green (s)	44.7				28.1		37.6	25.0
90th %ile Term Code	Coord				Max		Gap	Gap
70th %ile Green (s)	63.1				20.1		29.1	23.1
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	71.5				17.1		25.0	21.8
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	79.1				15.5		21.3	19.5
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	90.3				12.3		16.7	16.1
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	325	0	106	30	98	40		
Queue Length 95th (ft)	515	51	76	169	131	96		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1542	1145	1226	2233	602	1526		
Starvation Cap Reductn	0	0	0	947	0	0		
Spillback Cap Reductn	0	0	0	0	0	125		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.54	0.28	0.29	0.59	0.32	0.65		

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 64.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Harlem Road & Sheridan Drive



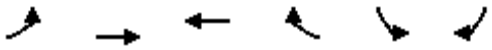
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	1407	0	0	931	682	145	0	314	0	0	0
Future Volume (vph)	264	1407	0	0	931	682	145	0	314	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.937			0.863	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	5085	0	0	4765	0	1681	1457	1504	0	0	0
Flt Permitted	0.053						0.950	0.996				
Satd. Flow (perm)	99	5085	0	0	4765	0	1681	1457	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					136			59	59			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		8.7			6.5			19.1			6.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	272	1451	0	0	960	703	149	0	324	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	272	1451	0	0	1663	0	134	171	168	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	99.2	99.2			69.3		50.5	50.5	50.5			
Actuated g/C Ratio	0.62	0.62			0.43		0.32	0.32	0.32			
v/c Ratio	0.87	0.46			0.91dr		0.25	0.34	0.33			
Control Delay	63.1	25.1			21.0		42.3	29.1	28.5			
Queue Delay	0.0	1.0			0.0		0.0	0.0	0.0			
Total Delay	63.1	26.1			21.0		42.3	29.1	28.5			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			C		D	C	C			
Approach Delay		32.0			21.0			32.7				
Approach LOS		C			C			C				
90th %ile Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
90th %ile Term Code	Max	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	28.8	99.2			64.6		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	25.0	99.2			68.4		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	21.1	99.2			72.3		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	15.5	99.2			77.9		50.5	50.5	50.5			
10th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
Queue Length 50th (ft)	240	345			560		110	96	90			
Queue Length 95th (ft)	343	525			637		173	174	162			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	376	3152			2140		530	500	515			
Starvation Cap Reductn	0	1337			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.72	0.80			0.78		0.25	0.34	0.33			

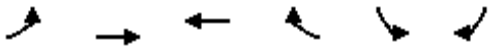
Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: I-290 Ramps & Sheridan Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	1642	1543	54	53	26
Future Volume (vph)	18	1642	1543	54	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3522	0	1770	1583
Flt Permitted	0.129				0.950	
Satd. Flow (perm)	240	3539	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			27
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	1728	1624	57	56	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	1728	1681	0	56	27
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	141.5	141.5	141.5		10.5	10.5
Actuated g/C Ratio	0.88	0.88	0.88		0.07	0.07
v/c Ratio	0.09	0.55	0.54		0.49	0.21
Control Delay	1.6	6.6	2.2		85.3	25.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	1.6	6.6	2.2		85.3	25.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	A	A	A		F	C
Approach Delay		6.6	2.2		65.8	
Approach LOS		A	A		E	
90th %ile Green (s)	133.8	133.8	133.8		14.6	14.6
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	136.2	136.2	136.2		12.2	12.2
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	137.9	137.9	137.9		10.5	10.5
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	139.7	139.7	139.7		8.7	8.7
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	178	66		58	0
Queue Length 95th (ft)	m3	217	116		106	34
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	212	3130	3115		490	457
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.09	0.55	0.54		0.11	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 5.9		Intersection LOS: A	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Sheridan Drive & Frankhauser Road

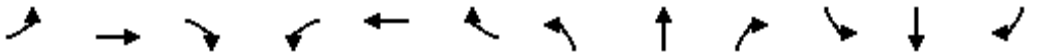
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1671	28	12	1572	14	20
Future Vol, veh/h	1671	28	12	1572	14	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1741	29	13	1638	15	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1770	0	2601	885
Stage 1	-	-	-	-	1756	-
Stage 2	-	-	-	-	845	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	348	-	20	288
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	348	-	19	288
Mov Cap-2 Maneuver	-	-	-	-	91	-
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	368	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	35.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	152	-	-	348	-
HCM Lane V/C Ratio	0.233	-	-	0.036	-
HCM Control Delay (s)	35.7	-	-	15.7	-
HCM Lane LOS	E	-	-	C	-
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1166	267	163	1192	25	179	340	171	41	386	191
Future Volume (vph)	233	1166	267	163	1192	25	179	340	171	41	386	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.997				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3529	0	1770	1863	1583	1770	3539	1583
Flt Permitted	0.056			0.105			0.261			0.294		
Satd. Flow (perm)	104	3539	1583	196	3529	0	486	1863	1583	548	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				178			128
Link Speed (mph)		45			45			40			35	
Link Distance (ft)		1664			992			903			941	
Travel Time (s)		25.2			15.0			15.4			18.3	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	243	1215	278	170	1242	26	186	354	178	43	402	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1215	278	170	1268	0	186	354	178	43	402	199
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0		0	0
Act Effct Green (s)	91.7	73.0	73.0	81.5	66.8		50.3	37.4	37.4	34.6	26.4	26.4
Actuated g/C Ratio	0.57	0.46	0.46	0.51	0.42		0.31	0.23	0.23	0.22	0.16	0.16
v/c Ratio	0.87	0.75	0.35	0.69	0.86		0.65	0.81	0.35	0.24	0.69	0.54
Control Delay	64.8	36.1	17.5	39.6	50.1		52.3	73.7	8.1	40.1	68.8	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	36.1	17.5	39.6	50.1		52.3	73.7	8.1	40.1	68.8	26.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	D	D		D	E	A	D	E	C
Approach Delay		37.1			48.8			51.9			53.9	
Approach LOS		D			D			D			D	
90th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	38.3	38.3	10.5	31.4	31.4
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
70th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	39.8	39.8	9.0	31.4	31.4
70th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
50th %ile Green (s)	21.6	69.3	69.3	16.2	63.9		17.4	37.0	37.0	8.1	27.7	27.7
50th %ile Term Code	Max	Coord	Coord	Gap	Coord		Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	25.1	77.6	77.6	13.3	65.8		16.0	32.5	32.5	7.2	23.7	23.7
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	22.5	90.3	90.3	8.5	76.3		13.8	39.4	39.4	0.0	18.0	18.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	218	621	130	83	651		146	355	0	31	209	65
Queue Length 95th (ft)	#404	727	208	168	755		209	#485	64	61	262	148
Internal Link Dist (ft)		1584			912			823			861	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	278	1614	793	279	1473		292	444	513	227	694	413
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.75	0.35	0.61	0.86		0.64	0.80	0.35	0.19	0.58	0.48

