DRAFT ENVIRONMENTAL IMPACT STATEMENT

UMS PROPERTY, LLC
NEW DISTRIBUTION CENTER SITE PLAN 2024

TOWN OF PLATTSBURGH
CLINTON COUNTY, NEW YORK

Lead Agency:

Town of Plattsburgh Planning Board
151 Banker Road
Plattsburgh, New York 12901

Applicant:

UMS Property, LLC
194 Pleasant Ridge Road
Plattsburgh, New York 12901

Preparer:

JMT of New York, Inc.
19 British American Boulevard
Latham, New York 12110
(518) 782-0882

Project No.: 24-02308-001

Submitted: March 28, 2025

Lead Agency Acceptance:_____

Public Hearing: _____

Comments Period: _____

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1
1.1 PROPOSED ACTION AND NEED FOR ACTION 1
1.2 INVOLVED AND INTERESTED AGENCIES 1
1.3 POTENTIAL IMPACTS 2
1.4 POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION .2
1.5 SUMMARY OF ALTERNATIVES 3
2.0 ENVIRONMENTAL REVIEW PROCESS 4
2.1 GENERAL OVERVIEW OF SEQRA 4
2.1.1 EIS Scoping Process 4
2.1.2 Opportunities for Public Comment 5
2.3 REQUIRED PERMITS AND APPROVALS 5
3.0 PROJECT DESCRIPTION 7
3.1 SITE LOCATION AND HISTORY 7
3.2 DESCRIPTION OF PROPOSED ACTION 7
3.3 PROJECT NEED AND PURPOSE 7
3.4 APPROVALS, REVIEWS AND PERMITS 8
4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION 9
4.1 LAND USE AND ZONING 9
4.1.1 Existing Environmental Setting 9
4.1.2 Potential Impacts 10
4.1.3 Proposed Mitigation Measures 10
4.2 GEOLOGY, SOILS, AND TOPOGRAPHY 10
4.2.1 Existing Environmental Setting 10
4.2.2 Potential Impacts 13
4.2.3 Proposed Mitigation Measures 13
4.3 STORMWATER MANAGEMENT 14
4.3.1 Existing Environmental Setting 14
4.3.2 Potential Impacts 14

4.3.3 Mitigation and Stormwater Management 16
4.4 TERRESTRIAL AND AQUATIC ECOLOGY 17
4.4.1 Habitat 17
4.4.2 Surface Waters and Wetlands 22
4.5 NOISE 24
4.5.1 Existing Environmental Setting 24
4.5.2 Potential Impacts 25
4.5.3 Proposed Mitigation Measures 27
4.6 VISUAL RESOURCES 29
4.6.1 Existing Environmental Setting 29
4.6.2 Potential Impacts 30
4.6.3 Proposed Mitigation Measures 32
4.7 TRANSPORTATION 33
4.7.1 Existing Environmental Setting 33
4.7.2 Potential Impacts 34
4.7.3 Mitigation Measures 37
4.8 AIR QUALITY 38
4.8.1 Existing Environmental Setting 38
4.8.2 Potential Impacts 38
4.8.3 Mitigation Measures 39
4.9 SOLID WASTE AND HAZARDOUS MATERIALS 40
4.9.1 Existing Environmental Setting 40
4.9.2 Potential Impacts 40
4.9.3 Mitigation Measures 41
4.10 UTILITIES AND INFRASTRUCTURE 42
4.10.1 Energy 42
4.10.2. Telecommunications 43
4.10.3. Water Supply 44
4.10.4 Wastewater 45
5.0 UNAVOIDABLE ADVERSE IMPACTS 47

5.1 NATURAL RESOURCES 47
5.1.1 Geology 47
5.1.2 Ecological Resources 47
5.1.3 Visual Resources 47
5.1.4 Traffic 48
5.1.5 Noise 48
6.0 ALTERNATIVES TO THE PROPOSED ACTION 50
6.1 NO ACTION ALTERNATIVE 50
6.2 ALTERNATIVE SITES 50
6.3 ALTERNATIVE SIZE 50
7.0 ABBREVIATIONS 52
8.0 REFERENCES 53

TABLES

TABLE 1 INVENTORY OF AESTHETIC RESOURCES

FIGURES

FIGURE 1 SITE LOCATION
FIGURE 2 BEDROCK GEOLOGY
FIGURE 3 SURFICIAL GEOLOGY
FIGURE 4 SOILS
FIGURE 4A SOILS LEGEND
FIGURE 5 WETLANDS
FIGURE 6 LOCATION MAP – INVENTORY OF AESTHETIC RESOURCES
FIGURE 6A LOCATION MAP – INVENTORY OF AESTHETIC RESOURCES
FIGURE 7 ZONING

SHEETS

SHEETS C100 - D300 RMS PROJECT PLANS

APPENDICES

APPENDIX A **SEQRA DOCUMENTATION**
APPENDIX B **AGENCY CORRESPONDENCE**
APPENDIX C **WETLANDS DELINEATION AND JOINT PERMIT APPLICATION**
APPENDIX D **TRAFFIC IMPACT ANALYSIS**
APPENDIX E **VISUAL IMPACT ASSESSMENT**
APPENDIX F **NOISE IMPACT ASSESSMENT**
APPENDIX G **STORMWATER MANAGEMENT REPORT**
APPENDIX H **ENDANGERED SPECIES DOCUMENTATION**
APPENDIX I **WATER AND WASTEWATER DOCUMENTATION**
APPENDIX J **MECHANICAL BASIS OF DESIGN**
APPENDIX K **SOLID WASTE SUMMARY**

1.0 EXECUTIVE SUMMARY

UMS Property, LLC (UMS) is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road in the Town of Plattsburgh, Clinton County, New York to support their nearby existing manufacturing facility (henceforth referred to as "Proposed Action"). The location of the Proposed Action includes Tax Parcel Nos. 245.-4-40.1, 245.-4-16.2, 245.-4-41, and portions of 245.-4-22.11, where the proposed building is approximately 774,750 sq ft. (the "Site"). UMS has entered into a purchase agreement to buy the Site for the Proposed Action. Figure 1 *Site Location Map* illustrates the location of the Site and its relationship to the surrounding area.

This Draft Environmental Impact Statement (DEIS) has been prepared to assess the potential environmental impacts associated with the Proposed Action in accordance with the Final Scoping Document dated, September 2024 (Appendix A), adopted by the Town of Plattsburgh Planning Board on September 17, 2024.

1.1 PROPOSED ACTION AND NEED FOR ACTION

UMS is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road to support their nearby existing manufacturing facility. The new facility will consolidate warehousing and distribution operations that are currently managed through multiple separate facilities located throughout the region into a single facility located in close proximity to production operations, thereby streamlining overall logistics and reducing overall shipping traffic between facilities.

1.2 INVOLVED AND INTERESTED AGENCIES

The following is a list of agencies having approval authority and/or interest over the action:

- Town of Plattsburgh (Zoning Board, Planning Board, Water and Wastewater Department)
- Clinton County Planning Board
- Clinton County Department of Health
- Clinton County Industrial Development Agency (IDA)
- New York State Department of Transportation (NYSDOT)
- New York State Department of Environmental Conservation (NYSDEC)
- Federal Aviation Administration (FAA)
- United States Army Corps of Engineers (USACE)

- New York State Historic Preservation Office (SHPO)
- New York State Department of State (NYSDOS)

1.3 POTENTIAL IMPACTS

The layout and design of the Proposed Action is such that any possible adverse environmental impacts will be minimized to the greatest extent that is reasonably practicable.

There will be a positive effect on the local and regional economy. The Proposed Action would allow for the continuation of existing jobs and the creation of additional jobs. The proposed action will occur within an industrial corridor of NYS Route 22, which prevents development in non-industrial areas. The consolidation of warehousing and shipping operations to a single facility in close proximity to the manufacturing facility will have the potential to reduce overall regional traffic and associated emissions.

Construction of the proposed facility will include land disturbance activities with the potential to impact site geology, surface water resources and wetlands, habitat, visual resources, noise and air quality. Operation of the proposed facility has the potential to impact noise, transportation, air quality, solid waste and hazardous materials, and utilities and infrastructure.

1.4 POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION

There will be a significant and positive effect on local and regional economies through the maintenance and creation of local jobs.

Mitigation measures proposed to minimize the potential for impacts associated with the construction and operation of the Site include activities specifically undertaken by UMS to minimize or eliminate potential impacts and project planning that, by its nature, serves as pre-mitigation by design.

Potentially significant impacts to wetlands will occur through the filling of approximately 9.4 acres of freshwater wetlands. Magnitude of potentially adverse impact to wetlands is limited as the impacted wetlands are a result of previous agricultural activities and are inundated with invasive species. Wetland impacts will be mitigated through a joint USACE/NYSDEC wetland disturbance permit application process involving compensatory mitigation.

Potentially significant impacts to noise may occur from the proposed action through night-time facility operations due to externally-located building mechanical equipment. Impacts will be mitigated through sound barrier construction, equipment shrouding or encapsulation, selection of alternate equipment, and/or alternate location of equipment.

1.5 SUMMARY OF ALTERNATIVES

Alternatives to the Proposed Action with respect to location and size were evaluated. The evaluation of each alternative included a comparison of impacts on natural resource system, traffic, and demand for utilities and community services. "No Action" alternative, meaning that the proposed warehouse and distribution center would not be developed, was also considered.

No Action Alternative

Under the “No Action” alternative, the proposed warehouse and distribution center would not be constructed and the Site would remain undeveloped. Although the "No Action" alternative would not increase environmental impacts, including those to natural resources and demand for utilities and community services, it would incur several disadvantages.

The "No Action" alternative's disadvantages include:

- Failure to provide economic growth and development at the local and regional levels;
- Failure to create additional job opportunities; and
- Failure to meet UMS’ long-term fiscal and operational goals.

Alternative Sites

The Site is located within one mile of UMS’ existing manufacturing facility and is zoned Industrial (I), where the proposed use is allowed by site plan approval. UMS has entered a purchasing agreement to buy the Site for the Proposed Action. UMS does not own or control additional properties in the immediate vicinity that would meet the needs of the Proposed Action, including the size requirements. If another site were to be selected, it would be much further away from the existing manufacturing facility, resulting in an increased potential for impacts on traffic as well as associated traffic noise and air impacts. The Site has been selected to minimize these impacts due to its location and current zoning designation.

Alternative Size

Constructing a smaller warehouse would not eliminate potential environmental impacts resulting from a larger size building. Although an alternate scale may decrease potential impacts on natural resources, the potential impacts on traffic and the demand for utilities and community services would remain. Furthermore, alternate scale would preclude the consolidation of multiple facilities, thereby significantly impacting the viability of the operation.

2.0 ENVIRONMENTAL REVIEW PROCESS

The following sections are derived from the DEIS Final Scoping Document (Appendix A).

2.1 GENERAL OVERVIEW OF SEQRA

SEQRA requires the governmental bodies undertaking or approving an action to include consideration of environmental impacts in their decision-making process. SEQRA further requires that government agencies minimize and avoid significant adverse environmental impacts to the maximum extent practicable, given the reasonable range of alternatives and consideration of social, economic, and other essential factors.

If an action is determined to have a potentially significant adverse environmental impact, SEQRA requires an Environmental Impact Statement (EIS) to be prepared to assess the impact and identify practicable means, if any, to avoid or mitigate it. This requirement can be found in Environmental Conservation Law sections 3-0301(1)(b), 3-0301(2)(m) and 8-0113, and 6 NYCRR Part 617. The EIS process is designed so that the government body undertaking or approving the action will examine how it can avoid or minimize significant adverse environmental impacts. The EIS should concisely describe and analyze the Proposed Action and must be made available to the public for review and comment. Generally, the EIS must include: a description of the action, including its need and benefits; a description of the environmental setting and areas to be affected; an analysis of all significant environmental impacts related to the action; an analysis of reasonable alternatives to the action; and an identification of ways to reduce or avoid significant adverse environmental impacts.

When an action consists of several steps or sets of related interdependent activities, the entire set must be considered the action, even if several separate governmental bodies are involved. An action should not be segmented into its different components, as this would be contrary to the intent of SEQRA. Lastly, no agency involved in the overall action can make a final decision, by undertaking, funding, or approving any part of the action, until the SEQRA process is complete.

2.1.1 EIS Scoping Process

The primary goals of scoping are to focus the DEIS on potentially significant adverse impacts and to eliminate consideration of those impacts that are irrelevant or non-significant. The scoping process establishes the contents of a DEIS, and the lead agency provides the public the opportunity to participate in that process. The final scoping document is completed after consideration of all substantive comments from the public and involved agencies.

The Final Scoping Document issued by Town of Plattsburgh Planning Department for this Proposed Action can be found in Appendix A.

2.1.2 Opportunities for Public Comment

In addition to seeking public input on its scope, the DEIS, when completed and accepted by the Town of Plattsburgh Planning Department, will be made available for public review and comment. A Public Hearing will be held by the Town of Plattsburgh Planning Department to receive public comment on the DEIS. A final EIS will then be prepared to address all substantive comments received. The DEIS and supporting documents will be available in an electronic format and posted on the web to enable public review.

2.3 Required Permits and Approvals

The Proposed Action will require the following approvals:

- Site Plan Review/Approval from the Town of Plattsburgh Planning Board and Clinton County Planning Board coordination under NYS General Municipal Law Section 239-m;
- FAA determination for the height of the proposed building;
- Area variance from Town of Plattsburgh Zoning Board for the height of proposed building;
- Town of Plattsburgh Water and Sewer Department Permits for water and sewer construction;
- Clinton County Health Department and NYSDEC Permits (where applicable) for extending the public water line along NYS Route 22 to the Site. Coordination with New York State Department of Health and Town of Plattsburgh Water and Wastewater Department will also be required;
- Clinton County Health Department for the onsite septic system (if required);
- Town of Plattsburgh Driveway Permit for any connection to Superior Road or Archie Bordeau Road;
- USACE Section 404 Permit for disturbance of federal wetlands;
- NYSDEC Jurisdictional Determination & Freshwater Wetland Permit (if applicable);
- Clinton County Industrial Development Agency (IDA) for possible tax incentives;
- NYSDOT Highway Work Permit and Access Permit for the new commercial driveway;

- NYSDEC State Pollution Discharge Elimination System (SPDES) Permit for disturbing more than one acre during construction; and
- NYSDEC SPDES Permit for sanitary sewage treatment discharges greater than 1,000 gallons per day.

3.0 PROJECT DESCRIPTION

3.1 SITE LOCATION AND HISTORY

The Site is located on the west side of NYS Route 22 between Salmon River Road and Irish Settlement Road on tax parcels 245.-4-40.1, 245.-4-16.2, 245.-4-41, and portions of 245.-4-22.11 in the Town of Plattsburgh, Clinton County, New York. UMS has entered into a purchase agreement to buy the Site for the Proposed Action. The Site is geographically situated approximately one (1) mile southwest of the Plattsburgh International Airport and is bordered on the east by railroad tracks and NYS Route 22. Residential and commercial lots exist to the north and south, and the Site is bordered on the west by mostly wooded lands. The lands are currently vacant and are zoned Industrial.

3.2 DESCRIPTION OF PROPOSED ACTION

As stated above, UMS is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22. The Site will be accessed from a new commercial driveway off NYS Route 22. The facility will operate 24 hours per day, 7 days a week with three work shifts. Most of the work at the facility will occur during the morning and afternoon shifts, with approximately 100 employees, with a smaller operational crew of approximately 22 employees for the evening or third shift. The Site has been designed with approximately 200 vehicle spaces to account for the maximum number of employees per shift with adequate reserve volume for shift overlap. Deliveries and outbound shipments from the facility will primarily occur during normal business hours of 7 AM to 5 PM, Monday through Friday. It is estimated that there will be approximately 100 trucks per day entering and exiting the Site with a peak hour rate of 10 trucks per hour.

The proposed warehouse building is approximately 774,750 sq ft, including approximately 34,600 sq ft of office area. The majority of the proposed building and office area is split in two sections of 46 ft and 75 ft in height, with a small portion of the warehouse approximately 100 ft in height. This high bay area will house a fully automated racking system that allows for material to be stored up to 90 ft in height, reducing the overall footprint of the building and allowing for more efficient material handling.

The Proposed Action will include construction of approximately 30.81 acres of road, building, and other paved or impervious surfaces, along with approximately 15.55 acres of open lawn areas. A water tower and 1,455 sq ft pump house will be also constructed on-site.

3.3 PROJECT NEED AND PURPOSE

The Proposed Action is intended to support UMS' nearby existing manufacturing facility. The new warehouse and distribution center will allow UMS to consolidate storage and distribution space for their

manufactured goods, and to expand storage and distribution capacity to accommodate projected future growth.

3.4 APPROVALS, REVIEWS AND PERMITS

The Proposed Action will require permits and approvals from federal, state, and local agencies. Section 2.3 details each of the approvals, reviews, and permits needed for the project.

4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section describes the environmental setting of the Proposed Action, and potential impacts resulting from the Proposed Action are identified and evaluated below. Where applicable, this section also includes proposed measures to mitigate unavoidable short-term, long-term, and/or cumulative impacts.

4.1 LAND USE AND ZONING

4.1.1 Existing Environmental Setting

The Site has historically been used for agricultural purposes and is contained within four (4) tax parcels within the Town of Plattsburgh: 245.-4-16.2, 245.-4-22.11, 245.-4-40.1, and 245.-4-41. Currently, the Site is almost entirely vacant and undeveloped, with overgrowth/woods. Parcels 245.-4-16.2, 245.-4-40.1, and 245.-4-41 have a property class of: rural vacant, greater than 10 acres. Parcel 245.-4-22.11 is bisected by the D & H Corporation Railroad right-of-way where the western portion is undeveloped and the eastern portion contains a single residence located on NY Route 22. The property class for the parcel is: two-family residential. The eastern portion of parcel 245.-4-22.11, where the existing residence is located is zoned Neighborhood Commercial (NC) and is not considered part of the Site.

Almost the entire area of the contiguous Site is zoned I*, with the exception of a 100-ft buffer area along the Site perimeter, which is zoned Residential (R-2). The Industrial District (I*) is intended to accommodate a wide variety of industrial uses, which are permitted with or without site plan approval. The difference between the I and I* is that asphalt and concrete manufacturing and mining are not listed as allowed uses within the I* designation.

In addition, the southern portion of the Site is partially located within the Wellhead Protection Overlay District, a district which provides for development restrictions within 1,000 ft of the Town's public water supply wells.

The Proposed Action would take place entirely within areas of parcels 245-4-22.11, 245-4-40.1, and a portion of 245-4-16.2, that are currently zoned as Industrial District (I*). In the Industrial District (I*), warehouses/distribution facilities are a land uses subject to site plan review. The Town further restricts height for non-residential uses within the Industrial District (I*) to 40 ft.

See Figure 7 *Zoning* for a depiction of the current zoning designations of the Site.

4.1.2 Potential Impacts

According to the Town of Plattsburgh Resolution No. 024-113 ("Zoning Map Amendment 2024"), the Town found that the 2024 rezoning of the Site parcels to their current designation of I* is consistent with and reflects the purpose and intent of the Town of Plattsburgh Comprehensive Plan. The Town has reduced the Industrial District zoning designation area by approximately 600 acres and has further rezoned approximately 1,900 acres of other industry-related zones, such as Airport (AP) and Airbase (AB-1 and AB-2), leaving only small sections of the Town to industry-related uses.

As discussed in Section 4.1.1, there is a 40 ft. height restriction in the Industrial District (I*), where the proposed warehouse would be constructed. As the proposed warehouse exceeds this height restriction, an area variance from the Town of Plattsburgh Zoning Board will be required. However, it is anticipated that this variance would have no significant impact on the land use or zoning of the Site, as it would not impact the footprint of the Proposed Action, nor would it require any rezoning of the parcels.

Additionally, one of the objectives included in the Town of Plattsburgh Comprehensive Land Use Plan, adopted December 2010 (see Recommendation 1, "Economic Development") is to "attract stable businesses that will create and retain good paying jobs." UMS has been in operation in Plattsburgh for almost four decades and is committed to retaining jobs and expanding upon the local economy. Thus, the Proposed Action is also consistent with the Town of Plattsburgh Comprehensive Land Use Plan.

4.1.3 Proposed Mitigation Measures

As there will be no significant adverse impacts on land use and zoning, no mitigation is required.

4.2 GEOLOGY, SOILS, AND TOPOGRAPHY

4.2.1 Existing Environmental Setting

4.2.1.1 Regional Bedrock Geology

This Site is located in the Town of Plattsburgh in the Champlain Valley or Lowlands, east of the Adirondack Mountains Grenville Province and west of Lake Champlain. The primary bedrock in the Site area consists of Beekmantown Group limestone and dolostone, dating back to the Middle Cambrian Era, approximately 500 million years ago (see Figure 2 *Bedrock Geology*). The bedrock type in the smaller, northeastern portion of the Site is unknown, though probably characterized as Middle Ordovician Era limestones as the bedrock along the western shore of Lake Champlain. Structurally normal faults exist west and east of the Site trending north to south and dipping to the east. Bedrock in this area is generally suitable for construction, especially when it is dense, solid, and well-cemented like dolostone and

limestone. (Bedrock reference as provided in the New York State Museum, Geology Map of New York, Adirondack Sheet, dated 1970.)

4.2.1.2 Regional Surficial Geology

The area has a diverse landscape shaped by the last glaciation, specifically the Late Wisconsin Glaciation (approximately 10,000 to 20,000 years ago), during which glaciers advanced and retreated multiple times, leaving behind a variety of glacial deposits and landforms. Clinton County is characterized by a series of glacial and post-glacial deposits and distinctive landforms that collectively define its surficial geology. These features include moraines, drumlins, outwash plains, glacial till, and evidence of ancient glacial lakes, such as the Champlain Sea.

As illustrated on Figure 3 *Surficial Geology*, glacial till can be found along the western portion of the Site. Till consists of poorly sorted, variable texture (boulders to silt) with varied compaction due to depth buried below the glacial ice sheet deposits. Till in this region is typically sand rich possessing a metamorphic provenance or having originated by glacial movement of metamorphic rock material likely to the north where the glaciers expansion originated. The eastern portion of the Site consists of undifferentiated marine and lacustrine sand. These well-sorted, stratified sands, ranging from fine to medium grains, are typically associated with near-shore deposits. They form in various types of lakes, where rivers and streams discharge their waters. During the last glaciation, the Champlain Valley was flooded by the Champlain Sea, an extension of the Atlantic Ocean. As the Wisconsin Glacier retreated, streams and rivers deposited these sands into the Champlain Sea. Glacial till can have poor drainage which may require additional site preparation such as drainage systems. The lacustrine sand deposits may provide better natural drainage and are more suitable for construction with minimal need for artificial drainage. (Surficial reference as provided in the New York State Museum, Surficial Geology Map of New York, Adirondack Sheet, dated 1991.) Sandy soils like the undifferentiated marine and lacustrine sand that is present on-site provides good stability for foundations as they drain well, are less prone to settling or expansion, and allow for straightforward construction with few concerns about water accumulation and foundation failure. Glacial till is also typically stable and provides a solid foundation for building, and when compacted, provides strong support for construction.

4.2.1.3 Soils

The soils on the Site primarily consist of several members of the Northway (NrA, NrB), Covertfalls (CtsA, CtsB), and Grattan (GrA) series. The Northway and Covertfalls series are very deep, somewhat poorly drained soils formed in outwash sands overlying loamy till. They are nearly level and gently sloping soils on glacial lake plains and adjacent uplands. The Grattan series consists of very deep, excessively drained soils formed in sandy drift on lake plains, outwash plains, moraines, and beach ridges. Soils on-site mainly

consists of loamy fine sand, 0 to 8 percent slopes, and are primarily derived from limestone and dolostone (see Figure 4 and 4a). Table 1 below, shows all the soils present on Site and their associated hydric rating and drainage class. Hydric soil is permanently or seasonally saturated by water, resulting in anaerobic or reduced oxygen present conditions.

Table 1
Soil Properties on Site

Map Unit	Unit Name	Acres on site	Hydric Rating	Drainage Class
AtA	Amenia fine sandy loam	8.2	0	Moderatley well drained
Crk	Cook mucky loamy fine sand	4.7	93	Very poorly drained
Cs	Covert loamy sand	5.4	1	Moderatley well drained
CtsA, CtsB	Covertfalls loamy fine sand	11	0	Moderatley well drained
DeA	Deerfield fine sand	17.7	2	Moderatley well drained
Df	Deinache fine sand	1.1	93	Poorly drained
GrA	Grattan loamy sand	26.1	0	Excessivly drained
Mn	Massena fine sandy loam	4.8	5	Somewhat poorly drained
NrA, NrB	Northway loamy fine sand	43.4	1	Somewhat poorly drained
Ph	Pipestone fine sand	12.7	3	Somewhat poorly drained
PtA	Plainfield loamy sand	8.2	0	Excessivly drained

Hydric Rating: A numerical system based on the proportion of hydric soil components in the map unit. 0 = non-hydric; 1-33 predominantly non-hydric = predominately non-hydric; 34-66 partially hydric; 67-99 predominantly hydric; 100 = hydric.

Approximately 51% of soils on-site, which include Cs, DeA, Df, GrA, Ph, PtA, are classified as farmland of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. Prime farmland soils roughly represent 12% of the soils on-site, including AtA, CtsA, CtsB, while prime farmland, if drained (Mn, NrA, NrB), make up approximately 34% of the Site. Only about 3% of soils (Crk) on-site are not prime farmland soils or those classified as farmland of statewide importance.

The Site is vacant land that is zoned for industrial use and is not currently used for agricultural purposes.

4.2.1.4 Topography

The Site is located within an area of Clinton County known as Champlain Valley. Existing contours and drainage areas are shown on Sheet C100 *Existing Conditions* (RMS Project Plans). The proposed gradings are shown on Sheets C300 through C302 *Proposed Grading Plan* (RMS Project Plans). Topography is an important consideration in determining potential siting and erosion impacts. The topography at the Site is variable and is controlled to some extent by the underlying bedrock formations.

The Site generally slopes from the northwest towards the southeast following the ridge along the Salmon River to the west. The area is gently sloping downhill to the east-southeast at approximately a 2% slope. The elevation of the Site ranges from 230 ft near Route 22 to 290 ft in the western part of the Site. Lands

adjacent to the Salmon River to the west do not have significant slopes in contact with the construction area.

4.2.2 Potential Impacts

The principal potential impact on geology and soils as a result of the Proposed Action is the potential for erosion of surficial (unconsolidated) materials during construction. This may occur where existing vegetation and their associated root systems are removed. Additionally, changes in site drainage as a result of grading can impact surface runoff, which will be prevented through the implementation of stormwater management and erosion controls as identified in the Stormwater Management Report (Appendix G). Dry conditions combined with machinery and truck movement and wind have the potential to cause airborne migration of soil generated particulate matter and reduced productivity in prime farmland soils. Minimization of actively disturbed soils and wetting of exposed soil areas when appropriate is recommended to control erosion. Water-borne erosion will be controlled through the implementation of stormwater management controls discussed in Section 4.3.

The Proposed Action includes the disturbance of prime farmland soils and farmland soils of statewide importance. However, the Site is not currently used for agricultural purposes, and is zoned for industrial activity. To the extent practicable, disturbed soils will be retained on-site through regrading, erosion control, and restoration and re-stabilization activities.

The Proposed Action will involve limited grading activities on a relatively flat site and does not include significant changes in topography.

As depth to bedrock at the Site is greater than 20 ft, there are no anticipated impacts to bedrock geology associated with the Proposed Action.

As the Proposed Action will conserve disturbed soils within an industrial zoned site, it will not significantly alter the site topography and will not impact bedrock geology. Therefore, the Proposed Action will not result in potentially significant adverse impacts to geology, soils, or topography.

4.2.3 Proposed Mitigation Measures

There are no potentially significant impacts to geology, soils or topography associated with the Proposed Action, and therefore no further mitigation is warranted. The following best management practices (BMPs) are part of the project design and will be utilized to minimize erosion of the surficial deposits and soils on-site:

- Only enough area to accommodate the construction needs of the facility will be disturbed;

- Erosion and sediment controls will be installed in accordance with the Stormwater Management Report (Appendix G) prior to construction to prevent soil erosion;
- Compacted soils will be restored back to its original conditions using soil restoration techniques;
- All activities will conform to the requirements set forth by the Town of Plattsburgh; and
- Vegetation will also be re-established during and following construction. As such, no additional mitigation is required.

4.3 STORMWATER MANAGEMENT

4.3.1 Existing Environmental Setting

A Stormwater Management Report was prepared by RMS in January 2024 for the Proposed Action, which details the design of the stormwater management system at the Site, including temporary and permanent stormwater and erosion and sediment controls. A copy of the report is included as Appendix G.

In addition to the requirements set forth by the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-25-001), and as disclosed in the Stormwater Management Report, The Town of Plattsburgh's Town's Zoning Ordinance requires new projects constructing stormwater facilities to reduce the peak flow from the post-development, 25-year storm event to less than the pre-development, 10-year storm event.

The drainage area that is expected to be affected by the Proposed Action is approximately 72.5 acres, which includes the footprint of the proposed impervious areas and surrounding areas that flow within the Site's drainage boundary. (Note, the total area of disturbance is estimated at 44.3 acres.)

The pre-development peak runoff rates at the Site for the 1-, 10-, and 100-year, 24-hour Type II Storm events are calculated at 40.97 cfs, 88.13 cfs, and 209.81 cfs, respectively. Runoff volumes for the same storm events are 3.414 acre-ft, 8.527 acre-ft, and 18.775 acre-ft, respectively. This information is also included in the runoff summary table provided in Section 4.3.2.1 below and in the Stormwater Management Report (Appendix G).

4.3.2 Potential Impacts

4.3.2.1 Stormwater Quantity and Quality

Approximately 31.61 acres of new impervious area will be created as a result of the Proposed Action. Calculated peak runoff rates for the Proposed Action for the 1-, 10- and 100-year, 24-hour Type II Storm

events are calculated at 23.20 cfs, 63.86 cfs, and 126.14 cfs, respectively. Runoff volumes for the same storm events are 5.594 acre-ft, 11.465 acre-ft, and 22.347 acre-ft, respectively.

The runoff summary table below summarizes the pre- and post-development conditions at the Site. As shown, the peak runoff rate is lower than the existing conditions with the use of the proposed stormwater controls described in Section 4.3.3, including a stormwater detention pond.

Storm Event	Total Existing Site		Total Proposed Site	
	Runoff Rate (cfs)	Runoff Volume (acre-ft)	Runoff Rate (cfs)	Runoff Volume (acre-ft)
1 year	40.97	3.414	23.20	5.594
2 year	51.72	4.489	32.35	6.886
5 year	81.81	6.526	43.61	9.235
10 year	88.13	8.527	63.86	11.465
25 year	139.11	11.832	80.81	15.050
50 year	163.58	14.985	103.16	18.390
100 year	209.81	18.775	126.14	22.347

The proposed stormwater pond provides a permanent storage volume of approximately 115,686 cf. This is over 100% of the water quality volume required. The pre-treatment requirement of 10% of the total Water Quality Control Volume at each inlet is also met by the storage provided in the forebay.

A spillway will be provided within the pond to handle emergency storm events. The pond design also provides for one foot of freeboard between the proposed 100-year water surface elevation in the pond and invert of the emergency spillway. The Stormwater Management Plan additionally determined there would be no negative impacts on the drainage area from the south access road, due to its limited size, even though it will not discharge into the pond. See Appendix G for additional details on the pond and its storage volume.

The Proposed Action also has the potential to impact surface water quality, if runoff is not adequately managed. The Stormwater Management Report includes stormwater post-construction controls and runoff reduction practices that will be implemented to ensure stormwater runoff from the Proposed Action does not adversely impact water quality of any nearby waterbodies. Some of these controls and practices are outlined in Section 4.3.3 below. For complete details, refer to the Stormwater Management Report, provided as Appendix G. With the implementation of controls and practices, stormwater impacts resulting from the Proposed Action are not anticipated.

4.3.3 Mitigation and Stormwater Management

Site construction activities will require coverage under NYSDEC SPDES GP-0-25-001. Compliance with GP-0-25-001 requires development of and conformance with stormwater management measures and erosion and sediment controls which prevent potentially significant impacts to stormwater. Implementation of the stormwater management measures and erosion and sediment controls identified in the Stormwater Management Report (Appendix G) will eliminate the potential for significant adverse impacts associated with stormwater, no further mitigation is necessary. The following sub-sections summarize these measures and controls as detailed in the Stormwater Management Report.

4.3.3.1 Stormwater Management

Per the Stormwater Management Report, the NYSDEC Stormwater Design Manual (2024) outlines a required 5-step stormwater management planning process that must be adhered to in the development of post-construction stormwater controls. The 5-step Stormwater Management Planning Process is described in the Stormwater Management Report (Appendix G) and is reiterated below.

1. Site Planning: The total amount of impervious area required to build the project has been reduced to the greatest extent possible, considering the size of the proposed building and the minimum parking requirements. The siting and orientation of the proposed building was largely determined by setback requirements and the locations of existing wetlands. A diversion swale is proposed along the northwestern boundary of the proposed improvements in order to limit the quantity of run-on into the closed stormwater system.

2. Determine Water Quality Treatment Volume (WQv): The WQv has been calculated for the drainage area that represents the footprint of the proposed site: For wet extended detention pretreatment is required for 10% of the total Water Quality Control Volume for each inlet into the pond. Furthermore, 100% of the total water quality volume is to be provided as permanent water storage. A forebay is proposed to pretreat 61,281 cf, which is well over 30% of the total WQv required given 3 inlets.

3. Apply Runoff Reduction Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv: A stormwater pond with a forebay was the selected SMP for this site, providing quantity and quality control, ensuring protection of downstream channels and drainage structures.

4. Determine the minimum of RRV Required: The minimum RRv is calculated by applying a Specific Reduction Factor to the calculated WQv as described in Chapter 4 of the NYSDEC Stormwater Design Manual, 2024. For this site, a Specific Reduction Factor of 0.20 was used and the minimum RRv was calculated to be 30,579 cf. Due to high groundwater detected in testing

infiltration practices are unfeasible for reduction purposes. Therefore, after evaluating all other applicable Runoff Reduction Techniques in Chapter 6, it is unfeasible to meet this requirement. Otherwise, all runoff quantity and water quality control requirements are met for the developed site.

5. Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume: The proposed stormwater pond is sufficient to reduce the peak runoff increase due to the developed site. Furthermore, the Forebay and permanent wet pond are proposed to treat 100% of the Water Quality Volume required. As a result, no additional stormwater facilities are required for this project.

4.3.3.2 Erosion and Sediment Control

Erosion and sediment control measures will be designed in conformance with the NYS Standards and Specifications for Erosion and Sediment Control, 2016, otherwise known as the "Blue Book".

Temporary control measures proposed for the Site include silt fence, erosion control wattles (in place of or in addition to silt fencing), a stabilized construction entrance to minimize off-site sediment tracking onto public roadways, rock outlet protection for culverts to provide energy dissipation, and seeding/mulching of any disturbed areas to promote ground stabilization.

Permanent control measures include soil restoration of any soil that has become compacted due to the construction process. Compacted soils will be restored back to its original conditions using standard soil restoration techniques. Additionally, final stabilization of the Site cannot be achieved until all disturbed areas have been fully stabilized and greater than 80% of the vegetative cover has been established.

The Proposed Erosion and Sediment Control Plan and Details are provided as Sheets C700, C701, C702, C703, and C704 (RMS Project Plans). The Stormwater Management Report, provided as Appendix G also includes additional details on the proposed stormwater controls as well as the proposed erosion and sediment controls.

4.4 TERRESTRIAL AND AQUATIC ECOLOGY

4.4.1 Habitat

4.4.1.1 Existing Environmental Setting

B. Laing Associates, Inc. (B. Laing) completed an assessment to determine potential impacts as a result of the Proposed Action to any endangered or threatened listed species, either federal or state. The findings

are presented in their Listed Species Review letter, dated March 3, 2025. A copy of which is included as Appendix H.

Although the Site is inclusive of vacant lands, B. Laing Associates, Inc. (B. Laing) during their December 2022 and July 2024 site investigations observed large portions as being disturbed from mowing, trails (e.g., ATV), tree clearing, and even grading in some upland areas. The Site was also observed to be mostly wooded, with the exception of the southern central and southeastern portions of the Site. These areas were observed to be mostly cleared of trees, with the southern central portion "maintained largely as a field/shrubland". See Appendix H for additional details.

B. Laing conducted field investigations on two separate occurrences, December 6-8, 2022, and July 23-24, 2024. Data on the onsite habitats and species were collected from the field investigations as well as from online resources.

The following table included in B. Laing's Listed Species Review letter illustrates the vegetative species observed at the Site:

Table 1 Vegetation Observed on Site (Alphabetical) 2022-2024			
Stratum	Common Name	Scientific Name	Indicator Status
Trees	American beech	*Fagus grandifolia*	FACU
	American hop hornbeam	*Ostrya virginiana*	FACU
	Eastern hemlock	*Tsuga canadensis*	FACU
	Gray birch	*Betula populifolia*	FAC
	Ironwood	*Carpinus caroliniana*	FAC
	Northern white cedar	*Thuja occidentalis*	FACW
	Paper birch	*Betula papyrifera*	FACU
	Red maple	*Acer rubrum*	FAC
	Red oak	*Quercus rubra*	FACU
	Staghorn sumac	*Rhus typhina*	UPL
	Sugar maple	*Acer saccharum*	FAC
	White oak	*Quercus alba*	FACU
	White pine	*Pinus strobus*	FACU
	Alder buckthorn	*Frangula alnus*	FACW
Shrubs	Common buckthorn	*Rhamnus cathartica*	FAC
	Red-osier dogwood	*Cornus sericea*	FACW
	Rosa multiflora	*Rosa multiflora*	FACU
	Silky dogwood	*Cornus amomum*	FACW
	Speckled alder	*Alnus incana*	FACW
	Sweetfern	*Comptonia peregrina*	UPL
Herbaceous	American pokeweed	*Phytolacca decandra*	FACU
	Bog orchid sp.	*Platanthera sp.*	FACW
	Bladder sedge	*Carex intumescens*	FACW
	Blue vervain	*Verbena hastata*	FACW
	Bracken fern	*Pteridium aquilinum*	FACU
	Brambles	*Rubus sp.*	FACU
	Bristly dewberry	*Rubus hispidus*	FACW
	Broad-leaved cattail	*Typha latifolia*	OBL
	Canada goldenrod	*Solidago canadensis*	FACU
	Canada mayflower	*Maianthemum canadensis*	FACU
	Christmas fern	*Polystichum acrostichoides*	FACU
	Cinnamon fern	*Osmundastrum cinnamomeum*	FACW
	Common milkweed	*Asclepias syriaca*	UPL
	Common mullein	*Verbascum thapsus*	UPL
	Common reed	*Phragmites australis*	FACW
	Enchanter's nightshade	*Circaea canadensis*	FACU
	Hay-scented fern	*Dennstaedtia punctilobula*	UPL
	Hickey's tree-clubmoss	*Dendrolycopodium hickeyi*	UPL
	Horsetail	*Equisetum sp.*	FACW

B. Laing Associates, Inc.

B. Laing further detailed, "Observed wildlife onsite included common bird species, typically found in second-growth woods, fields, and shrubland habitats, such as the red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), common raven (*C. corax*), black-capped chickadee (*Poecile atricapillus*), blue jay (*Cyanocitta cristata*), and northern cardinal (*Cardinalis cardinalis*)."

To determine if any federally-listed species have the potential to be impacted by the Proposed Action, B. Laing utilized the Information for Planning and Consultation (IPaC) tool to access the US Fish and Wildlife Service (USFWS) records. The NYSDEC Environmental Resource Mapper (ERM) and Short Environmental Assessment Form (EAF) Mapper were also consulted to determine if any state-listed species or their habitats have the potential to occur on-site. The IPaC search (included in Appendix H) identified the potential for the Northern Long-eared Bat (*Myotis septentrionalis*) and the Indiana Bat (*Myotis sodalis*), both federally and state-listed as endangered, and the Monarch Butterfly (*Danaus Plexippus*), a proposed threatened species (FR 2024-28855, 12/12/24).

The NYSDEC EAF Mapper Summary Report did not identify any state-listed threatened or endangered species on-site. A November 20, 2024, letter from New York Natural Heritage Program (NYNHP), identified the Eastern Pearlshell freshwater mussel (*Margaritifera margaritifera*), a species of special concern in the Salmon River and Houghton's Sedge (*Carex houghtoniana*), a state-listed, threatened plant species as occurring within 1/3 mile of the Site. The letter did not identify any other species, including bats.

As indicated above, no state or federally listed plants or animal species were observed during B. Laing's site investigations in 2022 and 2024.

The NYSDEC Environmental Resource Mapper indicates there is a significant natural community, Pitch Pine-Heath Barrens located approximately one half mile north of the Site and one mile east of the Site. Site construction activity will occur away from and does not include disturbance to the Pitch Pine-Heath Barrens. Accordingly, in their November 20, 2024, response letter, the NYNHP did not include this rare community type as occurring in the vicinity of the Site. Additional information is provided in the B. Laing Listed Species Review letter included in Appendix H.

4.4.1.2 Potential Impacts

Although the information provided by the USFWS IPaC system identified the potential for the state and federally listed Northern Long-eared bat (NLEB) and the Indiana bat, B. Laing determined that in their professional opinion the "proposed development of the subject site, as reviewed by this office, will not significantly impact any endangered or threatened species and no further review of this topic should be necessary." This was determined based on the lack of NYSDEC records of known occurrences of either

species within the vicinity of the Site, lack of NLEB occurrences in the Town of Plattsburgh or known Indiana bat hibernacula in Clinton County, and lack of observed evidence of the occurrence of these species during B. Laing's site investigation.

As wildlife is limited across the Site and no sensitive species are known to occur on-site, no significant adverse impacts to wildlife are anticipated. However, as there is potential for modification of existing habitat types as well as temporary and permanent displacement of the existing common wildlife, some minor adverse impacts to ecological resources may occur as a result of the project.

Additionally, and as is the case with any type of development, potential impacts from general site development (i.e., stripping and clearing of vegetation) include stormwater and erosion, which have the potential to affect nearby properties, if not properly managed and maintained. However, potential impacts will be minimized with the implementation of applicable environmental plans and management practices.

As a result of the distance from the Site to the significant natural community and the existing intervening site conditions, which include significant infrastructure, road improvements, and natural features, there are no anticipated potential impacts to the Pitch Pine-Heath Barrens as a result of the Proposed Action.

4.4.1.3 Proposed Mitigation Measures

As discussed above, there were no listed endangered or threatened species observed or documented to occur at the Site. The operation and phasing of the Proposed Action have been designed to minimize any potential impacts to wildlife. The amount of area stripped of vegetation at any one time will be limited to the area needed to accommodate the facility, leaving the remainder of the project site available for wildlife habitat.

Additionally, and as stated above, potential impacts will be minimal with the implementation of appropriate environmental plans and management practices. Specifically, the Stormwater Management Plan (see Appendix G) has been developed to minimize sediment and other pollutants in stormwater discharges. Appropriate stormwater management, including the best management practice of good housekeeping, will be implemented to ensure the integrity of stormwater discharges and mitigate any potential impacts to the ecological conditions of nearby properties.

Although the NYNHP (see Appendix H) did not identify the Indiana bat, NLEB or any other endangered or threatened bat species, seasonal restrictions to any tree removal with a diameter greater than 3-inches DBH will be implemented. Alternatively, a determination of no effect from USFWS either through a DKey, indicating no consultation is required for the two species or through direct consultation will be obtained in lieu of observing seasonal tree cutting restrictions. Furthermore, if any identified threatened

or endangered species is encountered or observed, an in-place procedure to immediately "stop work" will be followed until the appropriate actions are taken.

No additional mitigation is warranted.

4.4.2 Surface Waters and Wetlands

4.4.2.1 Existing Environmental Setting

The surface topography of a region determines the location and prominence of surface water divides and basins in that area. A common surface water divide is a topographic peak that separates distinct regions of surface water flow. When water (as precipitation) falls on the land surface, it flows down slope if it is not first lost to: a) infiltration; or b) evapotranspiration, and eventually joins surface water bodies (e.g., streams, lakes, and ponds). From topographic highs, such as ridgelines, water flows downhill on either side of the high. Topographic highs, therefore, serve as surface water divides.

Located in the Great Lakes - St. Lawrence River Basin in eastern Clinton County, the Site is a mix of both wetlands and uplands, and majority of the soils onsite are moderately poorly drained. The Site's topography is characterized by generally flat to gently sloped and tends to slope towards the east where most surface waters end up in a substantial ditch running along the train tracks on the eastern edge of the Site where it eventually flows south into the Salmon River, ultimately joining Lake Champlain.

Salmon River

The Salmon River is located west and south of the Site and has a state water classification of class C(T), meaning the best use is for fishing and non-contact activities. The (T) designation indicates it supports a trout population. The river flows in a southwesterly direction, where it ultimately meets Lake Champlain.

Site Surface Water Resources

The Site is mostly upland, though there are several mapped water bodies on and around the proposed site, these mapped water bodies are illustrated on Figure 5 *Wetlands Map*. The wetter areas/larger wetlands are associated with the western and north-central portions of the Site, where two (2) National Wetland Inventory (NWI) wetlands are located. These wetlands are identified as PFO1E, palustrine, forested, broad-leaved deciduous, seasonally flooded/saturated wetlands. They connect to a series of smaller wetlands that flow to the south.

B. Laing completed a delineation of freshwater wetlands on the Site on December 5 and 6, 2022 in accordance with the U.S. Army Corps Wetland Delineation Manual's three-parameter methodology for

wetland determinations, soils, hydrology, and vegetation, which is detailed in their Joint Permit Application and Freshwater Delineation Report, dated December 2024 (see Appendix C).

The delineation included three (3) wetland areas: Wetland #1, Wetland #2, and Wetland #3. The acreage for each wetland area is estimated at 31.63 acres, 0.56 acres, and 0.11 acres, respectively. These areas are shown on the Proposed Action Drawings for CWA 404 Individual Permit Application, appended to the B. Laing Freshwater Delineation Report (Appendix C).

The results of this delineation indicate 9.4 acres of wetlands will be filled as a result of the Proposed Action. The 9.4 acre impacted area is comprised of three (3) separate impacted wetland areas, estimated at 8.88 acres (Wetland #1 Impacted Area); 0.39 acres (Wetland #2 Impacted Area); and 0.08 acres (Wetland #3 Impacted Area).

See Appendix C for additional details, including mapping of the delineated wetlands and impacted areas.

4.4.2.2 Potential Impacts

Per B. Laing's findings, under the Proposed Action, 9.4 acres of freshwater wetlands will be filled. As detailed in B. Laing's Joint Permit Application (Appendix C), most of the wetlands to be filled are a result of previous agricultural activities (ditching having gone fallow) and are inundated with invasive species (e.g., buckthorn). These existing wetlands do not provide significant ecological value, and their reconfiguration and/or removal is not considered a significant ecological impact. Additionally, the proposed action includes positive hydrologic impacts through ditching and other stormwater management features which will restore previously-removed hydrological connections to ensure the upstream and downstream flows are maintained.

The Proposed Action has the potential to temporarily increase sediment mobilization by stormwater. Potential stormwater impacts are discussed further in Section 4.3 and in the attached Stormwater Management Plan (Appendix H). Any such impacts will be mitigated as described therein.

The Proposed Action will require a CWA 404 Individual Permit Application from USACE and a Section 401 Water Quality Certification from NYSDEC. A copy of the Joint Permit Application is provided in Appendix C. As a result of the new freshwater regulations taken effect on January 1, 2025, a Jurisdictional Determination (JD) from NYSDEC will be applied for in accordance with 6 NYCRR Part 664, and if appropriate, NYSDEC Freshwater Wetland Permit application will be added to the Joint Permit Application. All work will be performed in accordance with the applicable permits and regulatory requirements.

4.4.2.3 Proposed Mitigation Measures

As discussed above, there will be an estimated 9.4 acres of delineated wetlands impacted by the Proposed Action. Per the Joint Permit Application prepared by B. Laing, mitigation is proposed to be completed under the Ducks Unlimited Wetland in Lieu Fee system. However, details of mitigation activities will ultimately be subject to USACE and NYSDEC concurrence, and may vary from the proposed mitigation included in the B. Laing application. For additional information, including the proposed wetland mitigation areas, see Appendix C.

There are no other potential impacts to surface waters or wetlands that require mitigation.

4.5 NOISE

A detailed Noise Impact Assessment was completed for operational components of the Proposed Action, and is included in Appendix F. This section summarizes the Noise Impact Assessment methodology and findings, and includes additional discussion of potential noise impacts associated with construction of the proposed facility.

4.5.1 Existing Environmental Setting

The facility will be located on the west side of NYS Route 22 between Salmon River Road and Irish Settlement Road on tax parcels 245.-4-40.1, 245.-4-16.2, 245.-4-41, and portions of 245.-4-22.11 in the Town of Plattsburgh, Clinton County, New York. The Site is geographically situated approximately one (1) mile southwest of the Plattsburgh International Airport and is bordered on the east by railroad tracks and NYS Route 22. Residential and commercial lots exist to the north and south and the Site is bordered on the west by mostly wooded lands. The lands are currently vacant, undeveloped and are zoned Industrial. Daytime environmental ambient sound levels were recorded at two (2) different locations within the vicinity of the facility. Ambient levels at each location were collected over two (2) separate 30-minute intervals and are reported as equivalent continuous sound levels (Leq) in dB(A) (see Appendix F). Observed sound levels ranged from 48.9 dB(A) in a quiet residential area to 65.7 dB(A) in the vicinity of NYS RT 22. Based on collected measurements and a review of land use in the vicinity of the Site, the current predominant source of noise is from vehicular traffic along transportation corridors, including NYS Route 22 and Salmon River Road. For nighttime ambient sound levels, a conservative deduction of 10 dB(A) was applied to the daytime ambient measurements.

To account for baseline existing conditions in the noise projection analysis, existing ambient conditions were established across the study area using the field measurements and a review of adjacent land uses.

The existing noise conditions considered in the noise projection analysis are graphically presented in Appendix F. In general, for daytime conditions, the transportation corridor along NYS RT 22 was assigned a sound level of 64.8 dB(A) (the lowest measurement taken in the vicinity of NYS RT 22, which provides a conservative assessment), with sound levels decreasing over distance to the east to be reflective of the measured conditions in the residential areas proximal to the Site. The nighttime ambient conditions were determined using the same approach but with the 10 dB(A) reduction previously described.

4.5.2 Potential Impacts

There is no New York State noise code that regulates noise attributable to the Proposed Action. However, the NYSDEC's program policy "Assessing and Mitigation Noise impacts" ("NYSDEC Noise Policy") offers guidance for assessing and mitigating noise impacts. The Town of Plattsburgh has a local noise ordinance that applies to the Proposed Action. In consideration of this, potential noise impacts resulting from the Site are evaluated against the Town of Plattsburgh noise ordinance and the NYSDEC Noise Policy.

Construction Noise

Construction-associated noise will be produced during construction of on-site infrastructure, including installation of roadways, parking areas, utilities, stormwater management areas, and buildings. Construction noise is an unavoidable impact of land development activity and will vary daily and by season, but will be limited to daytime hours (7 am – 5 pm Monday through Friday, and 8 am – 5 pm on Saturdays). Noise will originate from the use of heavy equipment for land clearing, earthmoving, and facility construction. Impacts will be highly variable as equipment moves around the site and external construction areas.

Residential receptors to the north of the site are separated from the limits of disturbance by approximately 1,000 ft of dense vegetation. Noise levels generally decrease at an attenuation rate of 6 dB(A) per doubling of distance, without factoring for additional reductions from conditions such as intervening topography and vegetation or atmospheric absorption. In other words, a receptor located approximately 100 ft from the source would be expected to experience a level that is 6 dB(A) less than a receptor located 50 ft from the source. The presence of dense vegetation may reduce noise levels further between 3 to 7 dB(A) per NYSDEC guidance. Due to the distance between construction activities and dense intervening vegetation, construction activities are not anticipated to negatively impact residential receptors to the north of the Site.

Residential receptors to the east of the Site are proximal to NYS RT 22. Based on the current ambient conditions along this corridor, additive sound contribution from construction related activities will not result in an appreciable negative impact to these receptors.

During the construction of the stormwater management infrastructure, construction related activities will be within approximately 600 ft of residential receptors. While an area of intervening vegetation will provide attenuation, these receptors have the potential to experience short-term impacts during daytime construction when construction activities are occurring at the south end of the Site. Best management practices (BMPs), discussed in section 4.5.3 of this report, will be put in place to minimize potential noise impacts of these receptors during the construction phase of the Site.

In general, when considering the potential noise impact related to construction, it should be noted that construction noise differs from operational noise in several ways:

- Construction noise is highly variable and somewhat unpredictable depending on the type of equipment and its location relative to a receptor. Construction traffic noise varies by vehicle and by where along the travel path the vehicle is located relative to the receptor;
- Construction will occur during daytime hours when it is less likely to adversely affect outdoor activity unless that activity is based on recreation or similar outdoor uses that may rely on quiet conditions; and
- Construction activity is generally short-term and more acceptable as such.

Operational Impacts

Given the potential for long-term impacts, a noise projection analysis (Appendix F) was completed to assess potential noise impacts associated with operation of the Site.

In order to assess the potential impacts associated with the proposed Site, projected future conditions were modeled in SoundPlan® to determine potential noise impacts during both daytime and nighttime operations. To provide a conservative assessment, rooftop-mounted mechanical equipment was modeled at a higher-than-anticipated sound power level, and all noise sources were assumed to be operating at maximal capacity and continuously. Due to the additive nature of noise, both the daytime and nighttime operating scenario accounted for existing ambient noise levels. See Appendix F for more details on each scenario.

Appendix F illustrates the projected sound levels resulting from both daytime and nighttime operating scenarios. Under both daytime and nighttime operating scenarios, predicted sound levels at residential receptors are significantly below the 61 dB(A) threshold identified by the Town of Plattsburgh noise ordinance, other than at locations along NYS Route 22 where existing daytime ambient sound levels already exceed 61 dB(A). For additional detail on noise projection scenarios, resultant sound level, and the predicted increase over ambient conditions, see Appendix F.

Sound levels to the north (residential area) and to the east (along NYS RT 22) remain virtually unchanged from current conditions under both operating scenarios. For the daytime operating scenario, sound levels are predicted to increase by 1 dB(A) or less at residential receptors to the south of the Site. According to NYSDEC guidance policy, this level of increase over ambient is likely to be imperceptible. However, nighttime operations were found to have the potential to increase ambient conditions by up to 6 dB(A) at residential receptors to the south of the Site. This is largely due to assumption that all rooftop mechanical equipment is modeled at conservatively-high sound power levels and operating at maximal capacity and continuously, combined with the conservative assumption of existing nighttime ambient conditions. Although actual noise level increases are likely to less than projected under these highly conservative assumptions, a projected increase of 6 dB(A) represents a potentially significant noise impact.

4.5.3 Proposed Mitigation Measures

Construction Noise

As described in section 4.5.2 of this report, construction related activities have the potential to result in short-term noise impacts during the daytime when construction activity is occurring at the south end of the Site. To mitigate potential impacts, the following BMPs will be employed during the construction phase:

At a minimum the following mitigation measure will be incorporated into the various phases of site development to reduce potential noise impacts.

- Construction activities will be limited to daytime hours;
- All construction equipment will be maintained with properly functioning noise reduction muffler systems per manufacturer's specifications as part of construction contracts and contractor responsibilities;
- Earth-moving equipment and dump trucks will be restricted from "tail gate banging" during sensitive times of the day (early morning and late evening) and when operating near residential receptors;
- Building construction near adjacent residential receptors will consider phasing opportunities and scheduling work to reduce potential noise impacts by erecting buildings, berms, stockpiling materials, structure placement, etc. to interrupt sight lines and therefore reduce noise levels being generated in the direction of sensitive receptors as construction advances on-site;

- Haul roads, access drives, materials storage areas, staging areas, etc. will be placed as far from sensitive receptors and internal to central portions of the site to the greatest extent practicable; and
- Noise control equipment shrouding and/or temporary noise control fencing/walls will be installed when necessary to prevent significant off-site noise impacts.

Operational Noise

The results of the highly conservative model presented in the Noise Impact Assessment indicate a potential to increase sound levels by up to 6 dB(A) at nearby residences to the south of the Site, a potentially significant impact. The NYSDEC guidance policy indicates sound pressure level increases above ambient of up to 5 dB(A) are considered "unnoticed to tolerable." As such, it was determined that mitigation should include an additional 2 dB(A) of sound control to mitigate noise impacts below the level of significance. As a result, mitigative measures were explored to eliminate potential acoustical impacts to these receptors during nighttime operations. Those mitigation measures include:

- Selecting alternate facility mechanical equipment with lower levels of sound emissions;
- Selecting alternate locations for facility mechanical equipment;
- Installing noise control shrouding/encapsulation on facility mechanical equipment;
- Installing noise control fencing along the south margins of the Site;
- Installing noise control walls/fencing on the facility roof between the facility mechanical equipment and residential receptors;
- Other technological or operational measures that will reduce noise impacts by at least 2 dB(A); and
- Upward-revision of existing ambient sound level conditions based on additional ambient sound observations.

To demonstrate this mitigation approach, additional model scenarios were developed that incorporated a noise barrier wall constructed on the roof around the facility mechanical equipment, and to a height of 2 ft above the mechanical equipment noise source. Under this scenario, the maximum observed increase in nighttime sound level at proximal receptors is reduced to 4 dB(A), a level which does not constitute a potentially significant impact. Although the rooftop wall approach is the mitigation approach represented in the model, alternate mitigation approaches consistent with the level of noise control represented in this scenario remain viable alternative mitigation options.

For additional detail on the operation noise mitigation assessment, see Appendix F.

4.6 VISUAL RESOURCES

4.6.1 Existing Environmental Setting

4.6.1.1 Inventory of Aesthetic Resources

An inventory of aesthetic resources within a 5-mile radius has been developed in accordance with the NYSDEC Program Policy: Assessing and Mitigating Visual and Aesthetic Impacts (DEP-00-2). The inventory of aesthetic resources includes resources of statewide importance within the 5-mile radius, such as: national, state, and municipal parks, national wildlife/state game refuges, nature/historic preserve areas as well as listings on the National Register of Historic Places. The resource inventory is attached as Table 2 *Inventory of Aesthetic Resources*. A corresponding figure depicting the location of each resource is provided as Figure 6 and 6a *Location Map – Inventory of Aesthetic Resources*. A summary of the resources is presented below in Section 4.6.2.

In addition, Saratoga Associates (SA) completed a viewshed analysis, representative photographic simulations, and mitigation recommendations for the Proposed Action in accordance with DEP-00-2. This is outlined in their Technical Memorandum - Summary Visual Resource Assessment, dated March 3, 2025 (Technical Memorandum), included in Appendix E.

Although the Final Scoping Document dictates a SEQRA Visual Environmental Assessment Form (EAF) will be prepared for the Proposed Action as part of the DEIS, a Visual EAF Addendum has not been completed. NYSDEC eliminated the requirement, as the substance of the Visual EAF Addendum has been incorporated into the Full EAF. A copy of the Full EAF for the Proposed Action is included in Appendix A of the Final Scoping Document (Appendix A).

4.6.1.2 Historic and Cultural Resources

On March 16, 2023, New York State Office of Parks and Historic Preservation (NYS OPRHP) issued a findings letter (Appendix B) concluding that no properties, including archeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by the Proposed Action. As such, historic and cultural resources will only be discussed in this report in relation to visual and aesthetic resources.

Table 2 *Inventory of Aesthetic Resources* identified 32 properties listed on the National Register of Historic Places within a 5-mile radius. According to the viewshed analysis mapping completed by SA, there are no listed historic properties within a 2-mile radius that has “Likely Project Visibility”. However,

there is one property eligible for listing, Chapel Hill, located at 107 Salmon River Road. Current views of the Site property from Chapel Hill are screened by intervening topography and vegetation.

4.6.2 Potential Impacts

As described above, to assess potential visual impacts of the proposed project, SA conducted a viewshed analysis within a 2-mile radius. Significant topographic and vegetative screenings protect the project location from view from most directions except the northeast. As described in the SA Technical Memorandum (Appendix E), these areas are mainly along I-87 and in open areas associated with the Plattsburgh Airport.

The SA viewshed analysis identified five (5) visual sensitive resources (VSRs) as having potential visibility of the Proposed Action. The 5 VSRs identified did not include the historic register eligible Chapel Hill property at 107 Salmon River Road. Through further analysis, SA determined that potential views of the Proposed Action the 5 VSR locations identified do not constitute a significant adverse visual impact due to limited views of the site, limited accessibility of the VSRs, and/or limited duration of views of the Proposed Action due to the VSR being located along a transportation corridor.

The SA Technical Memorandum includes a series of photographs collected by SA on October 22, 2024, from three (3) Key Observation Points (KOPs) discussed below. These vantage points are representative of those areas having potential visibility or "Likely Project Visibility" (and the visual sensitive resource referenced above), as identified on the viewshed mapping (see Appendix E) of the proposed facility and include visually sensitive areas, various users, and the general landscape character. The following table summarizes these specific KOPs:

Location	**Applicable KOP and Photographs**
NYS Route 22 Bridge (I-87/Adirondack Northway overpass)	KOP 1; Photographs 1 and 2
NYS Route 22 (north of Salmon River Road, near #4025)	KOP 2; Photographs 3 and 4
South Junction Road (I-87/Adirondack Northway overpass)	KOP 3; Photographs 5 and 6

The following is an excerpt from the SA Technical Memorandum, which details the findings of the KOP analysis.

***KOP 1**: State Route 22 Bridge (I-87/Adirondack Northway overpass).*

***Existing View:** The view from KOP 1 is comprised of an open expanse of roadway and associated line paint and guard rails in the foreground. The roadway is lined with a mis of deciduous vegetation in fall color and at various stages of growth. Human-made elements dominate the view from the foreground road surface, and roadside utility lines and a telecommunications/cell tower in the middle ground. The view is from an elevated position in the overall landscape, looking down the open unobstructed view corridor created by the roadway. The combination of open view and elevated position allows for views above the middle ground vegetation to a silhouetted background ridge. Although dull with little contrast against the sky, the ridge acts as the focal point of the view drawing the attention of the viewer.*

***Simulated View:** With the Project in place, portions of the building are minimally visible in the center of the view, above the middle ground vegetation and below the background ridge. From a distance of approximately 3,430 feet the building appears as one large mass, with minimal visual distinction between texture and color. Tree removal associated with clearing of the site is visible without drawing attention.*

The varying heights and uneven tops of the remaining foreground and background vegetation softens the edges of the building, by breaking the horizontal lines, helping it to blend more with the existing landscape. The additional human-made features with the Project in place, however the focal point of the view remains the background ridge.

Viewer expectations in regard to landscape character and land-use are not changed by the addition of the proposed Project, and the resource is not impacted.

***KOP 2**: State Route 22 (north of Salmon River Road, near #4025)*

***Existing View:** The view from KOP 2 looks northwest at the Project just south of the proposed entrance. The view consists of a rural/suburban residential property, mown grass yard and multiple human-made elements on the left side of the frame, while the State Route 22 corridor dominates the center foreground. Characteristics include blacktop, line striping, utility infrastructure and a parallel roadside swale and associated scrub vegetation. Beyond the foreground roadway and manicured lawn, there is a hedgerow of various types and sizes of deciduous and evergreen vegetation. The vegetation adds interest to the view through the contrast in texture and color, creating a focal point drawing attention form the road corridor. An additional building is visible through the roadside vegetation, as viewer looks ahead.*

***Simulated View:** With the Project in place, the middle ground vegetation has been largely removed to allow for the Project building and associated site work and landscaping. The addition of the project adds additional land-use to the view, with the scale of the Project in contrast to the adjacent residential property. At a distance of 740 feet the building features are discernable with various shades of colors,*

and patterns breaking up the façade into sections. The division of the building with texture and color reduces the perceived scale of the building within the landscape. The unbroken horizontal line created by the top of the building attracts attention as a human-made feature within the landscape, where before a natural line interacted with the skyline.

Introduction of the Project to the view adds additional features to the landscape character and land-use altering the specific view. The surrounding landscape and scenic integrity of State Route 22 at this KOP are low. This transfers to viewer expectations for this stretch of road which are low therefore, the resource is not impacted.

***KOP 3**: South Junction Road (I-87/Adirondack Northway overpass)*

***Existing View:** The view from KOP 3 is similar to KOP 1 and is comprised of multiple road corridors. Foreground scrub vegetation screens the majority of the I-87 road surface as it fights to grow amongst the guardrail and shoulder. Beyond the foreground road surface human-made elements are screened by the roadside vegetation that defines the I-87 corridor. The fall, leaf-off foliage adds texture to the foreground and provides ample roadside screening. The conditions of the day combined with the time of year creates a dull image with now bright colors or unique contrasts to draw a viewer attention. The view does not contain a focal point.*

***Simulated View:** With the Project in place, portions of the building are minimally visible in the center of the view, above the middle ground vegetation. From this distance the building appears as one large mass, with minimal visual distinction between texture and color. There is no visibility of the site work and associated clearing, as the vegetation along the I-87 corridor blocks it. The building itself rises into the sky, yet the remaining foreground and background vegetation helps to soften the edges of the building and allow it to blend more with the existing landscape.*

Viewer expectations in regard to landscape character and land-use are not changed by the addition of the proposed Project, and the resource is not impacted.

SA further concludes in their Technical Memorandum "…it is clear that the Project will not cause a diminishment of the public enjoyment and appreciation of any scenic or historic resource, or one that impairs the character or quality of such a place. As such, the Project components of the [Proposed Action] will not result in an adverse visual impact."

4.6.3 Proposed Mitigation Measures

As discussed above and detailed in the Technical Memorandum (Appendix E), potential impacts to visual resources are anticipated to be minimal. Any potential impacts will be further mitigated by minimizing

the amount of vegetation removal to retain as much vegetation for screening purposes as possible. No additional mitigation is required.

4.7 TRANSPORTATION

4.7.1 Existing Environmental Setting

Traffic

Creighton Manning (CM) completed a Traffic Assessment in March 2025 for the Proposed Action. A copy of the Traffic Assessment is included as Appendix D. This section summarizes the information contained therein.

The proposed entrance to the Site is located on NYS Route 22. NYS Route 22 traverses through the Town of Plattsburgh and is classified as an urban minor arterial. Per the CM Traffic Assessment: "In the project corridor, NY Route 22 provides a 10 ½-foot-wide travel lane in each direction with two to four feet of paved shoulder on either side of the roadway. Near the Site, the posted speed limit is 40 mph, transitioning to 45 mph immediately north of the Site driveway. Land uses along NY Route 22 generally consist residential uses with some commercial uses mixed in. No sidewalks are provided; pedestrians and bicyclists use the shoulder of the road."

The CM Traffic Assessment specifically evaluated the following intersections to assess impacts from the Proposed Action considering trip generation:

- NY Route 22/I-87 Exit 36 Northbound Off-Ramp;
- NY Route 22/I-87 Exit 36 Southbound On-Ramp;
- NY Route 22/Irish Settlement Road (County Route 32);
- Irish Settlement Road (County Route 32)/Pleasant Ridge Road/Archie Bordeau Road;
- NY Route 22/I-87 Exit 36 Southbound Off-Ramp;
- NY Route 22/Archie Bordeau Road/Gas Station Driveway; and
- NY Route 22/Salmon River Road (County Route 33).

The Traffic Assessment included the collection of vehicle speeds and volumes on NYS Route 22 from an automatic traffic recorder (ATR). CM recorded approximately 5,600 vehicles per day (vpd) on NY Route

22 in an area adjacent to the Site. The speed was determined from the 85th percentile to be 50-mph in both northbound and southbound directions.

Aviation

The Site is located within one mile from the Plattsburgh Airport. A request was made to the Federal Aviation Administration (FAA) to determine if the Proposed Action would have any impacts to the nearby Plattsburgh Airport or any flight paths. The FAA determination is described below in Section 4.7.2.

4.7.2 Potential Impacts

Traffic

Deliveries and outbound shipments from the facility will primarily occur during normal business hours of 7 AM to 5 PM, Monday through Friday. It is estimated that there will be approximately 100 trucks per day entering and exiting the Site with a peak rate of ~10 trucks per hour. The CM Traffic Assessment calculated trip generations and evaluated the Level of Service (LOS) for the existing and proposed conditions. The following table included in the CM Traffic Assessment summarizes the estimated trips in a typical day, based on the estimated 200 employee daytime shift and anticipated truck deliveries.

Trip Generation Distribution

Time (Hour Beginning)	Employees (Cars)			Deliveries (Trucks)			Total		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
6:00 AM	70	10	80	5	5	10	75	15	90
7:00 AM	81	12	93	4	5	9	85	17	102
8:00 AM	15	2	17	10	8	18	25	10	35
9:00 AM	2	2	4	7	10	17	9	12	21
10:00 AM	2	2	4	13	10	23	15	12	27
11:00 AM	10	10	20	9	13	22	19	23	42
12:00 PM	10	10	20	8	8	16	18	18	36
1:00 PM	5	5	10	8	8	16	13	13	26
2:00 PM	4	25	29	9	9	18	13	34	47
3:00 PM	13	93	106	7	9	16	20	102	122
4:00 PM	7	48	55	8	8	16	15	56	71
5:00 PM	5	10	15	4	5	9	9	15	24
Total	**224**	**229**	**453**	**92**	**98**	**190**	**316**	**327**	**643**

As discussed in the CM Traffic Assessment, the Proposed Action is estimated to generate 102 trips in the AM peak hour (85 entering, 17 exiting) and 122 trips in the PM peak hour (20 entering, 102 trips exiting). Trucks trips will vary during peak hours (from about 1 to 8% of the trip generation). The analysis conservatively assumes the traffic generated is all new trips, even though about 90% of the employees

from the existing warehouse and distribution facilities on Pleasant Ridge Road will relocate to this location. As such, there will be a smaller net increase in overall network traffic. The table below, which is included in the CM Traffic Assessment presents the conservatively high peak-hour trip generation assumptions.

Trip Generation Summary

Land Use	Size	Vehicle Type	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Distribution Center	774,750 SF 200 Employees	Passenger	81	12	93	13	93	106
		Truck	4	5	9	7	9	16
		Total	**85**	**17**	**102**	**20**	**102**	**122**

Traffic projections were used for the 2027 design year (projected project completion) to evaluate impacts of the Proposed Project. CM noted that the traffic volume on Irish Settlement Road increased by over 2 percent over the past several years, while daily traffic volumes decreased by roughly 0.4 percent south of I-87 Exit 36 and increased 0.1% north of the same location. CM used a projected annual increase of 2% for the estimated completion of the project in 2027 to be conservative.

The 2027 No-Build traffic volumes were developed from the general background growth without the Proposed Action. Traffic generated by the Proposed Action was based on the existing traffic volumes and expected travel routes. Figures 4, 5, and 6 included in the CM Traffic Assessment (Appendix D) depict the distribution patterns and traffic volumes for the Build and No-build scenarios.

The resulting intersection LOS and capacity analysis was completed using Snychro 11. The following table, which is included in the Traffic Assessment summaries the results of the analysis.

Level of Service Summary

Intersection		Control	AM Peak Hour			PM Peak Hour		
			2024 Existing	2027 No-Build	2027 Build	2024 Existing	2027 No-Build	2027 Build
NY Route 22/I-87 NB Off-Ramp		U						
I-87 NB Off-Ramp WB	LR		C (18.4)	C (21.6)	D (25.5)	B (13.9)	C (20.9)	C (24.7)
NY Route 22/I-87 SB On-Ramp**		U						
Route 22 NB	L		A (7.6)	A (7.8)	A (7.8)	A (8.0)	A (8.2)	A (8.3)
NY Route 22/Irish Settlement Rd		U						
Irish Settlement Rd EB	LR		D (31.2)	**F (51.0)**	**F (59.6)**	C (21.9)	D (34.4)	**E (46.8)**
Route 22 NB	L		A (7.9)	A (8.1)	A (8.2)	A (8.2)	A (8.3)	A (8.4)
Irish Settlement Rd/Pleasant Ridge Rd		U						
Irish Settlement Rd EB	L		A (7.6)	A (7.6)	A (7.6)	A (7.7)	A (7.8)	A (7.8)
Irish Settlement Road WB	L		A (7.5)	A (7.6)	A (7.6)	A (7.4)	A (7.5)	A (7.5)
Archie Bordeau Road NB	LTR		B (11.7)	B (12.3)	B (12.5)	B (12.3)	B (12.9)	B (13.4)
Pleasant Ridge Rd SB	LTR		B (11.9)	B (12.6)	B (12.9)	B (13.5)	B (14.6)	C (15.0)
NY Route 22/I-87 SB Off-Ramp		U						
I-87 SB Off-Ramp WB	LR		C (19.5)	C (24.3)	D (30.1)	C (17.2)	C (19.8)	C (24.6)
NY Route 22/Archie Bordeau Road		U						
Archie Bordeau Road EB	LTR		B (12.2)	B (12.8)	B (13.2)	B (12.1)	B (12.5)	B (13.1)
Gas Station Drwy WB	LTR		B (13.2)	B (14.2)	C (15.0)	B (11.2)	B (11.6)	B (12.5)
NY Route 22 NB	L		A (7.6)	A (7.6)	A (7.7)	A (7.9)	A (8.0)	A (8.1)
NY Route 22 SB	L		A (8.0)	A (8.1)	A (8.1)	A (7.7)	A (7.8)	A (8.0)
NY Route 22/Site Drwy		U						
Site Drwy EB	LR		--	--	B (12.2)	--	--	B (14.7)
NY Route 22 NB	L		--	--	A (7.7)	--	--	A (8.2)
NY Route 22/Salmon River Road		U						
Salmon River Road EB	LR		B (11.7)	B (12.3)	B (12.7)	B (12.2)	B (12.8)	B (13.2)
NY Route 22 NB	L		A (7.5)	A (7.6)	A (7.6)	A (8.1)	A (8.2)	A (8.3)

EB, WB, SB = Eastbound, Westbound, Southbound intersection approaches
L, T, R = Left, Through, Right turn movements
X (Y.Y) = Level of service (Average delay in seconds per vehicle)
**Intersection was analyzed using HCM 2000 methodologies due to intersection signing layout

As shown by the table above, the LOS analysis indicates the majority of the intersections currently operate adequately and will continue to do so after project completion. The Proposed Action will result in minimal increases in delay with the exception of the eastbound approach of Irish Settlement Road to Route 22. This intersection is recommended for monitoring by CM for future signalization.

The following excerpt from the CM Traffic Assessment summarizes the findings of the traffic analysis:

- *The proposed development will generate 102 new trips during the AM peak hour and 122 new trips during the PM peak hour of which about 8% to 13% will be truck trips.*
- *The level of service analysis indicates that most of the study area intersections will not experience any significant increase in delay after full build out of the proposed development.*

- *The eastbound approach of Irish Settlement Road has been and will continue to operate with long delays during the peak hours. This analysis conservatively estimates that the approach will operate at LOS E/F during the peak hours but expects this conditions to be limited to the peak hours.*
- *Signalizing the intersection will reduce delays but we recommend the intersection be monitored given that most of the employees of the new center will relocated from the existing facility, and unsignalized operations may be adequate for most of the day.*
- *The project is located on the outside of a curve with clear views (sight lines) looking north and south along Route 22.*

As part of the CM Traffic Assessment, a sight distance feasibility evaluation at the proposed driveway was also completed which determined the available sight distances exceed 1,000 ft in each direction.

As indicated by the CM Traffic Assessment, the Proposed Action is not anticipated to have any potentially significant impact on traffic. CM recommends the monitoring of the eastbound approach of Irish Settlement Road to NYS Route 22 to determine if signalization is needed.

Aviation

The FAA reviewed the Proposed Action in accordance with 49 U.S.C., Section 44718 Title 14 of the Code of Federal Regulations, part 77, and issued a "Determination of No Hazard to Air Navigation" on January 6, 2025 (Appendix B). As such, there will be no impacts to aviation as a result of the Proposed Action.

4.7.3 Mitigation Measures

Traffic

The results of the CM Traffic Assessment indicate the Proposed Action does not have the potential to significantly impact traffic and therefore does not warrant mitigation. However, in light of the current and projected continuing long delay conditions during peak hours and unrelated to the Proposed Action, future signalization of the eastbound approach of Irish Settlement Road to NYS Route 22 may be necessary. CM recommends that the intersection be monitored to determine this need.

Aviation

No impacts to aviation will occur as a result of the Proposed Action. As a result, no additional mitigation is required.

4.8 AIR QUALITY

4.8.1 Existing Environmental Setting

The Site is currently vacant land and there are no onsite activities or emission sources that have an impact on air quality. The Site is geographically situated approximately one mile southwest of the Plattsburgh International Airport and is bordered on the east by railroad tracks and NYS Route 22. Residential and commercial lots exist to the north and south, and the Site is bordered on the west by mostly wooded lands. Based on the land use surrounding the Site, current sources of emissions include minor combustion related emissions associated with household and commercial comfort and domestic heat generation, and combustion emissions related to vehicular traffic within the surrounding transportation corridors, including NYS Route 22, the Northway, and CR 33 (Salmon River Road).

The NYSDEC info Locator Map was reviewed to determine if there are any federally regulated air emission sites within the vicinity of the Site. The closest facilities to the Site that maintain authorizations related to air emissions are more than one mile from the Site. Due to the geographic separation, emissions from these facilities are unlikely to impact ambient air quality in the vicinity of the Site as the permitting process would have required the facilities to demonstrate compliance with the United States Environmental Protection Agency's (USEPA) National Ambient Air Quality Standards (NAAQS) for criteria pollutants, as well as State regulatory air quality standards.

Regulatory Background

The federal Clean Air Act (CAA), the NAAQS (40 CFR part 50), and state law govern air quality in New York State. New York State, through the State Implementation Plan (SIP), has accepted delegation for portions of the CAA and operates a permitting program through NYSDEC's Division of Air Resources (DAR). In general, the level of permitting required for a facility under NYSDEC is determined by the amount of criteria pollutant (carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide) emissions from regulated stationary sources and the geographic location of a facility.

4.8.2 Potential Impacts

Construction Related Emissions

Construction-related emissions are primarily attributable to combustion emissions (exhaust) from mobile heavy equipment (e.g., bulldozers, excavators, front-end loaders, etc.) and fugitive particulate matter (dust) emissions associated with land clearing, earth works, material handling, and equipment movement on unpaved areas. Emissions attributable to these sources are temporary in nature and generally confined to the construction site. No regulated stationary emission sources subject to NYSDEC permitting will be

used during the construction process. Therefore, construction related impacts to air quality will be short term and trivial in nature.

Operational Emissions

Air emissions during operations will be attributable to mobile sources and stationary sources. Mobile source emissions will be related to employee personal vehicles and truck traffic entering and exiting the Site. Stationary source emissions will be produced by intermittent (routine maintenance and emergency) operation of diesel fired generators and from two (2) individual natural gas boilers, each with a heat input rating of 8 million Btu per hour. It should be noted that the natural gas boilers will serve as supplementary/backup heat sources that are intended only to be used in the case of degradation of geothermal well field performance.

NYCRR 201-3 defines exempt and trivial activities that have been determined to have a minimal impact on air quality and therefore do not require authorization for use from NYSDEC's DAR. Backup generators, such as those for the Site, are exempt from permitting due to their intermittent usage. Furthermore, combustion sources used as a furnace or heat source with a maximum heat capacity of less than 10 million Btu/hr are exempt from permitting due to a low potential to emit based on sizing. Therefore, the Site will not require a stationary source air pollution control permit or registration due to a regulatory pre-determined lack of impact on air quality.

4.8.3 Mitigation Measures

No potentially significant adverse impacts to air quality will result due to construction or operational activities and therefore, no mitigation measures are warranted. However, the Site will implement best management practices (BMPs) to minimize air emissions associated with the Site.

- Heavy trucks and construction equipment will not be allowed to idle during product loading and unloading, or other inactive times;
- Generator operating hours will be monitored to ensure annual operating hours do not exceed 500 hours, in accordance with NYSDEC's exemption requirements;
- Soil disturbance during construction activities will be limited to the amount of area needed, and water and/or approved palliatives will be applied to minimize the potential for fugitive dust generation;
- A stabilized construction exit will reduce sediment from being tracked onto public roads, reducing the potential for air borne particulate emissions; and

- The main storage areas will be minimally conditioned (50ºF during the heating season and 85ºF during the cooling season), reducing energy demand and associated emissions.

4.9 SOLID WASTE AND HAZARDOUS MATERIALS

4.9.1 Existing Environmental Setting

The Site consists of vacant land which was historically used for agricultural purposes. There are no existing improvements or infrastructure at the Site to produce solid or hazardous waste. Based on prior desktop research findings (i.e., NYSDEC Full Environmental Assessment Form (EAF) and the Final Scoping Document), there are no material concerns which would warrant the need for remedial action at the Site.

The neighboring Plattsburgh International Airport, located east of the Site and situated between I-87 to the west and Lake Champlain to the east, is the location of the former Plattsburgh Airforce Base (PAFB). PAFB is listed under the State Superfund Program (NYSDEC Site Code 510003) and has four (4) inactive solid waste landfills. The NYSDEC Site record includes contaminants of concern at the former Airforce Base such as pesticides, ignitable wastes, PCB oil and solvents. Currently, with exception of PFAS compounds, the entire property at the former base has been investigated and, where appropriate, remedial operations have been completed or are in process. The Airforce is in the process of assessing potential PFAS compound impacts which are commonly found in Aqueous Fire Fighting Foam and historically used at the base. As of the spring 2020, residences neighboring the former PAFB were found to have been impacted by PFAS compounds and Point of Entry Treatment Systems were installed at each residence to eliminate the exposure. An Expanded Site Inspection (ESI) conducted between 2018 and 2020 at the former PAFB revealed that off-Base migration of groundwater with PFOS and PFOA is likely occurring in the shallow sand aquifer along the former PAFB boundary. The Remedial Investigation currently underway for PFAS will further investigate 10 areas of concern (NYSDEC Environmental Remediation Database Details for Site Code 510003).

4.9.2 Potential Impacts

Although PFAS contamination investigations are ongoing at the former PAFB, a state superfund site, there are no known impacts to the Site. Additionally, due to project scope, the Proposed Action will have no impact on ongoing activities at the former PAFB site, which is located more than one mile from the Site, separated by infrastructure, including railroad, state and interstate roads, and multiple structures/buildings as well as the existing, operating portions of the airport itself.

A Solid Waste Summary dated January 22, 2025, was prepared by RMS for the UMS Property LLC, New Warehouse and Distribution Facility to detail the quantities and types of solid wastes to be generated from

the proposed building and its operations (Appendix K). According to the summary, the Proposed Action would generate solid waste from the warehouse and distribution portion of the proposed facility. This would be limited to cardboard, plastic pallet wrapping, and wood pallets, and other packaging materials. The weekly volume for the solid waste is estimated at 45 cubic yards. The solid waste generated from the office portion and the anticipated 200 employees of the proposed facility is estimated at 30 cubic yards per week. This waste will primarily consist of paper products from office use, along with minor food and packaging waste from employee break areas. Recycling bins for all cardboard, and plastics and returnable bottles will also be made available at the break and office areas.

All cardboard and wood products produced by the warehouse and distribution center will be fully recycled, while the break areas for the office portion of the project will have recycling bins for all cardboard, plastics, and returnable bottles, as described above. The remaining approximately 75 cubic yards of solid waste produced per week will be disposed of at the Clinton County Landfill, located in the Town of Schuyler Falls, approximately 9.5 miles northwest of the Site, which has the capacity to accept this volume of waste. Waste generated by the Proposed Action will be partially offset by consolidating operations into a single facility which will result in the reduction on waste generation at other currently operational facilities, and the total volume of waste will be managed by local facilities. The Proposed Action will therefore not result in generation of significant additional amounts of solid waste, and as all wastes will be handled by local facilities with adequate capacity to accept them.

No production, vehicle maintenance, or industrial activities will occur at the Site. As such, there would be no hazardous waste generated, or hazardous materials used at the proposed facility, including petroleum bulk storage (PBS) and chemical bulk storage (CBS). Spill prevention and response procedures will be outlined in the facility's Stormwater Management Report, which will be used to minimize the potential for leaks, spills and other releases (i.e., petroleum from heavy equipment) from entering any body of water during construction. Good housekeeping and preventative maintenance practices during construction will also help prevent spills before they occur.

As such, the Proposed Action will not result in potentially significant adverse impacts with regard to solid waste or hazardous materials.

4.9.3 Mitigation Measures

As the Proposed Action will not result in significant adverse impacts with respect to solid waste or hazardous materials, no additional mitigation is required.

4.10 UTILITIES AND INFRASTRUCTURE

4.10.1 Energy

4.10.1.1 Existing Environmental Setting

There are currently no utilities, including electrical service, serving the Site. Electrical service connection is available to the site property from the NYS Route 22 right-of-way.

4.10.1.2 Potential Impacts

The March 2025 Mechanical Basis of Design (BOD) report, developed by DuBois & King, Inc. (Appendix J) for the Proposed Action discusses several options for the proposed mechanical system and the energy demands of the system. Per correspondence with UMS personnel, the facility will utilize the *Geothermal Heat Pump HVAC System Option* (Geothermal Option) presented in the BOD report. The Geothermal Option optimizes energy efficiency and prioritizes renewable through the use of geothermal heat pumps and limiting natural gas demand and usage.

The Geothermal Option includes installation of the following equipment:

- 32 50-ton external (rooftop) HVAC units (RTUs)
- 10 10-ton external (rooftop) HVAC units (RTUs)
- 9 internally-located heat pump units
- 2 supplemental natural gas fired boilers

Service connection requirements for the Geothermal Option include 16,000 CFH of natural gas capacity, 11,829 kW of electrical connected load (including other connected building loads in addition to building conditioning loads), and 8,028 kW of electrical demand. Annual energy consumption associated with the Geothermal Option is 13,490,093 kWh. As the natural gas fired boilers are included for supplemental and emergency use only, annual natural gas consumption has not been calculated. The annual energy consumption estimates were determined based on local weather data, peak heating and cooling demands, assumed equipment operating hours, and minimum equipment performance/efficiencies.

The Site will be served by New York Electric & Gas (NYSEG). As part of the Action, a three-phase electrical service and natural gas utility service piping of appropriate capacity and reliability is proposed. To accomplish this, two (2) new transformers will be installed on-site.

The service available to the Site does not currently have the capacity to meet the electrical demand for the proposed facility. However, UMS is currently coordinating with NYSEG and the New York Power Authority on necessary upgrades to the nearby NYSEG substation in support of a separate project. These upgrades will result in sufficient capacity to serve the Proposed Action. The implementation of energy conservation through selection of the Geothermal Option limits overall impacts on energy usage which "projects…little or no use of natural gas under ideal conditions" (BOD report), and results in the lowest total projected energy consumption among the available HVAC system options. As such, there are no potentially significant adverse impacts to energy as a result of the Proposed Action.

4.10.1.3 Mitigation Measures

As the Proposed Action mitigates potential impacts by design, no additional mitigation is required.

4.10.2. Telecommunications

4.10.2.1 Existing Environmental Setting

There are currently no utilities, including telecommunications serving the Site. Telecommunications service connection is available to the site property from the NYS Route 22 right-of-way.

4.10.2.2 Potential Impacts

Under the Proposed Action, there will be one telecommunications line which will be buried. The location of the proposed line is shown on Sheets C400 and C401. Although there are no anticipated long-term adverse impacts associated with the line, short-term impacts during installation could occur. These include impacts associated with soil disturbance (i.e., erosion and sedimentation) as well as potential safety risks resulting from the open trench. These potential impacts will be minimized through adequate erosion and sediment controls, which will be installed prior to construction as well as the re-establishment of vegetation. Specific erosion and sediment controls are shown on Sheets C700 through C704 (RMS Project Plans) and are discussed in Section 4.3 above.

4.10.2.3 Mitigation Measures

As there are no anticipated significant adverse impacts, no additional mitigation is required.

4.10.3. Water Supply

4.10.3.1 Existing Environmental Setting

The Site is not currently served by public water supply. Public water supply connection is available to the Site property from the NYS Route 22 Right-of-Way (ROW).

4.10.3.2 Potential Impacts

Water demand for the Proposed Action include 3,500 gallons per day (gpd) for consumptive uses (potable, sanitary, cleaning, etc.) and 2,350 gallons per minute (gpm) for emergency fire suppression. Per the Town of Plattsburgh Water and Wastewater Department letter, dated December 17, 2024, the Plattsburgh Consolidated Water District has sufficient capacity to serve the Site's anticipated demand of 3,500 gallons per day of sanitary usage. A copy of the letter is provided in Appendix I.

It was determined by RAN Fire Protection Engineering (RAN), in their Fire Water Supply Analysis memo, dated December 5, 2024, that the existing municipal water supply capacity of 500 gallons per minute (gpm) to support fire protection would be insufficient for the Proposed Action. To address this, a new fire protection water storage tank, fire pump, and hydrant loop will be installed at the Site. (See RMS Project Plans, Sheets C400, C401, and C402 for proposed locations of each fire water system component.)

Additionally, as part of the proposed fire water system, the proposed warehouse will be equipped with an NFPA-13 compliant sprinkler system consisting of ESFR sprinklers and in-rack sprinklers. Additional details on the fire protection water system, including the sprinklers is provided in RAN's Fire Water Supply Analysis included in Appendix I.

Under the Proposed Action, a 500 gpm-rated fire pump will be supplied by a water storage tank with an anticipated capacity of at least 480,000 gallons. The fire protection water storage tank would supply the fire sprinkler systems within the warehouse building and the fire hydrants located around the warehouse. As a result of the proposed fire protection water storage tank and fire pump installation, the Proposed Action would not adversely impact the municipal water supply demand.

As part of the Proposed Action, a new water service line will be installed extending from NYS Route 22 ROW to an existing municipal pump house. An easement will be provided for the approximate 2,312 ft - waterline extension. (See RMS Project Plans, Sheets C400 and C401.)

Although the Plattsburgh Consolidated Water District has the capacity to serve the Site, there will be a need to extend the existing waterline to the Site. Approvals for the waterline extension are anticipated from NYSDEC, Clinton County Health Department, and the Town of Plattsburgh Water and Wastewater

Department. Coordination will also be required with New York State Department of Health. Potential short-term impacts include those associated with the installation, such as soil disturbance which has the potential for erosion and sedimentation. These potential impacts will be minimized through adequate erosion and sediment controls, which will be installed prior to construction as well as the re-establishment of vegetation.

As the municipal water supply has adequate capacity to serve the Proposed Action inclusive of water storage development on-site, and temporary construction impacts associated with extending service to the Site will be limited and controlled through standard erosion and sediment controls, and as the Proposed Action includes extending the service line to an existing municipal pump house which will benefit the municipal system, the Proposed Action will not result in potentially significant adverse impacts to water supply.

4.10.3.3 Mitigation Measures

As the Proposed Action mitigates potential impacts by design and will not result in potentially significant adverse impacts to water supply, no additional mitigation is required.

4.10.4 Wastewater

4.10.4.1 Existing Environmental Setting

The Site is currently vacant. Public sewer does not serve the Site. As part of the Proposed Action, an onsite wastewater treatment system (OWTS) will be installed and located south of the warehouse building to serve the wastewater needs of the Site. (See RMS Project Plans, Sheet C401.) RMS prepared Engineering Report for On-Site Wastewater Treatment System, dated January 2, 2025, which details the design of the system. A copy of the report is included in Appendix I.

As part of the OWTS, there are total of three (3) proposed septic tanks, a 5,500-gallon settling tank, 2,500-gallon septic tank, and 2,000-gallon auxiliary septic tank, two (2) absorption fields, and a pump station. Wastewater will first enter the settling tank and then flow to the 2,500-gallon septic tank to ensure adequate settlement and filtration. It will then enter the auxiliary tank, which provides additional storage volume in the event of pump failure before it is alternatively pumped to the two (2) absorption fields, where it is absorbed into the ground.

As discussed in the RMS Engineering Report, all wastewater on-site will be generated from sanitary use (e.g., bathroom facilities) with the exception of the automatic floor washing machines. The water from the floor washing machines will drain to a floor sink equipped with a bag filter to prevent pollutants (e.g., particulates from dirt) from entering the OWTS.

The estimated total daily maximum flow for the sanitary use is 1,800 gallons per day (GPD) and is 750 GPD for the automatic floor cleaning system. RMS estimates a total daily maximum flow of 3,315 gallons, which reflects a 30% increase to the combined estimated total for both sanitary use and the floor washing machines to account for future growth.

A NYSDEC SPDES Permit (GP-0-15-001) Groundwater Discharge of Treated Sanitary Sewage will be required for the proposed OWTS. Approvals are also anticipated from the Town of Plattsburgh Water and Sewer Department and Clinton County Health Department.

4.10.4.2 Potential Impacts

Under the Proposed Action, an OWTS will be installed at the Site. Potential impacts could occur during construction of the OWTS, including those associated with soil disturbance which has the potential for erosion and sedimentation. Additionally, if not maintained properly, the OWTS could have the potential for groundwater contamination. However, the OWTS will be maintained and inspected in accordance with the recommended operations and maintenance schedule outlined in the RMS Engineering Report (Appendix I). Additionally, the proposed septic tanks will be equipped with high water alarms to alert any blockages, as the tanks will have effluent filters and ventilation pipes. Furthermore, power outages should not impact the OWTS and its operation, as the Site will be equipped with generator back-up power.

As the Site will be served by the OWTS which will comply with all the requirements of GP-0-15-001 to protect environmental resources, the Proposed Action will result in no potentially significant adverse wastewater impacts.

4.10.4.3 Mitigation Measures

The Proposed Action mitigates potential impacts by design. The OWTS will comply with all local and state regulations set forth by NYSDEC, the Town of Plattsburgh Water and Sewer Department and Clinton County Health Department. As such, no additional mitigation is required.

5.0 UNAVOIDABLE ADVERSE IMPACTS

5.1 NATURAL RESOURCES

5.1.1 Geology

Construction activities associated with the Proposed Action will temporarily disturb the existing soil profile during clearing and grading activities. However, these soils will be used onsite for grading and will ensure the Site is developed in such a manner to prevent stormwater runoff and to re-establish vegetation, where applicable.

5.1.2 Ecological Resources

The Proposed Action will result in the temporary and permanent removal of common vegetation and habitat. As there are no known occurrences of rare, threatened, or endangered species on-site, it is not anticipated that any of these species will be affected. However, as there is potential for modification of existing habitat types as well as temporary and permanent displacement of the existing common wildlife, some minor adverse impacts to ecological resources may occur as a result of the project.

The Proposed Action will also result in the filling of approximately 9.4 acres of freshwater wetlands. Although the wetlands to be filled mostly exist within the south/western fields and were the result of human activity and are currently subject to invasive species, the Proposed Action will include compensatory wetland mitigation offsite. This will be achieved through the purchase of mitigation bank credits or other mechanisms deemed acceptable to USACE and/or NYSDEC for issuance of Freshwater Wetlands Permits, and will result in greater wetland acreage at higher-quality wetland habitats than what currently exists at the Site.

5.1.3 Visual Resources

There will be some minor impacts to visual resources, but none is considered to be significant. Some key observation points (KOPs) along NYS Route 22 will have views of the Site. However, views of Site from visual sensitive resources will not significantly differ from existing conditions. Furthermore, landscape character is not changed by the addition of the Proposed Action. As detailed in the Technical Memorandum - Summary Visual Resource Assessment (Appendix E), significant topographic and vegetative screenings will protect the Site from view from most directions except the northeast. These areas are mostly along I-87 and open areas associated with the Plattsburgh Airport. Vegetative screening will further limit the views of the Site, unless the view is from directly adjacent to the Site.

5.1.4 Traffic

Impacts to traffic are not considered to be significant. The Proposed Action will generate an estimated 102 trips during the AM peak hour and 122 trips during the PM peak hour. The study area intersections will not experience significant increase in delay as a result of these new trips. Although the eastbound approach of Irish Settlement Road with NYS Route 22 is recommended for monitoring to determine if signalization is needed, the analysis indicates long delays during peak hours currently exist. This will not alter as a result of the Proposed Action.

5.1.5 Noise

Construction Noise

As described in Section 4.5.2 of this report, construction related activities have the potential to result in short-term noise impacts during the daytime when construction activity is occurring at the south end of the Site. To mitigate potential impacts, the following BMPs will be employed during the construction phase:

At a minimum the following mitigation measure will be incorporated into the various phases of site development to reduce potential noise impacts.

- Construction activities will be limited to daytime hours;
- All construction equipment will be maintained with properly functioning noise reduction muffler systems per manufacturer's specifications as part of construction contracts and contractor responsibilities;
- Earth-moving equipment and dump trucks will be restricted from "tail gate banging" during sensitive times of the day (early morning and late evening) and when operating near residential receptors;
- Building construction near adjacent residential receptors will consider phasing opportunities and scheduling work to reduce potential noise impacts by erecting buildings, berms, stockpiling materials, structure placement, etc. to interrupt sight lines and therefore reduce noise levels being generated in the direction of sensitive receptors as construction advances on-site;
- Haul roads, access drives, materials storage areas, staging areas, etc. will be placed as far from sensitive receptors and internal to central portions of the site to the greatest extent practicable; and

- Noise control equipment shrouding and/or temporary noise control fencing/walls will be installed when necessary to prevent significant off-site noise impacts.

Operational Noise

The results of the highly conservative model presented in the Noise Impact Assessment indicate a potential to increase sound levels by up to 6 dB(A) at nearby residences to the south of the Site, a potentially significant impact. Mitigation measures will be implemented to ensure that potentially significant impacts to noise will not occur from facility operations by limiting sound level increases at proximal residential receptors to 4 dB(A) or less. Those mitigation measures may include:

- Selecting alternate facility mechanical equipment with lower levels of sound emissions;
- Selecting alternate locations for facility mechanical equipment;
- Installing noise control shrouding/encapsulation on facility mechanical equipment;
- Installing noise control fencing along the south margins of the Site;
- Installing noise control walls/fencing on the facility roof between the facility mechanical equipment and residential receptors; and
- Other technological or operational measures that will reduce noise impacts by at least 2 dB(A).

6.0 ALTERNATIVES TO THE PROPOSED ACTION

6.1 NO ACTION ALTERNATIVE

The "No Action" alternative means that the proposed warehouse and distribution center would not be constructed. However, the demand for consolidated storage and distribution operations would remain, which would result in the development at another location. As such, constructing the warehouse and distribution center would limit potential impacts by keeping them localized to the existing nearby manufacturing facility. Therefore, the no action alternative is not a reduction of impacts, but instead a shifting of impacts to another location. The disadvantages associated with the no action alternative can be considered significant and include:

- Failure to provide economic growth and development at the local and regional levels;
- Failure to maintain and create jobs; and
- Failure to meet UMS' long-term fiscal goals.

6.2 ALTERNATIVE SITES

The Site is located within one mile of UMS' existing manufacturing facility and is zoned Industrial (I*), where the proposed use is allowed by site plan approval. UMS has entered a purchasing agreement to buy the Site for the Proposed Action. UMS does not own or control additional properties in the immediate vicinity that would meet the needs of the project, including the size requirements. If another site were to be selected, it would be much further away from the existing manufacturing facility, resulting in potential increase in traffic, air impacts and associated traffic noise. The Site has been selected to minimize these impacts due to its location and current zoning designation. Furthermore, the existing community is already familiar with UMS and their existing manufacturing operations. If another site were to be selected outside of the Town of Plattsburgh or the vicinity of the existing UMS facility, potential impacts to community character may be greater in magnitude depending on the specific location.

6.3 ALTERNATIVE SIZE

The scale of the Proposed Action could be altered by a smaller building footprint. However, this would not meet the need of UMS for consolidated and expanded storage and distribution operations. This would also not eliminate potential environmental impacts resulting from a larger size building. Although an alternate scale may decrease potential impacts on natural resources, the potential impacts on traffic and the demand for utilities and community services would still remain. Additionally, the design of the

building is such that material is capable of being stored up to 90 ft in height, reducing the overall footprint of the building and allowing for more efficient material handling.

Based on initial and continuing investment toward the project, further downsizing of the Proposed Action would affect the economic viability of the project, without providing any significant environmental benefit. There are substantial costs associated with the start of the operation. These costs include: site development, equipment, permitting and environmental review. The outlay of capital dollars is substantial and continues throughout the life of the project, while a return on investment occurs only after permit issuance, commencement of operations and product sales.

7.0 ABBREVIATIONS

List of Abbreviations/Acronyms

Abbreviation/Acronym	Definition
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
USACE	Unites States Army Corps of Engineers
IDA	Industrial Development Agency
FAA	Federal Aviation Administration
UMS	UMS Property, LLC
NYSHPO	New York State Historic Preservation Office
NYNHP	New York Natural Heritage Program
DOH	Department of Health
SEQRA	State Environmental Quality Review Act
DEIS	Draft Environmental Impact Statement
RMS	Robert M. Sutherland P.C.
B. Laing	B. Laing Associates, Inc.
SA	Saratoga Associates
JMT	JMT of New York, Inc.
LOS	Level of Service
SWPPP	Stormwater Pollution Prevention Plan
PBS	Petroleum Bulk Storage
CBS	Chemical Bulk Storage
KOP	Key Observation Points
EAF	Environmental Assessment Form
OWTS	Onsite Wastewater Treatment System

8.0 REFERENCES

The following documents were used in preparation of this DEIS:

- (*Geographic Information System (GIS) | The New York State Museum*)
- *Champlain Sea | The New York State Museum*. https://www.nysm.nysed.gov/exhibitions/online/ice-ages/champlain-sea#:~:text=The%20Champlain%20Sea&text=This%20Champlain%20Sea%20lasted%20from,it%20made%2C%20creating%20the%20sea. Accessed 8 Jan. 2025.
- Isachsen, Yngvar W. and New York State Geological Survey, editors. *Geology of New York: A Simplified Account*. 2nd ed, New York State Museum/Geological Survey, State Education Dept., University of the State of New York, 2000.
- Donald W. Fisher. "Geology of the Plattsburgh and Rouses Point, New York - Vermont, Quadrangles." *New York State Museum and Science Service*, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.nysm.nysed.gov/sites/default/files/mc10_geologyplattsburghrousesptnyvtquads.pdf.
- US Geological Survey (USGS)
- *Maps | U.S. Geological Survey*. https://www.usgs.gov/products/maps. Accessed 8 Jan. 2025.
- U.S. Geological Survey, et al. *BEDROCK GEOLOGIC MAP OF THE PORT HENRY QUADRANGLE, ESSEX COUNTY, NEW YORK AND ADDISON COUNTY, VERMONT*. 2022, p. 397561. *DOI.org (Crossref)*, https://doi.org/10.1130/abs/2024NE-397561.
- Peterson, Warren Lee. *Late Wisconsinan Glacial History of Northeastern Wisconsin and Western Upper Michigan*. 1652, U.S. G.P.O., 1986. *pubs.usgs.gov*, https://doi.org/10.3133/b1652.
- *Web Soil Survey of Clinton County*. USDA Natural Resources Conservation Service, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed 8 Jan. 2025.
- Denny, Charles Storrow. *Pleistocene Geology of the Northeast Adirondack Region, New York*. 786, U.S. Geological Survey, 1974. *pubs.usgs.gov*, https://doi.org/10.3133/pp786.

- *Discover History (U.S. National Park Service)*. https://www.nps.gov/portals/history/index.htm. Accessed 8 Jan. 2025.

- *Geographic Information System (GIS) Online Map - Clinton County, New York*

  https://clinco.maps.arcgis.com/apps/webappviewer/index.html?id=65e91149b95842efa87689d950478b8d Accessed February 11, 2025.

TABLES

TABLE 1

AESTHETIC RESOURCES WITHIN 5 MILES OF THE UMS PROPOSED DISTRIBUTION CENTER

National Register of Historic Places

1. Bailey, William, House
2. Brinkerhoff Street Historic District
3. Carpenter, John B., House
4. City Hall
5. Clinton County Courthouse Complex
6. Court Street Historic District
7. D & H Railroad Complex
8. D'Youville Academy
9. First Presbyterian Church
10. Fort Brown Site
11. Hartwell, W. W., House & Dependencies
12. Hawkins Hall
13. House at 56 Cornelia Street
14. Kent-Delord House
15. Marshall, Paul, House
16. Old Stone Barracks
17. Platt, Charles C., Homestead
18. Plattsburgh Bay
19. Point, The, Historic District
20. Ritchie, Z., House
21. St. John the Baptist R. C. Church
22. Saint John The Baptist Rectory
23. Strand Theater
24. United States Oval Historic District
25. Valcour Bay
26. Vilas, S. F., Home for Aged & Infirmed Ladies
27. Wilcox, W. G., House
28. Winslow-Turner Carriage House
29. Heyworth-Mason Industrial Building
30. Lyon Street School
31. Peru Community Church
32. Valcour Island Lighthouse

State Forest Preserves

33. Macomb State Forest
34. Valcour Island State Park

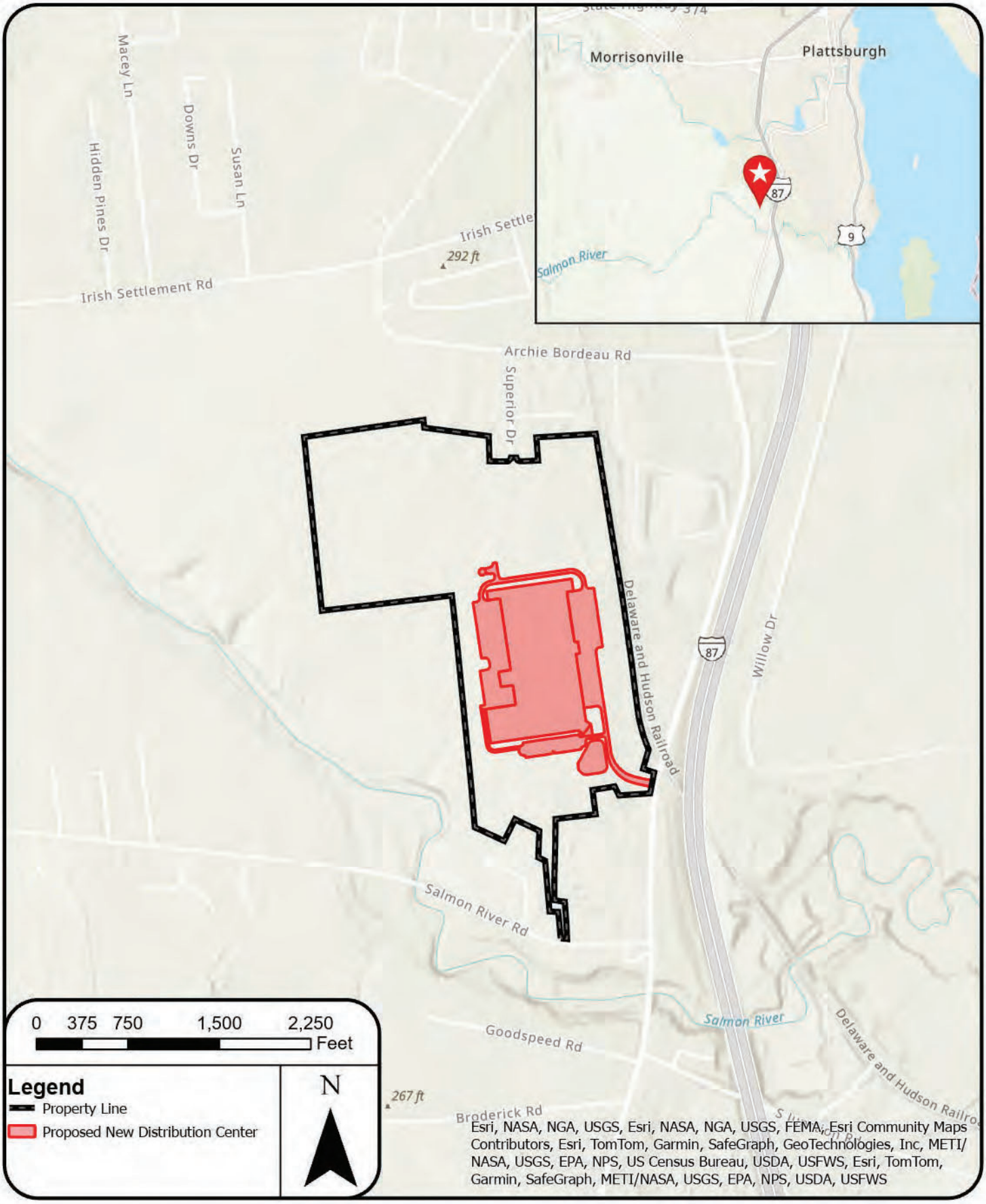
Municipal Parks

35. Adirondack Golf & Country Club
36. The Barracks Golf Course

37. Beth Israel Cemetery
38. Betty Little Arts Park
39. Bluff Point Golf Resort
40. Cliff Haven Recreation Parks
41. Clyde A. Lewis Air Park
42. East Morrisonville Park
43. Fox Hill
44. Imperial Mills Dam
45. Jefferson Dukette Memorial Field
46. LaPierre Lane Riverway
47. MacDonough Park
48. May Currier Park
49. Melissa Penfield Park
50. Old Post Cemetery
51. Peace Point Park
52. US Oval Park
53. Riverside Cemetery
54. Rotary Club Park
55. Sailor's Beach
56. Sailors Point Park
57. Samuel Champlain Monument
58. Schuyler Falls Futsal Court
59. Stone Ledge Sculpture Garden
60. SUNY Plattsburgh Community Garden
61. South Acres Park
62. South Plattsburgh Park
63. South Platt St. Park
64. Treadwell Mills Park
65. Tremblay Park
66. Trinity Park

Note: Identification number (e.g, 23.) corresponds with each resource depicted on *Figure 6 and 6a, Inventory of Aesthetic Resources.*

FIGURES



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

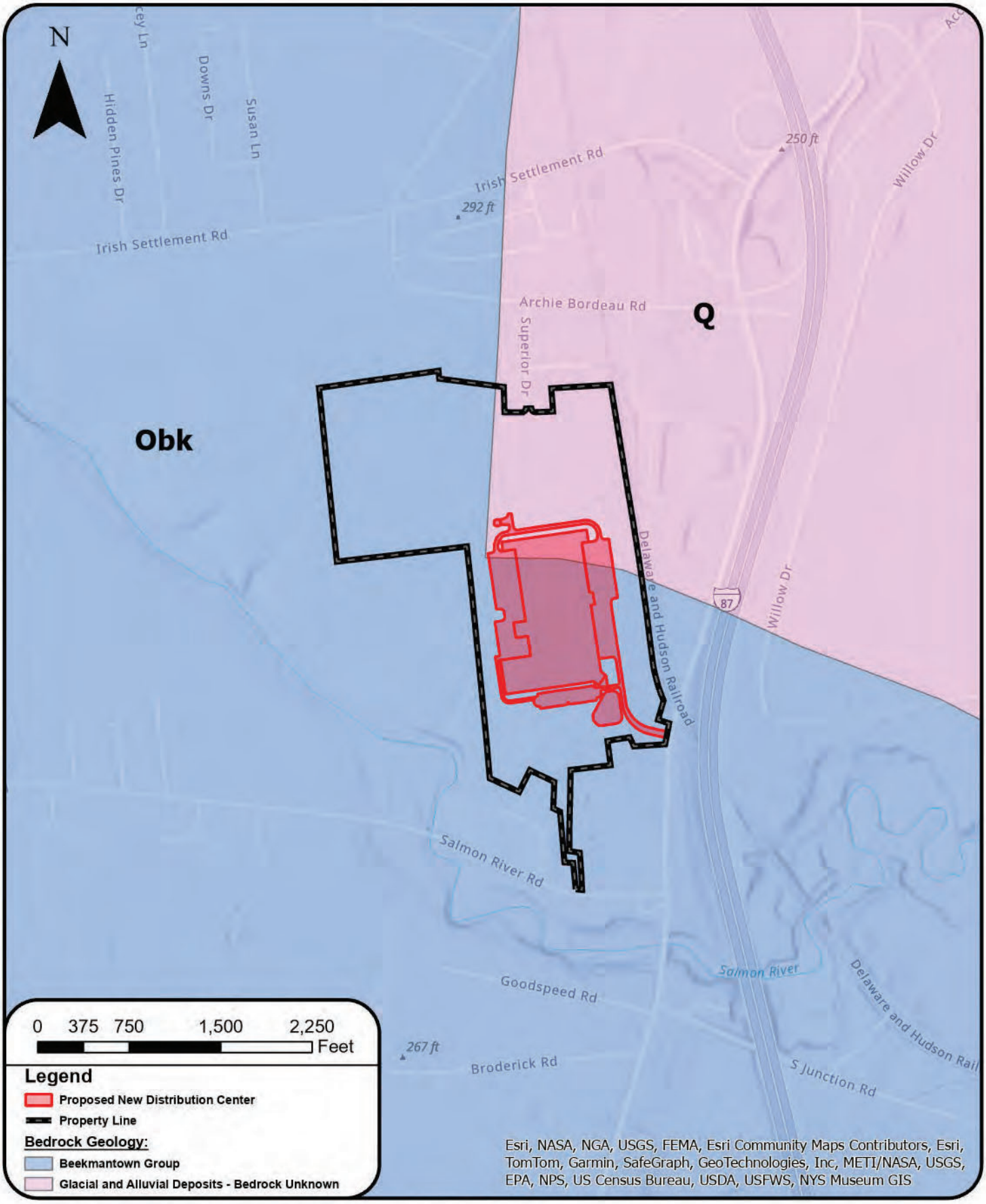
SITE LOCATION

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,500 FT	DWG NO. Site Location	FIGURE: 1



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

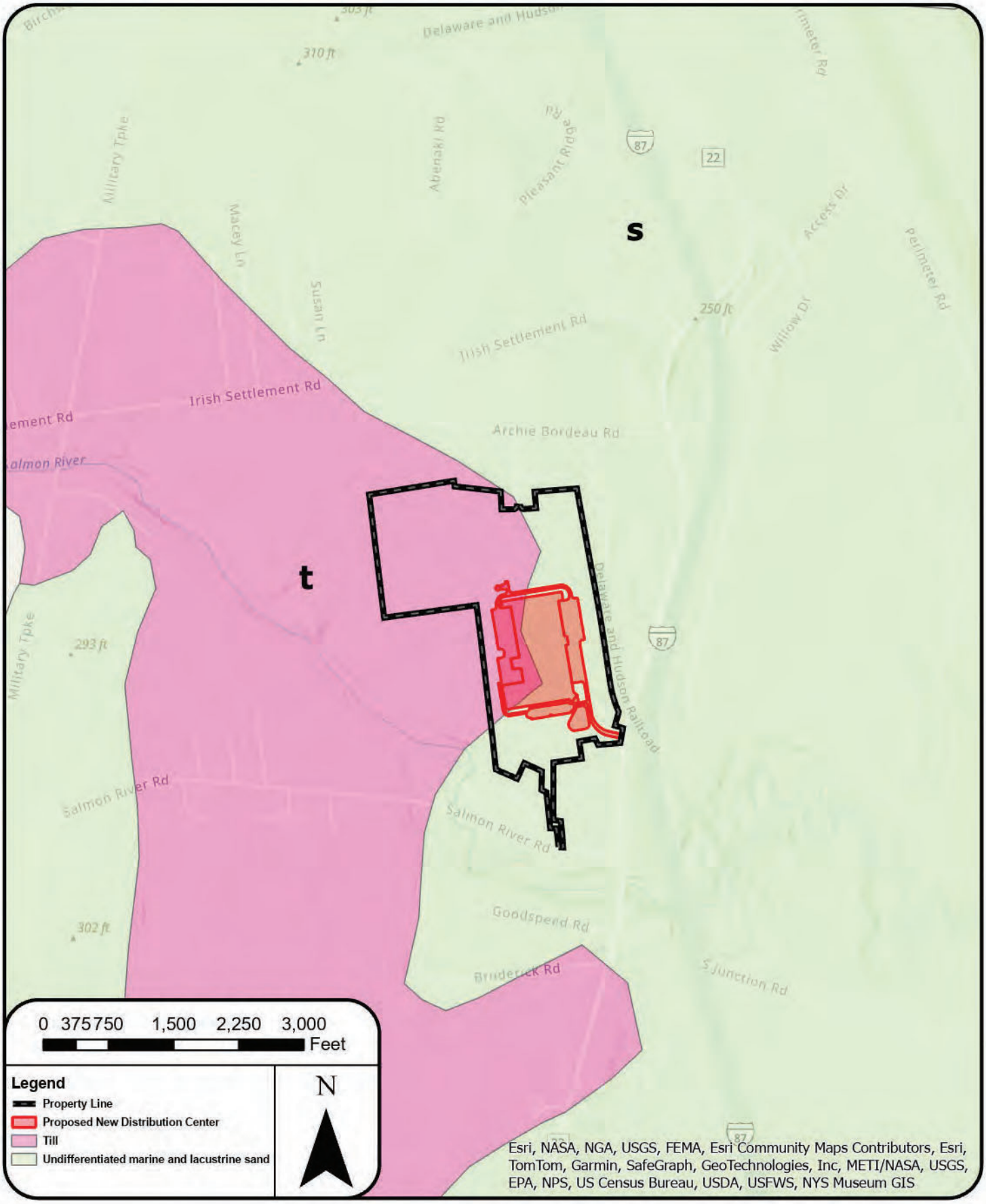
BEDROCK GEOLOGY

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,500 FT	DWG NO. Bedrock	FIGURE: 2



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

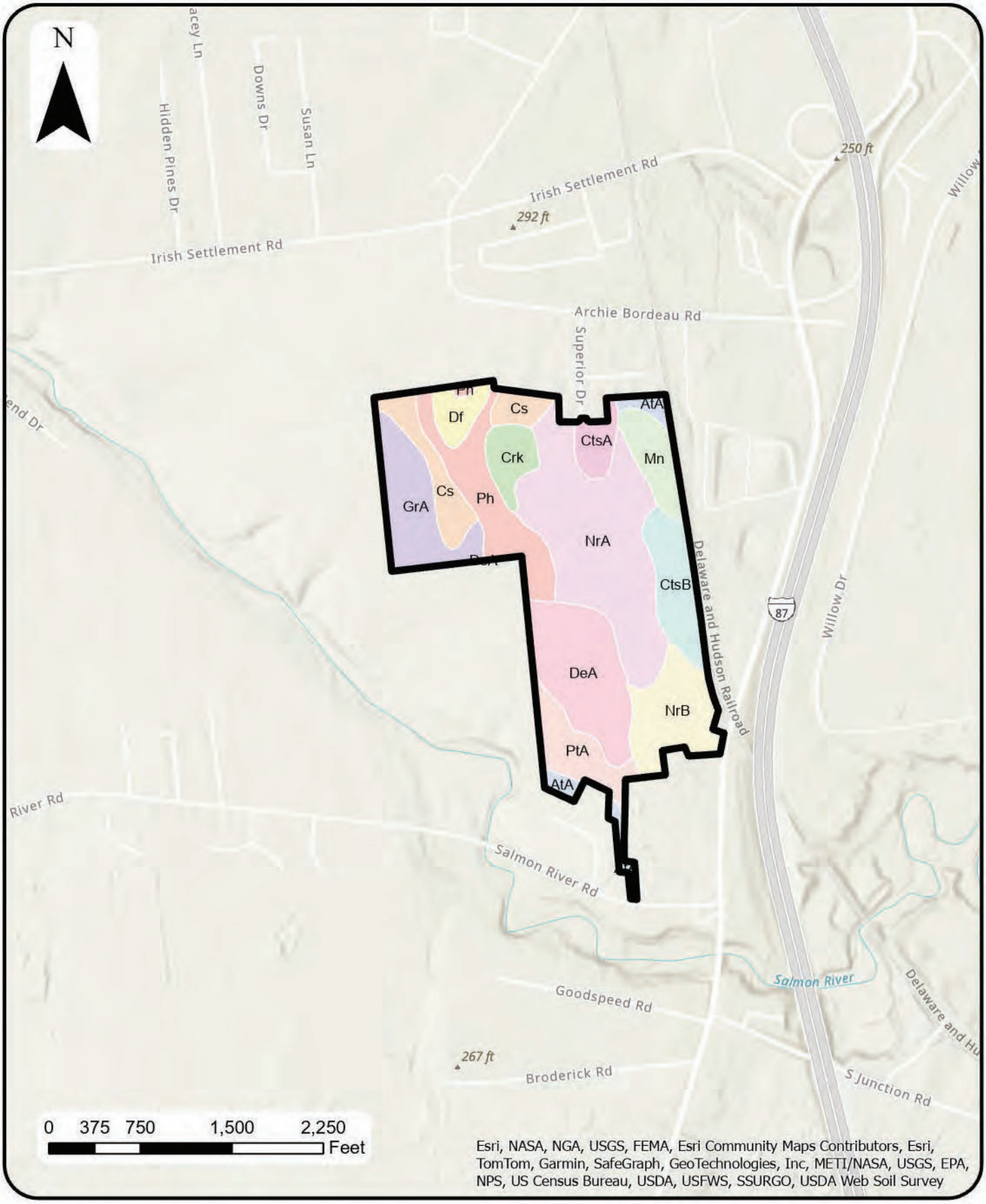
SURFICIAL GEOLOGY

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,500 FT	DWG NO. Surficial	FIGURE: 3



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

SOILS

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,500 FT	DWG NO. Soil	FIGURE: 4

Legend

Property Boundary

Mapunit Name:

- Amenia fine sandy loam, 0 to 3 percent slopes
- Cook mucky loamy fine sand
- Covert loamy sand
- Covertfalls loamy fine sand, 0 to 3 percent slopes
- Covertfalls loamy fine sand, 3 to 8 percent slopes
- Deerfield fine sand, 0 to 3 percent slopes
- Deinache fine sand
- Grattan loamy sand, 0 to 3 percent slopes
- Massena fine sandy loam
- Northway loamy fine sand, 0 to 3 percent slopes
- Northway loamy fine sand, 3 to 8 percent slopes
- Pipestone fine sand
- Plainfield loamy sand, 0 to 3 percent slopes

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, SSURGO, USDA Web Soil Survey

19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

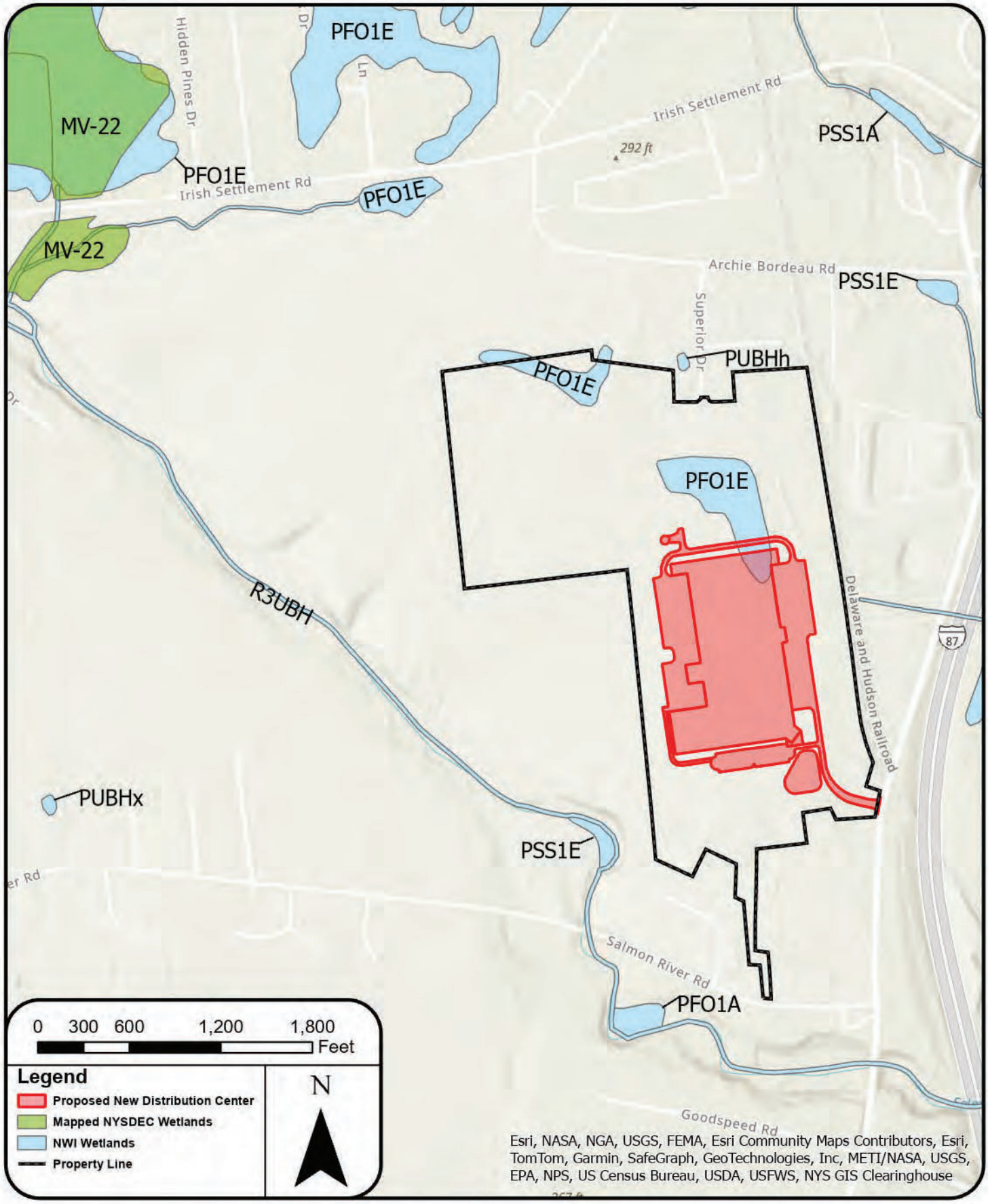
SOILS

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: -	DWG NO. Soils Legend	FIGURE: 4a



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

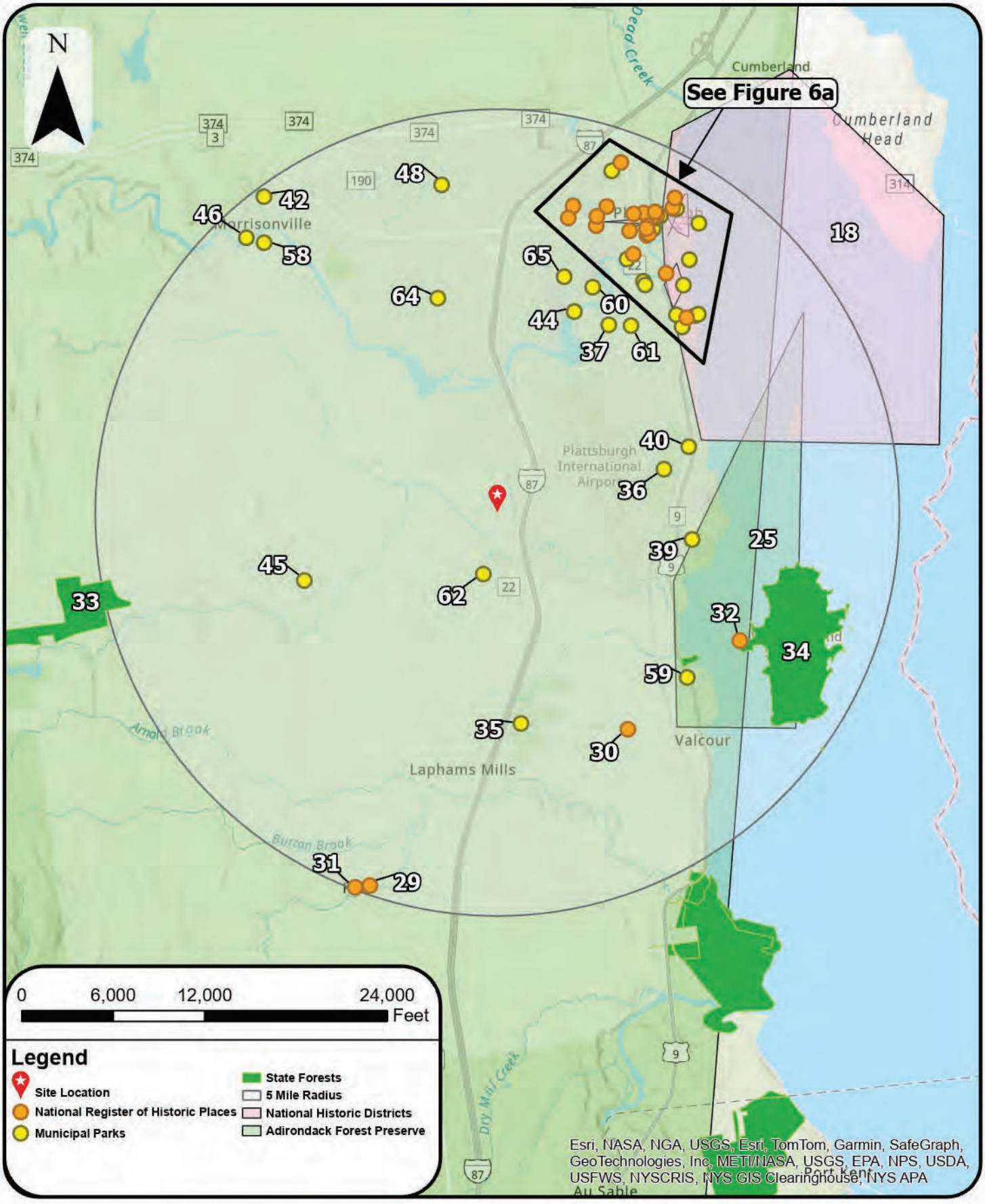
WETLANDS

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,200 FT	DWG NO. Wetlands	FIGURE: 5



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

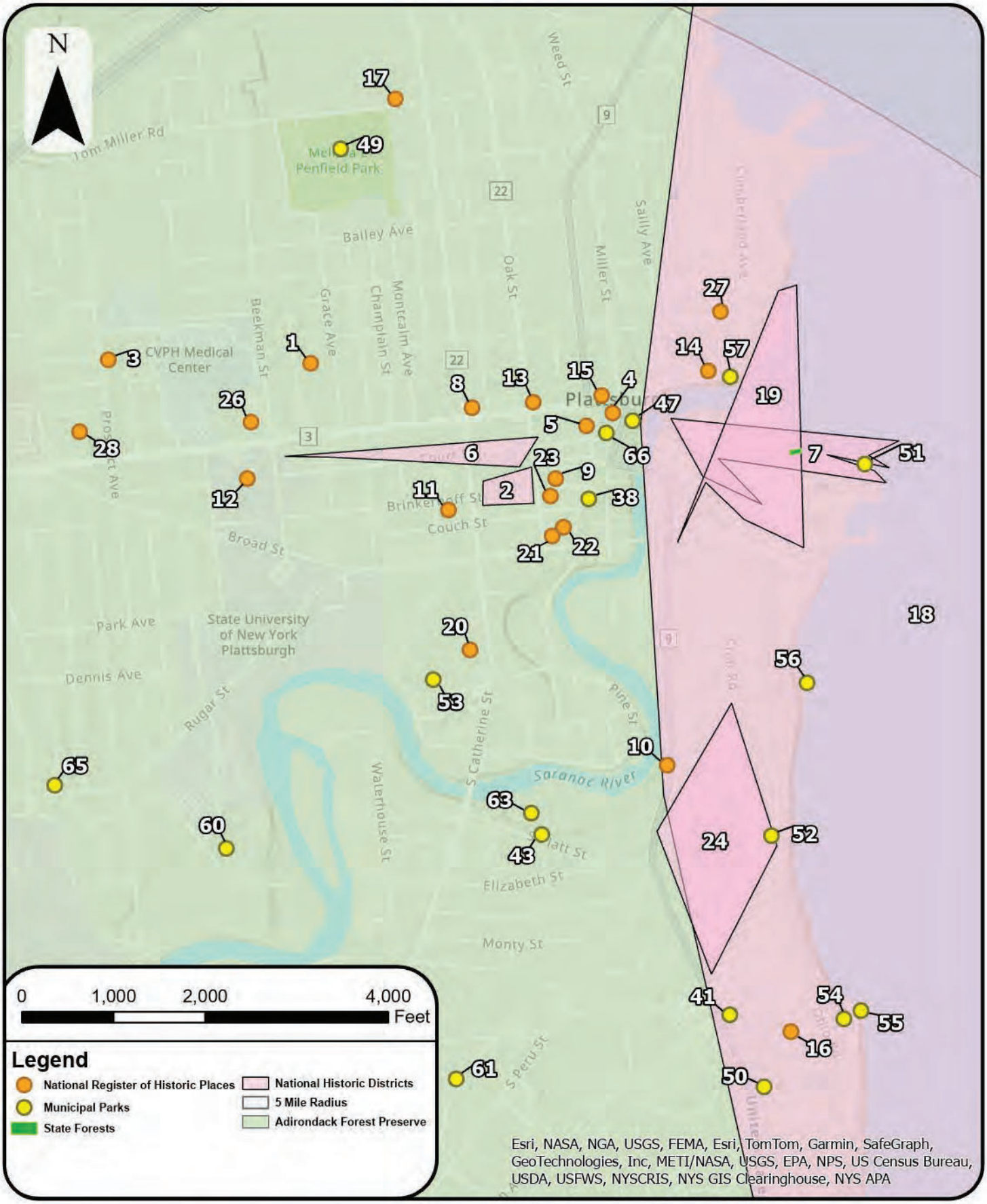
INVENTORY OF AESTHETIC RESOURCES

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 12,000 FT	DWG NO. Aesthetic Resources	FIGURE: 6



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

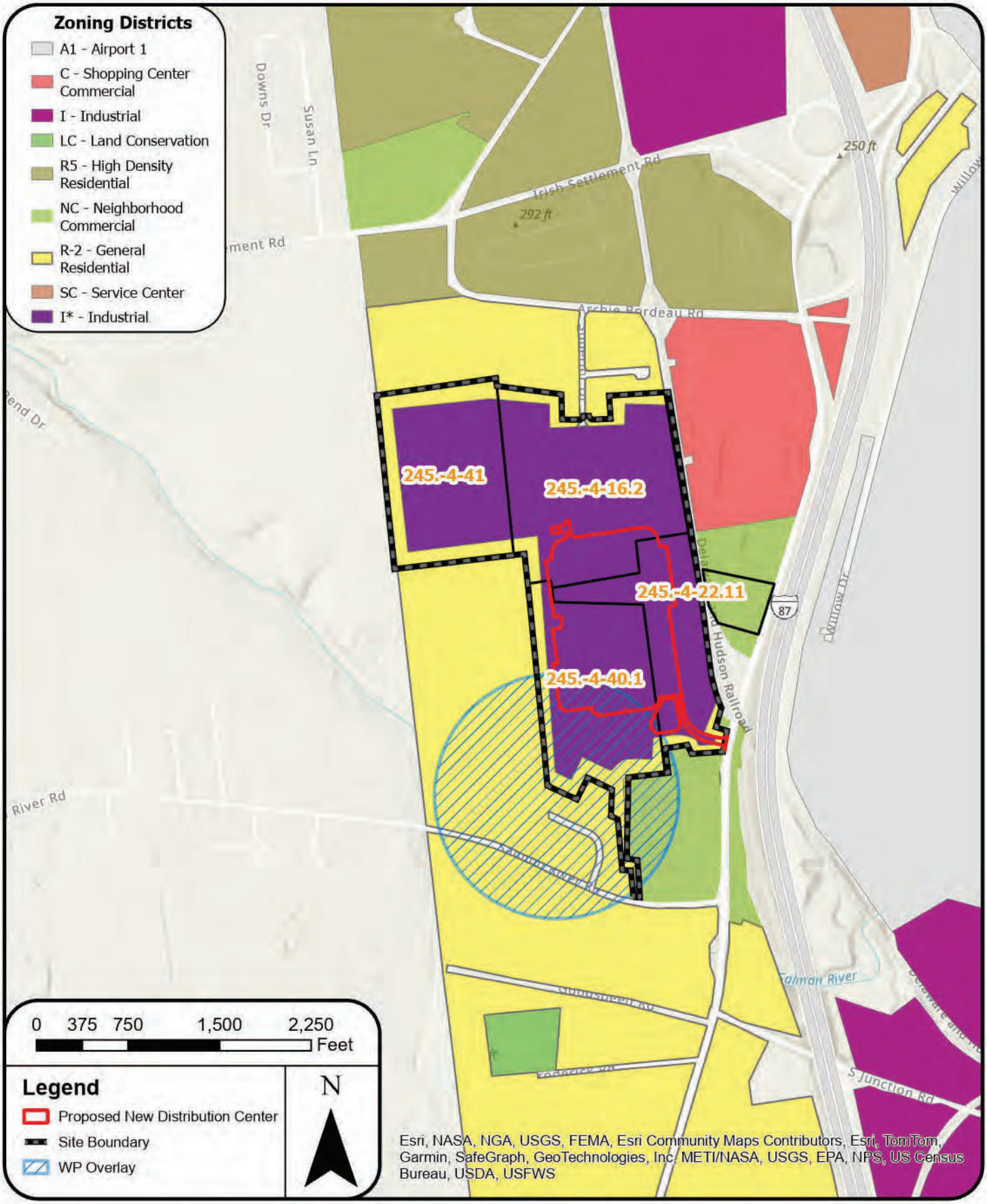
INVENTORY OF AESTHETIC RESOURCES

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 2,000 FT	DWG NO. AR - 6a	FIGURE: 6a



JMT
19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

Zoning

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,500 FT	DWG NO. Zoning	FIGURE: 7

SHEETS

SHEETS C100-D300 - RMS PROJECT PLANS

Map Notes:

1. Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of section 7209, sub-division 2 of the New York State Education Law.
2. Only copies from the original of this survey marked with an original of the Land Surveyor's embossed seal shall be considered valid true copies. (mylar prints shall be stamped with the surveyor's ink seal with an original signature)
3. Certifications indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person for whom the survey is prepared and on his behalf the title company, governmental agency, and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.
4. Copyright 2022, Robert M. Sutherland, P.C. All rights reserved.
5. The location of sub-surface improvements are approximate and compiled from field location and mapping provided by the respective utility companies. The contractor shall confirm the location of all utilities prior to the commencement of excavation.
6. Subject to any findings of an accurate abstract of title or those discoverable by inspection.
7. North arrow and bearings based on Grid North, NAD 1983 New York East Zone 18.
8. All distances shown hereon are ground distances.
9. Building offsets, as shown on this map, are not to be used for construction purposes.
10. Missing property corners were not set as a result of this survey.
11. All easements and right-of-ways of record as indicated in Title Insurance Commitment No. 23-CEN1030-ORT, issued by Old Republic National Title Insurance Company with an effective date of January 24, 2023, or easements and right-of-ways that are discoverable by inspection, are indicated hereon.

Reference Maps:

1. "Right of Way And Track Map The Plattsburgh and Dannemora Railroad, operated by The Delaware and Hudson Company, (V-16B/8)..." prepared by Office of Chairman Valuation Committee dated June 30, 1916.
2. "Map of Property Survey of Fuller Property..." prepared by Joseph W. Hogan, L.S., dated June 12, 1950 and filed in the Clinton County Clerk's Office in Map Drawer B-93.
3. "Map of Land Sold To Noel J. Brunell, Jr...."prepared by Robert H. Ladue, L.S., and filed in the Clinton County Clerk's Office in Map Book 1 Page 29.
4. "Lands of Earl W. Morehouse..." prepared by Leland Logan, P.E.& L.S., dated September 13, 1955 and filed in the Clinton County Clerk's Office in Map Drawer A-133.
5. FAI # 502-5-2.1, Section 7B-1 Map No. 379 Page 439, " Railway-Highway Crossing, Grade Seperation), lands of Calos Brand prepared by New York State Department of Public Works, dated October 20, 1958 and filed in the Clinton County Clerk's Office.
6. "Map of Survey Property T Be Conveyed By archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Kenneth Kratz, L.S., dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
7. "Survey of Lot Sold To Dale and Darla Holderman..."prepared by Robert H. Ladue, L.S., last revised June 5, 1984 and filed in the Clinton County Clerk's Office in Map Book 12 Page 35.
8. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 25, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 125.
9. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 28, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 126.
10. "Map of Survey Property to be Conveyed By Archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Johnston & Kratz Land Surveyors, L.L.S. dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
11. "Survey Map Showing Brand Subdivision 2004..." prepared by Dean H. Lashway, L.S., dated December 20, 2004 and filed in the Clinton County Clerk's Office on March 2, 2005 as Instrument # 2005-180127.
12. "Map of Survey prepared for Lisa J. Clemons showing Clemons Subdivision 2015..." prepared by Robert M. Sutherland, P.C., dated April 27, 2015 and filed in the Clinton County Clerk's Office on May 29, 2015 as Instrument # 2015-271931.
13. "Map Showing Detailed Preliminary/Final Plan For Superior Drive Subdivision 2020 Thomas LeClair Living Trust..." prepared by Dean H. Lashway, L.S., last revised on August 27, 2020 and filed in the Clinton County Clerk's Office on October 29, 2020 as Instrument # 2020-311129.

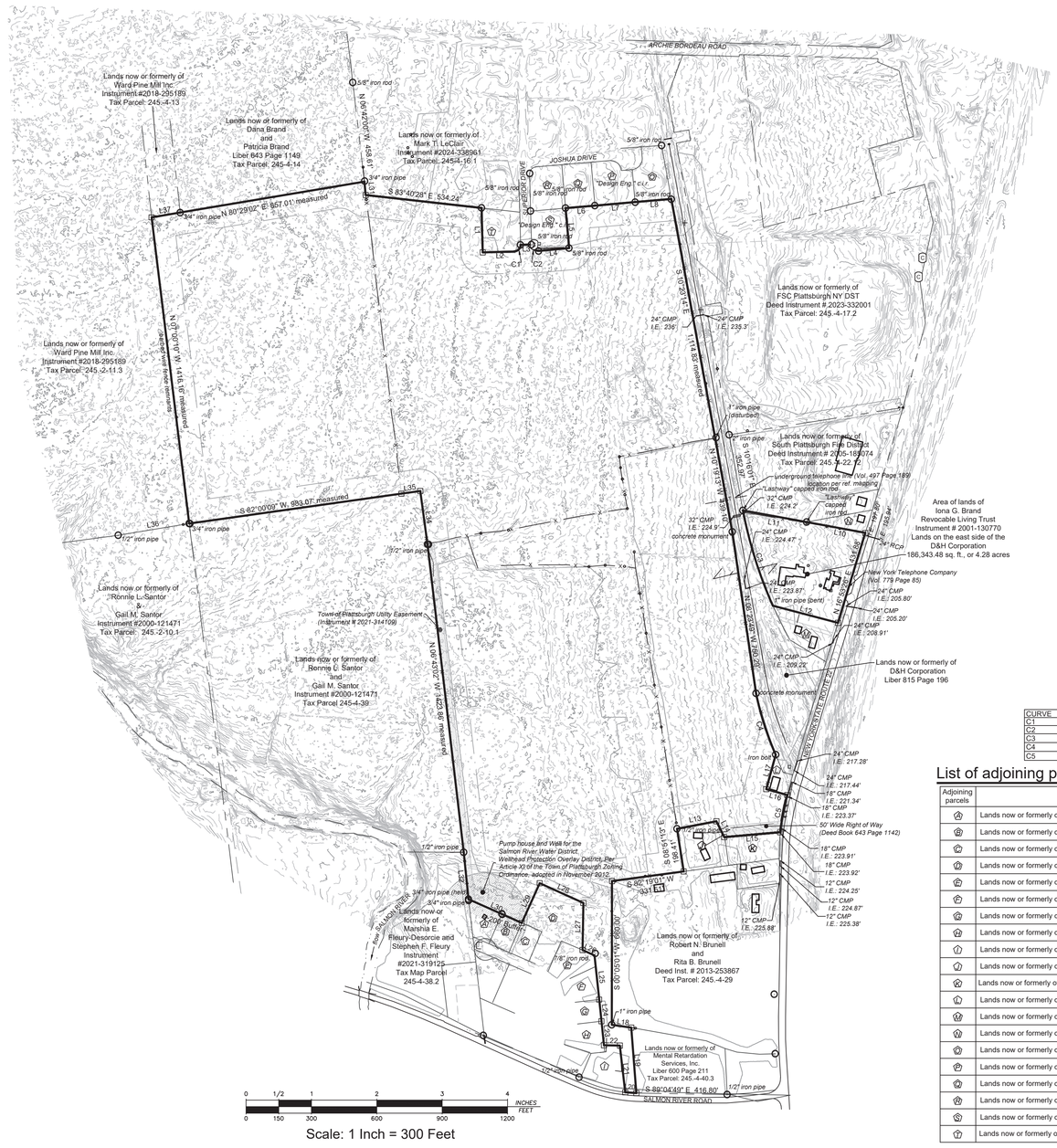
Reference Deeds:

1. Section 245. - Block 4 - Lot 40.1: Gerald Menard to Robert N. Brunell and Rita B. Brunell by deed dated October 14, 1986 and recorded in the Clinton County Clerk's Office on October 14, 1986 as Deed Volume 678 at page 33.
2. Section 245. - Block 4 - Lot 22.11: Carlos H. Brand and Iona G. Brand to Carlos H. Brand and Iona G. Brand by deed dated March 11, 1988 and recorded in the Clinton County Clerk's Office on April 6, 1988 as Deed Volume 725 at page 161
3. Section 245. - Block 4 - Lot 16.2: Thomas M. LeClair to Thomas M. LeClair and Sally A. Leclair by deed dated June 23, 2005 and recorded in the Clinton County Clerk's Office on September 6, 2005 as Instrument # 2005-186504.

Certification:

I hereby certify that this map was prepared from deeds and maps of record and an accurate survey performed during December of 2022.

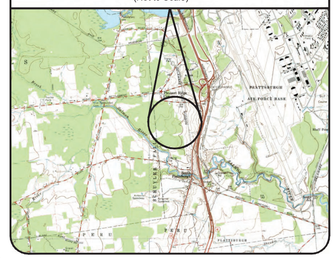
Jeffrey F. Burns, L.S. Date
N.Y.S. License #050702



Zoning Information:

LOCATION: Westerly side of NYS Route 22 and south of Archie Bordeau Road.	
ZONE: C, Shopping Center Commercial District	
USE: Commercial	
ITEM	REQUIREMENTS
Minimum lot area	N/A
Minimum road frontage	75 ft.
Minimum front setback	20 ft.
Minimum side setback	10 ft. min. / 25 ft. total
Minimum rear setback	20
Minimum open space	25%
Maximum building height	60 ft.
Maximum building coverage	25%

General Location Map
(Not to Scale)



Map of Survey

showing certain lands of

Iona G. Brand Revocable Living Trust

to be conveyed to

UMS Property, L.L.C.

LINE	BEARING	DISTANCE
L1	S 01°30'45" E	204.09'
L2	N 88°29'15" E	145.00'
L3	N 88°27'15" E	50.00'
L4	N 85°01'37" E	140.45'
L5	N 04°58'23" W	184.64'
L6	N 85°01'37" E	135.00'
L7	N 85°01'37" E	185.00'
L8	N 85°01'37" E	167.08'
L9	S 19°20'47" E	152.58'
L10	N 79°36'14" W	273.80'
L11	N 79°36'14" W	297.13'
L12	S 75°10'43" E	309.22'
L13	N 79°15'10" E	184.27'
L14	S 25°57'09" E	81.20'
L15	N 84°55'24" E	257.55'
L16	N 74°29'34" W	100.00'
L17	N 15°30'26" E	164.24'
L18	S 82°01'23" E	89.78'
L19	S 04°28'32" E	301.75'
L20	N 85°40'42" W	51.04'
L21	N 06°32'53" W	215.56'
L22	N 88°40'53" W	72.97'
L23	N 06°03'03" W	110.94'
L24	N 06°03'03" W	100.00'
L25	N 06°03'03" W	204.27'
L26	N 65°58'13" W	59.79'
L27	N 00°58'30" E	216.05'
L28	N 65°39'25" W	220.00'
L29	S 24°20'37" W	200.00'
L30	N 65°58'13" W	267.00'
L31	N 05°38'28" W	61.78'
L32	N 05°51'57" W	216.62'
L33	N 79°22'29" E	185.71'
L34	N 07°41'09" W	246.91'
L35	S 82°00'09" W	87.25'
L36	N 80°29'02" E	330.09'
L37	N 80°29'02" E	133.09'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	30.00'	47.12'	42.42'	N 43°29'28" E	89°59'33"
C2	30.00'	48.94'	43.69'	S 48°14'20" E	93°28'07"
C3	2,047.12'	459.14'	458.18'	S 17°25'01" E	12°51'02"
C4	1,432.69'	295.64'	295.11'	N 17°45'09" W	11°49'23"
C5	1,654.91'	174.14'	174.06'	N 10°50'18" E	6°01'44"

GRID NORTH NAD 83 NYS EAST ZONE-18

List of adjoining parcels:

Adjoining parcels	Parcel owner	Title reference	Tax parcel number
1	Lands now or formerly of Town of Plattsburgh	Liber 606 at Page 452	245.-4-35.11
2	Lands now or formerly of Peter N. Allen	Instrument # 2005-182632	245.-4-34.2
3	Lands now or formerly of Richard D. Wintersteen and Alexis Vasquez	Instrument # 2024-339723	245.-4-34.1
4	Lands now or formerly of Gary E. Diman and Magda L. Diman	Instrument # 2005-182632	245.-4-33
5	Lands now or formerly of Sandra J. Rezac	Instrument # 2005-185881	245.-4-32
6	Lands now or formerly of John R. Akin and Deanne K. Akin	Instrument # 2008-219704	245.-4-31
7	Lands now or formerly of Albert Senyah	Instrument # 2012-252966	245.-4-35.5
8	Lands now or formerly of David J. Casey and Elizabeth H. Casey	Liber 899 Page 208	245.-4-35.1
9	Lands now or formerly of Timothy Bedore	Instrument # 2017-290354	245.-4-30
10	Lands now or formerly of Darla J. Holderman	Instrument # 2018-296856	245.-4-22.21
11	Lands now or formerly of Frank L. Lovely, Jr. and Penny L. Lovely	Instrument # 2016-279156	245.-4-22.22
12	Lands now or formerly of Gregory L. Thew	Instrument # 2009-229308	245.-4-24
13	Lands now or formerly of Timothy C. Schwartz	Instrument # 2014-262768	245.-4-21
14	Lands now or formerly of Sonia Passino and Shane Passino	Instrument # 2021-313271	245.-4-20
15	Lands now or formerly of Nicholas Stewart and Tim Stewart	Instrument # 2007-206851	245.-10-15
16	Lands now or formerly of Makalyn Ross and Josh Bushey	Instrument # 2023-329955	245.-10-14
17	Lands now or formerly of Cory Davison	Instrument # 2016-281272	245.-10-13
18	Lands now or formerly of Donald A. Hastings	Liber 962 Page 37	245.-10-12
19	Lands now or formerly of Thomas M. LeClair Irrevocable Trust and Mark T. LeClair	Instrument # 2022-326604	245.-10-17
20	Lands now or formerly of Daniel M. Shaughnessy and Cheryl A. Shaughnessy	Instrument # 2002-319125	245.-10-16

Tax Map Reference:

Section 245. - Block 4 - Lot 16.2
Section 245. - Block 4 - Lot 22.11
Section 245. - Block 4 - Lot 40.1
Section 245. - Block 4 - Lot 41
Town of Plattsburgh
County of Clinton

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
Map of Survey
showing lands to be conveyed to
UMS Property, L.L.C.
lands to be used for
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	Sheet
22241	Existing Conditions
Date: 01/09/2025	C100
Scale: 1" = 300'	
Drawn: LSC/TJS	Checked: JFB

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

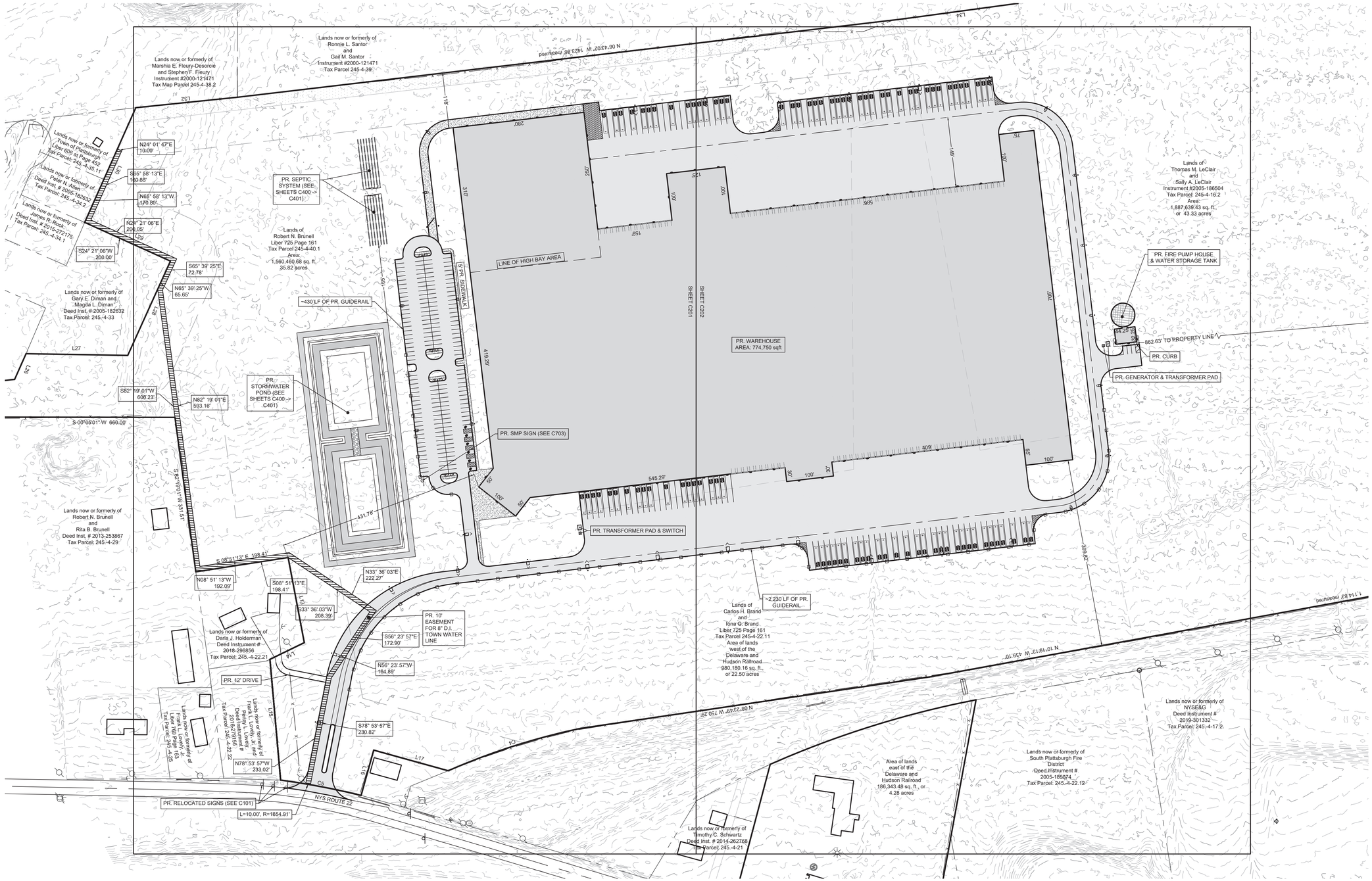
~ Situate ~

Town of Plattsburgh

Clinton County State of New York

Project #	Sheet
22241	Overall Demolition Plan
Date: 01/09/2025	C101
Scale: 1" = 100'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.0145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

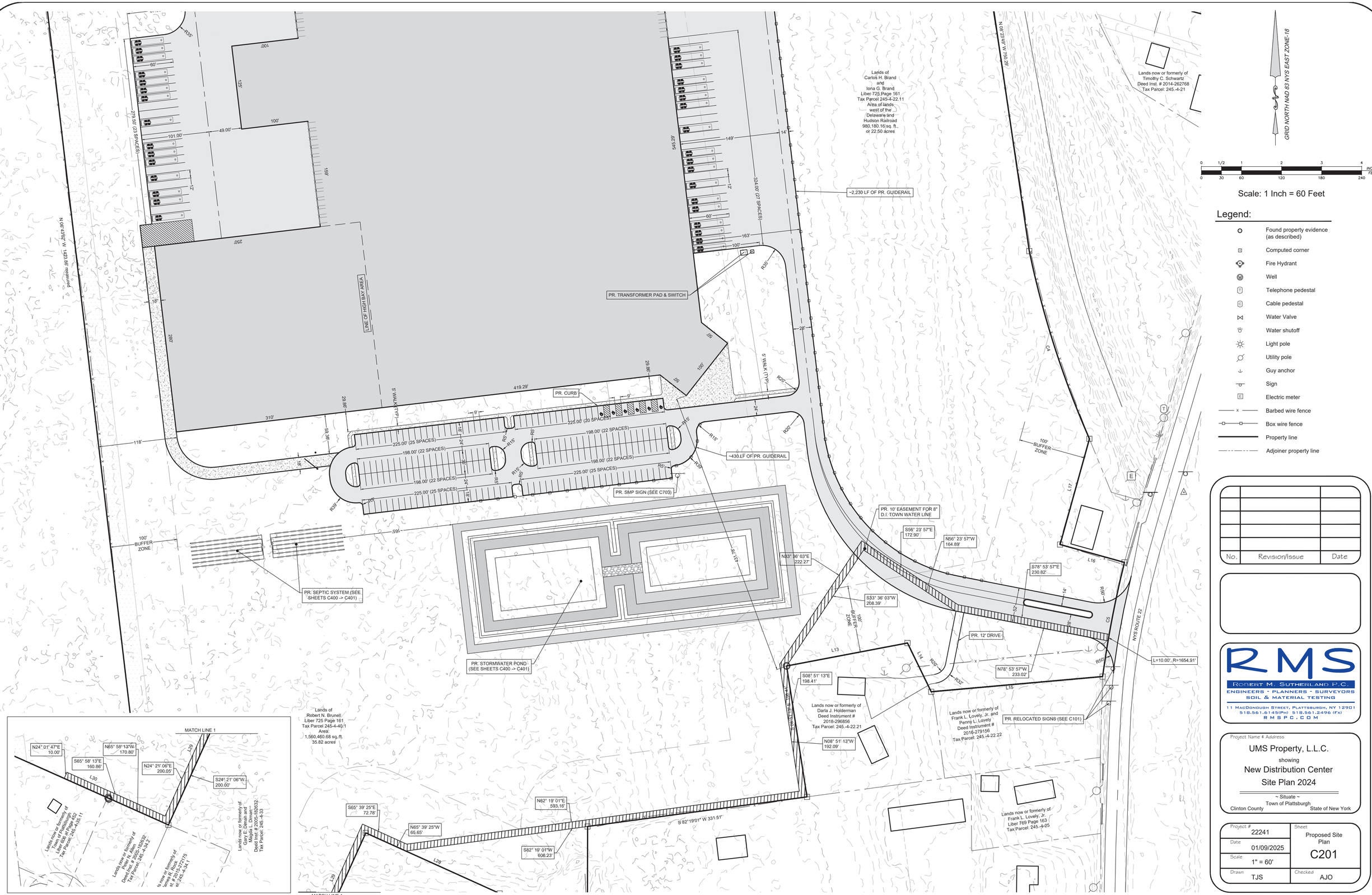
~ Situate ~

Town of Plattsburgh

Clinton County State of New York

Project # 22241	Sheet: Overall Proposed Site Plan
Date: 01/09/2025	C200
Scale: 1" = 100'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

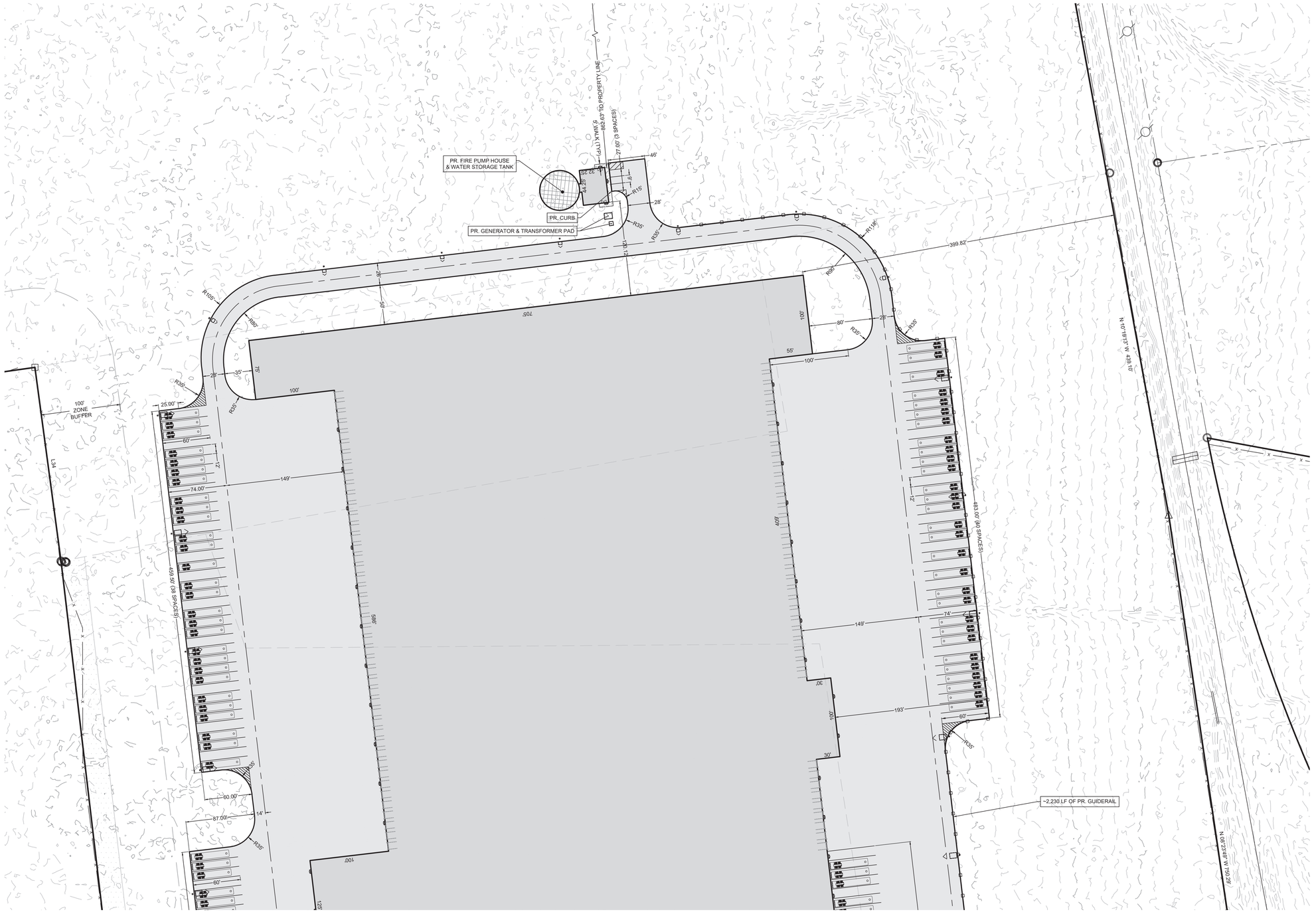
~ Situate ~

Town of Plattsburgh

Clinton County — State of New York

Project #	Sheet
22241	Proposed Site Plan
Date: 01/09/2025	C201
Scale: 1" = 60'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

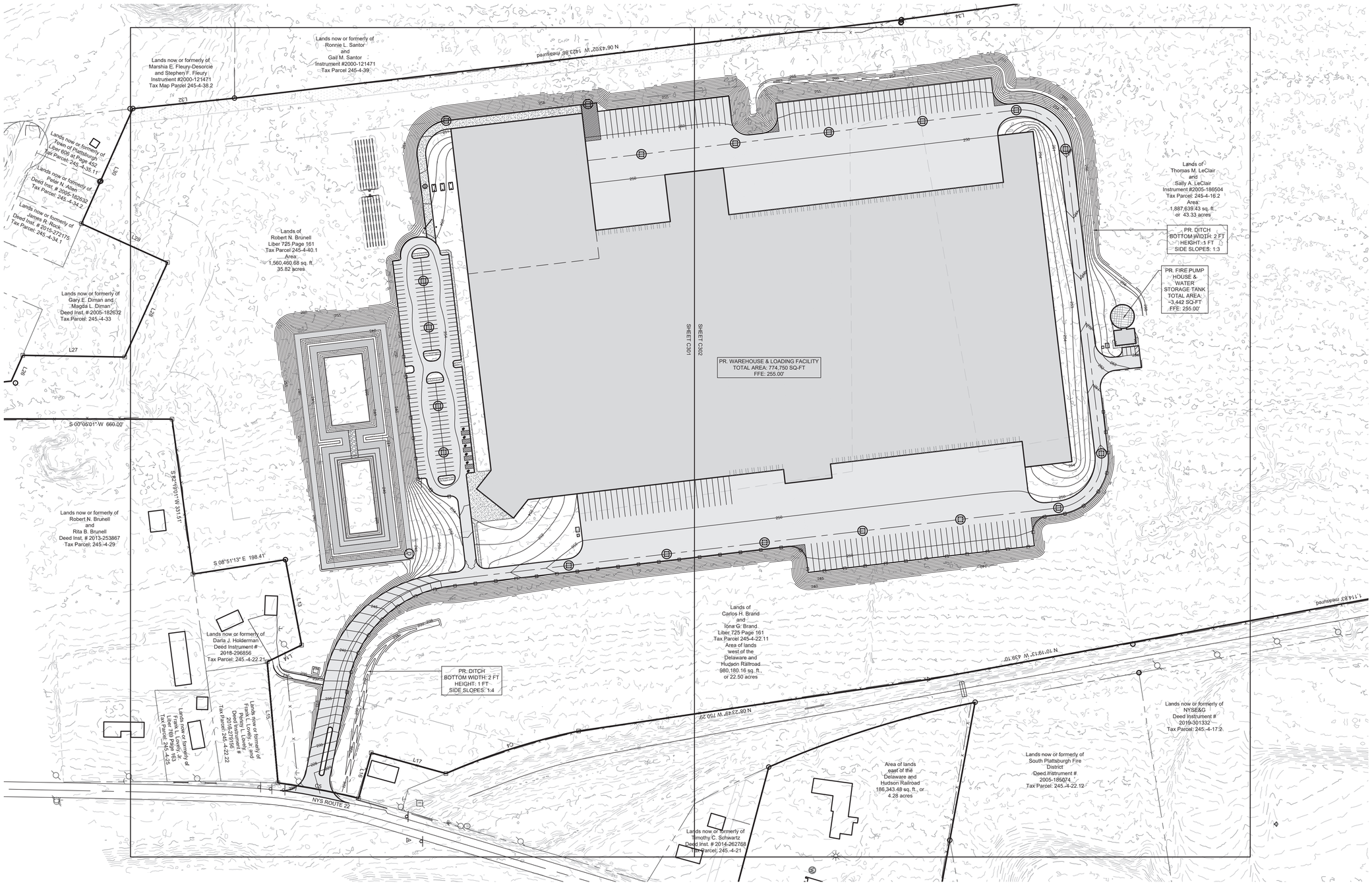
Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	Sheet
22241	Proposed Site Plan
Date: 01/09/2025	C202
Scale: 1" = 60'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

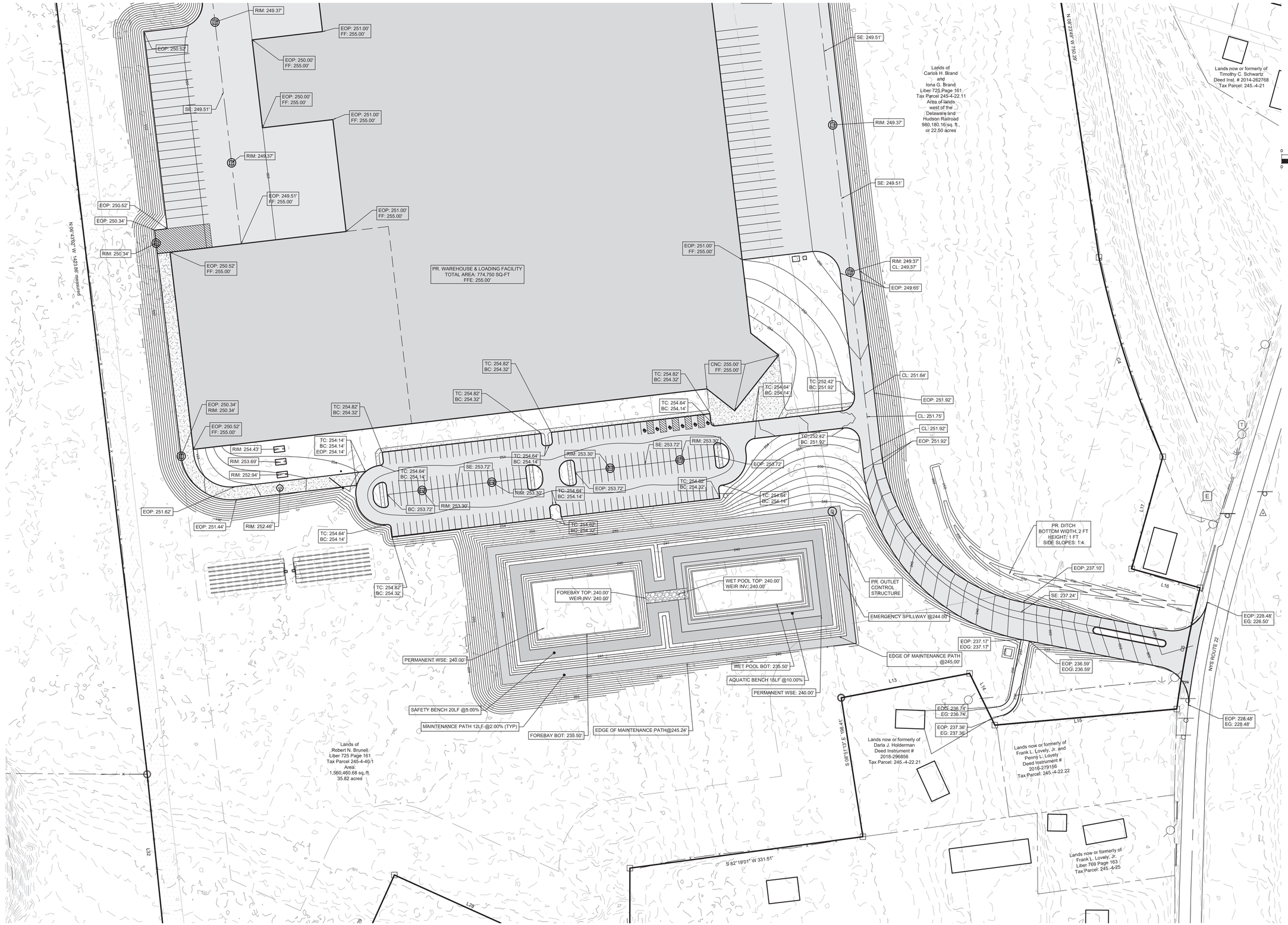
RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Overall Proposed Grading Plan
Date 01/09/2025	C300
Scale 1" = 100'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

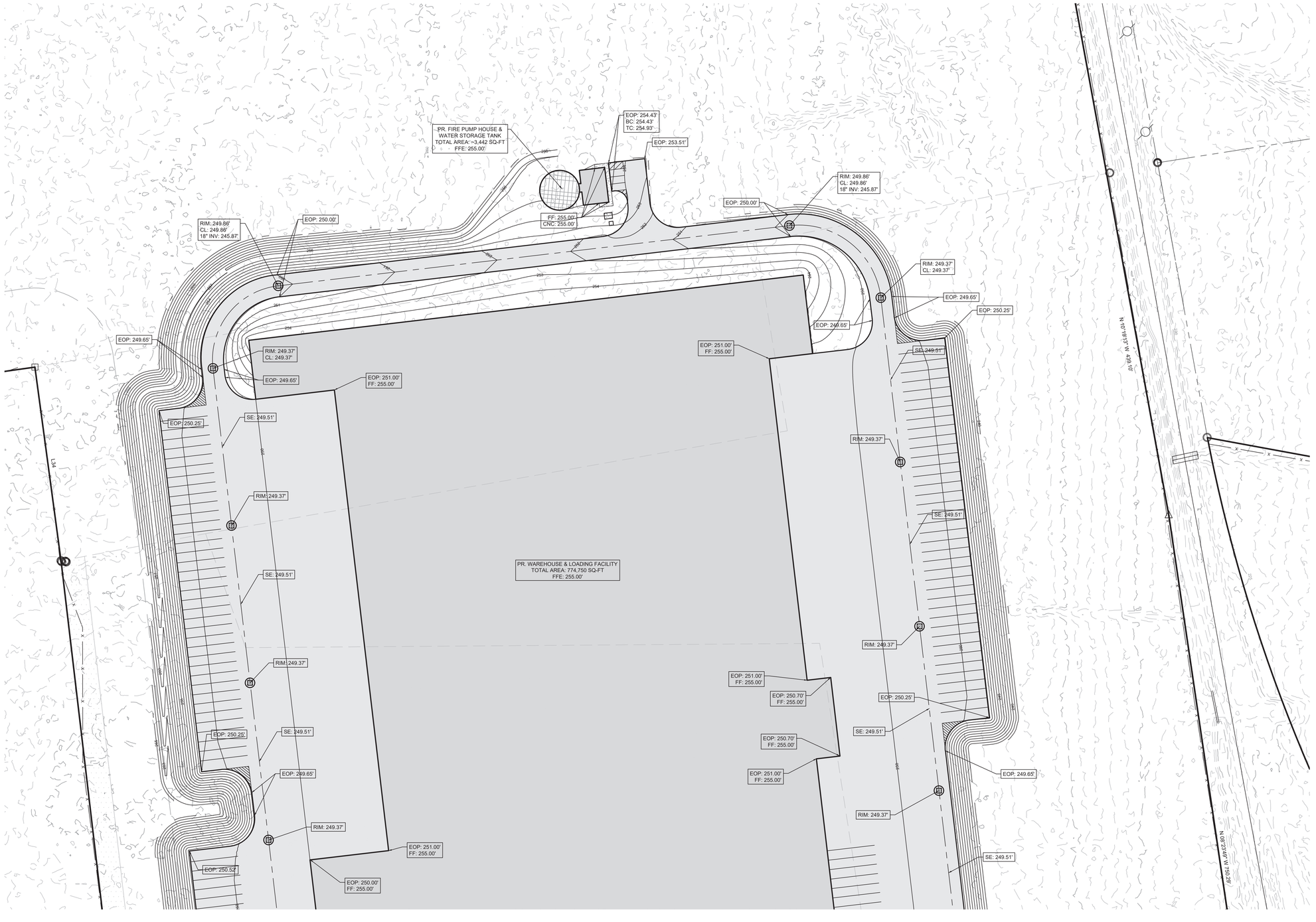
~ Situate ~

Town of Plattsburgh

Clinton County — State of New York

Project # 22241	Sheet: Proposed Grading Plan
Date 01/09/2025	C301
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



GRID NORTH NAD 83 NYS EAST ZONE 18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Proposed Grading Plan
Date: 01/09/2024	C302
Scale: 1" = 60'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

EX. PUMP HOUSE
PR. PUMP STATION
PR. SEPTIC SYSTEM LOCATION
PR. 5,500 GAL. SETTLING TANK
PR. 2,500 GAL. SEPTIC TANK
PR. 2,000 GAL. AUX. SEPTIC TANK
PR. STORM C.B. (TYP)
PR. GAS METER
PR. WATER TOWER & PUMP HOUSE
PR. TRANSFORMER & GENERATOR PAD
SHEET C401
SHEET C402
~4515LF OF PR. 12"Ø FIRE SUPPRESSION LINE
PR. WALLPACK LIGHT (TYP) (SEE SHEETS C600 -> C602)
PR. GAS METER
PR. TRANSFORMER PAD & SWITCH
P.R. STORMWATER POND
PR. STORM M.H. (TYP)
PR. STREET LIGHT (TYP) (SEE SHEETS C600 -> C602)
PR. STORM C.B. (TYP)
TOWN WATERLINE TO PUMP HOUSE ~1482LF OF PR. 8" D.I.
PROVIDE PR. 10LF WIDE WATERLINE EASEMENT FROM NYS RT22 R.O.W. TO EX. PUMP HOUSE
WATER SERVICE LINE TO WATER TOWER ~2312LF OF PR. 8" D.I.
PR. GAS, ELECTRIC, & TELECOMMUNICATIONS LINE
~144 LF OF PR. 18" CMP
NYS ROUTE 22
N 06°43'02" W 1423.86' measured
S 00°05'01" W 660.00'
S 82°18'01" W 331.51'
S 08°51'13" E 198.41'
N 10°19'37" W 439.10'
N 08°23'49" W 750.29'

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

SEPTIC SYSTEM DESIGN CALCULATIONS

DAILY DESIGN FLOW

± 150 EMPLOYEES @ 15 GPD/EMPLOYEE
LOW FLOW FIXTURE = 20% REDUCTION OR 12 GPD
± 150 EMPLOYEES X 12 GPD = 1,800 GPD
ADDITIONAL 750 GPD FOR AUTOMATIC FLOOR CLEANING SYSTEM
1,800 GPD + 750 GPD = 2550 GPD
FUTURE GROWTH 30%
TOTAL = 2,550 GPD + (2,550 GPD * 0.30)
TOTAL = 3315 GPD

SEPTIC TANK SIZING

SIGNIFICANT DELIVERY PERIOD = 10 HOURS
TOTAL VOLUME REQUIRED = (DESIGN FLOW X 24 HOURS PER DAY) / DELIVERY PERIOD
VOLUME REQUIRED = (3,315 GPD X 24 HOURS PER DAY) / 10 HOUR = 7,956 GAL.
VOLUME REQUIRED = 8,000 GAL.
PROVIDE TWO TANKS IN SERIES
1ST TANK MINIMUM VOLUME = 8,000 X (2/3) = 5333.33 GAL.
PROVIDE 5,500 GAL. TANK
SECOND TANK REQUIRED SIZE = 8,000 GAL. - 5,500 GAL. = 2,500 GAL.

LEACH FIELD SIZING

APPLICATION RATE = DESIGN FLOW RATE / 1.20 GPD/SF
AREA REQ. = 3,315 GPD / 1.20 GPD/SF = 2,762.5 SQUARE FEET
LATERAL LENGTH REQ. = 2,762.5 SF / 2FT WIDTH = 1,381.25 LINEAR FEET

TRENCH SYSTEM SIZE
TWO LEACHING AREAS OF 7 LATERALS BY 100FT = 1,400 LINEAR FEET PROPOSED

VOLUME OF DOSE PER FIELD

VOLUME OF DOSE = 75% TO 85% OF DISTRIBUTION PIPE VOLUME
TRENCH = 7 LINES x 100 LF EACH x 0.196 SF = 137.44 CF
FORCE MAIN = 116.0 LF x 0.022 SF = 2.55 CF
TOTAL DOSE VOLUME = 137.44 CF + 2.55 CF = 139.99 CF
75% -> 85% "TDV" = 104.99 CF TO 118.99 CF (785.38 GAL. -> 890.11 GAL.)
TOTAL DOSE VOLUME = 786 -> 891 GALLONS PER FIELD

RECOMMENDED 3 DOSES PER FIELD PER DAY OR A TOTAL OF 6 DOSES PER DAY
3,315 GPD / 6 DOSE PER DAY = 552.50 GALLONS PER DOSE
SINCE 552.50 GALLON < 786 GALLONS -> 786 GALLONS = MINIMUM DOSE
3315 GPD / 786 GALLONS PER DOSE = 4.21 DOSES PER DAY
3315 GPD / 891 GALLONS PER DOSE = 3.72 DOSES PER DAY
3315 GPD / 4 DOSES PER DAY = 828.75 GALLONS PER DOSE
SET TO DOSE ~ 830 GALLONS EVERY 6 HRS, ALTERNATING FIELDS
EQUIVALENT TO 3,320 GPD

REQUIRED STORAGE VOLUME AT PUMP STATION
PROVIDE 25% OF DAILY FLOW + DOSE VOLUME
REQUIRED VOLUME = 3315 GAL. x 0.25 + 830 GALLONS = 1658.75 GAL.
PROVIDE 2,000 GAL. OF STORAGE AT PUMP STATION

NOTE:
ABSORPTION TRENCH SYSTEM TOTALING OVER 1,000 LINEAR FEET REQUIRE ALTERNATING PRESSURE-DOSED GRAVITY DISTRIBUTION.

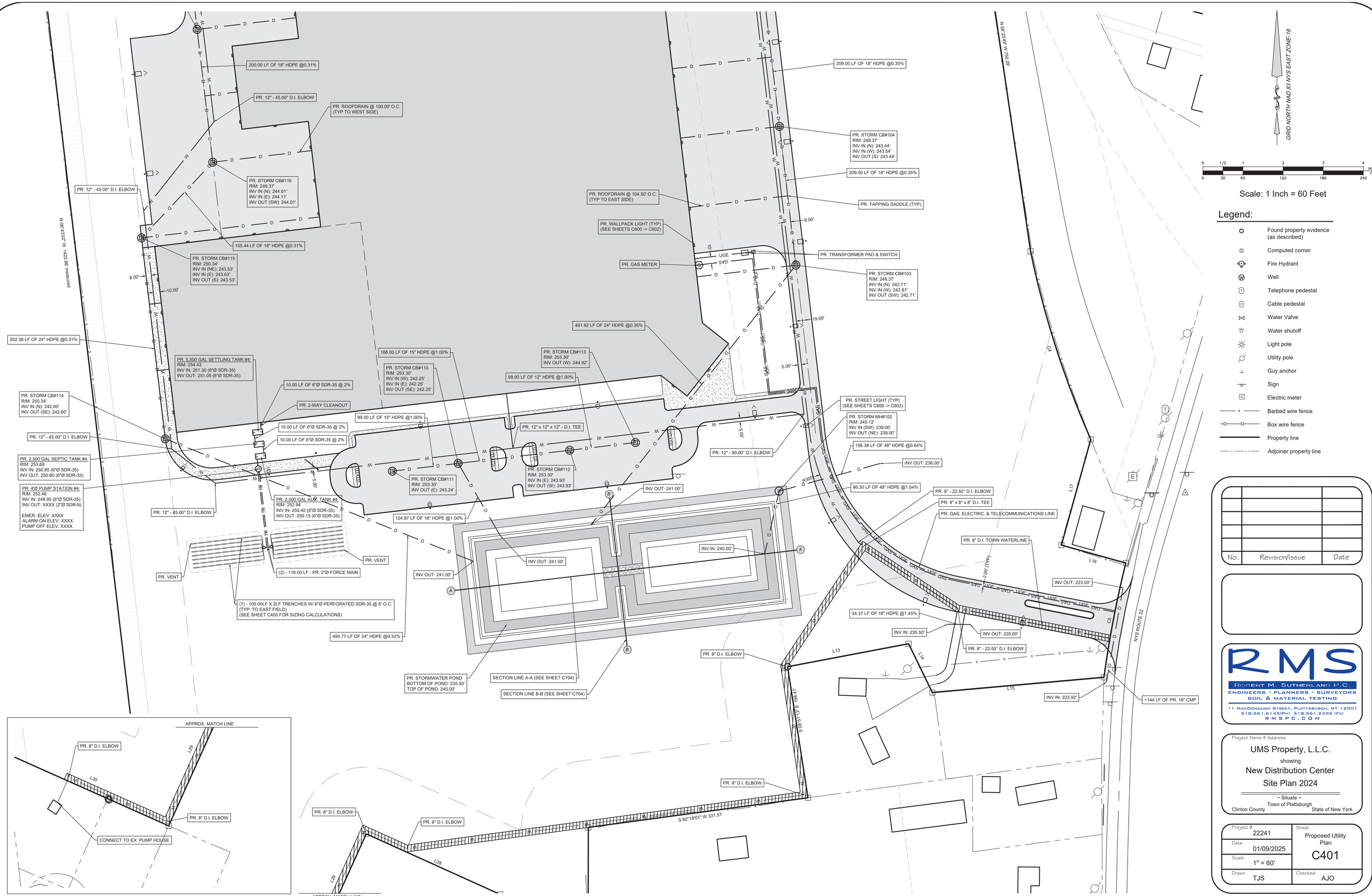
No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Overall Proposed Utility Plan C400
Date 01/09/2025	
Scale 1" = 100'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

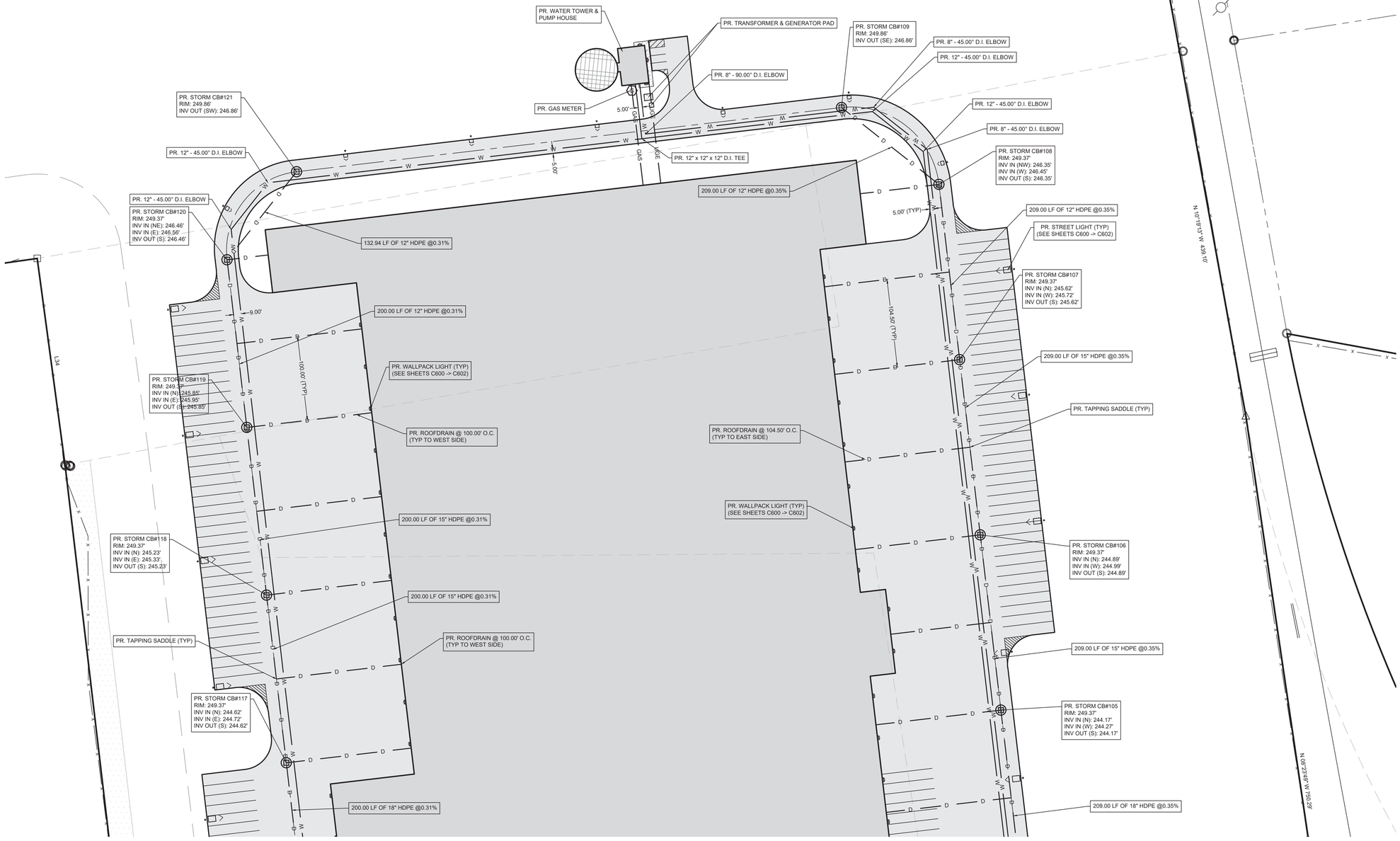
~ Situate ~

Town of Plattsburgh

Clinton County — State of New York

Project #	Sheet
22241	Proposed Utility Plan
Date: 01/09/2025	C401
Scale: 1" = 60'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

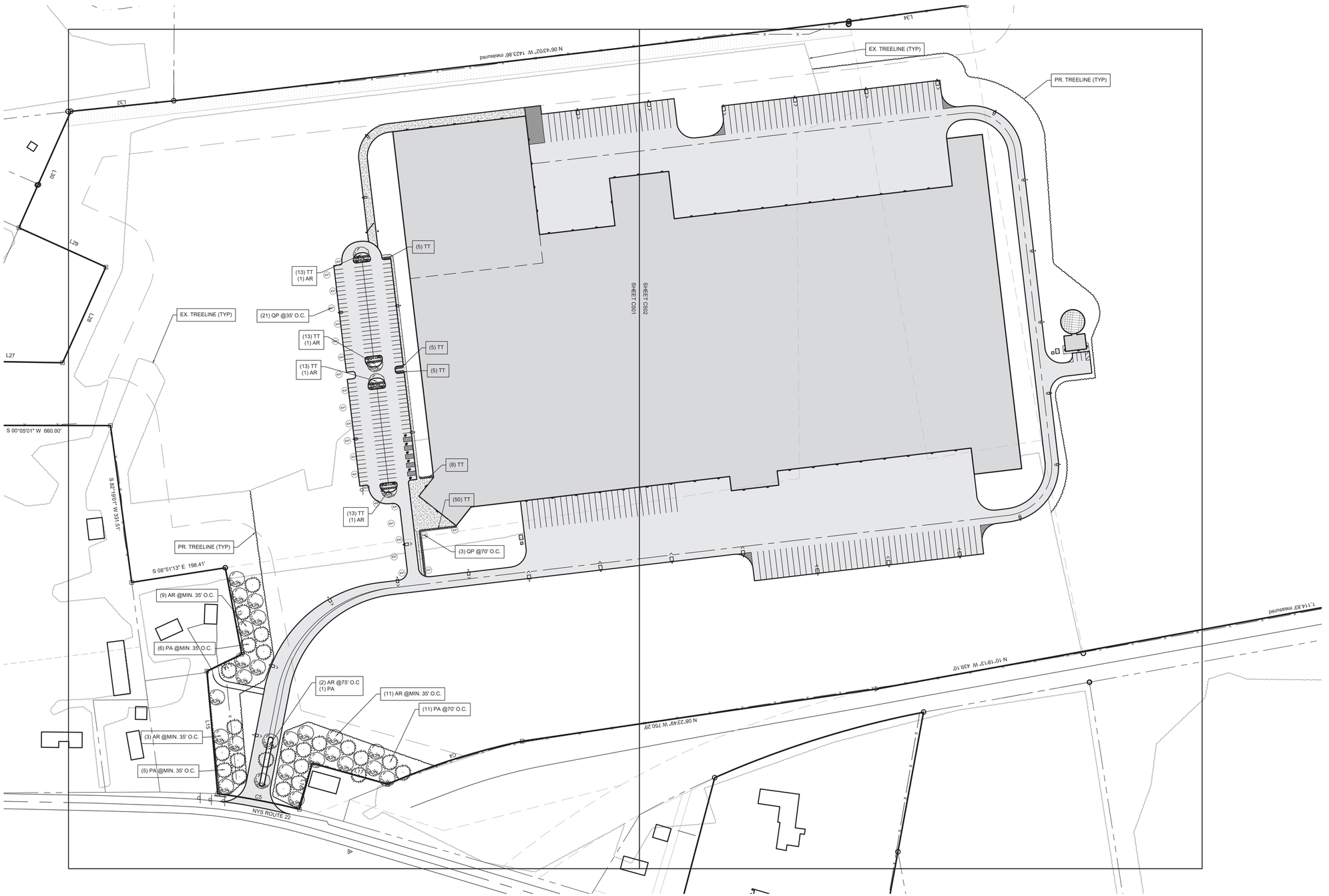
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Proposed Utility Plan
Date 01/09/2025	C402
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

NEW AND REPLACEMENT FACILITIES		Botanical Name	Common Name	Planted Size
SHADE TREES				
AR	29	Acer rubrum 'October Glory'	October Glory Red Maple	2" cal. B&B
QP	24	Quercus palustris	Pin Oak	2" cal. B&B
EVERGREEN TREES				
PA	23	Picea Abies	Norway Spruce	5'-6' ht.
SHRUBS				
TT	125	Taxus x media 'Tauntonii'	Taunton's Yew	24-36" ht.



GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	Sheet
22241	Overall Proposed Landscape Plan
Date: 01/09/2025	C500
Scale: 1" = 100'	
Drawn: TJS	Checked: AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

NEW AND REPLACEMENT FACILITIES		Botanical Name	Common Name	Planted Size
SHADE TREES				
AR	29	Acer rubrum 'October Glory'	October Glory Red Maple	2" cal. B&B
QP	24	Quercus palustris	Pin Oak	2" cal. B&B
EVERGREEN TREES				
PA	23	Picea Abies	Norway Spruce	5'-6' ht.
SHRUBS				
TT	125	Taxus x media 'Tauntonii'	Taunton's Yew	24-36" ht.

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

(50) TT
(3) QP @70' O.C.
(8) TT
(5) TT
(5) TT
(5) TT
(13) TT (1) AR
(13) TT (1) AR
(13) TT (1) AR
(13) TT (1) AR
EX. TREELINE (TYP)
(21) QP @35' O.C.
N 06°43'20" W 1523.98' measured
L32
L26
S 82°19'01" W 331.51'
S 08°51'15" E 988.11'
PR. TREELINE (TYP)
(11) PA @70' O.C.
(11) AR @MIN. 35' O.C.
(2) AR @75' O.C (1) PA
(6) PA @MIN. 35' O.C.
(9) AR @MIN. 35' O.C.
(3) AR @MIN. 35' O.C.
(5) PA @MIN. 35' O.C.
L18
L15
C4
C5
NYS ROUTE 22

No.	Revision/Issue	Date

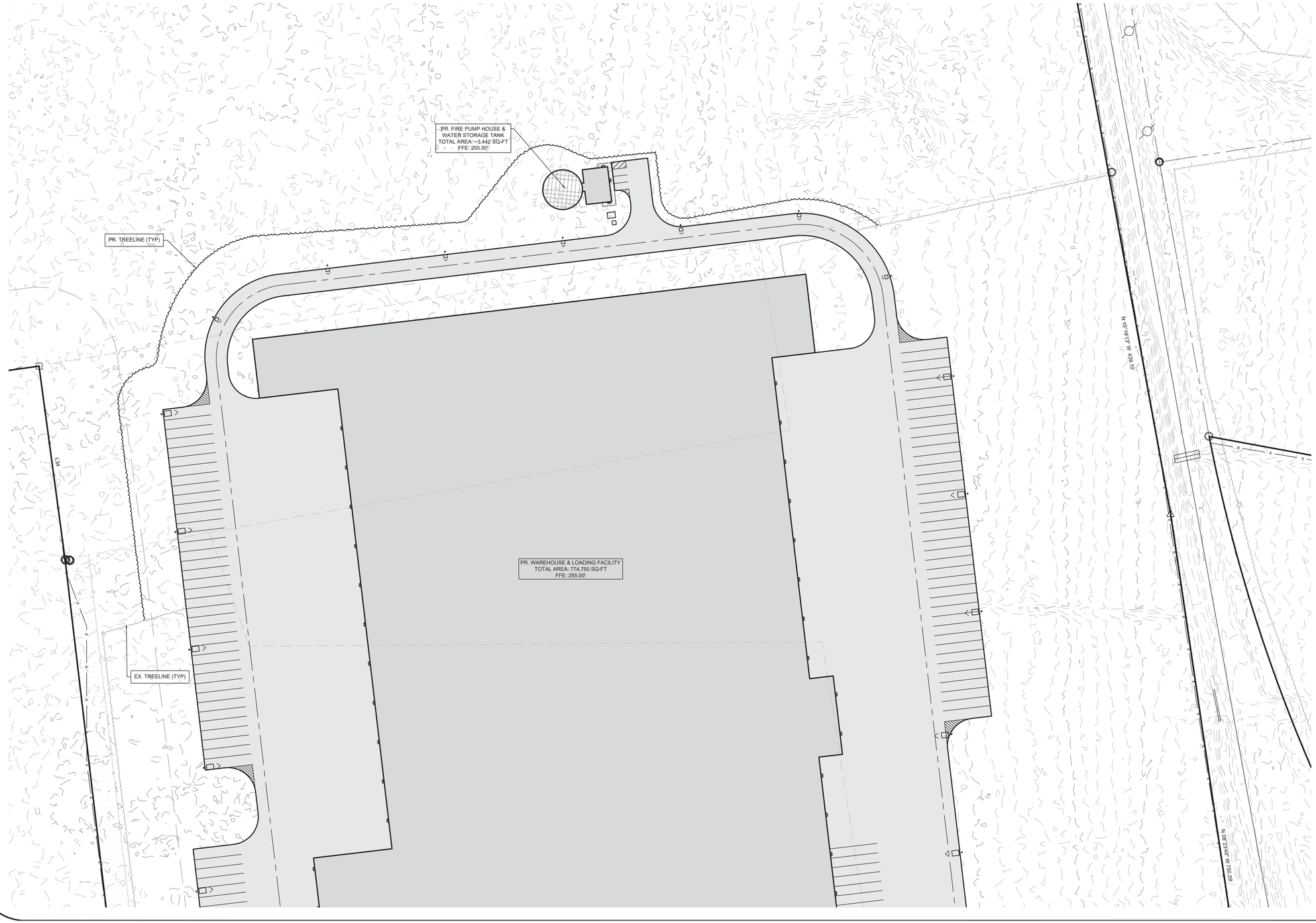
RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	22241	Sheet	Proposed Landscape Plan
Date	01/09/2025		C501
Scale	1" = 60'		
Drawn	TJS	Checked	AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

NEW AND REPLACEMENT FACILITIES		Botanical Name	Common Name	Planted Size
SHADE TREES				
AR	29	Acer rubrum 'October Glory'	October Glory Red Maple	2" cal. B&B
QP	24	Quercus palustris	Pin Oak	2" cal. B&B
EVERGREEN TREES				
PA	23	Picea Abies	Norway Spruce	5'-6' ht.
SHRUBS				
TT	125	Taxus x media 'Tauntonii'	Taunton's Yew	24-36" ht.



Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

GRID NORTH: NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

No.	Revision/Issue	Date

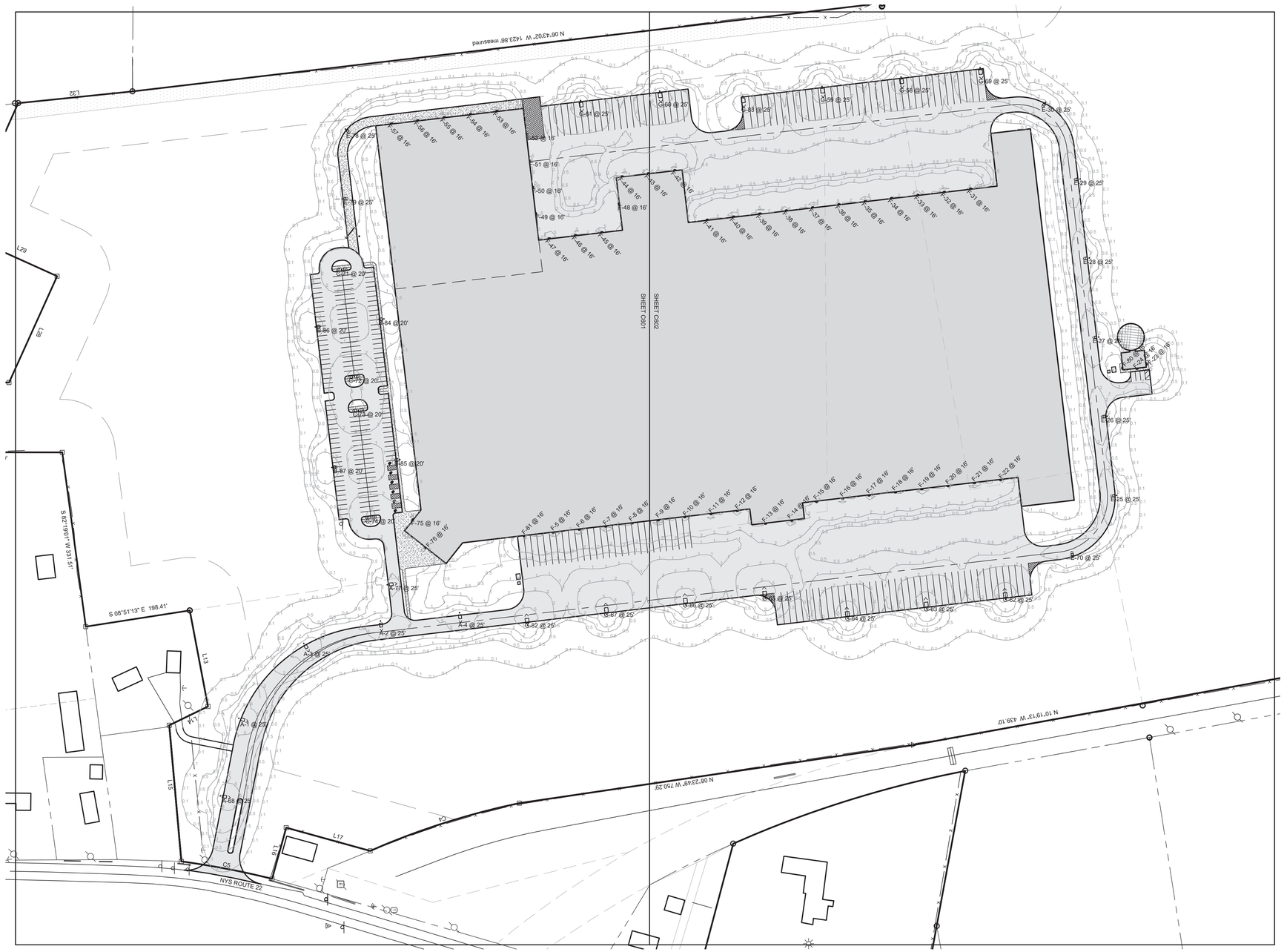
RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	22241	Sheet:	Proposed Landscape Plan
Date	01/09/2025		C502
Scale	1" = 60'		
Drawn	TJS	Checked	AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp Output	Lumens Per Lamp	LLF	Watts
	A	6	DSX2 LED P7 40K T2M MVOLT G1	DSX2 LED P7 40K T2M MVOLT	1. LUMINAIRE OUTPUT: 45,839 Lms.	ABSOLUTE	0.9	398.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	B	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	166.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	C	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	332.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	E	9	DSX1 LED P7 40K T1S MVOLT G1	DSX1 LED P7 40K T1S MVOLT	1. LUMINAIRE OUTPUT: 20,711 Lms.	ABSOLUTE	0.9	183.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	F	51	DSXW2 LED 30C 1000 40K T4M MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 1000mA DRIVER, 4000K LED, TYPE 4 MEDIUM OPTIC	1. LUMINAIRE OUTPUT: 11,198 Lms.	ABSOLUTE	0.9	109.0
MOUNTING HEIGHT = 16'								
	G	13	DSX2 LED P7 40K 80CRI TFTM	D-Series Size 2 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Forward Throw	1. LUMINAIRE OUTPUT: 48,253 Lms.	ABSOLUTE	0.9	409.1
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		

NOTE:
1. MAX LIGHT FIXTURE HEIGHT TO BE MEASURED FROM FINISHED GRADE AT GROUND LEVEL OR FINISHED FLOOR.