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 45.6 Intersection LOS: D
Intersection Capacity Utilization 94.0% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

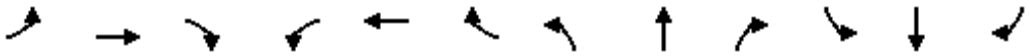
Splits and Phases: 5: North Forest Road & Sheridan Drive

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations								
Traffic Volume (vph)	617	343	359	569	170	484		
Future Volume (vph)	617	343	359	569	170	484		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3574	1599	3467	3574	3467	2814		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3574	1599	3467	3574	3467	2814		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		354				499		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%		
Adj. Flow (vph)	636	354	370	587	175	499		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	636	354	370	587	175	499		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		30.3	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		2.7	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	80.5	102.3	44.3	106.3	14.9	40.1		
Actuated g/C Ratio	0.50	0.64	0.28	0.66	0.09	0.25		
v/c Ratio	0.35	0.31	0.39	0.25	0.54	0.46		
Control Delay	26.6	2.1	32.8	10.7	75.0	4.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Total Delay	26.6	2.1	32.8	10.7	75.0	4.6		
LOS	C	A	C	B	E	A		
Approach Delay	17.9			19.2	22.9			
Approach LOS	B			B	C			
90th %ile Green (s)	63.3				19.8		26.8	25.5
90th %ile Term Code	Coord				Gap		Gap	Gap
70th %ile Green (s)	74.6				16.8		21.2	22.8
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	79.9				15.3		19.1	21.1
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	87.2				12.9		16.1	19.2
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	97.5				9.8		12.5	15.6
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	209	0	86	196	91	0		
Queue Length 95th (ft)	314	46	85	267	129	46		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1797	1252	1201	2361	608	1279		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.35	0.28	0.31	0.25	0.29	0.39		

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 19.7		Intersection LOS: B	
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Harlem Road & Sheridan Drive

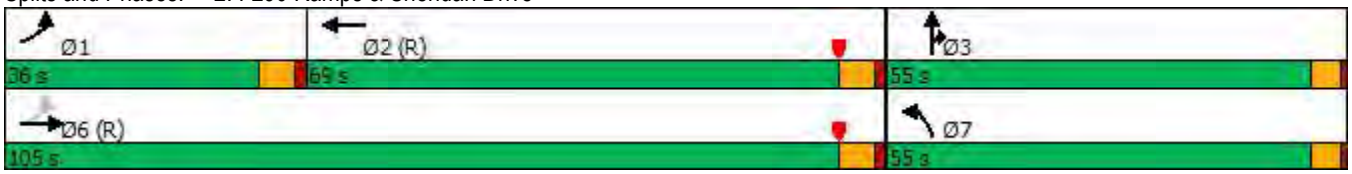


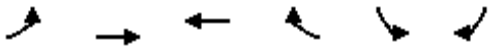
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	913	0	0	782	304	169	0	282	0	0	0
Future Volume (vph)	176	913	0	0	782	304	169	0	282	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.958			0.867	0.850			
Flt Protected	0.950						0.950	0.994				
Satd. Flow (prot)	1787	5136	0	0	4920	0	1698	1475	1519	0	0	0
Flt Permitted	0.201						0.950	0.994				
Satd. Flow (perm)	378	5136	0	0	4920	0	1698	1475	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					73			135	151			
Link Speed (mph)		45			45			35			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		8.7			6.5			16.4			6.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	180	932	0	0	798	310	172	0	288	0	0	0
Shared Lane Traffic (%)							10%		47%			
Lane Group Flow (vph)	180	932	0	0	1108	0	155	152	153	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	113.4	113.4			96.3		36.3	36.3	36.3			
Actuated g/C Ratio	0.71	0.71			0.60		0.23	0.23	0.23			
v/c Ratio	0.49	0.26			0.37		0.40	0.35	0.33			
Control Delay	26.6	15.2			10.5		52.6	10.3	7.7			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	26.6	15.2			10.5		52.6	10.3	7.7			
LOS	C	B			B		D	B	A			
Approach Delay		17.0			10.5			23.7				
Approach LOS		B			B			C				
90th %ile Green (s)	15.9	99.2			77.5		50.5	50.5	50.5			
90th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	13.7	99.2			79.7		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	12.3	99.2			81.1		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	7.9	132.6			118.9		17.1	17.1	17.1			
30th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
10th %ile Green (s)	6.8	136.9			124.3		12.8	12.8	12.8			
10th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
Queue Length 50th (ft)	101	145			272		129	13	1			
Queue Length 95th (ft)	213	305			176		197	74	58			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	534	3640			2990		535	438	582			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.34	0.26			0.37		0.29	0.35	0.26			

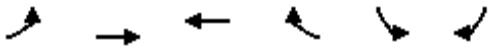
Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 15.5		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: I-290 Ramps & Sheridan Drive





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1091	985	39	42	18
Future Volume (vph)	17	1091	985	39	42	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3574	3553	0	1787	1599
Flt Permitted	0.262				0.950	
Satd. Flow (perm)	493	3574	3553	0	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			19
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	18	1136	1026	41	44	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1136	1067	0	44	19
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	142.5	142.5	142.5		9.3	9.3
Actuated g/C Ratio	0.89	0.89	0.89		0.06	0.06
v/c Ratio	0.04	0.36	0.34		0.42	0.17
Control Delay	1.0	2.7	1.7		84.1	28.8
Queue Delay	0.0	0.0	0.0		0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay	1.0	2.7	1.7		84.1	28.8
LOS	A	A	A		F	C
Approach Delay		2.6	1.7		67.4	
Approach LOS		A	A		E	
90th %ile Green (s)	135.5	135.5	135.5		12.9	12.9
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	137.5	137.5	137.5		10.9	10.9
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	139.1	139.1	139.1		9.3	9.3
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	140.6	140.6	140.6		7.8	7.8
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	52	51		45	0
Queue Length 95th (ft)	3	101	66		89	29
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	439	3184	3165		494	456
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.04	0.36	0.34		0.09	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 4.0		Intersection LOS: A	
Intersection Capacity Utilization 44.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Sheridan Drive & Frankhauser Road