Legend:

	Found property evidence (as described)		Utility pole
	Computed corner		Guy anchor
	Fire Hydrant		Sign
W	Well	E	Electric meter
T	Telephone pedestal	x	Barbed wire fence
C	Cable pedestal		Box wire fence
	Water Valve		Property line
	Water shutoff		Adjoiner property line
	Light pole		

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Overall Proposed Lighting Plan
Date 01/09/2025	C600
Scale 1" = 100'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp Output	Lumens Per Lamp	LLF	Watts
	A	6	DSX2 LED P7 40K T2M MVOLT G1	DSX2 LED P7 40K T2M MVOLT	1. LUMINAIRE OUTPUT: 45,839 Lms.	ABSOLUTE	0.9	398.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	B	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	166.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	C	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	332.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	E	9	DSX1 LED P7 40K T1S MVOLT G1	DSX1 LED P7 40K T1S MVOLT	1. LUMINAIRE OUTPUT: 20,711 Lms.	ABSOLUTE	0.9	183.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	F	51	DSXW2 LED 30C 1000 40K T4M MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 1000mA DRIVER, 4000K LED, TYPE 4 MEDIUM OPTIC	1. LUMINAIRE OUTPUT: 11,198 Lms.	ABSOLUTE	0.9	109.0
MOUNTING HEIGHT = 16'								
	G	13	DSX2 LED P7 40K 80CRI TFTM	D-Series Size 2 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Forward Throw	1. LUMINAIRE OUTPUT: 48,253 Lms.	ABSOLUTE	0.9	409.1
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		

NOTE:
1. MAX LIGHT FIXTURE HEIGHT TO BE MEASURED FROM FINISHED GRADE AT GROUND LEVEL OR FINISHED FLOOR.

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

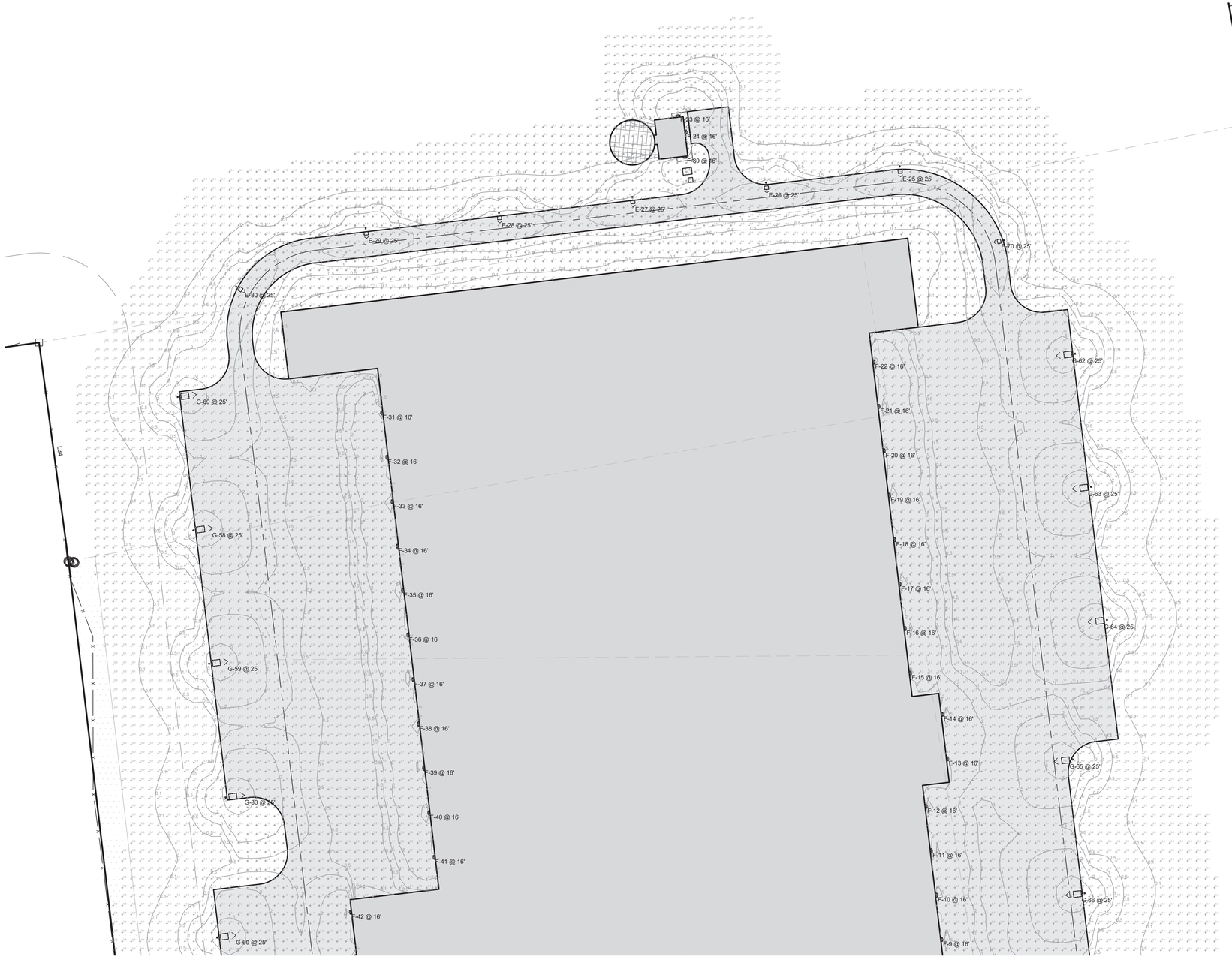
Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Proposed Lighting Plan
Date 01/09/2025	C601
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp Output	Lumens Per Lamp	LLF	Watts
	A	6	DSX2 LED P7 40K T2M MVOLT G1	DSX2 LED P7 40K T2M MVOLT	1. LUMINAIRE OUTPUT: 45,839 Lms.	ABSOLUTE	0.9	398.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	B	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	166.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	C	4	DSX0 LED P7 40K T5W MVOLT G1	DSX0 LED P7 40K T5W MVOLT	1. LUMINAIRE OUTPUT: 21,562 Lms.	ABSOLUTE	0.9	332.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	E	9	DSX1 LED P7 40K T1S MVOLT G1	DSX1 LED P7 40K T1S MVOLT	1. LUMINAIRE OUTPUT: 20,711 Lms.	ABSOLUTE	0.9	183.0
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		
	F	51	DSXW2 LED 30C 1000 40K T4M MVOLT	DSXW2 LED WITH 3 LIGHT ENGINES, 30 LED's, 1000mA DRIVER, 4000K LED, TYPE 4 MEDIUM OPTIC	1. LUMINAIRE OUTPUT: 11,198 Lms.	ABSOLUTE	0.9	109.0
MOUNTING HEIGHT = 16'								
	G	13	DSX2 LED P7 40K 80CRI TFTM	D-Series Size 2 Area Luminaire P7 Performance Package 4000K CCT 80 CRI Forward Throw	1. LUMINAIRE OUTPUT: 48,253 Lms.	ABSOLUTE	0.9	409.1
MOUNTING HEIGHT = 25'						MOUNTING HEIGHT = 25' POLE SSS 25 4G DM19AS DBLXD		

NOTE:
1. MAX LIGHT FIXTURE HEIGHT TO BE MEASURED FROM FINISHED GRADE AT GROUND LEVEL OR FINISHED FLOOR.

Legend:

GRID NORTH NAD 83 NYS EAST ZONE-18

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

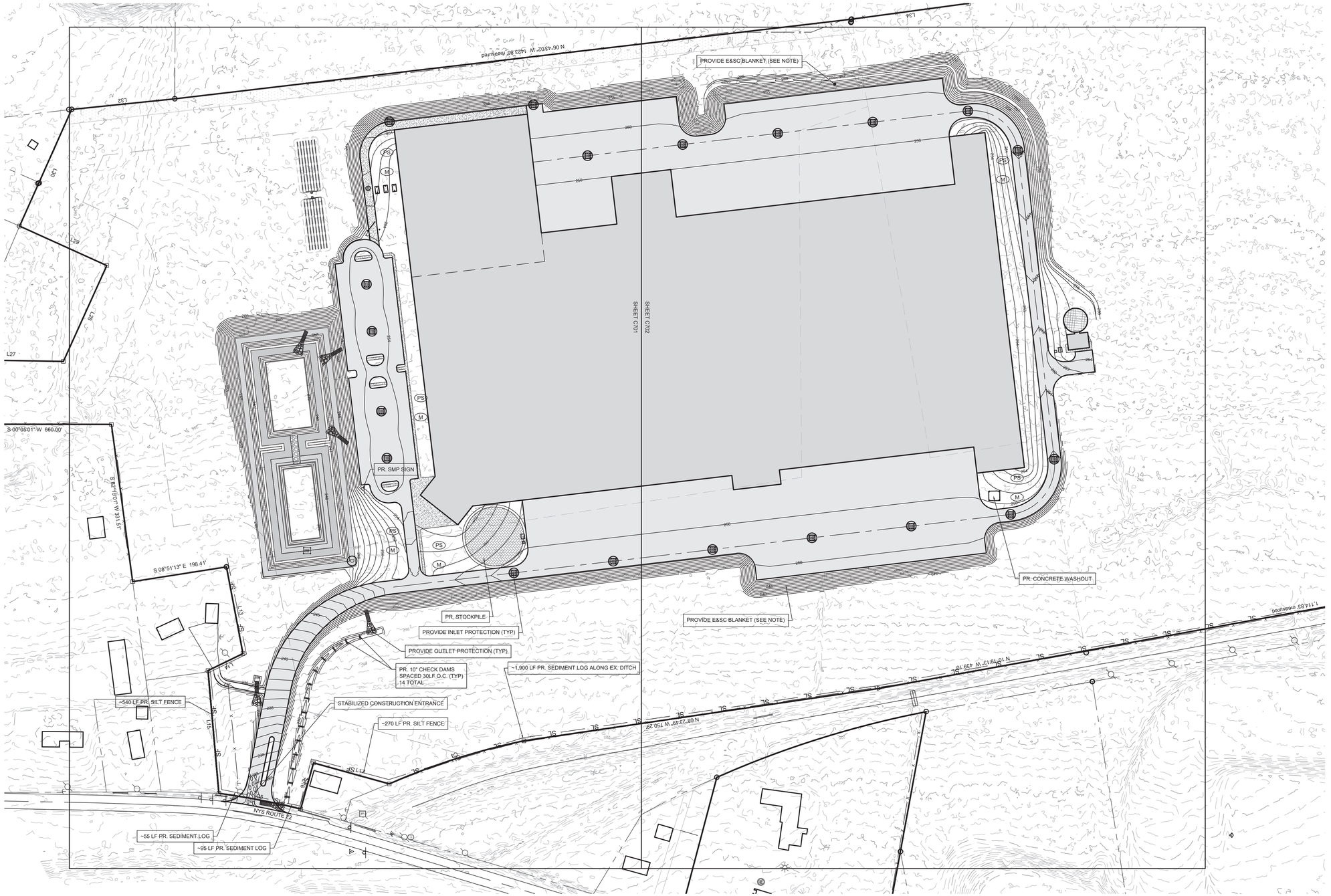
Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Proposed Lighting Plan
Date 01/09/2025	C602
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

NOTES:
1. PROVIDE E&SC BLANKET ON SLOPES EQUAL TO 3:1 OR GREATER

SOIL EROSION SEDIMENT CONTROL STANDARD SYMBOLS

- SL — SEDIMENT LOG
- SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- PS — PERMANANET SEEDING
- M — MULCHING
- RIP RAP OUTLET PROTECTION
- INLET PROTECTION
- CHECK DAM

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

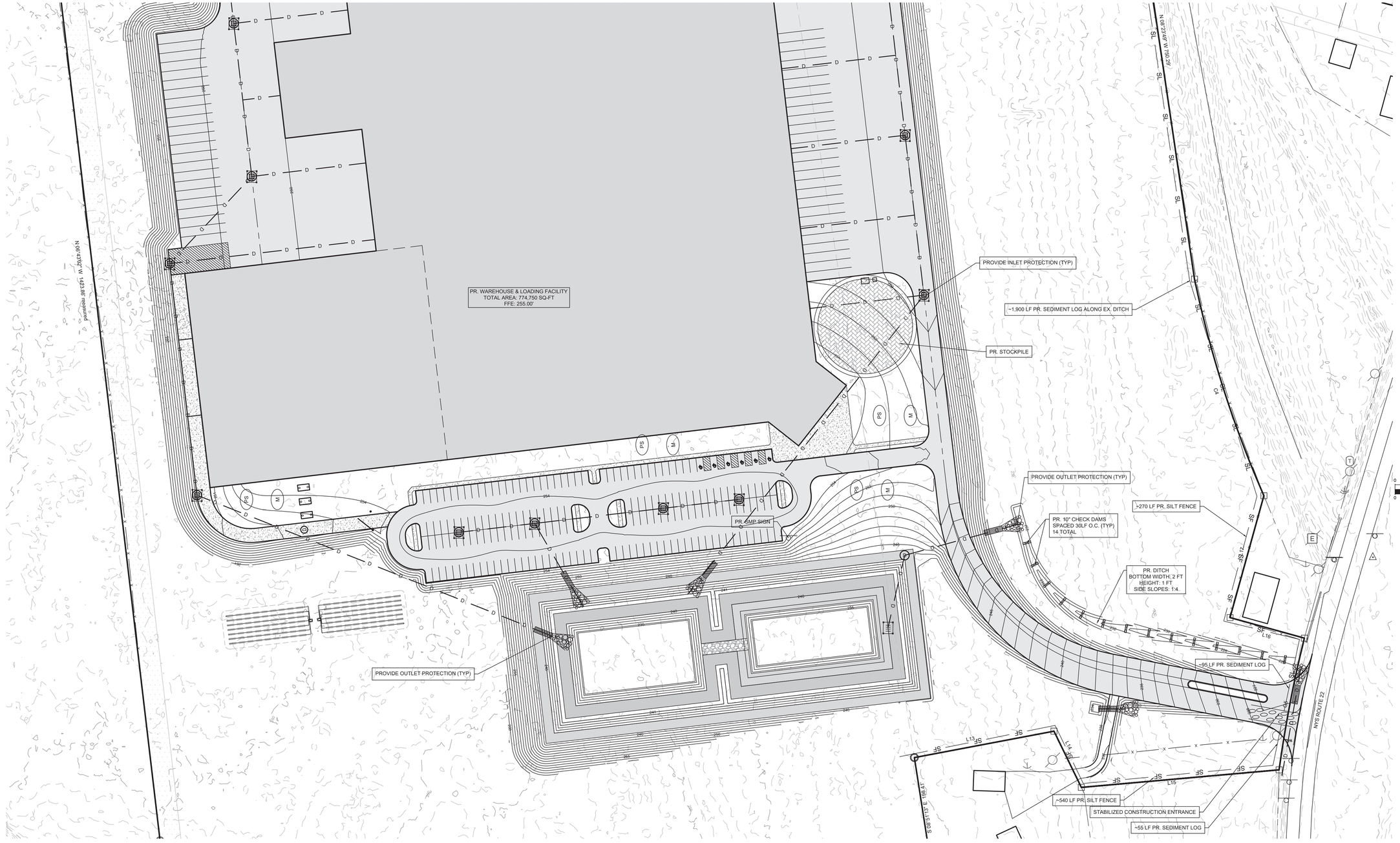
No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Overall Proposed Erosion & Sediment Control Plan
Date 01/09/2025	C700
Scale 1" = 100'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



SOIL EROSION SEDIMENT CONTROL STANDARD SYMBOLS

- SL — SEDIMENT LOG
- SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- PS — PERMANANET SEEDING
- M — MULCHING
- RIP RAP OUTLET PROTECTION
- INLET PROTECTION
- CHECK DAM

GRID NORTH NAD 83 NYS EAST ZONE - 18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

NOTES:
1. PROVIDE E&SC BLANKET ON SLOPES EQUAL TO 3:1 OR GREATER

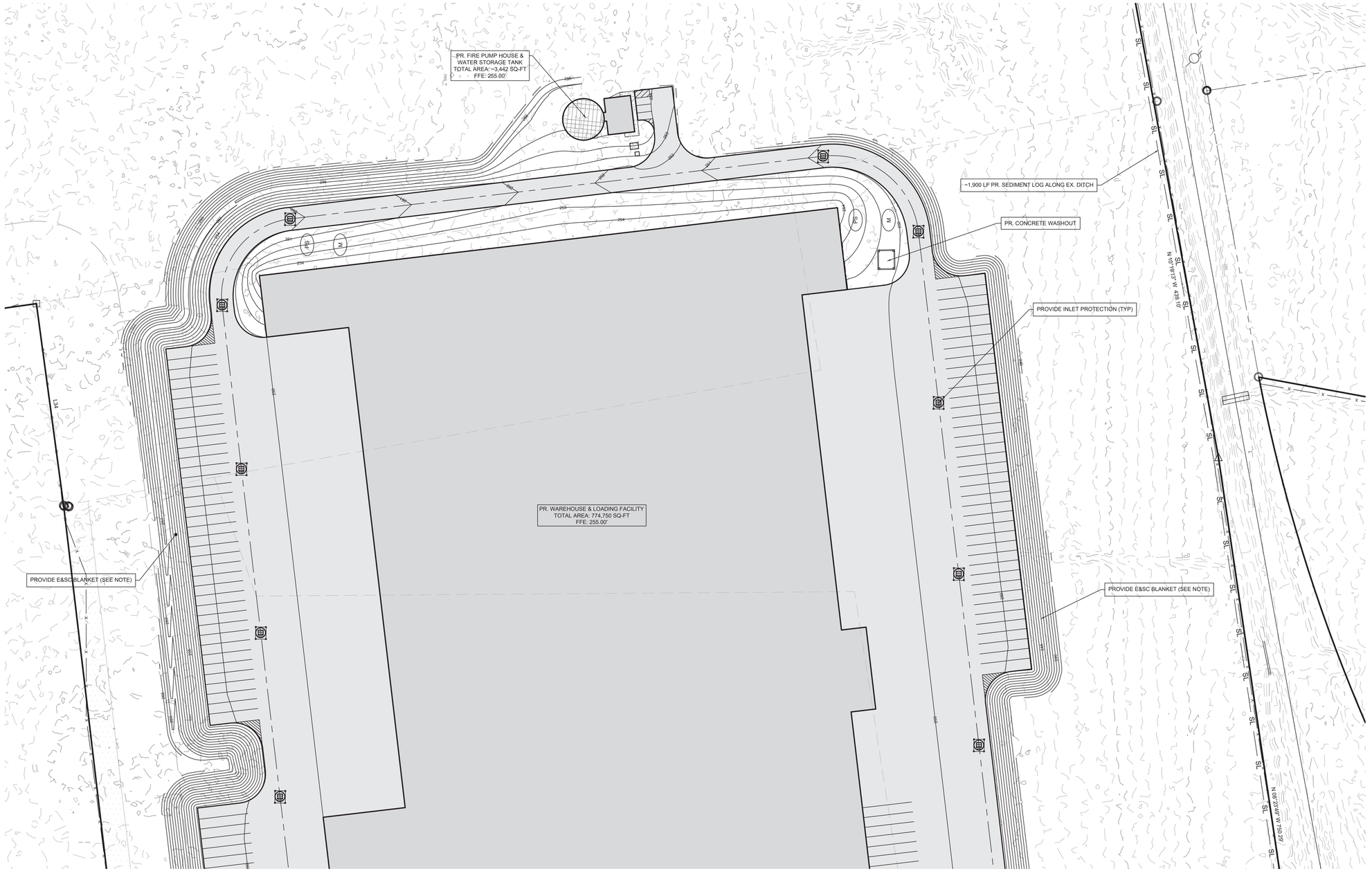
No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Proposed Erosion & Sediment Control Plan
Date 01/09/2025	C701
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



SOIL EROSION SEDIMENT CONTROL STANDARD SYMBOLS

- SL — SEDIMENT LOG
- SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- PS — PERMANANET SEEDING
- M — MULCHING
- RIP RAP OUTLET PROTECTION
- INLET PROTECTION
- CHECK DAM

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 30 60 120 180 240 FEET

Scale: 1 Inch = 60 Feet

Legend:

Found property evidence (as described)	Utility pole
Computed corner	Guy anchor
Fire Hydrant	Sign
Well	Electric meter
Telephone pedestal	Barbed wire fence
Cable pedestal	Box wire fence
Water Valve	Property line
Water shutoff	Adjoiner property line
Light pole	

NOTES:
1. PROVIDE E&SC BLANKET ON SLOPES EQUAL TO 3:1 OR GREATER

No.	Revision/Issue	Date

RMS
Robert M. Sutherland P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: Proposed Erosion & Sediment Control Plan
Date 01/09/2024	C702
Scale 1" = 60'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

GENERAL CONSTRUCTION SEQUENCE

FOLLOW PLAN OUTLINED ON THE EROSION AND SEDIMENT CONTROL PLAN SHEETS C700 -> C702

1. COMPLETE ALL ITEMS, BEFORE BEGINNING ANY GROUND DISTURBANCE. AT NO TIME MAY MORE THAN FIVE ACRES BE DISTURBED AT ANY ONE TIME. IF ADDITIONAL SOIL DISTURBANCE IS REQUIRED, PREVIOUSLY DISTURBED AREAS MUST BE FULLY STABILIZED PRIOR TO CREATING ADDITIONAL DISTURBANCES.

2. ALL BRUSH AND STUMPS SHALL BE DISPOSED OF OFFSITE, OR CHIPPED AND RE-UTILIZED ONSITE AS MULCH

3. STABILIZE DISTURBED AREAS UPON COMPLETION OF CLEARING AND GRUBBING OPERATIONS PRIOR TO BEGINNING NEXT PHASE.

6. INSTALL SITE STORMWATER STRUCTURES & UTILITIES AND GRADE SITE ACCORDING TO SHEET C300 & C400.

8. PAVE PARKING AREA AND CONSTRUCT BUILDING AND SIDEWALK PER SITE PLAN SPECS. MOUNT LIGHT POLES.

9. STABILIZE ANY REMAINING DISTURBED SOILS AND REMOVE EROSION CONTROL DEVICES AOBE.

STORMWATER INSPECTION

CONTRACTOR WILL BE RESPONSIBLE FOR HIRING A QUALIFIED INSPECTOR TO PERFORM WEEKLY INSPECTIONS AND INSPECTIONS AFTER AFTER EACH RAINFALL AS REQUIRED UNDER NYSDEC GENERAL PERMIT GP-0-20-001 FOR EROSION CONTROL MAINTENANCE AND COMPLIANCE.

SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

THE AMOUNT OF SOIL EXPOSED AT ANY ONE TIME SHALL BE KEPT TO AN ABSOLUTE MINIMUM. STABILIZATION OF CLEARED AND GRADED AREAS SHALL BE COMPLETED AS SOON AS WORK IS COMPLETED

CONTRACTORS SHALL REVIEW AND BECOME THOROUGHLY FAMILIAR WITH THE CONTENTS OF THE SWPPP AND THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", COPIES OF THE SWPPP AND THE PLANS SHALL BE KEPT ON SITE THROUGHOUT CONSTRUCTION AND THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL EROSION CONTROL PROCEDURES IN THE REFERENCE DOCUMENTS.

INSTALL CONSTRUCTION FENCING OR SILT FENCING AT LOCATIONS INDICATED ON THE DRAWINGS AND AS PER DETAILS.

CONSTRUCT CONSTRUCTION ENTRANCES IN THE LOCATION(S) SHOWN ON THE DRAWINGS AS NEEDED.

INSTALL EROSION CONTROL MEASURES AS INDICATED ON THE PLANS AND IN THE SWPPP DURING THE CONSTRUCTION ACTIVITIES. ADDITIONAL MEASURES MAY BE INSTALLED AS NECESSARY TO REMAIN IN COMPLIANCE WITH THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

SEED AND MULCH DISTURBED AREAS IMMEDIATELY FOLLOWING FINAL CONSTRUCTION ACTIVITY IN THAT AREA. ANY WORK AREA IN SLOPES 10% OR GREATER SHALL BE STABILIZED NO LATER THAN THE END OF EACH DAY. TOPSOIL STOCKPILES THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN 14 DAYS SHALL BE SEEDED, MULCHED AND SHALL HAVE A SILT FENCE INSTALLED ALONG THE PERIMETER TOE OF SLOPE.

AFTER UPHILL AREAS ARE PERMANENTLY STABILIZED, REMOVE ACCUMULATED SILT IN EROSION CONTROL STRUCTURES. COMPLETE STABILIZATION OF ALL REMAINING AREAS AND REMOVE TEMPORARY EROSION CONTROLS.

CONSTRUCTION EROSION AND SEDIMENT CONTROLS

IMMEDIATE STABILIZATION:
FOR AREAS NEAR WETLANDS, MULCH WORK AREA WITH WOOD CHIPS, HAY OR STRAW IMMEDIATELY AFTER ROUGH GRADING. ANY WORK ON SLOPES 10% OR GREATER SHALL BE STABILIZED NO LATER THAN THE END OF EACH DAY. SEE CONSTRUCTION SEQUENCE.

TEMPORARY STABILIZATION:
TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH IMMEDIATELY AFTER THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. PRIOR TO SEEDING, THE SOIL SHALL BE PREPARED WITH FERTILIZER. THE TEMPORARY SEED SHALL BE RYE APPLIED AT THE RATE OF 2.5 TO 3 POUNDS PER 1000 SQUARE FEET. MULCH AND WATER SHALL BE APPLIED AS NEEDED TO PROMOTE GROWTH. SLOPES OVER 10% SHALL BE STABILIZED WITH JUTE MESH, UNTIL SUCH TIME AS VEGETATION HAS BEEN ESTABLISHED. AREAS TO BE PAVED SHALL BE TEMPORARILY STABILIZED WITH GEOTEXTILES AND STONE SUB-BSE MATERIAL, UNTIL PAVEMENT IS INSTALLED.

PERMANENT STABILIZATION:
DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. PRIOR TO PERMANENT SEEDING, APPLY FERTILIZED AND LIME TO THE SOIL. PERMANENT SEED SHALL BE INSTALLED, MULCHED, WATERED AND MAINTAINED TO ENSURE VIGOROUS GROWTH.

SILT FENCING:
SILT FENCING SHALL BE INSTALLED AT THE LOCATIONS SHOWN AND AS DETAILED ON THE PLANS. SILT FENCING SHALL BE MAINTAINED IN WORKING ORDER: FABRIC SHALL BE TAUGHT BETWEEN STAKES AND FABRIC SHALL BE REATTACHED TO STAKES IF WIND DAMAGE OCCURS.

CONSTRUCTION FENCING:
CONSTRUCTION FENCING SHALL BE INSTALLED AS SHOWN PER SHEET C701.

OFFSITE TRACKING OF VEHICLES:
CLEAN AND SWEEP STREET AS NECCESSARY TO CONTROL DUST AND SEDIMENT RUNOFF INTO STORM SYSTEM.

OTHER TEMPORARY CONTROLS:
AS CONDITIONS WARRANT, OTHER TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE UTILIZED SO THAT ALL REQUIREMENTS OF THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" MANUAL ARE MET.

MAINTENANCE AND INSPECTION OF CONTROLS (CONSTRUCTION PHASE)

STABILIZED CONSTRUCTION ENTRANCE:
WEEKLY INSPECTIONS AND AFTER EACH RAINFALL EVENT. APPLY ADDITIONAL STONE AND MAINTENANCE AS REQUIRED. ALL SEDIMENT TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED AT THE END OF EACH DAY.

SILT FENCE:
WEEKLY INSPECTIONS AND AFTER EACH RAINFALL EVENT. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WITH "BULGES" DEVELOP IN FABRIC. FABRIC SHALL BE REFASTENED TO POSTS AS NEEDED.

STORMWATER TREATMENT FACILITY:
WEEKLY INSPECTIONS AND AFTER EACH RAINFALL EVENT. REMOVE ALL SEDIMENT AT LEAST ONCE PER WEEK OR WHEN SEDIMENT ACCUMULATES TO WITHIN 6 INCHES OF THE INLET / OUTLET STRUCTURES. EXAMINE THE OUTLET DITCH AND THE PIPE OUTFALL AREA, AND CLEAN OR FLUSH AS NEEDED.

DROP INLETS:
INSPECT WEEKLY AND AFTER RAINFALL EVENTS. REMOVE ALL SEDIMENT AT LEAST ONCE PER WEEK OR WHEN SEDIMENT ACCUMULATES TO A DEPTH OF 1 FOOT OR TO THE OUTLET PIPE INVERT.

A GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL TO PROTECT SURROUNDING WATER BODIES.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION CONTROL AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES TO ENSURE PROPER FUNCTIONING OF SAID FACILITIES (DURING CONSTRUCTION).

3. AFTER THE PROJECT HAS BEEN COMPLETED, THE PROJECT SHALL HAVE THE RESPONSIBILITY FOR ENSURING THAT ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR REPLACED BY PERMANENT CONTROLS.

4. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FIVE (5) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. MULCH SHALL BE USED IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER. DISTURBED AREAS SHALL BE LIMED AND FERTILIZED PRIOR TO TEMPORARY SEEDING.

5. PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTECTION AND ESTABLISHMENT. LIME AND FERTILIZE SEED BED PRIOR TO PERMANENT SEEDING.

SOIL RESTORATION AND FINAL STABILIZATION

1. APPLY MULCH TO ALL SOIL WHICH HAS NOT YET REACHED FINAL GRADES, BUT WILL BE LEFT UNATTENDED FOR MORE THAN (7) DAYS. MULCH MUST BE SUFFICIENTLY DEEP TO ADEQUATELY PROTECT SOIL. TEMPORARY MULCH USED IN THIS MANNER MAY BE RACKED UP AND REUSED FOLLOWING THE RESUMPTION OF SOIL GRADING. TEMPORARILY MULCH MUST BE APPLIED WITHIN (24) HOURS OF TEMPORARILY CEASING SOIL DISTURBANCES.

2. AFTER COMPLETING EARTH WORK TO DESIRED GRADES, PREPARE SOIL FOR FINAL STABILIZATION BY REPAIRING DAMAGED OR COMPACTED SOILS. USE BROAD FORK TO MANUALLY LOOSEN SOIL, OR FOR LARGER AREAS, PLOW SOIL TO A DEPTH OF 12". LEAVE SOIL SURFACE ROUGH.

3. APPLY FINAL SEEDING WITHIN (24) HOURS OF ACHIEVING FINAL SOIL GRADING. SEED MIX SHALL CONSIST OF MIXTURE OF SHORT-LIVED GRASSES APPLIED AT A RATE OF 30 LBS PER ACRE. SEED MIXTURE SHALL INCLUDE THE FOLLOWING SPECIES:

SPECIES:	% OF MIX (BY WEIGHT)
* PERRENIAL RYEGRASS (Lolium perenne L.)	25-50 %
* ANNUAL RYEGRASS (Lolium multiflorum)	15-35 %
* CEREAL RYE (Secale cereale)	15-35 %

4. AFTER APPLYING SEED, GENTLY ROLL SOIL TO PROVIDE GOOD SEED TO SOIL CONTACT. APPLY LIGHT MULCH AS NEEDED.

5. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED. FINAL STABILIZATION IS ACHIEVED WHEN A UNIFORM VEGETATION HAS COMPLETELY COVERED MORE THAN 80% OF THE ENTIRE SOIL SURFACES.

B EROSION & SEDIMENT POLLUTION CONTROL (E&SPC) GUIDELINES

1. EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES AND PRACTICES, UTILIZED IN THE CONSTRUCTION OF THE PROJECT, SHALL BE CONSISTENT WITH THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", DATED NOVEMBER 2016.

2. NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, AND SUPPLEMENTED, AS FEASIBLE PRIOR TO AND DURING CONSTRUCTION

3. CUT AND FILL SLOPES SHALL BE BROUGHT TO FINAL PROPOSED GRADES AS SOON AS POSSIBLE IN THE CONSTRUCTION SEQUENCES, AND SEEDED AND MULCHED IMMEDIATELY.

4. EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES (STRAW BALES, FILTER FABRIC FENCING, STABILIZED CONSTRUCTION ENTRANCES, SILTATION BASINS, AND OTHER ACCEPTABLE FACILITIES) SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL COMPLETE SITE STABILIZATION.

5. HEAVY CONSTRUCTION EQUIPMENT SHALL BE KEPT AS CLOSE TO THE AREA AS PRACTICAL TO MINIMIZE DISTURBANCE OF SOIL ALREADY STABILIZED OR UNDISTURBED.

6. TOPSOIL AND OTHER SOIL REMOVED DURING CONSTRUCTION SHALL BE STOCKPILED IN A SUITABLE LOCATION CLEAR FROM ANY STORMWATER DRAINAGE COURSES. STOCKPILES WHICH ARE INACTIVE FOR MORE THAN FIVE (5) DAYS SHALL BE SEEDED.

7. VEGETATIVE STABILIZATION SHALL BE PERIODICALLY INSPECTED FOR SUFFICIENT GROWTH AND PROGRESS. AREAS NOT RESPONDING SHALL BE PROMPTLY RESEEDED AND REMULCHED AS SOON AS POSSIBLE. AREAS SHOWING SIGNS OF EROSION PRIOR TO STABILIZATION SHALL BE GRADED, RESEEDED, AND REMULCHED AS SOON AS POSSIBLE. SOD OR EROSION CONTROL FABRIC SHALL BE UTILIZED WHERE ADEQUATE STABILIZATION IS NOT OCCURRING.

8. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE BEGINNING EARTH MOVING ACTIVITIES, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

9. A STABILIZED CONSTRUCTION ENTRANCE PAD OF 1-½" TO 2" CLEAN STONE WILL BE PLACED AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER SITE DISTURBANCE. (DIMENSIONS: LENGTH-NOT LESS THAN 50 FT., EXCEPT ON SINGLE RESIDENCE LOT WHERE 30 FT. MINIMUM WOULD APPLY; WIDTH-10 FT. MIN., BUT NOT LESS THAN FULL WIDTH OF ENTRANCE OR EXIT DRIVES; DEPTH-NOT LESS THAN 8 IN.) FILTER CLOTH IS REQUIRED PRIOR TO STONE PLACEMENT.

10. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 5 (5) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 2.5 - 3.0 TONS PER ACRE.

11. PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.

12. THE APPLICATION OF TOPSOIL, LIMING, FERTILIZING, SEEDING, AND MULCHING FOR DISTURBED AREAS SHALL BE CONSISTENT WITH THE STANDARD GENERAL PRACTICES FOR CONSTRUCTION.

13. IMMEDIATELY FOLLOWING INITIAL DISTURBANCES OF ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E., STEEP SLOPES AND ROADWAY EMBANMMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2.5 - 3.0 TONS PER ACRE.

14. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E., SLOPES GREATER THAN 3:1).

15. AT THE TIME WHEN SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS TO BE ESTABLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.

16. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.

17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES UNTIL ALL AREAS HAVE BEEN PERMANENTLY STABILIZED.

C. MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES

PROPER MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT CONTROL FACILITIES ARE NECESSARY TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES.

1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE ENTRANCE OF EACH CONSTRUCTION INGRESS ONTO PUBLIC THOROUGHFARES AND STABILIZED ROADWAYS. SEE DETAIL IN "BLUE BOOK" FOR STANDARD DETAIL CONSTRUCTION INFORMATION.

2. DISTURBED GROUND SURFACES SHALL BE SPRINKLED WITH WATER, AS NEEDED, TO LIMIT THE FORMATION AND MIGRATION OF AIRBORNE DUST.

3. OPERATIONAL MEASURES SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT THE SPILLS OF FUELS AND LUBRICANTS. IF A SPILL OCCURS, IT SHALL BE CONTROLLED IMMEDIATELY TO PREVENT ITS ENTRY INTO OFF-SITE AREAS INCLUDING ADJACENT STORM SEWER

4. ANY TEMPORARY EROSION CONTROL FACILITY SHALL REMAIN FUNCTIONAL UNTIL VEGETATIVE COVER IS SUFFICIENTLY ESTABLISHED WITHIN THE RESPECTIVE TRIBUTARY DRAINAGE AREA.

5. ANY DEBRIS ACCUMULATED IN EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE REMOVED AND PROPERLY DISPOSED. THESE FACILITIES SHALL BE CHECKED DAILY AND AFTER RAINFALL EVENTS, AND REALIGNED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES THE FOLLOWING DEPTHS:
STRAW BALE BARRIERS - 6 INCHES
SILT FENCING - 6 INCHES
SILTATION BASIN - 9 INCHES

6. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE CLAIMED AND REDRESSED WHEN VOIDS BECOME CLOGGED WITH MUD AND SEDIMENT.

NOTE: DISTURBED AREAS SHALL BE CONSIDERED AS PERMANENTLY STABILIZED WHEN A MINIMUM COVER OF 80% HAS BEEN ESTABLISHED.

SUGGESTED SEQUENCE OF CONSTRUCTION

THE FOLLOWING SUGGESTIONS ARE PRESENTED AS POSSIBLE STEPS REGARDING THE CONSTRUCTION/INSTALLATION OF VARIOUS PROJECT COMPONENTS THAT COULD ASSIST IN THE CONTROL OF EROSION AND SEDIMENTATION.

A. INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS NOTED.
B. INSTALLATION OF DRAINAGE DIVERSION DITCHES (IF REQUIRED).
C. INSTALLATION OF STRAW BALE BARRIERS AND/OR SILT BARRIER FENCING.
D. CLEARING AND GRUBBING ON CONSTRUCTION AREAS.
E. REMOVING AND STOCKPILING OF TOPSOIL.
F. EXCAVATION AND REMOVAL OF EXCESS CUT TO SPOILS AREA.
G. INSTALL TOPSOIL, SEEDING, AND MULCHING OF DISTURBED AREAS.
H. ESTABLISHMENT OF PERMANENT STABILIZATION AT ALL DISTURBED AREAS.
I. REMOVAL OF STRAW BALE BARRIERS AND SILT FENCING.
J. REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE.

D. MULCHING AND SEEDING REQUIREMENTS

TEMPORARY SEED REQUIREMENTS

1. SEED PREPARATION:
a. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT (50%) CALCIUM PLUS MAGNESIUM OXIDES) AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET. APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 14 POUNDS PER 1,000 SQUARE FEET USING 10-20-10 OR EQUIVALENT.

b. WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC. SPRINGTOOTH HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.

c. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACT, THE AREA MUST BE RETILLED AS ABOVE.

2. SEEDING:

a. APPLY LAWN MIX AT A RATE (SEE SPECIFICATIONS)

b. APPLY SEED WITH MECHANICAL SEEDER. OPTIMUM SEEDING DEPTH IS ONE INCH (EXCEPT SANDY SOILS, 2 INCHES).

c. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPAKER TYPE SEEDER OR HYDROSEEDER IS USED. THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.

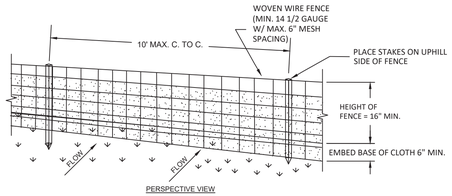
3. MULCHING:

a. MULCH MATERIAL SHALL BE UNROTTED SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 2-½ TO 3 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1,000 SQUARE FEET. MULCH SHOULD NOT BE GROUND OR CHOPPED INTO SHORT PIECES.

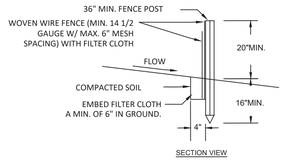
b. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75 PERCENT TO 85 PERCENT OF THE SOIL SURFACE WILL BE COVERED.

c. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER.

d. MULCHING NETTING'S - STAPLE, JUTE OR COTTON NETTING'S TO THE SOIL SURFACE, USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.



PERSPECTIVE VIEW



SECTION VIEW

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER- LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL

SCALE: NTS

DUST CONTROL

MATERIALS

A. USE OF ONE OF THE FOLLOWING OR COMBINATION OF MATERIALS FOR DUST CONTROL TO BE APPROVED BY ENGINEER:

- VEGETATIVE METHODS
1. SEED - SEE SPECIFICATIONS ON SHEET 1.0
2. MULCHING - SEE SPECIFICATIONS ON SHEET 1.0

- SPRAY ADHESIVES
1. PRODUCTS THAT ARE GENERALLY COMPSED OF POLYMERS IN A LIQUID OR SOILD FORM THAT ARE MIXED WITH WATER AND SPRAYED ON THE SOIL SURFACE. MIXING RATIOS AND APPLICATION RATES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

- SPRINKLING
1. SITE MAY BE SPRAYED WITH WATER UNTIL THE SURFACE IS WET.

- BARRIERS
1. WOVEN GEOTEXTILES CAN BE PLACED ON DRIVING SURFACE TO EFFECTIVELY REDUCE DUST THROW AND PARTICLE MIGRATION

INSTALLATION DETAILS

A. SOIL AREAS

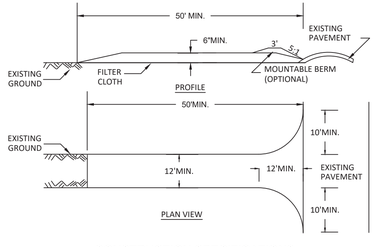
1. LOCATIONS REQUIRING DUST CONTROL WILL BE CLEARLY MARKED AND PLACED UNDER CONTROL WITHIN 24 HOURS
2. ONLY APPROVED MATERIALS AS SPECIFIED WILL BE USED TO CONTROL DUST FROM SOIL AREAS. THEY WILL BE DURABLE AND CAPABLE OF MAINTAINING ITS POSITION ONCE PLACED.
3. SPRAYS SHALL BE MIXED AND APPLIED AT THE DESIGN RATE OVER THE ENTIRE SURFACE.
4. AREAS NOT COMPLETED IN AN APPLICATION SHALL BE OVERLAPPED WITH PREVIOUSLY CONTROLLED AREA BY 10 FEET TO ASSURE COVERAGE.

B. ROAD AREAS

1. CONTROL WILL BE ACCOMPLISHED IN A MANNER THAT PREVENTS SOIL MATERIAL FROM BEING WASHED INTO THE STORM DRAINAGE SYSTEM, INCLUDING MANHOLES, SEWERS OR OPEN DITCHES.
2. SPRINKLING WILL BE DONE ON A CYCLE AND AT A RATE THAT KEEPS THE SURFACE WET AND PREVENTS SEDIMENT TRANSPORT.
3. SPRAYS, OTHER THAN WATER, WILL BE MIXED AND APPLIED AT THE DESIGN RATE OVER THE DESIGN SURFACE.
4. EXCESS MATERIAL BUILT UP DURING OPERATIONS WILL BE REMOVED BY LABOR OR MECHANICAL BRUSHES.

C. MAINTENANCE

1. MATERIALS USED FOR DUST CONTROL WILL BE STORED AT THE SITE IN A MANNER THAT PREVENTS DETERIORATION AND PROTECTS THE ENVIRONMENT.
2. OPERATIONS SHALL BE MONITORED TO EVALUATE THE SPRAYING OR SPRINKLING CYCLES AND ADJUSTMENTS MADE IF NECESSARY.
3. HIGHLY URBANIZED AREAS WILL REQUIRE FREQUENT REMOVAL OF ANY SOIL BUILD UP ON ROADS.
4. MAINTAIN DUST CONTROL MEASURES THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS ARE STABILIZED.

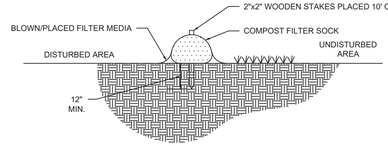


CONSTRUCTION SPECIFICATIONS

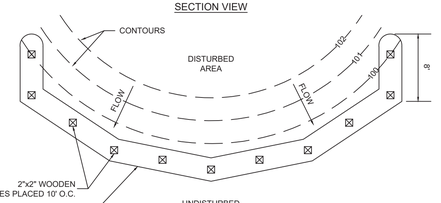
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS



SECTION VIEW



PLAN VIEW

1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 5.1. COMPOST SHALL MEET THE STANDARDS LISTED ON OF TABLE 5.2.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT (FIGURE 5.2). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE X.X. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
5. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
6. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. UPON STABILIZATION OF THE AREA TRIBUTART TO THE SOCKS, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

SEDIMENT LOG DETAIL

SCALE: NTS

TYPICAL SMP SIGN POST DETAIL

SCALE: NTS

STORMWATER MANAGEMENT PRACTICE
INFILTRATION BASIN

PROJECT INFORMATION - SPDES NYR _ _ _ _ _

RESPONSIBLE ENTITY - CHAMPLAIN FIRE DISTRICT

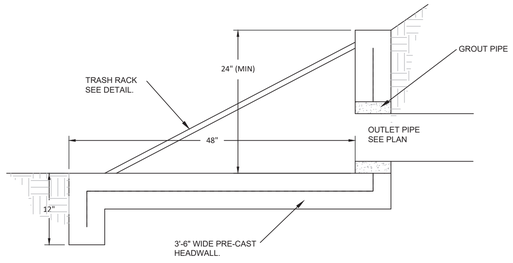
MUST BE MAINTAINED IN ACCORDANCE WITH O&M PLAN

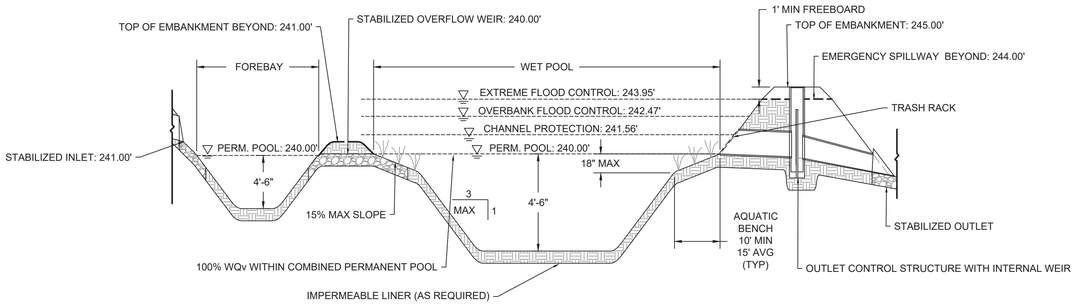
DO NOT REMOVE OR ALTER

18" X 24"
4'-0" MOUNTING HEIGHT
SIGN SHALL BE REFLECTORIZED

TYPICAL SMP SIGN

SCALE: NTS


GROUT PI



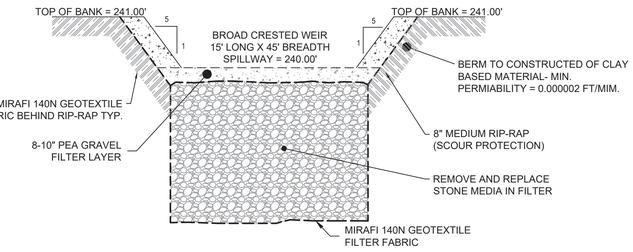
DETENTION POND SECTION A-A
SCALE: NTS

DETENTION POND SIZING SUMMARY

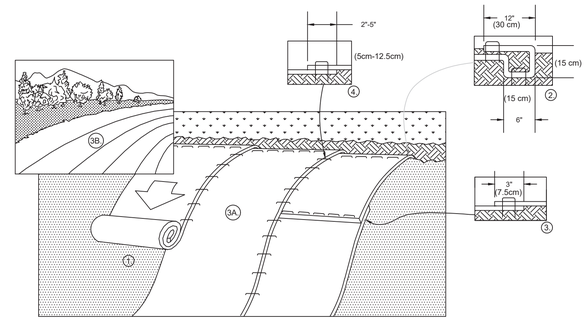
REQUIRED WATER QUALITY VOLUME: 104,119 CU-FT

FOREBAY REQUIRED VOLUME FOR 3 INLET POINTS -> 30% WQv (MIN.) = 104,119 CU-FT x 0.30 = 31,235.70 CU-FT
FOREBAY PROVIDED VOLUME = 61,281 CU-FT > 31,235.70 CU-FT

PERMANENT POOL REQUIRED VOLUME -> 100% WQv (MIN.) = 104,119 CU-FT
PERMANENT POOL PROVIDED VOLUME -> 115,686.00 CU-FT > 104,119 CU-FT

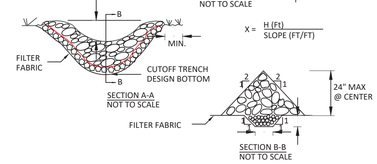


BROAD CRESTED WEIR SECTION B-B
SCALE: NTS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. GROUND SURFACE MUST BE FREE OF DEBRIS, ROCKS, CLAY CLODS AND RAKED SMOOTH SUFFICIENT TO ALLOW INTIMATE CONTACT OF THE RECP WITH THE SOIL OVER THE ENTIRETY OF THE INSTALLATION.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. USE SHOREMAX MAT AT THE CHANNEL/CULVERT OUTLET AS SUPPLEMENTAL SCOUR PROTECTION AS NEEDED. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES/PINS APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" (30 CM) PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES/PINS SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES/PINS IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. PLACE CONSECUTIVE RECPS END-OVER-END (SHINGLE STYLE) WITH A 4"- 6" (10 - 15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECPS.
5. FULL LENGTH EDGE OF RECPS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT ST APART IN A 6" (15 CM) DEEP X 6"(15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECPS MUST BE OVERLAPPED APPROXIMATELY 4"- 6" (10 - 15 CM) AND SECURED WITH STAPLES/STAKES/PINS AT ST.
7. IN HIGH FLOW CHANNEL APPLICATIONS A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 -12M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 6" (15 CM) APART AND 12" (30 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECPS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES/PINS SPACED AT ST APART IN A 6" (15 DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. FASTENERS SHOULD PROVIDE A MINIMUM OF TWENTY POUNDS OF PULLOUT RESISTANCE. SIX-INCH (10 CM) X ONE-INCH (2.5 CM) ELEVEN GAUGE STAPLES ARE TYPICALLY ADEQUATE. IN LOOSE SOILS, LONGER STAPLES MAY BE NECESSARY, TWIST PINS CAN PROVIDE THE GREATEST PULLOUT RESISTANCE. IN HARD OR ROCKY SOILS, STRAIGHT PINS MAY BY USED WHERE STAPLES OR TWIST PINS ARE REFUSED, PROVIDED THE MINIMUM PULLOUT REQUIREMENTS ARE MET. BIO-DEGRADABLE FASTENERS SHALL NOT BE USED WITH VMAX (TRM) OR TMAX (HPTRM) MATERIALS.

EROSION CONTROL BLANKET
SCALE: NTS

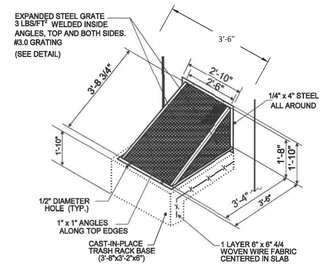


CONSTRUCTION SPECIFICATIONS

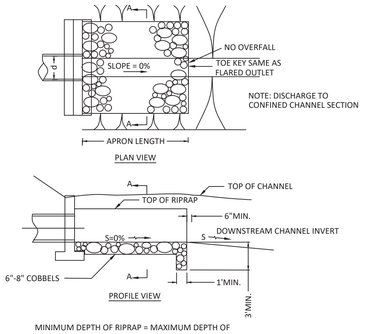
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

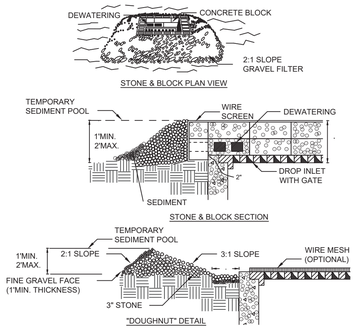
STONE CHECK DAM
SCALE: NTS



POND OUTLET TRASH RACK DETAIL
SCALE: NTS



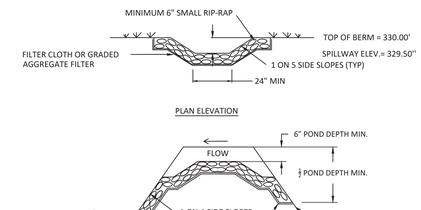
RIPRAP OUTLET PROTECTION
SCALE: NTS



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

TYPICAL CATCH BASIN INLET PROTECTION
SCALE: NTS



EMERGENCY SPILLWAY DETAIL
SCALE: NTS

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

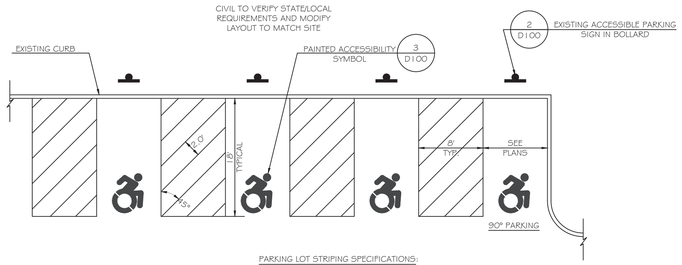
Project Name & Address

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

~ Situate ~
Town of Plattsburgh
Clinton County — State of New York

Project # 22241	Sheet: Proposed Erosion & Sediment Control Plan Notes & Details
Date 01/09/2025	C704
Scale SEE SCALE	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



NOTES

1. ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 1:50 IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS ISLE IS INSTALLED, IT IS TO BE A VAN SIZE.
2. PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY'S AND ADA STANDARDS AND IF DIFFERENT THAN THIS DETAIL SHALL BE THE DIMENSIONING SHOWN ON THE SITE LAYOUT PLAN.
3. CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
4. CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
5. NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.

PARKING LOT STRIPING SPECIFICATIONS:

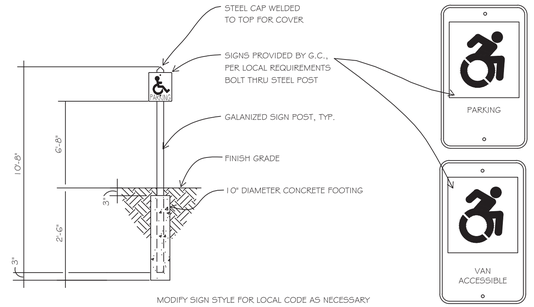
STANDARDS:
1. ALWAYS FOLLOW ALL APPLICABLE GOVERNING AUTHORITY'S STANDARDS.
2. SURFACES SHOULD BE CLEAN, DRY, AND FREE FROM LOOSE OR PEELING PAINT. REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. DO NOT APPLY WHEN AIR OR SURFACE TEMPERATURES ARE BELOW 40°F.
3. APPLY SHERWIN-WILLIAMS SETFAST PREMIUM ALKYD ZONE MARKING PAINT A300 WHITE OR A303 YELLOW USING EITHER AIRLESS OR CONVENTIONAL LINE STRIPING EQUIPMENT. USE THE FOLLOWING SETTINGS AS A GUIDE-ACTUAL SETTINGS DEPEND ON ATMOSPHERIC CONDITIONS AT THE TIME OF APPLICATION:

AIRLESS
- PRESSURE 1800-2700 PSI
- HOSE 1/4"-3/8" ID
- TIP 0.015"-0.017"
- FILTER 60 MESH
- REDUCTION ONLY IF NECESSARY, UP TO 1 PT/GAL VM&P NAPTHA R.I.K.3

CONVENTIONAL
- GUN BLINKS 21 (BLEEDER) OR EQUIVALENT
- FLUID NOZZLE #68
- AIR NOZZLE INTERNAL MIX, #709
- ATOMIZATION PRESSURE 45-80 PSI
- FLUID PRESSURE 40-70 PSI
- REDUCTION ONLY IF NECESSARY, UP TO 1 PT/GAL VM&P NAPTHA R.I.K.3

- MIX PAINT THOROUGHLY BY BOXING, STIRRING, OR POWER AGITATION BEFORE USE. APPLY AT 15 MILS WET TO ACHIEVE A SPREAD RATE OF 400-500 LINEAL FEET OF STANDARD 4" STRIPE PER GALLON. APPLIED AT THIS RATE AT 70 DEGREES F AND 50% RELATIVE HUMIDITY, PAINT WILL DRY WITH NO TRAFFIC PICKUP AFTER 20 MINUTES.

1 D100 WATER METER / BACKFLOW PREVENTER DETAIL
SCALE: NTS

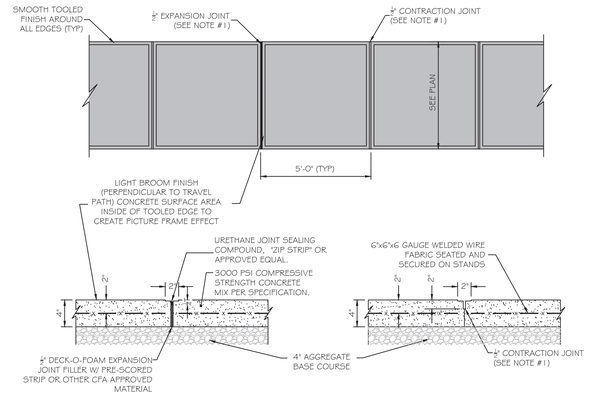


MODIFY SIGN STYLE FOR LOCAL CODE AS NECESSARY

2 D100 TYPICAL HANDICAP PARKING SIGN
SCALE: NTS

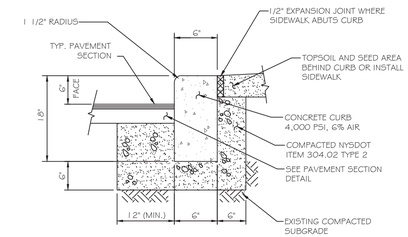
3 D100 NEW YORK STATE REQUIRED "ACCESSIBLE" ICON
SCALE: NTS

NOTES:
1. GENERAL CONTRACTOR SHALL REFER TO CVES PARKING LOT STRIPING SPECIFICATIONS, SEE DETAIL
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

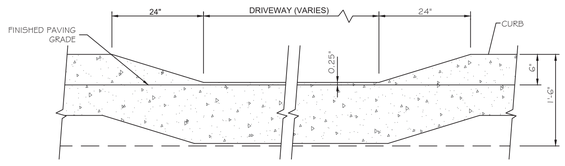


NOTES:
1. JOINTS AT 5'-0" O.C. TOOLED 1/4" WIDE, 1" DEEP OR MAX. 1/3 DEEP WHICHEVER IS GREATER. EXPANSION JOINTS AT 20' MAX. @ ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.

4 D100 TYPICAL CONCRETE SIDEWALK
SCALE: NTS

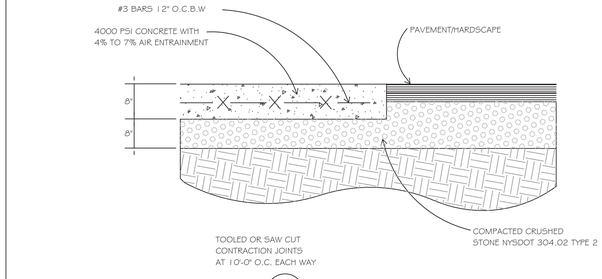


5 D100 TYPICAL CURB SECTION
SCALE: NTS

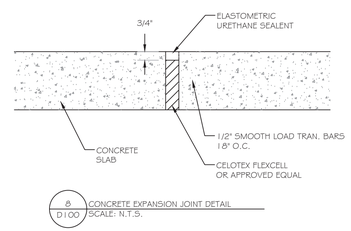


NOTE:
LOCATE CURB EXPANSION JOINTS AT 40' O.C.
WITH SAW-CUT JOINTS (6" DEPTH) EVERY 20' O.C.

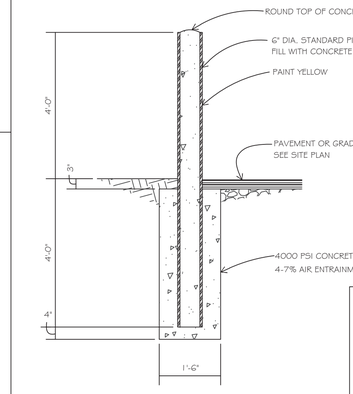
6 D100 TYPICAL DROP CURB DETAIL
SCALE: NTS



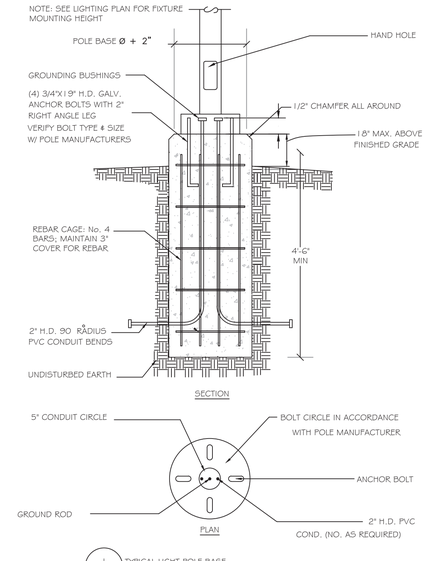
7 D100 TYPICAL CONCRETE SLAB - HARDSCAPE AREAS
SCALE: N.T.S.



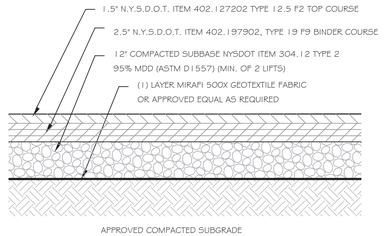
8 D100 CONCRETE EXPANSION JOINT DETAIL
SCALE: N.T.S.



9 D100 TYPICAL PIPE BOLLARD DETAIL
SCALE: N.T.S.



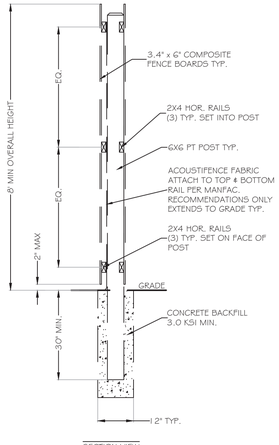
1 D5.00 TYPICAL LIGHT POLE BASE
SCALE: N.T.S.

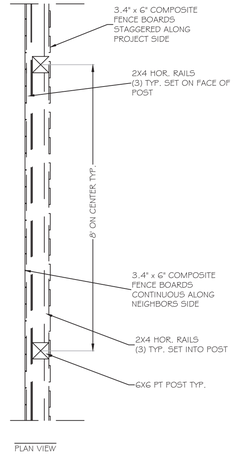


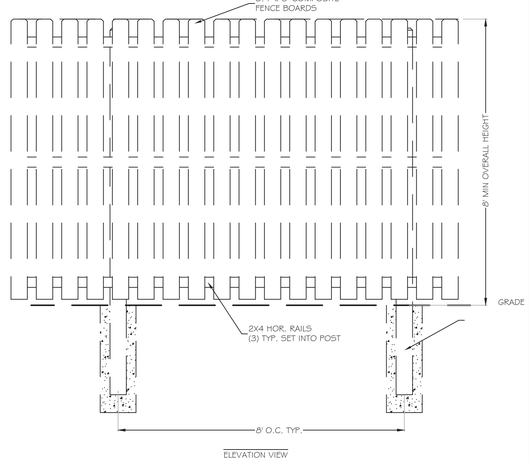
NOTE:
IF FILL IS REQUIRED TO MEET SUBGRADE ELEVATION THEN MATERIAL MUST MEET N.Y.S.D.O.T. ITEM 203.20 SELECT GRANULAR FILL COMPACTED TO MEET 100% MDD (ASTM D1557) MAXIMUM LIFT OF 8".

PAVING BASE MATERIAL AND COMPACTION REQUIREMENTS ARE EQUAL TO STATE HIGHWAY SPECIFICATIONS.

5 D200 STANDARD ASPHALT PAVING SECTION
SCALE: N.T.S.







6 D200 BOARD ON BOARD FENCE DETAIL
SCALE: N.T.S.

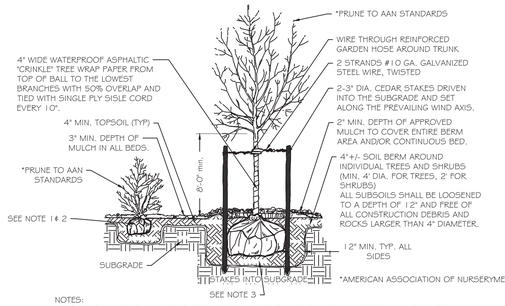
No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

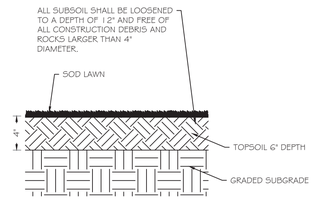
Project # 22241	Sheet: SITE DETAILS
Date 01/09/2024	D100
Scale SEE SCALE	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



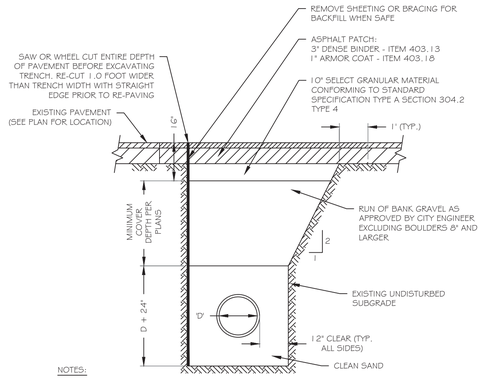
NOTES:
1. REMOVE ALL ROPES AND SYNTHETIC ROOT BALL COVERINGS. SURROUND ROOT BALL WITH 6" OF PLANTING MIX ON ALL SIDES
2. IN ALL CASES REMOVED THE CORDS FROM AROUND THE TREE OR SHRUB TRUNK BASE. IF SYNTHETIC ROOT BALL COVERING IS PRESENT, REMOVE IT COMPLETELY. FOLD NATURAL BURLAP WELL BELOW FINAL SOIL GRADE.
3. 6" MIN. PLANTING MIX

1 / D200 TYPICAL TREE AND SHRUB PLANTING
SCALE: N.T.S.



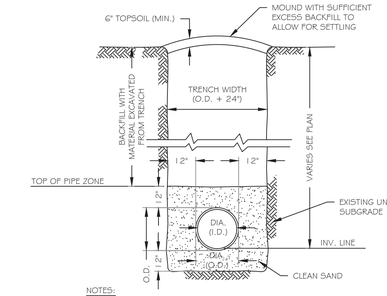
SEED ANALYSIS:
49.93% DERBY PER. RYE GRASS (90% GERM.)
26.88% SR 4000 PER. RYE GRASS (90% GERM.)
10.56% CROWN PER. RYE GRASS (90% GERM.)
8.64% PRELUDE PER. RYE GRASS (90% GERM.)
1.74% CROP SEED
2.21% INERT MATTER

2 / D200 TYPICAL SOD & TOPSOIL DETAIL
SCALE: N.T.S.



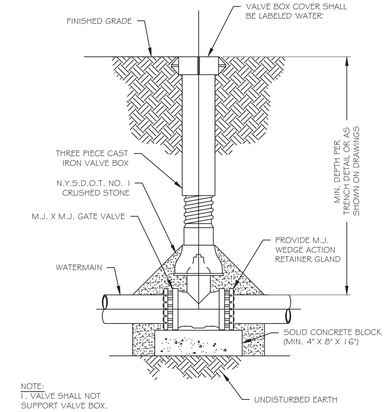
NOTES:
1. TRENCH TO BE ADEQUATELY BRACED AND SHORED OR CUT SLOPES SHALL BE PROVIDED.
2. ALL BACKFILL TO BE COMPACTED IN 12" LIFTS PER STANDARD SPECIFICATION SECTION 203-3.12.
3. SPECIFICATION REFERENCES ARE TO NYSDOT STANDARD SPECIFICATIONS

3 / D200 TYPICAL TRENCH SECTION IN PAVEMENT
SCALE: NTS



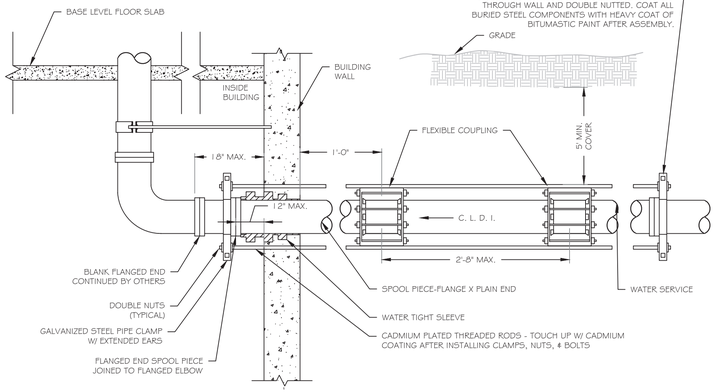
NOTES:
1. TRENCH TO BE ADEQUATELY BRACED AND SHORED OR CUT SLOPES SHALL BE PROVIDED.
2. ALL BACKFILL TO BE COMPACTED IN 12" LIFTS PER STANDARD SPECIFICATION SECTION 203-3.12.
3. SPECIFICATION REFERENCES ARE TO NYSDOT STANDARD SPECIFICATIONS

4 / D200 TYPICAL TRENCH DETAIL - NON-PAVEMENT AREAS
SCALE: NTS

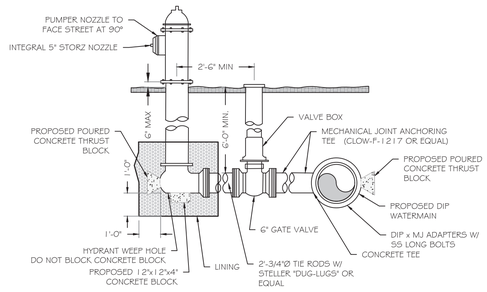


NOTE:
1. VALVE SHALL NOT SUPPORT VALVE BOX.

5 / D200 TYPICAL LINE VALVE DETAIL
SCALE: NTS

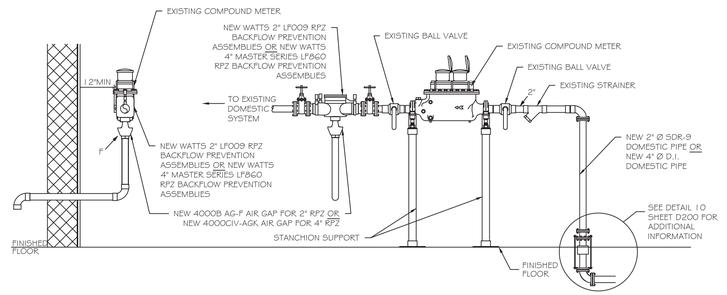


6 / D200 FIRE PROTECTION ENTRANCE THRU WALL BELOW GRADE
SCALE: NTS

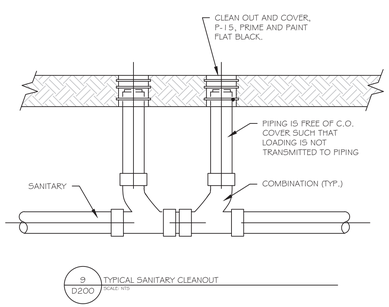


HYDRANT ASSEMBLY NOTES:
1. 6" D.I. PIPE (TO BE FURNISHED BY THE CONTRACTOR) SHALL BE INCLUDED IN THE UNIT PRICE FOR HYDRANTS INSTALLED.
2. THE RODS & LUGS (TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR) WILL BE INCLUDED IN THE UNIT PRICE FOR HYDRANTS INSTALLED.
3. CONCRETE THRUST BLOCKS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER IN LIEU OF TIE RODS & LUGS IN SPECIAL CASES. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH BLOCKS.
4. WHERE THERE IS AN EXISTING DRAINAGE SWALE HAVING A DEPTH OF 18-INCHES OR GREATER, BETWEEN THE ROAD AN HYDRANT, THE CONTRACTOR SHALL INSTALL A 20-FOOT SECTION OF 12-INCH PIPE (MIN) HDPE WITH END SECTIONS IN THE EXISTING SWALE AND BACKFILL.
5. IF GROUND WATER IS ENCOUNTERED WITHIN SEVEN FEET OF THE GROUND SURFACE, THE HYDRANT WEEP HOLE SHALL BE PLUGGED. THE HYDRANT SHALL BE LABELED BY AFFIXING A BRASS TAG STATING THAT THE HYDRANT HAS BEEN PLUGGED AND MUST BE PUMPED DRY AFTER USE.
6. INCLUDE A 90° BEND AND THRUST BLOCKS WHEN REQUIRED.

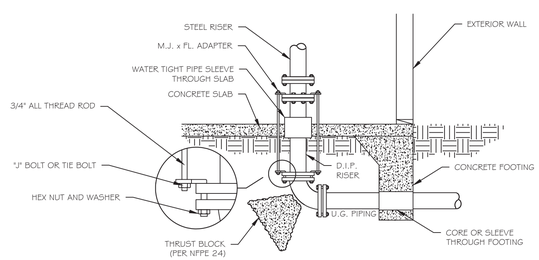
7 / D200 TYPICAL FIRE HYDRANT INSTALLATION
SCALE: NTS



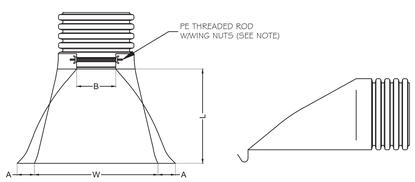
8 / D200 WATER METER / BACKFLOW PREVENTER DETAIL
SCALE: NTS



9 / D200 TYPICAL SANITARY CLEANOUT
SCALE: NTS

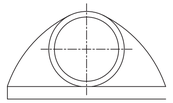


10 / D200 UNDERGROUND PIPE THROUGH FOUNDATION
SCALE: NTS



TOP VIEW

RIGHT SIDE VIEW



FRONT VIEW

PIPE SIZE	A	B (MAX)	H	L	W
12 in	6.50 in	10.00 in	6.50 in	25.00 in	29.00 in
15 in	6.50 in	10.00 in	6.50 in	25.00 in	29.00 in
18 in	7.50 in	15.00 in	6.50 in	32.00 in	35.00 in
24 in	7.50 in	18.00 in	6.50 in	36.00 in	45.00 in

NOTE:
1. PE THREADED ROD W/MING NUTS PROVIDED FOR END SECTIONS 12"-24". 30" & 36" END SECTIONS TO BE WELDED TO PIPE PER MANUFACTURER'S RECOMMENDATIONS. 2. ALL DIMENSIONS ARE NOMINAL
2. MANUFACTURER: ADVANCED DRAINAGE SYSTEMS (ADS) OR APPROVED EQUIVALENT

11 / D200 FLARED END SECTION
SCALE: N.T.S.

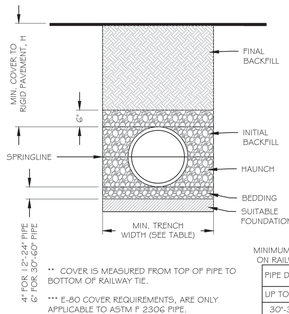
No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet: SITE DETAILS
Date 01/09/2024	D200
Scale SEE SCALE	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025



** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.

*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80***
UP TO 24"	24"
30"-36"	36"
42"-60"	48"

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

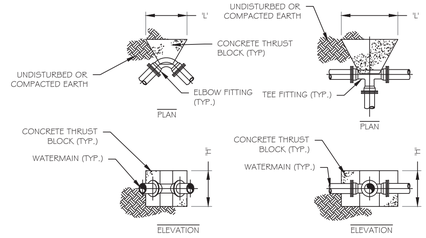
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

1 / D300 TYPICAL STORM TRENCH DETAIL
SCALE: NTS

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

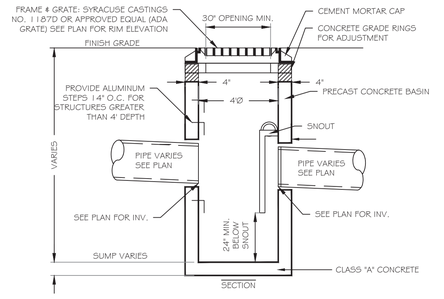
MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS



	DIMENSION SCHEDULE (IN FEET)							
PIPE SIZE	90° ELBOW		45° ELBOW		22.5° ELBOW		11.25° ELBOW	
	'H'	'L'	'H'	'L'	'H'	'L'	'H'	'L'
8"	2.25	5.00	1.75	3.50	1.50	2.50	1.50	1.75

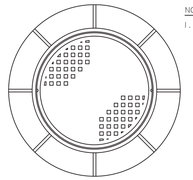
DIMENSION SCHEDULE (IN FEET)		
PIPE SIZE	TEE OR TAP SLEEVE	
----	'H'	'L'
8"	2.25	4.25

2 / D300 TYPICAL THRUST BLOCK DIMENSION SCHEDULE
SCALE: NTS

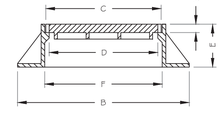


NOTES:
1. THICKNESS OF WALLS TO BE INCREASED TO 12" BELOW 12' DEPTH.
2. STEPS NOT REQUIRED FOR INLETS LESS THAN 4' DEEP.
3. SUMP VARIES SO THAT MIN TOTAL STRUCTURE HEIGHT IS GRATER THAN 5.5' (12" MIN.)
4. FOR PIPES GREATER THAN 24" IN DIA. INCREASE BASIN TO 48"x48" INSIDE DIMENSIONS
5. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS PRIOR TO ORDERING STRUCTURE

3 / D300 TYPICAL CATCH BASIN
SCALE: NTS



NOTES:
1. MANHOLE COVER SHALL BE LABELED EITHER "SANITARY" OR "STORM" TO CORRESPOND WITH THE PIPE.



PLAN SECTION

TABLE							
PATTERN NO.		B	C	D	E	F	X
1016A		40 3/4"	32"	30"	6 1/2"	33"	1 1/2"

4 / D300 TYPICAL MANHOLE FRAME AND COVER DETAIL
SCALE: NTS

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MACDONOUGH STREET, PLATTSBURGH, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project #	22241	Sheet	SITE DETAILS
Date	01/09/2024		D300
Scale	SEE SCALE		
Drawn	TJS	Checked	AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2025

APPENDIX A

SEQRA DOCUMENTATION

FINAL SCOPING DOCUMENT
FOR
PREPARATON OF A
DRAFT ENVIRONMENTAL
IMPACT STATEMENT (DEIS)

UMS PROPERTY, LLC
NEW DISTRIBUTION CENTER SITE PLAN 2024

TOWN OF PLATTSBURGH
CLINTON COUNTY, NEW YORK

Lead Agency:

Town of Plattsburgh Planning Board
151 Banker Road
Plattsburgh, New York 12901

Applicant/Project Sponsor:

UMS Property, LLC
194 Pleasant Ridge Road
Plattsburgh, New York 12901

Prepared by:

JMT of New York, Inc.
19 British American Boulevard
Latham, New York 12110

Submitted: September 2024

TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 BACKGROUND AND APPROVALS 2
3.0 PROPOSED ACTION 3
4.0 ENVIRONMENTAL IMPACT ASSESSMENT & SCREENING 4
5.0 ALTERNATIVES TO THE PROPOSED ACTION 9
6.0 DRAFT ENVIRONMENTAL IMPACT STATEMENT (OUTLINE) 9

FIGURES

Figure 1 Site Location Map

APPENDICES

Appendix A Site Plan Application

Appendix B NYS OPRHP Correspondence

1.0 INTRODUCTION

The following report is a Final Scoping Document (FSD) completed and issued pursuant to Article 8 of the New York Environmental Conservation Law and the regulations promulgated thereto at 6 NYCRR Part 617 which pertains to the New York State Environmental Quality Review Act (SEQRA).

SEQRA Status: Type I

Lead Agency: Town of Plattsburgh Planning Board
151 Banker Road
Plattsburgh, New York 12901

This FSD relates to a proposed warehouse and distribution facility to be located on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road in the Town of Plattsburgh, Clinton County, New York (henceforth referred to as "Proposed Action"). The location of the Proposed Action includes Tax Parcel Nos. 245.-4-40.1, 245.-4-16.2, and portions of 245.-4-22.11, where the proposed building is approximately 774,750 sq ft. (the "Site"). Figure 1 entitled "Site Location Map" illustrates the location of the Site and its relationship to the surrounding area. The Town of Plattsburgh Planning Board (Town) has determined the project to be a Type I Action under SEQRA, and issued a Positive Declaration on the basis that the Action has the potential for significant adverse impacts on the environment, and therefore requires preparation of a Draft Environmental Impact Statement (DEIS).

In accordance with SEQRA requirements, a Draft Scoping Document was provided to the Town and accepted via Town Planning Board Resolution No. 24-45 on August 6, 2024. The Town opened a public comment period on the Draft Scoping Document from August 9, 2024, through September 17, 2024, and scheduled a public hearing for September 17, 2024. Notice of the public comment period and public hearing were advertised in the Press Republican newspaper, and notice of the public hearing was published in the New York State Department of Environmental Conservation (NYSDEC) Environmental Notice Bulletin on August 21, 2024. Information regarding the action was published on the Town website (https://www.townofplattsburgh.com/2024/08/08/planning-board-information-regarding-proposed-ums-properties-distribution-site-plan/). The Town initiated lead agency coordination with and solicited comments on the Draft Scoping Document from the following involved and interested agencies:

- Town of Plattsburgh Zoning Board
- New York State Department of Transportation (NYSDOT)
- New York State Department of Environmental Conservation (NYSDEC)
- New York State Historic Preservation Office (SHPO)
- Clinton County Planning Board
- New York State Department of State (NYSDOS)
- Clinton County Industrial Development Agency (IDA)
- Federal Aviation Administration (FAA)
- Clinton County Department of Health

This FSD reflects the incorporation of relevant comments from involved and interested agencies and the public as provided through the designated public comment period and Town-held public hearing.

The purpose of the FSD is to identify the environmental issues that will be addressed in the DEIS as well as the methodology that will be used to study the potential environmental impacts of the proposed project. This FSD includes: (1) a brief description of the Proposed Action; (2) an identification of potentially significant adverse impacts provided in Parts 2 and 3 of the Full Environmental Assessment Form prepared for the Proposed Action and through consultation with involved and interested agencies; (3) the extent and quality of information needed to adequately address each impact; (4) an initial identification of mitigation measures; and (5) the reasonable alternatives to be considered.

UMS Property, LLC (UMS), as the Project Sponsor, will prepare the DEIS pursuant to SEQRA. As the Proposed Action will require federal permits and approvals, including, but not limited to, federal wetlands permits pursuant to Section 404 of the Clean Water Act, the DEIS will also contain information to support the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. § 4321 *et seq*.) review.

2.0 BACKGROUND AND APPROVALS

UMS is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road to support their nearby existing manufacturing facility. UMS has entered into a purchase agreement to buy the Site for the Proposed Action.

The Proposed Action will require the following approvals:

- Site Plan Review/Approval from the Town of Plattsburgh Planning Board and Clinton County Planning Board coordination under NYS General Municipal Law Section 239-m;
- FAA approval for the height of the proposed building;
- Area variance from Town of Plattsburgh Zoning Board for the height of proposed building;
- Town of Plattsburgh Water and Sewer Department Permits for water and sewer construction;
- Clinton County Health Department and NYSDEC Permits (where applicable) for extending the public water line along NYS Route 22 to the Site. Coordination with New York State Department of Health and Town of Plattsburgh Water and Wastewater Department will also be required;
- Clinton County Health Department for the onsite septic system (if required);
- Town of Plattsburgh Driveway Permit for any connection to Superior Road or Archie Bordeau Road;
- USACE Section 404 Permit for disturbance of federal wetlands;
- Clinton County Industrial Development Agency (IDA) for possible tax incentives;
- NYSDOT Highway Work Permit and Access Permit for the new commercial driveway;
- NYSDEC State Pollution Discharge Elimination System (SPDES) Permit for disturbing more than one acre during construction; and
- NYSDEC SPDES Permit for sanitary sewage treatment discharges greater than 1,000 gallons per day.

3.0 PROPOSED ACTION

As stated above, UMS is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road. The Site will be accessed from a new commercial driveway off NYS Route 22. The facility will operate 24 hours per day, 7 days a week with three work shifts. Most of the work at the facility will occur during the morning and afternoon shifts, with approximately

100 employees, with a smaller operational crew of approximately 22 employees for the evening or third shift. The Site has been designed with approximately 200 vehicle spaces to account for the maximum number of employees per shift with adequate reserve volume for shift overlap. Deliveries and outbound shipments from the facility will primarily occur during normal business hours of 7 AM to 5 PM, Monday through Friday. It is estimated that there will be approximately 50 trucks per day entering and exiting the Site with a peak rate of 10 trucks per hour.

The proposed warehouse building is approximately 774,750 sq ft, including approximately 34,600 sq ft of office area. The majority of the proposed building and office area is approximately 60 ft in height with a small portion of the warehouse approximately 100 ft in height. This high bay area will house a fully automated racking system that allows for material to be stored up to 90 ft in height, reducing the overall footprint of the building and allowing for more efficient material handling.

In summary, the Proposed Action includes construction of approximately 30.81 acres of road, building, and other paved or impervious surfaces, along with approximately 15.55 acres of open lawn areas. The Proposed Action will impact forested land, grasslands/meadowlands, and federal wetlands.

The anticipated construction period is 24 months. Construction and operation will be in accordance with the issued approvals.

4.0 ENVIRONMENTAL IMPACT ASSESSMENT & SCREENING

The DEIS will address all items in this scoping document and will conform to the general format set forth herein. Each impact category, such as transportation, wetlands, air, and other impacts, will be presented in a separate subsection which includes a discussion of existing conditions, potential impacts associated with the Proposed Action, and proposed mitigation measures designed to avoid, or minimize, the identified impacts.

GEOLOGY, SOILS, AND TOPOGRAPHY

The DEIS will identify the major geologic and soil conditions on the property, focusing on suitability of the property for development, stormwater management and sanitary discharge purposes. The analysis will use information readily available from the United States Department of Agriculture's Natural Resources Conservation Service (e.g., soil

survey) as well as the property information to complete this section. The assessment will also include a discussion of proposed modifications to site topography.

STORMWATER MANAGEMENT

The DEIS will summarize a Stormwater Pollution Prevention Plan (SWPPP) for the Proposed Action, prepared in accordance with the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) which shall include the following:

i. Drainage study, defining existing and post-development peak rates and flow volume of stormwater runoff and stormwater quality treatment during the statistical 1-, 10-, and 100-year, 24-hour Type II storm events.

ii. Pre- and post-development stormwater runoff quality will be discussed and summarized.

iii. A description of the proposed stormwater detention and treatment methods per current NYSDEC Design Standards and local regulations with the conceptual locations of all stormwater management design measures shown on a drawing. The access to, ownership of, and responsibility for long-term maintenance of any stormwater management facilities will also be discussed.

iv. A description of the proposed soil erosion and sediment control methods that will be implemented during- and post-construction per current NYSDEC Design Standards and local regulations.

TERRESTRIAL AND AQUATIC ECOLOGY

Habitat

The DEIS will include a discussion of the existing types of vegetation as well as the wildlife present at the Site, which will include birds, mammals, reptiles, amphibians, and rare, endangered, or threatened species along with a strong emphasis on the Indiana Bat (*Myotis sodalis*) and Northern Long-eared Bat (*Myotis septentrionalis*)- both federally and state-listed as endangered, will be evaluated and discussed in detail in the DEIS. The DEIS will identify and describe both potential short-term and long-term impacts to habitat based on the construction and operational activities of the Proposed Action. Potential Impacts to the nearby natural significant community, Pitch Pine-Heath Barrens will also be discussed.

Surface Waters and Wetlands

Potential impacts and mitigation to surface waters, including the Salmon River and federal wetlands will be evaluated and discussed. Delineation of wetlands will follow the three-part standard outlined in the 1987 U.S. Army Corps of Engineers (USACE) delineation manual, with the boundaries verified through the Jurisdictional Determination process. It is anticipated the wetlands will be USACE-jurisdictional and that a Section 401 Individual Water Quality Certification from NYSDEC will be needed, in addition to a USACE Section 404 Individual Permit for the proposed wetland disturbance. Possible mitigation will be discussed in the DEIS, as mitigation will be required as part of the permitting process with NYSDEC and USACE.

NOISE

The Proposed Action will have the potential to increase noise levels based on construction activities and operation of the proposed facility. The noise assessment will evaluate typical equipment used at the site and their potential impacts on the surrounding areas. The assessment of potential noise impacts will be conducted following the NYSDEC guidance document, “Assessing and Mitigating Noise Impacts” (DEP-00-1, Revised February 2, 2001).

VISUAL RESOURCES

The DEIS will include a SEQRA Visual Environmental Assessment Form (EAF) as well as a visual impact assessment in accordance with the NYSDEC Program Policy “Assessing and Mitigating Visual and Aesthetic Impacts.” This policy includes:

1. Creating an inventory of aesthetic resources;
2. Conducting a visual impact assessment including viewshed assessment. In addition to the resources identified in the policy, the analysis will include resources of local importance as identified in local land use zoning and planning processes and Town of Plattsburgh Comprehensive Plan;
3. Identifying any potential significant aesthetic/visual impacts; and,
4. Identifying whether mitigation is necessary and specific mitigation measures.

The analysis will identify and describe significant views into the Site from a range of representative publicly accessible vantage points and aesthetic resources. The visual and

architectural character of the Proposed Action, with special attention to the Site lighting and off-site visibility of buildings and structures will be assessed. Visual impacts to historic and cultural resources will also be assessed.

TRANSPORTATION

The DEIS will describe the existing transportation network, project conditions in the future with and without the Proposed Action and will assess potential impacts associated with the Proposed Action, such as changes to intersection and roadway capacity and Levels of Service as well as access to NYS Route 22 and major highways. In consultation with NYSDOT, New York State Thruway Authority, and Clinton County Department of Transportation, a Traffic Impact Study will be completed which will include mitigation, if deemed necessary. A copy of the study will be included in as an appendix and summarized within the DEIS.

Aviation

The DEIS will include an assessment of impacts on aviation and evaluate consistency with FAA requirements, including whether any approval is needed from FAA for the proposed building height. Any FAA correspondence will be included in an appendix.

AIR QUALITY

This DEIS will assess impacts on air quality including those from construction and operational activities at the Proposed Action. The DEIS will assess stationary source air emissions from the Proposed Action. Should the Proposed Action require a stationary source air pollution control permit or registration, the associated air pollution control permit application will include evaluation of pollutants subject to NAAQS, New York air toxic control, and ambient air requirements. The DEIS will summarize this detailed air quality impact analyses that will be prepared to support the air pollution control permitting process.

HISTORIC AND CULTURAL RESOURCES

On March 16, 2023, New York State Office of Parks and Historic Preservation (NYS OPRHP) issued a findings letter (Appendix A) concluding no properties, including archeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by the Proposed Action. As such,

historic and cultural resources will only be discussed in the DEIS in relation to visual and aesthetic resources.

SOLID WASTES AND HAZARDOUS MATERIALS

The DEIS will describe the proposed generation of solid waste by the Proposed Action and how that material will be handled, stored, and transported. This analysis will also describe any proposed measures to reduce generation of solid waste through reuse or recycling. The DEIS will also identify any hazardous materials (including any chemical or petroleum bulk storage) that would be used, stored, transported, or generated by the Proposed Action and measures to protect against releases to the environment. Any warranted remedial approaches for addressing identified or potential contaminated materials would be described.

UTILITIES AND INFRASTRUCTURE

Energy

The DEIS will describe the Proposed Action's use and consumption of energy- both gas and electric. Additional energy details will be described in the DEIS, including potential impacts and measures to maximize energy efficiency.

Telecommunications

The DEIS will discuss the location and number of telecommunications lines that will lead to the Site and whether they will be above or below ground and the potential impacts of any new service.

Water Supply

The DEIS will describe the existing public water service and the need for the water line extension. The DEIS will also discuss the need for a new fire protection water tank and fire pump and associated potential impacts.

Onsite Sewer System

The DEIS will detail the proposed onsite sewer system, including its location and its potential impacts and the necessary permits, including the need for a NYSDEC SPDES Permit (GP-0-15-001) Groundwater Discharge of Treated Sanitary Sewage.

5.0 ALTERNATIVES TO THE PROPOSED ACTION

No Action Alternative The DEIS will include an evaluation of a comparison of impacts on the natural resource system, traffic, demand for utilities and community services, employment, and fiscal balance. This alternative will be evaluated based on the assumption that the proposed warehouse and distribution center is not constructed.

Alternative Sites The evaluation of alternative sites owned by, or under option, to the applicant and located in the general project area will include a comparison of impacts on the natural resource system, traffic, and demand for utilities and community services.

Alternative Size Alternatives that reflect the evaluation of changes in scale or magnitude of the project will include a comparison of impacts on the natural resource system, traffic, and demand for utilities and community services.

6.0 DRAFT ENVIRONMENTAL IMPACT STATEMENT (OUTLINE)

Cover Sheet

Shall include: the title as a DEIS; the project and its location; identification of Lead Agency, Applicant, and Preparer with contact information for each and; all relevant dates, including those for document preparation, public hearing, and final document acceptance.

Table of Contents

Shall include all sections and subsections of the DEIS, identified by a page number, figures, tables, appendices, and any other included attachments.

1.0 Executive Summary

This section shall provide a concise summary of the DEIS, including a brief description of the Proposed Action, a list of the involved and interested agencies for DEIS distribution, anticipated significant environmental impacts, proposed mitigation measures, and project alternatives.

1.1 Proposed Action and Need for Action

1.2 Involved Agencies

1.3 Interested Agencies

1.4 Potential Impacts

1.5 Potentially Significant Environmental Impacts and Proposed Mitigations

1.6 Summary of Alternatives

2.0 Environmental Review Process

This section shall include a description of the purposes and objectives of the SEQRA process and a list as well as a brief description of all required federal, state, and local permits, approvals, and/or registrations that are anticipated to be applied for the Proposed Action.

2.1 General Overview of SEQRA

2.2 Required Permits and Approvals

3.0 Project Description

The geographic location and boundaries of the Proposed Action shall be clearly defined, including regional and local maps. Current and previous land use and zoning shall also be described here as well as the need and purpose of the action. A detailed discussion of the required approvals and reviews shall also be included in this section.

3.1Site Location and History3.2Description of the Proposed Action

3.3Project Need and Purpose

3.4Approvals, Reviews and Permits

4.0 Environmental Setting, Impacts and Mitigation

This section shall provide a concise description of the environmental setting of the area to be affected, sufficient to understand the impacts of the Proposed Action and alternatives, as well as a detailed description of the impacts and their proposed mitigation.

4.1 Land Use and Zoning

4.2 Geology, Soils and Topography

4.3 Stormwater Management

4.4 Terrestrial and Aquatic Ecology

4.3.1 Habitat

4.3.2 Surface Waters and Wetlands

4.5 Noise

4.6 Visual Resources

4.6.1 Historic and Cultural Resources

4.7 Transportation

4.8 Air Quality

4.9 Solid Waste and Hazardous Materials

4.10 Utilities and Infrastructure

4.10.1 Energy

4.10.2 Telecommunications

4.10.3 Water Supply

4.10.4 Onsite Sewer System

5.0 Unavoidable Adverse Impacts

This section shall list the long-term, permanent impacts that are likely to occur despite mitigation measures and shall compare in summary form the beneficial and adverse implications of these unavoidable impacts.

6.0 Alternatives to the Proposed Action

This section shall evaluate alternatives to the Proposed Action. The evaluation of each alternative will include a comparison of impacts on natural resources, traffic, visual impacts, air impacts, and noise.

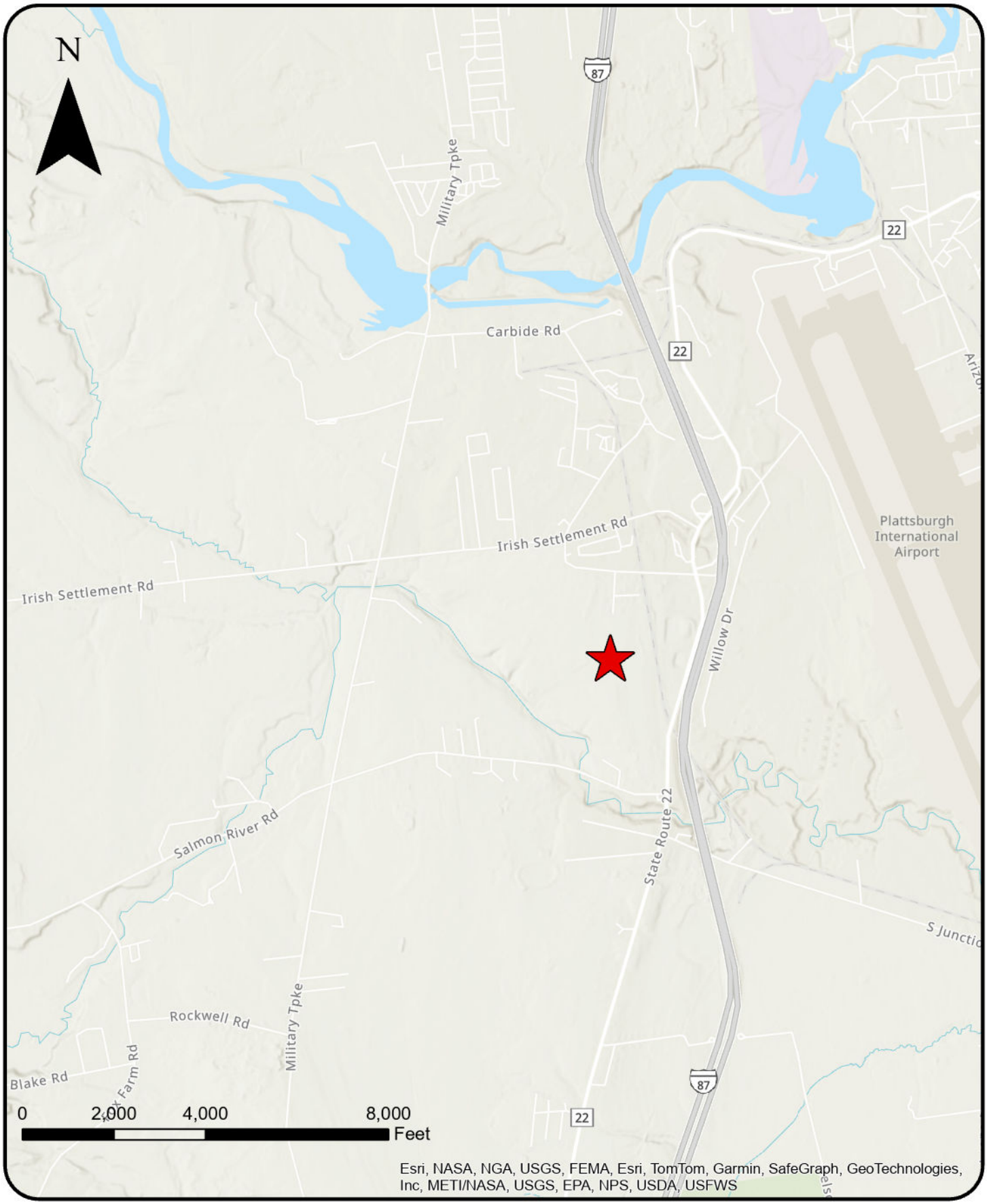
Abbreviations

References

Appendices

- **Appendix A - SEQR Documentation**
- **Appendix B – Agency Correspondence**
- **Appendix C – Wetlands Delineation**
- **Appendix D – Traffic Impact Analysis**
- **Appendix E – Visual Impact Assessment**
- **Appendix F – Noise Impact Assessment**

FIGURE



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

SITE LOCATION MAP

UMS Property, L.L.C.

New Distribution Center

Town of Plattsburgh — Clinton County

PROJ. NO: 24-02308	DATE: 07/19/2024	SCALE: 1 IN = 4,000 FT	DWG NO. -	FIGURE: 1

APPENDICES

APPENDIX A

SITE PLAN APPLICATION

RMS
ENGINEERS • PLANNERS • SURVEYORS • SOIL & MATERIAL TESTING
ROBERT M. SUTHERLAND P.C.

May 28, 2024

Trevor Cole
Senior Planner
Town of Plattsburgh Planning Department
151 Banker Road
Plattsburgh, New York 12901

RE: UMS Property LLC
New Warehouse and Distribution Facility Site Plan 2024

Dear Mr. Cole:

UMS Property LLC (UMS) is looking to construct a new warehouse and distribution facility on the west side of New York State Route 22 between Salmon River Road and Irish Settlement Road. UMS has entered into a purchase agreement to buy Tax Parcels 245.-4-40.1 (land of Robert and Rita Burnell), 245.-4-16.2 (lands of Thomas M. LeClair Living Trust), and portions of 245.-4-22.11 (lands of Iona G. Brand Revocable Living Trust) for the proposed development. The parcels are all Zoned (I) Industrial, where the proposed use is allowed by site plan approval. The proposed building would be approximately 774,750 square-feet in size, which includes approximately 34,600 of office area. The majority of the building and office area would be approximately 60 feet in height with a small portion of the warehouse being approximately 100 feet in height. This high bay area would house a fully automated racking system that allows for material to be stored up to 90 feet in height, reducing the overall footprint of the building and allowing for more efficient material handling.

The site will be accessed from a new commercial driveway off Route 22. The facility will operate 24 hours per day, 7 days a week with three work shifts. The majority of work at the facility will occur during the morning and afternoon shifts, with approximately 100 employees, with a smaller operational crew of approximately 22 employees for the evening or third shift. The site has been designed with approximately 200 vehicle spaces to account for maximum number of employees per shift with adequate reserve volume for shift overlap. Deliveries and outbound shipments from the facility will primarily occur during normal business hours of 7 AM to 5 PM, Monday through Friday. It is estimated that there will be approximately 50 trucks per day entering and exiting the facility with a peak rate of 10 trucks per hour.

11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

The facility will be served by public water that will be extended along Route 22 to the site. An extension of the Town system will be required. Due to the low water volume and pressure available from the Town's system, a new fire protection water tank and fire pump will be required. Due to the lack of public sewer in the area, the facility will utilize on site sanitary sewer similar to what occurs at the UMS other facilities. Natural gas, power, and communications will all be extended from Route 22 to serve the facility.

The facility will be fully conditioned for the comfort of the employees. The primary heat source for the building will be air to water heat pumps that will provide heating to a set point around 5-degrees, where a natural gas boiler will supplement during extreme low outdoor temperatures. The building will also include energy recovery units to maximize the energy efficiency of the structure while minimizing greenhouse gas emissions.

The building will include large glass sections to provide natural light within the work area and add to the overall aesthetics of the building. The exterior will include a mix of building materials, colors, and offset planes to further enhance the appearance of the structure.

Stormwater run-off for the project will be directed to stormwater detention facilities where infiltration will be promoted with a controlled outlet to established drainage facilities. The proposed systems will be designed in accordance with Town of Plattsburgh and New York State Department of Environmental Conservation Standards. The parcel is bisected by a federal wetland that has been delineated. The project will disturb some of the federal wetlands and will require a permit from the Army Corps of Engineers.

At this time, the applicant asks that the project be placed on the agenda of the next regular meeting of the Planning Board for sketch consideration. As the project requires a height variance to move forward, the SEQRA needs to be addressed prior to consideration by the Zoning Board of Appeals. Once the height variance issue has been addressed, the project would return to the Planning Board for Detailed Plan consideration.

To assist you in your review, we have enclosed 5 full size and 1 reduced copy of the Site Plan, Site Plan Application, Full EAF, and OPRHP No Significance Letter. If you have any further questions, or require additional information, please feel free to contact our office.

Respectfully submitted,

Aaron J. Ovios, P.E.
Robert M. Sutherland P.C.

Map Notes:

1. Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of section 7209, sub-division 2 of the New York State Education Law.
2. Only copies from the original of this survey marked with an original of the Land Surveyor's embossed seal shall be considered valid true copies. (mylar prints shall be stamped with the surveyor's ink seal with an original signature)
3. Certifications indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person for whom the survey is prepared and on his behalf the title company, governmental agency, and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.
4. Copyright 2022, Robert M. Sutherland, P.C. All rights reserved.
5. The location of sub-surface improvements are approximate and compiled from field location and mapping provided by the respective utility companies. The contractor shall confirm the location of all utilities prior to the commencement of excavation.
6. Subject to any findings of an accurate abstract of title or those discoverable by inspection.
7. North arrow and bearings based on Grid North, NAD 1983 New York East Zone 18.
8. All distances shown hereon are ground distances.
9. Building offsets, as shown on this map, are not to be used for construction purposes.
10. Missing property corners were not set as a result of this survey.
11. All easements and right-of-ways of record as indicated in Title Insurance Commitment No. 23-CEN1030-ORT, issued by Old Republic National Title Insurance Company with an effective date of January 24, 2023, or easements and right-of-ways that are discoverable by inspection, are indicated hereon.

Reference Maps:

1. "Right of Way And Track Map The Plattsburgh and Dannemora Railroad, operated by The Delaware and Hudson Company, (V-16B/8)..." prepared by Office of Chairman Valuation Committee dated June 30, 1916.
2. "Map of Property Survey of Fuller Property..." prepared by Joseph W. Hogan, L.S., dated June 12, 1950 and filed in the Clinton County Clerk's Office in Map Drawer B-93.
3. "Map of Land Sold To Noel J. Brunell, Jr...."prepared by Robert H. Ladue, L.S., and filed in the Clinton County Clerk's Office in Map Book 1 Page 29.
4. "Lands of Earl W. Morehouse..." prepared by Leland Logan, P.E.& L.S., dated September 13, 1955 and filed in the Clinton County Clerk's Office in Map Drawer A-133.
5. FAI # 502-5-2.1, Section 7B-1 Map No. 379 Page 439, " Railway-Highway Crossing, Grade Seperation), lands of Calos Brand prepared by New York State Department of Public Works, dated October 20, 1958 and filed in the Clinton County Clerk's Office.
6. "Map of Survey Property T Be Conveyed By archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Kenneth Kratz, L.S., dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
7. "Survey of Lot Sold To Dale and Darla Holderman..."prepared by Robert H. Ladue, L.S., last revised June 5, 1984 and filed in the Clinton County Clerk's Office in Map Book 12 Page 35.
8. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 25, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 125.
9. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 28, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 126.
10. "Map of Survey Property to be Conveyed By Archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Johnston & Kratz Land Surveyors, L.L.S. dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
11. "Survey Map Showing Brand Subdivision 2004..." prepared by Dean H. Lashway, L.S., dated December 20, 2004 and filed in the Clinton County Clerk's Office on March 2, 2005 as Instrument # 2005-180127.
12. "Map of Survey prepared for Lisa J. Clemons showing Clemons Subdivision 2015..." prepared by Robert M. Sutherland, P.C., dated April 27, 2015 and filed in the Clinton County Clerk's Office on May 29, 2015 as Instrument # 2015-271931.
13. "Map Showing Detailed Preliminary/Final Plan For Superior Drive Subdivision 2020 Thomas LeClair Living Trust..." prepared by Dean H. Lashway, L.S., last revised on August 27, 2020 and filed in the Clinton County Clerk's Office on October 29, 2020 as Instrument # 2020-311129.

Reference Deeds:

1. Section 245. - Block 4 - Lot 40.1: Gerald Menard to Robert N. Brunell and Rita B. Brunell by deed dated October 14, 1986 and recorded in the Clinton County Clerk's Office on October 14, 1986 as Deed Volume 678 at page 33.
2. Section 245. - Block 4 - Lot 22.11: Carlos H. Brand and Iona G. Brand to Carlos H. Brand and Iona G. Brand by deed dated March 11, 1988 and recorded in the Clinton County Clerk's Office on April 6, 1988 as Deed Volume 725 at page 161
3. Section 245. - Block 4 - Lot 16.2: Thomas M. Leclair to Thomas M. LeClair and Sally A. Leclair by deed dated June 23, 2005 and recorded in the Clinton County Clerk's Office on September 6, 2005 as Instrument # 2005-186504.

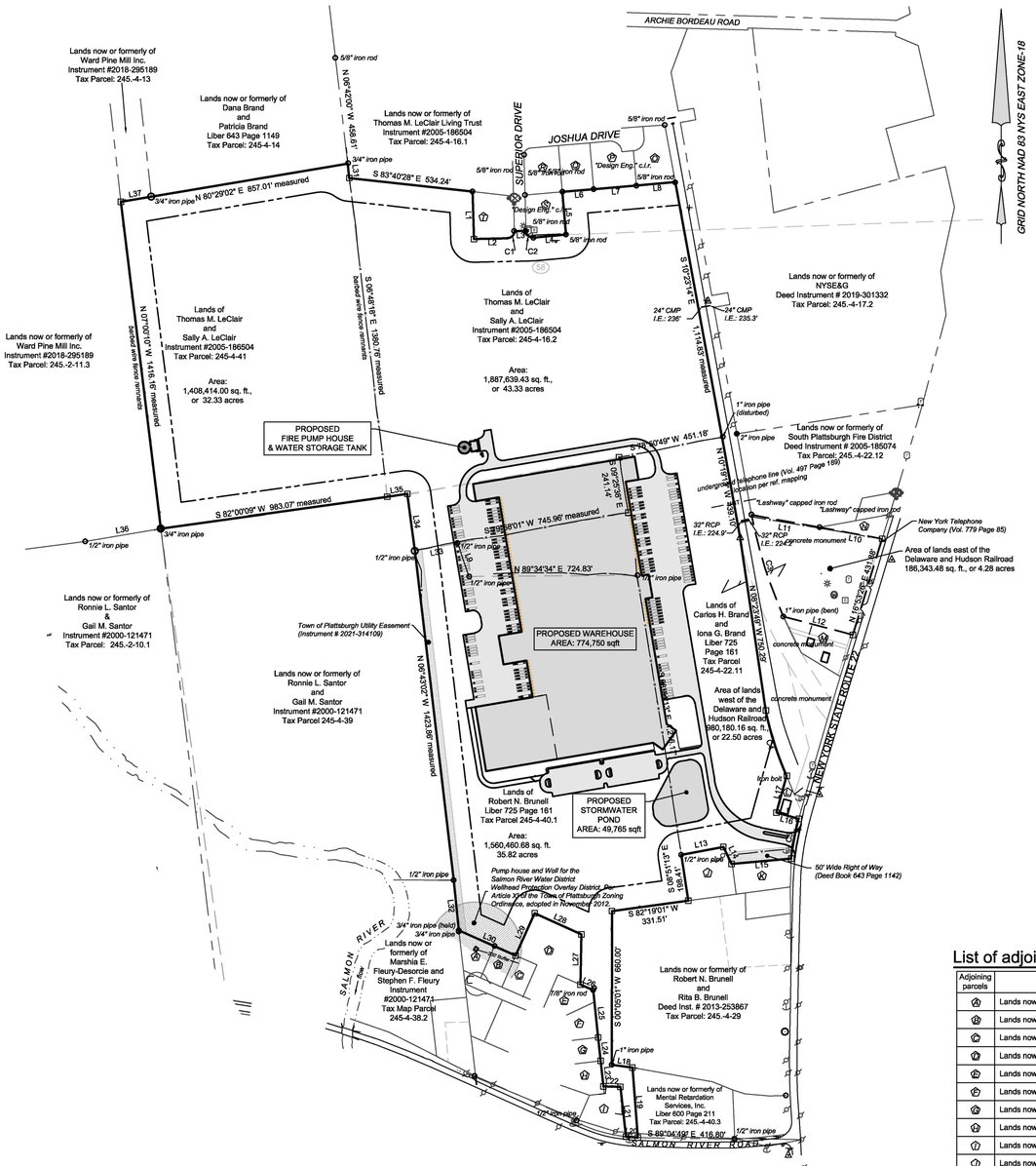
Certification:

I hereby certify that this map was prepared from deeds and maps of record and an accurate survey performed during December of 2022.

Jeffrey F. Burns, L.S. Date
N.Y.S. License #050702

Tax Map Reference:

Section 245. - Block 4 - Lot 16.2
Section 245. - Block 4 - Lot 22.11
Section 245. - Block 4 - Lot 40.1
Section 245. - Block 4 - Lot 41
Town of Plattsburgh
County of Clinton



Scale: 1 Inch = 300 Feet

Zoning Information:

LOCATION: Westerly side of NYS Route 22 and south of Archie Bordeau Road.	
ZONE: C, Shopping Center Commercial District	
USE: Commercial	
ITEM	REQUIREMENTS
Minimum lot area	N/A
Minimum road frontage	75 ft.
Minimum front setback	20 ft.
Minimum side setback	10 ft. min. / 25 ft. total
Minimum rear setback	20
Minimum open space	25%
Maximum building height	60 ft.
Maximum building coverage	25%

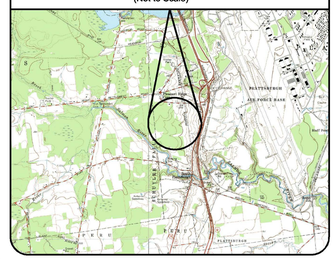
LINE	BEARING	DISTANCE
L1	S 01°30'45" E	204.09'
L2	N 88°29'15" E	145.00'
L3	N 88°-27'15" E	50.00'
L4	N 85°01'37" E	140.45'
L5	N 04°58'23" W	184.84'
L6	N 85°01'37" E	135.00'
L7	N 85°01'37" E	185.00'
L8	N 85°01'37" E	167.08'
L9	S 19°20'47" E	152.58'
L10	N 79°36'14" W	273.80'
L11	N 79°36'14" W	287.13'
L12	S 75°10'43" E	309.22'
L13	N 79°15'10" E	184.27'
L14	S 25°57'09" E	91.20'
L15	N 84°56'24" E	257.55'
L16	N 74°29'34" W	100.00'
L17	N 15°30'26" E	164.24'
L18	S 82°01'23" E	89.78'
L19	S 04°28'32" E	301.75'
L20	N 85°40'42" W	51.04'
L21	N 06°32'53" W	215.56'
L22	N 88°40'53" W	72.97'
L23	N 06°03'03" W	110.94'
L24	N 06°03'03" W	100.00'
L25	N 06°03'03" W	204.27'
L26	N 65°58'13" W	59.79'
L27	N 05°58'30" E	216.05'
L28	N 65°39'25" W	220.00'
L29	S 24°20'37" W	200.00'
L30	N 65°58'13" W	267.00'
L31	N 05°58'26" W	61.78'
L32	N 05°51'57" W	216.62'
L33	N 79°22'29" E	185.71'
L34	N 07°41'09" W	246.91'
L35	S 82°00'09" W	87.29'
L36	N 80°33'12" E	330.09'
L37	N 80°29'02" E	133.09'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	30.00'	47.12'	42.42'	N 43°29'28" E	89°59'33"
C2	30.00'	48.94'	43.69'	S 48°14'20" E	93°28'07"
C3	2,047.12'	459.14'	458.18'	S 17°26'01" E	12°51'02"
C4	1,432.69'	295.64'	295.11'	N 17°45'09" W	11°49'23"
C5	1,654.91'	174.14'	174.06'	N 10°50'16" E	6°01'44"

List of adjoining parcels:

Adjoining parcels	Parcel owner	Title reference	Tax parcel number
1	Lands now or formerly of Town of Plattsburgh	Liber 606 at Page 452	245.-4-35.11
2	Lands now or formerly of Peter N. Allen	Instrument # 2005-182632	245.-4-34.2
3	Lands now or formerly of James R. Rock	Instrument # 2015-272175	245.-4-34.1
4	Lands now or formerly of Gary E. Diman and Magda L. Diman	Instrument # 2005-182632	245.-4-33
5	Lands now or formerly of Sandra J. Rezac	Instrument # 2005-185881	245.-4-32
6	Lands now or formerly of John R. Akin and Deanne K. Akin	Instrument # 2008-219704	245.-4-31
7	Lands now or formerly of Albert Senyah	Instrument # 2012-252966	245.-4-35.5
8	Lands now or formerly of David J. Casey and Elizabeth H. Casey	Liber 899 Page 208	245.-4-35.1
9	Lands now or formerly of Timothy Bedore	Instrument # 2017-290354	245.-4-30
10	Lands now or formerly of Darla J. Holderman	Instrument # 2018-296856	245.-4-22.21
11	Lands now or formerly of Frank L. Lovely, Jr. and Penny L. Lovely	Instrument # 2016-279156	245.-4-22.22
12	Lands now or formerly of Gregory L. Thew	Instrument # 2009-229308	245.-4-24
13	Lands now or formerly of Timothy C. Schwartz	Instrument # 2014-262768	245.-4-21
14	Lands now or formerly of Sonia Passino and Shane Passino	Instrument # 2021-313271	245.-4-20
15	Lands now or formerly of Andre Babbitt	Instrument # 2006-200171	245.-10-15
16	Lands now or formerly of David Ross and Michelle Ross	Instrument # 2000-125742	245.-10-14
17	Lands now or formerly of Cory Davison	Instrument # 2016-281272	245.-10-13
18	Lands now or formerly of Donald A. Hastings	Liber 962 Page 37	245.-10-12
19	Lands now or formerly of Mark T. LeClair	Instrument # 2022-326604	245.-10-17
20	Lands now or formerly of Daniel M. Shaughnessy and Cheryl A. Cassevah	Instrument # 2022-326604	245.-10-16

General Location Map
(Not to Scale)



Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.3496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Sketch Plan
Date 05/28/2024	Sk100
Scale 1" = 300'	
Drawn LSC	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

Map Notes:

1. Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of section 7209, sub-division 2 of the New York State Education Law.
2. Only copies from the original of this survey marked with an original of the Land Surveyor's embossed seal shall be considered valid true copies. (mylar prints shall be stamped with the surveyor's ink seal with an original signature)
3. Certifications indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person for whom the survey is prepared and on his behalf the title company, governmental agency, and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.
4. Copyright 2022, Robert M. Sutherland, P.C. All rights reserved.
5. The location of sub-surface improvements are approximate and compiled from field location and mapping provided by the respective utility companies. The contractor shall confirm the location of all utilities prior to the commencement of excavation.
6. Subject to any findings of an accurate abstract of title or those discoverable by inspection.
7. North arrow and bearings based on Grid North, NAD 1983 New York East Zone 18.
8. All distances shown hereon are ground distances.
9. Building offsets, as shown on this map, are not to be used for construction purposes.
10. Missing property corners were not set as a result of this survey.
11. All easements and right-of-ways of record as indicated in Title Insurance Commitment No. 23-CEN1030-ORT, Issued by Old Republic National Title Insurance Company with an effective date of January 24, 2023, or easements and right-of-ways that are discoverable by inspection, are indicated hereon.

Reference Maps:

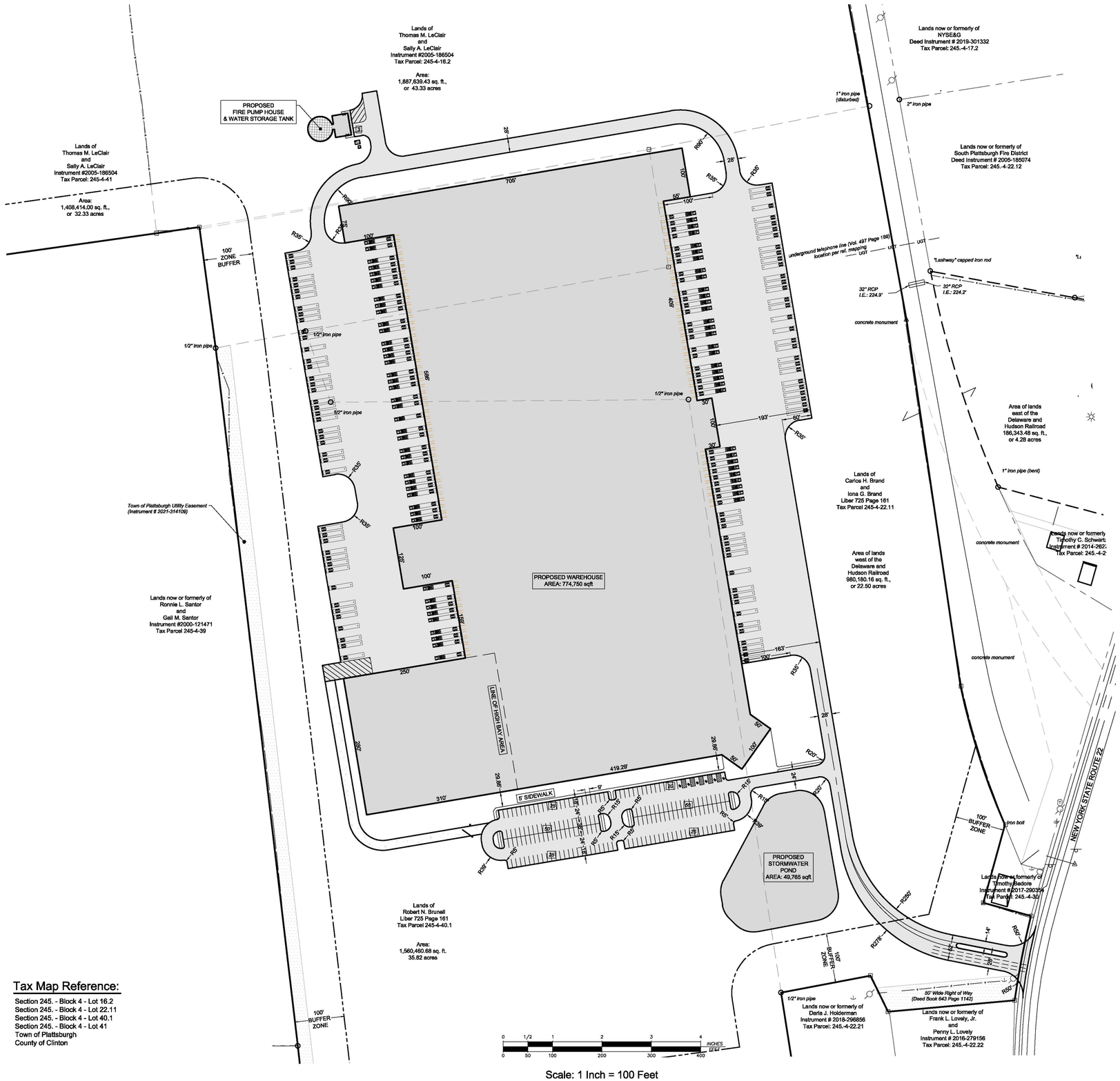
1. "Right of Way And Track Map The Plattsburgh and Dannemora Railroad, operated by The Delaware and Hudson Company, (V-16B/8)..." prepared by Office of Chairman Valuation Committee dated June 30, 1916.
2. "Map of Property Survey of Fuller Property..." prepared by Joseph W. Hogan, L.S., dated June 12, 1950 and filed in the Clinton County Clerk's Office in Map Drawer B-93.
3. "Map of Land Sold To Noel J. Brunell, Jr...."prepared by Robert H. Ladue, L.S., and filed in the Clinton County Clerk's Office in Map Book 1 Page 29.
4. "Lands of Earl W. Morehouse..." prepared by Leland Logan, P.E.& L.S., dated September 13, 1955 and filed in the Clinton County Clerk's Office in Map Drawer A-133.
5. FAI # 502-5-2.1, Section 7B-1 Map No. 379 Page 439, " Railway-Highway Crossing, Grade Seperation), lands of Calos Brand prepared by New York State Department of Public Works, dated October 20, 1958 and filed in the Clinton County Clerk's Office.
6. "Map of Survey Property T Be Conveyed By archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Kenneth Kratz, L.S., dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
7. "Survey of Lot Sold To Dale and Darla Holderman..."prepared by Robert H. Ladue, L.S., last revised June 5, 1984 and filed in the Clinton County Clerk's Office in Map Book 12 Page 35.
8. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 25, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 125.
9. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 28, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 126.
10. "Map of Survey Property to be Conveyed By Archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Johnston & Kratz Land Surveyors, L.L.S. dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
11. "Survey Map Showing Brand Subdivision 2004..." prepared by Dean H. Lashway, L.S., dated December 20, 2004 and filed in the Clinton County Clerk's Office on March 2, 2005 as Instrument # 2005-180127.
12. "Map of Survey prepared for Lisa J. Clemons showing Clemons Subdivision 2015..." prepared by Robert M. Sutherland, P.C., dated April 27, 2015 and filed in the Clinton County Clerk's Office on May 29, 2015 as Instrument # 2015-271931.
13. "Map Showing Detailed Preliminary/Final Plan For Superior Drive Subdivision 2020 Thomas LeClair Living Trust..." prepared by Dean H. Lashway, L.S., last revised on August 27, 2020 and filed in the Clinton County Clerk's Office on October 29, 2020 as Instrument # 2020-311129.

Reference Deeds:

1. Section 245. - Block 4 - Lot 40.1: Gerald Menard to Robert N. Brunell and Rita B. Brunell by deed dated October 14, 1986 and recorded in the Clinton County Clerk's Office on October 14, 1986 as Deed Volume 678 at page 33.
2. Section 245. - Block 4 - Lot 22.11: Carlos H. Brand and Iona G. Brand to Carlos H. Brand and Iona G. Brand by deed dated March 11, 1988 and recorded in the Clinton County Clerk's Office on April 6, 1988 as Deed Volume 725 at page 161
3. Section 245. - Block 4 - Lot 16.2: Thomas M. Leclair to Thomas M. LeClair and Sally A. Leclair by deed dated June 23, 2005 and recorded in the Clinton County Clerk's Office on September 6, 2005 as Instrument # 2005-186504.

Tax Map Reference:

Section 245. - Block 4 - Lot 16.2
Section 245. - Block 4 - Lot 22.11
Section 245. - Block 4 - Lot 40.1
Section 245. - Block 4 - Lot 41
Town of Plattsburgh
County of Clinton



Scale: 1 Inch = 100 Feet

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.3496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Sketch Plan
Date 05/28/2024	Sk101
Scale 1" = 100'	
Drawn LSC	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

Planning Board Review
Site Plan Application

Town of Plattsburgh
151 Banker Road
Plattsburgh, NY 12901

This Application is made to the Town of Plattsburgh Planning Board for site plan review as per article VII of the Town Zoning Ordinance.

Project Information		
Project Type:	[X] Site Plan Review	[ ] Special Use Permit
Date of Submission: 5/28/2024	Tax Map Parcel ID: 245 - 4 - 16.2, 22.11, 40.1, & 41	Zoning District: I
Project Name: UMS Property, LLC New Distribution Center Site Plan 2024		
Project Address: Salmon River Road and NYS Route 22, Plattsburgh, NY		
Project Description: The construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.		

Property Owner Name:	Applicant Name (if different) Greg Jandolenko
Address: Iona G Brand Revocable Living Trust	Address: UMS Property, LLC
Thomas M Leclair Living Trust	194 Plesaeant Ridge Road
Robert Brunell	Plattsburgh, NY 12901
Phone:	Phone: (518) 324 - 3444
Project Contact Person: Aaron J. Ovios, PE	Phone: (518) 561 - 6145
Address: 11 MacDonough Street Plattsburgh, NY 12901	
E-mail: aj.ovios@rmspc.com	

Planning Board Review
Site Plan Application

Town of Plattsburgh
151 Banker Road
Plattsburgh, NY 12901

Current use of property:
Vacant

Site Description: Woods & Grassland

Utilities: [X] Public Water [ ] Public Sewer [ ] Private Water [X] Private Sewer

Character of Surrounding Area:
Mix of mostly residential and contractor yards

Property Size (acres):	Area of Disturbance (acres):
+/- 139	+/- 50

Description of Proposed Structures and Improvements:
774,750 sq.ft. warehouse building with associated site improvements including driveways, parking areas, loading docks, utility service connections, landscaping, and stormwater management facilities.

Will the Project be Phased: [ ] Yes [X] No

Commencement:	Completion:
03/2025	09/2027

Anticipated increase in number of residents, users, shoppers, employees, etc. as a result of the project:
200 employees

Anticipated Increase in Number of Delivery Vehicle Trips as a Result of the Project:
50 trucks/day with a peak of 10 trucks/hour

Does the Project Require Area or Use Variances: [X] Yes [ ] No

Explain:
Height Variance for Building

Other Comments:

Application Checklist: [X] Completed Application [X] SEQRA Form [X] 5-Sets 24"X36" Plans [X] 1-Set 11"X17" Plans [ ] Completed Notarized Affidavit [X] Applicable Fees

Preparer: Signature: Date:

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: UMS Property, LLC New Distribution Center Site Plan 2024		
Project Location (describe, and attach a general location map): Salmon River and NYS Route 22, Plattsburgh, NY or Tax Parcels: 245 - 4 - 16.2, 22.11, 40.1, & 41		
Brief Description of Proposed Action (include purpose or need): The construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.		
Name of Applicant/Sponsor: UMS Property, LLC	Telephone: (518) 324 - 3444 E-Mail: gjandolenko@schluter.com	
Address: 194 Plesaeant Ridge Road		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Project Contact (if not same as sponsor; give name and title/role): Aaron J. Ovios, PE	Telephone: (518) 561 - 6145 E-Mail: aj.ovios@rmspc.com	
Address: 11 MacDonough Street		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Property Owner (if not same as sponsor): Iona G Brand Revocable Living Trust, Robert Brunell, Thomas M Leclair Living Trust	Telephone: E-Mail:	
Address: 4079 Route 22 Plattsburgh 12901, 716 Brand Hollow Rd. Peru 12972, 17 Superior Dr. Plattsburgh 12901		
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	Water Line Extenstion	
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Plattsburgh Planning Board	
c. City, Town or Village Zoning Board of Appeals ☑Yes ☐No	Town of Plattsburgh Zoning Board	
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Clinton County Health Department, Clinton County IDA	
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYS DEC & DOT	
h. Federal agencies ☑Yes ☐No	FAA for Height, Army Corps of Engineers	

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):

_____

_____

_____

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?
Industrial (I)

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? _____

C.4. Existing community services.

a. In what school district is the project site located? Peru School District

b. What police or other public protection forces serve the project site?
NYS Police, Clinton County Sheriff

c. Which fire protection and emergency medical services serve the project site?
South Plattsburgh Fire District

d. What parks serve the project site?
Plattsburgh Parks and Recreation

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)? Industrial

b. a. Total acreage of the site of the proposed action? 139 acres
b. Total acreage to be physically disturbed? 50 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 139 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)
Industrial
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 2
iv. Minimum and maximum proposed lot sizes? Minimum 4 Maximum 138

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 24 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

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 1

ii. Dimensions (in feet) of largest proposed structure: 100 height; 405 width; and 1225 length

iii. Approximate extent of building space to be heated or cooled: 774,750 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: Stormwater detention pond

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

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

iv. Approximate size of the proposed impoundment. Volume: 0.81 million gallons; surface area: 0.62 acres

v. Dimensions of the proposed dam or impounding structure: 4 height; 1,000 length

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

D.2. Project Operations

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

If Yes:

i .What is the purpose of the excavation or dredging?

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

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

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe.

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

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

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

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

ix. Summarize site reclamation goals and plan:

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): Federal wetland: 18,596

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 proposed improvement will be filling or excavating wetlands and then constructing in there place access drives, building, channels, and banks. Approximently 263,782.71 sqft or 6.06 acres of wetlands will be disturbed.

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

If Yes, describe: _____

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: _____

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: 3,000 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: WD046
- 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: Extend public water south along RT-22 to server the proposed site
- Source(s) of supply for the district: Town of Plattsburgh Water Districts

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: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

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: 4,000 gallons/minute.

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

If Yes:

i. Total anticipated liquid waste generation per day: 3,000 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

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

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of 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: _____

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

If Yes:

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

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):

_____

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

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 31 acres (impervious surface)

_____ Square feet or 139 acres (parcel size)

ii. Describe types of new point sources. Roof drainage pipes, swales, and curbs

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)?

The majority of the impervious surfaces will drain into a stormwater management pond while some may be directed into underground structures.

- If to surface waters, identify receiving water bodies or wetlands: _____
- 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)

Excavators,dump trucks,delivery equipment

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:

- 5,000 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): 50 trucks/day with a peak of 10 trucks/hour

iii. Parking spaces: Existing 0 Proposed 200 Net increase/decrease 200

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:

A new commercial access driveway is proposed off of NYS Route 22

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: 7,500 KW Peak Load

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

NYSEG

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: 7 am - 5 pm
- Saturday: 8 am - 5 pm
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 24/7
- Saturday: 24/7
- Sunday: 24/7
- Holidays: Closed

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:

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

Describe:

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:

Lithonia LED Lamps @ 25' above finish grade pointed downward with no street pole closer than 20'

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:

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):

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: 5 tons per week (unit of time)
- Operation : 3 tons per week (unit of time)

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

- Construction:
- Operation: Recycle and Reuse of Waste Materials

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

- Construction:
- Operation: Clinton County 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

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): Wetlands

ii. If mix of uses, generally describe:

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	0.63	31.44	+ 30.81
• Forested	92.56	71.11	- 21.45
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	20.9	3.65	- 17.25
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	24.17	16.08	- 8.09
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Open lawn	0	15.55	+ 15.55

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:

_____

_____

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:

_____

_____

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): _____

☐ 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): 510003

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

_____

_____

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? > 20 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:

Northway loamy fine sand	50 %
Deerfield fine sand	33 %
Covertfalls loamy fine sand	17 %

d. What is the average depth to the water table on the project site? Average: 5.5 feet

e. Drainage status of project site soils:
☐ Well Drained: _____% of site
☑ Moderately Well Drained: 67 % of site
☑ Poorly Drained 33 % 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 _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters Approximate Size 18 acres
- 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: _____

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: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site: _____

_____ _____ _____

_____ _____ _____

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): Pitch Pine-Heath Barrens

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: 13.0 acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): 0 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: _____

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: Lake Champlain

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

iii. Distance between project and resource: 2 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.

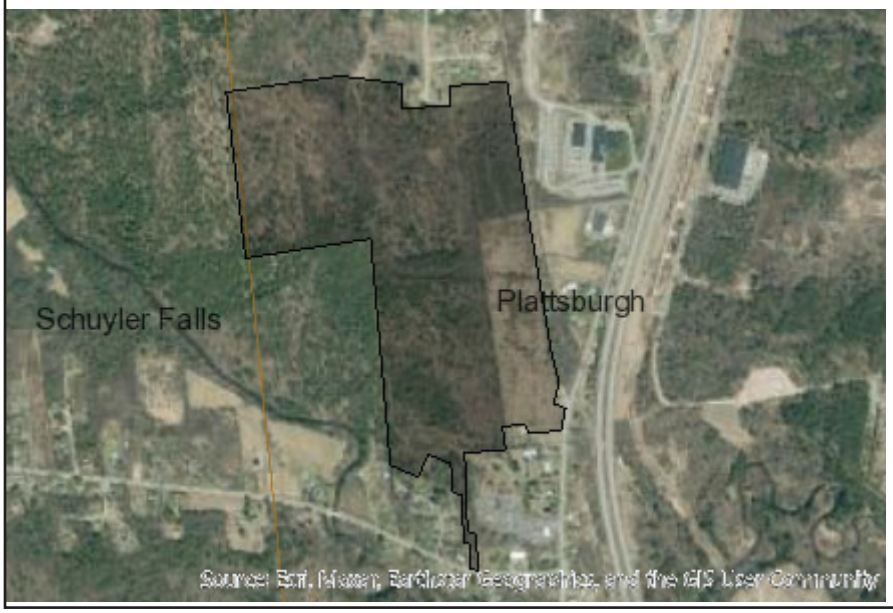
Applicant/Sponsor Name _____ Date _____

Signature _____ Title _____

PRINT FORM

EAF Mapper Summary Report

Wednesday, May 15, 2024 12:44 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]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
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]	510003
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 - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes

E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	Yes
E.2.n.i [Natural Communities - Name]	Pitch Pine-Heath Barrens
E.2.n.i [Natural Communities - Acres]	13.0
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]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

APPENDIX B

NYS OPRHP CORRESPONDENCE

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

March 16, 2023

Aaron Ovios
Robert M. Sutherland, PC
11 MacDonough Street
Plattsburgh, NY 12901

Re: DEC
Schluter Systems, LLC Proposed Route 22 Warehouse
Town of Plattsburgh, Clinton County, NY
23PR02130

Dear Aaron Ovios:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

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

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: D. Bagrow

TOWN OF PLATTSBURGH
PLANNING & COMMUNITY DEVELOPMENT
151 BANKER ROAD
PLATTSBURGH, NY 12901-7307

WWW.TOWNOFPLATTSBURGH.COM
DEPT. LINE: (518)-562-6850
FAX: (518)-563-8396
TDD: (800)-662-1220

SENIOR PLANNER
TREVOR COLE, AICP

SENIOR PLANNER
JESSICA KOGUT

PLANNING BOARD SECRETARY
MICHELE BUCKMINSTER

August 7, 2024

UMS Properties LLC
194 Pleasant Ridge Rd.
Plattsburgh, NY 12901

RE: UMS Properties LLC Distribution Center Site Plan 2024
SEQRA Review & Draft Scoping

Dear UMS Properties LLC:

Transmitted herewith is a copy of Resolution No. 24-45 dated August 6, 2024, wherein your Project was reviewed by the Town of Plattsburgh's Planning Board in accordance with the State of New York's State Environmental Quality Review Act (SEQRA). The Planning Board has prepared, executed, and filed accordingly, the attached "Notice of Positive Declaration of Environmental Impact" (POSITIVE DECLARATION) for this "Project".

If you have any questions relative to the above, please contact the Planning & Community Development Department at the Town of Plattsburgh.

Sincerely yours,

Tim Palmer, Chairperson of the Planning Board

Trevor Cole, AICP
Senior Planner

Pc: RMS, Project Engineer
Steve Imhoff, Codes Enforcement Officer

The Town of Plattsburgh is an equal opportunity provider and employer

TOWN OF PLATTSBURGH
PLANNING BOARD MEETING
AUGUST 6, 2024

Resolution No. 24-45

Motioned by: Debbie Blake

UMS PROPERTIES DISTRIBUTION CENTER SITE PLAN 2024- Request to construct a 774,750. sq. ft. warehouse and distribution facility with an office area and related site improvements. **AREA VARIANCES REQUIRED** Located on Salmon River Rd and Route 22 with public water and private sewer; Zoned I*; Tax Map Parcels 245.-4-16.2, 22.11, 40.1, & 41. Owners Iona Brand Revocable Living Trust, Thomas LeClair Living Trust and Robert & Rita Brunell; Applicant UMS Properties LLC; Engineer RMS

SEQRA DETERMINATION OF SIGNIFICANCE AND DRAFT SCOPING

WHEREAS, UMS Property, LLC ("UMS") wishes to develop approximately 50 acres of a 139acre real property located on the west side of State Route 22, between Salmon River Road and Archie Bourdeau Road in the Town of Plattsburgh, County of Clinton, for the purpose of constructing a new warehouse and distribution facility along with associated parking, stormwater, energy, utility, and transportation improvements (the "Project"); and

WHEREAS, UMS has prepared Part 1 of a Full Environmental Assessment Form ("FEAF") in compliance with Article 8 of the Environmental Conservation Law and 6 N.Y.C.R.R. Part 617 (collectively referred to as "SEQRA") with respect to the Project; and

WHEREAS, the Town of Plattsburgh Planning Board (the "Planning Board") has notified all involved agencies, and provided the same with Part 1 of the FEAF, on at least thirty (30) days' notice that the Planning Board intends to act as Lead Agency pursuant to SEQRA, and no objection to the Planning Board assuming such status has been made; and

WHEREAS, the Planning Board has caused the preparation of Part 2 and Part 3 of the FEAF which identified potential adverse environmental impacts resulting from the implementation of the Project; and

WHEREAS, as required by the SEQRA regulations, the Planning Board has reviewed the FEAF, identified the relevant areas of environmental concern and has taken a hard look at those concerns, considering both the magnitude and importance of each impact; and

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE TOWN OF PLATTSBURGH PLANNING BOARD AS FOLLOWS:

Section 1. The Planning Board hereby ratifies and confirms all actions taken, to date, by the Planning Board staff with respect to SEQRA compliance as so related to the Project.

Section 2. The Planning Board classifies the Project as a Type "I" action pursuant to 6 N.Y.C.R.R. § 617.4 of the SEQRA regulations.

Section 3. Pursuant to 6 N.Y.C.R.R. § 617.4 of the SEQRA regulations, the Planning Board hereby accepts and assumes the responsibility to act as Lead Agency for the coordinated review of the Project.

Section 4. The Planning Board hereby approves Parts 1, 2 and 3 of the FEAF and determines that the implementation of the Project may result in one or more large impacts that may have a significant impact on the environment.

Section 5. The Planning Board hereby determines: (i) that a Positive Declaration, as that term is defined by the SEQRA regulations, is required for the Project, and (ii) that a draft environmental impact statement ("DEIS") be prepared as applicable.

Section 6. The Planning Board accepts the Draft Scoping Document for the preparation of the DIES, directs that the Draft Scoping Document for the DEIS be sent to all applicable involved agencies and interested agencies, and that copies of the Draft Scoping Document be made available for the general public to review at locations determined to be appropriate by the Planning Board.

Section 7. The Planning Board further directs that a public comment period be established wherein written comments on the Draft Scoping Document can be submitted by the general public to The Town Planning & Community Development Department, technical reviewer of the project on behalf of the Planning Board, for the purpose of receiving and considering public comment on the Draft Scoping Document in order to prepare a Final Scoping Document

Section 8. The Planning Board shall cause a notice of public hearing to be posted and advertised for September 17, 2024, at the regularly scheduled Planning Board meeting for the purposes of receiving public comment on the Draft Scoping Document and discussing any written comments received during the public comment period.

Section 9. The Planning Board directs that a notice of this resolution shall be filed and circulated to the extent required by any applicable ordinance, statute or regulation.

Section 10. The Planning Board hereby authorizes and directs that Planning & Community Development staff, agents, employees, and consultants undertake any such other and further action as may be necessary to meet the Planning Board's obligations as Lead Agency or as otherwise might be appropriate in its role as Lead Agency.

Section 11. This Resolution shall take effect immediately.

The following vote was taken and recorded in the public or open session of said meeting:

Seconded By: Anne Brandell

Discussion (Not Verbatim): Town Senior Planner, Trevor Cole provided a brief but detailed project summary outlining the project's components. Project Engineer, Aaron Ovios reiterated some of the project's components and then answered some Planning Board member questions. Planning Board Chair, Tim Palmer then read the Resolution into the record and the Planning Board members unanimously confirmed their concurrence with the SEQRA EAF Parts I, II, and III responses.

		Yes	No
Roll Call:			
	Anne Brandell	X	
	Terry Senecal	X	
	Debbie Blake	X	
	James Sherman	Excused	
	Malana Tamer	Excused	
	Jay White	X	
	Tim Palmer, Chairman	X	

Carried: 5-0

Dated: August 6, 2024
Plattsburgh, New York

8/8/24

POSITIVE DECLARATION

NOTICE OF DETERMINATION

OF SIGNIFICANCE

TO ALL INTERESTED AGENCIES, GROUPS AND PERSONS:

In accordance with Article 8 of the Environmental Conservation Law (State Environmental Quality Review a/k/a "SEQRA"), and the statewide regulations under the Act (6 NYCRR Part 617) (the "Regulations"), the Town of Plattsburgh Planning Board (the "Lead Agency") has considered the proposed warehouse and distribution facility also known as "UMS Property, LLC New Distribution Site Plan 2024" inclusive of approximately 774,750 square feet of building, located on New York State Route 22 in the Town of Plattsburgh, Clinton County, New York (the "Action"), as described more fully in the summary attached hereto as Exhibit "A." The Lead Agency has determined: (i) that said proposed Action is a "Type I Action" pursuant to the Regulations, and therefore coordinated review and notification is required with respect to the Action; (ii) that the Lead Agency has appropriately engaged in a coordinated review of the Action; (iii) that a thorough review of all potential environmental impacts has been conducted; (iv) that upon due consideration, the Lead Agency has concluded that said Action has the potential for significant adverse impacts on the environment; and (v) therefore that an environmental impact statement is required to be prepared in order to assess the Action.

THIS NOTICE IS A POSITIVE DECLARATION FOR THE PURPOSES OF SEQRA.

Lead Agency:

The Lead Agency is the Town of Plattsburgh Planning Board.

2. Contact for Further Information:

Trevor Cole, Senior Planner
Town of Plattsburgh
151 Banker Road
Plattsburgh, New York 12901
Email: trevorc@townofplattsburgh.org
Phone: (518) 562-6850

3. Action Identification:

The Action includes the development of a warehouse and distribution facility located on NYS Route 22 in the Town of Plattsburgh, Clinton County, New York to support an existing nearby UMS manufacturing facility.

The Project site is located on the west side of NYS Route 22 between Salmon River and Archie Bourdeau Road and is comprised of three separate parcels where the site totals approximately 139 acres, 50 acres of which will be disturbed and where the proposed building is approximately 774,750 sq ft in size. The proposed site currently consists of mostly vacant land.

UMS has entered into a purchase agreement to buy tax parcels 245.-4-40.1, 245.-4-16.2, and portions of 245.-4-22.11 for the proposed development.

4. Action Description:

UMS Property, LLC ("the Applicant") is proposing the construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.

5. Action Location:

The Action will be located in the Town of Plattsburgh, Clinton County, New York.

6. Lead and Involved Agencies:

Lead Agency: Town of Plattsburgh Planning Board

Involved and Interested Agencies: Town of Plattsburgh Zoning Board, New York State Department of Transportation ("NYSDOT"); New York State Department of Environmental Conservation ("NYSDEC"); New York State Historic Preservation Office ("SHPO"); Clinton County Planning Board; New York State Department of State, Building Standards and Codes – Division of Code Enforcement and Administration ("NYSDOS"); Clinton County Industrial Development Agency ("CCIDA"), Federal Aviation Administration (FAA); and Clinton County Department of Health ("CCDOH").

7. Reasons for Determination of Significance:

See Exhibit "A" attached hereto.

DATED: August 6, 2024

Town of Plattsburgh Planning Board

By: Tim Palmer

Title: Planning Board Chairman

8/8/24

Exhibit A

Determination of Significance

Name of Action: UMS Property, LLC New Distribution Center Site Plan 2024

Description of Action & Location: The applicant, UMS Property, LLC, is proposing the construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.

SEQRA Classification: The Project is a Type I Action.

Rationale Supporting Determination:

Potential impacts associated with the proposed Action are identified in the Full Environmental Assessment Form (FEAF). These impacts, which may be reasonably expected to result from the Action, have been compared to the criteria for determining significance identified in 6 N.Y.C.R.R. § 617.7(c)(1) and in accordance with 6 N.Y.C.R.R. § 617.7(c)(2) and (3). The discussion of potentially significant adverse impacts, including those related to stormwater, habitat/vegetation loss, traffic, noise, visual resources, public water supply, fire access and safety, wetland alterations, emissions, and energy demand, as outlined below in accordance with the responses contained in Parts 1 and 2 of the FEAF completed for the project. For each impact category, potential impacts should be evaluated and appropriate mitigation measures should be identified and evaluated to determine how best to address potential adverse impacts associated with the Action.

Impact on Land

The Action will result in construction activity for a duration of two years, which includes ground disturbance, with the potential for increased erosion expanding over an approximate 50-acre area.

Impact on Surface Water

The Action involves construction within a freshwater wetland with an estimated 6.06 acres of federal wetland disturbance. Construction activities will have the potential to impact water quality of water bodies within or downstream of the project site through increased turbidity resulting from construction activities within a freshwater wetland and stormwater discharges associated with the development of the site.

The Action will require the construction of new sanitary wastewater treatment facilities and a stormwater detention pond.

Impact on Groundwater

The Action will generate an estimated 3,000 gallons/day of sanitary wastewater and will require a discharge to groundwater. The DEIS should describe the method of sanitary wastewater treatment and provide an assessment of potential environmental impacts associated with the discharge.

The Action will generate additional water supply demand beyond the current water supply capacity to the site. The Action will require the extension of the existing water supply to the proposed project location. The water supply lacks adequate pressure for fire suppression and additional on-site infrastructure will be required to maintain and apply adequate volumes of fire suppression water, or alternative means of fire suppression. The DEIS should provide an evaluation of water supply capacity, and assess potential impacts associated with connection to the municipal water supply.

Impact on Air

The Action includes proposed combustion units and associated emissions to deliver comfort heating on a limited auxiliary basis during periods of cold weather (i.e, natural gas boiler used as a backup when temperatures drop below 5 degrees), and internal combustion engines to power backup electrical generator(s) and fire suppression system pump(s). The Action may require a NYSDEC Air Facility Registration or other permitting. The Action has the potential to generate fugitive dust during construction activities.

The DEIS should quantify combustion emissions and evaluate potential associated impacts and potential mitigation. The DEIS should also discuss the potential for fugitive dust emissions, associated potential impacts, and mitigation measures.

Impact on Plants and Animals

The Indiana Bat (*Myotis sodalis*) and Northern Long-eared Bat (*Myotis septentrionalis*), both federally and state listed as endangered, have been identified as having the potential to be impacted by the Action. Additional ecological impacts resulting from the Action include the disturbance of a designated significant natural community, Pitch Pine-Heath Barrens. The Action will convert more than 10 acres of vegetated lands to commercial use and may interfere with habitat use for predominant local species, as a result of the +/-21 acres of forest conversion. Notwithstanding, mitigation to reduce adverse impacts to ecological resources (which may include the Freshwater Mussels, as identified in the EAF as a state species special concern and the endangered bat species) would be required.

Impact on Aesthetic Resources

Although the action does not differ significantly from other proximal facilities and projects, the Action has the potential to be visible from officially designated aesthetic resources and public vantage points, including Lake Champlain.

Impact on Historic and Archeological Resources

The FEAF Part 1 indicates the Action is located within or adjacent to an area designated as sensitive for archeological sites. However, the New York State Office of Parks, Recreation and Historic Preservation has issued a finding that "no properties, including archaeological and/or historic resources associated with the Action. Action impacts on cultural and archeological resources, listed or eligible for the New York State and National Registers of Historic Places will be impacted by this project." However, the Action has the potential for visual impacts to cultural resources in accordance with the *Impact on Aesthetic Resources* section above.

Impact on Transportation

The Action includes a new commercial access driveway off NYS Route 22. The Action includes a projected truck trip of 50 trucks/day which has the potential to impact transportation systems and local road networks, particularly from increased vehicular traffic along NYS Route 22. The Action is proximal to Plattsburgh International Airport. The DEIS should include an assessment of potential impacts to transportation including traffic impacts to local roadways and consistency with Federal Aviation Administration requirements.

Impact on Energy

The Action proposes installation of a new electric substation for a commercial development in excess of 100,000 square feet, including consumption of an estimated 7,500 MWhrs per year of electricity.

Impact on Noise, Odor, and Light

Potential noise impacts associated with both construction and operation of the facility, resulting from both mobile and stationary sources will result from the Action. Mitigation measures and Best Management Practices to reduce adverse impacts on the nearby receptors will be required for both short-term and long-term periods.

The Action proposes outdoor lighting at 25 ft above finished grade.

Scoping Information

Scoping of the issues to be contained in the EIS will be conducted. The Applicant has prepared a draft scope for consideration and is attached to this document. Involved agencies should provide written comments reflecting their concerns, jurisdiction and information needs sufficient to ensure that the EIS will be adequate to support their SEQR findings.

Agency Use Only [If applicable]

Project :

Date :

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. (See Part 1. C.1, C.2. and C.3.) ☑ NO ☐ YES

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. (See Part 1. C.2, C.3, D.2, E.3) ☑ NO ☐ YES

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

Agency Use Only [IfApplicable]

Project :

Date :

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.

See attached.

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 Plattsburgh Planning 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: UMS Property, LLC New Distribution Center Site Plan 2024

Name of Lead Agency: Town of Plattsburgh Planning Board

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer:

Signature of Responsible Officer in Lead Agency: Date:

Signature of Preparer (if different from Responsible Officer) Date:

For Further Information:

Contact Person: Trevor Cole, Senior Planner

Address: Town of Plattsburgh, 151 Banker Road, Plattsburgh, New York 12901

Telephone Number: 518-562-6850

E-mail: trevorc@townofplattsburgh.org

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 B

AGENCY CORRESPONDENCE

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

March 16, 2023

Aaron Ovios
Robert M. Sutherland, PC
11 MacDonough Street
Plattsburgh, NY 12901

Re: DEC
Schluter Systems, LLC Proposed Route 22 Warehouse
Town of Plattsburgh, Clinton County, NY
23PR02130

Dear Aaron Ovios:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

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

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: D. Bagrow

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AEA-13337-OE

Issued Date: 01/06/2025

Aaron J Ovios
Robert M Sutherland PC
11 MacDonough Street
Plattsburgh, NY 12901

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Commercial Use Building Schluter Plattsburgh DC
Location:	Plattsburgh, NY
Latitude:	44-38-48.22N NAD 83
Longitude:	73-29-24.49W
Heights:	255 feet site elevation (SE) 105 feet above ground level (AGL) 360 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M Change 1.

This determination expires on 07/06/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

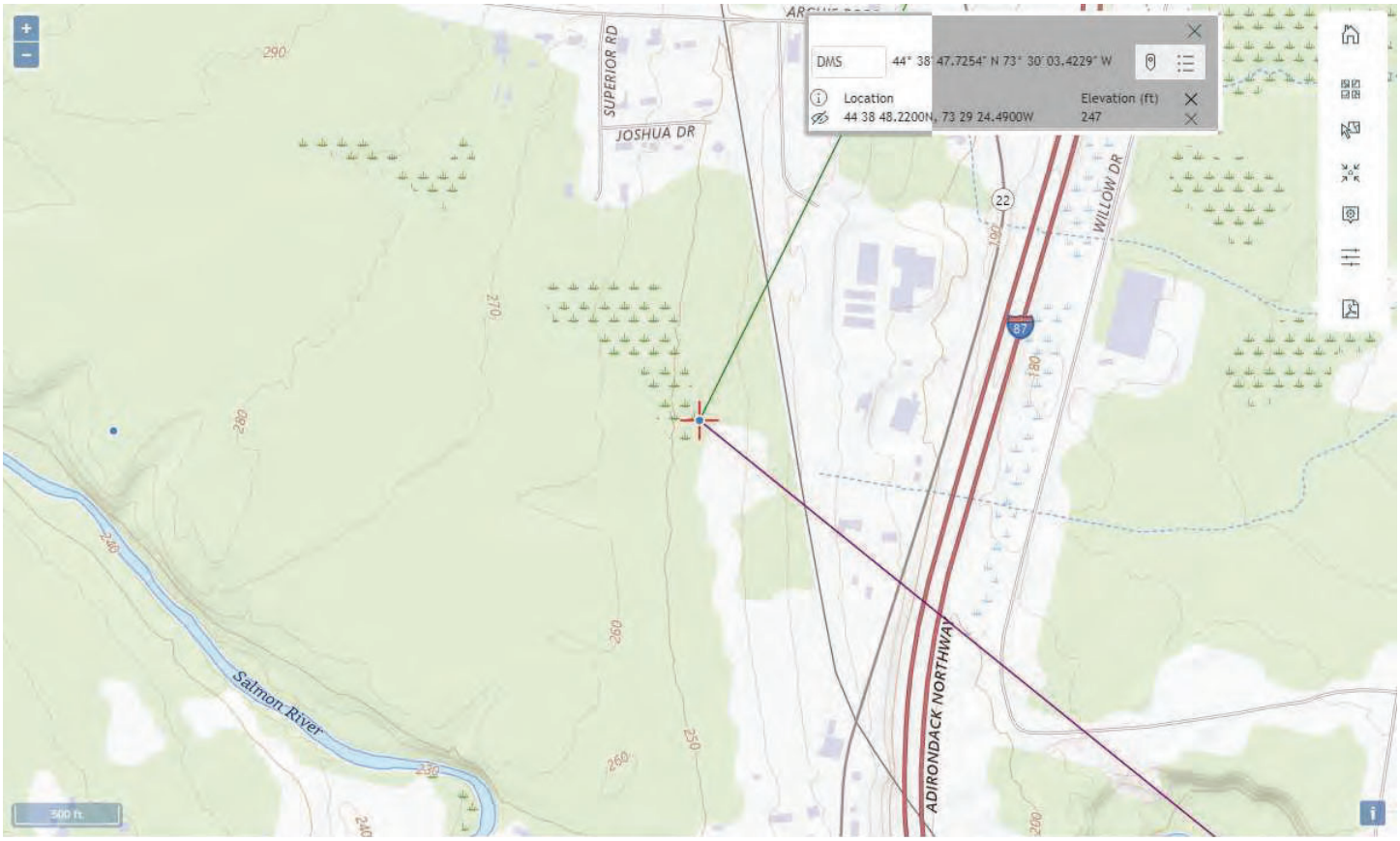
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6068, or Dianne.Marin@FAA.GOV. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AEA-13337-OE.

Signature Control No: 640950018-643316144 (DNE)
Dianne Marin
Technician

Attachment(s)
Map(s)

Verified Map for ASN 2024-AEA-13337-OE



APPENDIX C

WETLANDS DELINEATION AND JOINT PERMIT APPLICATION

B. LAING ASSOCIATES
A Woman-owned Business Enterprise
ENVIRONMENTAL CONSULTING
www.blaingassociates.com
380 N Broadway, Suite 407 - Jericho, NY 11753
(631) 261-7170

Date of Request: January 17, 2025

Permittee: UMS Property, LLC (Schluter Systems, LLC)
194 Pleasant Ridge Road, Plattsburgh NY 12901

Project Location: Tax parcels: 245-4-16.2, 245-4-22.11, 245-4-41, & 245-4-40
in the Town of Plattsburgh, Clinton County, New York

Authorization Sought: Section 404 of the Clean Water Act (CWA) and Section 401 WQC
Individual Permit for Filling Federal Freshwater Wetlands

Introduction:

B. Laing Associates is the environmental consulting firm assisting the applicant, Schluter Systems, LLC, and the project engineer, Robert M. Sutherland P.C., regarding the above-mentioned project. On December 5 & 6, 2023, and July 24, 2024, B. Laing Associates performed a delineation of freshwater wetlands on said property (based on the 1987 Manual).

Per the US Army Corps Wetland Delineation Manual's three-parameter methodology for wetland determinations, soils, hydrology, and vegetation were simultaneously characterized at each observation point. Field investigations by B. Laing Associates, Inc. discovered that wetlands, characterized by all three parameters, (i.e., wetland vegetation, hydrology, and soils) were largely associated with a large, centrally-located wetland that runs approximately northwest to southeast, as well associated ditches and drainage ways that have moved hydrology across the site (e.g., dilapidated drainage ditches, etc.)

The applicant is proposing to construct a distribution center on the currently unimproved site. An analysis of the site and the proposed action showed that there is a need to fill approximately 9.4 acres of wetlands to achieve the goals of the applicant. Please see below for more information.

Existing Conditions:

The subject site is located within an area of largely undeveloped, large lots in the Town of Plattsburgh, Clinton County, New York. The site is ±135.5 acres and is comprised of four tax parcels: 245-4-16.2, 245-4-41, 245-4-22.11, & 245-4-40.1. It is bordered on the east by railroad tracks and NYS Route 22, on the north by residential lots associated with Superior Drive and Joshua Drive, on the south by residential lots associated with Linda Lane, and to the west by similar unimproved (i.e., wooded) large tax parcels. See Figure 1 for a location map of the site.

The site is almost entirely unimproved, although large portions are disturbed and/or maintained through mowing, ATV (or equivalent) trails, or the clearing of vegetation (e.g., trees). Further, portions of this site have been regraded and or filled, at least in some upland areas. The site is mostly wooded, although the southeastern section is maintained largely as a field, and the south-central portion of the site was mostly cleared of trees during the December 2022 site investigation.

The site is mostly upland, though wetlands do exist on site. The wetlands on site were largely associated with a large, centrally-located wetland with associated ditches and drainage ways that move hydrology across the site. The wetter areas/larger wetlands tend to be associated with the western and north-central portions of the site, where two National Wetland Inventory (NWI) wetlands are mapped (See Figure 2). These mapped wetlands are known to be "palustrine, forested, broad-leaved deciduous, seasonally flooded/saturated wetlands", per the USFWS.

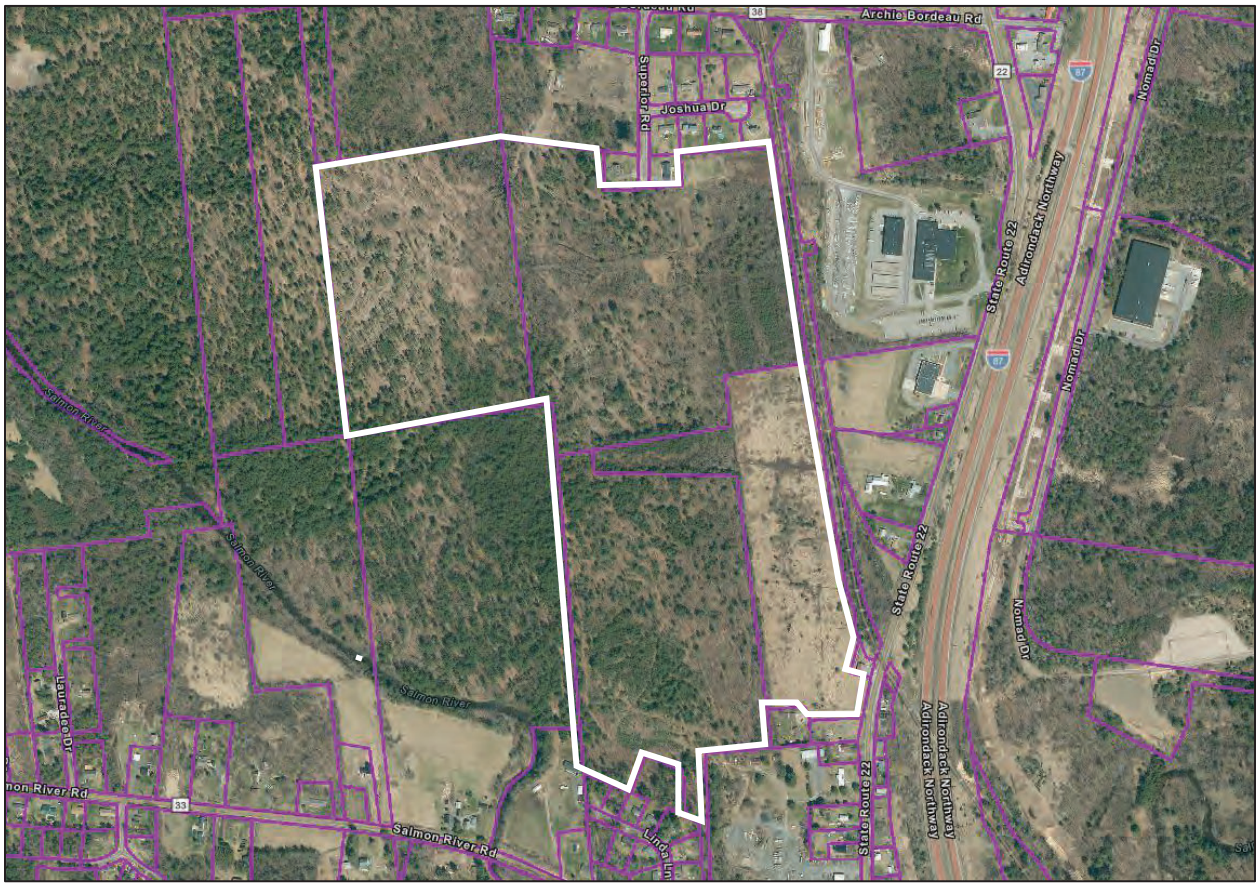


FIGURE 1
SITE LOCATION MAP
Site Bounded in White
(Source: ESRI, Clinton County)

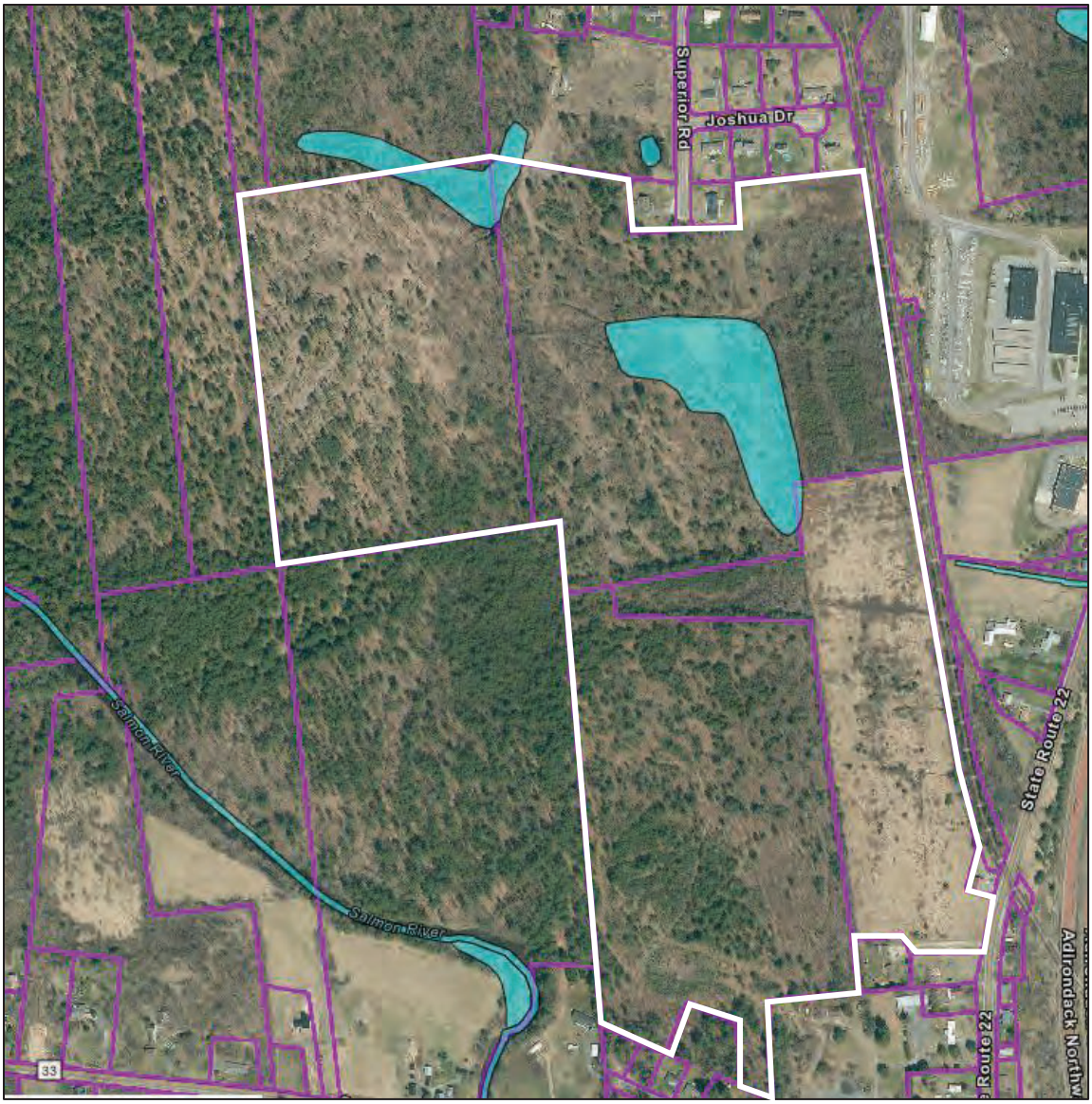


FIGURE 2
MAP SHOWING NWI MAPPED-WETLANDS ON SITE
Site Bounded in White
(Source: ESRI, USFWS)

Project Description:

The applicant, Schluter Systems, LLC, is looking to construct a distribution center that will operate on four tax parcels: 245-4-16.2, 245-4-41, 245-4-22.1, & 245-4-40.1. At present, the site is largely unimproved, though portions of the site are disturbed through mowing, logging, and occasional ATV use. The site is primarily comprised of uplands; however, wetlands do exist on site. Please see the B. Laing wetland delineation report, and other project reports, for more information about the existing conditions.

The applicant is looking to develop the land, including areas that were delineated as freshwater wetlands utilizing federal methodology. The applicant is proposing to construct a 774,750 square foot (s.f.) warehouse/distribution center and associated parking in the center of the property. Access to the site is proposed along New York State Route 22. A stormwater retention pond is proposed to the south of the warehouse, as well as a fire pump house and water storage tank.

Thus, the proposed regulated activities under the Clean Water Act will include:

- The filling of approximately 9.4 acres of freshwater wetlands.

Project Need:

Based on the review of the documents associated with the projects undertaken and included in the background history discussed above, the key factors below emerge as the basis for needing the proposed Project:

- Schluter Systems needs to expand its existing industry to meet market demands;
- The existing Schluter facility is located within a fully-developed industrial park and the ability to expand on-site is not possible;
- The new distribution center needs to be able to work in tandem with their existing facility (i.e., within 1.50 miles of same);
- The amount of space required to meet the demand of the new Schluter Systems distribution center will be a 774,750 s.f. structure, as determined by the project team;
- The new facility will need all required infrastructure per the Town Code (e.g., parking, access) as well as functional infrastructure (e.g., loading bays, etc.);
- A distribution center, unlike housing developments where there is discretion and flexibility in design, requires a single, unbroken structure that will be “squared off.”

- Thus, the project requires developable, Industrial-Zoned (from a zoning standpoint) land that can fit a large 775,750 s.f. distribution center.

The project has been designed to practically fill the smallest acreage of wetlands possible, but the loss of less than 9.4 acres was deemed to be impossible for the applicant to expand their use as needed. The implementation of the Proposed Action would address the above factors:

- The applicant would be able to utilize the land to establish a new distribution center which will allow Schluter Systems to meet market demands;

- The applicant's new distribution center will provide a significant source of manufacturing/distribution jobs throughout the local community;

- The proposed facility will exist within the growing Route 22 industrial corridor, which allows for growth in proximity to the Adirondack Northway while avoiding large-scale development in otherwise undisturbed neighborhoods. The local area is already "disturbed" from a noise, trucking, and industrial standpoint. Thus, continuing this type of development along Route 22 is preferential to doing so elsewhere;

- By filling freshwater wetlands on site and triggering an individual Section 404 CWA permit, off-site mitigation (compensatory wetland creation) will be achieved through the purchasing of mitigation bank credits. This will create higher-quality wetland habitats at a greater acreage than what exists on site.

Project Impacts:

As above, the regrading and development of the site will include the filling of 9.4 acres of freshwater wetlands, which is the primary "project impact." Most of the wetlands that are proposed to be filled exist within the south/eastern fields. These wetlands were the result of ditching having gone fallow in the intervening years since these fields were last used for agriculture. See Figure 3, below.

In the existing condition, the wetlands slope gently east where most hydrology ends up in a substantial ditch running along the train tracks on the eastern edge of the site. From there, water likely flows south and ends in the Salmon River and, ultimately, Lake Champlain. The project proposes to create a stormwater pond to contain runoff from nearby impervious surfaces. However, the project engineer will ensure any hydrologically removed connections will be restored through ditching or other stormwater features such that upstream and the aforementioned downstream flows are maintained.

Further, a consultation with the NYSDEC's Environmental Resource Mapper (and Short Environmental Assessment Mapper) showed that there is no known potential for endangered or threatened species to occur on site (and thus be impacted by development). This was corroborated by the Natural Heritage Program (NYNHP) and further refined by B. Laing Associates'

field investigations which concurred with that assessment. The NYNHP response only mentioned records of eastern pearlshell (*Margaritifera margaritifera*)- an unlisted mussel known from the Salmon River, and Houghton's sedge (*Carex houghtoniana*)- a state-threatened plant which was found over 0.3-miles to the east (on the other side of the Adirondack Northway). Thus, no significant impacts to any listed species will occur.

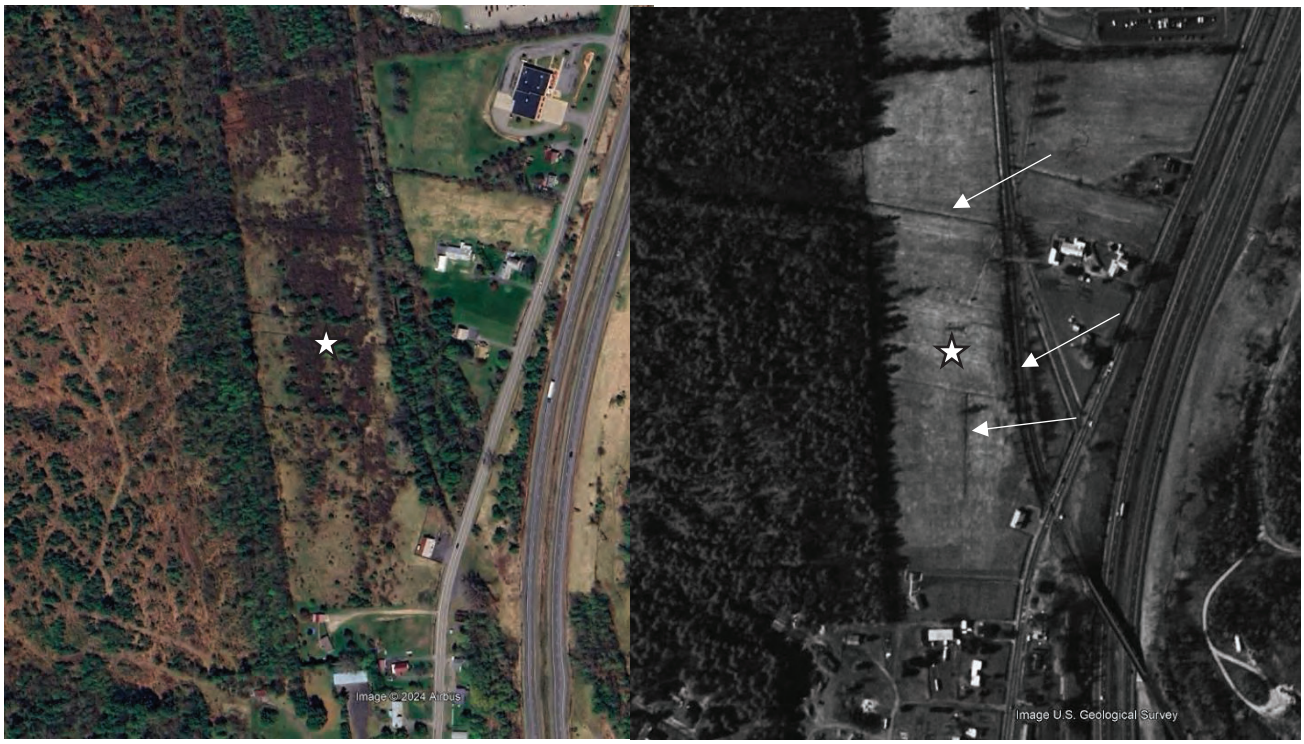


FIGURE 3

MAP SHOWING DRAINAGE CONDITIONS OVER TIME
2024 conditions on left, 1995 conditions on right. Note old, historical, agricultural ditching and overall drier appearance; lacking significant staining, etc.

(Source: Google Earth)

Alternative Analysis:

As a part of the application for an Individual 404 permit, Clean Water Act Section 404(b)(1) Guidelines (40 CFR 230), alternatives must be addressed. This includes the analysis of alternatives and the practicality of implementing alternatives that would avoid and minimize disturbance to regulated federal waterbodies and wetlands.

As known to the Army Corps of Engineers and this office, Plattsburgh and the surrounding area is encumbered by freshwater wetlands at a very high frequency. This is due to several factors, including being within the Lake Champlain Valley; the proximity to Lake Champlain itself; generally flat, sloping, somewhat poorly-drained soils; and the presence of the Saranac and Salmon Rivers, among other factors. Areas that were previously drained for prime agriculture land also have begun to either revert or cause additional hydrologic areas as drainage goes fallow/unmaintained.

As such, the siting of a ±775,000 s.f. distribution center can become very challenging. This is especially true when one not only has to account for wetlands, but also local zoning laws, finding large enough parcels, and ensuring the project is within proximity of the former Schluter Systems building.

Prior to the final design, as shown in this application, multiple alternatives were considered. As described above, an on-site expansion is considered impossible due to the fact that their existing industrial park is "full" and no additional distribution (trucking, etc.) space exists. Building additional interior space by adding additional floors was also determined to be impossible due to the lack of additional trucking space and local zoning laws. Furthermore, the no-action alternative was also found to be at odds with the project's goals.

Over the last few years, Schluter Systems has been attempting to undertake this project. During that time, multiple parcels have been analyzed. This office, in particular, has delineated wetlands for Schluter Systems' analysis of local parcels for the last ±4-years. As examples[1]:

1. In 2021, this office delineated wetlands on the former Clinton County Airport for this applicant. In January 2022, Schluter Systems was slated to utilize a large 62.45-acre upland lot, subdivided from that development (then, "Lot B"). Unfortunately, that ended up not being viable. The size of that property meant large PFAS remediation would have been required, in addition to large-scale regrading of same. These hurdles made the use of the airport too costly and out of the reach for the project. The airport is now subject to a New York State-funded development and is no longer an option.

2. Also in 2022, the Champlain Industrial Park (in the Village of Champlain, Clinton County) was analyzed as a potential site for this facility. There, a 96.1-acre undeveloped lot (19.13-2-2.1) was considered for this project. However, following a freshwater wetland

[1] This does not include a considerable number of other parcels as delineated by this office in the surrounding area which were conceptually considered, though not directly delineated "for" Schluter Systems.

delineation (and other analyses, inc. endangered & threatened species) by this office it was determined that this site was not a feasible choice. The Champlain site also includes a significant acreage of existing wetlands that would have needed to be filled. This includes forested floodplain wetlands associated with a significant, deep, steep-sided stream which would have required relocation and/or other significant engineering/permitting hurdles. In addition, large areas of the old agricultural fields met the three-parameters for federal wetlands and were delineated as such. Furthermore, this site was located almost 27-miles from the main production facility, which was at odds with the goal of the project. Having to ship and transport numerous trucks per day from the Town of Plattsburgh to the Village of Champlain would greatly increase truck traffic, and noise in both communities. Furthermore, each of these one-way trips (27 miles per truck) has the potential to emit 9.6 pounds of carbon dioxide,[2] among other emissions. The fact that Schluter was forced to look as far away as 27-miles provides an insight into how challenging siting projects like this in Plattsburgh can be.

3. Another site that was analyzed for this project is at Reeves Lane (both north and south of same), in the City of Plattsburgh. This parcel is known as 220.4-6-32. B. Laing Associates provided wetland analyses of this site in May 2022 and June 2023. These wetlands were not delineated by this office, as a reconnaissance effort of same (with a preliminary sketch of likely freshwater wetlands) deemed the parcel too encumbered with water resources to pursue. Furthermore, this site is within the City of Plattsburgh and has no immediate access to the Northway or the existing Schluter Systems facility. Thus, this site would have forced over 100 trucks per day into the surrounding residential neighborhood/City areas such as Military Turnpike, Church Street, and Rugar Street. This site was also located more than 4 miles from the main Schluter Systems plant.

4. During the summer of 2021, this office also delineated federal freshwater wetlands on a nearby property for this applicant. This parcel is known as Tax Map # 232-3-18 and is situated west of the Adirondack Northway-Route 22 interchange, north of Irish Settlement Road. This parcel was found to have dry, barrens-like uplands on the east, but low-lying riparian wetlands throughout most of the center and west of the parcel. Ultimately, when the property was comprehensively delineated and analyzed, over 9 acres of wetlands (no less than proposed herein) would have to be filled to suit the needs of Schluter Systems. These wetlands were also of considerably higher-quality than most of the wetlands on the subject site, being botanically diverse and underlain by deep organic material; rather than fallow agricultural fields dominated by invasive buckthorn. Beyond that, a NYSDEC-regulated stream would have had to be relocated for this alternative. Thus, it was determined that this alternative was also not feasible due to these hurdles, despite the proximity of this alternative to the existing Schluter Systems facility. This alternative parcel has since received site plan approval for another use, which has avoided all wetlands on site; an additional benefit to having not chosen this alternative.

[2] At an average of 161.8 grams of CO_2 per mile, per Environmental Defense Fund.

As discussed above, the project seeks to install a new distribution center that is not only close to Route 22 and the Adirondack Northway, but in proximity to the existing Schluter Systems building. This will also help reduce large-scale development in otherwise rural or "less disturbed" communities. Figure 4, below, shows a ±1.50-mile radius from the existing Schluter Systems building which includes the GIS overlays for the NWI map and the NYSDEC wetland map. Note the density of freshwater wetlands throughout this area which does not even include any of the in-person wetlands as delineated by this office[3], or other areas where the online mapping fails to show "actual" freshwater wetlands.

Unfortunately, this part of the state is not abounded in large upland parcels (especially those that are for sale[4] or use). On the contrary, freshwater wetlands exist in such a density that in order to balance local economic interests and common-sense land-use with wetland preservation, the goal becomes filling "as few wetlands as possible." This is especially true with larger projects such as this: the idea that a parcel large enough to fit a 775,000 s.f. distribution center, with associated parking, bays, entryways, etc., in the Greater Plattsburgh Area would be entirely uplands is not a feasible alternative. Instead, this parcel was chosen, after considering alternatives, despite the need to fill ±9.4-acres of wetlands. There are a number of other parcels where more wetlands would need to be filled (throughout most of Plattsburgh's undeveloped land).

While there are ±9.4 acres of wetlands being proposed to be filled, these are largely old agricultural fields that have been flooded due to poor/unmaintained drainage (in addition to some wooded wetlands). The wetlands in these old agricultural fields are now largely dominated by invasive species (e.g., buckthorn, etc.) Nevertheless, they are protected features and their loss is proposed to be mitigated. With the expansion of the Ducks Unlimited Wetland in Lieu Fee system, these wetlands will be mitigated at a rate based on cover type. For example, herbaceous/emergent wetlands will be mitigated at a 1:1 ratio, but wooded wetlands may be mitigated at a ratio of 2+:1. A letter of availability, demonstrating an excess of wetland credits, is enclosed with this submission.

[3] e.g., along Benny Blake Road, etc., as known to the Corps of Engineers.
[4] Another large hurdle in siting such a use, locally.

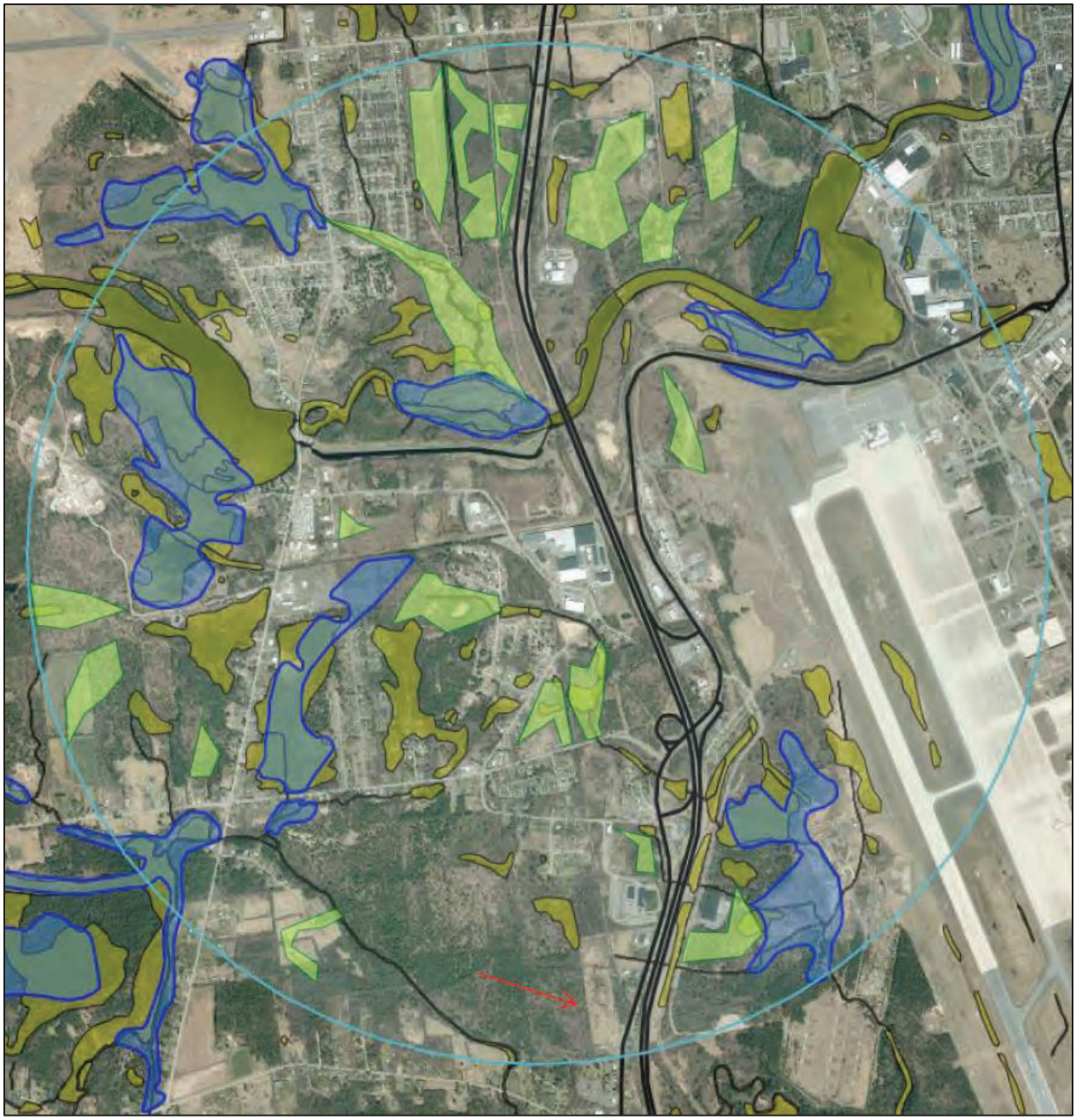


FIGURE 4

MAP SHOWING A 1.50-MILE RADIUS FROM EXISTING SCHLUTER SITE

Yellow overlays indicate NWI wetlands. Blue overlay represents NYSDEC wetlands. Green overlay represents approximate addition of "unmapped wetlands" by this office, based on aerial imagery, local knowledge, etc. Green overlay is approximate and not based on actual delineation. In addition, greater wetlands may likely exist. Further, all upland area may not be correctly zoned or for sale.
Site indicated by red arrow.

(Source: Google Earth)

401 Water Quality Certificate:

As the applicant is seeking coverage under Section 404 of the Clean Water Act (CWA) - Individual Permit, a 401 Water Quality Certificate (WQC) will be required to ensure that the proposed construction will meet the state water quality requirements. An application to the NYSDEC for a 401 WQC is being simultaneously submitted.

Best Management Practices (BMPs):

Best Management Practices (BMPs) will be installed to prevent impacts, such as sediment-laden runoff, to any adjacent areas during construction and to protect the surrounding natural resources. No significant, permanent impacts are anticipated with the proposed implementation of the enhanced stormwater management plan; however, BMPs such as appropriate staging, equipment, and storage areas will be implemented to decrease the risk of impact. In addition, the erection of silt fences and hay bales to provide sediment control and seeding for soil stabilization will be incorporated before, during, and after construction activities. See the attached plans prepared by Robert M. Sutherland, P.C.

Summary:

In summary, the applicant is seeking coverage under Section 404 of the Clean Water Act (CWA) - Individual Permit to fill 9.4-acres of freshwater wetlands.

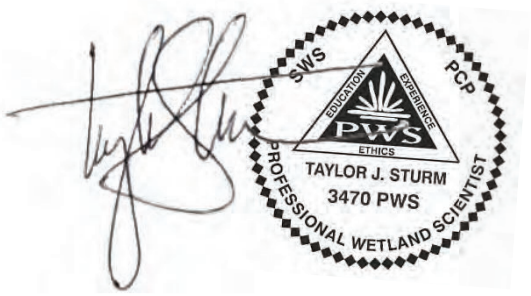
To prevent any "downstream" impacts, stabilization and restoration of the impacted area will be reestablished once the construction activity has been completed. Best Management Practices (BMPs) will be installed to prevent any sediment-laden runoff to the adjacent areas and to protect natural resources during construction.

Enclosed please find:

1. The Joint Application Form,
2. The 401 Water Quality Certificate Supplement,
3. The Full Environmental Assessment Form,
4. Information regarding adjacent property owners,
5. Photographs and Site Location Maps of the Project Site,
6. The B. Laing Associates, Inc. Delineation Report, &
7. Site Plans by Robert M. Sutherland, P.C., for the Proposed Action.

As the Applicant's agent in this matter, please contact the office with any questions or concerns regarding the above information. Thank you for your consideration.

Sincerely,



Taylor J. Sturm, PWS, CE
Senior Project Scientist

NEW YORK STATE | Department of Environmental Conservation | Office of General Services | Department of State

US Army Corps of Engineers

JOINT APPLICATION FORM

For Permits for activities activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. **Applications To:**

>NYS Department of Environmental Conservation ☑ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☑ 401 Water Quality Certification*
- ☐ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Coastal Erosion Management
- ☐ Water Withdrawal
- ☐ Long Island Well
- ☐ Incidental Take of Endangered / Threatened Species

* See Instructions (page 3)

>US Army Corps of Engineers ☑ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☑ Section 404 Clean Water Act ☐ Section 10 Rivers and Harbors Act

Is the project Federally funded? Yes ✓ No

If yes, name of Federal Agency:

General Permit Type(s), if known:

Preconstruction Notification: Yes No

>NYS Office of General Services ☐ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

- ☐ State Owned Lands Under Water
- ☐ Utility Easement (pipelines, conduits, cables, etc.)
- ☐ Docks, Moorings or Platforms

>NYS Department of State ☐ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☐ Coastal Consistency Concurrence

2. **Name of Applicant**

UMS Property, LLC

Taxpayer ID (if applicant is NOT an individual)

Mailing Address: 194 Pleasant Ridge Road

Post Office / City: Plattsburgh

State: NY

Zip: 12901

Telephone: (518) 324-3444

Email: gjandolenko@schluter.com

Applicant Must be (check all that apply): ☑ Owner ☑ Operator ☐ Lessee

3. **Name of Property Owner (if different than Applicant)**

Iona G Brand Revocable Living Trust, Robert Brunell, Thomas M

Mailing Address: 4079 Route 22 Plattsburgh 12901, 716 Brand Hollow Rd. Peru 12972, & 17 Superior Dr. Plattsburgh 12901

Post Office / City: See Mailing Address Section

State:

Zip:

Telephone:

Email:

For Agency Use Only	Agency Application Number:

4. **Name of Contact / Agent**

Taylor Sturm, PWS - B. Laing Associates, Inc.

Mailing Address	Post Office / City	State	Zip
380 N Broadway, Suite 407	Jericho	NY	11753

Telephone (631) 261-7170 Email taylors@blaingassociates.com

5. **Project / Facility Name**

Schluter Systems Distribution Facility

Property Tax Map Section / Block / Lot Number:

245-4-16.2, 245-4-22.11, 245-4-40, 245-4-41

Project Street Address, if applicable	Post Office / City	State	Zip
Off of Route 22	Plattsburgh	NY	12901

Provide directions and distances to roads, intersections, bridges and bodies of water

Site is ±0.5-miles N of Salmon River; 0.17-miles W of I-87; 0.5-miles NNW of Route 22 x S Junction Road; 0.84-miles SSW of the interchange between I-87 and Route 22; 1.17-miles W of Plattsburgh Internation Airport.

✓ Town Village City	County	Stream/Waterbody Name
Plattsburgh	Clinton	Salmon River, ultimately

Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:

Latitude: 44 ° 38 ' 40.4 N " Longitude: 73 ° 29 ' 23.6 "

6. **Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

The construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.

b. Description of current site conditions:

Presently the site is a mix of industrial use on the eastern side (the existing Johns Manville facility) and an undeveloped field on the western half. The lot is approximately bisected in two equal portions. The developed portion is mostly paved or developed and the undeveloped half is a mix of upland and wetlands. The section that is currently undeveloped is mostly a combination of disturbance oriented exotic upland plants (eg Daucus carota) and invasive wetland plants (eg Phragmites australis and Lythrum salicaria).

c. Proposed site changes:

The project proposes to construct a 43,735.65 SF addition to the existing Johns Manville facility. This will extend to the west of the existing building and project into the undeveloped portion of the lot. Associated with the expanded building will be an expanded parking area, site egress, truck loading bays, etc.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

The project will require the filling of 0.84-acres of wetlands. In addition, uplands will be filled and/or regreaded. Please see the enclosed site plans by Robert M. Sutherland, PC, for more details.

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

No dredging proposed. Some material will be removed for upland grading and the installation of a stormwater detention pond.

f. Is tree cutting or clearing proposed? Yes If Yes, explain below. ✓ No

Timing of the proposed cutting or clearing (month/year):

Number of trees to be cut: Acreage of trees to be cleared:

g. Work methods and type of equipment to be used:

Standard commercial construction equipment will be used, including excavators, and other heavy machinery.

h. Describe the planned sequence of activities:

Purchasing of mitigation credits, installation of erosion/sediment controls, regrading of uplands and filling of wetlands, installation of building foundations, digging of stormwater basin, build building, finish concrete parking areas and finalize site egress, stabilize all disturbed areas and install landscaping.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Best management practices will be undertaken to prevent any pollution. The wetlands that will be filled will not discharge sediment into downstream receptors. The existing road ditching will be improved by the project such that all drainage and water resources on site will continue to drain off-site, without any "discharge" of fill downstream.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

Erosion controls such as silt fences and haybales will be installed along the limit of disturbance to ensure no impacts to adjoining wetlands (those not to be filled) will occur. The existing ditching will be improved by the project such that all drainage and water resources on site will continue to drain off-site (as currently occur) without any additional "discharges."

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

Please see the application enclosures for an analysis of alternatives.

l. Proposed use: ☑ Private ☐ Public ☑ Commercial

m. Proposed Start Date: 11/25 Estimated Completion Date: 11/27

n. Has work begun on project? Yes If Yes, explain below. ✓ No

o. Will project occupy Federal, State, or Municipal Land? ___ Yes If Yes, explain below. ✓ No

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

✓ Yes If Yes, list below. ___ No

The project will require: NYSDEC 401 WQC and ACOE/CWA Section 404 permit for the filling of wetlands. Local (Town of Plattsburgh) site plan approval will also be required.

7. **Signatures.**

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant | Date

Applicant Must be (check all that apply): ☐ Owner ☑ Operator ☐ Lessee

Printed Name: UMS Property, LLC | Title: Applicant

Signature of Owner (if different than Applicant) | Date

Printed Name: Iona G Brand Revocable Living Trust, Robert Brunell, Thomas M Leclair Trust | Title: Owner

Signature of Contact / Agent | Date: December 8, 2024

Printed Name: Mr. Taylor J. Sturm, PWS - B. Laing Associates, Inc. | Title: Senior Project Scientist

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name | Title

Signature | Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

APPLICATION FOR PERMIT FOR SECTION 401 STATE WATER QUALITY CERTIFICATION

Supplement WQC-1

DEC ID (if known): _____

Applicant Information:

Name of Applicant (from Joint Application Form): UMS Property, LLC			
Email: gjandolenko@schluter.com		Phone: (518) 324-3444	
Mailing Address: Street: 194 Pleasant Ridge Road	City: Plattsburgh	State: NY	Zip: 12901
Project Location (from Joint Application Form): Schluter Systems Distribution Facility			
Town (where property taxes paid): Plattsburgh		County: Clinton	
Street Address: Off Route 22	City: Plattsburgh	State: NY	Zip: 12901

To comply with federal requirements at 40 CFR §121.5(b) for New York State Section 401 Water Quality Certification, all items below must be completed and the applicant must sign page 2 of this form.

1.	By signing this form, the applicant affirms that the project proponent(s) and a point of contact were accurately identified in the Joint Application for Permit provided with this supplement.
2.	By signing this form, the applicant affirms that the proposed project is accurately and completely identified in the Joint Application for Permit provided with this supplement, and in any supporting plans, photos, reports or other project information.
3.	Identify here the applicable federal license or permit for this request: Currently pending (concurrent submission) Individual Permit under Clean Water Act Section 404. If this request relates to a Section 404 Nationwide Permit administered by the US Army Corps of Engineers, please identify the appropriate Nationwide Permit number(s):
4.	Please identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters (attached additional information as needed): 9.4-acres of freshwater wetlands are proposed to be filled as a result of the project. The majority of these wetlands are the result of old agricultural fields with fallow ditching. The wetlands on site will be filled, but the existing drainage will be improved such that any stormwater from the project to the north will continue to discharge unimpeded through the improved ditches and the "receiving waters," such as they are, will be unchanged. No "discharge" to downstream waters is proposed.
5.	Please provide a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge (attach additional information as needed): All fill will be done through best management practices to prevent sedimentation of down-stream waters. Once the site is stabilized, no "discharge" will occur beyond maintaining the existing ditching and stormwater conveyances.

6.	Please provide a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received: CWA Section 404; Town of Plattsburgh Site Plan Approval.
7.	Please indicate the date a Section 401 Water Quality Certification pre-filing meeting request was submitted to DEC and attach a copy of the request to this form. The pre-filing meeting request must have been made at least 30 days prior to submitting application for Section 401 Water Quality Certification. Pre-filing meeting requests are no longer necessary per NYSDEC correspondence.
8.	By signing below the applicant is providing the following statement: "*The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief*"
9.	By signing below the applicant is providing the following statement: "*The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.*"

Certification:

In addition to the Joint Application Form provided with this supplement, I hereby submit this form and the attachments indicated to request a Section 401 Water Quality Certification from DEC. The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Project Applicant/Proponent Signature — December 9, 2024 (Date)

Taylor J. Sturm, PWS - B. Laing Associates, Inc.
(Agent for Applicant)

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: UMS Property, LLC New Distribution Center Site Plan 2024		
Project Location (describe, and attach a general location map): Salmon River and NYS Route 22, Plattsburgh, NY or Tax Parcels: 245 - 4 - 16.2, 22.11, 40.1, & 41		
Brief Description of Proposed Action (include purpose or need): The construction of approximately 774,750 square-feet warehouse and distribution facility with approximately 34,600 of office area and related site improvements. The majority of the building and office area would average 60 feet in height with a portion of the warehouse being approximately 100 feet in height.		
Name of Applicant/Sponsor: UMS Property, LLC	Telephone: (518) 324 - 3444 E-Mail: gjandolenko@schluter.com	
Address: 194 Plesaeant Ridge Road		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Project Contact (if not same as sponsor; give name and title/role): Aaron J. Ovios, PE	Telephone: (518) 561 - 6145 E-Mail: aj.ovios@rmspc.com	
Address: 11 MacDonough Street		
City/PO: Plattsburgh	State: NY	Zip Code: 12901
Property Owner (if not same as sponsor): Iona G Brand Revocable Living Trust, Robert Brunell, Thomas M Leclair Living Trust	Telephone: E-Mail:	
Address: 4079 Route 22 Plattsburgh 12901, 716 Brand Hollow Rd. Peru 12972, 17 Superior Dr. Plattsburgh 12901		
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	Water Line Extenstion	
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Plattsburgh Planning Board	
c. City, Town or Village Zoning Board of Appeals ☑Yes ☐No	Town of Plattsburgh Zoning Board	
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Clinton County Health Department, Clinton County IDA	
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYS DEC & DOT	
h. Federal agencies ☑Yes ☐No	FAA for Height, Army Corps of Engineers	

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):

_____

_____

_____

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?
Industrial (I)

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? _____

C.4. Existing community services.

a. In what school district is the project site located? Peru School District

b. What police or other public protection forces serve the project site?
NYS Police, Clinton County Sheriff

c. Which fire protection and emergency medical services serve the project site?
South Plattsburgh Fire District

d. What parks serve the project site?
Plattsburgh Parks and Recreation

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)? Industrial

b. a. Total acreage of the site of the proposed action? 139 acres
b. Total acreage to be physically disturbed? 50 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 139 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)
Industrial
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? 2
iv. Minimum and maximum proposed lot sizes? Minimum 4 Maximum 138

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 24 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

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 1

ii. Dimensions (in feet) of largest proposed structure: 100 height; 405 width; and 1225 length

iii. Approximate extent of building space to be heated or cooled: 774,750 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: Stormwater detention pond

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

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

iv. Approximate size of the proposed impoundment. Volume: 0.81 million gallons; surface area: 0.62 acres

v. Dimensions of the proposed dam or impounding structure: 4 height; 1,000 length

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

D.2. Project Operations

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

If Yes:

i .What is the purpose of the excavation or dredging?

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

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

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe.

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

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

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

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

ix. Summarize site reclamation goals and plan:

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): Federal wetland: 18,596

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 proposed improvement will be filling or excavating wetlands and then constructing in there place access drives, building, channels, and banks. Approximately 9.4-acres of wetlands will be filled.