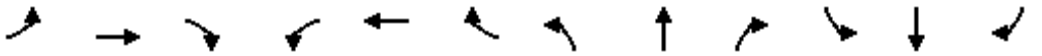
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1119	19	18	1004	20	21
Future Vol, veh/h	1119	19	18	1004	20	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1166	20	19	1046	21	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1186	0	1737	593
Stage 1	-	-	-	-	1176	-
Stage 2	-	-	-	-	561	-
Critical Hdwy	-	-	4.12	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	3.31
Pot Cap-1 Maneuver	-	-	590	-	79	451
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	538	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	590	-	76	451
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	521	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	21
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	267	-	-	590	-
HCM Lane V/C Ratio	0.16	-	-	0.032	-
HCM Control Delay (s)	21	-	-	11.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	853	103	125	767	21	100	185	109	46	202	175
Future Volume (vph)	171	853	103	125	767	21	100	185	109	46	202	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3574	1599	1787	3560	0	1787	1881	1599	1787	3574	1599
Flt Permitted	0.285			0.271			0.457			0.548		
Satd. Flow (perm)	536	3574	1599	510	3560	0	860	1881	1599	1031	3574	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				128			176
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1664			992			903			941	
Travel Time (s)		25.2			15.0			20.5			21.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	173	862	104	126	775	21	101	187	110	46	204	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	862	104	126	796	0	101	187	110	46	204	177
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0		0	0
Act Effct Green (s)	101.6	90.2	90.2	98.2	88.5		35.7	24.7	24.7	26.6	17.9	17.9
Actuated g/C Ratio	0.64	0.56	0.56	0.61	0.55		0.22	0.15	0.15	0.17	0.11	0.11
v/c Ratio	0.40	0.43	0.11	0.32	0.40		0.38	0.64	0.31	0.22	0.51	0.53
Control Delay	9.7	19.6	5.4	13.0	22.4		51.9	74.9	7.8	48.2	71.1	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	9.7	19.6	5.4	13.0	22.4		51.9	74.9	7.8	48.2	71.1	14.1
LOS	A	B	A	B	C		D	E	A	D	E	B
Approach Delay		16.8			21.2			50.5			45.0	
Approach LOS		B			C			D			D	
90th %ile Green (s)	15.6	78.1	78.1	13.0	75.5		16.7	28.2	28.2	11.3	22.8	22.8
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	12.8	85.8	85.8	10.8	83.8		14.4	24.1	24.1	9.9	19.6	19.6
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	11.0	91.3	91.3	9.4	89.7		12.8	21.2	21.2	8.7	17.1	17.1
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	9.6	96.2	96.2	8.3	94.9		11.1	18.6	18.6	7.5	15.0	15.0
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Gap	Min	Min
10th %ile Green (s)	8.0	99.8	99.8	7.0	98.8		8.8	31.4	31.4	0.0	15.0	15.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Min	Min
Queue Length 50th (ft)	35	231	16	44	240		87	192	0	38	108	1
Queue Length 95th (ft)	115	419	75	84	352		131	270	40	70	147	75
Internal Link Dist (ft)		1584			912			823			861	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	497	2015	959	479	1970		304	427	462	253	701	455
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.43	0.11	0.26	0.40		0.33	0.44	0.24	0.18	0.29	0.39

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 27.0		Intersection LOS: C	
Intersection Capacity Utilization 73.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: North Forest Road & Sheridan Drive

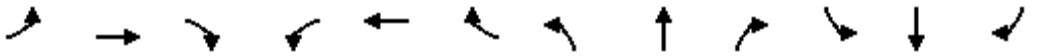
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations								
Traffic Volume (vph)	837	309	358	760	187	915		
Future Volume (vph)	837	309	358	760	187	915		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3539	1583	3433	3539	3433	2787		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3539	1583	3433	3539	3433	2787		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		315				839		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	854	315	365	776	191	934		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	854	315	365	776	191	934		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		31.9	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		1.1	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	70.4	96.1	52.1	102.0	18.7	44.4		
Actuated g/C Ratio	0.44	0.60	0.33	0.64	0.12	0.28		
v/c Ratio	0.55	0.29	0.33	0.34	0.48	0.68		
Control Delay	37.8	2.6	39.8	3.4	68.9	7.7		
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.2		
Total Delay	37.8	2.6	39.8	3.9	68.9	7.9		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
LOS	D	A	D	A	E	A		
Approach Delay	28.3			15.4	18.3			
Approach LOS	C			B	B			
90th %ile Green (s)	45.6				28.1		38.3	25.0
90th %ile Term Code	Coord				Max		Gap	Gap
70th %ile Green (s)	62.9				20.7		29.9	23.5
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	72.3				17.1		25.5	22.1
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	80.1				15.5		21.7	19.7
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	91.2				12.3		17.1	16.4
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	335	0	108	33	98	43		
Queue Length 95th (ft)	532	50	m77	169	131	100		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1557	1150	1261	2234	602	1541		
Starvation Cap Reductn	0	0	0	946	0	0		
Spillback Cap Reductn	0	0	0	0	0	141		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.55	0.27	0.29	0.60	0.32	0.67		

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 20.7 Intersection LOS: C
Intersection Capacity Utilization 66.5% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Harlem Road & Sheridan Drive



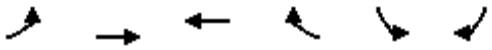
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	1462	0	0	956	698	145	0	328	0	0	0
Future Volume (vph)	264	1462	0	0	956	698	145	0	328	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.937			0.863	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	5085	0	0	4765	0	1681	1457	1504	0	0	0
Flt Permitted	0.053						0.950	0.996				
Satd. Flow (perm)	99	5085	0	0	4765	0	1681	1457	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					136			59	59			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		8.7			6.5			19.1			6.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	272	1507	0	0	986	720	149	0	338	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	272	1507	0	0	1706	0	134	177	176	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	99.2	99.2			69.3		50.5	50.5	50.5			
Actuated g/C Ratio	0.62	0.62			0.43		0.32	0.32	0.32			
v/c Ratio	0.87	0.48			0.93dr		0.25	0.35	0.34			
Control Delay	62.9	25.4			21.8		42.3	29.8	29.5			
Queue Delay	0.0	1.2			0.0		0.0	0.0	0.0			
Total Delay	62.9	26.6			21.8		42.3	29.8	29.5			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			C		D	C	C			
Approach Delay		32.2			21.8			33.1				
Approach LOS		C			C			C				
90th %ile Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
90th %ile Term Code	Max	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	28.8	99.2			64.6		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	25.0	99.2			68.4		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	21.1	99.2			72.3		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	15.5	99.2			77.9		50.5	50.5	50.5			
10th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
Queue Length 50th (ft)	240	357			580		110	103	96			
Queue Length 95th (ft)	343	547			654		173	182	172			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	376	3152			2140		530	500	515			
Starvation Cap Reductn	0	1316			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.72	0.82			0.80		0.25	0.35	0.34			