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

If Yes, describe: _____

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: _____

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: 3,000 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: WD046
- 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: Extend public water south along RT-22 to server the proposed site
- Source(s) of supply for the district: Town of Plattsburgh Water Districts

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: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

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: 4,000 gallons/minute.

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

If Yes:

i. Total anticipated liquid waste generation per day: 3,000 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

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

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of 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: _____

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

If Yes:

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

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):

_____

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

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 31 acres (impervious surface)

_____ Square feet or 139 acres (parcel size)

ii. Describe types of new point sources. Roof drainage pipes, swales, and curbs

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)?

The majority of the impervious surfaces will drain into a stormwater management pond while some may be directed into underground structures.

- If to surface waters, identify receiving water bodies or wetlands: _____
- 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)

Excavators,dump trucks,delivery equipment

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:

- 5,000 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): 50 trucks/day with a peak of 10 trucks/hour

iii. Parking spaces: Existing 0 Proposed 200 Net increase/decrease 200

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:

A new commercial access driveway is proposed off of NYS Route 22

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: 7,500 KW Peak Load

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

NYSEG

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: 7 am - 5 pm
- Saturday: 8 am - 5 pm
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 24/7
- Saturday: 24/7
- Sunday: 24/7
- Holidays: Closed

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:

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

Describe:

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:

Lithonia LED Lamps @ 25' above finish grade pointed downward with no street pole closer than 20'

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:

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):

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: 5 tons per week (unit of time)
- Operation : 3 tons per week (unit of time)

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

- Construction:
- Operation: Recycle and Reuse of Waste Materials

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

- Construction:
- Operation: Clinton County 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

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): Wetlands

ii. If mix of uses, generally describe:

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	0.63	31.44	+ 30.81
• Forested	92.56	71.11	- 21.45
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	20.9	3.65	- 17.25
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)	24.17	14.77	- 9.4
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Open lawn	0	15.55	+ 15.55

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:

_____

_____

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:

_____

_____

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): _____

☐ 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): 510003

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

_____

_____

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? > 20 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:

Northway loamy fine sand	50 %
Deerfield fine sand	33 %
Covertfalls loamy fine sand	17 %

d. What is the average depth to the water table on the project site? Average: 5.5 feet

e. Drainage status of project site soils:
☐ Well Drained: _____% of site
☑ Moderately Well Drained: 67 % of site
☑ Poorly Drained 33 % 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 _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters Approximate Size 18 acres
- 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: _____

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: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site: _____

_____ _____ _____

_____ _____ _____

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): Pitch Pine-Heath Barrens

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: 13.0 acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): 0 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: _____

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: Lake Champlain

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

iii. Distance between project and resource: 2 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.

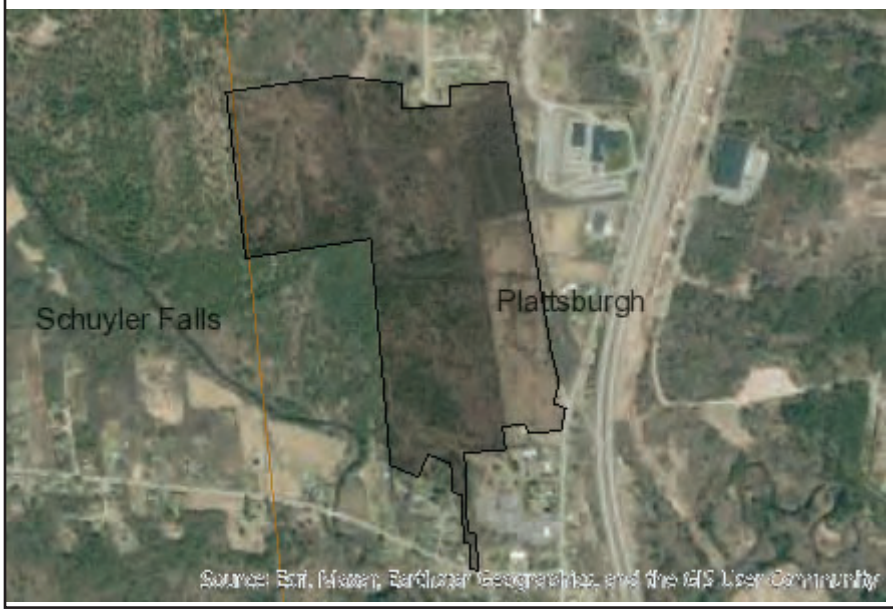
Applicant/Sponsor Name _____ Date _____

Signature _____ Title _____

PRINT FORM

EAF Mapper Summary Report

Wednesday, May 15, 2024 12:44 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]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
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]	510003
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 - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes

E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	Yes
E.2.n.i [Natural Communities - Name]	Pitch Pine-Heath Barrens
E.2.n.i [Natural Communities - Acres]	13.0
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]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

B. LAING ASSOCIATES
A Woman-owned Business Enterprise
ENVIRONMENTAL CONSULTING
www.blaingassociates.com
380 N Broadway, Suite 407 - Jericho, NY 11753
(631) 261-7170

Proposed Distribution Center
UMS Property, LLC (Schluter Systems, LLC)

Property Information for Adjacent Lots to the Site

See Accompanying Map

1- **Parcel**: 245.-10-16
Owner: SHAUGHNESSY, DANIEL M
Address: 1 SUPERIOR DR

2- **Parcel**: 245.-10-17
Owner: LECLAIR IRREVOCABLE TRUST, THOMAS M
Address: 17 SUPERIOR DR
Secondary Address: 1 Archie Bordeau Rd
Plattsburgh NY 12901

3- **Parcel**: 245.-10-12
Owner: HASTINGS, DONALD
Address: 2 JOSHUA DR

4- **Parcel**: 245.-10-13
Owner: DAVISON, CORY
Address: 4 JOSHUA DR

5- **Parcel**: 245.-10-14
Owner: ROSS, MAKALYN
Address: 6 JOSHUA DR
Secondary Address: 6121 Rt 22
Plattsburgh NY 12901

6- **Parcel**: 245.-10-15
Owner: STEWART, NICHOLAS
Address: 8 JOSHUA DR

7- **Parcel**: 245.-4-17.2
Owner: FSC PLATTSBURGH NY DST
Address: 4125 RT 22
Secondary Address: 3349 SR 138 Bldg A Ste A
Wall NJ 07719

8- **Parcel**: 245.-4-22.12
Owner: FIRE DISTRICT, SOUTH PLATTSBURGH
Address: 4105 RT 22
Secondary Address: P.O. Box 991
Plattsburgh NY 12901

9- **Parcel**: 245.-4-22.11
Owner: BRAND REVOCABLE LIVING TRUST, IONA G
Address: 4079 RT 22
Secondary Address: P.O. Box 991
Plattsburgh NY 12901

10- **Parcel**: 245.-4-21
Owner: SCHWARTZ, TIMOTHY C
Address: 4067 RT 22

11- **Parcel**: 245.-4-24
Owner: THEW, GREGORY A
Address: 4039 RT 22

12- **Parcel**:245.-4-22.22
Owner: LOVELY, FRANK
Address: 4025 Route 22 Plattsburgh NY 12901

13- **Parcel**: 245.-4-22.21
Owner: HOLDERMAN, DARLA J
Address: 4031 RT 22
Secondary Address:

14- **Parcel**: 245.-4-29
Owner: BRUNELL, ROBERT N
Address: 3997-4019 RT 22
Secondary Address:

15- **Parcel**: 245.-4-32
Owner: REZAC, SANDRA J
Address: 16 LINDA LN

16- **Parcel**: 245.-4-33
Owner: DIMAN, MAGDA
Address: 20 LINDA LN
Secondary Address: 183 John Boswell Rd Peru NY 12972

17- **Parcel**: 245.-4-34.1
Owner: ROCK, JAMES R
Address: 24 LINDA LN
Secondary Address: 33 Fort Brown Dr Ste 201
Plattsburgh NY 12903

18- **Parcel**: 245.-4-34.2
Owner: ALLEN, PETER N
Address: LINDA LN
Secondary Address: 659 Cumberland Head Rd
Plattsburgh NY 12901

19- **Parcel**: 245.-4-35.11
Owner: TOWN OF PLATTSBURGH
Address: 38 LINDA LN
Secondary Address: 151 Banker Rd
Plattsburgh NY 12901

20- **Parcel**: 245.-4-38.2
Owner: FLEURY-DESORCIE, MARSHIA E
Address: 31 LINDA LN

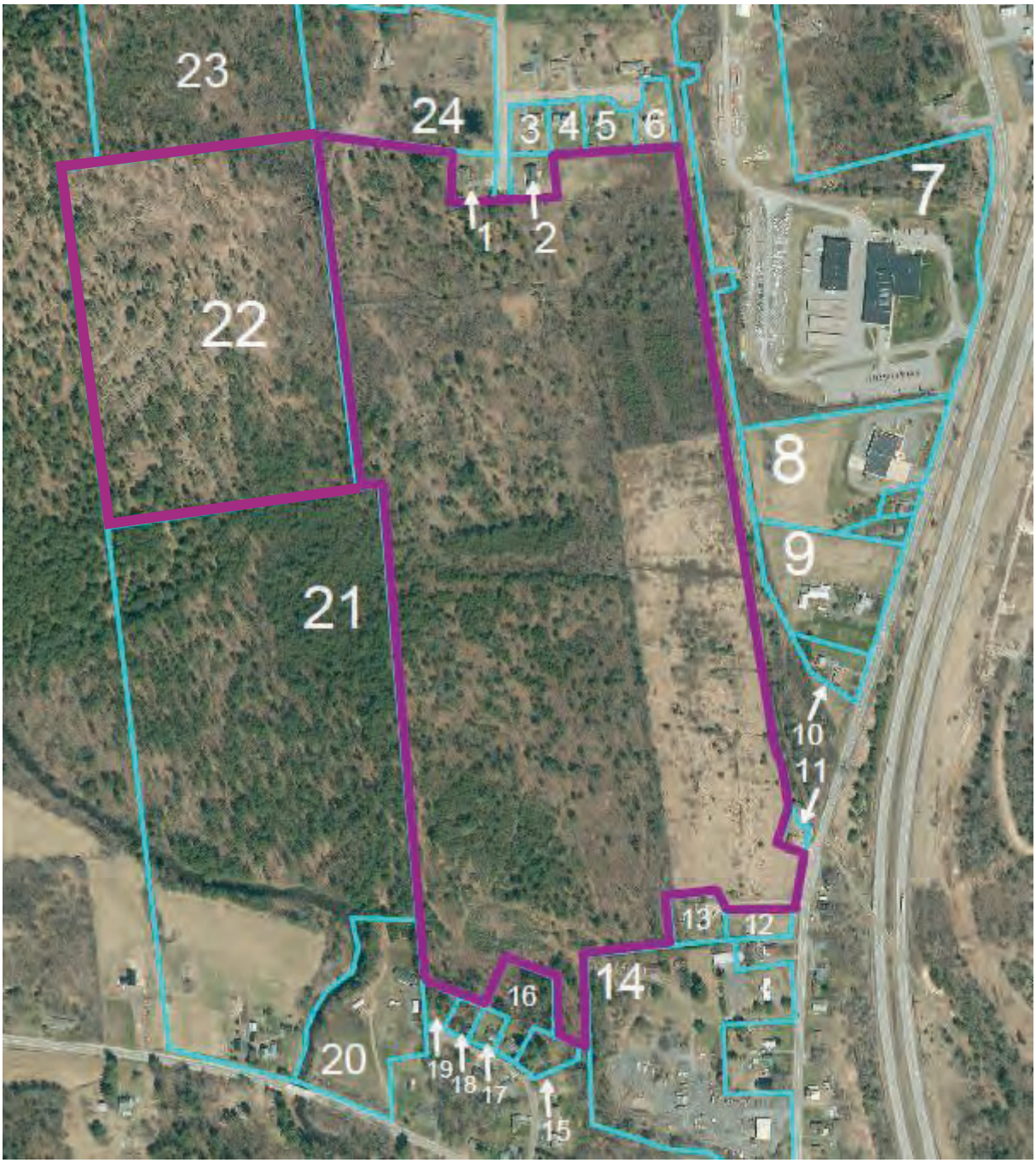
21- **Parcel**: 245.-4-39
Owner: SANTOR, RONNIE
Address: 84 SALMON RIVER RD

22- **Parcel**: 245.-4-41[1]
Owner: LECLAIR LIVING TRUST, THOMAS M
Address: ARCHIE BORDEAU RD
Secondary Address: 17 Superior Dr
Plattsburgh NY 12901

[1] Unintentionally included. This parcel is actually a part of the project and not an adjoining neighbor.

23- **Parcel**: 245.-4-14
Owner: BRAND, DANA
Address: 121 ARCHIE BORDEAU RD
Secondary Address: 5318 38th Ave W
Bradenton FL 34209

24- **Parcel**: 245.-4-16.1
Owner: LECLAIR LIVING TRUST, THOMAS M
Address: 13 SUPERIOR DR
Secondary Address: 30 Trafalgar Dr
Plattsburgh NY 12901



MAP OF ADJOINING PROPERTY OWNERS

SITE DENOTED BY PURPLE BOUNDARY

B. LAING ASSOCIATES

Photo 1: Showing typical wooded uplands on the northern portion of the site. (2022)

Photo 2: Showing herbaceous/shrub dominated wetlands on the northwest portion of the site where "Wetland A/B/C flows off-site." (2022)

Photo 3: Showing typical wooded uplands on the central portion of the site. (2022)

Photo 4: Showing an area of ATV/automobile disturbance immediately adjacent to the wetlands in the site's center. (2022)

Photo 5: Showing a centrally-located open area of wetlands dominated by *Verbena, Scirpus,* etc. (2022)

Photo 6: Looking east from the wooded parcel into where hydrology enters (flowing east) the fields in the southeastern portion of the site. (2022)

Photo 7: Showing a dense *Rhamnus* and *Cornus* section of the southeastern fields. (2022)

Photo 8: Showing wooded wetlands on the western/central portions of the site where Wetland A/B/C flows off-site to the west. (2022)

Photo 9: Showing wooded uplands adjacent to the wetlands in Photo 8. (2022)

Photo 10: Looking at wetlands along the wooded central portion of the site. (2022)

Photo 11: Looking at upland areas lacking a tree stratum. (2022)

Photo 12: Looking at *Solidago*-dominated uplands in the southeastern fields. (2022)

Photo 13: Looking at dry, upland fields at the southeast of the site, where the entrance is. (2024)

Photo 14: Looking at wetland thickets including dogwoods, buckthorn, etc. (2024)

Photo 15: Looking at the dark, saturated soils within the dense thickets in wetlands. (2024)

Photo 16: Looking at dry, upland fields in the south-central portion of the site. (2024)

Photo 17: Looking at seasonally flooded wetland areas in "Wetland E" that show sparse sedge coverage and water-stained leaves. (2024)

Photo 18: Showing wetlands (Wetland E) in the background with saturated soils and uplands to the left with Christmas fern and other upland plants.

Photo 19: Looking at standard hydric soil on site with a depleted gray matrix beneath a dark layer. (2024)

Photo 20: Showing dry, sandy pine and oak "barrens" on the western part of the site.

Photo 21: Showing “Wetland Q” which is a linear, Sphagnum-dominated feature that sticks in from the west, off-site.

FRESHWATER WETLAND DELINEATION REPORT
SCHLUTER SYSTEMS, LLC
SOUTH PARCELS
CLINTON COUNTY, NEW YORK
December 2024

PREPARED FOR:

Robert M. Sutherland, P.C.
11 MacDonough Street
Plattsburgh, NY 12901

PREPARED BY:

B. LAING ASSOCIATES
A Woman-owned Business Enterprise
ENVIRONMENTAL CONSULTING
www.blaingassociates.com
380 N Broadway, Suite 407 - Jericho, NY 11753
(631) 261-7170

FRESHWATER WETLAND DELINEATION REPORT
SCHLUTER SYSTEMS, LLC
SOUTH PARCELS
CLINTON COUNTY, NEW YORK
December 2024

Contents

1.0 INTRODUCTION 3
2.0 SITE CONDITIONS 3
2.1 Existing Condition 3
2.2 Vegetation 6
2.3 Hydrology 7
2.4 Soils 7
3.0 FRESHWATER WETLAND DEFINITIONS 11
3.1 NYSDEC Freshwater Wetland Definition 11
3.2 ACOE Freshwater Wetland Definition 12
3.3 Wetland Definition Summary 12
4.0 WETLAND FINDINGS AND ASSESSMENT 13

Figures and Tables

Figure 1: Site Location Map 4
Figure 2: National Wetlands Inventory Map 5
Figure 3: NRCS Soils Map 8
Table 1: NRCS Soils Properties 7
Table 2: Vegetation Observed on Site 9

APPENDICES

Appendix A
Site Photographs

Appendix B
NRCS Soil Map Data

Appendix C
Wetland Determination Data Forms

Appendix D
Wetland Plans by RMS P.C.

1.0 INTRODUCTION

B. Laing Associates, Inc. has prepared this report to outline wetland findings at a property within Pleasant Ridge Corners, Town of Plattsburgh, Clinton County, New York. On December 5 & 6, 2022, B. Laing Associates personnel performed a delineation of Federal Clean Water Act freshwater wetlands on a portion of said property (the site, see below). Per the US Army Corps Wetland Delineation Manual's three-parameter methodology for wetland determinations, soils, hydrology, and vegetation were simultaneously characterized at each observation point. These data were utilized to make a wetland determination at each point. Only when all three conditions tested positive, a wetland determination was made. Flagging was placed at the boundary between wetland and upland conditions.

In summary, a diverse mosaic of freshwater wetlands were delineated on site, most of which are somehow interconnected. The largest wetland ("Wetland A") extends from the northwest and cuts southeastward, diagonally across the site, where it meets a central east/west wetland. These central wetlands mostly converge in the center of the site and flow south, off-site, in two distinct north-south wetlands. While separated, these wetlands are connected to one another by wetland ditches/swales which typically flow towards the east. Fields also include additional ditches, some of which expressed all three wetland parameters, and were flagged as wetlands. Surrounding areas in these fields occasionally included hydrophytic vegetation but lacked hydric soils. One isolated wetland was delineated but surrounded by dry, goldenrod and milkweed-dominated uplands.

2.0 SITE CONDITIONS

2.1 Existing Condition

The subject site is located within an area of largely undeveloped large lots in the Town of Plattsburgh, Clinton County, New York. The site is ±102.5-acres and is comprised of three tax parcels: 245-4-16.2, 245-4-22.1, & 245-4-40.1. It is bordered on the east by railroad tracks and NYS Route 22, on the north by residential lots associated with Superior Road and Joshua Drive, on the south by residential lots associated with Linda Lane, and to the west by other unimproved (i.e., wooded) large tax parcels. See Figure 1 for a location map of the site.

The site is almost entirely unimproved, although large portions are disturbed and/or maintained through mowing, ATV (or equivalent) trails, as well as the clearing of vegetation (e.g., trees). Further, portions of this site have been regraded and or filled, at least in some upland areas. The site is mostly wooded, although the southeastern section is maintained largely as a field, and the south-central portion of the site was mostly cleared of trees/logged.

The site is mostly upland, though wetlands do exist on site. The wetter areas/larger wetlands tend to be associated with the western and north-central portions of the site, where two National Wetland Inventory (NWI) wetlands are mapped (See Figure 2). These mapped wetlands are known to be "palustrine, forested, broad-leaved deciduous, seasonally flooded/saturated wetlands", per the USFWS. These connect into a series of unmapped wetlands and flow to the

south. Detailed descriptions of these conditions and the wetland parameters – vegetation, soils, hydrology, as well as general wildlife are discussed below.

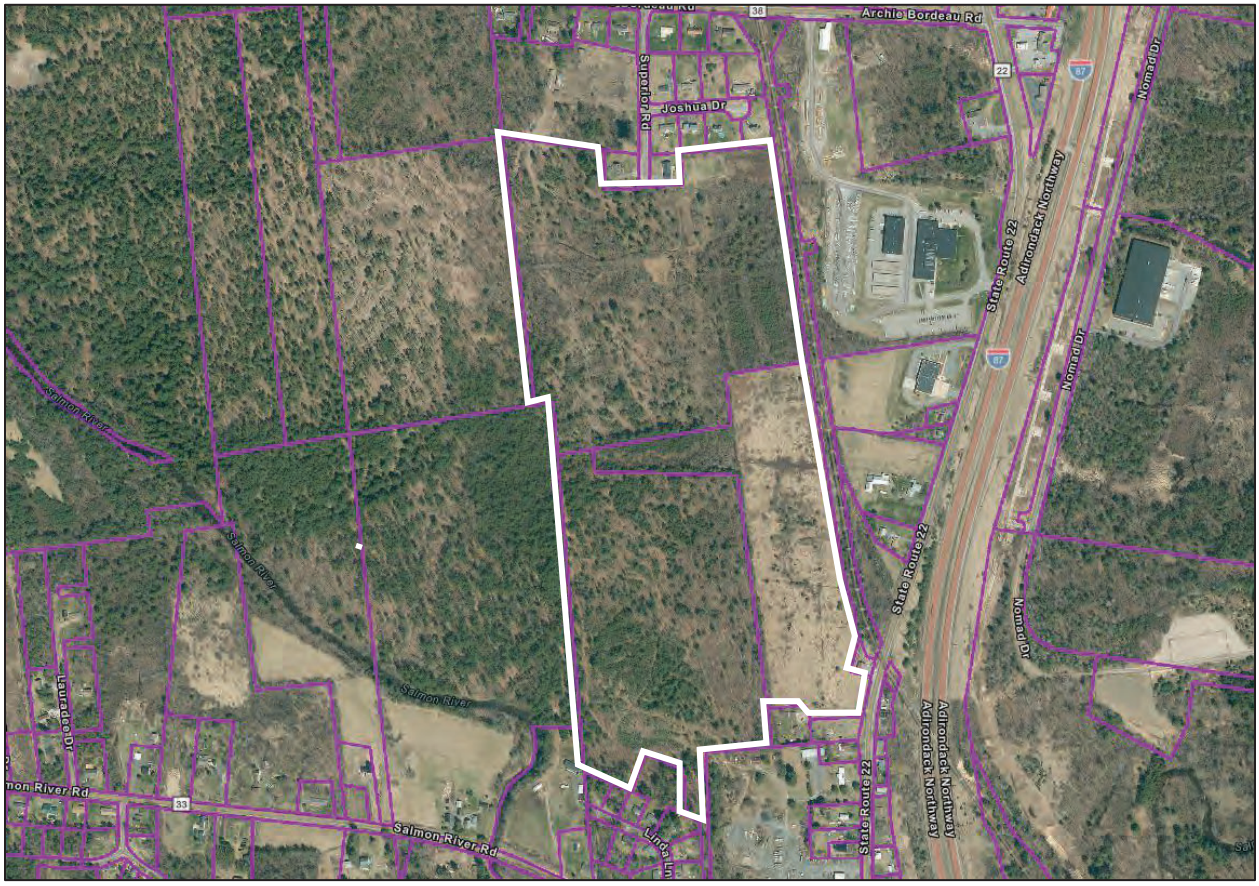


FIGURE 1

SITE LOCATION MAP
SITE BOUNDED IN WHTIE
(Source: ESRI, Clinton County)

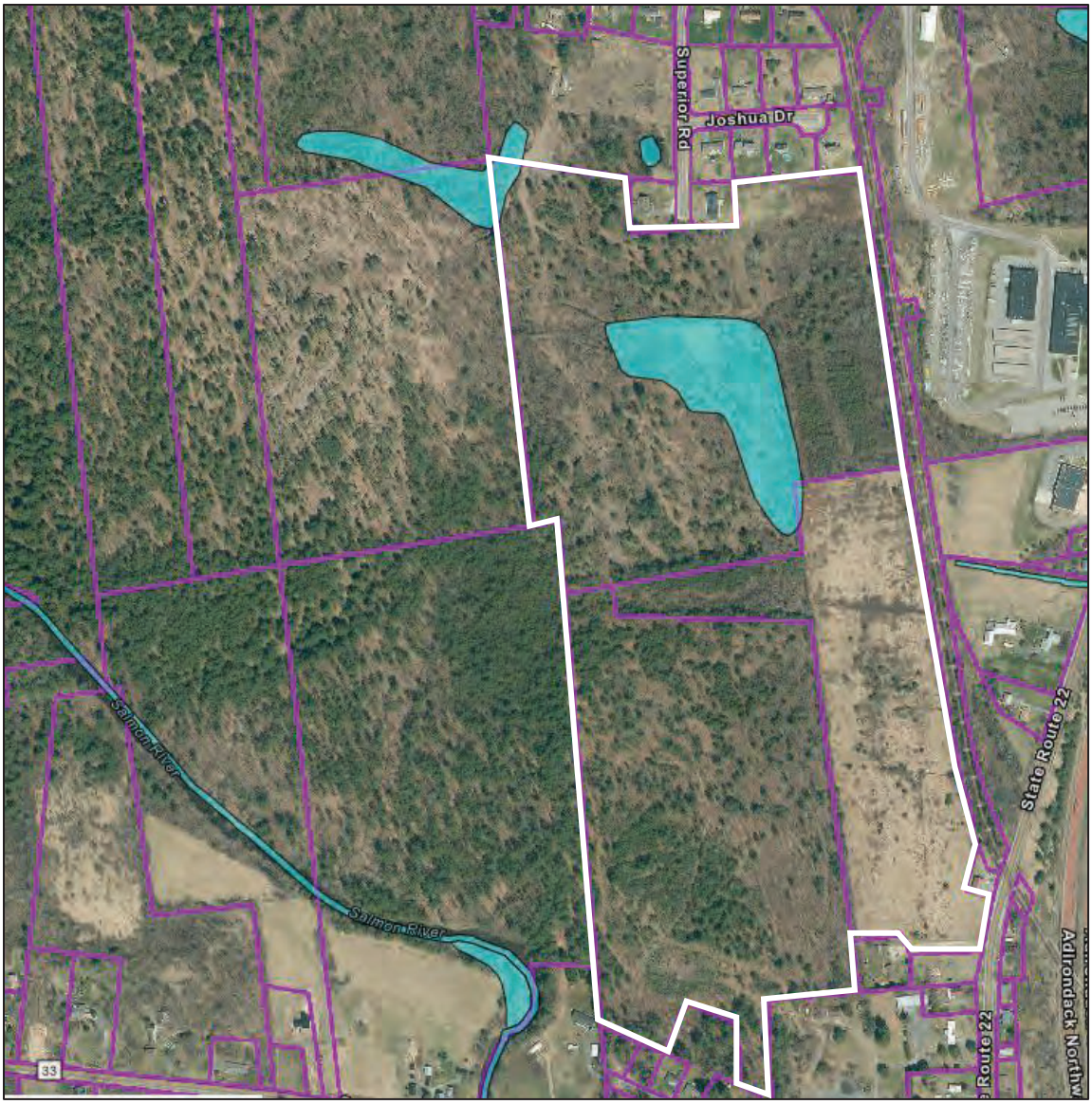


FIGURE 2

MAP SHOWING NWI MAPPED-WETLANDS ON SITE
SITE BOUNDED IN WHITE
(Source: ESRI, USFWS)

2.2 Vegetation

As previously indicated, vegetation on site ranges between disturbed areas, including mowed fields and cleared areas, as well as less-disturbed, woodland areas. A large portion of the site and surroundings is wooded, with a moderately closed to closed canopy comprised dominantly of a mix of white pine (*Pinus strobus*) and hardwoods such as red maple (*Acer rubrum*), and various oak species (*Quercus spp.*) This is especially true in wooded uplands where pines are often the dominant tree, including the western lot which is comprised of sandy, "barrens" habitat. The southeast portion of the site is largely fields and lacks a substantial tree layer. Portions of the site's southwest and south-central areas appeared to have been cleared, in part, based on the difference between recent aerial imagery (showing woods) and the existing condition on site (felled trees).

The shrub stratum on site was often sparse in the north and west, though occasionally thick along the edges of wetlands or in almost-impenetrable buckthorn (*Rhamnus, Frangula*) thickets in the southeastern fields. Where a shrub layer did exist in uplands, the species are typically young pines or other young/small trees. In the wetlands, the dominant shrubs were common buckthorn (*R. cathartica*) and alder buckthorn (*F. incana*), along with speckled alder (*Alnus incana*) and dogwoods (*Cornus spp.*).

The date of the initial field investigation meant that a considerable amount of the herbaceous layer had senesced and died back for the season. Despite that fact, the herbaceous layer was usually dense except in areas that were overly disturbed, areas of standing water, or where the ground was lacking cover or covered by decaying leaves. The delineation update in July 2024 made the identification of herbaceous plants much easier.

Within wooded wetland areas, the dominant herbaceous species were ferns such as royal fern (*Osmunda regalis*), ostrich fern (*Matteuccia struthiopteris*), and sensitive fern (*Onoclea sensibilis*), among horsetail (*Equisetum sp.*), giant goldenrod (*Solidago gigantea*), and other typical wetland plants such as goldthread (*Coptis trifolia*), bladder sedge (*Carex intumescens*), etc. The corresponding wooded uplands were typically found to be dominated by upland species of ferns such as hay-scented fern (*Dennstaedtia punctilobula*), bracken fern (*Pteridium aquilinum*), and Christmas fern (*Polystichum acrostichoides*), as well as other wooded upland species such as *Dendrolycopodium*. The more open wetlands (i.e., not shaded by trees) typically were dominated by sensitive fern, soft rush (*Juncus effusus*), cattail (*Typha latifolia*), woolgrass (*Scirpus cyperinus*), lurid sedge (*Carex lurida*), etc.

Further west, the site dries out and the vegetation becomes more typical of "sandy barrens" species, with a dominance of brackenfern, sweetfern (*Comptonia peregrina*), oaks, and pines. Corresponding "Wetland Q" which enters the site from the west is mostly dominated by sedges, Sphagnum moss (*Sphagnum sp.*), and cinnamon fern (*Osmundastrum cinnamomeum*).

A complete list of vegetation identified on site can be found can be found in Table 2.

2.3 Hydrology

As above, the site is a mix of both wetlands and uplands. The dominant soils (as described below) are moderately well-drained to poorly drained soils (as are typical of the general area) which vary throughout the site. The majority of the site is "moderately poorly drained."

The site's topography is generally flat to gently sloped (with occasional piles of fill or other man-made excavation, especially on the eastern side), and tends to slope towards the east, where most hydrology ends up in a substantial ditch running along the train tracks on the eastern edge of the site. From there, water likely flows south and ends in the Salmon River and, ultimately, Lake Champlain.

The majority of wetlands on site extend from the west and northwest and flow off-site to the east, as above. However, to the south of the field area, a small ditch drains the center of the site in the same fashion. Wetlands extend from this ditch and are likely channeled south. A similar linear ditch (and associated wetlands) is included in the western parcel. See Appendix D for the location of wetlands on site.

No wetlands are identified on, or immediately adjacent to, the site by the New York State Department of Environmental Conservation (NYSDEC) freshwater wetlands map (via the state's online Environmental Resource Mapper). The nearest NYSDEC wetland is MV-22, which is off-site by approximately 0.75 miles to the northwest. As the water moves across the site, roughly northwest to southeast, it is conceivable that the site's hydrology comes from wet areas associated with MV-22. In addition, wetland PB-14 is approximately 0.5 miles east of the site but is separated therefrom by the Adirondack Northway, Route 22, and the above-mentioned train tracks. Further, no regulated NYSDEC-streams have been mapped on site.

2.4 Soils

The Soil Survey for Clinton County depicts the site as consisting of eleven (11) soil types. The majority of the site is underlain by Northway loamy fine sands (NrA, NrB), between 0 and 8 percent slopes, which encompass 45.6-acres of the site. Deerfield fine sand (DeA) encompasses 17.1 acres, Covertfalls loamy fine sand (CtsA, CtsB) encompasses 12.2-acres, and Plainfield loamy sand (PtA) encompasses 7.5 acres. The remaining soil types each take up less than 6 acres on site. The United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) describes a series of soil qualities including drainage class and hydric rating. Table 1, below, shows a breakdown of these soil properties. A NRCS soil map of the site can be found in Figure 3, below, with additional information found in Appendix B.

Table 1 Soil Properties on Site				
Map Unit	**Unit Name**	**Acres on Site**	**Hydric Rating**	**Drainage Class**
Ata	Amenia fine sandy loam	3.7	0	Moderately well drained
Crk	Cook mucky loamy fine sand	3.5	93	Very poorly drained
Cs	Covert loamy sand	2.1	1	Moderately well drained
CtsA, CtsB	Covertfalls loamy sand	12.2	0	Moderately well drained
DeA	Deerfield fine sand	17.1	2	Moderately well drained
Mn	Massena fine sandy loam	5.8	5	Somewhat poorly drained
NrA, NrB	Northway loamy fine sand	45.6	1	Somewhat poorly drained
Ph	Pipesone fine sand	3.9	3	Somewhat poorly drained
PtA	Plainfield loamy sand	7.5	0	Excessively drained

Hydric Rating: A numerical description based on the proportion of hydric soil components in the map unit. 0 = non-hydric; 1-33 = predominantly non-hydric; 34-66 = partially hydric; 67-99 predominantly hydric; 100 = hydric.

2.5 Wildlife

Wildlife on site was found to be typical of second-growth woods, fields, and shrublands. This included common bird species such as red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), common raven (*C. corax*), black-capped chickadee (*Poecile atricapillus*), blue jay (*Cyanocitta cristata*), and northern cardinal (*Cardinalis cardinalis*).

No species, listed by the state or federal government as endangered or threatened were found to exist on site. See the B. Laing Associates Endangered/Listed Species Review for more information.

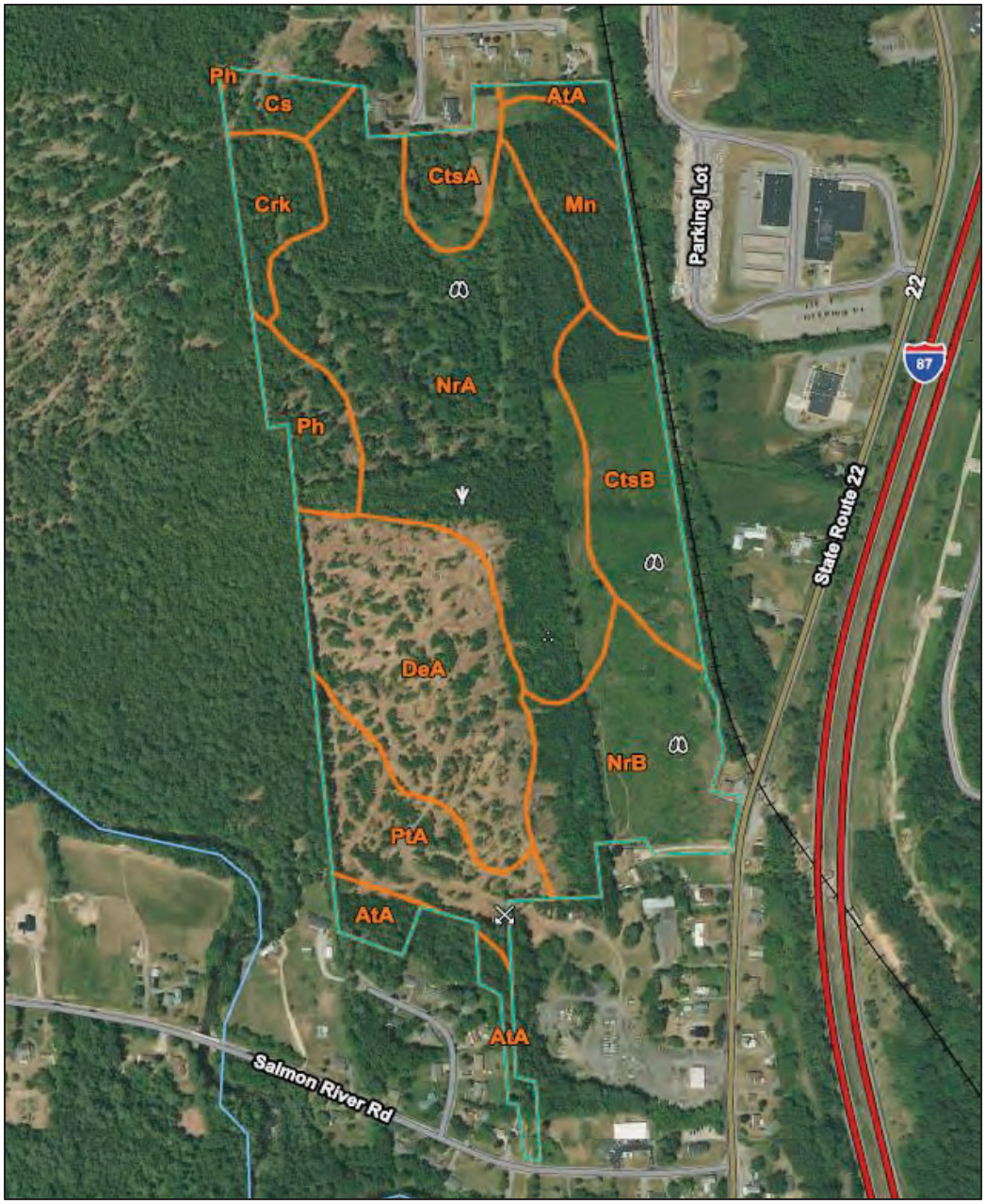


FIGURE 3

NRCS SOILS MAP

(Source: USDA Natural Resources Conservation Service)

Table 2 Vegetation Observed on Site (Alphabetical) 2022-2024			
Stratum	**Common Name**	**Scientific Name**	**Indicator Status**
Trees	American beech	*Fagus grandifolia*	FACU
	American hop hornbeam	*Ostrya virginiana*	FACU
	Eastern hemlock	*Tsuga canadensis*	FACU
	Gray birch	*Betula populifolia*	FAC
	Ironwood	*Carpinus caroliniana*	FAC
	Northern white cedar	*Thuja occidentalis*	FACW
	Paper birch	*Betula papyrifera*	FACU
	Red maple	*Acer rubrum*	FAC
	Red oak	*Quercus rubra*	FACU
	Staghorn sumac	*Rhus typhina*	UPL
	Sugar maple	*Acer saccharum*	FAC
	White oak	*Quercus alba*	FACU
	White pine	*Pinus strobus*	FACU
	Alder buckthorn	*Frangula alnus*	FACW
Shrubs	Common buckthorn	*Rhamnus cathartica*	FAC
	Red-osier dogwood	*Cornus sericea*	FACW
	Rosa multiflora	*Rosa multiflora*	FACU
	Silky dogwood	*Cornus amomum*	FACW
	Speckled alder	*Alnus incana*	FACW
	Sweetfern	*Comptonia peregrina*	UPL
Herbaceous	American pokeweed	*Phytolacca decandra*	FACU
	Bog orchid sp.	*Platanthera sp.*	FACW
	Bladder sedge	*Carex intumescens*	FACW
	Blue vervain	*Verbena hastata*	FACW
	Bracken fern	*Pteridium aquilinum*	FACU
	Brambles	*Rubus sp.*	FACU
	Bristly dewberry	*Rubus hispidus*	FACW
	Broad-leaved cattail	*Typha latifolia*	OBL
	Canada goldenrod	*Solidago canadensis*	FACU
	Canada mayflower	*Maianthemum canadensis*	FACU
	Christmas fern	*Polystichum acrostichoides*	FACU
	Cinnamon fern	*Osmundastrum cinnamomeum*	FACW
	Common milkweed	*Asclepias syriaca*	UPL
	Common mullein	*Verbascum thapsus*	UPL
	Common reed	*Phragmites australis*	FACW
	Enchanter's nightshade	*Circaea canadensis*	FACU
	Hay-scented fern	*Dennstaedtia punctilobula*	UPL
	Hickey's tree-clubmoss	*Dendrolycopodium hickeyi*	UPL
	Jack-in-the-pulpit	*Arisaema triphyllum*	FAC

	Lurid sedge	*Carex lurida*	FACW
	Narrow bur-reed	*Sparganium angustifolium*	OBL
	Nodding sedge	*Carex gynandra*	OBL
	Partridge berry	*Mitchella repens*	FACU
	Pink lady's-slipper	*Cypripedium acaule*	FACW
	Ostrich fern	*Matteuccia struthiopteris*	FAC
	Queen-anne's lace	*Daucus carota*	UPL
	Royal fern	*Osmunda regalis*	OBL
	Sensitive fern	*Onoclea sensibilis*	FACW
	Sphagnum moss	*Sphagnum sp.*	-
	Spotted knapweed	*Centaurea stoebe*	UPL
	Soft rush	*Juncus effusus*	OBL
	Swamp goldenrod	*Solidago gigantea*	FACW
	Threeleaf goldthread	*Coptis trifolia*	FACW
	Woolgrass	*Scirpus cyperinus*	OBL

3.0 FRESHWATER WETLAND DEFINITIONS

3.1 NYSDEC Freshwater Wetland Definition

Freshwater wetlands are defined by New York State as the outer limit of vegetation or of the waters of lands, defined in Subdivision 1 of § 24-0107 of the Environmental Conservation Law of the State of New York. That definition of freshwater wetlands, per the NYSDEC, is as follows:

(a) lands and submerged lands commonly called marshes, swamps, sloughs, bogs, and flats supporting aquatic or semi-aquatic vegetation.

(b) lands and submerged lands containing remnants of any vegetation that is not aquatic or semi-aquatic that has died because of wet conditions over a sufficiently long period, provided that such wet conditions do not exceed a maximum seasonal water depth of six feet and provided further that such conditions can be expected to persist indefinitely, barring human intervention;
(c) lands and waters substantially enclosed by aquatic or semi-aquatic vegetation as set forth in paragraph (a) or by dead vegetation as set forth in paragraph (b), the regulation of which is necessary to protect and preserve the aquatic and semi-aquatic vegetation; and

(d) the waters overlying the areas set forth in (a) and (b) and the lands underlying (c).

To be protected under Article 24 under the Environmental Conservation Law (NYSDEC's Freshwater Wetlands Act), a wetland must be 12.4 acres (5 hectares or larger) and be on the NYSDEC's freshwater wetland map. In this case, no wetlands as delineated by this office meet this threshold. Further, as discussed above, no wetlands exist on site that are mapped by the NYSDEC as jurisdictional freshwater wetlands.

3.2 ACOE Freshwater Wetland Definition

The Army Corps of Engineers (ACOE), defines federally jurisdictional wetlands as:

> "… areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

As above, the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements (to the 1987 Manual) organize characteristics of a potential wetland into three categories: soils, vegetation, and hydrology. The manual and supplements contain criteria for each category. With this approach, the ACOE takes jurisdiction, under the Clean Water Act, over any wetland that exhibits the three parameters per the 1987 Manual, regardless of size.

A footnote in the Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers case holds that a water or wetland must have a "significant nexus" (i.e., surface water connection) with other waters or wetlands to be considered a "water of the United States" and thereby under the ACOE's jurisdiction under Section 404 of the Clean Water Act.

All the delineated wetlands on site exhibited all three of the hydric parameters set forth in the 1987 Manual. Most of the wetlands either continue off the site either to the northwest or to the east and are hydrologically connected to each other. As such, these are "connected" to other waters and would not be considered isolated. These wetlands, as delineated on site, would be considered under the federal jurisdiction of the Army Corps of Engineers. However, one isolated wetland[1] exist on the site's southern and central portions. Provided the Corps of Engineers concurs with this assessment through the jurisdictional determination process, these wetlands would not be considered jurisdictional *waters of the United States* under Section 404.

3.3 Wetland Definition Summary

As above, the NYSDEC defines their wetlands as limits of hydrophytic vegetation or the waters associated with lands dominated by hydrophytic vegetation. However, NYSDEC has a minimum wetland size of 12.4 acres and hydrophytic areas on site do not meet that threshold. In addition, no previously mapped freshwater wetlands exist on site. As such, the NYSDEC does not have current jurisdiction over the wetlands on site. Further, no regulated streams (Article 15) or other state-regulated water features appear to exist on site.

However, as the delineated wetlands on site do exhibit the three wetland parameters as set forth in the 1987 Manual, per the Clean Water Act, all of the wetlands on site were delineated by Army Corps methodology. Most of the wetlands on site would be considered federally jurisdictional, with the exception of those that are presumed to be isolated.

[1] Isolated per this office's analysis.

4.0 WETLAND FINDINGS AND ASSESSMENT

The site located as detailed in Section 1 was analyzed for wetland characteristics and jurisdictional wetlands were recently delineated per the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements (to the 1987 Manual).

As above, field investigations by B. Laing Associates, Inc. discovered that wetlands, characterized by all three parameters, (i.e., wetland vegetation, hydrology, or soils) were largely associated with two large, centrally-located wetlands which run approximately northwest to southeast, as well associated wetland ditches and drainageways that move hydrology across the site, which connect them. Based on a review of historic aerial imagery, it appears this site was once considerably drier than it is today, as is often the case where historic drainage installations (e.g., ditches) have gone fallow and unmaintained. These wetlands are found to be typically associated with poorly drained to somewhat poorly drained. During the 2022 delineation, which was undertaken during winter-time conditions, certain hydrologic parameters (e.g., herbaceous vegetation, etc.) were obscured due to the time of year. As such, the 2024 delineation was able to expand on the initial findings to include additional areas which are considered federal wetlands as above.

For precise locations and sizes of the wetland delineated on site, please see Appendix D. It is the opinion of this office that none of the water resources delineated on site are currently state-jurisdictional. However, the non-isolated wetlands (i.e., the majority of the interconnected wetlands on site) would be considered federally jurisdictional under the Clean Water Act.

Appendix A

Site Photographs

Photo 1: Showing typical wooded uplands on the northern portion of the site. (2022)

Photo 2: Showing herbaceous/shrub dominated wetlands on the northwest portion of the site where "Wetland A/B/C flows off-site." (2022)

Photo 3: Showing typical wooded uplands on the central portion of the site. (2022)

Photo 4: Showing an area of ATV/automobile disturbance immediately adjacent to the wetlands in the site's center. (2022)

Photo 5: Showing a centrally-located open area of wetlands dominated by *Verbena, Scirpus,* etc. (2022)

Photo 6: Looking east from the wooded parcel into where hydrology enters (flowing east) the fields in the southeastern portion of the site. (2022)

Photo 7: Showing a dense *Rhamnus* and *Cornus* section of the southeastern fields. (2022)

Photo 8: Showing wooded wetlands on the western/central portions of the site where Wetland A/B/C flows off-site to the west. (2022)

Photo 9: Showing wooded uplands adjacent to the wetlands in Photo 8. (2022)

Photo 10: Looking at wetlands along the wooded central portion of the site. (2022)

Photo 11: Looking at upland areas lacking a tree stratum. (2022)

Photo 12: Looking at *Solidago*-dominated uplands in the southeastern fields. (2022)

Photo 13: Looking at dry, upland fields at the southeast of the site, where the entrance is. (2024)

Photo 14: Looking at wetland thickets including dogwoods, buckthorn, etc. (2024)

Photo 15: Looking at the dark, saturated soils within the dense thickets in wetlands. (2024)

Photo 16: Looking at dry, upland fields in the south-central portion of the site. (2024)

Photo 17: Looking at seasonally flooded wetland areas in "Wetland E" that show sparse sedge coverage and water-stained leaves. (2024)

Photo 18: Showing wetlands (Wetland E) in the background with saturated soils and uplands to the left with Christmas fern and other upland plants.

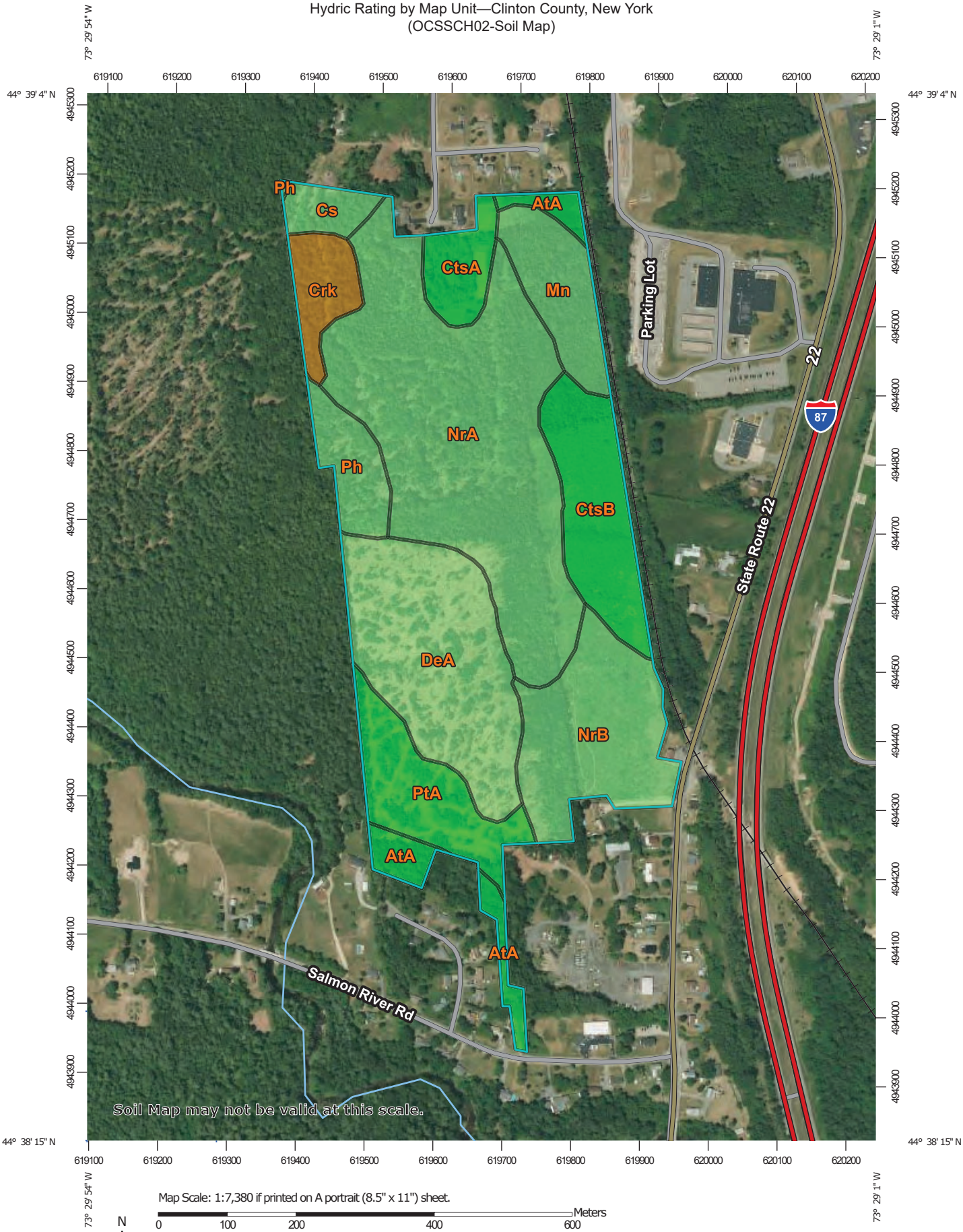
Photo 19: Looking at standard hydric soil on site with a depleted gray matrix beneath a dark layer. (2024)

Photo 20: Showing dry, sandy pine and oak "barrens" on the western part of the site.

Photo 21: Showing “Wetland Q” which is a linear, Sphagnum-dominated feature that sticks in from the west, off-site.

Appendix B

NRCS Soil Information



Map Scale: 1:7,380 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Clinton County, New York
Survey Area Data: Version 23, 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: Jun 18, 2020—Jun 20, 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
AtA	Amenia fine sandy loam, 0 to 3 percent slopes	0	3.7	3.6%
Crk	Cook mucky loamy fine sand	93	3.5	3.4%
Cs	Covert loamy sand	1	2.1	2.0%
CtsA	Covertfalls loamy fine sand, 0 to 3 percent slopes	0	3.4	3.3%
CtsB	Covertfalls loamy fine sand, 3 to 8 percent slopes	0	8.8	8.7%
DeA	Deerfield fine sand, 0 to 3 percent slopes	2	17.1	16.9%
Mn	Massena fine sandy loam	5	5.8	5.7%
NrA	Northway loamy fine sand, 0 to 3 percent slopes	1	33.2	32.8%
NrB	Northway loamy fine sand, 3 to 8 percent slopes	1	12.4	12.2%
Ph	Pipestone fine sand	3	3.9	3.9%
PtA	Plainfield loamy sand, 0 to 3 percent slopes	0	7.5	7.4%
Totals for Area of Interest			**101.3**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Appendix C

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SCHLUTER SOUTH City/County: CLINTON Sampling Date: 12/5/22
Applicant/Owner: FOR RMS State: NY Sampling Point: W-1
Investigator(s): TJS Section, Township, Range: PLATTSBURGH
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%): < 3%
Subregion (LRR or MLRA): R, 142 Lat: 44.64717 Long: -73.49295 Datum:
Soil Map Unit Name: NrA - Northway loamy fine sand NWI classification: Palu. Wooded/SS
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
"Wetland ABC," north central portion near beginning of delineation

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ____	Depth (inches): 2" - 6"
Water Table Present?	Yes ____	No ____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ____	No ____	Depth (inches):

Wetland Hydrology Present? Yes ✓ No

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W-1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus Strobus	15%	✓	FACU
2. Betula populifolia	10%		FAC
3. Quercus rubra	5%		FACU
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Alnus incornata	25%	✓	FACW
2. Pinus strobus	5%		FACU
3. Cornus sericea	5%		FACW
4.			
5.			
6.			
7.			
	35	= Total Cover	

Herb Stratum (Plot size:)			
1. Carex sp.	30%	✓	FACW
2. Onoclea sensibilis	40%	✓	FACW
3. Osmunda regalis	20%	✓	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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 diamete 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

a bit of veg dead/senesced for season

SOIL

Sampling Point: W-1

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 3/1							
4-8	10YR 3/2	95	10YR 4/6	5	C	M		dark slight mottling
8-16	10YR 5/1	85	10YR 4/6	15	C	M		pale w/ mottles

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ✓ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:_____

Depth (inches):_____

Hydric Soil Present? Yes ✓ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SCHLUTER SOUTH City/County: CLINTON Sampling Date: 12/5/22

Applicant/Owner: FOR RMS State: NY Sampling Point: W-1

Investigator(s): TJS Section, Township, Range: PLATTSBURGH

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

Subregion (LRR or MLRA): _____ Lat: 44.64859 Long: -73.49235 Datum: _____

Soil Map Unit Name: NrA - Nunda loam for sand/CtrA NWI classification: _____

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

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

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

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

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

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

Adjacent to wetland location "W-1"

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches):
Water Table Present?	Yes _____	No _____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches):

Wetland Hydrology Present? Yes _____ No ✓

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: U-1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus strobus	20	✓	FACU
2. Fagus grandifolia	5		FACU
3. Acer rubrum	5		FAC
4.			
5.			
6.			
7.			
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Fagus grandifolia	15	✓	FACU
2. Quercus rubra	15	✓	FACU
3. Pinus strobus	10	✓	FACU
4.			
5.			
6.			
7.			
	40	= Total Cover	

Herb Stratum (Plot size:)			
1. Pteridium aquilinum	10	✓	FACU
2. Carex spp.*	15	✓	FACU
3. Rubus hispidus	5		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	30	= Total Cover	

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ___ No ✓

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

* presumed upland carex (eg. C. pensylvanica)

SOIL

Sampling Point: W-1

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 4/2	100						
8-16"	10YR 3/3	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:_____

Depth (inches):_____

Hydric Soil Present? Yes _____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schlueter South City/County: Clinton Sampling Date: 12/5/22
Applicant/Owner: for RMS State: NY Sampling Point: W-2
Investigator(s): TJS Section, Township, Range: Plattsburgh
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): R, 142 Lat: 44.64588 Long: -73.49230 Datum:
Soil Map Unit Name: NrA- Nellmay loamy fine sand NWI classification: Wo dep/Palus.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: (Explain alternative procedures here or in a separate report.)
Bottom of wetland "WBC" near B/C line heading west, off site

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓ No ____	Depth (inches): 2"	
Water Table Present?	Yes ____ No ____	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ____ No ____	Depth (inches):	Wetland Hydrology Present? Yes ✓ No

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W-2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	10	✓	FAC
2. Pinus strobus	7	✓	FACU
3. Tsuga canadensis	5		FACU
4.			
5.			
6.			
7.			
	22	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Cornus sericea	20	✓	FACW
2. Alnus incanata	15	✓	FACW
3.			
4.			
5.			
6.			
7.			
	35	= Total Cover	

Herb Stratum (Plot size:)			
1. Onoclea sensibilis	10		FACW
2. Coptis trifolia	10		FACW
3. Matteuccia struthiopteris	25	✓	FAC
4. Carex sp.	25	✓	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	70	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (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:

- ___ Rapid Test for Hydrophytic Vegetation
- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

SOIL

Sampling Point: W-2

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 3/1	100						
6-16"	10YR 4/1	100						

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

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ✓ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (Inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schluter South City/County: Clinton Sampling Date: 12/5/22

Applicant/Owner: for RMC, PC State: NY Sampling Point: U-2

Investigator(s): TJS Section, Township, Range: Plattsburgh

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

Subregion (LRR or MLRA): R, 142 Lat: 44.64666 Long: -73.49250 Datum:

Soil Map Unit Name: NrA – Northway loamy fine sand NWI classification:

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

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

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? Yes ____ No ✓

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: UP-2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga canadensis	15	V.	FACU
2. Acer rubrum	10	V	FAC.
3. Fagus grandifolia	5		FACU
4. Pinus strobus	5		FACU
5.			
6.			
7.			
	35	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Pinus strobus	10	√	FACU
2. Fagus grandifolia	5	√	FACU
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Herb Stratum (Plot size:)			
1. Polystichum acrostichoides	10	✓	FACU
2. Dennstaedtia punctilobula	5		UPL
3. Dennstaedtia punctilobula	20	✓	UPL
4. Carex	15	√	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 28.5% (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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ___ No ✓

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

SOIL

Sampling Point: UP-2

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
2-4"	10YR 3/1	100						
4-6"	10YR 3/2	100						
6-12"	10YR 4/3	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:_____

Depth (inches):_____

Hydric Soil Present? Yes _____ No ✓

Remarks:

- Bright-ish chroma soils
- relatively dry / no moisture

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schlueter Storm City/County: Clinton Sampling Date: 12/5/22
Applicant/Owner: for RMS State: NY Sampling Point: W-3
Investigator(s): TJS Section, Township, Range: Plattsburgh
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): R, 142 Lat: 44.64387 Long: -73.49823 Datum:
Soil Map Unit Name: CtsB - Covert Fally loamy fine Sand NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ✓ No
Hydric Soil Present? Yes ✓ No
Wetland Hydrology Present? Yes ✓ No

Is the Sampled Area within a Wetland? Yes ✓ No
If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Southern ditch & associated wetland which drains E through S/E fields "Wetland D"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)
- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)
- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): var. ± 1"
Water Table Present? Yes ___ No ___ Depth (inches):
Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches):

Wetland Hydrology Present? Yes ✓ No

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W-3

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

Sapling/Shrub Stratum (Plot size:)			
1. Cornus sericea	50	✓	FACW
2. Rhamnus cathartica	15	✓	FACU
3. Rosa multiflora	5		FACU
4.			
5.			
6.			
7.			
	90	= Total Cover	

Herb Stratum (Plot size:)			
1. Carex sp.	35	✓	FACW
2. Equisetum sp	30	✓	FACW
3. Onoclea sensibilis	10		FACW
4. Asclepias syriaca	5		FACU
5. Solidago canadensis	20	✓	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 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		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:

- ___ Rapid Test for Hydrophytic Vegetation
- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

SOIL

Sampling Point: W-3

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
0-2"	10YR 3/1	100						
2-6"	10YR 4/1	100						
6-14"	10YR 5/1	90	10YR 5/4	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ✓ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (Inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schluter South City/County: Clinton Sampling Date: 12/5/22

Applicant/Owner: Hoar RMS, PC State: NY Sampling Point: U-3

Investigator(s): TJS Section, Township, Range: Plattsburgh

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

Subregion (LRR or MLRA): R, 142 Lat: 44.64467 Long: -73.48832 Datum:

Soil Map Unit Name: CtsB - Covertfalls loamy fine sand NWI classification:

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

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

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ____	Depth (inches):
Water Table Present?	Yes ____	No ____	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ✓	No ____	Depth (inches):

Wetland Hydrology Present? Yes ✓ No

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

Remarks:

Base of ditch-ish topography, adjacent to Southern wetland ditch ("wetland D")

VEGETATION – Use scientific names of plants.

Sampling Point: U-3

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

Sapling/Shrub Stratum (Plot size:)			
1. Cornus sericea	40	✓	FACW
2. Rhamnus cathartica	20	✓	FAC
3.			
4.			
5.			
6.			
7.			
	60 = Total Cover		

Herb Stratum (Plot size:)			
1. Onoclea sensibilis	5		FACW
2. Juncus effusus	5		FACW
3. Carex spp.	40	✓	FACW
4. Solidago canadensis	15		FACU
5. Asclepias syriaca	15		FACU
6. Equisetum sp.	35	✓	FACW
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

SOIL

Sampling Point: U-3

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
0-3"	10 YR 3/2	100						
3-7"	10 YR 4/3	100						
7-12"	10 YR 5/4	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Very bright chroma soil, somewhat wet.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schluter South City/County: Clinton Sampling Date: 12/6/22

Applicant/Owner: for RMS State: NY Sampling Point: W-4

Investigator(s): TJS Section, Township, Range: Plattsburgh

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

Subregion (LRR or MLRA): R, 142 Lat: 44.64284 Long: -73.45035 Datum:

Soil Map Unit Name: DeA - Deerfield fine sand NWI classification:

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

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

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ___	Depth (inches): +/- 3"
Water Table Present?	Yes ___	No ___	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches):

Wetland Hydrology Present? Yes ✓ No

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W-4

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	35	✓	FAC
2. Vinus striatus	10		FACU
3. Acer saccharinum	10		FAC
4. Quercus rubra	15	✓	FACU
5.			
6.			
7.			
	70	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Carpinus caroliniana	5	✓	FAC
2. Cornus sericea	5	✓	FACW
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	

Herb Stratum (Plot size:)			
1. Onoclea sensibilis	15	✓	FACW
2. Osmunda regalis	30	✓	OBL
3. Carex Sp.	+10		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	55	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

SOIL

Sampling Point: W-4

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 3/3	100						
4-12"	10YR 4/1	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ✓ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schluter South City/County: clinton Sampling Date: 11-4

Applicant/Owner: Fox RMS State: NY Sampling Point: 12/6/22

Investigator(s): TJS Section, Township, Range: Plattsburgh

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

Subregion (LRR or MLRA): R, 142 Lat: 44.643440 Long: -73.493377 Datum:

Soil Map Unit Name: DeA / NnB NWI classification:

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

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

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ____	Depth (inches):	
Water Table Present?	Yes ____	No ____	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ____	No ____	Depth (inches):	**Wetland Hydrology Present?** Yes ____ No ✓

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: U-4

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus Strobus	30	✓	FACU
2. Acer saccharinum	10		FAC
3. Acer rubrum	20	✓	FAC
4. Quercus rubra	20	✓	FACU
5.			
6.			
7.			
	80	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Carpinus caroliniana	10	✓	FAC
2. Pinus strobus	5		
3. Fagus grandifolia	15	✓	FACU
4.			
5.			
6.			
7.			
	30	= Total Cover	

Herb Stratum (Plot size:)			
1. Polystichum acrostichoides	10	✓	FACU
2. Carex sp.	10	✓	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 42.8% (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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ___ No ✓

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

Ground mostly "unvegetated"

SOIL

Sampling Point: U-4

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
0-2	10YR 3/1	100						
2-6"	10YR 4/2	100						
6-12"	10YR 4/3	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:_____

Depth (inches):_____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Soil dry

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Schluter South City/County: Clinton Sampling Date: 12/6/22

Applicant/Owner: for RMS, PC State: NY Sampling Point: W-5

Investigator(s): TJS Section, Township, Range: Plattsburgh

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

Subregion (LRR or MLRA): K, 142 Lat: 44.64513 Long: -73.49117 Datum:

Soil Map Unit Name: NWI classification:

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

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

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

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

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

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

Wetlands "G + H"

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No ___	Depth (inches):
Water Table Present?	Yes ___	No ___	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ___	No ___	Depth (inches):

Wetland Hydrology Present? Yes ✓ No

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W5

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Thuja occidentalis	5	✓	FACW
2. Acer rubrum	5	✓	FAC
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Alnus incana	10	✓	FACW
2. Cornus sericea	5	✓	FACW
3. Fagus grandifolia	5	✓	FACU
4.			
5.			
6.			
7.			
	20	= Total Cover	

Herb Stratum (Plot size:)			
1. Sarsparilla cyperinus	30	✓	OBL
2. Typha latifolia	15		OBL
3. Juncus effusus	10		FACW
4. Carex sp.	45	✓	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= 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: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7 (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:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ 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.

Hydrophytic Vegetation Present? Yes ✓ No ___

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

Most trees cleared.

SOIL

Sampling Point: IN-5

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 3/1	100						
4-6"	10YR 4/1	100						
6-12"	10YR 4/1	95	10YR 4/2	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ✓ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SCHUTER SOUTH City/County: CLINTON CO. Sampling Date: 7/24/24

Applicant/Owner: FOR AMS State: NY Sampling Point: W-Q

Investigator(s): TJS/CAS Section, Township, Range: PLATTSBURGH

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): < 3

Subregion (LRR or MLRA): R142 Lat: 44.64361 Long: -73.49288 Datum: _____

Soil Map Unit Name: DeA - Deerfield fine sand. NWI classification: _____

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

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

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

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

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

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

Updating 2022 delineation. W side of site where wetland enters "Wetland Q"

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ✓ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): 4" +
Water Table Present?	Yes _____	No _____	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

Sphagnum - dominated swamp. Hydrology apparently self-contained. Comes into site, but ends.

VEGETATION – Use scientific names of plants.

Sampling Point: W-Q

Tree Stratum (Plot size: 10 m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	15	✓	FAC
2. Tsuga canadensis	20	✓	FACW
3. Pinus strobus	15	✓	FACU
4. Quercus rubra	5		FACU
5.			
6.			
7.			
	55	= Total Cover	

Sapling/Shrub Stratum (Plot size:)			
1. Tsuga canadensis	15	✓	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	

Herb Stratum (Plot size:)			
1. Sphagnum spp.	30	✓	–
2. Coptis trifolia	7		FACW
3. Rubus hispidus	15	✓	FACW
4. Scirpus cyperinus	15	✓	OBL
5. Platanthera sp.	8		FACW
6. Dryopteris carthusiana	5		FACW
7. Osmunda cinnamomea	20	✓	FACW
8.			
9.			
10.			
11.			
12.			
	100	= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 62.5% (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 or equal to 3.28 ft (1 m) tall.

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

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

Hydrophytic Vegetation Present? Yes ✓ No ___

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

Sphagnum + not counted in 5/20 rule due to being non-vascular.

SOIL

Sampling Point: WP

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 3/1	100						dark black
6-12"	10YR 5/1	100						almost 6/1 - very pale

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

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ✓ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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**)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

very depleted

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SCHLUTER SOUTH City/County: CLINTON CO. Sampling Date: JUL. 24, 24

Applicant/Owner: FOR RMS State: NY Sampling Point: U-Q

Investigator(s): TJS / CAS Section, Township, Range: PLATTSBURGH

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): < 3%

Subregion (LRR or MLRA): R142 Lat: 44.69364 Long: -73.49179 Datum: _____

Soil Map Unit Name: DeA - Deerfield fine sand NWI classification: N/A

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

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

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

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

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

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

updating 2022 wetland delineation. W. side of SITE, near "tip" of U Q.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No _____	Depth (inches): _____	
Water Table Present?	Yes _____	No _____	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches): _____	**Wetland Hydrology Present?** Yes _____ No ✓

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

Remarks:

VERY DRY SANDS

VEGETATION – Use scientific names of plants.

Sampling Point: U-9

Tree Stratum (Plot size: 10m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus strobus	10	✓	FACU
2. Quercus alba	15	✓	FACU
3. Quercus rubra	10	✓	FACU
4. Populus deltoides	5		FAC
5.			
6.			
7.			
	40	= Total Cover	

Sapling/Shrub Stratum (Plot size: 5m)			
1. Quercus alba	10	✓	FACU
2. Comptonia peregrina	15	✓	UPL
3. Quercus rubra	5		
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: 1m)			
1. Carex sect Acrocystis *	20	✓	FACU
2. Pteridium aquilinum	40	✓	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60	= Total Cover	

Woody Vine Stratum (Plot size:)			
1. Rubus	5	✓	FACU
2.			
3.			
4.			
	5	= 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: 8 (B)

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	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 or equal to 3.28 ft (1 m) tall.

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

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

Hydrophytic Vegetation Present? Yes ___ No ✓

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

Some exposed sand. Typical "backbone" habitat – very "dry"

* eg, tonsa, etc.

SOIL

Sampling Point: U-9

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

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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**)
- ___ 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 (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

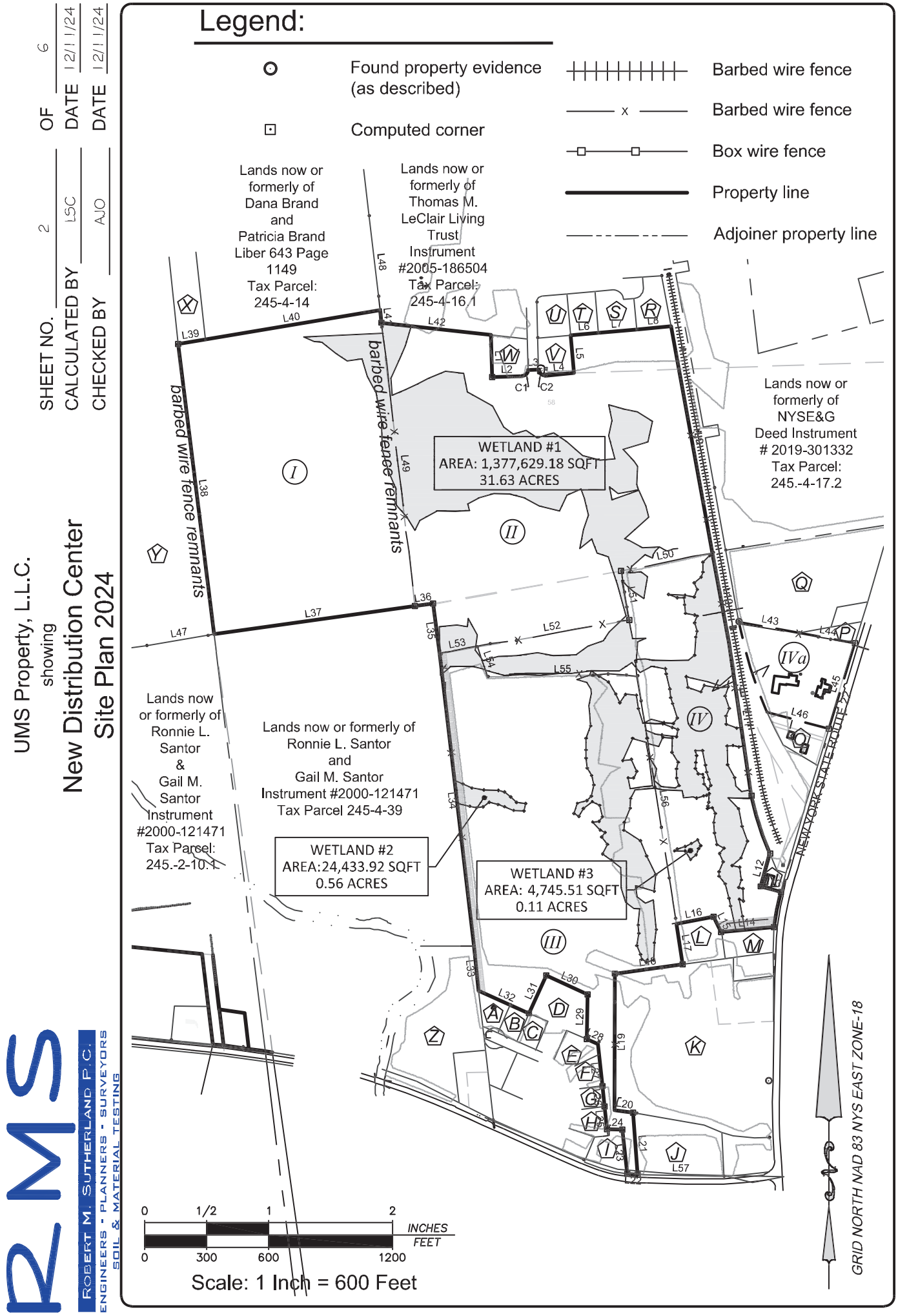
Hydric Soil Present? Yes _____ No ✓

Remarks:

soils not checked. very dry/sandy. with overwhelmingly UPL- veg.

Appendix D

Wetland Map by RMS, P.C.



UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

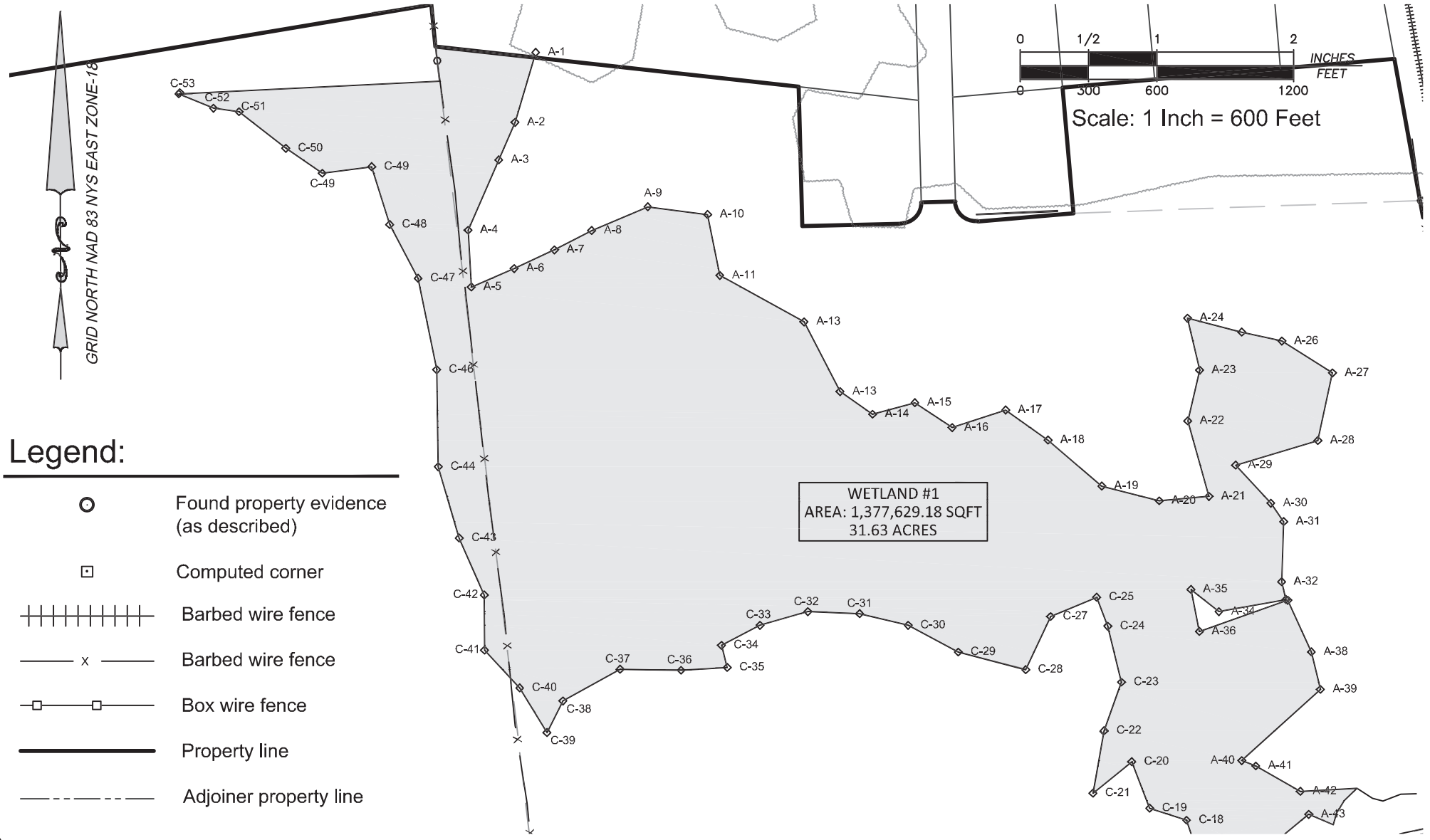
SHEET NO. 2 OF 6
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

RMS
Robert M. Sutherland P.C.
Engineers - Planners - Surveyors
Soil & Material Testing
11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

SHEET NO. 3 OF 9
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

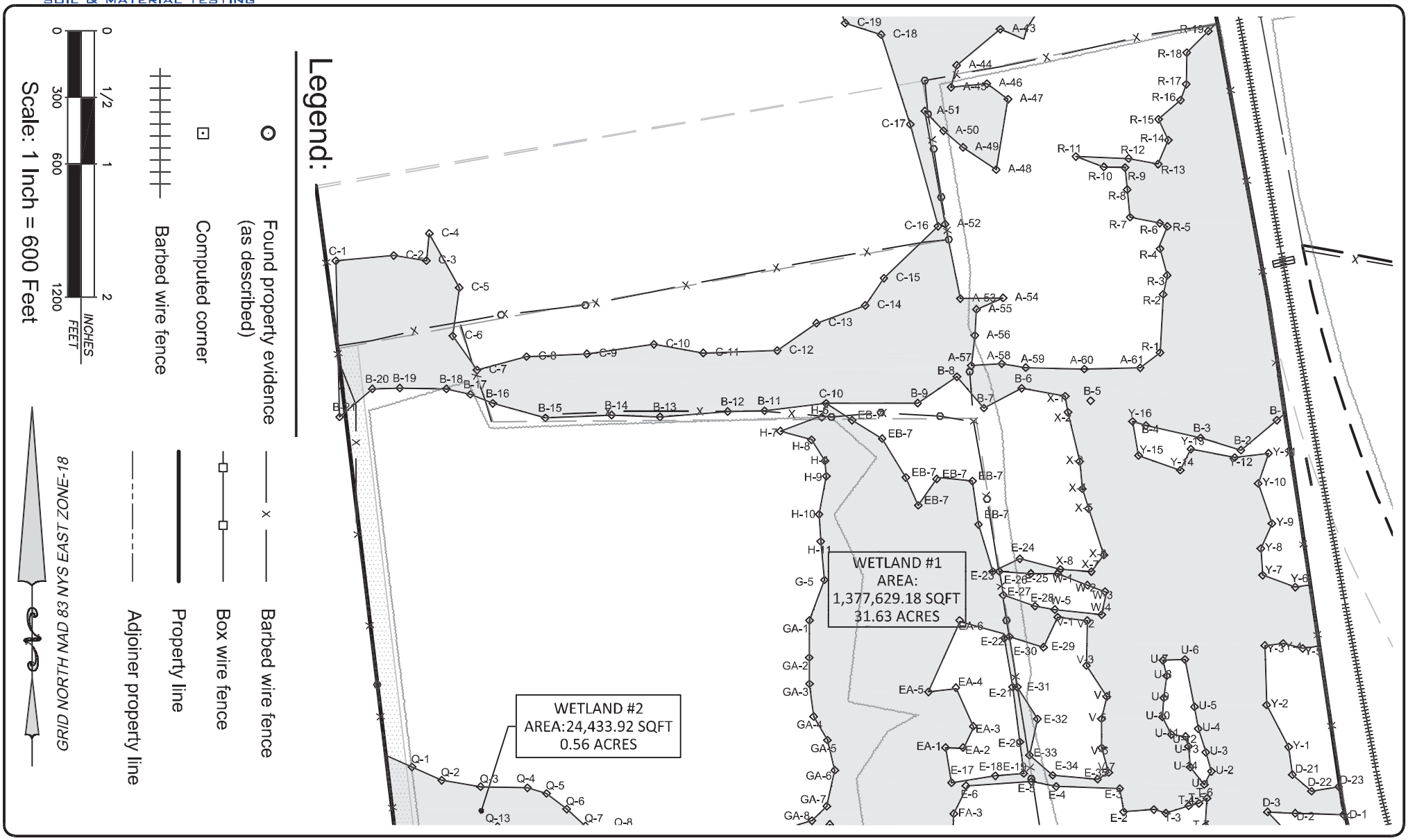


11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX) RMSPC.COM

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

SHEET NO. 4 OF 9
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24



11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx) RMSPC.COM

RMS

ROBERT M. SUTHERLAND P.C.

ENGINEERS - PLANNERS - SURVEYORS

SOIL & MATERIAL TESTING

UMS Property, L.L.C.

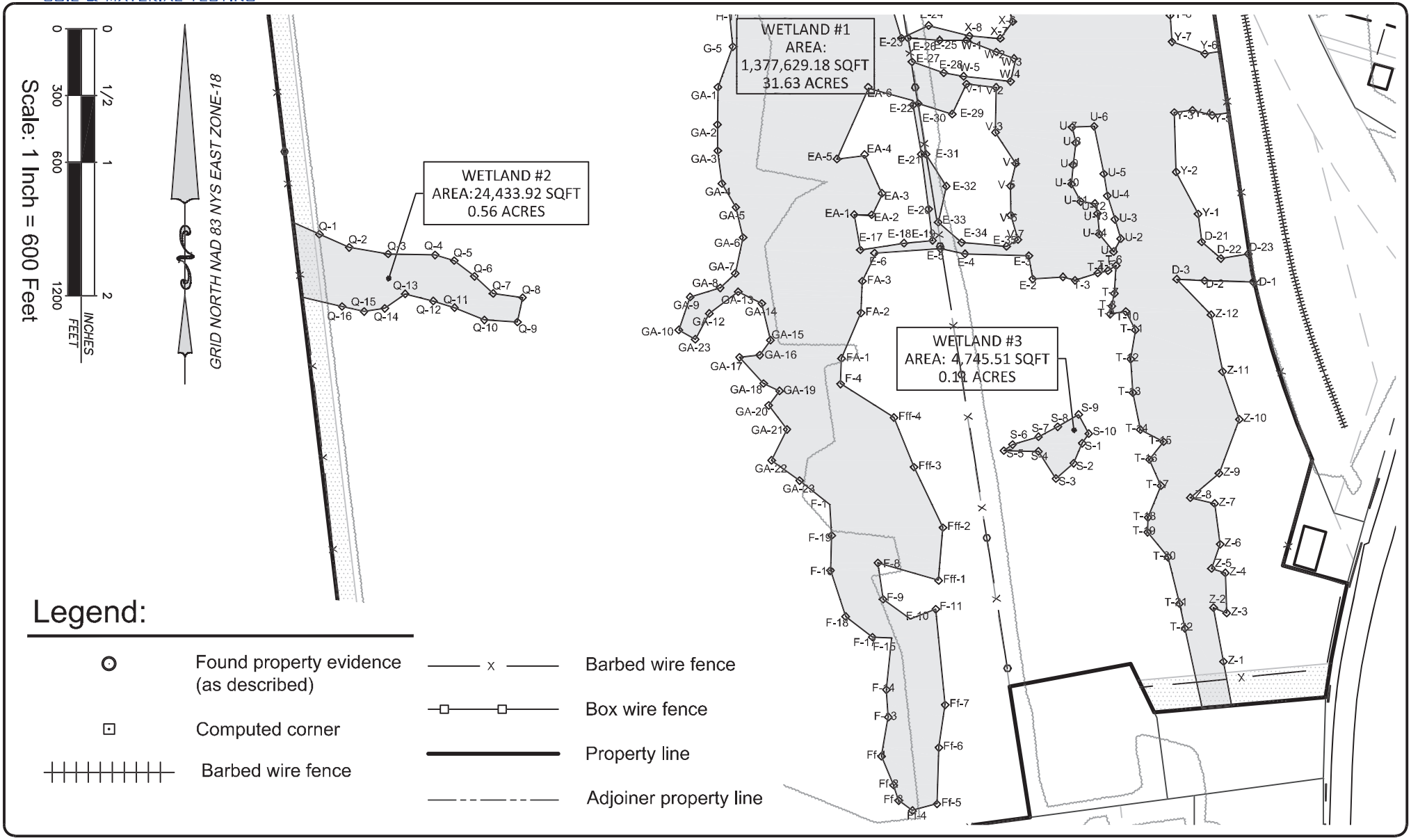
showing

New Distribution Center Site Plan 2024

SHEET NO. 5 OF 9

CALCULATED BY LSC DATE 12/11/24

CHECKED BY AJO DATE 12/11/24

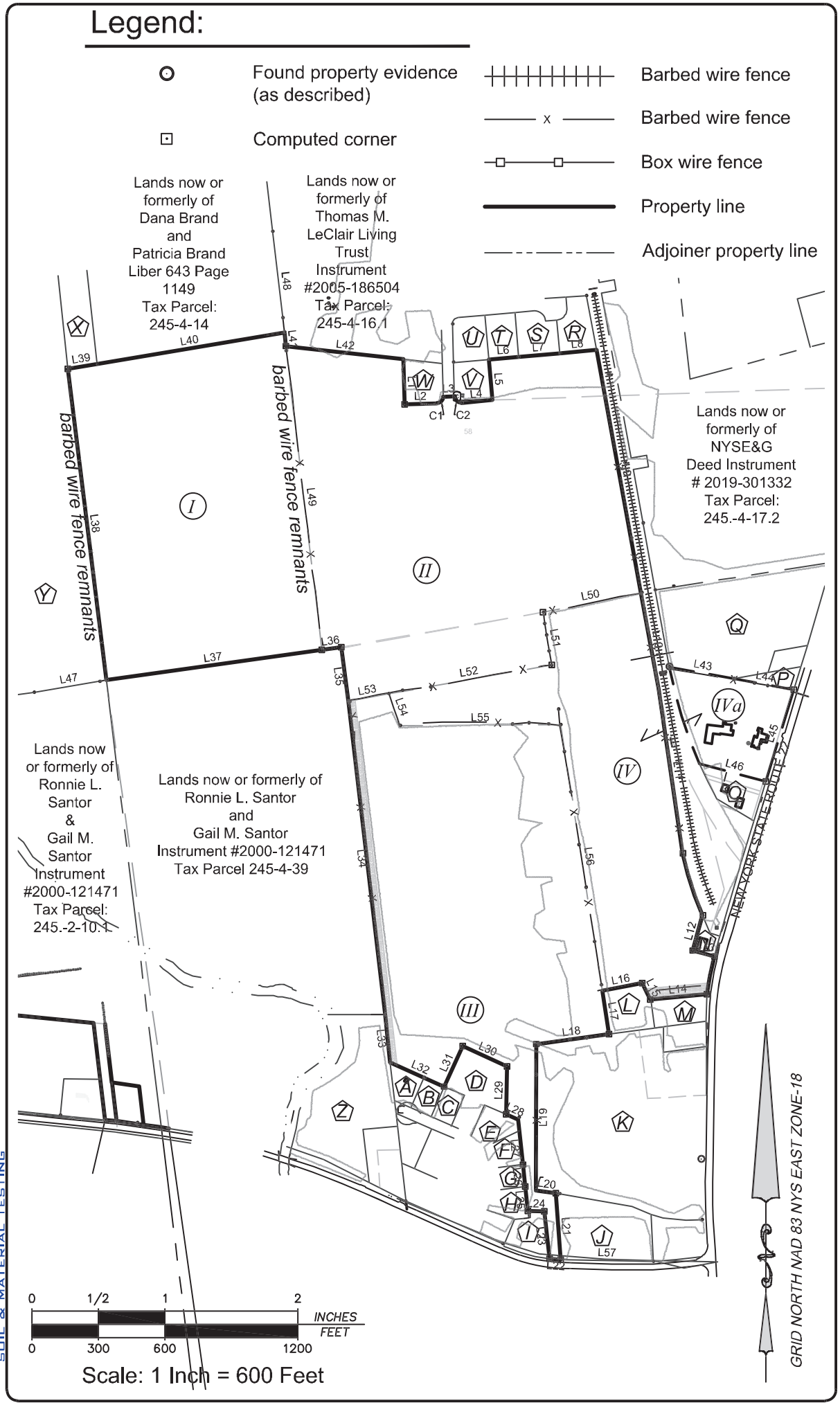


11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx) RMSPC.COM

PROPOSED ACTION DRAWINGS for CWA 404 Individual Permit Application

By Robert M. Sutherland, P.C.

B. LAING ASSOCIATES

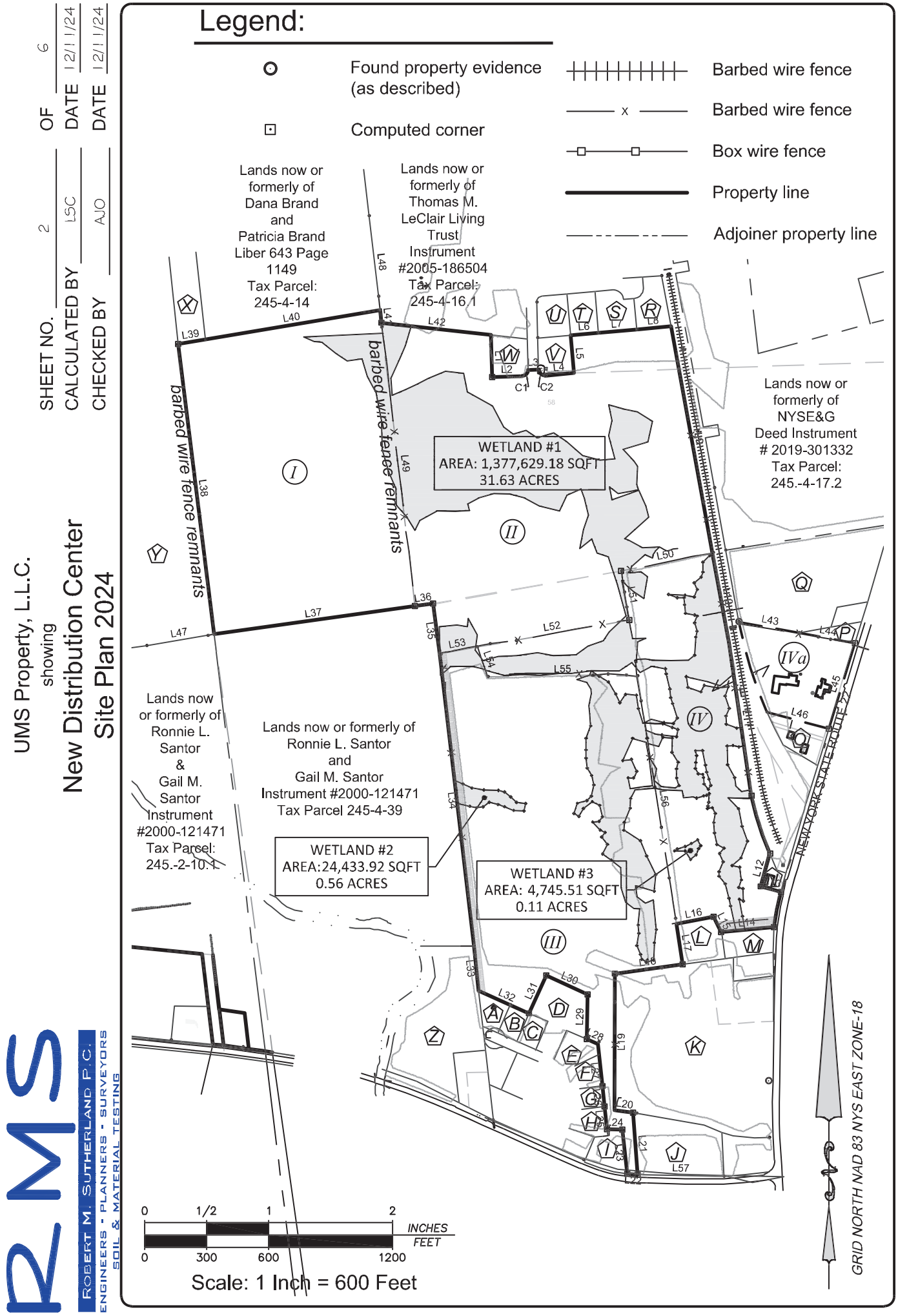


SHEET NO. 1 OF 6
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

RMS
Robert M. Sutherland P.C.
Engineers - Planners - Surveyors
Soil & Material Testing

11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM



UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

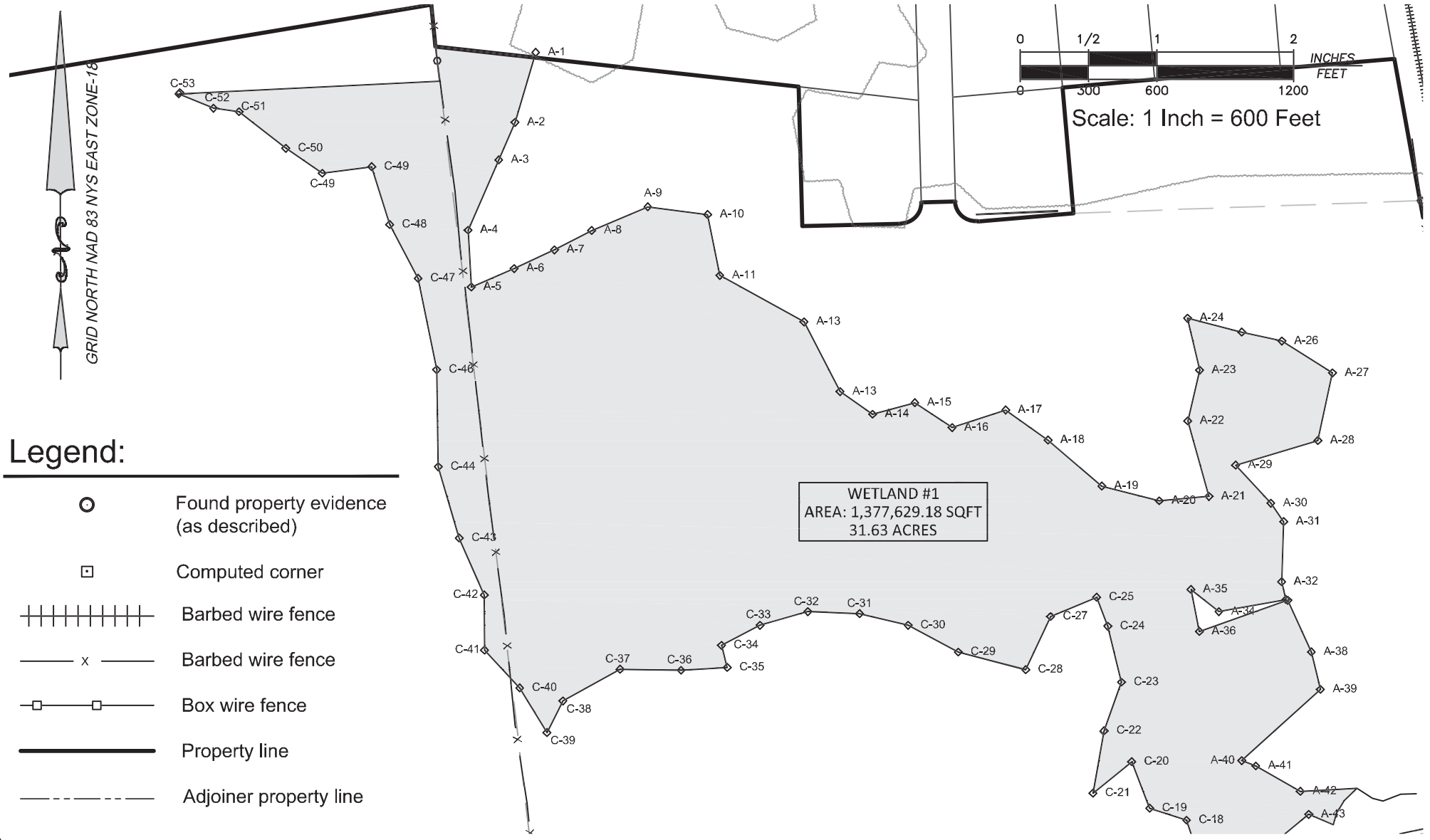
SHEET NO. 2 OF 6
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

RMS
Robert M. Sutherland P.C.
Engineers - Planners - Surveyors
Soil & Material Testing
11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

SHEET NO. 3 OF 9
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

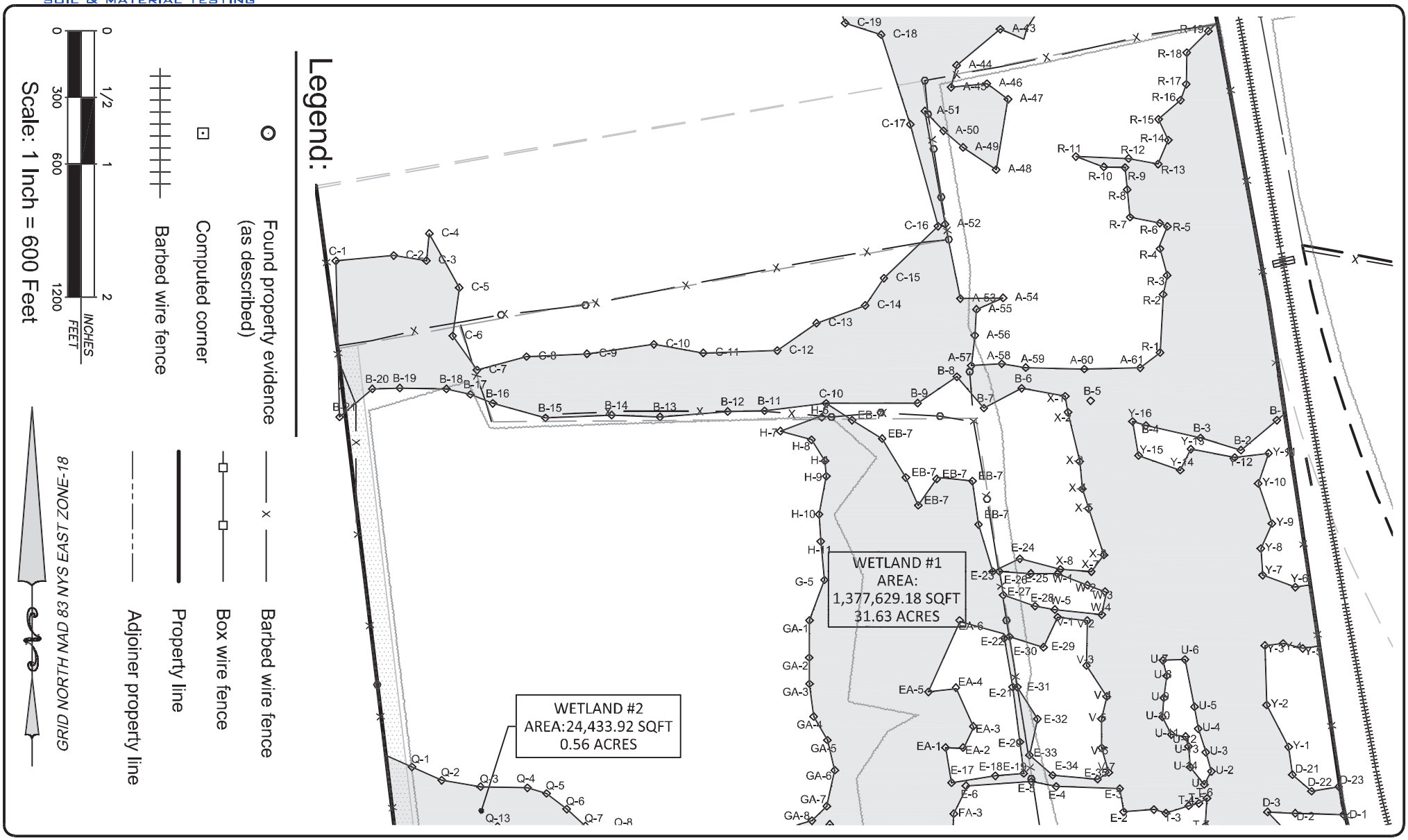


11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX) RMSPC.COM

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

SHEET NO. 4 OF 9
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24



11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx) RMSPC.COM

RMS

ROBERT M. SUTHERLAND P.C.

ENGINEERS - PLANNERS - SURVEYORS

SOIL & MATERIAL TESTING

UMS Property, L.L.C.

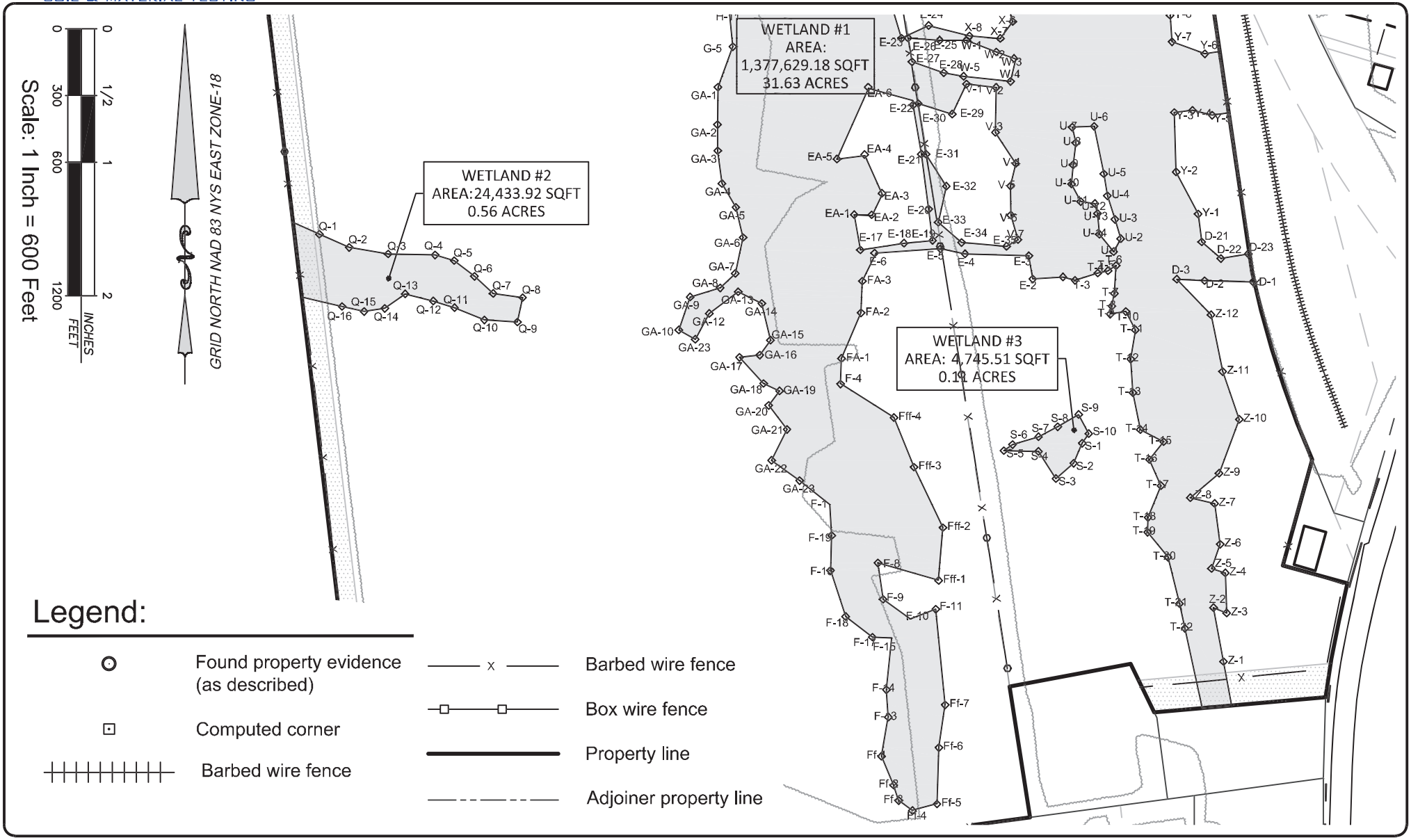
showing

New Distribution Center Site Plan 2024

SHEET NO. 5 OF 9

CALCULATED BY LSC DATE 12/11/24

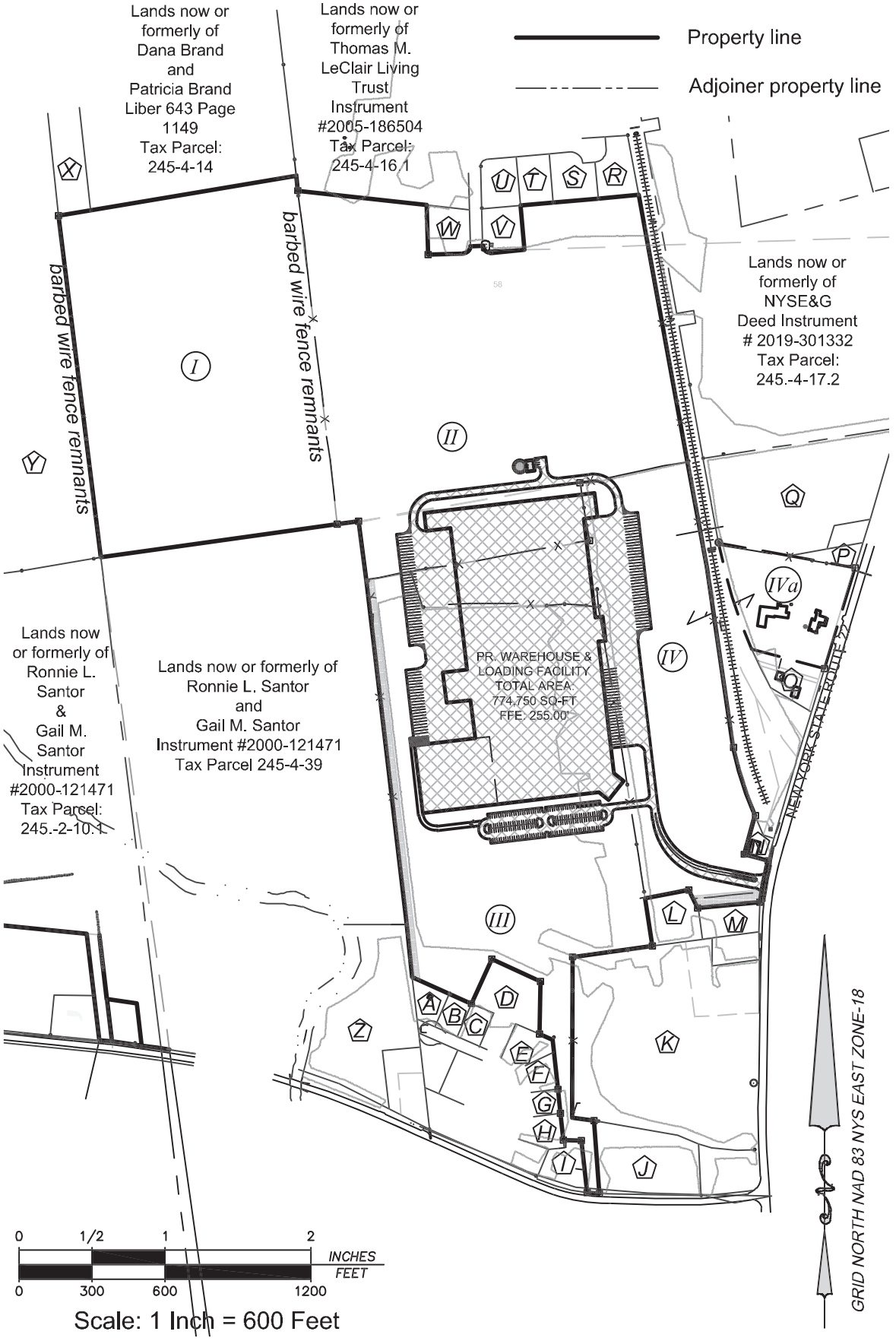
CHECKED BY AJO DATE 12/11/24



11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx) RMSPC.COM

Legend:

- Found property evidence (as described)
- Computed corner
- Barbed wire fence
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line



SHEET NO. 6 OF 9

CALCULATED BY LSC DATE 12/11/24

CHECKED BY AJO DATE 12/11/24

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

RMS
Robert M. Sutherland P.C.
Engineers - Planners - Surveyors
Soil & Material Testing
11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

RMS

ROBERT M. SUTHERLAND P.C.

ENGINEERS - PLANNERS - SURVEYORS

SOIL & MATERIAL TESTING

UMS Property, L.L.C.

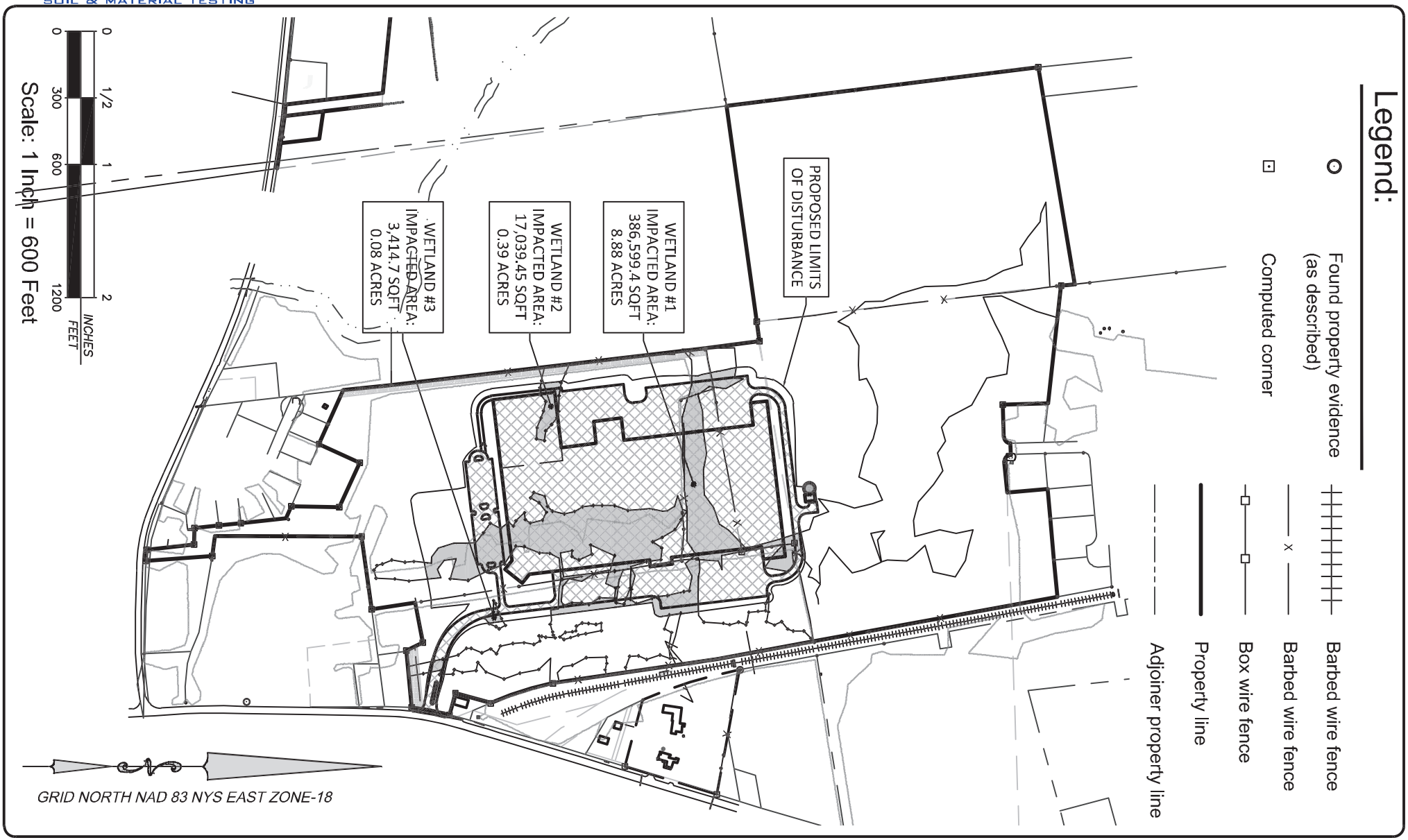
showing

New Distribution Center
Site Plan 2024

SHEET NO. 7 OF 9

CALCULATED BY LSC DATE 12/11/24

CHECKED BY AJO DATE 12/11/24



11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX) RMSPC.COM

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING

UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024

SHEET NO. 8 OF 9
CALCULATED BY LSC DATE 12/11/24
CHECKED BY AJO DATE 12/11/24

List of subject parcels:

Subject parcels	Parcel owner	Title reference	Tax parcel number
(I)	Lands of Thomas M. LeClair and Sally A. LeClair	Instrument # 2005 -186504	245-4-41
(II)	Lands of Thomas M. LeClair and Sally A. LeClair	Instrument # 2005 -186504	245-4-16.2
(III)	Lands of Robert N. Brunell	Liber 725 Page 161	245-4-40.1
(IV)	Lands of Iona G. Brand Revocable Living Trust	Instrument # 2001 - 130770	245.-4-22.11
(IVa)	Area of lands east of the Delaware and Hudson Railroad	Instrument # 2001 - 130770	245.-4-22.11

List of adjoining parcels:

Adjoining parcels	Parcel owner	Title reference	Tax parcel number
(A)	Lands now or formerly of Town of Plattsburgh	Liber 606 at Page 452	245.-4-35.11
(B)	Lands now or formerly of Peter N. Allen	Instrument # 2005-182632	245.-4-34.2
(C)	Lands now or formerly of James R. Rock	Instrument # 2015-272175	245.-4-34.1
(D)	Lands now or formerly of Gary E. Diman and Magda L. Diman	Instrument # 2005-182632	245.-4-33
(E)	Lands now or formerly of Sandra J. Rezac	Instrument # 2005-185881	245.-4-32
(F)	Lands now or formerly of John R. Akin and Deanne K. Akin	Instrument # 2008-219704	245.-4-31
(G)	Lands now or formerly of Albert Senyah	Instrument # 2012-252966	245.-4-35.5
(H)	Lands now or formerly of David J. Casey and Elizabeth H. Casey	Liber 899 Page 208	245.-4-35.1
(I)	Lands now or formerly of Timothy Bedore	Instrument # 2017-290354	245.-4-30
(J)	Lands now or formerly of Mental Retardation Services, Inc.	Liber 600 Page 211	245.-4-40.3
(K)	Lands now or formerly of Robert N. Brunell and Rita B. Brunell	Instrument # 2013-253867	245.-4-29
(L)	Lands now or formerly of Darla J. Holderman	Instrument # 2018-296856	245.-4-22.21
(M)	Lands now or formerly of Frank L. Lovely, Jr. and Penny L. Lovely	Instrument # 2016-279156	245.-4-22.22
(N)	Lands now or formerly of Gregory L. Thew	Instrument # 2009-229308	245.-4-24
(O)	Lands now or formerly of Timothy C. Schwartz	Instrument # 2014-262768	245.-4-21
(P)	Lands now or formerly of Sonia Passino and Shane Passino	Instrument # 2021-313271	245.-4-20
(Q)	Lands now or formerly of South Plattsburgh Fire District	Instrument # 2005-185074	245.-4-22.12
(R)	Lands now or formerly of Nicholas Stewart and Tim Stewart	Instrument # 2007 - 026851	245.-10-15
(S)	Lands now or formerly of Makalyn Ross and Josh Bushey	Instrument # 2023 - 329955	245.-10-14
(T)	Lands now or formerly of Cory Davison	Instrument # 2016-281272	245.-10-13
(U)	Lands now or formerly of Donald A. Hastings	Liber 962 Page 37	245.-10-12
(V)	Lands now or formerly of Mark T. LeClair	Instrument # 2022-326604	245.-10-17
(W)	Lands now or formerly of Daniel M. Shaughnessy and Cheryl A. Cassevah	Instrument # 2022-326604	245.-10-16
(X)	Lands now or formerly of Ward Pine Mill Inc.	Instrument # 2018-295189	245.-4-13
(Y)	Lands now or formerly of Ward Pine Mill Inc.	Instrument # 2018-295189	245.-2-11.3
(Z)	Lands now or formerly of Marshia E. Fleury-Desorcie and Stephen F. Fleury	Instrument # 2000-121471	245-4-38.2

11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

RMS

ROBERT M. SUTHERLAND P.C.

ENGINEERS - PLANNERS - SURVEYORS

SOIL & MATERIAL TESTING

UMS Property, L.L.C.

showing

New Distribution Center
Site Plan 2024

SHEET NO. 9 OF 9

CALCULATED BY LSC DATE 12/11/24

CHECKED BY AJO DATE 12/11/24

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	30'	47.12'	42.42'	S 43°29'28" W	89°59'33"
C2	30'	48.94'	43.69'	S 48°14'20" E	93°28'07"
C3	1,432.68'	295.64'	295.11'	N 17°45'09" W	11°49'23"
C4	1,654.91'	174.14'	174.06'	S 10°50'18" W	6°01'44"
C5	2,047.12'	459.14'	458.18'	S 17°25'01" E	12°51'02"

LINE	BEARING	DISTANCE
L1	N 01°30'45" W	204.09'
L2	S 88°29'15" W	145'
L3	S 88°27'00" W	50'
L4	S 85°01'37" W	140.45'
L5	N 04°58'23" W	184.64'
L6	S 85°01'37" W	135'
L7	S 85°01'37" W	185'
L8	S 85°01'37" W	167.08'
L9	N 10°23'14" W	1,114.83'
L10	N 10°19'13" W	439.1'
L11	N 08°23'49" W	750.29'
L12	N 15°30'26" E	164.24'
L13	S 74°29'34" E	100'
L14	N 84°55'24" E	257.55'
L15	S 25°57'09" E	81.2'
L16	N 79°15'10" E	184.27'
L17	S 08°51'13" E	198.41'
L18	N 82°19'01" E	331.51'
L19	N 00°05'01" E	660'
L20	S 82°01'23" E	89.78'
L21	S 04°28'32" E	301.75'
L22	S 85°40'42" E	51.04'
L23	S 06°32'53" E	215.56'
L24	N 88°40'53" W	72.97'
L25	N 06°03'03" W	110.94'
L26	N 06°03'03" W	100'
L27	S 06°03'03" E	204.27'
L28	S 06°03'03" E	204.27'
L29	N 65°58'13" W	59.79'
L30	N 00°58'30" E	216.05'
L31	S 65°39'25" E	220'
L32	S 24°20'37" W	200'
L33	N 65°58'13" W	267'
L34	S 05°51'57" E	216.62'
L35	S 06°43'02" E	1,423.86'
L36	N 07°41'09" W	246.91'
L37	S 82°00'09" W	87.25'
L38	S 82°00'09" W	983.07'
L39	S 07°00'10" E	1,416.16'
L40	S 80°29'02" W	133.09'
L41	N 80°29'02" E	857.01'
L42	S 05°38'26" E	61.78'
L43	S 83°40'28" E	534.24'
L44	S 79°36'14" E	297.13'
L45	S 79°36'14" E	273.8'
L46	S 16°53'26" W	431.88'
L47	S 75°10'43" E	309.22'
L48	N 80°33'12" E	330.09'
L49	N 06°42'00" W	458.61'
L50	N 06°48'18" W	1,380.76'
L51	N 78°50'49" E	451.18'
L52	N 09°25'38" W	241.14'
L53	S 79°58'01" W	745.96'
L54	S 79°22'29" W	185.71'
L55	S 19°20'47" E	152.58'
L56	N 89°34'34" E	724.83'
L57	N 08°51'13" W	1,216.17'
	N 89°04'49" W	416.8'

11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX) RMSPC.COM

APPENDIX D

TRAFFIC IMPACT ANALYSIS

March 25, 2025

Mr. Aaron Ovios, P.E.
Robert M. Sutherland P.C.
11 MacDonough St
Plattsburgh, NY 12901

RE: Traffic Assessment, Schluter **Distribution Center, NY Route 22, Town of Plattsburgh, Clinton County, NY; CM Project No. 124-158**

Dear Mr. Ovios:

Creighton Manning (CM) has conducted a Traffic Assessment for the proposed Schluter Distribution Center on NY Route 22 in the Town of Plattsburgh. This assessment is based on information provided in the conceptual site plan prepared by *Robert M Sutherland P.C.*, dated May 28, 2024 (see Attachment A).

1.0 Project Descriptions

The proposed project includes the construction of a new distribution warehouse totaling 774,750 square feet (SF) located on NY Route 22. Access to the site is proposed via one new site driveway on NY Route 22, approximately 1,300-feet north of Salmon River Road (CR 33). The proposed project would support 200 employees during the maximum daytime shift, with the vast majority of the employees being reassigned from the existing distribution center located on Pleasant Ridge Road. It is anticipated that proposed project will be fully constructed and occupied by 2027. The project location is shown on Figure 1.

Figure 1: Project Area

2.0 Existing Conditions

Roadway Serving the Site

NY Route 22 is classified as an urban minor arterial that generally travels in a north-south direction through the Town of Plattsburgh. In the project corridor, NY Route 22 provides a 10 ½-foot-wide travel lane in each direction with two to four feet of paved shoulder on either side of the roadway. Near the site, the posted speed limit is 40 mph, transitioning to 45 mph immediately north of the site driveway. Land uses along NY Route 22 generally consist residential uses with some commercial uses mixed in. No sidewalks are provided; pedestrians and bicyclists use the shoulder of the road.

Study Area Intersections

- **NY Route 22/I-87 Exit 36 Northbound Off-Ramp** – This is a three-leg intersection operating under stop sign-control on the westbound off-ramp approach. Each approach provides a single lane for travel movements. There are no sidewalks of crosswalks provided at this intersection.
- **NY Route 22/I-87 Exit 36 Southbound On-Ramp** – This is a three-leg unsignalized intersection. While there are no vehicle controls in place, northbound vehicles looking to turn left onto the interstate on-ramp must

yield to oncoming southbound through traffic. The northbound NY Route 22 approach provides separate lanes for left turn and through movements. The southbound approach provides a through lane and a separate, channelized right turn lane. There are no sidewalks of crosswalks provided at this intersection.

- **NY Route 22/Irish Settlement Road (County Route 32)** – This is a three-leg intersection operating under stop sign control on the eastbound Irish Settlement Road approach. The eastbound and southbound approach both provide a single lane for shared vehicle movements, while the northbound NY Route 22 approach provides separate lanes for left turns and through movements. There are no sidewalks of crosswalks provided at this intersection.
- **Irish Settlement Road (County Route 32)/Pleasant Ridge Road/Archie Bordeau Road** – this is a four-leg intersection operating under stop sign control on the northbound Archie Bordeau Road and southbound Pleasant Ridge Road approaches. Each approach provides a single lane for shared travel movements. There are no sidewalks of crosswalks provided at this intersection.
- **NY Route 22/I-87 Exit 36 Southbound Off-Ramp** – This is a three-leg intersection operating under stop sign-control on the westbound off-ramp approach. Each approach provides a single lane for travel movements. There are no sidewalks of crosswalks provided at this intersection.
- **NY Route 22/Archie Bordeau Road/Gas Station Driveway** – this is a four-leg intersection operating under stop sign control on the eastbound Archie Bordeau Road and westbound Shell station driveway approaches. Each approach provides a single lane for shared travel movements. There are no sidewalks of crosswalks provided at this intersection.
- **NY Route 22/Salmon River Road (County Route 33)** – This is a three-leg intersection operating under stop sign control on the eastbound Salmon River Road approach. Each approach provides a single lane for shared travel movements. There are no sidewalks or crosswalks at this intersection.

Data Collection

An automatic traffic recorder (ATR) recorded vehicle speeds and volumes on NY Route 22 in the vicinity of the site driveway from Wednesday, November 6, 2024, to Wednesday November 13, 2024. NY Route 22 serves approximately 5,600 vehicles per day (vpd) adjacent to the site. The 85th percentile speed was measured to be approximately 50-mph in both the northbound and southbound directions. It is noted that data recorded on Monday, November 11 (Veteran's Day) was filtered out due to irregular traffic conditions associated with the federal holiday.

Turning movement counts (TMCs) were conducted by RMS surveyors at the following intersections on Wednesday, November 15, 2023, from 6:00 am to 9:00 am and from 2:00 pm to 5:00 pm. The peak hours of these TMCs were factored to be representative of November 2024 conditions.

- NY Route 22/I-87 South On-Ramp
- NY Route 22/Irish Settlement Road (County Route 32)

CM conducted new TMCs at the following intersections on Wednesday, November 6, 2024 from 4:00 pm to 6:00 pm, and on Thursday, November 7, 2024 from 7:00 am to 9:00 am.

- NY Route 22/I-87 Exit 36 Northbound Off-Ramp
- Irish Settlement Road (County Route 32)/Pleasant Ridge Road/Archie Bordeau Road
- NY Route 22/I-87 Exit 36 Southbound Off-Ramp
- NY Route 22/Archie Bordeau Road/Gas Station Driveway
- NY Route 22/Salmon River Road (County Route 33)

These time periods represent the peak weekday commuter times of residents and background traffic, as well as the peak of the proposed facility operations. The observed peak hours generally occurred from 7:15 am to 8:15

am and 4:00 pm to 5:00 pm. The existing traffic volumes are shown on Figure 2. The raw ATR and TMC data reports are included under Attachment B.

A sight distance feasibility evaluation was conducted at the proposed site driveway location. Available sight distances exceed 1,000 feet in each direction at the site driveway.

3.0 Traffic Assessment

Trip Generation

Trip generation determines the quantity of traffic expected to travel to/from a given site. The Institute of Transportation Engineers (ITE) Trip Generation is the industry standard used for estimating trip generation for proposed land uses based on data collected at similar uses; however, ITE does not provide comparable data for industrial distribution centers. Therefore, the operating characteristics of the facility (number of employees, deliveries, etc.) were provided by the Schluter Systems and the number and types of trips estimated by CM.

The daytime shift is estimated to have 200 employees that will arrive staggered over two hours. It's assumed that some will carpool (1.2 persons per car). Traffic arriving for the beginning of the shift and leaving at the end of the shift was estimated. In addition, there will be truck deliveries. Those delivers includes shipments leaving the facility, crossdocking – goods delivered from the Pleasant Ridge facility, deliveries from vendors, regional distribution centers, FedEx/UPS, etc. These deliveries were distributed through the day and totaled. Table 1 summarizes the estimated trips through the course of a typical day.

Table 1 – Trip Generation Distribution

Time (Hour Beginning)	Employees (Cars)			Deliveries (Trucks)			Total		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
6:00 AM	70	10	80	5	5	10	75	15	90
7:00 AM	81	12	93	4	5	9	85	17	102
8:00 AM	15	2	17	10	8	18	25	10	35
9:00 AM	2	2	4	7	10	17	9	12	21
10:00 AM	2	2	4	13	10	23	15	12	27
11:00 AM	10	10	20	9	13	22	19	23	42
12:00 PM	10	10	20	8	8	16	18	18	36
1:00 PM	5	5	10	8	8	16	13	13	26
2:00 PM	4	25	29	9	9	18	13	34	47
3:00 PM	13	93	106	7	9	16	20	102	122
4:00 PM	7	48	55	8	8	16	15	56	71
5:00 PM	5	10	15	4	5	9	9	15	24
Total	**224**	**229**	**453**	**92**	**98**	**190**	**316**	**327**	**643**

The hourly distribution of traffic through the day indicates two distinct peaks, one being in the morning and one in the afternoon. The AM and PM peak hour trip generation is broken down into passenger vehicle and truck trips is summarized in Table 2.

Table 2 – Trip Generation Summary

Land Use	Size	Vehicle Type	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Distribution Center	774,750 SF 200 Employees	Passenger	81	12	93	13	93	106
		Truck	4	5	9	7	9	16
		Total	**85**	**17**	**102**	**20**	**102**	**122**

It is estimated that the project will generate 102 trips in the AM peak hour (85 entering, 17 exiting) and 122 trips in the PM peak hour (20 entering, 102 trips exiting). Trucks trips will vary from about 1 to 8% of the trip generation during the peak hours. It is noted that about 90% of the employees will relocate from the existing manufacturing facilities on Pleasant Ridge Road. As such, this analysis conservatively assumes the traffic generated is all new trips, whereas there will actually be a smaller net increase.

Future Traffic Volumes

To evaluate the impact of the proposed development, traffic projections were prepared for the design year, 2027. Historical traffic volume data found in the Traffic Data Viewer published by NYSDOT indicates that traffic volumes on Irish Settlement have increased by +2.1% over the past several years. The same analysis on NY Route 22 indicated that daily traffic volumes decreased by -0.4% south of I-87 Exit 36 and +0.1% north of I-87 Exit 36. In order to provide a conservative analysis, traffic volumes at all of the study intersections were projected to increase by 2% annually, for the estimated time of completion of the project of 2027. The Town of Plattsburgh was contacted about other proposed developments in the area that could potentially impact the results of traffic forecasts. Trips associated with the proposed Schluter Manufacturing Center on Irish Settlement Road (SBL 232.-3-18, CM Project 123-482, 11/21/2023) were added to the general background growth and distributed onto the network. The general background growth was used to develop the 2027 No-Build traffic volumes, representing future traffic volumes in the study area without the proposed distribution center as shown on Figure 3.

Traffic generated by the project was distributed on the study area roadways based on the existing traffic volume counts and expected travel routes. The primary trip distribution patterns for the proposed development are shown on Figure 4. The associated trip assignment volumes are shown on Figure 5. The site generated trips were added to the 2027 No-Build traffic volumes resulting in the 2027 Build traffic volumes for the AM and PM peak hours. The 2027 Build traffic volumes (Figure 6) represent the future traffic volumes after the project is complete.

Traffic Operations

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using Synchro 11, which automates the procedures contained in the *Highway Capacity Manual.* Table 3 summarizes the results of the level of service calculations for the project. The detailed level of service analyses is included under Attachment B.

Table 3 – Level of Service Summary

Intersection		Control	AM Peak Hour			PM Peak Hour		
			2024 Existing	2027 No-Build	2027 Build	2024 Existing	2027 No-Build	2027 Build
NY Route 22/I-87 NB Off-Ramp		U						
I-87 NB Off-Ramp WB	LR		C (18.4)	C (21.6)	D (25.5)	B (13.9)	C (20.9)	C (24.7)
NY Route 22/I-87 SB On-Ramp**		U						
Route 22 NB	L		A (7.6)	A (7.8)	A (7.8)	A (8.0)	A (8.2)	A (8.3)
NY Route 22/Irish Settlement Rd		U						
Irish Settlement Rd EB	LR		D (31.2)	**F (51.0)**	**F (59.6)**	C (21.9)	D (34.4)	**E (46.8)**
Route 22 NB	L		A (7.9)	A (8.1)	A (8.2)	A (8.2)	A (8.3)	A (8.4)
Irish Settlement Rd/Pleasant Ridge Rd		U						
Irish Settlement Rd EB	L		A (7.6)	A (7.6)	A (7.6)	A (7.7)	A (7.8)	A (7.8)
Irish Settlement Road WB	L		A (7.5)	A (7.6)	A (7.6)	A (7.4)	A (7.5)	A (7.5)
Archie Bordeau Road NB	LTR		B (11.7)	B (12.3)	B (12.5)	B (12.3)	B (12.9)	B (13.4)
Pleasant Ridge Rd SB	LTR		B (11.9)	B (12.6)	B (12.9)	B (13.5)	B (14.6)	C (15.0)
NY Route 22/I-87 SB Off-Ramp		U						
I-87 SB Off-Ramp WB	LR		C (19.5)	C (24.3)	D (30.1)	C (17.2)	C (19.8)	C (24.6)
NY Route 22/Archie Bordeau Road		U						
Archie Bordeau Road EB	LTR		B (12.2)	B (12.8)	B (13.2)	B (12.1)	B (12.5)	B (13.1)
Gas Station Drwy WB	LTR		B (13.2)	B (14.2)	C (15.0)	B (11.2)	B (11.6)	B (12.5)
NY Route 22 NB	L		A (7.6)	A (7.6)	A (7.7)	A (7.9)	A (8.0)	A (8.1)
NY Route 22 SB	L		A (8.0)	A (8.1)	A (8.1)	A (7.7)	A (7.8)	A (8.0)
NY Route 22/Site Drwy		U						
Site Drwy EB	LR		--	--	B (12.2)	--	--	B (14.7)
NY Route 22 NB	L		--	--	A (7.7)	--	--	A (8.2)
NY Route 22/Salmon River Road		U						
Salmon River Road EB	LR		B (11.7)	B (12.3)	B (12.7)	B (12.2)	B (12.8)	B (13.2)
NY Route 22 NB	L		A (7.5)	A (7.6)	A (7.6)	A (8.1)	A (8.2)	A (8.3)

EB, WB, SB = Eastbound, Westbound, Southbound intersection approaches
L, T, R = Left, Through, Right turn movements
X (Y.Y) = Level of service (Average delay in seconds per vehicle)
**Intersection was analyzed using HCM 2000 methodologies due to intersection signing layout

The level of service analysis indicates that most of the study area intersections currently operate adequately and will continue to do so after full build out of the development, with minimal increases in delay associated with the proposed distribution center. The exception being the eastbound approach of Irish Settlement Road to Route 22.

This approach is projected to operate at LOS F during the AM peak hour and LOS E in the PM peak hour. The eastbound left turn movement generally operates at LOS E/F while the right turn movement operates at LOS A/B; however, left turning vehicles far exceed right turning vehicles which means even right turn vehicles experience LOS E/F from having to wait behind the left turn vehicles. Widening Irish Settlement Road to separate lefts and rights is a possibility, but NYSDOT generally discourages side by side lanes operating under stop sign control, as side-by-side drivers creep out to see around the adjacent vehicle. If the intersection were signalized, it would operate at LOS A/B during the peak hours, however, the primary benefit might be limited to those few peak hours of the day (3 to 4 hours), while an unsignalized intersection may operate adequately for 20 hours of the day.

Given that the project anticipates that 90% of the employees from originate from existing staff at the main facility, we recommended that this intersection be monitored for future signalization if necessary.

4.0 Conclusions

The proposed project includes the construction of a new distribution warehouse totaling 774,750 square feet (SF) located on NY Route 22. Access to the site is proposed via one new site driveway on NY Route 22, approximately 1,300-feet north of Salmon River Road (County Route 33). The proposed project would support 200 employees during the maximum daytime shift, with the vast majority of the employees being reassigned from the existing distribution center located on Pleasant Ridge Road. It is anticipated that proposed project will be fully constructed and occupied by 2027. The following is noted regarding the proposed project:

- The proposed development will generate 102 new trips during the AM peak hour and 122 new trips during the PM peak hour of which about 8% to 13% will be truck trips.
- The level of service analysis indicates that most of the study area intersections will not experience any significant increase in delay after full build out of the proposed development.
- The eastbound approach of Irish Settlement Road has been and will continue to operate with long delays during the peak hours. This analysis conservatively estimates that the approach will operate at LOS E/F during the peak hours but expects this conditions to be limited to the peak hours.
- Signalizing the intersection will reduce delays but we recommend the intersection be monitored given that most of the employees of the new center will relocated from the existing facility, and unsignalized operations may be adequate for most of the day.
- The project is located on the outside of a curve with clear views (sight lines) looking north and south along Route 22.

Please feel free to call our office if you have any questions or comments regarding the above evaluation.
Respectfully submitted,
Creighton Manning Engineering

Kenneth Wersted, P.E., PTOE
Associate

Attachments

N:\Projects\2024\124-158 RMS - UMS Distribution Ctr\Working\Traffic\Reports\20250325_UMS Distribution Ltr Rpt_124158.docx

Attachment A
Site Plan

Schluter Distribution Center
Town of Plattsburgh, New York

Map Notes:

1. Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of section 7209, sub-division 2 of the New York State Education Law.
2. Only copies from the original of this survey marked with an original of the Land Surveyor's embossed seal shall be considered valid true copies. (mylar prints shall be stamped with the surveyor's ink seal with an original signature)
3. Certifications incicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person for whom the survey is prepared and on his behalf the title company, governmental agency, and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.
4. Copyright 2022, Robert M. Sutherland, P.C. All rights reserved.
5. The location of sub-surface improvements are approximate and compiled from field location and mapping provided by the respective utility companies. The contractor shall confirm the location of all utilities prior to the commencement of excavation.
6. Subject to any findings of an accurate abstract of title or those discoverable by inspection.
7. North arrow and bearings based on Grid North, NAD 1983 New York East Zone 18.
8. All distances shown hereon are ground distances.
9. Building offsets, as shown on this map, are not to be used for construction purposes.
10. Missing property corners were not set as a result of this survey.
11. All easements and right-of-ways of record as indicated in Title Insurance Commitment No. 23-CEN1030-ORT, issued by Old Republic National Title Insurance Company with an effective date of January 24, 2023, or easements and right-of-ways that are discoverable by inspection, are indicated hereon.

Reference Maps:

1. "Right of Way And Track Map The Plattsburgh and Dannemora Railroad, operated by The Delaware and Hudson Company, (V-16B/8)..." prepared by Office of Chairman Valuation Committee dated June 30, 1916.
2. "Map of Property Survey of Fuller Property..." prepared by Joseph W. Hogan, L.S., dated June 12, 1950 and filed in the Clinton County Clerk's Office in Map Drawer B-93.
3. "Map of Land Sold To Noel J. Brunell, Jr...."prepared by Robert H. Ladue, L.S., and filed in the Clinton County Clerk's Office in Map Book 1 Page 29.
4. "Lands of Earl W. Morehouse..." prepared by Leland Logan, P.E.& L.S., dated September 13, 1955 and filed in the Clinton County Clerk's Office in Map Drawer A-133.
5. FAI # 502-5-2.1, Section 7B-1 Map No. 379 Page 439, " Railway-Highway Crossing, Grade Seperation), lands of Calos Brand prepared by New York State Department of Public Works, dated October 20, 1958 and filed in the Clinton County Clerk's Office.
6. "Map of Survey Property T Be Conveyed By archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Kenneth Kratz, L.S., dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
7. "Survey of Lot Sold To Dale and Darla Holderman..."prepared by Robert H. Ladue, L.S., last revised June 5, 1984 and filed in the Clinton County Clerk's Office in Map Book 12 Page 35.
8. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Lacue, L.S. dated September 25, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 125.
9. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 28, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 126.
10. "Map of Survey Property to be Conveyed By Archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Johnston & Kratz Land Surveyors, L.L.S. dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
11. "Survey Map Showing Brand Subdivision 2004..." prepared by Dean H. Lashway, L.S., dated December 20, 2004 and filed in the Clinton County Clerk's Office on March 2, 2005 as Instrument # 2005-180127.
12. "Map of Survey prepared for Lisa J. Clemons showing Clemons Subdivision 2015..." prepared by Robert M. Sutherland, P.C., dated April 27, 2015 and filed in the Clinton County Clerk's Office on May 29, 2015 as Instrument # 2015-271931.
13. "Map Showing Detailed Preliminary/Final Plan For Superior Drive Subdivision 2020 Thomas LeClair Living Trust..." prepared by Dean H. Lashway, L.S., last revised on August 27, 2020 and filed in the Clinton County Clerk's Office on October 29, 2020 as Instrument # 2020-311129.

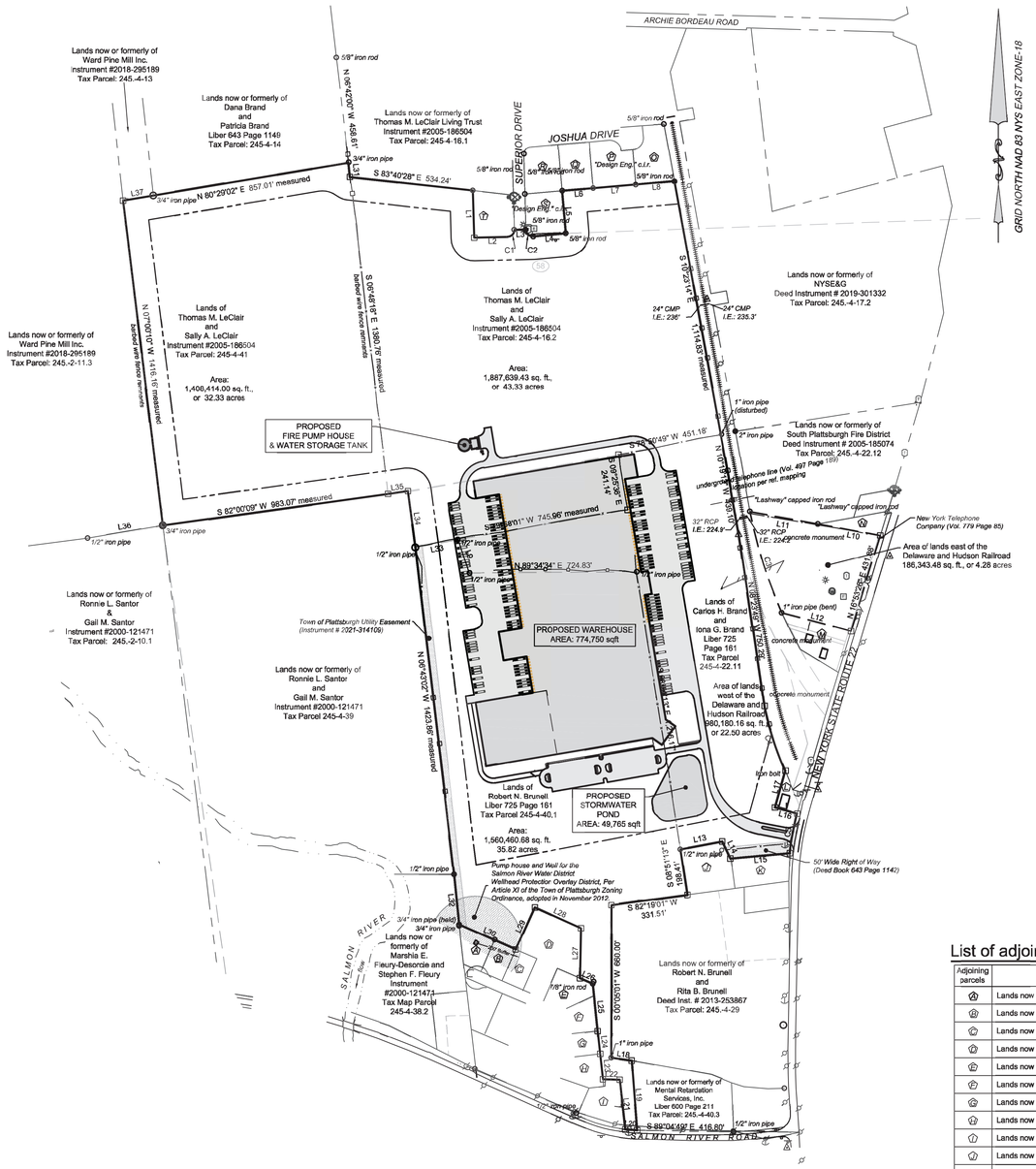
Reference Deeds:

1. Section 245. - Block 4 - Lot 40.1: Gerald Menard to Robert N. Brunell and Rita B. Brunell by deed dated October 14, 1986 and recorded in the Clinton County Clerk's Office on October 14, 1986 as Deed Volume 678 at page 33.
2. Section 245. - Block 4 - Lot 22.11: Carlos H. Brand and Iona G. Brand to Carlos H. Brand and Iona G. Brand by deed dated March 11, 1988 and recorded in the Clinton County Clerk's Office on April 6, 1988 as Deed Volume 725 at page 161
3. Section 245. - Block 4 - Lot 16.2: Thomas M. LeClair and Sally A. Leclair by deed dated June 23, 2005 and recorded in the Clinton County Clerk's Office on September 6, 2005 as Instrument # 2005-186504.

Certification:

I hereby certify that this map was prepared from deeds and maps of record and an accurate survey performed during December of 2022.

Jeffrey F. Burns, L.S. Date
N.Y.S. License #050702



Scale: 1 Inch = 300 Feet

Tax Map Reference:

Section 245. - Block 4 - Lot 16.2
Section 245. - Block 4 - Lot 22.11
Section 245. - Block 4 - Lot 40.1
Section 245. - Block 4 - Lot 41
Town of Plattsburgh
County of Clinton

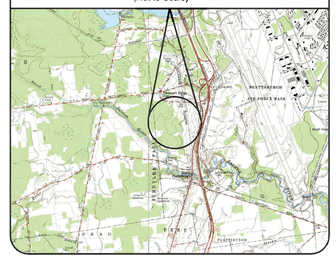
Zoning Information:

LOCATION: Westerly side of NYS Route 22 and south of Archie Bordeau Road.	
ZONE: C, Shopping Center Commercial District	
USE: Commercial	
ITEM	REQUIREMENTS
Minimum lot area	N/A
Minimum road frontage	75 ft.
Minimum front setback	20 ft.
Minimum side setback	10 ft. min. / 25 ft. total
Minimum rear setback	20
Minimum open space	25%
Maximum building height	60 ft.
Maximum building coverage	25%

List of adjoining parcels:

Adjoining parcels	Parcel owner	Title reference	Tax parcel number
1	Lands now or formerly of Town of Plattsburgh	Liber 606 at Page 452	245.-4-35.11
2	Lands now or formerly of Peter N. Allen	Instrument # 2005-182632	245.-4-34.2
3	Lands now or formerly of James R. Rock	Instrument # 2015-272175	245.-4-34.1
4	Lands now or formerly of Gary E. Diman and Magda L. Diman	Instrument # 2005-182632	245.-4-33
5	Lands now or formerly of Sandra J. Rezac	Instrument # 2005-185881	245.-4-32
6	Lands now or formerly of John R. Akin and Deanne K. Akin	Instrument # 2008-219704	245.-4-31
7	Lands now or formerly of Albert Senyah	Instrument # 2012-252966	245.-4-35.5
8	Lands now or formerly of David J. Casey and Elizabeth H. Casey	Liber 899 Page 208	245.-4-35.1
9	Lands now or formerly of Timothy Bedore	Instrument # 2017-290354	245.-4-30
10	Lands now or formerly of Darla J. Holderman	Instrument # 2018-296856	245.-4-22.21
11	Lands now or formerly of Frank L. Lovely, Jr. and Penny L. Lovely	Instrument # 2016-279156	245.-4-22.22
12	Lands now or formerly of Gregory L. Thew	Instrument # 2009-229308	245.-4-24
13	Lands now or formerly of Timothy C. Schwartz	Instrument # 2014-262768	245.-4-21
14	Lands now or formerly of Sonia Passino and Shane Passino	Instrument # 2021-313271	245.-4-20
15	Lands now or formerly of Andre Babbitt	Instrument # 2006-200171	245.-10-15
16	Lands now or formerly of David Ross and Michelle Ross	Instrument # 2000-125742	245.-10-14
17	Lands now or formerly of Cory Davison	Instrument # 2016-281272	245.-10-13
18	Lands now or formerly of Donald A. Hastings	Liber 962 Page 37	245.-10-12
19	Lands now or formerly of Mark T. LeClair	Instrument # 2022-326604	245.-10-17
20	Lands now or formerly of Daniel M. Shaughnessy and Cheryl A. Cassevah	Instrument # 2022-326604	245.-10-16

General Location Map
(Not to Scale)



Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Sketch Plan
Date 05/28/2024	Sk100
Scale 1" = 300'	
Drawn LSC	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

Map Notes:

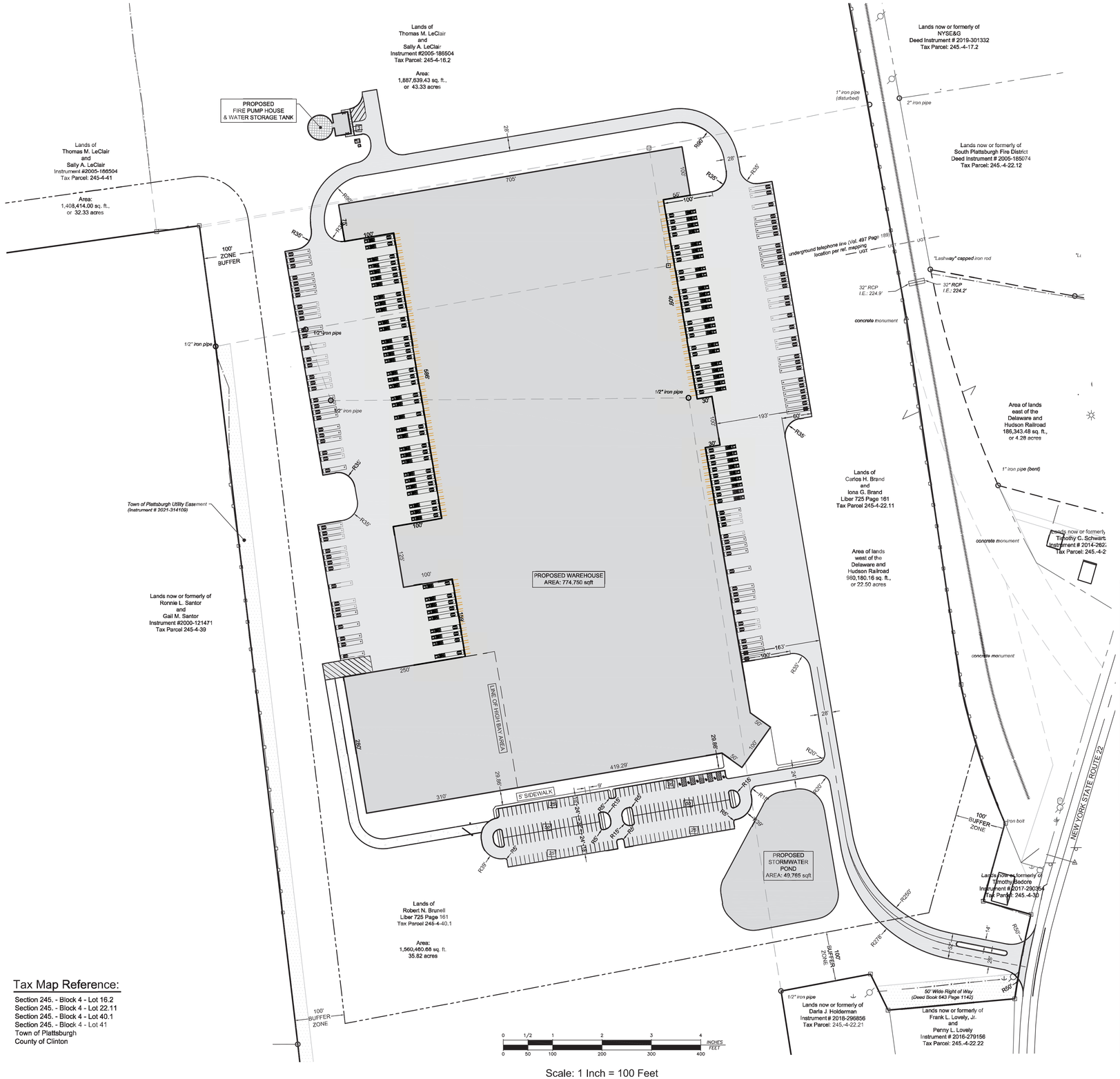
1. Unauthorized alteration or addition to a survey map bearing a Licensed Land Surveyor's seal is a violation of section 7209, sub-division 2 of the New York State Education Law.
2. Only copies from the original of this survey marked with an original of the Land Surveyor's embossed seal shall be considered valid true copies. (mylar prints shall be stamped with the surveyor's ink seal with an original signature)
3. Certifications incicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person for whom the survey is prepared and on his behalf the title company, governmental agency, and lending institution listed hereon, and to the assignees of the lending institution. Certifications are not transferable to additional institutions or subsequent owners.
4. Copyright 2022, Robert M. Sutherland, P.C. All rights reserved.
5. The location of sub-surface improvements are approximate and compiled from field location and mapping provided by the respective utility companies. The contractor shall confirm the location of all utilities prior to the commencement of excavation.
6. Subject to any findings of an accurate abstract of title or those discoverable by inspection.
7. North arrow and bearings based on Grid North, NAD 1983 New York East Zone 18.
8. All distances shown hereon are ground distances.
9. Building offsets, as shown on this map, are not to be used for construction purposes.
10. Missing property corners were not set as a result of this survey.
11. All easements and right-of-ways of record as indicated in Title Insurance Commitment No. 23-CEN1030-ORT, issued by Old Republic National Title Insurance Company with an effective date of January 24, 2023, or easements and right-of-ways that are discoverable by inspection, are indicated hereon.

Reference Maps:

1. "Right of Way And Track Map The Plattsburgh and Dannemora Railroad, operated by The Delaware and Hudson Company, (V-16B/8)..." prepared by Office of Chairman Valuation Committee dated June 30, 1916.
2. "Map of Property Survey of Fuller Property..." prepared by Joseph W. Hogan, L.S., dated June 12, 1950 and filed in the Clinton County Clerk's Office in Map Drawer B-93.
3. "Map of Land Sold To Noel J. Brunell, Jr...."prepared by Robert H. Ladue, L.S., and filed in the Clinton County Clerk's Office in Map Book 1 Page 29.
4. "Lands of Earl W. Morehouse..." prepared by Leland Logan, P.E.& L.S., dated September 13, 1955 and filed in the Clinton County Clerk's Office in Map Drawer A-133.
5. FAI # 502-5-2.1, Section 7B-1 Map No. 379 Page 439, " Railway-Highway Crossing, Grade Seperation), lands of Calos Brand prepared by New York State Department of Public Works, dated October 20, 1958 and filed in the Clinton County Clerk's Office.
6. "Map of Survey Property T Be Conveyed By archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Kenneth Kratz, L.S., dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
7. "Survey of Lot Sold To Dale and Darla Holderman..."prepared by Robert H. Ladue, L.S., last revised June 5, 1984 and filed in the Clinton County Clerk's Office in Map Book 12 Page 35.
8. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Lacue, L.S. dated September 25, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 125.
9. "Carlos Brand Subdivision II - 1989..."prepared by Robert H. Ladue, L.S. dated September 28, 1989, last revised November 28, 1989 and filed in the Clinton County Clerk's Office in Map Book 17 Page 126.
10. "Map of Survey Property to be Conveyed By Archie N. Bordeau To New York State Electric & Gas Corporation..." prepared by Johnston & Kratz Land Surveyors, L.L.S. dated June 7, 1973 and filed in the Clinton County Clerk's Office on May 16, 1974 in Map Book 6 Page 16.
11. "Survey Map Showing Brand Subdivision 2004..." prepared by Dean H. Lashway, L.S., dated December 20, 2004 and filed in the Clinton County Clerk's Office on March 2, 2005 as Instrument # 2005-180127.
12. "Map of Survey prepared for Lisa J. Clemons showing Clemons Subdivision 2015..." prepared by Robert M. Sutherland, P.C., dated April 27, 2015 and filed in the Clinton County Clerk's Office on May 29, 2015 as Instrument # 2015-271931.
13. "Map Showing Detailed Preliminary/Final Plan For Superior Drive Subdivision 2020 Thomas LeClair Living Trust..." prepared by Dean H. Lashway, L.S., last revised on August 27, 2020 and filed in the Clinton County Clerk's Office on October 29, 2020 as Instrument # 2020-311129.

Reference Deeds:

1. Section 245. - Block 4 - Lot 40.1: Gerald Menard to Robert N. Brunell and Rita B. Brunell by deed dated October 14, 1986 and recorded in the Clinton County Clerk's Office on October 14, 1986 as Deed Volume 678 at page 33.
2. Section 245. - Block 4 - Lot 22.11: Carlos H. Brand and Iona G. Brand to Carlos H. Brand and Iona G. Brand by deed dated March 11, 1988 and recorded in the Clinton County Clerk's Office on April 6, 1988 as Deed Volume 725 at page 161
3. Section 245. - Block 4 - Lot 16.2: Thomas M. Leclair to Thomas M. LeClair and Sally A. Leclair by deed dated June 23, 2005 and recorded in the Clinton County Clerk's Office on September 6, 2005 as Instrument # 2005-186504.



Scale: 1 Inch = 100 Feet

Tax Map Reference:

Section 245. - Block 4 - Lot 16.2
Section 245. - Block 4 - Lot 22.11
Section 245. - Block 4 - Lot 40.1
Section 245. - Block 4 - Lot 41
Town of Plattsburgh
County of Clinton

Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

No.	Revision/Issue	Date

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Sketch Plan
Date 05/28/2024	Sk101
Scale 1" = 100'	
Drawn LSC	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

Attachment B
Traffic Volume Data

Schluter Distribution Center
Town of Plattsburgh, New York

MetroCount Traffic Executive
Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-57 -- English (ENU)

Datasets:

Site:	**[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute:	UMSc Distribution Center
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration:	15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:	
File:	124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier:	FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)
Exclusion:	**Vehicles are excluded at the following times:** None **The following entire days are excluded:** Monday, November 11, 2024
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	6 - 99 mph.
Direction:	North, South (bound), P = North
Separation:	Headway > 0 sec, Span 0 - 328.084 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 27781 / 33040 (84.08%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-57
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	*	17.0	19.0	22.0	21.0	22.0	18.0	19.8	19.8
0100-0200	*	14.0	14.0	6.0	11.0	12.0	17.0	11.3	12.3
0200-0300	*	14.0	9.0	9.0	8.0	18.0	18.0	10.0	12.7
0300-0400	*	13.0	27.0	20.0	21.0	7.0	15.0	20.3	17.2
0400-0500	*	43.0	40.0	44.0	40.0	26.0	17.0	41.8	35.0
0500-0600	*	139.0	131.0	142.0	127.0	50.0	34.0	134.8	103.8
0600-0700	*	304.0	277.0	300.0	282.0	94.0	61.0	290.8	219.7
0700-0800	*	**437.0**	449.0	**423.0**	**420.0**	139.0	112.0	**432.3**	330.0
0800-0900	*	313.0	351.0	334.0	347.0	231.0	174.0	336.3	291.7
0900-1000	*	347.0	286.0	362.0	336.0	315.0	226.0	332.8	312.0
1000-1100	*	312.0	*	323.0	355.0	346.0	310.0	330.0	329.2
1100-1200	*	344.0	*	335.0	374.0	**350.0**	**331.0**	351.0	**346.8**
1200-1300	*	372.0	*	354.0	379.0	**355.0**	304.0	368.3	352.8
1300-1400	*	334.0	*	330.0	385.0	304.0	283.0	349.7	327.2
1400-1500	*	433.0	*	408.0	425.0	330.0	**306.0**	422.0	380.4
1500-1600	*	497.0	*	477.0	448.0	329.0	288.0	474.0	407.8
1600-1700	*	**520.0**	524.0	**488.0**	**486.0**	293.0	257.0	**504.5**	**428.0**
1700-1800	*	408.0	352.0	381.0	404.0	278.0	239.0	386.3	343.7
1800-1900	*	235.0	267.0	251.0	233.0	220.0	164.0	246.5	228.3
1900-2000	*	183.0	192.0	192.0	175.0	127.0	119.0	185.5	164.7
2000-2100	*	140.0	150.0	133.0	153.0	130.0	96.0	144.0	133.7
2100-2200	*	85.0	75.0	82.0	113.0	99.0	75.0	88.8	88.2
2200-2300	*	72.0	46.0	59.0	94.0	82.0	29.0	67.8	63.7
2300-2400	*	37.0	33.0	36.0	53.0	41.0	34.0	39.8	39.0
Totals									
0700-1900	*	4552.0	*	4466.0	4592.0	3490.0	2994.0	4533.5	4077.9
0600-2200	*	5264.0	*	5173.0	5315.0	3940.0	3345.0	5242.5	4684.0
0600-0000	*	5373.0	*	5268.0	5462.0	4063.0	3408.0	5350.0	4786.7
0000-0000	*	5613.0	*	5511.0	5690.0	4198.0	3527.0	5587.8	4987.5
AM Peak	*	0700	*	0700	0700	1100	1100		
	*	437.0	*	423.0	420.0	350.0	331.0		
PM Peak	*	1600	*	1600	1600	1200	1400		
	*	520.0	*	488.0	486.0	355.0	306.0		

*** - No data.**

MetroCount Traffic Executive
Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-58 -- English (ENU)

Datasets:

Site:	**[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute:	UMSc Distribution Center
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration:	15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:	
File:	124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier:	FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)
Exclusion:	**Vehicles are excluded at the following times:** None **The following entire days are excluded:** Monday, November 11, 2024
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	6 - 99 mph.
Direction:	North (bound), P = North
Separation:	Headway > 0 sec, Span 0 - 328.084 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 13841 / 33040 (41.89%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-58
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	*	3.0	8.0	7.0	11.0	6.0	4.0	7.3	6.5
0100-0200	*	6.0	6.0	1.0	5.0	8.0	7.0	4.5	5.5
0200-0300	*	8.0	3.0	4.0	4.0	7.0	9.0	4.8	5.8
0300-0400	*	10.0	21.0	18.0	14.0	6.0	5.0	15.8	12.3
0400-0500	*	38.0	33.0	38.0	33.0	18.0	12.0	35.5	28.7
0500-0600	*	116.0	116.0	117.0	111.0	37.0	27.0	115.0	87.3
0600-0700	*	227.0	217.0	221.0	205.0	70.0	45.0	217.5	164.2
0700-0800	*	**328.0**	328.0	**312.0**	**306.0**	77.0	63.0	**318.5**	**235.7**
0800-0900	*	196.0	215.0	207.0	207.0	143.0	111.0	206.3	179.8
0900-1000	*	192.0	164.0	192.0	188.0	181.0	138.0	184.0	175.8
1000-1100	*	165.0	*	181.0	184.0	183.0	169.0	176.7	176.4
1100-1200	*	166.0	*	167.0	212.0	**183.0**	**184.0**	181.7	182.4
1200-1300	*	183.0	*	171.0	189.0	**163.0**	133.0	181.0	**167.8**
1300-1400	*	176.0	*	165.0	187.0	152.0	128.0	176.0	161.6
1400-1500	*	175.0	*	170.0	180.0	158.0	**147.0**	175.0	166.0
1500-1600	*	**187.0**	*	**182.0**	172.0	137.0	138.0	180.3	163.2
1600-1700	*	184.0	180.0	169.0	**191.0**	128.0	128.0	**181.0**	163.3
1700-1800	*	157.0	137.0	120.0	171.0	134.0	113.0	146.3	138.7
1800-1900	*	87.0	93.0	96.0	98.0	96.0	72.0	93.5	90.3
1900-2000	*	57.0	61.0	59.0	59.0	53.0	47.0	59.0	56.0
2000-2100	*	34.0	49.0	43.0	52.0	50.0	36.0	44.5	44.0
2100-2200	*	28.0	29.0	30.0	39.0	31.0	35.0	31.5	32.0
2200-2300	*	27.0	13.0	18.0	32.0	26.0	8.0	22.5	20.7
2300-2400	*	12.0	11.0	11.0	17.0	13.0	10.0	12.8	12.3
Totals									
0700-1900	*	2196.0	*	2132.0	2285.0	1735.0	1524.0	2200.2	2001.1
0600-2200	*	2542.0	*	2485.0	2640.0	1939.0	1687.0	2552.7	2297.2
0600-0000	*	2581.0	*	2514.0	2689.0	1978.0	1705.0	2587.9	2330.2
0000-0000	*	2762.0	*	2699.0	2867.0	2060.0	1769.0	2770.7	2476.4
AM Peak	*	0700	*	0700	0700	1100	1100		
	*	328.0	*	312.0	306.0	183.0	184.0		
PM Peak	*	1500	*	1500	1600	1200	1400		
	*	187.0	*	182.0	191.0	163.0	147.0		

*** - No data.**

MetroCount Traffic Executive
Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-59 -- English (ENU)

Datasets:

Site:	**[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute:	UMSc Distribution Center
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration:	15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:	
File:	124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier:	FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)
Exclusion:	**Vehicles are excluded at the following times:** None **The following entire days are excluded:** Monday, November 11, 2024
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	6 - 99 mph.
Direction:	South (bound), P = North
Separation:	Headway > 0 sec, Span 0 - 328.084 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 13940 / 33040 (42.19%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-59
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	Averages 1 - 7
Hour									
0000-0100	*	14.0	11.0	15.0	10.0	16.0	14.0	12.5	13.3
0100-0200	*	8.0	8.0	5.0	6.0	4.0	10.0	6.8	6.8
0200-0300	*	6.0	6.0	5.0	4.0	11.0	9.0	5.3	6.8
0300-0400	*	3.0	6.0	2.0	7.0	1.0	10.0	4.5	4.8
0400-0500	*	5.0	7.0	6.0	7.0	8.0	5.0	6.3	6.3
0500-0600	*	23.0	15.0	25.0	16.0	13.0	7.0	19.8	16.5
0600-0700	*	77.0	60.0	79.0	77.0	24.0	16.0	73.3	55.5
0700-0800	*	109.0	121.0	111.0	114.0	62.0	49.0	113.8	94.3
0800-0900	*	117.0	136.0	127.0	140.0	88.0	63.0	130.0	111.8
0900-1000	*	155.0	122.0	**170.0**	148.0	134.0	88.0	148.8	136.2
1000-1100	*	147.0	*	142.0	**171.0**	163.0	141.0	153.3	152.8
1100-1200	*	**178.0**	*	168.0	162.0	**167.0**	**147.0**	**169.3**	**164.4**
1200-1300	*	189.0	*	183.0	190.0	192.0	**171.0**	187.3	185.0
1300-1400	*	158.0	*	165.0	198.0	152.0	155.0	173.7	165.6
1400-1500	*	258.0	*	238.0	245.0	172.0	159.0	247.0	214.4
1500-1600	*	310.0	*	295.0	276.0	**192.0**	150.0	293.7	244.6
1600-1700	*	**336.0**	344.0	**319.0**	**295.0**	165.0	129.0	**323.5**	**264.7**
1700-1800	*	251.0	215.0	261.0	233.0	144.0	126.0	240.0	205.0
1800-1900	*	148.0	174.0	155.0	135.0	124.0	92.0	153.0	138.0
1900-2000	*	126.0	131.0	133.0	116.0	74.0	72.0	126.5	108.7
2000-2100	*	106.0	101.0	90.0	101.0	80.0	60.0	99.5	89.7
2100-2200	*	57.0	46.0	52.0	74.0	68.0	40.0	57.3	56.2
2200-2300	*	45.0	33.0	41.0	62.0	56.0	21.0	45.3	43.0
2300-2400	*	25.0	22.0	25.0	36.0	28.0	24.0	27.0	26.7
Totals									
0700-1900	*	2356.0	*	2334.0	2307.0	1755.0	1470.0	2333.3	2076.8
0600-2200	*	2722.0	*	2688.0	2675.0	2001.0	1658.0	2689.8	2386.8
0600-0000	*	2792.0	*	2754.0	2773.0	2085.0	1703.0	2762.1	2456.5
0000-0000	*	2851.0	*	2812.0	2823.0	2138.0	1758.0	2817.1	2511.1
AM Peak	*	1100	*	0900	1000	1100	1100		
	*	178.0	*	170.0	171.0	167.0	147.0		
PM Peak	*	1600	*	1600	1600	1500	1200		
	*	336.0	*	319.0	295.0	192.0	171.0		

*** - No data.**

MetroCount Traffic Executive
Speed Statistics

SpeedStat-60 -- English (ENU)

Datasets:

Site:	**[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute:	UMSc Distribution Center
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration:	15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:	
File:	124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier:	FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)

Exclusion:

Vehicles are excluded at the following times:
None
The following entire days are excluded:
Monday, November 11, 2024

Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	6 - 99 mph.
Direction:	North, South (bound), P = North
Separation:	Headway > 0 sec, Span 0 - 328.084 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 27781 / 33040 (84.08%)

Speed Statistics

SpeedStat-60
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(NS) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 27781
Posted speed limit = 40 mph, Exceeding = 26185 (94.26%), Mean Exceeding = 47.20 mph
Maximum = 86.6 mph, **Minimum** = 10.7 mph, **Mean** = 46.6 mph
85% Speed = 51.0 mph, **95% Speed** = 54.1 mph, **Median** = 46.3 mph
10 mph Pace = 41 - 51, **Number in Pace** = 21106 (75.97%)
Variance = 21.76, **Standard Deviation** = 4.66 mph

Speed Bins (Partial days)

Speed	Bin		Below		Above		Energy	vMult	n * vMult
0 - 5	0	0.0%	0	0.0%	27781	100.0%	0.00	0.00	0.00
5 - 10	0	0.0%	0	0.0%	27781	100.0%	0.00	0.00	0.00
10 - 15	6	0.0%	6	0.0%	27775	100.0%	0.00	0.00	0.00
15 - 20	6	0.0%	12	0.0%	27769	100.0%	0.00	0.00	0.00
20 - 25	31	0.1%	43	0.2%	27738	99.8%	0.00	0.00	0.00
25 - 30	44	0.2%	87	0.3%	27694	99.7%	0.00	0.00	0.00
30 - 35	116	0.4%	203	0.7%	27578	99.3%	0.00	0.00	0.00
35 - 40	1393	5.0%	1596	5.7%	26185	94.3%	0.00	0.00	0.00
40 - 45	8425	30.3%	10021	36.1%	17760	63.9%	0.00	0.00	0.00
45 - 50	11930	42.9%	21951	79.0%	5830	21.0%	0.00	0.00	0.00
50 - 55	4737	17.1%	26688	96.1%	1093	3.9%	0.00	0.00	0.00
55 - 60	930	3.3%	27618	99.4%	163	0.6%	0.00	0.00	0.00
60 - 65	136	0.5%	27754	99.9%	27	0.1%	0.00	0.00	0.00
65 - 70	19	0.1%	27773	100.0%	8	0.0%	0.00	0.00	0.00
70 - 75	6	0.0%	27779	100.0%	2	0.0%	0.00	0.00	0.00
75 - 80	0	0.0%	27779	100.0%	2	0.0%	0.00	0.00	0.00
80 - 85	1	0.0%	27780	100.0%	1	0.0%	0.00	0.00	0.00
85 - 90	1	0.0%	27781	100.0%	0	0.0%	0.00	0.00	0.00
90 - 95	0	0.0%	27781	100.0%	0	0.0%	0.00	0.00	0.00
95 - 100	0	0.0%	27781	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit	Below		Above	
0	40 (PSL)	1596	5.7%	26185	94.3%

MetroCount Traffic Executive
Speed Statistics

SpeedStat-61 -- English (ENU)

Datasets:

Site:	**[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute:	UMSc Distribution Center
Direction:	7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration:	15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:	
File:	124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier:	FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)

Exclusion:

Vehicles are excluded at the following times:
None
The following entire days are excluded:
Monday, November 11, 2024

Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	6 - 99 mph.
Direction:	North (bound), P = North
Separation:	Headway > 0 sec, Span 0 - 328.084 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 13841 / 33040 (41.89%)

Speed Statistics

SpeedStat-61
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(N) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 13841
Posted speed limit = 40 mph, Exceeding = 13256 (95.77%), Mean Exceeding = 47.24 mph
Maximum = 86.6 mph, **Minimum** = 12.0 mph, **Mean** = 46.8 mph
85% Speed = 50.8 mph, **95% Speed** = 53.7 mph, **Median** = 46.5 mph
10 mph Pace = 42 - 52, **Number in Pace** = 10971 (79.26%)
Variance = 18.83, **Standard Deviation** = 4.34 mph

Speed Bins (Partial days)

Speed	Bin		Below		Above		Energy	vMult	n * vMult
0 - **5**	0	0.0%	0	0.0%	13841	100.0%	0.00	0.00	0.00
5 - **10**	0	0.0%	0	0.0%	13841	100.0%	0.00	0.00	0.00
10 - **15**	1	0.0%	1	0.0%	13840	100.0%	0.00	0.00	0.00
15 - **20**	4	0.0%	5	0.0%	13836	100.0%	0.00	0.00	0.00
20 - **25**	13	0.1%	18	0.1%	13823	99.9%	0.00	0.00	0.00
25 - **30**	21	0.2%	39	0.3%	13802	99.7%	0.00	0.00	0.00
30 - **35**	45	0.3%	84	0.6%	13757	99.4%	0.00	0.00	0.00
35 - **40**	501	3.6%	585	4.2%	13256	95.8%	0.00	0.00	0.00
40 - **45**	3954	28.6%	4539	32.8%	9302	67.2%	0.00	0.00	0.00
45 - **50**	6455	46.6%	10994	79.4%	2847	20.6%	0.00	0.00	0.00
50 - **55**	2396	17.3%	13390	96.7%	451	3.3%	0.00	0.00	0.00
55 - **60**	400	2.9%	13790	99.6%	51	0.4%	0.00	0.00	0.00
60 - **65**	41	0.3%	13831	99.9%	10	0.1%	0.00	0.00	0.00
65 - **70**	7	0.1%	13838	100.0%	3	0.0%	0.00	0.00	0.00
70 - **75**	2	0.0%	13840	100.0%	1	0.0%	0.00	0.00	0.00
75 - **80**	0	0.0%	13840	100.0%	1	0.0%	0.00	0.00	0.00
80 - **85**	0	0.0%	13840	100.0%	1	0.0%	0.00	0.00	0.00
85 - **90**	1	0.0%	13841	100.0%	0	0.0%	0.00	0.00	0.00
90 - **95**	0	0.0%	13841	100.0%	0	0.0%	0.00	0.00	0.00
95 - **100**	0	0.0%	13841	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit	Below		Above	
0	40 (PSL)	585	4.2%	13256	95.8%

MetroCount Traffic Executive
Speed Statistics

SpeedStat-62 -- English (ENU)

Datasets:

Site: **[124-158] NY Route 22, approximately 1,300-feet north of Salmon River Road**
Attribute: UMSc Distribution Center
Direction: 7 - North bound A>B, South bound B>A. **Lane:** 2
Survey Duration: 15:48 Wednesday, November 6, 2024 => 10:36 Wednesday, November 13, 2024,
Zone:
File: 124-158 0 2024-11-13 1036.EC2 (Plus)
Identifier: FJ79ENC0 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm: Factory default axle (v4.06)
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (6.75)** (With Exclusions)
Exclusion:
Vehicles are excluded at the following times:
None
The following entire days are excluded:
Monday, November 11, 2024

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 6 - 99 mph.
Direction: South (bound), P = North
Separation: Headway > 0 sec, Span 0 - 328.084 ft
Name: Default Profile
Scheme: Vehicle classification (Scheme F3)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)
In profile: Vehicles = 13940 / 33040 (42.19%)

Speed Statistics

SpeedStat-62
Site: 124-158.2.3NS
Description: **NY Route 22, approximately 1,300-feet north of Salmon River Road**
Filter time: **16:00 Wednesday, November 6, 2024 => 10:00 Wednesday, November 13, 2024 (With Exclusions)**
Scheme: Vehicle classification (Scheme F3)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 13) Dir(S) Sp(6,99) Headway(>0) Span(0 - 328.084)

Vehicles = 13940
Posted speed limit = 40 mph, Exceeding = 12929 (92.75%), Mean Exceeding = 47.16 mph
Maximum = 83.2 mph, **Minimum** = 10.7 mph, **Mean** = 46.4 mph
85% Speed = 51.2 mph, **95% Speed** = 54.6 mph, **Median** = 46.1 mph
10 mph Pace = 41 - 51, **Number in Pace** = 10142 (72.75%)
Variance = 24.61, **Standard Deviation** = 4.96 mph

Speed Bins (Partial days)

Speed	Bin		Below		Above		Energy	vMult	n * vMult
0 - **5**	0	0.0%	0	0.0%	13940	100.0%	0.00	0.00	0.00
5 - **10**	0	0.0%	0	0.0%	13940	100.0%	0.00	0.00	0.00
10 - **15**	5	0.0%	5	0.0%	13935	100.0%	0.00	0.00	0.00
15 - **20**	2	0.0%	7	0.1%	13933	99.9%	0.00	0.00	0.00
20 - **25**	18	0.1%	25	0.2%	13915	99.8%	0.00	0.00	0.00
25 - **30**	23	0.2%	48	0.3%	13892	99.7%	0.00	0.00	0.00
30 - **35**	71	0.5%	119	0.9%	13821	99.1%	0.00	0.00	0.00
35 - **40**	892	6.4%	1011	7.3%	12929	92.7%	0.00	0.00	0.00
40 - **45**	4471	32.1%	5482	39.3%	8458	60.7%	0.00	0.00	0.00
45 - **50**	5475	39.3%	10957	78.6%	2983	21.4%	0.00	0.00	0.00
50 - **55**	2341	16.8%	13298	95.4%	642	4.6%	0.00	0.00	0.00
55 - **60**	530	3.8%	13828	99.2%	112	0.8%	0.00	0.00	0.00
60 - **65**	95	0.7%	13923	99.9%	17	0.1%	0.00	0.00	0.00
65 - **70**	12	0.1%	13935	100.0%	5	0.0%	0.00	0.00	0.00
70 - **75**	4	0.0%	13939	100.0%	1	0.0%	0.00	0.00	0.00
75 - **80**	0	0.0%	13939	100.0%	1	0.0%	0.00	0.00	0.00
80 - **85**	1	0.0%	13940	100.0%	0	0.0%	0.00	0.00	0.00
85 - **90**	0	0.0%	13940	100.0%	0	0.0%	0.00	0.00	0.00
90 - **95**	0	0.0%	13940	100.0%	0	0.0%	0.00	0.00	0.00
95 - **100**	0	0.0%	13940	100.0%	0	0.0%	0.00	0.00	0.00

Total Speed Rating = 0.00
Total Moving Energy (Estimated) = 0.00

Speed limit fields (Partial days)

	Limit	Below		Above	
0	40 (PSL)	1011	7.3%	12929	92.7%

124-128: NY-22 & Salmon River Road PM - TMC

Wed Nov 6, 2024
Full Length (4 PM-5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244498, Location: 44.638789, -73.487599, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

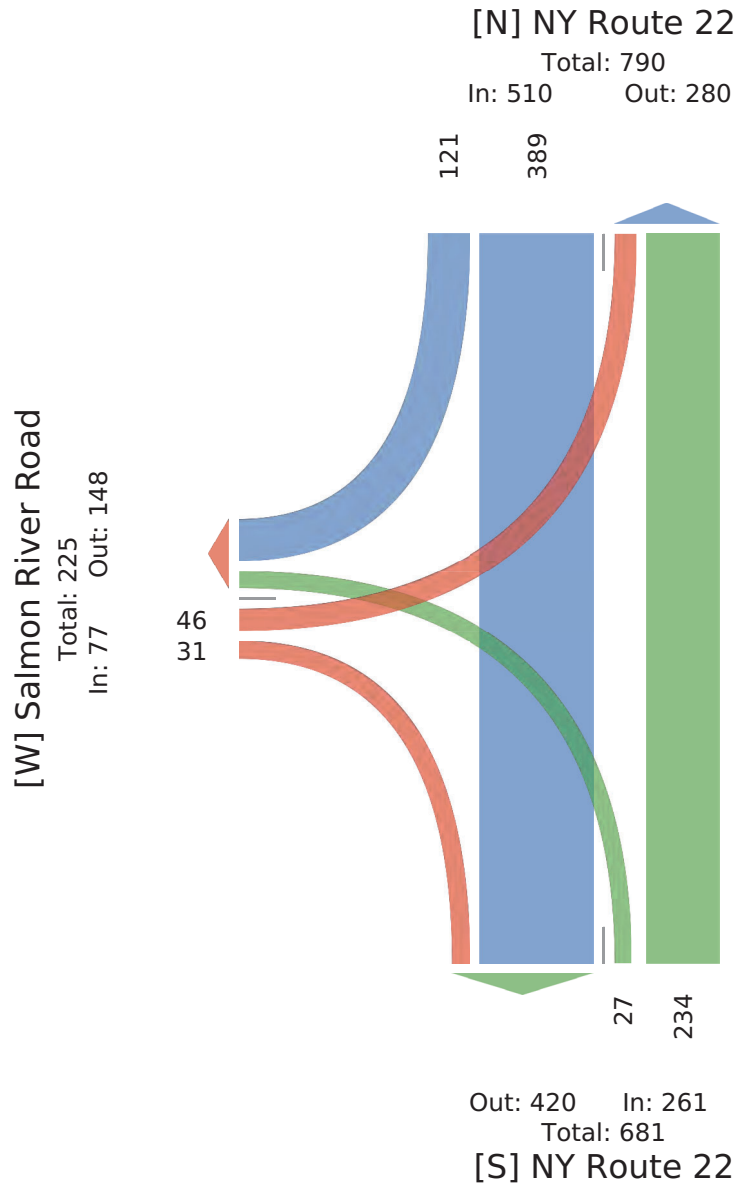
Leg	Salmon River Road					NY Route 22					NY Route 22					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2024-11-06 4:00PM	8	7	0	**15**	0	3	33	0	**36**	0	79	21	0	**100**	0	**151**
4:15PM	9	5	0	**14**	0	3	34	0	**37**	0	66	16	0	**82**	0	**133**
4:30PM	8	2	0	**10**	0	6	47	0	**53**	0	72	23	0	**95**	0	**158**
4:45PM	5	5	0	**10**	0	5	41	0	**46**	0	49	17	0	**66**	0	**122**
Hourly Total	30	19	0	**49**	0	17	155	0	**172**	0	266	77	0	**343**	0	**564**
5:00PM	6	4	0	**10**	0	7	24	0	**31**	0	50	10	0	**60**	0	**101**
5:15PM	4	7	0	**11**	0	1	29	0	**30**	0	41	21	0	**62**	0	**103**
5:30PM	6	1	0	**7**	0	2	26	0	**28**	0	32	13	0	**45**	0	**80**
Hourly Total	16	12	0	**28**	0	10	79	0	**89**	0	123	44	0	**167**	0	**284**
Total	46	31	0	**77**	0	27	234	0	**261**	0	389	121	0	**510**	0	**848**
% Approach	59.7%	40.3%	0%	**-**	-	10.3%	89.7%	0%	**-**	-	76.3%	23.7%	0%	**-**	-	-
% Total	5.4%	3.7%	0%	**9.1%**	-	3.2%	27.6%	0%	**30.8%**	-	45.9%	14.3%	0%	**60.1%**	-	-
Lights	46	31	0	**77**	-	27	203	0	**230**	-	385	121	0	**506**	-	813
% Lights	100%	100%	0%	**100%**	-	100%	86.8%	0%	**88.1%**	-	99.0%	100%	0%	**99.2%**	-	95.9%
Articulated Trucks and Single-Unit Trucks	0	0	0	**0**	-	0	30	0	**30**	-	3	0	0	**3**	-	33
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	12.8%	0%	**11.5%**	-	0.8%	0%	0%	**0.6%**	-	3.9%
Buses	0	0	0	**0**	-	0	1	0	**1**	-	1	0	0	**1**	-	2
% Buses	0%	0%	0%	**0%**	-	0%	0.4%	0%	**0.4%**	-	0.3%	0%	0%	**0.2%**	-	0.2%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

124-128: NY-22 & Salmon River Road PM - TMC

Wed Nov 6, 2024
Full Length (4 PM-5:45 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244498, Location: 44.638789, -73.487599, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



124-128: NY-22 & Salmon River Road PM - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244498, Location: 44.638789, -73.487599, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

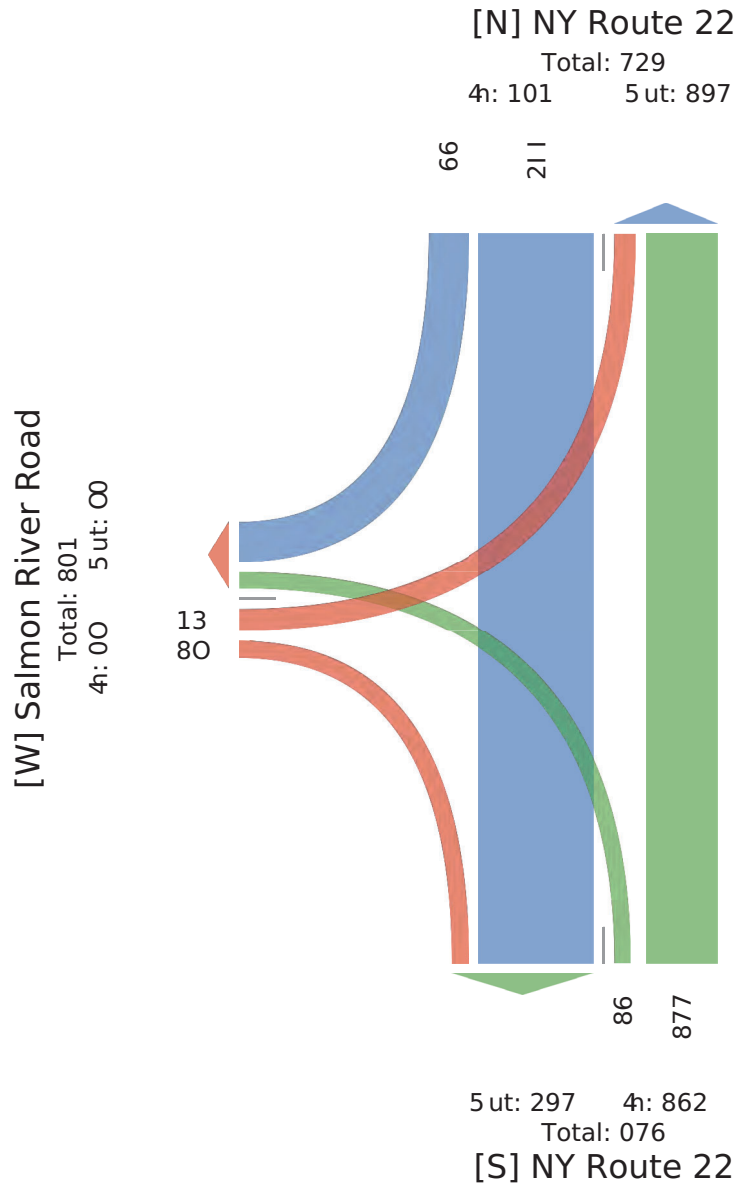
Leg	Salmon River Road					NY Route 22					NY Route 22					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2024-11-06 4:00PM	8	7	0	**15**	0	3	33	0	**36**	0	79	21	0	**100**	0	**151**
4:15PM	9	5	0	**14**	0	3	34	0	**37**	0	66	16	0	**82**	0	**133**
4:30PM	8	2	0	**10**	0	6	47	0	**53**	0	72	23	0	**95**	0	**158**
4:45PM	5	5	0	**10**	0	5	41	0	**46**	0	49	17	0	**66**	0	**122**
Total	30	19	0	**49**	0	17	155	0	**172**	0	266	77	0	**343**	0	**564**
% Approach	61.2%	38.8%	0%	**-**	-	9.9%	90.1%	0%	**-**	-	77.6%	22.4%	0%	**-**	-	-
% Total	5.3%	3.4%	0%	**8.7%**	-	3.0%	27.5%	0%	**30.5%**	-	47.2%	13.7%	0%	**60.8%**	-	-
PHF	0.833	0.679	-	**0.817**	-	0.708	0.824	-	**0.811**	-	0.842	0.837	-	**0.858**	-	0.892
Lights	30	19	0	**49**	-	17	131	0	**148**	-	263	77	0	**340**	-	537
% Lights	100%	100%	0%	**100%**	-	100%	84.5%	0%	**86.0%**	-	98.9%	100%	0%	**99.1%**	-	95.2%
Articulated Trucks and Single-Unit Trucks	0	0	0	**0**	-	0	23	0	**23**	-	3	0	0	**3**	-	26
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	**0%**	-	0%	14.8%	0%	**13.4%**	-	1.1%	0%	0%	**0.9%**	-	4.6%
Buses	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0.6%	0%	**0.6%**	-	0%	0%	0%	**0%**	-	0.2%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

124-128: NY-22 & Salmon River Road PM - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244498, Location: 44.638789, -73.487599, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



124-158: Irish Settlement Rd & Pleasant Ridg... - TMC

Wed Nov 6, 2024

Fdul Lngte h6 (P M (P 5

(uu: u) AALAhl CgetA. (atCsdu) tLi WadsrA) ni cCnguLMTnCWadsrA, kdALA, SLi LAtaCJnA, kCsUsuLAon Bo) i , kCsUsuLAon : aoAAy) ur 5

(uuP ovLRLntA

wmI D244419, l os) tConI 4489. 4DD , M384 - 9D94, cCL : oi LI D24MD 1

Creighton Manning

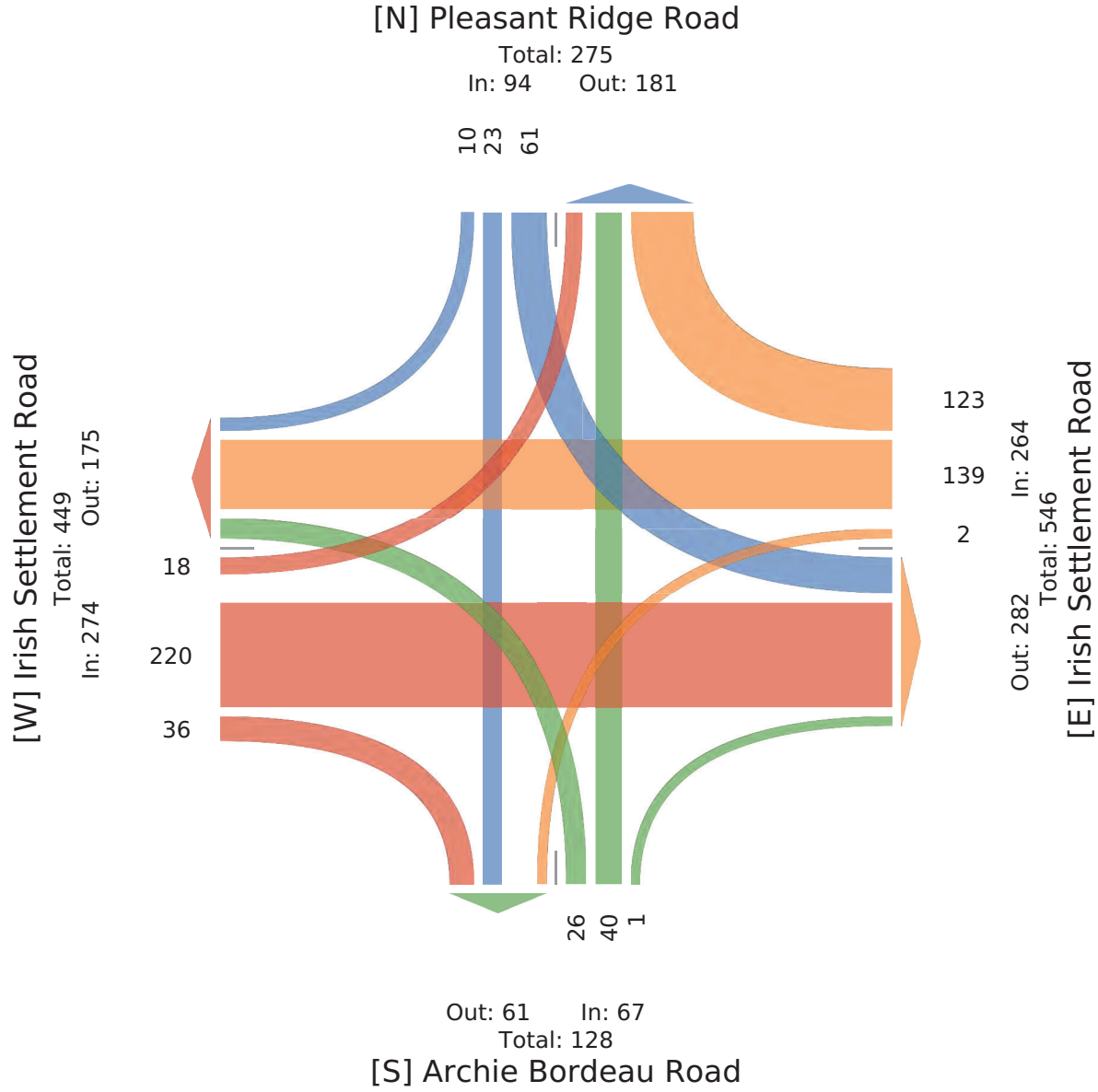
SaovCLi 7UI : aLCgeton P) nnCng b ngCnLLaCng

2 E CnnLaA: CasuL, (u7) nU, NY, D220. , Tc

l Ig mCaLstCon	waCAe c LttuLR Lnt Bo) i b) At7odni						waCAe c LttuLR Lnt Bo) i E LA7odni						(aseCL k oai L) d Bo) i Noate7odni						SuL) A) nt BCgL Bo) i codte7odni						
WCRL	l	W	B	T	(pp	SLi *	l	W	B	T	(pp	SLi *	l	W	B	T	(pp	SLi *	l	W	B	T	(pp	SLi *	wnt
2024MDDM6 6I00(P	D	31	6	0	**49**	0	0	D.	D2	0	**26**	0	0	4	0	0	**4**	0	9	3	2	0	**DD**	0	**11**
6ID. (P	.	26	-	0	**4D**	0	0	D9	D1	0	**34**	0	3	9	0	0	**-**	0	9	2	0	0	**1**	0	**-2**
6I30(P	3	30	.	0	**31**	0	0	20	D6	0	**36**	0	D	.	0	0	**9**	0	9	3	0	0	**-**	0	**-0**
6I4. (P	2	3.	3	0	**40**	0	0	D.	29	0	**4D**	0	6	D3	0	0	**20**	0	-	2	2	0	**D3**	0	**DD4**
HodauUWot) u	DD	D30	24	0	**D9.**	0	0	99	63	0	**D3-**	0	DD	21	0	0	**3-**	0	26	D0	4	0	**4D**	0	**314**
1I00(P	D	22	D	0	**24**	0	D	23	D4	0	**31**	0	6	2	D	0	**D0**	0	D9	3	D	0	**20**	0	**-2**
1ID. (P	3	D-	3	0	**2.**	0	0	D-	D0	0	**2-**	0	2	6	0	0	**-**	0	9	.	0	0	**DD**	0	**64**
1I30(P	2	22	4	0	**21**	0	D	D1	D2	0	**3D**	0	4	2	0	0	**9**	0	9	.	D	0	**D2**	0	**66**
1I4. (P	D	26	4	0	**32**	0	0	D3	D4	0	**26**	0	2	D	0	0	**3**	0	9	0	4	0	**D0**	0	**62**
HodauUWot) u	6	- 0	D2	0	**D0-**	0	2	63	. 0	0	**D2.**	0	D.	D2	D	0	**21**	0	34	D3	9	0	**. 3**	0	**3D.**
- I00(P	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
HodauUWot) u	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Wot) u	D1	220	39	0	**264**	0	2	D3-	D23	0	**294**	0	29	40	D	0	**96**	0	9D	23	D0	0	**- 4**	0	**9- -**
% (ppao) se	989%	1083%	D38D%	0%	**M**	M	081%	. 286%	4989%	0%	**M**	M	3181%	. - 86%	D8 %	0%	**M**	M	948 %	248 %	D089%	0%	**M**	M	M
% Wot) u	289%	3D8 %	. 82%	0%	**3- 82%**	M	083%	D- 8 %	D689%	0%	**3681%**	M	386%	. 86%	08D%	0%	**- 89%**	M	186%	383%	D84%	0%	**D384%**	M	M
l CgetA	D6	209	34	0	**2. 6**	M	2	D29	- 3	0	**22D**	M	23	40	D	0	**94**	M	44	20	-	0	**63**	M	9D.
% l CgetA	- 484%	- 389%	- 484%	0%	**- 381%**	M	D00%	- 089%	6. 89%	0%	**1386%**	M	118 %	D00%	D00%	0%	**- . 8 %**	M	628D%	1680%	- 080%	0%	**6686%**	M	1180%
(atCsdu) tLi WadsrA) ni cCnguLMTnCWadsrA	D	D0	2	0	**D3**	M	0	D2	21	0	**40**	M	3	0	0	0	**3**	M	D6	2	0	0	**D-**	M	6.
% (atCsdu) tLi WadsrA) ni cCnguLMTnCWadsrA	. 89%	48 %	. 89%	0%	**486%**	M	0%	189%	2281%	0%	**D. 82%**	M	DD8 %	0%	0%	0%	**48 %**	M	268 %	186%	0%	0%	**2082%**	M	D086%
kdALA	0	4	0	0	**4**	M	0	D	2	0	**3**	M	0	0	0	0	**0**	M	0	D	D	0	**2**	M	-
% kdALA	0%	D81%	0%	0%	**D8 %**	M	0%	086%	D89%	0%	**D8D%**	M	0%	0%	0%	0%	**0%**	M	0%	483%	D080%	0%	**28D%**	M	D83%
kCsUsuLAon Bo) i	0	0	0	0	**0**	M	0	0	0	0	**0**	M	0	0	0	0	**0**	M	0	0	0	0	**0**	M	0
% kCsUsuLAon Bo) i	0%	0%	0%	0%	**0%**	M	0%	0%	0%	0%	**0%**	M	0%	0%	0%	0%	**0%**	M	0%	0%	0%	0%	**0%**	M	0%
SLi LAtaCJnA	M	M	M	M	M	0	M	M	M	M	M	0	M	M	M	M	M	0	M	M	M	M	M	0	
% SLi LAtaCJnA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
kCsUsuLAon : aoAAy) ur	M	M	M	M	M	0	M	M	M	M	M	0	M	M	M	M	M	0	M	M	M	M	M	0	
% kCsUsuLAon : aoAAy) ur	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

*SLi LAtaCJnA) ni kCsUsuLAon : aoAAy) ur 8l I l Lft, BI BCget, WI Wead, T I T Wdan

SaovGLi 7UI : aLGgeton P)nnGng bngGnLLaGng
2 E GnnLaA: GasuL, (w7)nU, NY, D220. , Tc



124-158: Irish Settlement Rd & Pleasant Ridg... - TMC

Wed Nov 6, 2024

PM ak(- 56)Or PM l H)Or PMul AvkC(ssak(- LodC

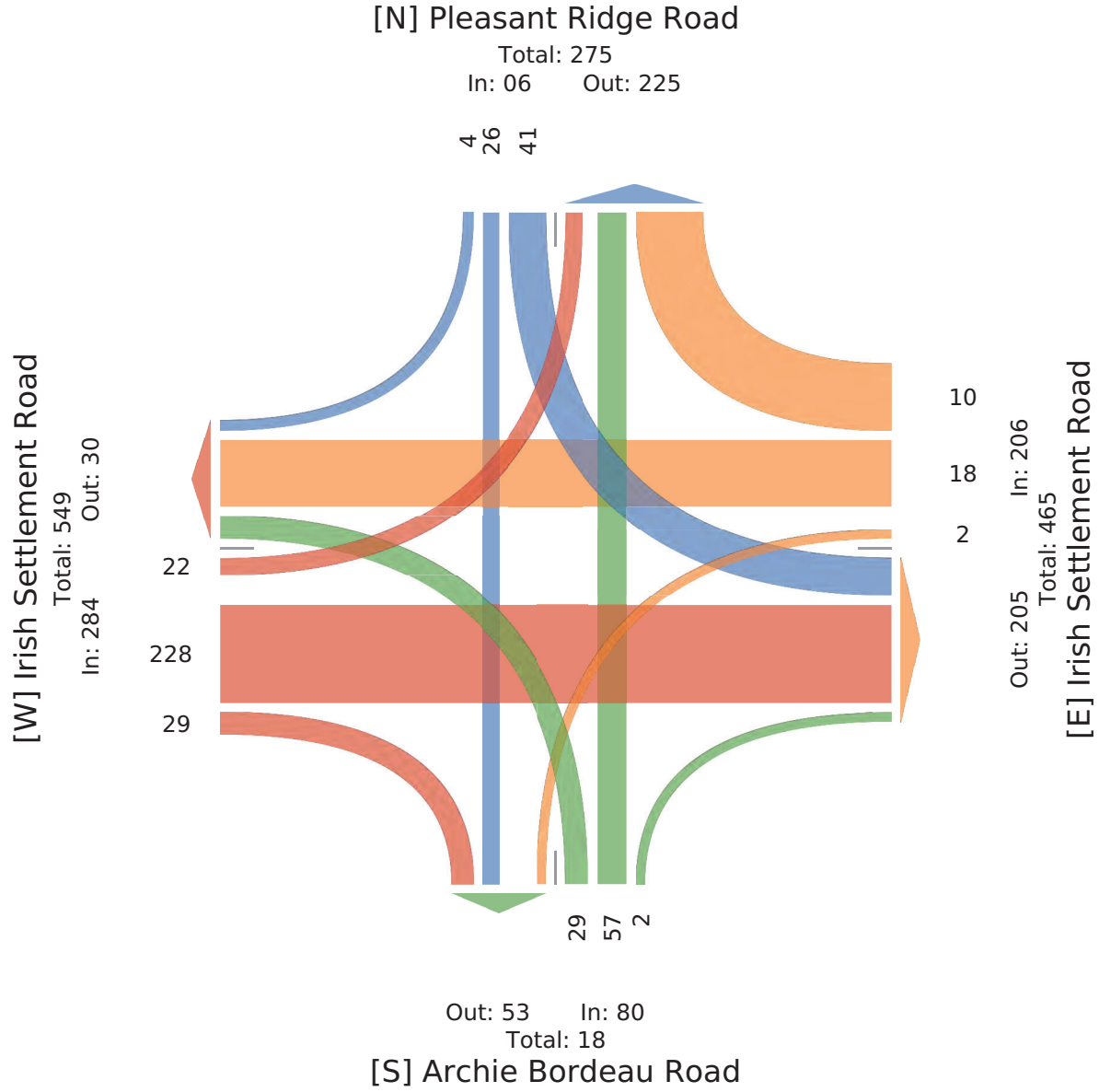
Pssis(ggkg5htceTg, PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g, Rdgkg, akSkgTC(Ug, Rtnwnskg oUmo(S, Rtnwnskg oUi CoggI (s-u Pss MovkDkUTg