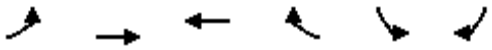
Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 27.8 Intersection LOS: C
Intersection Capacity Utilization 69.5% ICU Level of Service C
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: I-290 Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	1711	1584	54	53	26
Future Volume (vph)	18	1711	1584	54	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3522	0	1770	1583
Flt Permitted	0.123				0.950	
Satd. Flow (perm)	229	3539	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			27
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	1801	1667	57	56	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	1801	1724	0	56	27
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	141.5	141.5	141.5		10.5	10.5
Actuated g/C Ratio	0.88	0.88	0.88		0.07	0.07
v/c Ratio	0.09	0.58	0.55		0.49	0.21
Control Delay	1.7	7.4	2.0		85.3	25.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	1.7	7.4	2.0		85.3	25.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	A	A	A		F	C
Approach Delay		7.4	2.0		65.8	
Approach LOS		A	A		E	
90th %ile Green (s)	133.8	133.8	133.8		14.6	14.6
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	136.2	136.2	136.2		12.2	12.2
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	137.9	137.9	137.9		10.5	10.5
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	139.7	139.7	139.7		8.7	8.7
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	189	68		58	0
Queue Length 95th (ft)	m2	232	124		106	34
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	202	3130	3115		490	457
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.09	0.58	0.55		0.11	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 6.2		Intersection LOS: A	
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Sheridan Drive & Frankhauser Road

Intersection	
Int Delay, s/veh	28

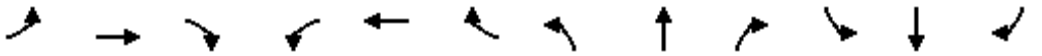
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	1671	28	12	1572	27	14	0	20	16	0	41
Future Vol, veh/h	69	1671	28	12	1572	27	14	0	20	16	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	1741	29	13	1638	29	15	0	21	17	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1667	0	0	1770	0	0	2751	3599	885	2700	3599	834
Stage 1	-	-	-	-	-	-	1906	1906	-	1679	1679	-
Stage 2	-	-	-	-	-	-	845	1693	-	1021	1920	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	382	-	-	348	-	-	~ 9	5	288	~ 10	5	311
Stage 1	-	-	-	-	-	-	71	115	-	99	150	-
Stage 2	-	-	-	-	-	-	324	147	-	253	113	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	382	-	-	348	-	-	~ 6	4	288	~ 8	4	311
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 6	4	-	~ 8	4	-
Stage 1	-	-	-	-	-	-	57	92	-	80	144	-
Stage 2	-	-	-	-	-	-	267	142	-	189	91	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.1	$ 1247.6	$ 901.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	14	382	-	-	348	-	-	27
HCM Lane V/C Ratio	2.53	0.196	-	-	0.036	-	-	2.295
HCM Control Delay (s)	$ 1247.6	16.7	-	-	15.7	-	-	$ 901.4
HCM Lane LOS	F	C	-	-	C	-	-	F
HCM 95th %tile Q(veh)	5.2	0.7	-	-	0.1	-	-	7.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1178	271	163	1213	39	186	354	171	49	394	191
Future Volume (vph)	233	1178	271	163	1213	39	186	354	171	49	394	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	1770	1863	1583	1770	3539	1583
Flt Permitted	0.057			0.096			0.259			0.265		
Satd. Flow (perm)	106	3539	1583	179	3522	0	482	1863	1583	494	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				178			128
Link Speed (mph)		45			45			40			35	
Link Distance (ft)		1664			992			903			690	
Travel Time (s)		25.2			15.0			15.4			13.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	243	1227	282	170	1264	41	194	369	178	51	410	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1227	282	170	1305	0	194	369	178	51	410	199
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0		0	0
Act Effct Green (s)	90.2	71.9	71.9	81.1	66.2		51.1	37.9	37.9	35.9	27.3	27.3
Actuated g/C Ratio	0.56	0.45	0.45	0.51	0.41		0.32	0.24	0.24	0.22	0.17	0.17
v/c Ratio	0.89	0.77	0.36	0.71	0.89		0.68	0.84	0.35	0.28	0.68	0.53
Control Delay	68.2	36.3	17.1	44.1	53.1		52.9	75.3	8.1	40.9	67.8	26.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	36.3	17.1	44.1	53.1		52.9	75.3	8.1	40.9	67.8	26.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	D	D		D	E	A	D	E	C
Approach Delay		37.6			52.1			53.3			53.3	
Approach LOS		D			D			D			D	
90th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	37.5	37.5	11.3	31.4	31.4
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
70th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	39.1	39.1	9.7	31.4	31.4
70th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
50th %ile Green (s)	19.4	66.9	66.9	16.4	63.9		17.4	38.8	38.8	8.5	29.9	29.9
50th %ile Term Code	Max	Coord	Coord	Gap	Coord		Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	24.9	75.2	75.2	13.6	63.9		16.4	34.2	34.2	7.6	25.4	25.4
30th %ile Term Code	Max	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	22.5	89.5	89.5	8.6	75.6		14.2	40.1	40.1	0.0	18.3	18.3
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	219	641	131	91	681		150	368	0	36	210	64
Queue Length 95th (ft)	#402	733	201	177	#825		219	#539	65	69	267	148
Internal Link Dist (ft)		1584			912			823			610	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	273	1589	783	272	1459		293	446	515	221	694	413
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.77	0.36	0.63	0.89		0.66	0.83	0.35	0.23	0.59	0.48

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 47.0 Intersection LOS: D
Intersection Capacity Utilization 95.8% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

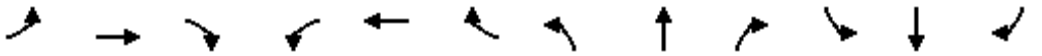
Splits and Phases: 5: North Forest Road & Sheridan Drive

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations								
Traffic Volume (vph)	650	343	378	588	170	517		
Future Volume (vph)	650	343	378	588	170	517		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3574	1599	3467	3574	3467	2814		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3574	1599	3467	3574	3467	2814		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		349				533		
Link Speed (mph)	45			45	30			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	22.6			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%		
Adj. Flow (vph)	670	354	390	606	175	533		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	670	354	390	606	175	533		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		31.9	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		1.1	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	80.2	102.2	46.0	105.3	15.1	41.1		
Actuated g/C Ratio	0.50	0.64	0.29	0.66	0.09	0.26		
v/c Ratio	0.37	0.31	0.39	0.26	0.54	0.48		
Control Delay	27.2	2.2	31.0	9.0	74.7	4.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Total Delay	27.2	2.2	31.0	9.0	74.7	4.5		
LOS	C	A	C	A	E	A		
Approach Delay	18.6			17.6	21.8			
Approach LOS	B			B	C			
90th %ile Green (s)	63.4				19.8		27.6	26.2
90th %ile Term Code	Coord				Gap		Gap	Gap
70th %ile Green (s)	72.9				16.8		23.0	24.3
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	80.1				15.3		19.7	21.9
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	87.6				12.9		16.6	19.9
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	97.1				10.7		13.0	16.2
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	222	2	89	205	91	0		
Queue Length 95th (ft)	333	48	87	254	129	46		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1791	1249	1254	2341	608	1304		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.37	0.28	0.31	0.26	0.29	0.41		

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 19.1		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Harlem Road & Sheridan Drive

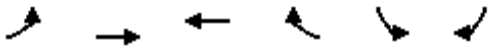


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	979	0	0	821	314	169	0	299	0	0	0
Future Volume (vph)	176	979	0	0	821	314	169	0	299	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.959			0.866	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1787	5136	0	0	4925	0	1698	1475	1519	0	0	0
Flt Permitted	0.179						0.950	0.995				
Satd. Flow (perm)	337	5136	0	0	4925	0	1698	1475	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					71			130	130			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		13.1			9.7			19.1			6.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	180	999	0	0	838	320	172	0	305	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	180	999	0	0	1158	0	155	163	159	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	106.7	106.7			88.9		43.0	43.0	43.0			
Actuated g/C Ratio	0.67	0.67			0.56		0.27	0.27	0.27			
v/c Ratio	0.54	0.29			0.42		0.34	0.33	0.32			
Control Delay	31.1	20.0			12.2		47.0	12.1	11.4			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			

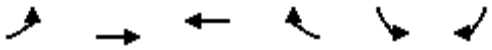
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	31.1	20.0			12.2		47.0	12.1	11.4			
LOS	C	B			B		D	B	B			
Approach Delay		21.7			12.2			23.2				
Approach LOS		C			B			C				
90th %ile Green (s)	16.7	99.2			76.7		50.5	50.5	50.5			
90th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	13.7	99.2			79.7		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	12.3	99.2			81.1		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	10.9	99.2			82.5		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	6.8	136.9			124.3		12.8	12.8	12.8			
10th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
Queue Length 50th (ft)	115	166			281		129	26	22			
Queue Length 95th (ft)	210	360			129		197	93	83			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	498	3426			2766		535	491	568			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.36	0.29			0.42		0.29	0.33	0.28			

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: I-290 Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1174	1034	39	42	18
Future Volume (vph)	17	1174	1034	39	42	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3574	3553	0	1787	1599
Flt Permitted	0.248				0.950	
Satd. Flow (perm)	467	3574	3553	0	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			19
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	18	1223	1077	41	44	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1223	1118	0	44	19
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	142.5	142.5	142.5		9.3	9.3
Actuated g/C Ratio	0.89	0.89	0.89		0.06	0.06
v/c Ratio	0.04	0.38	0.35		0.42	0.17
Control Delay	1.0	3.0	1.7		84.1	28.8
Queue Delay	0.0	0.0	0.0		0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay	1.0	3.0	1.7		84.1	28.8
LOS	A	A	A		F	C
Approach Delay		3.0	1.7		67.4	
Approach LOS		A	A		E	
90th %ile Green (s)	135.5	135.5	135.5		12.9	12.9
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	137.5	137.5	137.5		10.9	10.9
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	139.1	139.1	139.1		9.3	9.3
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	140.6	140.6	140.6		7.8	7.8
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	67	61		45	0
Queue Length 95th (ft)	3	123	73		89	29
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	416	3184	3165		494	456
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.04	0.38	0.35		0.09	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 4.1		Intersection LOS: A	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Sheridan Drive & Frankhauser Road