:1) C2444H9, hon(TroU) 4489r 4COr, l6. 8439O94, BtTk i oSk) C24lOr H

aCovtSkS 7w)i CktceTbUM(UUtUc bUctUkkCtUc
2 E tUUkCgi tCnsk, Ps7(Uw, NY, C2220r, y B

hkc 1 tCknTroU	:Cige BkTSkDkUTmo(S b(gT7odUS						:Cige BkTSkDkUTmo(S E kgT7odUS						PCnetk RoCSk(dmo(S NoCE7odUS						ask(gUTmtSckmo(S BodTe7odUS						
WtDk	h	W	m	y	**Ppp**	akS*	h	W	m	y	**Ppp**	akS*	h	W	m	y	**Ppp**	akS*	h	W	m	y	**Ppp**	akS*	**:UT**
2024lCC106 6)Or PM	r	26	3	0	**4O**	0	0	O9	CH	0	**. 4**	0	.	9	0	0	**3**	0	9	2	0	0	**H**	0	**32**
6). 0PM	.	. 0	r	0	**. H**	0	0	20	O6	0	**. 6**	0	O	r	0	0	**9**	0	9	.	0	0	**3**	0	**30**
6)4rPM	2	. r	.	0	**40**	0	0	Or	29	0	**4O**	0	6	O.	0	0	**20**	0	3	2	2	0	**O.**	0	**CO4**
H)00PM	O	22	O	0	**24**	0	O	2.	O4	0	**. H**	0	6	2	O	0	**C0**	0	O9	.	O	0	**20**	0	**32**
WbT(s	CO	CO4	CH	0	**O4.**	0	O	64	6r	0	**Or 0**	0	CH	29	O	0	**4r**	0	. 6	C0	.	0	**r 0**	0	**. HH**
% PppCo(ne	686%	636%	C289%	0%	**l**	l	086%	438 %	r 080%	0%	**l**	l	4080%	r 68H%	282%	0%	**l**	l	6480%	2080%	980%	0%	**l**	l	l
% WbT(s	28H%	2384%	489%	0%	**. 9880%**	l	08 %	C380%	C388 %	0%	**. H66%**	l	489%	986%	08 %	0%	**CC89%**	l	38r %	289%	08H%	0%	**C288%**	l	l
aLF	08r 0	08HO4	08r 00	l	**08H62**	l	082r 0	08H04	0862O	l	**0880r**	l	0894.	08r 00	082r 0	l	**08r 9.**	l	08r 6H	08H .	08 6r	l	**0892r**	l	08H rO
htceTg	CO	C0H	O6	0	**O. 9**	l	O	93	92	0	**O. 2**	l	Or	29	O	0	**42**	l	2H	H	.	0	**. 3**	l	. 43
% htceTg	C00%	3486%	3484%	0%	**3r 8O%**	l	C00%	3. 82%	H286%	0%	**HH80%**	l	H 8 %	C00%	C00%	0%	**3. 8 %**	l	6r 86%	H080%	C00%	0%	**6H80%**	l	H38%
PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g	0	9	O	0	**6**	l	0	r	O2	0	**O6**	l	.	0	0	0	**.**	l	3	2	0	0	**CO**	l	. H
% PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g	0%	r 8 %	r 89%	0%	**488%**	l	0%	98H%	C980%	0%	**CO8 %**	l	C986%	0%	0%	0%	**986%**	l	248 %	2080%	0%	0%	**2280%**	l	38H%
Rdgkg	0	0	0	0	**0**	l	0	0	O	0	**O**	l	0	0	0	0	**0**	l	0	0	0	0	**0**	l	O
% Rdgkg	0%	0%	0%	0%	**0%**	l	0%	0%	C8 %	0%	**086%**	l	0%	0%	0%	0%	**0%**	l	0%	0%	0%	0%	**0%**	l	08 %
Rtnwnskg oUmo(S	0	0	0	0	**0**	l	0	0	0	0	**0**	l	0	0	0	0	**0**	l	0	0	0	0	**0**	l	0
% Rtnwnskg oUmo(S	0%	0%	0%	0%	**0%**	l	0%	0%	0%	0%	**0%**	l	0%	0%	0%	0%	**0%**	l	0%	0%	0%	0%	**0%**	l	0%
akSkgTC(Ug	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	
% akSkgTC(Ug	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l
Rtnwnskg oUi CoggI (s-	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	
% Rtnwnskg oUi CoggI (s-	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l

*akSkgTC(Ug(US Rtnwnskg oUi CoggI (s- 8h) hkfT, m) mtceT, WJ WeCd, y) y lWdCU


[N] Pleasant Ridge Road
Total: 275
In: 06
Out: 225
4
26
41
[W] Irish Settlement Road
Total: 549
Out: 30
In: 284
22
228
29
10
18
2
In: 206
Total: 465
Out: 205
[E] Irish Settlement Road
29
57
2
Out: 53
In: 80
Total: 18
[S] Archie Bordeau Road

124-158: Irish Settlement Rd & Pleasant Ridg... - TMC

Wed Nov 6, 2024

Full Length (4 PM-6 PM5

: ll) lACCeC(LaghtC, : staiulAted r suicCAnd Tangle-k nat r suicC, SuCeC, PedeCtsaAnC, SaiUileCon BoAd, SaiUileCon) soCCy Alc5

: ll MoveRentC

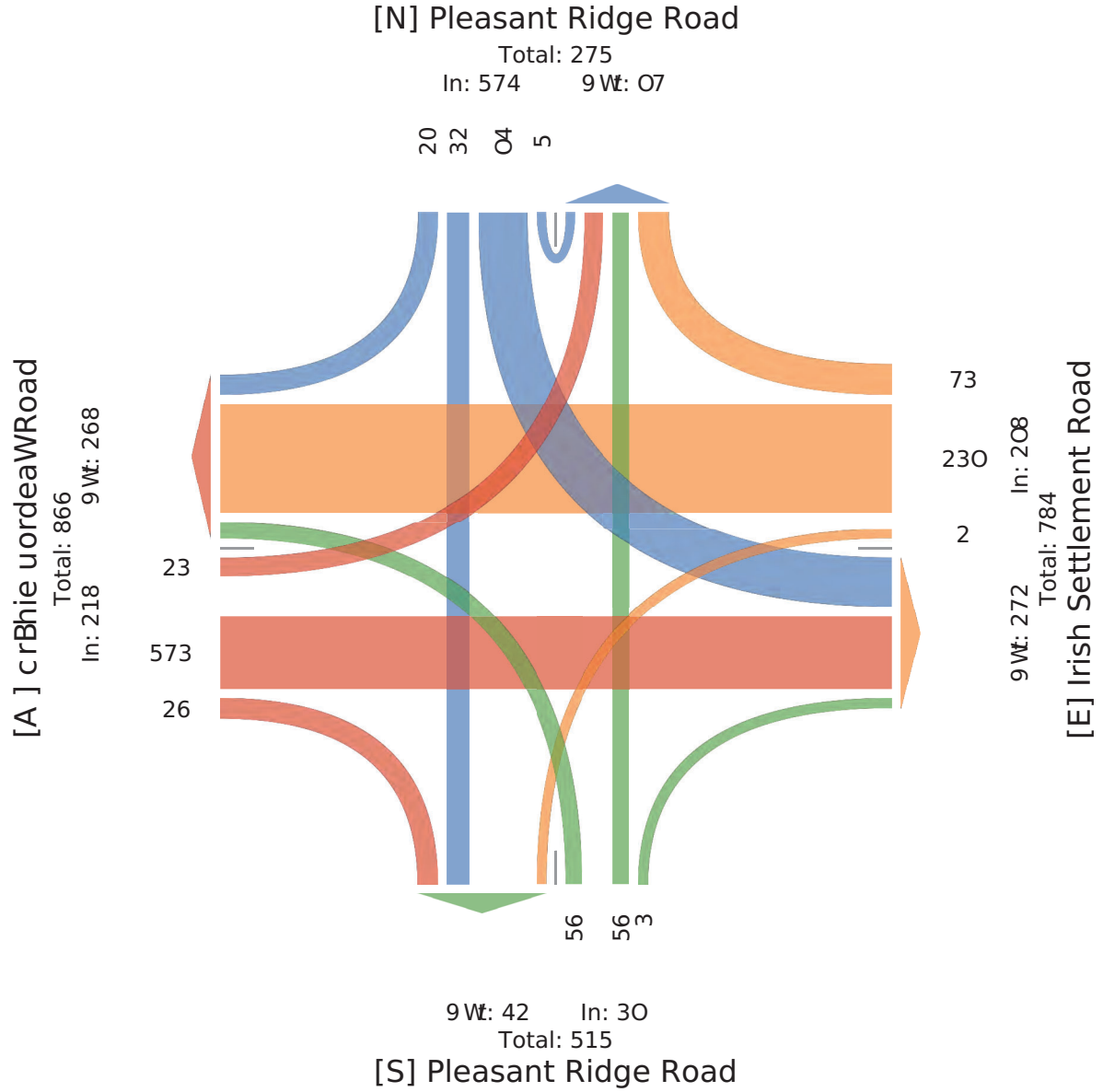
wnI D24441D, Loi AtaonI 449684DD8, -. 39476D64, Tate) odeI D24-D81

Psovaded bUI) seaghton MAnnang Enganeesang
2 WannesC) asile, : lbAnU, NY, D2208, k T

Leg maseitaon	: sihae SosdeAu BoAd EACtbound						wacCh TettleRent BoAd WeCtbound						PleACAnt Badge BoAd Nosthbound						PleACAnt Badge BoAd Touthbound						
raRe	L	r	B	k	: pp	Ped*	L	r	B	k	: pp	Ped*	L	r	B	k	: pp	Ped*	L	r	B	k	: pp	Ped*	wnt
2024-DD-06 4I00PM	D	20	7	0	**30**	0	0	3.	6	0	**43**	0	4	3	0	0	**.**	0	D8	3	2	D	**2D**	0	**DDD**
4ID8PM	3	22	2	0	**2.**	0	D	3.	D8	0	**8D**	0	D	2	0	0	**3**	0	7	8	.	0	**2D**	0	**D02**
4I30PM	4	D4	2	0	**20**	0	D	47	D0	0	**60**	0	6	2	0	0	**1**	0	31	1	1	0	**84**	0	**D42**
4I48PM	6	24	D	0	**3D**	0	0	24	3	0	**2.**	0	D	2	0	0	**3**	0	D8	4	3	0	**22**	0	**13**
HouslUr otAl	D4	10	D4	0	**D01**	0	2	D4.	32	0	**D1D**	0	D2	7	0	0	**2D**	0	. .	20	20	D	**DD1**	0	**421**
8I00PM	4	2D	3	0	**21**	0	0	27	.	0	**36**	0	3	0	0	0	**3**	0	7	4	4	0	**D**	0	**14**
8ID8PM	D	D7	4	0	**24**	0	0	2D	.	0	**21**	0	2	2	0	0	**4**	0	3	2	D	0	**6**	0	**62**
8I30PM	3	D4	.	0	**24**	0	0	20	4	0	**24**	0	0	8	D	0	**6**	0	4	3	2	0	**7**	0	**63**
8I48PM	D	D7	0	0	**20**	0	0	22	3	0	**28**	0	D	2	2	0	**8**	0	3	3	0	0	**6**	0	**86**
HouslUr otAl	7	. 3	D4	0	**76**	0	0	72	2D	0	**DD8**	0	6	7	3	0	**D1**	0	D7	D2	.	0	**31**	0	**268**
6I00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
HouslUr otAl	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
r otAl	23	D83	21	0	**204**	0	2	237	83	0	**274**	0	D1	D1	3	0	**37**	0	76	32	2.	D	**D86**	0	**673**
% : ppsoAih	DD8%	. 89%	D89 %	0%	**-**	-	09 %	1D8%	D19%	0%	**-**	-	462%	462%	. 9 %	0%	**-**	-	6D8%	208%	D. 8%	06%	**-**	-	-
% r otAl	38%	229D%	49%	0%	**2794%**	-	08%	348%	. 6%	0%	**4294%**	-	26%	26%	04%	0%	**86%**	-	D87%	46%	37%	09D%	**2298%**	-	-
LaghtC	22	D82	21	0	**202**	-	2	238	41	0	**218**	-	D1	D1	3	0	**37**	-	72	3D	26	D	**D80**	-	6. 6
% LaghtC	789 %	779%	D00%	0%	**7790%**	-	D00%	719%	706%	0%	**7697%**	-	D00%	D00%	D00%	0%	**D00%**	-	789%	769%	769%	D00%	**7692%**	-	7. 8%
: staiulAted r suicCAnd Tangle-k nat r suicC	0	D	0	0	**D**	-	0	4	8	0	**7**	-	0	0	0	0	**0**	-	4	0	0	0	**4**	-	D4
% : staiulAted r suicCAnd Tangle-k nat r suicC	0%	09 %	0%	0%	**08%**	-	0%	D9 %	79%	0%	**39D%**	-	0%	0%	0%	0%	**0%**	-	42%	0%	0%	0%	**26%**	-	290%
SuCeC	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	D	0	0	**D**	-	D
% SuCeC	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	39D%	0%	0%	**06%**	-	09D%
SaiUileCon BoAd	D	0	0	0	**D**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	D	0	**D**	-	2
% SaiUileCon BoAd	48%	0%	0%	0%	**08%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	39 %	0%	**06%**	-	08%
PedeCtsaAnC	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% PedeCtsaAnC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SaiUileCon) soCCy Alc	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% SaiUileCon) soCCy Alc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*PedeCtsaAnCAnd SaiUileCon) soCCy Alc9LI Left, BI Baght, r I r hsu, k I k -r usn

Psovaded bUI) seaghton MAnnang Enganeesang
2 WannesC) asile, : lbAnU, NY, D2208, k T



124-158: Irish Settlement Rd & Pleasant Ridg... - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244491, Location: 448654115, -. 38476164, Site Code: 124-159

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

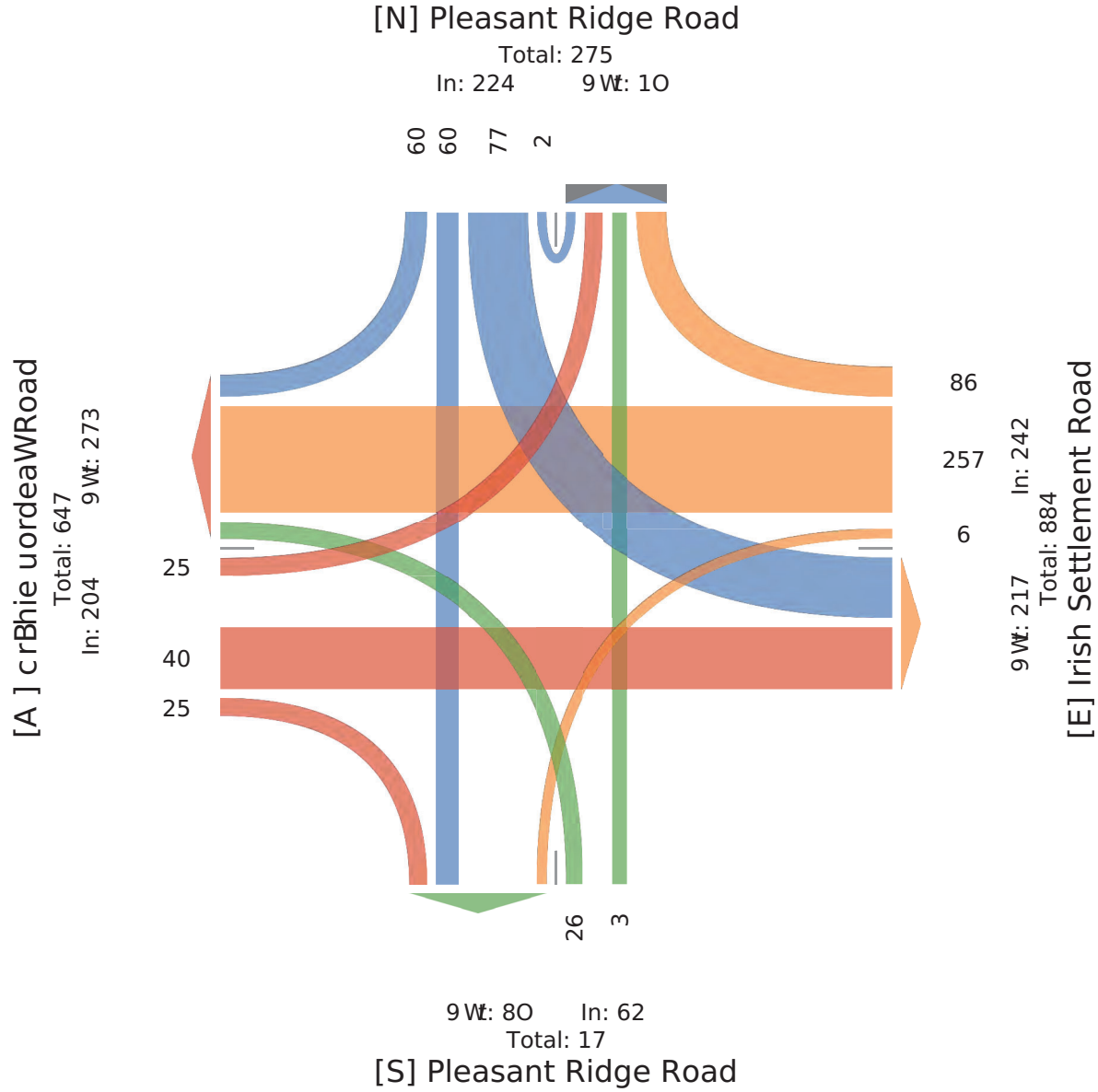
Leg Direction	Archie Bordeau Road Eastbound						Irish Settlement Road Westbound						Pleasant Ridge Road Northbound						Pleasant Ridge Road Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-11-06 4:00PM	1	20	7	0	**30**	0	0	3.	6	0	**43**	0	4	3	0	0	**.**	0	15	3	2	1	**21**	0	**101**
4:15PM	3	22	2	0	**2.**	0	1	3.	13	0	**51**	0	1	2	0	0	**3**	0	7	5	.	0	**21**	0	**102**
4:30PM	4	14	2	0	**20**	0	1	47	10	0	**60**	0	6	2	0	0	**9**	0	39	9	9	0	**54**	0	**142**
4:45PM	6	24	1	0	**31**	0	0	24	3	0	**2.**	0	1	2	0	0	**3**	0	15	4	3	0	**22**	0	**93**
Total	14	90	14	0	**109**	0	2	14.	32	0	**191**	0	12	7	0	0	**21**	0	. .	20	20	1	**119**	0	**429**
% Approach	138 0%	. 48 1%	138 0%	0%	**-**	-	18 1%	918 2%	1. 8 %	0%	**-**	-	5. 81%	428 7%	0%	0%	**-**	-	658 3%	168 7%	168 7%	08 9%	**-**	-	-
% Total	38 3%	198 %	38 3%	0%	**258 2%**	-	08 5%	348 3%	. 85%	0%	**428 8%**	-	28 9%	28 1%	0%	0%	**48 7%**	-	198 0%	48 %	48 %	08 2%	**2. 86%**	-	-
PHF	08 593	08 933	08 397	-	**08 9. 1**	-	08 500	08 50	08 615	-	**08 54**	-	08 500	08 50	-	-	**08 656**	-	08 50.	08 625	08 574	08 250	**08 542**	-	08 52
Lights	14	. 7	14	0	**10.**	-	2	145	30	0	**1. .**	-	12	7	0	0	**21**	-	. 5	17	17	1	**114**	-	417
% Lights	100%	798 9%	100%	0%	**778 1%**	-	100%	798 6%	738 9%	0%	**7. 89%**	-	100%	100%	0%	0%	**100%**	-	7. 84%	758 0%	758 0%	100%	**768 6%**	-	7. 87%
Articulated Trucks and Single-Unit Trucks	0	1	0	0	**1**	-	0	2	2	0	**4**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	.
% Articulated Trucks and Single-Unit Trucks	0%	18 %	0%	0%	**08 7%**	-	0%	184%	68 %	0%	**28 2%**	-	0%	0%	0%	0%	**0%**	-	28 6%	0%	0%	0%	**18 %**	-	18 6%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	58 0%	0%	0%	**08 9%**	-	08 2%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	58 0%	0%	**08 9%**	-	08 2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk8L: Left, R: Right, T: Thru, U: U-Turn

124-158: Irish Settlement Rd & Pleasant Ridg... - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244491, Location: 448654115, -. 38476164, Site Code: 124-159

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



124-158: NY-22 & Archie Bordeau Rd AM - TMC

Wed Nov 6, 2024

PdMak(-5e)6 Or lHOr u

OMAMssks)aL-e5s, Oi5gdM5kh Wdgt s C(h cI(-M1T(I5Wdgt s, ndsks, Skhks5IC(s, nIgUgMs o(BoCh, nIgUgMs o(Aiossy CMu

OMf ovkRk(5s

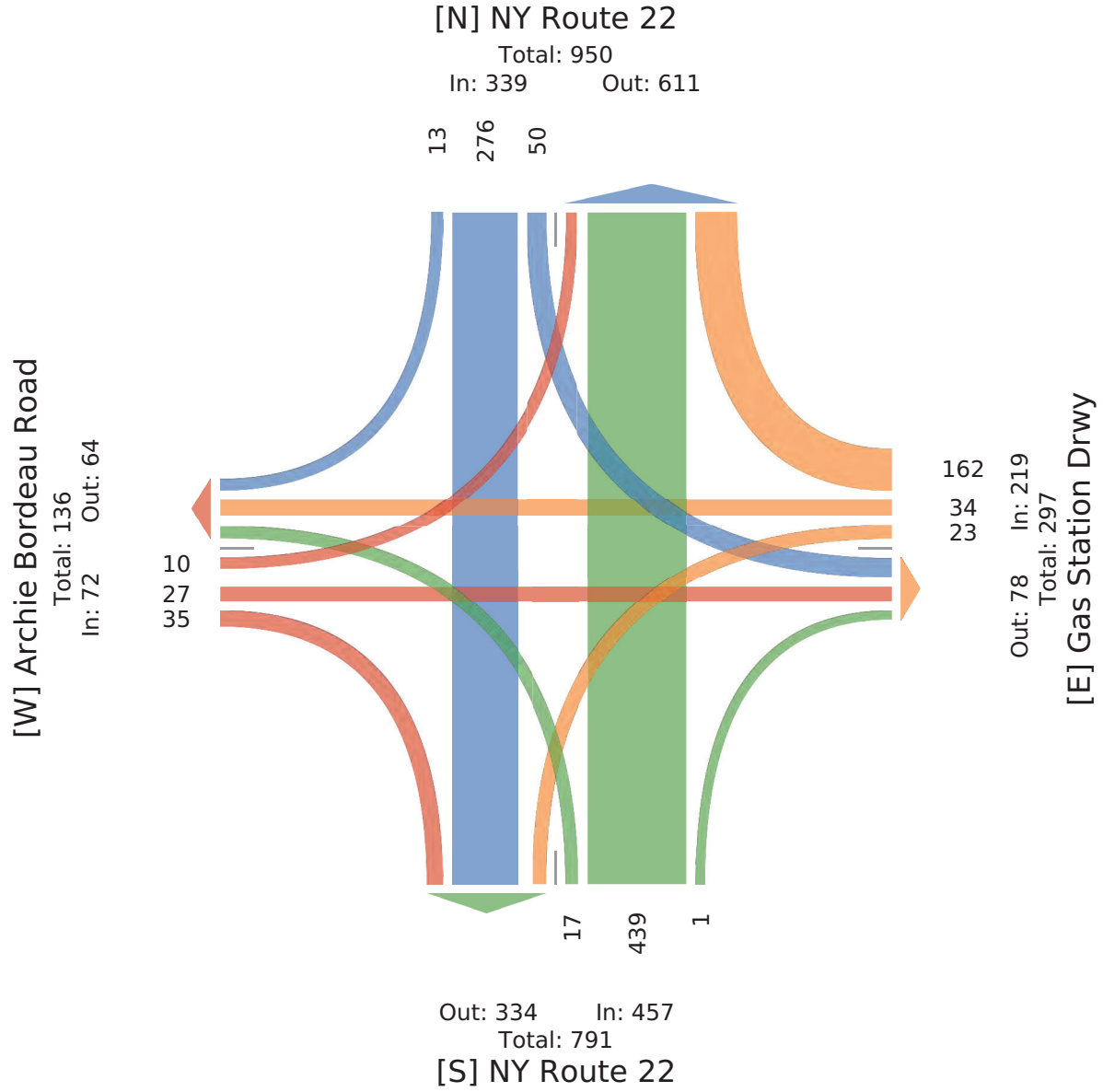
wmI D2444H4, a ogC5o(I 44:19D81D, l6. :489D , cI5k AohkI D24lD98

SiovIhkh 3UI AikL-e5o(r C((I(- 7(-I(kkiI(-
2 b I((kis ALigM, OM C(U, NE, D2209, Tc

ak- mLikg5o(	Oige Ik n oihkCd BoCh 7Gs:3od(h						YGs c3:5o(miy U b ks3od(h						NE Bod5k 22 Noi5e3od(h						NE Bod5k 22 cod5e3od(h						
WRk	a	W	B	T	Opp	Skh*	a	W	B	T	Opp	Skh*	a	W	B	T	Opp	Skh*	a	W	B	T	Opp	Skh*	v(5
2024lDD106 6I00Or	.	9	6	0	**D9**	0	2	.	D8	0	**2.**	0	D	. H	0	0	**40**	0	D0	. 4	0	0	**44**	0	**D22**
6ID9Or	0	.	1	0	**H**	0	4	.	26	0	**. 4**	0	9	91	0	0	**1D**	0	1	. 1	.	0	**49**	0	**D4H**
6I. 0Or	2	2	6	0	**DD**	0	D	4	. 2	0	**. 6**	0	D	6.	0	0	**64**	0	8	2H	0	0	**. 6**	0	**D9H**
6I49Or	D	1	2	0	**H**	0	4	8	24	0	**. 1**	0	.	HD	0	0	**H4**	0	6	. 1	.	0	**41**	0	**D89**
%odiMWo5CM	1	D1	22	0	**44**	0	DD	D8	D0D	0	**D. 0**	0	D0	29H	0	0	**21H**	0	. D	D. 9	1	0	**D62**	0	**1D9**
8I00Or	0	2	.	0	**9**	0	9	.	D8	0	**21**	0	2	94	0	0	**91**	0	4	. D	2	0	**. 6**	0	**D24**
8ID9Or	2	9	.	0	**D0**	0	2	4	D1	0	**22**	0	.	40	0	0	**4.**	0	2	. 1	.	0	**4D**	0	**DD1**
8I. 0Or	D	4	1	0	**DD**	0	.	6	D9	0	**29**	0	2	4.	D	0	**41**	0	9	. 2	D	0	**. 8**	0	**D20**
8I49Or	D	0	D	0	**2**	0	2	2	D2	0	**D1**	0	0	42	0	0	**42**	0	8	42	D	0	**9D**	0	**DDD**
%odiMWo5CM	4	DD	D.	0	**28**	0	D2	D1	1D	0	**8H**	0	6	D6H	D	0	**D86**	0	DH	D4D	6	0	**D16**	0	**46D**
HI00Or	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	D	0	0	**D**	0	0	0	0	0	**0**	0	**D**
%odiMWo5CM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	D	0	0	**D**	0	0	0	0	0	**0**	0	**D**
Wo5CM	D0	26	. 9	0	**62**	0	2.	. 4	D12	0	**2DH**	0	D6	4. H	D	0	**496**	0	90	261	D.	0	**. . H**	0	**D086**
F OppioCge	D. :HF	. 6:9F	48:1F	0F	**l**	l	D0:9F	D9:9F	64:0F	0F	**l**	l	. :6F	H1:DF	0:2F	0F	**l**	l	D4:6F	8D4F	. :8F	0F	**l**	l	l
F Wo5CM	0:HF	2:9F	. :2F	0F	**1:1F**	l	2:DF	. :DF	D4:HF	0F	**20:DF**	l	D1F	40:4F	0:DF	0F	**42:0F**	l	4:1F	29:4F	D2F	0F	**. D2F**	l	l
aL-e5s	H	26	. 0	0	**11**	l	22	. .	D98	0	**2D**	l	D6	4D0	D	0	**428**	l	90	24D	D2	0	**. 0.**	l	D0D0
F aL-e5s	H0:0F	D00F	89:6F	0F	**HD6F**	l	H9:6F	H6:DF	H6:9F	0F	**H6:. F**	l	D00F	H :4F	D00F	0F	**H :6F**	l	D00F	86:. F	H2:. F	0F	**8H4F**	l	H2:HF
Oi5gdM5kh Wdgt s C(h cI(-M1T(I5Wdgt s	0	0	4	0	**4**	l	D	0	4	0	**9**	l	0	22	0	0	**22**	l	0	2H	0	0	**2H**	l	10
F Oi5gdM5kh Wdgt s C(h cI(-M1T(I5Wdgt s	0F	0F	DD4F	0F	**9:1F**	l	4:. F	0F	2:9F	0F	**2:. F**	l	0F	9:0F	0F	0F	**4:8F**	l	0F	D0:9F	0F	0F	**8:1F**	l	9:9F
ndsks	D	0	D	0	**2**	l	0	0	0	0	**0**	l	0	9	0	0	**9**	l	0	1	D	0	**6**	l	D4
F ndsks	D0:0F	0F	2:HF	0F	**2:8F**	l	0F	0F	0F	0F	**0F**	l	0F	DDF	0F	0F	**DDF**	l	0F	2:2F	6:6F	0F	**2:DF**	l	D. F
nIgUgMs o(BoCh	0	0	0	0	**0**	l	0	D	0	0	**D**	l	0	2	0	0	**2**	l	0	0	0	0	**0**	l	.
F nIgUgMs o(BoCh	0F	0F	0F	0F	**0F**	l	0F	2:HF	0F	0F	**0:9F**	l	0F	0:9F	0F	0F	**0:4F**	l	0F	0F	0F	0F	**0F**	l	0:. F
Skhks5IC(s	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	
F Skhks5IC(s	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l
nIgUgMs o(Aiossy CM	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	l	l	l	l	l	0	
F nIgUgMs o(Aiossy CM	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l

*Skhks5IC(s C(h nIgUgMs o(Aiossy CM: aI akf5, BI BL-e5, WI Wid, TI TlWdi(

SaovGLi 7UI : aLGgeton P) nnGng b ngGnLLaGng
2 E GnnLaA: GsuL, (w7) nU, NY, D2208, Tc



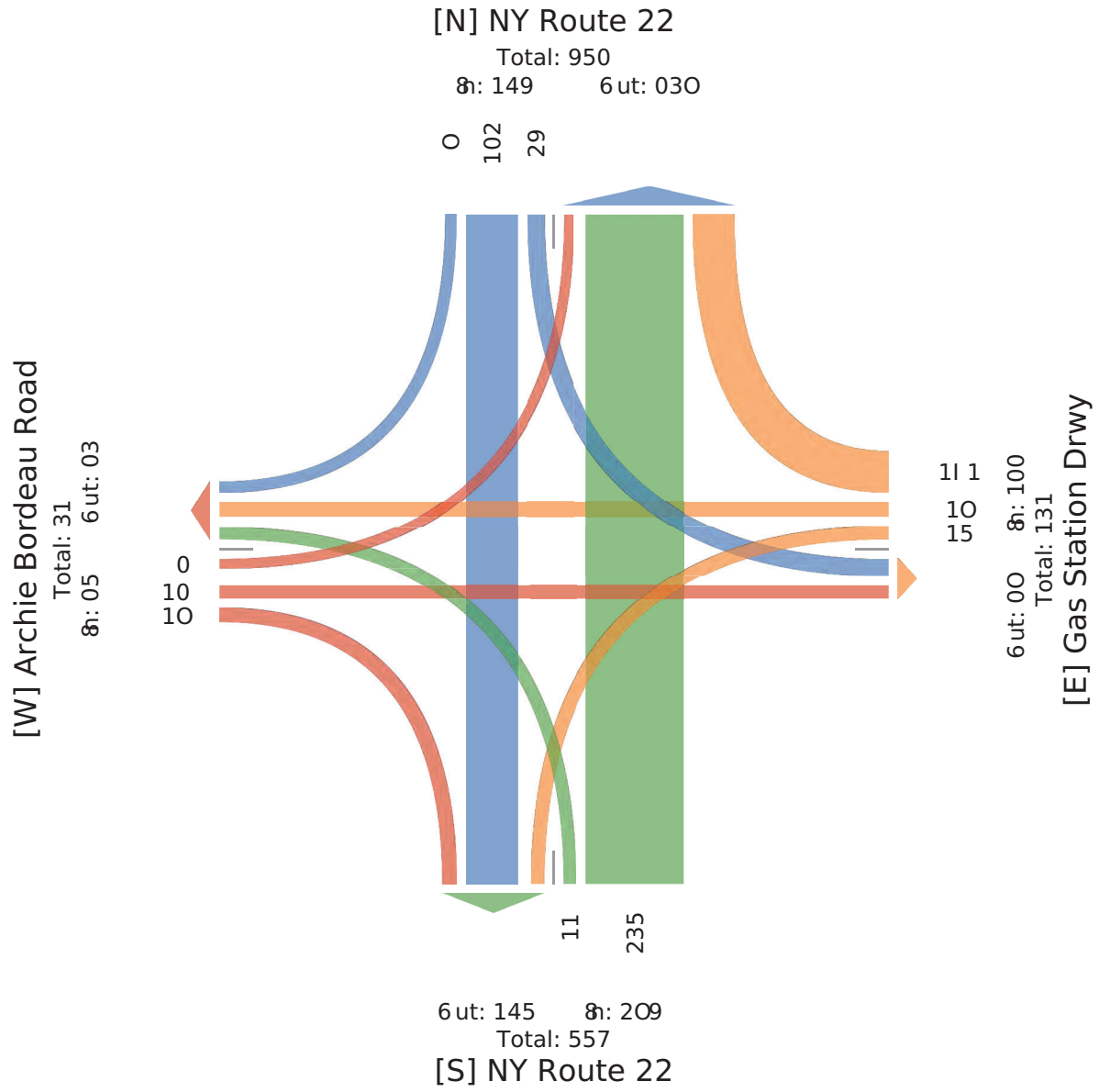
124-158: NY-22 & Archie Bordeau Rd AM - TMC

Thu Nov 7, 2024
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244494, Location: 44.651861, -73.48513, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	Archie Bordeau Road						Gas Station Drwy						NY Route 22						NY Route 22						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2024-11-07 7:15AM	0	3	6	0	**9**	0	4	3	27	0	**34**	0	5	56	0	0	**61**	0	6	36	3	0	**45**	0	**149**
7:30AM	2	2	7	0	**11**	0	1	4	32	0	**37**	0	1	73	0	0	**74**	0	8	29	0	0	**37**	0	**159**
7:45AM	1	6	2	0	**9**	0	4	8	24	0	**36**	0	3	91	0	0	**94**	0	7	36	3	0	**46**	0	**185**
8:00AM	0	2	3	0	**5**	0	5	3	18	0	**26**	0	2	54	0	0	**56**	0	4	31	2	0	**37**	0	**124**
Total	3	13	18	0	**34**	0	14	18	101	0	**133**	0	11	274	0	0	**285**	0	25	132	8	0	**165**	0	**617**
% Approach	8.8%	38.2%	52.9%	0%	**-**	-	10.5%	13.5%	75.9%	0%	**-**	-	3.9%	96.1%	0%	0%	**-**	-	15.2%	80.0%	4.8%	0%	**-**	-	-
% Total	0.5%	2.1%	2.9%	0%	**5.5%**	-	2.3%	2.9%	16.4%	0%	**21.6%**	-	1.8%	44.4%	0%	0%	**46.2%**	-	4.1%	21.4%	1.3%	0%	**26.7%**	-	-
PHF	0.375	0.542	0.643	-	**0.773**	-	0.700	0.607	0.789	-	**0.892**	-	0.550	0.764	-	-	**0.769**	-	0.781	0.917	0.667	-	**0.897**	-	0.843
Lights	3	13	14	0	**30**	-	14	17	98	0	**129**	-	11	261	0	0	**272**	-	25	117	8	0	**150**	-	581
% Lights	100%	100%	77.8%	0%	**88.2%**	-	100%	94.4%	97.0%	0%	**97.0%**	-	100%	95.3%	0%	0%	**95.4%**	-	100%	88.6%	100%	0%	**90.9%**	-	94.2%
Articulated Trucks and Single-Unit Trucks	0	0	4	0	**4**	-	0	0	3	0	**3**	-	0	9	0	0	**9**	-	0	12	0	0	**12**	-	28
% Articulated Trucks and Single-Unit Trucks	0%	0%	22.2%	0%	**11.8%**	-	0%	0%	3.0%	0%	**2.3%**	-	0%	3.3%	0%	0%	**3.2%**	-	0%	9.1%	0%	0%	**7.3%**	-	4.5%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	3	0	0	**3**	-	5
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.7%	0%	0%	**0.7%**	-	0%	2.3%	0%	0%	**1.8%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	5.6%	0%	0%	**0.8%**	-	0%	0.7%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn


[N] NY Route 22
Total: 950
8n: 149
6ut: 03O
O
102
29
[W] Archie Bordeau Road
Total: 31
6ut: 03
8n: 05
0
10
1O
1I 1
1O
15
8n: 100
Total: 131
6ut: 0O
[E] Gas Station Drwy
11
235
6ut: 145
8n: 2O9
Total: 557
[S] NY Route 22

124-158: NY-22 & Archie Bordeau Rd PM - TMC

Wed Nov 6, 2024

PMake(-5) O4rl H6rl u

AaaCasLIeLOki-)5L, Ag5ihMs5edtgMncLs(dTi(-aeHn(i5tgMncL, SMeL, redeL5gis(L, SihUhaeLo(Bosd, SihUhaeLo(CgoLLysacu

Aaal oveRe(5L

wnI D2444: 1, kohs5io(I44968D: 6D; H394: 8D8, Ti5e CodeI D24HD8:

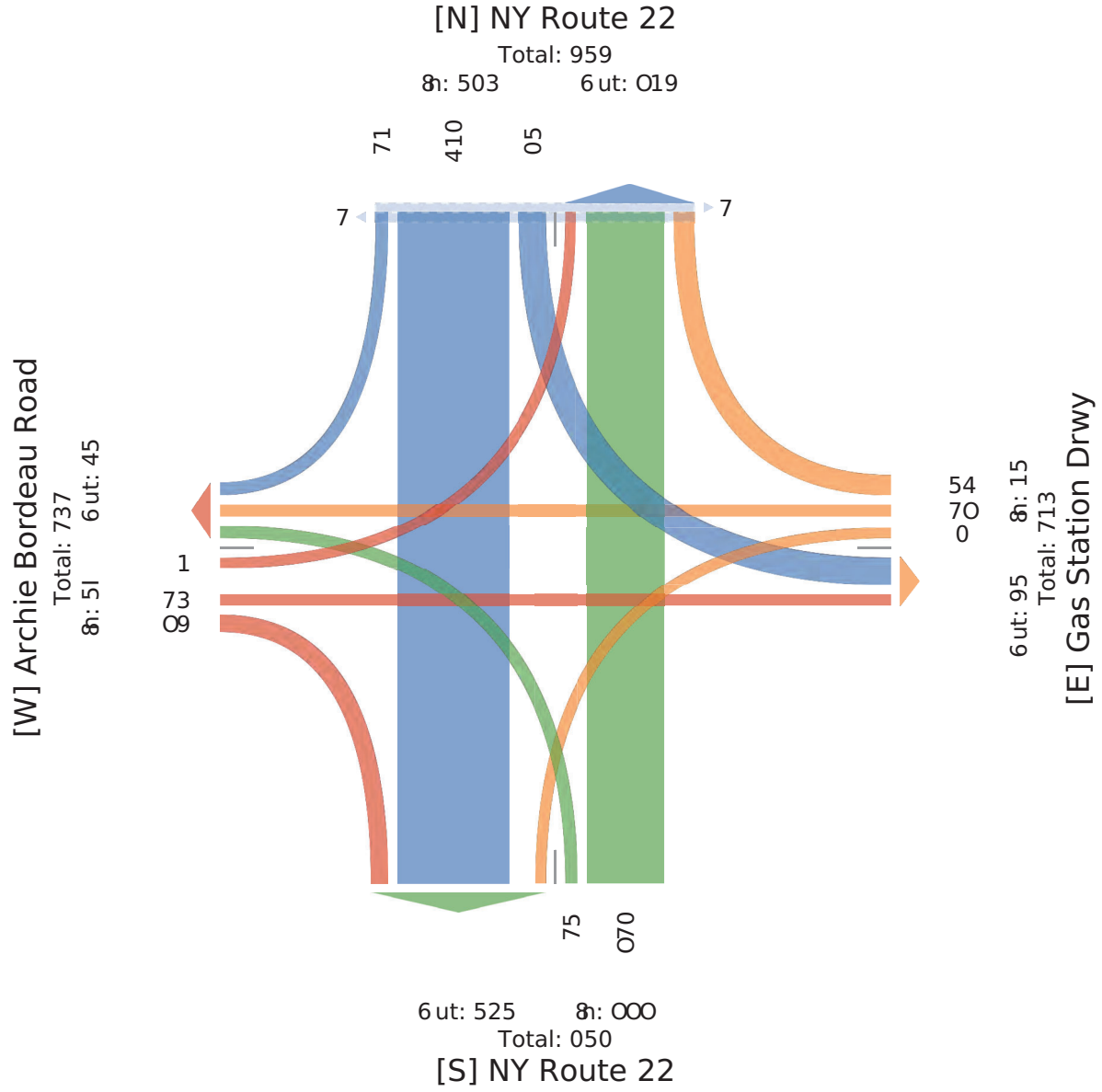
rgovided 7UI Cgei-)5o(l s((i(-b(-i(eegi(-

2 Wi((egL Cighae, Aa7s(U, NE, D2208, nT

ke- migeh5io(	Agh)ie SogdesMBosd bsL57oM(d						YsLT5s5io(mgyU WeL57oM(d						NE BoMe 22 Nog5)7oM(d						NE BoMe 22 ToM5)7oM(d						
tiRe	k	t	B	n	App	red*	k	t	B	n	App	red*	k	t	B	n	App	red*	k	t	B	n	App	red*	w(5
2024HDDH06 4l00rl	3	D	4	0	:	0	3	D	2	0	6	0	2	83	0	0	88	0	D4	:4	0	0	1:	0	D6.
4lD3rl	0	0	:	0	:	0	0	2	DD	0	D3	0	2	3.	0	0	31	0	D4	66	2	0	:2	D	D42
4l30rl	2	D	1	0	D2	0	0	3	:	0	DD	0	3	41	0	0	82	0	D0	:8	4	0	11	D	D.4
4l48rl	D	D	4	0	6	0	D	0	DD	0	D2	0	D	4.	0	0	4:	0	D2	8:	2	0	.2	0	D8:
%oMgaUto5sa	6	3	28	0	34	0	4	6	32	0	42	0	:	D.6	0	0	D14	0	80	213	:	0	38D	2	62D
8l00rl	0	0	4	0	4	0	0	D	8	0	6	0	2	3D	0	0	33	0	D4	80	3	0	6.	0	DD0
8lD3rl	0	8	0	0	8	0	D	4	4	0	1	0	D	4D	0	0	42	0	:	8:	2	0	6:	0	D24
8l30rl	0	D	:	0	1	0	D	0	6	0	.	0	2	34	0	0	36	0	:	38	D	0	44	0	16
8l48rl	D	D	2	0	4	0	2	2	.	0	DD	0	2	28	0	0	2.	0	8	42	3	0	80	0	12
%oMgaUto5sa	D	.	D4	0	22	0	4	.	22	0	33	0	.	D3D	0	0	D3:	0	38	D.8	1	0	221	0	422
6l00rl	0	0	0	0	0	0	0	0	0	0	0	0	0	D	0	0	D	0	0	0	0	0	0	0	D
%oMgaUto5sa	0	0	0	0	0	0	0	0	0	0	0	0	0	D	0	0	D	0	0	0	0	0	0	0	D
to5sa	.	D0	31	0	86	0	:	D3	84	0	.8	0	D3	3D.	0	0	333	0	:8	4.:	D.	0	8:0	2	D044
F Appgosh)	D29F	D.91F	6196F	0F	H	H	D09F	D.93F	.290F	0F	H	H	493F	1893F	0F	0F	H	H	D49F	:294F	291F	0F	H	H	H
F to5sa	09F	D0F	39F	0F	894F	H	09F	D92F	892F	0F	.92F	H	D94F	3093F	0F	0F	3D91F	H	:9DF	489F	D86F	0F	8896F	H	H
ki-)5L	.	D0	3:	0	88	H	:	D3	82	0	.3	H	D8	2:6	0	0	30D	H	:4	4.3	D.	0	8.4	H	D003
F ki-)5L	D00F	D00F	1.94F	0F	1:92F	H	D00F	D00F	1693F	0F	1.93F	H	D00F	:191F	0F	0F	1094F	H	1:9F	1190F	D00F	0F	1190F	H	169DF
Ag5ihMs5edtgMncLs(dTi(-aeHn(i5tgMncL	0	0	0	0	0	H	0	0	2	0	2	H	0	3D	0	0	3D	H	D	8	0	0	6	H	31
F Ag5ihMs5edtgMncLs(dTi(-aeHn(i5tgMncL	0F	0F	0F	0F	0F	H	0F	0F	39F	0F	29F	H	0F	19F	0F	0F	193F	H	D92F	D90F	0F	0F	D90F	H	39F
SMeL	0	0	D	0	D	H	0	0	0	0	0	H	0	D	0	0	D	H	0	0	0	0	0	H	2
F SMeL	0F	0F	296F	0F	D91F	H	0F	0F	0F	0F	0F	H	0F	093F	0F	0F	093F	H	0F	0F	0F	0F	0F	H	092F
SihUhaeLo(Bosd	0	0	0	0	0	H	0	0	0	0	0	H	0	0	0	0	0	H	0	0	0	0	0	H	0
F SihUhaeLo(Bosd	0F	0F	0F	0F	0F	H	0F	0F	0F	0F	0F	H	0F	0F	0F	0F	0F	H	0F	0F	0F	0F	0F	H	0F
redeL5gis(L	H	H	H	H	H	0	H	H	H	H	H	0	H	H	H	H	H	0	H	H	H	H	H	2	
F redeL5gis(L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	HD00F		H
SihUhaeLo(CgoLLysac	H	H	H	H	H	0	H	H	H	H	H	0	H	H	H	H	H	0	H	H	H	H	H	0	
F SihUhaeLo(CgoLLysac	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	0F	H

*redeL5gis(Ls(dSihUhaeLo(CgoLLysac9kIkef5, BIBi-)5, tIt)gM,nInHtMg(

Psovaded bUI) seaghton MAnnang Enganeesang
2 WannesC) asile, : lbAnU, NY, D220. , k T



124-158: NY-22 & Archie Bordeau Rd PM - TMC

T hu Nov 7, 2024
AM AhPe a4 AM k(AM: k1 vh5P-- AhPe 8 o) 5
O-- r -Pl lhl aHGS Lil, O5iG) -Pihu t 5) gel Pcu dGcs-hkn cGt 5) gel, S) lhl, Ahuhli5CPcl, SGgUg-hl oc BoPu, SGgUg-hl oc r 5olly P-e:
O-- MovhR hcil
wnI D24449. , HogPiGocI 4467(D97D, k3b649(Db, dGh r ouhI D24kD(9

A5ovGuhu EUI r 5hGS Lioc MPccGcs WcsGchh5Gcs
2 T Gcch5I r G5g-h, O-EPcU, NY, D220(, n d

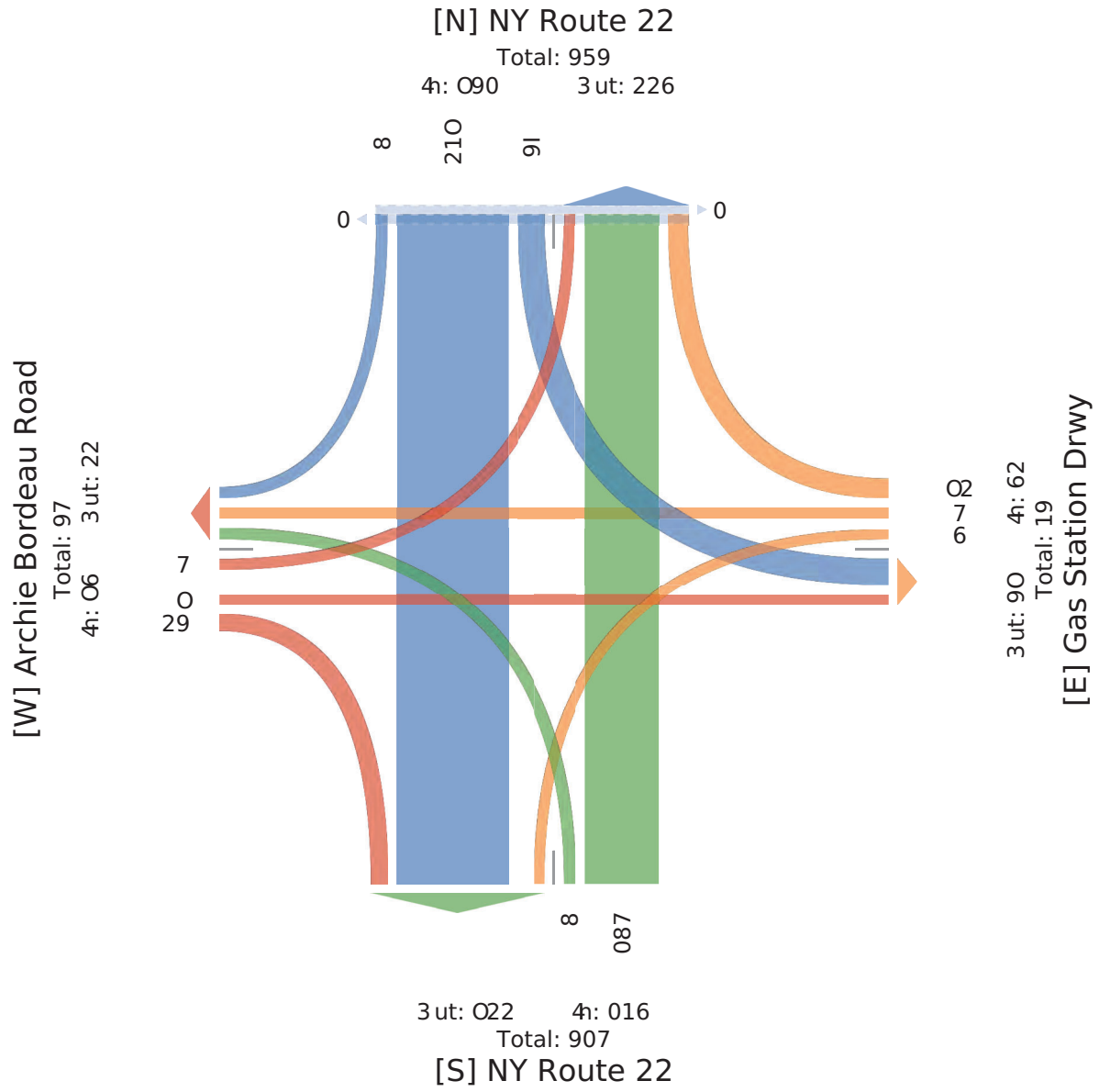
Hhs mG5hgiGoc	O5gLGi So5uhP) BoPu WPliEo) cu						GPl diPiGoc m5y U T hliEo) cu						NY Bo) ih 22 No5iLEo) cu						NY Bo) ih 22 do) iLEo) cu						
t GRh	H	t	B	n	Opp	Ahu*	H	t	B	n	Opp	Ahu*	H	t	B	n	Opp	Ahu*	H	t	B	n	Opp	Ahu*	wei
2024kDDk07 4I00AM	b	D	4	0	**9**	0	b	D	2	0	**7**	0	2	(b	0	0	**((**	0	D4	94	0	0	**. 9**	0	**D73**
4ID(AM	0	0	9	0	**9**	0	0	2	DD	0	**Db**	0	2	b3	0	0	**b.**	0	D4	77	2	0	**92**	D	**D42**
4Ib0AM	2	D	.	0	**D2**	0	0	b	9	0	**DD**	0	b	4.	0	0	**(2**	0	D0	9(	4	0	**. .**	D	**DB4**
4I4(AM	D	D	4	0	**7**	0	D	0	DD	0	**D2**	0	D	43	0	0	**49**	0	D2	(9	2	0	**32**	0	**Db9**
t oiP-	7	b	2(	0	**b4**	0	4	7	b2	0	**42**	0	9	D97	0	0	**D. 4**	0	(0	2. b	9	0	**b(D**	2	**72D**
% Opp5oPgL	DB67%	969%	3b6(%	0%	**k**	k	. 6(%	D46b%	3762%	0%	**k**	k	46D%	. (6 %	0%	0%	**k**	k	D462%	9b6(%	26b%	0%	**k**	k	k
% t oiP-	D60%	06(%	460%	0%	**((6 %**	k	067%	D60%	(62%	0%	**769%**	k	D6b%	b060%	0%	0%	**bD62%**	k	96D%	4362%	D6b%	0%	**(76(%**	k	k
A8 F	06(00	063(0	067. 4	k	**06309**	k	06bbb	06(00	0623 23	k	**06909**	k	0673	0693 3	k	k	**06992**	k	069. b	0697 2	06(00	k	**06997**	k	069. 2
HGS Lil	7	b	2(	0	**b4**	k	4	7	b2	0	**42**	k	9	D74	0	0	**DB2**	k	(0	29.	9	0	**b43**	k	(. (
% HGS Lil	D00%	D00%	D00%	0%	**D00%**	k	D00%	D00%	D00%	0%	**D00%**	k	D00%	996 2%	0%	0%	**996 3%**	k	D00%	. 96 7%	D00%	0%	**. 96 %**	k	. (69%
O5iG) -Pihu t 5) gel Pcu dGcs-hkn cGt 5) gel	0	0	0	0	**0**	k	0	0	0	0	**0**	k	0	2D	0	0	**2D**	k	0	4	0	0	**4**	k	2(
% O5iG) -Pihu t 5) gel Pcu dGcs-hkn cGt 5) gel	0%	0%	0%	0%	**0%**	k	0%	0%	0%	0%	**0%**	k	0%	DD6b%	0%	0%	**D069%**	k	0%	D64%	0%	0%	**DBD%**	k	460%
S) lhl	0	0	0	0	**0**	k	0	0	0	0	**0**	k	0	D	0	0	**D**	k	0	0	0	0	**0**	k	D
% S) lhl	0%	0%	0%	0%	**0%**	k	0%	0%	0%	0%	**0%**	k	0%	06(%	0%	0%	**06(%**	k	0%	0%	0%	0%	**0%**	k	062%
SGgUg-hl oc BoPu	0	0	0	0	**0**	k	0	0	0	0	**0**	k	0	0	0	0	**0**	k	0	0	0	0	**0**	k	0
% SGgUg-hl oc BoPu	0%	0%	0%	0%	**0%**	k	0%	0%	0%	0%	**0%**	k	0%	0%	0%	0%	**0%**	k	0%	0%	0%	0%	**0%**	k	0%
Ahuhli5CPcl	k	k	k	k	k	0	k	k	k	k	k	0	k	k	k	k	k	0	k	k	k	k	k	2	
% Ahuhli5CPcl	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	D00%	k
SGgUg-hl oc r 5olly P-e	k	k	k	k	k	0	k	k	k	k	k	0	k	k	k	k	k	0	k	k	k	k	k	0	
% SGgUg-hl oc r 5olly P-e	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	0%	k

*Ahuhli5CPcl Pcu SGgUg-hl oc r 5olly P-e6HI Hhfi, BI BGS Li, t I t L5) , n I n kt) 5c

124-158: NY-22 & Archie Bordeau Rd PM - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244498, Location: 44.651961, -37.49517, Site Code: 124-159

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



124-158: NY-22 & I-87 NB Off Ramp AM - TMC

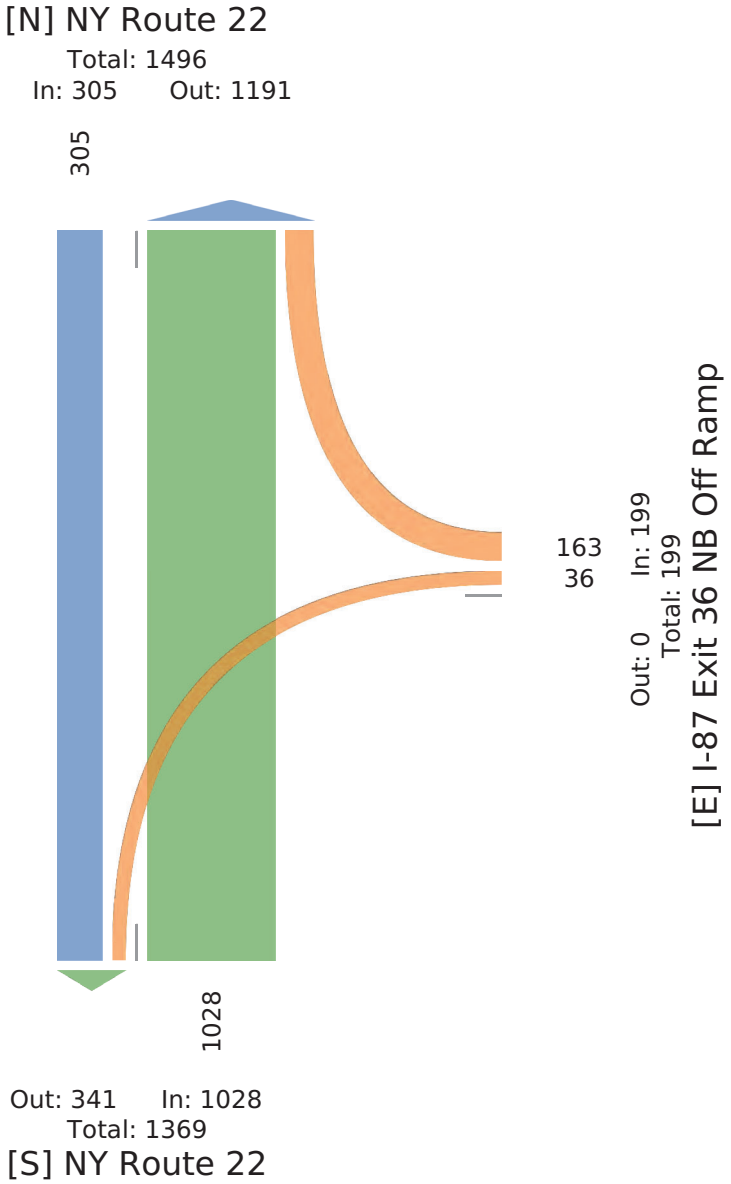
Thu Nov 7, 2024
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244504, Location: 44.657209, -73.481734, Site Code: 124-158

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	I-87 Exit 36 NB Off Ramp				NY Route 22				NY Route 22				
Direction	Westbound				Northbound				Southbound				
Time	L	R	**App**	Ped*	T	U	**App**	Ped*	T	U	**App**	Ped*	**Int**
2024-11-07 7:00AM	3	11	**14**	0	109	0	**109**	0	43	0	**43**	0	**166**
7:15AM	7	21	**28**	0	136	0	**136**	0	35	0	**35**	0	**199**
7:30AM	4	24	**28**	0	158	0	**158**	0	42	0	**42**	0	**228**
7:45AM	4	30	**34**	0	186	0	**186**	0	32	0	**32**	0	**252**
Hourly Total	18	86	**104**	0	589	0	**589**	0	152	0	**152**	0	**845**
8:00AM	9	20	**29**	0	123	0	**123**	0	43	0	**43**	0	**195**
8:15AM	4	26	**30**	0	107	0	**107**	0	32	0	**32**	0	**169**
8:30AM	2	18	**20**	0	107	0	**107**	0	37	0	**37**	0	**164**
8:45AM	3	13	**16**	0	102	0	**102**	0	41	0	**41**	0	**159**
Hourly Total	18	77	**95**	0	439	0	**439**	0	153	0	**153**	0	**687**
9:00AM	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	**0**
Hourly Total	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	**0**
Total	36	163	**199**	0	1028	0	**1028**	0	305	0	**305**	0	**1532**
% Approach	18.1%	81.9%	**-**	-	100%	0%	**-**	-	100%	0%	**-**	-	-
% Total	2.3%	10.6%	**13.0%**	-	67.1%	0%	**67.1%**	-	19.9%	0%	**19.9%**	-	-
Lights	33	151	**184**	-	966	0	**966**	-	274	0	**274**	-	1424
% Lights	91.7%	92.6%	**92.5%**	-	94.0%	0%	**94.0%**	-	89.8%	0%	**89.8%**	-	93.0%
Articulated Trucks and Single-Unit Trucks	3	11	**14**	-	58	0	**58**	-	27	0	**27**	-	99
% Articulated Trucks and Single-Unit Trucks	8.3%	6.7%	**7.0%**	-	5.6%	0%	**5.6%**	-	8.9%	0%	**8.9%**	-	6.5%
Buses	0	1	**1**	-	4	0	**4**	-	4	0	**4**	-	9
% Buses	0%	0.6%	**0.5%**	-	0.4%	0%	**0.4%**	-	1.3%	0%	**1.3%**	-	0.6%
Bicycles on Road	0	0	**0**	-	0	0	**0**	-	0	0	**0**	-	0
% Bicycles on Road	0%	0%	**0%**	-	0%	0%	**0%**	-	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	0	-	-	-	0	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	0	-	-	-	0	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

SaovC Li 7UI : aLCgeton P) nnCng b ngCnLLaCng
2 E CnnLaA: CasuL, (u7) nU, NY, D2201, T c



124-158: NY-22 & I-87 NB Off Ramp AM - TMC

Thu Nov 7, 2024

Fl Leng t7(AMFl - 9(AMFl) - Cveanss Leng i oua

Fss r snccec tdkShUd, FaUBusnUeP TauBgc nyP RkySse-wykUTauBgc, mucec, LePecUaknyc, mkBI Bsec oy DonP, mkBI Bsec oy r aocc: nsg)

Fss l ove1 eyUd

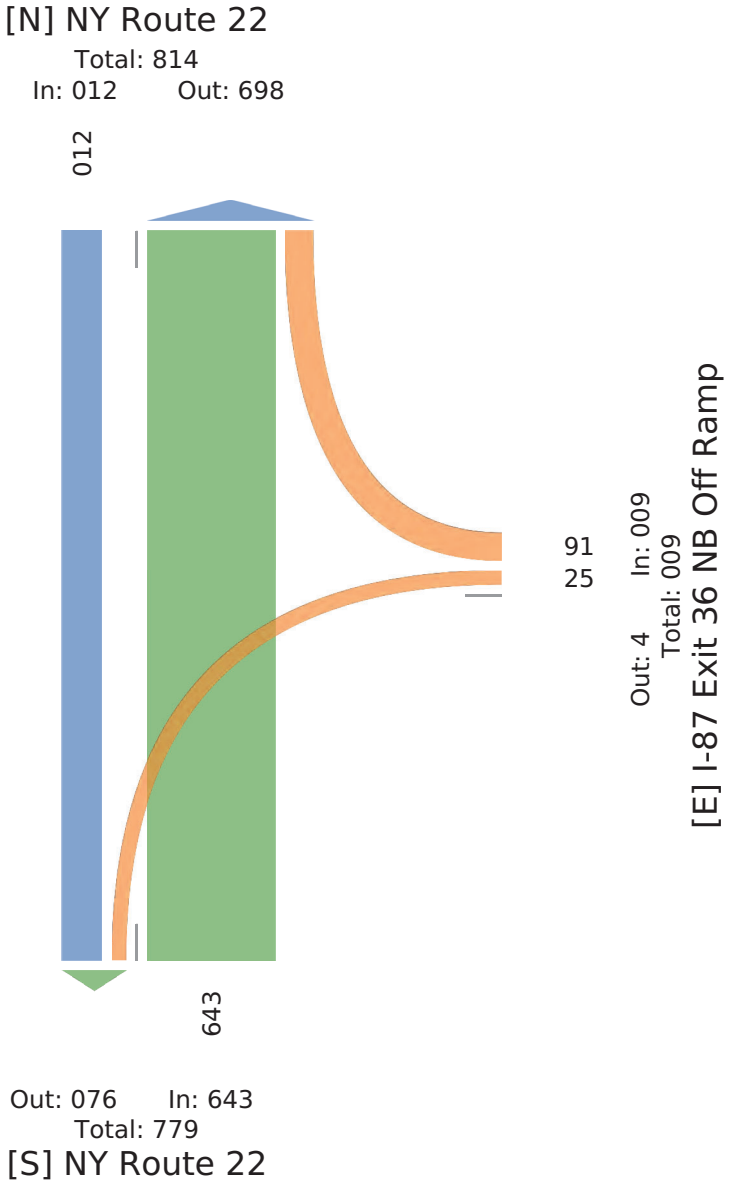
5. (A244M04, doBnUoy(4463M7208, -7b649A7b4, RkUr oPe(A24-AM9

LaovkPeP EI (r aekShUoy l nyykyS WySkyeeakyS
2 Y kyyeac r kaBse, F sEnyI , Nx , A220M, wR

deS . kaeBUoy	5-97 wOkUb3 Nm Cff Dn1 p Y ecUEouyP				Nx DouUe 22 NoaUiEouyP				Nx DouUe 22 RouUiEouyP				
Tkle	d	D	**Fpp**	LeP*	T	w	**Fpp**	LeP*	T	w	**Fpp**	LeP*	**5yU**
2024-AA-07 7(AMFl	7	2A	**29**	0	Ab3	0	**Ab3**	0	bM	0	**bM**	0	**A88**
7(b0Fl	4	24	**29**	0	AM9	0	**AM9**	0	42	0	**42**	0	**229**
7(4MFl	4	b0	**b4**	0	A93	0	**A93**	0	b2	0	**b2**	0	**2M2**
9(00Fl	8	20	**28**	0	A2b	0	**A2b**	0	4b	0	**4b**	0	**A8M**
Toluis	24	8M	**AA8**	0	30b	0	**30b**	0	AM2	0	**AM2**	0	**974**
H FppaonBh	206 2H	786 9H	**-**	-	A00H	0H	**-**	-	A00H	0H	**-**	-	-
H Toluis	267H	A06 8H	**Ab6 3H**	-	386 0H	0H	**386 0H**	-	A76 4H	0H	**A76 4H**	-	-
Li %	0637	0782	**069 7M**	-	069 A0	-	**069 A0**	-	0994	-	**0994**	-	0937
dkShUd	2b	98	**AA2**	-	M72	0	**M72**	-	Ab8	0	**Ab8**	-	92b
H dkShUd	8M6 9H	8b6 7H	**846 AH**	-	846 8H	0H	**846 8H**	-	8A6 4H	0H	**8A6 4H**	-	846 2H
FaUBusnUeP TauBgc nyP RkySse-wykUTauBgc	A	3	**7**	-	29	0	**29**	-	A0	0	**A0**	-	4M
H FaUBusnUeP TauBgc nyP RkySse-wykUTauBgc	462H	36 bH	**M6 3H**	-	463H	0H	**463H**	-	363H	0H	**363H**	-	M6AH
mucec	0	0	**0**	-	b	0	**b**	-	b	0	**b**	-	3
H mucec	0H	0H	**0H**	-	06MH	0H	**06MH**	-	260H	0H	**260H**	-	067H
mkBI Bsec oy DonP	0	0	**0**	-	0	0	**0**	-	0	0	**0**	-	0
H mkBI Bsec oy DonP	0H	0H	**0H**	-	0H	0H	**0H**	-	0H	0H	**0H**	-	0H
LePecUaknyc	-	-	-	0	-	-	-	0	-	-	-	0	
H LePecUaknyc	-	-	-	-	-	-	-	-	-	-	-	-	-
mkBI Bsec oy r aocc: nsg	-	-	-	0	-	-	-	0	-	-	-	0	
H mkBI Bsec oy r aocc: nsg	-	-	-	-	-	-	-	-	-	-	-	-	-

*LePecUaknyc nyP mkBI Bsec oy r aocc: nsg6d(defU,D(DkShU,T(Thau, w(w-Tuay

aCovtSkS 7w)i CktceTbUM(UUcUc bUctUkkCUc
2 E tUUkCgi tCnsk, Ps7(Uw, NY, C220r, y B



124-158: NY-22 & I-87 NB Off Ramp PM - TMC

T hu Nov 7, 2024
Fl lLe hngt(A4 M4 97 M4)
CILa Isiihi Aerg(ti, Cctrdl Isthu kcl dSi snu UmgIh9Bnrt kcl dSi, Plihi, Mhuhitcrsni, PrdydIhi on Rosu, PrdydIhi on a coiiwsIS)
CIL- ovhmhnti
ID: 1244501, e odstron: 44.756203, 968.4b1684, Urth a ouh: 124915b

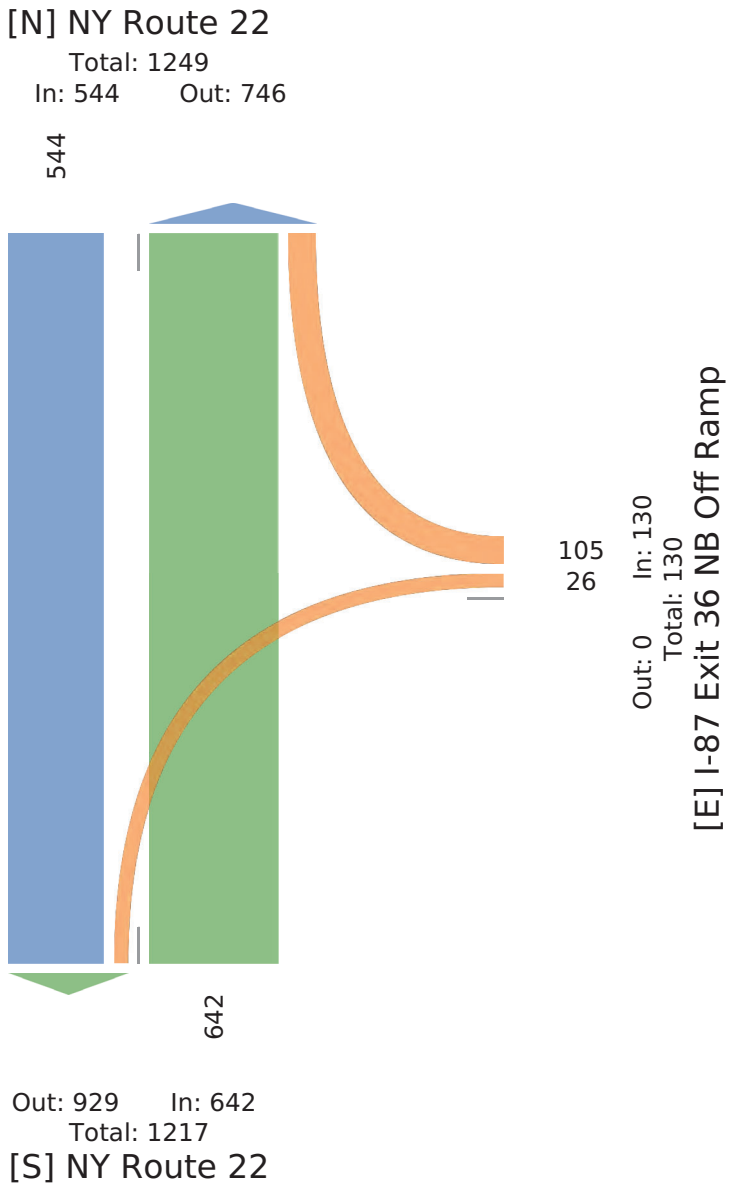
Creighton Manning

Mtovruhu Ey: a chrg(ton - snnrng Wngrnhhcrng
2 T rnnhci a rcdIh, CIEsny, NY, 12205, BU

e hg Drchdtron	I9b6 Wkrt 87 NP Off Rsmp T hitEol nu				NY Rol th 22 Noct(Eol nu				NY Rol th 22 Uol t(Eol nu				
krmh	e	R	**Cpp**	Mhu*	k	B	**Cpp**	Mhu*	k	B	**Cpp**	Mhu*	**Int**
2024911907 4:00M4	8	b	**11**	0	33	0	**33**	0	104	0	**104**	0	**214**
4:15M4	4	15	**13**	0	62	0	**62**	0	66	0	**66**	0	**17b**
4:80M4	4	24	**2b**	0	126	0	**126**	0	31	0	**31**	0	**247**
4:45M4	4	14	**1b**	0	35	0	**35**	0	54	0	**54**	0	**176**
Hol cIy kotsL	15	71	**67**	0	838	0	**838**	0	827	0	**827**	0	**635**
5:00M4	1	11	**12**	0	38	0	**38**	0	47	0	**47**	0	**151**
5:15M4	7	12	**1b**	0	61	0	**61**	0	58	0	**58**	0	**142**
5:80M4	2	14	**17**	0	74	0	**74**	0	87	0	**87**	0	**117**
5:45M4	2	7	**b**	0	61	0	**61**	0	8b	0	**8b**	0	**116**
Hol cIy kotsL	11	48	**54**	0	233	0	**233**	0	168	0	**168**	0	**527**
kotsL	27	104	**180**	0	732	0	**732**	0	433	0	**433**	0	**1821**
% Cppcosd(	20.0%	b0.0%	**9**	9	100%	0%	**9**	9	100%	0%	**9**	9	9
% kotsL	2.0%	6.3%	**3.b%**	9	52.4%	0%	**52.4%**	9	86.b%	0%	**86.b%**	9	9
erg(ti	24	36	**121**	9	745	0	**745**	9	4b3	0	**4b3**	9	1255
% erg(ti	32.8%	38.8%	**38.1%**	9	38.2%	0%	**38.2%**	9	3b.0%	0%	**3b.0%**	9	35.0%
Cctrdl Isthu kcl dSi snu UmgIh9Bnrt kcl dSi	2	6	**3**	9	47	0	**47**	9	10	0	**10**	9	75
% Cctrdl Isthu kcl dSi snu UmgIh9Bnrt kcl dSi	6.6%	7.6%	**7.3%**	9	7.7%	0%	**7.7%**	9	2.0%	0%	**2.0%**	9	4.3%
Plihi	0	0	**0**	9	1	0	**1**	9	0	0	**0**	9	1
% Plihi	0%	0%	**0%**	9	0.1%	0%	**0.1%**	9	0%	0%	**0%**	9	0.1%
PrdydIhi on Rosu	0	0	**0**	9	0	0	**0**	9	0	0	**0**	9	0
% PrdydIhi on Rosu	0%	0%	**0%**	9	0%	0%	**0%**	9	0%	0%	**0%**	9	0%
Mhuhitcrsni	9	9	9	0	9	9	9	0	9	9	9	0	
% Mhuhitcrsni	9	9	9	9	9	9	9	9	9	9	9	9	9
PrdydIhi on a coiiwsIS	9	9	9	0	9	9	9	0	9	9	9	0	
% PrdydIhi on a coiiwsIS	9	9	9	9	9	9	9	9	9	9	9	9	9

*Mhuhitcrsni snu PrdydIhi on a coiiwsIS. e: ehft, R: Rrg(t, k: k(cl , B: B9kl cn

Psovaded bUI) seaghton MAnnang Enganeesang
2 WannesC) asile, : lbAnU, NY, D2201, k T



124-158: NY-22 & I-87 NB Off Ramp PM - TMC

T hu Nov 7, 2024

Fl FhLe m4 Fl gt Fl (g AvhMI– FhLe 9 o) M

C– a -Lsshs ni rcdks, CMfS) -Lkhu UMSes LBu PrBc-hgy BrkUMSes, R) shs, FhuhskMLBs, RrSwS-hs oB moLu, RrSwS-hs oB a MssI L-e(

C– l ovhDhBks

:1 5. 244t 0. , i oSLkroB5 4467t 3208, g3b64E. 3b4, Prkh a ouh5. 24g t E

Creighton Manning

FMdvruhu Wv5a MdrcdkoBl LBBrBc YBcrBhhMBc

2 T rBBhMa rMfh, C-WLBw, Nx , . 220t , y P

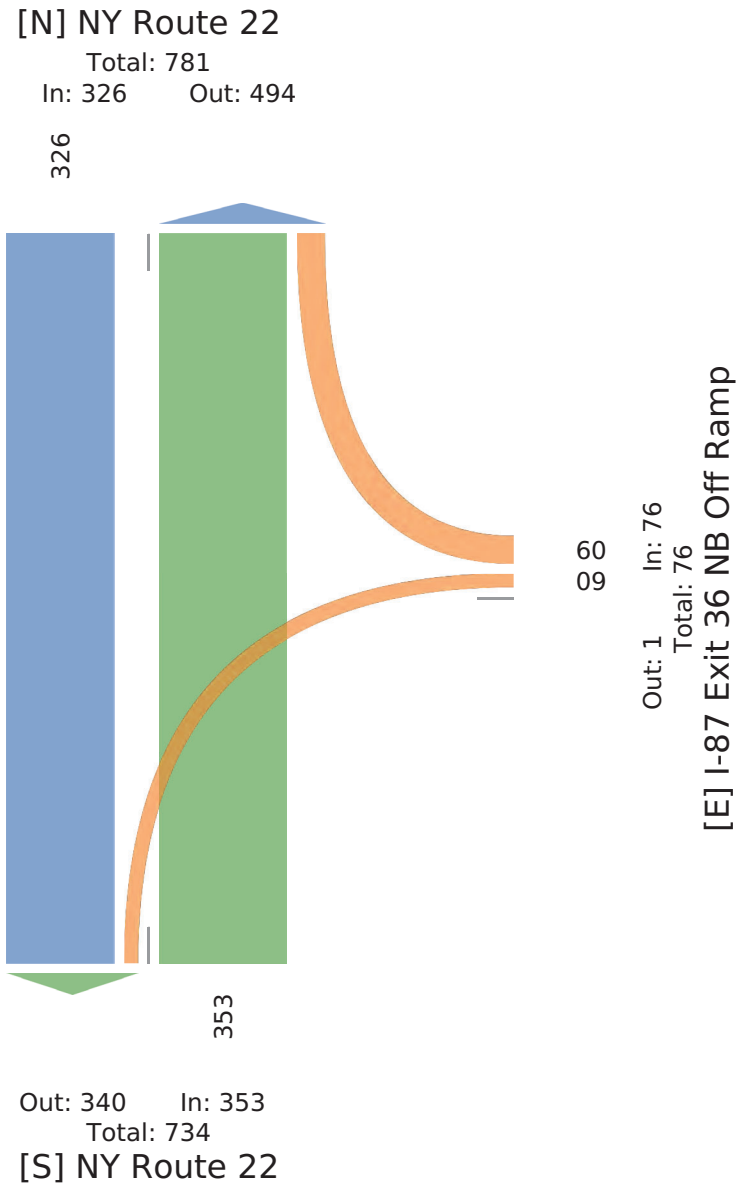
i hc 1 rMfSkroB	:gE3 YOrkb7 NR Aff mLDp T hskWvi) Bu				Nx mo) kh 22 NoMdWvi) Bu				Nx mo) kh 22 Po) kdWvi) Bu				
UrDh	i	m	Cpp	Fhu*	U	y	Cpp	Fhu*	U	y	Cpp	Fhu*	:Bk
2024g . g07 4500Fl	b	E	. .	0	88	0	**88**	0	. 04	0	**. 04**	0	**2. 4**
45 t Fl	4	. t	**. 8**	0	32	0	**32**	0	33	0	**33**	0	**. 7E**
45b0Fl	4	24	**2E**	0	. 23	0	**. 23**	0	8.	0	**8.**	0	**247**
454t Fl	4	. 4	**. E**	0	8t	0	**8t**	0	t 4	0	**t 4**	0	**. 73**
UokL-	. t	7.	**37**	0	b8b	0	**b8b**	0	b27	0	**b27**	0	**38t**
H CppMLSd	. 863H	E06bH	**g**	g	. 00H	0H	**g**	g	. 00H	0H	**g**	g	g
H UokL-	. 68H	363H	**867H**	g	4864H	0H	**4864H**	g	4. 60H	0H	**4. 60H**	g	g
F9 %	068bE	067bt	**06738**	g	0634	g	**0634**	g	063E4	g	**063E4**	g	06E0E
i rcdks	. t	t E	**3b**	g	b72	0	**b72**	g	b2.	0	**b2.**	g	3t 7
H i rcdks	. 00H	8t 6 H	**876 H**	g	826 H	0H	**826 H**	g	8E6 H	0H	**8E6 H**	g	8t 6 H
CMfS) -Lkhu UMSes LBu PrBc-hgy BrkUMSes	0	b	**b**	g	b0	0	**b0**	g	t	0	**t**	g	bE
H CMfS) -Lkhu UMSes LBu PrBc-hgy BrkUMSes	0H	468H	**b68H**	g	367H	0H	**367H**	g	. 6 H	0H	**. 6 H**	g	46EH
R) shs	0	0	**0**	g	.	0	**.**	g	0	0	**0**	g	.
H R) shs	0H	0H	**0H**	g	06bH	0H	**06bH**	g	0H	0H	**0H**	g	06 H
RrSwS-hs oB moLu	0	0	**0**	g	0	0	**0**	g	0	0	**0**	g	0
H RrSwS-hs oB moLu	0H	0H	**0H**	g	0H	0H	**0H**	g	0H	0H	**0H**	g	0H
FhuhskMLBs	g	g	g	0	g	g	g	0	g	g	g	0	
H FhuhskMLBs	g	g	g	g	g	g	g	g	g	g	g	g	g
RrSwS-hs oB a MssI L-e	g	g	g	0	g	g	g	0	g	g	g	0	
H RrSwS-hs oB a MssI L-e	g	g	g	g	g	g	g	g	g	g	g	g	g

*FhuhskMLBs LBu RrSwS-hs oB a MssI L-e6i 5i hfk, m5mrcdk, U5UdMI, y 5y gU) MB

124-158: NY-22 & I-87 NB Off Ramp PM - TMC

Wed Nov 6, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1244501, Location: 44965820. , -839471834, Site Code: 124-157

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



124-158: NY-22 & Salmon River Road AM - TMC

Wed Nov 6, 2024

Fdull Lngte h6 (P M (P 5

(uu: u) AALAhl CgetA. (atCsdu) tLi Wadsr A) ni cCnguLMTnCt Wadsr A, kdALA, SLi LAtaCJnA, kCsUsuLAon Bo) i , kCsUsuLAon : aoAAy) ur 5

(uuP ovLRLntA

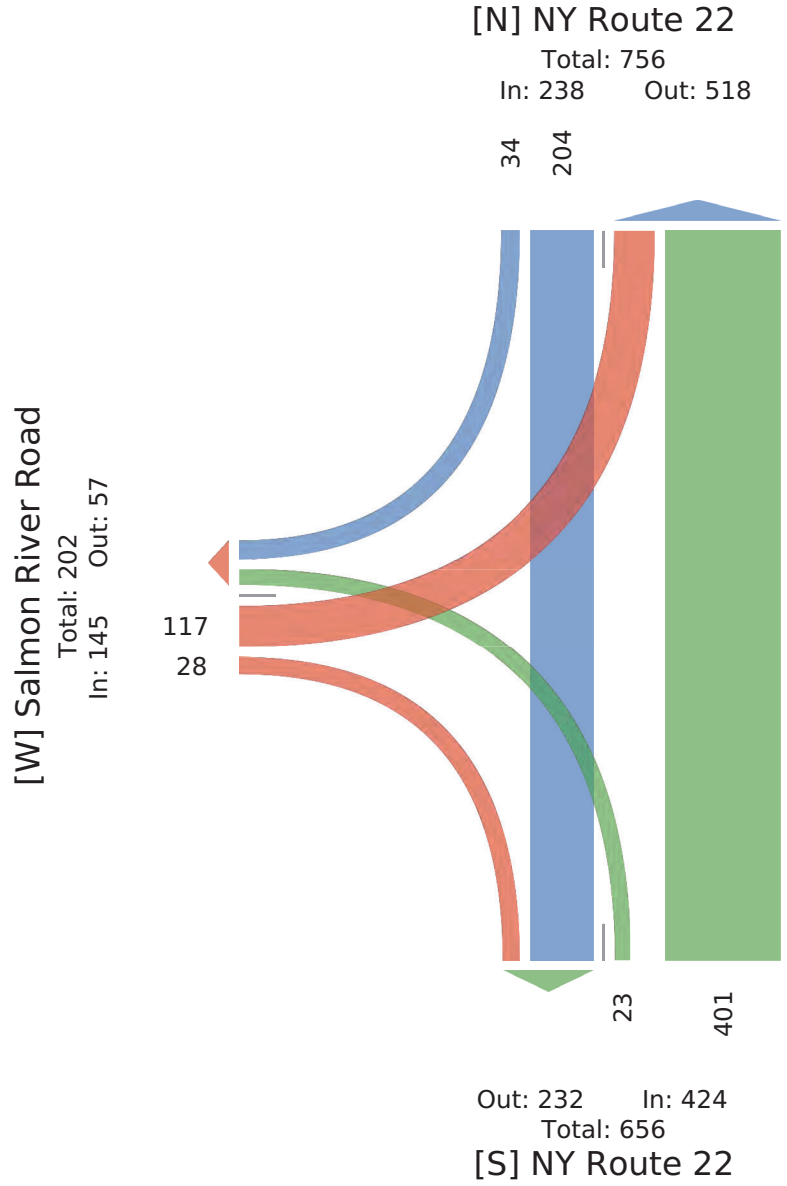
wmI D2444- - , l os) tConI 44198. 6. - , M814. 63- - , cCtL : oi LI D24MD8.

SaovCtLi 7UI : aLCgeton P) nnCng b ngCnLLaCng
2 E CnnLaA: CasuL, (u7) nU, NY, D2203, Tc

l Ig mCaLstCn	c) uRon BCVLa Bo) i b) A7odni					NY BodtL 22 Noate7odni					NY BodtL 22 codte7odni					
WCRL	l	B	T	(pp	SLi *	l	W	T	(pp	SLi *	W	B	T	(pp	SLi *	vnt
2024MDDM6 6I00(P	D9	4	0	**20**	0	4	83	0	**8-**	0	82	3	0	**86**	0	**-9**
6IDB(P	D-	2	0	**2D**	0	8	3-	0	**92**	0	20	8	0	**28**	0	**D09**
6I80(P	D.	2	0	**20**	0	4	63	0	**6-**	0	2D	3	0	**29**	0	**D23**
6I43(P	D-	4	0	**28**	0	8	6D	0	**64**	0	2D	3	0	**29**	0	**D28**
HodauUWot) u	62	D2	0	**. 4**	0	D4	240	0	**234**	0	- 4	D.	0	**DD2**	0	**430**
. I00(P	D.	6	0	**23**	0	8	44	0	**46**	0	2-	6	0	**89**	0	**D0.**
. IDB(P	-	D	0	**D0**	0	2	4D	0	**48**	0	26	3	0	**82**	0	**. 3**
. I80(P	DD	2	0	**D8**	0	D	4D	0	**42**	0	8D	8	0	**84**	0	**. -**
. I43(P	6	9	0	**D8**	0	8	83	0	**8.**	0	28	D	0	**24**	0	**63**
HodauUWot) u	43	D9	0	**9D**	0	-	D9D	0	**D60**	0	DD0	D9	0	**D29**	0	**836**
Wot) u	DD6	2.	0	**D43**	0	28	40D	0	**424**	0	204	84	0	**28.**	0	**. 06**
% (ppao) se	. 016%	D- 18%	0%	**M**	M	314%	- 419%	0%	**M**	M	. 316%	D418%	0%	**M**	M	M
% Wot) u	D413%	813%	0%	**D. 10%**	M	21- %	4- 16%	0%	**3213%**	M	2318%	412%	0%	**2- 13%**	M	M
l CgetA	DD4	26	0	**D4D**	M	22	86-	0	**40D**	M	D98	82	0	**D- 3**	M	686
% l CgetA	- 614%	- 914%	0%	**- 612%**	M	- 316%	- 413%	0%	**- 419%**	M	6- 1- %	- 41D%	0%	**. D4- %**	M	- D18%
(atCsdu) tLi Wadsr A) ni cCnguLMTnCt Wadsr A	D	0	0	**D**	M	0	D-	0	**D-**	M	84	D	0	**83**	M	33
% (atCsdu) tLi Wadsr A) ni cCnguLMTnCt Wadsr A	01- %	0%	0%	**016%**	M	0%	416%	0%	**413%**	M	D916%	21- %	0%	**D416%**	M	91 %
kdALA	2	D	0	**8**	M	D	8	0	**4**	M	6	D	0	**.**	M	D8
% kdALA	D16%	819%	0%	**21D%**	M	418%	016%	0%	**01- %**	M	814%	21- %	0%	**814%**	M	D1- %
kCsUsuLAon Bo) i	0	0	0	**0**	M	0	0	0	**0**	M	0	0	0	**0**	M	0
% kCsUsuLAon Bo) i	0%	0%	0%	**0%**	M	0%	0%	0%	**0%**	M	0%	0%	0%	**0%**	M	0%
SLi LAtaCJnA	M	M	M	M	0	M	M	M	M	0	M	M	M	M	0	
% SLi LAtaCJnA	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
kCsUsuLAon : aoAAy) ur	M	M	M	M	0	M	M	M	M	0	M	M	M	M	0	
% kCsUsuLAon : aoAAy) ur	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

*SLi LAtaCJnA) ni kCsUsuLAon : aoAAy) ur 1l I l Lft, BI BCget, WI Wead, TI T MWdan

SaovC Li 7UI : aLGgeton P) nnGg bngGuLLaGg
2 E GnnLaA: GasuL, (u7) nU, NY, D2203, T c



124-158: NY-22 & Salmon River Road AM - TMC

Wed Nov 6, 2024

PM ak(- 56)Or PM l H)Or PMul AvkC(ssak(- LodC

Pssi s(ggkg 5htceTg, PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g, Rdgkg, akSkgTCt(Ug, Rtnwnskg oUmo(S, Rtnwnskg oUi CoggI (s-u

Pss MovkDkUTg

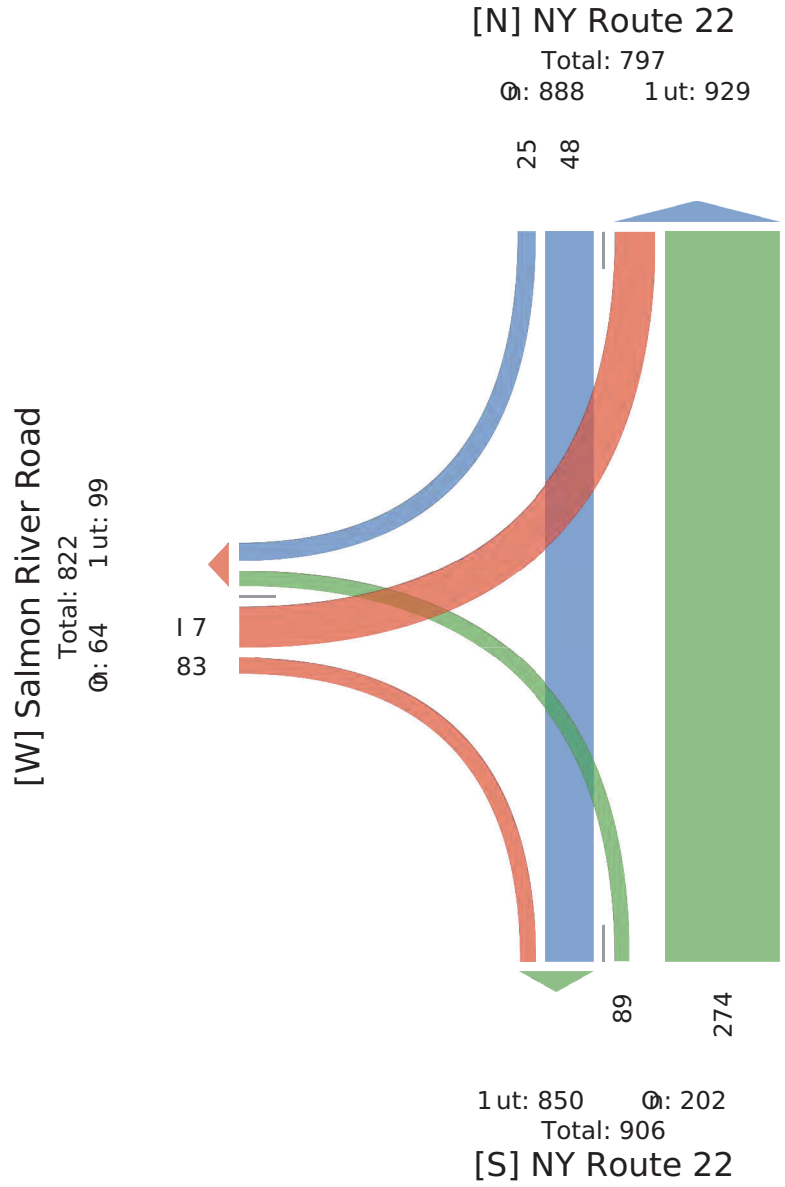
:1) C244499, hon(TtoU) 448 3H6H9, l6384H6r 99, BtTk i oSk) C24lOr H

aCovtSkS 7w)i CktceTbUM(UUtUc bUctUkkCtUc

2 E tUUkCg i tCnsk, Ps7(Uw, NY, C2220r, y B

hkc 1 tCknToU	B(sDoUmtvkCmo(S b(g7odUS					NY modTk 22 NoCE7odUS					NY modTk 22 BodTE7odUS					
WtDk	h	m	y	**Ppp**	akS*	h	W	y	**Ppp**	akS*	W	m	y	**Ppp**	akS*	**:UT**
2024lOC106 6)Or PM	C9	2	0	**2O**	0	3	r9	0	**. 2**	0	20	3	0	**23**	0	**C0.**
6)30P M	CH	2	0	**20**	0	4	6r	0	**69**	0	2O	r	0	**2.**	0	**C2r**
6)4r P M	C9	4	0	**23**	0	3	6O	0	**64**	0	2O	r	0	**2.**	0	**C23**
H)00P M	CH	6	0	**2r**	0	3	44	0	**46**	0	29	6	0	**3.**	0	**C0H**
WbT(ts	64	Cr	0	**H9**	0	C3	249	0	**2. 2**	0	9O	20	0	**CCC**	0	**4. 2**
% PppGo(ne	H38C%	C. 89%	0%	**l**	l	r 80%	9r 80%	0%	**l**	l	H280%	CH80%	0%	**l**	l	l
% WbT(ts	C. 80%	382%	0%	**C983%**	l	28H%	r 389%	0%	**r. 86%**	l	C986%	483%	0%	**2480%**	l	l
aL F	08964	08r 3.	l	**08H90**	l	08HC3	08H30	l	**08H29**	l	0861H4	0861O4	l	**08660**	l	08924
htceTg	64	Cr	0	**H9**	l	C2	236	0	**249**	l	62	CH	0	**90**	l	42H
% htceTg	C00%	C00%	0%	**C00%**	l	9283%	9r 82%	0%	**9r 80%**	l	6980%	9080%	0%	**HC80%**	l	928 %
PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g	0	0	0	**0**	l	0	C0	0	**C0**	l	C6	O	0	**CH**	l	2H
% PCTnds(TkS WCdn-g(US BtUcskly UtTWCdn-g	0%	0%	0%	**0%**	l	0%	480%	0%	**38H%**	l	CH6%	r 80%	0%	**C. 82%**	l	. 8C%
Rdgkg	0	0	0	**0**	l	O	2	0	**3**	l	2	O	0	**3**	l	.
% Rdgkg	0%	0%	0%	**0%**	l	685%	08H%	0%	**C8C%**	l	282%	r 80%	0%	**285%**	l	C83%
RtnwnskgoUmo(S	0	0	0	**0**	l	0	0	0	**0**	l	0	0	0	**0**	l	0
% RtnwnskgoUmo(S	0%	0%	0%	**0%**	l	0%	0%	0%	**0%**	l	0%	0%	0%	**0%**	l	0%
akSkgTCt(Ug	l	l	l	l	0	l	l	l	l	0	l	l	l	l	0	
% akSkgTCt(Ug	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l
RtnwnskgoUi CoggI (s-	l	l	l	l	0	l	l	l	l	0	l	l	l	l	0	
% RtnwnskgoUi CoggI (s-	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l

*akSkgTCt(Ug(US RtnwnskgoUi CoggI (s- 8h) hkfT, m) mtceT, W) WdCd, y) y lWdCU


[N] NY Route 22
Total: 797
On: 888
1ut: 929
25
48
[W] Salmon River Road
Total: 822
1ut: 99
On: 64
17
83
89
274
1ut: 850
On: 202
Total: 906
[S] NY Route 22

124-158: UMS Distribution
NY Route 22 & I-87 Exit 36 SB Off Ramp
PM: Wednesday, November 6th, 2024
AM: Thursday, November 7th, 2024

Leg Direction	Exit 36 SB Off Ramp			NY-22 NB		NY-22 SB		TOTAL	PEAK
Time	L	R	APP	T	APP	T	APP	APP	HOUR
7:15 AM	30	42	72	83	83	15	15	170	
7:30 AM	27	50	77	107	107	10	10	194	
7:45 AM	22	44	66	116	116	24	24	206	
8:00 AM	19	39	58	72	72	18	18	148	718

Peak: 7:15-8:15
PHF 0.871359

4:00 PM	49	30	79	58	58	49	49	186	
4:15 PM	38	27	65	48	48	44	44	157	
4:30 PM	54	36	90	59	59	45	45	194	
4:45 PM	36	23	59	59	59	36	36	154	691

Peak: 4:00-5:00
PHF 0.890464

AM Peak Hour Sum	98	175	273	378	378	67	67	718
HV %	20	12	15	4	4	10	10	9
PM Peak Hour Sum	177	116	293	224	224	174	174	691
HV %	10	15	12	10	10	1	1	9

AM PHF 0.871
PM PHF 0.89

Attachment C
Level of Service Summary

Schluter Distribution Center
Town of Plattsburgh, New York

LOS Definitions

The following is an excerpt from the Highway Capacity Manual, 6th Edition (HCM).

Level of Service for Signalized Intersections

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay *and* volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort and fuel consumption. The v/c ratio quantifies the degree to which a phase's capacity is utilized by a lane group. The following paragraphs describe each LOS.

LOS A describes operations with a control delay of 10 s/veh or less and a v/c ratio no greater than 1.0. This level is typically assigned when the v/c ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a v/c ratio no greater than 1.0. This level is typically assigned when the v/c ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a v/c ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D describes operations with control delay between 35 and 55 s/veh and a v/c ratio no greater than 1.0. This level is typically assigned when the v/c ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E describes operations with control delay between 55 and 80 s/veh and a v/c ratio no greater than 1.0. This level is typically assigned when the v/c ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F describes operations with control delay exceeding 80 s/veh or a v/c ratio greater than 1.0. This level is typically assigned when the v/c ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

A lane group can incur a delay less than 80 s/veh when the v/c ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and v/c ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

Average control delay and queue length at roundabout controlled intersections are calculated using SIDRA Intersection. The physical geometry such as entry lane width and approach flare, and traffic volume at the roundabout are factors that influence the intersection's performance. The average delay reported using SIDRA Intersection is based on the signalized HCM Method of Delay for Level-of-Service.

LOS Definitions

The following is an excerpt from the Highway Capacity Manual, 6th Edition (HCM).

Level of Service Criteria for Unsignalized Intersections

Level of service (LOS) for Two-Way Stop-Controlled (TWSC) intersections is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns by using criteria given in Exhibit 20-2. LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons: (a) major-street through vehicles are assumed to experience zero delay; (b) the disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles; and (c) the resulting low delay can mask important LOS deficiencies for minor movements. LOS F is assigned to the movement if the volume-to-capacity (v/c) ratio for the movement exceeds 1.0, regardless of the control delay.

The LOS criteria for TWSC intersections are somewhat different from the criteria used in Chapter 18 for signalized intersections, primarily because user perceptions differ among transportation facility types. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will present greater delay than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals, which can reduce users' delay tolerance.

The LOS criteria for All-Way Stop-Controlled (AWSC) intersections are given in Exhibit 21-8. LOS F is assigned if the v/c ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

Exhibits 20-2/21-8:
Level-of-Service Criteria for Stop Controlled Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c ≥ 1.0
10.0	A	F
>10.0 and ≤ 15.0	B	F
>15.0 and ≤ 25.0	C	F
>25.0 and ≤ 35.0	D	F
>35.0 and ≤ 50.0	E	F
>50.0	F	F

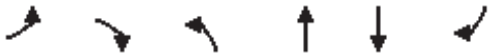
Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	95	606	0	0	152
Future Vol, veh/h	24	95	606	0	0	152
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	6	5	0	0	9
Mvmt Flow	28	109	697	0	0	175

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	872	697	0	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.44	6.26	-	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	-	-	-	-
Pot Cap-1 Maneuver	319	434	-	0	0	-
Stage 1	490	-	-	0	0	-
Stage 2	851	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	319	434	-	-	-	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	405	-
HCM Lane V/C Ratio	-	0.338	-
HCM Control Delay (s)	-	18.4	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.5	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	13	606	131	45
Future Volume (Veh/h)	0	0	13	606	131	45
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	15	681	147	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	858	147	147			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	858	147	147			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	99			
cM capacity (veh/h)	326	905	1399			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	15	681	147	51
Volume Left	15	0	0	0
Volume Right	0	0	0	51
cSH	1399	1700	1700	1700
Volume to Capacity	0.01	0.40	0.09	0.03
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	7.6	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.2		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	139	13	73	480	54	77
Future Vol, veh/h	139	13	73	480	54	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	7	0	17	6	7	13
Mvmt Flow	160	15	84	552	62	89

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	827	107	151	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Critical Hdwy	6.47	6.2	4.27	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	2.353	-	-	-
Pot Cap-1 Maneuver	335	953	1343	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	314	953	1343	-	-	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	473	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.1	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1343	-	333	-	-
HCM Lane V/C Ratio	0.062	-	0.525	-	-
HCM Control Delay (s)	7.9	-	27.1	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	2.9	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	114	18	1	74	75	16	26	1	37	10	3
Future Vol, veh/h	11	114	18	1	74	75	16	26	1	37	10	3
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	5	6	0	7	17	17	0	0	24	20	0
Mvmt Flow	13	134	21	1	87	88	19	31	1	44	12	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	175	0	0	155	0	0	312	348	145	320	314	131
Stage 1	-	-	-	-	-	-	171	171	-	133	133	-
Stage 2	-	-	-	-	-	-	141	177	-	187	181	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.27	6.5	6.2	7.34	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.653	4	3.3	3.716	4.18	3.3
Pot Cap-1 Maneuver	1414	-	-	1438	-	-	612	579	908	592	573	924
Stage 1	-	-	-	-	-	-	797	761	-	820	753	-
Stage 2	-	-	-	-	-	-	827	756	-	766	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1438	-	-	595	573	908	562	567	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	595	573	-	562	567	-
Stage 1	-	-	-	-	-	-	789	753	-	812	752	-
Stage 2	-	-	-	-	-	-	810	755	-	727	710	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	11.7	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	586	1414	-	-	1438	-	-	577
HCM Lane V/C Ratio	0.086	0.009	-	-	0.001	-	-	0.102
HCM Control Delay (s)	11.7	7.6	0	-	7.5	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	98	175	378	0	0	67
Future Vol, veh/h	98	175	378	0	0	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	20	12	4	0	0	10
Mvmt Flow	113	201	434	0	0	77

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	511	434	0	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.6	6.32	-	-	-	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.408	-	-	-	-
Pot Cap-1 Maneuver	492	601	-	0	0	-
Stage 1	617	-	-	0	0	-
Stage 2	902	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	492	601	-	-	-	-
Mov Cap-2 Maneuver	492	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	902	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	557	-
HCM Lane V/C Ratio	-	0.563	-
HCM Control Delay (s)	-	19.5	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	3.5	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	13	18	14	18	101	11	274	0	25	132	8
Future Vol, veh/h	3	13	18	14	18	101	11	274	0	25	132	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	22	0	6	3	0	5	0	0	11	0
Mvmt Flow	4	15	21	17	21	120	13	326	0	30	157	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	645	574	162	592	579	326	167	0	0	326	0	0
Stage 1	222	222	-	352	352	-	-	-	-	-	-	-
Stage 2	423	352	-	240	227	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.1	6.56	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.5	4.054	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	388	432	833	421	421	713	1423	-	-	1245	-	-
Stage 1	785	723	-	669	625	-	-	-	-	-	-	-
Stage 2	613	635	-	768	709	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	301	416	833	387	405	713	1423	-	-	1245	-	-
Mov Cap-2 Maneuver	301	416	-	387	405	-	-	-	-	-	-	-
Stage 1	776	703	-	662	618	-	-	-	-	-	-	-
Stage 2	487	628	-	712	690	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	13.2	0.3	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	541	598	1245	-	-
HCM Lane V/C Ratio	0.009	-	-	0.075	0.265	0.024	-	-
HCM Control Delay (s)	7.6	0	-	12.2	13.2	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.1	0.1	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	74	15	13	249	91	20
Future Vol, veh/h	74	15	13	249	91	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	8	5	21	10
Mvmt Flow	80	16	14	271	99	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	409	110	121	0	-	0
Stage 1	110	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.272	-	-	-
Pot Cap-1 Maneuver	602	949	1430	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	595	949	1430	-	-	-
Mov Cap-2 Maneuver	595	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1430	-	635	-	-
HCM Lane V/C Ratio	0.01	-	0.152	-	-
HCM Control Delay (s)	7.5	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

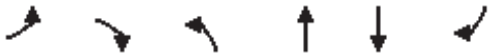
Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	61	393	0	0	326
Future Vol, veh/h	15	61	393	0	0	326
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	5	8	0	0	1
Mvmt Flow	19	75	485	0	0	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	887	485	0	-	-	-
Stage 1	485	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.4	6.25	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.345	-	-	-	-
Pot Cap-1 Maneuver	317	576	-	0	0	-
Stage 1	623	-	-	0	0	-
Stage 2	680	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	317	576	-	-	-	-
Mov Cap-2 Maneuver	317	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	680	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	496	-
HCM Lane V/C Ratio	-	0.189	-
HCM Control Delay (s)	-	13.9	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.7	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	15	393	276	65
Future Volume (Veh/h)	0	0	15	393	276	65
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	17	437	307	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	778	307	307			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778	307	307			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	99			
cM capacity (veh/h)	363	738	1226			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	17	437	307	72
Volume Left	17	0	0	0
Volume Right	0	0	0	72
cSH	1226	1700	1700	1700
Volume to Capacity	0.01	0.26	0.18	0.04
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	8.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.3		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	154	15	64	254	159	117
Future Vol, veh/h	154	15	64	254	159	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	33	10	11	3	5
Mvmt Flow	173	17	72	285	179	131

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	674	245	310	0	-	0
Stage 1	245	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.41	6.53	4.2	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.597	2.29	-	-	-
Pot Cap-1 Maneuver	422	723	1206	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	397	723	1206	-	-	-
Mov Cap-2 Maneuver	397	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	659	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.9	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1206	-	414	-	-
HCM Lane V/C Ratio	0.06	-	0.459	-	-
HCM Control Delay (s)	8.2	-	20.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2.3	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	80	14	2	147	32	12	9	0	78	20	20
Future Vol, veh/h	14	80	14	2	147	32	12	9	0	78	20	20
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	1	0	0	1	6	0	0	0	3	5	5
Mvmt Flow	19	107	19	3	196	43	16	12	0	104	27	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	239	0	0	126	0	0	406	400	117	385	388	218
Stage 1	-	-	-	-	-	-	155	155	-	224	224	-
Stage 2	-	-	-	-	-	-	251	245	-	161	164	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.13	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.527	4.045	3.345
Pot Cap-1 Maneuver	1340	-	-	1473	-	-	559	541	941	572	542	814
Stage 1	-	-	-	-	-	-	852	773	-	776	713	-
Stage 2	-	-	-	-	-	-	758	707	-	839	757	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1340	-	-	1473	-	-	513	532	941	555	533	814
Mov Cap-2 Maneuver	-	-	-	-	-	-	513	532	-	555	533	-
Stage 1	-	-	-	-	-	-	839	761	-	764	712	-
Stage 2	-	-	-	-	-	-	704	706	-	813	746	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.1	12.3	13.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	521	1340	-	-	1473	-	-	582
HCM Lane V/C Ratio	0.054	0.014	-	-	0.002	-	-	0.27
HCM Control Delay (s)	12.3	7.7	0	-	7.4	0	-	13.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	1.1

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	177	116	224	0	0	174
Future Vol, veh/h	177	116	224	0	0	174
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	15	10	0	0	1
Mvmt Flow	199	130	252	0	0	196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	448	252	0	-	-	-
Stage 1	252	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.5	6.35	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.435	-	-	-	-
Pot Cap-1 Maneuver	554	756	-	0	0	-
Stage 1	772	-	-	0	0	-
Stage 2	818	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	554	756	-	-	-	-
Mov Cap-2 Maneuver	554	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	818	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	620	-
HCM Lane V/C Ratio	-	0.531	-
HCM Control Delay (s)	-	17.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	3.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	3	25	4	6	32	8	186	0	50	293	8
Future Vol, veh/h	6	3	25	4	6	32	8	186	0	50	293	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	12	0	0	1	0
Mvmt Flow	7	3	28	4	7	36	9	209	0	56	329	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	695	673	334	688	677	209	338	0	0	209	0	0
Stage 1	446	446	-	227	227	-	-	-	-	-	-	-
Stage 2	249	227	-	461	450	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	359	379	712	363	377	836	1232	-	-	1374	-	-
Stage 1	595	577	-	780	720	-	-	-	-	-	-	-
Stage 2	759	720	-	584	575	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	324	357	712	331	355	836	1232	-	-	1374	-	-
Mov Cap-2 Maneuver	324	357	-	331	355	-	-	-	-	-	-	-
Stage 1	590	548	-	774	714	-	-	-	-	-	-	-
Stage 2	714	714	-	530	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	11.2	0.3	1.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	548	624	1374	-	-
HCM Lane V/C Ratio	0.007	-	-	0.07	0.076	0.041	-	-
HCM Control Delay (s)	7.9	0	-	12.1	11.2	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	19	17	155	266	77
Future Vol, veh/h	30	19	17	155	266	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	15	1	0
Mvmt Flow	34	21	19	174	299	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	555	343	386	0	-	0
Stage 1	343	-	-	-	-	-
Stage 2	212	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	496	704	1184	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	487	704	1184	-	-	-
Mov Cap-2 Maneuver	487	-	-	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	828	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1184	-	553	-	-
HCM Lane V/C Ratio	0.016	-	0.1	-	-
HCM Control Delay (s)	8.1	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

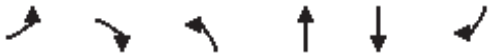
Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	101	649	0	0	201
Future Vol, veh/h	31	101	649	0	0	201
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	6	5	0	0	9
Mvmt Flow	36	116	746	0	0	231

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	977	746	0	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	231	-	-	-	-	-
Critical Hdwy	6.44	6.26	-	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	-	-	-	-
Pot Cap-1 Maneuver	276	407	-	0	0	-
Stage 1	465	-	-	0	0	-
Stage 2	803	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	276	407	-	-	-	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	366	-
HCM Lane V/C Ratio	-	0.415	-
HCM Control Delay (s)	-	21.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	2	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	21	649	185	48
Future Volume (Veh/h)	0	0	21	649	185	48
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	24	729	208	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	985	208	208			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	985	208	208			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	98			
cM capacity (veh/h)	272	837	1328			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	24	729	208	54
Volume Left	24	0	0	0
Volume Right	0	0	0	54
cSH	1328	1700	1700	1700
Volume to Capacity	0.02	0.43	0.12	0.03
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	7.8	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.2		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	161	17	105	509	57	128
Future Vol, veh/h	161	17	105	509	57	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	7	0	17	6	7	13
Mvmt Flow	185	20	121	585	66	147

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	967	140	213	0	-	0
Stage 1	140	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Critical Hdwy	6.47	6.2	4.27	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	2.353	-	-	-
Pot Cap-1 Maneuver	276	913	1273	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	250	913	1273	-	-	-
Mov Cap-2 Maneuver	250	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	51	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1273	-	269	-	-
HCM Lane V/C Ratio	0.095	-	0.761	-	-
HCM Control Delay (s)	8.1	-	51	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	5.6	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	138	19	1	83	80	17	28	1	39	11	3
Future Vol, veh/h	12	138	19	1	83	80	17	28	1	39	11	3
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	5	6	0	7	17	17	0	0	24	20	0
Mvmt Flow	14	162	22	1	98	94	20	33	1	46	13	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	192	0	0	184	0	0	357	395	173	365	359	145
Stage 1	-	-	-	-	-	-	201	201	-	147	147	-
Stage 2	-	-	-	-	-	-	156	194	-	218	212	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.27	6.5	6.2	7.34	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.653	4	3.3	3.716	4.18	3.3
Pot Cap-1 Maneuver	1394	-	-	1403	-	-	571	545	876	552	540	908
Stage 1	-	-	-	-	-	-	768	739	-	806	742	-
Stage 2	-	-	-	-	-	-	812	744	-	737	695	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1394	-	-	1403	-	-	553	538	876	521	534	908
Mov Cap-2 Maneuver	-	-	-	-	-	-	553	538	-	521	534	-
Stage 1	-	-	-	-	-	-	760	731	-	797	741	-
Stage 2	-	-	-	-	-	-	794	743	-	695	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	12.3	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	548	1394	-	-	1403	-	-	537
HCM Lane V/C Ratio	0.099	0.01	-	-	0.001	-	-	0.116
HCM Control Delay (s)	12.3	7.6	0	-	7.6	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	9.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	195	420	0	0	74
Future Vol, veh/h	104	195	420	0	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	20	12	4	0	0	10
Mvmt Flow	120	224	483	0	0	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	568	483	0	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	85	-	-	-	-	-
Critical Hdwy	6.6	6.32	-	-	-	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.408	-	-	-	-
Pot Cap-1 Maneuver	455	564	-	0	0	-
Stage 1	585	-	-	0	0	-
Stage 2	895	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	455	564	-	-	-	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	521	-
HCM Lane V/C Ratio	-	0.66	-
HCM Control Delay (s)	-	24.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	4.8	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	14	19	15	19	107	12	310	0	27	143	8
Future Vol, veh/h	3	14	19	15	19	107	12	310	0	27	143	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	22	0	6	3	0	5	0	0	11	0
Mvmt Flow	4	17	23	18	23	127	14	369	0	32	170	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	711	636	175	656	641	369	180	0	0	369	0	0
Stage 1	239	239	-	397	397	-	-	-	-	-	-	-
Stage 2	472	397	-	259	244	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.1	6.56	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.5	4.054	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	351	398	819	382	388	674	1408	-	-	1201	-	-
Stage 1	769	711	-	633	596	-	-	-	-	-	-	-
Stage 2	576	607	-	750	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	263	381	819	348	371	674	1408	-	-	1201	-	-
Mov Cap-2 Maneuver	263	381	-	348	371	-	-	-	-	-	-	-
Stage 1	759	690	-	625	588	-	-	-	-	-	-	-
Stage 2	443	599	-	690	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.8	14.2	0.3	1.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1408	-	-	505	557	1201	-	-
HCM Lane V/C Ratio	0.01	-	-	0.085	0.301	0.027	-	-
HCM Control Delay (s)	7.6	0	-	12.8	14.2	8.1	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	1.3	0.1	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	79	16	14	283	100	21
Future Vol, veh/h	79	16	14	283	100	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	8	5	21	10
Mvmt Flow	86	17	15	308	109	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	459	121	132	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.272	-	-	-
Pot Cap-1 Maneuver	564	936	1417	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	557	936	1417	-	-	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1417	-	598	-	-
HCM Lane V/C Ratio	0.011	-	0.173	-	-
HCM Control Delay (s)	7.6	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

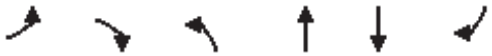
Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	65	436	0	0	364
Future Vol, veh/h	17	65	436	0	0	364
Conflicting Peds, #/hr	312	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	5	8	0	0	1
Mvmt Flow	21	80	538	0	0	449

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1299	538	0	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.4	6.25	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.345	-	-	-	-
Pot Cap-1 Maneuver	180	537	-	0	0	-
Stage 1	589	-	-	0	0	-
Stage 2	465	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	131	537	-	-	-	-
Mov Cap-2 Maneuver	131	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	327	-
HCM Lane V/C Ratio	-	0.31	-
HCM Control Delay (s)	-	20.9	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.3	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	39	436	312	69
Future Volume (Veh/h)	0	0	39	436	312	69
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	43	484	347	77
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	917	347	347			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	917	347	347			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	96			
cM capacity (veh/h)	293	701	1185			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	43	484	347	77
Volume Left	43	0	0	0
Volume Right	0	0	0	77
cSH	1185	1700	1700	1700
Volume to Capacity	0.04	0.28	0.20	0.05
Queue Length 95th (ft)	3	0	0	0
Control Delay (s)	8.2	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.7		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	26.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	205	23	80	270	169	143
Future Vol, veh/h	205	23	80	270	169	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	33	10	11	3	5
Mvmt Flow	230	26	90	303	190	161

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	754	271	351	0	-	0
Stage 1	271	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Critical Hdwy	6.41	6.53	4.2	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.597	2.29	-	-	-
Pot Cap-1 Maneuver	378	699	1165	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	349	699	1165	-	-	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.4	1.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1165	-	368	-	-
HCM Lane V/C Ratio	0.077	-	0.696	-	-
HCM Control Delay (s)	8.3	-	34.4	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	5	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	92	15	2	167	34	13	10	0	83	21	21
Future Vol, veh/h	15	92	15	2	167	34	13	10	0	83	21	21
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	1	0	0	1	6	0	0	0	3	5	5
Mvmt Flow	20	123	20	3	223	45	17	13	0	111	28	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	268	0	0	143	0	0	453	447	133	432	435	246
Stage 1	-	-	-	-	-	-	173	173	-	252	252	-
Stage 2	-	-	-	-	-	-	280	274	-	180	183	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.13	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.527	4.045	3.345
Pot Cap-1 Maneuver	1307	-	-	1452	-	-	520	509	922	532	510	785
Stage 1	-	-	-	-	-	-	834	760	-	750	693	-
Stage 2	-	-	-	-	-	-	731	687	-	819	743	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1307	-	-	1452	-	-	473	499	922	513	500	785
Mov Cap-2 Maneuver	-	-	-	-	-	-	473	499	-	513	500	-
Stage 1	-	-	-	-	-	-	820	747	-	737	692	-
Stage 2	-	-	-	-	-	-	675	686	-	791	730	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.1	12.9	14.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1307	-	-	1452	-	-	542
HCM Lane V/C Ratio	0.063	0.015	-	-	0.002	-	-	0.308
HCM Control Delay (s)	12.9	7.8	0	-	7.5	0	-	14.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	1.3

Intersection	
Int Delay, s/veh	8.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	188	127	246	0	0	192
Future Vol, veh/h	188	127	246	0	0	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	15	10	0	0	1
Mvmt Flow	211	143	276	0	0	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	492	276	0	-	-	-
Stage 1	276	-	-	-	-	-
Stage 2	216	-	-	-	-	-
Critical Hdwy	6.5	6.35	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.435	-	-	-	-
Pot Cap-1 Maneuver	522	733	-	0	0	-
Stage 1	752	-	-	0	0	-
Stage 2	801	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	522	733	-	-	-	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	591	-
HCM Lane V/C Ratio	-	0.599	-
HCM Control Delay (s)	-	19.8	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	4	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	3	27	4	6	34	8	205	0	53	318	8
Future Vol, veh/h	6	3	27	4	6	34	8	205	0	53	318	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	12	0	0	1	0
Mvmt Flow	7	3	30	4	7	38	9	230	0	60	357	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	753	730	362	746	734	230	366	0	0	230	0	0
Stage 1	482	482	-	248	248	-	-	-	-	-	-	-
Stage 2	271	248	-	498	486	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	329	352	687	332	350	814	1204	-	-	1350	-	-
Stage 1	569	557	-	760	705	-	-	-	-	-	-	-
Stage 2	739	705	-	558	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	293	329	687	299	328	814	1204	-	-	1350	-	-
Mov Cap-2 Maneuver	293	329	-	299	328	-	-	-	-	-	-	-
Stage 1	564	526	-	753	699	-	-	-	-	-	-	-
Stage 2	691	699	-	500	523	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	11.6	0.3	1.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1204	-	-	523	599	1350	-	-
HCM Lane V/C Ratio	0.007	-	-	0.077	0.083	0.044	-	-
HCM Control Delay (s)	8	0	-	12.5	11.6	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	18	172	289	82
Future Vol, veh/h	32	20	18	172	289	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	15	1	0
Mvmt Flow	36	22	20	193	325	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	604	371	417	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	465	679	1153	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	456	679	1153	-	-	-
Mov Cap-2 Maneuver	456	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	810	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1153	-	522	-	-
HCM Lane V/C Ratio	0.018	-	0.112	-	-
HCM Control Delay (s)	8.2	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

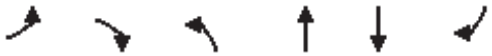
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	101	653	0	0	201
Future Vol, veh/h	52	101	653	0	0	201
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	6	5	0	0	9
Mvmt Flow	60	116	751	0	0	231

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	982	751	0	-	-	-
Stage 1	751	-	-	-	-	-
Stage 2	231	-	-	-	-	-
Critical Hdwy	6.44	6.26	-	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	-	-	-	-
Pot Cap-1 Maneuver	274	404	-	0	0	-
Stage 1	463	-	-	0	0	-
Stage 2	803	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	274	404	-	-	-	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	348	-
HCM Lane V/C Ratio	-	0.505	-
HCM Control Delay (s)	-	25.5	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	2.7	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	25	653	206	48
Future Volume (Veh/h)	0	0	25	653	206	48
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	28	734	231	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1021	231	231			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1021	231	231			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	98			
cM capacity (veh/h)	258	813	1302			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	28	734	231	54
Volume Left	28	0	0	0
Volume Right	0	0	0	54
cSH	1302	1700	1700	1700
Volume to Capacity	0.02	0.43	0.14	0.03
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	7.8	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.3		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	161	26	107	518	78	128
Future Vol, veh/h	161	26	107	518	78	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	7	0	17	6	7	13
Mvmt Flow	185	30	123	595	90	147

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1005	164	237	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Critical Hdwy	6.47	6.2	4.27	-	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	2.353	-	-	-
Pot Cap-1 Maneuver	262	886	1247	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	236	886	1247	-	-	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	415	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	59.6	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1247	-	263	-	-
HCM Lane V/C Ratio	0.099	-	0.817	-	-
HCM Control Delay (s)	8.2	-	59.6	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	6.5	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	142	23	1	84	81	18	29	1	43	15	3
Future Vol, veh/h	12	142	23	1	84	81	18	29	1	43	15	3
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	5	6	0	7	17	17	0	0	24	20	0
Mvmt Flow	14	167	27	1	99	95	21	34	1	51	18	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	194	0	0	194	0	0	369	405	181	375	371	147
Stage 1	-	-	-	-	-	-	209	209	-	149	149	-
Stage 2	-	-	-	-	-	-	160	196	-	226	222	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.27	6.5	6.2	7.34	6.7	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.27	5.5	-	6.34	5.7	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.653	4	3.3	3.716	4.18	3.3
Pot Cap-1 Maneuver	1391	-	-	1391	-	-	561	538	867	544	531	905
Stage 1	-	-	-	-	-	-	760	733	-	804	741	-
Stage 2	-	-	-	-	-	-	808	742	-	730	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1391	-	-	1391	-	-	540	532	867	512	525	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	540	532	-	512	525	-
Stage 1	-	-	-	-	-	-	752	725	-	795	740	-
Stage 2	-	-	-	-	-	-	785	741	-	687	679	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	12.5	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	539	1391	-	-	1391	-	-	526
HCM Lane V/C Ratio	0.105	0.01	-	-	0.001	-	-	0.136
HCM Control Delay (s)	12.5	7.6	0	-	7.6	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	11.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	125	195	430	0	0	104
Future Vol, veh/h	125	195	430	0	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	20	12	4	0	0	10
Mvmt Flow	144	224	494	0	0	120

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	614	494	0	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.6	6.32	-	-	-	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.408	-	-	-	-
Pot Cap-1 Maneuver	427	556	-	0	0	-
Stage 1	578	-	-	0	0	-
Stage 2	862	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	427	556	-	-	-	-
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	862	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	497	-
HCM Lane V/C Ratio	-	0.74	-
HCM Control Delay (s)	-	30.1	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	6.2	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	14	28	15	19	107	14	320	0	27	194	8
Future Vol, veh/h	3	14	28	15	19	107	14	320	0	27	194	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	22	0	6	3	0	5	0	0	11	0
Mvmt Flow	4	17	33	18	23	127	17	381	0	32	231	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	790	715	236	740	720	381	241	0	0	381	0	0
Stage 1	300	300	-	415	415	-	-	-	-	-	-	-
Stage 2	490	415	-	325	305	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.42	7.1	6.56	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.498	3.5	4.054	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	310	359	756	335	349	664	1337	-	-	1189	-	-
Stage 1	713	669	-	619	586	-	-	-	-	-	-	-
Stage 2	564	596	-	692	655	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	229	342	756	297	333	664	1337	-	-	1189	-	-
Mov Cap-2 Maneuver	229	342	-	297	333	-	-	-	-	-	-	-
Stage 1	702	648	-	609	577	-	-	-	-	-	-	-
Stage 2	431	586	-	624	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	15	0.3	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1337	-	-	494	525	1189	-	-
HCM Lane V/C Ratio	0.012	-	-	0.108	0.32	0.027	-	-
HCM Control Delay (s)	7.7	0	-	13.2	15	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	1.4	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	5	26	362	121	59
Future Vol, veh/h	12	5	26	362	121	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	4	20	2
Mvmt Flow	13	5	28	393	132	64

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	613	164	196	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	456	881	1377	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	444	881	1377	-	-	-
Mov Cap-2 Maneuver	444	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	643	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1377	-	520	-	-
HCM Lane V/C Ratio	0.021	-	0.036	-	-
HCM Control Delay (s)	7.7	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	88	16	14	300	103	23
Future Vol, veh/h	88	16	14	300	103	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	8	5	21	10
Mvmt Flow	96	17	15	326	112	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	481	125	137	0	-	0
Stage 1	125	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.272	-	-	-
Pot Cap-1 Maneuver	548	931	1411	-	-	-
Stage 1	906	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	541	931	1411	-	-	-
Mov Cap-2 Maneuver	541	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1411	-	578	-	-
HCM Lane V/C Ratio	0.011	-	0.196	-	-
HCM Control Delay (s)	7.6	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

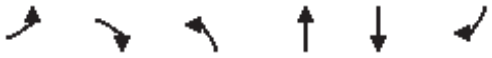
Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	65	462	0	0	364
Future Vol, veh/h	22	65	462	0	0	364
Conflicting Peds, #/hr	312	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	5	8	0	0	1
Mvmt Flow	27	80	570	0	0	449

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1331	570	0	-	-	-
Stage 1	570	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.4	6.25	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.345	-	-	-	-
Pot Cap-1 Maneuver	172	515	-	0	0	-
Stage 1	570	-	-	0	0	-
Stage 2	465	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	125	515	-	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	570	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	288	-
HCM Lane V/C Ratio	-	0.373	-
HCM Control Delay (s)	-	24.7	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.7	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	65	462	317	69
Future Volume (Veh/h)	0	0	65	462	317	69
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	72	513	352	77
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1009	352	352			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1009	352	352			
tC, single (s)	6.4	6.2	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.3			
p0 queue free %	100	100	94			
cM capacity (veh/h)	252	696	1180			

Direction, Lane #	NB 1	NB 2	SB 1	SB 2
Volume Total	72	513	352	77
Volume Left	72	0	0	0
Volume Right	0	0	0	77
cSH	1180	1700	1700	1700
Volume to Capacity	0.06	0.30	0.21	0.05
Queue Length 95th (ft)	5	0	0	0
Control Delay (s)	8.3	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	1.0		0.0	
Approach LOS				

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	12

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	205	25	90	321	174	143
Future Vol, veh/h	205	25	90	321	174	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	248	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	1	33	10	11	3	5
Mvmt Flow	230	28	101	361	196	161

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	840	277	357	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.41	6.53	4.2	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.597	2.29	-	-	-
Pot Cap-1 Maneuver	337	693	1159	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	308	693	1159	-	-	-
Mov Cap-2 Maneuver	308	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46.8	1.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1159	-	328	-	-
HCM Lane V/C Ratio	0.087	-	0.788	-	-
HCM Control Delay (s)	8.4	-	46.8	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	6.4	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	93	16	2	172	39	18	15	0	84	22	21
Future Vol, veh/h	15	93	16	2	172	39	18	15	0	84	22	21
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	1	0	0	1	6	0	0	0	3	5	5
Mvmt Flow	20	124	21	3	229	52	24	20	0	112	29	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	281	0	0	145	0	0	465	462	135	446	446	255
Stage 1	-	-	-	-	-	-	175	175	-	261	261	-
Stage 2	-	-	-	-	-	-	290	287	-	185	185	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.13	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.55	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.527	4.045	3.345
Pot Cap-1 Maneuver	1293	-	-	1450	-	-	511	500	919	521	503	776
Stage 1	-	-	-	-	-	-	832	758	-	742	687	-
Stage 2	-	-	-	-	-	-	722	678	-	814	741	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1293	-	-	1450	-	-	463	491	919	498	493	776
Mov Cap-2 Maneuver	-	-	-	-	-	-	463	491	-	498	493	-
Stage 1	-	-	-	-	-	-	818	745	-	729	686	-
Stage 2	-	-	-	-	-	-	665	677	-	779	728	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.1	13.4	15
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	475	1293	-	-	1450	-	-	528
HCM Lane V/C Ratio	0.093	0.015	-	-	0.002	-	-	0.321
HCM Control Delay (s)	13.4	7.8	0	-	7.5	0	-	15
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	1.4

Intersection	
Int Delay, s/veh	9.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	193	127	307	0	0	199
Future Vol, veh/h	193	127	307	0	0	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	15	10	0	0	1
Mvmt Flow	217	143	345	0	0	224

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	569	345	0	-	-	-
Stage 1	345	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.5	6.35	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.435	-	-	-	-
Pot Cap-1 Maneuver	470	669	-	0	0	-
Stage 1	700	-	-	0	0	-
Stage 2	795	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	470	669	-	-	-	-
Mov Cap-2 Maneuver	470	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	533	-
HCM Lane V/C Ratio	-	0.675	-
HCM Control Delay (s)	-	24.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	5	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	3	29	4	6	34	18	266	0	53	330	8
Future Vol, veh/h	6	3	29	4	6	34	18	266	0	53	330	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	12	0	0	1	0
Mvmt Flow	7	3	33	4	7	38	20	299	0	60	371	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	858	835	376	853	839	299	380	0	0	299	0	0
Stage 1	496	496	-	339	339	-	-	-	-	-	-	-
Stage 2	362	339	-	514	500	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	279	306	675	281	304	745	1190	-	-	1274	-	-
Stage 1	559	549	-	680	643	-	-	-	-	-	-	-
Stage 2	661	643	-	547	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	244	282	675	249	280	745	1190	-	-	1274	-	-
Mov Cap-2 Maneuver	244	282	-	249	280	-	-	-	-	-	-	-
Stage 1	548	516	-	666	630	-	-	-	-	-	-	-
Stage 2	608	630	-	486	513	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	12.5	0.5	1.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1190	-	-	486	529	1274	-	-
HCM Lane V/C Ratio	0.017	-	-	0.088	0.093	0.047	-	-
HCM Control Delay (s)	8.1	0	-	13.1	12.5	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	71	31	6	204	371	14
Future Vol, veh/h	71	31	6	204	371	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	13	1	2
Mvmt Flow	77	34	7	222	403	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	647	411	418	0	-	0
Stage 1	411	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	436	641	1141	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	433	641	1141	-	-	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1141	-	480	-	-
HCM Lane V/C Ratio	0.006	-	0.231	-	-
HCM Control Delay (s)	8.2	0	14.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	20	18	176	309	92
Future Vol, veh/h	34	20	18	176	309	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	15	1	0
Mvmt Flow	38	22	20	198	347	103

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	637	399	450	0	-	0
Stage 1	399	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	445	655	1121	-	-	-
Stage 1	682	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	655	1121	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	806	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1121	-	498	-	-
HCM Lane V/C Ratio	0.018	-	0.122	-	-
HCM Control Delay (s)	8.3	0	13.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

APPENDIX E

VISUAL IMPACT ANALYSIS

SARATOGA ASSOCIATES
Landscape Architects, Architects,
Engineers, and Planners, P.C.

March 3, 2025

Technical Memorandum – Summary Visual Resource Assessment

Schluter South Expansion Project - Route 22

Introduction - In accordance with the NYSDEC Visual Policy (DEP-00-2) this technical memorandum addresses the visual and aesthetic impacts resulting from the proposed Project. It examines the visual, aesthetic and recreational resources within a Visual Study Area (VSA) extending out to a two-mile radius from the proposed Project Site and the potential impact on these resources, so as to determine whether the proposed expansion will, "avoid scenic, recreational, and historic areas," and whether the ROW has been, "routed to minimize its visibility from areas of public view." Additionally, this memo includes a viewshed analysis, representative photographic simulations, and mitigation recommendations in accordance with NYSDEC Visual Policy.

Visually Sensitive Resource Inventory – Visually Sensitive Resources (VSRs) are landscape areas and features that are significant because of either their inherent scenic quality or their cultural importance, including: naturally occurring landscapes; natural features; human-made features; designated recreational and scenic areas; and landscapes that demonstrate historical significance.

The NYSDEC's Program Policy, Assessing and Mitigating Visual Impacts, identifies categories of aesthetic resources of statewide significance which have been recognized through either national or state designations. The designations have been organized into four categories below.

- Properties of Historic Significance | *National/State Historic Landmarks, Properties/Districts Listed on the NRHP and/or SRHP, and Other Designated Historic Sites;*

- Designated Scenic Resources | *Rivers Designated as National or State Wild, Scenic or Recreational; Adirondak Park Scenic Vistas; Sites, Areas, Lakes, Reservoirs or Highways Designated or Eligible for Designation as Scenic; Scenic Areas of Statewide Significance (SASS); Other Designated Scenic Resources (Easements, Roads, Districts, and Overlooks)*

- Public Lands and Recreational Resources | *National Parks, Recreation Areas, Seashores, and/or Forests; National Natural Landmarks; National Wildlife Refuges; Heritage Areas; State Parks; Sate Natural and Historic Preserve Areas; State Forest Preserve; Other State Lands; Wildlife Management Areas and Game Refuges; State Forests; State Boat Launches/Waterway Access*

Sites; Designated Trails; Palisades Park; Local Parks and Recreation areas; Publicly Accessible Conservation Lands/Easements; Rivers and Streams with Public Fishing Rights Easements; Named Lakes, Ponds and Reservoirs; and

- High Use Public Areas | *State, US and Interstate Highways; Cities, Villages and Hamlets.*

The above categories were inventoried, with a total of 23 VSRs located within the VSA. The location of the VSRs is mapped on Figure 1.

Viewshed Analysis - Viewshed analysis is a geographic information system (GIS) based tool that identifies the geographic area within which there is a relatively high probability that some portion of the Project will be visible above intervening landform, vegetation, and structures. Viewshed analysis is the first step in determining whether the Project will be visible from the identified VSRs.
A viewshed overlay was prepared defining the area within the VSA where some portion of the Project would be visible above intervening landform only (i.e., excluding the screening effect of intervening vegetation and built structures). This "bare earth" or "Theoretical Project Visibility" condition analysis identifies the maximum potential geographic area within which Project visibility could conceivably occur. A second viewshed overlay was prepared adding the screening effect of existing vegetation and built structures. This more realistic "land cover" or "Likely Project Visibility" condition identifies the geographic area where one would reasonably expect the Project to be substantially screened by intervening vegetation or buildings.

For this evaluation, GIS software was used to generate viewshed areas based on publicly available digital topographic and land cover datasets. Viewshed calculations were conducted by creating a digital terrain model (DTM) representing the existing ground surface and a digital surface model (DSM) representing the existing ground surface plus existing vegetation and built structures. The DTM and DSM were generated based on the most current LiDAR data available from the NYSGIS Clearinghouse. The viewshed overlay is included on Figure 1.

Visually Sensitive Resource Analysis - The VSR analysis shows that based on the land cover viewshed overlay 5 of the 23 VSRs located within the VSA will have potential visibility of the proposed Project.

Public Fishing Rights/Easements – Located on the shorelines of the Salmon River and various tributaries to Lake Champlain, New York State Public Fishing Rights and Easements are commonly used by anglers who may be local residents or recreationalists from out of town. Located within a generally suburban landscape south of the City of Plattsburgh, anglers who seek out this section of river and these tributaries are driven by the ease of access and convenience they provide. Scenic quality, and views of the landscape are not the driving factors.

Viewshed analysis illustrates that the stretches of potential Project visibility from these resources are concentrated along I-87 (Adirondack Northway) east and north of the site.

State Routes and Interstate Highways – Interstate 87 the Adirondack Northway and State Route 22 generally parallel each other as they travers the VSA on a north south axis through the center just east of the Project Site. These resources see a large number of users for this geographic area with I-87 having an Average Annual Daily Traffic (AADT) of 13,510 vehicles and State Route 22 having 8,689 AADT[1]. Users traveling this section of these two roads will have views toward the Project Site. The duration of the views will be short and fleeting as one travels by at 65 miles per hour (mph) plus on I-87 and slightly longer durations of view from 40 mph on State Route 22.

High-Use Public Area - The City of Plattsburgh extends just far enough south that two small areas approximately 20 acres each, of City land is located within the VSA. These areas are adjacent to the airport and I-87. There is no public access to the areas of the City within the VSA and with potential Project Visibility.

Photo Simulations - Saratoga Associates visited the VSA to photograph existing condition views. Photographs were taken from Key Observation Points that are representative of the landscape character, various users and VSRs that fall within the Likely Project Visibility as identified in the viewshed mapping. Three locations where chosen as Key Observation Points (KOPs) that represent the VSA and potential changes to the landscape from the installation of the Project. The KOPs are:

- KOP 1: State Route 22 Bridge (I-87/Adirondack Northway overpass) – View looking southeast from a High-Use Public Area approximately 3,430 feet from the building footprint.
- KOP 2: State Route 22 (north of Salmon River Road, near #4025) – View looking northwest from a High-Use Public Area approximately 740 feet from the building footprint.
- KOP 3: South Junction Road (I-87/Adirondack Northway overpass) – View looking northwest from an ordinary roadside approximately 3,380 feet from the building footprint.

Photo locations are mapped in Figure 1.

All photographs were taken using a high resolution (26 mega pixel) digital SLR camera (a 35-millimeter (mm) sensor [full frame]) in uncompressed “RAW” format. Photographs were taken using a 50mm “normal” lens to minimize optical distortion. Photos were also captured at 24mm to better represent the near foreground.

[1] https://nysdottrafficdata.drakewell.com/publicmultinodemap.asp

All photographs were taken before noon, in the morning of October 23, 2024, under generally clear weather conditions.

For each of the identified KOPs, a photographic simulation was prepared illustrating the visual character and degree of Project visibility. Photo simulations were developed by superimposing a rendering of a three-dimensional (3D) computer model of the building into the base photograph taken from each selected KOP. The 3D computer model for the simulations was developed using *3D Studio Max Design*® software. The 3D model of the Facility was constructed in sufficient detail to accurately represent the scale, mass, and visual character of the proposed facility.

Photo Simulations are provided in Figure 2,

Findings

KOP 1: State Route 22 Bridge (I-87/Adirondack Northway overpass).

Existing View: The view from KOP 1 is comprised of an open expanse of roadway and associated line paint and guard rails in the foreground. The roadway is lined with a mis of deciduous vegetation in fall color and at various stages of growth. Human-made elements dominate the view from the foreground road surface, and roadside utility lines and a telecommunications/cell tower in the middle ground. The view is from an elevated position in the overall landscape, looking down the open unobstructed view corridor created by the roadway. The combination of open view and elevated position allows for views above the middle ground vegetation to a silhouetted background ridge. Although dull with little contrast against the sky, the ridge acts as the focal point of the view drawing the attention of the viewer.

Simulated View: With the Project in place, portions of the building are minimally visible in the center of the view, above the middle ground vegetation and below the background ridge. From a distance of approximately 3,430 feet the building appears as one large mass, with minimal visual distinction between texture and color. Tree removal associated with clearing of the site is visible without drawing attention. The varying heights and uneven tops of the remaining foreground and background vegetation softens the edges of the building, by breaking the horizontal lines, helping it to blend more with the existing landscape. The additional human-made features with the Project in place, however the focal point of the view remains the background ridge.

Viewer expectations in regard to landscape character and land-use are not changed by the addition of the proposed Project, and the resource is not impacted.

KOP 2: State Route 22 (north of Salmon River Road, near #4025)

Existing View: The view from KOP 2 looks northwest at the Project just south of the proposed entrance. The view consists of a rural/suburban residential property, mown grass yard and multiple human-made elements on the left side of the frame, while the State Route 22 corridor dominates the center

foreground. Characteristics include blacktop, line striping, utility infrastructure and a parallel roadside swale and associated scrub vegetation. Beyond the foreground roadway and manicured lawn, there is a hedgerow of various types and sizes of deciduous and evergreen vegetation. The vegetation adds interest to the view through the contrast in texture and color, creating a focal point drawing attention form the road corridor. An additional building is visible through the roadside vegetation, as viewer looks ahead.

Simulated View: With the Project in place, the middle ground vegetation has been largely removed to allow for the Project building and associated site work and landscaping. The addition of the project adds additional land-use to the view, with the scale of the Project in contrast to the adjacent residential property. At a distance of 740 feet the building features are discernable with various shades of colors, and patterns breaking up the façade into sections. The division of the building with texture and color reduces the perceived scale of the building within the landscape. The unbroken horizontal line created by the top of the building attracts attention as a human-made feature within the landscape, where before a natural line interacted with the skyline.

Introduction of the Project to the view adds additional features to the landscape character and land-use altering the specific view. The surrounding landscape and scenic integrity of State Route 22 at this KOP are low. This transfers to viewer expectations for this stretch of road which are low therefore, the resource is not impacted.

KOP 3: South Junction Road (I-87/Adirondack Northway overpass)

Existing View: The view from KOP 3 is similar to KOP 1 and is comprised of multiple road corridors. Foreground scrub vegetation screens the majority of the I-87 road surface as it fights to grow amongst the guardrail and shoulder. Beyond the foreground road surface human-made elements are screened by the roadside vegetation that defines the I-87 corridor. The fall, leaf-off foliage adds texture to the foreground and provides ample roadside screening. The conditions of the day combined with the time of year creates a dull image with now bright colors or unique contrasts to draw a viewer attention. The view does not contain a focal point

Simulated View: With the Project in place, portions of the building are minimally visible in the center of the view, above the middle ground vegetation. From this distance the building appears as one large mass, with minimal visual distinction between texture and color. There is no visibility of the site work and associated clearing, as the vegetation along the I-87 corridor blocks it. The building itself rises into the sky, yet the remaining foreground and background vegetation helps to soften the edges of the building and allow it to blend more with the existing landscape.

Viewer expectations in regard to landscape character and land-use are not changed by the addition of the proposed Project, and the resource is not impacted.

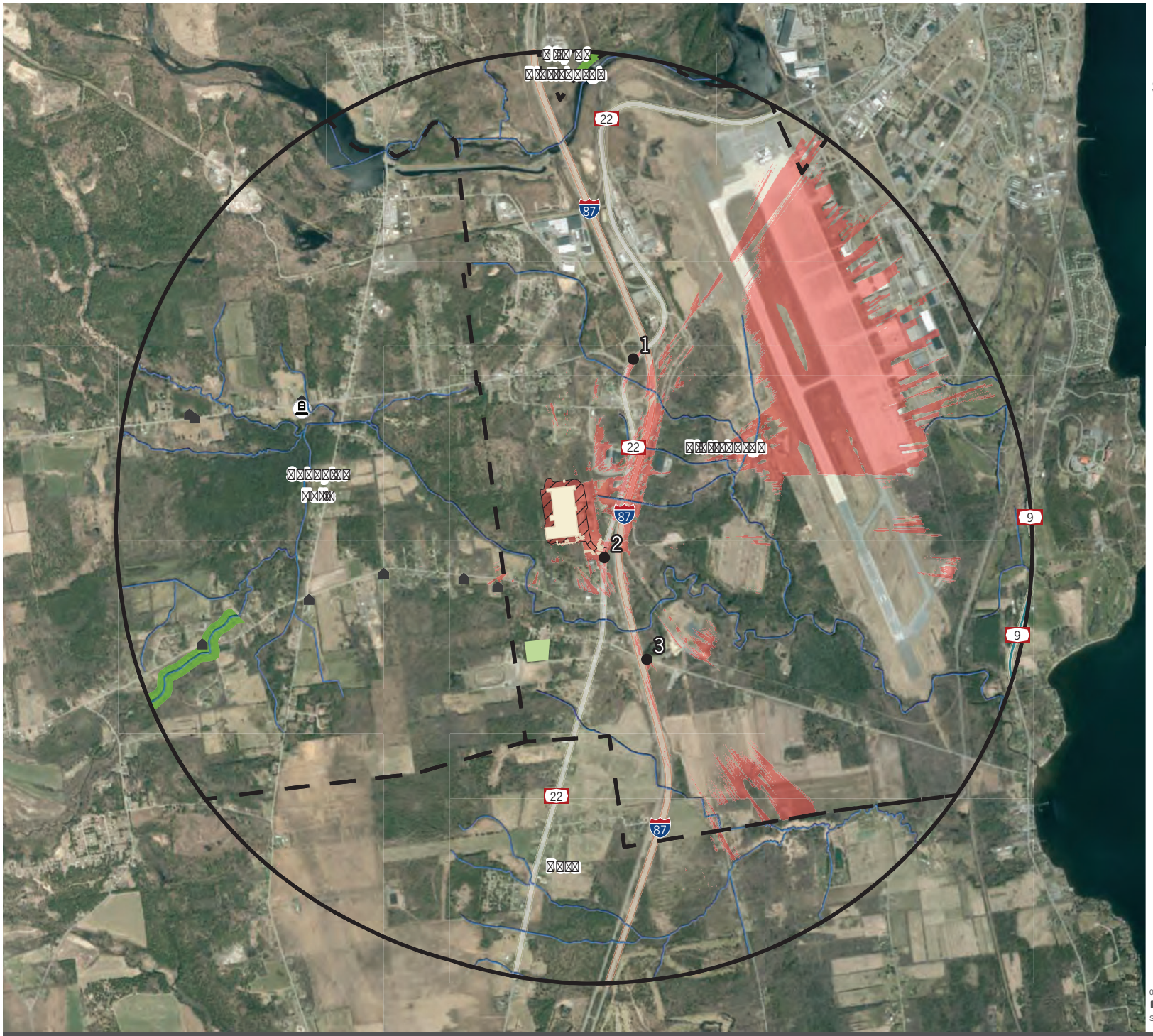
Conclusion - A viewshed analysis was conducted for the 2-mile VSA that illustrated areas of likely visibility of the Project were concentrated along I-87 (Adirondack Northway) and in open areas adjacent to and associated with the Plattsburgh Airport facilities.

The VSR analysis shows that based on the land cover viewshed overlay 5 of the 23 VSRs located within the VSA will have potential visibility of the proposed Project. This visibility will be of varying degrees depending on specific location. The simulations provided illustrate typical views from selected resources that represent the VSA and potential changes to the landscape. Based on the simulated views the Project is located in an areas where existing vegetation will screen the majority of the building when a viewer is not directly adjacent to the site.

Visual impact is defined by the NYS Department of Environmental Conservation as follows:

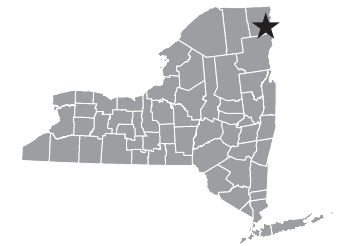
> *"Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility of a project should not be a threshold for decision making Instead a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment or appreciation of the appearance of a significant place or structure "* (NYSDEC, 2019, p. 15). *" Significant aesthetic impacts are those that may cause a diminishment of the public enjoyment and appreciation of an inventoried resource, or one that impairs the character or quality of such a place. Proposed large facilities by themselves should not be a trigger for a declaration of significance"* (NYSDEC, 2019, p. 5).

In other words, the DEC Visual Policy recognizes that not everything that is visible rises to the level of an Aesthetic Impact, and not all Aesthetic Impacts rise to the level of a Significant Aesthetic Impact that may diminish public enjoyment of the resource.
Based on the degree of limited visibility, it is clear that any remaining project visibility is not of a size or extent that it would constitute an unacceptable change in magnitude. Nor does the building visibility affect a sufficient number of visually sensitive viewers or geographic areas where the resource can reasonably be deemed to be visually important as defined by New York State Environmental Quality Review Act (SEQRA.)
When considered within the framework of the DEC Visual Policy's definition of "significant adverse visual impact", it is clear the Project will not cause a diminishment of the public enjoyment and appreciation of any scenic or historic resource, or one that impairs the character or quality of such a place. As such, the Project components of the proposed Schluter South Expansion Project will not result in an adverse visual impact.



Schluter South Expansion Project
Route 22

Towns of Schuyler Falls, Plattsburgh, and Peru
City of Plattsburgh
Clinton County, New York



0 2 4 Miles

Scale: 1:40,276

Area of Proposed Visibility

SARATOGA ASSOCIATES

KOP 1: State Route 22 Bridge (I-87/Adirondack Northway overpass)
EXISTING CONDITION

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 39' 18.8244" N
Time:	10:30 AM		73° 29' 04.1064" W
Focal Length:	50 mm	Distance to building:	3,430 Feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 1
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

KOP 1: State Route 22 Bridge (I-87/Adirondack Northway overpass)
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 39' 18.8244" N
Time:	10:30 AM		73° 29' 04.1064" W
Focal Length:	50 mm	Distance to building:	3,430 Feet
Camera:	Canon EOS 6D Mark II		

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 2
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

KOP 2: State Route 22 (north of Salmon River Road, near #4025)
EXISTING CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 38' 30.6564" N
Time:	11 :30 AM		73° 29' 14.8020" W
Focal Length:	24 mm	Distance to building:	740 Feet
Camera:	Canon EOS 6D Mark II		

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 3
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

KOP 2: State Route 22 (north of Salmon River Road, near #4025)
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 38' 30.6564" N
Time:	11:30 AM		73° 29' 14.8020" W
Focal Length:	24 mm	Distance to building:	740 Feet
Camera:	Canon EOS 6D Mark II		

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 4
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

KOP 3: South Junction Road (I-87/Adirondack Northway overpass)
EXISTING CONDITION

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 38' 05.7804" N
Time:	12:00 NOON		73° 29' 00.7584" W
Focal Length:	50 mm	Distance to building:	3,380 Feet
Camera:	Canon EOS 6D Mark II		

SARATOGA ASSOCIATES

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 5
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

KOP 3: South Junction Road (I-87/Adirondack Northway overpass)
SIMULATED CONDITION

SARATOGA ASSOCIATES

Photograph Information

Date:	October 22, 2024	Photo Location:	44° 38' 05.7804" N
Time:	12:00 NOON		73° 29' 00.7584" W
Focal Length:	50 mm	Distance to building:	3,380 Feet
Camera:	Canon EOS 6D Mark II		

RMS
ROBERT M. SUTHERLAND P.C.
ENGINEERS - PLANNERS - SURVEYORS

Figure 6
PHOTO SIMULATIONS

Schluter Expansion - Route 22
Town of Plattsburg, NY

APPENDIX F

NOISE IMPACT ANALYSIS

NOISE IMPACT ASSESSMENT

UMS PROPRTY, LLC
NEW DISTRIBUTION CENTER SITE PLAN 2024

TOWN OF PLATTSBURGH
CLINTON COUNTY, NEW YORK

Prepared for:

UMS Property, LLC
194 Pleasant Ridge Road
Plattsburgh, New York 12901

Prepared by:

JMT of New York, Inc.
19 British American Boulevard
Latham, New York 12110

Submitted: March 2025

Project No: 24-02308-001

TABLE OF CONTENTS

1.0 INTRODUCTION....1
2.0 SITE LOCATION....1
3.0 BACKGROUND....2
3.1 SOUND PROPAGATION....2
3.2 REGULATORY SETTING....4
4.0 NOISE IMPACT ASSESSMENT....6
4.1 BACKGROUND NOISE LEVELS....6
4.2 FUTURE CONDITIONS....7
4.2.1 Modelled Scenarios....7
4.2.2 Noise Model Results....9
4.3 MITIGATION....11
5.0 CONCLUSION....12

TABLES

TABLE 1 AMBIENT NOISE MEASUREMENTS

FIGURES

FIGURE 1 SITE LOCATION MAP
FIGURE 2 DAYTIME AMBIENT CONDITIONS
FIGURE 3 NIGHTIME AMBIENT CONDITIONS
FIGURE 4 DAYTIME RESULTING SOUND LEVEL
FIGURE 5 NIGHTTIME RESULTING SOUND LEVEL
FIGURE 6 DAYTIME INCREASE OVER AMBIENT
FIGURE 7 NIGHTTIME INCREASE OVER AMBIENT
FIGURE 8 DAYTIME MITIGATED INCREASE OVER AMBIENT
FIGURE 9 NIGHTTIME MITIGATED INCREASE OVER AMBIENT

APPENDICES

APPENDIX A **AMBIENT NOISE MONITORING DATA**

APPENDIX B **NOISE MODEL INPUT DATA**

1.0 INTRODUCTION

UMS Property, LLC (UMS) is proposing to construct a new warehouse and distribution facility on the west side of NYS Route 22 between Salmon River Road and Archie Bourdeau Road in the Town of Plattsburgh, Clinton County, New York to support their nearby existing manufacturing facility (henceforth referred to as "Proposed Action" or "the Facility"). The Facility will be accessed from a new commercial driveway off NYS Route 22. Although deliveries and outbound shipments from the Facility will primarily occur during normal business hours of 6 AM to 6 PM, Monday through Friday, the Facility will operate 24 hours per day, 7 days a week with three work shifts. This report addresses the impacts of operational noise generated on-site and projected to nearby noise-sensitive receptors (residences).

There is no New York State noise code that regulates noise attributable to the Proposed Action. However, the New York State Department of Environmental Conservation's (NYSDEC) program policy "Assessing and Mitigation Noise impacts" ("NYSDEC Noise Policy") offers guidance for assessing and mitigating noise impacts. The Town of Plattsburgh has a local noise ordinance that applies to the Proposed Action. This report evaluates potential noise impacts resulting from the Proposed Action within the context of the Town of Plattsburgh code and the NYSDEC Noise Policy.

2.0 SITE LOCATION

The Facility will be located on the west side of NYS Route 22 between Salmon River Road and Irish Settlement Road on tax parcels 245.-4-40.1, 245.-4-16.2, and portions of 245.-4-22.11 in the Town of Plattsburgh, Clinton County, New York. The Site is geographically situated approximately one (1) mile southwest of the Plattsburgh International Airport and is bordered on the east by railroad tracks and NYS Route 22. Residential lots exist to the north and south and is bordered on the west by mostly wooded lands. The lands are currently vacant, undeveloped and are zoned Industrial. For additional details related to the site location, please see Figure 1: Site Location Map.

3.0 BACKGROUND

3.1 SOUND PROPAGATION

Audible sound results when a sound source vibrates in the air. Specifically, sound is produced as a wave motion in air, or other media, by a mechanical disturbance. The vibration of an object produces longitudinal sound waves in the air, or other media, which radiate outward from the vibrating body much in the same manner that ripples spread out on the surface of a pond when a stone is thrown into it. This longitudinal wave propagation creates a fluctuation in the atmospheric pressure within the propagating media. These fluctuations in pressure are the sounds that are heard through the human ear. Sound pressure is the amplitude or measure of the difference between atmospheric pressure (with no sound present) and the total pressure (with sound present).

The sound pressure of an acoustic wave is measured in Pascals (Pa). The sound pressure level is measured in decibels (dB) where:

$dB = 20 \log_{10}(P/P_{ref})$
P = Sound pressure in pascals
P_{ref} = Reference pressure of 10^{-5} pascals

Because the range of sound intensities is so large the decibel scale is logarithmic. The range of audible sound pressures is extremely large. Specifically, sharply painful sound is roughly ten million times greater in pressure than the least audible sound. This pressure difference of 10 million pascals equates to approximately 140 decibels, when presented logarithmically.

Decibels are not added arithmetically. That is, two 60 decibel sounds do not equal a 120-decibel sound in intensity. In other words, the composite sound of two sewing machines operating at 60 dB each is not as loud as a single ambulance siren operating at 120 dB. Rather, sound levels are added logarithmically such that two 60 dB sounds total approximately 63 dB. If two sounds are of different levels, the lower level (in dB) adds less to the higher as this difference increases. If the difference between sound levels is 10 or more dB, the lower level adds almost nothing to the higher level. A 60 dB sound added to a 70 dB sound results in a total sound level of approximately 70.4 dB. Performing this type of additory computation is referred to logarithmic, or energetic, addition.

The rate at which a sound source vibrates, or makes the air vibrate, determines the frequency. Only pure harmonic tones (such as that produced by a tuning fork) have a single frequency. Most sounds consist of a wide spectrum of sound frequencies that when summed constitute the sound heard. The range of frequencies that is audible to the human ear (approximately 20 to 20,000 Hz.) is divided into 10 octave bands. An octave is defined as the frequency range or interval whose upper frequency limit is twice the lower frequency limit. The ten octave bands each possess a "preferred frequency" at the center of the octave band. The octave band center frequencies are measured at approximately 31.5 Hz., 63 Hz., 125 Hz., 250 Hz., 500 Hz., 1,000 Hz., 2,000 Hz., 4,000 Hz., 8,000 Hz., and 16,000 Hz. The sound levels at each of these octave bands are then combined to achieve a total sound level for the audible range of frequencies. Depending on the type of noise or the type of receiver, octave band data may be averaged using a weighting which focuses on specific octave bands. When describing sound levels in relation to human hearing, an "A"-weighting is typically applied, resulting in a reading in dB(A) which focuses on frequencies that human hearing is most sensitive to.

All field measurements and acoustical modelling for this noise impact assessment were completed using frequency octave band data. However, for ease of review and to provide a concise report, results and discussion is provided using the equivalent A-weighted sound pressure level (dB(A)) or A-weighted sound power level (LwA). A-weighted sound levels allow for the consideration of noise levels relative to the human ear's sensitivity to different frequencies and is the most common metric for assessing environmental noise levels. dB(A) is reflective of the sound pressure level, or noise level, perceived at a specified distance from a noise source. LwA is reflective of the total acoustical energy emitted from a sound source. Full octave band data for all field measurements and model inputs are provided in Appendix A: *Ambient Noise Monitoring Data* and Appendix B: *Noise Model Input Data*.

Precipitation, wind fluctuations, wind gradients (with altitude), temperature, temperature gradients (with altitude), and relative humidity are atmofiguespheric factors that influence sound propagation. Sound traveling with the wind is bent down to earth, while sound traveling against the wind is bent upward above the ground. There is little or no increase in sound levels due to the sound waves bent down; in fact, there is additional loss at the higher frequencies and at the greater distances. There can be noticeable reductions of sound levels (sometimes up to 20 to 30

decibels) at relatively long distances (beyond a few hundred yards) when the sound waves are bent upward, for sound traveling against the wind (for 10 to 20 mph wind speeds).

In addition to atmospheric factors, topography and vegetation also influence sound propagation. In general, sound from any point source decreases with distance by about 6 dBA with each doubling of the distance from the source. This is assuming that there are no obstructions in the linear path of the sound. The presence of vegetation, berms and intervening topography has an additive mitigating effect.

3.2 REGULATORY SETTING

Sound emissions from the Facility will be regulated by the Town of Plattsburgh Local Law No.1 "*A Local Law Providing for The Control of Excessive, Unnecessary and Unreasonable Noise*" ("local law"). Specific noise producing acts are prohibited, but most are not applicable to the Proposed Action. However, the local law does provide factors that are considered when determining "*whether noise is unreasonable at the time and under the circumstances it is made*", as follows:

A. The volume, intensity, and duration of noise.

B. Whether the noise is normally associated with the permitted us of property in the zoning district where the noise is created.

C. The ambient or background noise in the area where noise is created.

D. The time of day the noise occurs.

E. Whether the noise occurs at a time when residents in the vicinity are likely to be sleeping, which shall be presumed to be between the hours of 11:00 p.m. and 7:00 a.m.

F. Whether the noise occurs in the vicinity of a school, court, house of worship, public library, hospital or nursing home and disturbs persons using or residing in such facilities.

G. Whether the person making the noise, or the owner or occupant of the property or dwelling where the noise occurs, has received prior complaints about noise from the property or dwelling.

H. Whether there are reasonable measures the person making the noise could have taken to make the noise not unreasonable.

I. Sound levels that exceed 61 dB(A) in residential districts.

NYSDEC's Noise Policy specifies that noise performance standards for facilities should be based on community character and generally quantifies the potential for adverse impacts through consideration of the increase over ambient conditions from sound contributions associated with a proposed action. The Facility is zoned industrial, with residential and commercial areas to the north, east, and south, and vacant land to the west. The NYSDEC Noise Policy states that "Where activities may be undertaken as a "right of use," it is presumed that noise has been addressed in establishing the zoning. Any residual noise that is present following BMP implementation should be considered an inherent component of the activity that has been found acceptable in consideration of the zoning designation of the site." Although the Proposed Action constitutes a by-right use in the applicable zoning district, the Noise Impact Assessment was prepared to ensure no significant adverse noise impact will result to proximal residential uses as a result of Facility operations.

For this report, the 61 dB(A) limit in residential districts is considered the upper limit for noise levels in the adjoining residential districts. However, additional consideration is given to the potential increase over current ambient levels, noise levels during nighttime hours, and the potential for impact on identified sensitive receptors. NYSDEC's Noise Policy is used as guidance for determining what level of increase over ambient conditions may result in an impact on sensitive receptors.

To determine the level of any potential noise impacts from the Facility, a model was developed that is reflective of a "worst-case" noise generating scenario based on the current understanding of planned operations. This analysis was completed using SoundPLAN, a three-dimensional noise planning and modeling software. SoundPLAN utilizes octave band source data, topography, structures, ground cover, and background environmental ambient conditions to model the noise regime in three dimensions.

The impact analysis presented below uses equivalent continuous sound levels (Leq), in dB(A). Leq is a standard metric for comparing average relative sound levels over a specified period of

time, and the primary metric referenced in NYSDEC's Noise Policy for assessing potential noise impacts. Consistent with the Town of Plattsburgh local law, daytime is defined as 7:00 a.m. – 11:00 p.m. and nighttime as 11:00 p.m. – 7:00 a.m.

Modelled sound levels are graphically displayed as noise propagation "heat maps" (Figures 2-9), which allow for review of potential acoustical impacts at various land use and receptor locations in the area surrounding the Facility.

4.0 NOISE IMPACT ASSESSMENT

4.1 BACKGROUND NOISE LEVELS

Environmental ambient sound levels were recorded at two (2) different locations within the vicinity of the Facility. Ambient levels at each location were collected over two (2) separate 30-minute intervals and are reported as equivalent continuous sound levels (Leq) in dB(A). Appendix A contains instrument data from the ambient noise survey. The ambient noise monitoring locations are indicated on Figure 2: *Daytime Ambient Conditions* and Figure 3: *Nighttime Ambient Conditions*. Results from these measurements are summarized in the following table.

Table 1 – Ambient Measurements (Daytime)

Location	Measurement 1 – Leq dB(A)	Measurement 2 – Leq dB(A)
A1	65.7	64.8
A2	48.9	50.6

The results from location A1 are reflective of the daytime ambient conditions of lands to the east and southeast of the Facility, with the principal source of noise contributing to the ambient levels being vehicle traffic on NYS RT 22 and the Northway. The results from A2 are representative of ambient conditions in the residential areas to the north and southwest of the Facility and are consistent with typical daytime rural ambient noise levels.

Figure 2: *Daytime Ambient Conditions* presents approximated daytime ambient conditions that were developed for the operational noise projection model. To provide a conservative

assessment, the lowest field measurement in the vicinity of NYS RT 22 (64.8 dB(A)) was used to characterize the transportation corridor along NYS RT 22, and the lowest residential measurement (48.9 dB(A)) was used to characterize residential areas to the north and south of the Facility. In addition to using the lowest collected measurements, this approach provides a conservative characterization of ambient sound conditions in that it does not account for the acoustical contribution of nearby east-west transportation corridors (CR 33 (Salmon River Road) to the south or Archie Boudreau Road to the north), or of proximal commercial uses.

To approximate nighttime ambient condition, a conservative approach of reducing daytime ambient levels by 10 dB(A) was used. This approach is consistent with noise impact guidance based on typical time-variability of ambient sound conditions and heightened sensitivity to noise during nighttime periods. While ambient levels commonly fluctuate up to 10 dB(A) in urban and commercial areas, and near transportation corridors, day-night fluctuations are typically much less in suburban and rural residential areas. As such, the approximated nighttime ambient conditions for residential areas are likely lower than actual nighttime ambient conditions. As with daytime ambient conditions, NYS RT 22 and the Northway continue to be the principal acoustical contributor in the vicinity of the Facility under ambient conditions. For additional detail on the nighttime ambient conditions considered in the analysis, see Figure 3: *Nighttime Ambient Conditions.*

4.2 FUTURE CONDITIONS

Sources of noise at the Facility will include rooftop HVAC equipment, a staff and visitor parking lot, and truck activity (truck movement, coupling/decoupling, loading, standard back up alarms, etc.) associated with the shipping and receiving of merchandise in the loading bays. In this report, these noise sources are evaluated, considered in relation to existing ambient noise conditions, and compared to the applicable Town of Plattsburgh local law and guidance provided by NYSDEC's Noise Policy.

4.2.1 Modelled Scenarios

SoundPLAN, an acoustical modelling software, was used to create and analyze sound level projections for the site. The model considers relevant parameters to determine how noise will propagate from source to receptors, including distance attenuation, effects of terrain, type of

ground cover (e.g., hard, soft), and shielding and reflections from structures, including buildings and vegetation. Predicted sound levels (as presented in noise propagation figures) are reflective of noise levels for an ear-height elevation of 5 feet above grade, reflective of a typical standing observer. All calculations are completed in octave frequency bands and all sources are considered to operate continuously.

Sources of noise from the Facility will include exterior-mounted building mechanical (HVAC) equipment, loading activities, and intermittent vehicle traffic on site. To demonstrate a worst-case scenario, all noise sources are assumed to be operating simultaneously, at maximum intensity, and continuously (i.e., 100% of the time duration applicable to the modeled scenario). This approach provides a conservative assessment in that it overstates the likely acoustical impact of the Facility, as the magnitude and duration of use of the HVAC equipment will vary throughout operations due to seasonal and time-of-day variations in weather conditions, and vehicular traffic will be periodic rather than continuous.

HVAC equipment will consist of forty-five (45) roof top units (RTU), consisting of thirty-five (35) 50-ton units, and ten (10) 10-ton units. Each HVAC RTU was modelled as a point source placed 4 feet above the rooftop, and RTUs were evenly distributed across a portion of the rooftop planned to accommodate HVAC equipment. The sound power level for each type of RTU was sourced from vendor supplied octave band data and is equivalent to a 99.9 dB(A) LwA each 50-ton unit[1] and 88.3 dB(A) LwA for each 10-ton unit. The HVAC units are included in both the daytime and nighttime scenario models.

The employee and visitor parking lot is modelled as an area source set at 1 meter (3.28 feet) above the ground surface and is assigned a 95.71 dB(A) LwA based on reference source data provided by SoundPLAN, and accounts for the type of use and anticipated traffic levels

[1] Per subsequent correspondence with vendor, the LwA of the 50-ton RTUs will likely be less than the 99.9 dB(A) provided. LwA of 99.9 dB(A) was retained for the modeled scenarios in order to provide a conservative assessment of potential impacts.

considered in the Traffic Impact Study completed for the Facility. The parking lot is included in both the daytime and nighttime models.

For the daytime scenario, truck traffic within the facility was modelled as a line source, which considers traffic entering the facility and traversing through the east and west loading areas. The truck line source was assigned an LwA of 62 dB(A) per meter based on typical data provided within the SoundPLAN software and is reflective of noise levels associated with an accelerating truck. In addition, a total of 10 (ten) point sources were included in the daytime model scenarios to account for truck loading activities, which represents a conservative assessment of simultaneous truck loading activities based on input from the operator of the Facility and as represented in the Traffic Impact Study. All truck loading point sources were modelled at 1.5 meters (4.92 feet) above the ground surface with each assigned an 80 dB(A) LwA based on typical data for loading general cargo supplied within the SoundPLAN software. Five (5) of the truck loading point sources were placed in both the east and west truck loading areas. Based on planned operations, truck traffic and loading activities were not included in the nighttime scenario models.

For the nighttime model, a line source reflective of personal vehicle traffic was included in the model. The line source enters the facility and traverses the access road up to the modelled parking area. The personal vehicle line source was modelled at 1.5 meters (4.92 feet) above the ground surface and is assigned a LwA of 62 dB(A) per meter.

Both the daytime and nighttime models include existing areas of dense vegetation, and the associated acoustical attenuation is accounted for in the noise models.

4.2.2 Noise Model Results

Daytime Sound Levels

Predicted sound levels resultant from the worst case daytime operating scenario are presented on Figure 4: *Daytime Resulting Sound Levels.* The dB(A) contours and shading included in the figure are the result of the logarithmic addition of modelled source contribution and existing daytime ambient conditions. Resultant sound levels at residential receptors located to the north and south of the Facility are predicted to be 50 dBA or less. This resultant sound level is 11

dB(A) less than the 61 dB(A) level in residential areas specified by the Town of Plattsburgh local noise law.

Figure 6: *Daytime Increase Over Ambient* depicts the maximum dB(A) increase over existing ambient conditions that is predicted to result due to the additional sound sources associated with the Facility. This figure is calculated by arithmetically subtracting existing ambient conditions from resulting conditions presented in Figure 4: *Daytime Resulting Sound Levels*. As presented by the Figure 6: *Daytime Increase Over Ambient,* daytime sound levels are predicted to increase by 1 dB(A) or less at surrounding receptors. According to NYSDEC's noise policy, this magnitude of increase in noise levels should have no appreciable effect on receptors and is likely to be imperceptible. Operation of the facility does not present the potential for significantly adverse noise impacts during daytime hours.

Nighttime Sound Levels

Predicted sound levels resultant from the worst-case nighttime operating scenario are presented on Figure 5: *Nighttime Resulting Sound Levels.* As with the daytime figure, the dB(A) contours and shading included in the figure are the result of logarithmic addition of modelled source contribution and existing nighttime ambient conditions. Resultant noise levels at residential receptors to the north of the Facility are 40 dB(A) or less and to the south of the Facility, 44 dB(A) or less. In both residential areas, resultant nighttime noise levels are significantly less than the 61 dB(A) level in residential areas specified by the Town of Plattsburgh local noise law.

Figure 7: *Nighttime Increase Over Ambient* depicts the dB(A) increase over existing ambient conditions that is predicted to result due to the additional sound sources associated with the Facility under the nighttime operating scenario. This figure is calculated by arithmetically subtracting existing ambient conditions from resulting conditions presented in Figure 5: *Nighttime Resulting Sound Levels*. As presented by Figure 7: *Nighttime Increase Over Ambient,* the maximum increase in ambient conditions in the residential areas north of the Facility are predicted to be 2 dB(A) or less and in the residential areas to the south of the Facility. Potential increases to off-site sound levels south of the Facility are slightly higher, including increases up to 6 dB(A) at three (3) residences and one (1) commercial property structure. According to NYSDEC's noise policy, increases in sound levels by 5 dB(A) or more over ambient conditions

have the potential to be intrusive. Potentially intrusive increases in nighttime sound levels observed at residential locations constitutes a potentially significant noise impact.

4.3 MITIGATION

The noise projection model identified sound level increases at three (3) residential receptors of up to 6 dB(A) at night under the following highly conservative assumptions:

- Conservatively high LwA of 99. dB(A) for 50-ton rooftop HVAC units (RTUs)
- All rooftop equipment and parking lot activity continuously operating at maximum intensity
- Assumed nighttime ambient sound levels are likely lower than current actual nighttime ambient sound levels

Although the modeled scenario likely overstates level of impact due to these conservative assumptions, a potential increase in nighttime sound levels of 6 dB(A) constitutes a potentially significant adverse noise impact that warrants mitigation. NYSDEC's noise policy states that increases in noise levels under 5 dB(A) is unnoticed to tolerable.

Through an analysis of the relative contribution of different noise sources it was determined that the HVAC equipment is the principal contributor to the potential increase over ambient during nighttime operations. This is in part due to the number of HVAC units and the amphitheater effect caused by the height variance between the central and north building sections. To reduce the contribution of HVAC RTUs to increases in nighttime residential noise, several mitigation options are available:

- Selecting alternate facility mechanical equipment with lower levels of sound emissions
- Selecting alternate locations for facility mechanical equipment
- Installing noise control shrouding/encapsulation on facility mechanical equipment
- Installing noise control fencing along the south margins of the Site

- Installing noise control walls/fencing on the facility roof between the facility mechanical equipment and residential receptors
- Other technological or operational measures that will reduce noise impacts by at least 2 dB(A)
- Upward-revision of existing ambient sound level conditions based on additional ambient sound observations

To demonstrate this mitigation approach, additional model scenarios were developed that incorporated a noise barrier wall constructed on the roof around the facility mechanical equipment, and to a height of 2 feet above the mechanical equipment noise source. Under this scenario, the maximum observed increase in nighttime sound level at proximal residential receptors is reduced to 4 dB(A) (see Figure 9: *Nighttime Mitigated Increase Over Ambient)*.

According to NYSDEC's noise policy, an increase in noise levels of less than 5 dB(A) is considered "unnoticed to tolerable." The noise projection model results, utilizing a highly conservative approach inclusive of 2 dB(A) of sound control mitigation, indicates maximum potential sound increases in sound levels of no more than 4 dB(A), which does not constitute a potentially significant impact.

Although the rooftop wall approach is the mitigation approach represented in the model, alternate mitigation approaches, or combinations of approaches (e.g., relocation of facility mechanical equipment in combination with noise barrier construction) consistent with the level of noise control represented in this scenario (i.e., 2 dB(A)) remain viable alternative mitigation options.

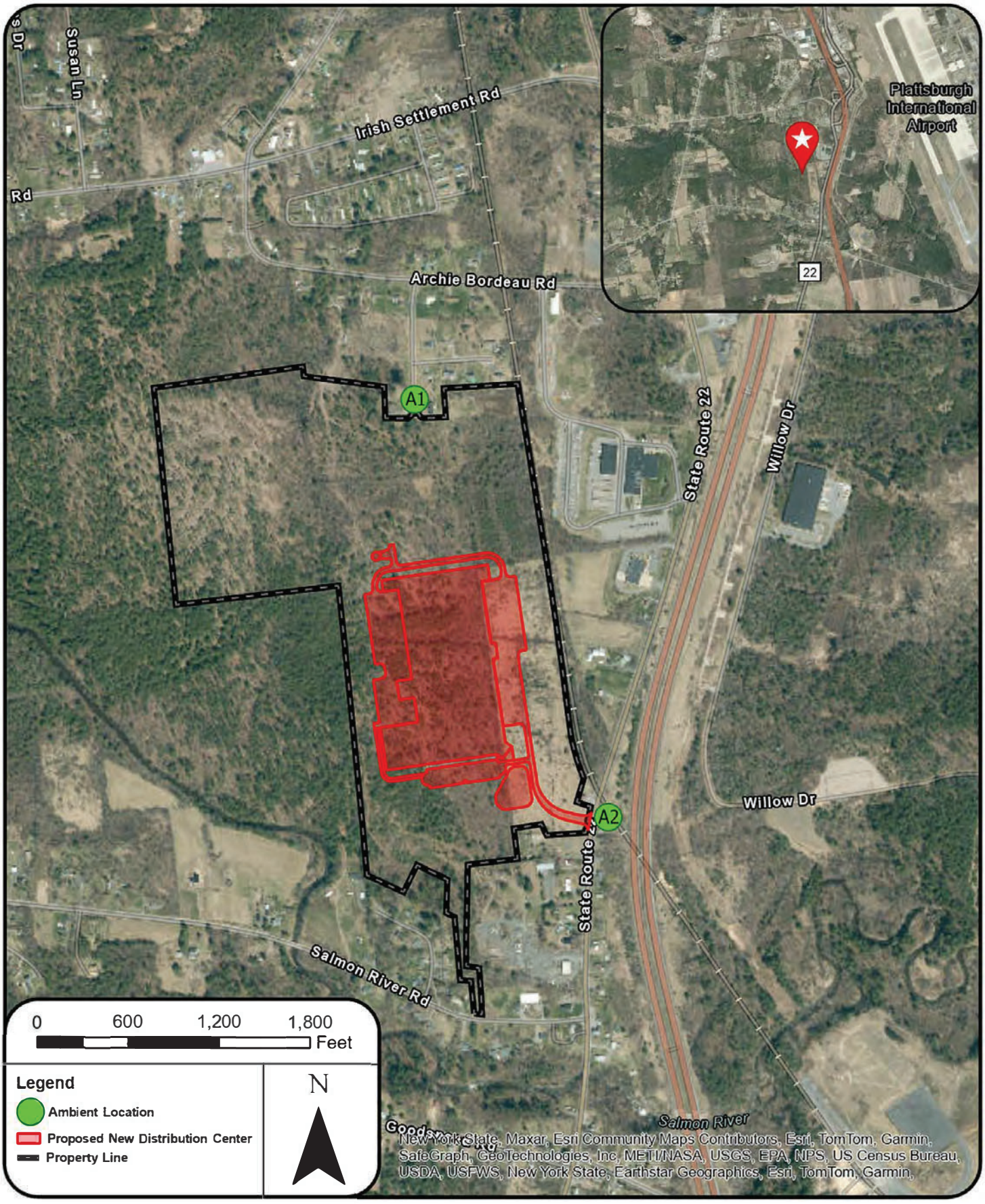
As described in section 4.2 of the report, the daytime operating scenario was found to not require additional mitigation. However, as any permanent sound control mitigation will remain in place during daytime operating conditions as a permanent feature, a model was run to determine the increase in daytime ambient conditions with the wall in place. As depicted in Figure 8: *Daytime Mitigated Increase Over Ambient*, the inclusion of the HVAC equipment sound barrier wall will further decrease the noise propagation attributable to the Facility during daytime operations.

5.0 CONCLUSION

NYSDEC's program policy Assessing and Mitigation Noise Impacts states that increases in sound pressure of 0-5 dB(A) are unnoticeable to tolerable to human hearing. The noise

projection analysis modeled impacts of up to 6 dB(A) at several residential locations to the south of the Facility. Mitigation of 2 dB(A) is available via source sound control, noise barrier construction, alternate equipment factors, updated ambient sound level studies, or a combination thereof to reduce potential impacts below the level of significance.

FIGURES



19 British American Blvd. W, Latham NY 12110
P: 518-782-0882| F: 518-782-0973| JMT.com

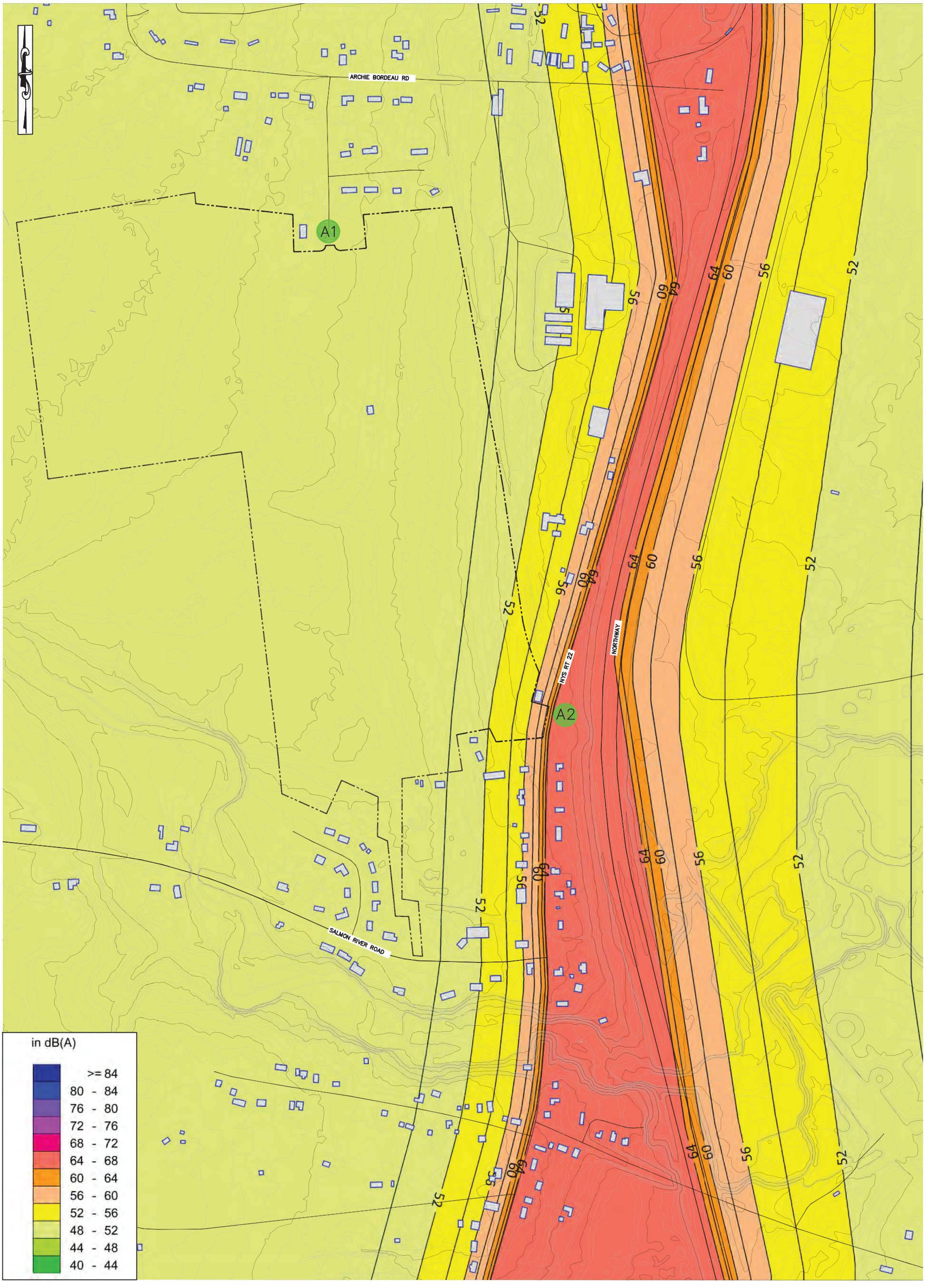
SITE LOCATION

UMS PROPERTY, LLC

Proposed New Distribution Center

Town of Plattsburgh — Clinton County, NY

PROJ. NO: 24-02308	DATE: 2/12/2025	SCALE: 1 IN = 1,200 FT	DWG NO. SLM	FIGURE: 1



LEGEND

PROPERTY LINE

BUILDING

AMBIENT LOCATION A1

NOTES:

1. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

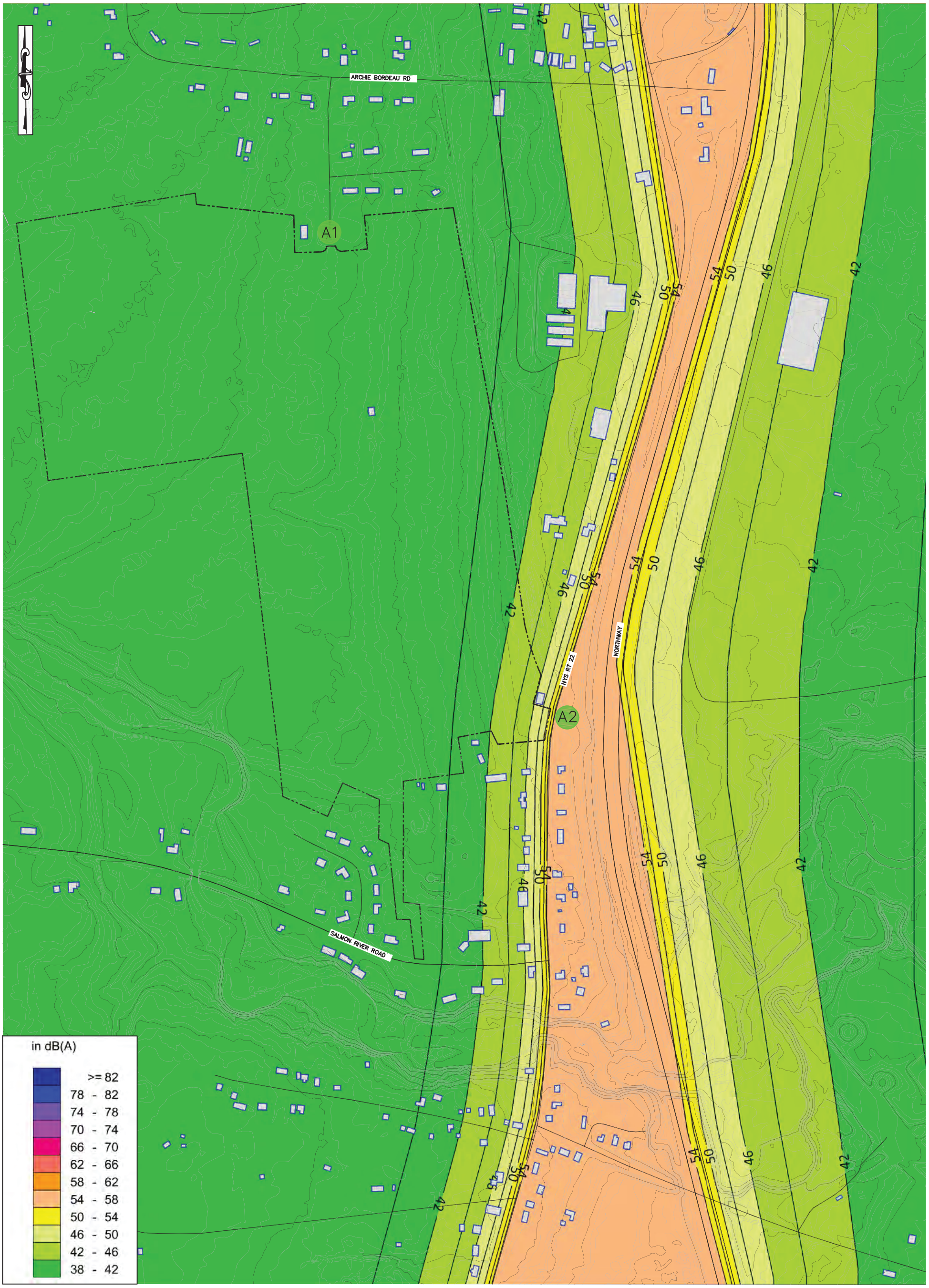
NOISE IMPACT ASSESSMENT
DAYTIME AMBIENT CONDITIONS

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308001A	FIGURE 2



LEGEND

PROPERTY LINE

BUILDING

AMBIENT LOCATION A1

NOTES:

1. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

JMT

19 British American Blvd.,Latham, New York 12110

P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

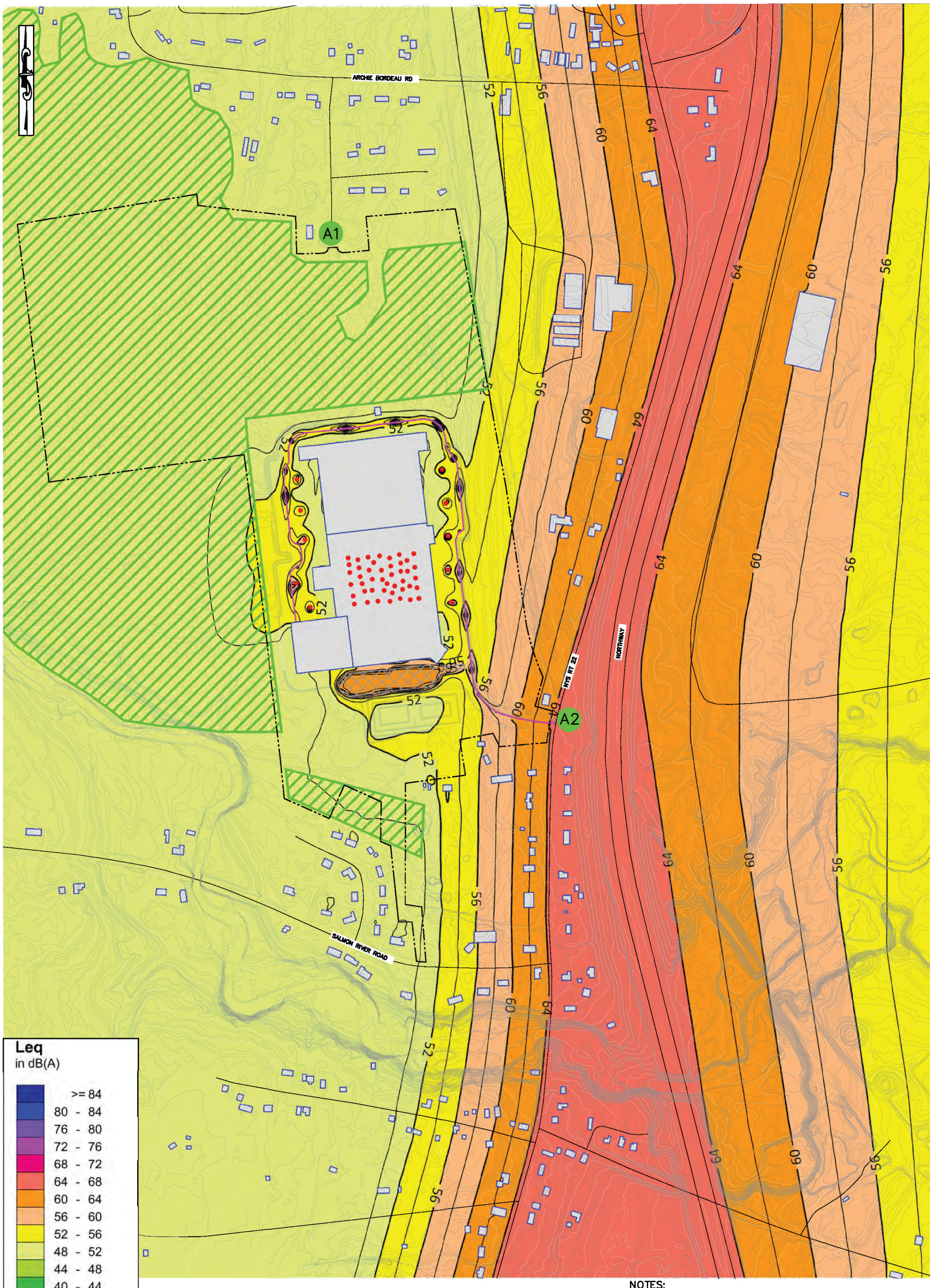
NOISE IMPACT ASSESSMENT
NIGHTTIME AMBIENT CONDITIONS

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308001A	FIGURE 3



LEGEND

PROPERTY LINE

BUILDING

AMBIENT LOCATION A1

VEGETATION

POINT SOURCE

LINE SOURCE

PARKING AREA

NOTES:

1. DEPICTED SOUND LEVELS REFLECT SOURCE CONTRIBUTION LOGARITHMICALLY ADDED TO AMBIENT CONDITIONS
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

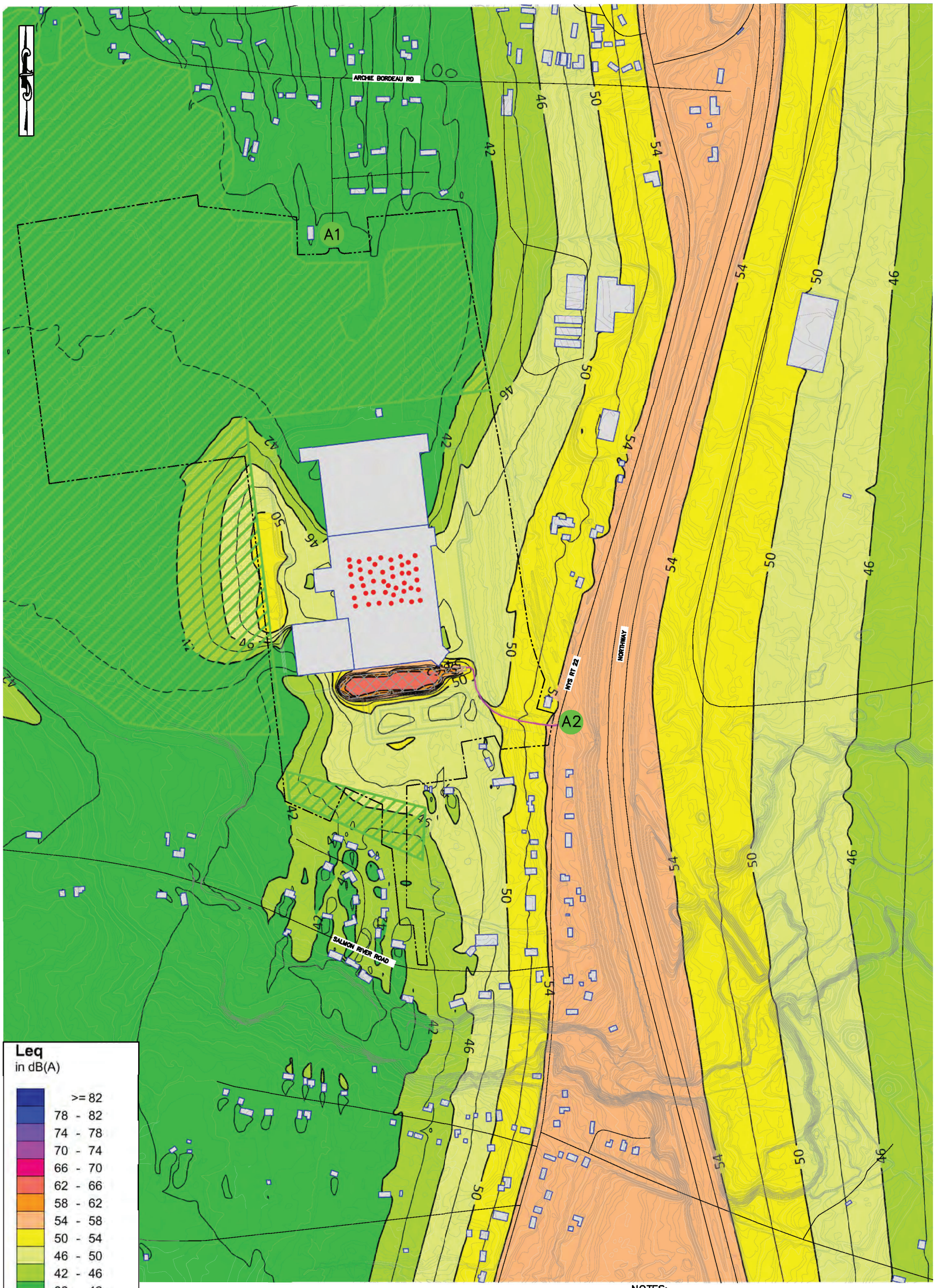
NOISE IMPACT ASSESSMENT
DAYTIME RESULTING SOUND LEVEL

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 4



LEGEND

- PROPERTY LINE
- BUILDING
- AMBIENT LOCATION (A1)
- VEGETATION
- POINT SOURCE
- LINE SOURCE
- PARKING AREA

NOTES:

1. DEPICTED SOUND LEVELS REFLECT SOURCE CONTRIBUTION LOGARITHMICALLY ADDED TO AMBIENT CONDITIONS
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

JMT
19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

NOISE IMPACT ASSESSMENT
NIGHTTIME RESULTING SOUND LEVEL

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 5

ARCHIE BORDEAU RD

A1

A2

NYS RT 22

NORTHWAY

SALMON RIVER ROAD

Leq
in dB(A)

>= 22
20 - 22
18 - 20
16 - 18
14 - 16
12 - 14
10 - 12
8 - 10
6 - 8
4 - 6
2 - 4
0 - 2

LEGEND

- PROPERTY LINE
- BUILDING
- AMBIENT LOCATION (A1)
- VEGETATION
- POINT SOURCE
- LINE SOURCE
- PARKING AREA

NOTES:

1. DEPICTED SOUND LEVELS REFLECT AMBIENT CONDITIONS SUBTRACTED FROM THE LOGARITHMIC SUM OF SOURCE CONTRIBUTION AND AMBIENT
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

JMT
19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

NOISE IMPACT ASSESSMENT
DAYTIME INCREASE OVER AMBIENT

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 6

NOTES:

1. DEPICTED SOUND LEVELS REFLECT AMBIENT CONDITIONS SUBTRACTED FROM THE LOGARITHMIC SUM OF SOURCE CONTRIBUTION AND AMBIENT
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

LEGEND

- PROPERTY LINE
- BUILDING
- AMBIENT LOCATION (A1)
- VEGETATION
- POINT SOURCE
- LINE SOURCE
- PARKING AREA

JMT
19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

NOISE IMPACT ASSESSMENT
NIGHTTIME INCREASE OVER AMBIENT

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 7

ARCHIE BORDEAU RD

A1

NOISE WALL

NYS RT 22

NORTHWAY

A2

SALMON RIVER ROAD

Leq
in dB(A)

>= 22
20 - 22
18 - 20
16 - 18
14 - 16
12 - 14
10 - 12
8 - 10
6 - 8
4 - 6
2 - 4
0 - 2

LEGEND

- PROPERTY LINE
- BUILDING
- AMBIENT LOCATION A1
- VEGETATION
- POINT SOURCE
- LINE SOURCE
- PARKING AREA

NOTES:
1. DEPICTED SOUND LEVELS REFLECT AMBIENT CONDITIONS SUBTRACTED FROM THE LOGARITHMIC SUM OF SOURCE CONTRIBUTION AND AMBIENT
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

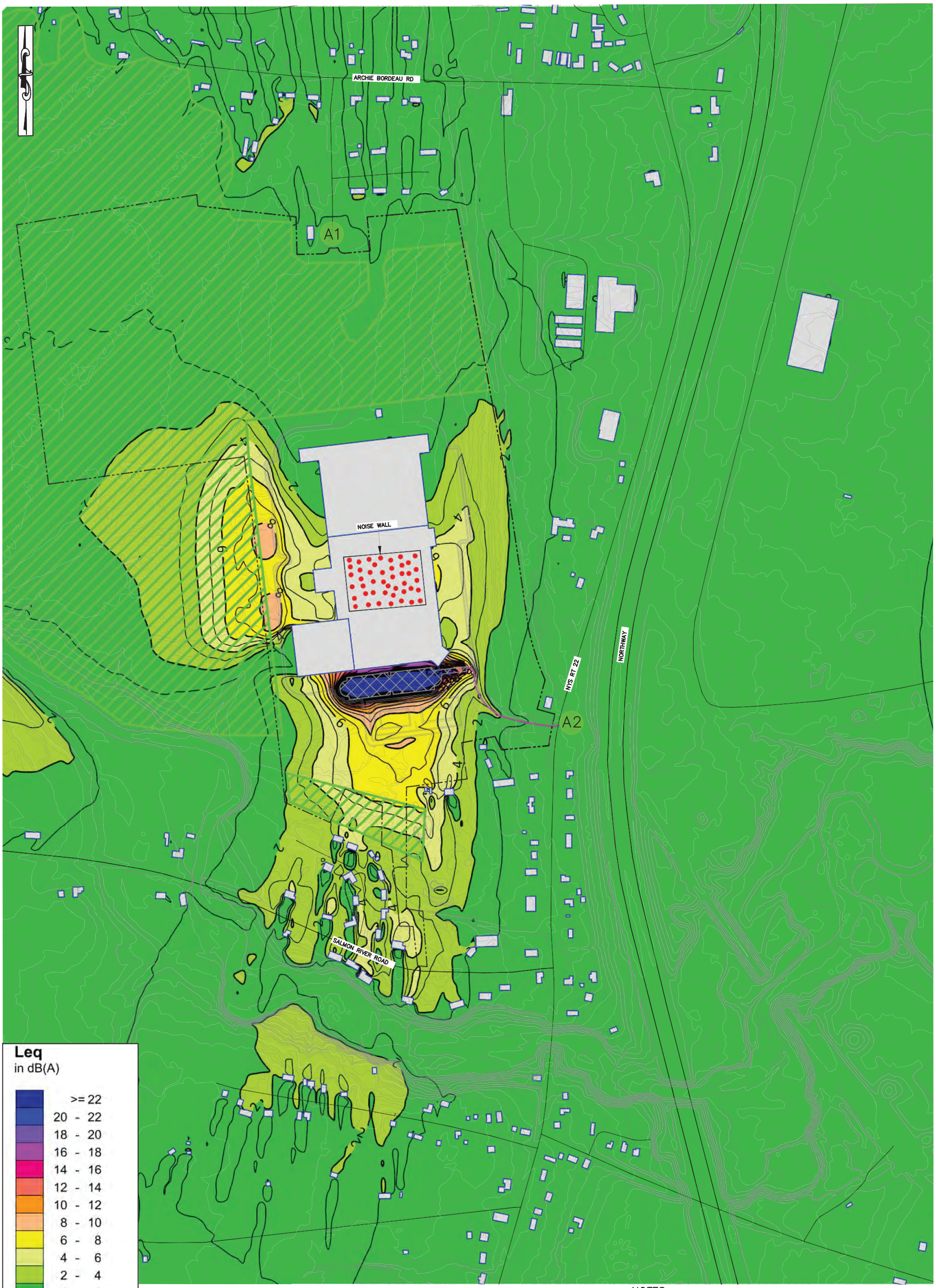
NOISE IMPACT ASSESSMENT
DAYTIME MITIGATED INCREASE OVER AMBIENT

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 8



NOTES:

1. DEPICTED SOUND LEVELS REFLECT AMBIENT CONDITIONS SUBTRACTED FROM THE LOGARITHMIC SUM OF SOURCE CONTRIBUTION AND AMBIENT
2. ALL BOUNDARIES APPROXIMATE WHERE SHOWN

LEGEND

- PROPERTY LINE
- BUILDING
- AMBIENT LOCATION (A1)
- VEGETATION
- POINT SOURCE
- LINE SOURCE
- PARKING AREA

19 British American Blvd.,Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

NOISE IMPACT ASSESSMENT
NIGHTTIME MITIGATED INCREASE OVER AMBIENT

UMS PROPERTY, LLC

NEW DISTRIBUTION CENTER

TOWN OF PLATTSBURGH CLINTON CO., NY

PROJ.No.: 2402308001	DATE: 3/23/25	SCALE: 1"=500'	DWG.NO. 2402308002A	FIGURE 9

APPENDIX A

AMBIENT NOISE MONITORING DATA

Project DEIS Plattsburg Dist Facility

Subject Ambient Noise Collection Job No. 24-02308-001

Sheet No. ____ of ____

Computed By MG Date 2/12/25 Checked By ____ Date ____

A2- Measurement 1

Location: 1 Run 1 (side of NY-22, pulloff) Weather: 6°F 2 mph breeze

GPS: 44.6422393, -73.4873175 Start Time: 0800

File: 831 Data 027 End Time: 0830

Duration

Min.	sec.	Event
1	20	Fuel truck passes
2	16	truck w/ trailer
4	29	Box truck passes
7	05	Nat. Grid truck w/ pole arm
7	53	small ~~engine~~ dump truck
7	55	fuel truck
8	10	small engine plane passes overhead
8	50	plow truck
10	00	Dualie truck
11	00	Fuel truck air brakes
12	45	school bus
13	53	mini bus
14	13	Van
15	18	Dualie F350 trailor
15	55	Jeep with studded tires
17	59	18-wheeler
18	49	Septic vac truck
21	40	plow truck
24	12	plow truck
24	32	truck w/ trailor
24	58	Nat Grid truck with pole arm
26	40	Small Garbage truck w/ trailer
27	24	NYSEG truck
27	50	truck w/ studded tires
29	25	truck w/ animal trailer

General Notes

1.) Primary Noise via traffic

2.) Personal vehicles too frequent, heavy class vehicles or exceptionally loud vehicles noted only.