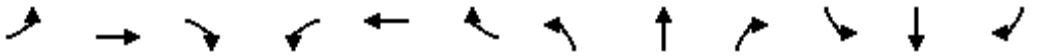
Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	1119	19	18	1004	33	20	0	21	19	0	49
Future Vol, veh/h	83	1119	19	18	1004	33	20	0	21	19	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	1	1	1	1	2	1	2	1	2	2	2
Mvmt Flow	90	1166	20	19	1046	36	21	0	22	21	0	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1082	0	0	1186	0	0	1917	2476	593	1865	2468	541
Stage 1	-	-	-	-	-	-	1356	1356	-	1102	1102	-
Stage 2	-	-	-	-	-	-	561	1120	-	763	1366	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.52	6.54	6.92	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.21	-	-	3.51	4.02	3.31	3.52	4.02	3.32
Pot Cap-1 Maneuver	640	-	-	590	-	-	41	29	451	45	30	485
Stage 1	-	-	-	-	-	-	159	216	-	226	286	-
Stage 2	-	-	-	-	-	-	482	280	-	363	213	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	640	-	-	590	-	-	32	24	451	37	25	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	24	-	37	25	-
Stage 1	-	-	-	-	-	-	137	186	-	194	277	-
Stage 2	-	-	-	-	-	-	415	271	-	297	183	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.2	148.7	86.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	640	-	-	590	-	-	111
HCM Lane V/C Ratio	0.7	0.141	-	-	0.032	-	-	0.666
HCM Control Delay (s)	148.7	11.5	-	-	11.3	-	-	86.2
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	3	0.5	-	-	0.1	-	-	3.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	868	108	125	784	38	108	202	109	56	212	175
Future Volume (vph)	171	868	108	125	784	38	108	202	109	56	212	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3574	1599	1787	3549	0	1787	1881	1599	1787	3574	1599
Flt Permitted	0.266			0.261			0.457			0.496		
Satd. Flow (perm)	500	3574	1599	491	3549	0	860	1881	1599	933	3574	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		4				128			167
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1664			992			903			690	
Travel Time (s)		25.2			15.0			20.5			15.7	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	173	877	109	126	792	38	109	204	110	57	214	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	877	109	126	830	0	109	204	110	57	214	177
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0					11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0					0	0		0	0
Act Effct Green (s)	99.8	88.1	88.1	96.2	86.4		37.4	26.0	26.0	28.8	19.4	19.4
Actuated g/C Ratio	0.62	0.55	0.55	0.60	0.54		0.23	0.16	0.16	0.18	0.12	0.12
v/c Ratio	0.43	0.45	0.12	0.34	0.43		0.39	0.67	0.30	0.26	0.50	0.52
Control Delay	9.8	20.4	6.2	14.1	24.3		50.5	74.7	7.5	47.6	69.1	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	9.8	20.4	6.2	14.1	24.3		50.5	74.7	7.5	47.6	69.1	15.6
LOS	A	C	A	B	C		D	E	A	D	E	B
Approach Delay		17.5			22.9			51.0			45.2	
Approach LOS		B			C			D			D	
90th %ile Green (s)	16.1	75.0	75.0	13.3	72.2		17.2	30.0	30.0	12.3	25.1	25.1
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	13.1	83.2	83.2	11.0	81.1		14.9	25.7	25.7	10.7	21.5	21.5
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	11.3	88.8	88.8	9.6	87.1		13.3	22.7	22.7	9.5	18.9	18.9
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	9.7	94.4	94.4	8.4	93.1		11.5	19.6	19.6	8.2	16.3	16.3
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	8.0	99.3	99.3	7.0	98.3		9.3	31.9	31.9	0.0	15.0	15.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Min	Min
Queue Length 50th (ft)	44	247	18	46	263		92	209	0	47	112	9
Queue Length 95th (ft)	123	454	83	88	385		137	288	40	80	151	83
Internal Link Dist (ft)		1584			912			823			610	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	470	1968	940	462	1917		313	427	462	251	701	448
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.45	0.12	0.27	0.43		0.35	0.48	0.24	0.23	0.31	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 28.1		Intersection LOS: C	
Intersection Capacity Utilization 75.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: North Forest Road & Sheridan Drive

Appendix E – Signal Warrant Analysis

Sheridan Drive at Fenwick Road Signal Warrant Analysis

Reference: FHWA Manual on Uniform Traffic Control Devices 2009 Edition, Chapter 4C Warrants
NYS Supplement MUTCD, 2009 Edition, Chapter 4C Warrants

Background Data:

Artery: Sheridan Drive (NYS Route 324)
Side Road: Fenwick road

Traffic Volumes:	Saturday Peak Hour	8th Highest Hour
Artery (Total of Both Approaches, incl aux lns):	2276	1366
Side Road (Highest of either approach, 1 dir only, incl aux lns):	68	41

* If 8th highest hour is not known, use 0.6 x peak hour

Number of Approach Lanes excluding Auxiliary Lanes
Artery: 2
Side Road: 1

Warrant 1 - Eight-Hour Vehicular Volume

85th percentile speed exceed 40 mph? Yes
OR
Is intersection within built up area of an isolated community having population less than 10,000? No
If answer is yes to either question, then 70% or 56% of condition can be applicable No

Condition A - Min Vehicular Volume

Number of lanes		VPH on Major				VPH on Higher Volume			
Each Approach		Total Both Approaches				Minor Approach			
Major	Minor	Incl Aux Lanes				Incl Aux Lanes			
		100%	80%	70%	56%	100%	80%	70%	56%
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B - Interruption of Continous Traffic

Number of lanes		VPH on Major				VPH on Higher Volume			
Each Approach		Total Both Approaches				Minor Approach			
Major	Minor	Incl Aux Lanes				Incl Aux Lanes			
		100%	80%	70%	56%	100%	80%	70%	56%
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

Major # Lanes 2 VPH on Artery 1366
Minor # Lanes 1 VPH on Side Road 41

Warrant Satisfied:

No

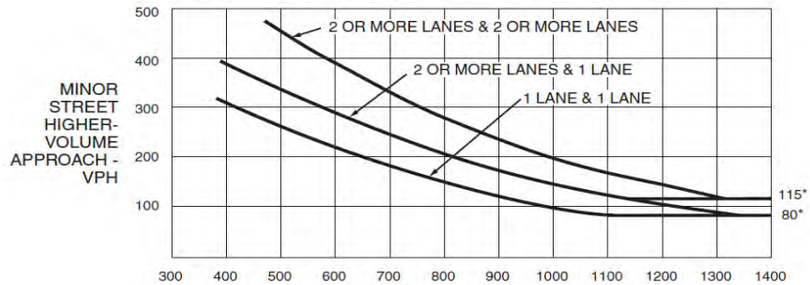
If 100% of A or B is met, then yes (same 8 hours for major/minor)
If 80% of A and B is met, then yes (same major/minor 8 hours, but not same for A&B)
If speed is > 40MPH and 70% of A or B is met, then yes
If speed is > 40MPH and 56% of A and B is met, then yes

Warrant 2 - Four Hour Volumes

Four Highest Hourly Volumes (any four hrs, same for side rd and artery, not necessarily consectutive)

Major	1914	Minor	68
(Both Approaches)	2039	(1 direction)	
	1989		57
	2023		

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

If 4 volumes when plotted fall above curve shown for given approach lane configuration, warrant is satisfied

Does the 85th percentile speed exceed 40 mph? Yes

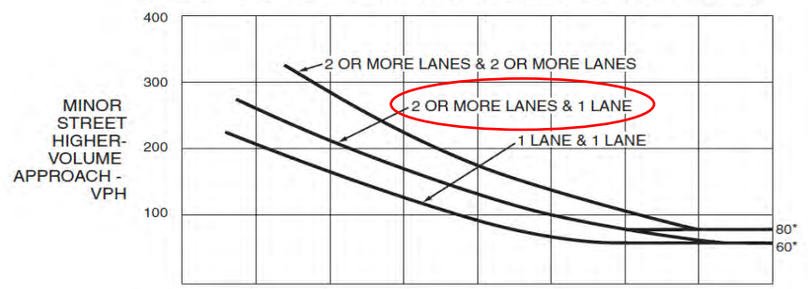
OR

Is intersection within built up area of an isolated community having population less than 10,000? No

If Yes to either, then the following graph should be used:

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

If 4 volumes when plotted fall above curve shown for given approach lane configuration, warrant is satisfied

Warrant Satisfied: **No**

Warrant 3 - Peak Hour

(used in unusual cases that attract or discharge a lot of vehicles in a short amount of time)

Criteria A or B need to be met for warrant to be met

Criteria A: need all three (3) conditions to be met

1) stopped time delay for minor (1 dir) equals or exceeds 4 veh/hrs (1 appr) or 5 veh/hr (2 appr) and — Yes
2) volume on the same minor appr equals or exceeds 100 veh/hr (1 lane) or 150 veh/hr (2 lanes) and — No
3) total entering volume equals or exceeds 650 veh/hr (3 appr) or 800 veh/hr (4 + appr) — Yes

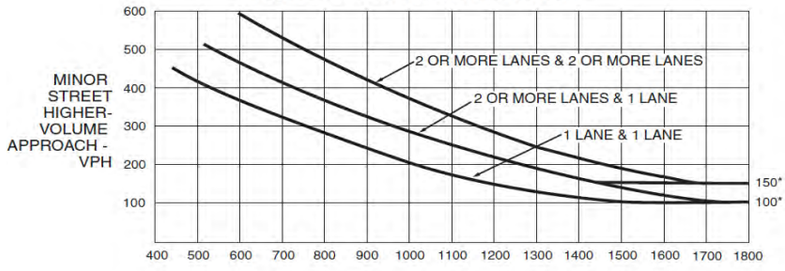
Criteria A met? No

Criteria B

Peak Hour Volume (any 4 consecutive 15 minute intervals)

Major 2276 (Both Approaches) Minor 68 (1 direction)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

If Peak Hour volume when plotted falls above curve shown for given approach lane configuration, Criteria B is satisfied

Does the 85th percentile speed exceed 40 mph? — Yes

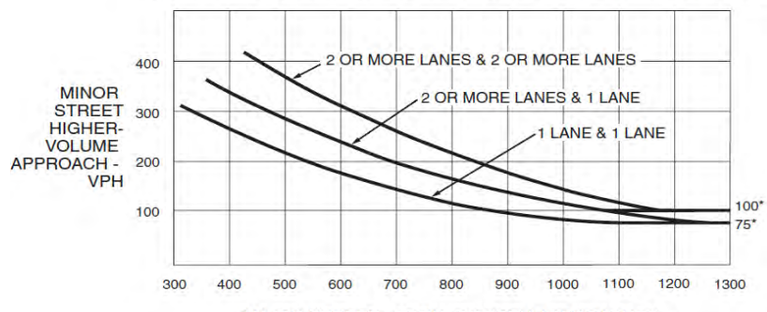
OR

Is intersection within built up area of an isolated community having population less than 10,000? — No

If Yes to either, then the following graph should be used:

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

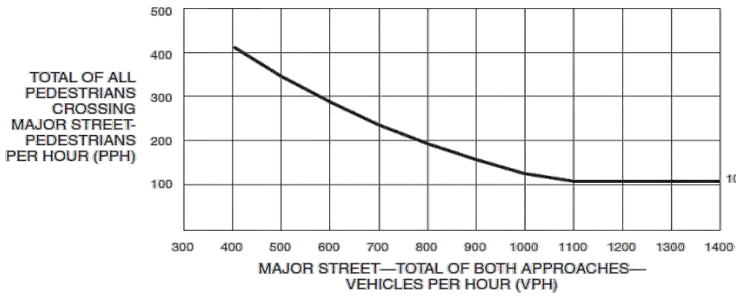
If Peak Hour volume when plotted falls above curve shown for given approach lane configuration, criteria B is satisfied

Criteria B met? No

Warrant Satisfied: **No**

Warrant 4 - Minimum Pedestrian Volume

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



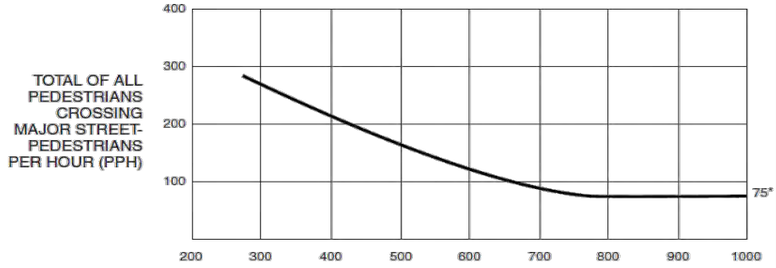
*Note: 107 pph applies as the lower threshold volume.

Use Figure 4C-5 for any 4 hours of an average day

Four-hour Volumes
(any 4 hours of an average day)

Major 2276 (Both Approaches) Peds 0 (Crossing Major)

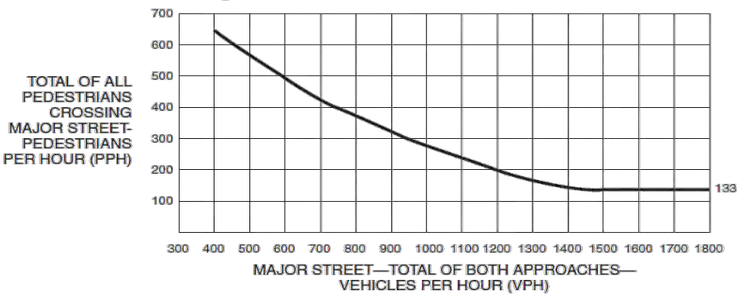
Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



*Note: 75 pph applies as the lower threshold volume.