3.) Ambient noise noted from I-87, though no "loud" events were observed

Project DEIS Plattsburg Dist Facility

Subject Ambient Noise Collection Job No. 24-02308-007

Sheet No. ____ of ____

Computed By MG Date 2/12/25 Checked By ____ Date ____

A1- Measurement 1

Location: 1 Run 2

GPS: 44.6422393, -73.4873175

File: 831 Data 29

Weather: 12F, 3-4 mph breeze

Start Time: 1059

End Time: 1129

Duration

Min.	sec.	Event
3	58	NYSEG Truck
5	33	Fuel truck
6	26	Jeep w/ studded tires
6	34	Semi truck w/ trailer
9	06	NYSDEC truck
9	12	Dualie with trailer
10	18	Semi truck w/ trailer
12	53	Jeep w/ studded tires
15	37	Logging truck
16	27	fuel truck, small airbrake in front of measurement location
20	12	Three MAC trucks
21	09	F-350 Dualie
21	20	Truck w/ studded tires
23	25	Haul truck
25	00	F-350 w/ trailer
27	58	Semi truck with trailer
29	10	Truck w/ Studs

General Notes

1) traffic consistent w/ Run 1 slightly less busy. Personal vehicles less frequent

A2- Measurement 2

Project DEIS Plattsburgh Dist. Facility

Subject Ambient Noise Collection Job No. 24-02308-001

Sheet No. _____ of _____

Computed By MG Date 2/12/25 Checked By _____ Date _____

Location: 2 Run 1 (Dead End of Spencer Rd.)

GPS: 44.6496079, -73.4920432

File: 831 Data 028

Weather: 7°F 3 mph breeze

Start Time: 8:52

End Time: 9:22

Duration

Min.	sec.	Event
1	00	Neighbor car idling
5	00	Crow ~ 50 feet away
		" "
		" "
8	00	" "
13	20	Airplane overhead
20	17	Crow and other birds nearby ~ 100 ft
		" "
22	29	" "

General Notes

- No traffic, generally quiet. Only sounds of nature, ambient noise from I-87 and one airplane

Project DEIS Plattsburgh Dist Facility

Subject Ambient Noise Collection Job No. 24-02308-001

Sheet No. _____ of _____

Computed By MG Date 2/12/25 Checked By _____ Date _____

A1- Measurement 2

Location: 2 Run 2

GPS: 44.6496079, -73.4920432

File: 831 Data 030

Weather: 13°F, 4 mph breeze

Start Time: 11 41

End Time: 12 11

Duration

Min.	sec.	Event
10	05	Neighbor returns home & pulls into driveway ~ 20' from Mic
21	21	Distant plane overhead

General Notes

1) very quiet, zero traffic aside from neighbor

R1-Measurment 1

Summary

File Name on Meter	831_Data.028.s
File Name on PC	831_0003004-20250212 085231-831_Data.028.ldbin
Serial Number	0003004
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2025-02-12 08:52:31
Stop	2025-02-12 09:22:31
Duration	00:30:00.0
Run Time	00:30:00.0
Pause	00:00:00.0
Pre-Calibration	2024-04-18 12:12:34
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	C	Z	
Under Range Peak	77.5	74.5	**79.5**	dB
Under Range Limit	**26.9**	27.4	33.5	dB
Noise Floor	17.7	18.3	23.9	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	48.9	dB
LAE	81.5	dB
EA	15.525	µPa²h
EA8	248.399	µPa²h
EA40	1.242	mPa²h
LZpk (max)	2025-02-12 09:07:42	108.0 dB
LASmax	2025-02-12 09:05:50	67.9 dB
LASmin	2025-02-12 09:11:13	37.2 dB
SEA	-99.9	dB

	Exceedance Counts	Duration
LAS > 0.0 dB	1	1799.7 s
LAS > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s

Community Noise	**LDN**	**LDay 00:00-00:00**	**LNight 00:00-00:00**	**LDEN**	**LDay 00:00-00:00**	**LEvening 00:00-00:00**	**LNight 00:00-00:00**	
	48.9	-99.9	48.9	48.9	-99.9	-99.9	48.9	dB

LCeq	70.7	dB
LAeq	48.9	dB
LCeq - LAeq	21.8	dB
LAleq	52.7	dB
LAeq	48.9	dB
LAleq - LAeq	3.8	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	48.9		70.7		79.4	
LS(max)	67.9	2025/02/12 9:05:50	84.9	2025/02/12 9:07:42	95.6	2025/02/12 9:07:42
LF(max)	69.9	2025/02/12 9:05:49	90.2	2025/02/12 9:07:42	101.3	2025/02/12 9:07:50
LI(max)	71.1	2025/02/12 9:05:49	92.8	2025/02/12 9:07:42	104.2	2025/02/12 9:07:42
LS(min)	37.2	2025/02/12 9:11:13	51.3	2025/02/12 8:59:32	60.5	2025/02/12 8:59:33
LF(min)	35.3	2025/02/12 9:11:12	49.3	2025/02/12 8:59:28	55.6	2025/02/12 8:59:31
LI(min)	36.9	2025/02/12 9:11:13	51.7	2025/02/12 8:59:32	63.2	2025/02/12 9:20:27
Lpk(max)	82.0	2025/02/12 9:07:42	100.1	2025/02/12 9:07:51	108.0	2025/02/12 9:07:42

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Dose Settings

Dose Name		
Exchange Rate	3	3 dB
Threshold	0	0 dB
Criterion Level	0	0 dB
Criterion Duration	0	0 h

Results

Dose	∞	∞ %
Projected Dose	7762478.00	7762478.00 %
TWA (Projected)	48.9	48.9 dB
TWA (t)	∞	∞ dB
Lep (t)	-51.0	-51.0 dB

Ln Percentiles

LA 5.00	53.9	dB
LA 10.00	51.7	dB
LA 33.30	47.0	dB
LA 50.00	45.4	dB
LA 66.60	43.4	dB
LA 90.00	40.9	dB

R1-Measurment 2

Summary	
File Name on Meter	831_Data.030.s
File Name on PC	831_0003004-20250212 114107-831_Data.030.ldbin
Serial Number	0003004
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement		
Description		
Start	2025-02-12	11:41:07
Stop	2025-02-12	12:11:07
Duration		00:30:00.0
Run Time		00:30:00.0
Pause		00:00:00.0
Pre-Calibration	2024-04-18	12:12:34
Post-Calibration		None
Calibration Deviation		---

Overall Settings	
RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	C	Z	
Under Range Peak	77.5	74.5	**79.5**	dB
Under Range Limit	**26.9**	27.4	33.5	dB
Noise Floor	17.7	18.3	23.9	dB

	First	Second	Third
Instrument Identification			

Results			
LAeq	50.6	dB	
LAE	83.2	dB	
EA	22.963	µPa²h	
EA8	367.409	µPa²h	
EA40	1.837	mPa²h	
LZpk (max)	2025-02-12 11:42:22	107.8	dB
LASmax	2025-02-12 11:51:09	72.2	dB
LASmin	2025-02-12 11:47:37	35.8	dB
SEA	-99.9	dB	

	Exceedance Counts	Duration	
LAS > 0.0 dB	1	1799.7	s
LAS > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s

Community Noise	**LDN**	**LDay 00:00-00:00**	**LNight 00:00-00:00**	**LDEN**	**LDay 00:00-00:00**	**LEvening 00:00-00:00**	**LNight 00:00-00:00**	
	50.6	-99.9	50.6	50.6	-99.9	-99.9	50.6	dB

LCeq	72.1	dB	
LAeq	50.6	dB	
LCeq - LAeq	21.5	dB	
LAleq	55.3	dB	
LAeq	50.6	dB	
LAleq - LAeq	4.7	dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	50.6		72.1		82.1	
LS(max)	72.2	2025/02/12 11:51:09	88.3	2025/02/12 12:04:58	98.0	2025/02/12 11:42:23
LF(max)	76.9	2025/02/12 11:51:09	91.5	2025/02/12 12:04:55	101.9	2025/02/12 11:42:22
LI(max)	79.6	2025/02/12 11:51:09	94.0	2025/02/12 11:46:20	104.7	2025/02/12 11:42:22
LS(min)	35.8	2025/02/12 11:47:37	46.8	2025/02/12 11:47:34	55.1	2025/02/12 11:47:35
LF(min)	34.9	2025/02/12 11:46:54	44.7	2025/02/12 11:47:35	50.5	2025/02/12 11:47:29
LI(min)	35.7	2025/02/12 11:47:37	49.5	2025/02/12 11:47:35	59.8	2025/02/12 12:10:30
Lpk(max)	94.5	2025/02/12 11:51:09	102.4	2025/02/12 11:42:23	107.8	2025/02/12 11:42:22

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Dose Settings		
Dose Name		
Exchange Rate	3	3 dB
Threshold	0	0 dB
Criterion Level	0	0 dB
Criterion Duration	0	0 h

Results			
Dose	∞	∞	%
Projected Dose	11481540.00	11481540.00	%
TWA (Projected)	50.6	50.6	dB
TWA (t)	∞	∞	dB
Lep (t)	-49.3	-49.3	dB

Ln Percentiles		
LA 5.00	56.0	dB
LA 10.00	53.2	dB
LA 33.30	46.5	dB
LA 50.00	44.1	dB
LA 66.60	42.3	dB
LA 90.00	40.0	dB

Summary

File Name on Meter	831_Data.027.s
File Name on PC	831_0003004-20250212 075801-831_Data.027.ldbin
Serial Number	0003004
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2025-02-12 07:58:01
Stop	2025-02-12 08:28:01
Duration	00:30:00.0
Run Time	00:30:00.0
Pause	00:00:00.0
Pre-Calibration	2024-04-18 12:12:34
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	C	Z	
Under Range Peak	77.5	74.5	**79.5**	dB
Under Range Limit	**26.9**	27.4	33.5	dB
Noise Floor	17.7	18.3	23.9	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	65.7	dB	
LAE	98.3	dB	
EA	743.070	µPa²h	
EA8	11.889	mPa²h	
EA40	59.446	mPa²h	
LZpk (max)	2025-02-12 08:22:21	110.4	dB
LASmax	2025-02-12 07:59:21	80.2	dB
LASmin	2025-02-12 08:15:27	45.2	dB
SEA	-99.9	dB	

	Exceedance Counts	Duration
LAS > 0.0 dB	1	1799.7 s
LAS > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s
LZpk > 0.0 dB	1	1799.7 s

Community Noise	**LDN**	**LDay 00:00-00:00**	**LNight 00:00-00:00**	**LDEN**	**LDay 00:00-00:00**	**LEvening 00:00-00:00**	**LNight 00:00-00:00**	
	65.7	-99.9	65.7	65.7	-99.9	-99.9	65.7	dB

LCeq	75.2	dB
LAeq	65.7	dB
LCeq - LAeq	9.5	dB
LAleq	67.4	dB
LAeq	65.7	dB
LAleq - LAeq	1.7	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	65.7		75.2		84.4	
LS(max)	80.2	2025/02/12 7:59:21	88.3	2025/02/12 8:18:49	100.1	2025/02/12 7:59:22
LF(max)	82.8	2025/02/12 7:59:20	92.9	2025/02/12 8:18:49	105.3	2025/02/12 7:59:22
LI(max)	85.3	2025/02/12 8:08:59	96.0	2025/02/12 7:59:19	107.1	2025/02/12 7:59:22
LS(min)	45.2	2025/02/12 8:15:27	54.3	2025/02/12 8:15:27	62.7	2025/02/12 8:15:27
LF(min)	44.5	2025/02/12 8:15:26	51.9	2025/02/12 8:15:26	58.2	2025/02/12 8:15:20
LI(min)	45.1	2025/02/12 8:15:26	55.8	2025/02/12 8:15:21	63.7	2025/02/12 8:14:25
Lpk(max)	101.3	2025/02/12 8:08:59	104.0	2025/02/12 7:59:19	110.4	2025/02/12 8:22:21

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Dose Settings

Dose Name		
Exchange Rate	3	3 dB
Threshold	0	0 dB
Criterion Level	0	0 dB
Criterion Duration	0	0 h

Results

Dose	∞	∞	%
Projected Dose	371535000.00	371535000.00	%
TWA (Projected)	65.7	65.7	dB
TWA (t)	∞	∞	dB
Lep (t)	-34.2	-34.2	dB

Ln Percentiles

LA 5.00	71.3	dB
LA 10.00	69.6	dB
LA 33.30	64.0	dB
LA 50.00	61.0	dB
LA 66.60	59.0	dB
LA 90.00	55.5	dB

R2-Measurment 2

Summary

File Name on Meter	831_Data.029.s
File Name on PC	831_0003004-20250212 105855-831_Data.029.ldbin
Serial Number	0003004
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description		
Start	2025-02-12	10:58:55
Stop	2025-02-12	11:28:55
Duration		00:30:00.0
Run Time		00:30:00.0
Pause		00:00:00.0
Pre-Calibration	2024-04-18	12:12:34
Post-Calibration		None
Calibration Deviation		---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamplifier	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Frequency Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	C	Z	
Under Range Peak	77.5	74.5	**79.5**	dB
Under Range Limit	**26.9**	27.4	33.5	dB
Noise Floor	17.7	18.3	23.9	dB

	First	Second	Third
Instrument Identification			

Results

LAeq	64.8	dB	
LAE	97.4	dB	
EA	603.991	µPa²h	
EA8	9.664	mPa²h	
EA40	48.319	mPa²h	
LZpk (max)	2025-02-12 11:15:56	106.0	dB
LASmax	2025-02-12 11:14:27	80.3	dB
LASmin	2025-02-12 11:10:05	48.6	dB
SEA	-99.9	dB	

	Exceedance Counts	Duration	
LAS > 0.0 dB	1	1799.7	s
LAS > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s
LZpk > 0.0 dB	1	1799.7	s

Community Noise	**LDN**	**LDay 00:00-00:00**	**LNight 00:00-00:00**	**LDEN**	**LDay 00:00-00:00**	**LEvening 00:00-00:00**	**LNight 00:00-00:00**	
	64.8	-99.9	64.8	64.8	-99.9	-99.9	64.8	dB

LCeq	73.7	dB
LAeq	64.8	dB
LCeq - LAeq	8.9	dB
LAleq	66.7	dB
LAeq	64.8	dB
LAleq - LAeq	1.9	dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	64.8		73.7		81.7	
LS(max)	80.3	2025/02/12 11:14:27	94.8	2025/02/12 11:14:26	95.7	2025/02/12 11:14:26
LF(max)	82.7	2025/02/12 11:07:59	97.2	2025/02/12 11:14:26	99.4	2025/02/12 11:02:22
LI(max)	84.0	2025/02/12 11:07:59	97.7	2025/02/12 11:14:26	102.0	2025/02/12 11:02:22
LS(min)	48.6	2025/02/12 11:10:05	54.9	2025/02/12 11:12:40	61.1	2025/02/12 11:12:39
LF(min)	47.4	2025/02/12 11:10:04	53.8	2025/02/12 11:12:40	57.5	2025/02/12 11:12:38
LI(min)	47.8	2025/02/12 11:10:05	55.2	2025/02/12 11:12:39	62.0	2025/02/12 11:12:50
Lpk(max)	96.3	2025/02/12 11:19:13	103.0	2025/02/12 11:14:26	106.0	2025/02/12 11:15:56

Overload Count	0	
Overload Duration	0.0	s
OBA Overload Count	0	
OBA Overload Duration	0.0	s

Dose Settings

Dose Name		
Exchange Rate	3	3 dB
Threshold	0	0 dB
Criterion Level	0	0 dB
Criterion Duration	0	0 h

Results

Dose	∞	∞	%
Projected Dose	301995500.00	301995500.00	%
TWA (Projected)	64.8	64.8	dB
TWA (t)	∞	∞	dB
Lep (t)	-35.1	-35.1	dB

Ln Percentiles

LA 5.00	70.4	dB
LA 10.00	68.5	dB
LA 33.30	62.1	dB
LA 50.00	58.9	dB
LA 66.60	56.8	dB
LA 90.00	53.5	dB

APPENDIX B
NOISE MODEL INPUT DATA

UM Property, LLC
New Distribution Center
Sound Power Levels

Description	Octave Band Frequency (Hz)- dB								Overall dB(A)
	63	125	250	500	1k	2k	4k	8k	
50-Ton RTU	104.00	97.00	96.00	97.00	95.00	93.00	88.00	79.00	99.9
10-Ton RTU	91.00	92.00	89.00	86.00	83.00	78.00	75.00	71.00	88.29
Cargo Truck[1]	69.75	63.65	60.18	57.78	57.55	54.35	49.58	46.66	62.01
Loading Activities	73.24	73.14	72.67	73.27	73.04	72.84	73.07	73.15	72.05
Parking Lot[2]	95.30	93.80	85.93	86.73	93.00	82.80	91.13	86.71	93.37

[1]To model lindear source, sound power set to 62.01 db(A)/m.

[2]Typical spectrum applied to the parkign lot area source. Sound level, with octave band weighting maintained, factored to 95.71 dB(A) based on the methodology "Recommendations for the Calculation of Sound Emissions of Parking Areas, Motorcar Centers and Bus Stations as well as of Multi-Storey Car Parks and Underground Car Parks" published by the Bavarian Landesamt für Umwelt

APPENDIX G

STORMWATER MANAGEMENT REPORT

RMS
Engineers • Planners • Surveyors • Soil & Material Testing
Robert M. Sutherland P.C.

STORMWATER MANAGEMENT REPORT

for

UMS Property LLC
New Distribution Center
Site Plan 2024

Prepared for:

UMS Property, LLC

Located at:

New York State RT 22
Town of Plattsburgh, NY

January 15th, 2025

Prepared by:

Robert M. Sutherland P.C.

11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx)
R M S P C . C O M

Table of Contents

SECTION 1: INTRODUCTION **3**
1.1 Purpose **3**
1.2 Project Location **3**
1.3 Project Description **3**
1.4 Design Requirements **3**
1.5 Receiving Waters and Underlying Soils **4**
1.6 Hydrologic Analysis Methodology **4**
1.7 Resonsible Entity for O&M of Stormwater Practices **4**
SECTION 2: STORMWATER QUANTITY MANAGEMENT **4**
2.1 Existing Site Drainage Characteristics **4**
2.2 Proposed Site Drainage Characteristics 5
2.3 Hydrologic Analysis **5**
2.4 Summary Quantity Control **5**
SECTION 3: STORMWATER QUALITY MANAGEMENT 5
3.1 5 Step Process **6**
3.2 Channel Protection Volume 7
3.4 Summary Quality Control 7
SECTION 4: EROSION & SEDIMENT CONTROL **7**
4.1 Estimated Area of Soil Distrubance 8
4.2 Temporary Erosion and Sediment Control Measures **8**
4.3 Permanent Erosion and Sediment Control Measures **8**
SWPPP APPENDICES
Appendix A – Existing Drainage Area Map
Appendix B – Proposed Drainage Area Map
Appendix C – HydroCAD Report: Existing Conditions
Appendix D – HydroCAD Report: Proposed Conditions
Appendix E – NRSC Soil Map
Appendix F – GI Worksheet summary

(1) INTRODUCTION

1.1 Purpose

The New York State Department of Environmental Conservation (NYSDEC) regulates stormwater discharges from certain construction activities and has implemented design objectives relating to the stormwater management of new and redeveloped sites. These design objectives can be found in the *NYSDEC Stormwater Design Manual* most recently revised in 2024. This Stormwater Management Report has been created to address these design objectives set forth by the NYSDEC and the *General Permit for Stormwater Discharges from Construction Activity* (GP-0-20-001).

1.2 Project Location

The proposed *UMS Property LLC* site is located on West side of New York State Route 22 in the Town of Plattsburgh, Clinton County, New York. The project is situated on portions of Tax Map Parcel 245-4-22.11 & 245-4-40.1. The approximate coordinate location of the site is:

Latitude, Longitude: 44° 38' 37.05" N, 73° 29' 21.41" W

1.3 Project Description

The *UMS Property LLC New Distribution Center Site Plan 2024* consists of the construction of a 774,750 square foot industrial building with loading docks, roadway access, parking, and utilities. In addition, a water tower and 1,455 square foot pump house will be constructed onsite. The new building will house Schluter Systems' post production work.

1.4 Design Requirements

The NYSDEC provides *sizing criteria* to address stormwater impacts both during and after the construction process. The Town of Plattsburgh Zoning Ordinance provides additional requirements that are applicable to this project. These requirements will be further discussed within the following sections:

- Water Quantity Control
- Water Quality Control
- Erosion and Sediment Control

1.5 Receiving Waters and Underlying Soils

Runoff from the site flows Eastward towards an existing railroad and ultimately is conveyed to a culvert located at the southeast corner of the site as seen in appendix A. The underlying soils consist mainly of Deerfield fine sand, with slopes ranging from 0 to 3 percent & Northway loamy fine sand, 0 to 3 percent & Northway loamy fine sand 0 to 8 percent. These soils belong to hydrologic soil group (HSG) Type A/D & B/D & B/D respectively. Conservatively, all soil analysed in modeling was assumed to be Hydrologic group D. A National Resource Conservation Service (NRCS) Web Soil Survey map is provided in Appendix E.

1.6 Hydrological Analysis Methodology

The software HydroCAD was used to assist in the Hydraulical analysis of this project. The program utilizes the TR-20 runoff method to calculate the peak runoff rate and volume for pre and post construction conditions. The HydroCAD report for the pre and post conditions can be found in Appendix C & D.

1.7 Responsible Entity for Operation and Maintenance of Stormwater Practices

UMS Property, LLC is the responsible entity for operation and maintenance of the stormwater management practices.

(2) STORMWATER QUANTITY MANAGEMENT

One of the goals of this stormwater management report is to ensure that the total quantity of stormwater runoff and the rate at which it leaves the site, does not raise from the existing values given the same storm event. In the Town of Plattsburgh, the Town's Zoning Ordinance also requires new projects constructing stormwater facilities to reduce the peak flow from the post-development, 25-year storm event to less than the pre-development, 10-year storm event. Stormwater modelling of the existing and proposed conditions, including modelling of stormwater facilities are used to ensure these requirements.

2.1 Existing Site Drainage Characteristics

A drainage area map, which shows the existing conditions of the site, is provided in Appendix A. The existing site was previously a agricultural field and has been abonded for an extensive amount of time. The site is mostly overgrown with trees and brush. The drainage area affected by the proposed project is approximately 72.541 acres. This area includes the footprint of the proposed new impervious areas and surrounding areas that flow within the drainage limits. The curve number for the existing site, given

Hydrolical soil class D and dense woods and grass is 82. The time of concentration was calculated to be around 20 minutes. The Existing Hydrological analysis report can be seen in Appedix C.

2.2 Proposed Site Drainage Characteristics

A drainage area map, which shows the proposed conditions of the site, is provided in Appendix B. Approximately 31.61 acres of new impervious area will be created as a result of the project. As result of these changes in impervious area, a significant increase in the volume and rate of runoff are expected compared to the existing conditions. The drainage area used for analysis purposes remains the same as the existing case. The time of concentration, however, is reduced to approximately 5.1 minutes. The composite curve number of the proposed site is calculated to be 88.

To manage this increase in runoff volume, a wet extended detention pond is proposed. A comparison of the runoff rates and volumes of the proposed and existing site is provided in Table 1.

2.3 Hydrologic Analysis – Summary of Existing and Proposed Site

A summary of the discharge rates and volumes for the drainage areas of the existing site are shown in Table 1 below. A complete HydroCAD report detailing the full hydrological analysis of the existing and proposed site are provided in Appendix C and Appendix D, respectively**.**

Table 1 – Hydrologic Summary

Storm Event	Total Existing Site		Total Proposed Site	
	Runoff Rate (cfs)	Runoff Volume (acre-ft)	Runoff Rate (cfs)	Runoff Volume (acre-ft)
1 year	40.97	3.414	23.20	5.594
2 year	51.72	4.489	32.35	6.886
5 year	81.81	6.526	43.61	9.235
10 year	88.13	8.527	63.86	11.465
25 year	139.11	11.832	80.81	15.050
50 year	163.58	14.985	103.16	18.390
100 year	209.81	18.775	126.14	22.347

2.2 Summary – Stormwater Quantity Control

As can be seen from Table 1, the peak runoff rate is lower than the existing conditions with the use of stormwater controls. A Spillway will be provided within the pond to handle emergency storm events. A foot of freeboard between the proposed 100-YR water surface elevation in the pond and invert of the emergency spillway is provided. The south access road will not discharge into the pond, but due to the limited size, will not have a negative impact on the overall drainage area.

(3) STORMWATER QUALITY MANAGEMENT

A second goal of this Report is to ensure that stormwater leaving the site is free of contamination and does impact the water quality of adjoining waterbodies. This is achieved by adhering to best practices

during the construction process. The construction of new impervious surfaces can leave lasting impacts that also need to be addressed. Stormwater post-construction controls and runoff reduction practices are proposed for this project to ensure these potential impacts are addressed.

3.1 5-Step Stormwater Management Planning Process

The *NYSDEC Stormwater Design Manual, 2015* provides a required 5-step stormwater management planning process that must be adhered to in the development of post-construction stormwater controls. This 5-step process was used in the development of this report. A summary of this process as it applied to this project is presented below:

1. Site Planning: The total amount of impervious area required to build the project has been reduced to the greatest extent possible, considering the size of the proposed building and the minimum parking requirements. The siting and orientation of the proposed building was largely determined by setback requirements and the locations of existing wetlands. A diversion swale is proposed along the northernwestern boundary of the proposed improvements in order to limit the quantity of run-on into the closed stormwater system.

2. Determine Water Quality Treatment Volume (WQv): The WQv has been calculated for the drainage area that represents the footprint of the proposed site: For wet extended detention pretreatment is required for 10% of the total Water Quality Control Volume for each inlet into the pond. Furthermore, 100% of the total water quality volume is to be provided as permanent water storage. A forebay is proposed to pretreat 61,281 cf, which is well over 30% of the total WQv required given 3 inlets. The GI Worksheet summaries can be seen in Appendix F.

Proposed New R & D Building			Water Quality Volume (WQv)
Total Drainage Area:	**44.34**	**ac**	
Impervious Area:	**31.60**	**ac**	
P =	**1.00**	**inch**	P = 90% Rainfall Event
I =	71.00	**%**	Rv = 0.05 + 0.009(I)
Rv =	0.69		I = Impervious Cover (%)
A =	44.34	**ac**	A = Area of Disturbed
			WQv = (P)(Rv)(A) / 12
WQv =	***111,285***	***cf***	

3. Apply Runoff Reduction Techniques and Standard SMPs with RRv Capacity to Reduce Total WQv: An stormwater pond with a forebay was the selected SMP for this site, providing quantity and quality control, ensuring protection of downstream channels and drainage structures.
4. Determine the minimum of RRv required: The minimum RRv is calculated by applying a Specific Reduction Factor to the calculated WQv as described in Chapter 4 of the NYSDEC Stormwater Design Manual, 2024. For this site, a Specific Reduction Factor of 0.20 was used and the minimum RRv was calculated to be 30,579 cf. Due to high groundwater detected in testing infiltration practices are unfeasable for reduction purposes. Therefore, after evaluating all other applicable Runoff Reduction Techniques in Chapter 6, it is unfeasible to meet this requirement. Otherwise, all runoff quantity and water quality control requirements are met for the developed site.
5. Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume: The proposed stormwater pond is sufficient to reduce the peak runoff increase due to the developed site. Furthermore, the Forebay and permanent wet pond are proposed to treat 100% of the Water Quality Volume required. As a result, no additional stormwater facilities are required for this project.

3.2 Channel Protection Volume (CPv)

Typically, the CPv requirement is met by providing 24-hour extended detention of the runoff volume produced from the one-year, 24-hour storm event. As can be seen from the stormwater modelling results discussed in Section 2, no increase in runoff is expected to occur from the developed site from the one-year storm. As a result, the channel protection volume criteria has been achieved.

3.3 Summary Quality Control

The proposed stormwater pond provides a permanent storage volume of approximately 115,686 cf. This is over 100% of the Water quality required as seen in Appendix F. Furthermore, pretreatment is required for 10% of the total Water Quality Control Volume at each inlet. Given 3 inlets proposed, a minimum of 33,385.50 cubic feet of pretreatment is required. As seen in Appendix F, with 61,281 cubic feet of storage being provided in the forebay, we conservatively meet this requirement.

(4) EROSION AND SEDIMENT CONTROL

All erosion and sediment control practices described in this section will be designed in conformance with the *NYS Standards and Specifications for Erosion and Sediment Control, 2016*, aka the “Blue Book”.

4.1 Estimated Area of Disturbances

The total area of disturbance is estimated at 44.34 acres.

4.2 Temporary Erosion and Sediment Control Measures

The following erosion and sediment control measures are proposed for this site. Additional measures may be required as necessary based on weekly SWPPP inspections.

A. Silt Fence – Constructed by the assembly of wooden/steel stakes, woven wire and filter cloth or through the use of prefabricated units GEOFAB, Envirofence, or an approved equivalent. The proposed silt fence is to be installed perpendicular to the flow of the stormwater runoff. The purpose of the silt fence is to intercept the sediments carried by the stormwater runoff from the construction site before it can accumulate in nearby rivers, lakes, etc.

B. Erosion Control Wattles – Can be used in replace of silt fence, or in addition to silt fence to provide additional protection.

C. Stabilized Construction Entrance – All site driveway entrances shall be converted to a stabilized construction entrance. These entrances consist of crushed stone to collect loose sediment and debris from construction vehicles, minimizing sediment tracking on the roads.

D. Rock Outlet Protection – the outlets of culverts must be stabilized with stone rip-rap to provide energy dissipation.

E. Seeding and Mulching – The contractor is encouraged to seed or mulch disturbed areas as soon as possible to promote ground stabilization.

4.3 Permanent Erosion and Sediment Control Measures

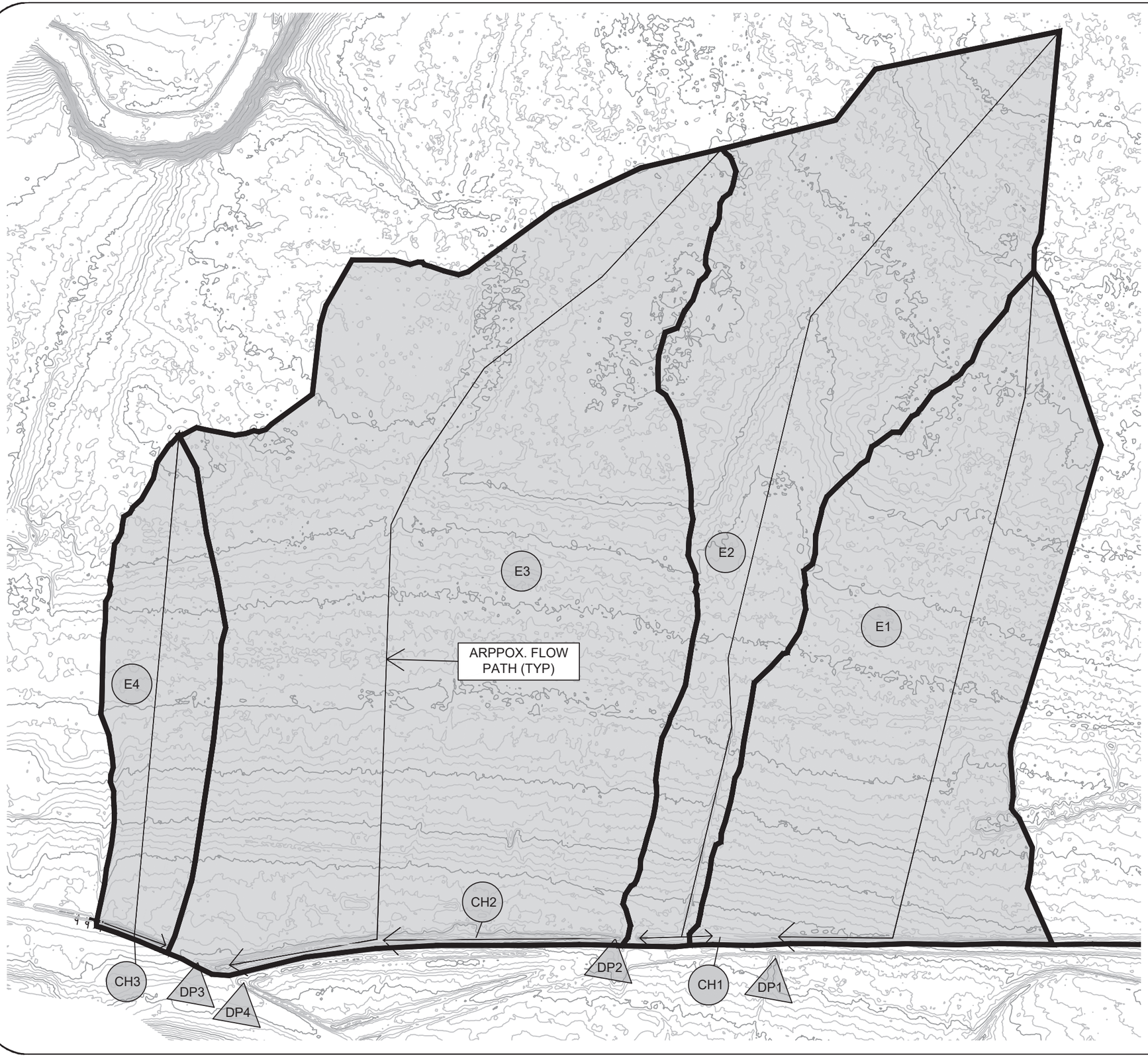
A. Soil Restoration – Any soil that has become compacted due to the construction process will be restored back to its original conditions using standard soil restoration techniques.

B. Seeding and Mulch – Final stabilization of the site cannot be achieved until all disturbed area have been fully stabilized and greater than 80% of the vegetative cover has been established.

APPENDICES

Appendix A - Existing Site Drainage Area Map
Appendix B - Proposed Site Drainage Area Map
Appendix C - HydroCAD Report: Existing Conditions
Appendix D - HydroCAD Report: Proposed Conditions
Appendix E - NRSC Soil Report
Appendix F – GI Worksheet Summary

APPENDIX A: EXISTING SITE DRAINAGE AREA MAP



No.	Revision/Issue	Date

RMS
R. M. SUTHERLAND, P.C.
ENGINEERS • PLANNERS • SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address

UMS Property, L.L.C.

showing

New Distribution Center

Site Plan 2024

~ Situate ~

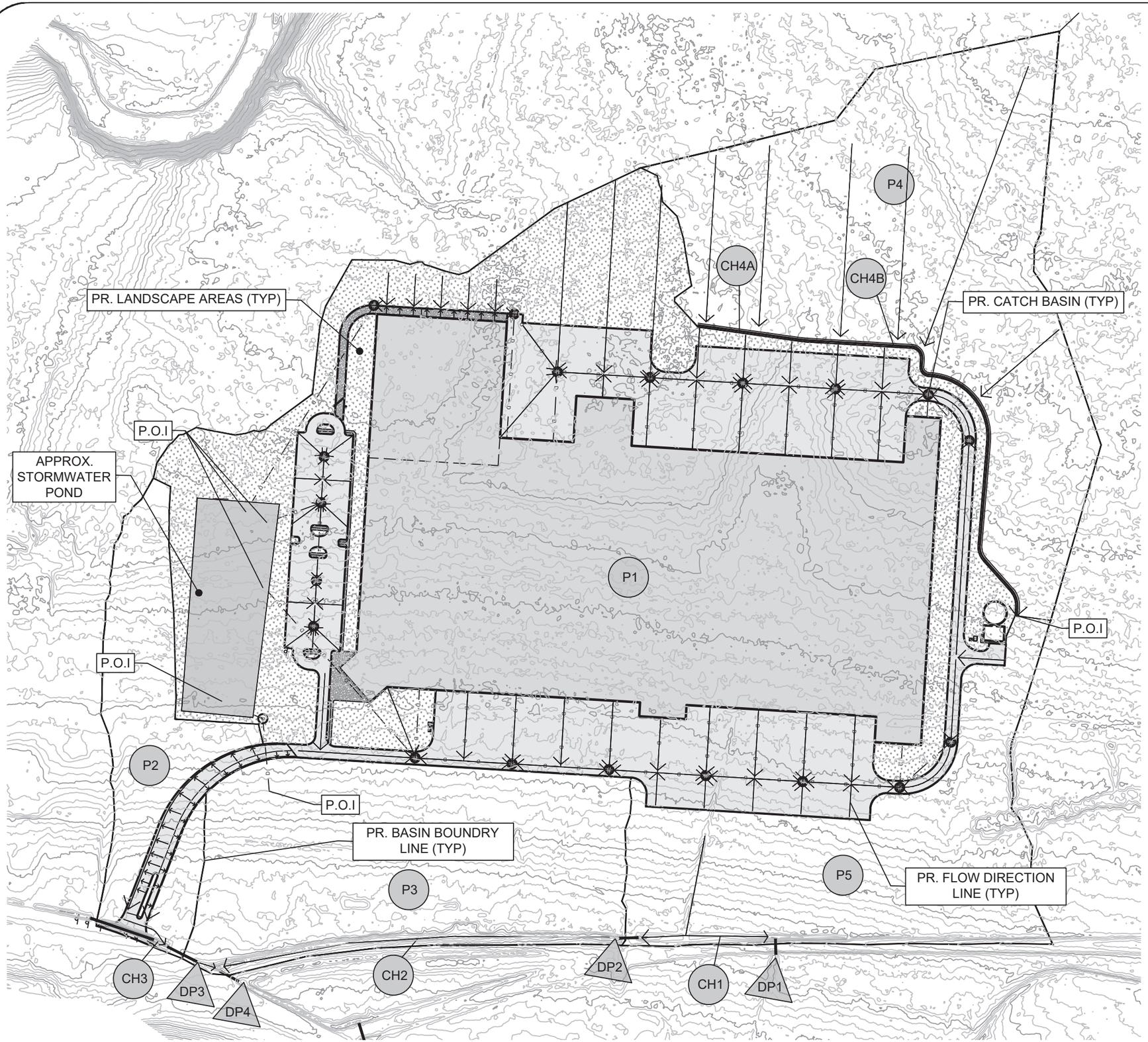
Town of Plattsburgh

Clinton County State of New York

Project # 22241	Sheet Existing Drainage Exhibit
Date 12/17/2024	EX-DA
Scale N.T.S	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

APPENDIX B: PROPOSED SITE DRAINAGE AREA MAP



No.	Revision/Issue	Date

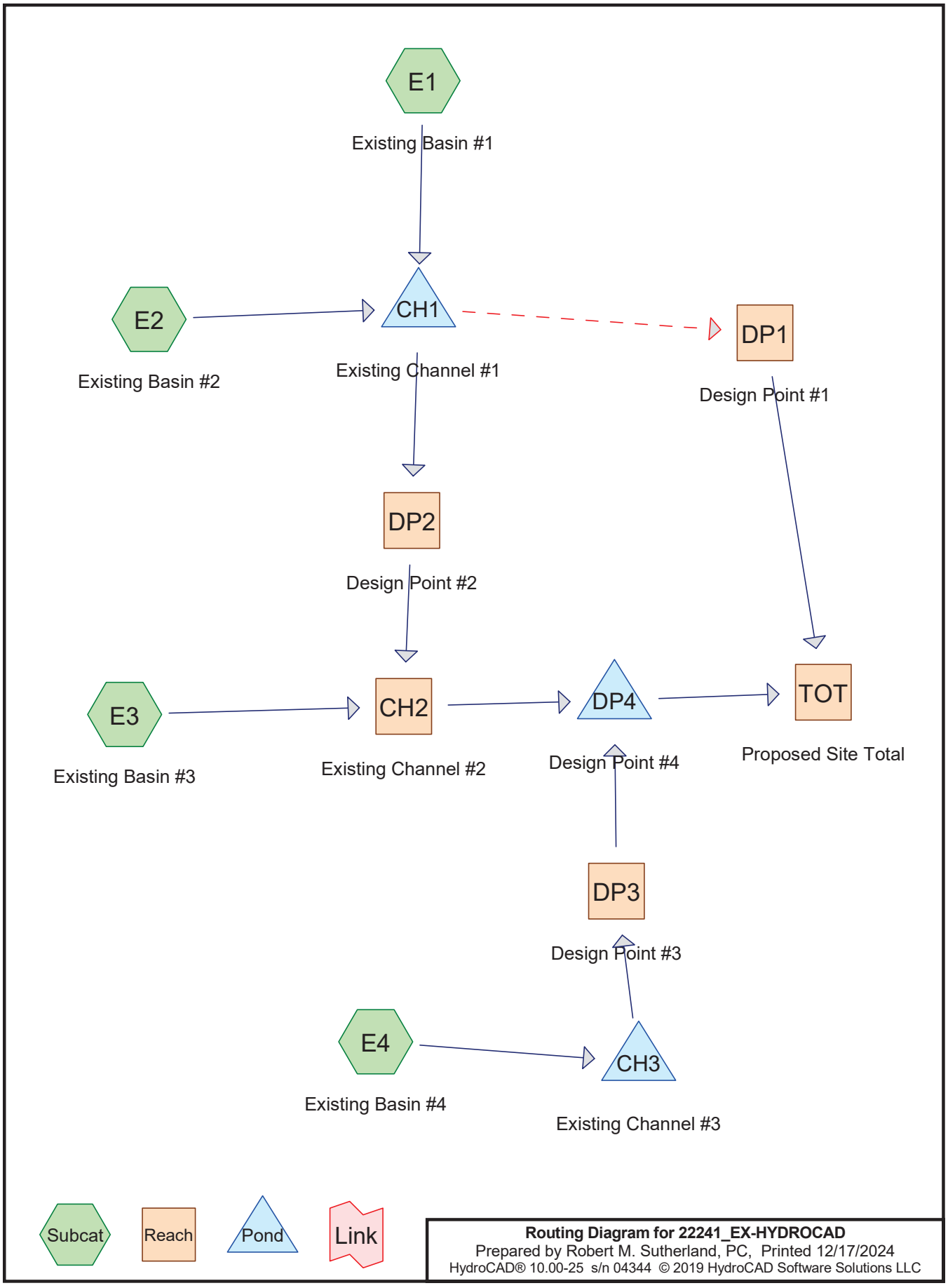
RMS
ENGINEERS • PLANNERS • SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(PH) 518.561.2496 (FX)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County — State of New York

Project # 22241	Sheet: Proposed Drainage Exhibit
Date 12/17/2024	PR-DA
Scale N.T.S	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

APPENDIX C: HYDROCAD REPORT: EXISTING CONDITIONS



Routing Diagram for 22241_EX-HYDROCAD
Prepared by Robert M. Sutherland, PC, Printed 12/17/2024
HydroCAD® 10.00-25 s/n 04344 © 2019 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
72.541	82	Woods/grass comb., Fair, HSG D (E1, E2, E3, E4)
72.541	**82**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
72.541	HSG D	E1, E2, E3, E4
0.000	Other	
72.541		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	72.541	0.000	72.541	Woods/grass comb., Fair	E1, E2, E3, E4
0.000	**0.000**	**0.000**	**72.541**	**0.000**	**72.541**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	CH1	224.47	223.87	41.3	0.0145	0.025	24.0	0.0	0.0
2	CH1	224.90	224.20	33.5	0.0209	0.011	32.0	0.0	0.0
3	CH3	223.35	221.69	69.0	0.0241	0.025	18.0	0.0	0.0
4	DP4	217.37	217.13	46.8	0.0051	0.025	24.0	0.0	0.0

Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=0.56"
Tc=20.0 min CN=82 Runoff=8.30 cfs 0.787 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=0.56"
Tc=20.0 min CN=82 Runoff=8.42 cfs 0.798 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=0.56"
Tc=20.0 min CN=82 Runoff=16.89 cfs 1.601 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=0.56"
Tc=20.0 min CN=82 Runoff=2.41 cfs 0.228 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=0.81' Max Vel=4.78 fps Inflow=26.33 cfs 2.855 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=26.26 cfs 2.855 af

Reach DP1: Design Point #1 Inflow=7.18 cfs 0.331 af
Outflow=7.18 cfs 0.331 af

Reach DP2: Design Point #2 Inflow=9.46 cfs 1.254 af
Outflow=9.46 cfs 1.254 af

Reach DP3: Design Point #3 Inflow=2.40 cfs 0.228 af
Outflow=2.40 cfs 0.228 af

Reach TOT: Proposed Site Total Inflow=40.97 cfs 3.414 af
Outflow=40.97 cfs 3.414 af

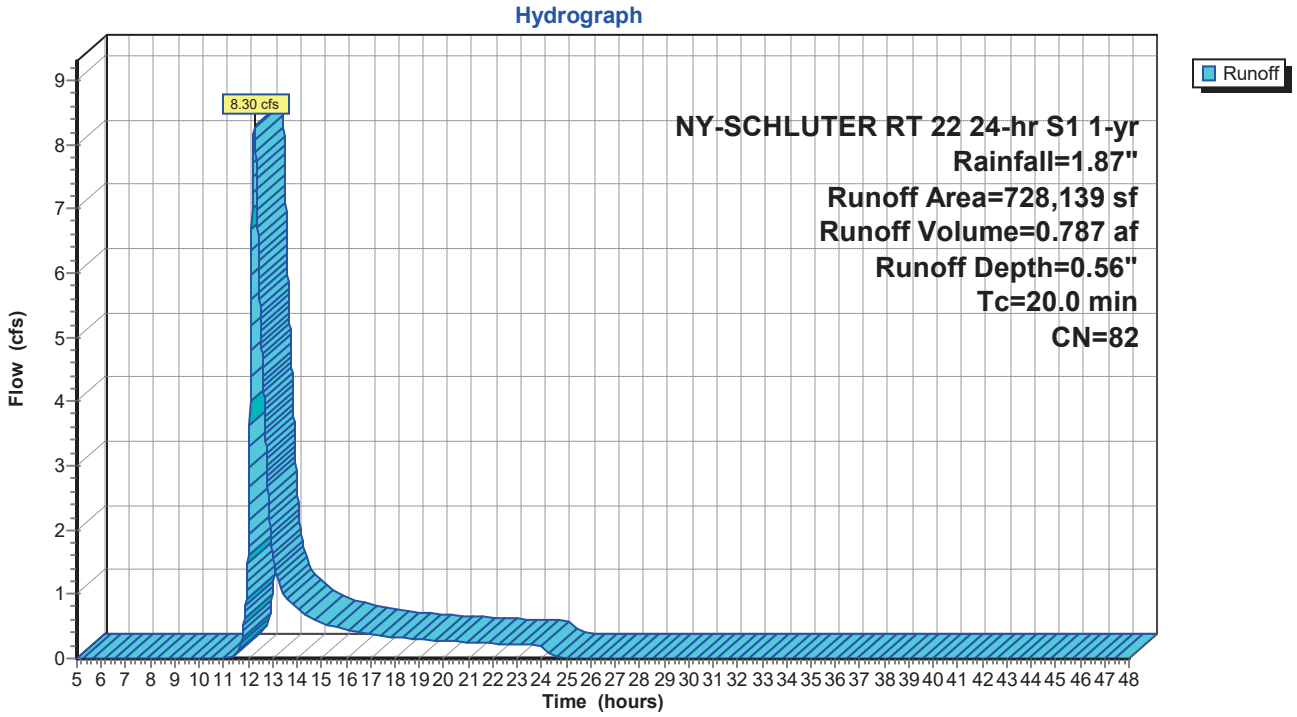
Pond CH1: Existing Channel #1 Peak Elev=226.14' Storage=537 cf Inflow=16.72 cfs 1.585 af
Primary=9.46 cfs 1.254 af Secondary=7.18 cfs 0.331 af Outflow=16.64 cfs 1.585 af

Pond CH3: Existing Channel #3 Peak Elev=224.19' Storage=96 cf Inflow=2.41 cfs 0.228 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=2.40 cfs 0.228 af

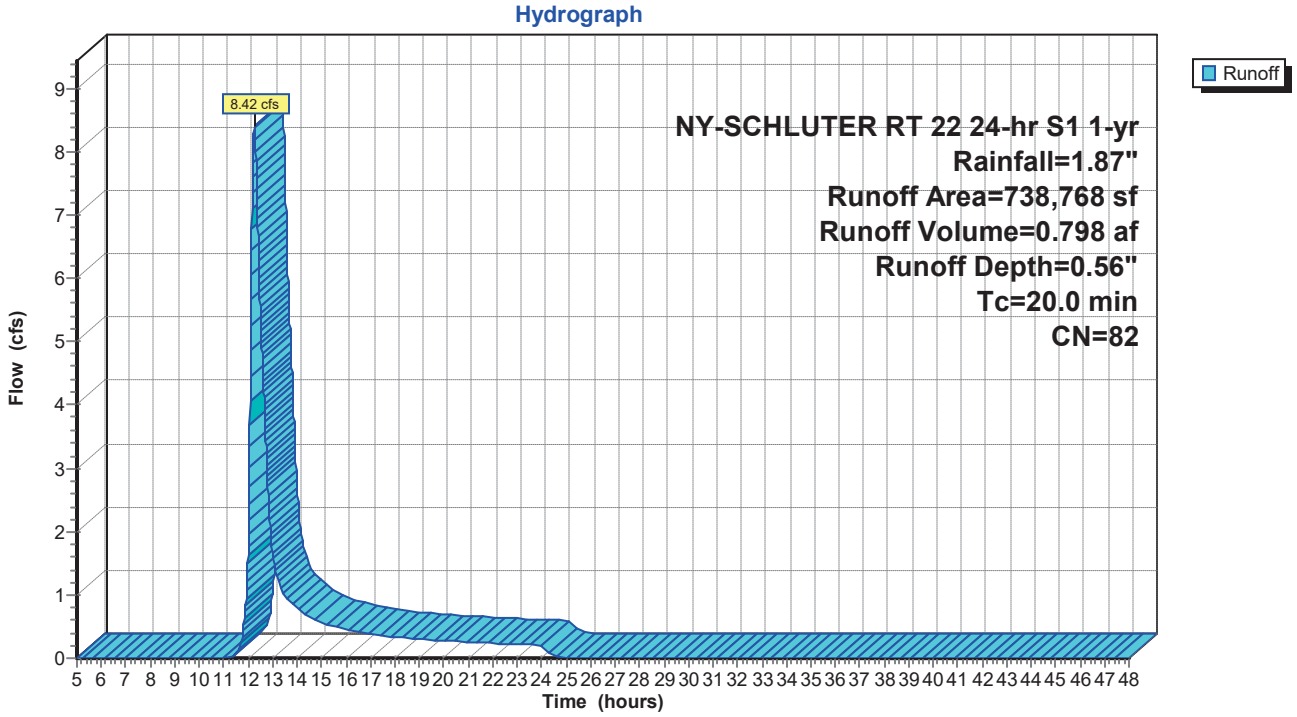
Pond DP4: Design Point #4 Peak Elev=225.70' Storage=4,154 cf Inflow=28.65 cfs 3.083 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=33.79 cfs 3.083 af

Total Runoff Area = 72.541 ac Runoff Volume = 3.414 af Average Runoff Depth = 0.56"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

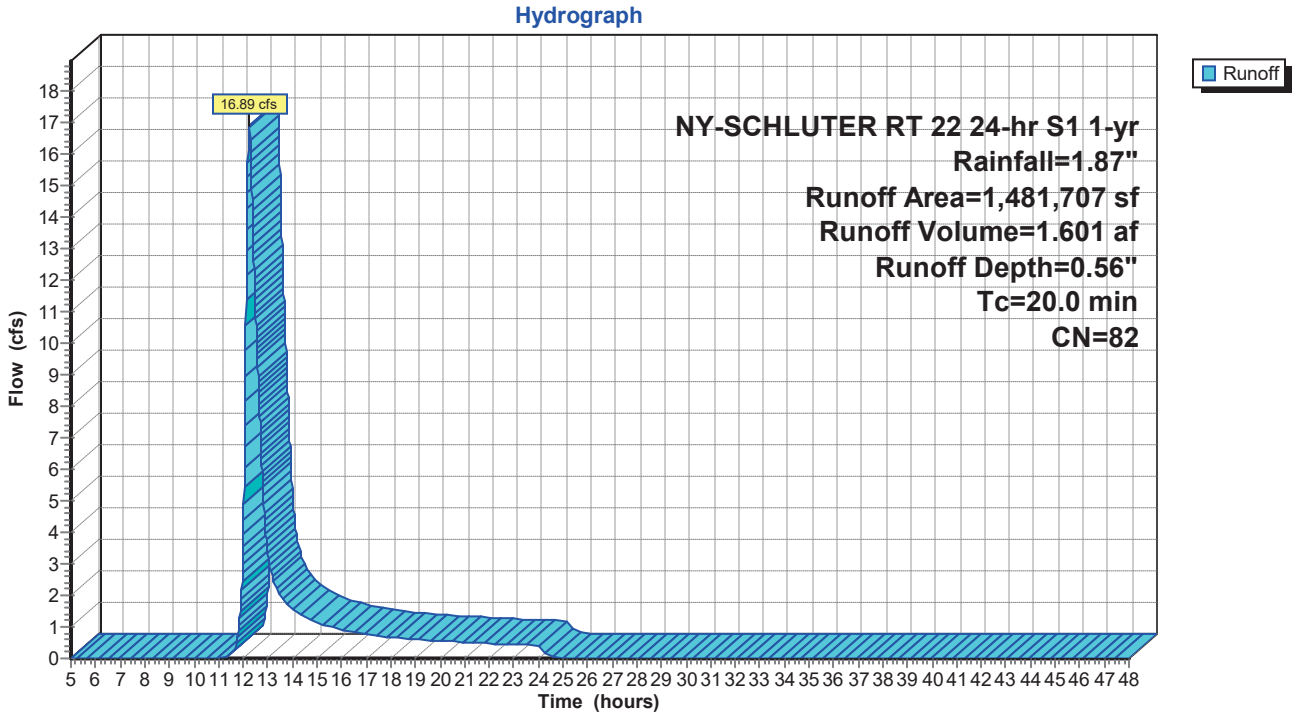
Subcatchment E1: Existing Basin #1



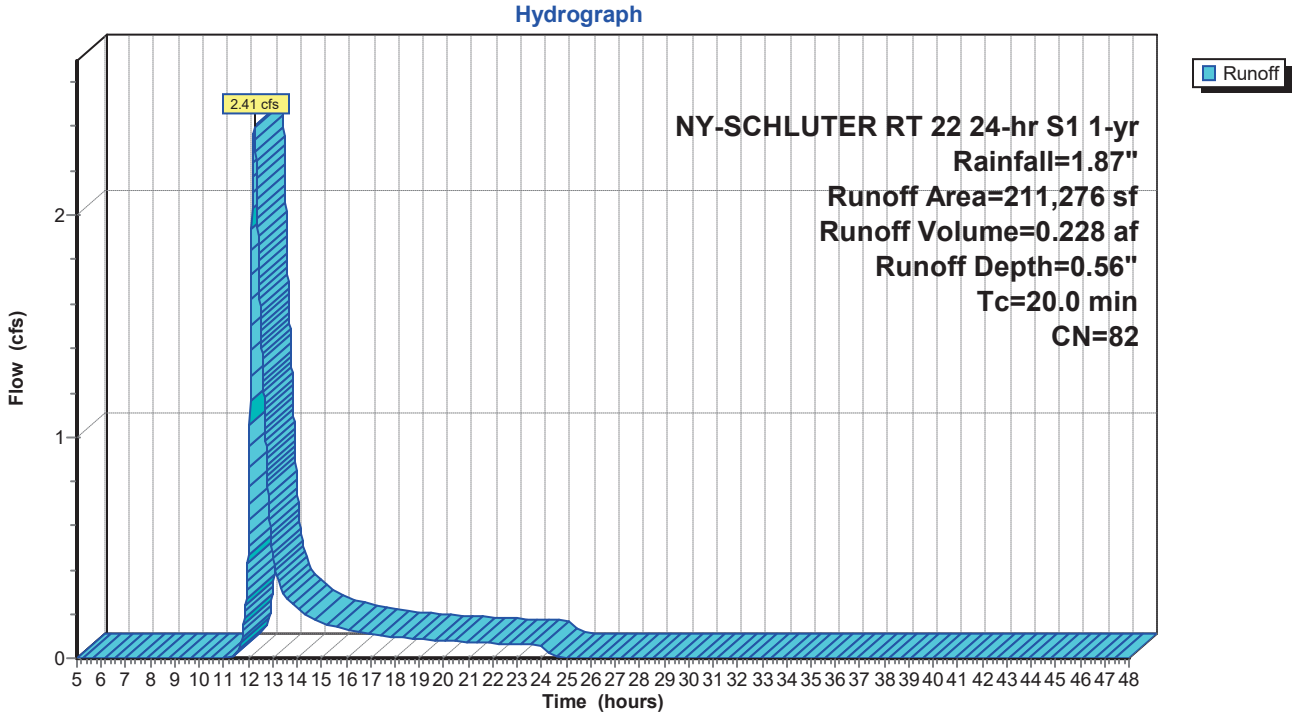
Subcatchment E2: Existing Basin #2



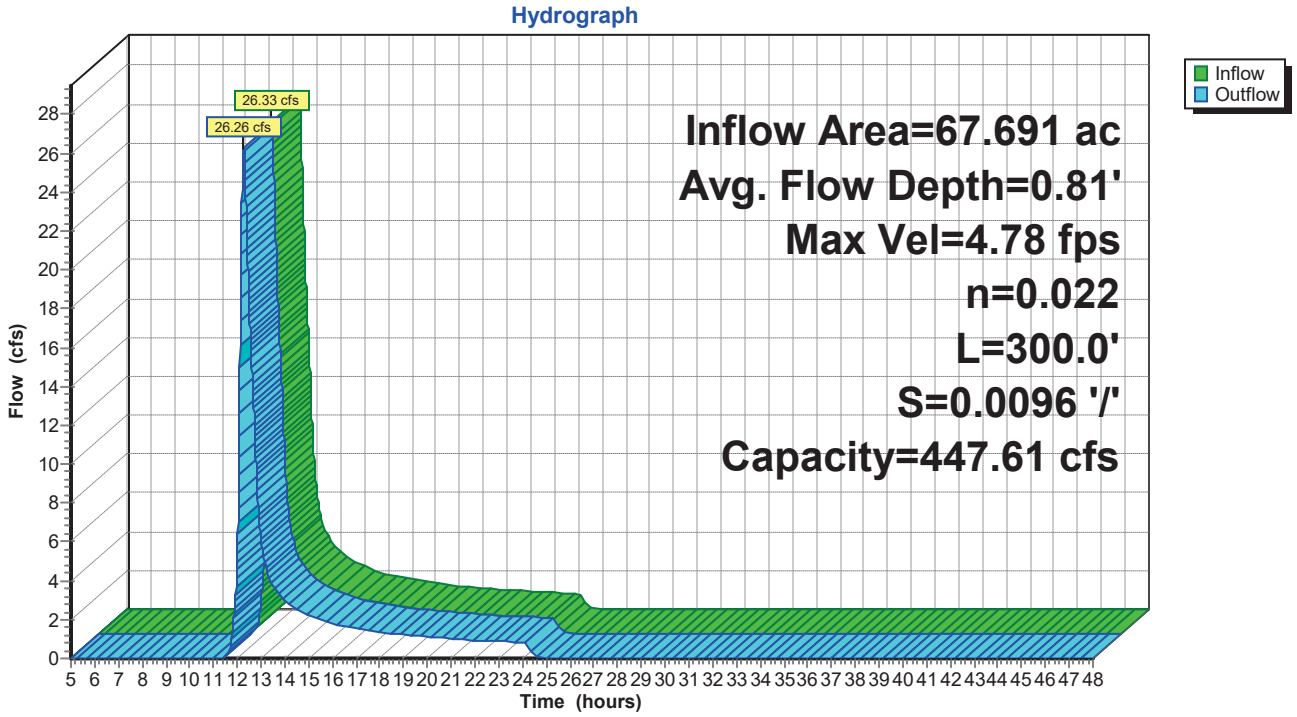
Subcatchment E3: Existing Basin #3



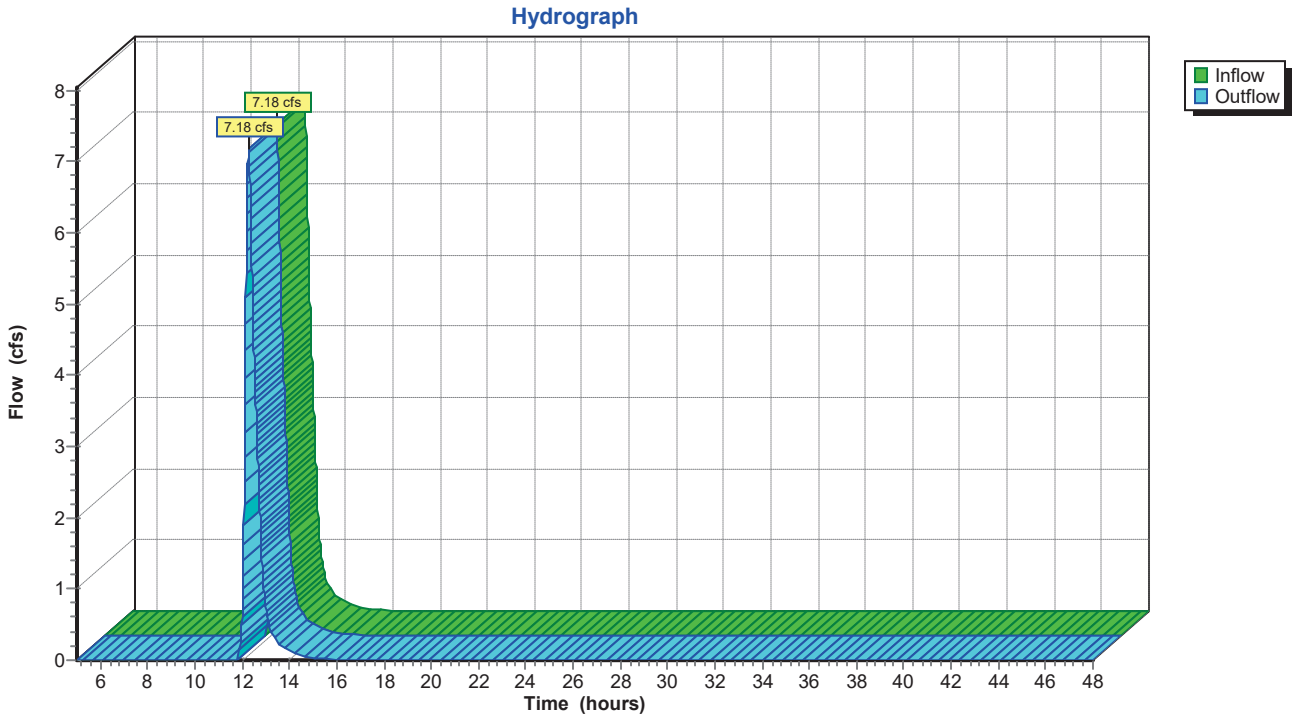
Subcatchment E4: Existing Basin #4



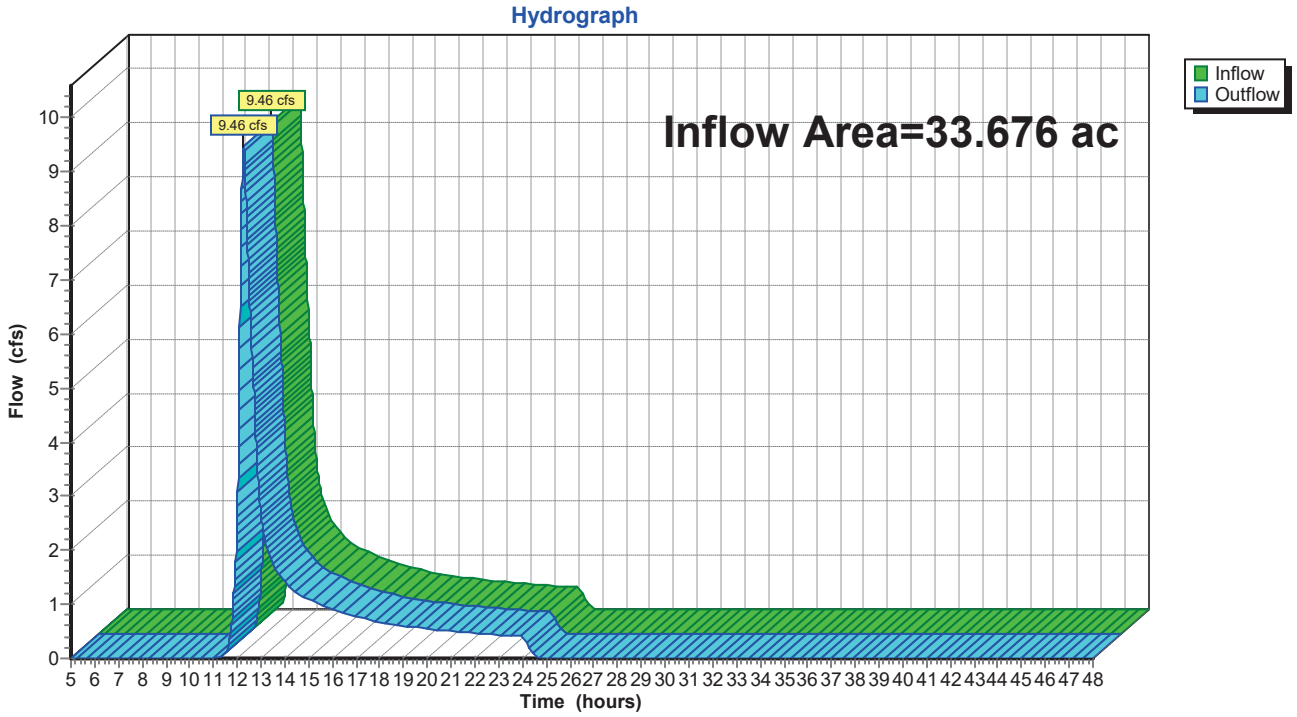
Reach CH2: Existing Channel #2



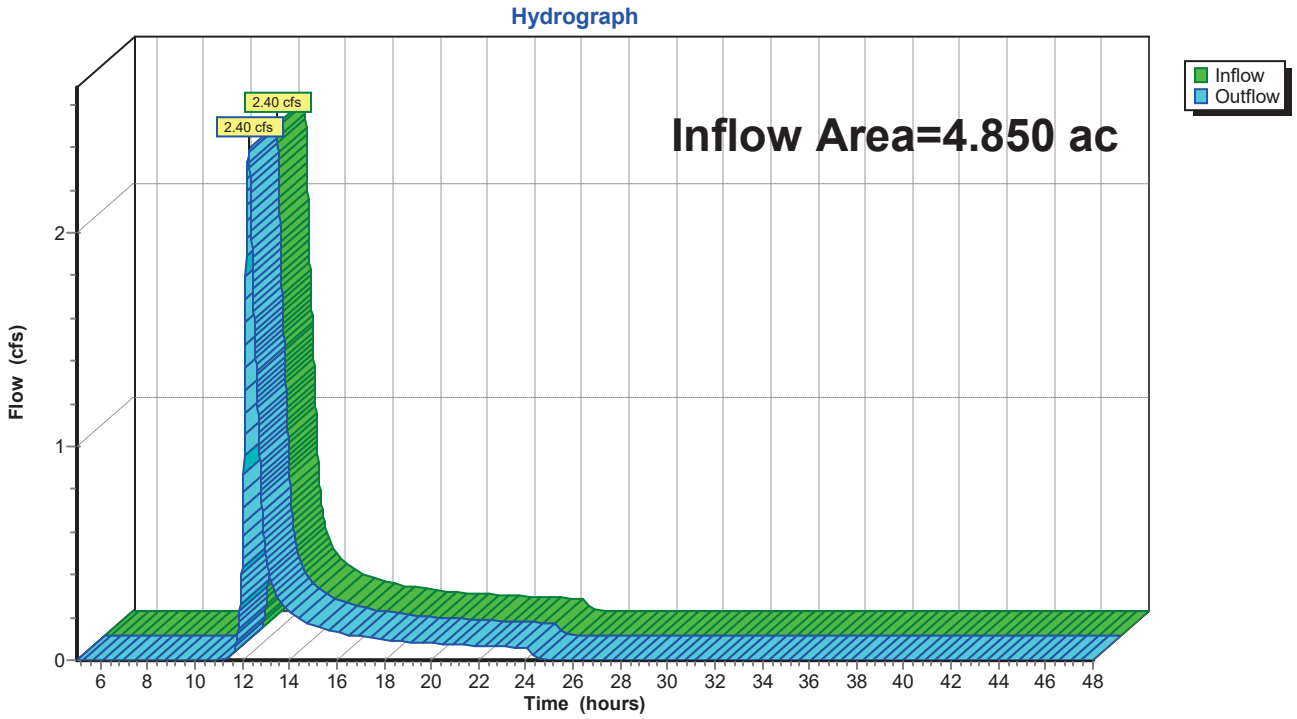
Reach DP1: Design Point #1



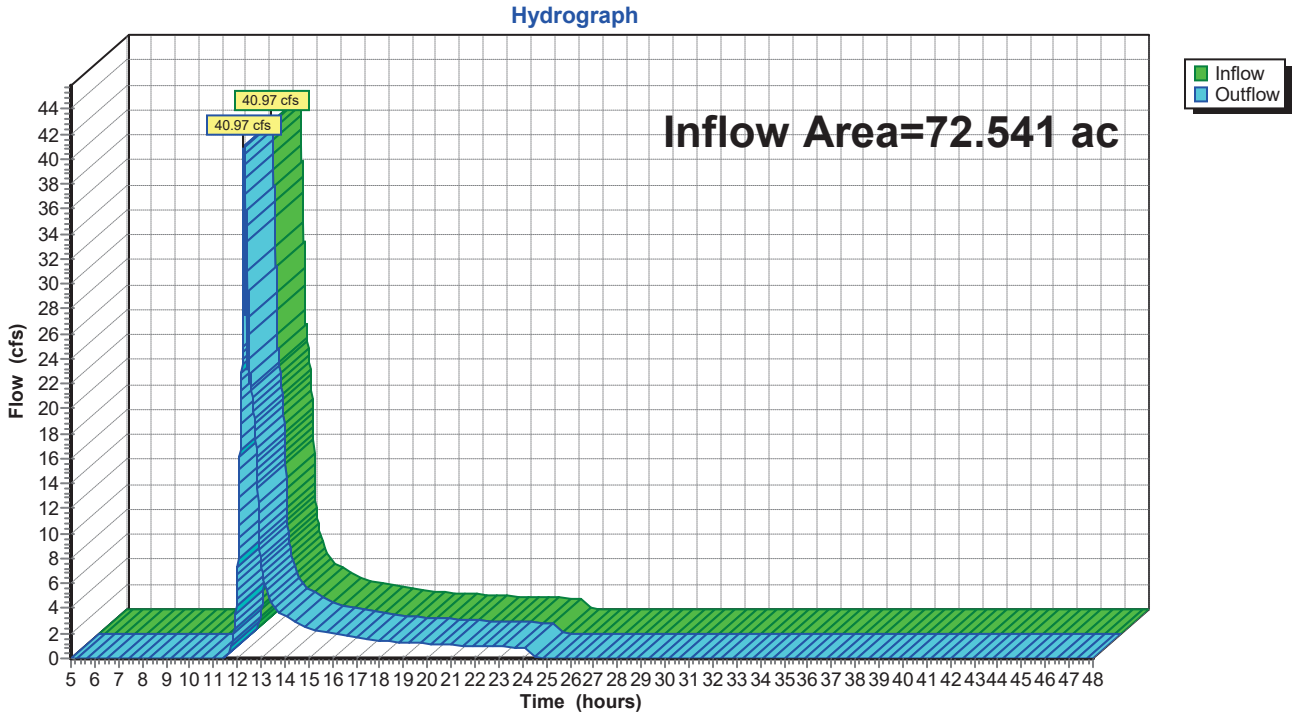
Reach DP2: Design Point #2



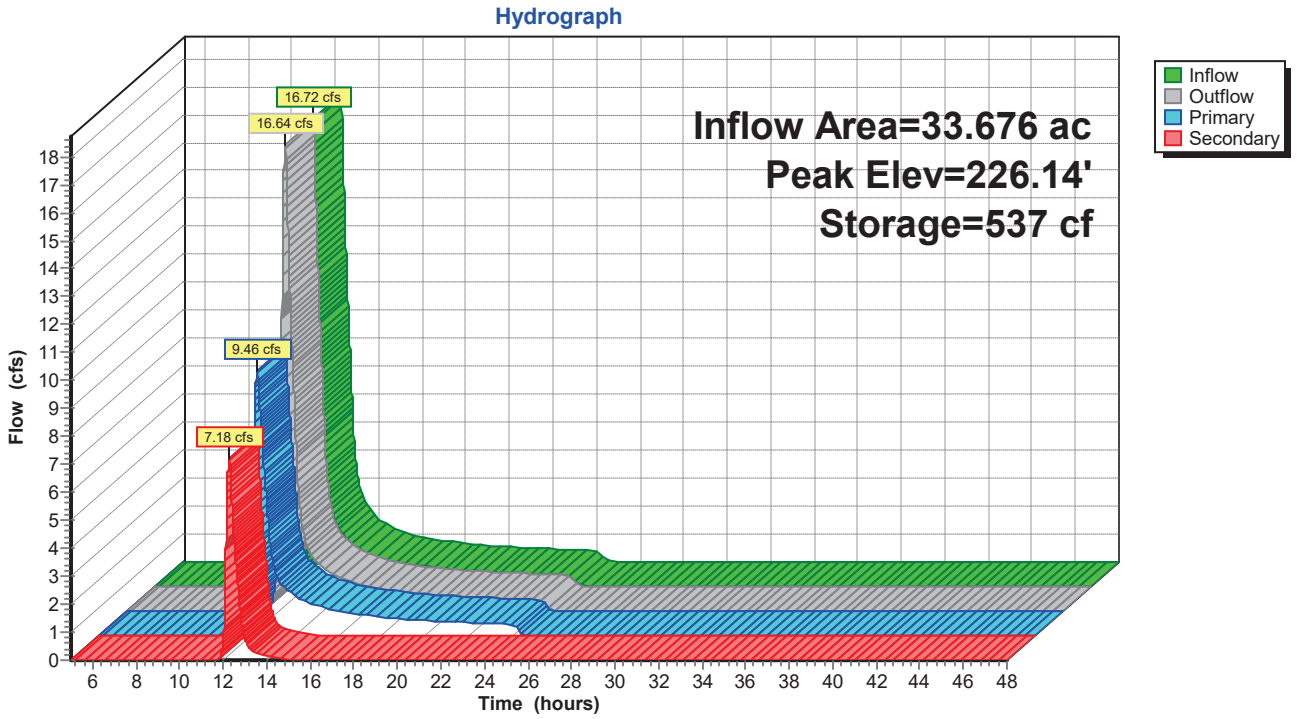
Reach DP3: Design Point #3



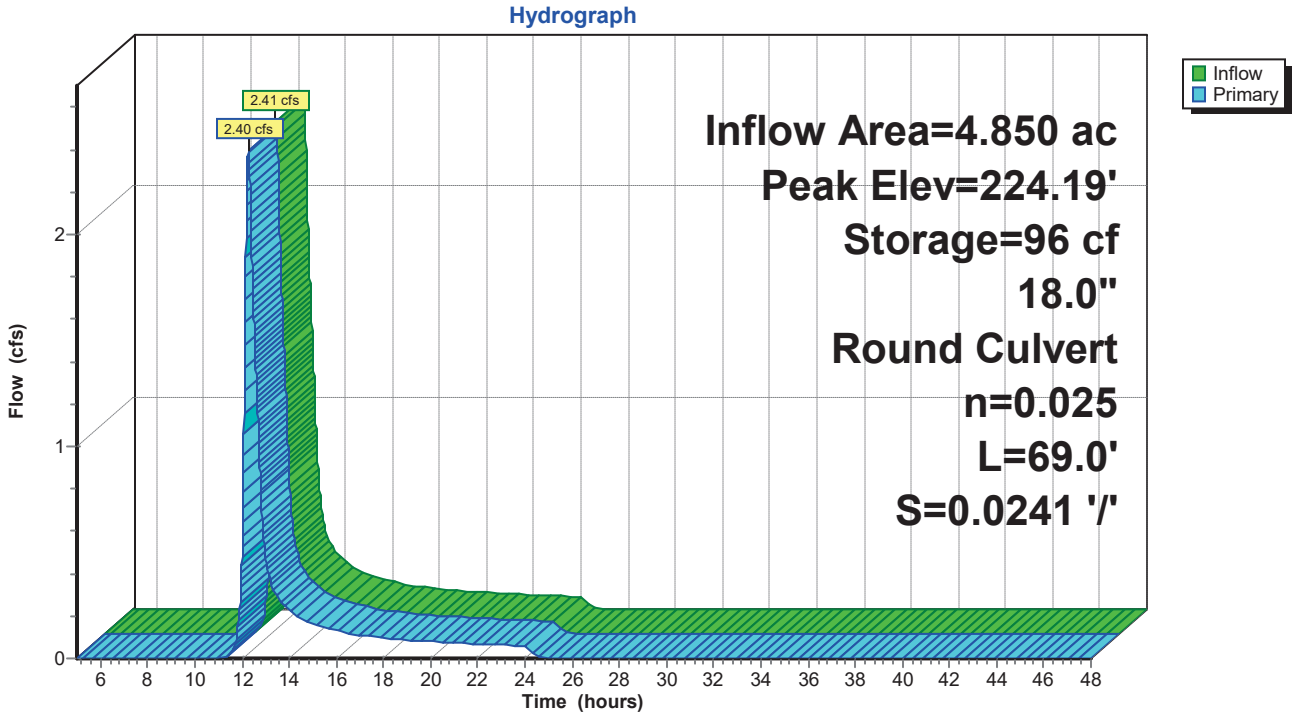
Reach TOT: Proposed Site Total



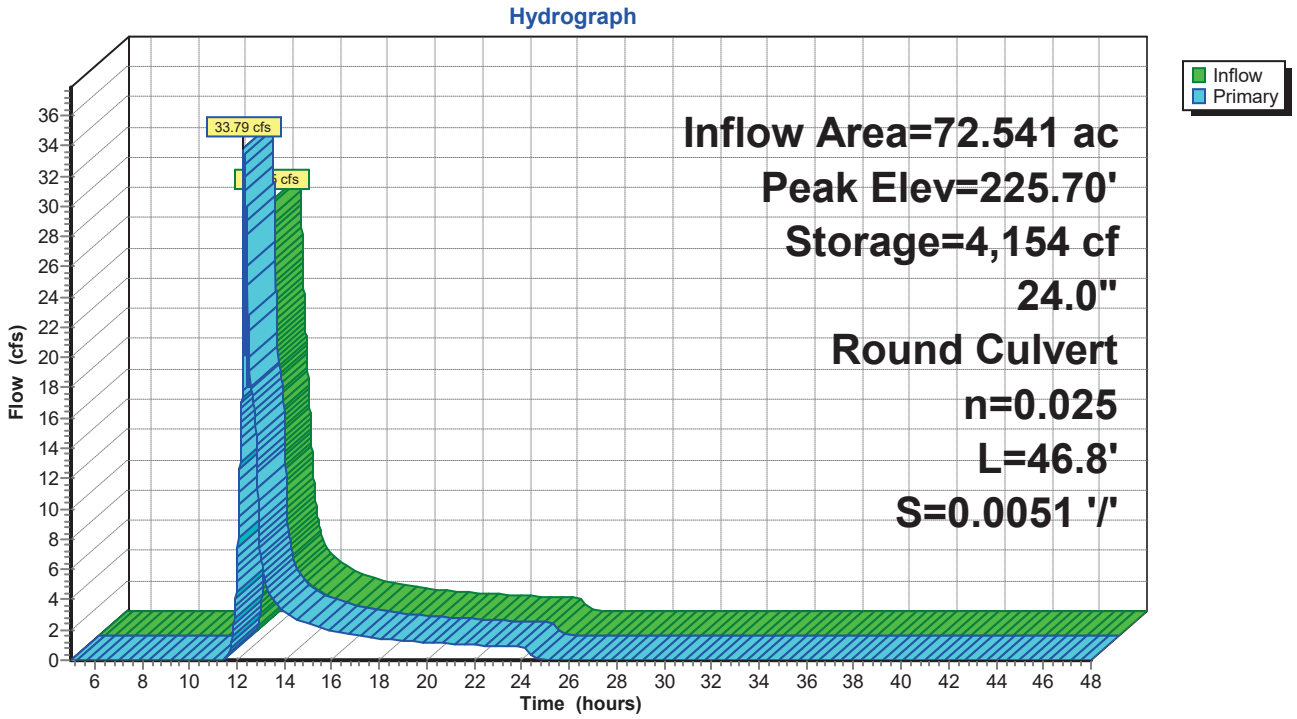
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=0.74"
Tc=20.0 min CN=82 Runoff=10.67 cfs 1.034 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=0.74"
Tc=20.0 min CN=82 Runoff=10.83 cfs 1.050 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=0.74"
Tc=20.0 min CN=82 Runoff=21.72 cfs 2.105 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=0.74"
Tc=20.0 min CN=82 Runoff=3.10 cfs 0.300 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=0.92' Max Vel=5.13 fps Inflow=33.17 cfs 3.707 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=33.08 cfs 3.707 af

Reach DP1: Design Point #1 Inflow=9.80 cfs 0.482 af
Outflow=9.80 cfs 0.482 af

Reach DP2: Design Point #2 Inflow=11.51 cfs 1.602 af
Outflow=11.51 cfs 1.602 af

Reach DP3: Design Point #3 Inflow=3.07 cfs 0.300 af
Outflow=3.07 cfs 0.300 af

Reach TOT: Proposed Site Total Inflow=51.72 cfs 4.489 af
Outflow=51.72 cfs 4.489 af

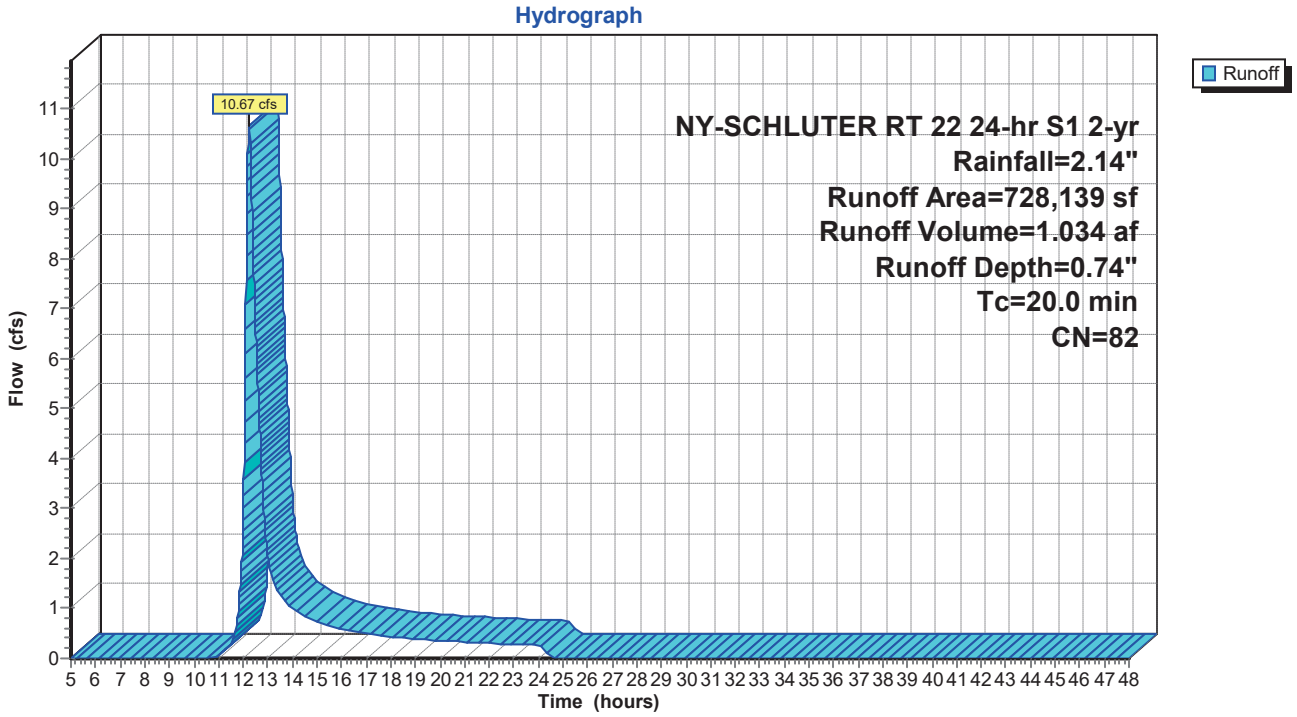
Pond CH1: Existing Channel #1 Peak Elev=226.37' Storage=854 cf Inflow=21.50 cfs 2.084 af
Primary=11.51 cfs 1.602 af Secondary=9.80 cfs 0.482 af Outflow=21.30 cfs 2.084 af

Pond CH3: Existing Channel #3 Peak Elev=224.33' Storage=139 cf Inflow=3.10 cfs 0.300 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=3.07 cfs 0.300 af

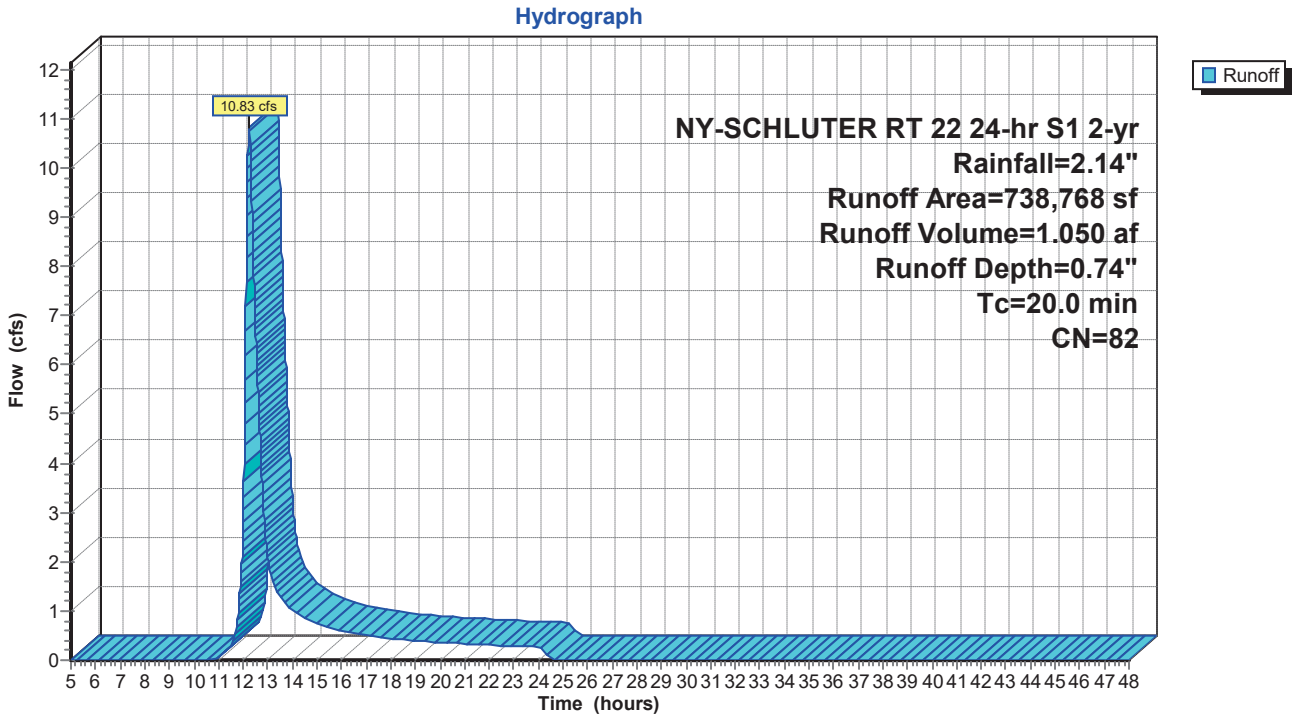
Pond DP4: Design Point #4 Peak Elev=229.24' Storage=4,154 cf Inflow=36.16 cfs 4.008 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=41.92 cfs 4.008 af

Total Runoff Area = 72.541 ac Runoff Volume = 4.489 af Average Runoff Depth = 0.74"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

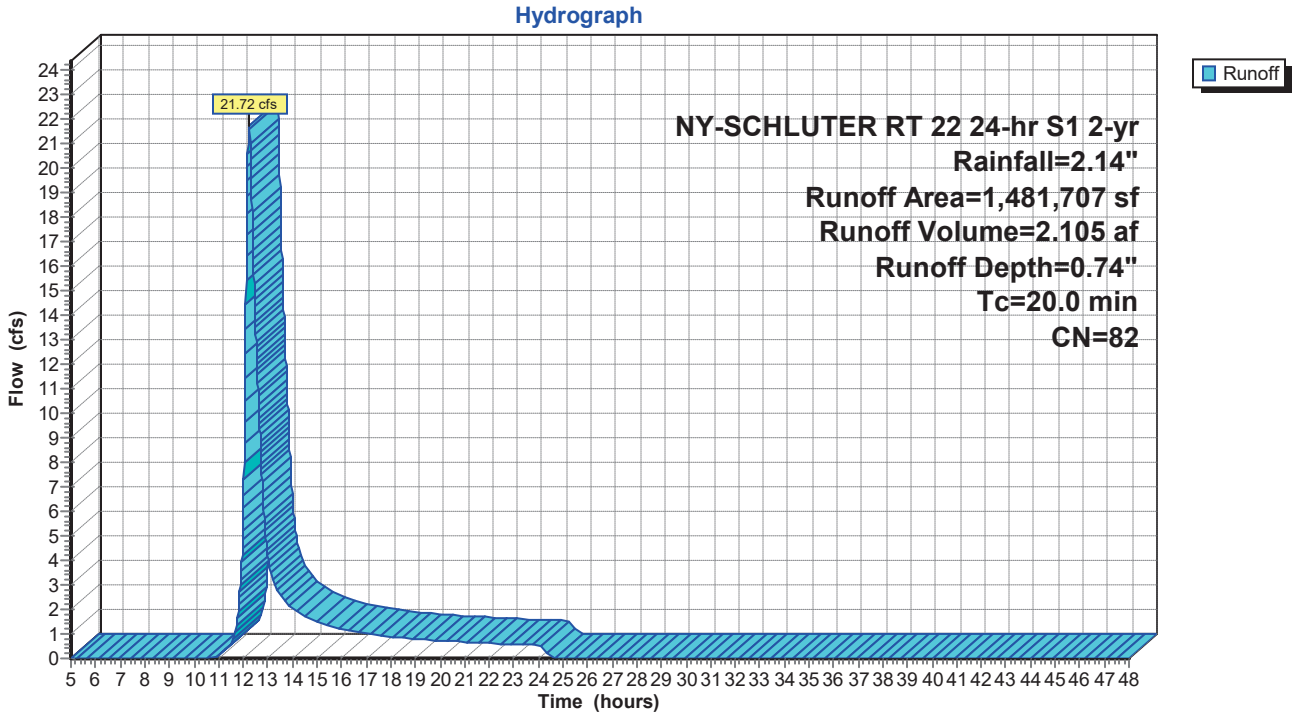
Subcatchment E1: Existing Basin #1



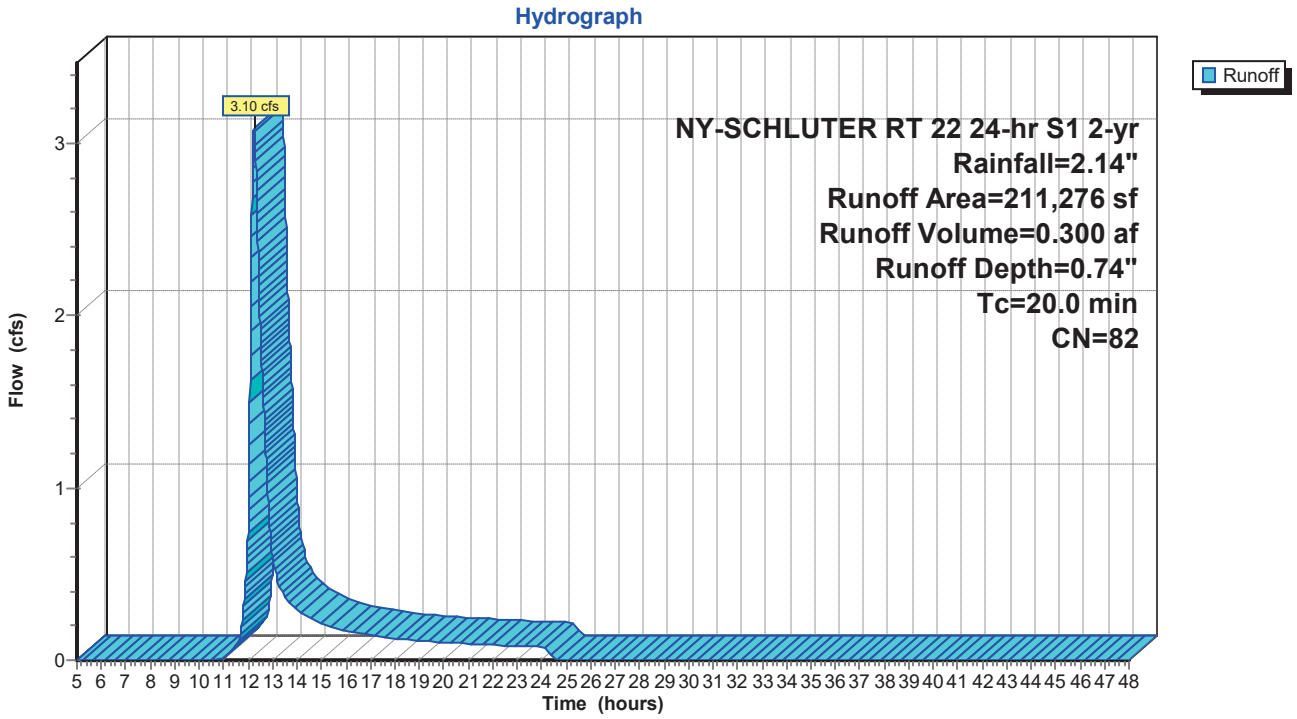
Subcatchment E2: Existing Basin #2



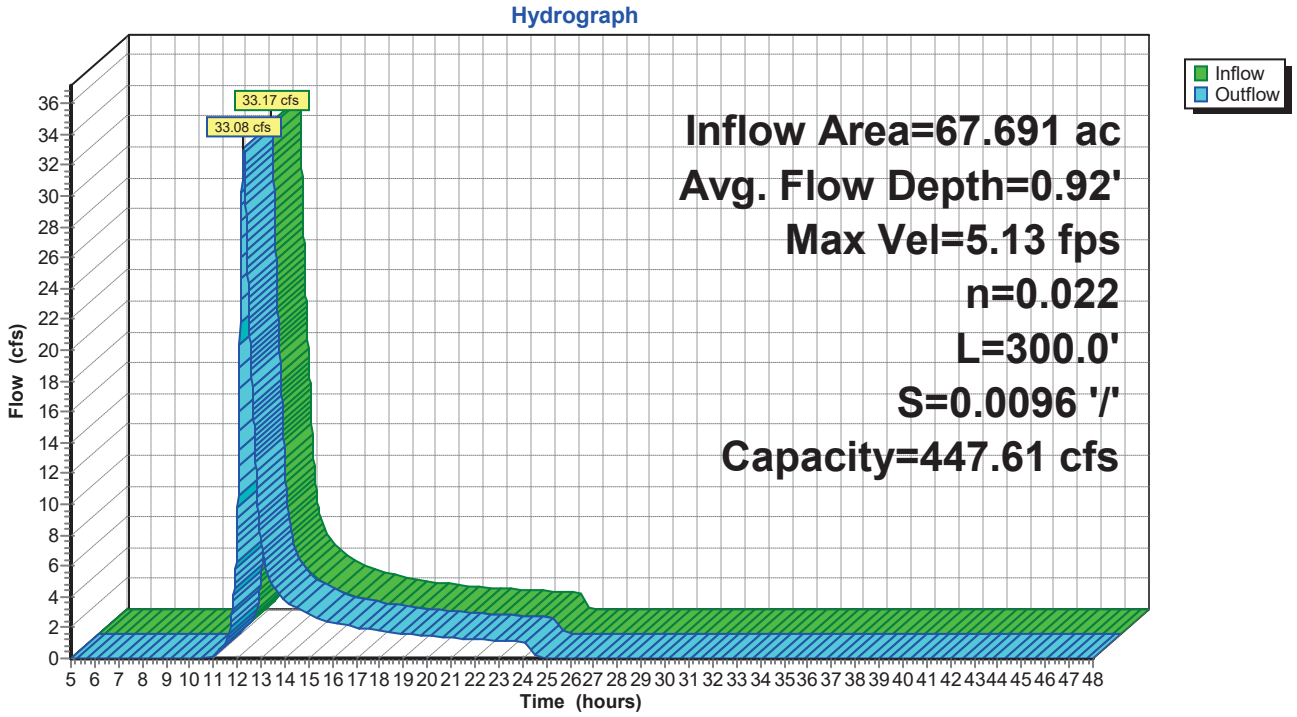
Subcatchment E3: Existing Basin #3



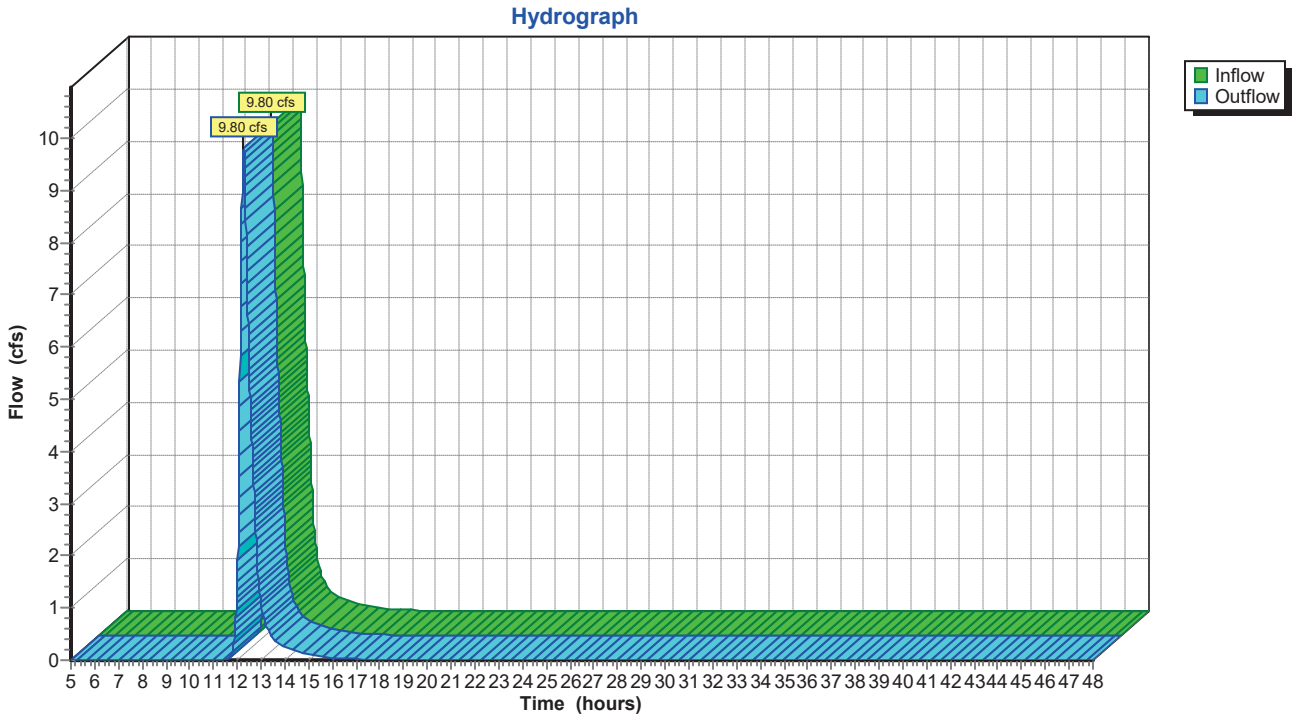
Subcatchment E4: Existing Basin #4



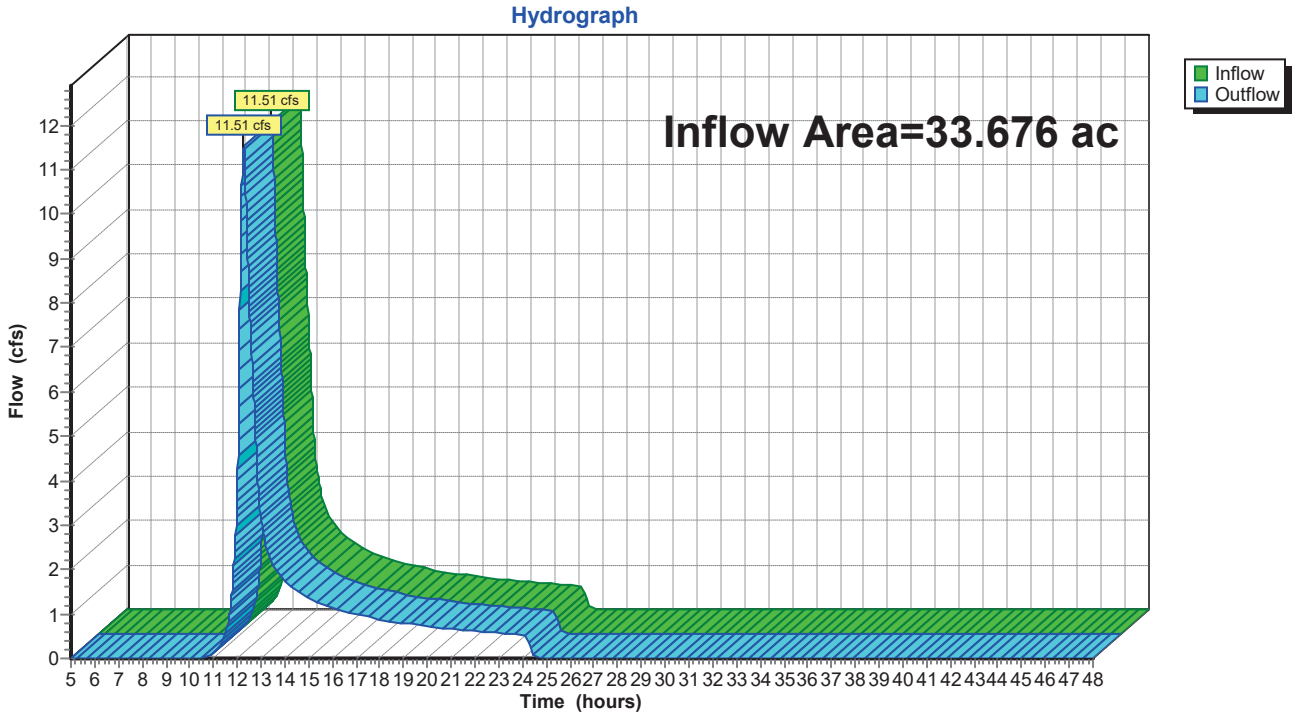
Reach CH2: Existing Channel #2



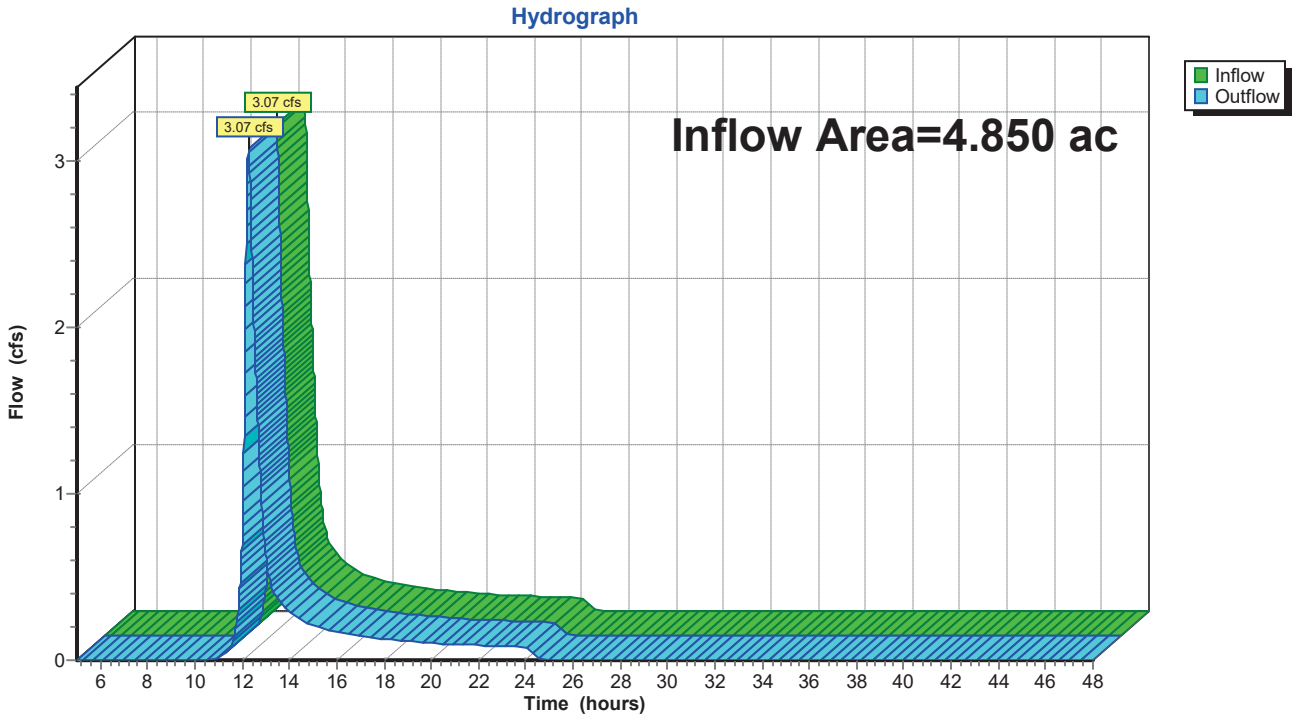
Reach DP1: Design Point #1



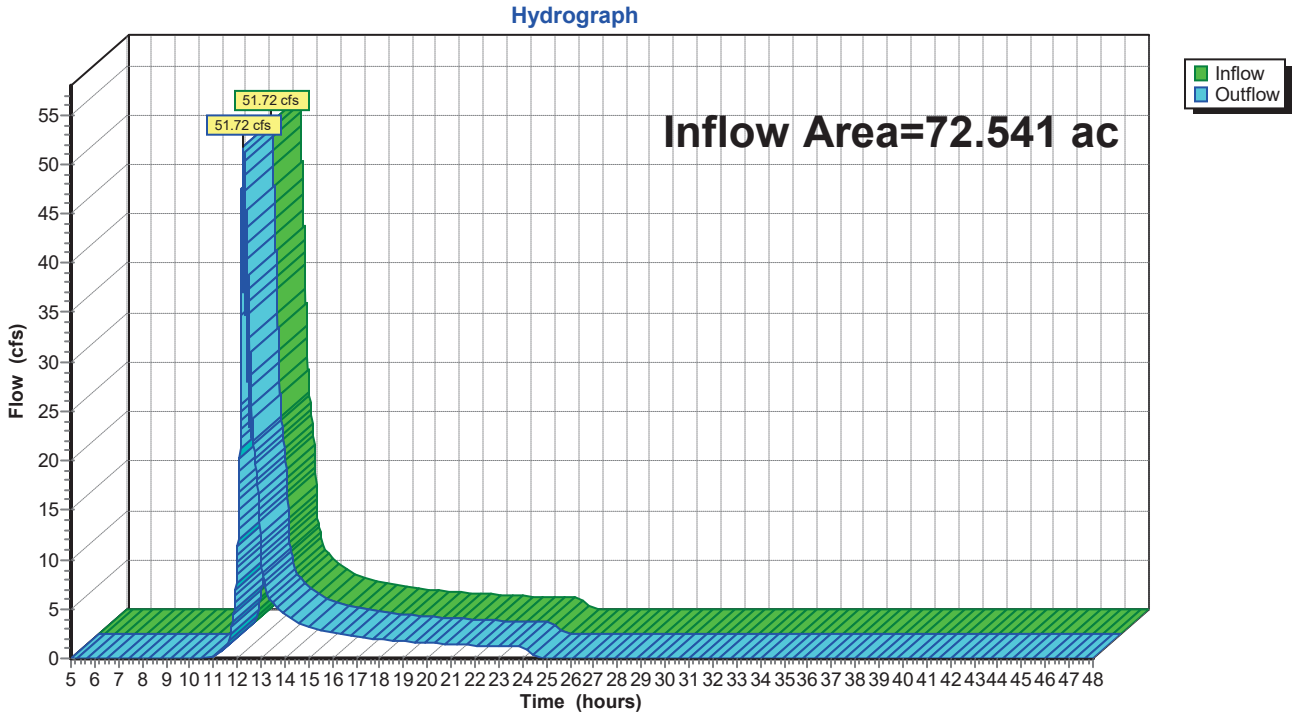
Reach DP2: Design Point #2



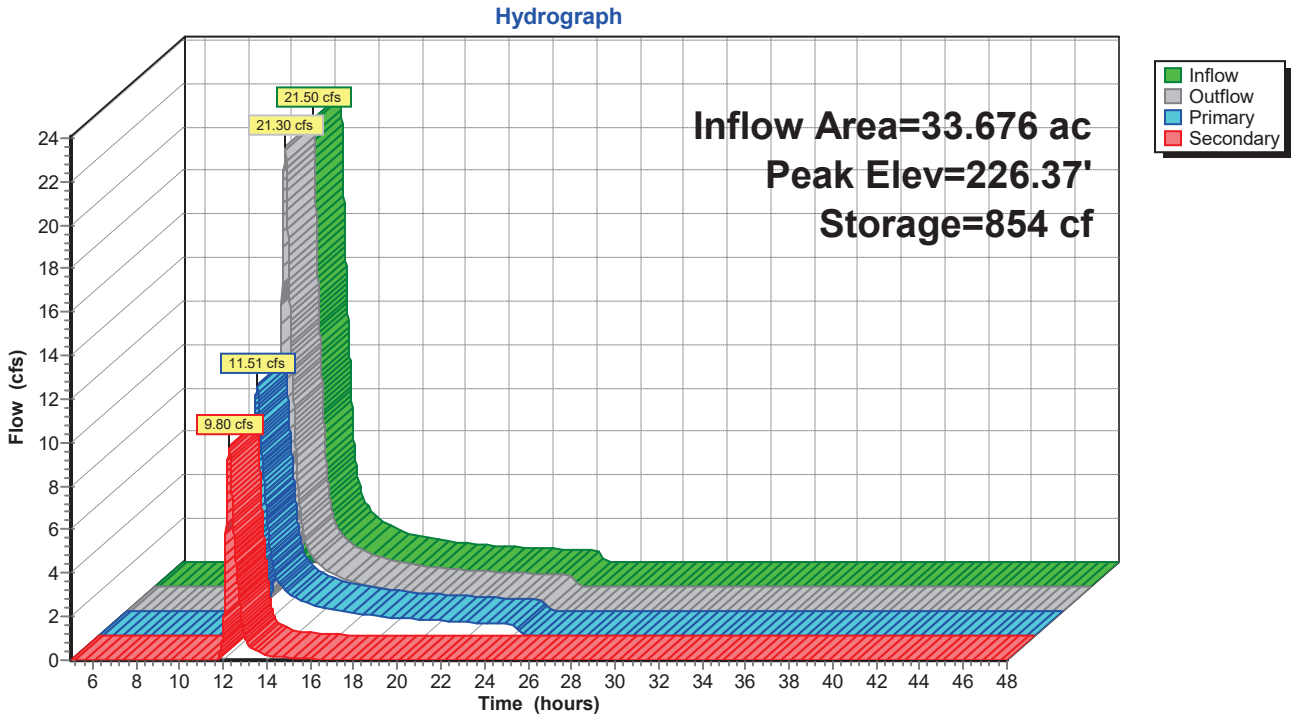
Reach DP3: Design Point #3



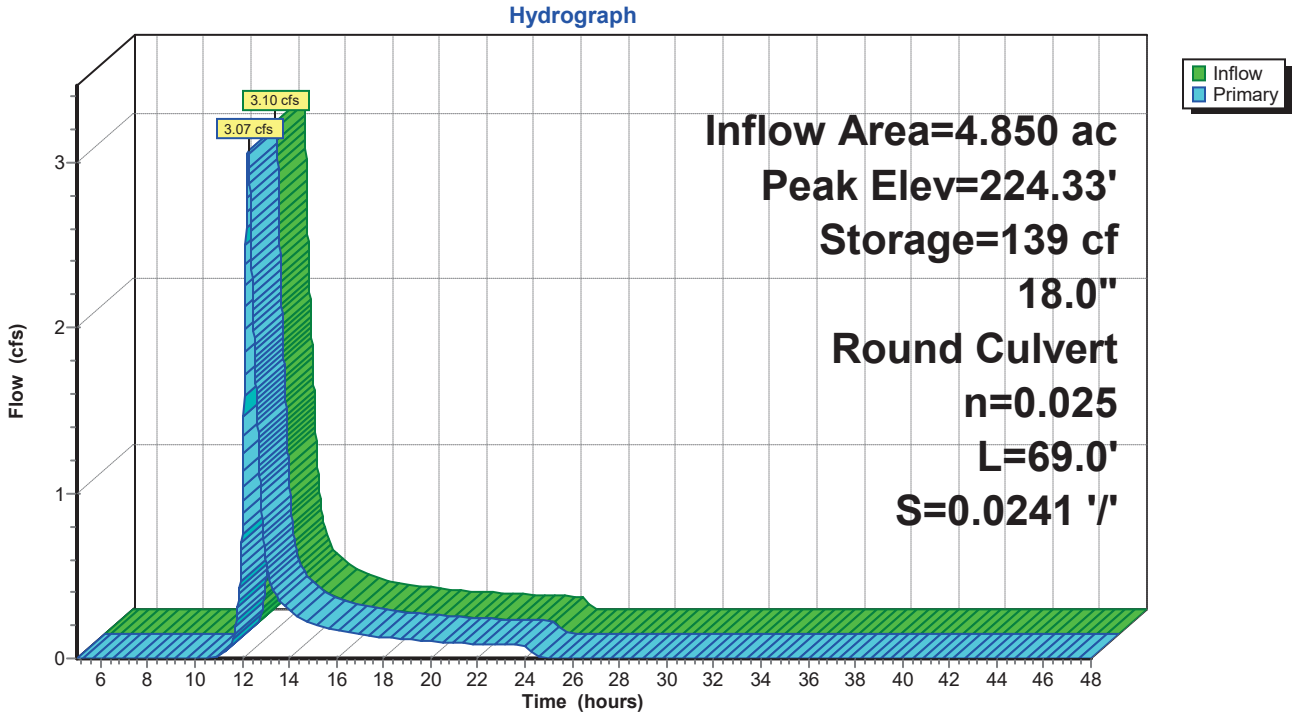
Reach TOT: Proposed Site Total



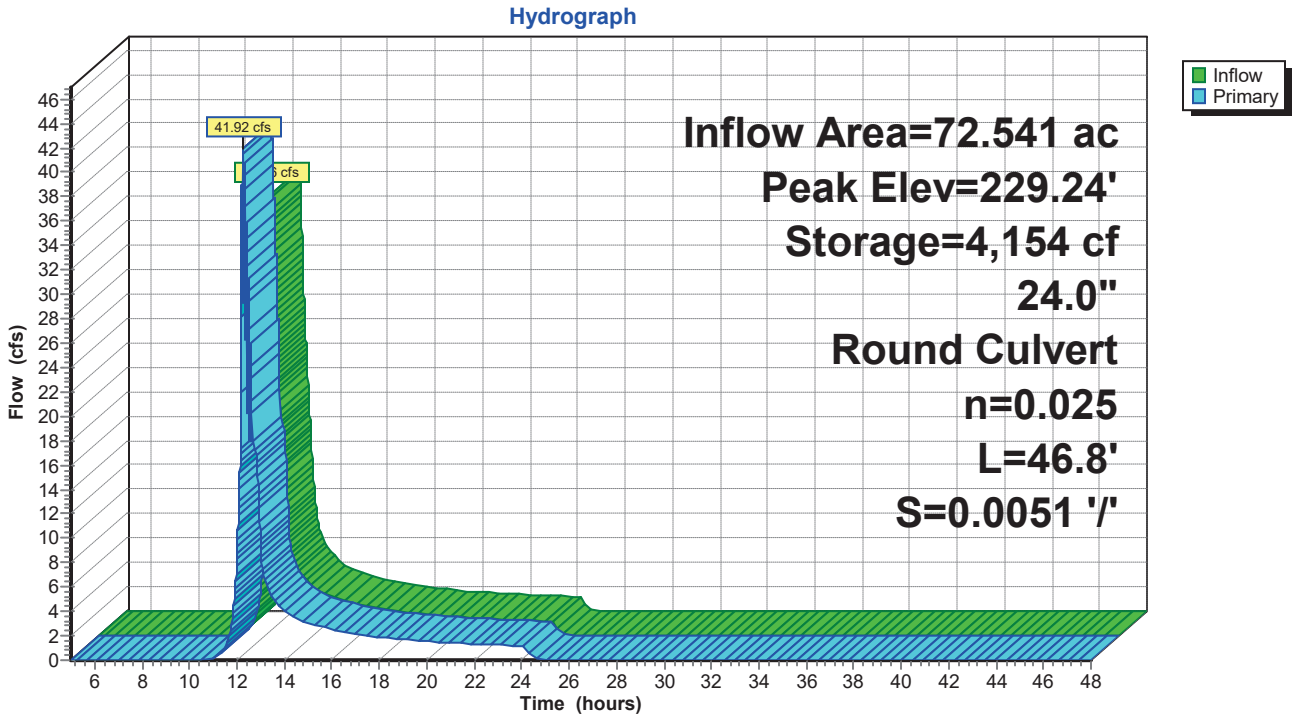
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=1.08"
Tc=20.0 min CN=82 Runoff=15.84 cfs 1.504 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=1.08"
Tc=20.0 min CN=82 Runoff=16.07 cfs 1.526 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=1.08"
Tc=20.0 min CN=82 Runoff=32.23 cfs 3.060 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=1.08"
Tc=20.0 min CN=82 Runoff=4.60 cfs 0.436 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.11' Max Vel=5.69 fps Inflow=47.17 cfs 5.234 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=47.08 cfs 5.234 af

Reach DP1: Design Point #1 Inflow=15.88 cfs 0.855 af
Outflow=15.88 cfs 0.855 af

Reach DP2: Design Point #2 Inflow=15.11 cfs 2.174 af
Outflow=15.11 cfs 2.174 af

Reach DP3: Design Point #3 Inflow=4.54 cfs 0.436 af
Outflow=4.54 cfs 0.436 af

Reach TOT: Proposed Site Total Inflow=81.81 cfs 6.526 af
Outflow=81.81 cfs 6.526 af

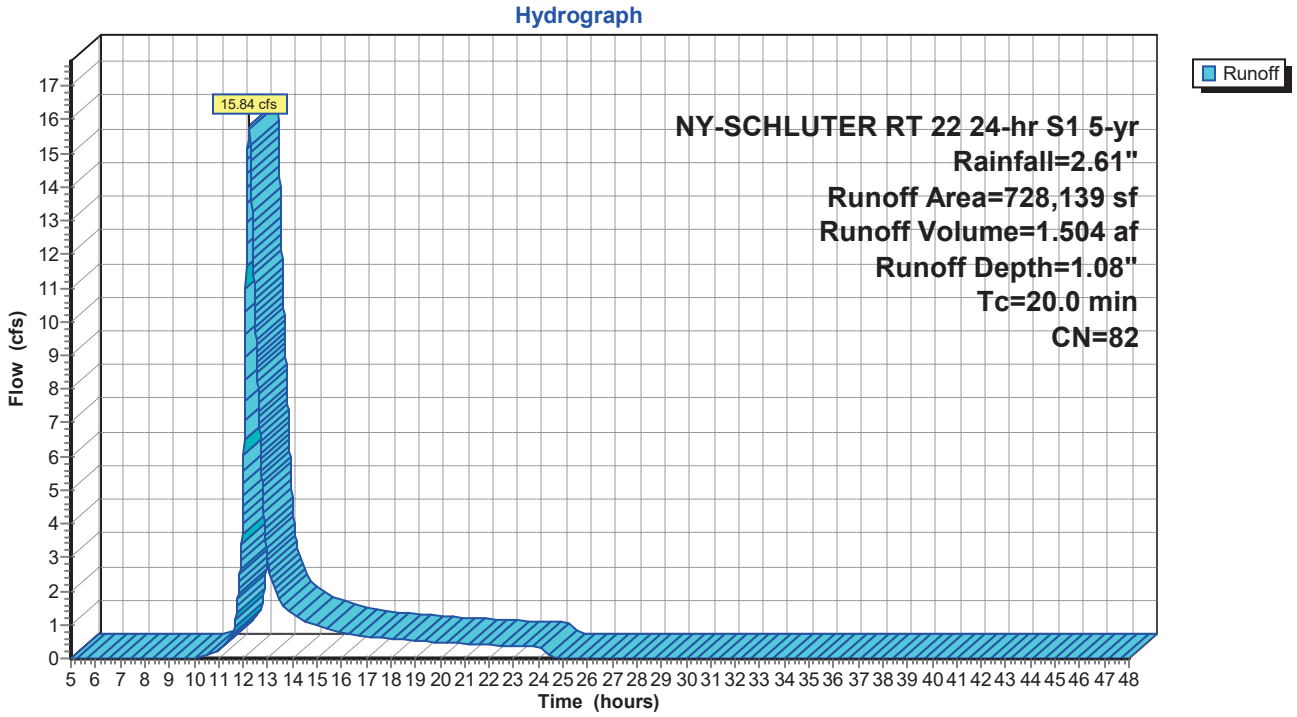
Pond CH1: Existing Channel #1 Peak Elev=226.87' Storage=2,079 cf Inflow=31.91 cfs 3.029 af
Primary=15.11 cfs 2.174 af Secondary=15.88 cfs 0.855 af Outflow=30.99 cfs 3.029 af

Pond CH3: Existing Channel #3 Peak Elev=224.61' Storage=261 cf Inflow=4.60 cfs 0.436 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=4.54 cfs 0.436 af

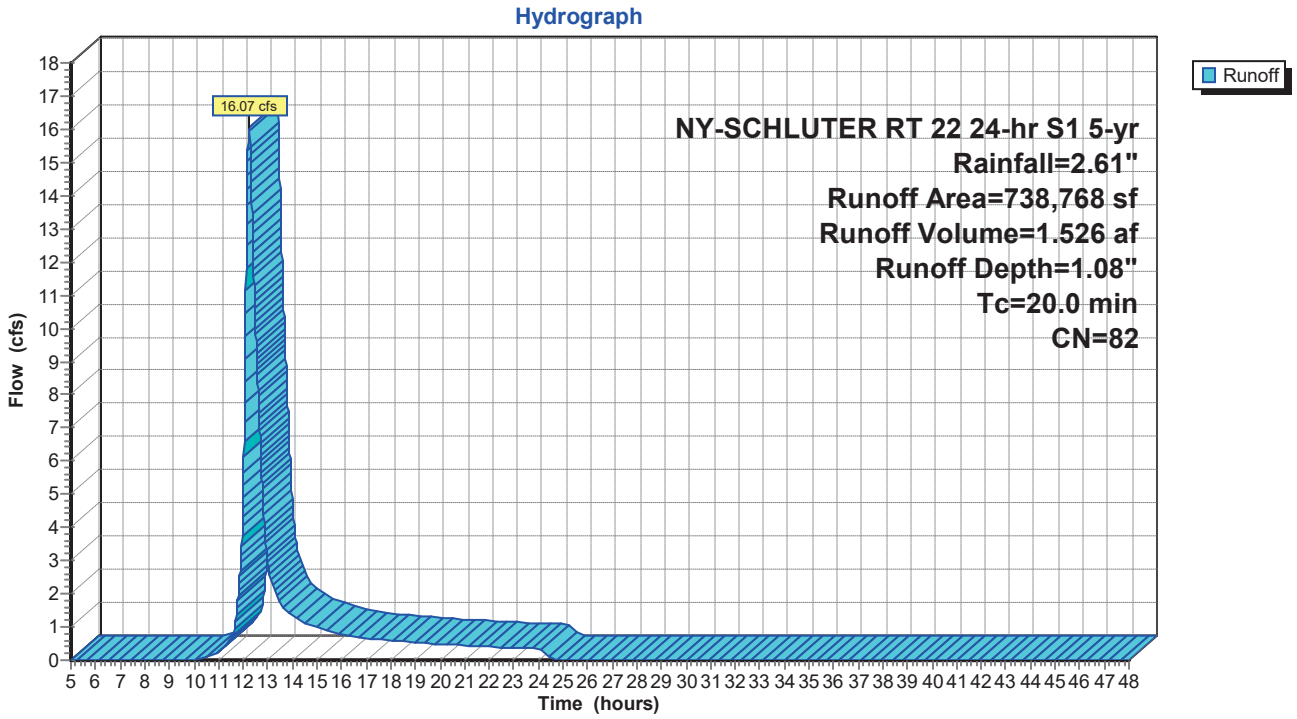
Pond DP4: Design Point #4 Peak Elev=244.25' Storage=4,154 cf Inflow=51.62 cfs 5.671 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=66.08 cfs 5.671 af

Total Runoff Area = 72.541 ac Runoff Volume = 6.526 af Average Runoff Depth = 1.08"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

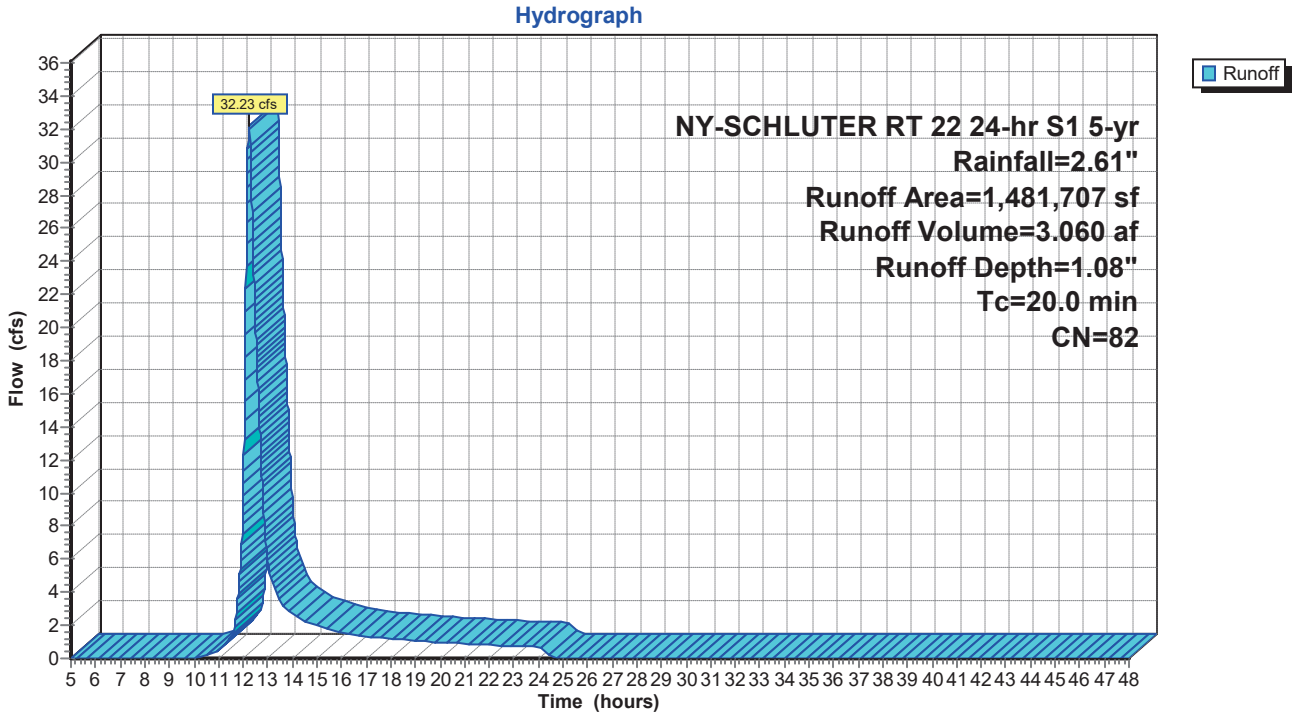
Subcatchment E1: Existing Basin #1



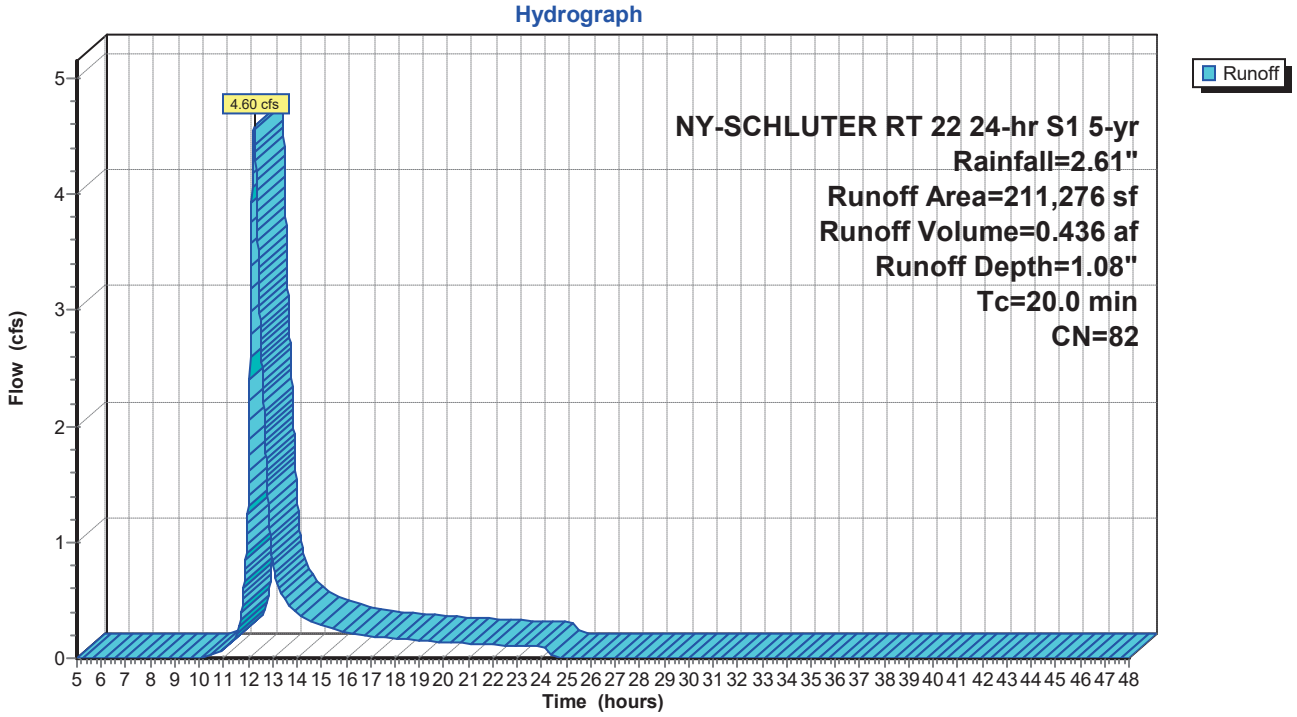
Subcatchment E2: Existing Basin #2



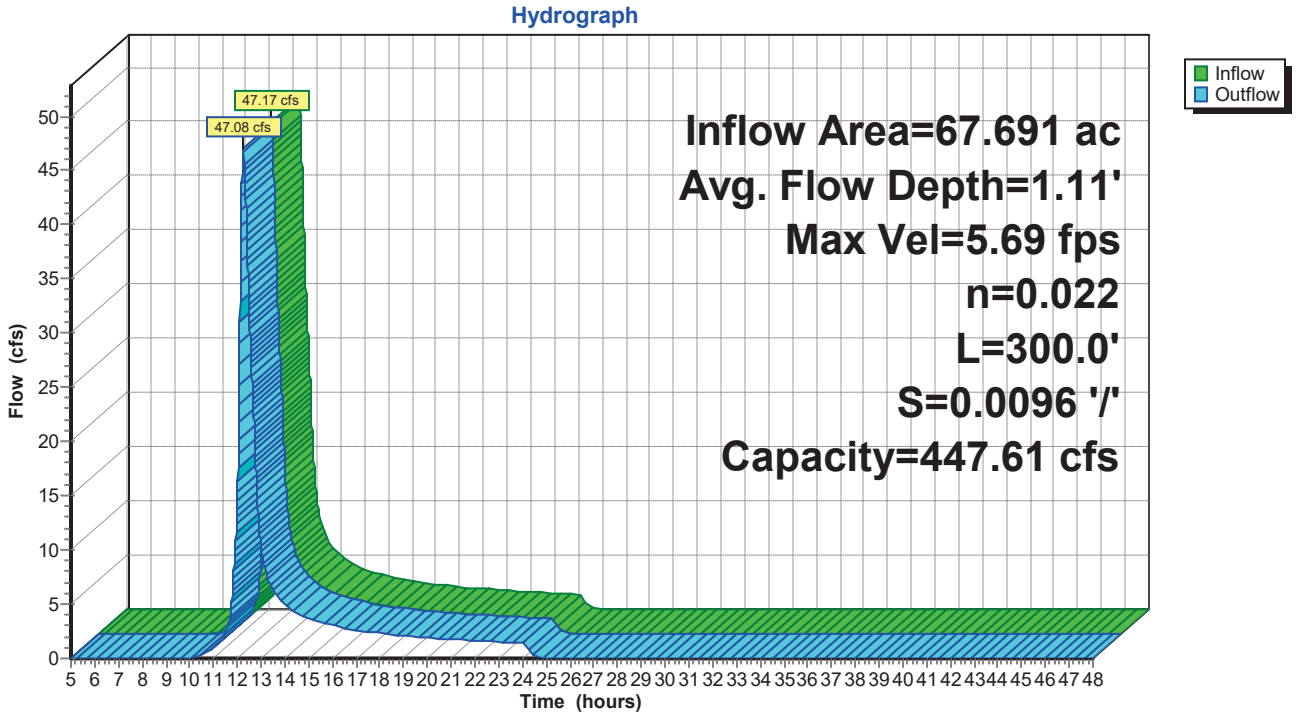
Subcatchment E3: Existing Basin #3



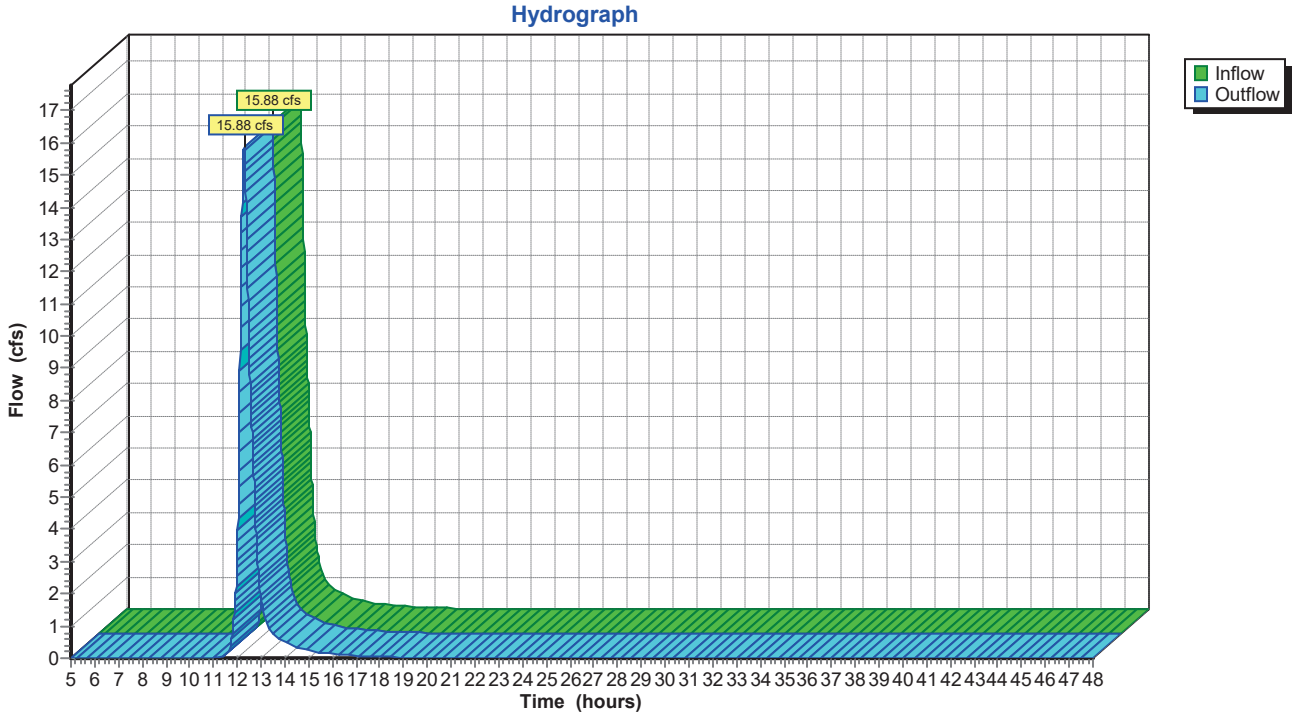
Subcatchment E4: Existing Basin #4



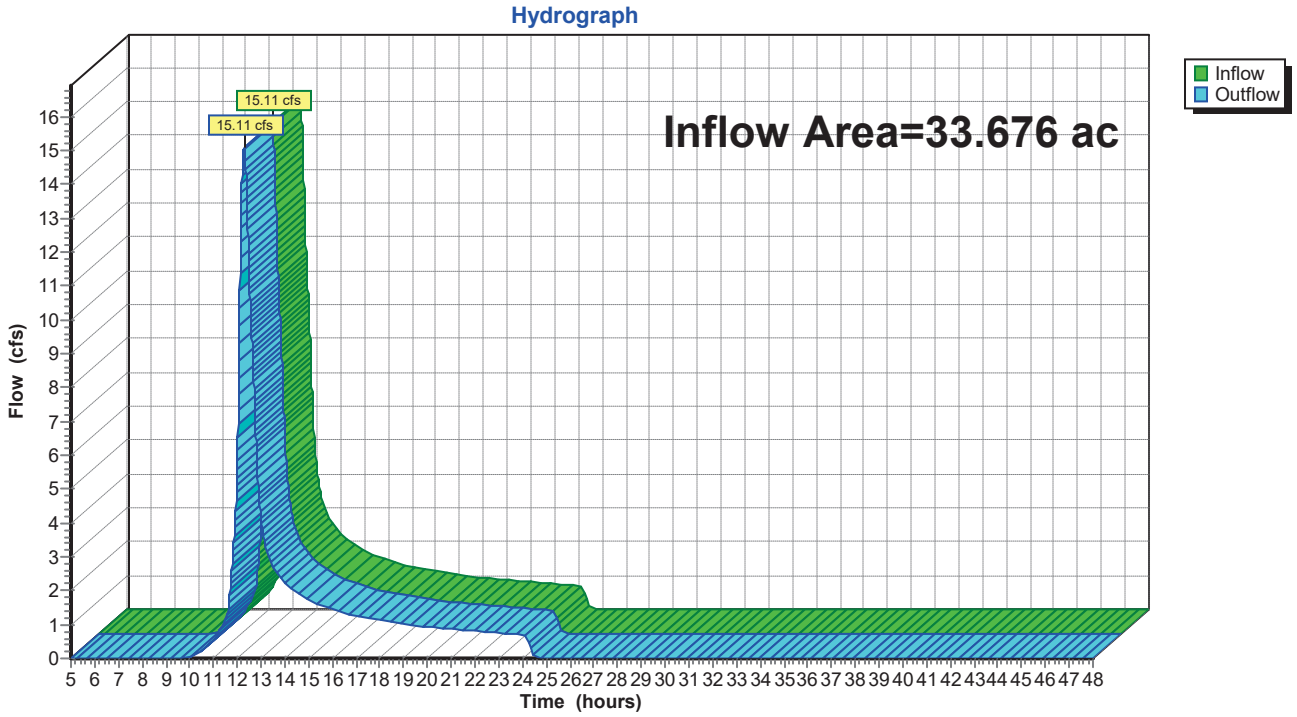
Reach CH2: Existing Channel #2



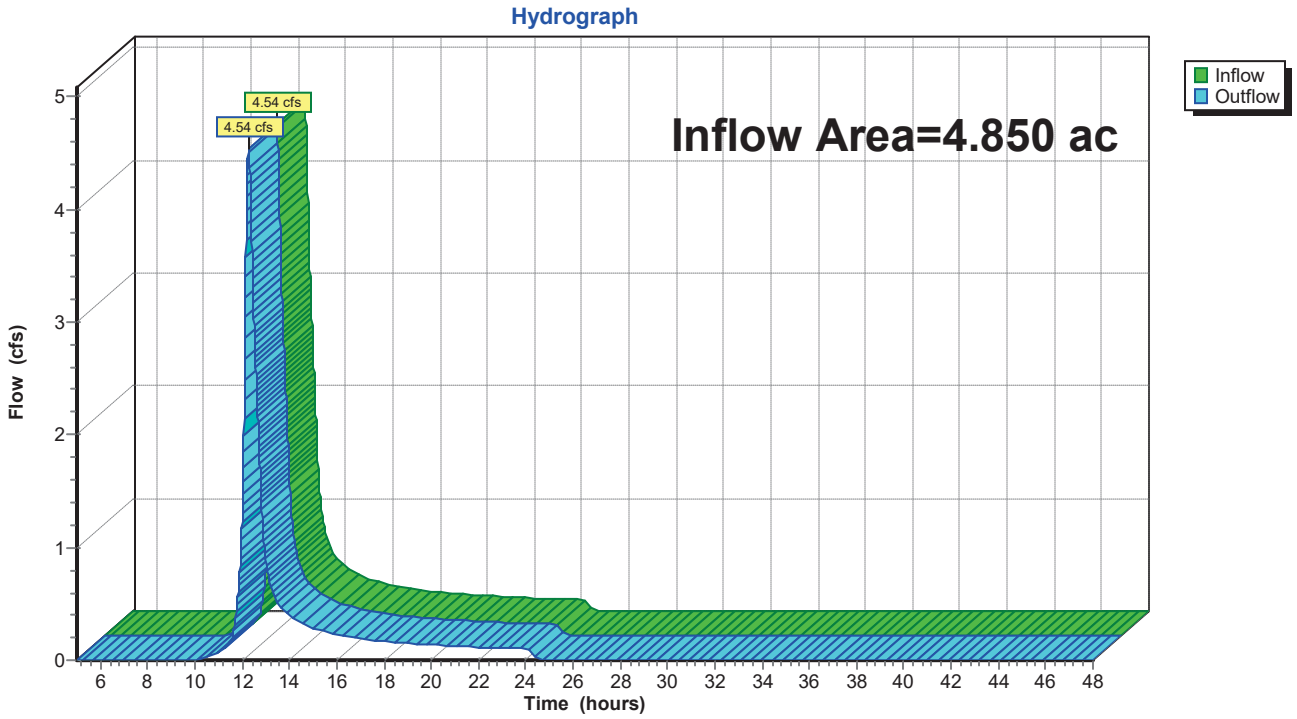
Reach DP1: Design Point #1



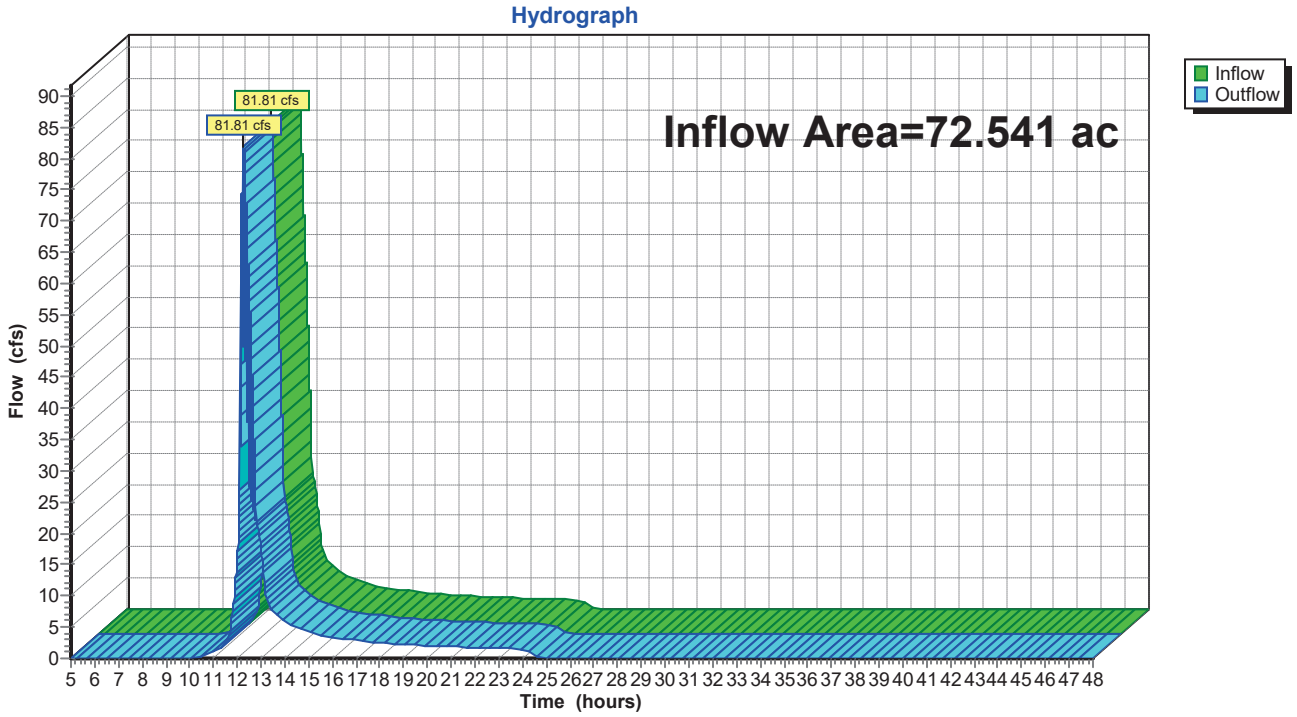
Reach DP2: Design Point #2



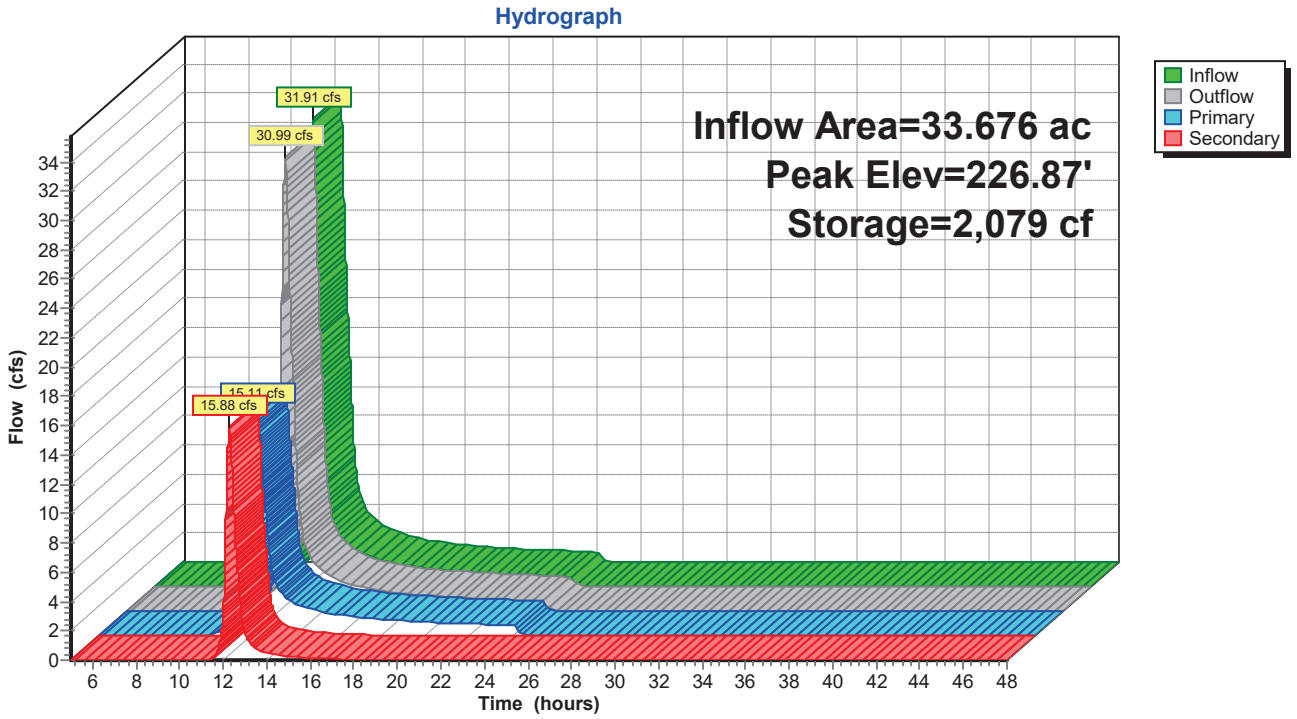
Reach DP3: Design Point #3



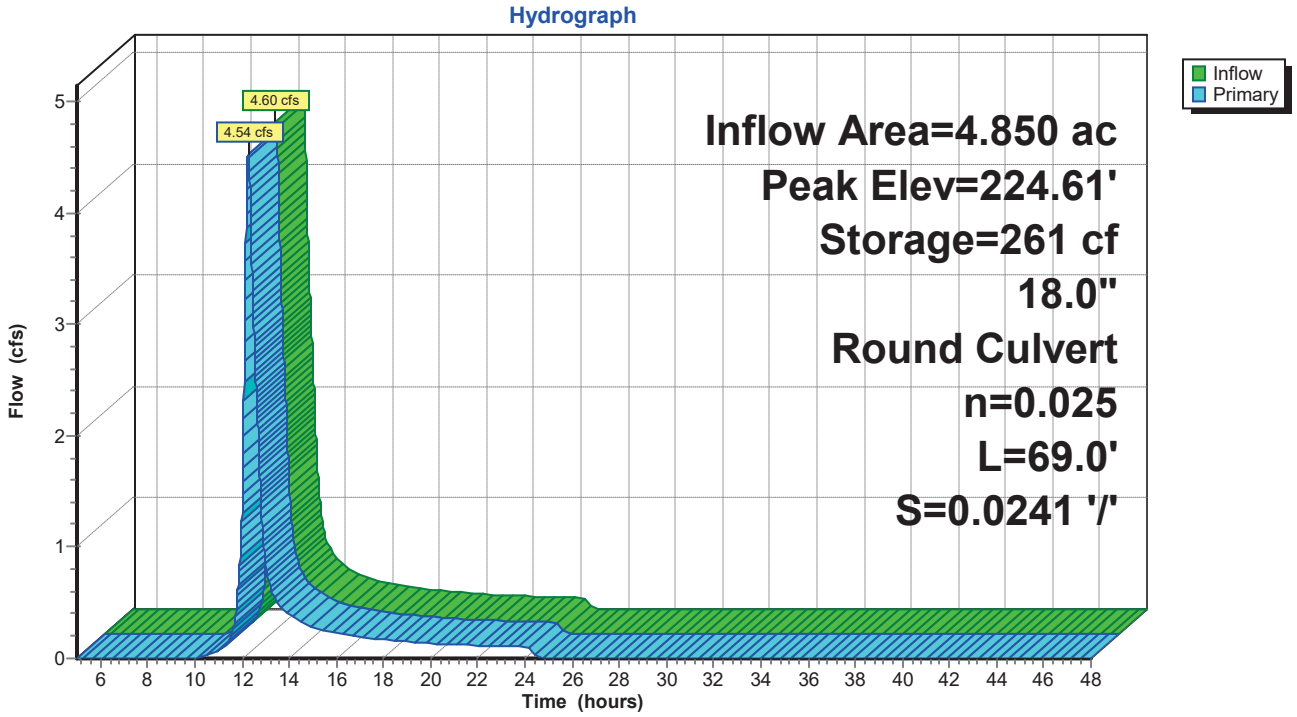
Reach TOT: Proposed Site Total



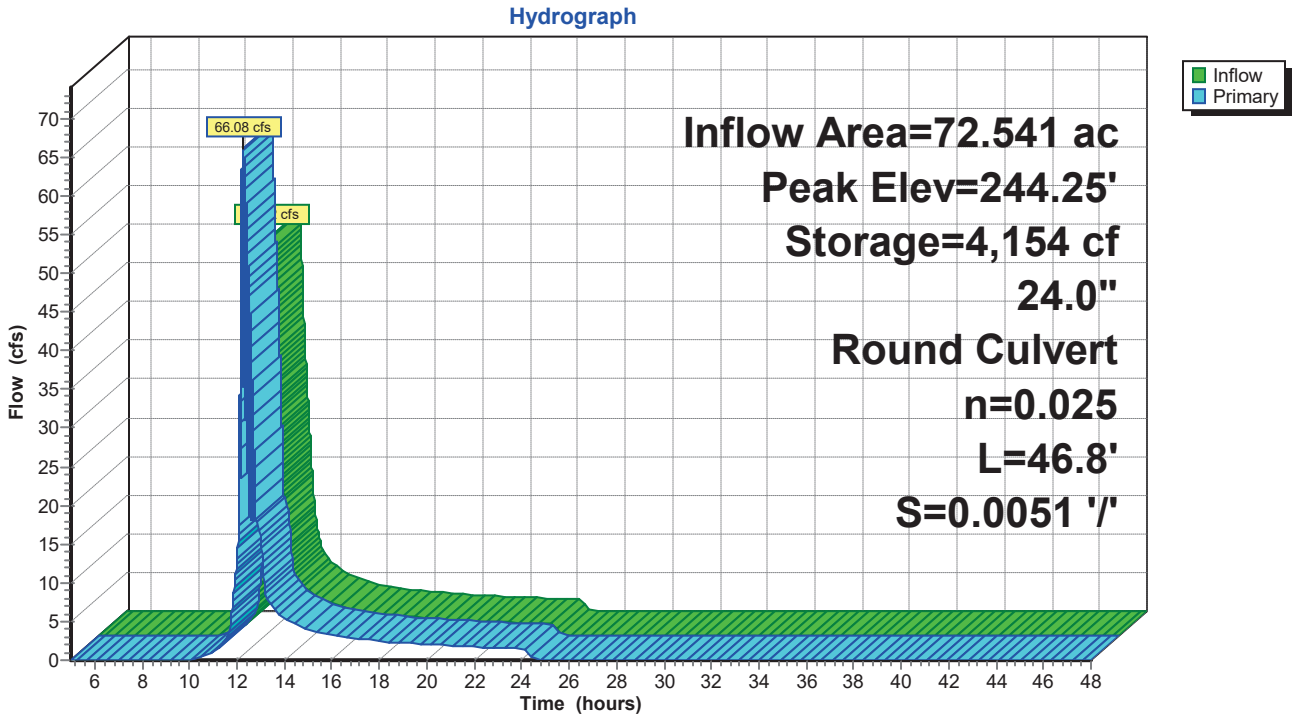
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=1.41"
Tc=20.0 min CN=82 Runoff=21.02 cfs 1.965 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=1.41"
Tc=20.0 min CN=82 Runoff=21.33 cfs 1.994 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=1.41"
Tc=20.0 min CN=82 Runoff=42.78 cfs 3.998 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=1.41"
Tc=20.0 min CN=82 Runoff=6.10 cfs 0.570 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.26' Max Vel=6.07 fps Inflow=59.22 cfs 6.663 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=59.12 cfs 6.663 af

Reach DP1: Design Point #1 Inflow=22.26 cfs 1.294 af
Outflow=22.26 cfs 1.294 af

Reach DP2: Design Point #2 Inflow=17.08 cfs 2.665 af
Outflow=17.08 cfs 2.665 af

Reach DP3: Design Point #3 Inflow=5.89 cfs 0.570 af
Outflow=5.89 cfs 0.570 af

Reach TOT: Proposed Site Total Inflow=88.13 cfs 8.527 af
Outflow=88.13 cfs 8.527 af

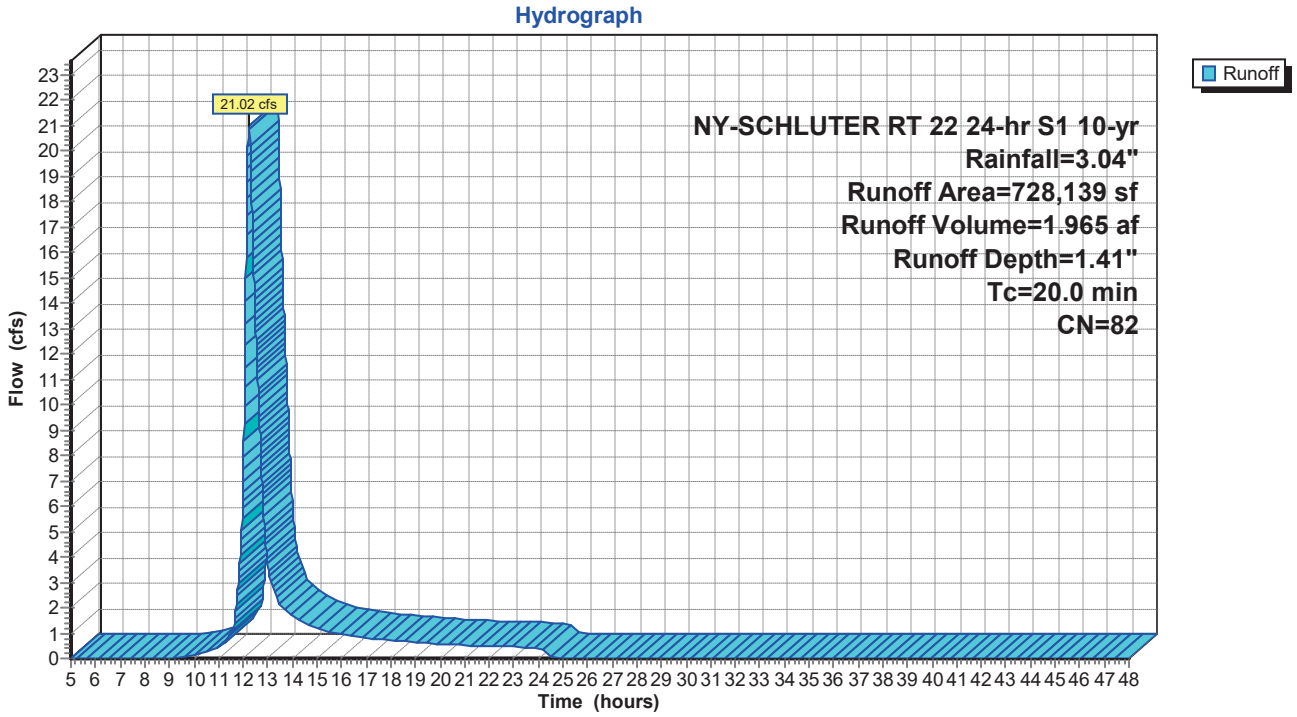
Pond CH1: Existing Channel #1 Peak Elev=227.43' Storage=4,656 cf Inflow=42.35 cfs 3.958 af
Primary=17.08 cfs 2.665 af Secondary=22.26 cfs 1.294 af Outflow=39.34 cfs 3.958 af

Pond CH3: Existing Channel #3 Peak Elev=224.95' Storage=475 cf Inflow=6.10 cfs 0.570 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=5.89 cfs 0.570 af

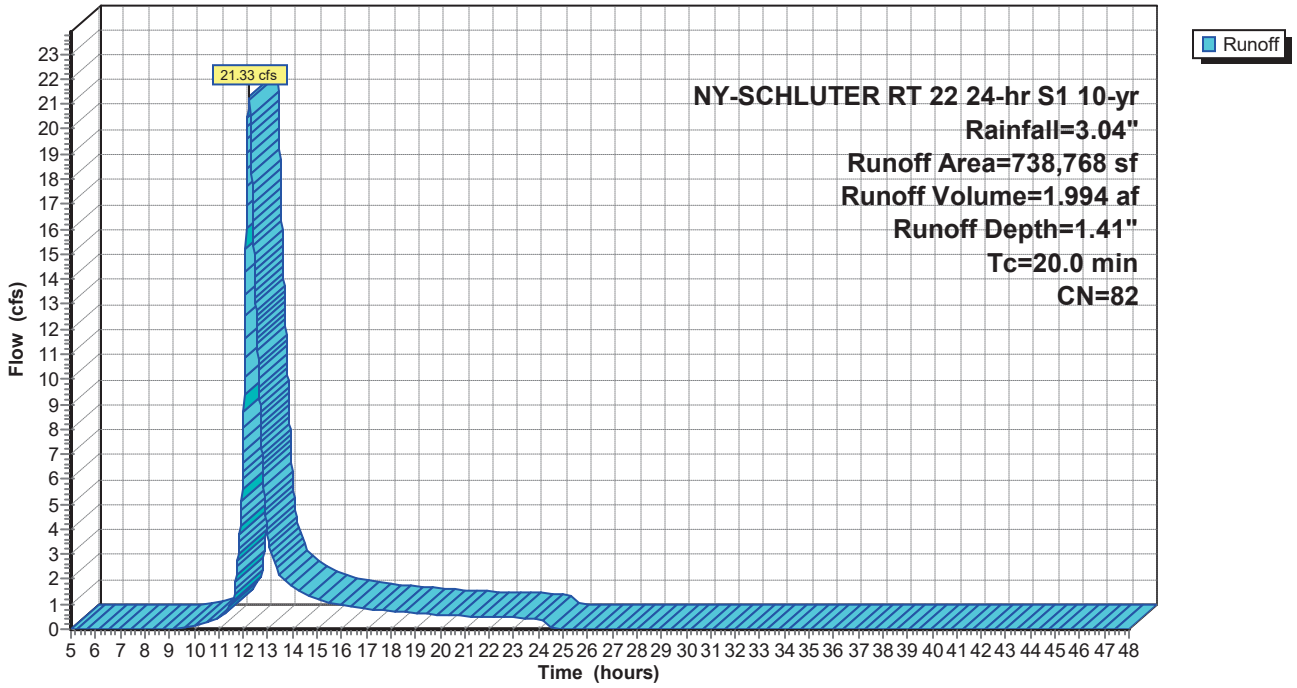
Pond DP4: Design Point #4 Peak Elev=244.46' Storage=4,154 cf Inflow=64.96 cfs 7.233 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=66.35 cfs 7.233 af

Total Runoff Area = 72.541 ac Runoff Volume = 8.527 af Average Runoff Depth = 1.41"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

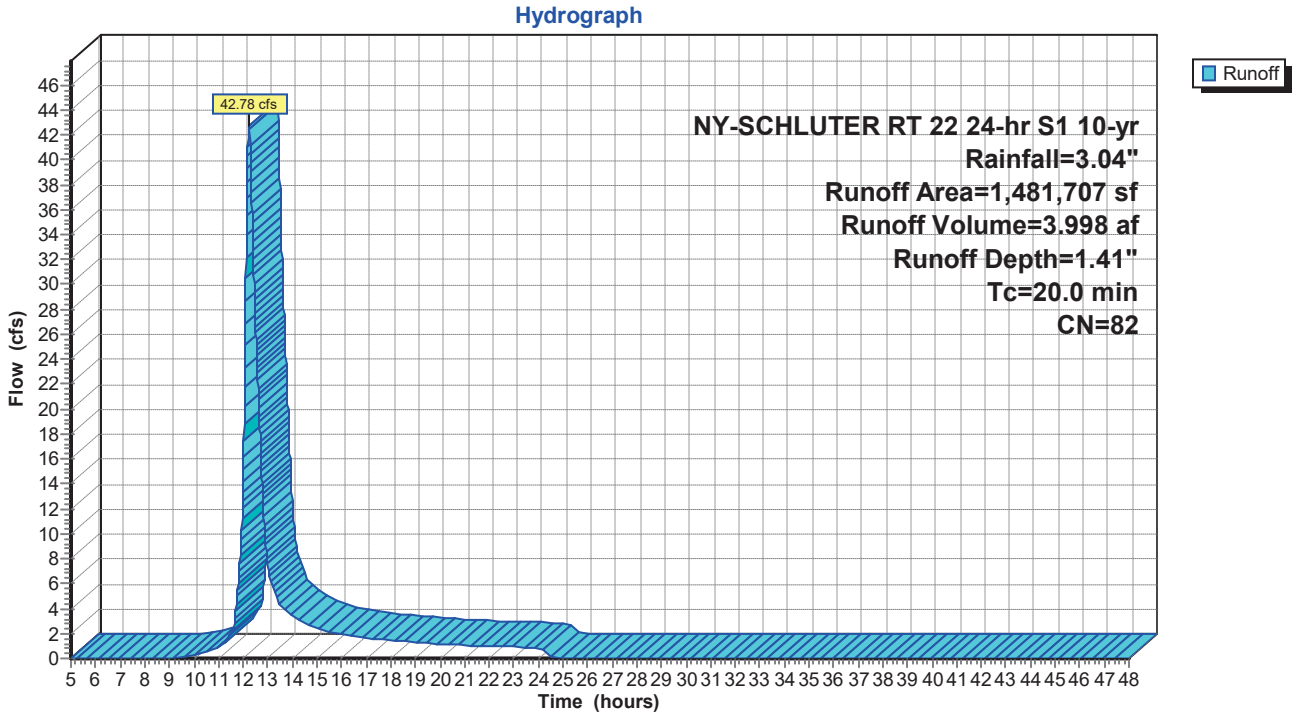
Subcatchment E1: Existing Basin #1



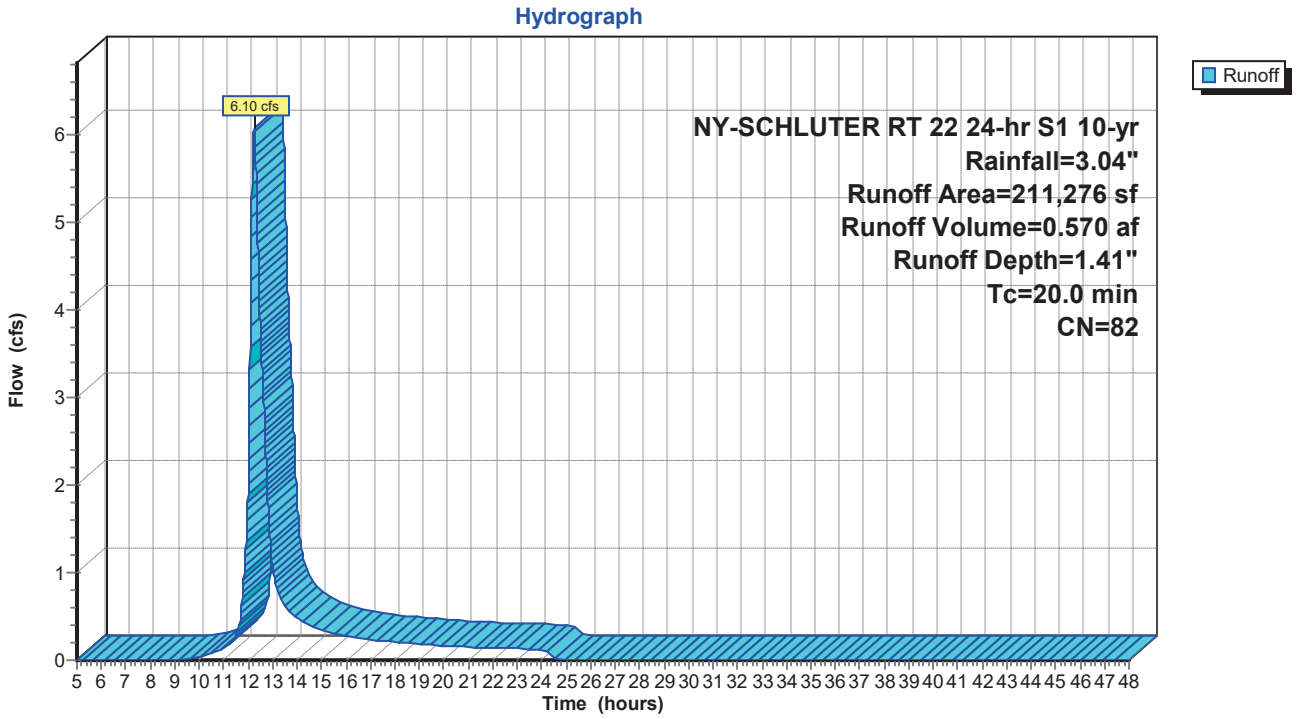
Subcatchment E2: Existing Basin #2



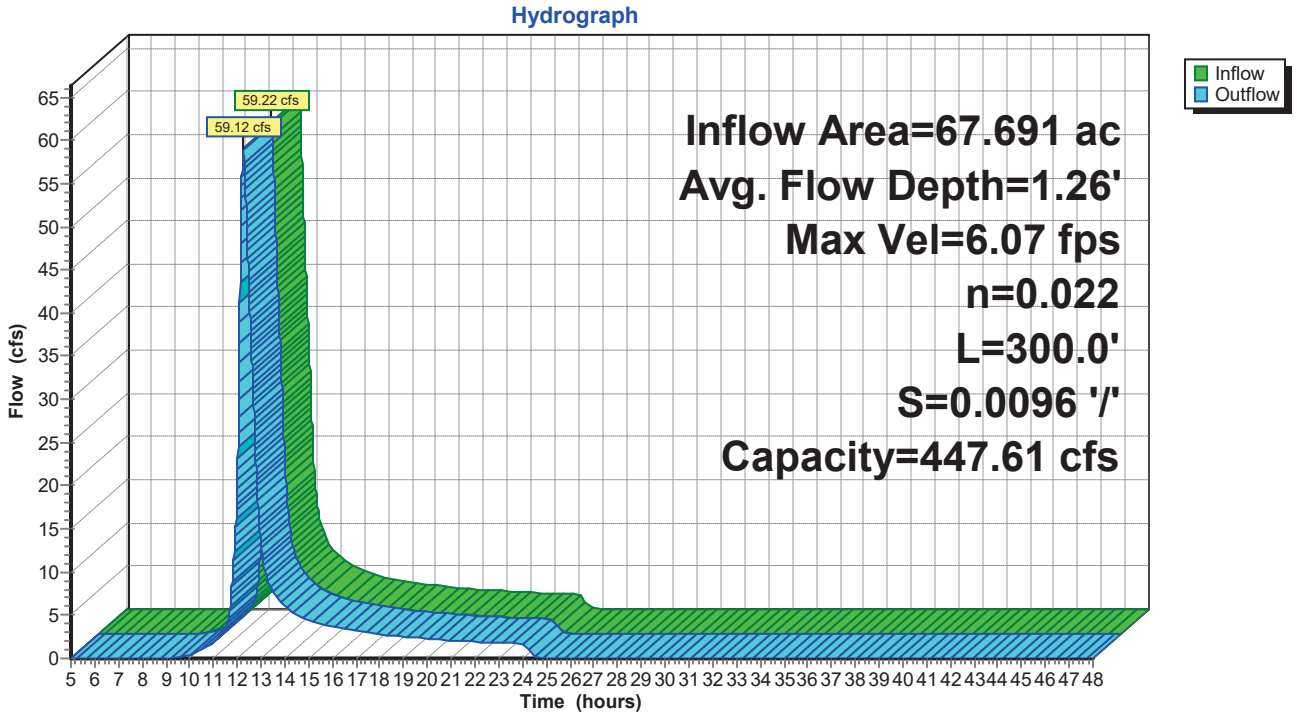
Subcatchment E3: Existing Basin #3



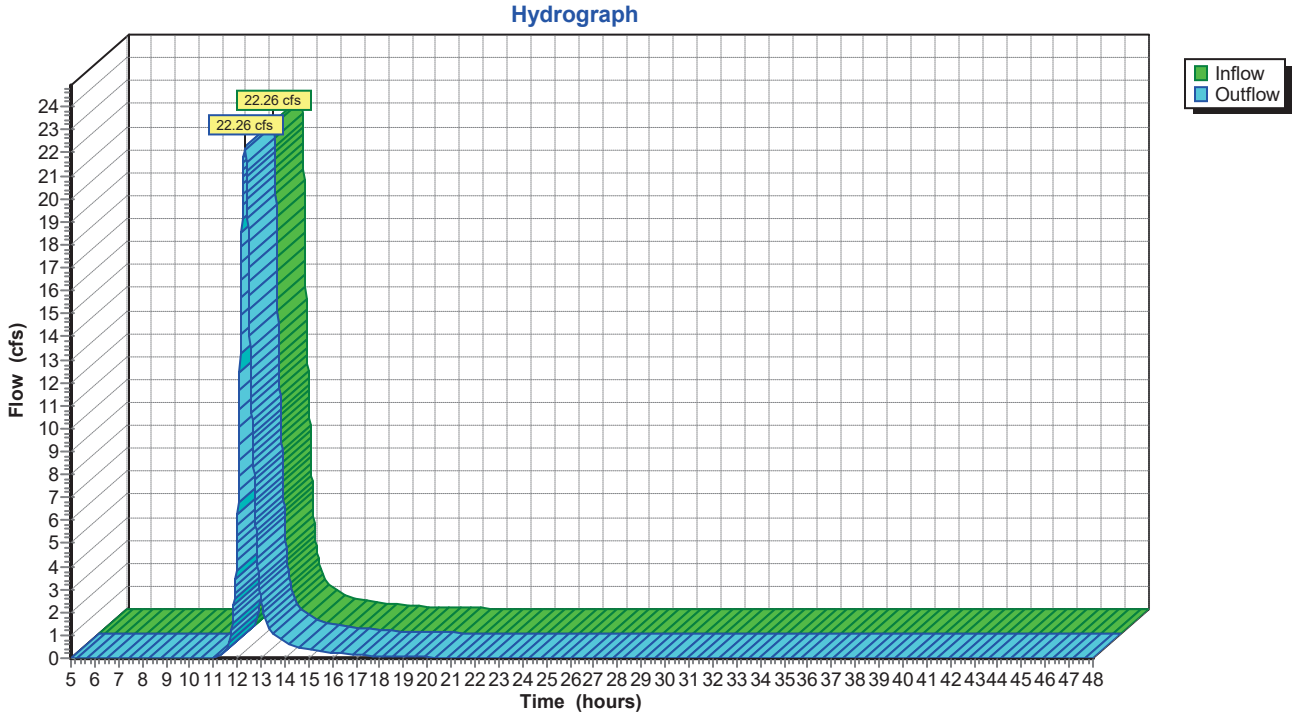
Subcatchment E4: Existing Basin #4



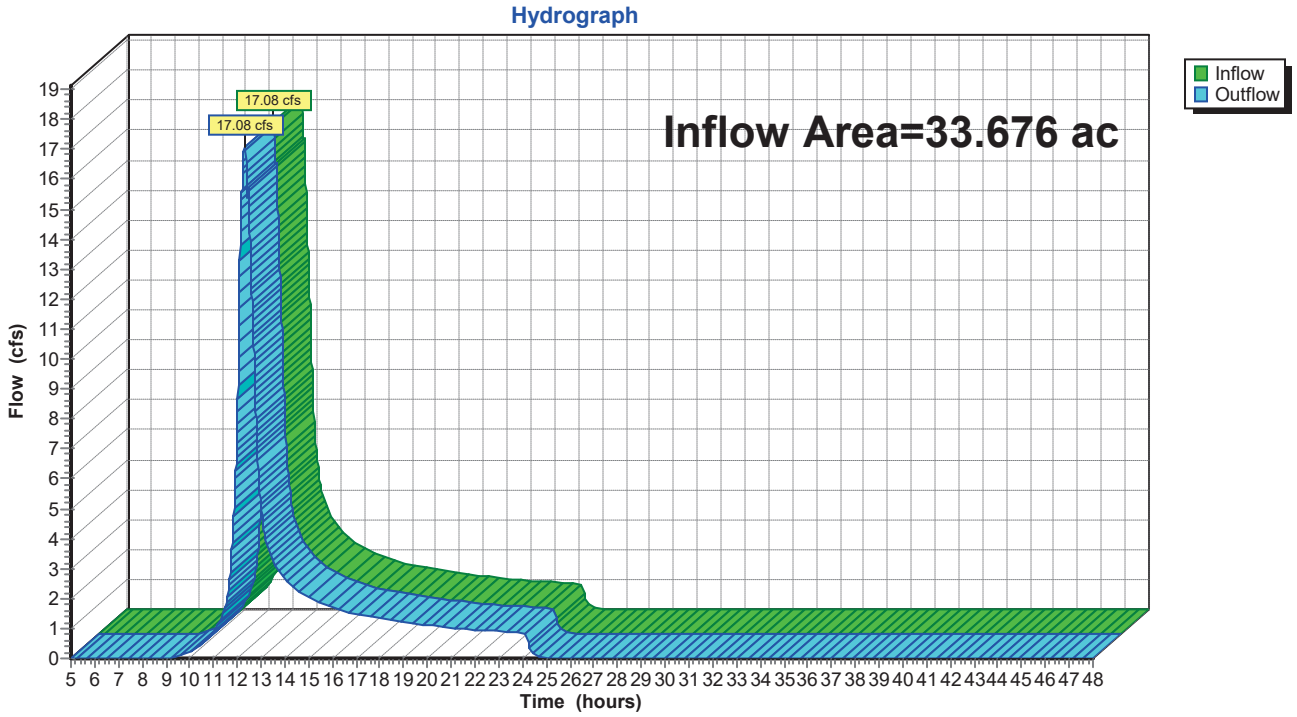
Reach CH2: Existing Channel #2



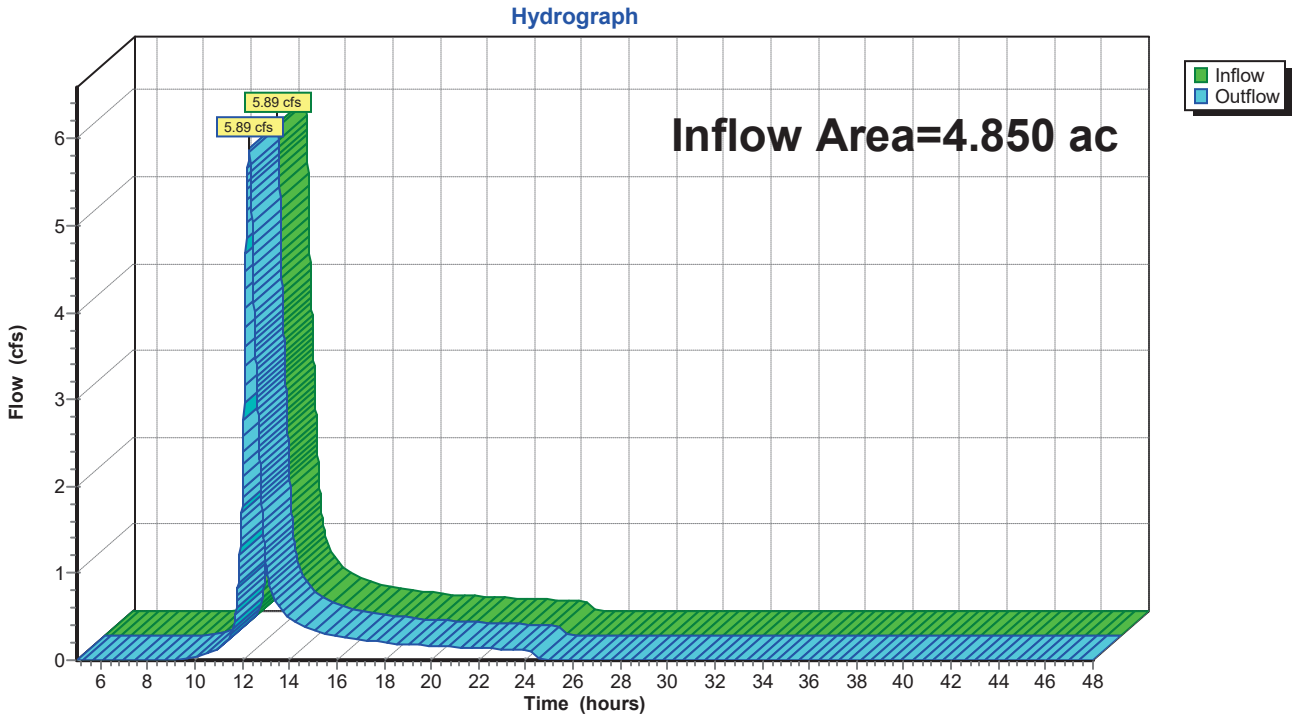
Reach DP1: Design Point #1



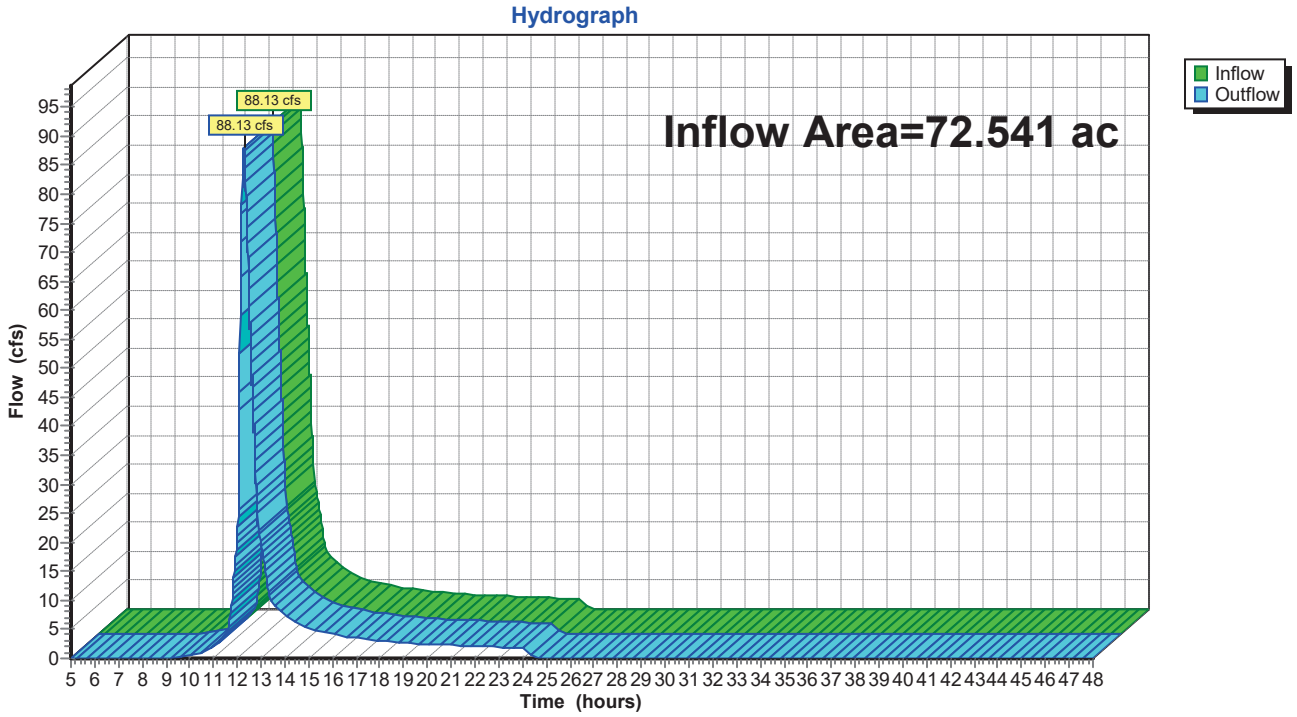
Reach DP2: Design Point #2



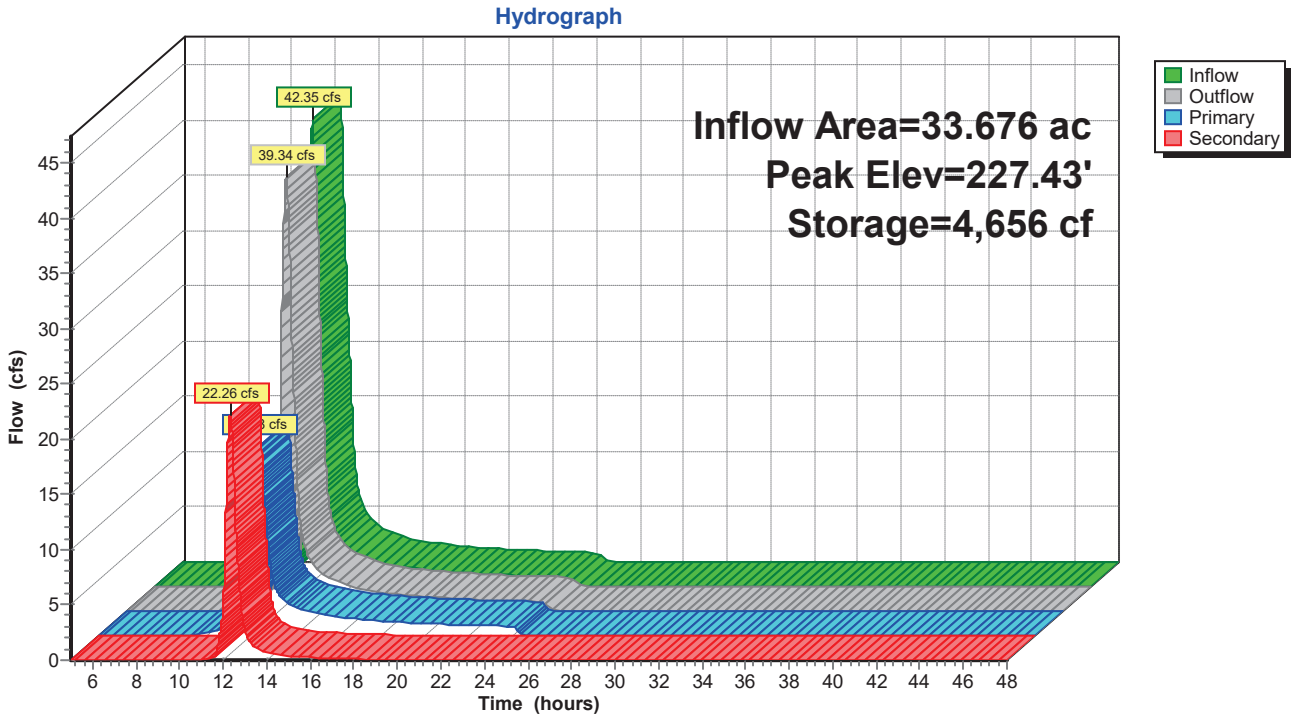
Reach DP3: Design Point #3



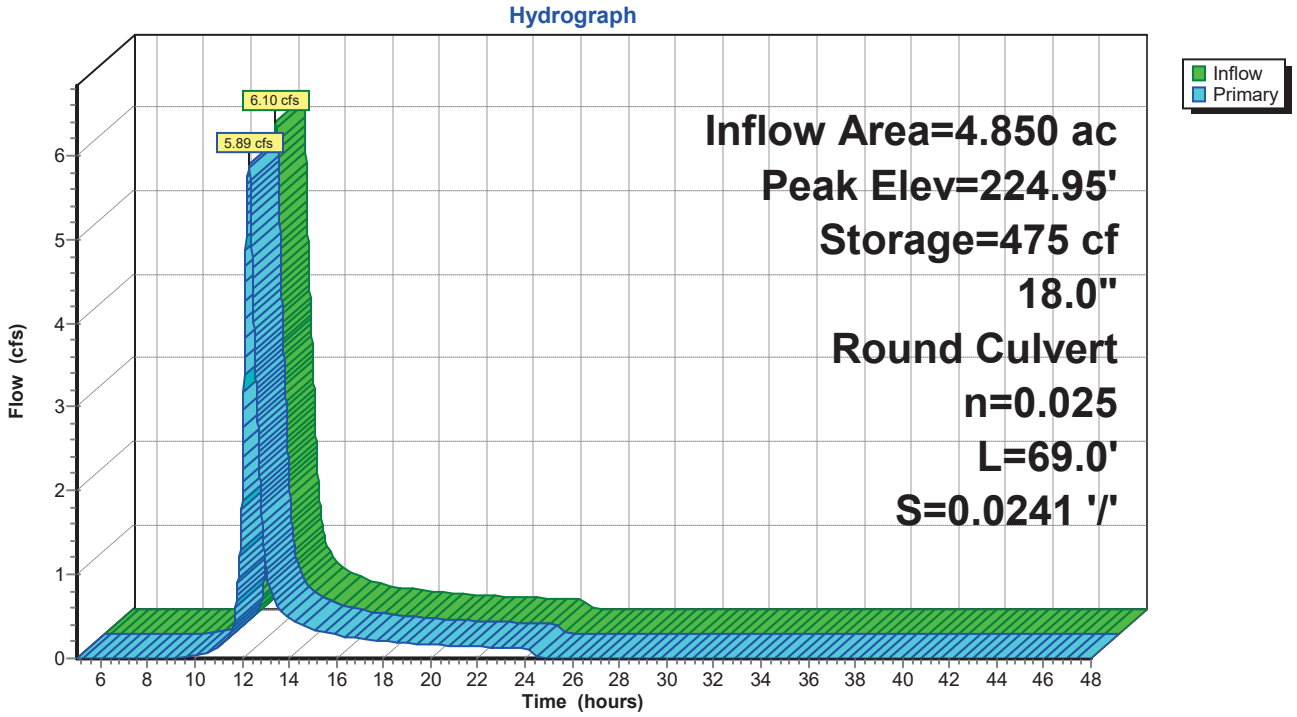
Reach TOT: Proposed Site Total



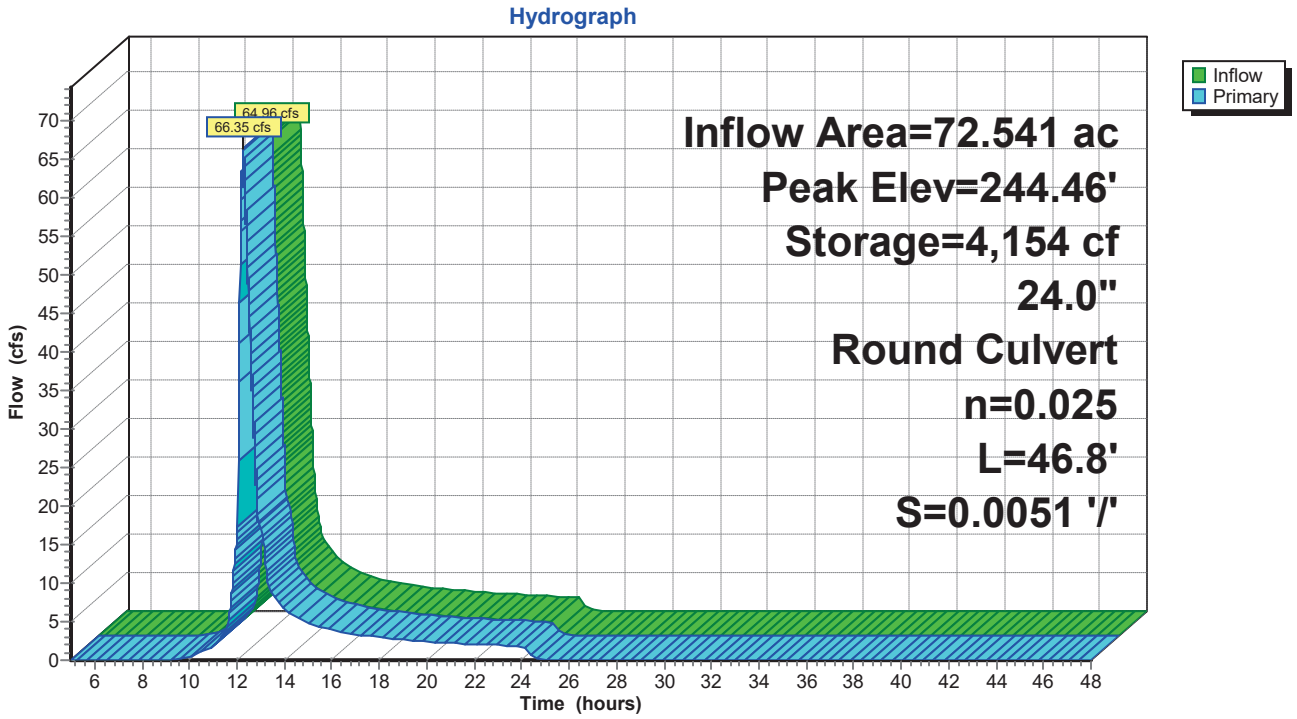
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=1.96"
Tc=20.0 min CN=82 Runoff=29.91 cfs 2.727 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=1.96"
Tc=20.0 min CN=82 Runoff=30.35 cfs 2.766 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=1.96"
Tc=20.0 min CN=82 Runoff=60.86 cfs 5.548 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=1.96"
Tc=20.0 min CN=82 Runoff=8.68 cfs 0.791 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.52' Max Vel=6.73 fps Inflow=89.17 cfs 8.994 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=85.41 cfs 8.994 af

Reach DP1: Design Point #1 Inflow=39.92 cfs 2.047 af
Outflow=39.92 cfs 2.047 af

Reach DP2: Design Point #2 Inflow=28.28 cfs 3.446 af
Outflow=28.28 cfs 3.446 af

Reach DP3: Design Point #3 Inflow=7.90 cfs 0.791 af
Outflow=7.90 cfs 0.791 af

Reach TOT: Proposed Site Total Inflow=139.11 cfs 11.833 af
Outflow=139.11 cfs 11.833 af

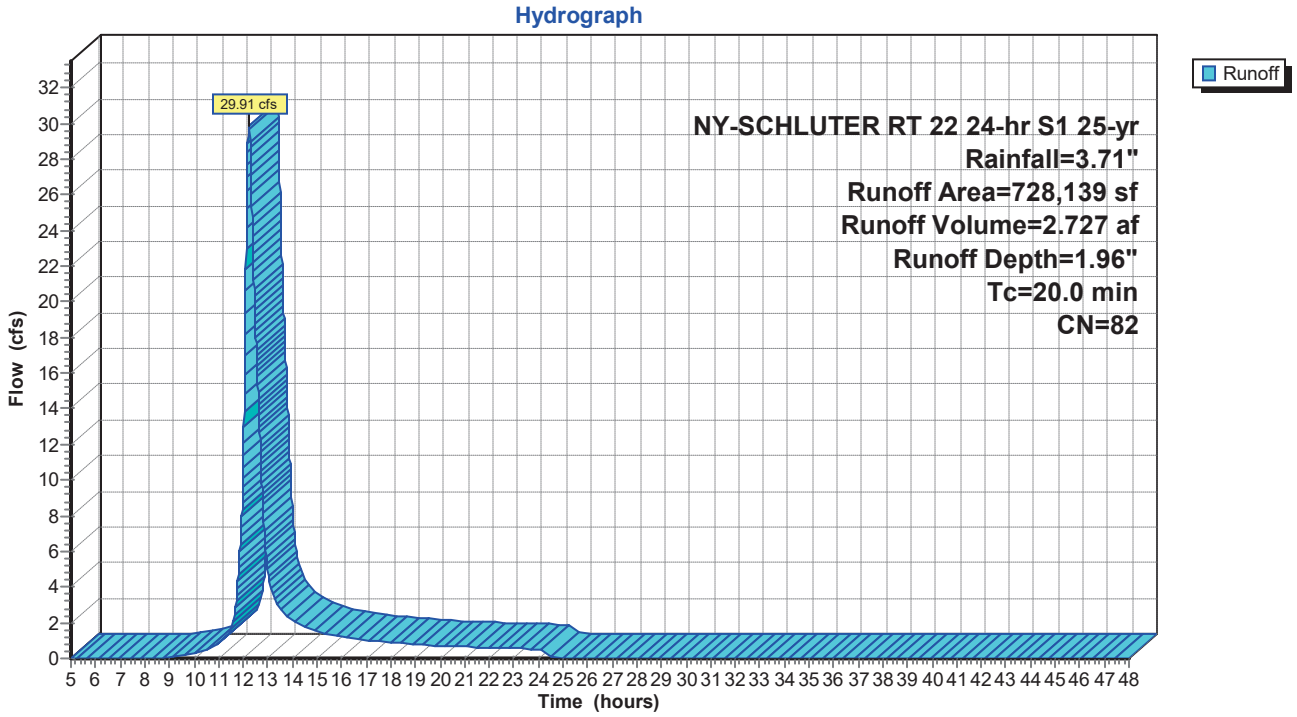
Pond CH1: Existing Channel #1 Peak Elev=230.15' Storage=8,765 cf Inflow=60.25 cfs 5.493 af
Primary=28.28 cfs 3.446 af Secondary=39.92 cfs 2.047 af Outflow=68.20 cfs 5.493 af

Pond CH3: Existing Channel #3 Peak Elev=225.63' Storage=1,161 cf Inflow=8.68 cfs 0.791 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=7.90 cfs 0.791 af

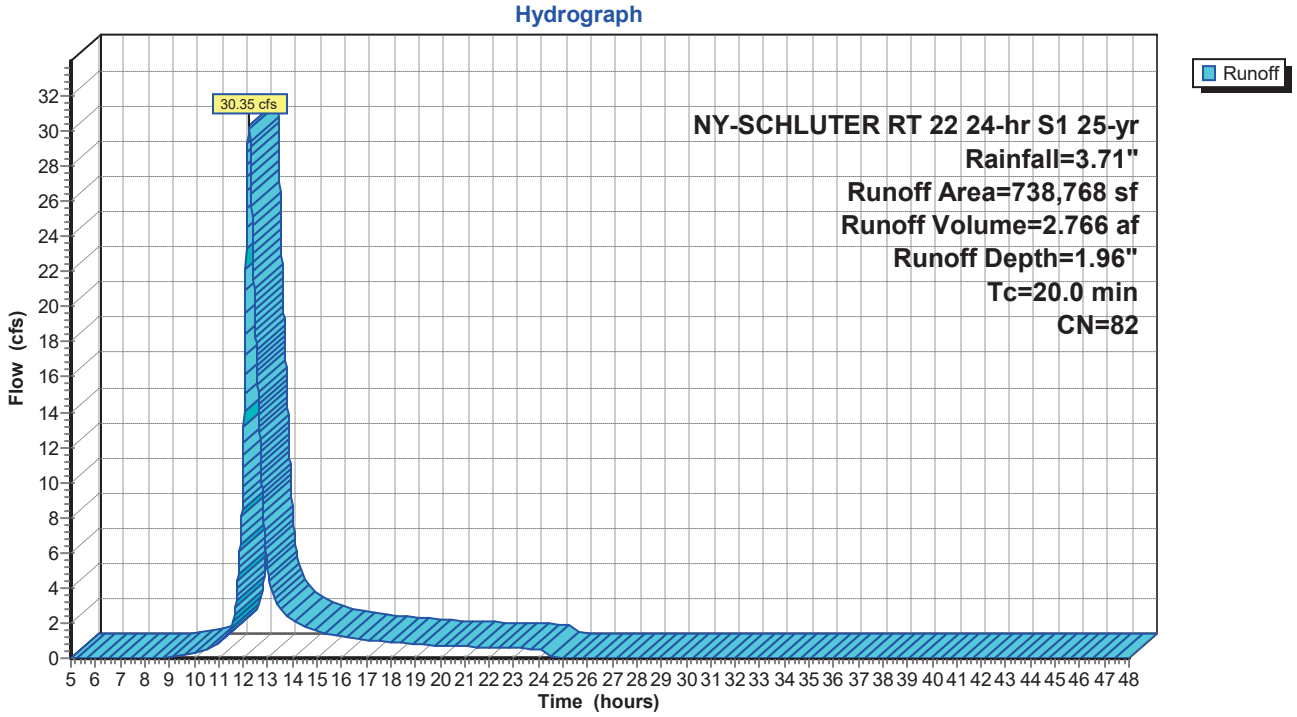
Pond DP4: Design Point #4 Peak Elev=276.17' Storage=4,154 cf Inflow=93.10 cfs 9.786 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=99.57 cfs 9.786 af

Total Runoff Area = 72.541 ac Runoff Volume = 11.833 af Average Runoff Depth = 1.96"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