Use Figure 4C-6 for 4-hour volumes if the speed limit or 85th percentile speed on the major exceeds 35 MPH, or if the intersection lies in a built-up area of an isolated community of less than 10,000

Figure 4C-7. Warrant 4, Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

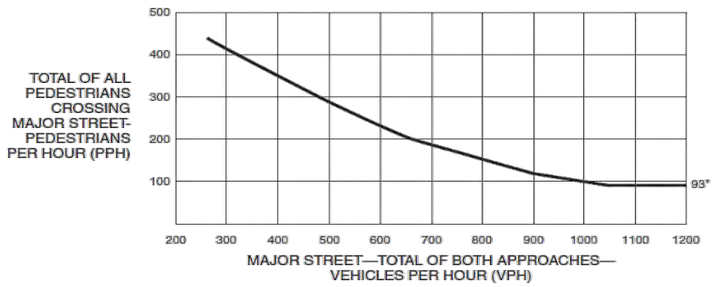
Use Figure 4C-7 for one hour (any 4 consecutive 15 min periods)

Peak Hour Volume
(any 4 consecutive 15 min intervals)

Major 2276 (Both Approaches) Peds 0 (Crossing Major)

Use Figure 4C-8 for 4-hour volumes if the speed limit or 85th percentile speed on the major exceeds 35 MPH, or if the intersection lies in a built-up area of an isolated community of less than 10,000

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

This warrant shall not be applied at locations where the distance to the nearest signal along major is less than 90m (300ft)

*** The ped criterion may be reduced as much as 50% if the average crossing speed of a ped is less than 3.5 ft/s**

Warrant Satisfied: **No**

Warrant 5 - School Crossing

Are the # of adequate gaps in each hour less than the # of minutes in each hour? N/A
AND
Are there a minimum of 20 students during the highest crossing hour? N/A

This warrant shall not be applied at locations where the distance to the nearest signal along the

major is less than 90m (300ft)

Warrant Satisfied: **No**

This warrant does not apply because it is for school children, and there are no schools near this intersection.

Warrant 6 - Coordinated Signal System

Are the adjacent traffic control signals so far apart that they do no provide a necessary degree of vehicular platooning (1-way street or traffic mainly in 1 direction)? No
OR
On a 2-way street will proposed and adjacent signals provide a progressive operation? No

* This warrant should not be applied where the spacing of signals would be less than 300m (1000ft).

Warrant Satisfied: **No**

Warrant 7 - Crash Experience

Have adequate trial of less restrictive remedies with satisfactory observance and enforcement failed to reduce the number of accidents? No
AND
Have there been 5 or more reported accidents susceptible to correction by a traffic signal within a 12 month period? Yes
AND

Are vehicle and ped volumes at least 80% of the requirements specified in Warrants 1 (Cond A or B) or 4? (56% criteria can be used if applicable) No

The answer to all above questions must be "yes" to satisfy this warrant

Warrant Satisfied: **No**

Warrant 8 - Roadway Network (for intersection of 2 majors)

1) Total Existing Weekday Peak Hour Volume Entering Intersection 3502
Is this volume > 1000 VPH? No
AND
Do the ETC+5 yrs volumes satisfy warrants 1, 2 or 3? No

OR

2) 5th highest Weekend volume entering intersection
Is this volume > 1000 VPH? No

Both answers to 1) **or** the answer to 2) must be "yes" to satisfy this warrant

Warrant Satisfied: **No**

Warrant 9 - Intersection Near a Grade Crossing

This warrant does not apply because there are no grade crossings at this intersection

Criteria A and B need to be met for warrant to be met

Criteria A:

A grade crossing exists on an approach controlled by a stop or yield sign and the center of the track nearest to the intersection is within 140 ft of the stop line or yield line on the approach

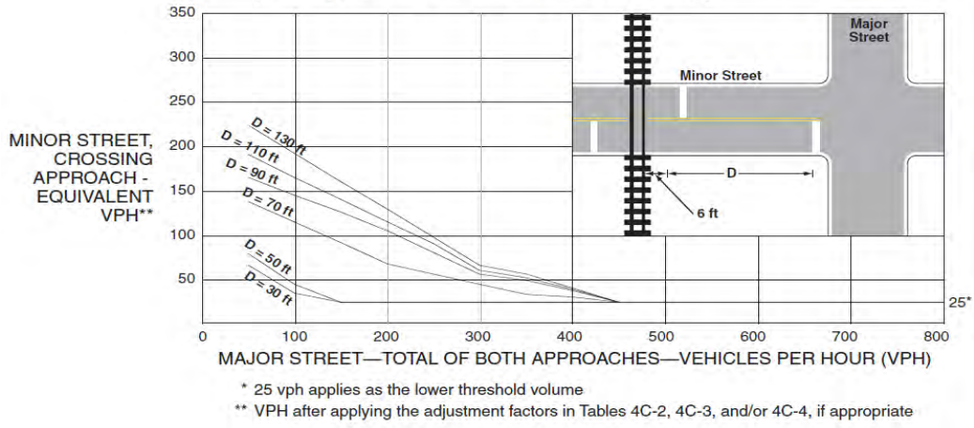
Criteria A met? No

Criteria B

Highest traffic volume hour with rail traffic (if rail schedule isn't known, use peak hour volumes)

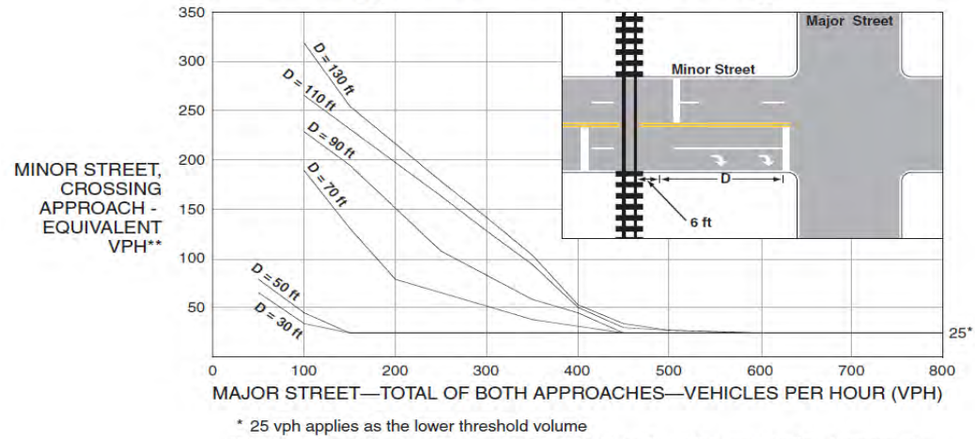
Major 2276 (Both Approaches) Minor 68 (1 direction)

Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)



* 25 vph applies as the lower threshold volume
** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)



* 25 vph applies as the lower threshold volume
** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

See MUTCD text for adjustment based on frequency of rail traffic, high-occupancy buses and tractor-trailer percentages

Criteria B met? No

Warrant Satisfied: **No**