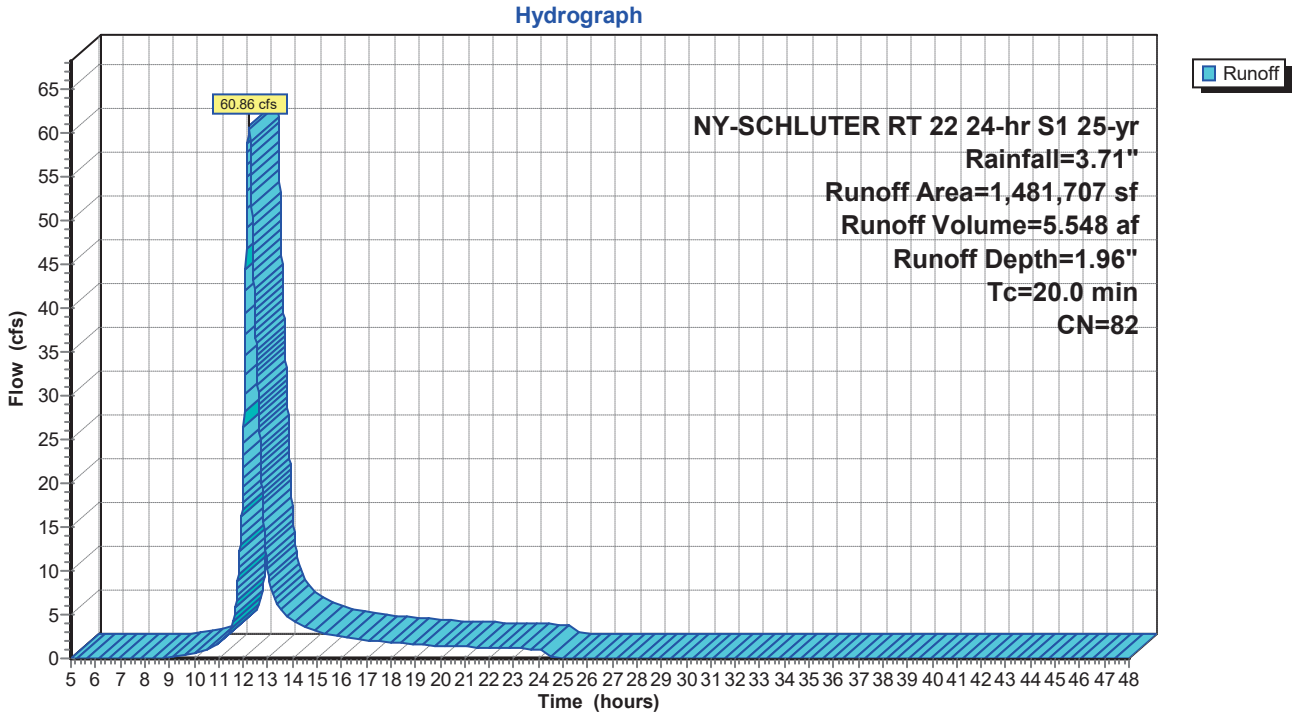
Subcatchment E1: Existing Basin #1



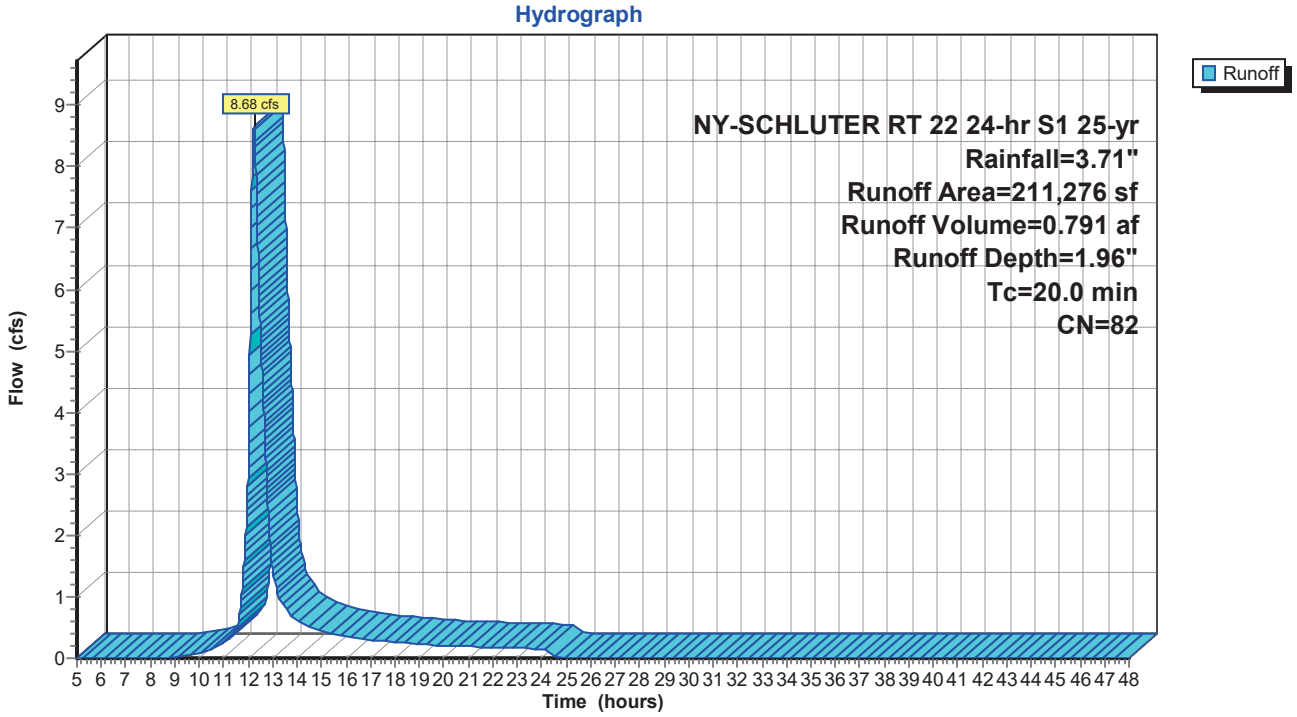
Subcatchment E2: Existing Basin #2



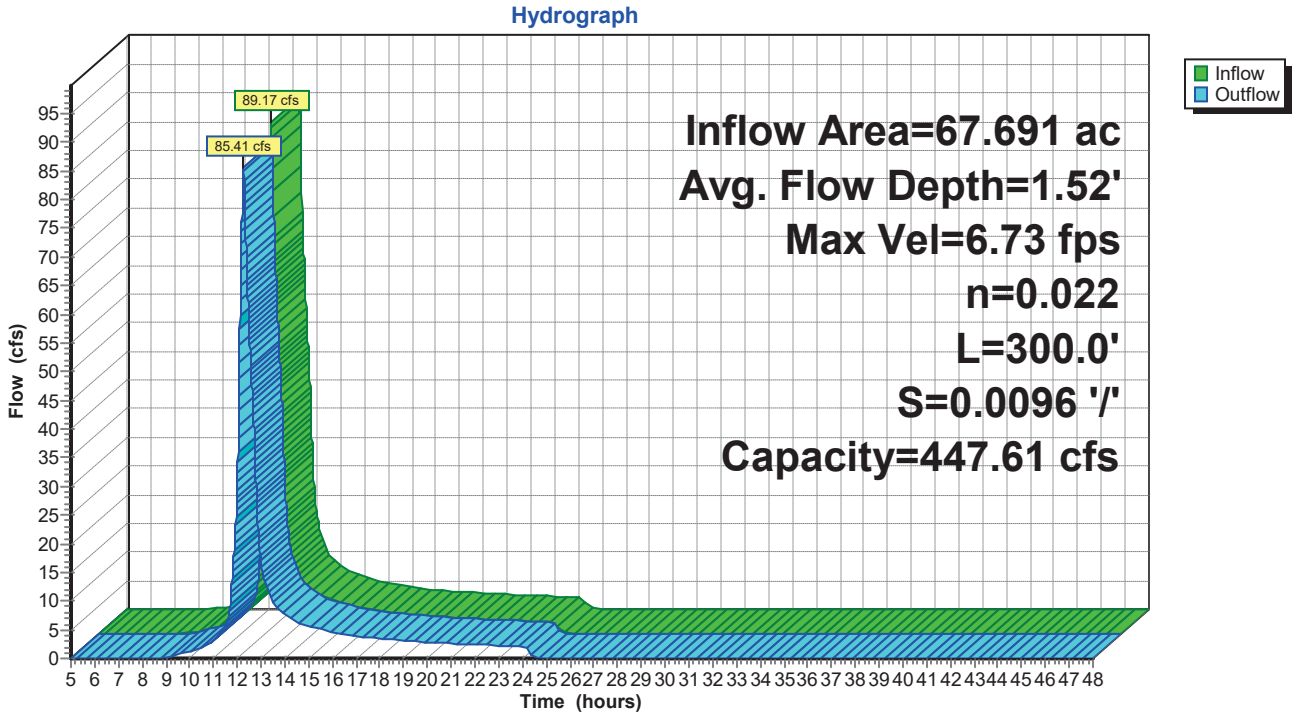
Subcatchment E3: Existing Basin #3



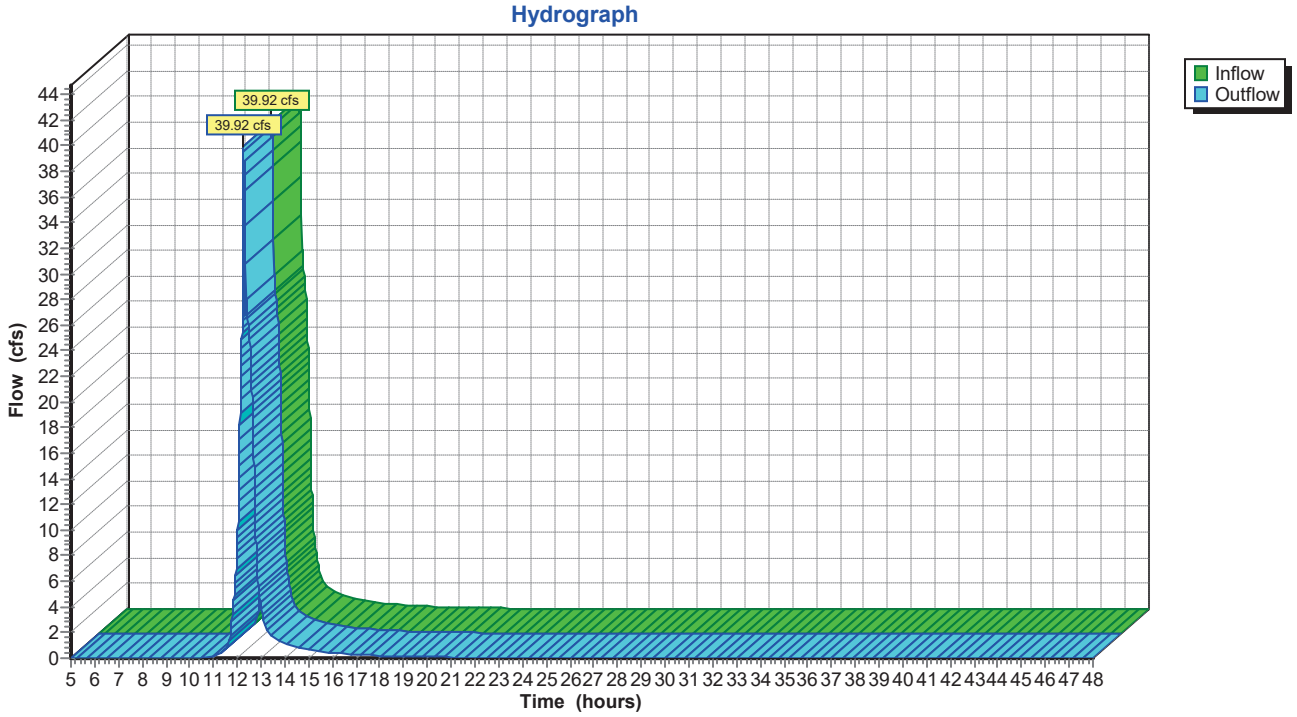
Subcatchment E4: Existing Basin #4



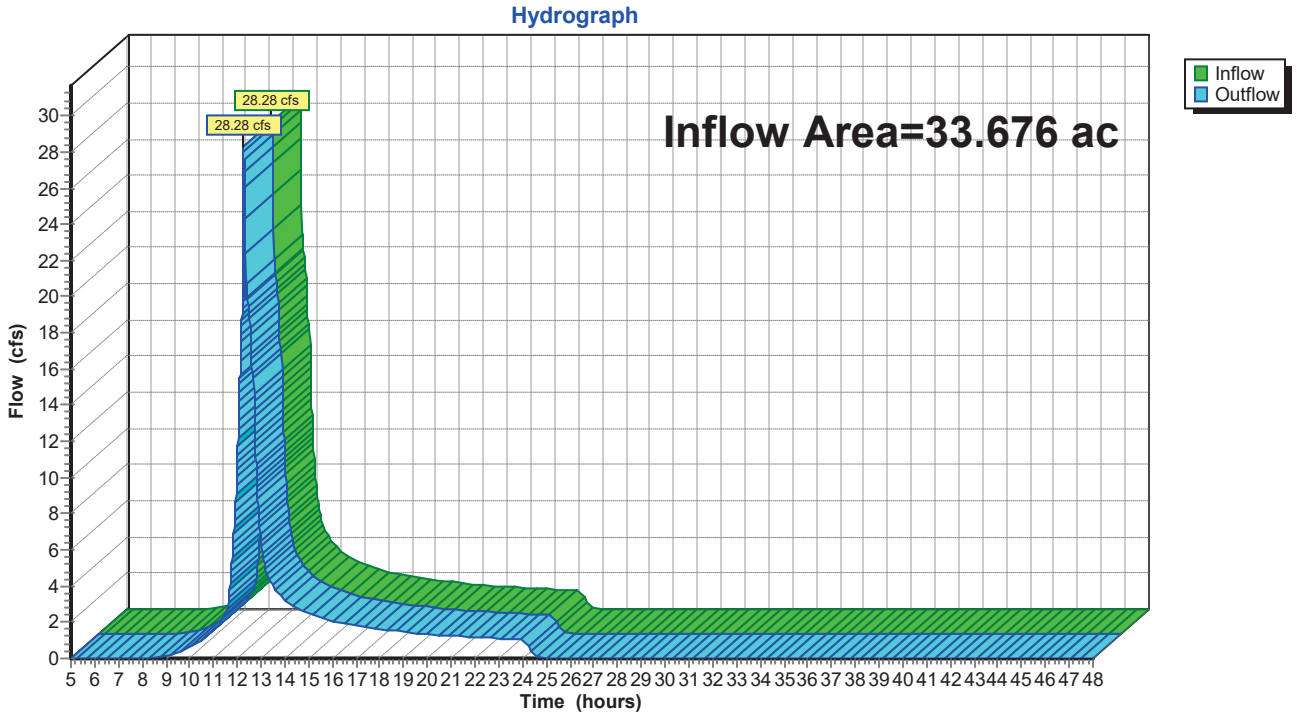
Reach CH2: Existing Channel #2



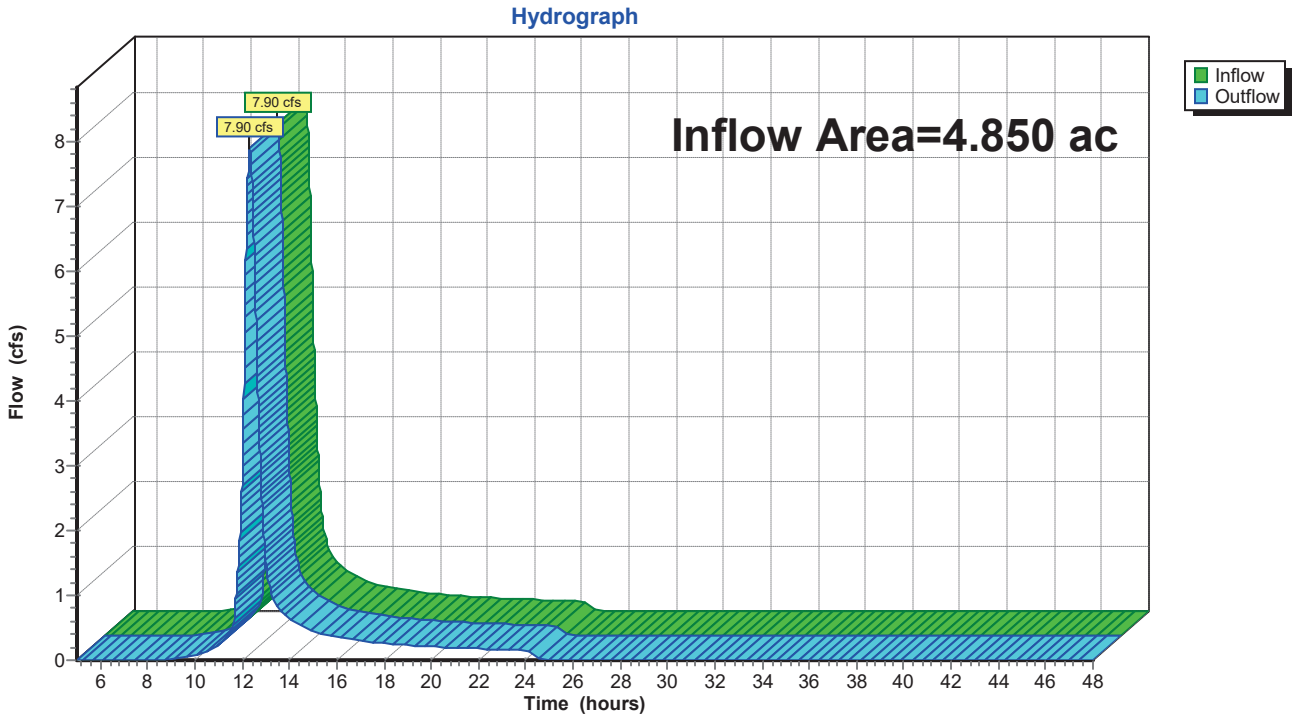
Reach DP1: Design Point #1



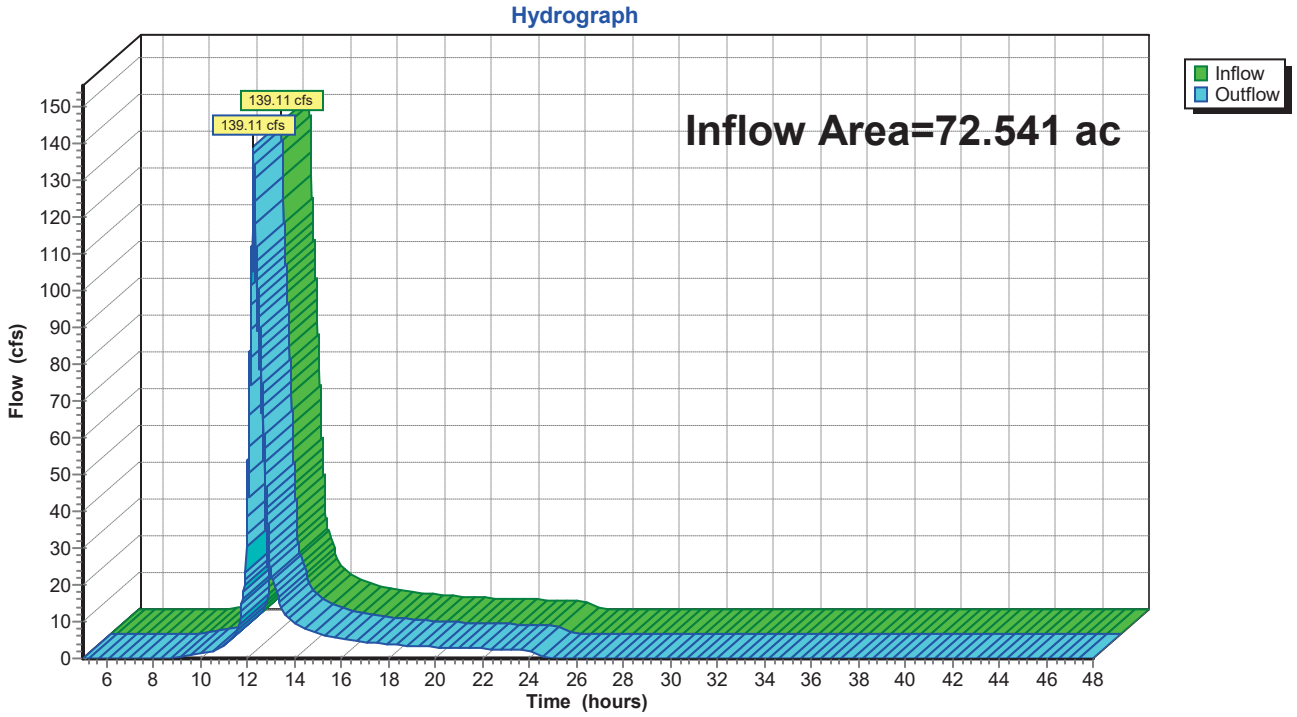
Reach DP2: Design Point #2



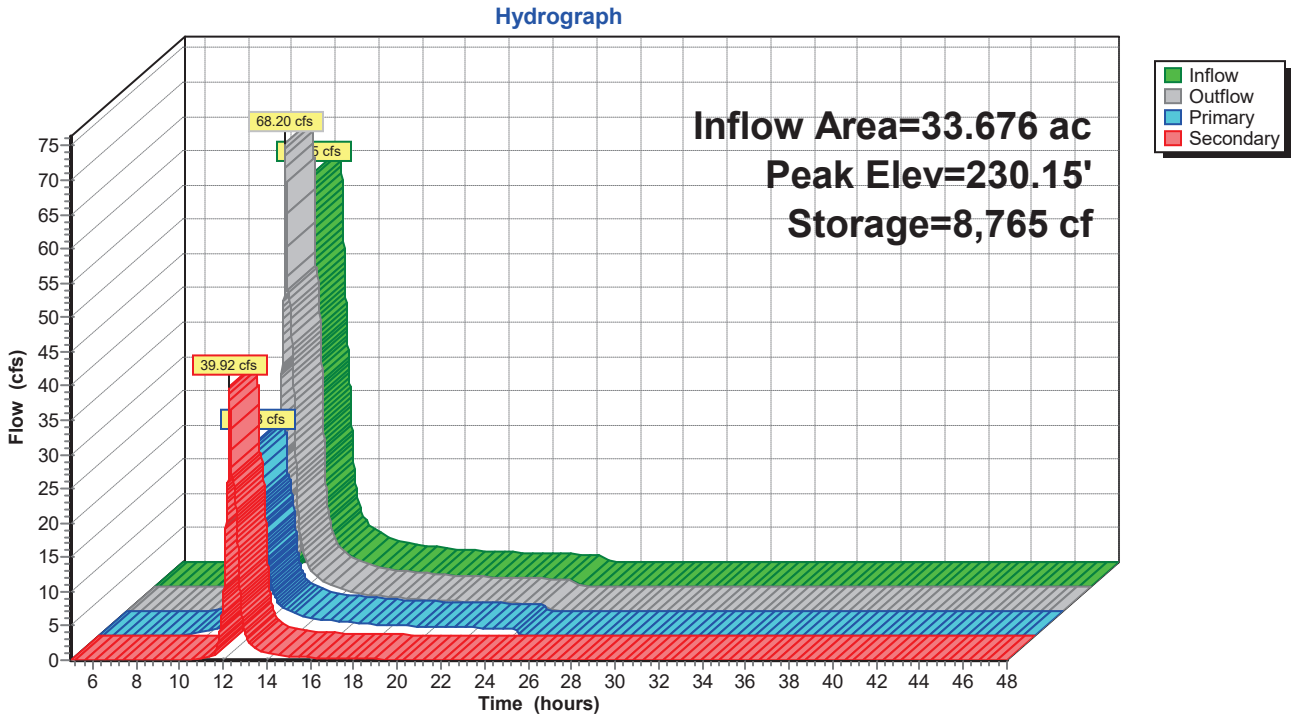
Reach DP3: Design Point #3



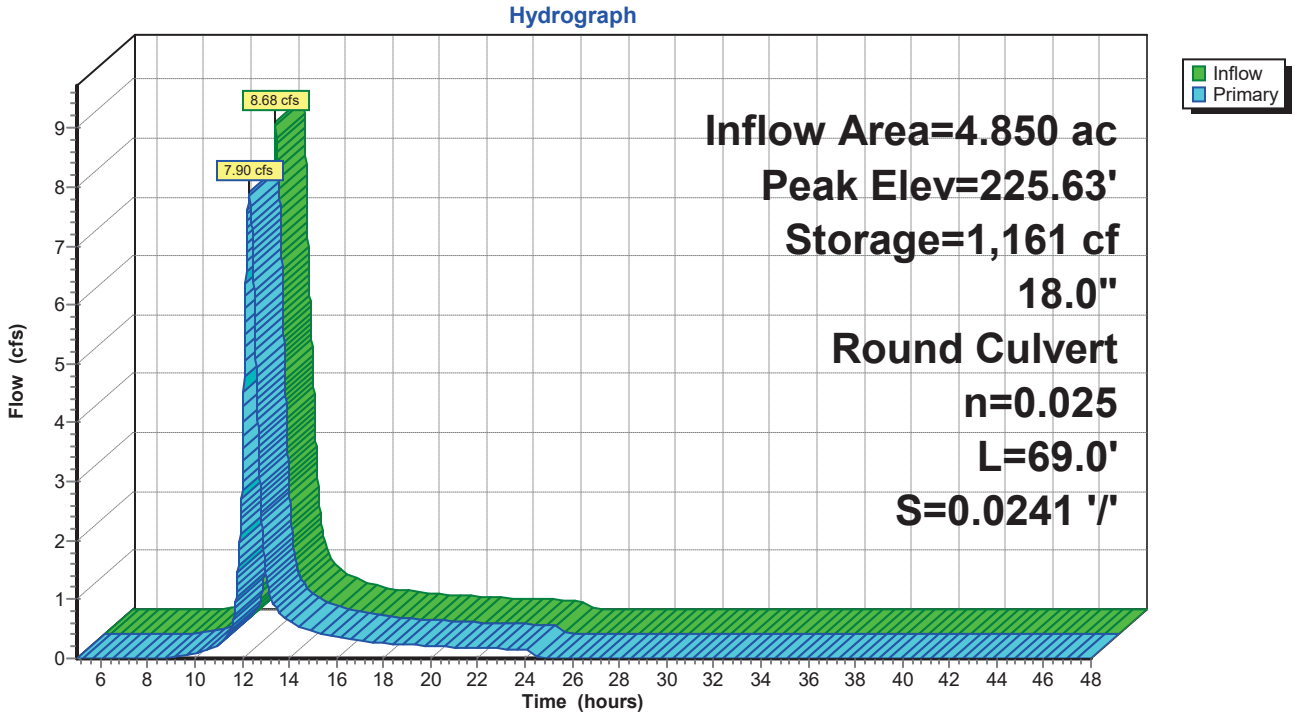
Reach TOT: Proposed Site Total



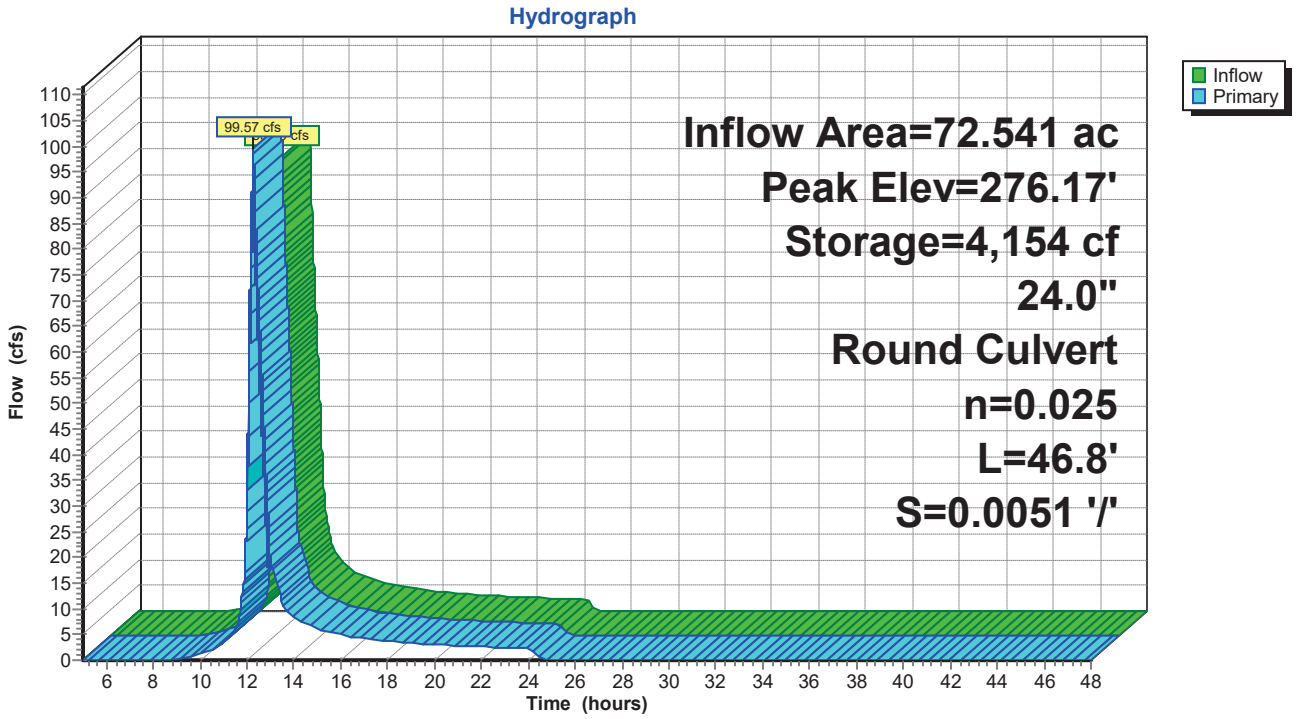
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=2.48"
Tc=20.0 min CN=82 Runoff=37.99 cfs 3.453 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=2.48"
Tc=20.0 min CN=82 Runoff=38.55 cfs 3.503 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=2.48"
Tc=20.0 min CN=82 Runoff=77.31 cfs 7.027 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=2.48"
Tc=20.0 min CN=82 Runoff=11.02 cfs 1.002 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.72' Max Vel=7.19 fps Inflow=113.61 cfs 11.203 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=108.74 cfs 11.203 af

Reach DP1: Design Point #1 Inflow=52.34 cfs 2.780 af
Outflow=52.34 cfs 2.780 af

Reach DP2: Design Point #2 Inflow=36.41 cfs 4.176 af
Outflow=36.41 cfs 4.176 af

Reach DP3: Design Point #3 Inflow=9.37 cfs 1.002 af
Outflow=9.37 cfs 1.002 af

Reach TOT: Proposed Site Total Inflow=163.58 cfs 14.985 af
Outflow=163.58 cfs 14.985 af

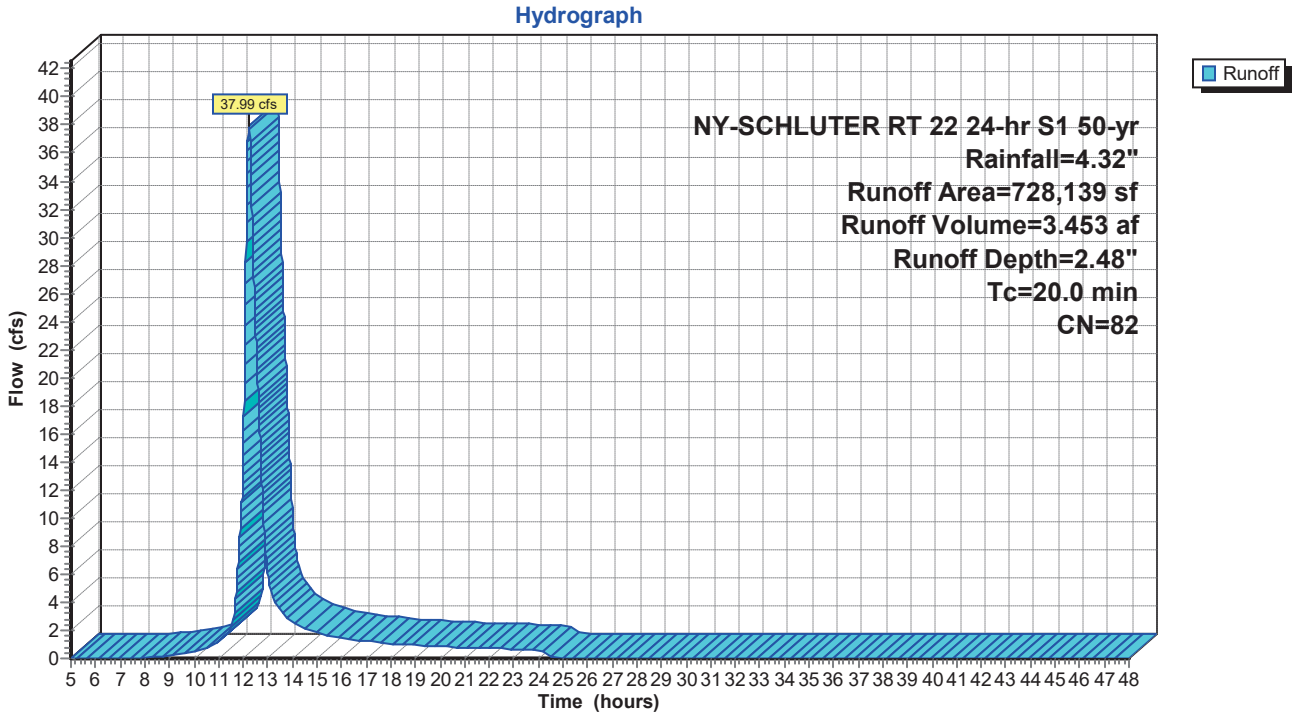
Pond CH1: Existing Channel #1 Peak Elev=232.97' Storage=8,765 cf Inflow=76.54 cfs 6.956 af
Primary=36.41 cfs 4.176 af Secondary=52.34 cfs 2.780 af Outflow=88.75 cfs 6.956 af

Pond CH3: Existing Channel #3 Peak Elev=226.26' Storage=2,168 cf Inflow=11.02 cfs 1.002 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=9.37 cfs 1.002 af

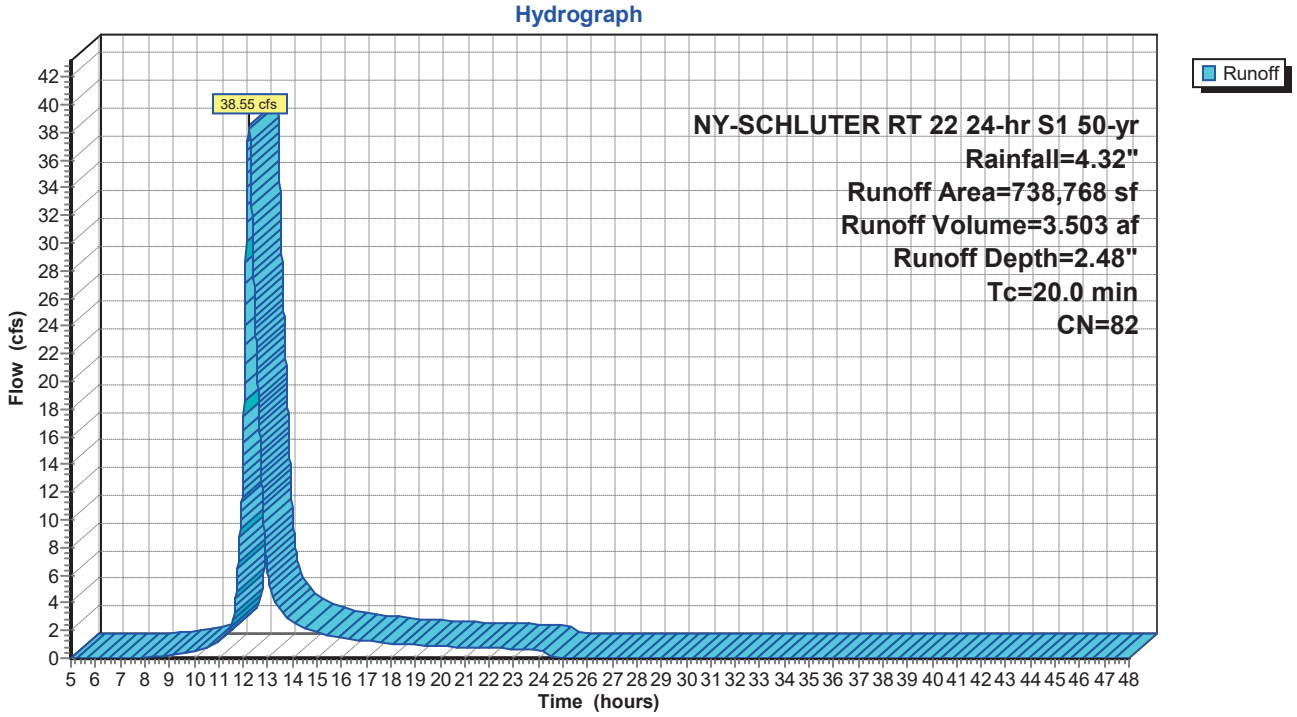
Pond DP4: Design Point #4 Peak Elev=307.28' Storage=4,154 cf Inflow=117.61 cfs 12.205 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=123.77 cfs 12.205 af

Total Runoff Area = 72.541 ac Runoff Volume = 14.985 af Average Runoff Depth = 2.48"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

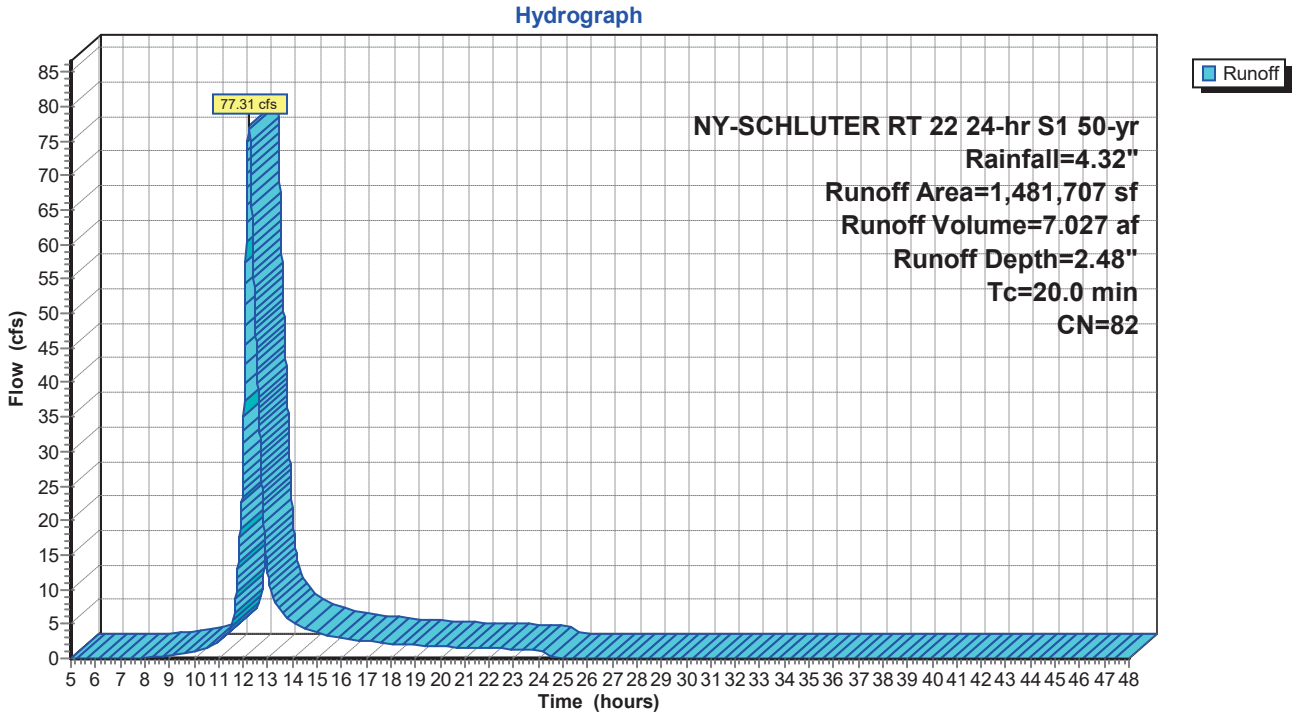
Subcatchment E1: Existing Basin #1



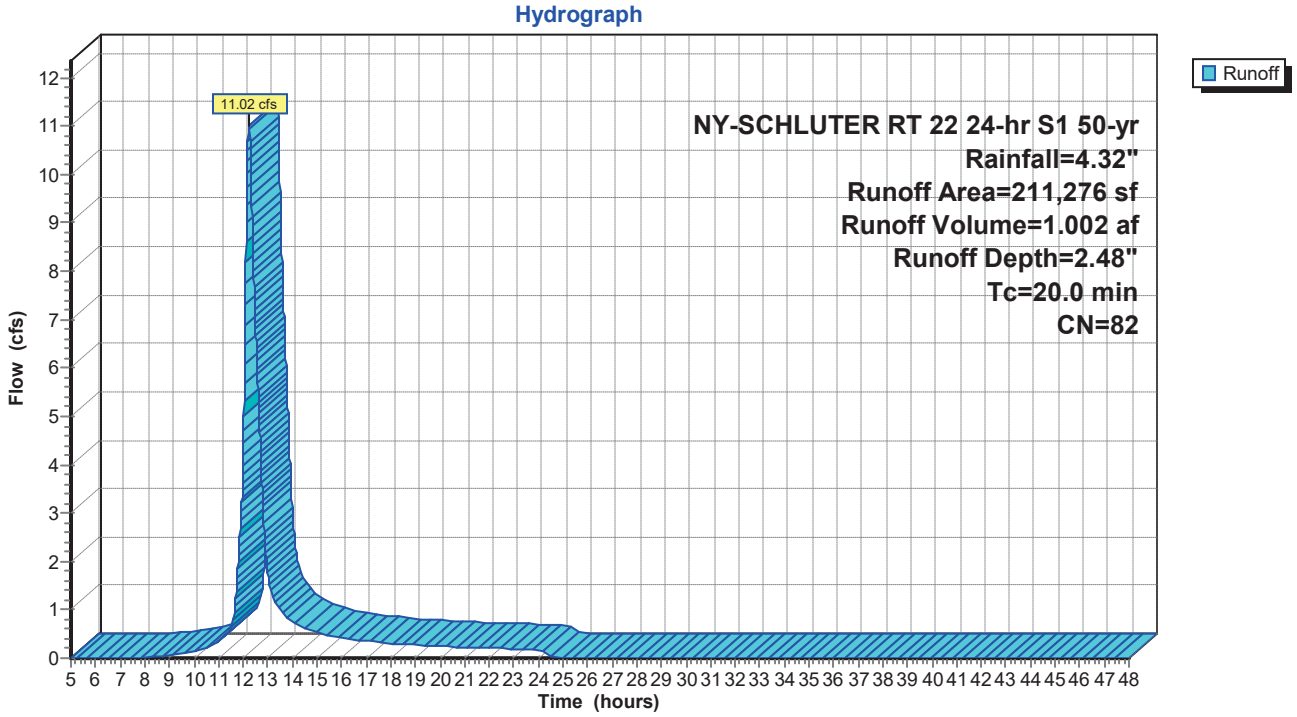
Subcatchment E2: Existing Basin #2



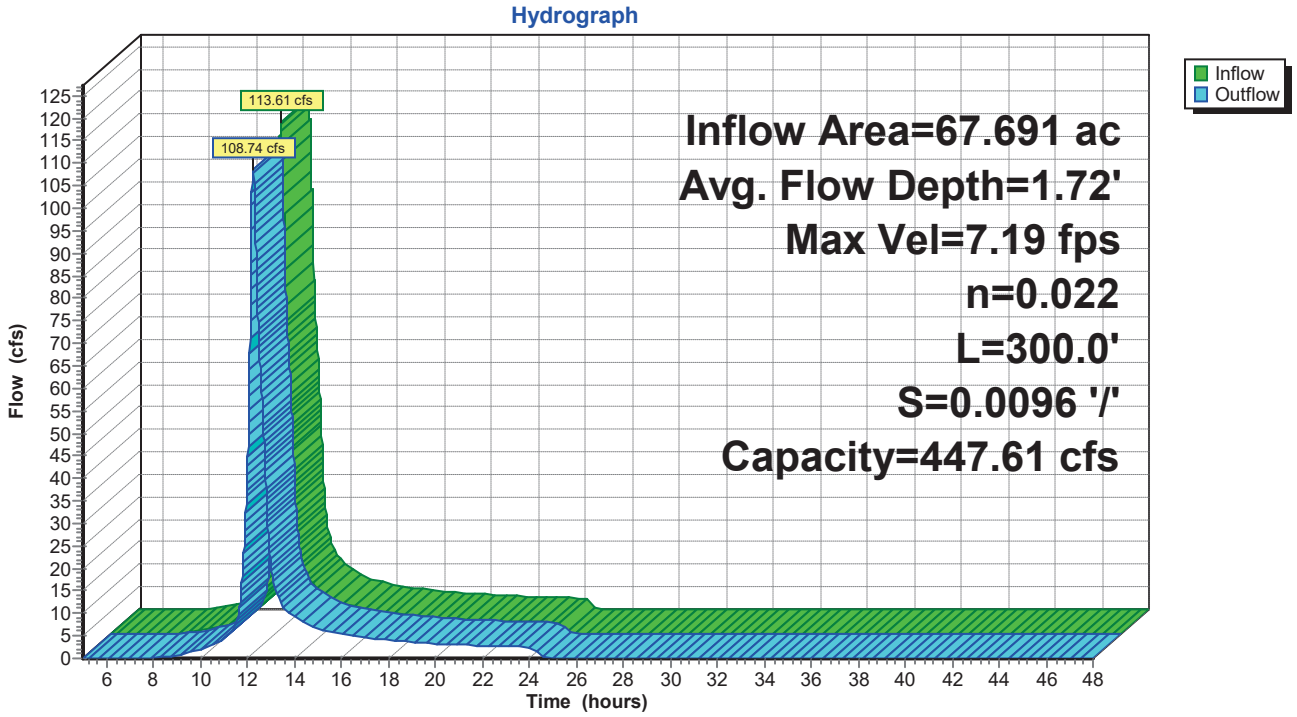
Subcatchment E3: Existing Basin #3



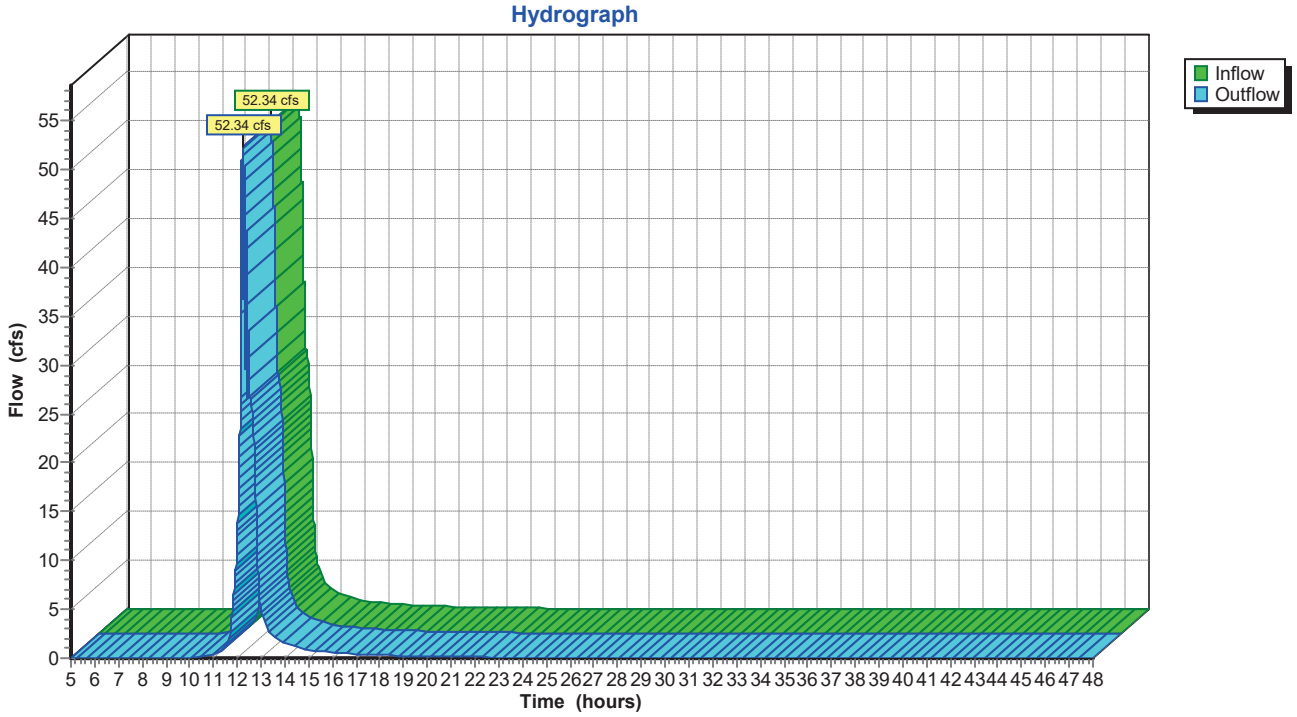
Subcatchment E4: Existing Basin #4



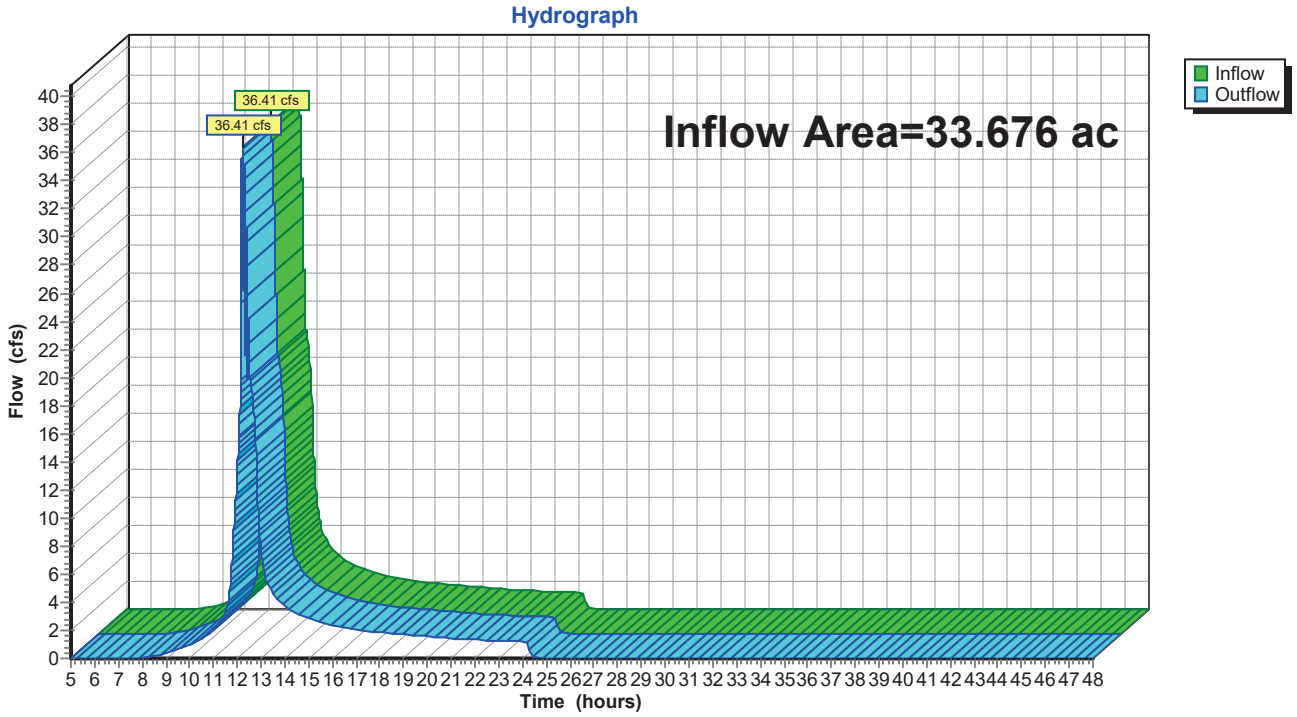
Reach CH2: Existing Channel #2



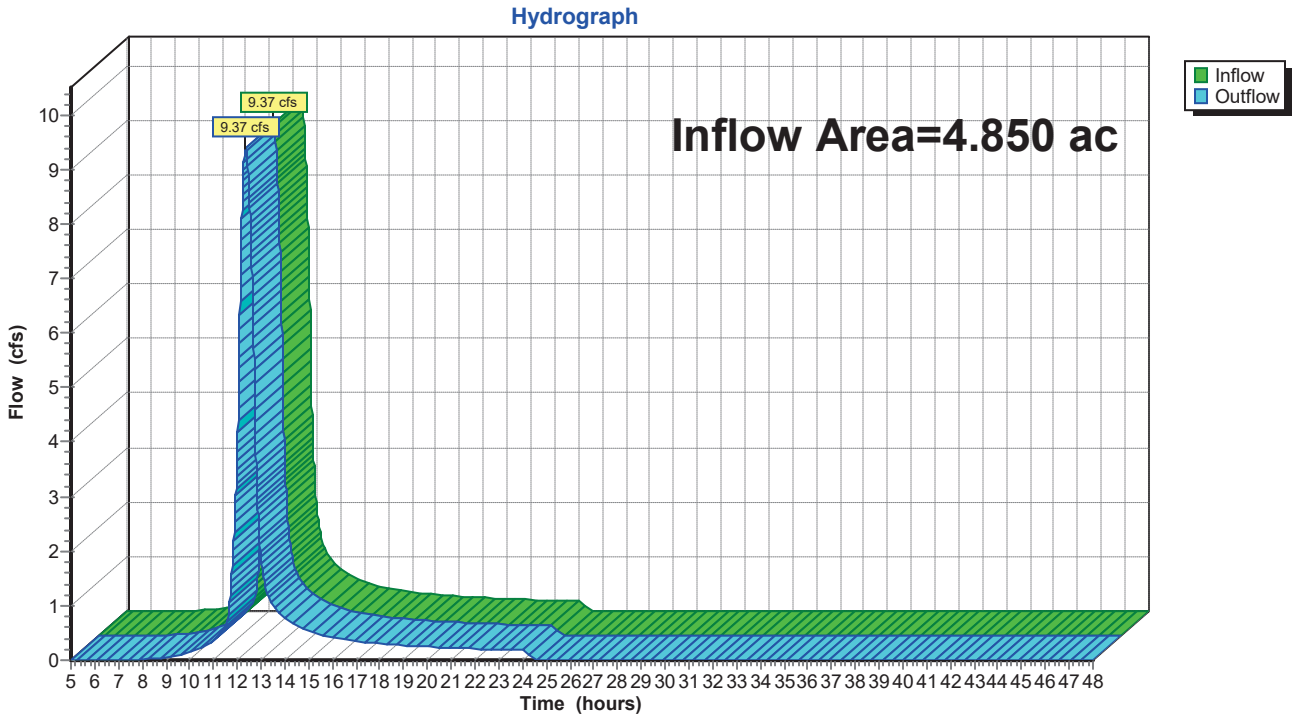
Reach DP1: Design Point #1



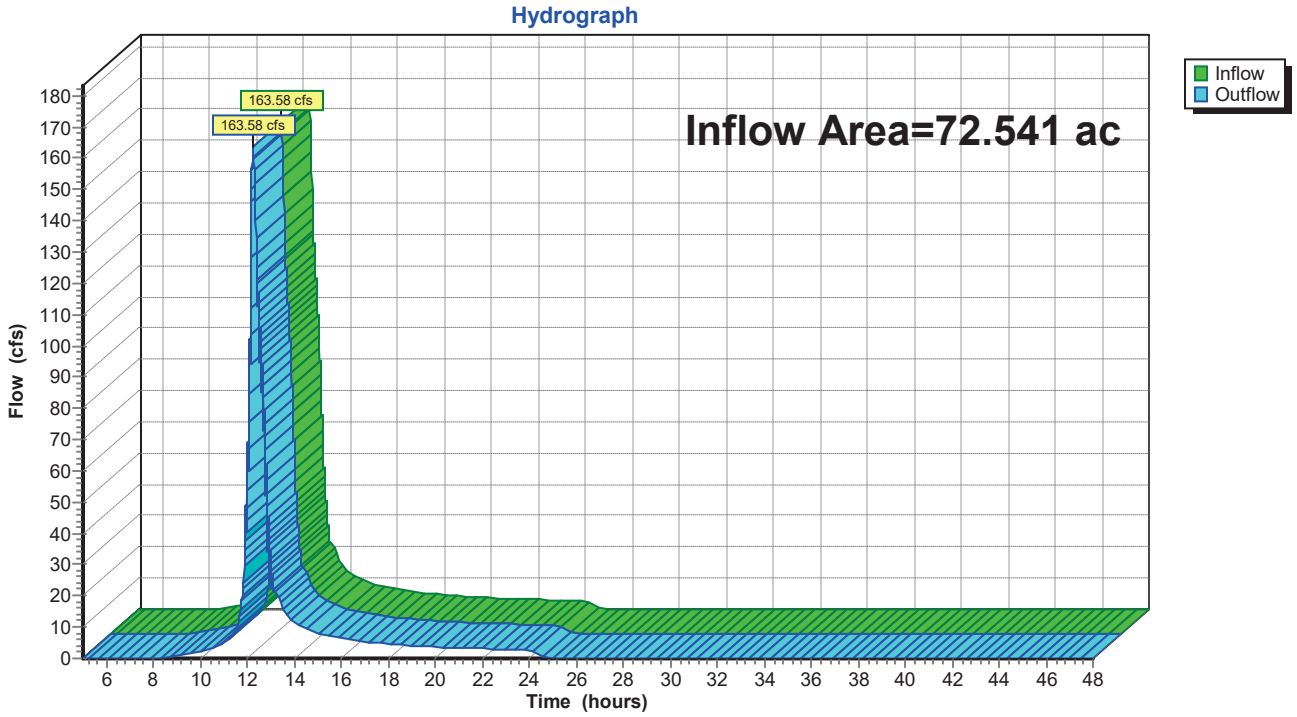
Reach DP2: Design Point #2



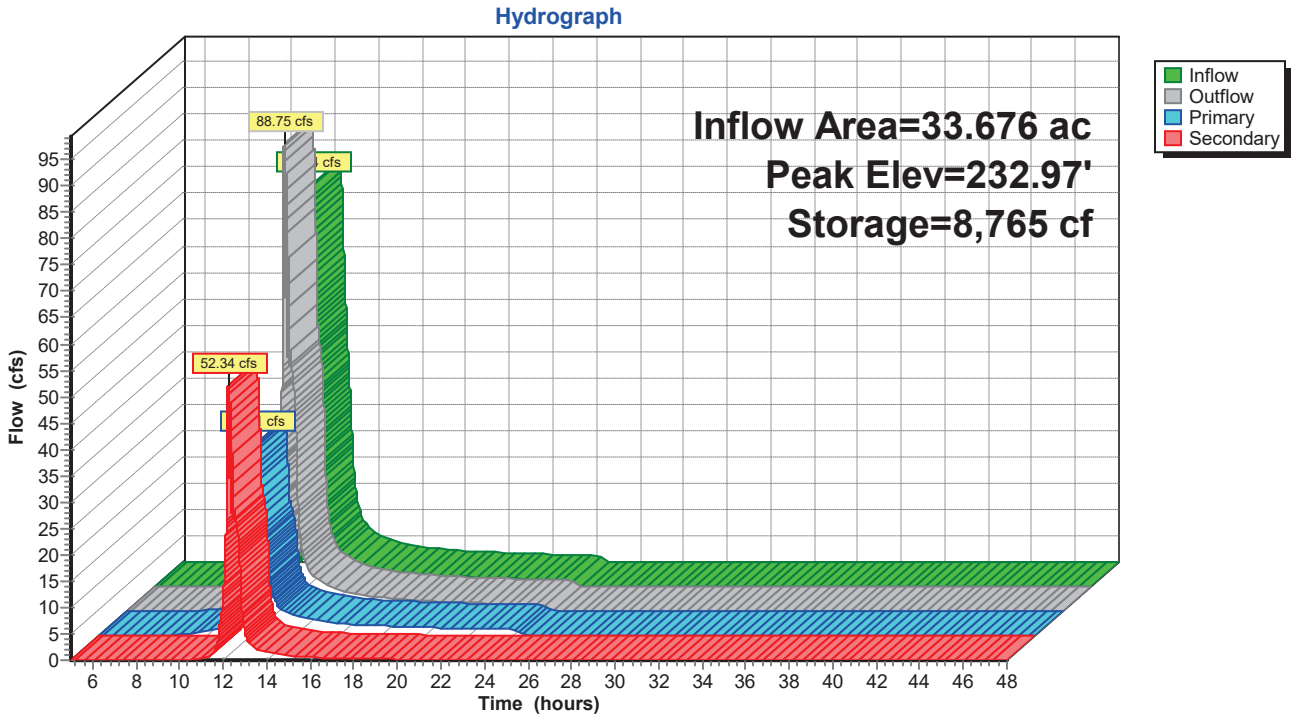
Reach DP3: Design Point #3



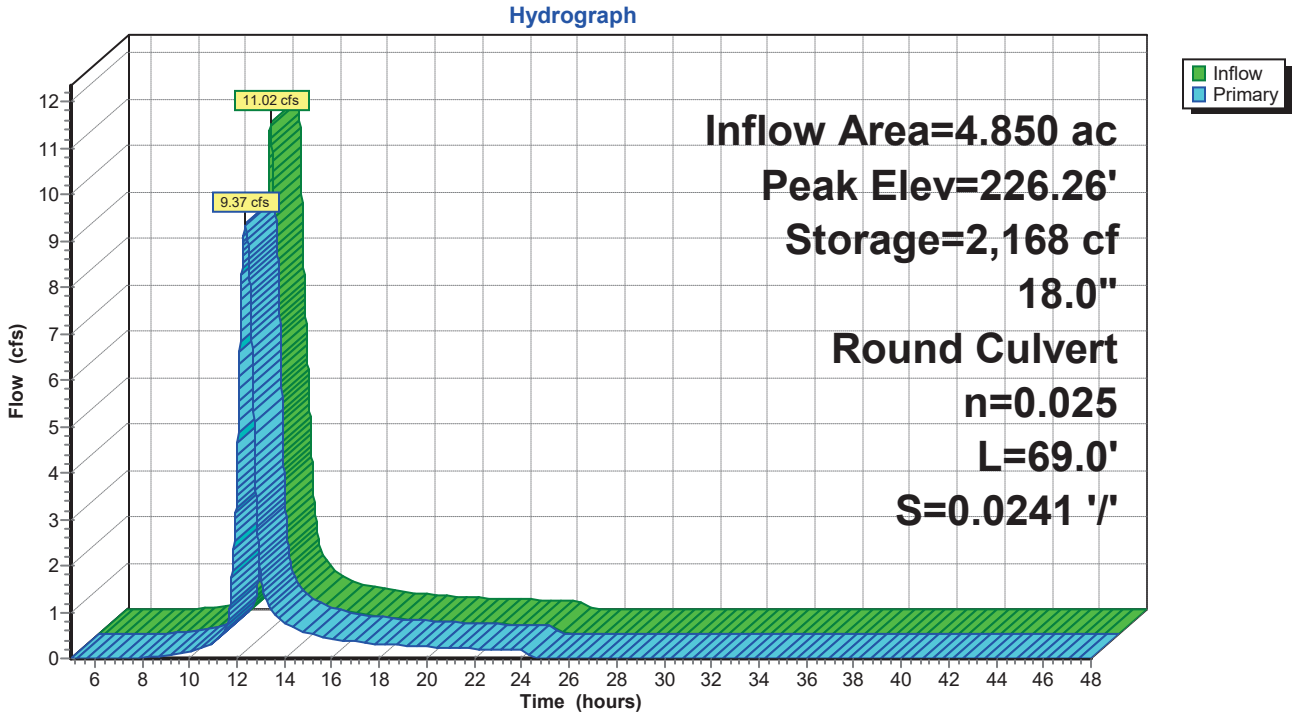
Reach TOT: Proposed Site Total



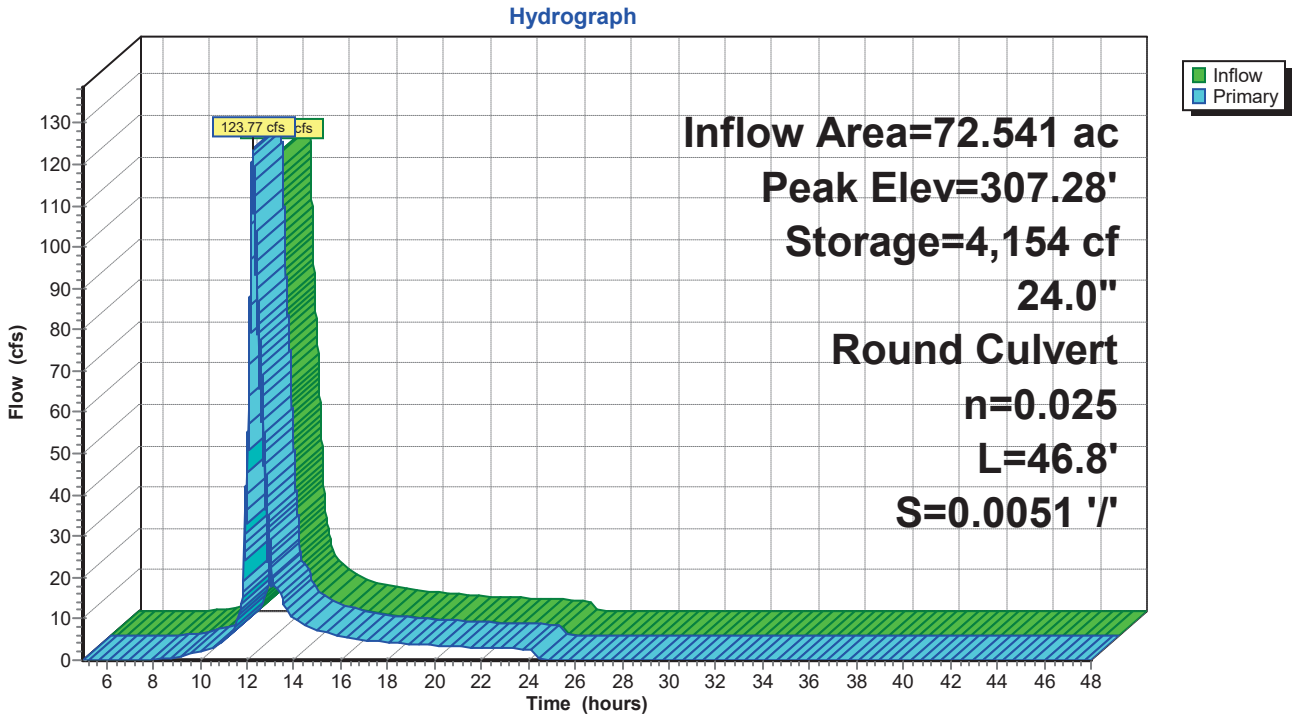
Pond CH1: Existing Channel #1



Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1: Existing Basin #1 Runoff Area=728,139 sf 0.00% Impervious Runoff Depth=3.11"
Tc=20.0 min CN=82 Runoff=47.96 cfs 4.326 af

Subcatchment E2: Existing Basin #2 Runoff Area=738,768 sf 0.00% Impervious Runoff Depth=3.11"
Tc=20.0 min CN=82 Runoff=48.66 cfs 4.390 af

Subcatchment E3: Existing Basin #3 Runoff Area=1,481,707 sf 0.00% Impervious Runoff Depth=3.11"
Tc=20.0 min CN=82 Runoff=97.59 cfs 8.804 af

Subcatchment E4: Existing Basin #4 Runoff Area=211,276 sf 0.00% Impervious Runoff Depth=3.11"
Tc=20.0 min CN=82 Runoff=13.92 cfs 1.255 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.93' Max Vel=7.66 fps Inflow=139.02 cfs 13.838 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=136.97 cfs 13.838 af

Reach DP1: Design Point #1 Inflow=59.95 cfs 3.683 af
Outflow=59.95 cfs 3.683 af

Reach DP2: Design Point #2 Inflow=41.45 cfs 5.034 af
Outflow=41.45 cfs 5.034 af

Reach DP3: Design Point #3 Inflow=10.69 cfs 1.255 af
Outflow=10.69 cfs 1.255 af

Reach TOT: Proposed Site Total Inflow=209.81 cfs 18.776 af
Outflow=209.81 cfs 18.776 af

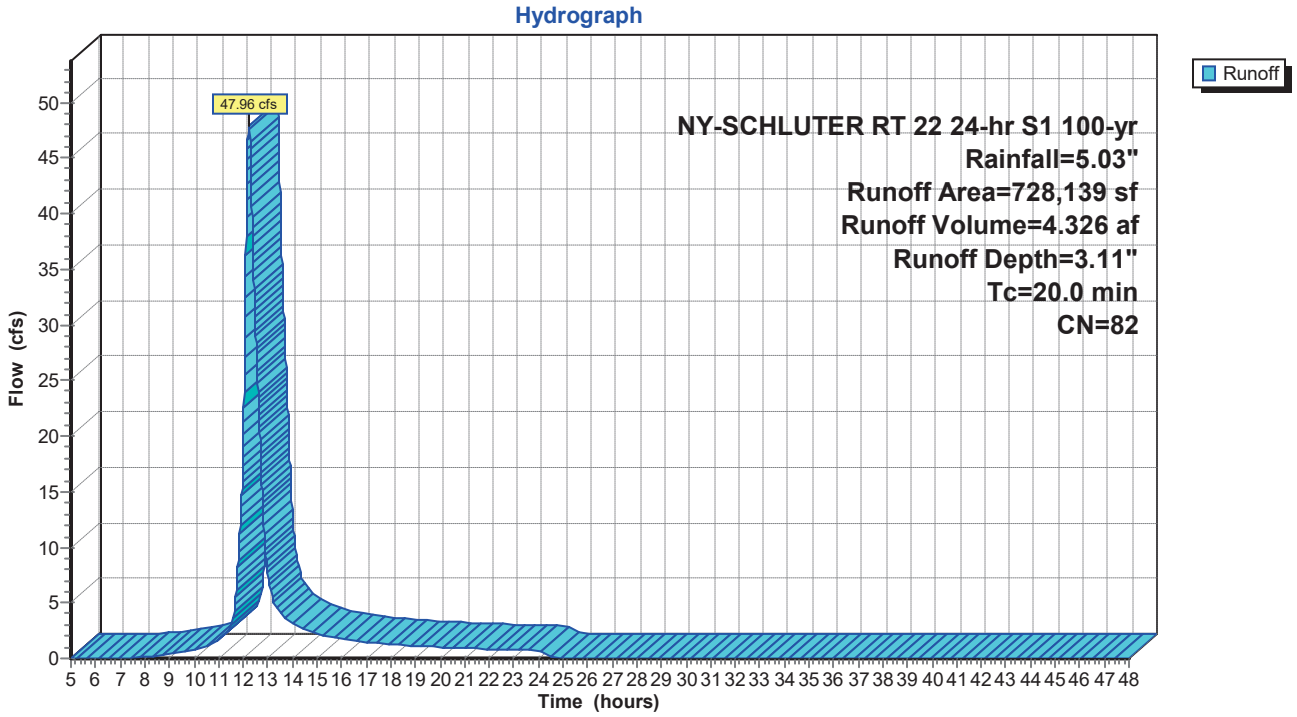
Pond CH1: Existing Channel #1 Peak Elev=235.07' Storage=8,765 cf Inflow=96.62 cfs 8.716 af
Primary=41.45 cfs 5.034 af Secondary=59.95 cfs 3.683 af Outflow=101.40 cfs 8.716 af

Pond CH3: Existing Channel #3 Peak Elev=226.98' Storage=3,945 cf Inflow=13.92 cfs 1.255 af
18.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=10.69 cfs 1.255 af

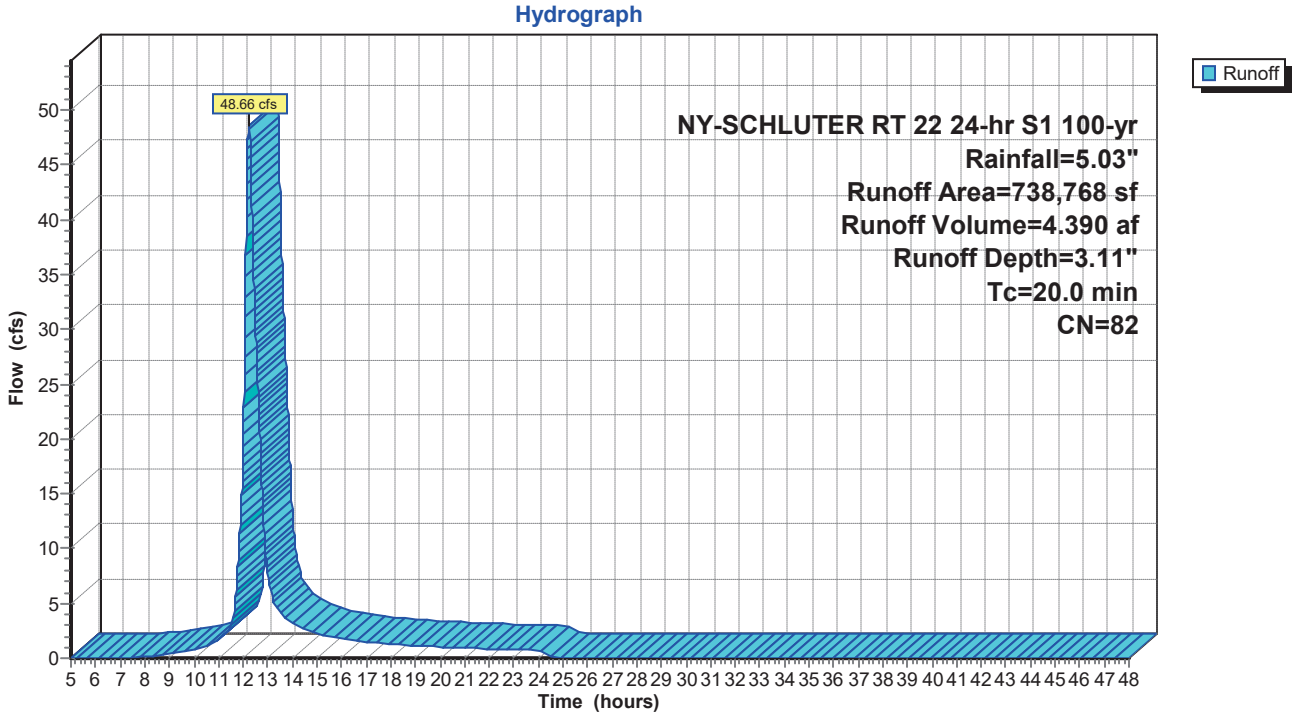
Pond DP4: Design Point #4 Peak Elev=358.92' Storage=4,154 cf Inflow=147.04 cfs 15.093 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=155.87 cfs 15.093 af

Total Runoff Area = 72.541 ac Runoff Volume = 18.776 af Average Runoff Depth = 3.11"
100.00% Pervious = 72.541 ac 0.00% Impervious = 0.000 ac

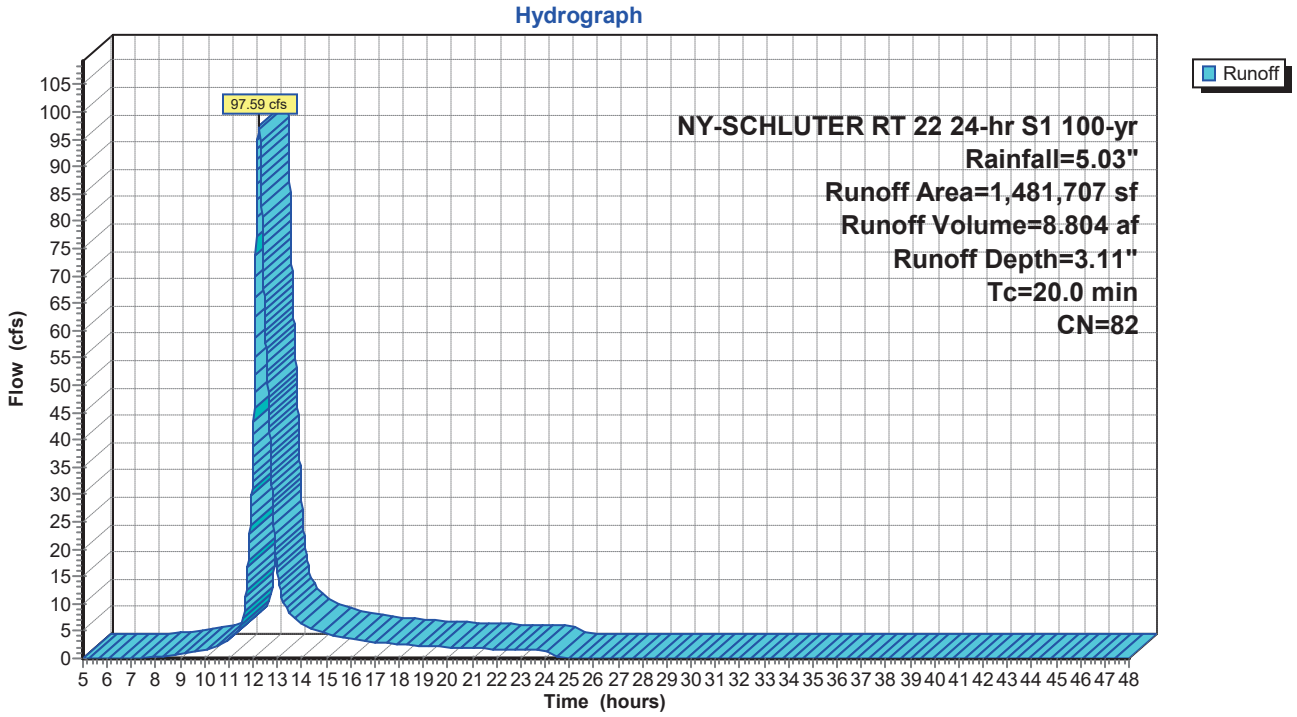
Subcatchment E1: Existing Basin #1



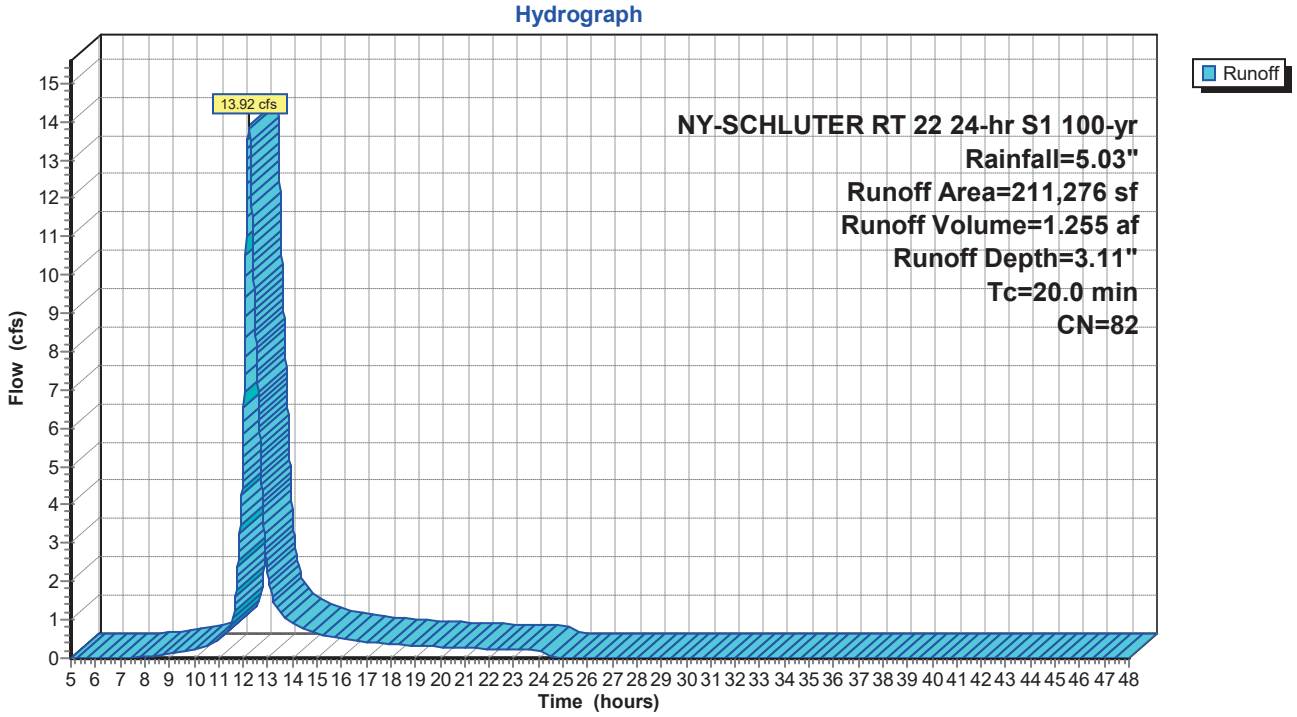
Subcatchment E2: Existing Basin #2



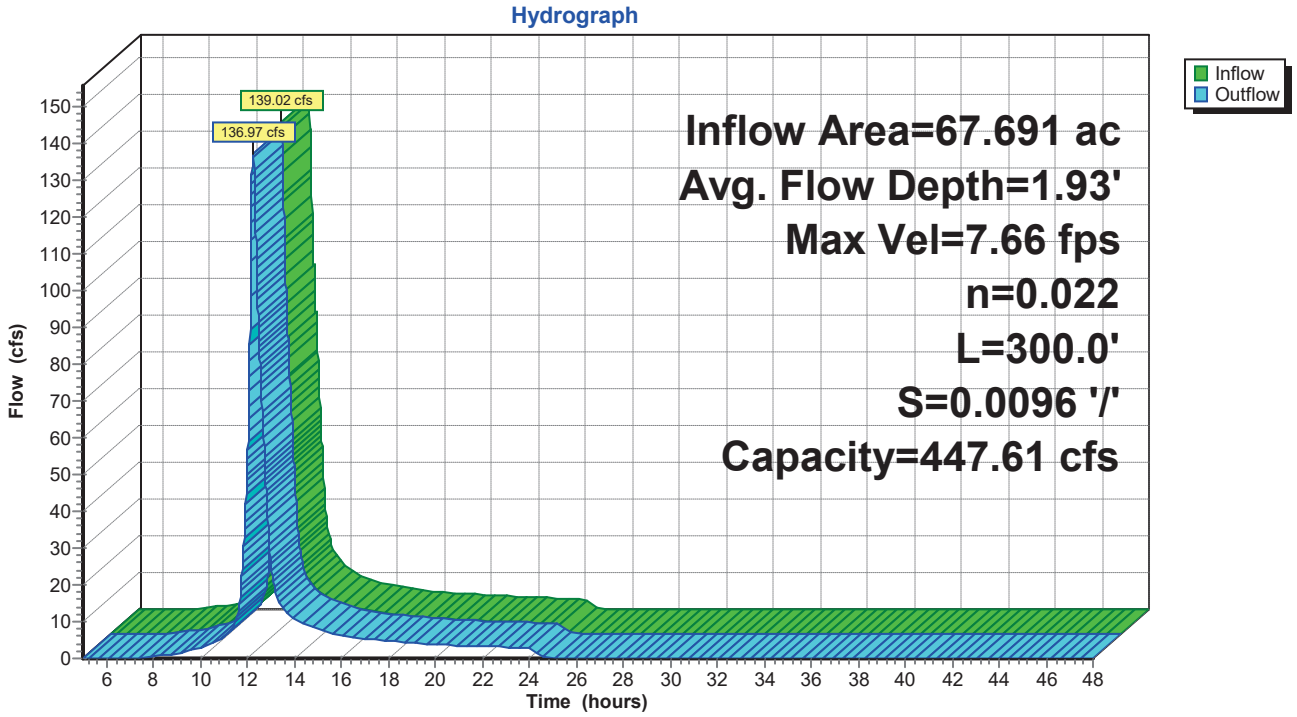
Subcatchment E3: Existing Basin #3



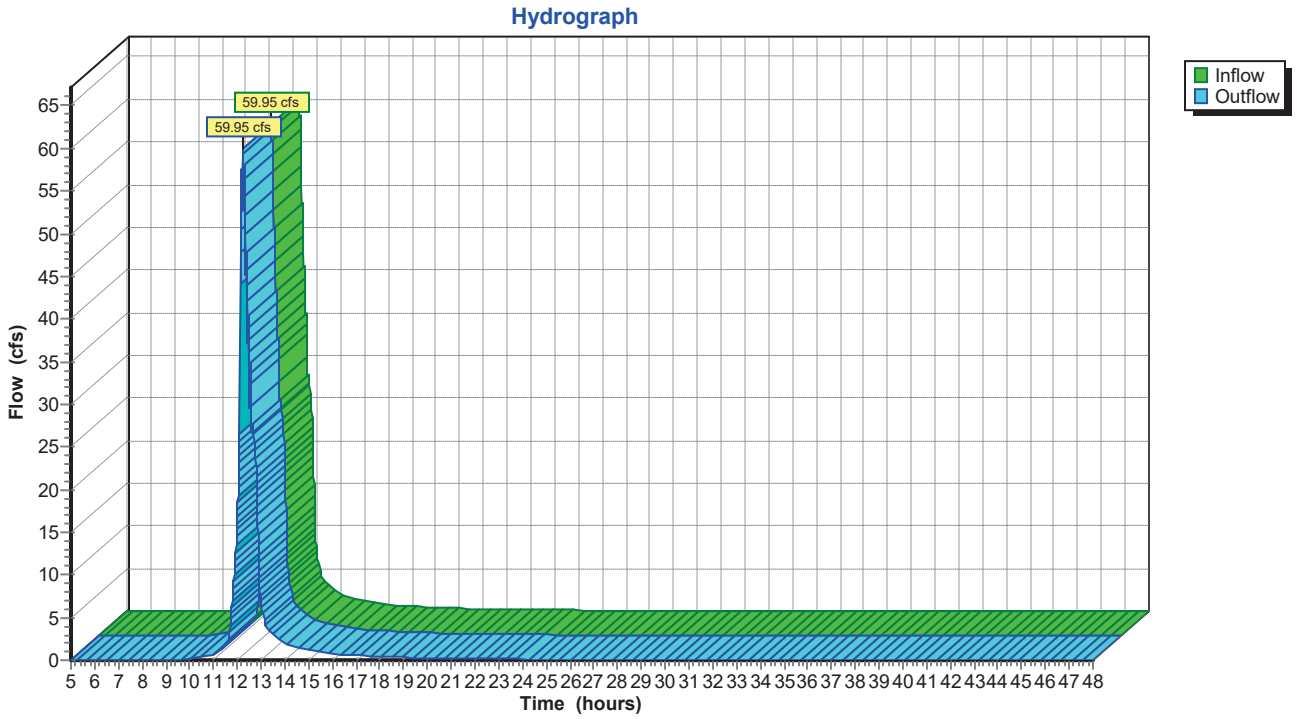
Subcatchment E4: Existing Basin #4



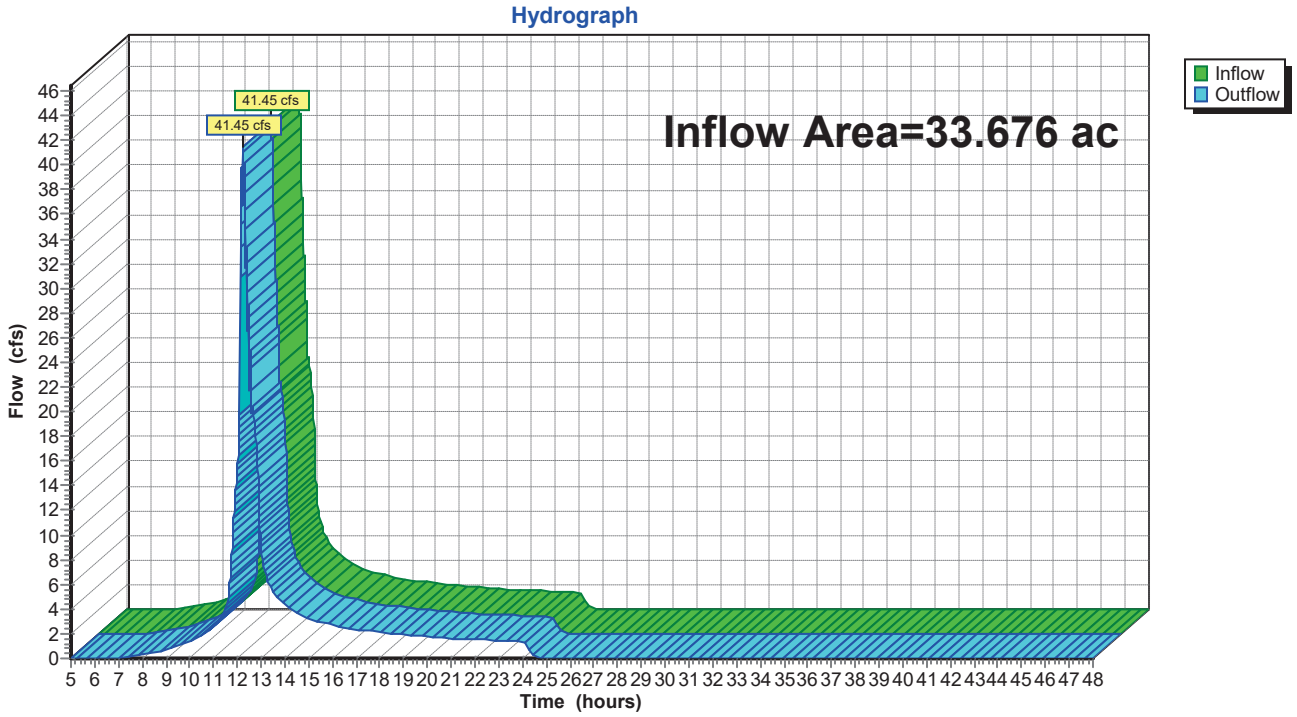
Reach CH2: Existing Channel #2



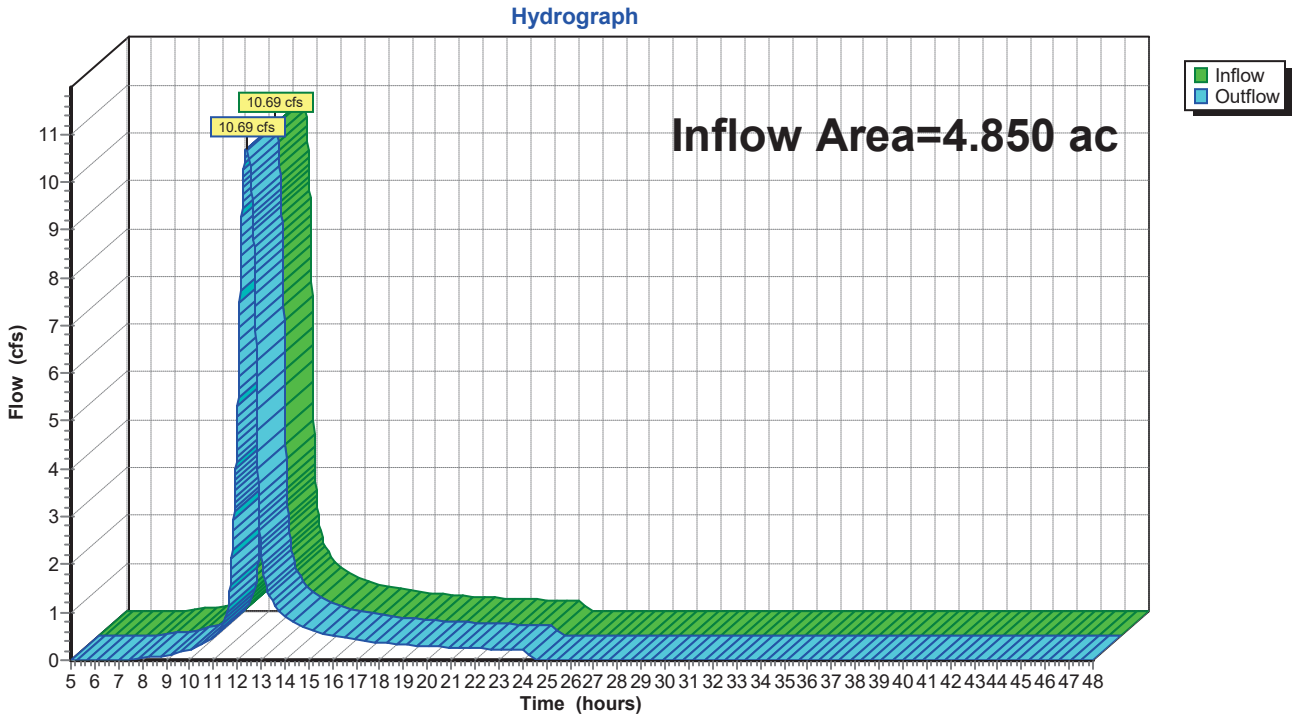
Reach DP1: Design Point #1



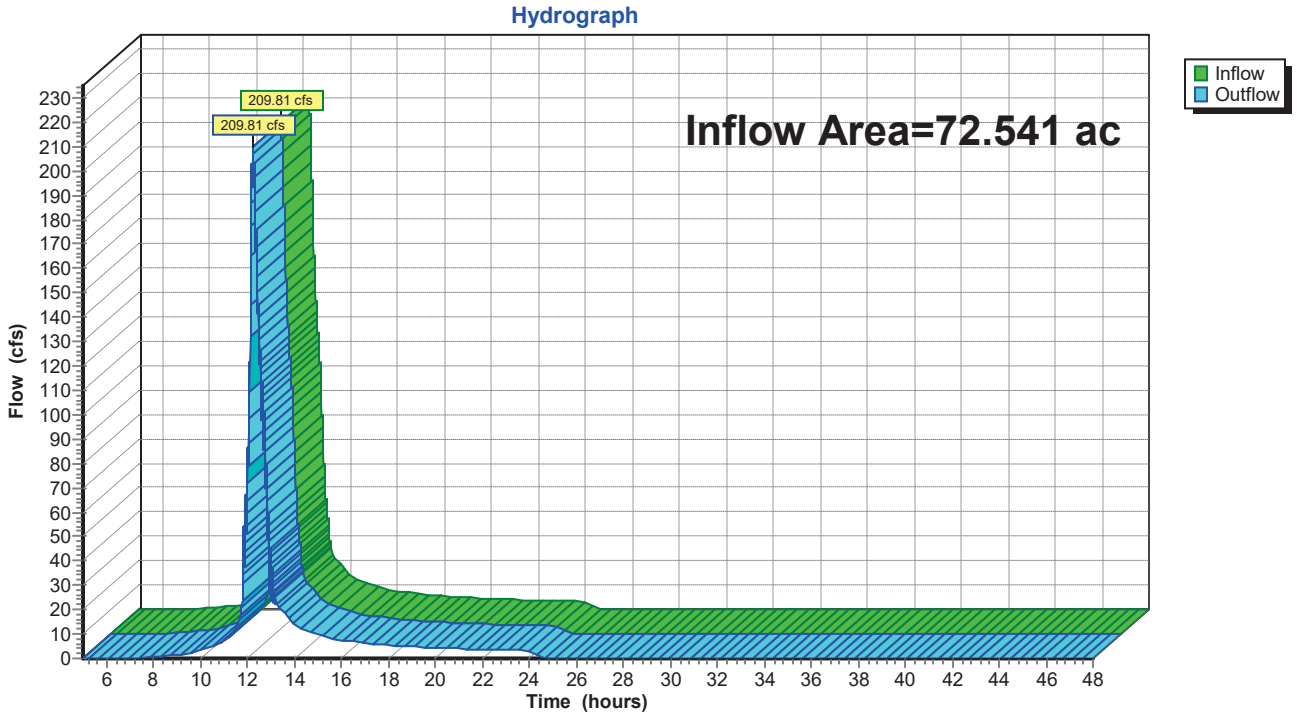
Reach DP2: Design Point #2



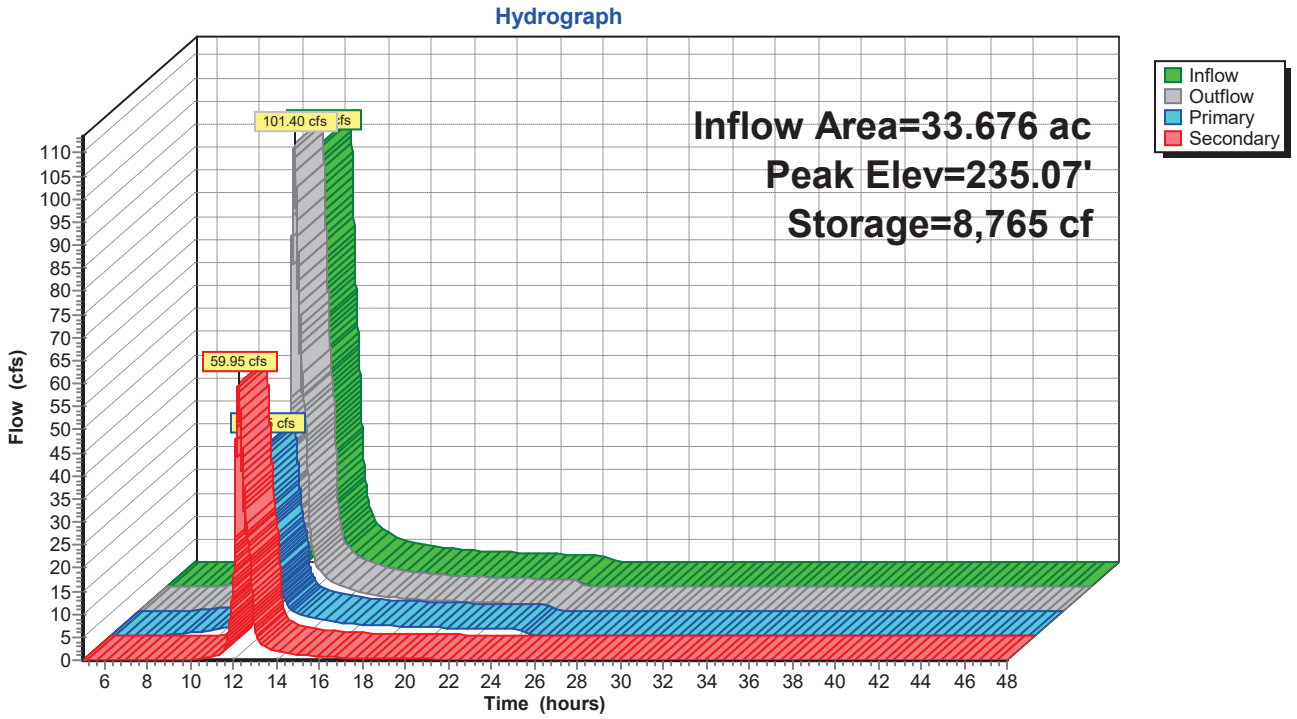
Reach DP3: Design Point #3



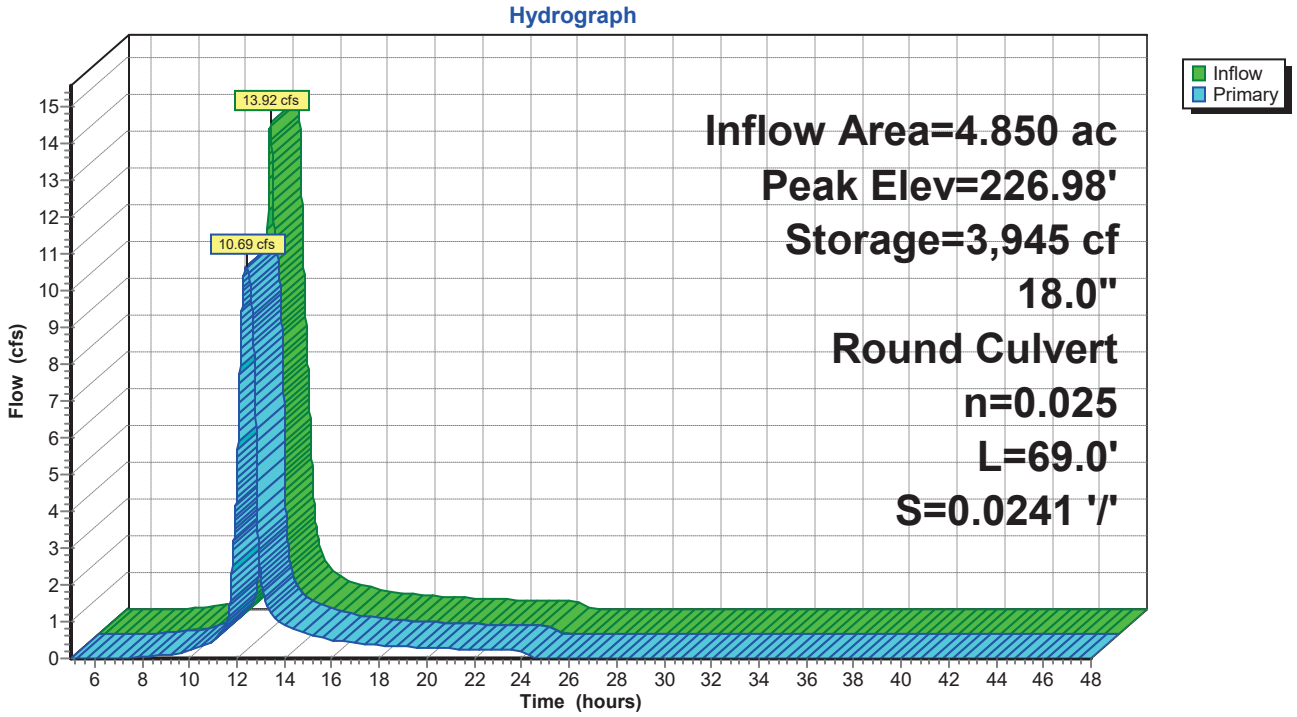
Reach TOT: Proposed Site Total



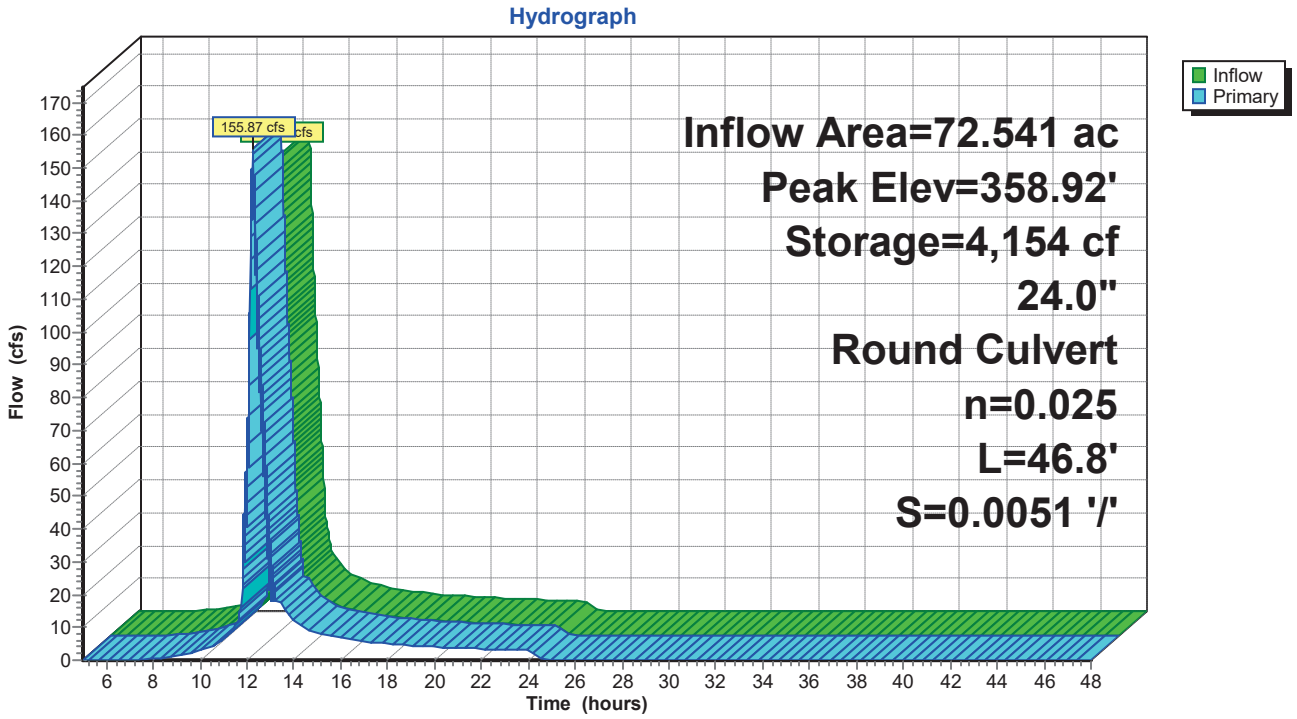
Pond CH1: Existing Channel #1



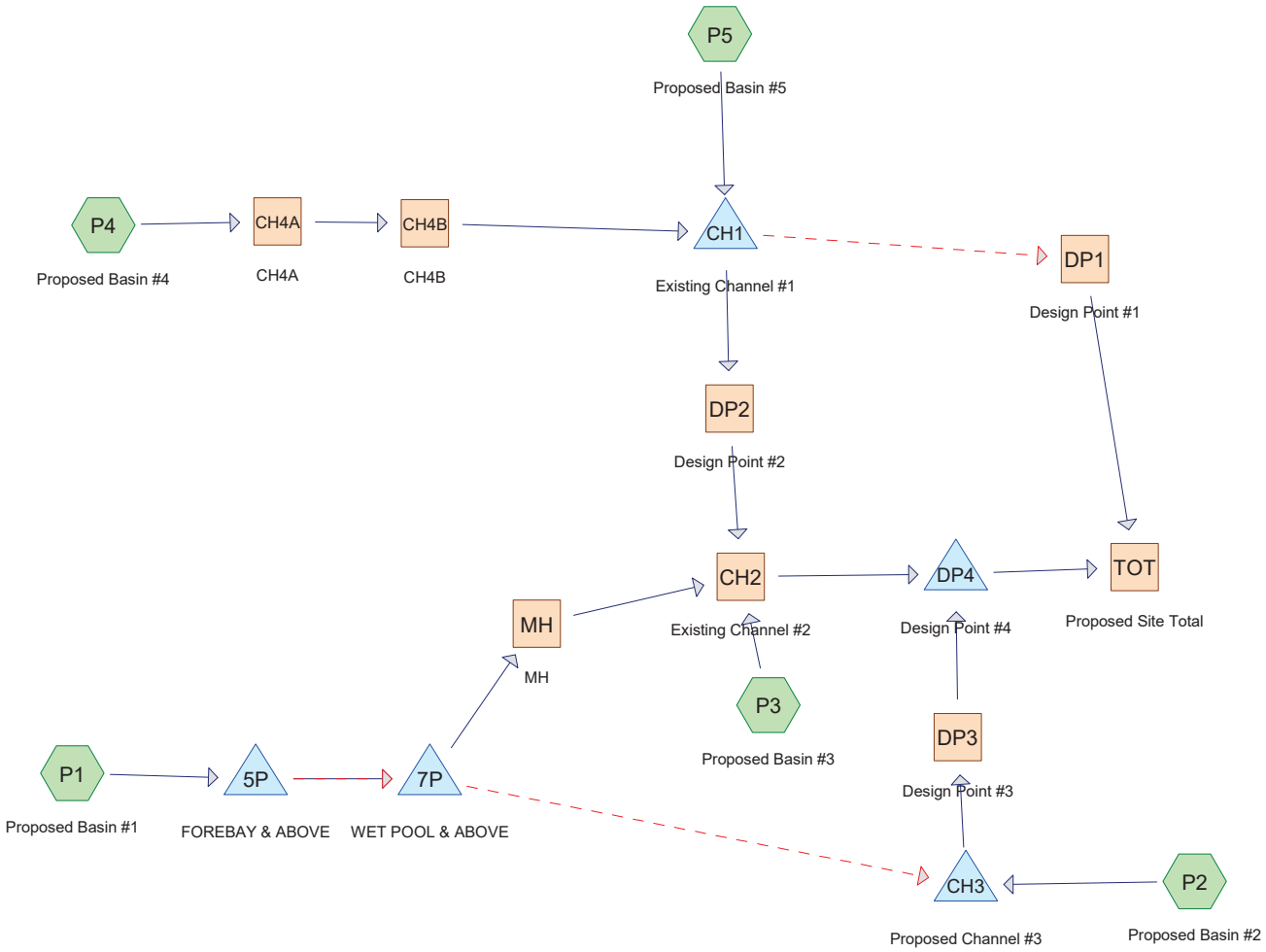
Pond CH3: Existing Channel #3



Pond DP4: Design Point #4



APPENDIX D: HYDROCAD REPORT: PROPOSED CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 22241_PR-HYDROCAD
Prepared by Robert M. Sutherland, PC, Printed 12/17/2024
HydroCAD® 10.00-25 s/n 04344 © 2019 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
40.935	80	>75% Grass cover, Good, HSG D (P1, P2, P3, P4, P5)
31.606	98	Unconnected pavement, HSG D (P1, P2)
72.541	**88**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
72.541	HSG D	P1, P2, P3, P4, P5
0.000	Other	
72.541		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	40.935	0.000	40.935	>75% Grass cover, Good	P1, P2, P3, P4, P5
0.000	0.000	0.000	31.606	0.000	31.606	Unconnected pavement	P1, P2
0.000	**0.000**	**0.000**	**72.541**	**0.000**	**72.541**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	MH	239.00	238.00	156.4	0.0064	0.011	48.0	0.0	0.0
2	7P	240.00	239.00	96.3	0.0104	0.011	48.0	0.0	0.0
3	CH1	224.47	223.87	41.3	0.0145	0.025	24.0	0.0	0.0
4	CH1	224.90	224.20	33.5	0.0209	0.011	32.0	0.0	0.0
5	CH3	223.35	221.69	69.0	0.0241	0.025	30.0	0.0	0.0
6	DP4	217.37	217.13	46.8	0.0051	0.025	24.0	0.0	0.0

Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth=1.28"
Tc=20.0 min CN=94 Runoff=49.58 cfs 4.275 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=0.52"
Tc=20.0 min UI Adjusted CN=81 Runoff=1.85 cfs 0.179 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=0.48"
Tc=20.0 min CN=80 Runoff=3.40 cfs 0.339 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=0.48"
Tc=20.0 min CN=80 Runoff=5.16 cfs 0.514 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=0.48"
Tc=20.0 min CN=80 Runoff=2.88 cfs 0.287 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=0.69' Max Vel=4.38 fps Inflow=19.67 cfs 5.259 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=19.67 cfs 5.258 af

Reach CH4A: CH4A Avg. Flow Depth=0.39' Max Vel=4.10 fps Inflow=5.16 cfs 0.514 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=5.15 cfs 0.514 af

Reach CH4B: CH4B Avg. Flow Depth=0.67' Max Vel=1.57 fps Inflow=5.15 cfs 0.514 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=4.23 cfs 0.514 af

Reach DP1: Design Point #1 Inflow=2.13 cfs 0.104 af
Outflow=2.13 cfs 0.104 af

Reach DP2: Design Point #2 Inflow=4.53 cfs 0.697 af
Outflow=4.53 cfs 0.697 af

Reach DP3: Design Point #3 Inflow=1.85 cfs 0.179 af
Outflow=1.85 cfs 0.179 af

Reach MH: MH Avg. Flow Depth=0.88' Max Vel=7.02 fps Inflow=14.36 cfs 4.222 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=14.36 cfs 4.222 af

Reach TOT: Proposed Site Total Inflow=24.13 cfs 5.541 af
Outflow=24.13 cfs 5.541 af

Pond 5P: FOREBAY & ABOVE Peak Elev=241.55' Storage=93,834 cf Inflow=49.58 cfs 4.275 af
Outflow=32.79 cfs 4.252 af

Pond 7P: WET POOL & ABOVE Peak Elev=241.55' Storage=105,920 cf Inflow=32.79 cfs 4.252 af
Primary=14.36 cfs 4.222 af Secondary=0.00 cfs 0.000 af Outflow=14.36 cfs 4.222 af

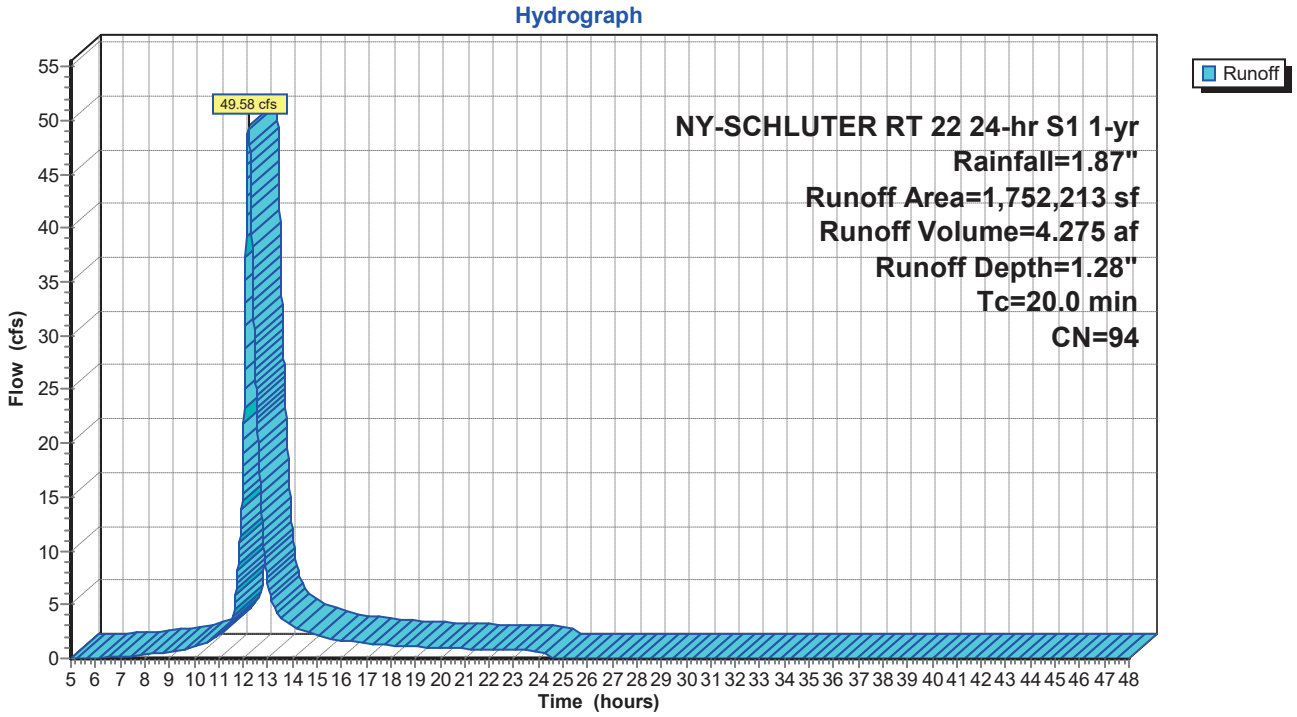
Pond CH1: Existing Channel #1 Peak Elev=225.54' Storage=146 cf Inflow=6.67 cfs 0.801 af
Primary=4.53 cfs 0.697 af Secondary=2.13 cfs 0.104 af Outflow=6.67 cfs 0.801 af

Pond CH3: Proposed Channel #3 Peak Elev=223.96' Storage=25 cf Inflow=1.85 cfs 0.179 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=1.85 cfs 0.179 af

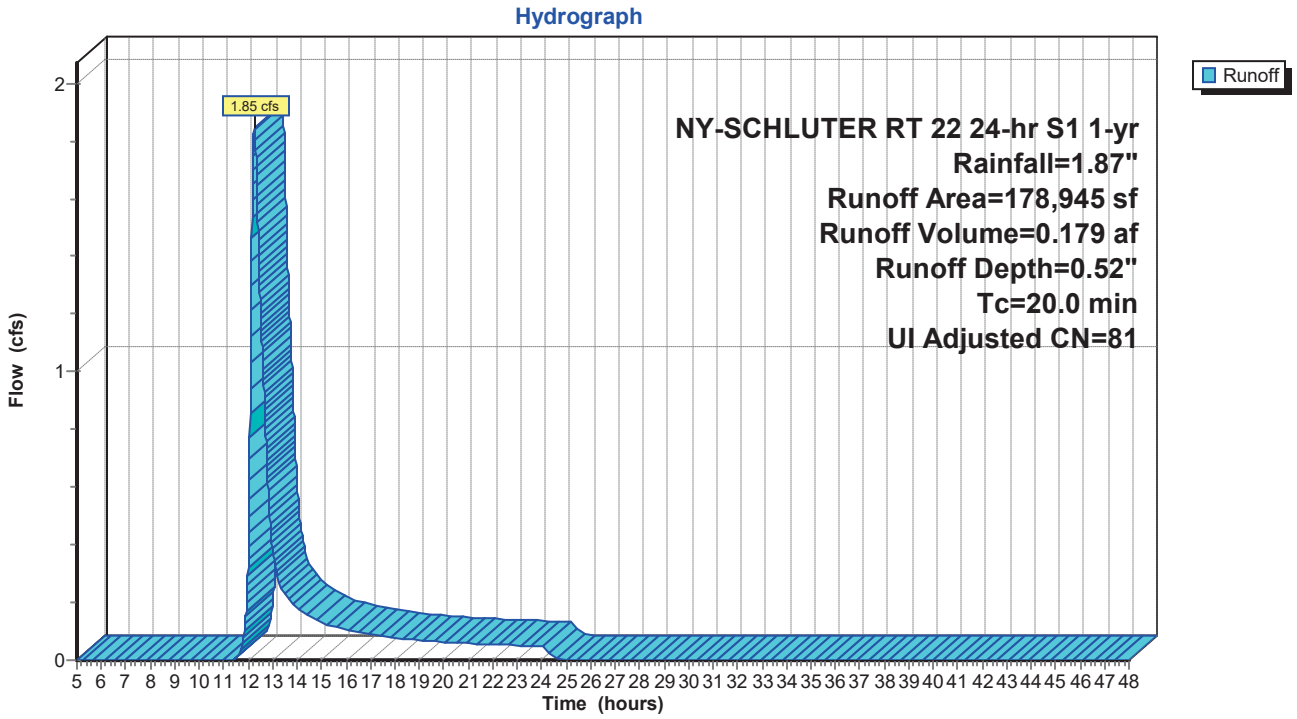
Pond DP4: Design Point #4 Peak Elev=222.02' Storage=4,154 cf Inflow=20.76 cfs 5.438 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=22.41 cfs 5.438 af

Total Runoff Area = 72.541 ac Runoff Volume = 5.594 af Average Runoff Depth = 0.93"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

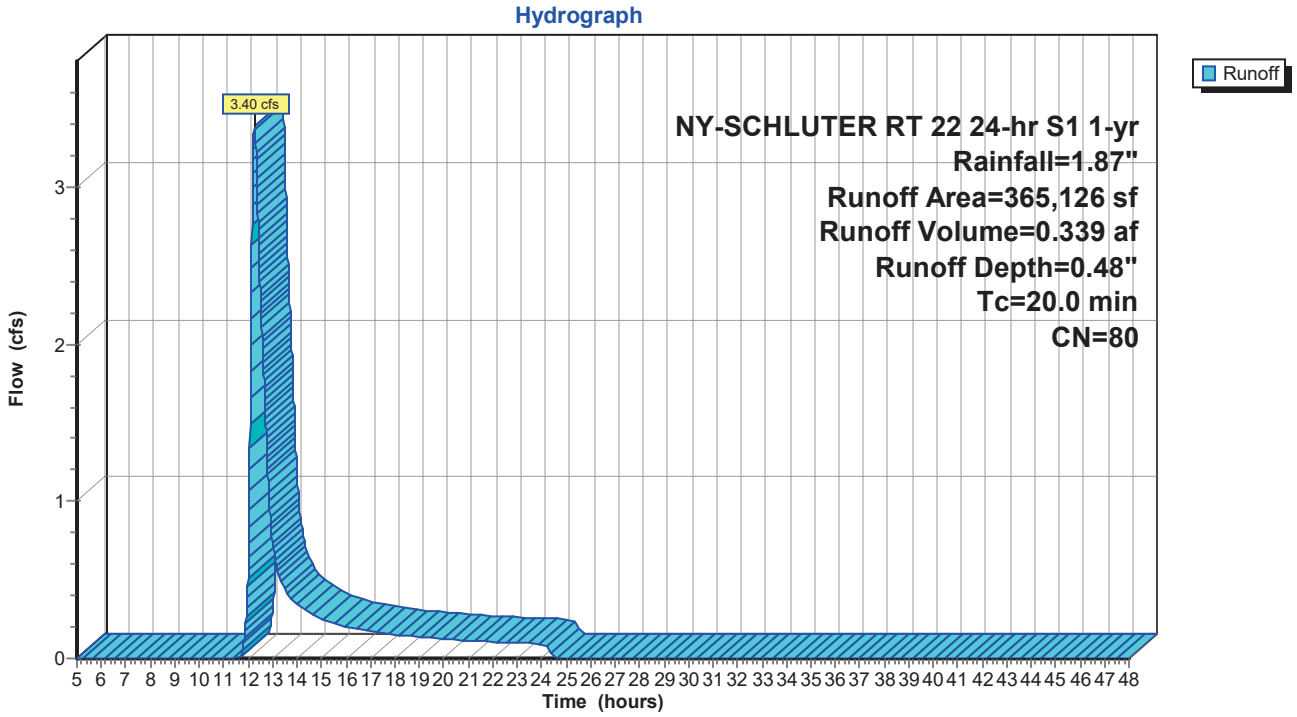
Subcatchment P1: Proposed Basin #1



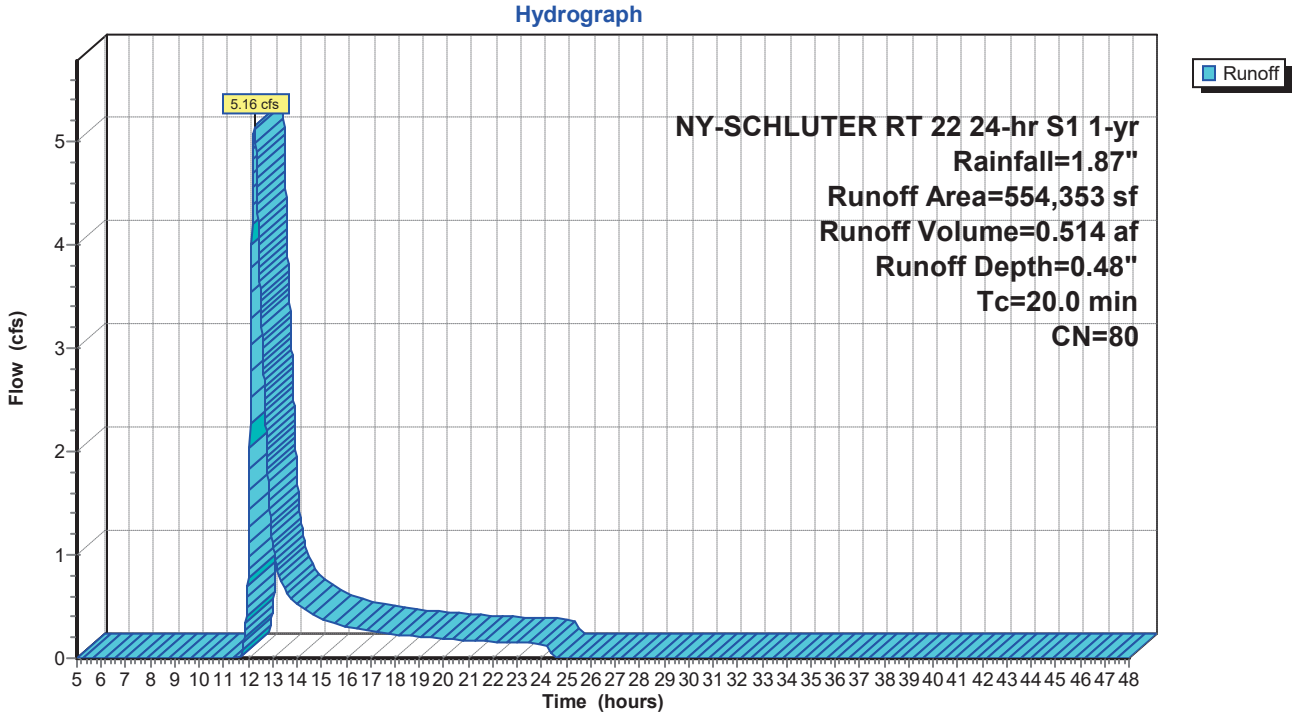
Subcatchment P2: Proposed Basin #2



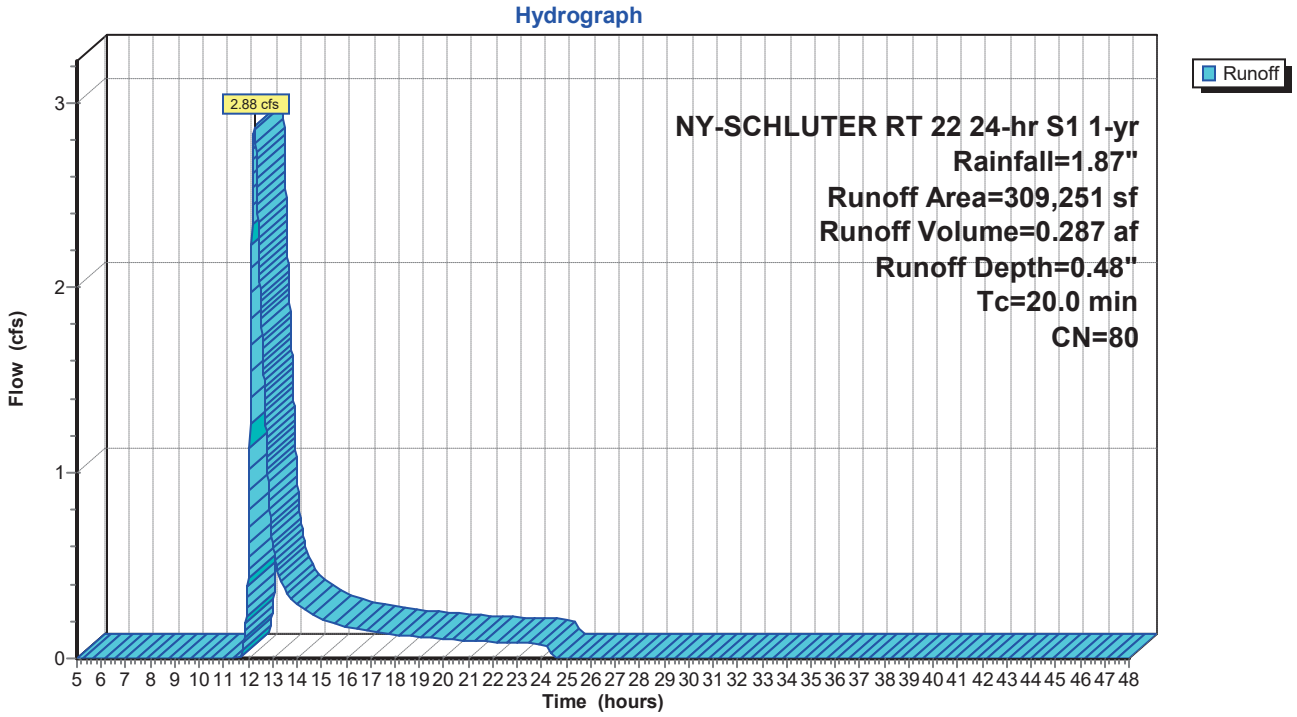
Subcatchment P3: Proposed Basin #3



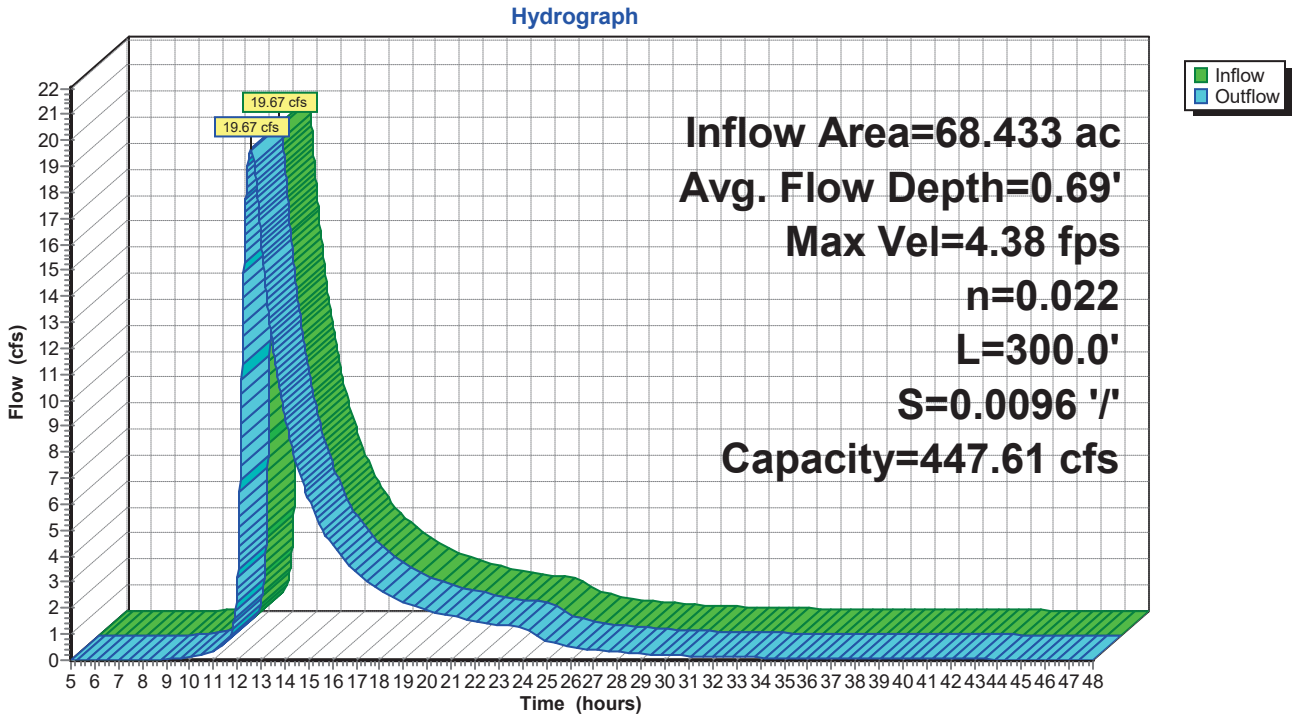
Subcatchment P4: Proposed Basin #4



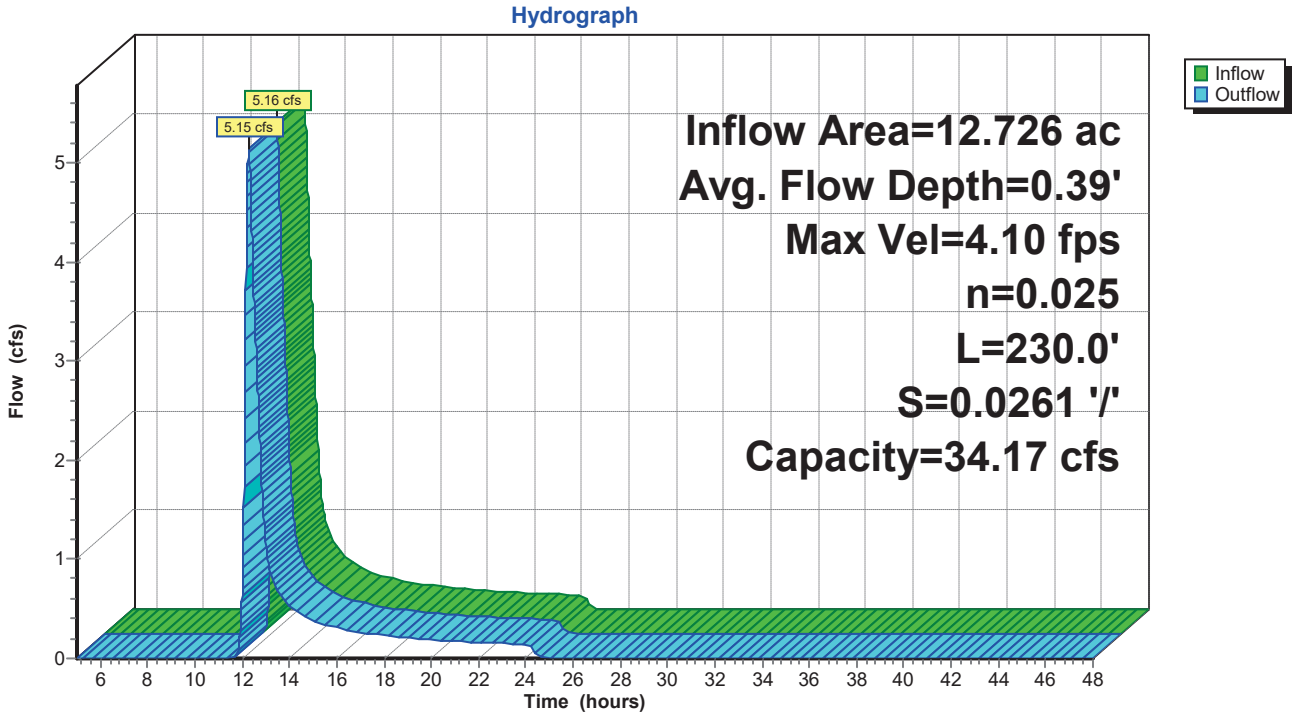
Subcatchment P5: Proposed Basin #5



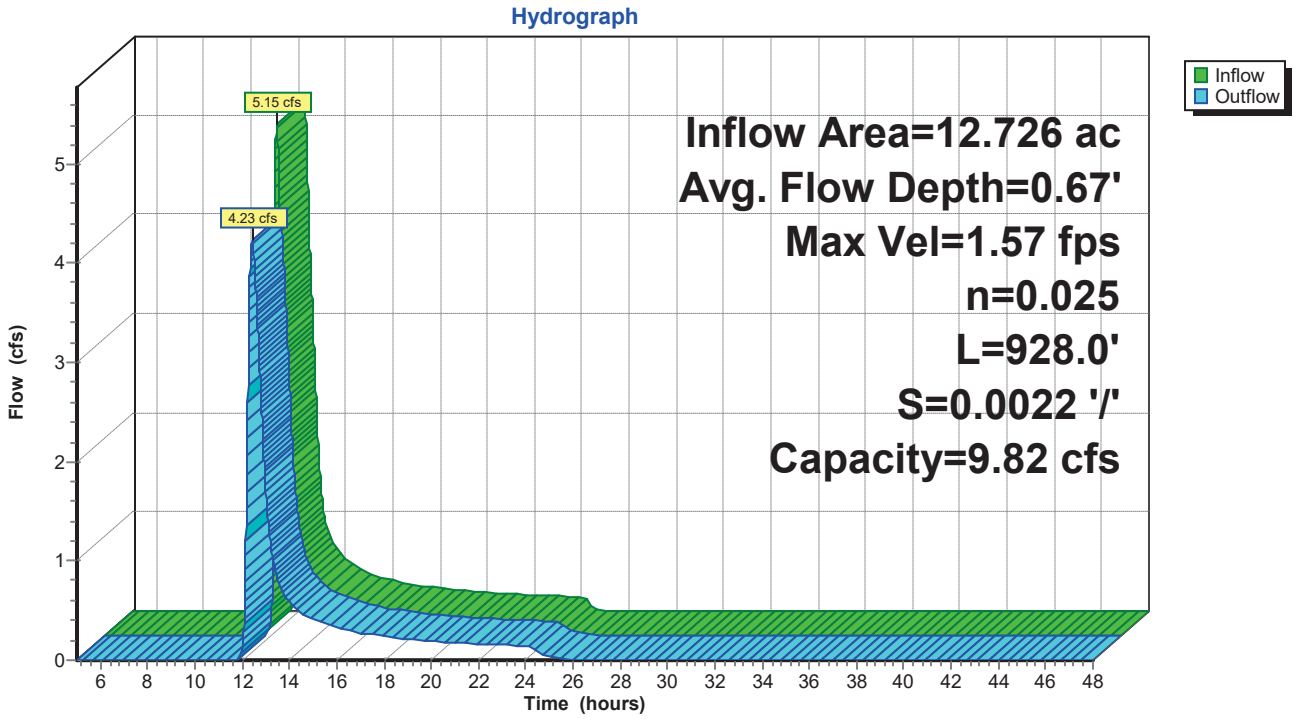
Reach CH2: Existing Channel #2



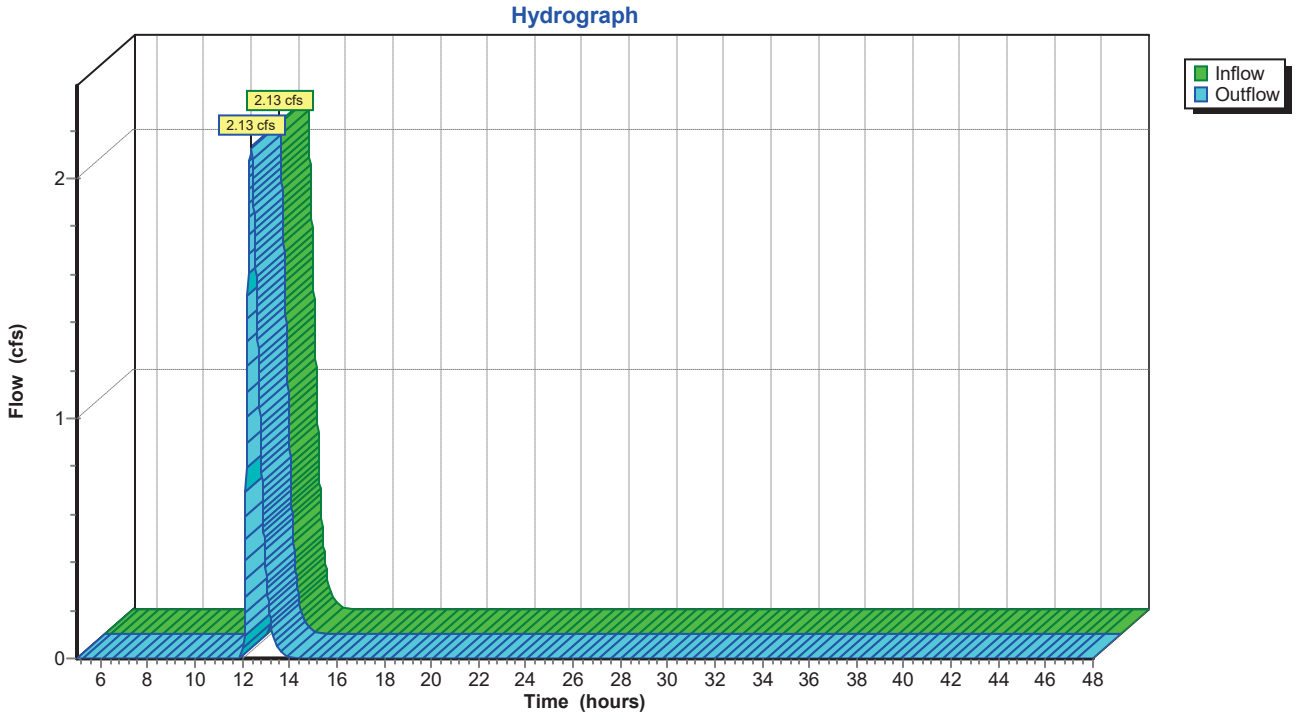
Reach CH4A: CH4A



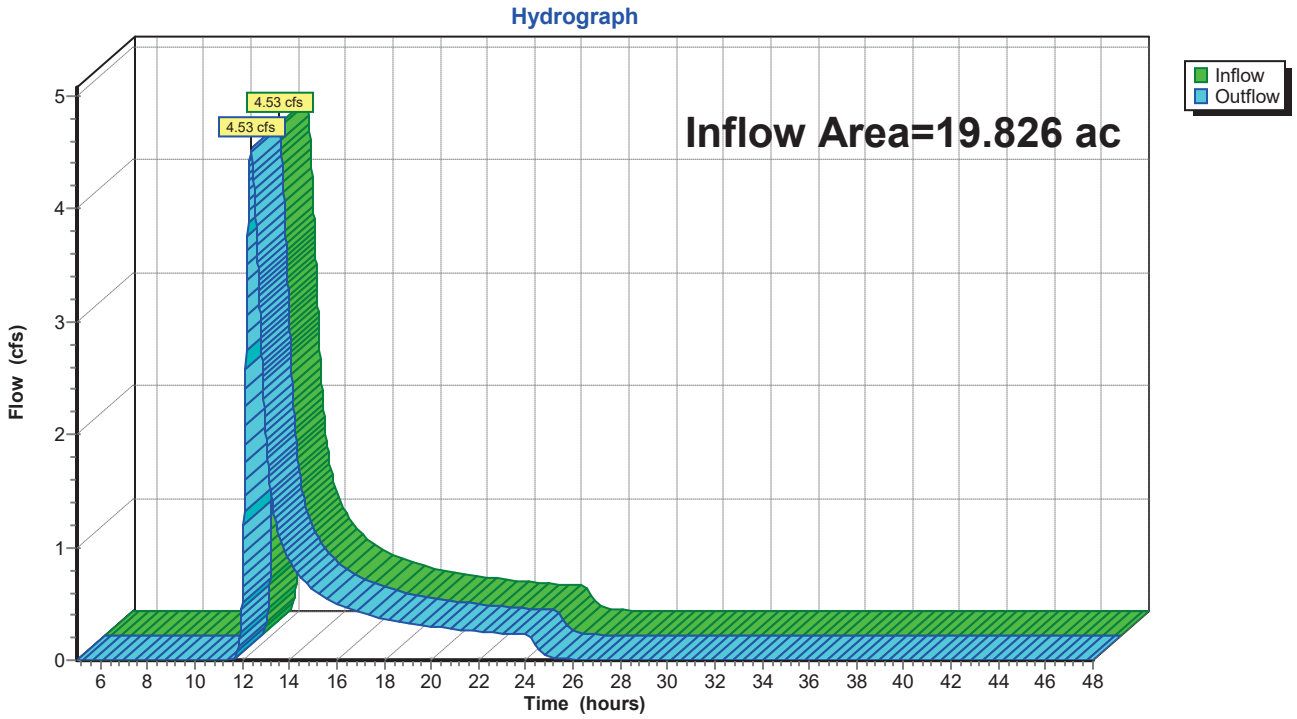
Reach CH4B: CH4B



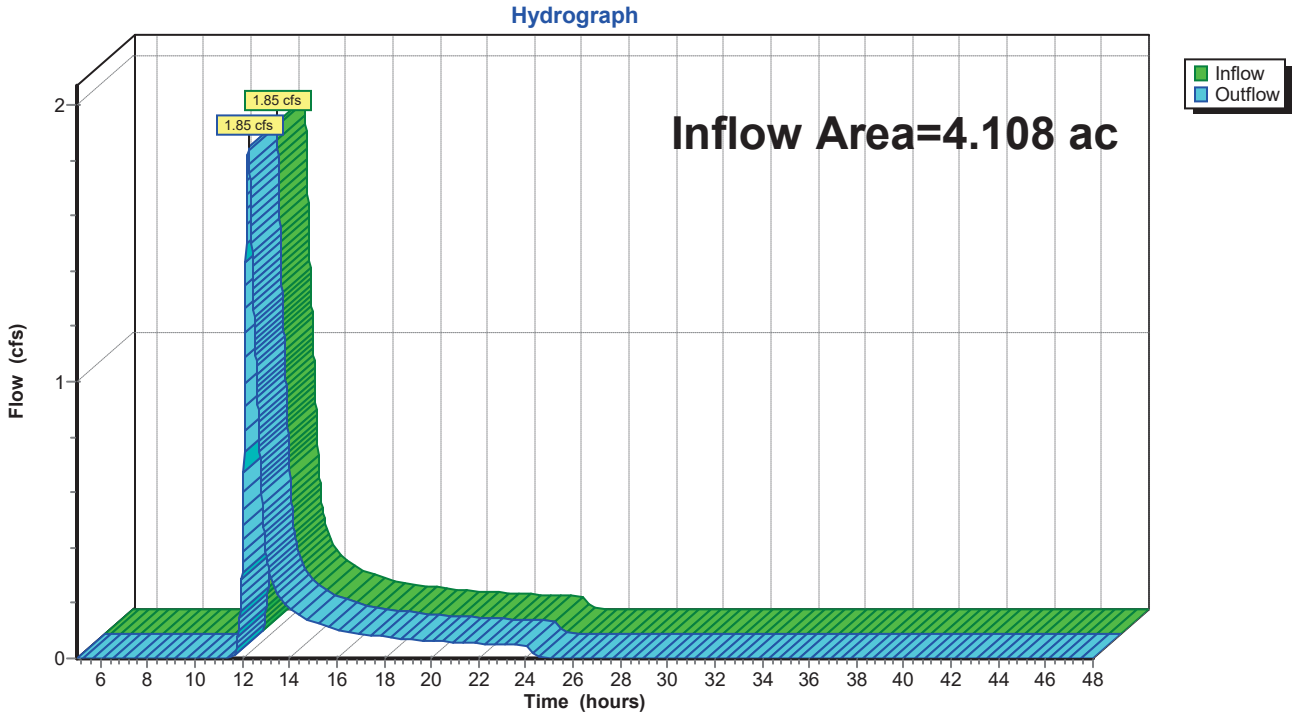
Reach DP1: Design Point #1



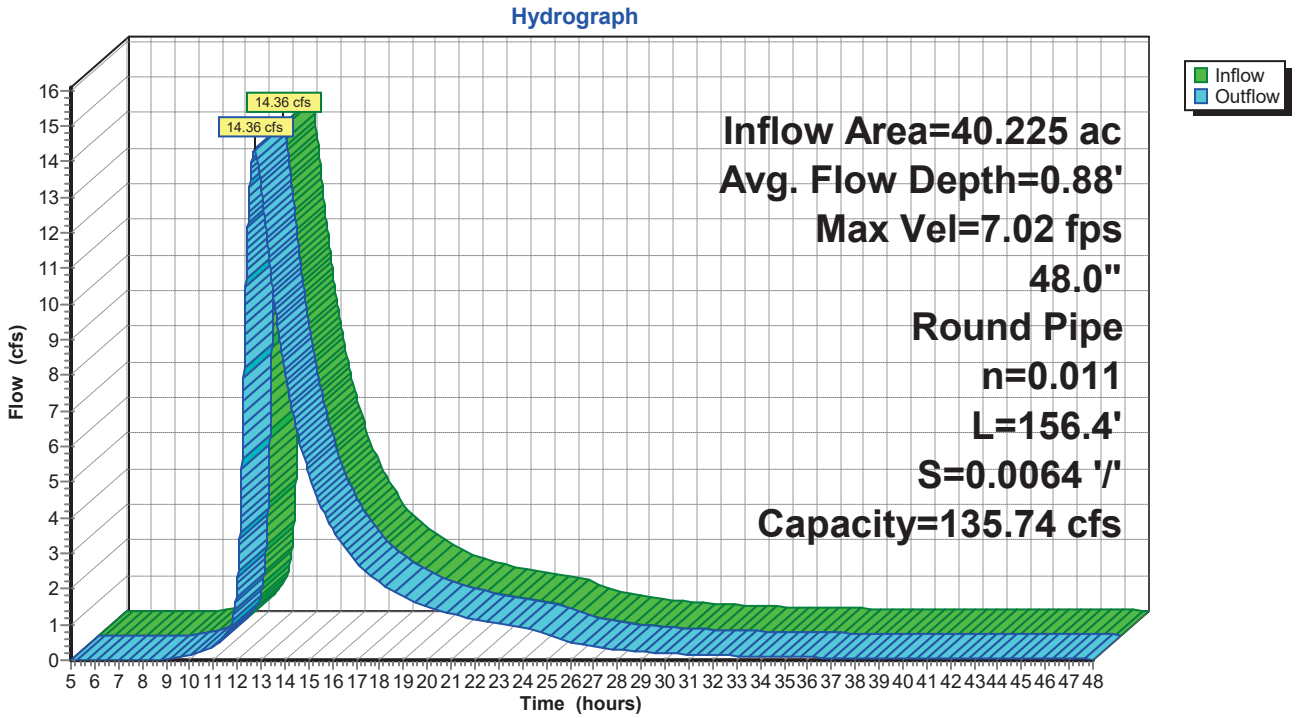
Reach DP2: Design Point #2



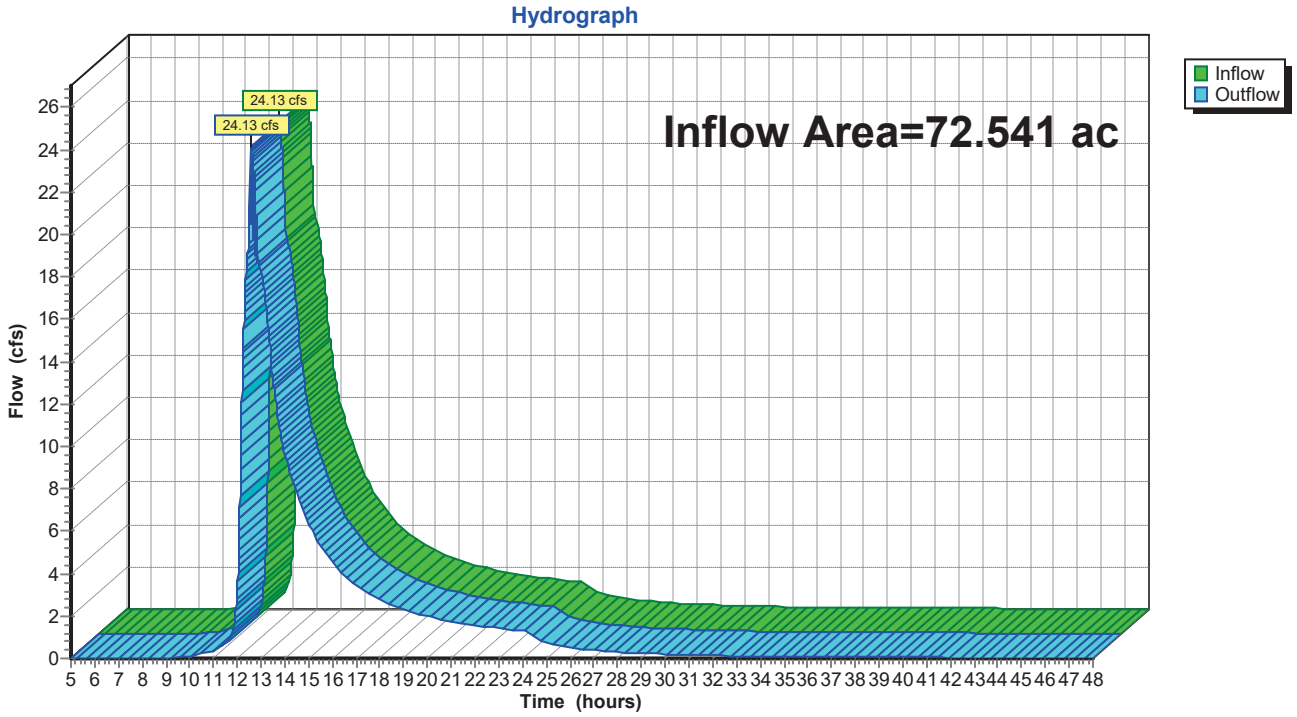
Reach DP3: Design Point #3



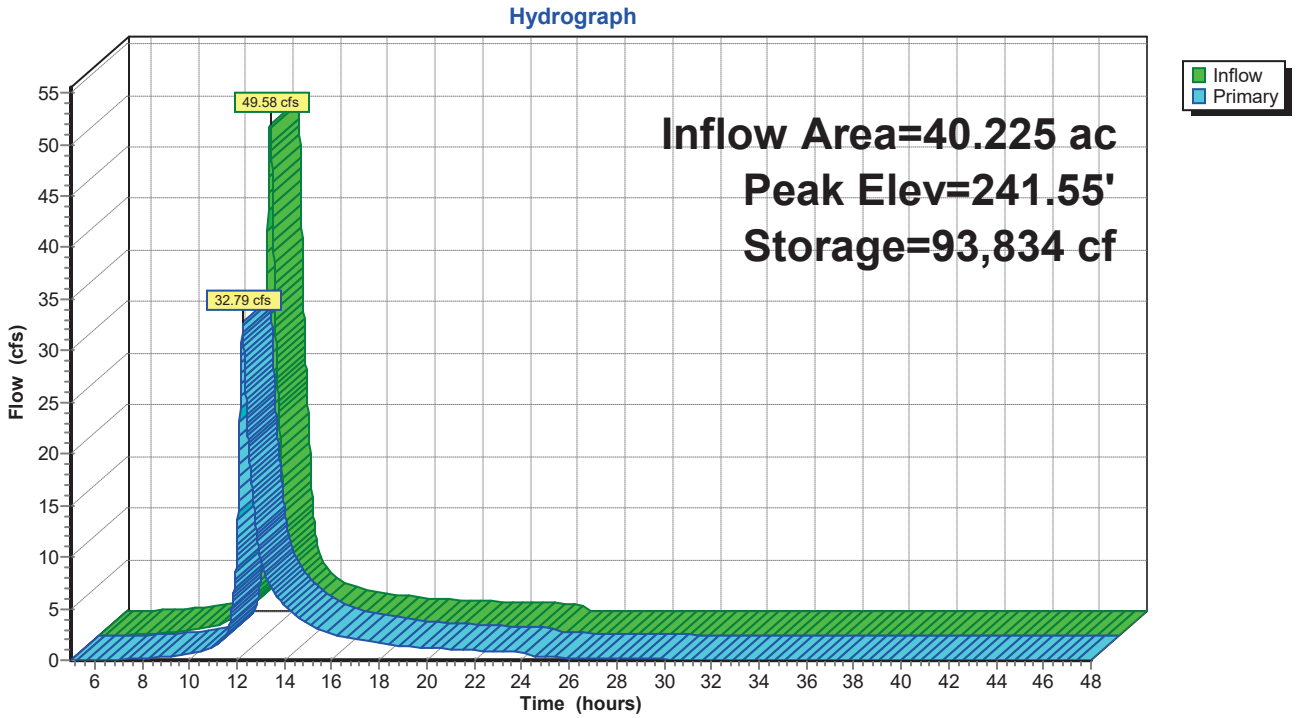
Reach MH: MH



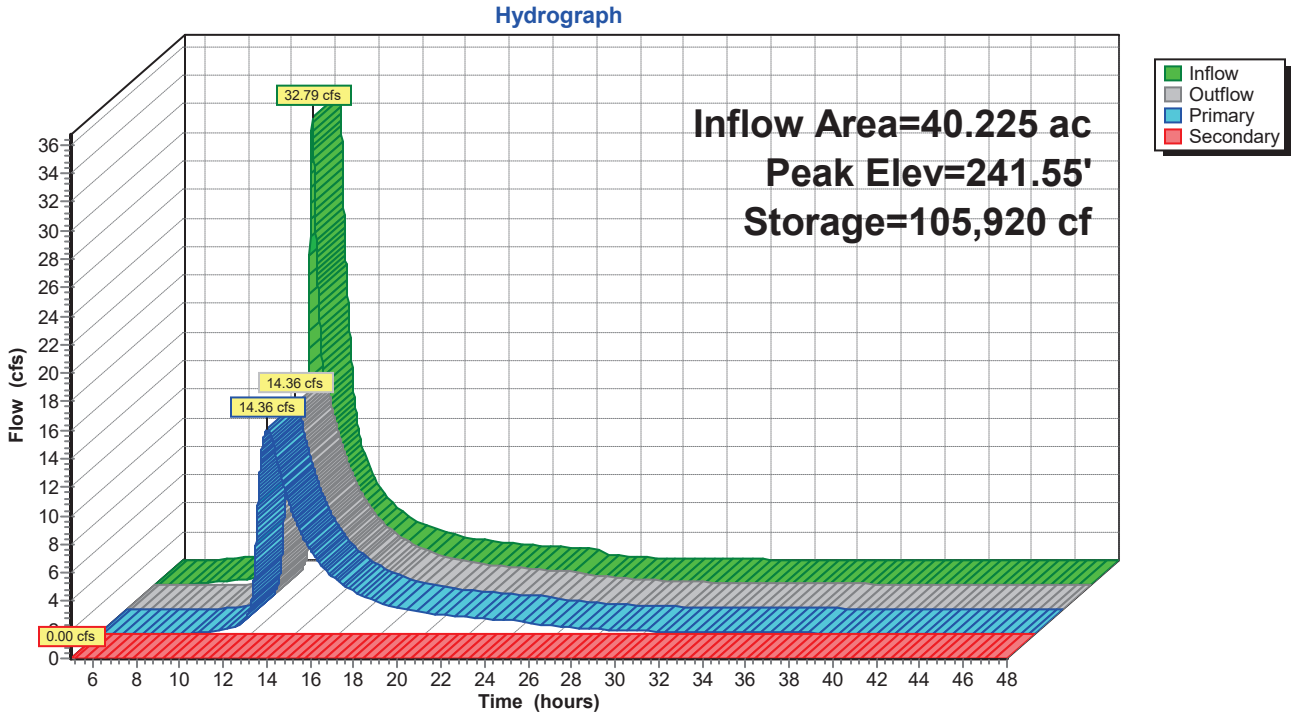
Reach TOT: Proposed Site Total



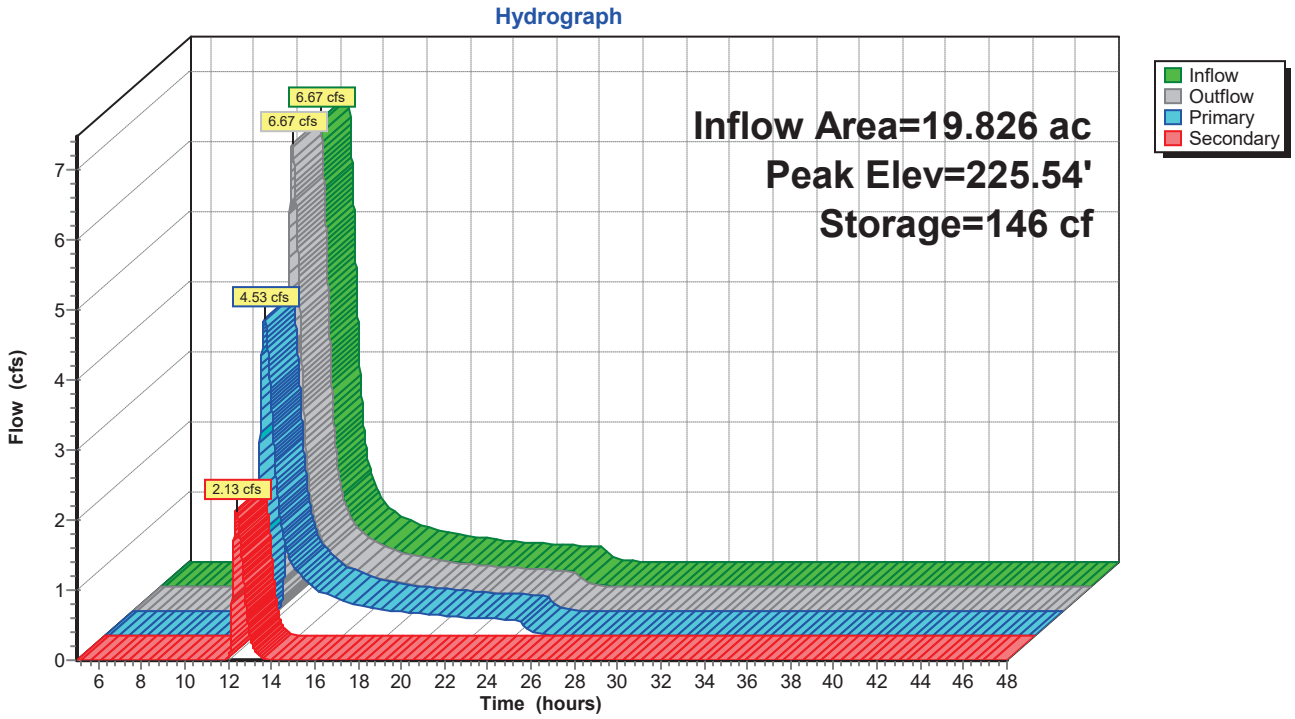
Pond 5P: FOREBAY & ABOVE



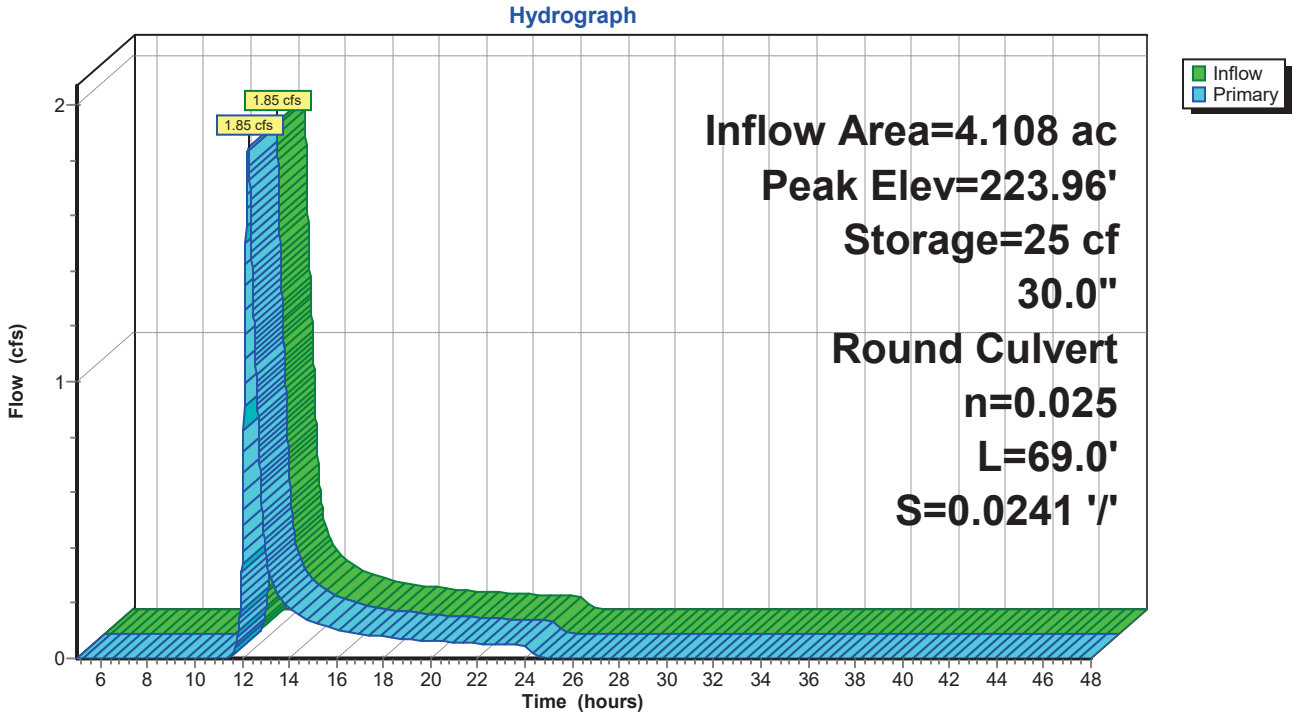
Pond 7P: WET POOL & ABOVE



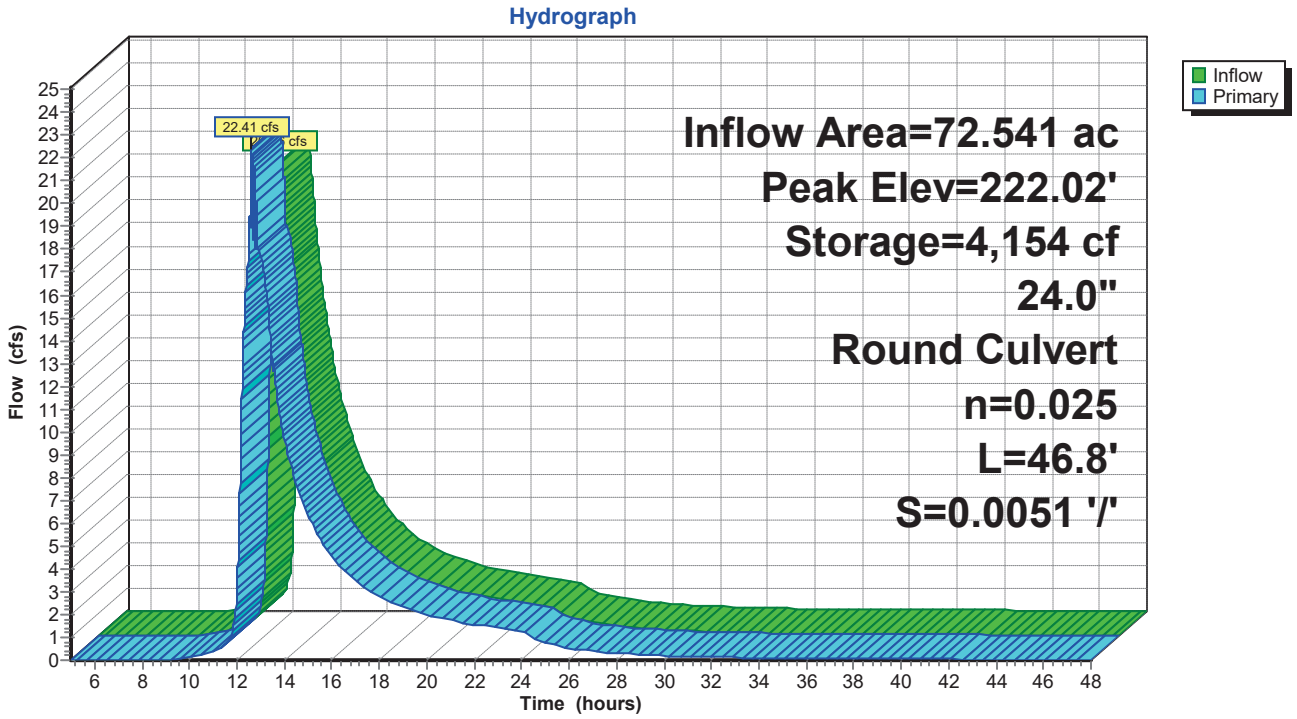
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>1.53"
Tc=20.0 min CN=94 Runoff=55.73 cfs 5.121 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=0.70"
Tc=20.0 min UI Adjusted CN=81 Runoff=2.42 cfs 0.238 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=0.65"
Tc=20.0 min CN=80 Runoff=4.53 cfs 0.454 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=0.65"
Tc=20.0 min CN=80 Runoff=6.87 cfs 0.689 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=0.65"
Tc=20.0 min CN=80 Runoff=3.83 cfs 0.384 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=0.77' Max Vel=4.66 fps Inflow=24.17 cfs 6.430 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=24.16 cfs 6.430 af

Reach CH4A: CH4A Avg. Flow Depth=0.46' Max Vel=4.45 fps Inflow=6.87 cfs 0.689 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=6.85 cfs 0.689 af

Reach CH4B: CH4B Avg. Flow Depth=0.78' Max Vel=1.71 fps Inflow=6.85 cfs 0.689 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=5.77 cfs 0.689 af

Reach DP1: Design Point #1 Inflow=3.28 cfs 0.165 af
Outflow=3.28 cfs 0.165 af

Reach DP2: Design Point #2 Inflow=5.82 cfs 0.908 af
Outflow=5.82 cfs 0.908 af

Reach DP3: Design Point #3 Inflow=2.41 cfs 0.238 af
Outflow=2.41 cfs 0.238 af

Reach MH: MH Avg. Flow Depth=0.97' Max Vel=7.42 fps Inflow=17.38 cfs 5.068 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=17.38 cfs 5.068 af

Reach TOT: Proposed Site Total Inflow=28.71 cfs 6.833 af
Outflow=28.71 cfs 6.833 af

Pond 5P: FOREBAY & ABOVE Peak Elev=241.72' Storage=98,757 cf Inflow=55.73 cfs 5.121 af
Outflow=36.03 cfs 5.098 af

Pond 7P: WET POOL & ABOVE Peak Elev=241.72' Storage=112,154 cf Inflow=36.03 cfs 5.098 af
Primary=17.38 cfs 5.068 af Secondary=0.00 cfs 0.000 af Outflow=17.38 cfs 5.068 af

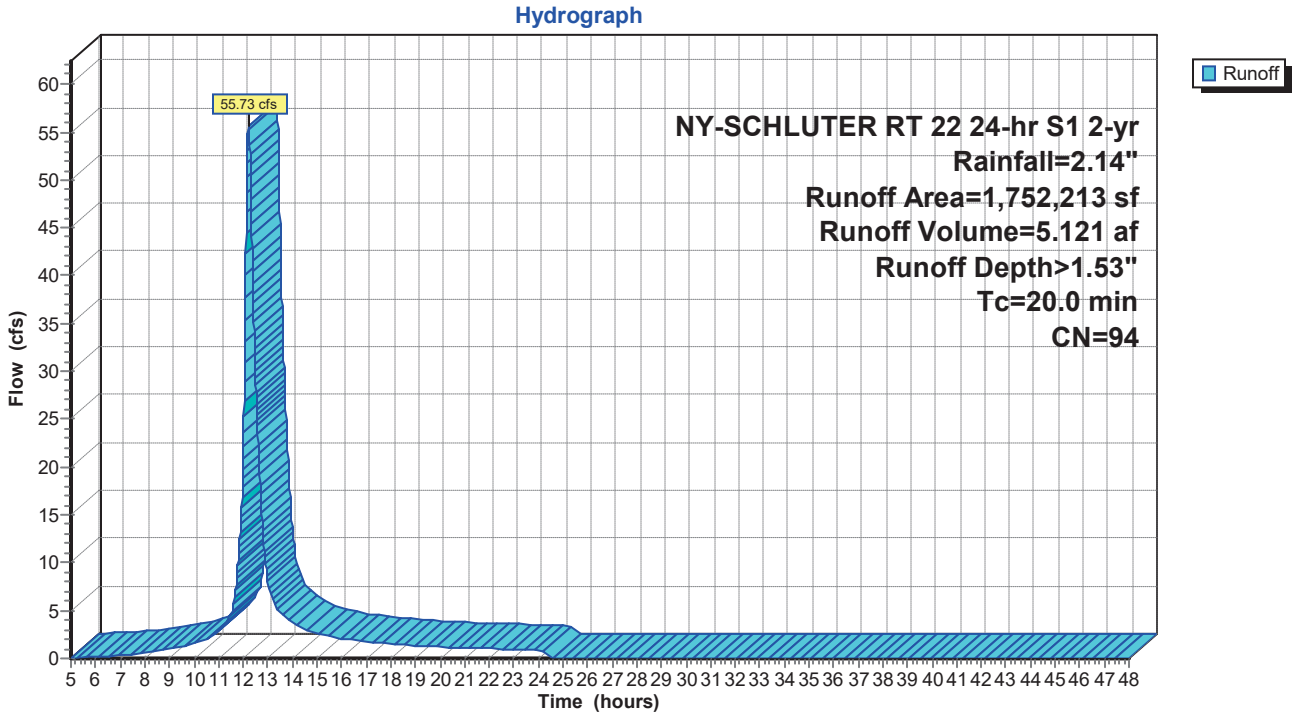
Pond CH1: Existing Channel #1 Peak Elev=225.71' Storage=222 cf Inflow=9.11 cfs 1.073 af
Primary=5.82 cfs 0.908 af Secondary=3.28 cfs 0.165 af Outflow=9.10 cfs 1.073 af

Pond CH3: Proposed Channel #3 Peak Elev=224.05' Storage=37 cf Inflow=2.42 cfs 0.238 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=2.41 cfs 0.238 af

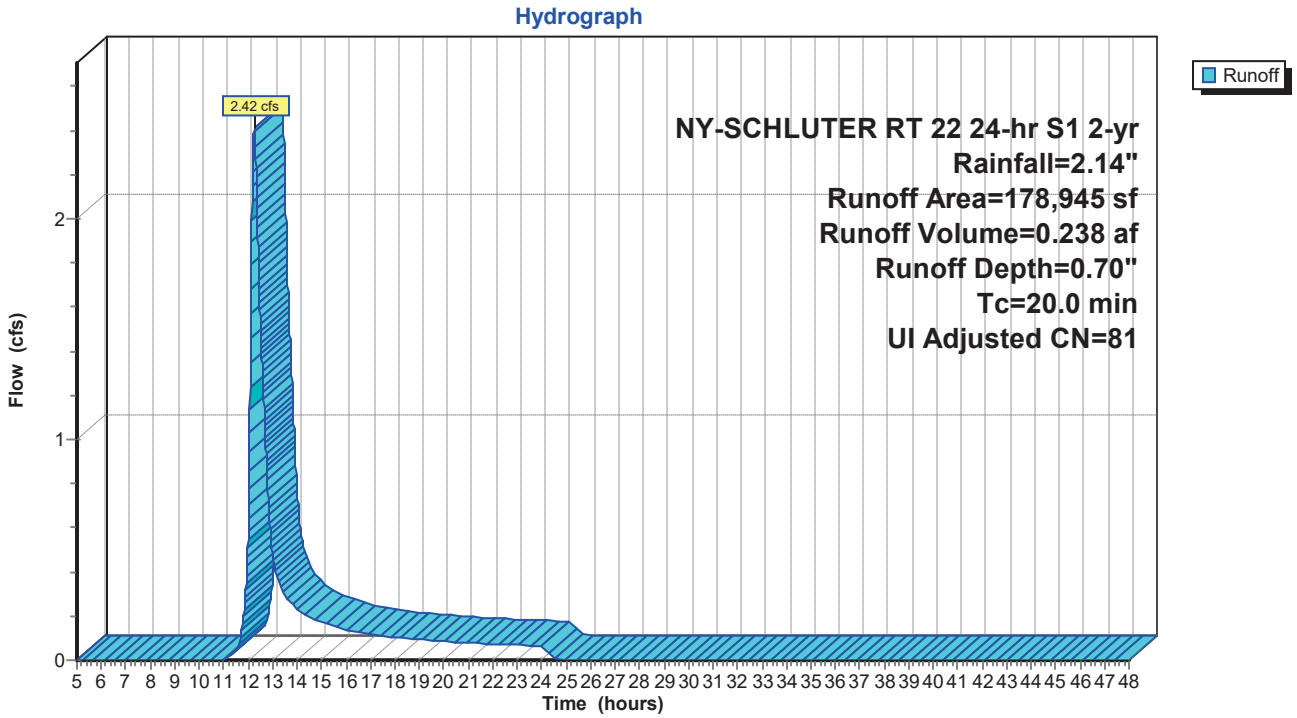
Pond DP4: Design Point #4 Peak Elev=222.97' Storage=4,154 cf Inflow=25.66 cfs 6.667 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=25.83 cfs 6.667 af

Total Runoff Area = 72.541 ac Runoff Volume = 6.886 af Average Runoff Depth = 1.14"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

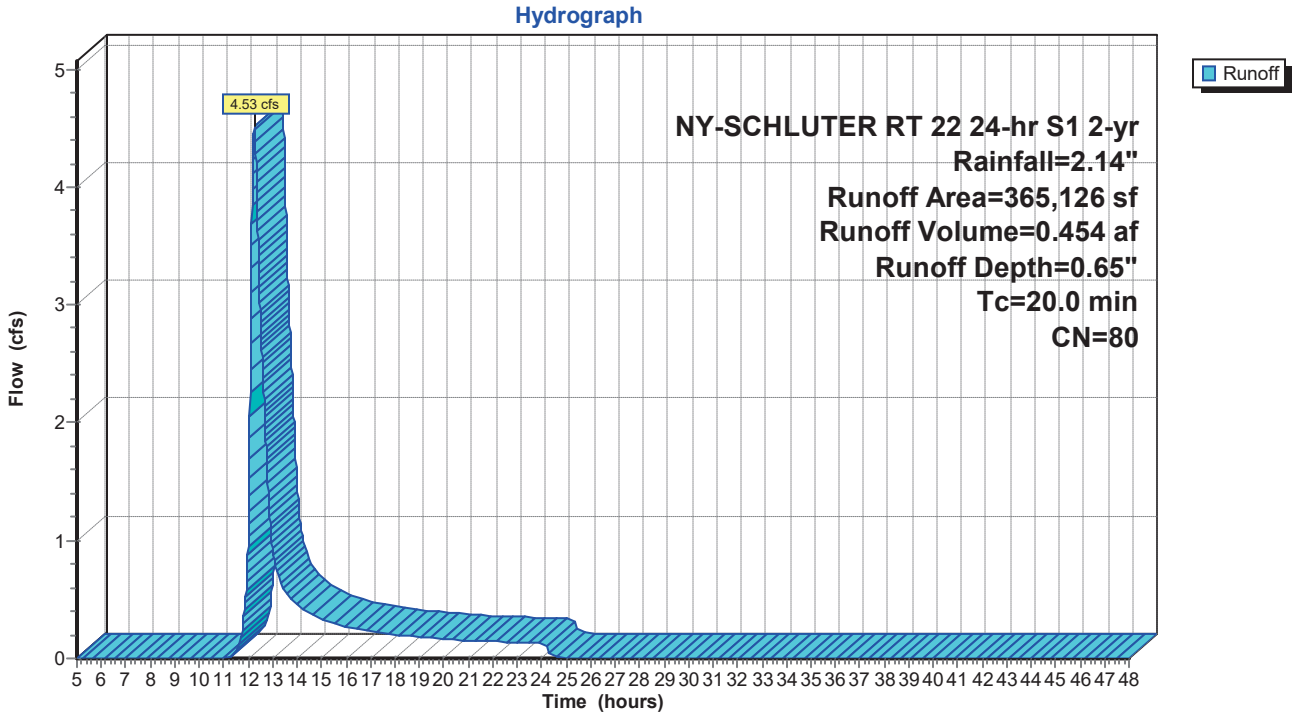
Subcatchment P1: Proposed Basin #1



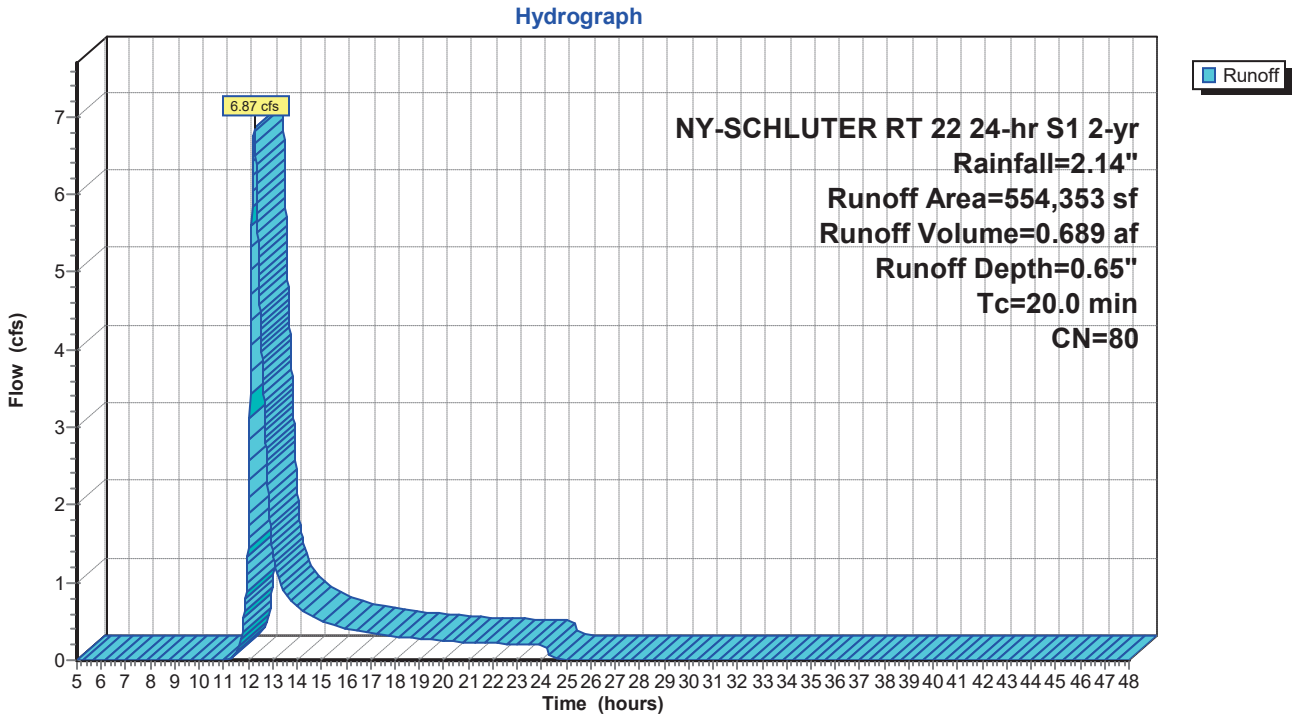
Subcatchment P2: Proposed Basin #2



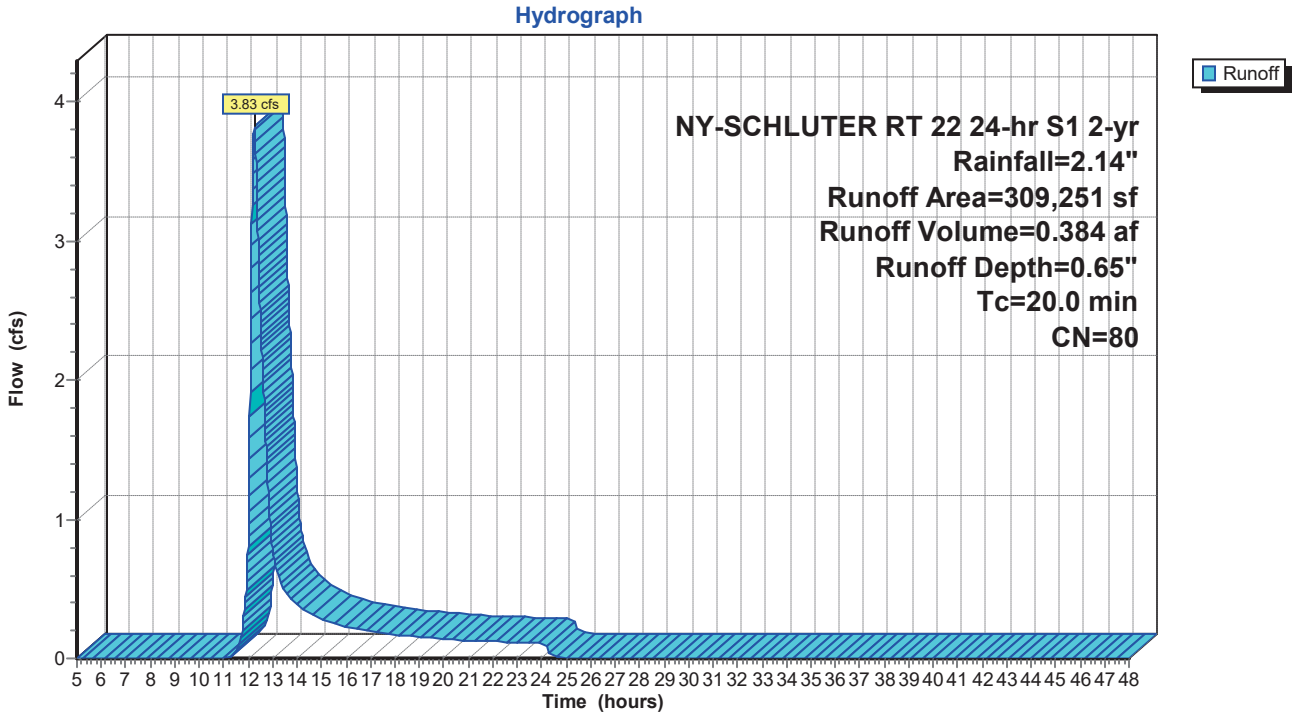
Subcatchment P3: Proposed Basin #3



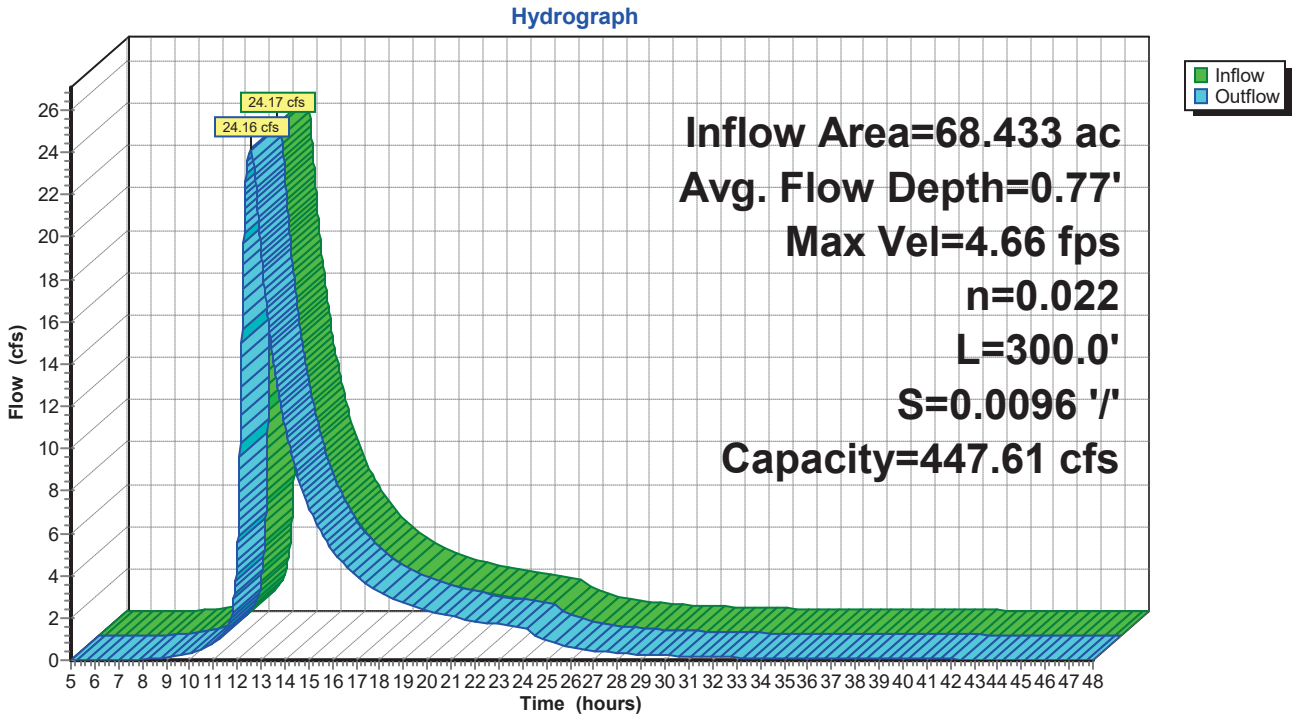
Subcatchment P4: Proposed Basin #4



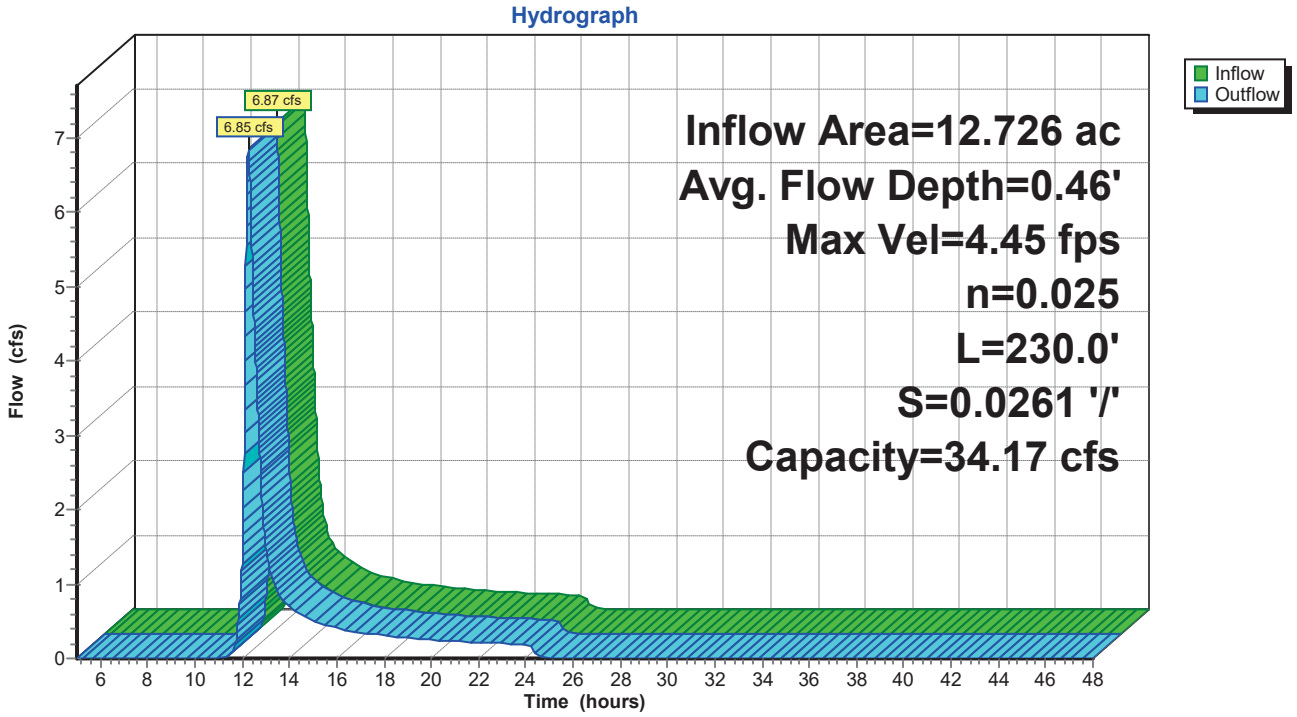
Subcatchment P5: Proposed Basin #5



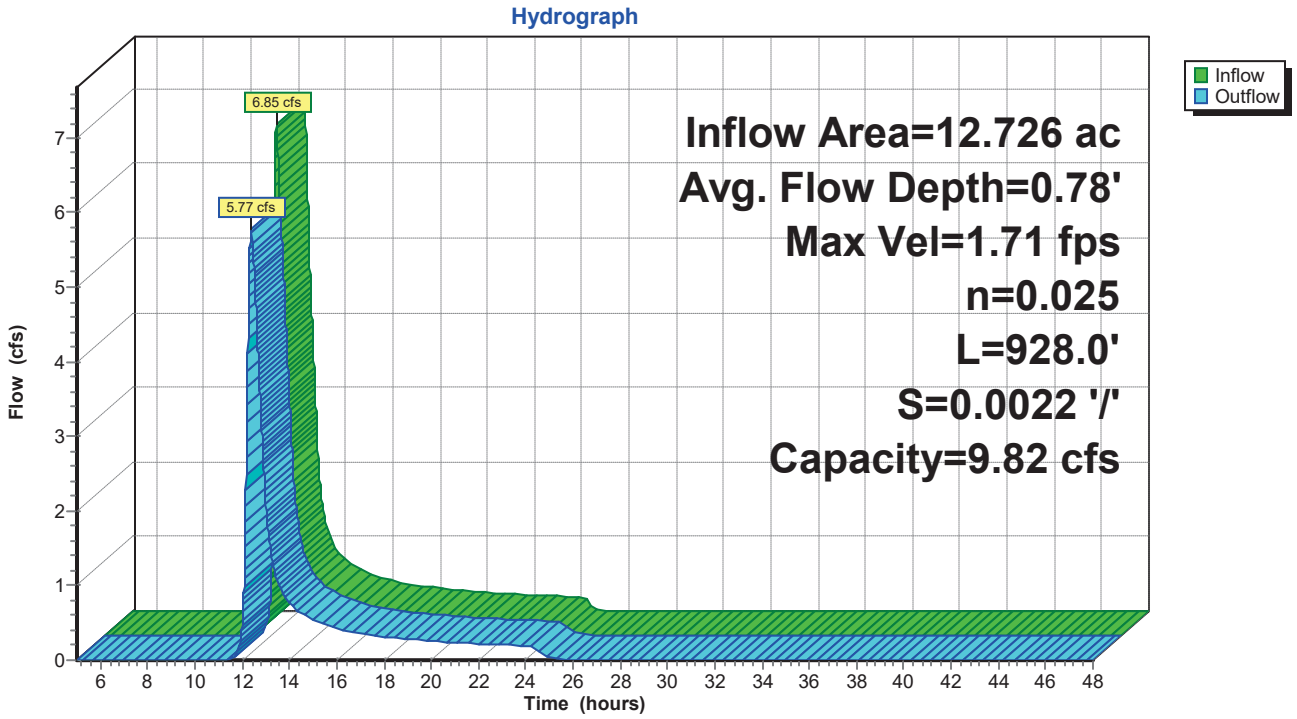
Reach CH2: Existing Channel #2



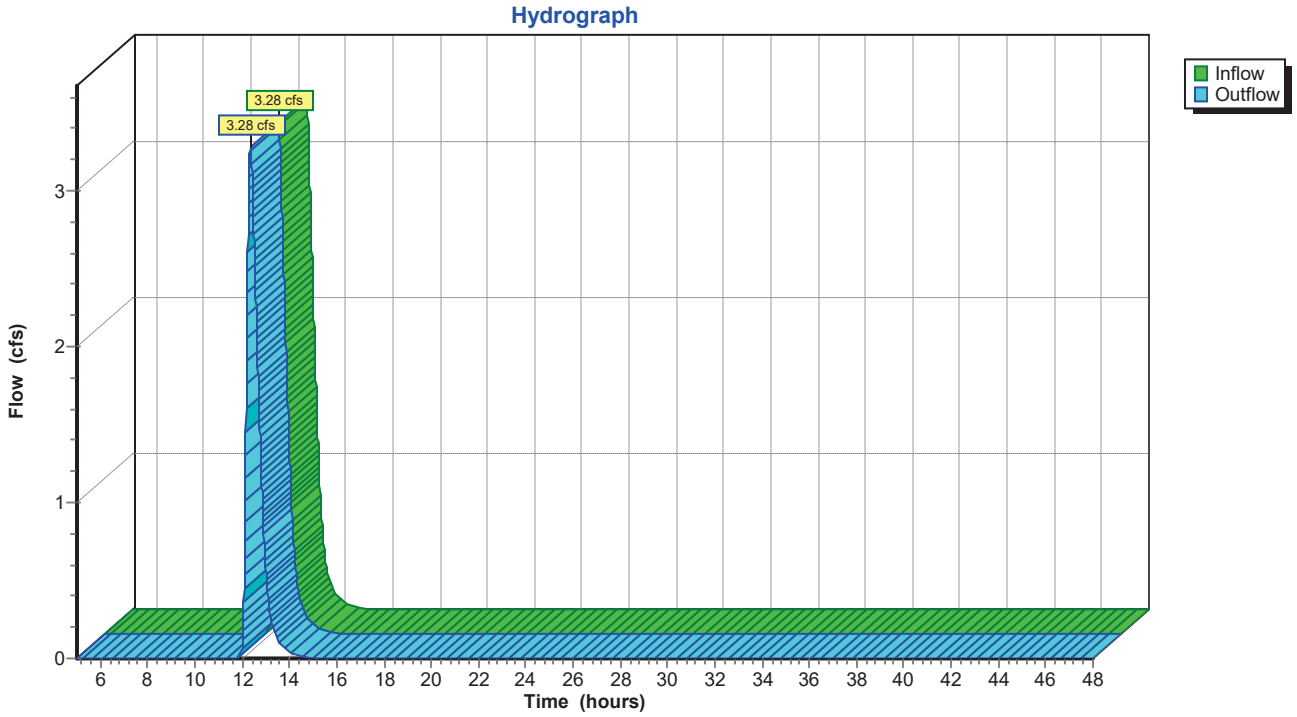
Reach CH4A: CH4A



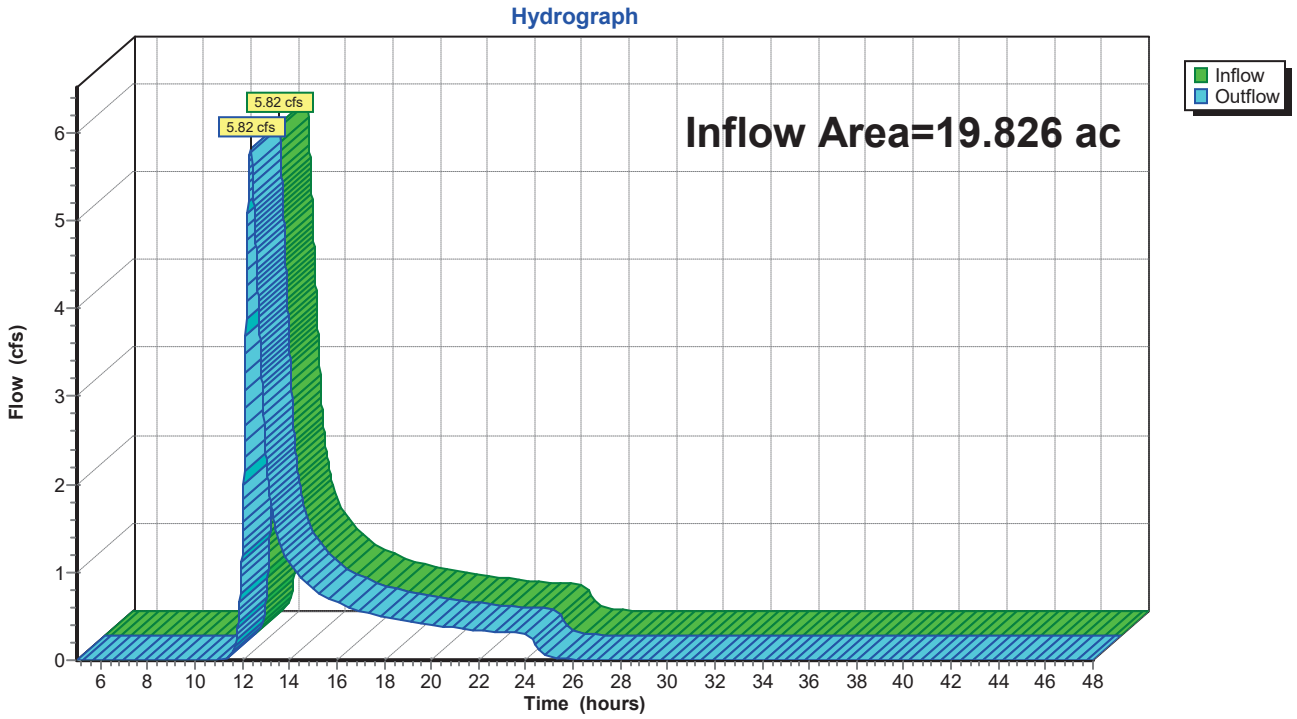
Reach CH4B: CH4B



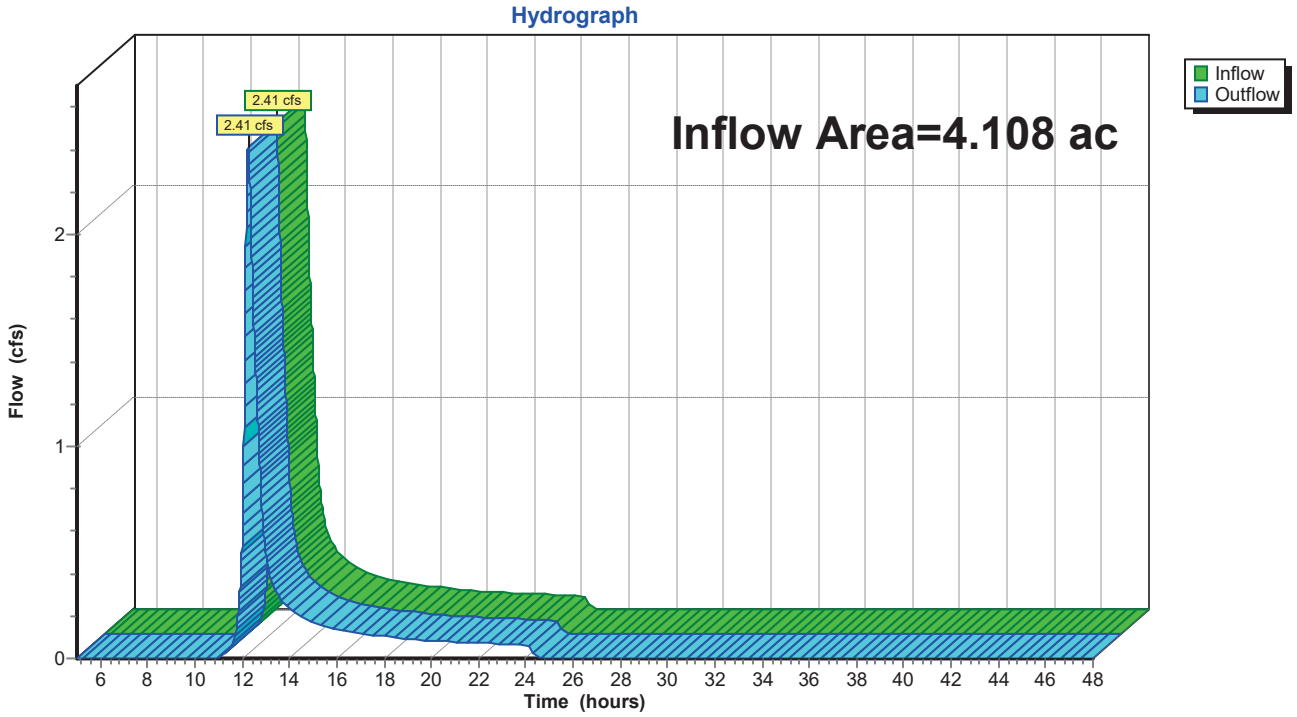
Reach DP1: Design Point #1



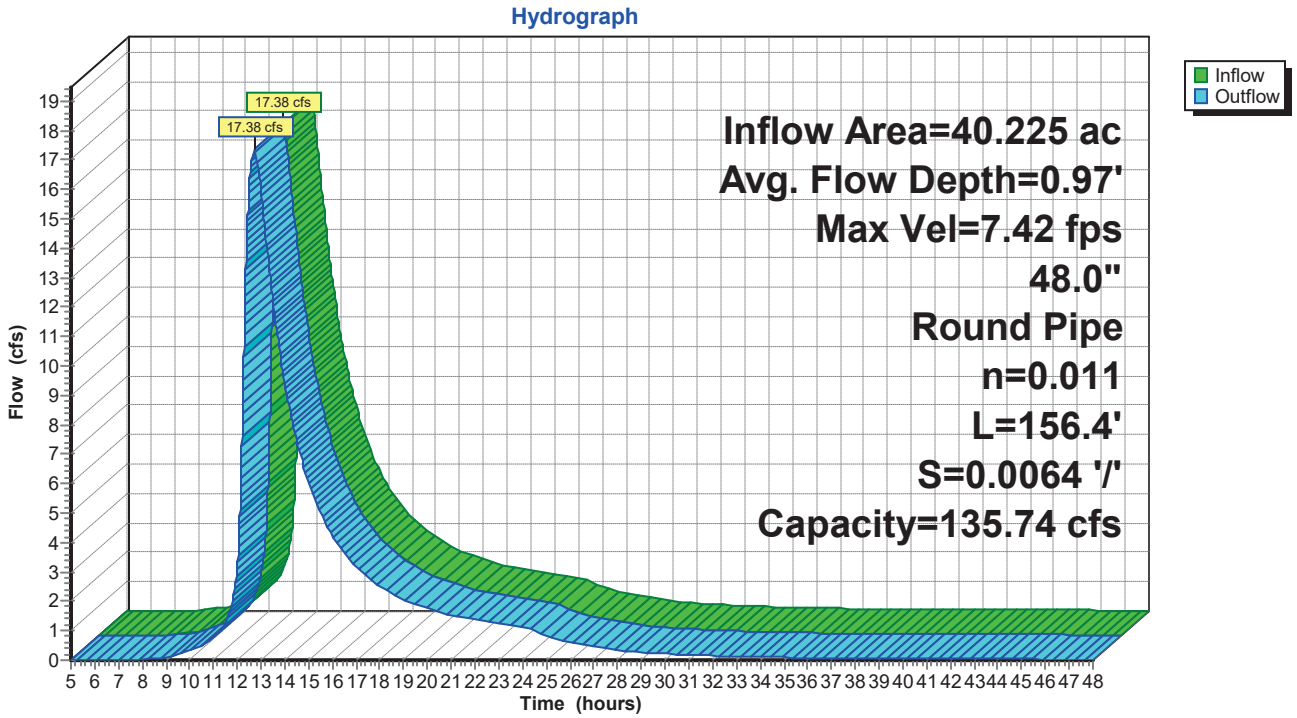
Reach DP2: Design Point #2



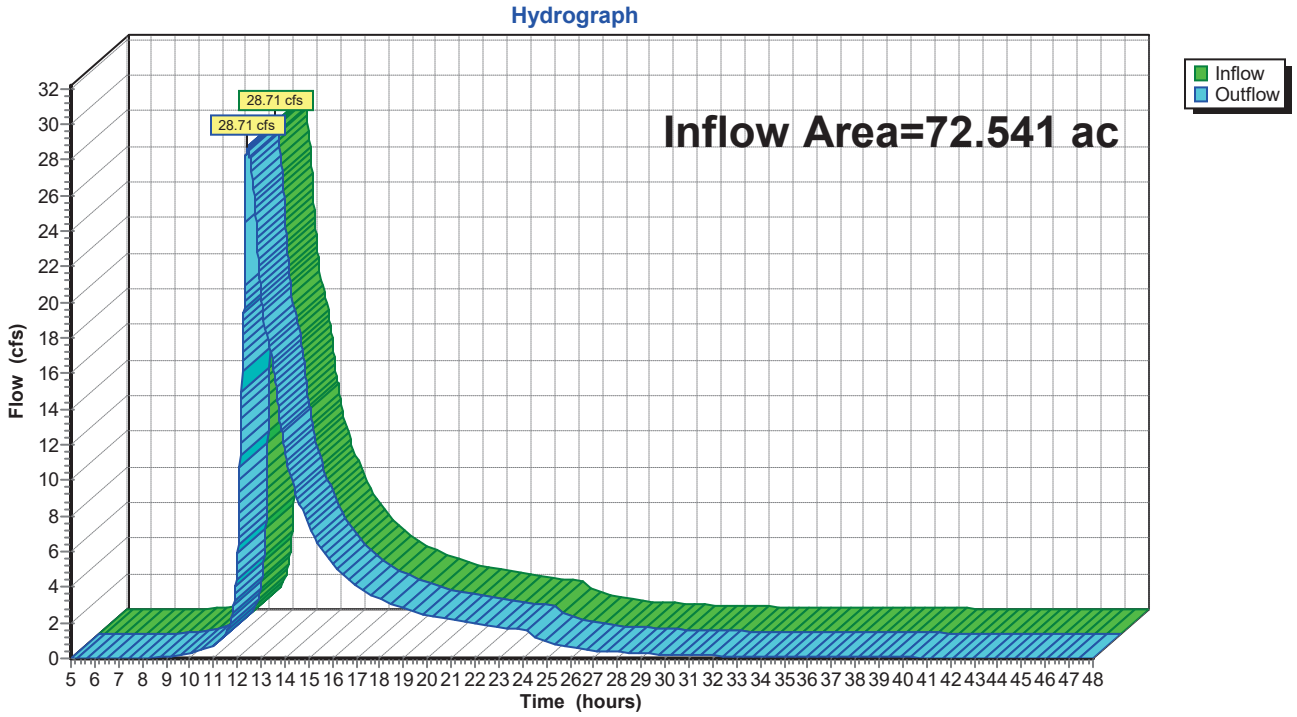
Reach DP3: Design Point #3



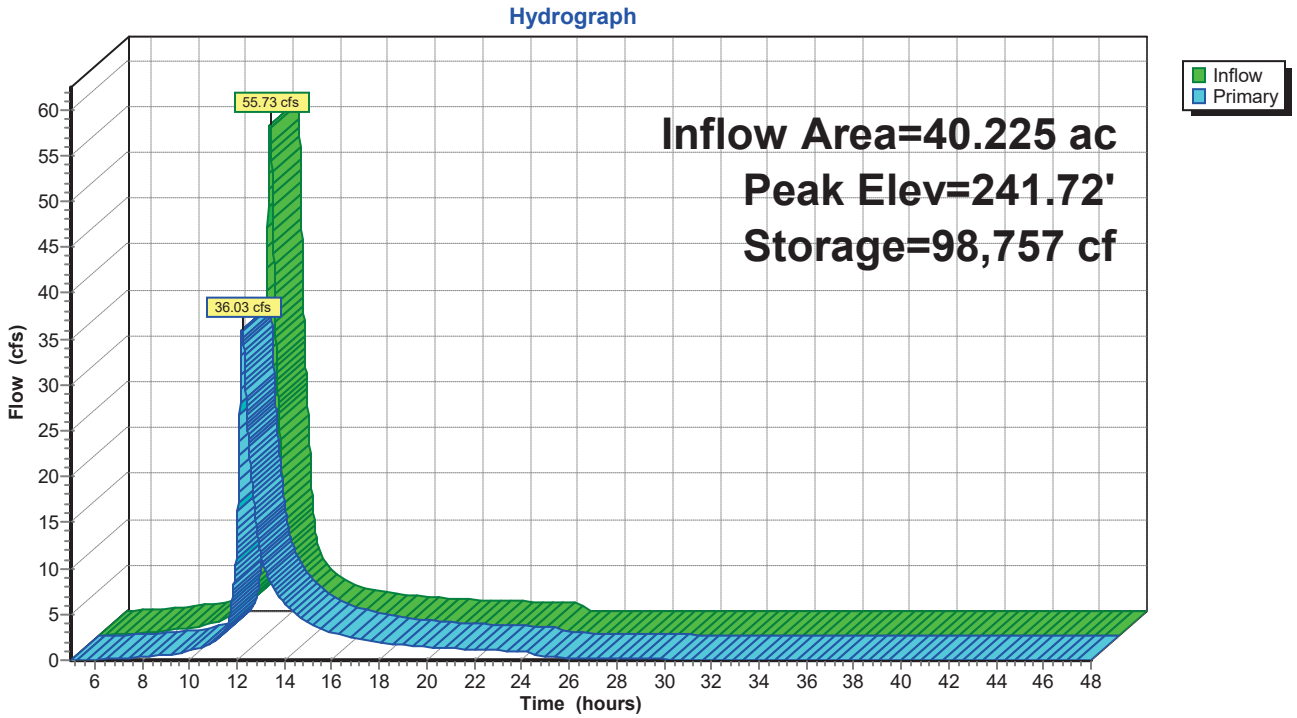
Reach MH: MH



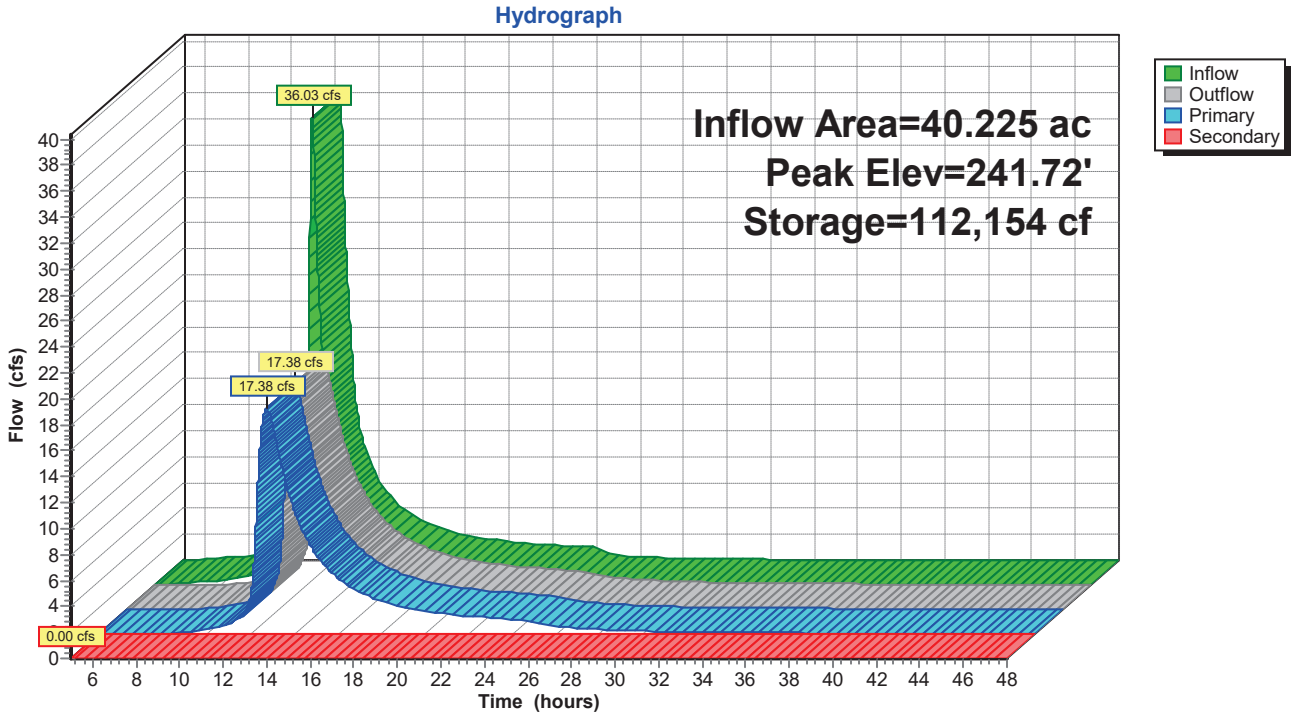
Reach TOT: Proposed Site Total



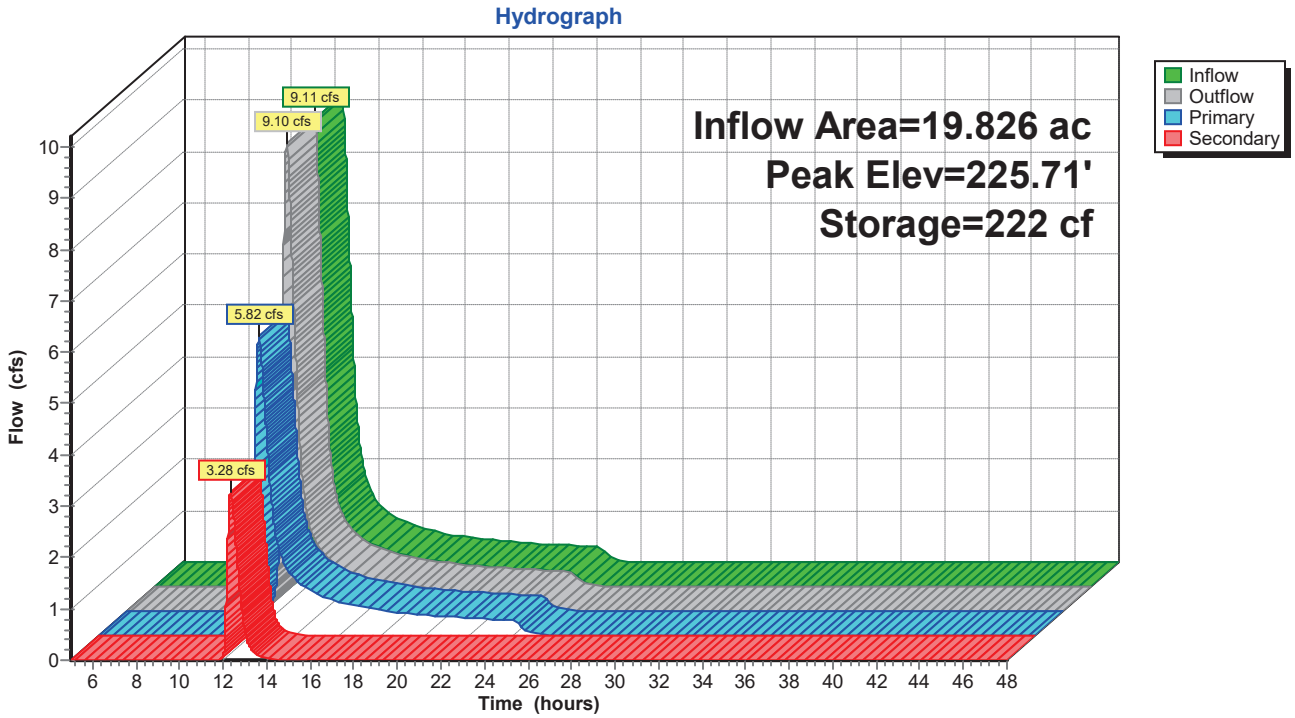
Pond 5P: FOREBAY & ABOVE



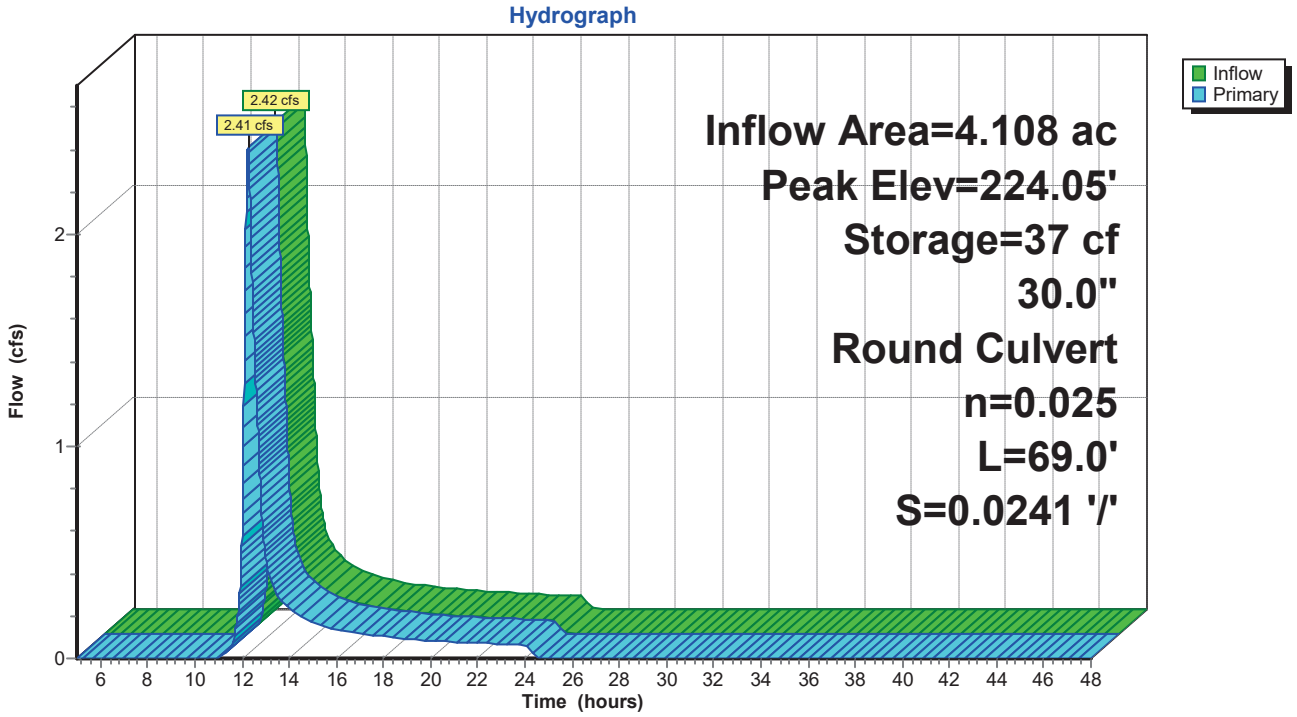
Pond 7P: WET POOL & ABOVE



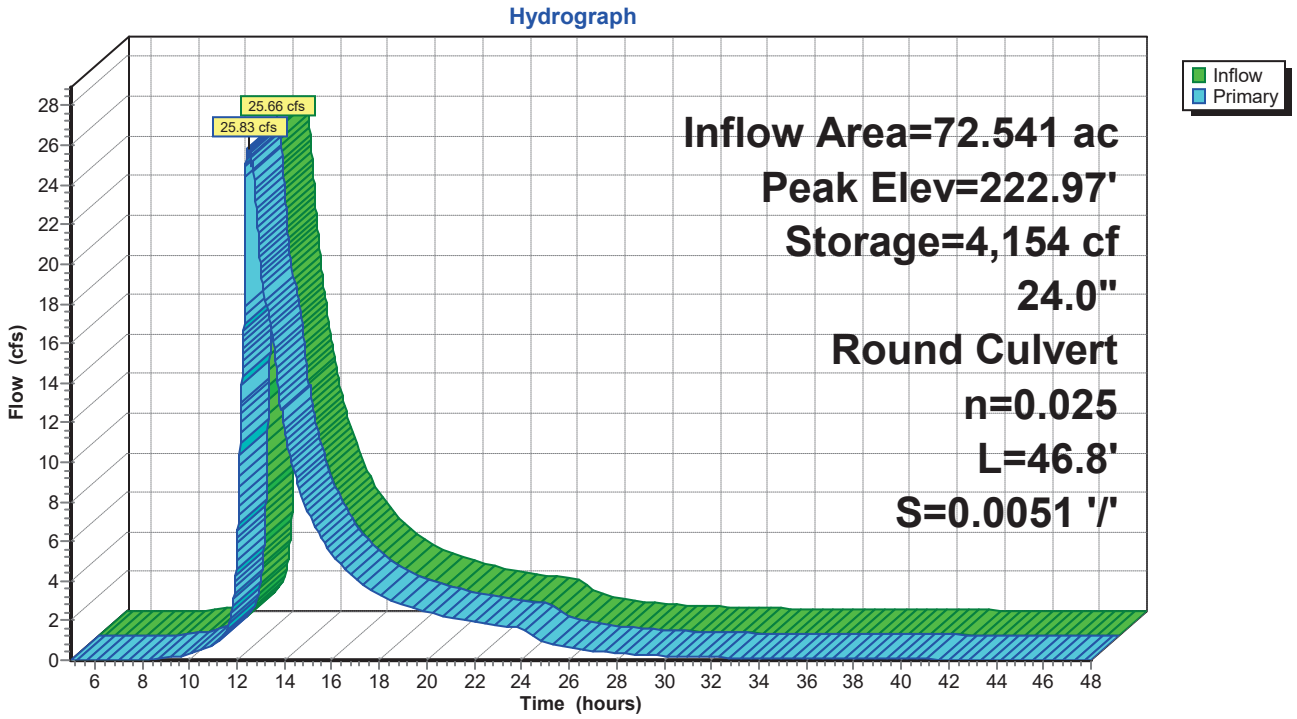
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>1.97"
Tc=20.0 min CN=94 Runoff=70.61 cfs 6.615 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=1.02"
Tc=20.0 min UI Adjusted CN=81 Runoff=3.65 cfs 0.350 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=0.97"
Tc=20.0 min CN=80 Runoff=6.97 cfs 0.675 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=0.97"
Tc=20.0 min CN=80 Runoff=10.58 cfs 1.024 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=0.97"
Tc=20.0 min CN=80 Runoff=5.90 cfs 0.571 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=0.94' Max Vel=5.21 fps Inflow=34.82 cfs 8.507 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=34.82 cfs 8.507 af

Reach CH4A: CH4A Avg. Flow Depth=0.57' Max Vel=5.01 fps Inflow=10.58 cfs 1.024 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=10.56 cfs 1.024 af

Reach CH4B: CH4B Avg. Flow Depth=0.97' Max Vel=1.93 fps Inflow=10.56 cfs 1.024 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=9.21 cfs 1.024 af

Reach DP1: Design Point #1 Inflow=6.02 cfs 0.324 af
Outflow=6.02 cfs 0.324 af

Reach DP2: Design Point #2 Inflow=8.46 cfs 1.271 af
Outflow=8.46 cfs 1.271 af

Reach DP3: Design Point #3 Inflow=3.65 cfs 0.350 af
Outflow=3.65 cfs 0.350 af

Reach MH: MH Avg. Flow Depth=1.15' Max Vel=8.20 fps Inflow=24.56 cfs 6.562 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=24.56 cfs 6.561 af

Reach TOT: Proposed Site Total Inflow=48.41 cfs 9.181 af
Outflow=48.41 cfs 9.181 af

Pond 5P: FOREBAY & ABOVE Peak Elev=242.09' Storage=109,528 cf Inflow=70.61 cfs 6.615 af
Outflow=45.96 cfs 6.592 af

Pond 7P: WET POOL & ABOVE Peak Elev=242.09' Storage=125,783 cf Inflow=45.96 cfs 6.592 af
Primary=24.56 cfs 6.562 af Secondary=0.00 cfs 0.000 af Outflow=24.56 cfs 6.562 af

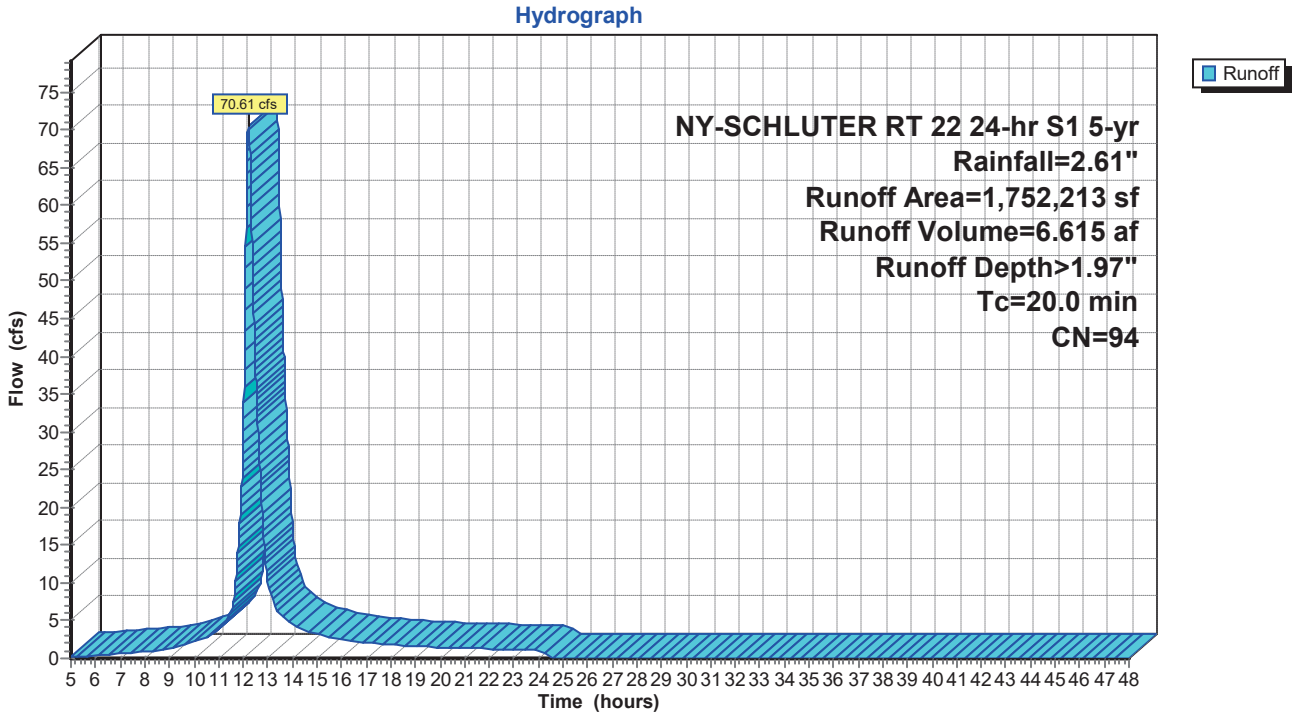
Pond CH1: Existing Channel #1 Peak Elev=226.02' Storage=429 cf Inflow=14.50 cfs 1.596 af
Primary=8.46 cfs 1.271 af Secondary=6.02 cfs 0.324 af Outflow=14.48 cfs 1.596 af

Pond CH3: Proposed Channel #3 Peak Elev=224.22' Storage=63 cf Inflow=3.65 cfs 0.350 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=3.65 cfs 0.350 af

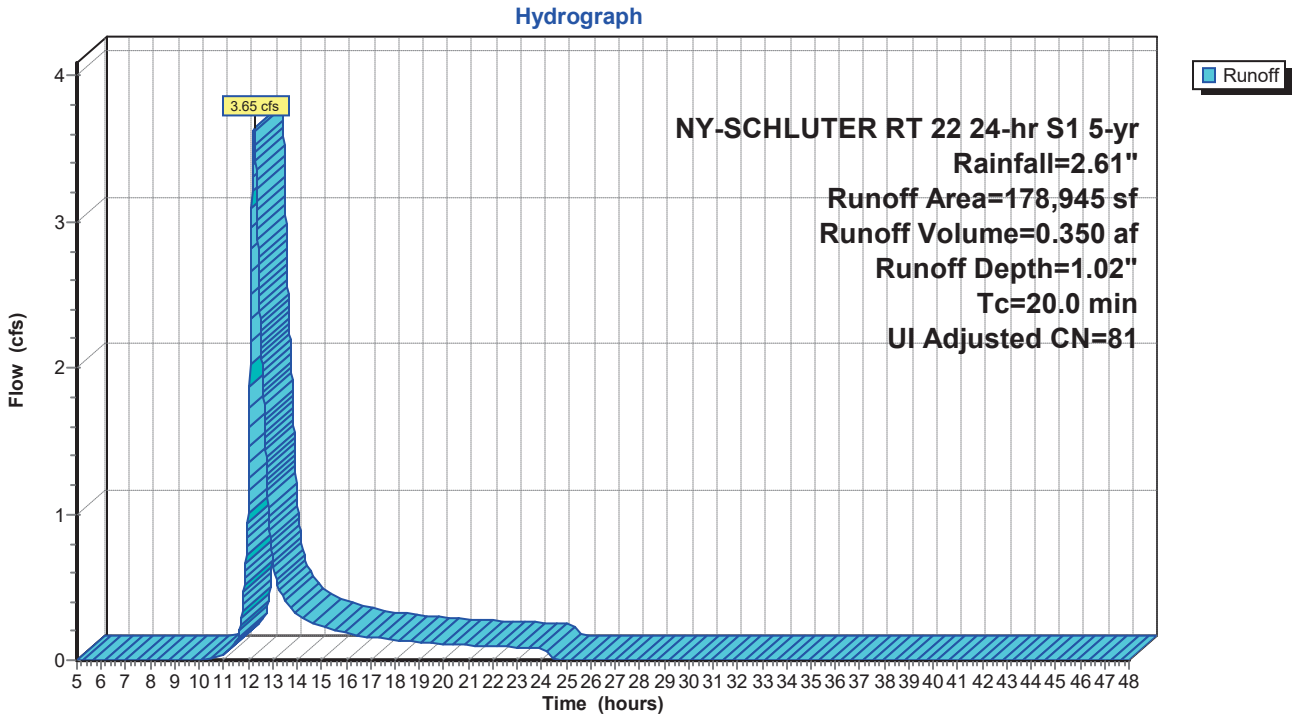
Pond DP4: Design Point #4 Peak Elev=229.74' Storage=4,154 cf Inflow=37.25 cfs 8.857 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=42.94 cfs 8.857 af

Total Runoff Area = 72.541 ac Runoff Volume = 9.235 af Average Runoff Depth = 1.53"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

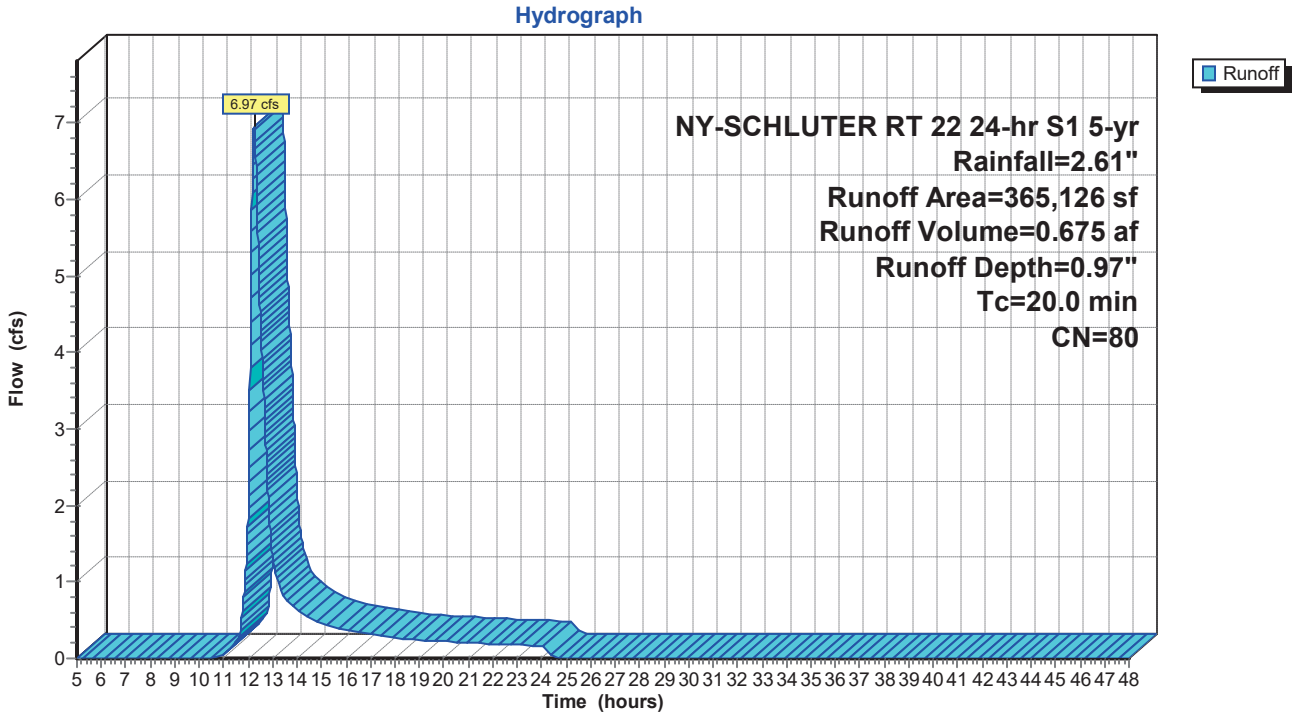
Subcatchment P1: Proposed Basin #1



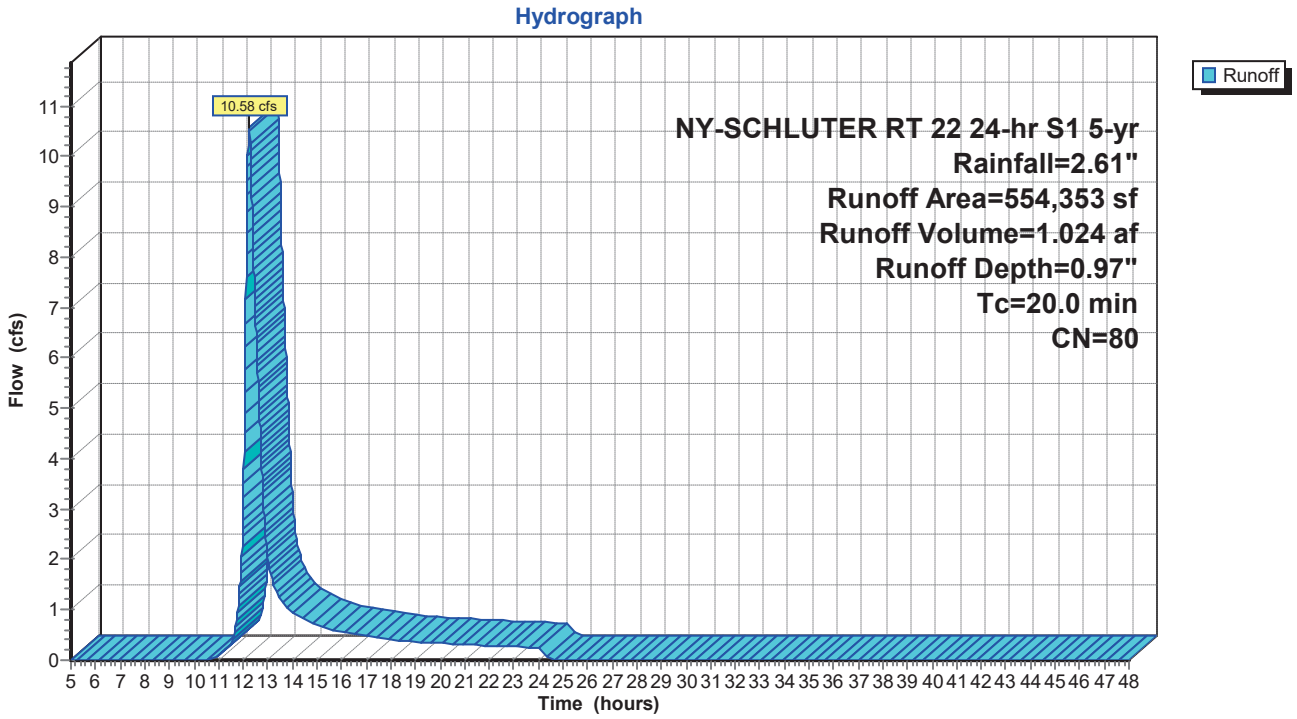
Subcatchment P2: Proposed Basin #2



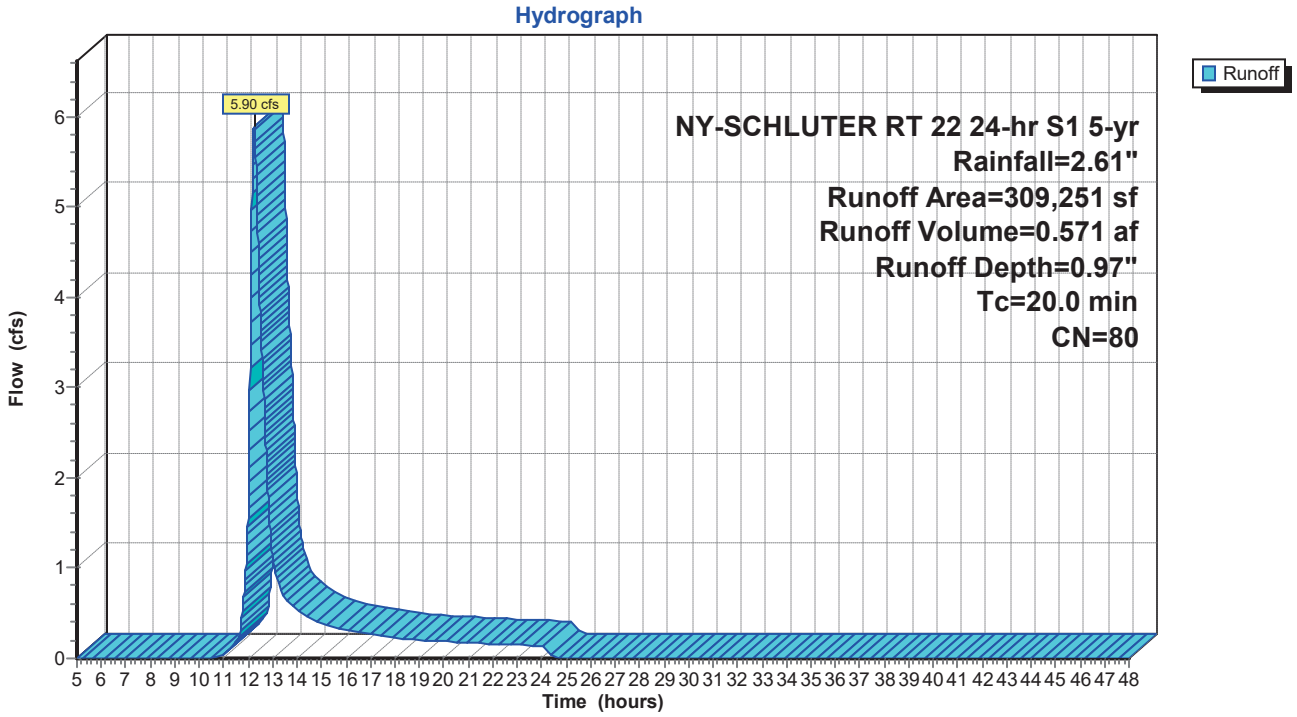
Subcatchment P3: Proposed Basin #3



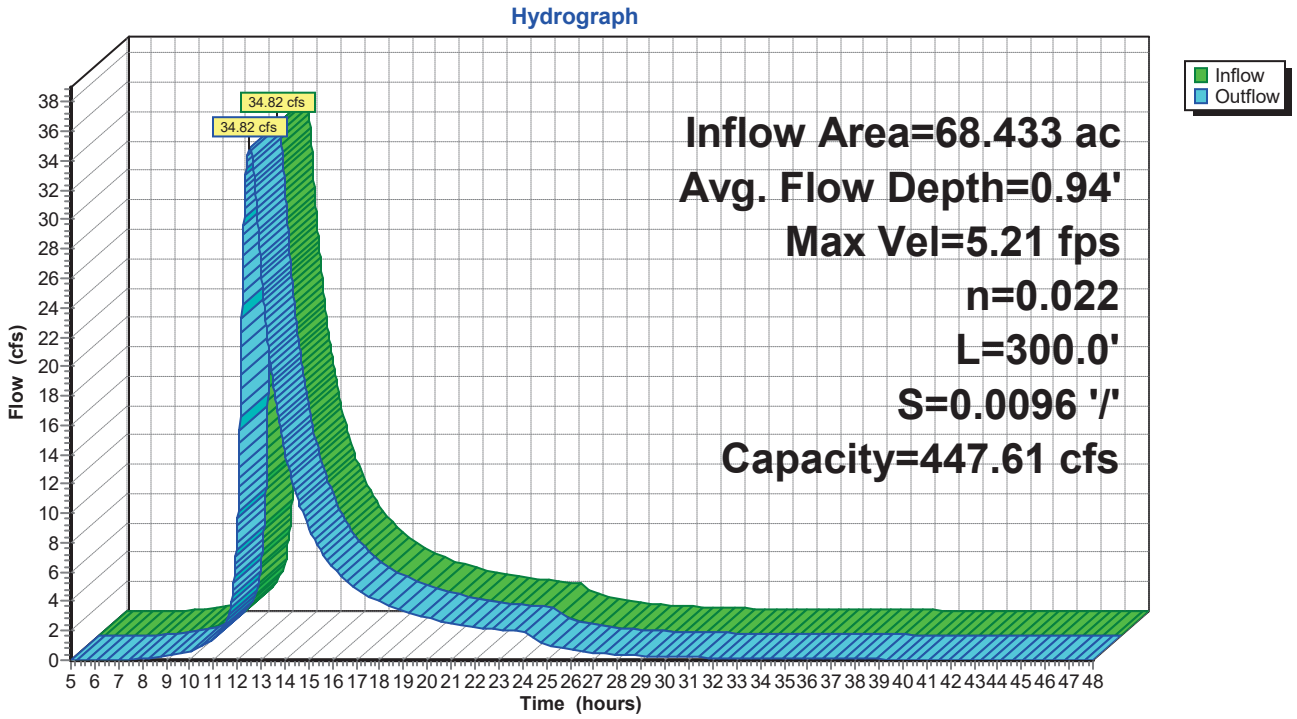
Subcatchment P4: Proposed Basin #4



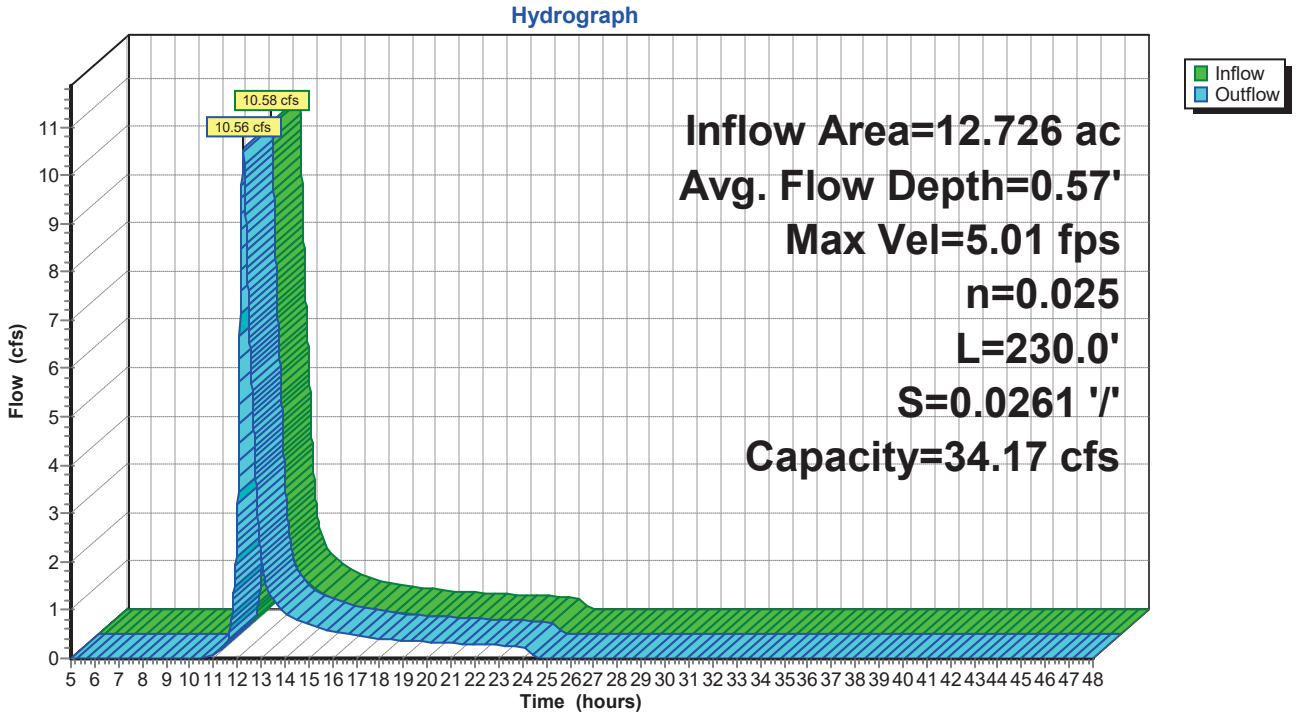
Subcatchment P5: Proposed Basin #5



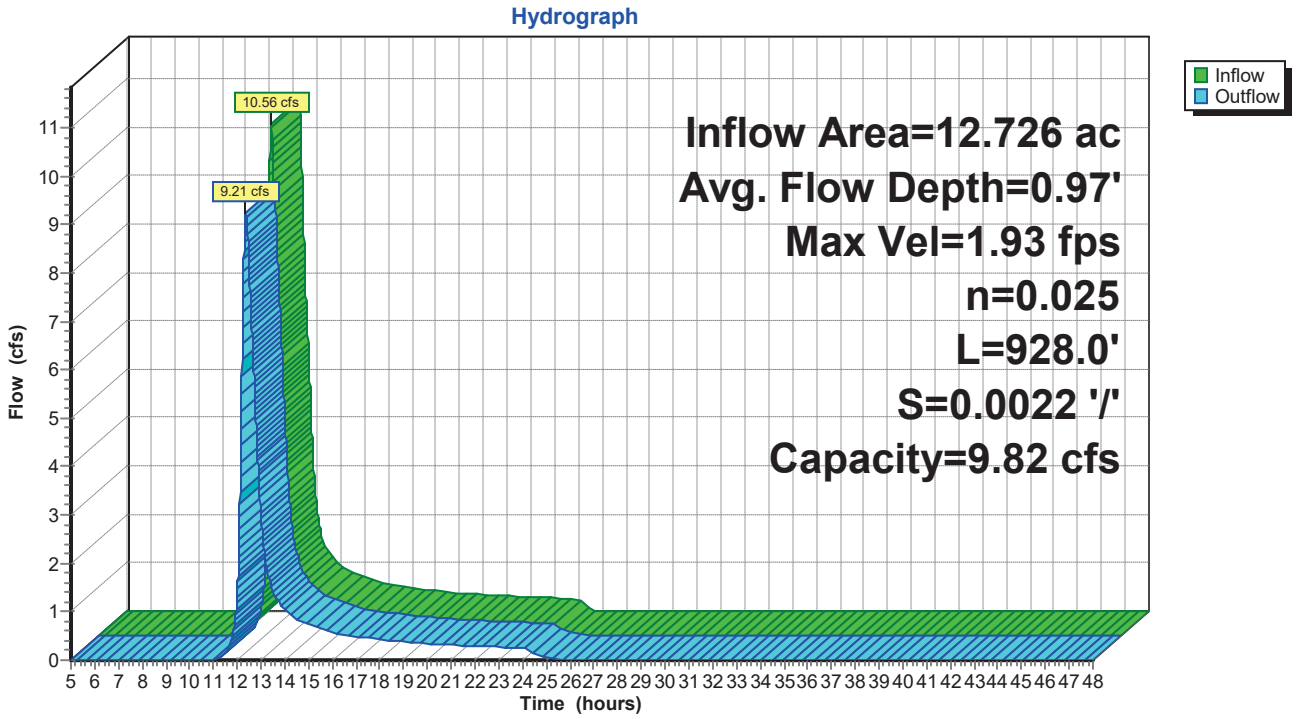
Reach CH2: Existing Channel #2



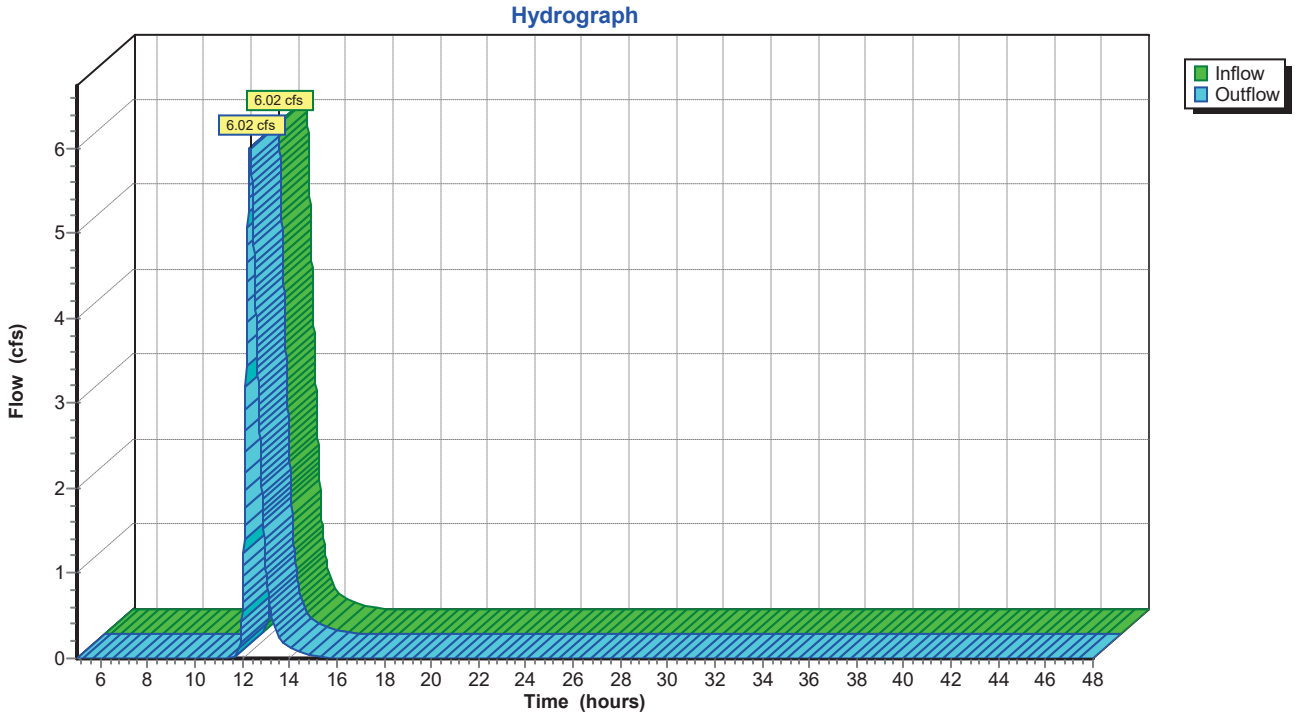
Reach CH4A: CH4A



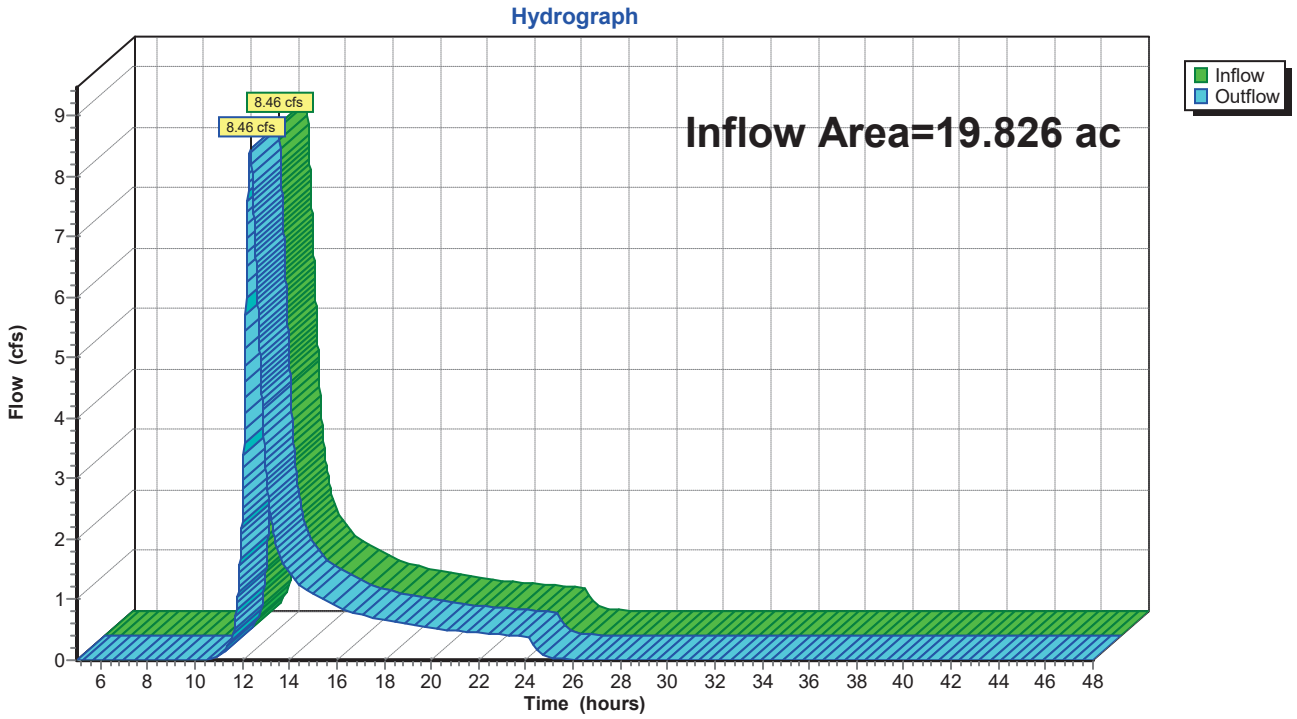
Reach CH4B: CH4B



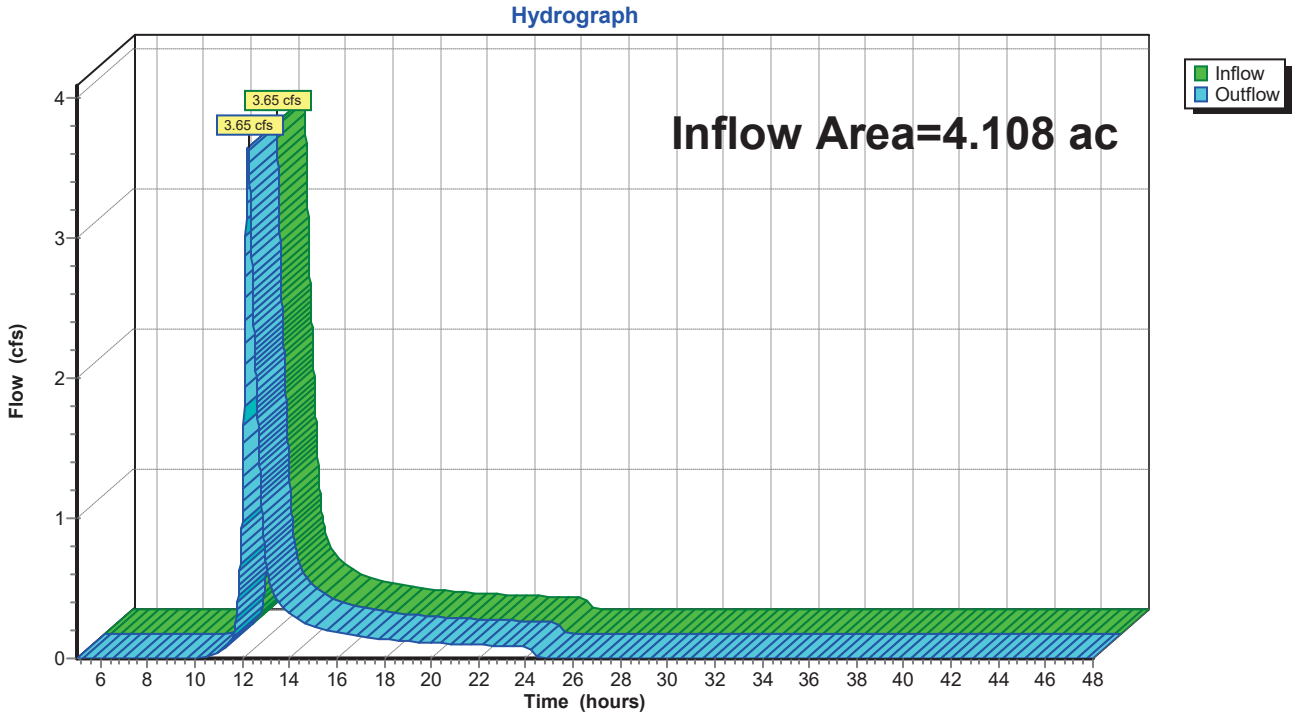
Reach DP1: Design Point #1



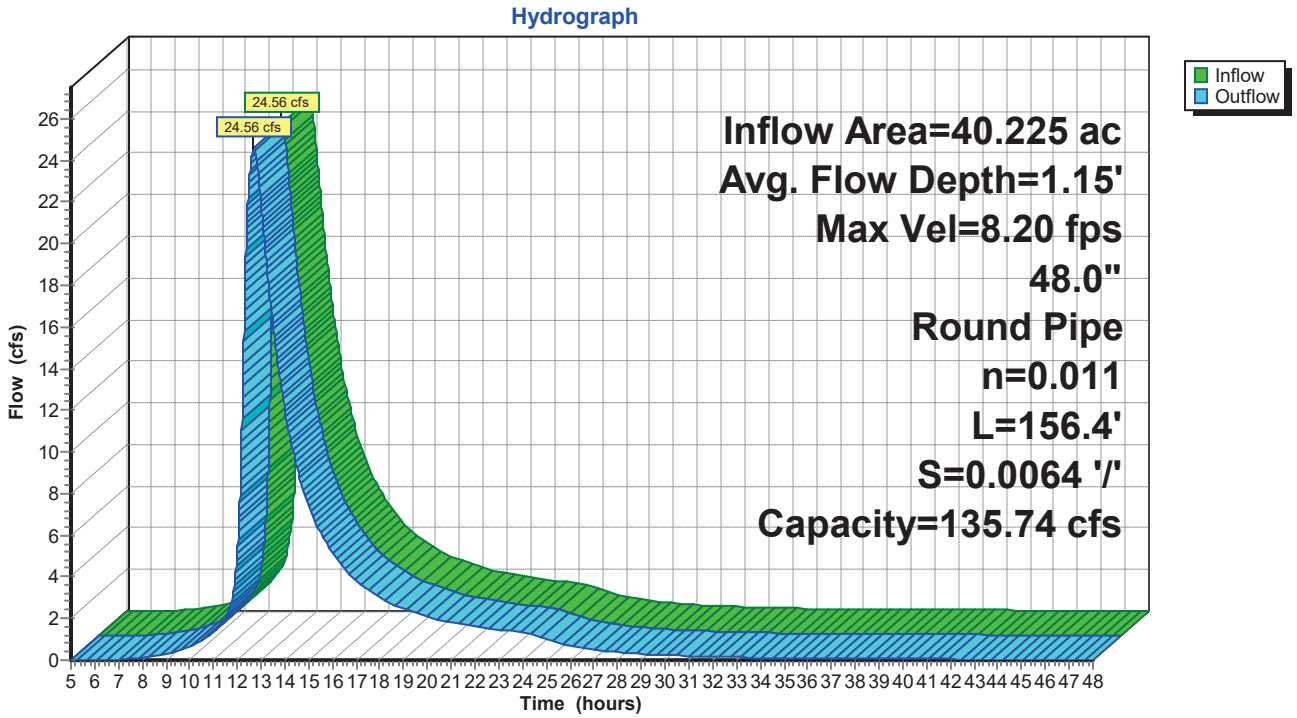
Reach DP2: Design Point #2



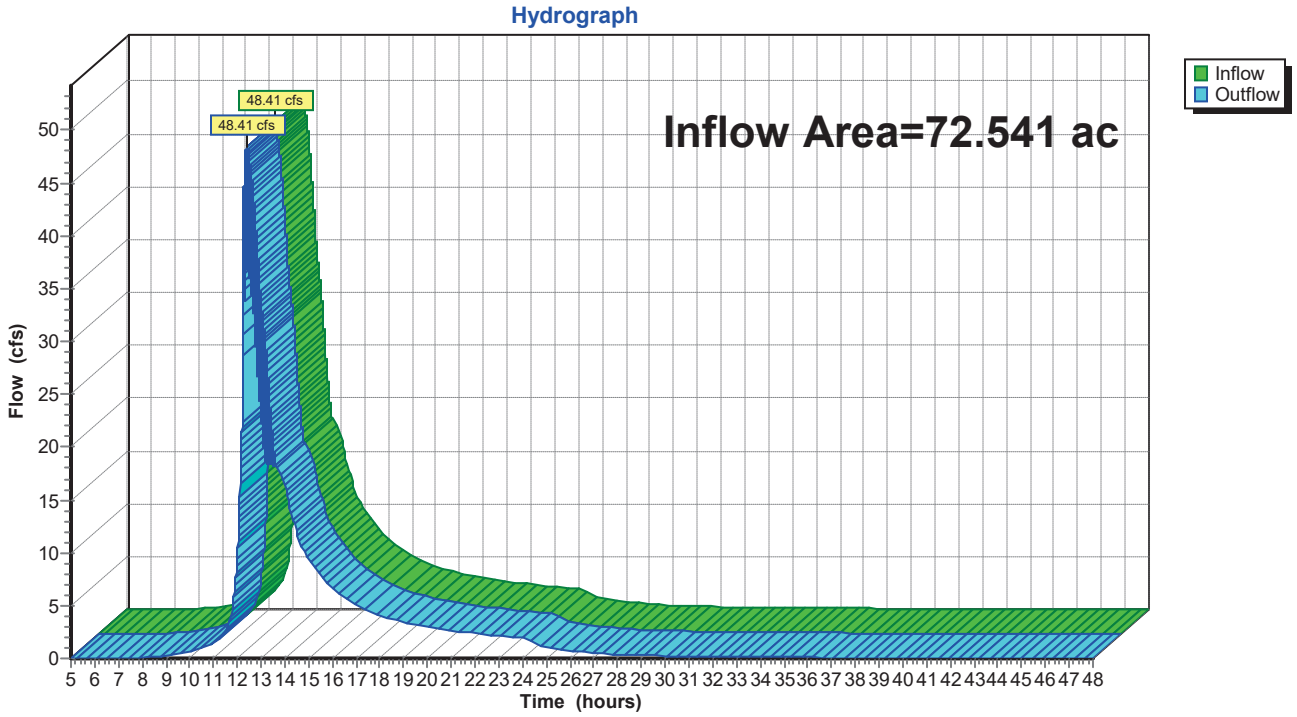
Reach DP3: Design Point #3



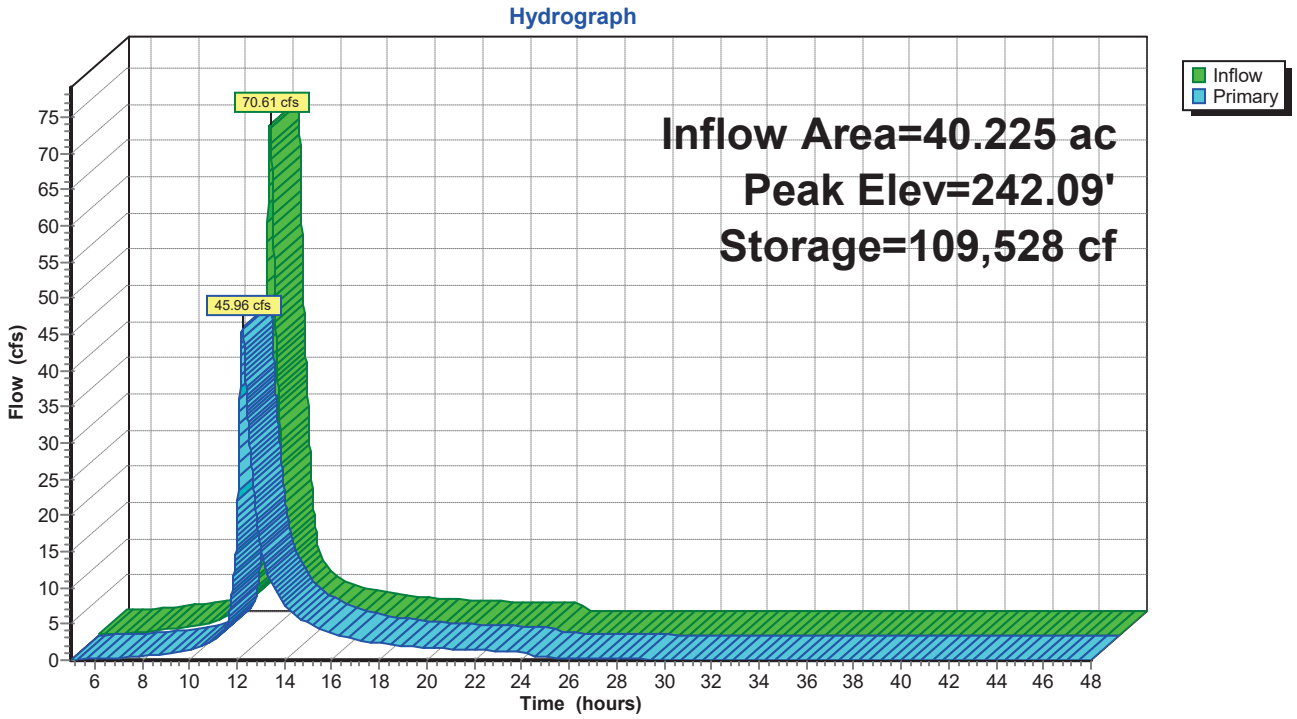
Reach MH: MH



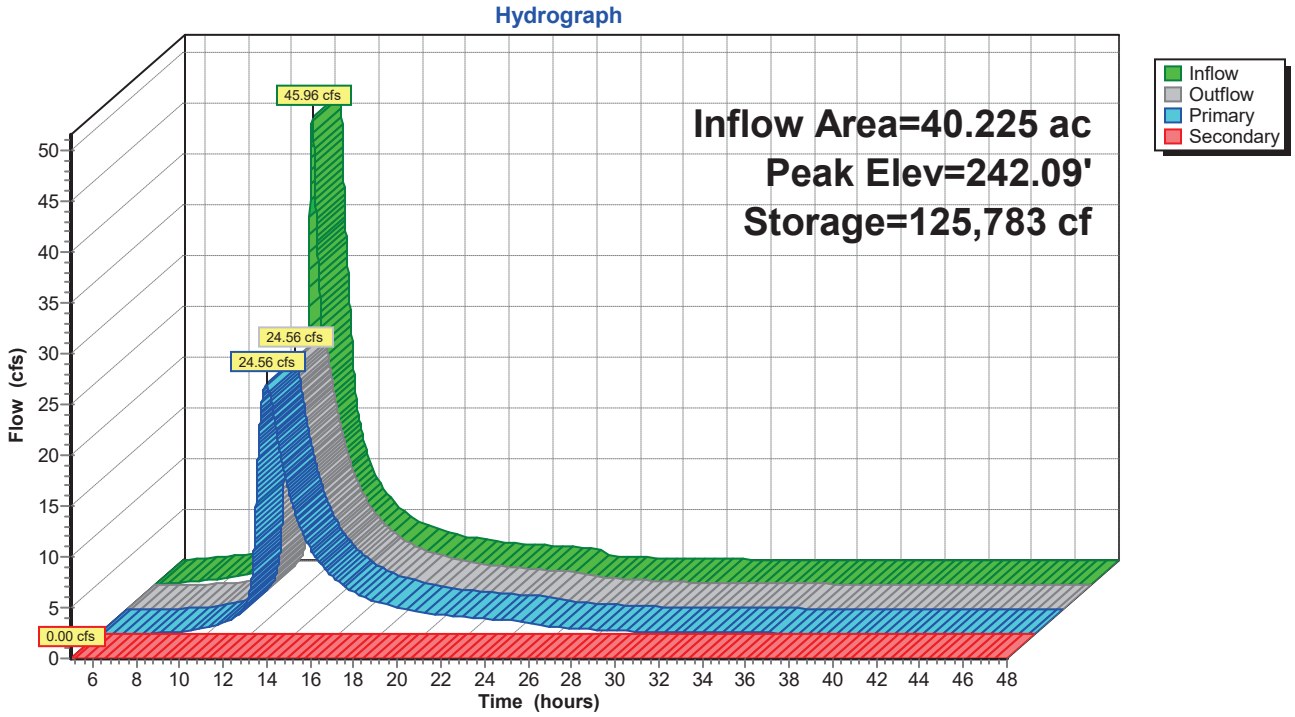
Reach TOT: Proposed Site Total



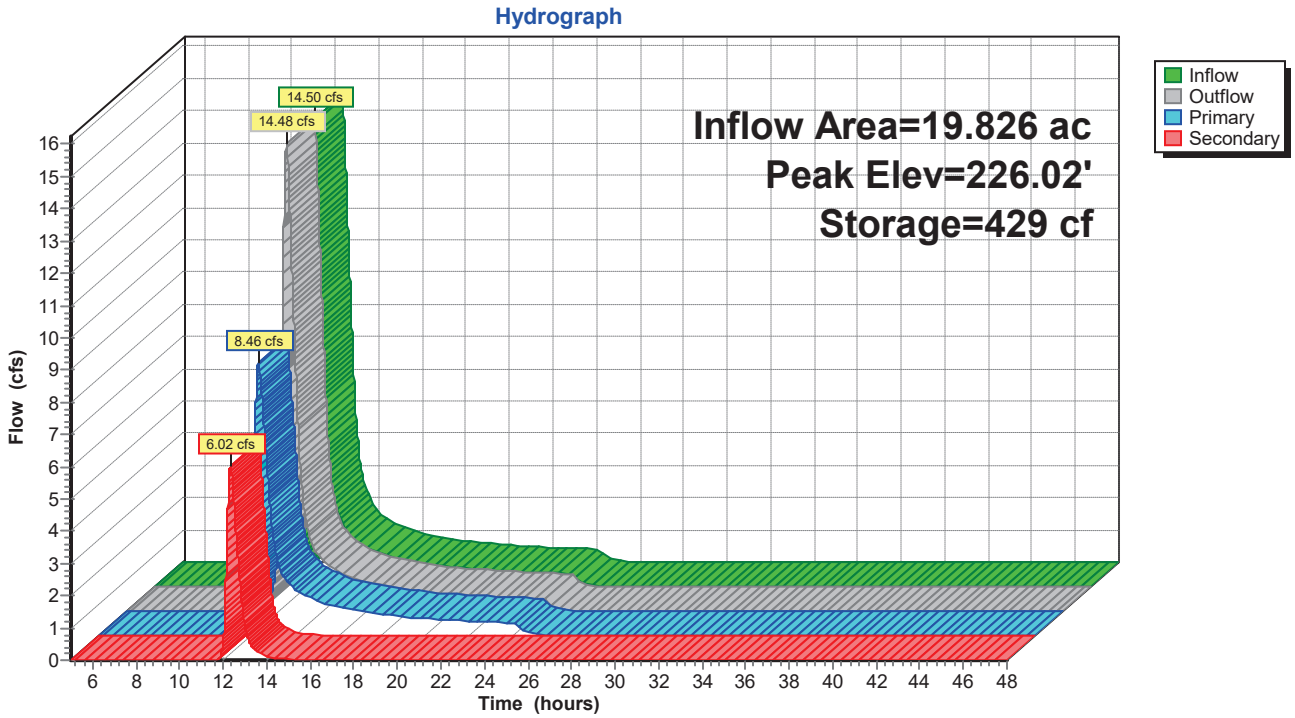
Pond 5P: FOREBAY & ABOVE



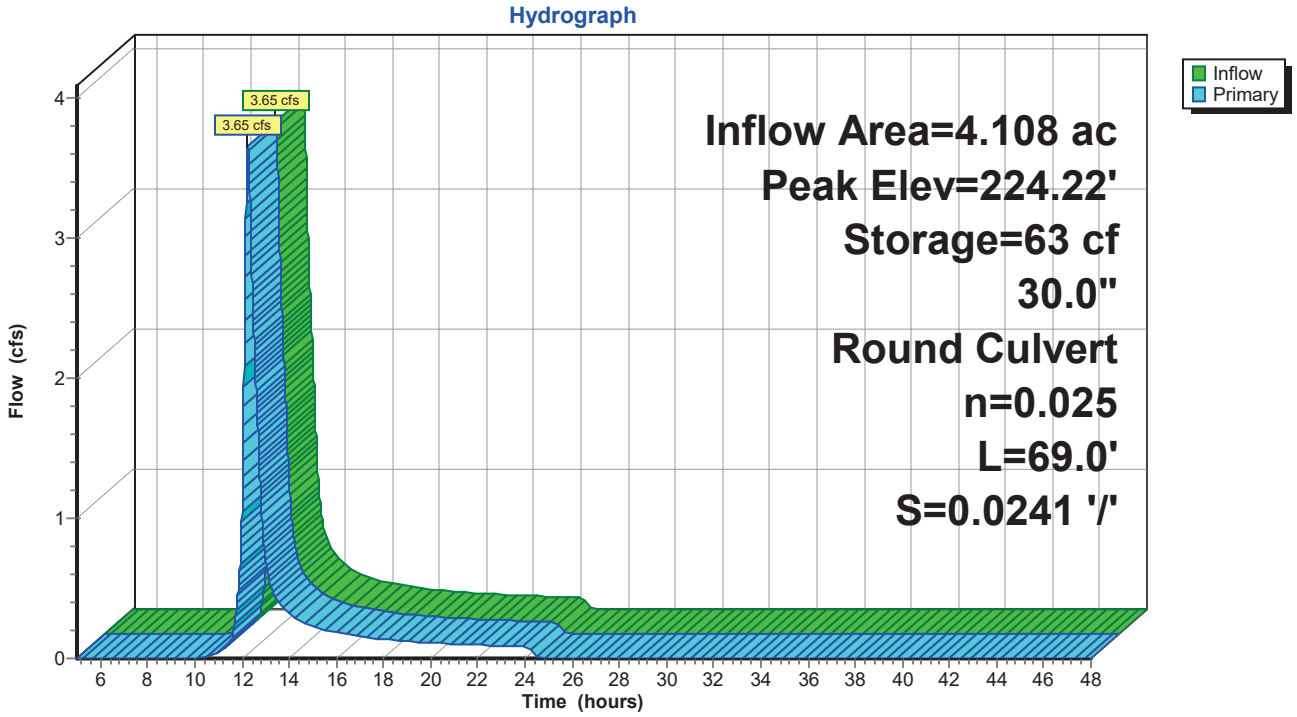
Pond 7P: WET POOL & ABOVE



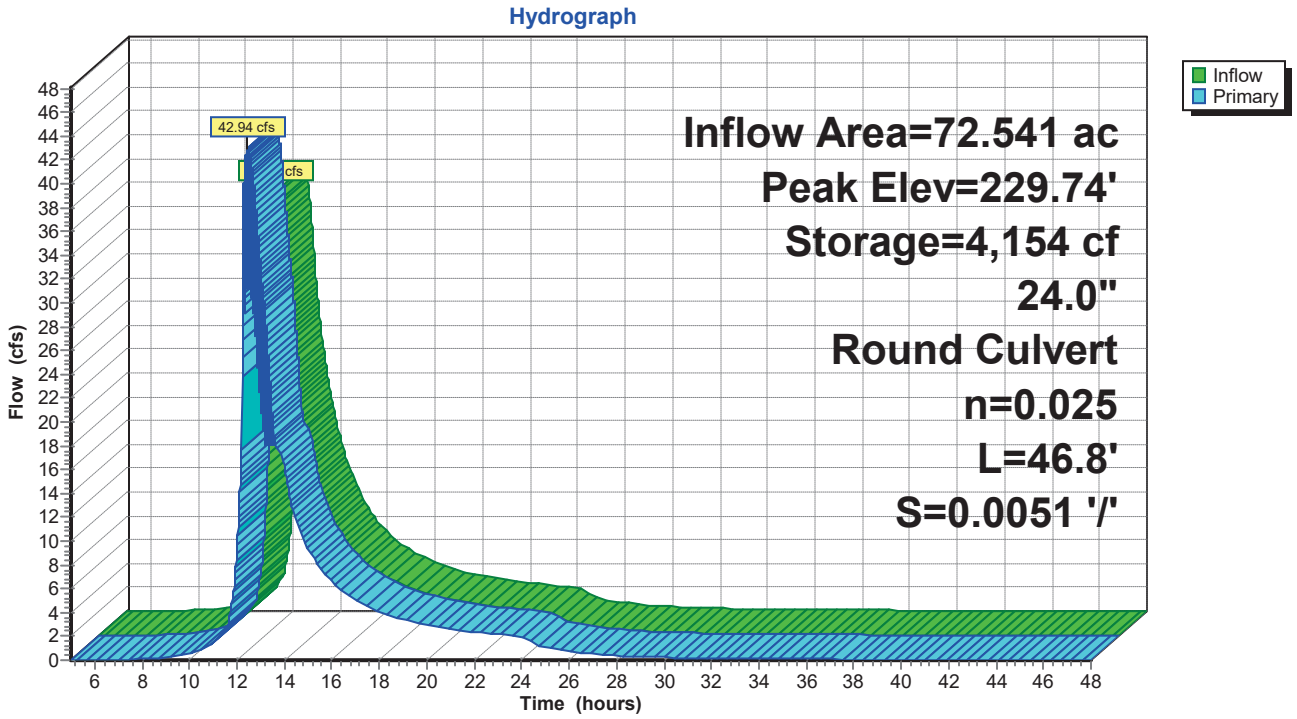
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>2.39"
Tc=20.0 min CN=94 Runoff=84.84 cfs 7.996 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=1.34"
Tc=20.0 min UI Adjusted CN=81 Runoff=4.90 cfs 0.460 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=1.28"
Tc=20.0 min CN=80 Runoff=9.45 cfs 0.894 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=1.28"
Tc=20.0 min CN=80 Runoff=14.34 cfs 1.358 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=1.28"
Tc=20.0 min CN=80 Runoff=8.00 cfs 0.757 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.09' Max Vel=5.62 fps Inflow=45.37 cfs 10.444 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=45.36 cfs 10.444 af

Reach CH4A: CH4A Avg. Flow Depth=0.66' Max Vel=5.44 fps Inflow=14.34 cfs 1.358 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=14.32 cfs 1.358 af

Reach CH4B: CH4B Avg. Flow Depth=1.14' Max Vel=2.09 fps Inflow=14.32 cfs 1.358 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=12.69 cfs 1.358 af

Reach DP1: Design Point #1 Inflow=8.98 cfs 0.507 af
Outflow=8.98 cfs 0.507 af

Reach DP2: Design Point #2 Inflow=10.90 cfs 1.608 af
Outflow=10.90 cfs 1.608 af

Reach DP3: Design Point #3 Inflow=4.89 cfs 0.460 af
Outflow=4.89 cfs 0.460 af

Reach MH: MH Avg. Flow Depth=1.31' Max Vel=8.80 fps Inflow=31.53 cfs 7.942 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=31.53 cfs 7.942 af

Reach TOT: Proposed Site Total Inflow=64.65 cfs 11.411 af
Outflow=64.65 cfs 11.411 af

Pond 5P: FOREBAY & ABOVE Peak Elev=242.42' Storage=119,268 cf Inflow=84.84 cfs 7.996 af
Outflow=55.74 cfs 7.973 af

Pond 7P: WET POOL & ABOVE Peak Elev=242.42' Storage=138,091 cf Inflow=55.74 cfs 7.973 af
Primary=31.53 cfs 7.942 af Secondary=0.00 cfs 0.000 af Outflow=31.53 cfs 7.942 af

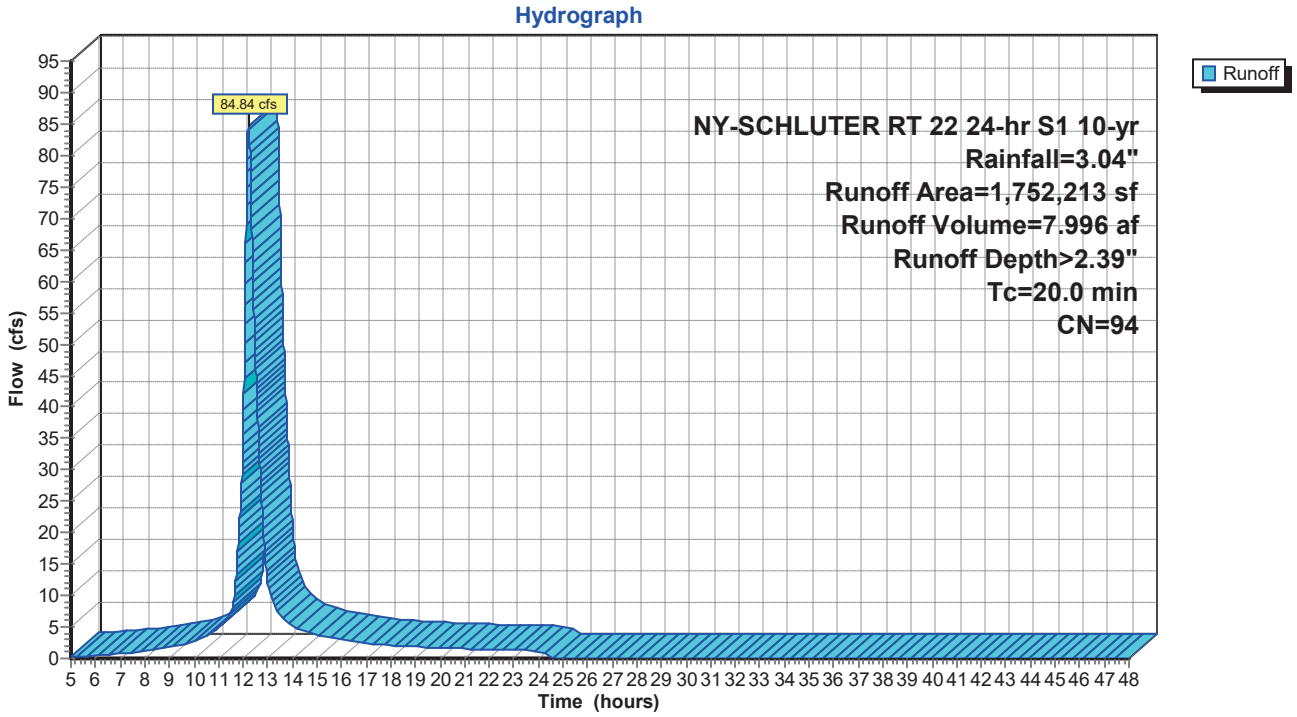
Pond CH1: Existing Channel #1 Peak Elev=226.30' Storage=743 cf Inflow=19.97 cfs 2.115 af
Primary=10.90 cfs 1.608 af Secondary=8.98 cfs 0.507 af Outflow=19.88 cfs 2.115 af

Pond CH3: Proposed Channel #3 Peak Elev=224.37' Storage=90 cf Inflow=4.90 cfs 0.460 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=4.89 cfs 0.460 af

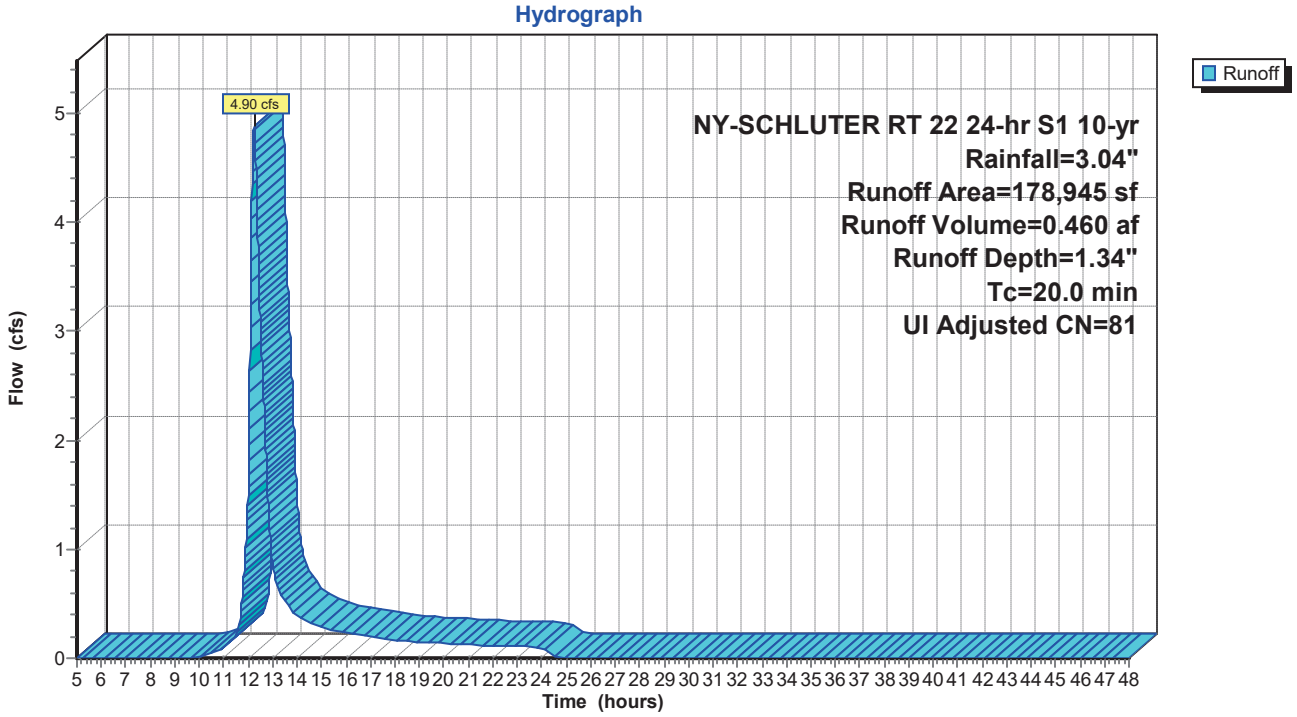
Pond DP4: Design Point #4 Peak Elev=237.35' Storage=4,154 cf Inflow=48.76 cfs 10.904 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=56.27 cfs 10.904 af

Total Runoff Area = 72.541 ac Runoff Volume = 11.466 af Average Runoff Depth = 1.90"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

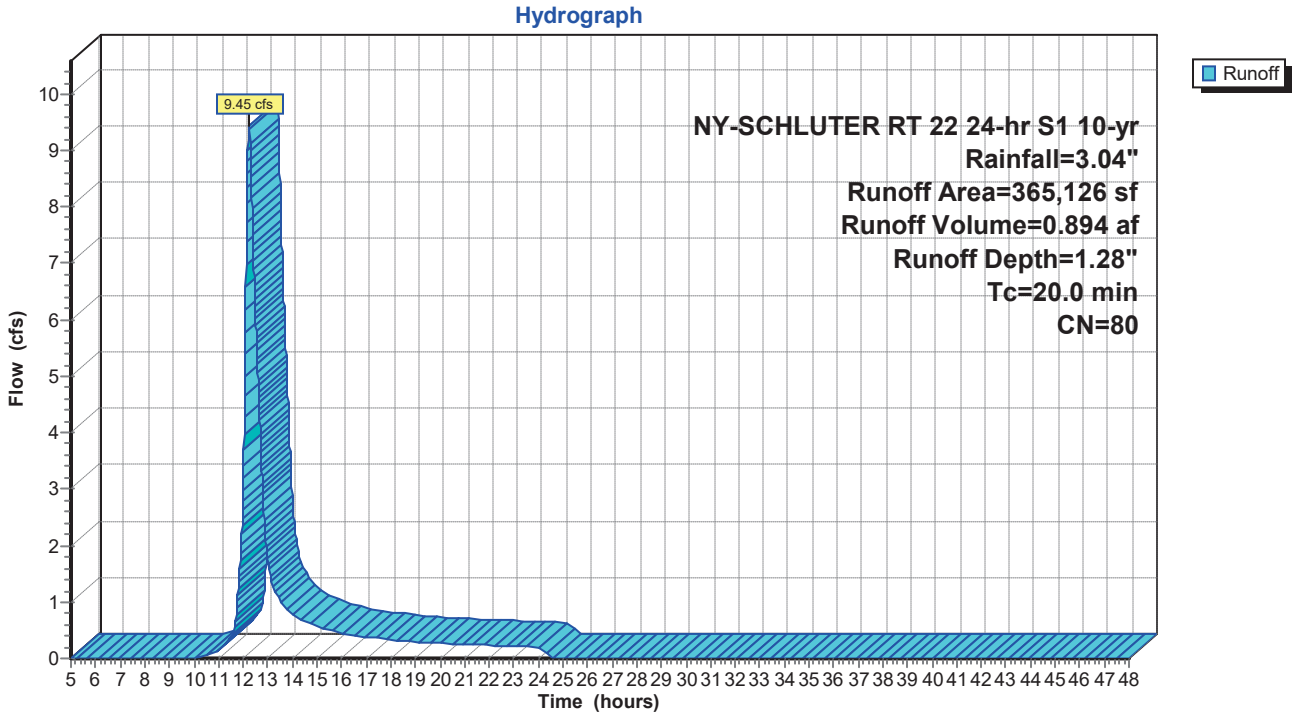
Subcatchment P1: Proposed Basin #1



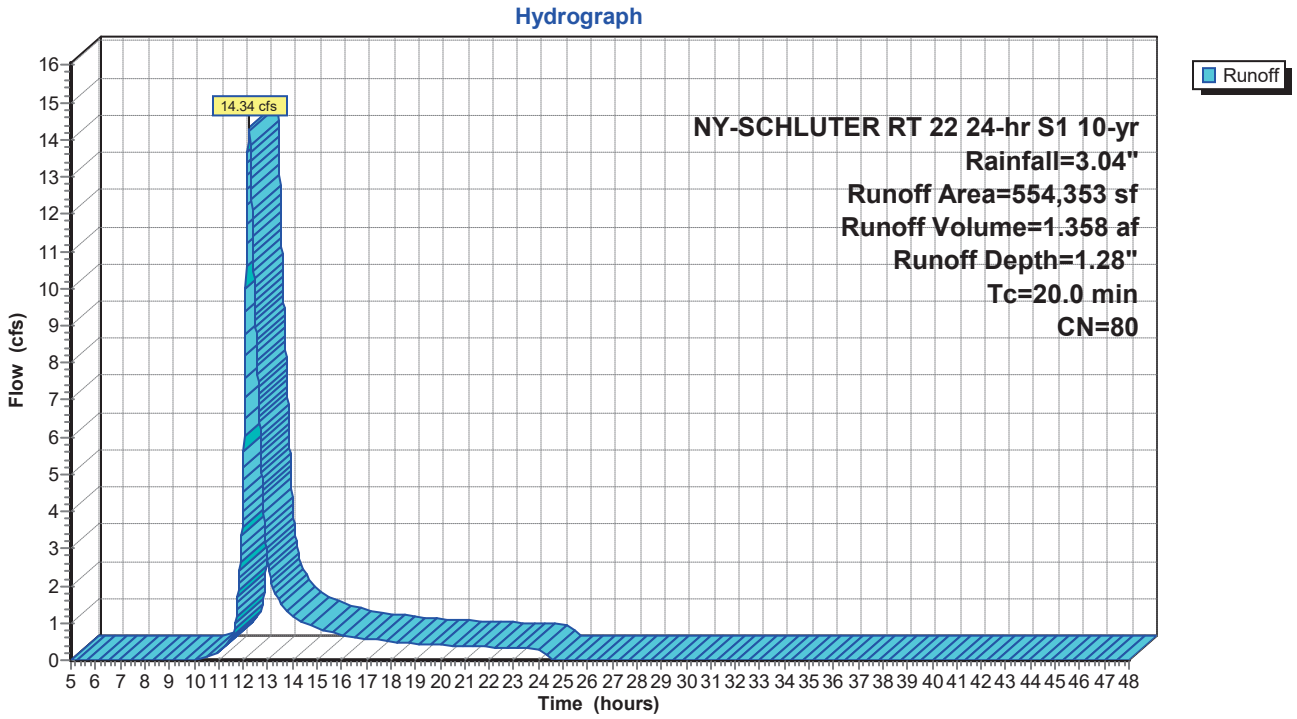
Subcatchment P2: Proposed Basin #2



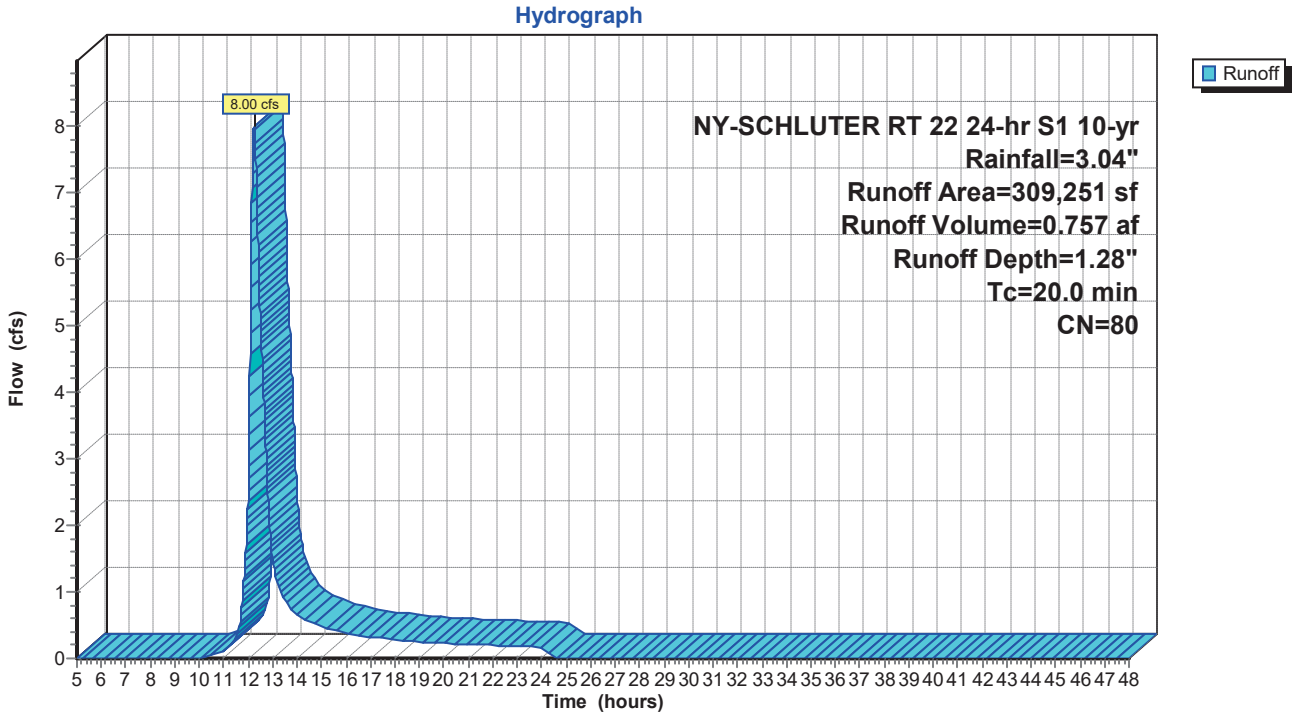
Subcatchment P3: Proposed Basin #3



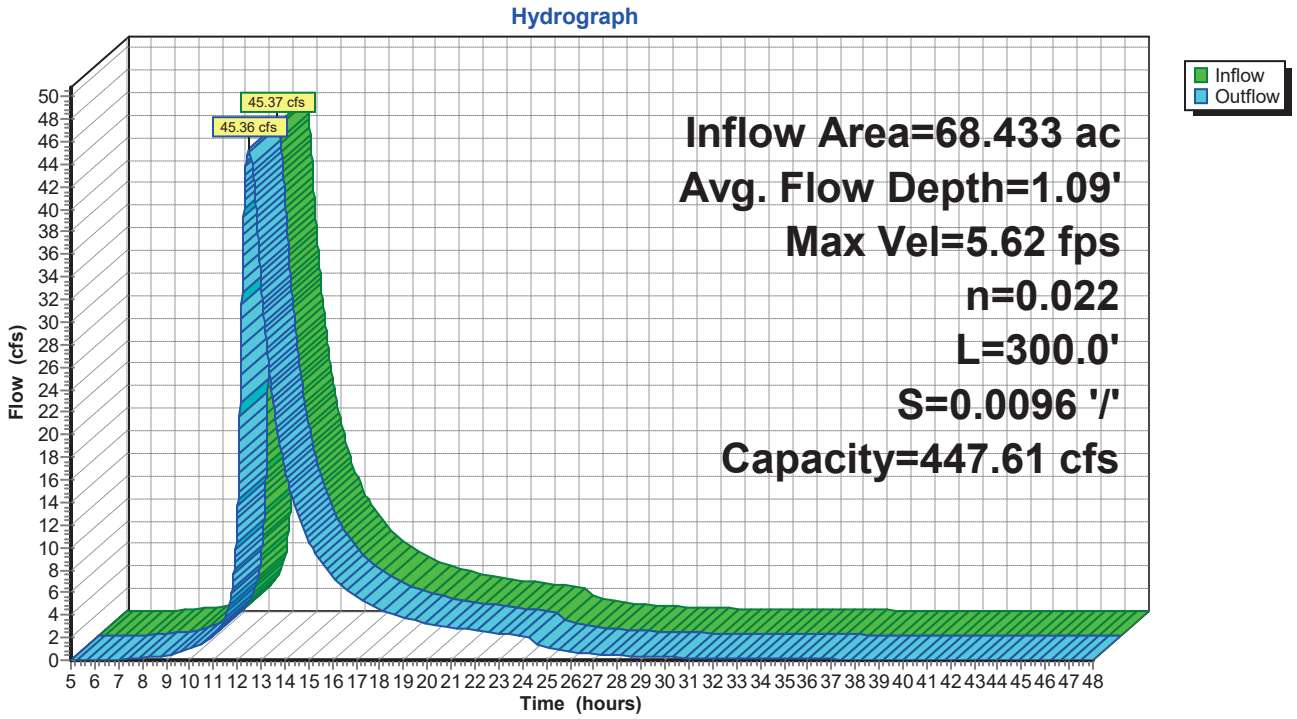
Subcatchment P4: Proposed Basin #4



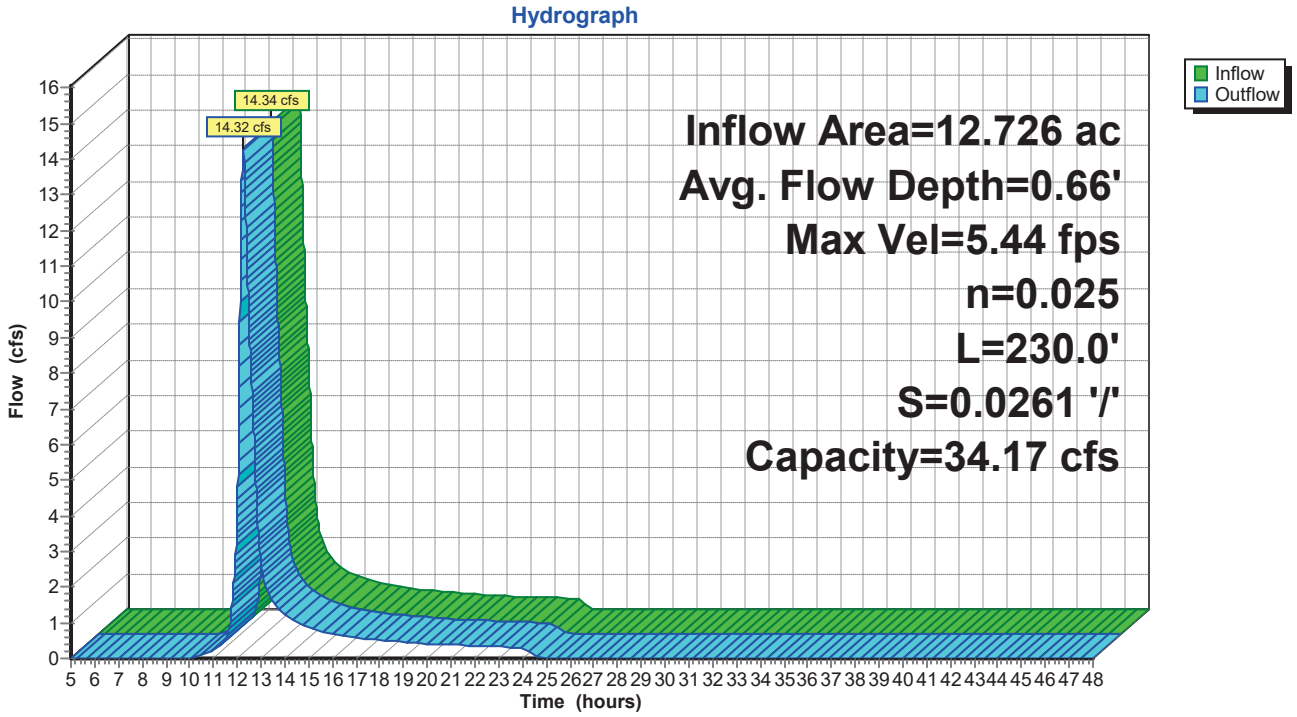
Subcatchment P5: Proposed Basin #5



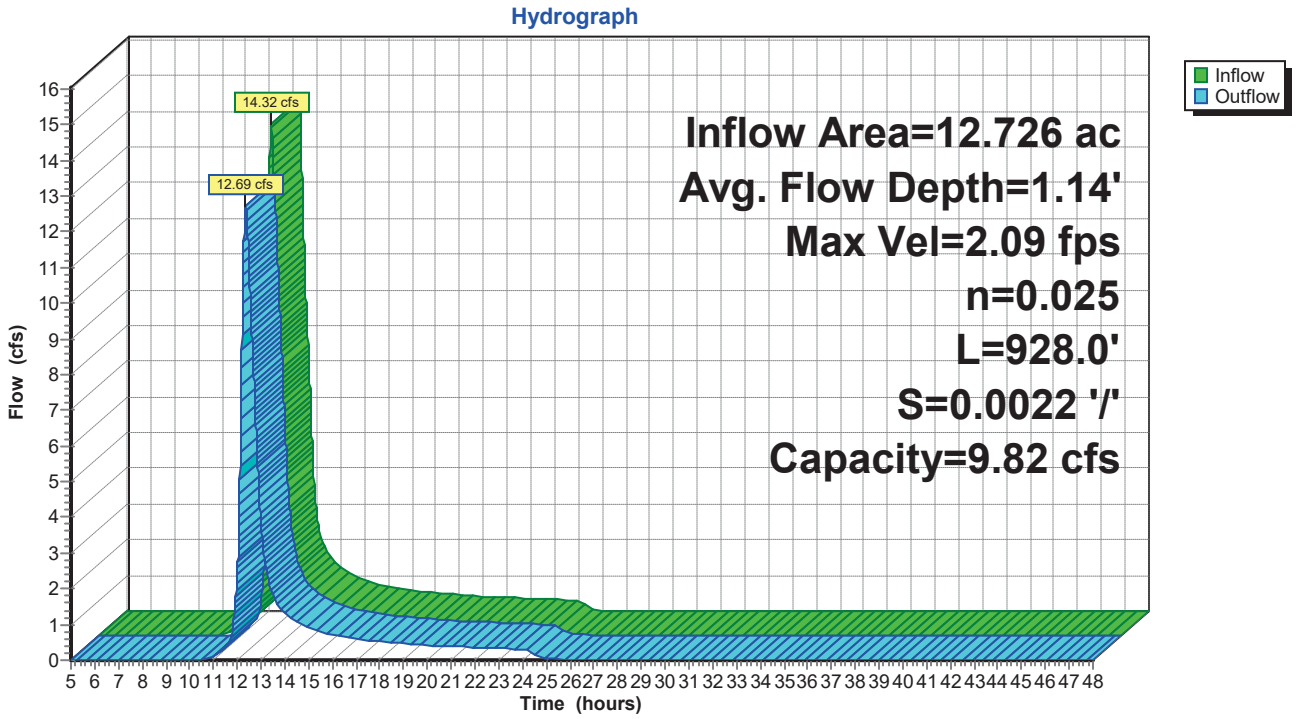
Reach CH2: Existing Channel #2



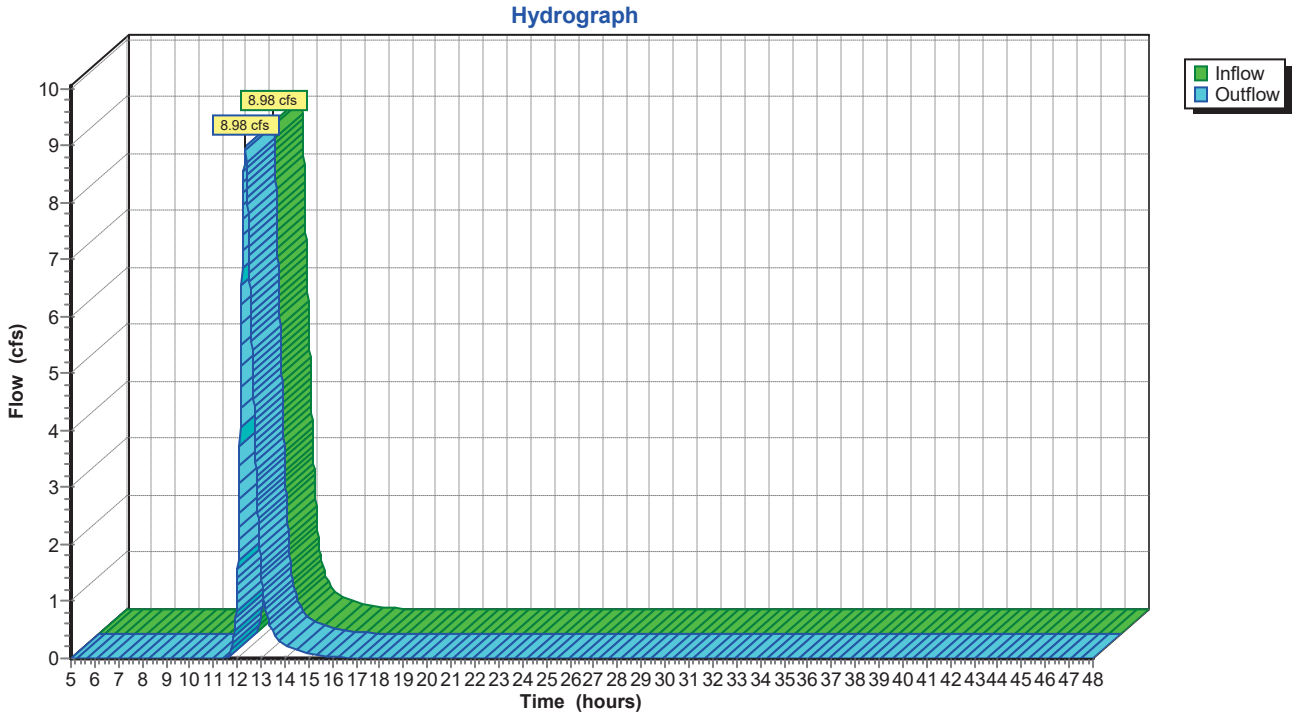
Reach CH4A: CH4A



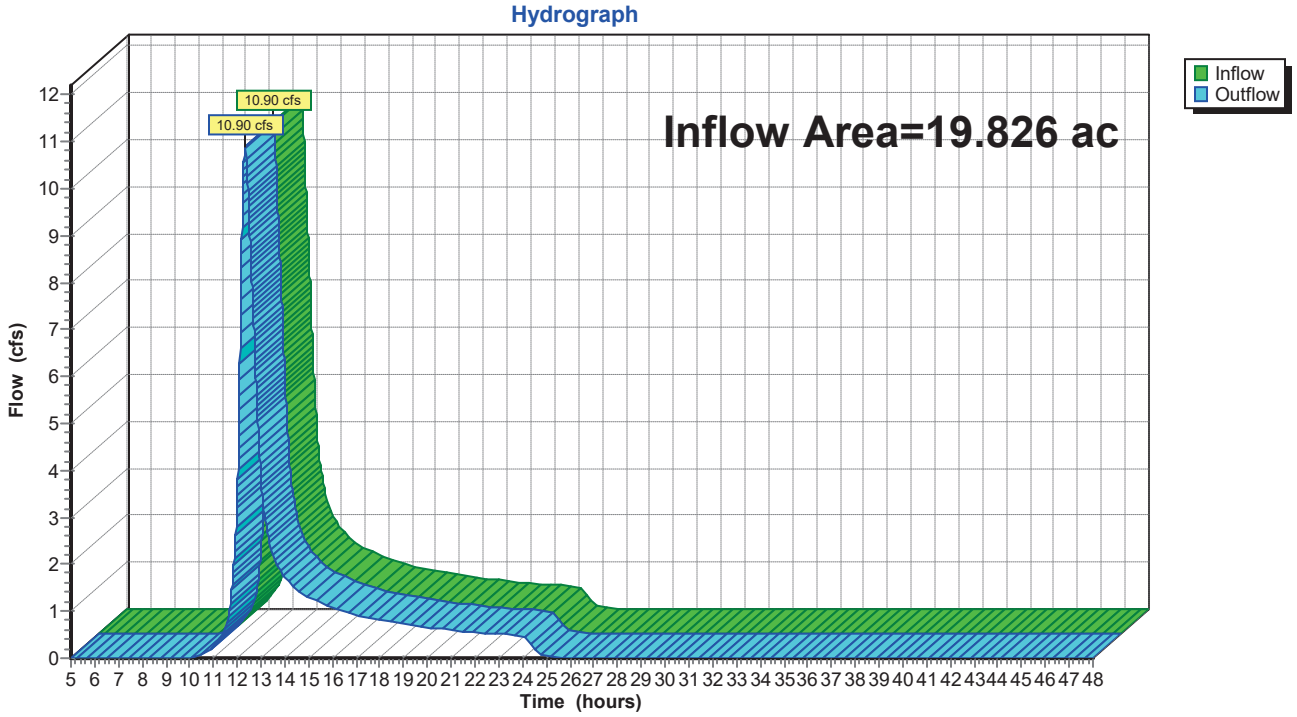
Reach CH4B: CH4B



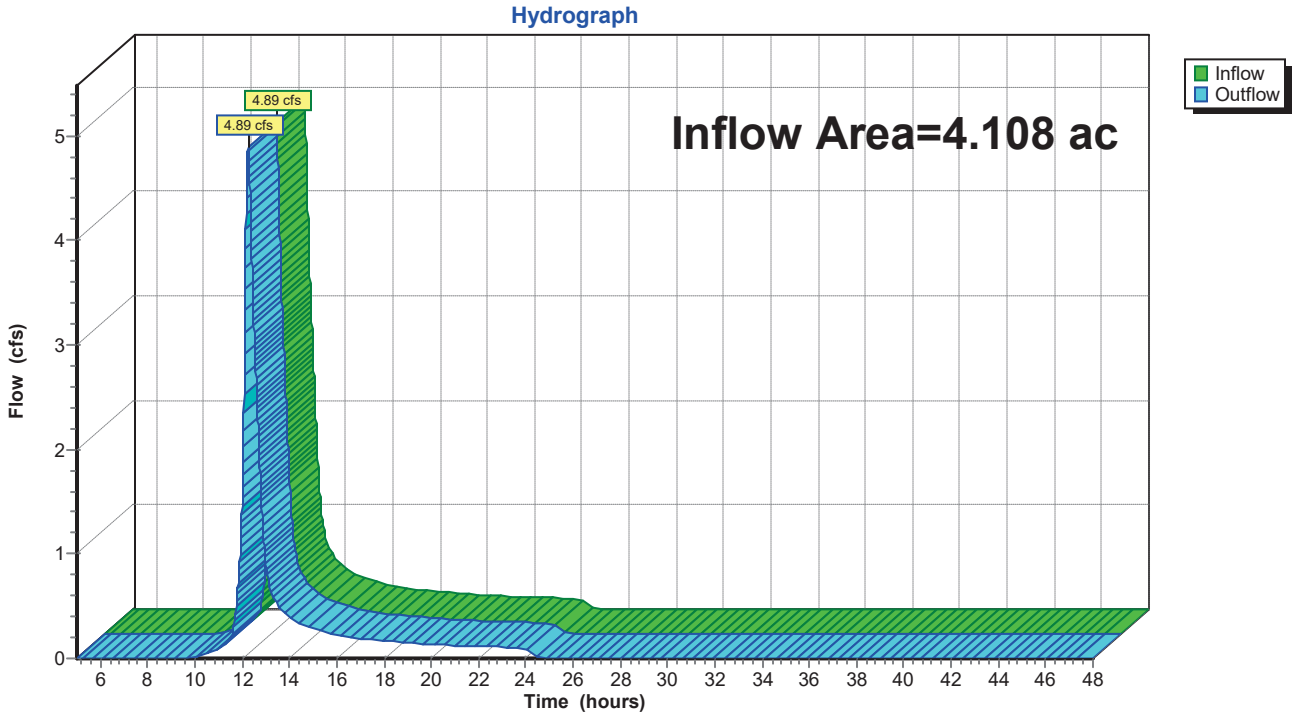
Reach DP1: Design Point #1



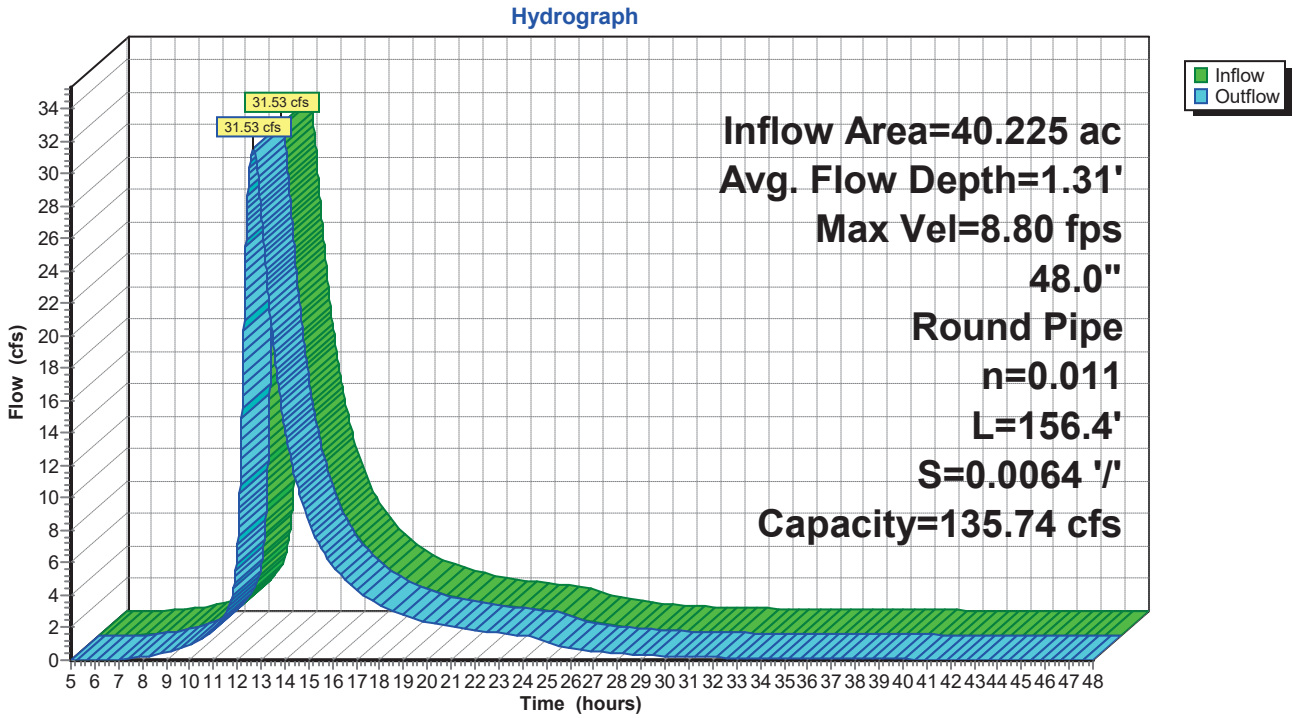
Reach DP2: Design Point #2



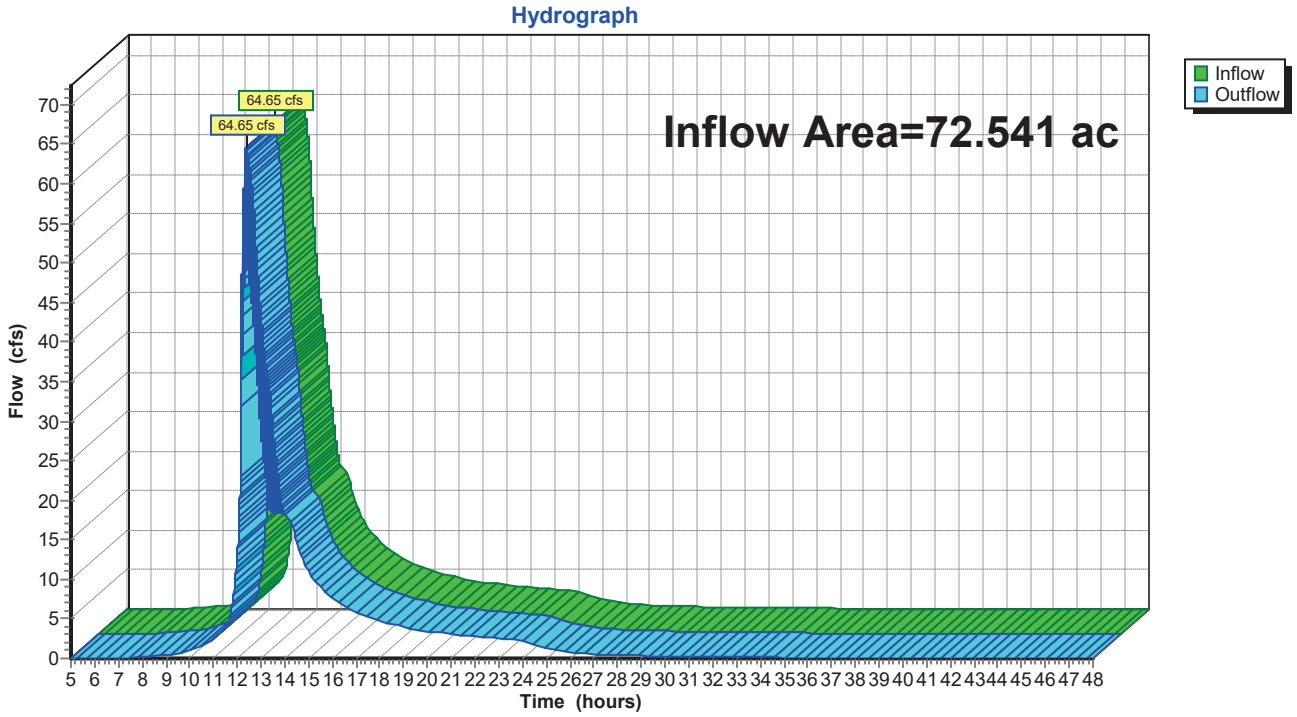
Reach DP3: Design Point #3



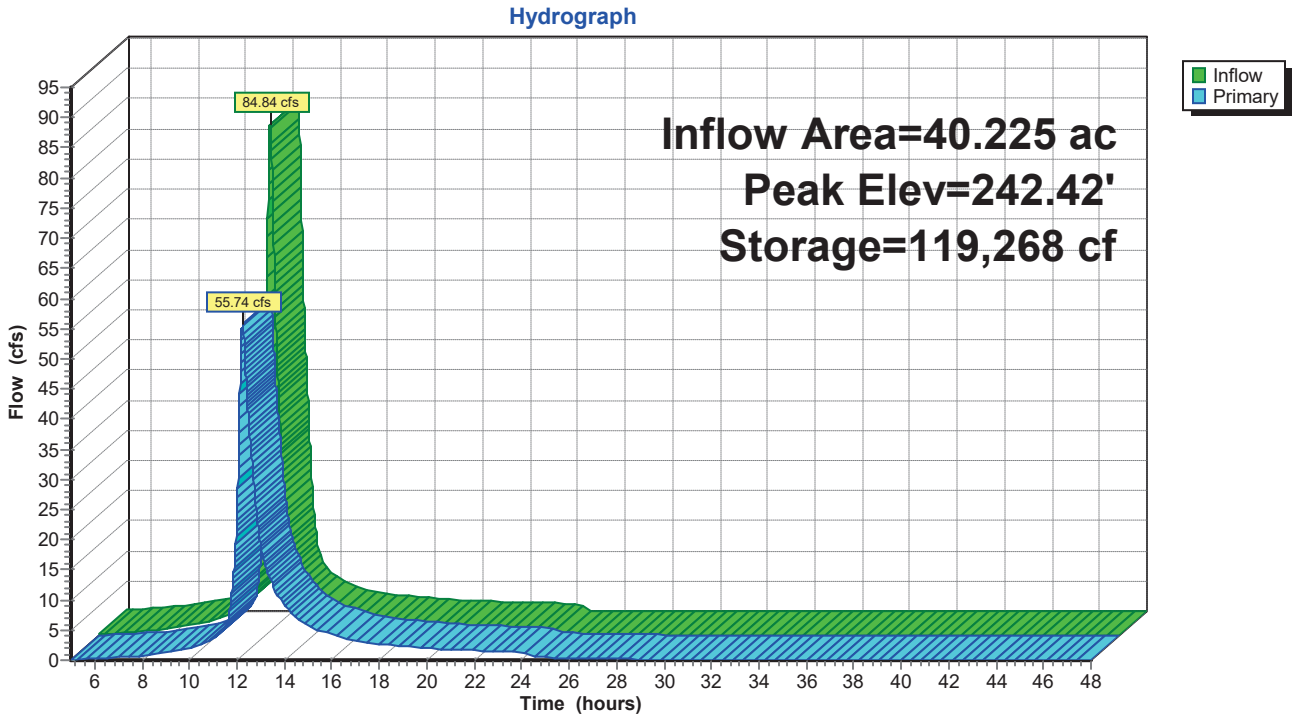
Reach MH: MH



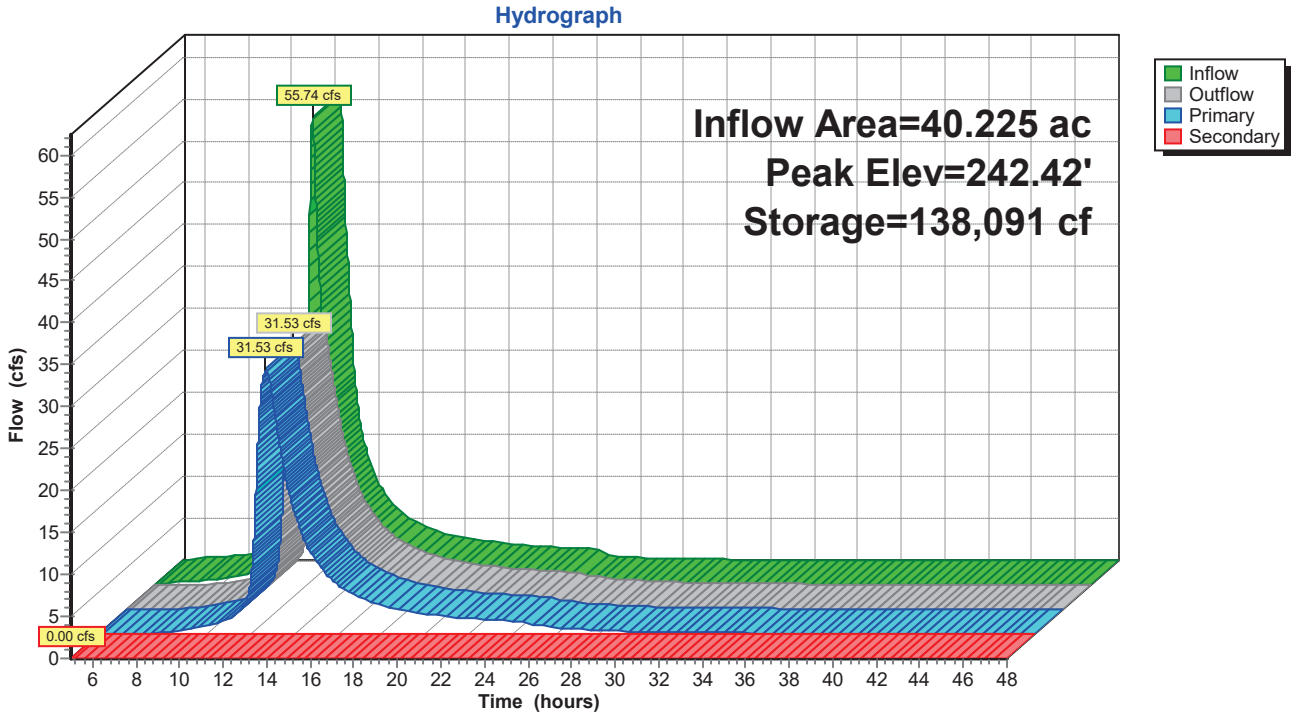
Reach TOT: Proposed Site Total



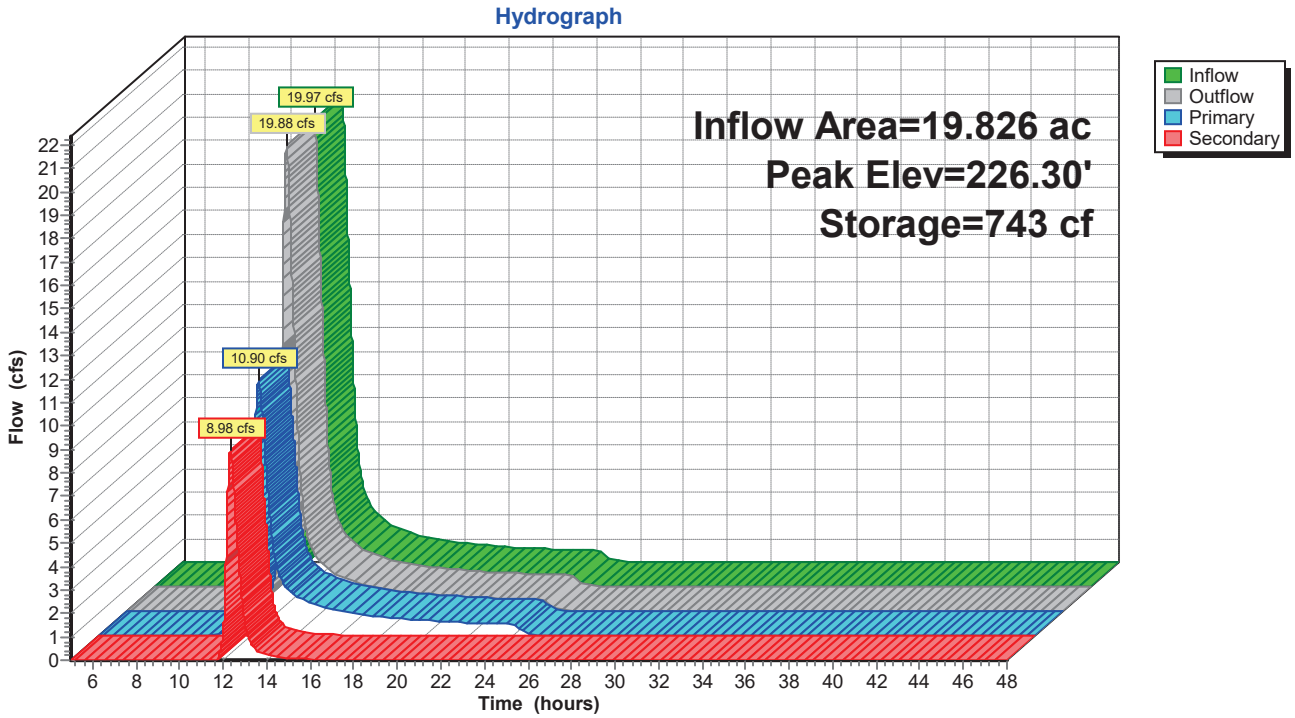
Pond 5P: FOREBAY & ABOVE



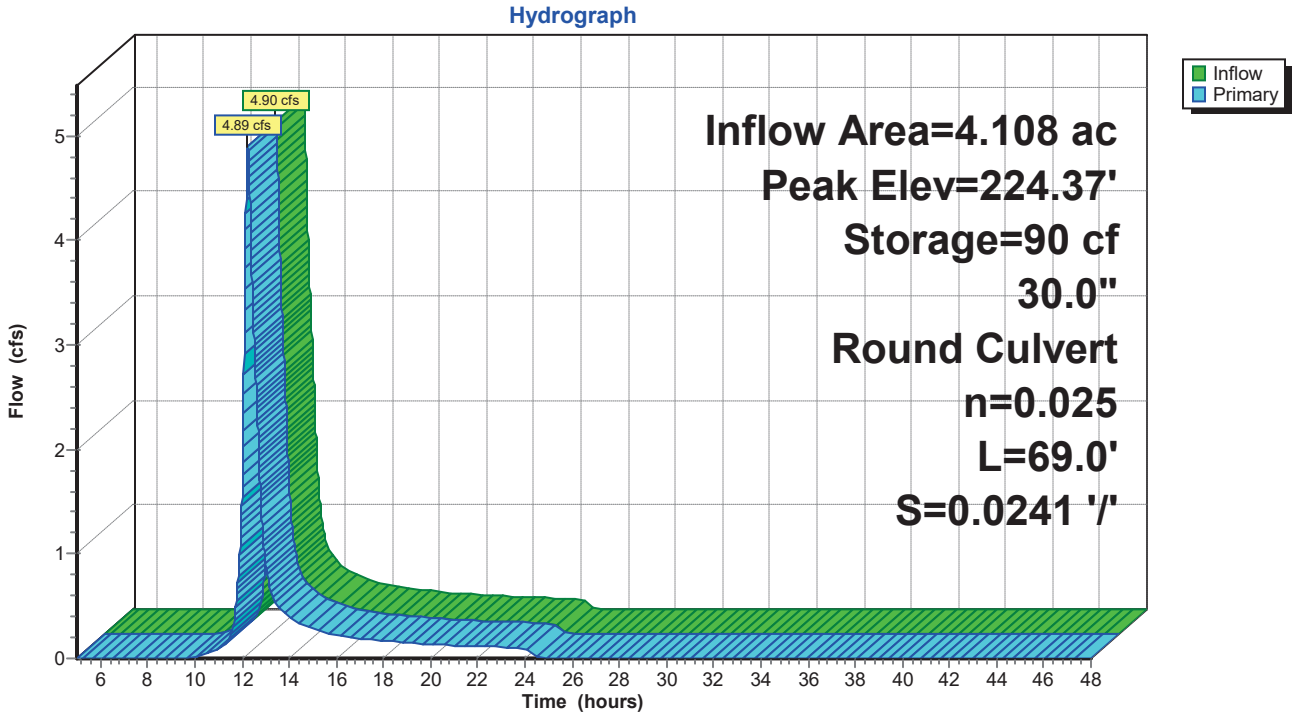
Pond 7P: WET POOL & ABOVE



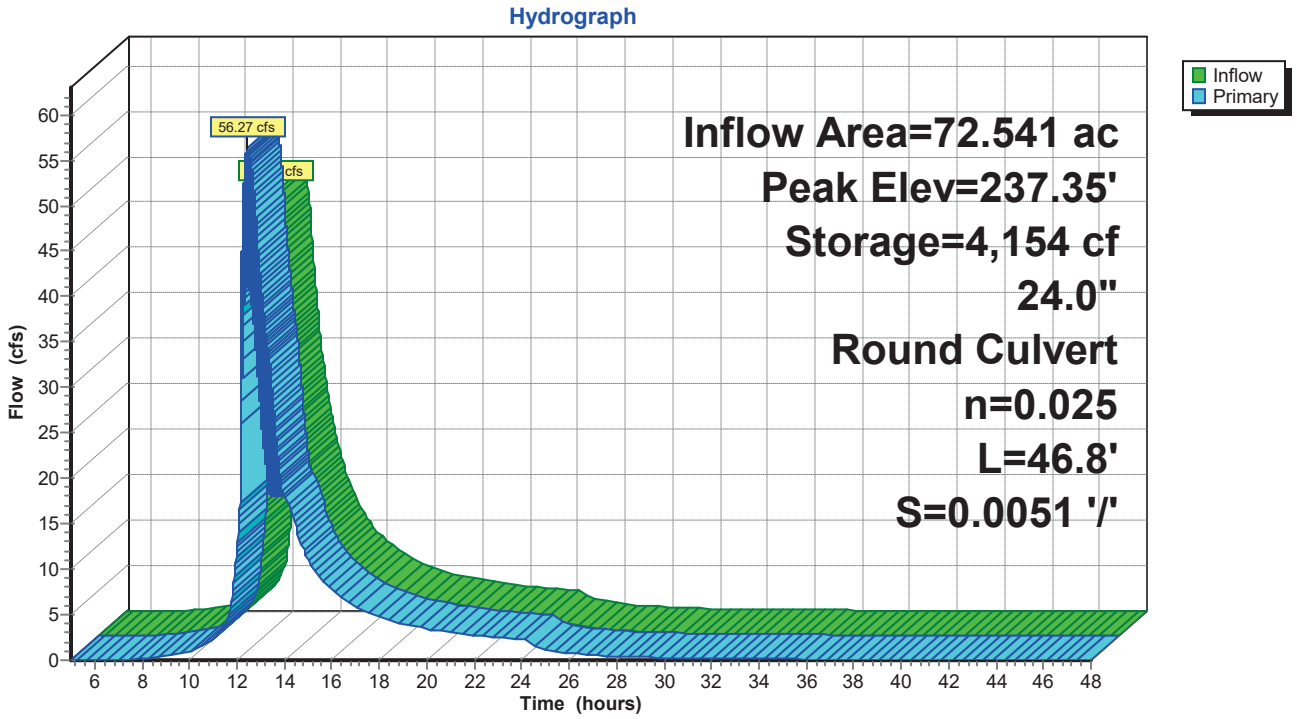
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>3.03"
Tc=20.0 min CN=94 Runoff=108.40 cfs 10.163 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=1.88"
Tc=20.0 min UI Adjusted CN=81 Runoff=7.04 cfs 0.644 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=1.80"
Tc=20.0 min CN=80 Runoff=13.74 cfs 1.261 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=1.80"
Tc=20.0 min CN=80 Runoff=20.86 cfs 1.914 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=1.80"
Tc=20.0 min CN=80 Runoff=11.64 cfs 1.068 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.29' Max Vel=6.17 fps Inflow=62.59 cfs 13.498 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=62.58 cfs 13.497 af

Reach CH4A: CH4A Avg. Flow Depth=0.79' Max Vel=6.01 fps Inflow=20.86 cfs 1.914 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=20.83 cfs 1.914 af

Reach CH4B: CH4B Avg. Flow Depth=1.42' Max Vel=2.24 fps Inflow=20.83 cfs 1.914 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=18.60 cfs 1.914 af

Reach DP1: Design Point #1 Inflow=14.39 cfs 0.852 af
Outflow=14.39 cfs 0.852 af

Reach DP2: Design Point #2 Inflow=14.41 cfs 2.130 af
Outflow=14.41 cfs 2.130 af

Reach DP3: Design Point #3 Inflow=7.03 cfs 0.644 af
Outflow=7.03 cfs 0.644 af

Reach MH: MH Avg. Flow Depth=1.54' Max Vel=9.56 fps Inflow=42.64 cfs 10.107 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=42.64 cfs 10.107 af

Reach TOT: Proposed Site Total Inflow=90.27 cfs 14.993 af
Outflow=90.27 cfs 14.993 af

Pond 5P: FOREBAY & ABOVE Peak Elev=242.91' Storage=134,271 cf Inflow=108.40 cfs 10.163 af
Outflow=72.09 cfs 10.139 af

Pond 7P: WET POOL & ABOVE Peak Elev=242.91' Storage=157,027 cf Inflow=72.09 cfs 10.139 af
Primary=42.64 cfs 10.107 af Secondary=0.00 cfs 0.000 af Outflow=42.64 cfs 10.107 af

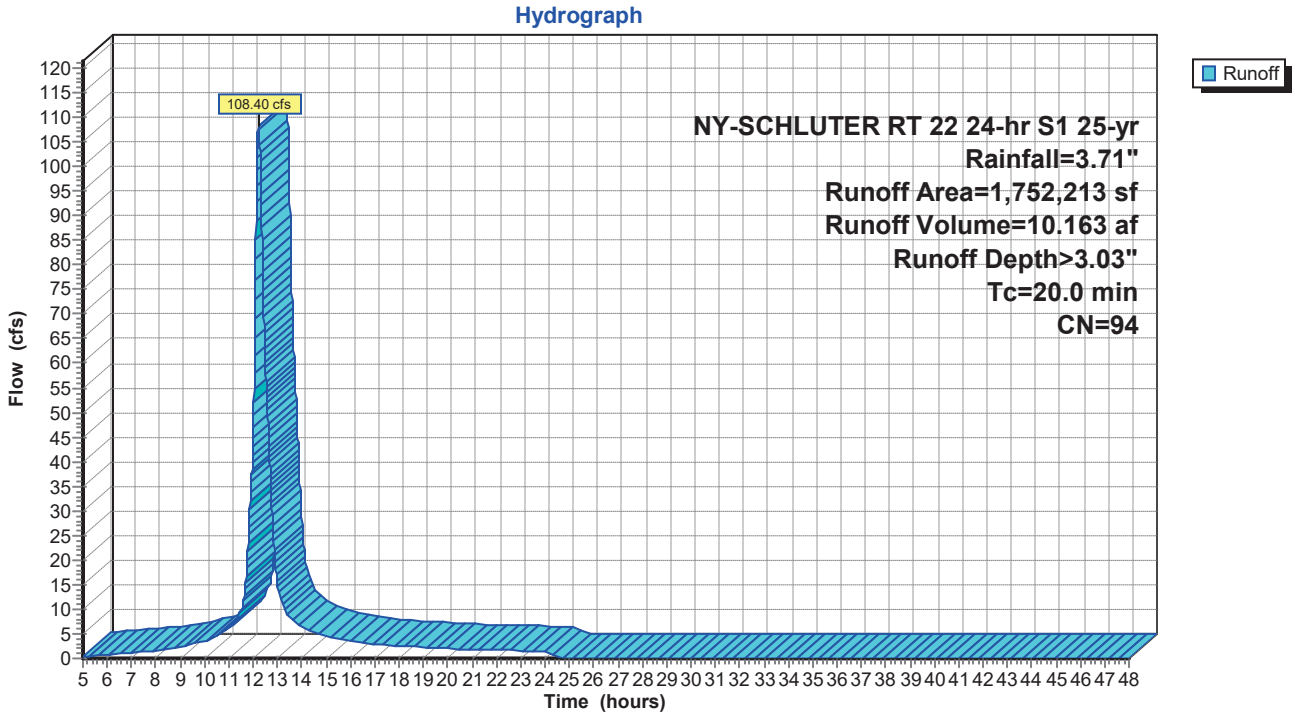
Pond CH1: Existing Channel #1 Peak Elev=226.75' Storage=1,705 cf Inflow=29.27 cfs 2.981 af
Primary=14.41 cfs 2.130 af Secondary=14.39 cfs 0.852 af Outflow=28.81 cfs 2.981 af

Pond CH3: Proposed Channel #3 Peak Elev=224.60' Storage=141 cf Inflow=7.04 cfs 0.644 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=7.03 cfs 0.644 af

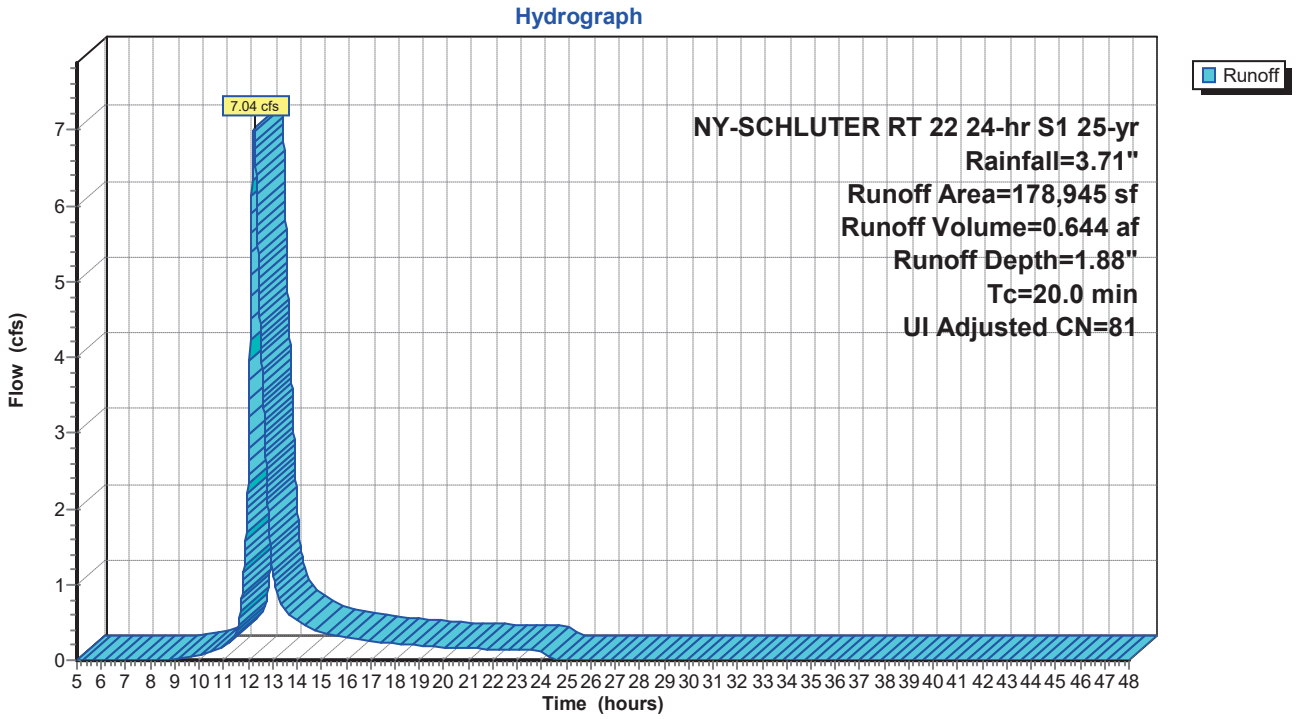
Pond DP4: Design Point #4 Peak Elev=252.71' Storage=4,154 cf Inflow=67.59 cfs 14.141 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=76.40 cfs 14.141 af

Total Runoff Area = 72.541 ac Runoff Volume = 15.048 af Average Runoff Depth = 2.49"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

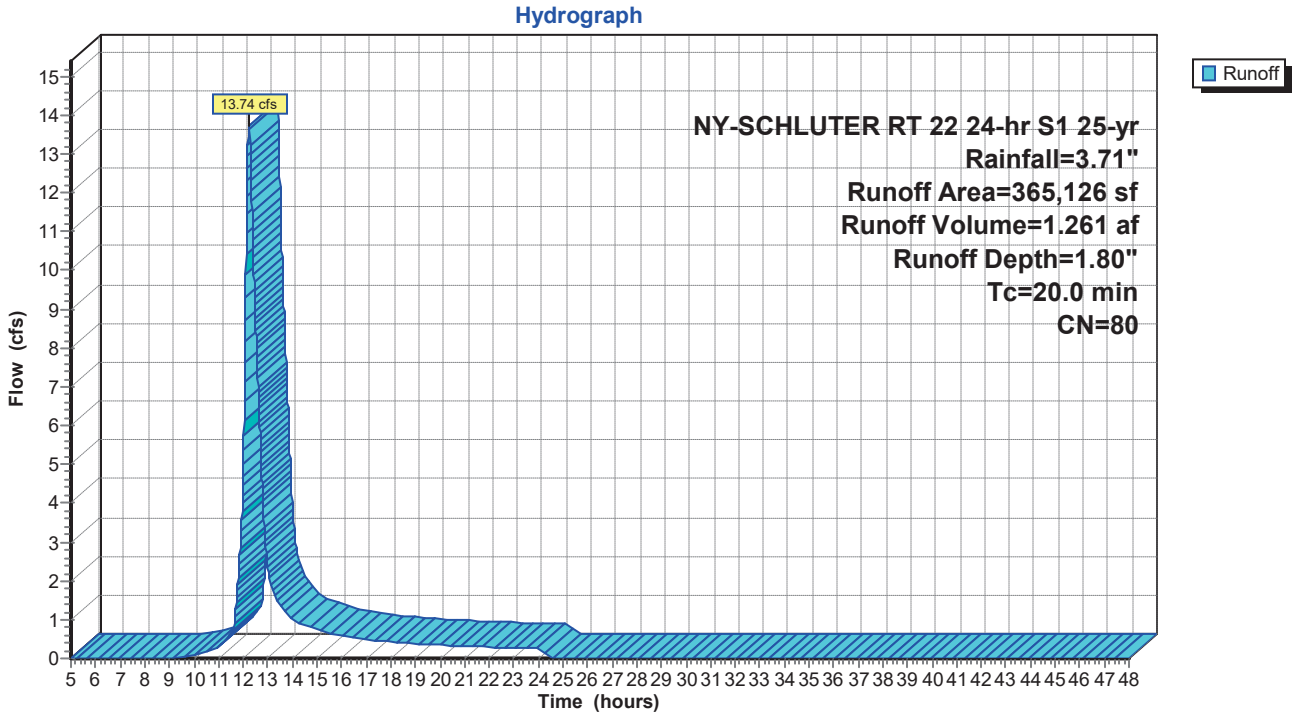
Subcatchment P1: Proposed Basin #1



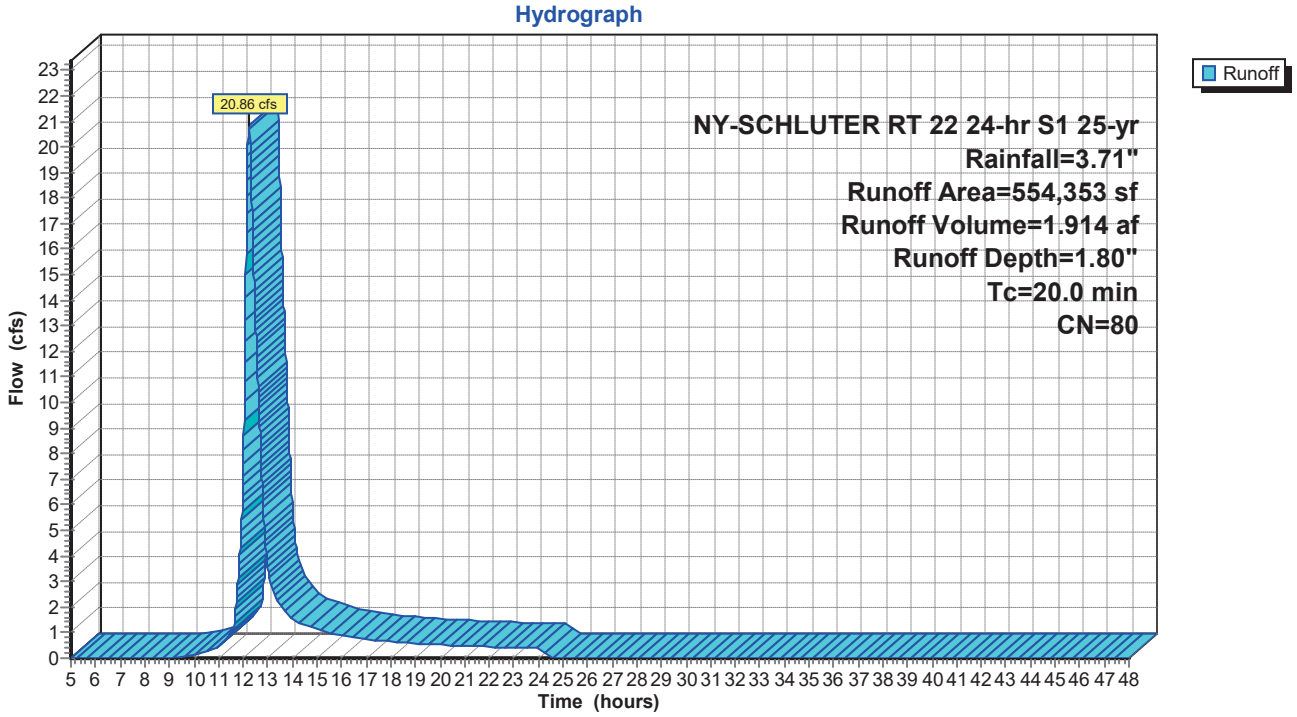
Subcatchment P2: Proposed Basin #2



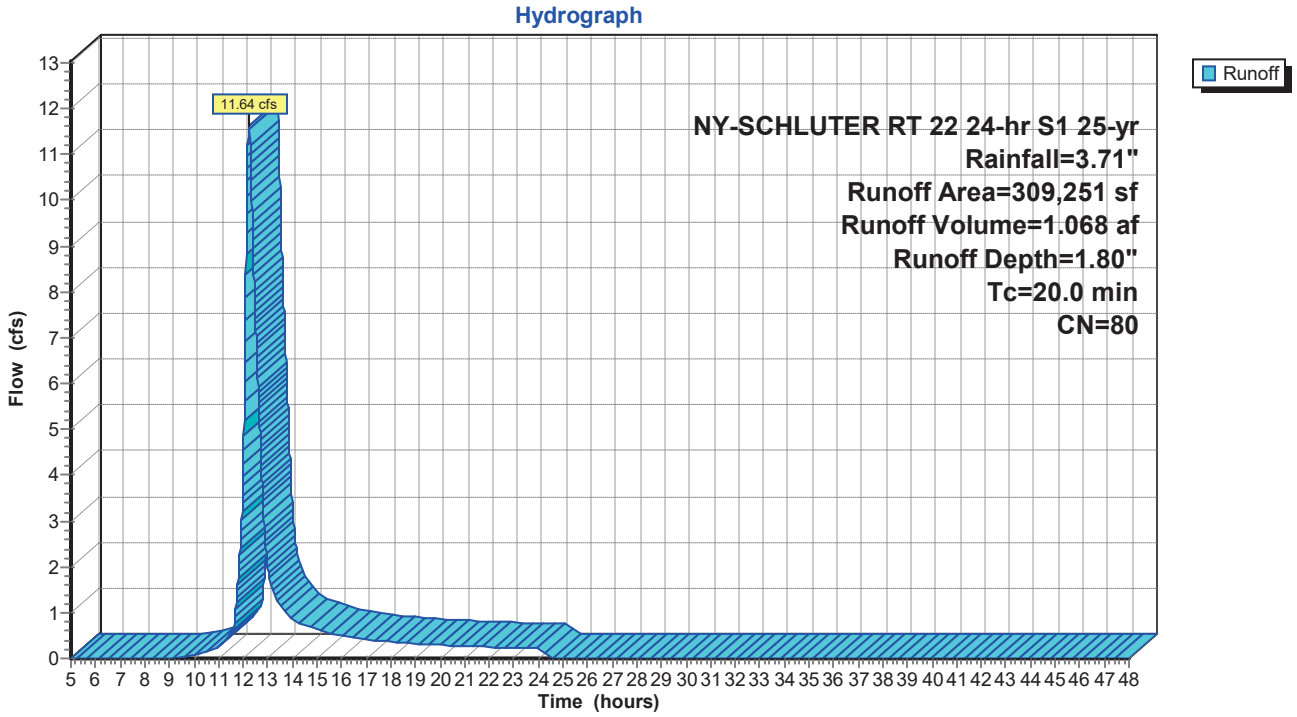
Subcatchment P3: Proposed Basin #3



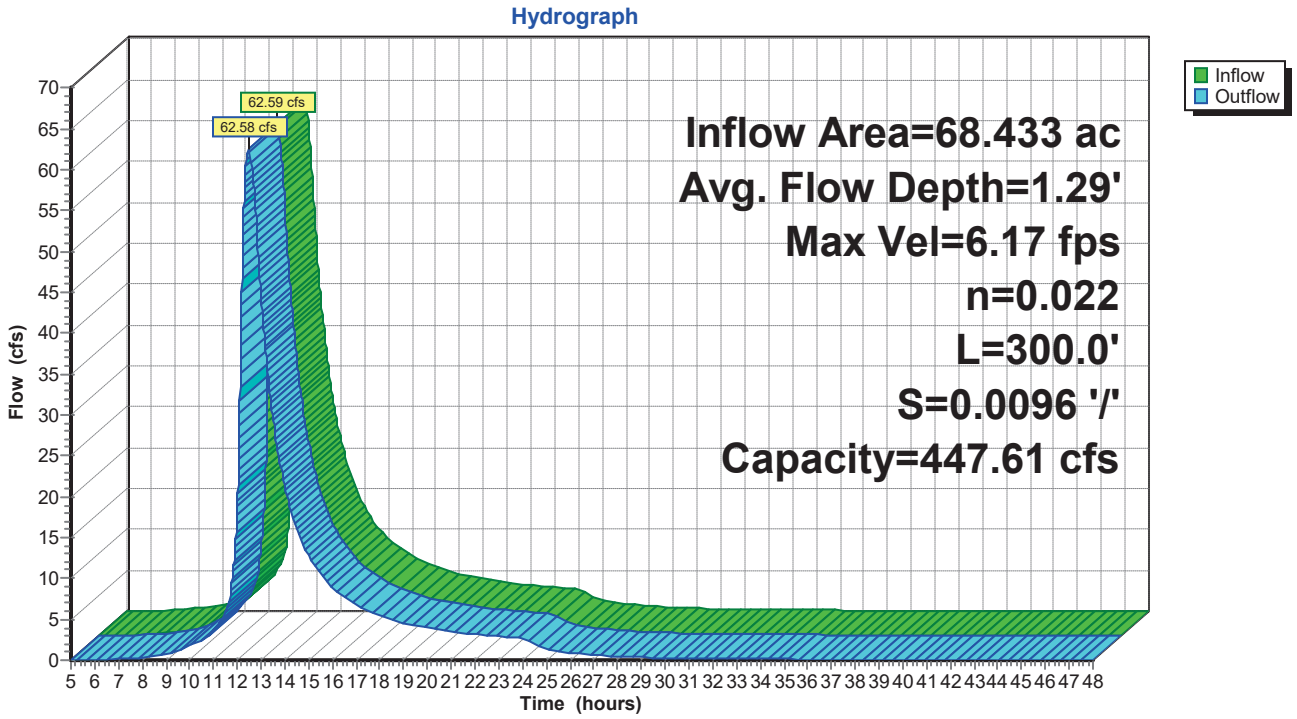
Subcatchment P4: Proposed Basin #4



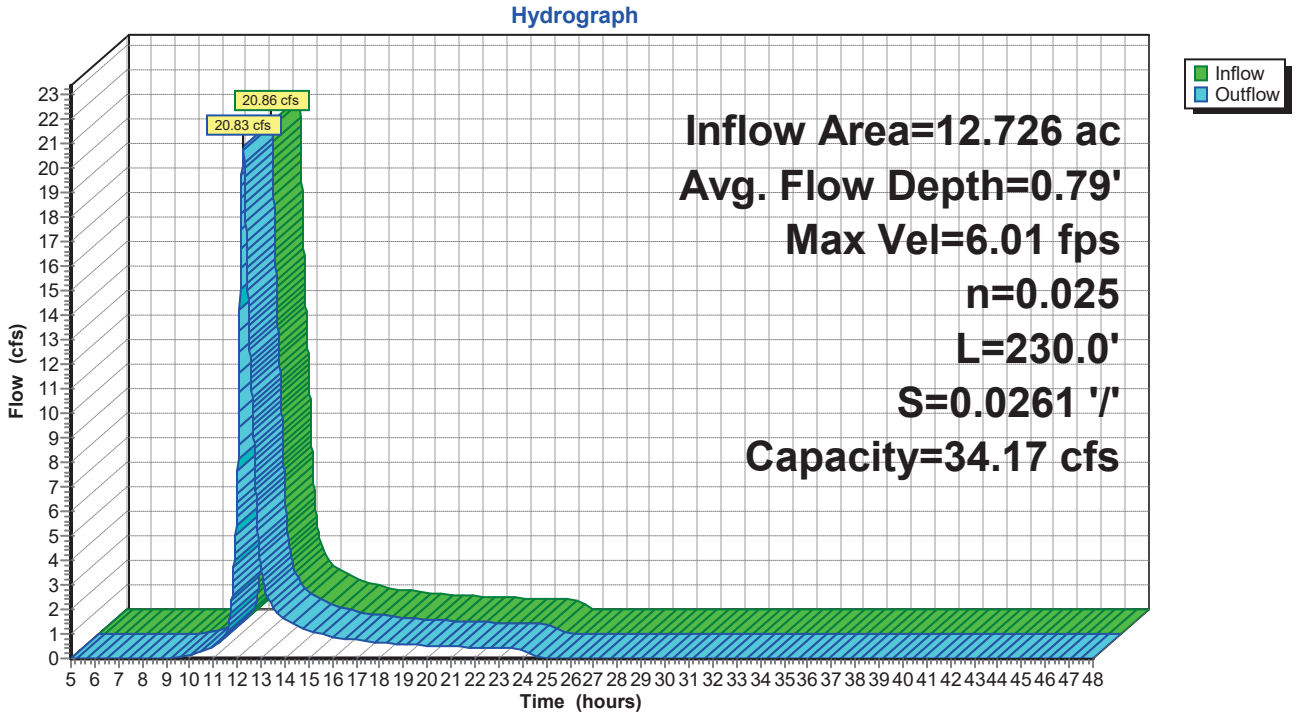
Subcatchment P5: Proposed Basin #5



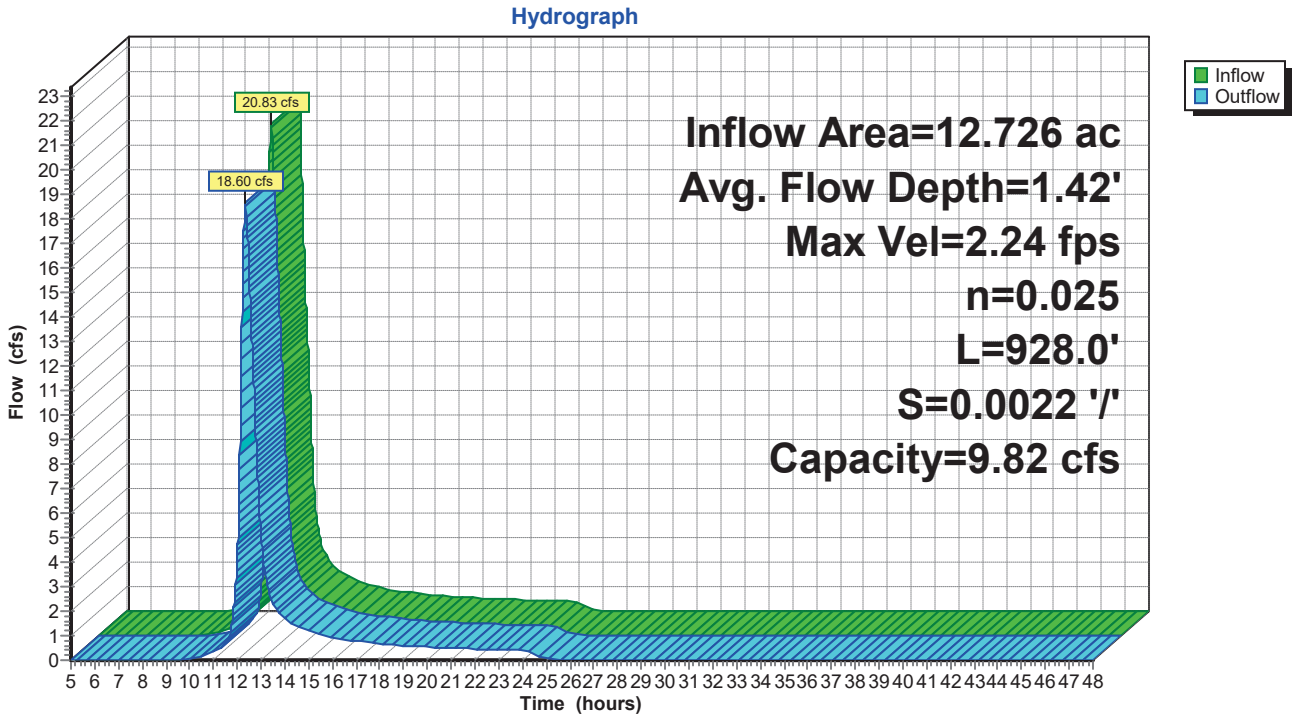
Reach CH2: Existing Channel #2



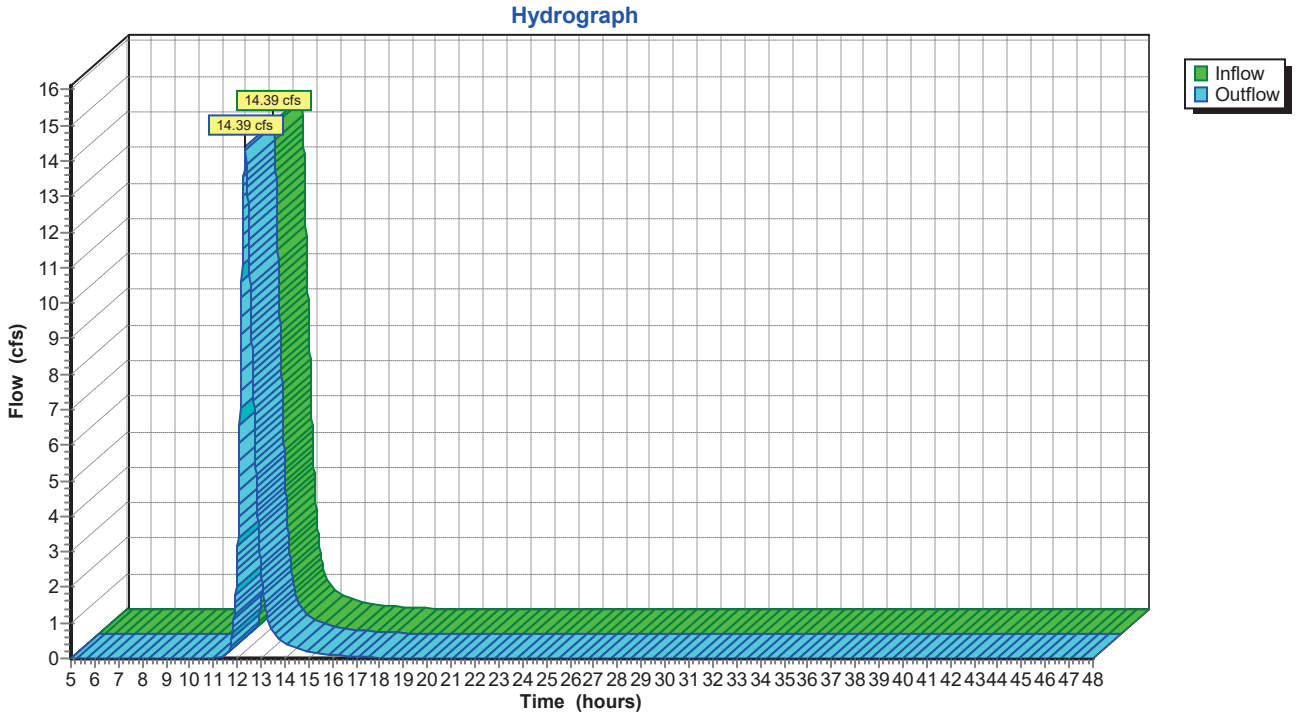
Reach CH4A: CH4A



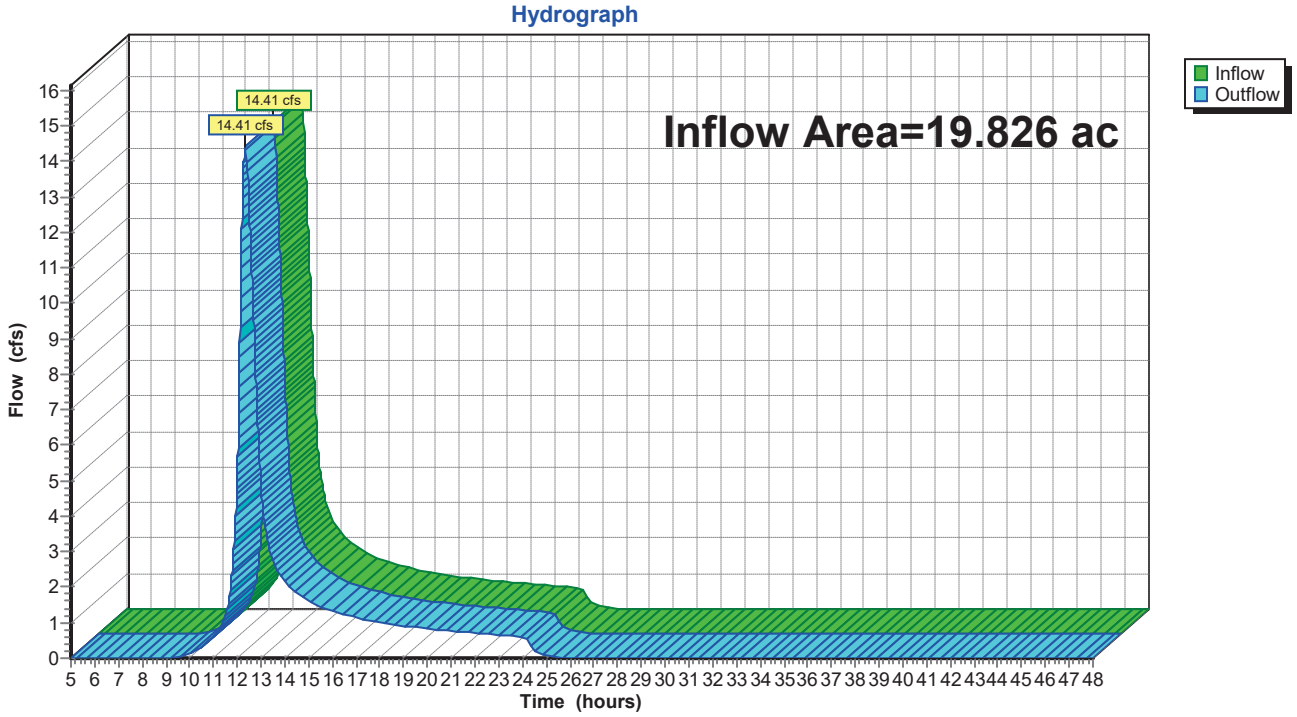
Reach CH4B: CH4B



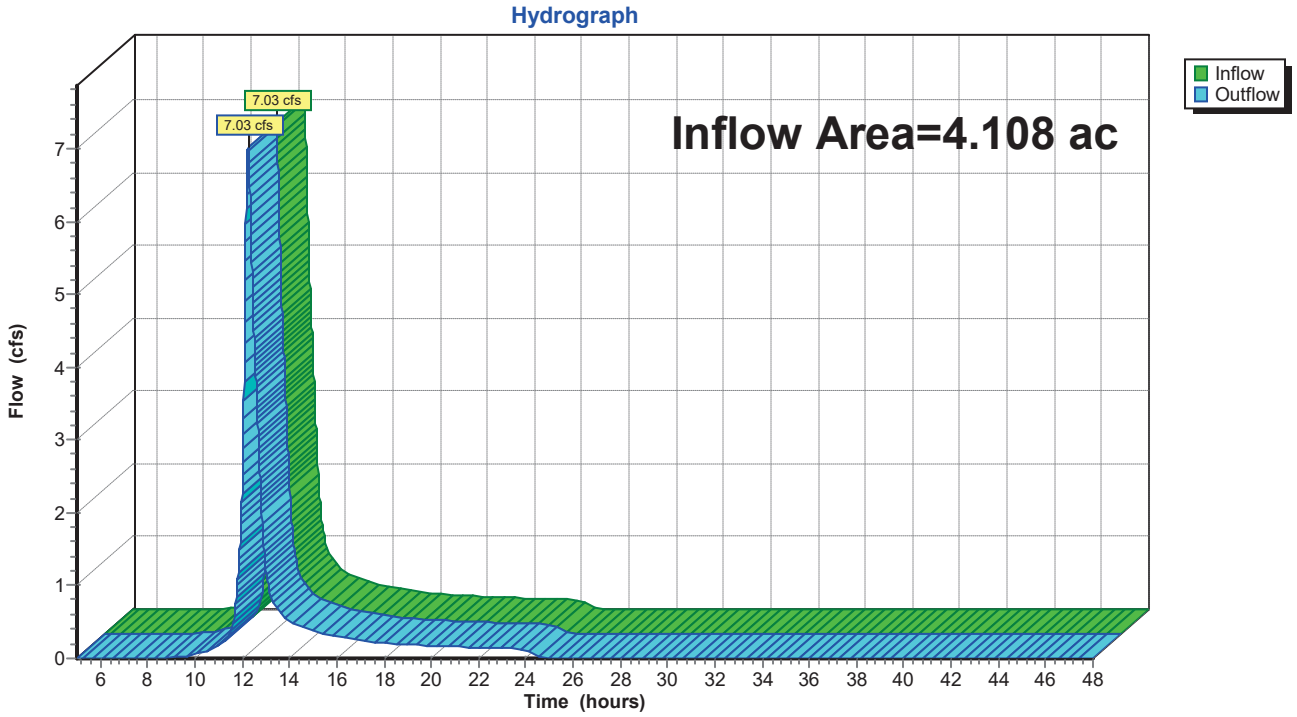
Reach DP1: Design Point #1



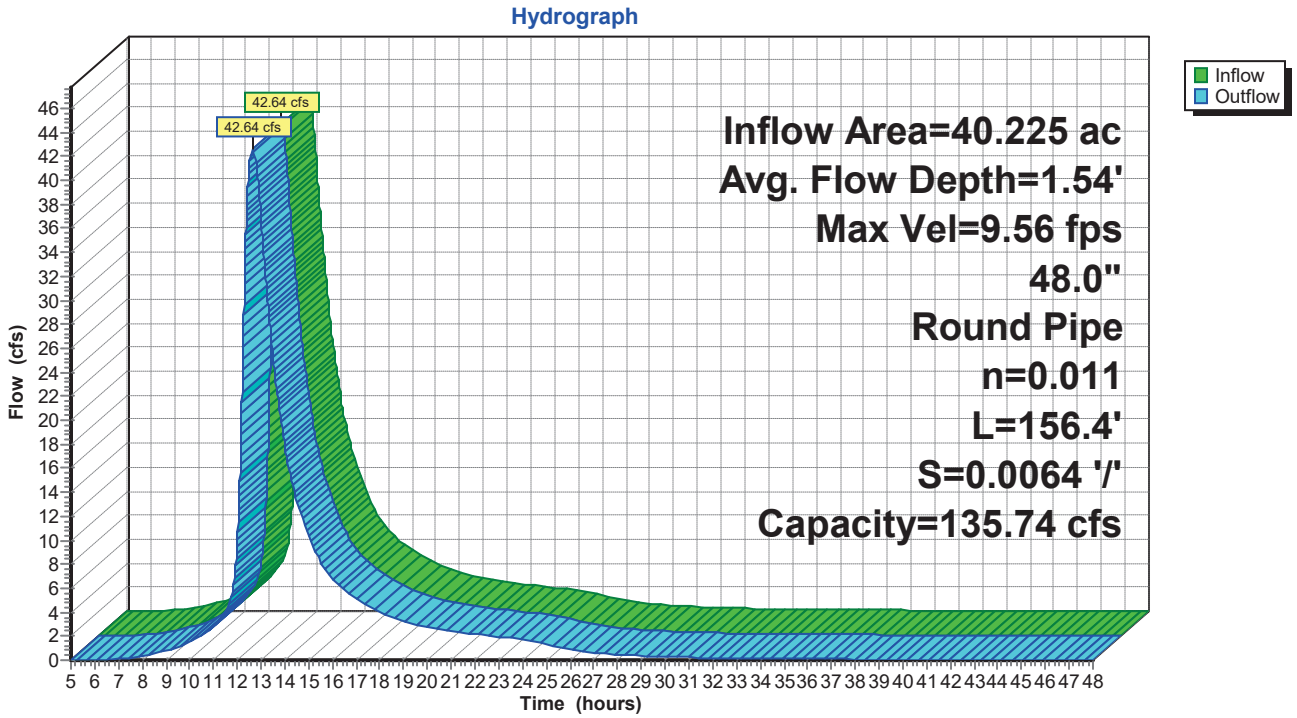
Reach DP2: Design Point #2



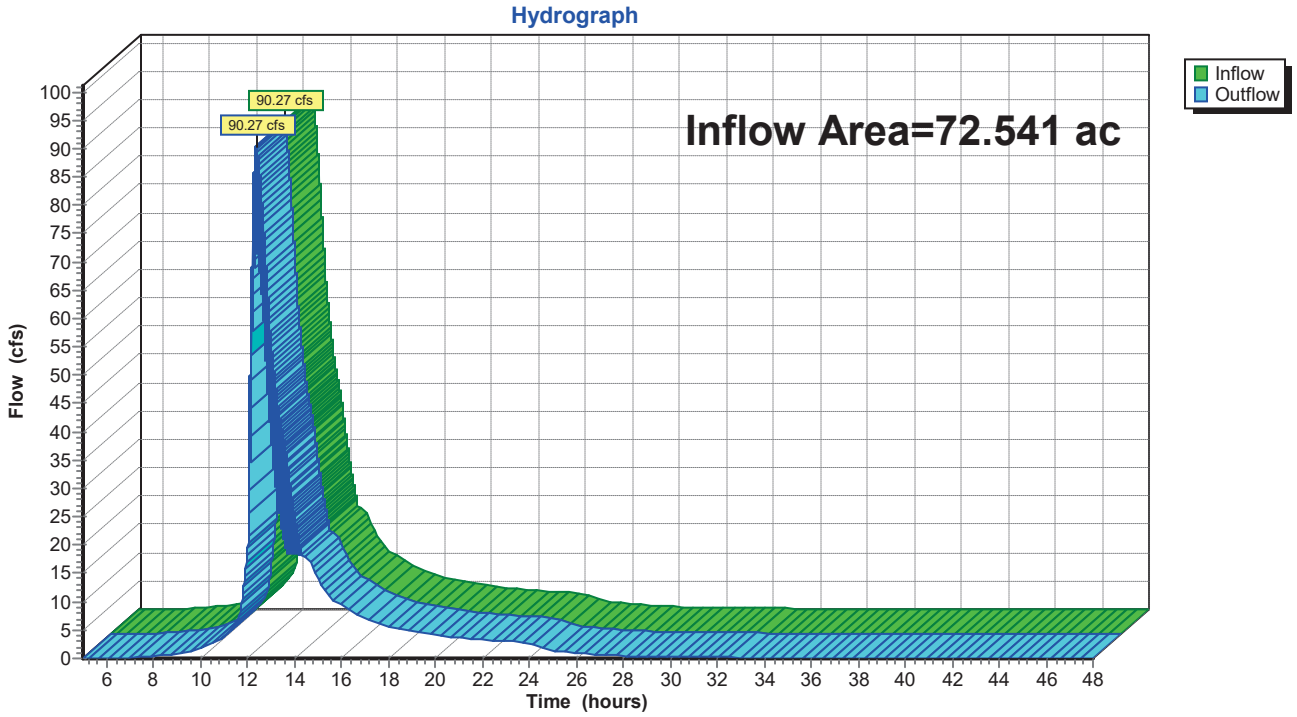
Reach DP3: Design Point #3



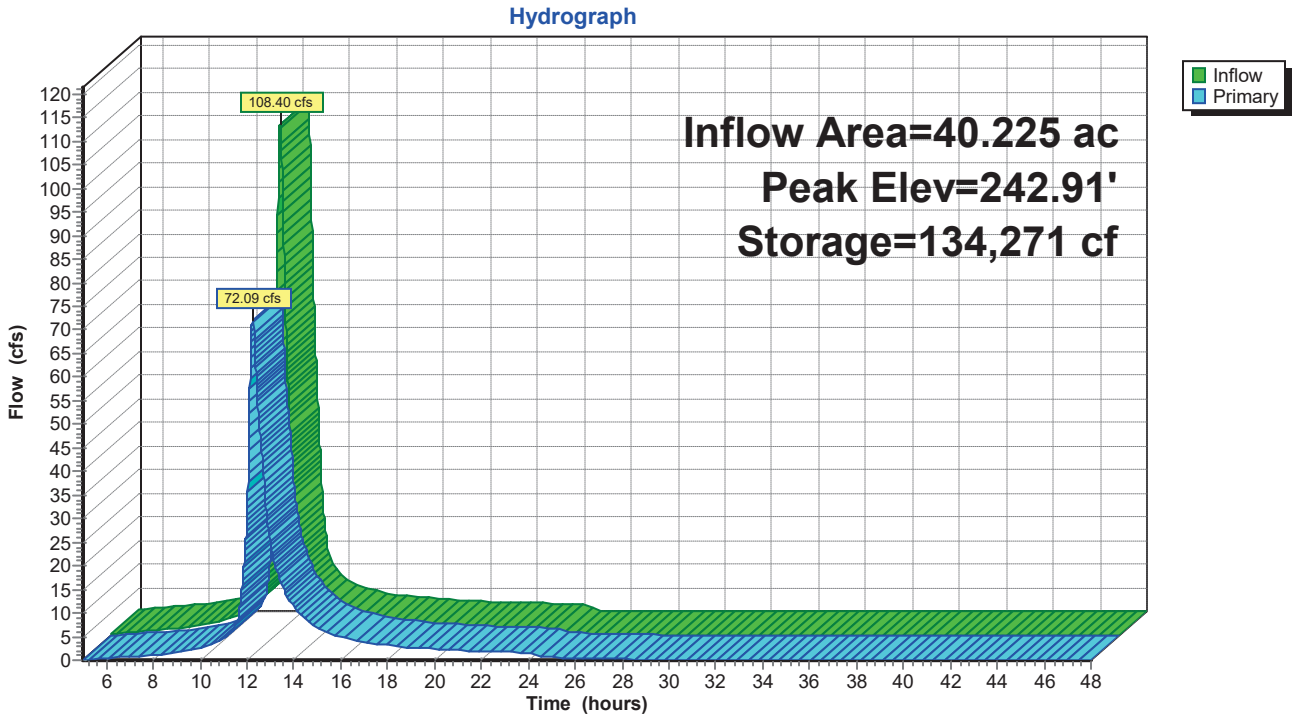
Reach MH: MH



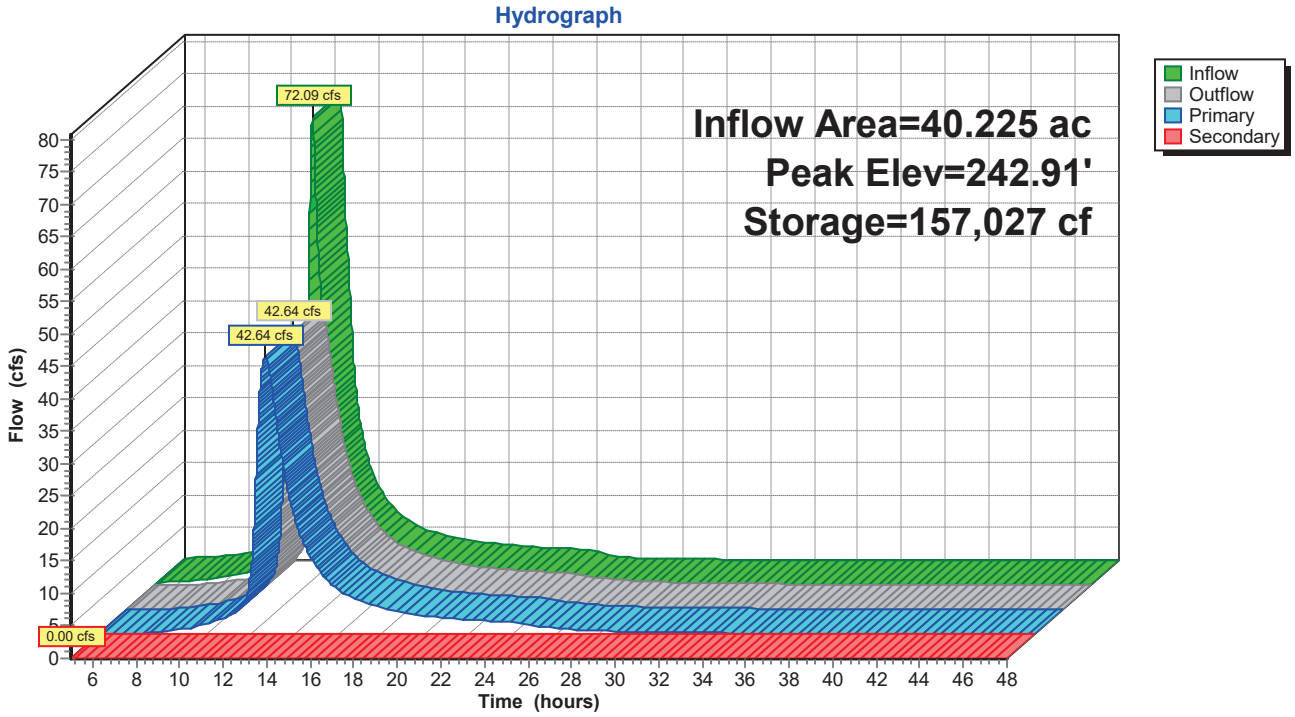
Reach TOT: Proposed Site Total



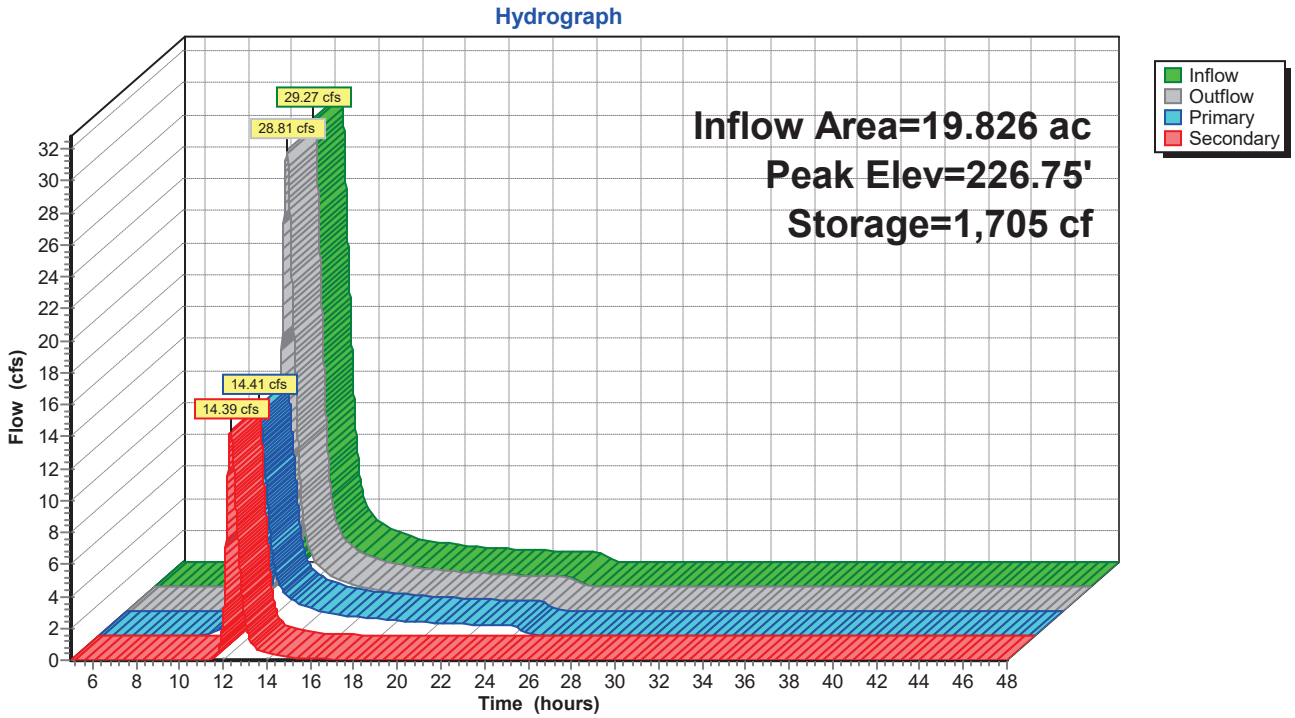
Pond 5P: FOREBAY & ABOVE



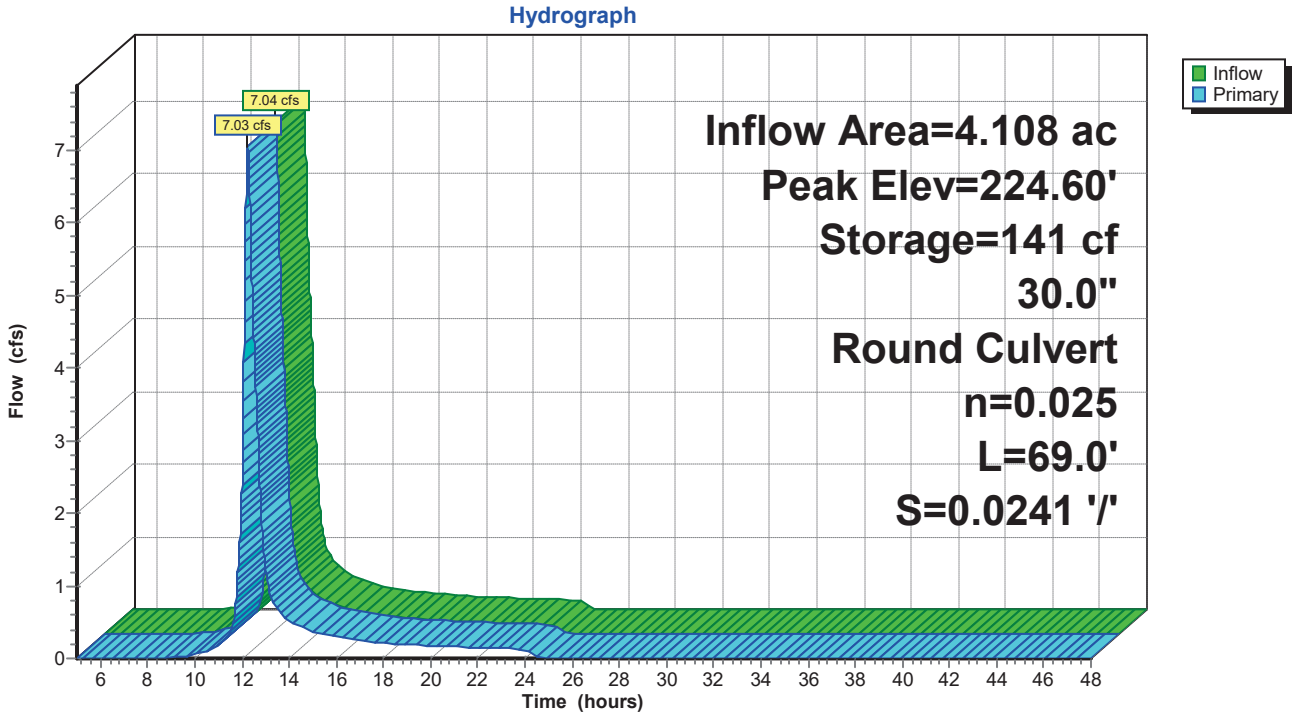
Pond 7P: WET POOL & ABOVE



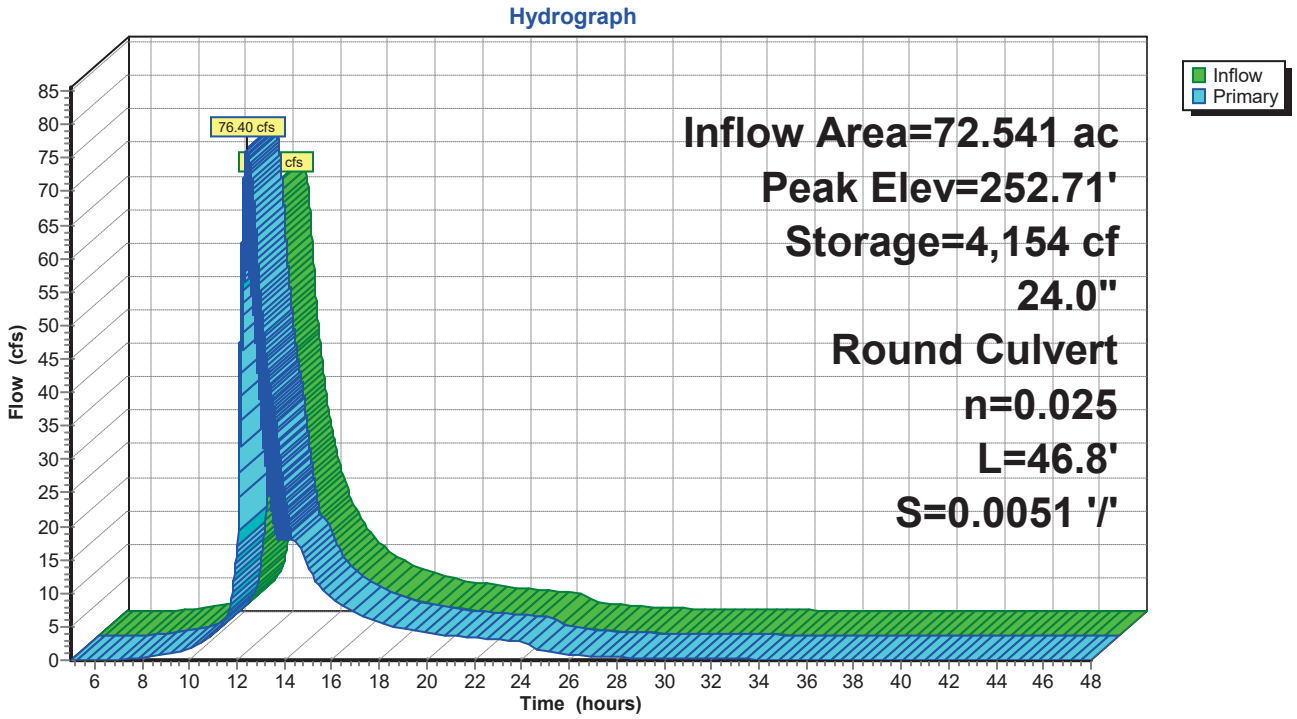
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>3.62"
Tc=20.0 min CN=94 Runoff=128.54 cfs 12.143 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=2.39"
Tc=20.0 min UI Adjusted CN=81 Runoff=9.00 cfs 0.819 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=2.31"
Tc=20.0 min CN=80 Runoff=17.69 cfs 1.613 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=2.31"
Tc=20.0 min CN=80 Runoff=26.86 cfs 2.449 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=2.31"
Tc=20.0 min CN=80 Runoff=14.99 cfs 1.366 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.44' Max Vel=6.54 fps Inflow=77.30 cfs 16.276 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=77.28 cfs 16.276 af

Reach CH4A: CH4A Avg. Flow Depth=0.89' Max Vel=6.42 fps Inflow=26.86 cfs 2.449 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=26.83 cfs 2.449 af

Reach CH4B: CH4B Avg. Flow Depth=1.68' Max Vel=2.32 fps Inflow=26.83 cfs 2.449 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=24.06 cfs 2.449 af

Reach DP1: Design Point #1 Inflow=20.14 cfs 1.239 af
Outflow=20.14 cfs 1.239 af

Reach DP2: Design Point #2 Inflow=15.92 cfs 2.576 af
Outflow=15.92 cfs 2.576 af

Reach DP3: Design Point #3 Inflow=8.99 cfs 0.819 af
Outflow=8.99 cfs 0.819 af

Reach MH: MH Avg. Flow Depth=1.72' Max Vel=10.10 fps Inflow=52.29 cfs 12.087 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=52.29 cfs 12.087 af

Reach TOT: Proposed Site Total Inflow=106.06 cfs 18.334 af
Outflow=106.06 cfs 18.334 af

Pond 5P: FOREBAY & ABOVE Peak Elev=243.34' Storage=147,728 cf Inflow=128.54 cfs 12.143 af
Outflow=86.41 cfs 12.119 af

Pond 7P: WET POOL & ABOVE Peak Elev=243.34' Storage=173,987 cf Inflow=86.41 cfs 12.119 af
Primary=52.29 cfs 12.087 af Secondary=0.00 cfs 0.000 af Outflow=52.29 cfs 12.087 af

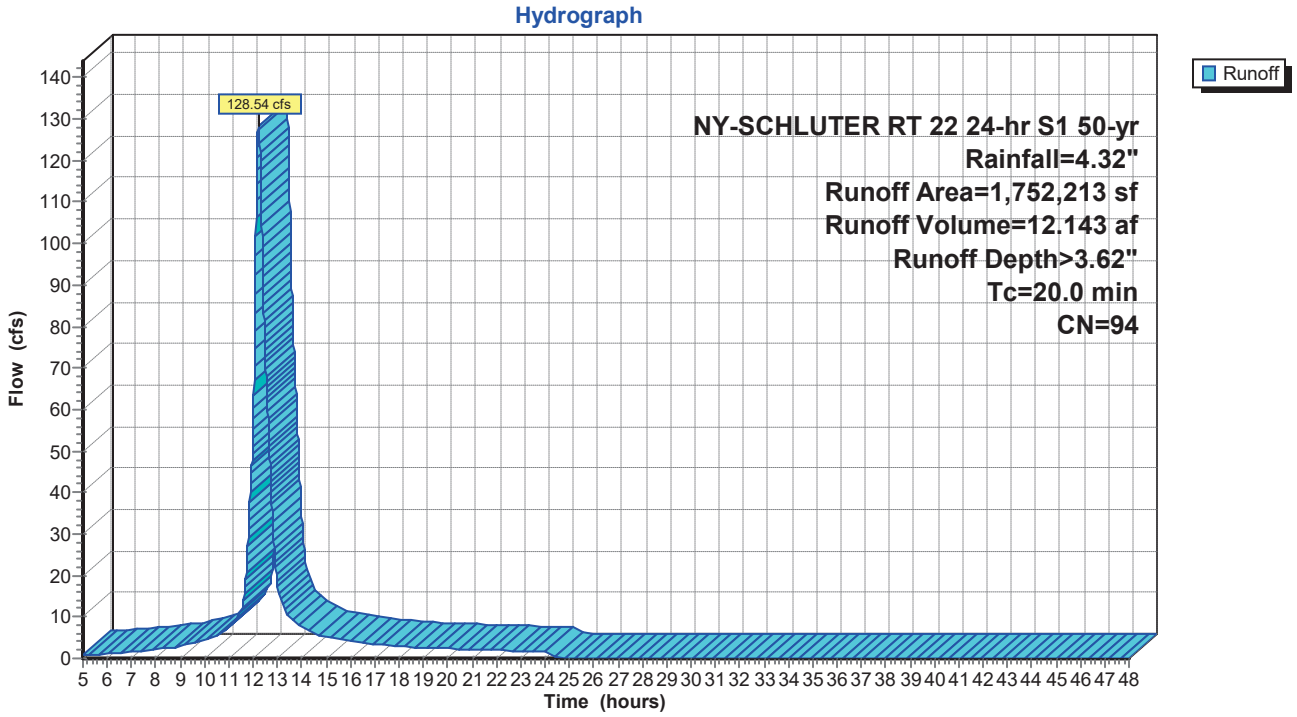
Pond CH1: Existing Channel #1 Peak Elev=227.23' Storage=3,574 cf Inflow=37.88 cfs 3.815 af
Primary=15.92 cfs 2.576 af Secondary=20.14 cfs 1.239 af Outflow=36.06 cfs 3.815 af

Pond CH3: Proposed Channel #3 Peak Elev=224.79' Storage=192 cf Inflow=9.00 cfs 0.819 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=8.99 cfs 0.819 af

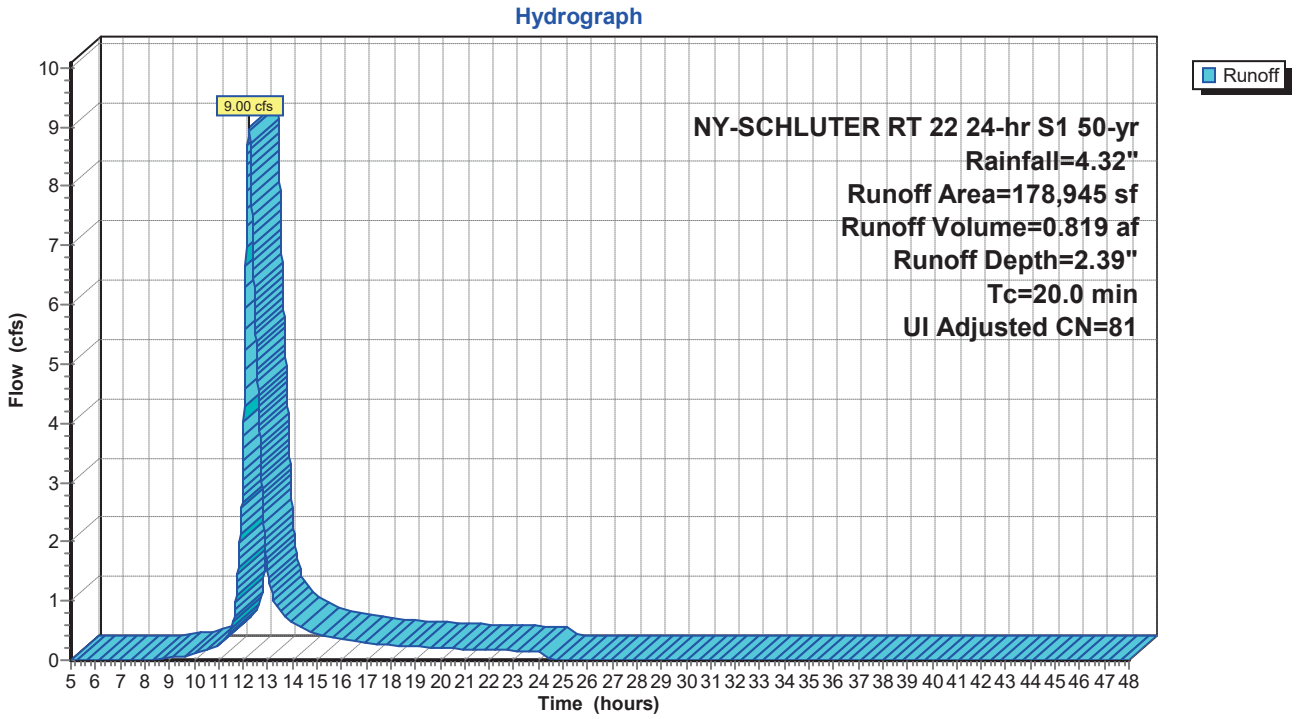
Pond DP4: Design Point #4 Peak Elev=261.83' Storage=4,154 cf Inflow=83.07 cfs 17.095 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=86.14 cfs 17.095 af

Total Runoff Area = 72.541 ac Runoff Volume = 18.390 af Average Runoff Depth = 3.04"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

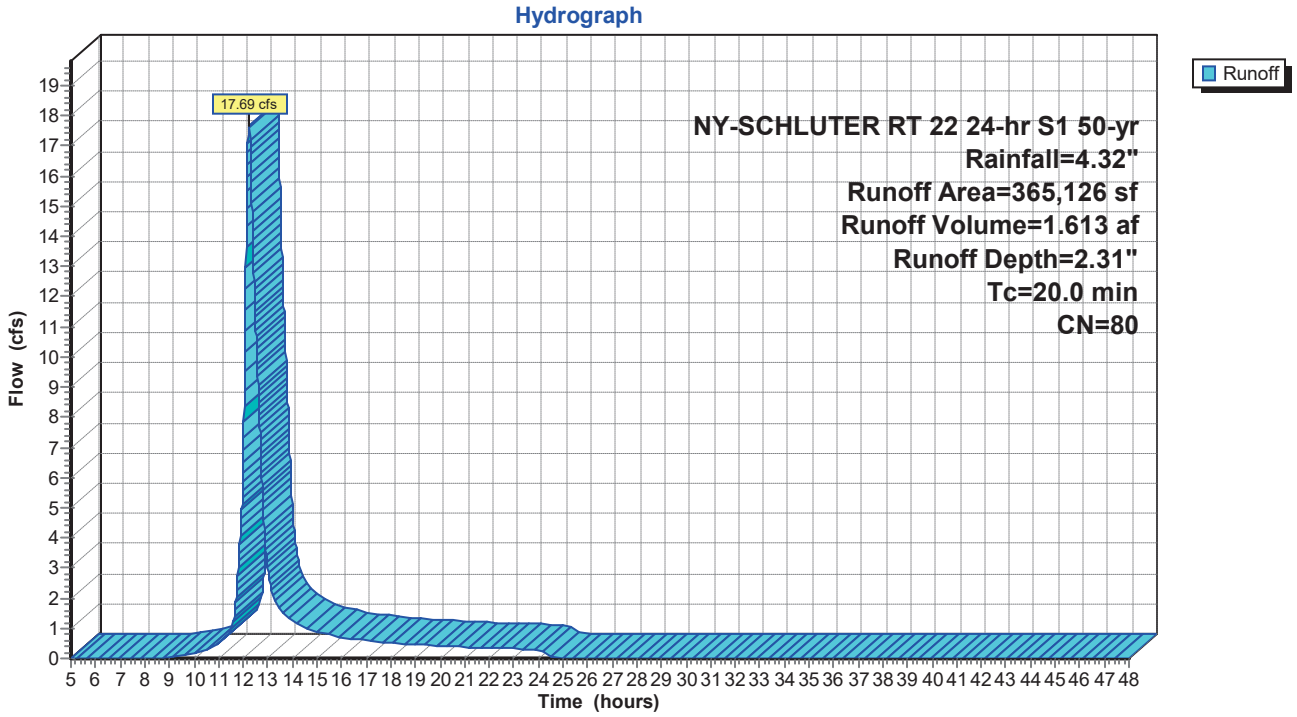
Subcatchment P1: Proposed Basin #1



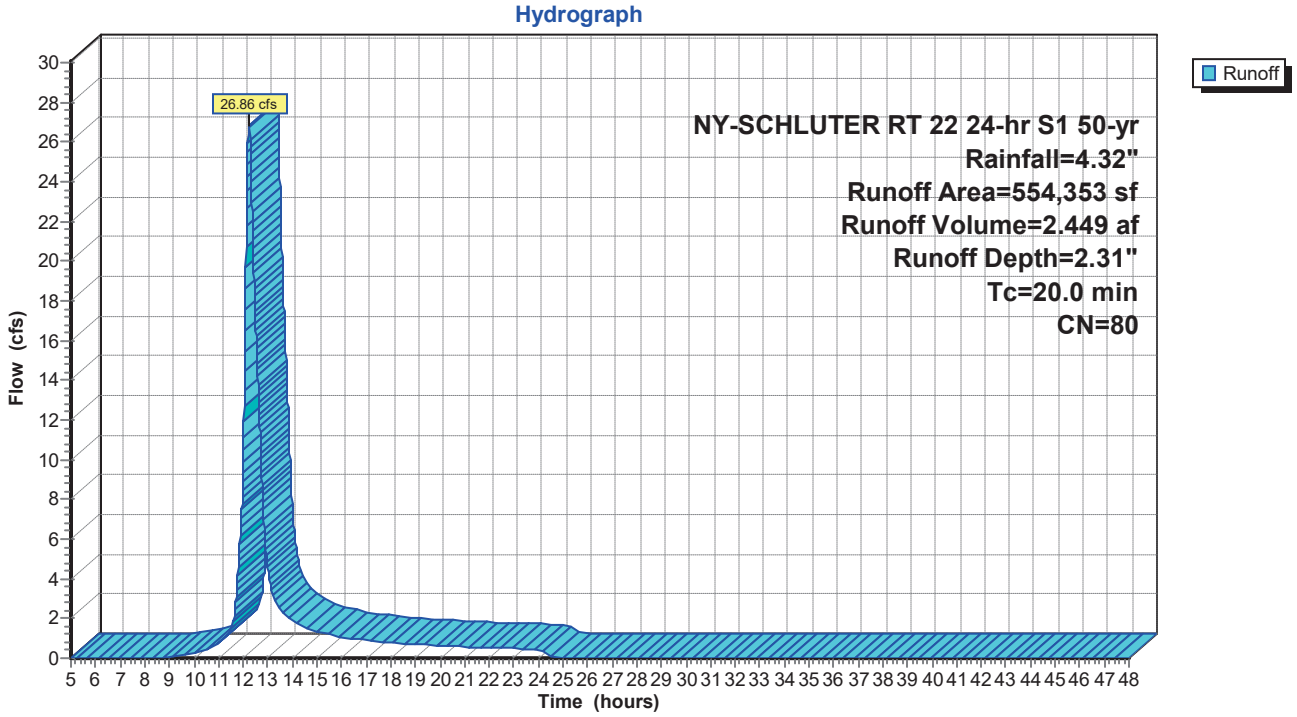
Subcatchment P2: Proposed Basin #2



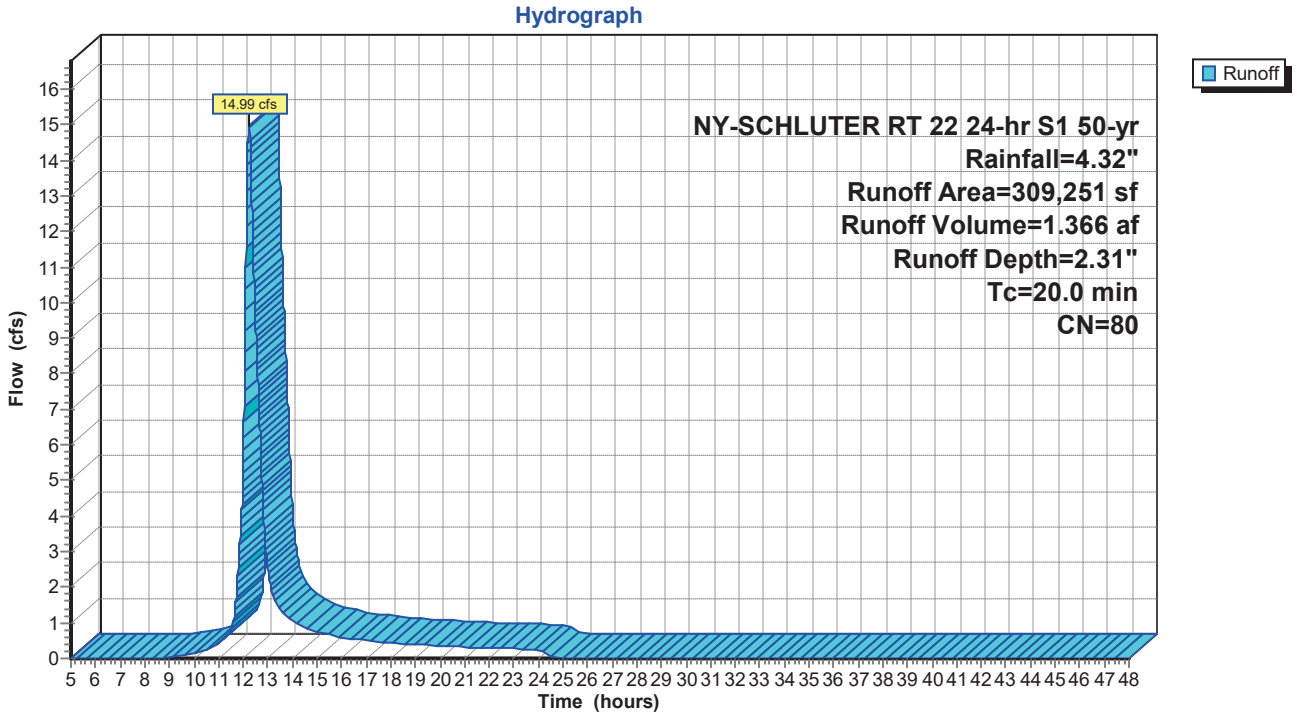
Subcatchment P3: Proposed Basin #3



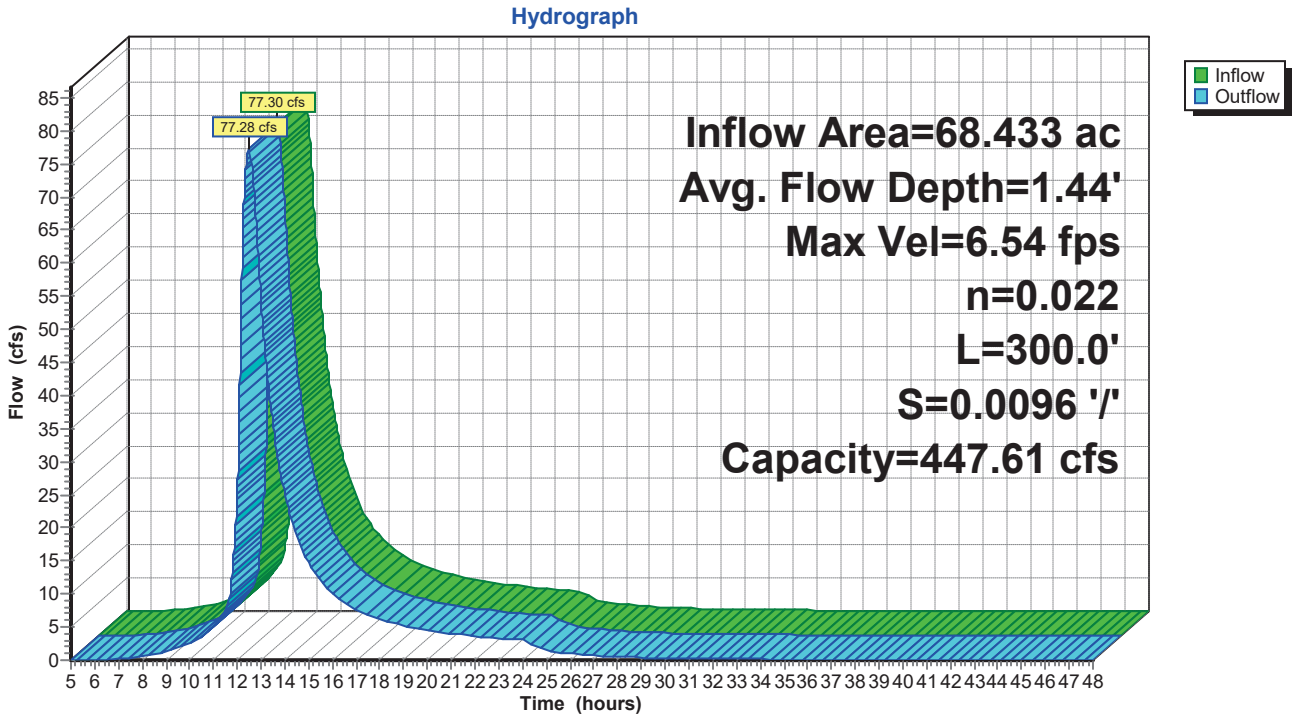
Subcatchment P4: Proposed Basin #4



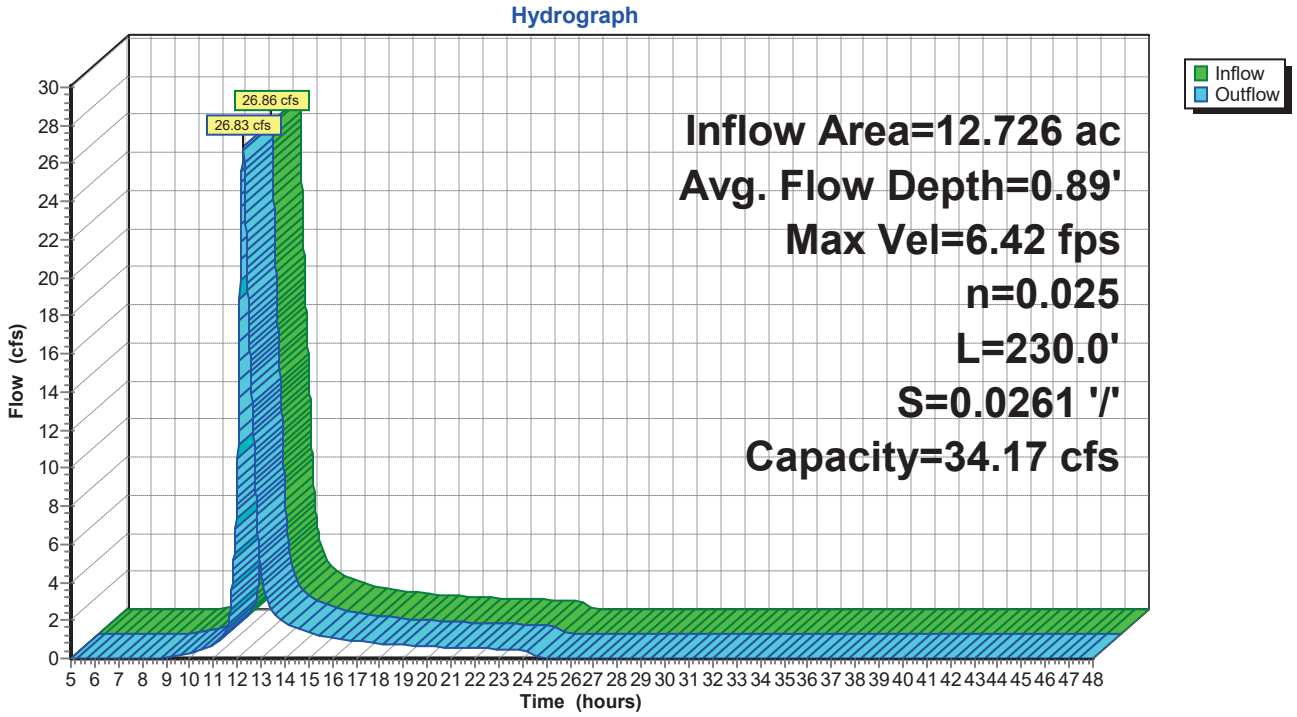
Subcatchment P5: Proposed Basin #5



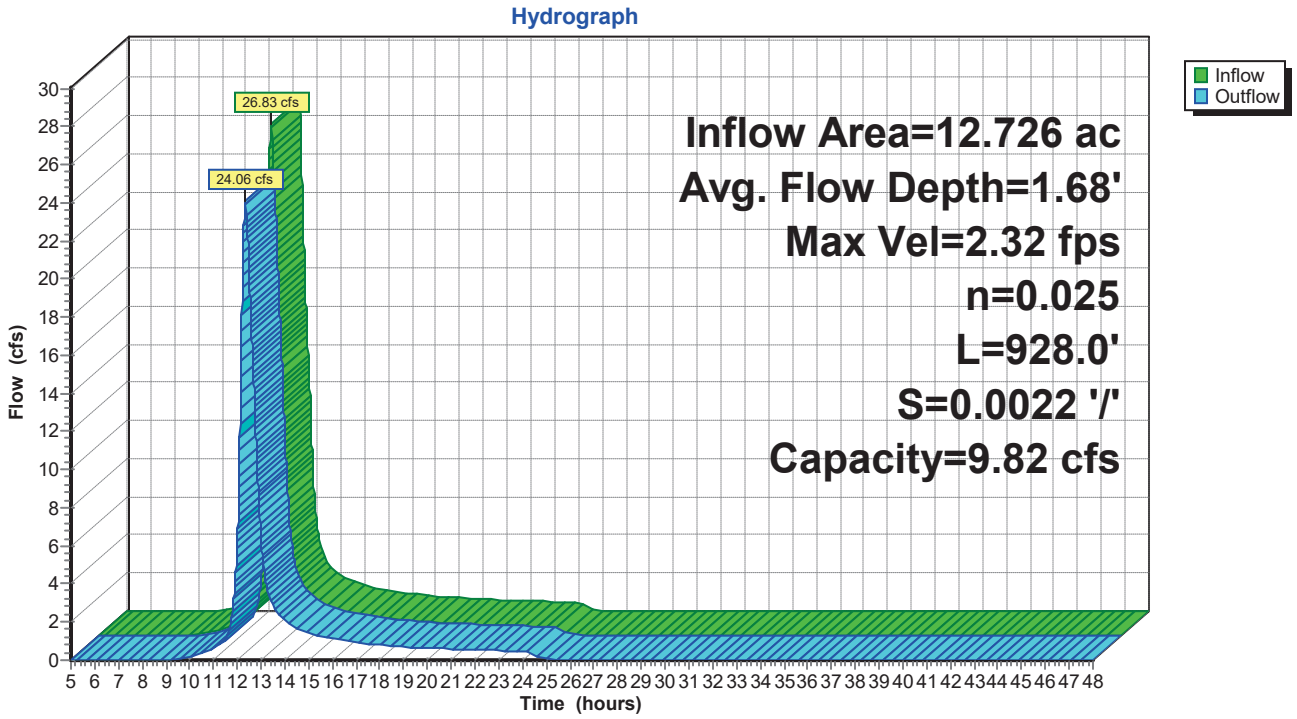
Reach CH2: Existing Channel #2



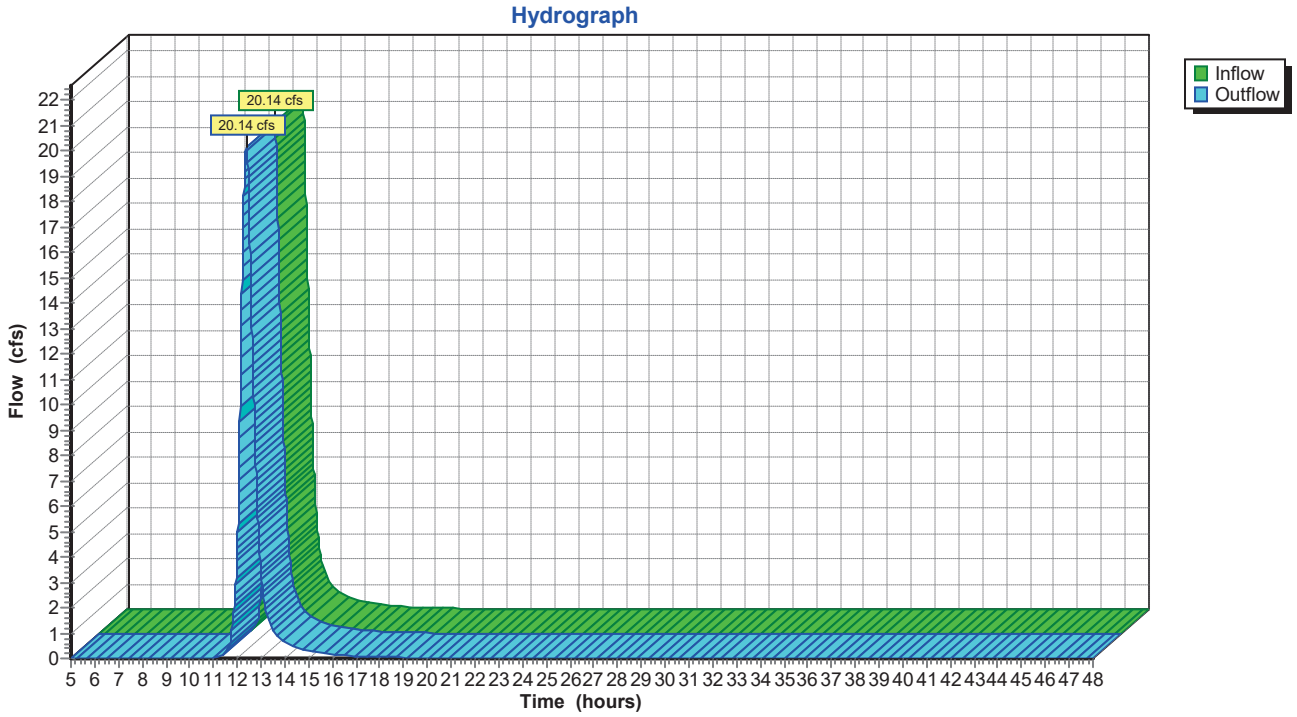
Reach CH4A: CH4A



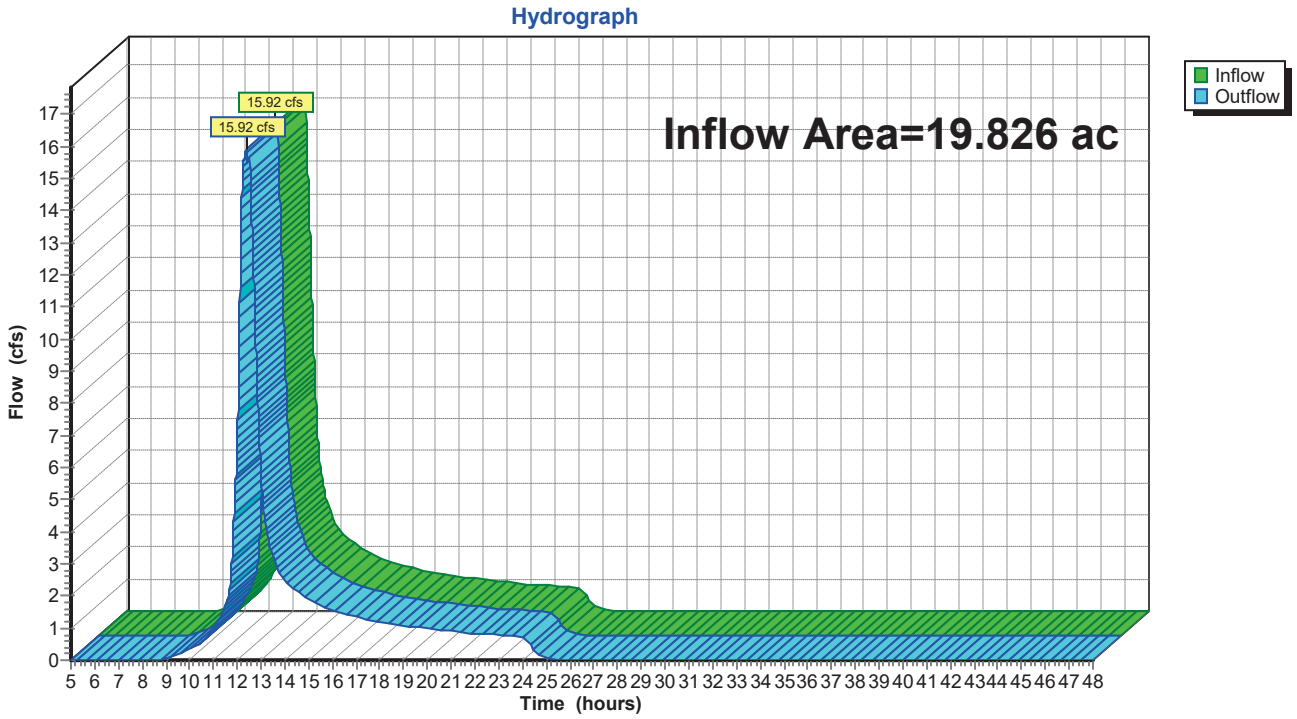
Reach CH4B: CH4B



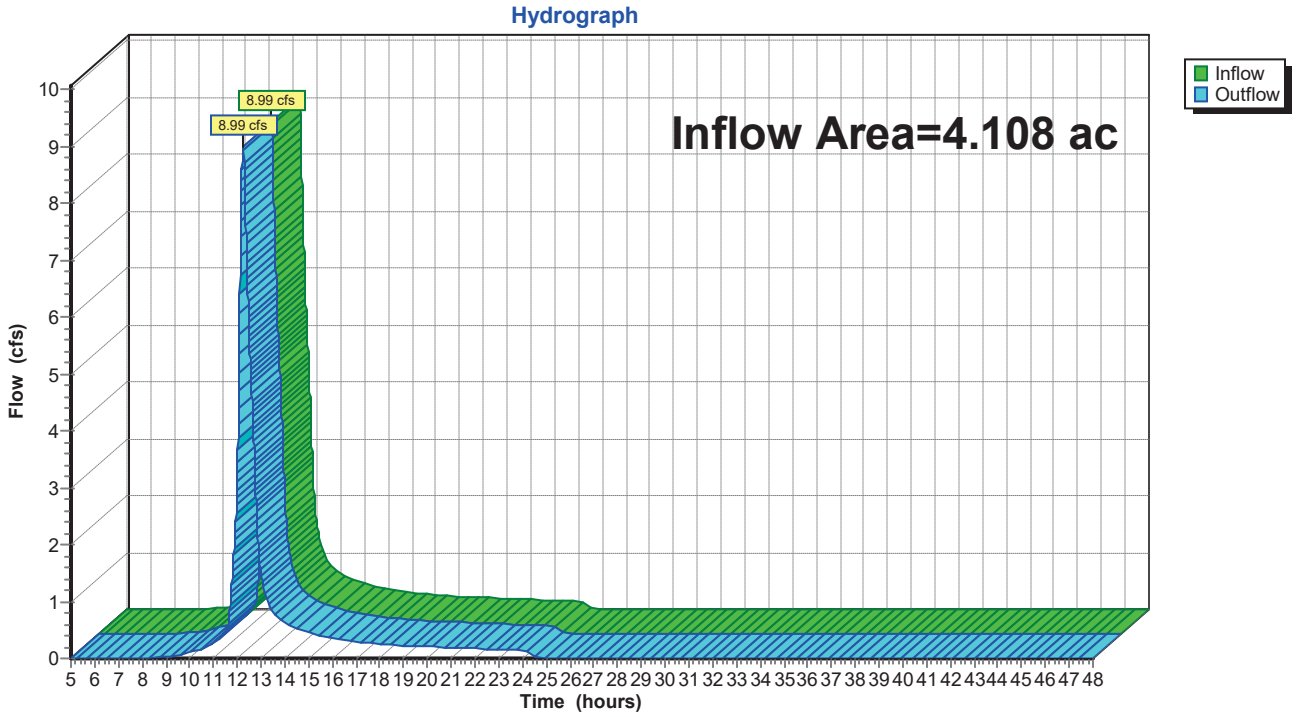
Reach DP1: Design Point #1



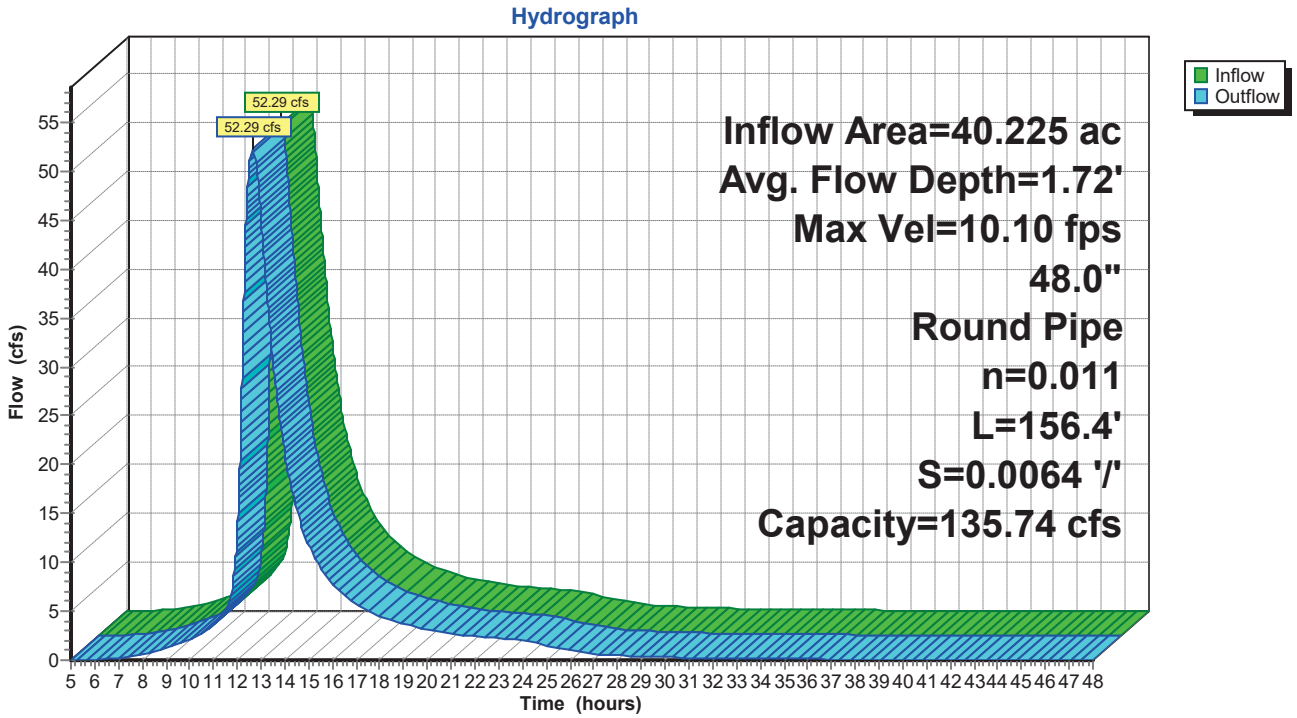
Reach DP2: Design Point #2



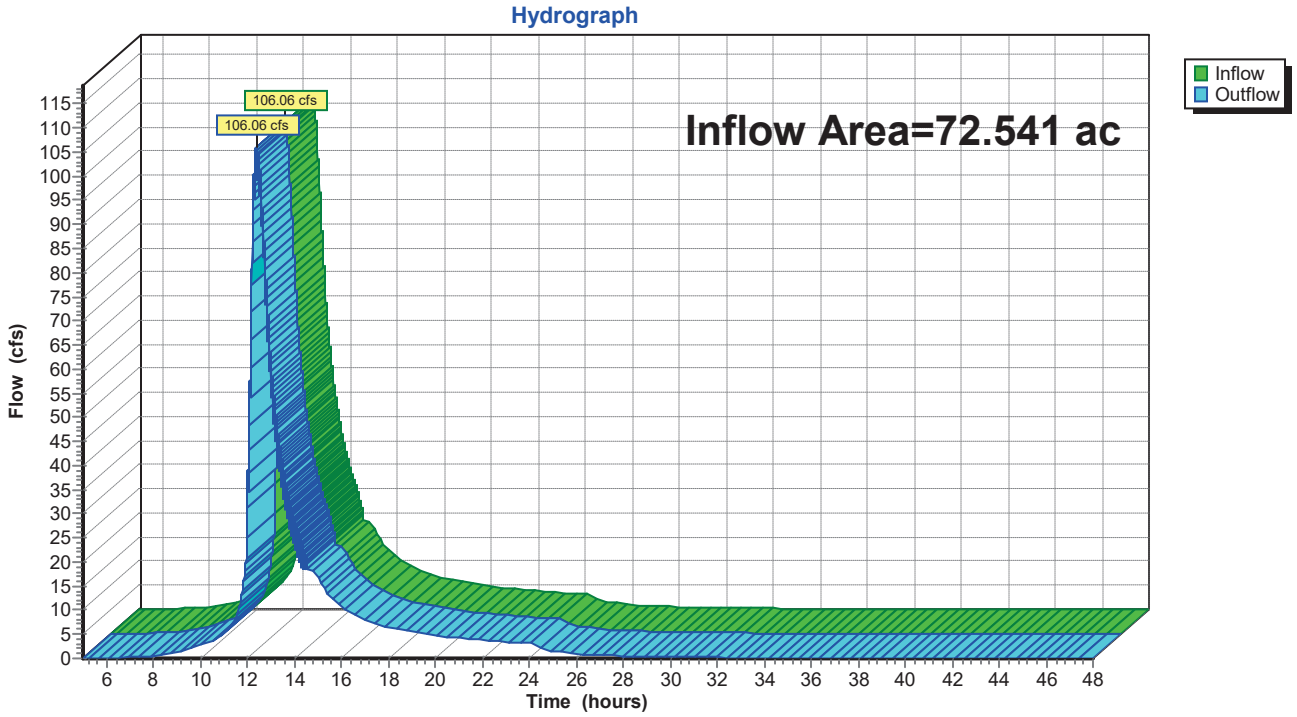
Reach DP3: Design Point #3



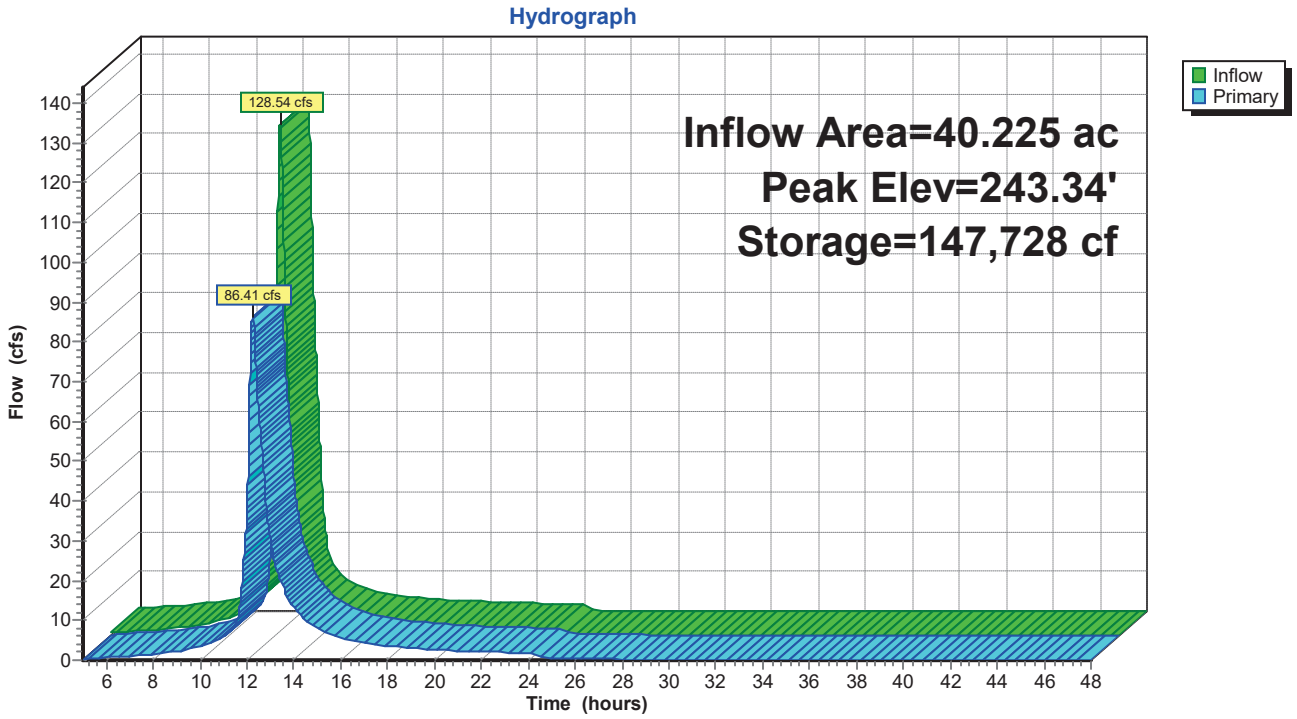
Reach MH: MH



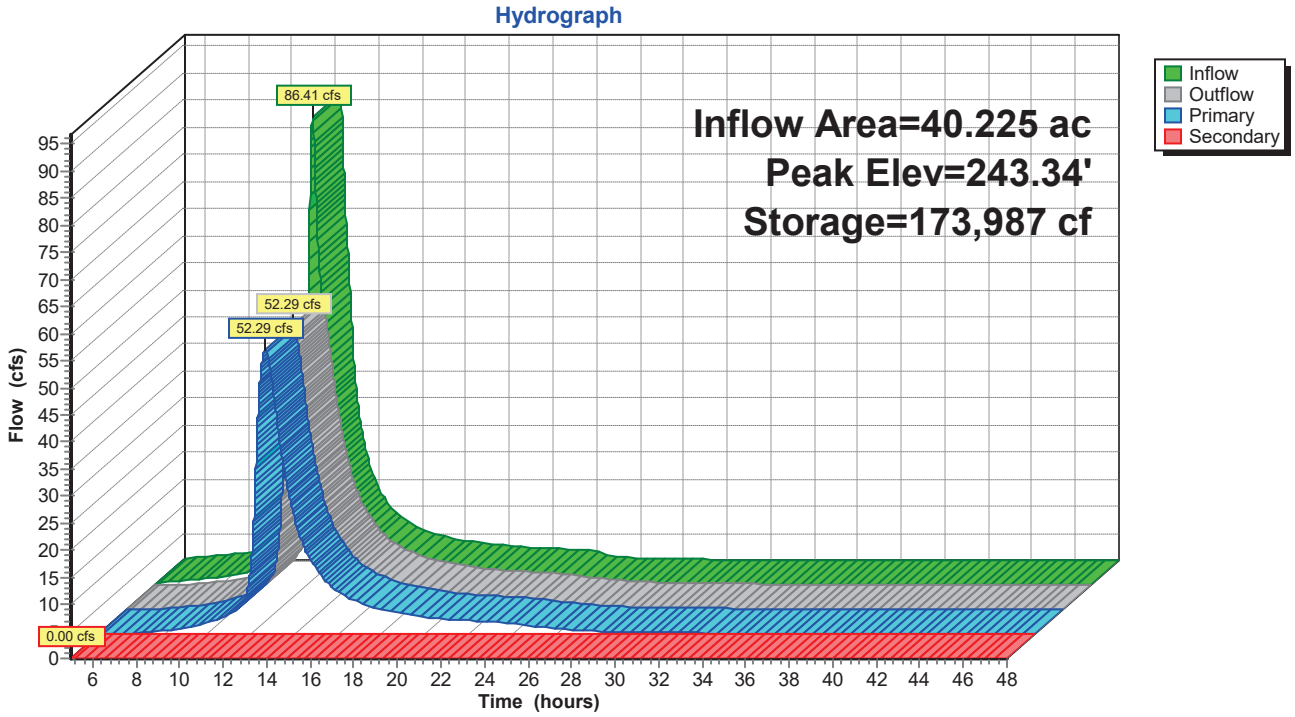
Reach TOT: Proposed Site Total



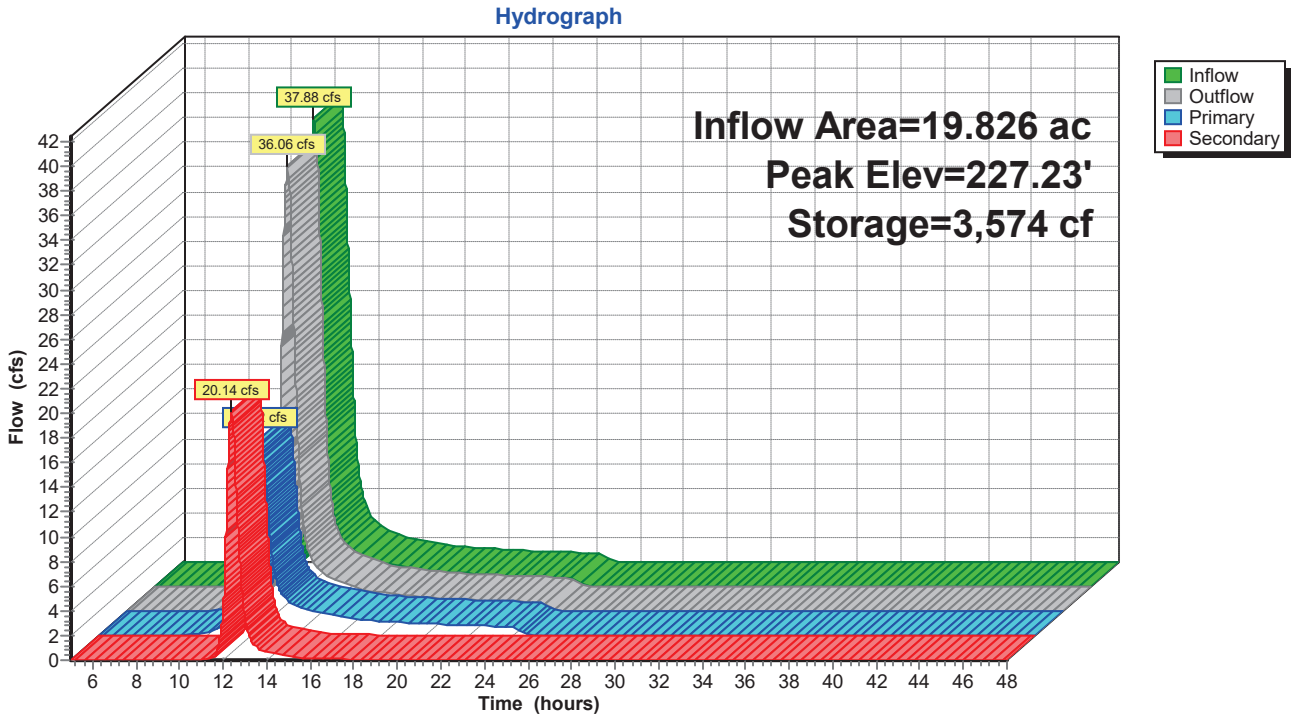
Pond 5P: FOREBAY & ABOVE



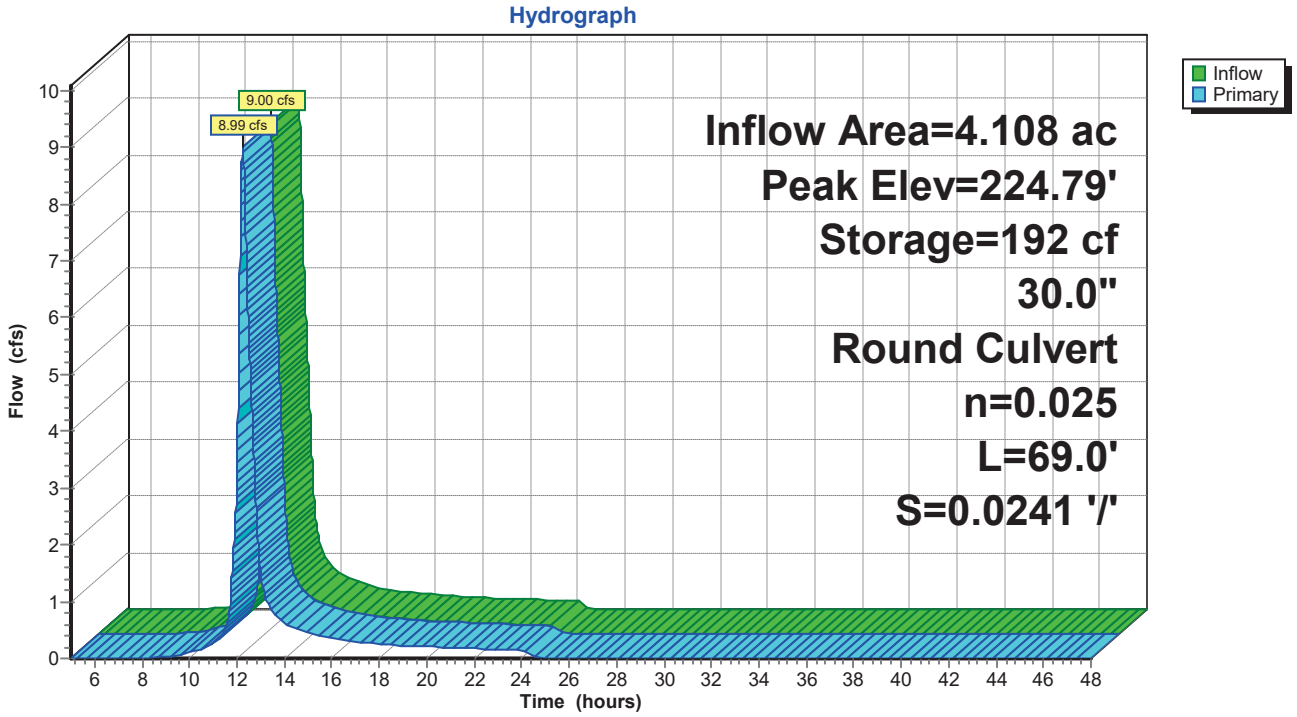
Pond 7P: WET POOL & ABOVE



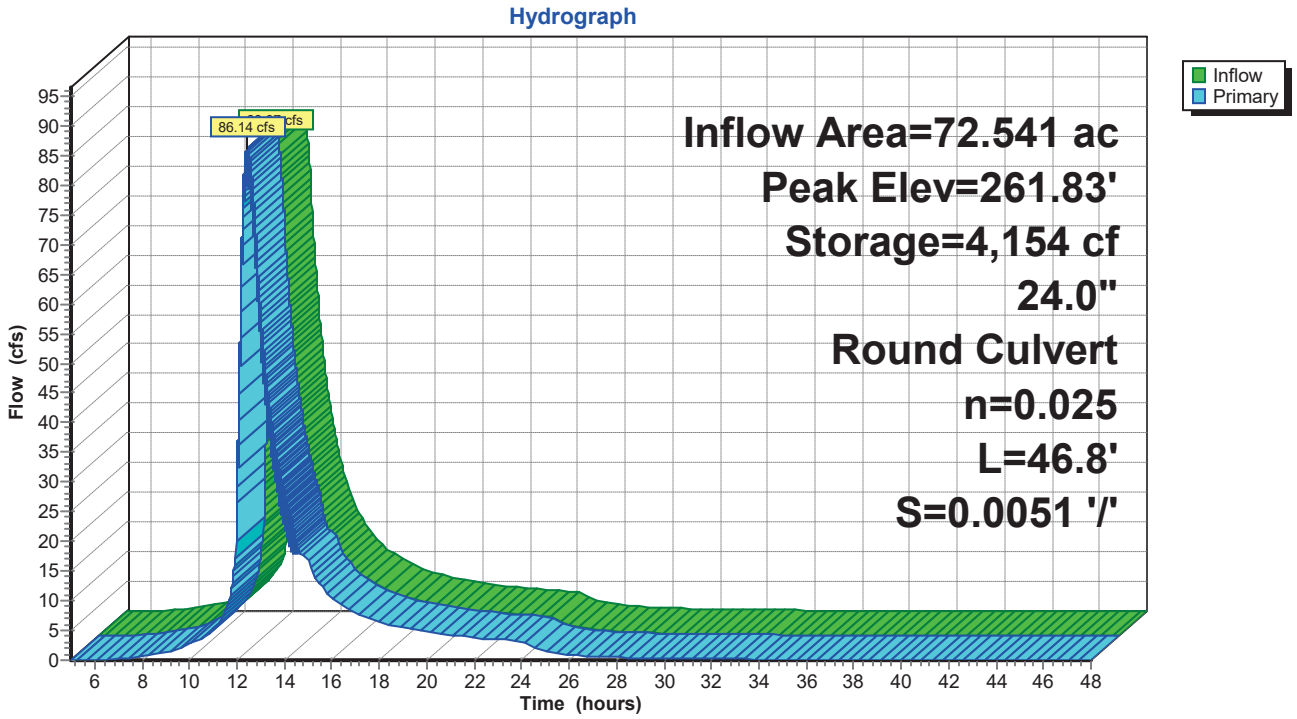
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P1: Proposed Basin #1 Runoff Area=1,752,213 sf 76.98% Impervious Runoff Depth>4.31"
Tc=20.0 min CN=94 Runoff=153.03 cfs 14.454 af

Subcatchment P2: Proposed Basin #2 Runoff Area=178,945 sf 15.61% Impervious Runoff Depth=3.01"
Tc=20.0 min UI Adjusted CN=81 Runoff=11.43 cfs 1.031 af

Subcatchment P3: Proposed Basin #3 Runoff Area=365,126 sf 0.00% Impervious Runoff Depth=2.92"
Tc=20.0 min CN=80 Runoff=22.60 cfs 2.039 af

Subcatchment P4: Proposed Basin #4 Runoff Area=554,353 sf 0.00% Impervious Runoff Depth=2.92"
Tc=20.0 min CN=80 Runoff=34.31 cfs 3.096 af

Subcatchment P5: Proposed Basin #5 Runoff Area=309,251 sf 0.00% Impervious Runoff Depth=2.92"
Tc=20.0 min CN=80 Runoff=19.14 cfs 1.727 af

Reach CH2: Existing Channel #2 Avg. Flow Depth=1.59' Max Vel=6.90 fps Inflow=93.48 cfs 19.526 af
n=0.022 L=300.0' S=0.0096 '/' Capacity=447.61 cfs Outflow=93.47 cfs 19.525 af

Reach CH4A: CH4A Avg. Flow Depth=1.00' Max Vel=6.84 fps Inflow=34.31 cfs 3.096 af
n=0.025 L=230.0' S=0.0261 '/' Capacity=34.17 cfs Outflow=34.27 cfs 3.096 af

Reach CH4B: CH4B Avg. Flow Depth=2.00' Max Vel=2.38 fps Inflow=34.27 cfs 3.096 af
n=0.025 L=928.0' S=0.0022 '/' Capacity=9.82 cfs Outflow=30.81 cfs 3.096 af

Reach DP1: Design Point #1 Inflow=25.36 cfs 1.734 af
Outflow=25.36 cfs 1.734 af

Reach DP2: Design Point #2 Inflow=19.05 cfs 3.089 af
Outflow=19.05 cfs 3.089 af

Reach DP3: Design Point #3 Inflow=11.41 cfs 1.031 af
Outflow=11.41 cfs 1.031 af

Reach MH: MH Avg. Flow Depth=1.90' Max Vel=10.56 fps Inflow=62.16 cfs 14.398 af
48.0" Round Pipe n=0.011 L=156.4' S=0.0064 '/' Capacity=135.74 cfs Outflow=62.16 cfs 14.398 af

Reach TOT: Proposed Site Total Inflow=132.92 cfs 22.290 af
Outflow=132.92 cfs 22.290 af

Pond 5P: FOREBAY & ABOVE Peak Elev=243.85' Storage=164,042 cf Inflow=153.03 cfs 14.454 af
Outflow=103.71 cfs 14.430 af

Pond 7P: WET POOL & ABOVE Peak Elev=243.85' Storage=194,518 cf Inflow=103.71 cfs 14.430 af
Primary=62.16 cfs 14.398 af Secondary=0.00 cfs 0.000 af Outflow=62.16 cfs 14.398 af

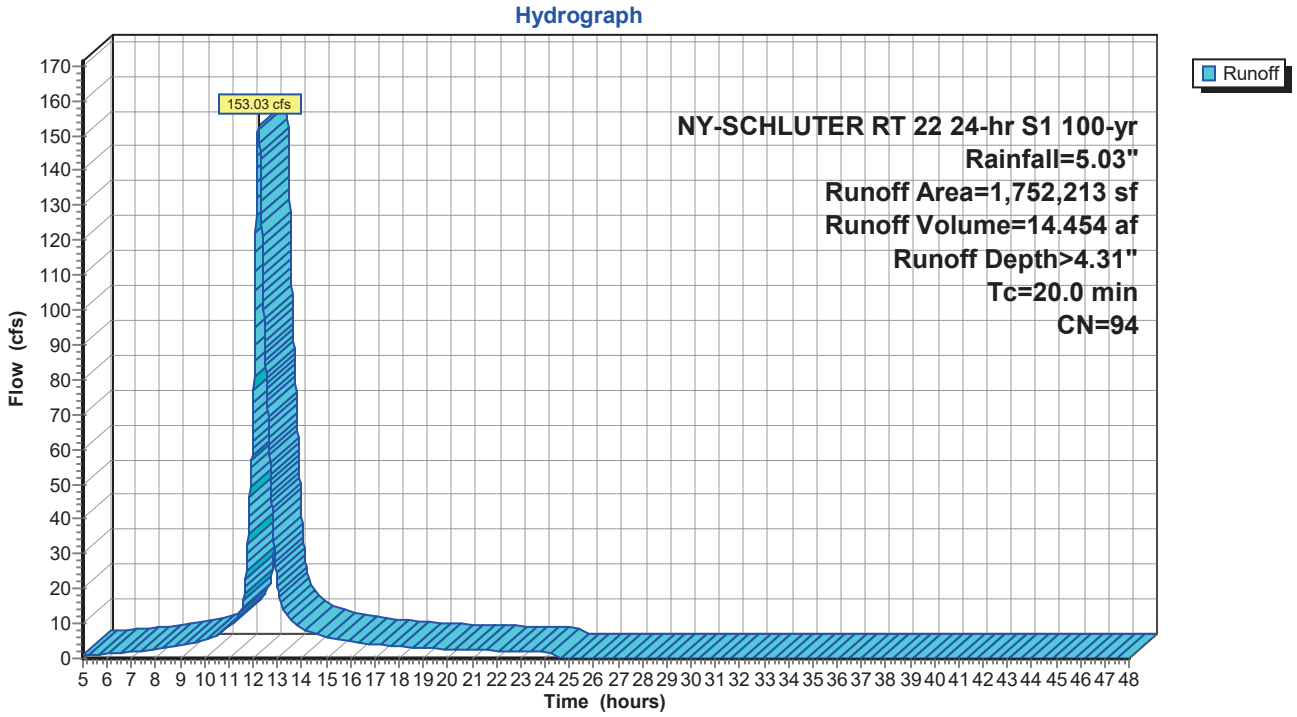
Pond CH1: Existing Channel #1 Peak Elev=227.81' Storage=7,106 cf Inflow=48.51 cfs 4.823 af
Primary=19.05 cfs 3.089 af Secondary=25.36 cfs 1.734 af Outflow=44.41 cfs 4.823 af

Pond CH3: Proposed Channel #3 Peak Elev=225.01' Storage=264 cf Inflow=11.43 cfs 1.031 af
30.0" Round Culvert n=0.025 L=69.0' S=0.0241 '/' Outflow=11.41 cfs 1.031 af

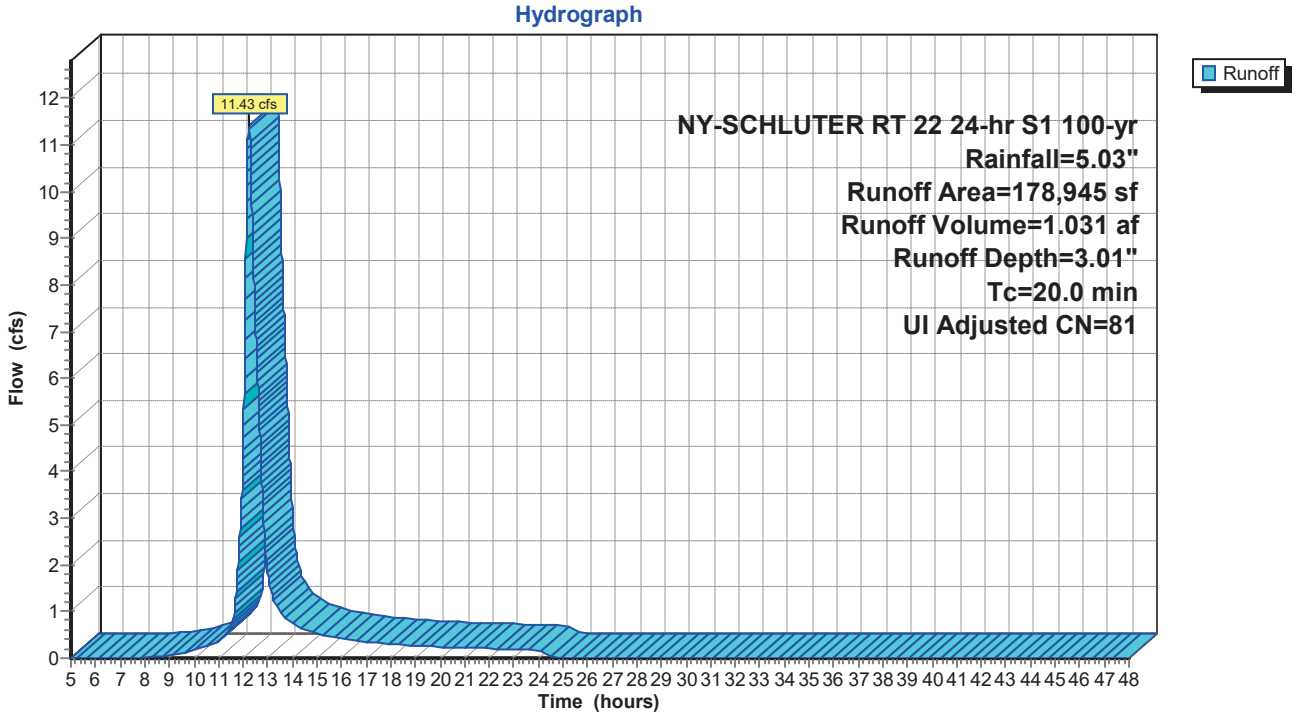
Pond DP4: Design Point #4 Peak Elev=285.72' Storage=4,154 cf Inflow=101.82 cfs 20.556 af
24.0" Round Culvert n=0.025 L=46.8' S=0.0051 '/' Outflow=107.58 cfs 20.556 af

Total Runoff Area = 72.541 ac Runoff Volume = 22.347 af Average Runoff Depth = 3.70"
56.43% Pervious = 40.935 ac 43.57% Impervious = 31.606 ac

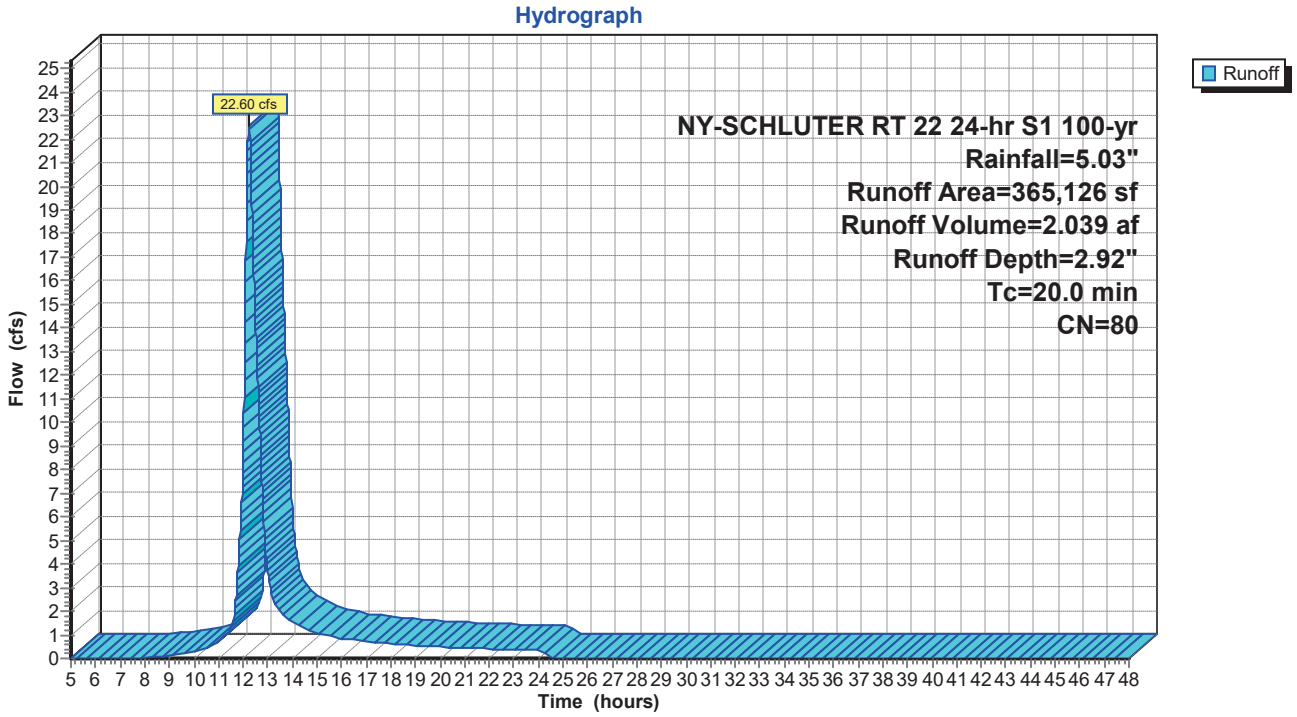
Subcatchment P1: Proposed Basin #1



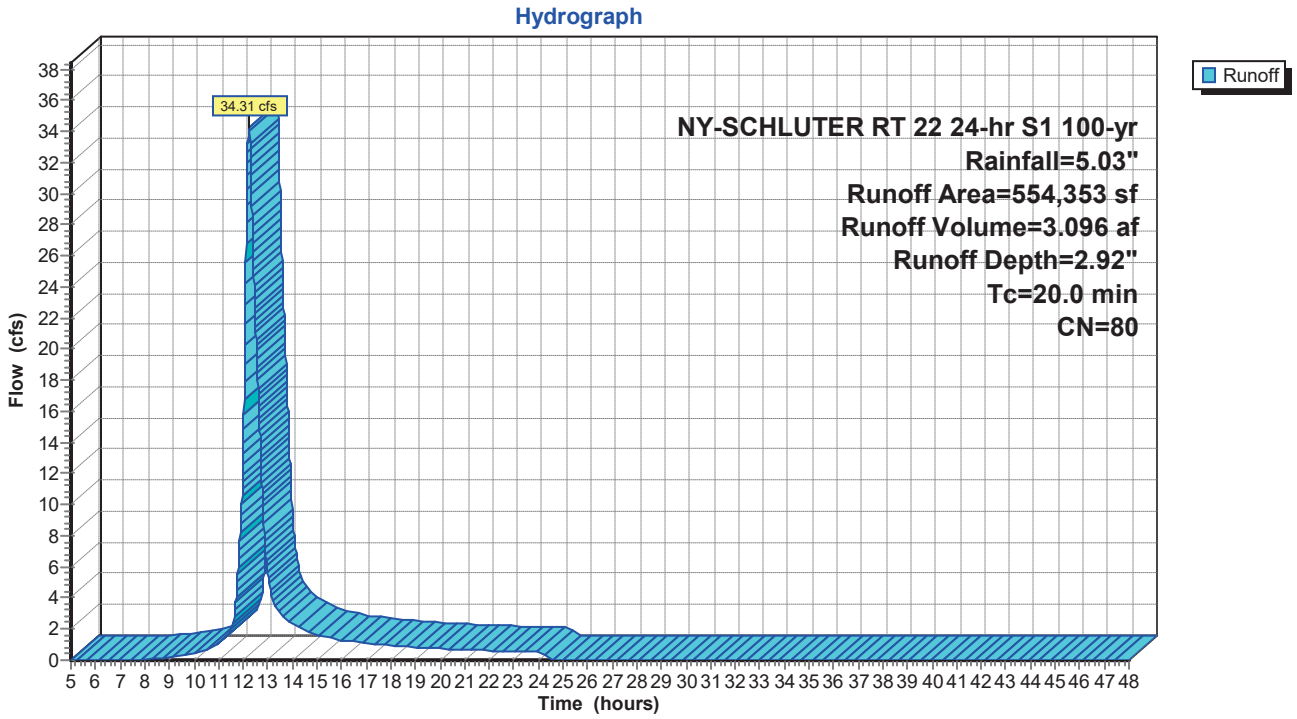
Subcatchment P2: Proposed Basin #2



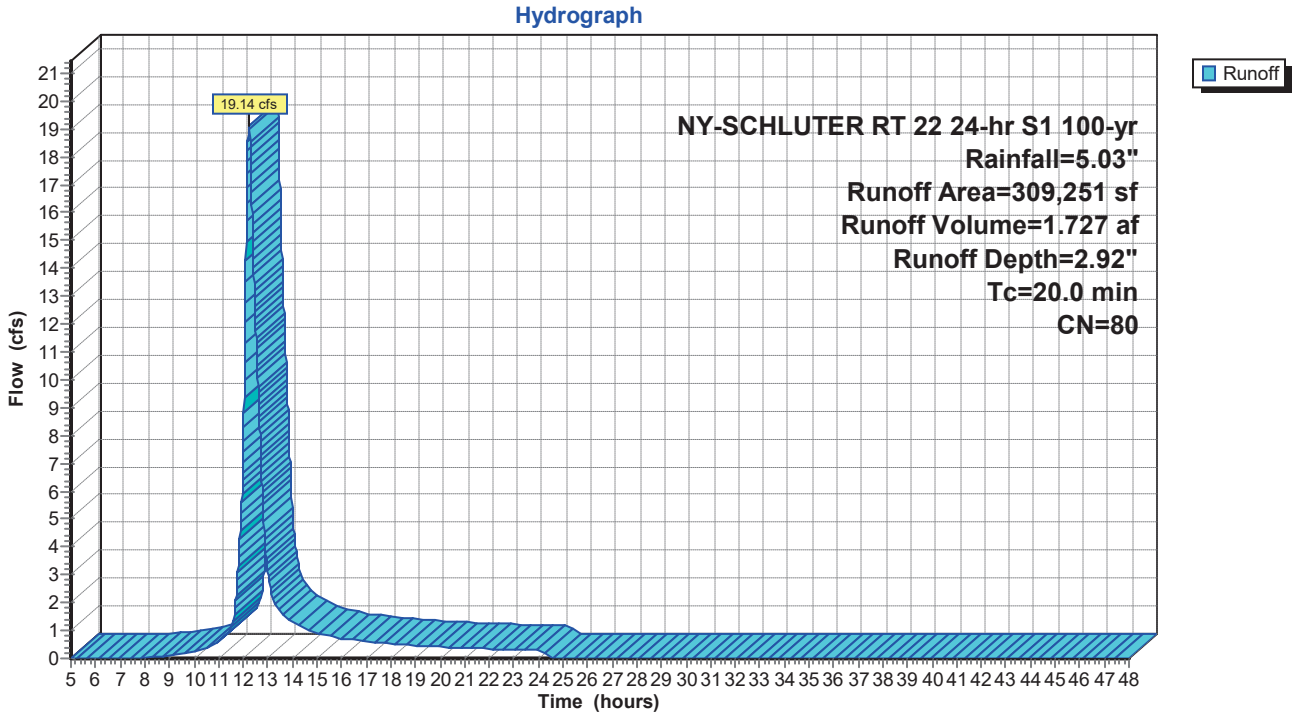
Subcatchment P3: Proposed Basin #3



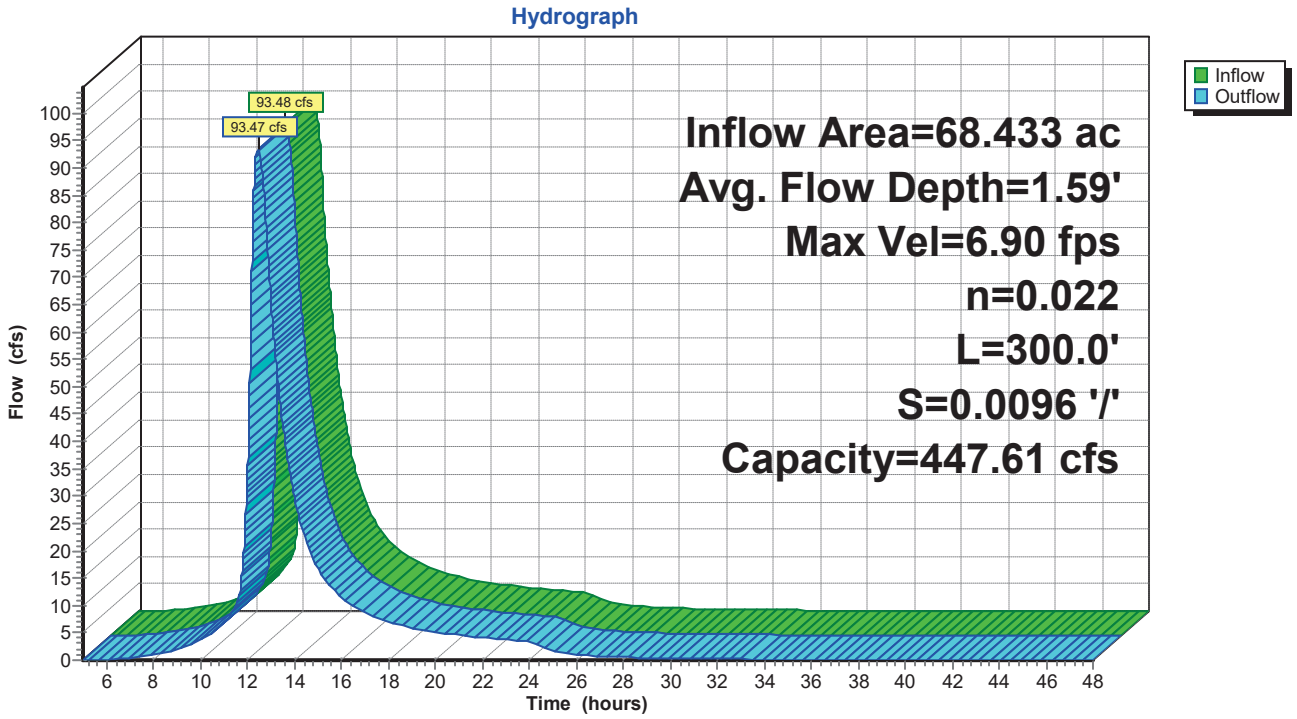
Subcatchment P4: Proposed Basin #4



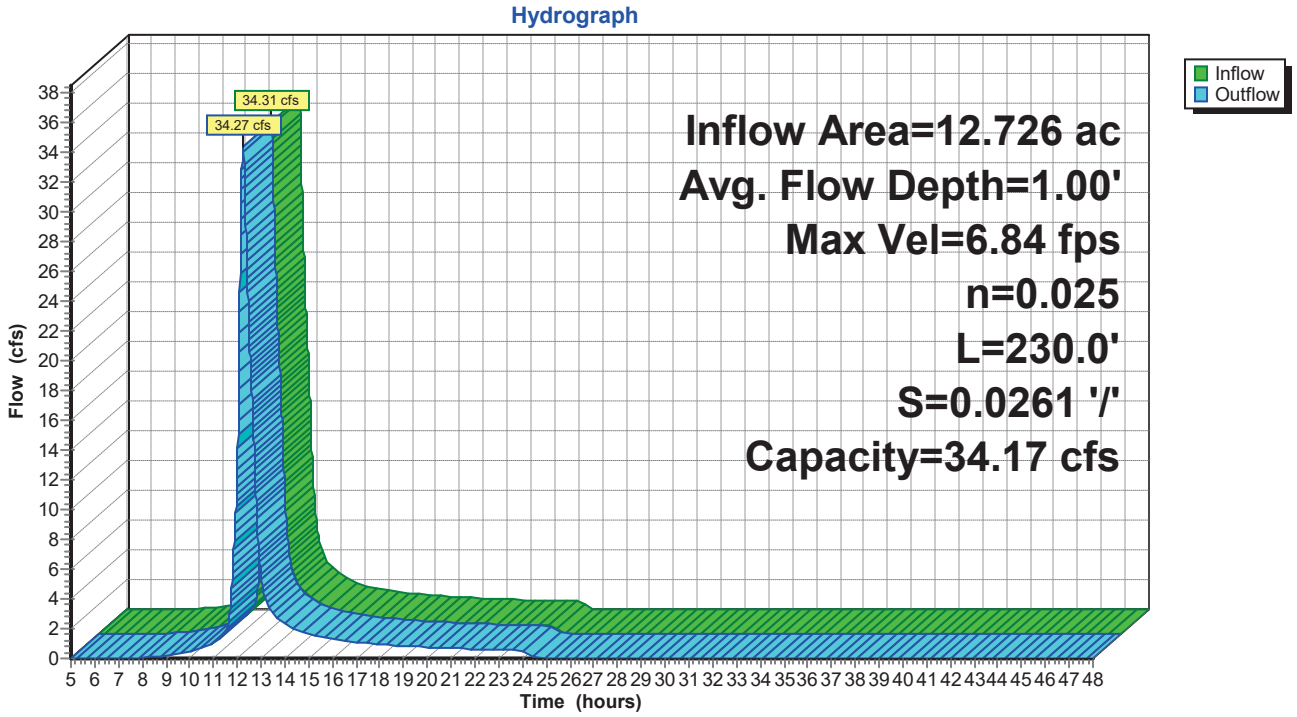
Subcatchment P5: Proposed Basin #5



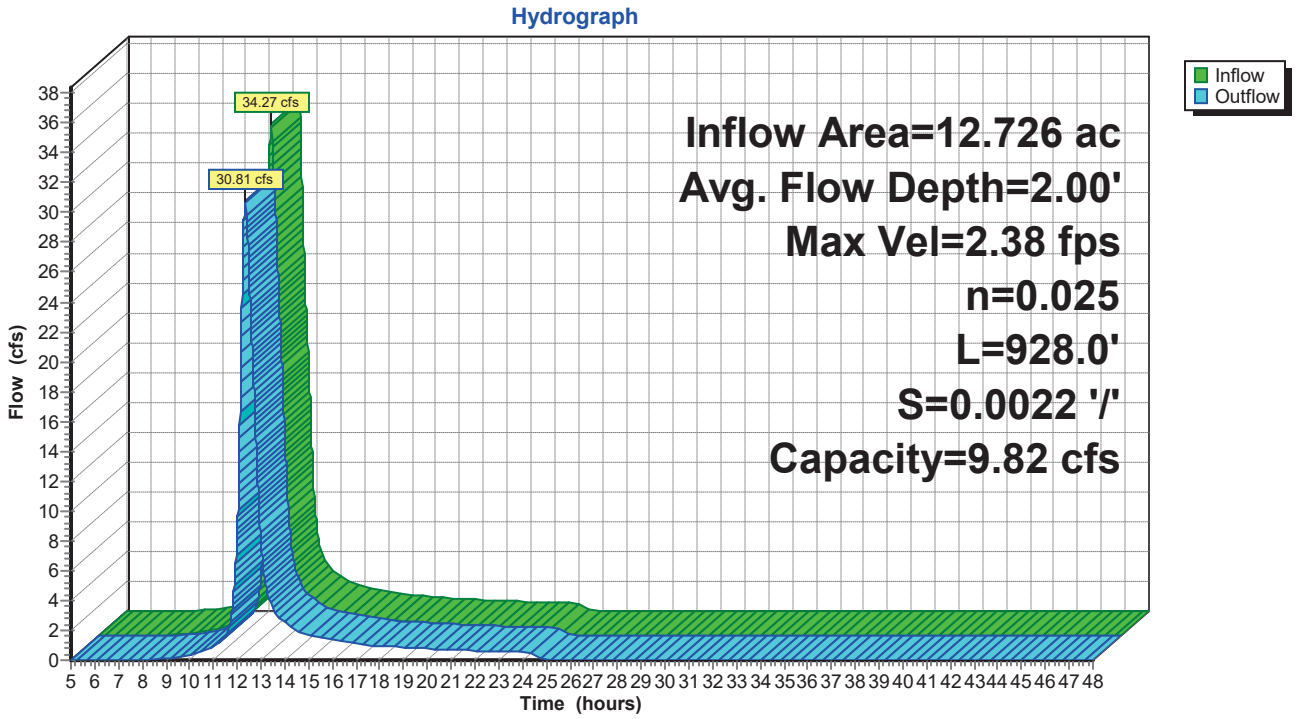
Reach CH2: Existing Channel #2



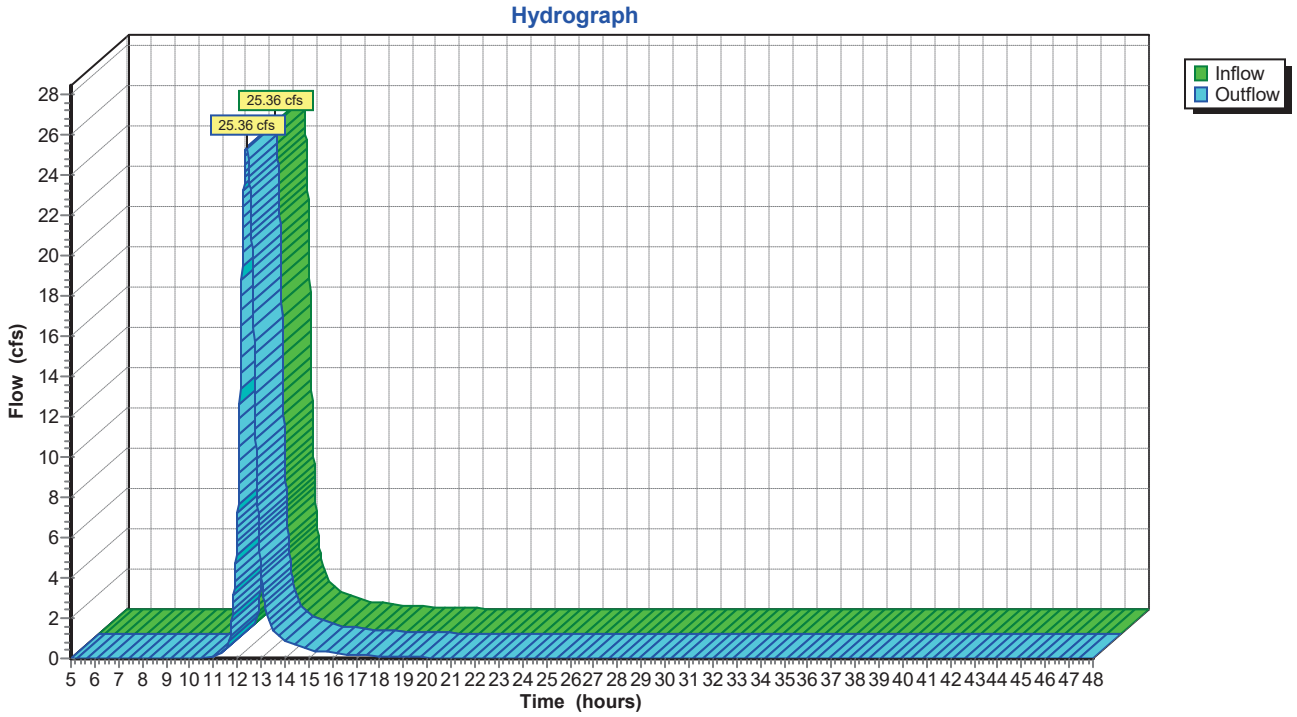
Reach CH4A: CH4A



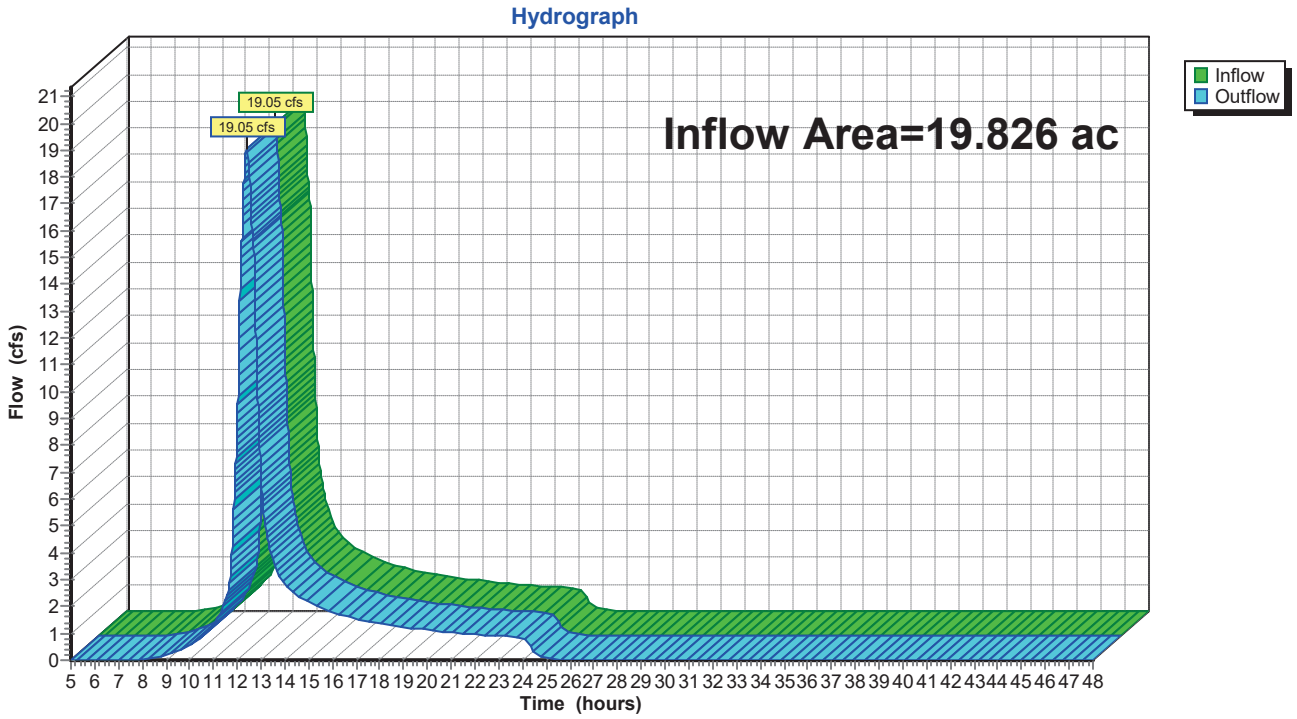
Reach CH4B: CH4B



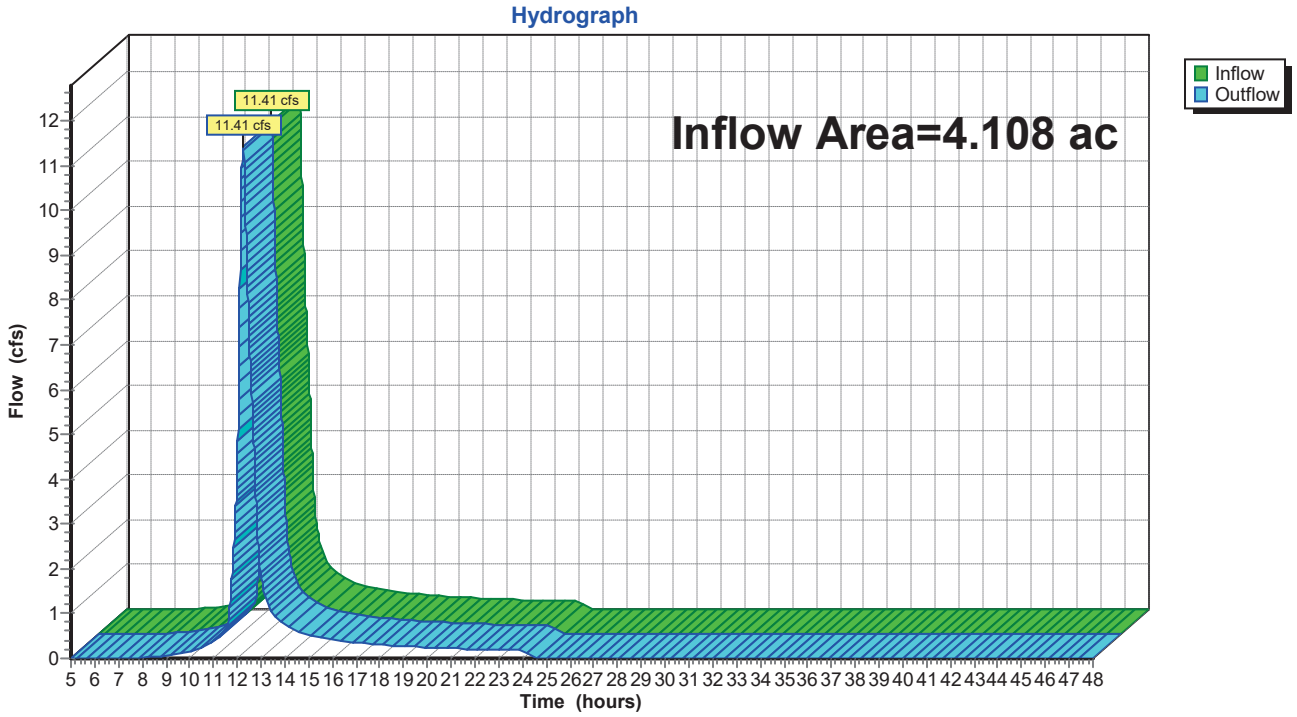
Reach DP1: Design Point #1



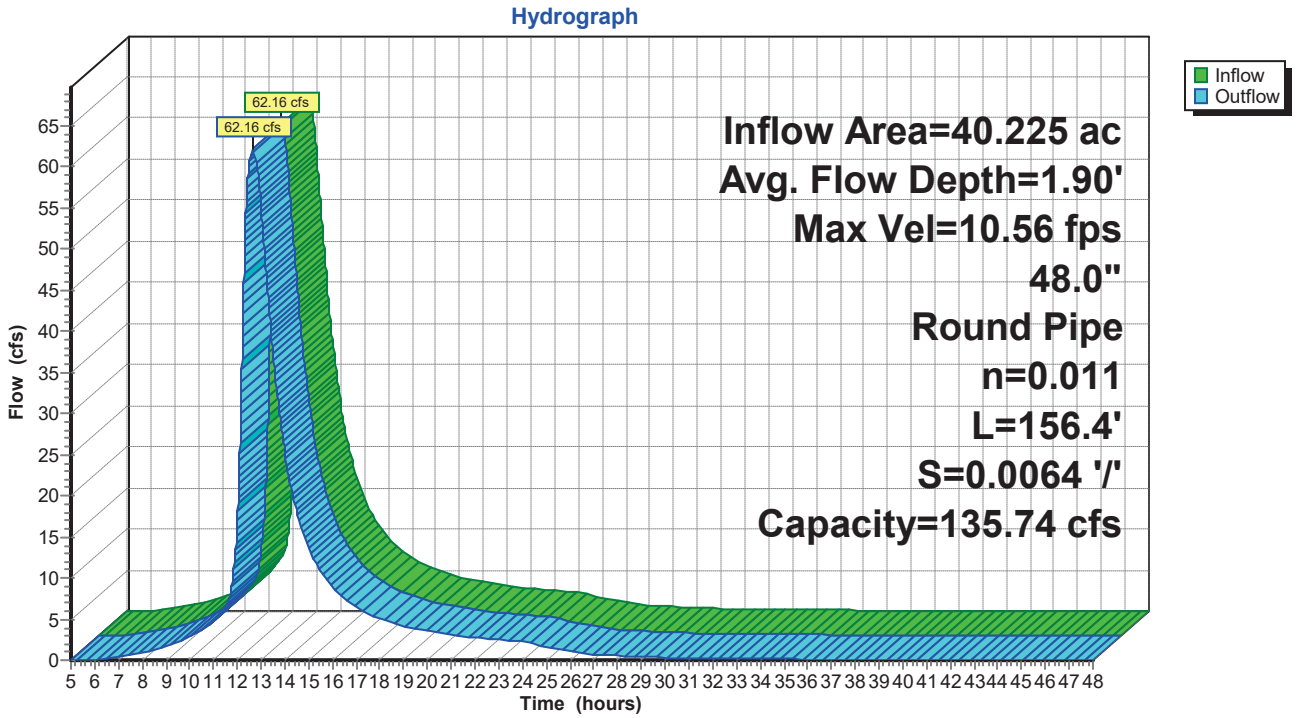
Reach DP2: Design Point #2



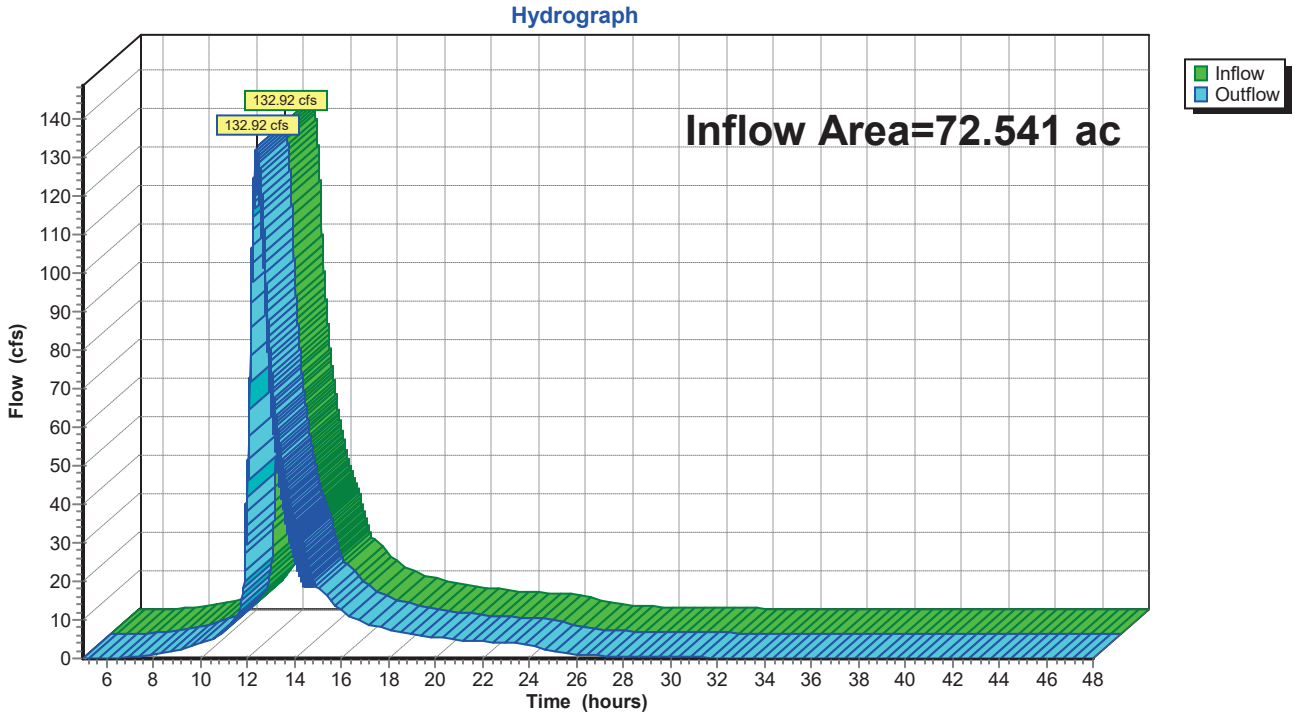
Reach DP3: Design Point #3



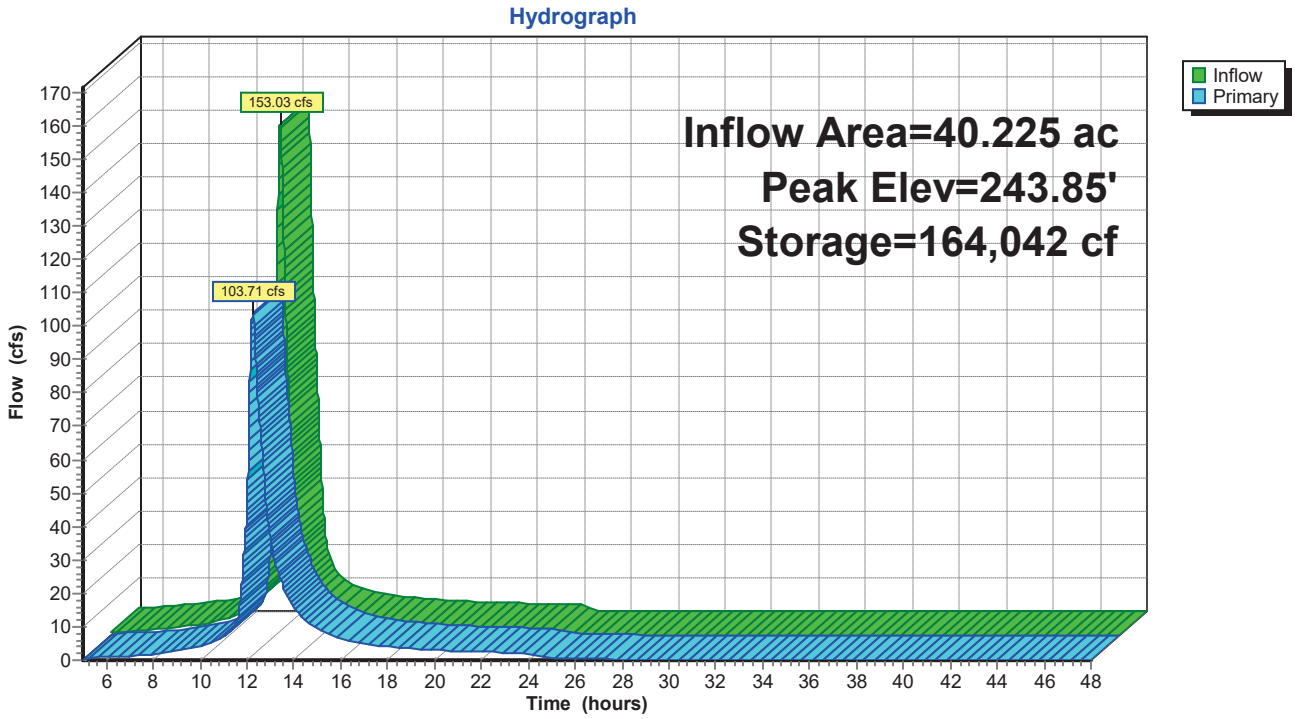
Reach MH: MH



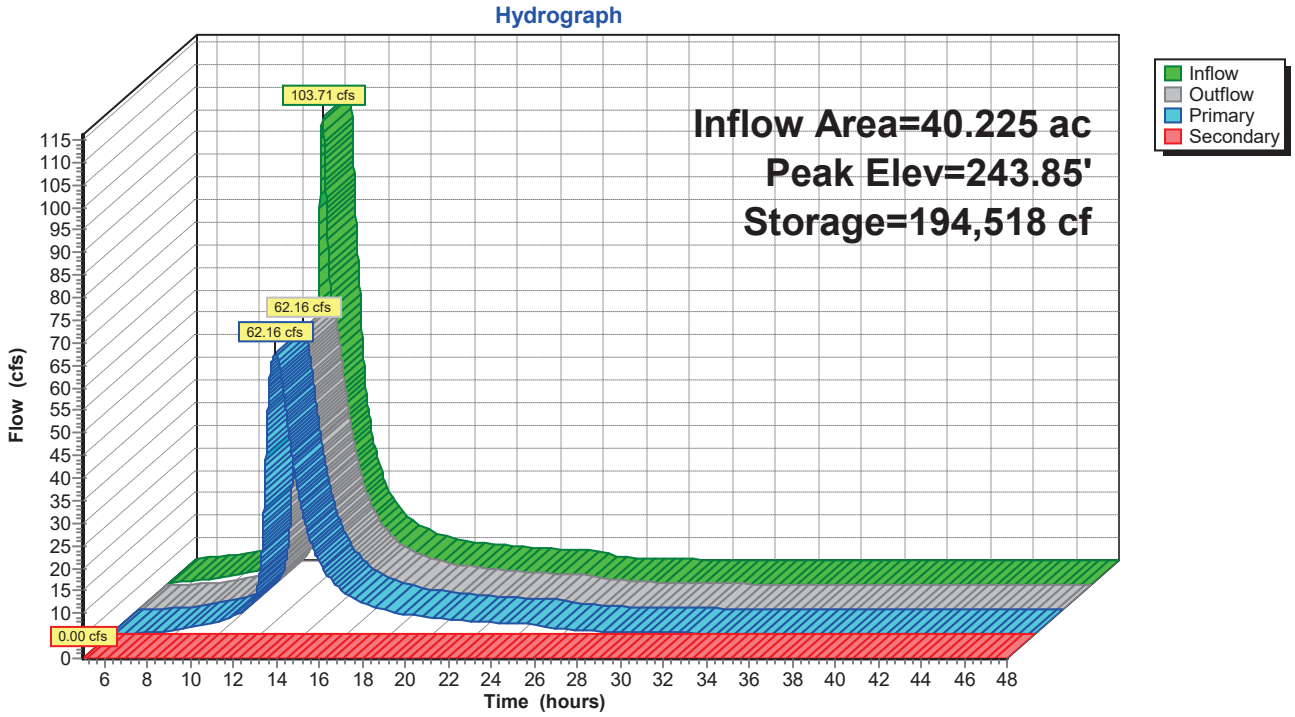
Reach TOT: Proposed Site Total



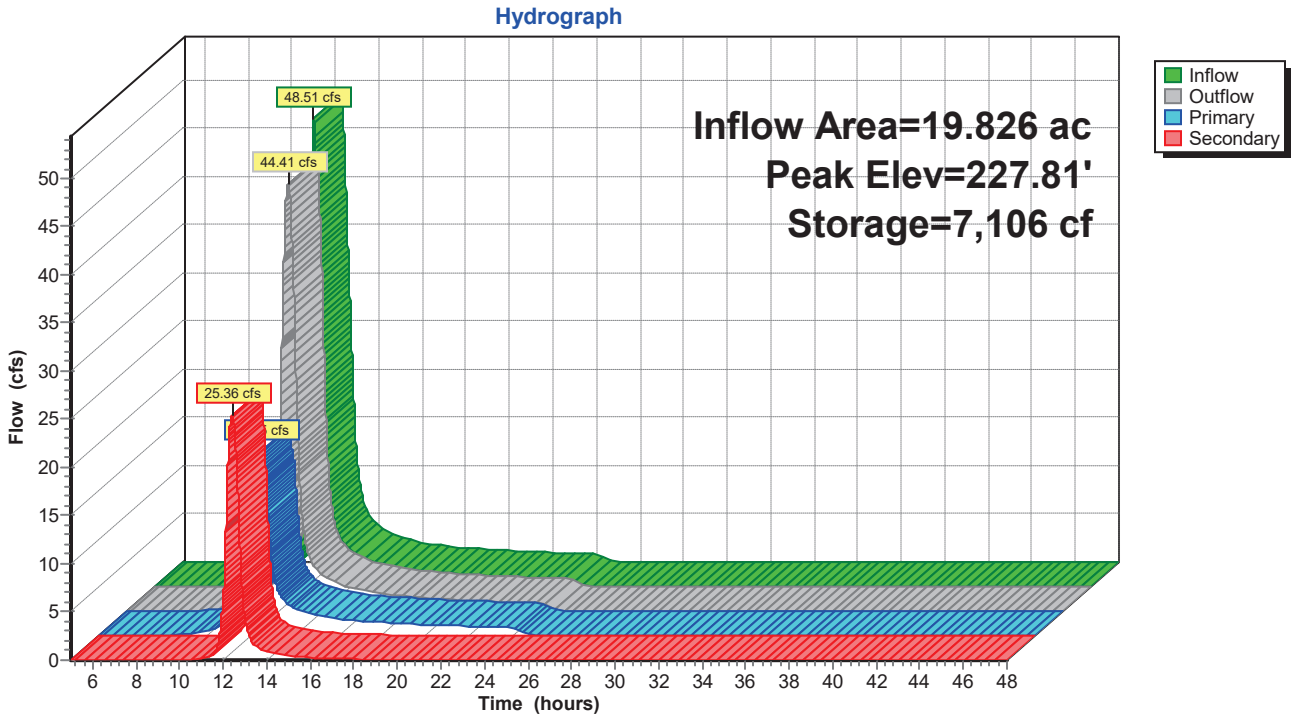
Pond 5P: FOREBAY & ABOVE



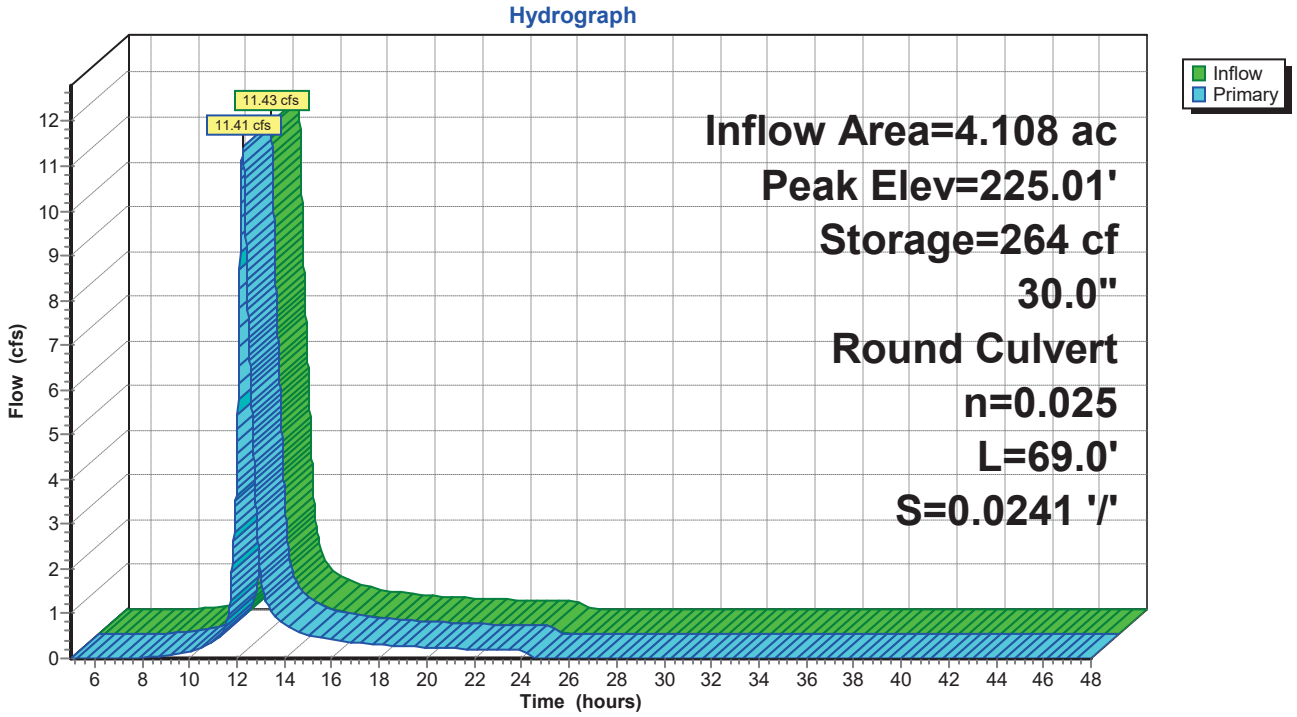
Pond 7P: WET POOL & ABOVE



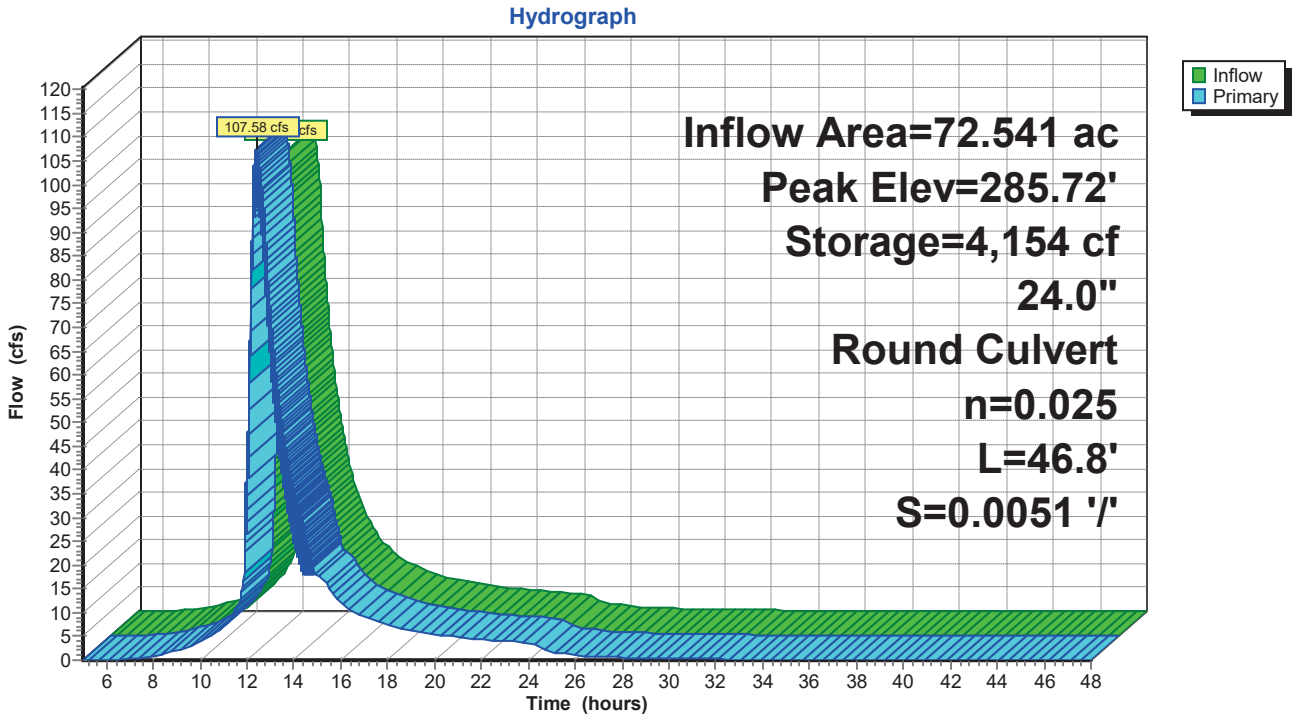
Pond CH1: Existing Channel #1



Pond CH3: Proposed Channel #3



Pond DP4: Design Point #4



APPENDIX E: NRSC SOIL MAP

United States Department of Agriculture

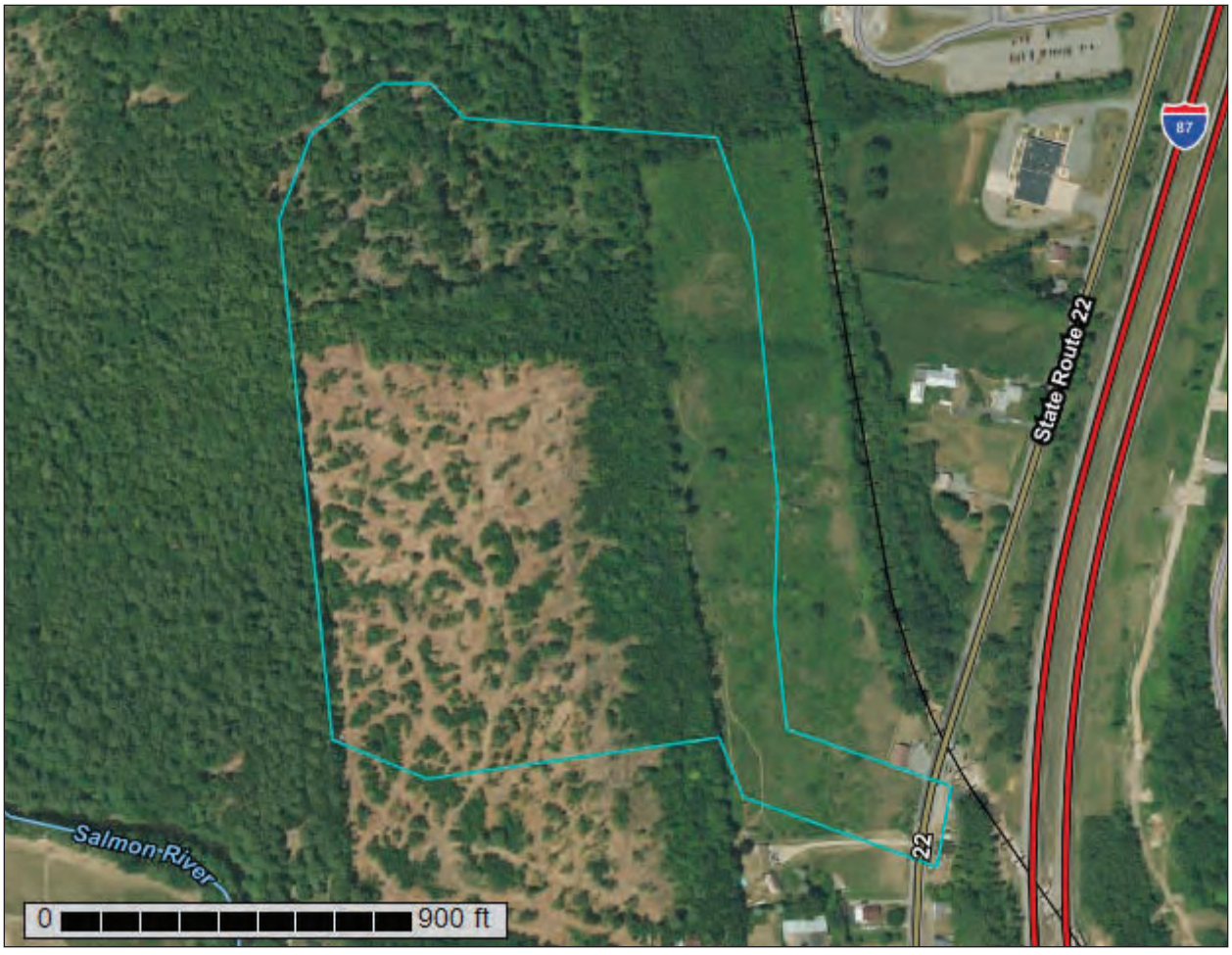
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Clinton County, New York

22241 Schluter Rt. 22 Soil Report



October 28, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Clinton County, New York.....13
AtA—Amenia fine sandy loam, 0 to 3 percent slopes.....13
CtsB—Covertfalls loamy fine sand, 3 to 8 percent slopes.....14
DeA—Deerfield fine sand, 0 to 3 percent slopes.....15
NrA—Northway loamy fine sand, 0 to 3 percent slopes.....17
NrB—Northway loamy fine sand, 3 to 8 percent slopes.....18
Ph—Pipestone fine sand.....20
PtA—Plainfield loamy sand, 0 to 3 percent slopes.....21
References.....24

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:4,070 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Clinton County, New York
Survey Area Data: Version 25, Aug 29, 2024

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

Date(s) aerial images were photographed: Jun 18, 2020—Jun 20, 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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AtA	Amenia fine sandy loam, 0 to 3 percent slopes	0.0	0.0%
CtsB	Covertfalls loamy fine sand, 3 to 8 percent slopes	2.8	6.0%
DeA	Deerfield fine sand, 0 to 3 percent slopes	15.4	33.0%
NrA	Northway loamy fine sand, 0 to 3 percent slopes	17.8	38.2%
NrB	Northway loamy fine sand, 3 to 8 percent slopes	6.4	13.7%
Ph	Pipestone fine sand	2.7	5.7%
PtA	Plainfield loamy sand, 0 to 3 percent slopes	1.6	3.4%
Totals for Area of Interest		**46.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor

components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Clinton County, New York

AtA—Amenia fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qw4
Elevation: 100 to 330 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Amenia and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Amenia

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Calcareous loamy till

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 28 inches: fine sandy loam
C - 28 to 36 inches: loam
Cd - 36 to 72 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 80 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F142XB013NY - Moist Till Upland
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 12 percent

Hydric soil rating: No

Massena

Percent of map unit: 5 percent
Hydric soil rating: No

Grenville

Percent of map unit: 3 percent
Hydric soil rating: No

CtsB—Covertfalls loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9qxc
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Covertfalls and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Covertfalls

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciofluvial deposits over loamy till

Typical profile

H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 20 inches: loamy fine sand
BC - 20 to 26 inches: loamy fine sand
2C - 26 to 72 inches: cobbly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 5 percent
Hydric soil rating: No

Grattan

Percent of map unit: 3 percent
Hydric soil rating: No

Northway

Percent of map unit: 3 percent
Hydric soil rating: No

Pipestone

Percent of map unit: 2 percent
Hydric soil rating: No

Covert

Percent of map unit: 2 percent
Hydric soil rating: No

DeA—Deerfield fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qxl
Elevation: 0 to 1,000 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Deerfield and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits derived mainly from granite, gneiss, or sandstone

Typical profile

H1 - 0 to 6 inches: fine sand
H2 - 6 to 31 inches: fine sand
H3 - 31 to 72 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Pipestone

Percent of map unit: 5 percent
Hydric soil rating: No

Junius

Percent of map unit: 5 percent
Hydric soil rating: No

Covert

Percent of map unit: 5 percent
Hydric soil rating: No

Gougeville

Percent of map unit: 2 percent
Hydric soil rating: Yes

Unnamed soils

Percent of map unit: 1 percent

Covertfalls

Percent of map unit: 1 percent
Hydric soil rating: No

Northway

Percent of map unit: 1 percent
Hydric soil rating: No

NrA—Northway loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qzh
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Northway and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northway

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits or beach ridge deposits over loamy till

Typical profile

H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 32 inches: fine sand
H3 - 32 to 72 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 6 percent

Covertfalls
Percent of map unit: 3 percent
Hydric soil rating: No

Pipestone
Percent of map unit: 3 percent
Hydric soil rating: No

Massena
Percent of map unit: 3 percent
Hydric soil rating: No

Junius
Percent of map unit: 2 percent
Hydric soil rating: No

Appleton
Percent of map unit: 2 percent
Hydric soil rating: No

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

NrB—Northway loamy fine sand, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9qzj
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Northway and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northway

Setting
Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave

Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits or beach ridge deposits over loamy till

Typical profile
H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 32 inches: fine sand
H3 - 32 to 72 inches: gravelly loam

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 6 percent

Covertfalls
Percent of map unit: 5 percent
Hydric soil rating: No

Pipestone
Percent of map unit: 3 percent
Hydric soil rating: No

Massena
Percent of map unit: 2 percent
Hydric soil rating: No

Junius
Percent of map unit: 2 percent
Hydric soil rating: No

Appleton
Percent of map unit: 1 percent
Hydric soil rating: No

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Ph—Pipestone fine sand

Map Unit Setting

National map unit symbol: 9qzs
Elevation: 600 to 1,000 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Pipestone and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pipestone

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy glaciofluvial, deltaic, or beach ridge deposits

Typical profile

H1 - 0 to 7 inches: fine sand
H2 - 7 to 19 inches: fine sand
H3 - 19 to 26 inches: sand
H4 - 26 to 72 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Northway
Percent of map unit: 5 percent
Hydric soil rating: No

Covert
Percent of map unit: 4 percent
Hydric soil rating: No

Shaker
Percent of map unit: 3 percent
Hydric soil rating: No

Junius
Percent of map unit: 3 percent
Hydric soil rating: No

Gougeville
Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed soils
Percent of map unit: 1 percent

Grattan
Percent of map unit: 1 percent
Hydric soil rating: No

PtA—Plainfield loamy sand, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9qzx
Elevation: 720 to 1,150 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Plainfield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Plainfield

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand
H2 - 8 to 23 inches: sand
H3 - 23 to 72 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F142XB002VT - Dry Outwash
Hydric soil rating: No

Minor Components

Grattan

Percent of map unit: 7 percent
Hydric soil rating: No

Deerfield

Percent of map unit: 3 percent
Hydric soil rating: No

Covert

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 1 percent

Covertfalls

Percent of map unit: 1 percent
Hydric soil rating: No

Colton

Percent of map unit: 1 percent
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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 FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX F: GI WORKSHEET SUMMARY

11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Step 2 - Calculate Water Quality Volume

Is this project subject to Section 4.3 of the NYS Design Manual for Enhanced Phosphorus Removal?	
What is the nature of this construction project?	

Design Point:		
P=	1.00	inches

Calculate Required WQv

Drainage Area Number	Contributing Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (cf)	SMP Description
1	44.34	31.60	71	0.69	111,285	Wet Extended Detention Pond
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Total	44.34	31.60	71	0.69	**111285**	**Required WQv**	**2.55**	**af**

Steps 3 and 5 - Apply RR Techniques and Standard SMPs

Runoff Reduction Volume and Treated Volumes						
	Runoff Reduction Techiques/Standard SMPs		**Total Contributing Area**	**Total Contributing Impervious Area**	**WQv Reduced (RRv)**	**WQv Treated**
			(acres)	**(acres)**	**(cf)**	**(cf)**
RR Techniques	Conservation of Natural Areas	RR-1	0.00		0	
	Sheet Flow to Riparian Buffer/Filter Strip	RR-2	0.00	0.00	0	
	Tree Planting/Tree Pit/Tree Trench	RR-3	0.00	0.00	0	
	Disconnection of Rooftop Runoff	RR-4		0.00	0	
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rainwater Harvesting Systems	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Extensive & Intensive)	RR-10	0.00	0.00	0	
	Stream Daylighting	RR-11				
Standard SMPs w/ RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4	0.00	0.00	0	0
	Infiltration Bioretention	F-4	0.00	0.00	0	0
	Filtration Bioretention	F-5	0.00	0.00	0	0
	Bioslope	F-6	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention	P-1	0.00	0.00		0
	Wet Pond	P-2	44.34	31.60		111,285
	Wet Extended Detention	P-3	0.00	0.00		0
	Multiple Pond System	P-4	0.00	0.00		0
	Shallow Wetland	W-1	0.00	0.00		0
	Extended Detention Shallow Wetland	W-2	0.00	0.00		0
	Pond/Wetland System	W-3	0.00	0.00		0
	Pocket Wetland	W-4	0.00	0.00		0
	Gravel Wetland	W-5	0.00	0.00		0
	Surface Sand Filter	F-1	0.00	0.00		0
	Underground Sand Filter	F-2	0.00	0.00		0
	Perimeter Sand Filter	F-3	0.00	0.00		0
	Wet Swale	O-2	0.00	0.00		0
Alt. SMPs	Flow Based Alternative Practice	-	0.00	0.00		0
	Volume Based Alternative Practice	-				
	Totals by RR Technique →		0.00	0.00	0	
	Totals by Standard SMP w/RRV →		0.00	0.00	0	0
	Totals by Standard SMP →		44.34	31.60		111,285
	Totals by Alternative SMP →		0.00	0.00		0
	Totals (RR Techniques + all SMPs) →		44.34	31.60	0	111,285

APPENDIX H

ENDANGERED SPECIES DOCUMENTATION

B. LAING ASSOCIATES
A Woman-owned Business Enterprise
ENVIRONMENTAL CONSULTING
www.blaingassociates.com
380 N Broadway, Suite 407 - Jericho, NY 11753
(631) 261-7170

March 3, 2025

Aaron Ovios, PE, President
Robert M. Sutherland, P.C.
11 MacDonough Street
Plattsburgh, NY 12901

Re: Proposed Schluter Systems Distribution Center - Plattsburgh, Clinton County
Endangered/Listed Species Review

Mr. Ovios,

Thank you for contacting B. Laing Associates, Inc. in regard to providing this letter outlining the potential for listed (i.e., endangered and threatened) species to be impacted by a proposed distribution center in the Town of Plattsburgh, Clinton County, New York.

B. Laing Associates, Inc. is an environmental consulting firm that conducts scientific investigations to provide quantitative, accurate, precise, and verifiable answers to wetlands, ecology, water quality, natural resource surveys, and endangered species issues. B. Laing Associates, Inc. and its principals are staffed to conduct and have conducted numerous endangered, threatened, and species of special concern surveys and analyses on its client's properties throughout the past 35 years.

On December 6-8, 2022, and July 23-24, 2024, B. Laing Associates, Inc. conducted field investigations of the subject site to determine the extent of the subject wetlands on site. During those visits, broad data regarding on-site habitats and species (as incidentally observed) were collected. At this point, a more in-depth analysis of the site with respect to listed species has been herein undertaken[1]. In summary, the project as reviewed by this office, does not have the potential to significantly impact listed species or their occupied habitats. Thus, no "taking" of listed species is anticipated to occur based on the project and no further review should be needed. See below for a discussion of these findings.

Existing Conditions and General Information

The subject site is located within an area of largely undeveloped large lots in the Town of Plattsburgh, Clinton County, New York. The site is ±135.5 acres and is comprised of four tax

[1] As a combination of desktop analysis and field investigations.

parcels: 245-4-16.2, 245-4-41, 245-4-22.11, & 245-4-40.1. It is bordered on the east by railroad tracks and NYS Route 22, on the north by residential lots associated with Superior Road and Joshua Drive, on the south by residential lots associated with Linda Lane, and to the west by other large, unimproved (i.e., wooded) tax parcels. See Figure 1 for a location map of the site.

The site is almost entirely unimproved, although large portions are disturbed and/or maintained through mowing, ATV (or equivalent) trails, as well as the clearing of vegetation (e.g., trees). Further, portions of this site may have been regraded, at least in some upland areas. The site is mostly wooded, although the southeastern section is maintained largely as a field/shrubland, and the south-central portion of the site was mostly cleared of trees during the site investigation(s).

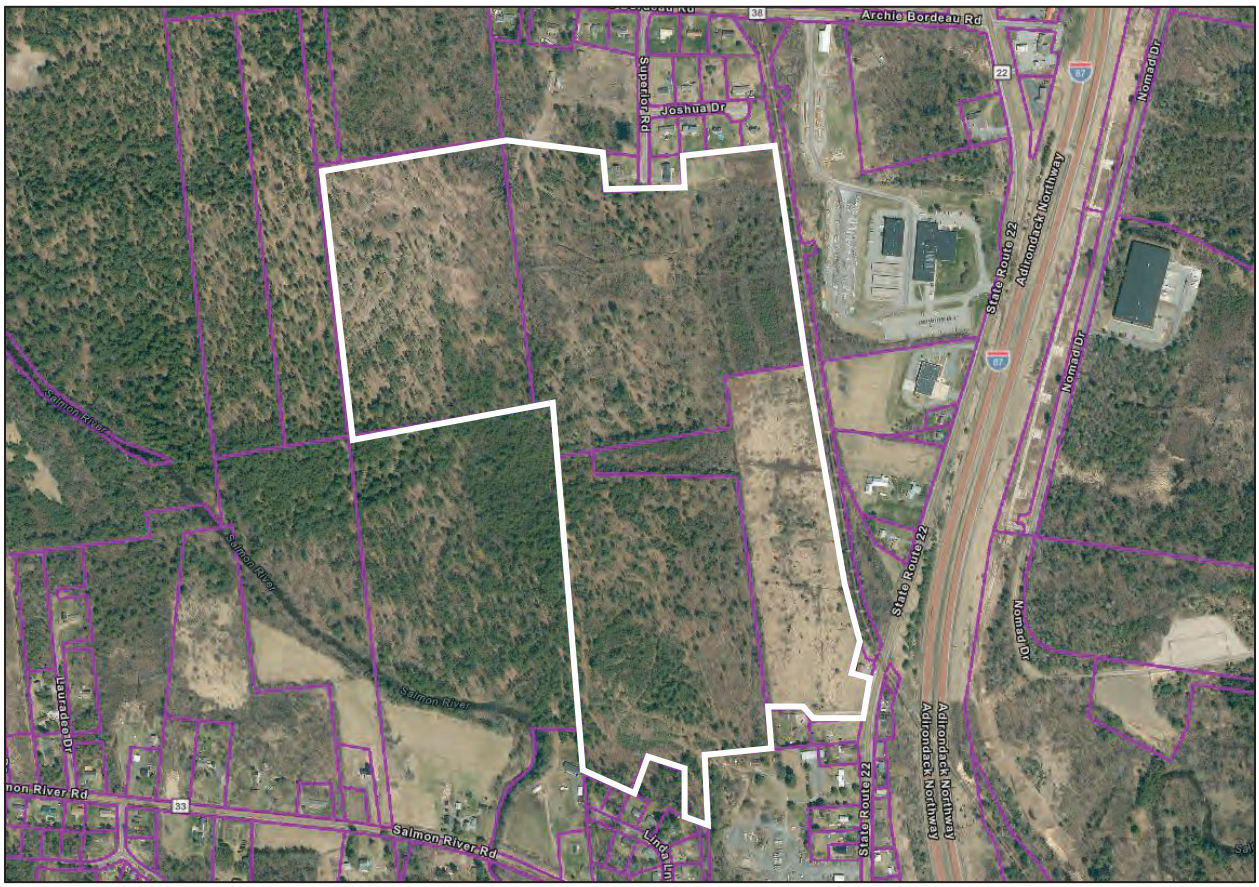


Figure 1: A Site Location Map of the Subject Site (Outlined in White). North is straight up.

Source: ESRI, Clinton County GIS

Based on B. Laing Associates site visits, vegetation on site is consistent with a number of varying habitats. It ranges between disturbed areas, including mowed fields and cleared areas, as well as less-disturbed, woodland areas; both uplands and wetlands exist on site as well. A large portion of the site and surroundings is wooded, with a moderately-closed to closed canopy comprised dominantly of a mix of white pine (*Pinus strobus*) and hardwoods such as red maple (*Acer rubrum*), and various oak species (*Quercus spp.*) This is especially true in wooded uplands where pines are often the dominant tree. The southeast portion of the site is largely fields and lacks a substantial tree layer. Portions of the site's southwest and south-central areas appeared to have been partially cleared.

The southeastern parcel (245-4-22.11) is mostly comprised of old agricultural areas with failed drainage, which has transitioned to shrubland and weedy fields. The shrub layer in this parcel is mostly comprised of thick, almost-impenetrable wet areas of invasive buckthorns (*Rhamnus sp., Frangula sp.*) which is typical of failed agricultural drainage in the area. Where a shrub layer did exist in uplands, the species are typically young pines or other young/small trees.

At the western site boundary (i.e., the western edge of 245-4-40.1), the site dries out and the vegetation becomes more typical of "sandy barrens" species, with a dominance of bracken fern, sweet fern (*Comptonia peregrina*- UPL), oaks, and pines. Corresponding "Wetland Q" which enters the site from the west is mostly dominated by sedges, Sphagnum moss (*Sphagnum sp.*), and cinnamon fern (*Osmundastrum cinnamomeum*- FACW). This condition continues off-site to the west.

The eastern and northern portions of the northeastern lot (245-4-16.2) are mostly disturbed with an open canopy. "Open" wetland areas (e.g., emergent, shrub-dominated) areas, as well as wooded wetlands are present. The balance of the site tends to be a mix of wooded uplands and wetlands, as described above.

To understand if there is potential for listed (i.e., endangered and/or threatened species) plants or animals to occupy the subject site, or have their habitat needs met by the subject site, consultations/inquiries were made through various federal and state-wide databases. To determine if any federally listed species could exist on site, the Information for Planning and Consultation (IPaC) tool was consulted to see if the US Fish and Wildlife Service (USFWS) had records of federally listed species, or their habitats, in the area. Further, the New York State Department of Environmental Conservation's (NYSDEC) Environmental Resource Mapper (ERM) and Short Environmental Assessment Form (EAF) mapper, and the New York Natural Heritage Program were also consulted to determine if state-listed species[2], or rare habitats, have the potential to exist on-site.

Table 1 below shows a full list of plant species observed on site during the aforementioned wetland site inspections.

[2] Per Article 11 of the Environmental Conservation Law, all species federally listed by the USFWS as threatened or endangered are automatically listed by the NYS. Thus, the state-listing is considered more conservative/stringent.

Table 1 Vegetation Observed on Site (Alphabetical) 2022-2024			
Stratum	Common Name	Scientific Name	Indicator Status
Trees	American beech	*Fagus grandifolia*	FACU
	American hop hornbeam	*Ostrya virginiana*	FACU
	Eastern hemlock	*Tsuga canadensis*	FACU
	Gray birch	*Betula populifolia*	FAC
	Ironwood	*Carpinus caroliniana*	FAC
	Northern white cedar	*Thuja occidentalis*	FACW
	Paper birch	*Betula papyrifera*	FACU
	Red maple	*Acer rubrum*	FAC
	Red oak	*Quercus rubra*	FACU
	Staghorn sumac	*Rhus typhina*	UPL
	Sugar maple	*Acer saccharum*	FAC
	White oak	*Quercus alba*	FACU
	White pine	*Pinus strobus*	FACU
	Alder buckthorn	*Frangula alnus*	FACW
Shrubs	Common buckthorn	*Rhamnus cathartica*	FAC
	Red-osier dogwood	*Cornus sericea*	FACW
	Rosa multiflora	*Rosa multiflora*	FACU
	Silky dogwood	*Cornus amomum*	FACW
	Speckled alder	*Alnus incana*	FACW
	Sweetfern	*Comptonia peregrina*	UPL
Herbaceous	American pokeweed	*Phytolacca decandra*	FACU
	Bog orchid sp.	*Platanthera sp.*	FACW
	Bladder sedge	*Carex intumescens*	FACW
	Blue vervain	*Verbena hastata*	FACW
	Bracken fern	*Pteridium aquilinum*	FACU
	Brambles	*Rubus sp.*	FACU
	Bristly dewberry	*Rubus hispidus*	FACW
	Broad-leaved cattail	*Typha latifolia*	OBL
	Canada goldenrod	*Solidago canadensis*	FACU
	Canada mayflower	*Maianthemum canadensis*	FACU
	Christmas fern	*Polystichum acrostichoides*	FACU
	Cinnamon fern	*Osmundastrum cinnamomeum*	FACW
	Common milkweed	*Asclepias syriaca*	UPL
	Common mullein	*Verbascum thapsus*	UPL
	Common reed	*Phragmites australis*	FACW
	Enchanter's nightshade	*Circaea canadensis*	FACU
	Hay-scented fern	*Dennstaedtia punctilobula*	UPL
	Hickey's tree-clubmoss	*Dendrolycopodium hickeyi*	UPL
	Horsetail	*Equisetum sp.*	FACW

Table 1, continued…			
	Jack-in-the-pulpit	*Arisaema triphyllum*	FAC
	Lurid sedge	*Carex lurida*	FACW
	Narrow bur-reed	*Sparganium angustifolium*	OBL
	Nodding sedge	*Carex gynandra*	OBL
	Partridge berry	*Mitchella repens*	FACU
	Pink lady's-slipper	*Cypripedium acaule*	FACW
	Ostrich fern	*Matteuccia struthiopteris*	FAC
	Queen-anne's lace	*Daucus carota*	UPL
	Royal fern	*Osmunda regalis*	OBL
	Sensitive fern	*Onoclea sensibilis*	FACW
	Sphagnum moss	*Sphagnum sp.*	-
	Spotted knapweed	*Centaurea stoebe*	UPL
	Soft rush	*Juncus effusus*	OBL
	Swamp goldenrod	*Solidago gigantea*	FACW
	Threeleaf goldthread	*Coptis trifolia*	FACW
	Woolgrass	*Scirpus cyperinus*	OBL

Potentially Listed Endangered and Threatened Species

The U.S. Fish and Wildlife Service provides broad records of federally listed endangered and threatened species in New York (by county). Based on the IPaC search (the results of which are included at the rear of this report), a list of potential federally listed[3] and candidate species that may exist on or adjacent to the site is as follows:

Common Name	Scientific Name	Federal Status
MAMMALS		
Northern Long-eared Bat	*Myotis septentrionalis*	Endangered
Indiana Bat	*Myotis sodalis*	Endangered
INSECTS		
Monarch Butterfly	*Danaus plexippus*	Candidate

In addition to the USFWS, the NYSDEC and NY Natural Heritage Program (NYNHP) maintain databases of New York State-listed species with greater precision than at the federal level. A NYNHP letter was sought in October 2024 and received on November 20, 2024. The NYNHP letter included a report of rare or state-listed animals and plants, plus significant natural communities in, or adjacent to, the development area. These are as follows:

[3] The IPaC-generated report also includes migratory birds that are of conservation concern, but they are not listed, or afforded protection under the Endangered Species Act.

Common Name	Scientific Name	NYS Status
MUSSELS		
Eastern Pearlshell	*Margaritifera margaritifera*	Unlisted/Imperiled
PLANTS		
Houghton's Sedge	*Carex houghtoniana*	Threatened/Imperiled

Analysis for Federally Endangered and Threatened Species on Site

Based on the information provided by the IPaC system, the USFWS provided concern for the northern long-eared bat (NLEB), the Indiana bat, and monarch butterfly to exist on site. The latter is not currently afforded any federal protection, so no further discussion of same is herein provided. No other species were provided except for select migratory birds which are not listed or afforded protection under the Endangered Species Act.

From a state perspective, no concern for any bat species was provided by the NYSDEC. As discussed above, all species that are federally listed are also automatically state-listed. Further, NYSDEC maintains much more specific databases regarding these species in New York than the USFWS, which tends to be broader. This is demonstrated on the IPaC list which refers to NLEB and the Indiana Bat as being endangered "wherever found."

The NYSDEC's map for endangered species (as shown at the rear of this text) does not include this area as a known NLEB or Indiana Bat location, or location for any listed species[4]. In addition, the NYSDEC maintains a public list of NLEB occurrences by township. Based on this list, Clinton County does have known summering locations for NLEB, however, occurrences have not been noted on this specific site, or within the Town of Plattsburgh. Regarding the Indiana Bat, there are eight hibernacula currently known, none of which are in Clinton County. It is certain that the summer range of this species extends well beyond these counties since the animals disperse to breeding areas.

Once again, during the 2022 or 2024 field visits by B. Laing Associates biologists, no species (plant or animal) listed as federally threatened or endangered were observed.

Analysis for State Endangered and Threatened Species on Site

Based on the information provided by the NYNHP, the state provided concern for the eastern pearlshell mussel and Houghton's sedge. The former is not listed, but is considered "imperiled," whereas the latter is state threatened. As above, the state provided no information or potential impact to listed bat species.

[4] The site is within a check-zone for freshwater mussels as well as rare plants, per the NYNHP letter.

Eastern pearlshell is a S2S3 (imperiled) species of river mussel that is obligately tied to cold-water streams that host *Salmonid* (e.g., trout, salmon, char, etc.) fish. These fish provide host-habitat to their larval forms (glochidia) which parasitize them as a means of dispersal. Eastern pearlshell is the only member of the *Margaritiferidae* family in New York State. According to the NYNHP, eastern pearlshell is known from the Salmon River, approximately 250 yards southwest of the project site (last observed in 2017). There is no suitable mussel habitat on site and no impacts to the Salmon River are proposed from the proposed project. As such, no significant impacts to this species are anticipated.

Houghton's sedge is an S2 (imperiled) species of true sedge (Carex) in the *Cyperaceae* family that is listed as threatened by the NYSDEC, though secure globally. There are currently 11 known populations in the state, though as many as 20 historic locations exist. The NYNHP describes its habitat as open, dry areas such as dunes, old sand pits, exposed sandy or rocky soils, disturbed areas, and breaks in woodlands. Populations have the potential to rebound after succession or reforestation following disturbance events such as clearing or fire. According to NYNHP, this species has been documented approximately 1/3 mile east of the project site, in 1994. These plants were located within an old sand pit in a level, mixed conifer-hardwood successional woodland dominated by white pine, red maple, and black cherry (*Prunus serotina*). The extreme west portion of the site contains sandy soils and canopy breaks which may favor Houghton's sedge. However, this species was not found on site and the project development is over 1,700 feet from the known population of this species. As such, no significant impacts to this species are anticipated.

Results of B. Laing Associates Field Investigations

As discussed above, the primary purpose of the B. Laing Associates field inventories was to delineate freshwater wetlands. As a result, vegetation and plant communities were inventoried[5] as it pertained to the task at hand, but wildlife (fauna) data not expressly sought. That said, wildlife data were collected as species were observed incidentally; mostly with respect to birds.

Wildlife on site was found to be typical of second-growth woods, fields, and shrublands. This included common bird species such as red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), common raven (*C. corax*), black-capped chickadee (*Poecile atricapillus*), blue jay (*Cyanocitta cristata*), northern cardinal (*Cardinalis cardinalis*), gray catbird (*Dumetella carolinensis*) and alder flycatcher (*Empidonax alnorum*). Signs of common mammals such as deer (*Odocoileus virginanus*) and raccoon (*Procyon lotor*) were also noted.

No species of plant or animal listed by the state or federal government as threatened or endangered were observed on site.

[5] See Table 1, above.

Pitch Pine-heath Barrens

While not discussed in the NYNHP letter, the Environmental Resource Mapper (ERM) indicates that the northeastern corner of the site is in the vicinity of Pitch Pine-Heath Barrens, which is a significant natural community. Only ±3 acres of the site are within these advisory bounds, but no portion of the site is within the mapped habitat. The northeastern point of the site is 0.44 miles from the mapped Pitch Pine-Heath Barrens community. Given the distance, from this mapped community to the development area, it is not expected that any significant impact will occur thereto. The extreme western portion of the site also expresses some barrens qualities, with sandy soils and a dominance of ericaceous plants. However, it is not a pitch pine (*Pinus rigida*)-dominated community; the dominant pine is white pine.

Summary

As above, the subject site is located within an area of largely undeveloped large lots, on which development (a proposed distribution center) is proposed. Most of the development footprint is within areas currently dominated by invasive shrubland (defunct agricultural areas) and weedy fields.

Based on a review of the IPaC database it was determined there could be the potential for the northern long-eared bat (endangered) and the Indiana bat (endangered) to exist on site. However, after a review of the more precise data kept by the NYSDEC, it was determined that NLEB and the Indiana Bat are not known from the site, or within the vicinity[6]. The NYNHP letter also provided a concern for nearby eastern pearlshell (not protected) and Houghton's sedge (threatened). However, these species are found off-site and no impacts to same are proposed. There are also no impacts proposed to the pitch pine-heath barrens community which exists ±0.4-miles to the northeast.

Furthermore, no listed species of plant or animal were discovered on site during any of the B. Laing Associates field investigations. Thus, it is our opinion that the proposed development of the subject site, as reviewed by this office, will not significantly impact any endangered or threatened species, or any significant natural communities.

Please see the additional data that appends this letter and reach out with any questions.

Sincerely,

Taylor J. Sturm, PWS, Certified Ecologist
Senior Project Scientist

[6] The project should still adhere to tree clearing restrictions to ensure no impacts to these species occur. Per the USFWS, habitat removal during the winter is not a cause of these species' decline.

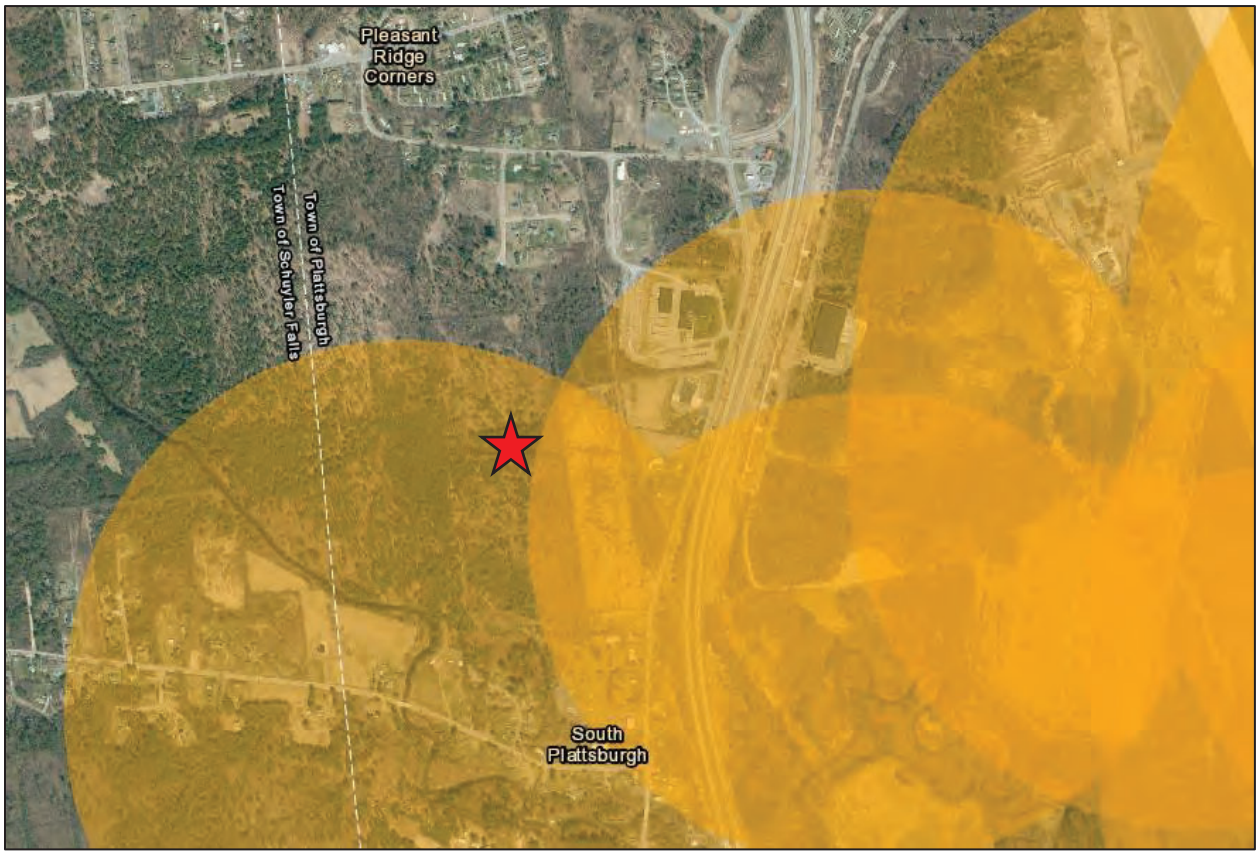
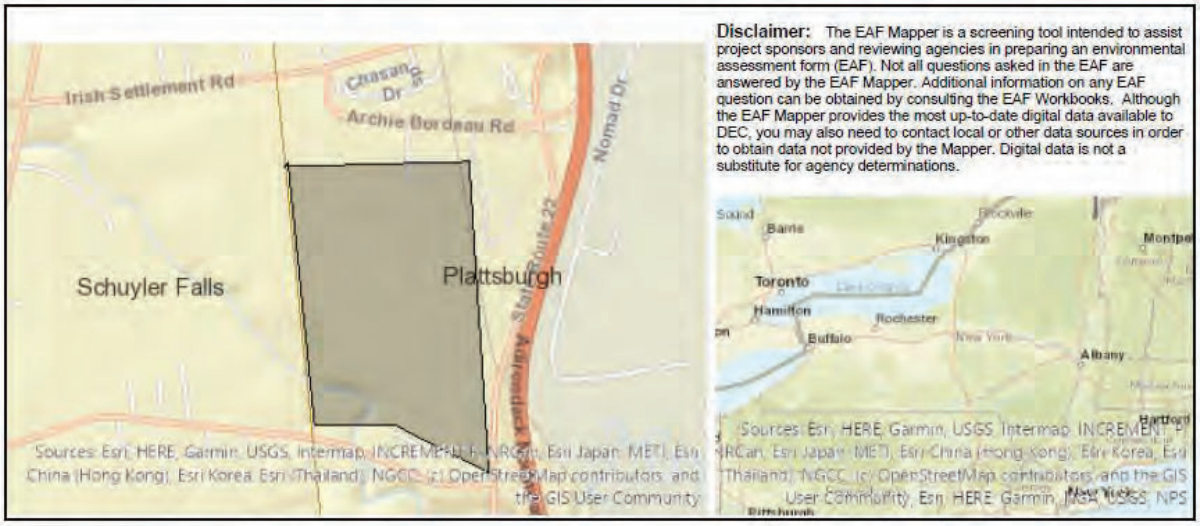


Exhibit A: Showing the site on the NYSDEC Environmental Resource Mapper. The orange overlays represent check zones for rare/listed species (mostly with respect to freshwater mussels). The center of the site is denoted by a red star.

EAF Mapper Summary Report

Tuesday, October 15, 2024 12:02 PM



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Yes
Part 1 / Question 20 [Remediation Site]	Yes

Exhibit B: Showing the auto-generated EAF Mapper data from NYSDEC which shows that the state has no records of threatened or endangered animals on site.

Northern Long-eared Bat Occurrences by Town

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact NYNHP or your regional DEC office to see whether your project site falls within known occupied habitat.

	Westfield		Yes
Clinton	Ausable	Yes	
	Black Brook	Yes	
	Clinton		Yes
	Dannemora	Yes	
	Ellenburg		Yes
	Mooers		Yes
	Peru	Yes	
	Saranac	Yes	

Exhibit C: Showing a portion of the state-wide known list of NLEB occurrences within Clinton County. The right-most column refers to occurrences in the summer months. The column to the left refers to the winter months. Note that there is no data (known locations) for the Town of Plattsburgh within Clinton County.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Clinton County, New York

Local office

New York Ecological Services Field Office

(607) 753-9334
(607) 753-9699
fw5es_nyfo@fws.gov

3817 Luker Road
Cortland, NY 13045-9385

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

NOT FOR CONSULTATION

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Indiana Bat Myotis sodalis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat Myotis septentrionalis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

NOT FOR CONSULTATION

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

NOT FOR CONSULTATION

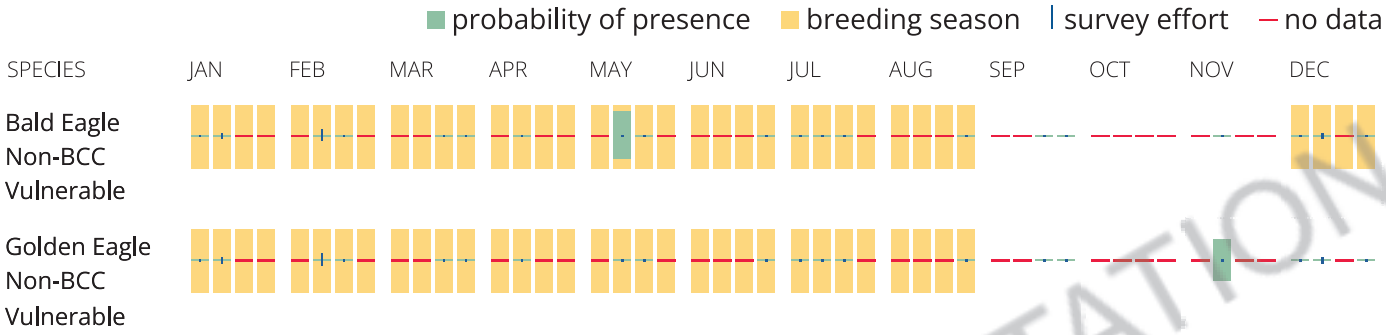
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

NOT FOR CONSULTATION

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

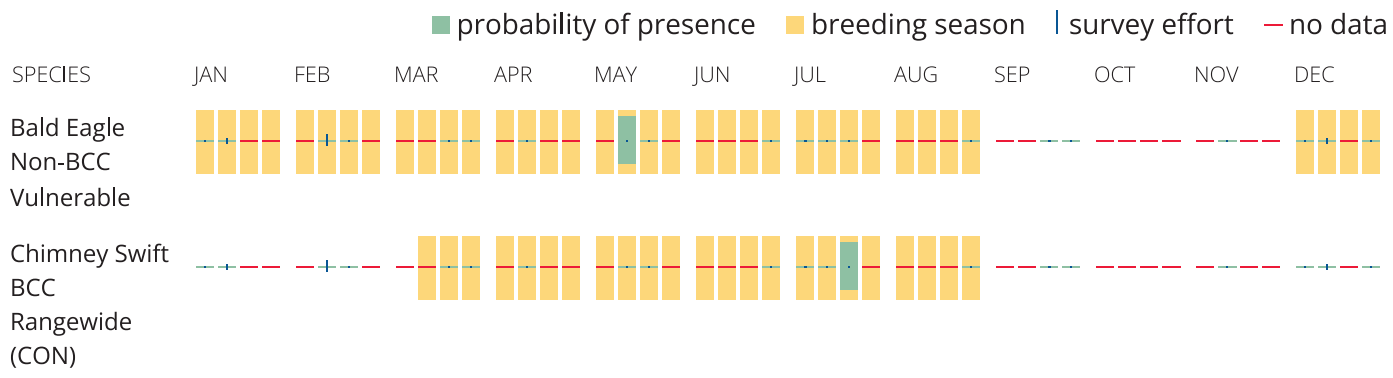
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

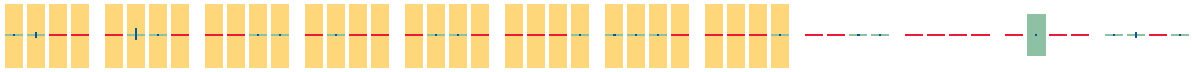
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

Golden Eagle
Non-BCC
Vulnerable



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird

NOT FOR CONSULTATION

on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is

NOT FOR CONSULTATION

the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

NOT FOR CONSULTATION

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

PFO1E

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas

NOT FOR CONSULTATION

should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

November 20, 2024

Taylor Sturm
B. Laing Associates, Inc.
380 N Broadway, Suite 407
Jericho, NY 11753

Re: Potential Distribution Center Development
County: Clinton Town/City: Plattsburgh

Dear Taylor Sturm:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 5 Office, Division of Environmental Permits, at dep.r5@dec.ny.gov.

Sincerely,

Heidi Krahling
Environmental Review Specialist
New York Natural Heritage Program

623

The following rare plants, rare animals, and significant natural communities have been documented at the project site, or in its vicinity.

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Freshwater Mussels			
Eastern Pearlshell	*Margaritifera margaritifera*	Unlisted	Imperiled in NYS

Documented in the Salmon River within 250 yards southwest of the project site. 2017-08-29. 2828

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and are a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Houghton's Sedge	*Carex houghtoniana*	Threatened	Imperiled in NYS

Documented with 1/3 mile east of the project site. 1994-07-29: The plants are located generally within 50 feet of an old sand pit berm in a mixed conifer-hardwood successional woods dominated by Pinus strobus, Acer rubrum and Prunus serotina.The soils are sandy and quite dry. A thin layer of litter, about 0.5 inch,lies over the top of the soil. The slope is nearly level. 6640

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org.

APPENDIX I

WATER AND WASTEWATER DOCUMENTATION

Engineering Report

for

On-Site Wastewater Treatment System

Prepared for:

UMS Property LLC

Located at:

New York Sate RT 22
Plattsburgh, NY 12901

Prepared:

January 2, 2025

Prepared by:

Robert M. Sutherland P.C.

11 MacDonough Street, Plattsburgh, NY 12901 518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Table of Contents

SECTION 1: FACILITY PLANNING AND PERMITTING **3**
1.1 Introduction **3**
1.2 Project Plans **3**
1.3 State Pollutant Discharge Elimination System **3**
SECTION 2: PROJECT EVALUATION **3**
2.1 Site Evaluation **3**
2.2 Horizontal Separation **3**
2.3 Soil Evaluation **4**
2.4 Wastewater Characteristics **4**
2.5 Average Daily Design Flow **4**
SECTION 3: PRIMARY TREATMENT **5**
3.1 Septic Tanks **5**
SECTION 4: ABSORPTION BED SYSTEM **5**
4.1 Soil Application Rate **5**
4.2 Absorption Bed Sizing **5**
4.3 Distribution Piping **5**
4.4 Pump Dosing System **6**
SECTION 5: OPERATION AND MAINTENANCE **6**
APPENDICES **7**

SECTION 1 – FACILITY PLANNING AND PERMITTING

1.1 - Introduction

The proposed facility at 4079 NYS Rt 22 will be served by an on-site wastewater treatment system (OWTS). This engineering report will document the design process & assumptions, and calculations used to size the wastewater facility. This report intends to assist the facility owners with the ongoing operation and maintenance of the facility after its construction and to assist the regulatory agencies to help them ensure compliance with the State's water quality standards. The "*NYS Design Standards for Intermediate Sized Wastewater Treatment Systems, 2014*" (Design Standards) were followed to design this proposed expansion.

1.2 – Project Plans

The proposed OWTS is depicted on the project plan entitled "Produced Facility Site Plan," dated December 19th, 2024. Please refer to the project plans for additional information regarding the proposed OWTS.

1.3 – State Pollutant Discharge Elimination System (SPDES)

Following the construction of the proposed OWTS, the facility must be certified by a licensed professional engineer before it can be used. The SPDES permit may require construction inspections conducted by a professional engineer. Any problems encountered during the construction process should be brought to the attention of the design engineer.

SECTION 2 – PROJECT EVALUATION

2.1 – Site Evaluation

Initial investigation of the project site and testing began by Labella Associates on January 18th of 2023. This testing consisted of sporadic deep holes to confirm the general depth and texture of the existing soil and to identify any limiting features such as rock or high groundwater. A suitable location to construct a soil absorption system was identified during these initial investigations. A percolation rate of 1.20 was conservatively determined using soil boring results and the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems.

2.2 – Horizontal Separation

The location of the proposed soil absorption system was evaluated to determine if sufficient horizontal separation exists relative to various features of concern. Table 1 below provides the measured and required horizontal separation distances.

Table 1 – Horizontal Separation Distances to Proposed Absorption System Location		
Feature of Concern	*Measured Distance (feet)*	*Required Distance (feet)*
Existing Well	None on site	100
Water Line	78.96	10
Surface Waterbody	159.44	100
NYSDEC Wetland	2,268	100
Interceptor Drain	None Present	50
Stormwater Infiltration	None Present	50
Building Foundation	161.31	20
Property Line	113.33	10

2.3 – Soil Evaluation

In 2023 LaBella Associates dug a test pit (B-4), near the proposed septic fields, finding fine sand and small gravel at a depth of 5ft-7ft deep with groundwater at a depth of 5ft and a limiting layer detected ~30ft in depth. Additional deep borings were conducted throughout the site that revealed groundwater table at higher depths with rock at depths greater than 20 feet. The approximate location of these test pits is provided on the attached report from LaBella Associates (Appdendix A). Based on the results of these tests, a review of National Resource Conservation Services soil mapping, and other observations made at the site, the soil conditions at the location of the proposed absorption system appear uniform, and no significant variability in the soil conditions is expected at this location.

2.4 – Wastewater Characterization

With the facility not utilizing any production water or cooling tower or boiler blow down water, almost all waste water generated from the facility will be waste from the bathroom facilities. The only non-bathroom waste would be the floor washing machines that could add up to 750 gallons a day. The floor wash equipment will discharge to a floor sink that will be equipped with a bag filter to remove any large particulates and allow settlement of and dirt and sands. Therefore, this waste will not introduce any additional pollutants to our septic system. This waste will discharge in a Southern direction through the Southern side of the building to the leach field.

2.5 – Average Daily Design Flow

The average daily hydraulic flow rates of 15 GPD/person is used to size the absorption field based on NYSDEC guidelines. Low-flow fixtures will be used for all new fixtures within the proposed building which will result in a 20% reduction from this value or 12 GPD/person. With an estimated 150 employees in the facility over a 10 hour delivery period, an estimated maximum flow of 1,800 GPD is expected (150x12=1,800). The automatic floor cleaning system will contribute an extra 750 GPD, taking our total maximum flow to 2,550 GPD. Adding in an additional 30% for future growth would yield a total daily flow of 3,315 gallons.

SECTION 3 – PRIMARY & SECONDARY TREATMENT

3.1 – Septic Tanks

At the sanitary outlet from the building, septic tanks will provide primary treatment as seen on the utility plans. Due to the majority of the sanitary flow occurring during a 10-hour significant delivery period, the septic tanks have been upsized based on a 24-hour equivalent of said flow. Given a total daily design flow of 3,315 Gallons, the minimum required total septic tank capacity is ~8,000 Gallons. Due to the minimum capacity required, the system will utilize two tanks in series. With (2/3) of the total capacity required in the first tank in series, a 5,500 gallon settling tank is proposed prior to a 2,500 Gallon Septic Tank. The proposed septic tanks will be equipped with effluent filters and ventilation pipes. Due to the installation of an outlet filter, high water alarms will be installed within the septic tanks to alert the operator of any blockages.

After settlement and filtration through the septic tanks, the wastewater will flow to auxiliary holding tank and pump chamber. The purpose of this auxillary tank is to provide additional storage volume in the event of pump failure which includes 25% of the total daily flow and the proposed Dose Volume. Given a daily flow of 3,315 GPD and a dose volume of 830 Gallons as discussed below in section 4.4, the required capcity of the auxillary tank and pump chamber is 1658.75 Gallons. This is provided with a 2,000 gallon auxillary tank. The site is equipped with generator back-up power so power outages would not have a negative effect on the system operations. The wastewater will will then be sent to alternating dosed absorption fields and be absorbed into the ground in the surrounding area.

SECTION 4 – ABSORPTION BED SYSTEM

Absorption trenches are proposed to provide the final treatment and disposal of the septic tank effluent.

4.1 – Soil Application Rate

Given fine sand with gravel, the soil type was assumed to be Coarse Medium Sand for design purposes. Based on the Design Standards, for coarse sand soil types, the recommended soil application rate is 1.20 gpd/ft^2.

4.2 – Pressure Distribution Absorption Field Sizing

At the total design flow rate of 3,315 gpd, a minimum of 1,381.25 LF of absorption trench is required. Two fields are proposed, each with dimensions of seven (7), 2’ wide by 100’ long trenches, giving a total absorption area of 2,800 ft^2.

4.3 – Distribution Piping

The proposed trenches will be dosed utilizing equalized timed doses via the proposed pump chamber. Pressurized effluent from the pump will be alternated between two separate distribution boxes, providing even distribution throughout the field. It will be divided into seven 6” dia. lateral lines, each with a length of 100’.

4.4 – Pump Dosing System

The ideal dose volume required is between 75% and 85% of the volume of the distribution piping:

Trenches Volume	= (7)*(100)*(0.196) = 137.44 cf or 1,028.12 gallons
Force Main	= (116)*(0.022) = 2.55 cf or 19.08 gallons
Total Pipe Volume	= (137.44)+(2.55) = 139.99 CF or 1,047.20 gallons
Ideal Dose Volume	= 786 to 891 gallons

With the absorption field broken down into two separate absorption areas, and alternating fields every 6 hours, each side will receive 50% of the total design volume, or 1660 gallons per day. With a dosing rate of 830 gallons per field, each field will receive an average of 2 doses per day.

SECTION 5 – OPERATIONS AND MAINTENANCE

The septic tanks must be opened and visually inspected at least once per year; however, more frequent inspections are recommended. Accumulated sludge and scum must be removed before the depth of either exceeds one-fourth of the liquid depth of the tanks so that settleable solids cannot escape. Removed sludge must be disposed of at a permitted facility capable of handling septage. A recommended schedule for performing maintenance on the system is provided below:

Spring:

- Open and visually inspect the septic tank, and use a “sludge judge” to measure the depth of the sludge and scum levels. Inspect around the tank for signs of leakage or excessive corrosion.
- Open and visually inspect the pump station. Ensure that both pumps and alarms are in working order.

Summer:

- Periodically mow absorption fields so that grass does not exceed 6” in length. Take note of any wet spots or other abnormalities.

Fall:

- Open and inspect the septic tank, and use a “sludge judge” to measure the depth of the sludge and scum levels. Visually inspect the tank for signs of leakage or excessive corrosion.
- Open and visually inspect the pump station. Ensure that both pumps and alarms are in working order.

Winter:

- Don’t stockpile snow on top of absorption fields

Helpful tools that will assist operation and maintenance of the facility:

- Clear plastic sludge sampler such as the “sludge judge”.
- Steel manhole hook to allow easy access to tanks and manholes for inspection.
- Do not enter septic tank or pump stations without proper authorization and permits.

It is recommended that a log book be kept to record maintenance activities, tank pump outs, and any observations or problems encountered with the system.

Appendices

Appendix A – Labella Associates Deep Hole Testing
Appendix B – Overall Utility Plan
Appendix C – NRCS Soil Survey

Appendix A – LaBella Associates Deep Hole Testing

RMS

ROBERT M. SUTHERLAND P.C.

ENGINEERS • PLANNERS • SURVEYORS

SOIL & MATERIAL TESTING

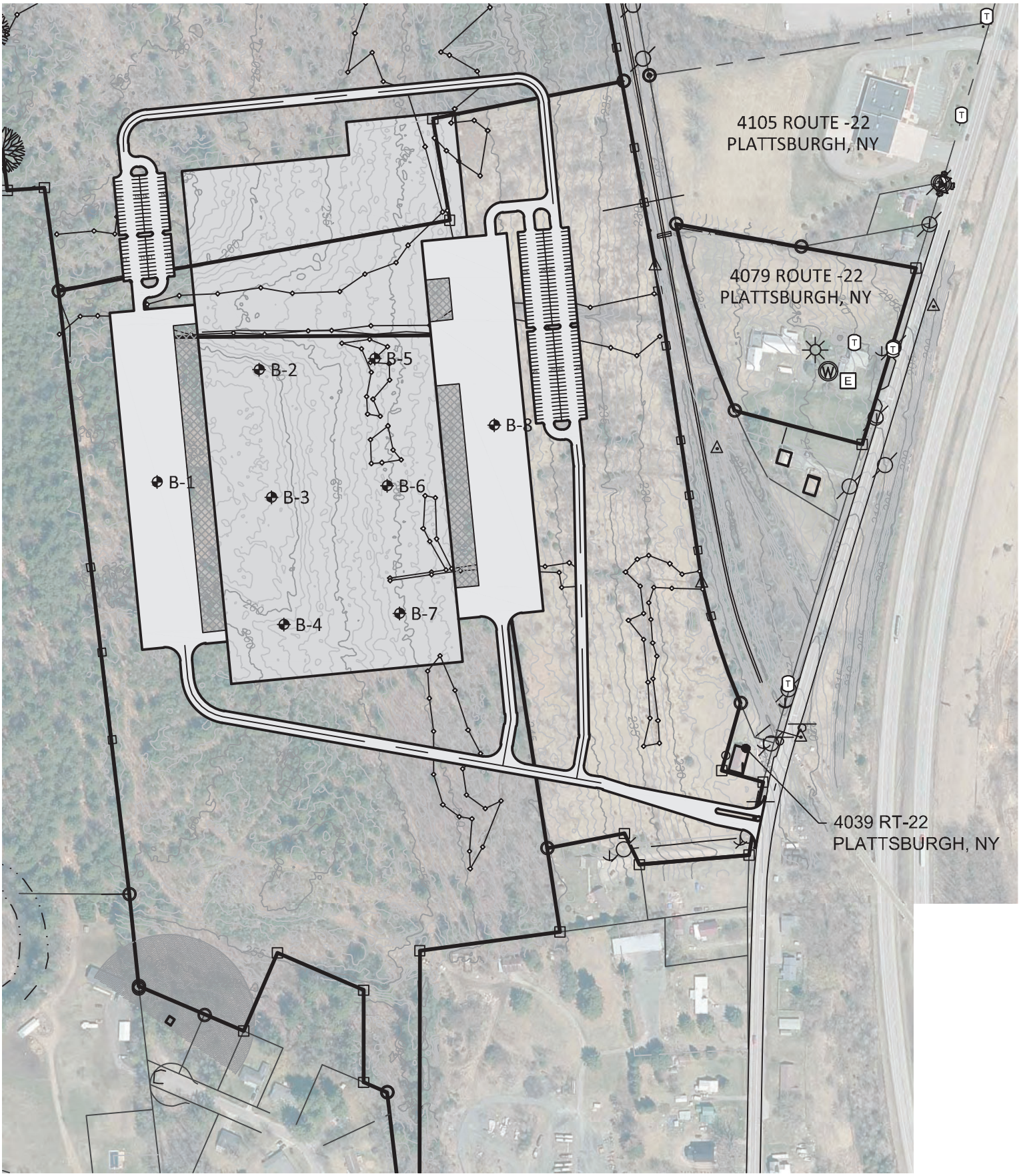
JOB UMS Property, LLC - Boring Locations

SHEET NO. 1 OF 1

CALCULATED BY LSC DATE 1/3/22

CHECKED BY AJO DATE 1/3/22

SCALE 1" = 300'



11 MACDONOUGH STREET, PLATTSBURGH, NY 12901 518.561.6145(PH) 518.561.2496 (FX) RMSPC.COM

LaBella
Powered by partnership
5 McCrea Hill Road, Ballston Spa, New York 12020
Phone: (518) 885-8353 Fax: (518) 885-5385

Boring: B-1

GPS Coordinates:
44.643518
-73.488779

Project: Plattsburgh
Client: RMS
Location: 4079 NY-22, Plattsburgh, NY
Drilling Co.: Labella Associates
Driller: Mike Deyette
Method: 4-14" HSA and Split Spoon

Drill Rig: Geoprobe 3230
Advanced by: HSA
Total Depth: 22'
Water Table Elevation: ~5'
Start Date: 1/18/2023
End Date: 1/18/2023

Hammer Weight (lbs) : 140 lbs
Fall: 30"
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	Sample Type	Blow / 6"	Recovery / Penetration (")	Description	Depth (feet)	Lithology
0						Advance Augers.		
5	SS-1	5' - 7'	SS	1-3-11-19	23"	13" Moist, brown fine silty sand. 7" Saturated brown fine sand, some silt, small gravel. 3" Saturated, hard gray clay, small gravel.		
7						Advance Augers.		
10	SS-2	10' - 12'	SS	15-26-27-25	17"	Saturated, gray fine silt, some sand, small gravel.		
12						Advance Augers.		
15	SS-3	15' - 17'	SS	4-6-8-20	23"	Saturated, gray fine sily sand, trace large gravel.		
17						Advance Augers.		
20	SS-4	20 - 22'	SS	13-50/5"	19"	Wet, gray fine silty sand to till, small to medium gravel with rock at tip of sampler. Refusal Encountered at 20'-11"		
22								

Notes:

SS- 2" O.D. Split spoon sampler
NX- 5' NX size core barrel
NA - Not Available
fbg - feet below grade

" - inches
DTW - depth to water

Logged by: Jeff Morgan

Classification of material:

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

LaBella
Powered by partnership
5 McCrea Hill Road, Ballston Spa, New York 12020
Phone: (518) 885-8353 Fax: (518) 885-5385

Boring: B-2

GPS Coordinates:
44.644301
-73.489484

Project: Plattsburgh
Client: RMS
Location: 4079 NY-22, Plattsburgh, NY
Drilling Co.: Labella Associates
Driller: Mike Deyette
Method: 4-14" HSA and Split Spoon

Drill Rig: Geoprobe 3230
Advanced by: HSA
Total Depth: 17'
Water Table Elevation: ~5'
Start Date: 1/18/2023
End Date: 1/18/2023

Hammer Weight (lbs) : 140 lbs
Fall: 30"
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	Sample Type	Blow / 6"	Recovery / Penetration (")	Description	Depth (feet)	Lithology
1						Advance Augers.	1	
2							2	
3							3	
4							4	
5							5	
6	SS-1	5' - 7'	SS	4-14-21-32	17"	Saturated to wet, dense brown fine silty sand, smal gravel, rock in sampler tip.	6	
7						Advance Augers.	7	
8							8	
9							9	
10							10	
11	SS-2	10' - 12'	SS	28-29-36-42	16"	Wet, dense gray fine silty sand, small gravel.	11	
12						Advance Augers.	12	
13							13	
14							14	
15							15	
16	SS-3	15' - 17'	SS	24-26-28-26	23"	Wet, gray fine silty sand, small gravel.	16	
17							17	

Notes:

SS- 2" O.D. Split spoon sampler
NX- 5' NX size core barrel
NA - Not Available
fbg - feet below grade

" - inches
DTW - depth to water

Logged by: Jeff Morgan

Classification of material:

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

LaBella
Powered by partnership
5 McCrea Hill Road, Ballston Spa, New York 12020
Phone: (518) 885-8353 Fax: (518) 885-5385

Boring: B-3

GPS Coordinates:
44.645143
-73.489900

Project: Plattsburgh
Client: RMS
Location: 4079 NY-22, Plattsburgh, NY
Drilling Co.: Labella Associates
Driller: Mike Deyette
Method: 4-14" HSA and Split Spoon

Drill Rig: Geoprobe 3230
Advanced by: HSA
Total Depth: 17'
Water Table Elevation: ~5'
Start Date: 1/18/2023
End Date: 1/18/2023

Hammer Weight (lbs) : 140 lbs
Fall: 30"
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	Sample Type	Blow / 6"	Recovery / Penetration (")	Description	Depth (feet)	Lithology
1						Advance Augers.	1	
2							2	
3							3	
4							4	
5							5	
6	SS-1	5' - 7'	SS	12-12-19-22	13"	Saturated to wet, brown silty sand, small gravel to dense gray fine silty sand, small gravel.	6	
7						Advance Augers.	7	
8							8	
9							9	
10							10	
11	SS-2	10' - 12'	SS	43-51-37-36	14"	Wet to moist, gray fine silty sand, small gravel.	11	
12						Advance Augers.	12	
13							13	
14							14	
15							15	
16	SS-3	15' - 17'	SS	6-16-14-19	11"	Saturated, gray very fine silty sand, small gravel.	16	
17							17	

Notes:

SS- 2" O.D. Split spoon sampler
NX- 5' NX size core barrel
NA - Not Available
fbg - feet below grade

" - inches
DTW - depth to water

Logged by: Jeff Morgan

Classification of material:

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

LaBella
Powered by partnership
5 McCrea Hill Road, Ballston Spa, New York 12020
Phone: (518) 885-8353 Fax: (518) 885-5385

Boring: B-4

GPS Coordinates:
44.642538
-73.487559

Project: Plattsburgh
Client: RMS
Location: 4079 NY-22, Plattsburgh, NY
Drilling Co.: Labella Associates
Driller: Mike Deyette
Method: 4-14" HSA and Split Spoon

Drill Rig: Geoprobe 3230
Advanced by: HSA
Total Depth: 32'
Water Table Elevation: ~5'
Start Date: 1/19/2023
End Date: 1/19/2023

Hammer Weight (lbs) : 140 lbs
Fall: 30"
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	Sample Type	Blow / 6"	Recovery / Penetration (")	Description	Depth (feet)	Lithology
1-4						Advance Augers.	1-4	
5							5	
6	SS-1	5' - 7'	SS	6-8-13-20	14"	Moist to wet, dense gray fine silty sand, small gravel.	6	
7-9						Advance Augers.	7-9	
10							10	
11	SS-2	10' - 12'	SS	18-21-24-31	16"	Wet, dense gray fine silty sand, small gravel, reddish brown sandstone in sampler tip.	11	
12-14						Advance Augers.	12-14	
15							15	
16	SS-3	15' - 17'	SS	21-25-28-33	17"	Wet, gray fine sand to medium silty sand.	16	
17-19						Advance Augers.	17-19	
20							20	
21	SS-4	20' - 22'	SS	20-50/5"	7"	Moist, gray fine silty sand, small gravel to rock.	21	
22-24						Advance Augers.	22-24	
25							25	
26	SS-5	25' - 27'	SS	46-50/5"	8"	Moist, gray till.	26	
27-29						Advance Augers.	27-29	
30							30	
31	SS-6	30' - 32'	SS	46-50/5"	9"	Moist, gray till to rock. Refusal Encountered at 30'-11"	31	
32-33							32-33	

Notes:

SS- 2" O.D. Split spoon sampler
NX- 5' NX size core barrel
NA - Not Available
fbg - feet below grade

" - inches
DTW - depth to water

Logged by: Jeff Morgan

Classification of material:

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

LaBella
Powered by partnership
5 McCrea Hill Road, Ballston Spa, New York 12020
Phone: (518) 885-8353 Fax: (518) 885-5385

Boring: B-5

GPS Coordinates:
44.642189
-73.490327

Project: Plattsburgh
Client: RMS
Location: 4079 NY-22, Plattsburgh, NY
Drilling Co.: Labella Associates
Driller: Mike Deyette
Method: 4-14" HSA and Split Spoon

Drill Rig: Geoprobe 3230
Advanced by: HSA
Total Depth: 25.3'
Water Table Elevation: NA
Start Date: 1/19/2023
End Date: 1/19/2023

Hammer Weight (lbs) : 140 lbs
Fall: 30"
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	Sample Type	Blow / 6"	Recovery / Penetration (")	Description	Depth (feet)	Lithology
1						Advance Augers.	1	
2							2	
3							3	
4							4	
5							5	
6	SS-1	5' - 7'	SS	3-10-15-23	16"	Moist, brown fine to medium silty sand, roots to gray silt, some sand, trace clay.	6	
7						Advance Augers.	7	
8							8	
9							9	
10							10	
11	SS-2	10' - 12'	SS	20-19-26-20	6"	Moist, gray to brown fine sand, small to medium gravel, trace clay.	11	
12						Advance Augers.	12	
13							13	
14							14	
15							15	
16	SS-3	15' - 17'	SS	23-22-26-26	15"	Moist, gray fine silty sand, small to medium gravel.	16	
17						Advance Augers.	17	
18							18	
19							19	
20							20	
21	SS-4	20' - 22'	SS	23-45-50/5"	15"	Moist, gray fine silt with some sand, trace clay, medium to large gravel.	21	
22						Advance Augers.	22	
23							23	
24							24	
25							25	
26	SS-5	25' - 27'	SS	50/3"	1"	Rock. Refusal encountered at 25'-4".	26	
27							27	

Notes:

SS- 2" O.D. Split spoon sampler
NX- 5' NX size core barrel
NA - Not Available
fbg - feet below grade

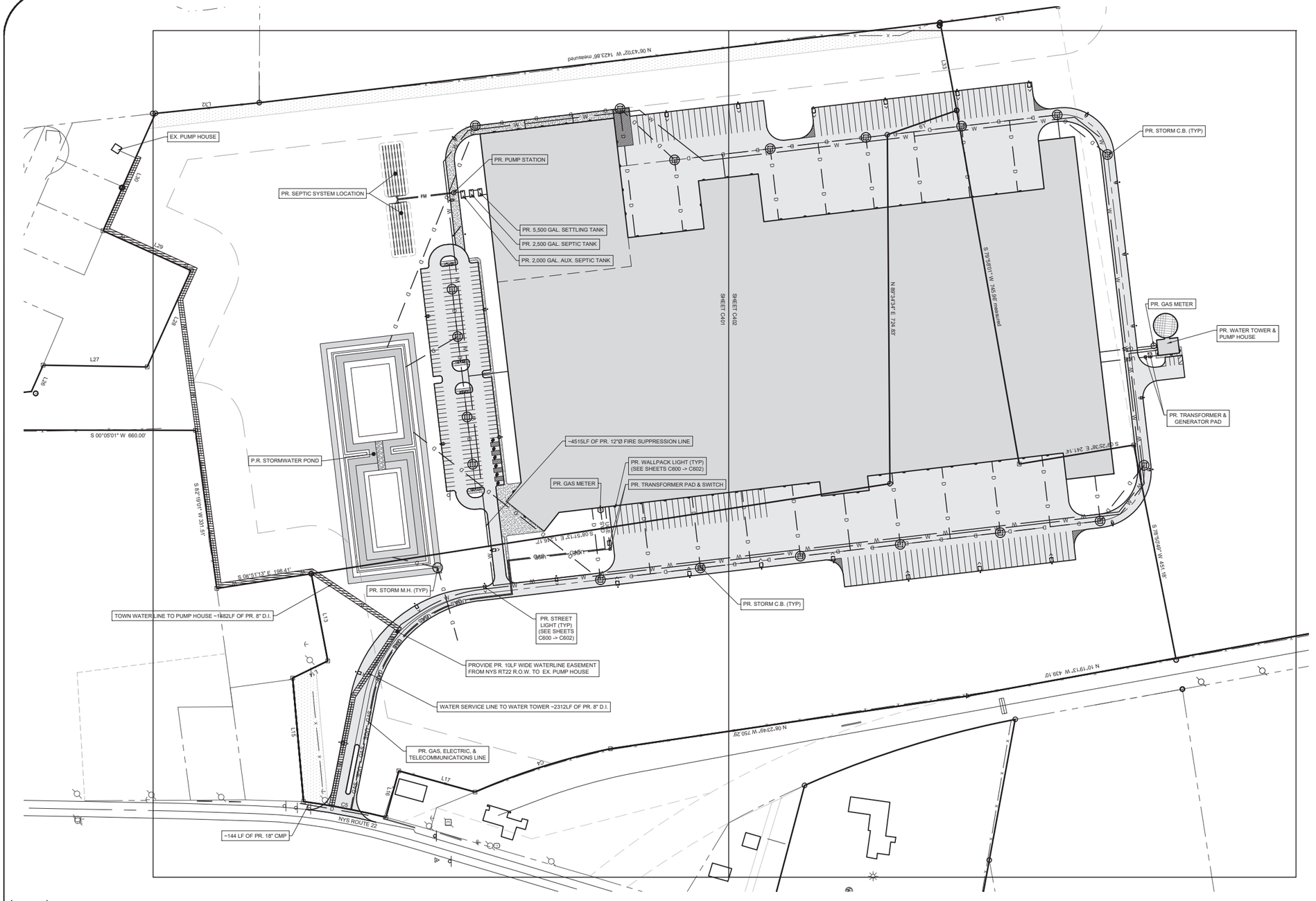
" - inches
DTW - depth to water

Logged by: Jeff Morgan

Classification of material:

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

Appendix B – Overall Utility Plan



Legend:

- Found property evidence (as described)
- Computed corner
- Fire Hydrant
- Well
- Telephone pedestal
- Cable pedestal
- Water Valve
- Water shutoff
- Light pole
- Utility pole
- Guy anchor
- Sign
- Electric meter
- Barbed wire fence
- Box wire fence
- Property line
- Adjoiner property line

GRID NORTH NAD 83 NYS EAST ZONE-18

0 1/2 1 2 3 4 INCHES
0 50 100 200 300 400 FEET

Scale: 1 Inch = 100 Feet

SEPTIC SYSTEM DESIGN CALCULATIONS

DAILY DESIGN FLOW

± 150 EMPLOYEES @ 15 GPD/EMPLOYEE
LOW FLOW FIXTURE = 20% REDUCTION OR 12 GPD
± 150 EMPLOYEES X 12 GPD = 1,800 GPD
ADDITIONAL 750 GPD FOR AUTOMATIC FLOOR CLEANING SYSTEM
1,800 GPD + 750 GPD = 2550 GPD
FUTURE GROWTH 30%
TOTAL = 2,550 GPD + (2,550 GPD * 0.30)
TOTAL = 3315 GPD

SEPTIC TANK SIZING

SIGNIFICANT DELIVERY PERIOD = 10 HOURS
TOTAL VOLUME REQUIRED = (DESIGN FLOW X 24 HOURS PER DAY) / DELIVERY PERIOD
VOLUME REQUIRED = (3,315 GPD X 24 HOURS PER DAY) / 10 HOUR = 7,956 GAL.
VOLUME REQUIRED = 8,000 GAL.
PROVIDE TWO TANKS IN SERIES
1ST TANK MINIMUM VOLUME = 8,000 X (2/3) = 5333.33 GAL.
PROVIDE 5,500 GAL. TANK
SECOND TANK REQUIRED SIZE = 8,000 GAL. - 5,500 GAL. = 2,500 GAL.

LEACH FIELD SIZING

APPLICATION RATE = DESIGN FLOW RATE / 1.20 GPD/SF
AREA REQ. = 3,315 GPD / 1.20 GPD/SF = 2,762.5 SQUARE FEET
LATERAL LENGTH REQ. = 2,762.5 SF / 2FT WIDTH = 1,381.25 LINEAR FEET

TRENCH SYSTEM SIZE
TWO LEACHING AREAS OF 7 LATERALS BY 100FT = 1,400 LINEAR FEET PROPOSED

VOLUME OF DOSE PER FIELD

VOLUME OF DOSE = 75% TO 85% OF DISTRIBUTION PIPE VOLUME
TRENCH = 7 LINES x 100 LF EACH x 0.196 SF = 137.44 CF
FORCE MAIN = 116.0 LF x 0.022 SF = 2.55 CF
TOTAL DOSE VOLUME = 137.44 CF + 2.55 CF = 139.99 CF
75% -> 85% "TDV" = 104.99 CF TO 118.99 CF (785.38 GAL. -> 890.11 GAL.)
TOTAL DOSE VOLUME ≈ 786 -> 891 GALLONS PER FIELD

RECOMMENDED 3 DOSES PER FIELD PER DAY OR A TOTAL OF 6 DOSES PER DAY
3,315 GPD / 6 DOSE PER DAY = 552.50 GALLONS PER DOSE
SINCE 552.50 GALLON < 786 GALLONS -> 786 GALLONS = MINIMUM DOSE
3315 GPD / 786 GALLONS PER DOSE = 4.21 DOSES PER DAY
3315 GPD / 891 GALLONS PER DOSE = 3.72 DOSES PER DAY
3315 GPD / 4 DOSES PER DAY = 828.75 GALLONS PER DOSE
SET TO DOSE ~ 830 GALLONS EVERY 6 HRS. ALTERNATING FIELDS
EQUIVALENT TO 3,320 GPD

REQUIRED STORAGE VOLUME AT PUMP STATION
PROVIDE 25% OF DAILY FLOW = DOSE VOLUME
REQUIRED VOLUME = 3315 GAL. x 0.25 = 830 GALLONS = 1658.75 GAL.
PROVIDE 2,000 GAL. OF STORAGE AT PUMP STATION

NOTE:
ABSORPTION TRENCH SYSTEM TOTALING OVER 1,000 LINEAR FEET REQUIRE ALTERNATING PRESSURE-DOSED GRAVITY DISTRIBUTION.

No.	Revision/Issue	Date

R M S
ENGINEERS - PLANNERS - SURVEYORS
SOIL & MATERIAL TESTING
11 MacDonough Street, Plattsburgh, NY 12901
518.561.6145(Ph) 518.561.2496 (Fx)
RMSPC.COM

Project Name & Address
UMS Property, L.L.C.
showing
New Distribution Center
Site Plan 2024
~ Situate ~
Town of Plattsburgh
Clinton County State of New York

Project # 22241	Sheet Overall Proposed Utility Plan C400
Date 12/19/2024	
Scale 1" = 100'	
Drawn TJS	Checked AJO

COPYRIGHT R. M. SUTHERLAND, P.C. - 2024

Appendix C – NRCS Soil Survey

United States Department of Agriculture

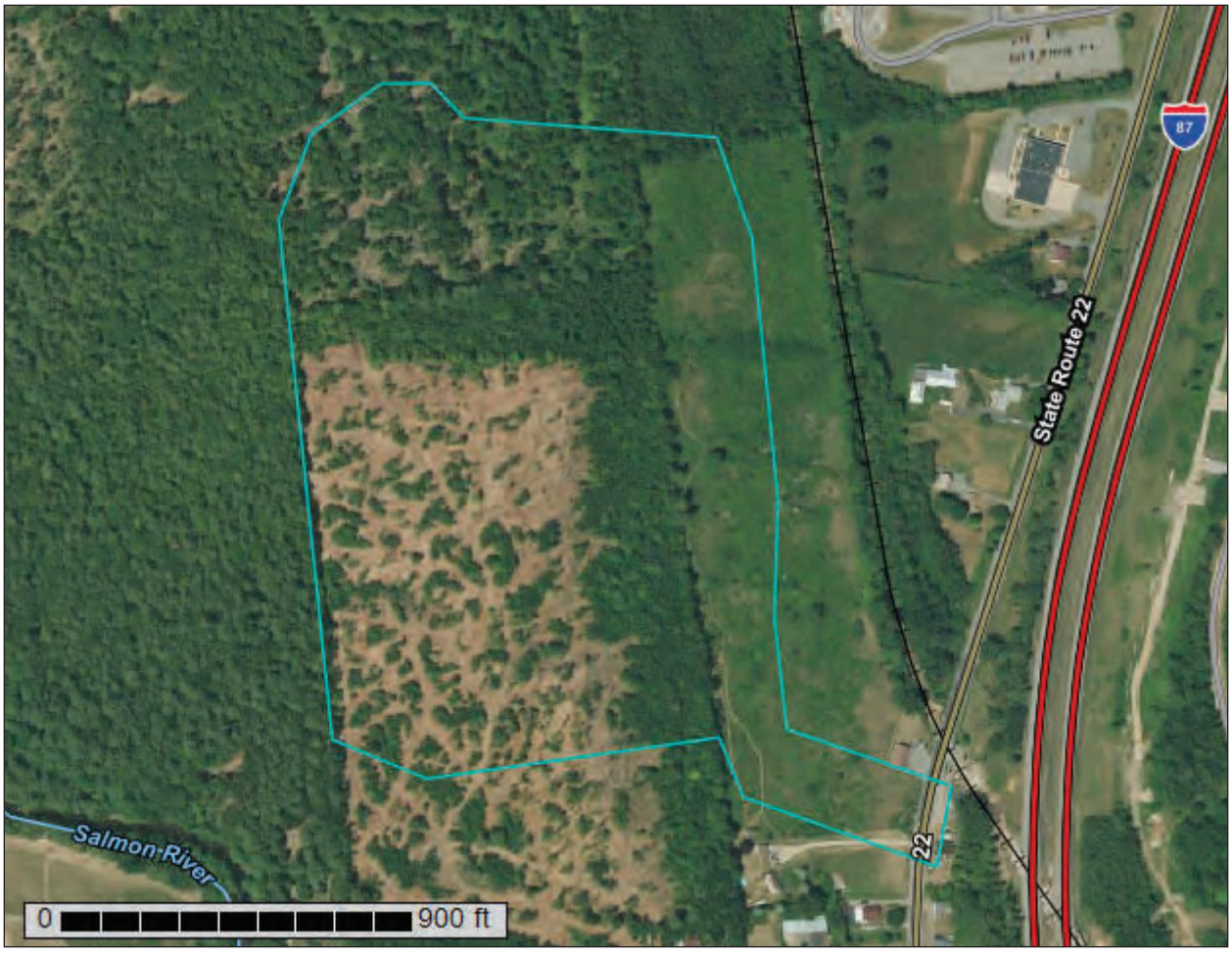
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Clinton County, New York

22241 Schluter Rt. 22 Soil Report



October 28, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Clinton County, New York.....13
AtA—Amenia fine sandy loam, 0 to 3 percent slopes.....13
CtsB—Covertfalls loamy fine sand, 3 to 8 percent slopes.....14
DeA—Deerfield fine sand, 0 to 3 percent slopes.....15
NrA—Northway loamy fine sand, 0 to 3 percent slopes.....17
NrB—Northway loamy fine sand, 3 to 8 percent slopes.....18
Ph—Pipestone fine sand.....20
PtA—Plainfield loamy sand, 0 to 3 percent slopes.....21
References.....24

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

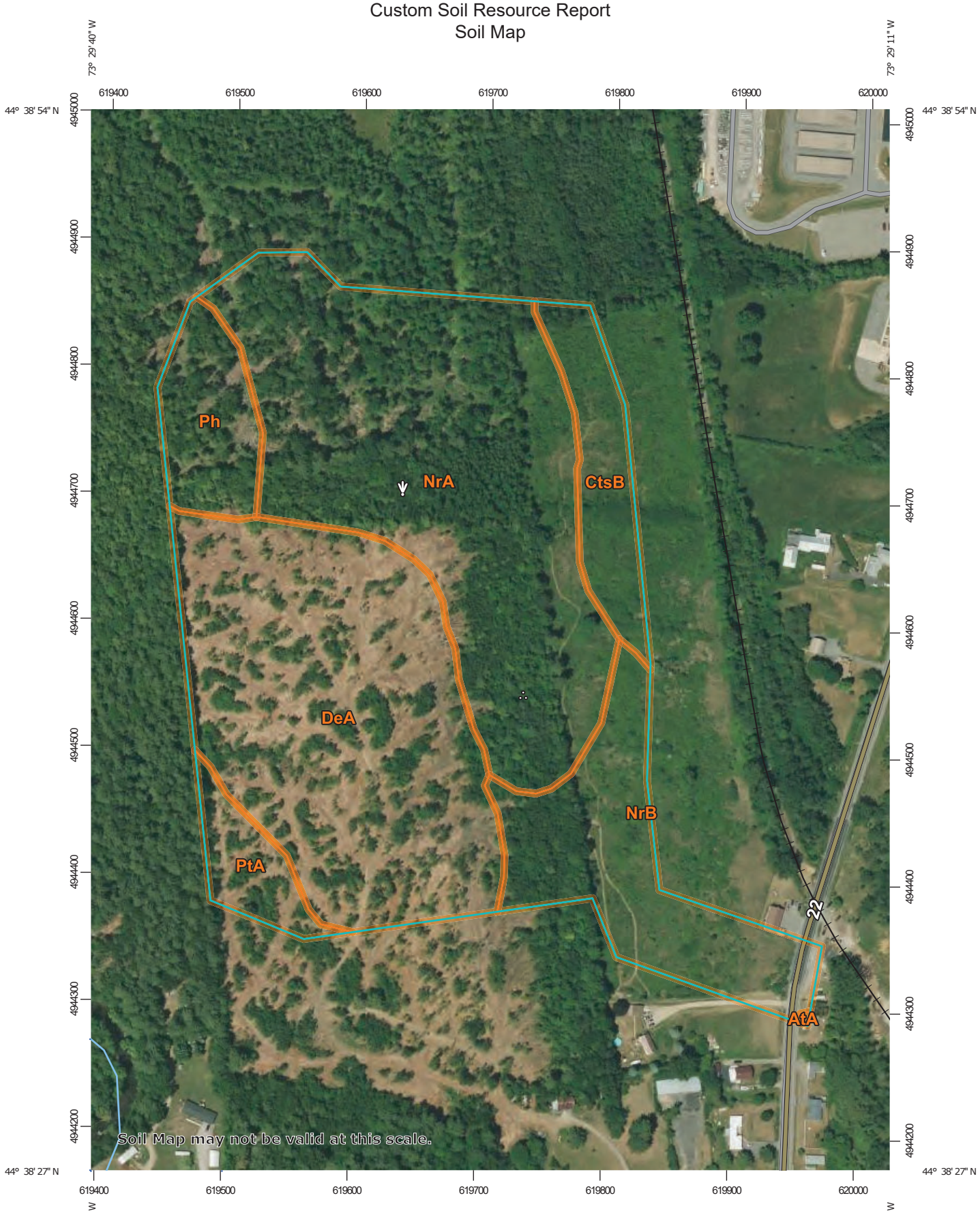
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,070 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

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

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Clinton County, New York
Survey Area Data: Version 25, Aug 29, 2024

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

Date(s) aerial images were photographed: Jun 18, 2020—Jun 20, 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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AtA	Amenia fine sandy loam, 0 to 3 percent slopes	0.0	0.0%
CtsB	Covertfalls loamy fine sand, 3 to 8 percent slopes	2.8	6.0%
DeA	Deerfield fine sand, 0 to 3 percent slopes	15.4	33.0%
NrA	Northway loamy fine sand, 0 to 3 percent slopes	17.8	38.2%
NrB	Northway loamy fine sand, 3 to 8 percent slopes	6.4	13.7%
Ph	Pipestone fine sand	2.7	5.7%
PtA	Plainfield loamy sand, 0 to 3 percent slopes	1.6	3.4%
Totals for Area of Interest		**46.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor

components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Clinton County, New York

AtA—Amenia fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qw4
Elevation: 100 to 330 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Amenia and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Amenia

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Calcareous loamy till

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 28 inches: fine sandy loam
C - 28 to 36 inches: loam
Cd - 36 to 72 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 80 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F142XB013NY - Moist Till Upland
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 12 percent

Hydric soil rating: No

Massena

Percent of map unit: 5 percent
Hydric soil rating: No

Grenville

Percent of map unit: 3 percent
Hydric soil rating: No

CtsB—Covertfalls loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9qxc
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Covertfalls and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Covertfalls

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest, tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciofluvial deposits over loamy till

Typical profile

H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 20 inches: loamy fine sand
BC - 20 to 26 inches: loamy fine sand
2C - 26 to 72 inches: cobbly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 5 percent
Hydric soil rating: No

Grattan

Percent of map unit: 3 percent
Hydric soil rating: No

Northway

Percent of map unit: 3 percent
Hydric soil rating: No

Pipestone

Percent of map unit: 2 percent
Hydric soil rating: No

Covert

Percent of map unit: 2 percent
Hydric soil rating: No

DeA—Deerfield fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qxl
Elevation: 0 to 1,000 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Deerfield and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits derived mainly from granite, gneiss, or sandstone

Typical profile

H1 - 0 to 6 inches: fine sand
H2 - 6 to 31 inches: fine sand
H3 - 31 to 72 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Pipestone

Percent of map unit: 5 percent
Hydric soil rating: No

Junius

Percent of map unit: 5 percent
Hydric soil rating: No

Covert

Percent of map unit: 5 percent
Hydric soil rating: No

Gougeville

Percent of map unit: 2 percent
Hydric soil rating: Yes

Unnamed soils

Percent of map unit: 1 percent

Covertfalls

Percent of map unit: 1 percent
Hydric soil rating: No

Northway

Percent of map unit: 1 percent
Hydric soil rating: No

NrA—Northway loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9qzh
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Northway and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northway

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits or beach ridge deposits over loamy till

Typical profile

H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 32 inches: fine sand
H3 - 32 to 72 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 6 percent

Covertfalls
Percent of map unit: 3 percent
Hydric soil rating: No

Pipestone
Percent of map unit: 3 percent
Hydric soil rating: No

Massena
Percent of map unit: 3 percent
Hydric soil rating: No

Junius
Percent of map unit: 2 percent
Hydric soil rating: No

Appleton
Percent of map unit: 2 percent
Hydric soil rating: No

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

NrB—Northway loamy fine sand, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9qzj
Elevation: 100 to 500 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Northway and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Northway

Setting
Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave

Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits or beach ridge deposits over loamy till

Typical profile
H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 32 inches: fine sand
H3 - 32 to 72 inches: gravelly loam

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 6 percent

Covertfalls
Percent of map unit: 5 percent
Hydric soil rating: No

Pipestone
Percent of map unit: 3 percent
Hydric soil rating: No

Massena
Percent of map unit: 2 percent
Hydric soil rating: No

Junius
Percent of map unit: 2 percent
Hydric soil rating: No

Appleton
Percent of map unit: 1 percent
Hydric soil rating: No

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Ph—Pipestone fine sand

Map Unit Setting

National map unit symbol: 9qzs
Elevation: 600 to 1,000 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Pipestone and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pipestone

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy glaciofluvial, deltaic, or beach ridge deposits

Typical profile

H1 - 0 to 7 inches: fine sand
H2 - 7 to 19 inches: fine sand
H3 - 19 to 26 inches: sand
H4 - 26 to 72 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Ecological site: F142XB003VT - Moist Outwash
Hydric soil rating: No

Minor Components

Northway
Percent of map unit: 5 percent
Hydric soil rating: No

Covert
Percent of map unit: 4 percent
Hydric soil rating: No

Shaker
Percent of map unit: 3 percent
Hydric soil rating: No

Junius
Percent of map unit: 3 percent
Hydric soil rating: No

Gougeville
Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Cook
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed soils
Percent of map unit: 1 percent

Grattan
Percent of map unit: 1 percent
Hydric soil rating: No

PtA—Plainfield loamy sand, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9qzx
Elevation: 720 to 1,150 feet
Mean annual precipitation: 31 to 34 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 130 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Plainfield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Plainfield

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand
H2 - 8 to 23 inches: sand
H3 - 23 to 72 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F142XB002VT - Dry Outwash
Hydric soil rating: No

Minor Components

Grattan

Percent of map unit: 7 percent
Hydric soil rating: No

Deerfield

Percent of map unit: 3 percent
Hydric soil rating: No

Covert

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 1 percent

Covertfalls

Percent of map unit: 1 percent
Hydric soil rating: No

Colton

Percent of map unit: 1 percent
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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 FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

TOWN OF PLATTSBURGH
WATER & WASTEWATER DEPARTMENT
151 BANKER ROAD
PLATTSBURGH, NY 12901-7307

WWW.TOWNOFPLATTSBURGH.COM
DEPT. LINE: (518)-562-6890
EMERGENCY: (518)-561-3370
FAX: (518)-563-8396
TDD: (800)-662-1220

DIRECTOR
SCOTT STODDARD

ASSISTANT SUPERINTENDENT
PAUL WRIGHT

ADMINISTRATIVE ASSISTANT
VALERIE CIOFFI

December 17, 2024

Greg Jandolenko
Facilities Director
Schluter Systems
194 Pleasant Ridge Road
Plattsburgh, New York 12901

RE: Schluter Systems
Proposed Distribution Center
Water System Capacity

Dear Mr. Jandolenko,

The Town of Plattsburgh water system has sufficient capacity for the proposed distribution center connecting to the Plattsburgh Consolidated Water District.

Projected usages are:
3,500 gallons per day sanitary,
0 gallons per day process and
maximum fire suppression tank 500 gallons per minute fill rate.

If you have any questions please contact the department at 562-6890.

Sincerely,

Scott Stoddard
Director

cc: Trevor Cole, Planning Department
Aaron Ovios, Sutherland Engineering. Project Engineer

The Town of Plattsburgh is an equal opportunity provider and employer

Schluter Distribution Center – Fire Water Supply Analysis

To: Aaron J. Ovios, PE

From: Christopher Crivello, MSFPE, PE

Date: 12/5/2024

RAN Fire Protection Engineering was retained to determine the approximate fire flow requirements for the proposed Schluter distribution center located in Plattsburgh, NY. This analysis was intended to determine NFPA-13 sprinkler design criteria as well as Fire Flows per the Fire Code of New York State, to determine preliminary sizing for a site fire pump and water storage tank. It is estimated that the existing municipal water supply to the site has a capacity of 500 gpm or less, which will not be sufficient to support the fire flows for the building. Therefore, a dedicated fire water storage tank, fire pump and hydrant loop will be provided around the building. The installation of this fire water system will not impact the water supply to the neighbors and surrounding area to the proposed site.

The building will contain rack storage of expanded Group A plastics, up to a height of nearly 110-feet. The building will be protected with an NFPA-13 compliant sprinkler system consisting of ESFR sprinklers and in-rack sprinklers. The NFPA-13 sprinkler system requirements can be summarized as follows:

1. The high rack system will be protected with horizontal barriers and in-rack sprinklers designed in accordance with NFPA-13. This will allow the roof level and in-rack level sprinklers to be hydraulically calculated separately per NFPA-13.
2. The racking will be protected with Reliable RA0842, K25.2 EC pendent sprinklers, or equal. The in-rack sprinklers shall be hydraulically calculated as follows per NFPA-13:
    a. Operate eight (8) in-rack sprinklers at 138 gpm minimum per sprinkler.
    b. Provide a 250 gpm hose stream allowance.
    c. Provide a 60 minute water supply duration.
    d. The estimated flow demand is approximately 1,700 gpm, and the required water storage volume is about 105,000 gallons.
3. The roof level design criteria within the storage area will be based on the final storage height and horizontal barrier layout, however the worst-case design criteria would require that the roof level be protected with K25.2 pendent ESFR sprinklers where the maximum ceiling height shall not exceed 30-feet between the highest barrier and the roof level. For this worst-case scenario, the roof level ESFR sprinklers shall be hydraulically calculated as follows:
    a. Operate twelve ESFR sprinklers (four sprinklers on three branch lines) at 30 psi minimum per sprinkler.
    b. Provide a 250 gpm hose stream allowance.
    c. Provide a 60 minute water supply duration.

d. The estimated flow demand is approximately 2,350 gpm, and the required water storage volume is about 150,000 gallons.

In addition to an NFPA-13 sprinkler system, the building is required to provided with adequate fire flow per the Fire Code of New York State. The building construction will be Type IIB. Therefore, Table B105.1(2) of the Fire Code requires a needed fire flow of 8,000 gpm for a duration of 4 hours. Fire Code table B105.2 then states that the fire flow rate is permitted to be reduced to 25% of the rate listed in Table B105.1(2), where the duration is not modified. Therefore, the final needed fire flow for the building can be reduced to 2,000 gpm for a 4 hour duration. This would require a water storage volume of 480,000 gallons.

Based on the analysis conducted above, the worst-case fire flow demand for the building is the sprinkler system, at an estimated flow rate of 2,350 gpm per NFPA-13. The worst-case water storage demand is dictated by the Fire Code, which would require a water volume of 480,000 gallons.

Ultimately, it is recommended that the new Schluter distribution center be provided with a fire pump rated for 2,500 gpm, supplied by a water storage tank having a minimum volume of 480,000 gallons. The system would supply the fire sprinkler systems within the building, as well as site fire hydrants to be located around the new building. The installation of a site fire pump and water storage tank would allow the facility to be constructed without causing a negative impact to the municipal water supply to the surround neighbors and area.

RAN Fire Protection Engineering makes all reasonable efforts to incorporate practical and advanced fire protection concepts in our consults and other professional work. Opinions and reports rendered by RAN Fire Protection Engineering personnel are based on facts and data made available for review in addition to our experience and professional analysis.

APPENDIX J

MECHANICAL BASIS OF DESIGN

Note – This document is provided for informational purposes only.

Mechanical
Basis of Design

Schluter New Distribution Center

Plattsburgh, NY 12901

March 2025

DRAFT

6 Green Tree Drive, South Burlington, VT 05403 802.878.7661 www.dubois-king.com

Offices in Vermont, New Hampshire, Maine and New York

Since 1962 Providing Over 50 Years of Engineering Excellence

GENERAL PROJECT SCOPE

The project consists of the construction of a new product and material distribution facility on a site in Plattsburgh, New York. The proposed facility will have an approximate footprint of 1,225 feet by 630 feet (±770,000 sf) and be designed to enclose product and material storage, logistics and transfer as well as general office spaces, utility and accessory spaces. The storage areas will be primarily comprised of three general spaces:

A. Main Warehouse (approx. 326,000 sf)
B. Pallet Storage (approx. 326,000 sf)
C. Cassette Storage (approx. 87,000 sf)
D. Accessory support areas for:
    a. Maintenance & Offices (approx. 28,000 sf)
    b. Driver Lounge, Cutting Room, Etc. (approx. 12,500 sf)

The main warehouse area will have a clear height of 42 feet with window and exterior wall penetrations concentrated on the east and west faces to include a total of 47 loading bay doors. The pallet storage area will have a clear height of 65 feet with minimal windows and exterior wall penetrations concentrated on the east and west faces to include a total of 63 loading bay doors. The High Bay Storage area will have a clear height of 97 feet with only minimal windows and small exterior wall penetrations. The accessory support areas will have a clear height of 20 feet with exterior wall penetrations as needed to suit functions in the spaces. The office area will be comprised of dedicated office spaces, meeting/conference areas, restrooms, locker room and mechanical/electrical rooms to serve the facility staff.

The new mechanical systems will be designed based on the following criteria and considerations.

CODES, STANDARDS, & GUIDELINES

Enforced

- General Building – IBC-2018 as amended by the State of New York
- Mechanical – IMC-2018 as amended by the State of New York
- Plumbing - IPC-2018 as amended by the State of New York
- Fuel Gas – IFGC-2018 as amended by the State of New York
- Building Energy Standard - IECC-2018 as amended by the State of New York
- NFPA 1-2018 and 101-2018
- NFPA 58-2017, and 211-2016

Reference

- Thermal Comfort: ASHRAE 55-2017
- Ventilation: ASHRAE 62.1-2017
- Energy Standard: ASHRAE 90.1-2016

GENERAL CONSIDERATIONS

Occupancy

The Warehouse, Pallet and Cassette Storage areas will be designed based upon assumed occupant loads of up to 150 personnel at various stations and activities during business hours. The Office Areas will be designed based upon assumed occupant loads of up to 25 full-time staff.

Maintenance

All necessary perimeter clearances for the operation, maintenance and repair of facility equipment will be provided according to manufacturer's specifications. Maintenance and operating clearances will be provided for all HVAC and plumbing equipment in accordance with manufacturer requirements. The proposed HVAC and plumbing equipment may include: heat pump(s), heat exchanger(s), energy recovery unit(s), boiler(s), circulation pump(s), air handling unit(s), fan coil unit(s), unit heaters and domestic water heater(s).

Fuel Source Availability

In the interests of serving the building in both an economically and environmentally responsible manner, the Mechanical systems will be designed to rely predominantly on electric sources with limited use of natural gas. The use of a geothermal source is described and may be incorporated for the facility, noting that the full building demands would require an approximately 7 acre well field. Natural gas-fired equipment will be provided where required for facility operation during extreme low temperatures or as an option when operation is considered to be cost effective to the owner. Three-phase electrical service and natural gas utility service piping of appropriate capacity and reliability are anticipated to be available from the local utility to the site of the proposed facility.

Acoustics – Noise & Vibration

The noise generated by proposed HVAC equipment is anticipated to be less than the normal operating sound level of normal vehicle traffic on site. The proposed building will not be located in a noise sensitive area and is not anticipated to require special noise provisions more stringent than standard design practices.

Spatial Requirements

Mechanical rooms of sufficient size will be required to accommodate the hydronic pumps, tanks, heat exchangers, hydronic specialties and other items related to the HVAC systems. Mechanical equipment pads of sufficient size will be required for the air source heat pump units and associated piping. The air handling equipment serving the storage areas will primarily be roof mounted and located to evenly distribute airflow throughout the spaces. Fan coils and terminal units serving the office areas will be located on perimeter walls or above ceilings to suit the spaces, with associated piping to run concealed above ceilings or adjacent to structural members to the extent possible.

Air Filtration/Zone Pressurization

Each of the storage areas will be provided with appropriate filtration or ventilation and recirculated air streams. Duct collection and special treatment are not anticipated to be required for these spaces.

The office areas will be provided with filtration of the conditioned air supply in accordance with the requirements of ASHRAE Standard 62.1, filters shall be located upstream of wetted cooling coils where possible. The proposed air handling units and energy recovery units will be provided with MERV 8 pre-filters and MERV 13 final filters to maintain indoor air quality (IAQ) within standard acceptable range. Termninal units will be provided with the standard available filtration options and accessories.

Space Pressurization – The office areas will be maintained at positive space pressure relative to the storage areas to control or limit air infiltration to the office spaces. The storage areas will be maintained at a neutral to slightly negative pressure relative to the adjacent spaces and outdoors through normal exhaust operation.

Ventilation

The various storage areas will be provided with exhaust and ventilation at the minimum levels required per applicable code and industry guidelines for occupant safety and comfort. Rooftop Units will be mounted on roof curbs or steel frames, ducted down through the roof or horizontally through the upper walls with return/exhaust and supply ductwork as necessary for air distribution and balanced to maintain slightly negative space pressurization. Exhaust Fans will be mounted on roof curbs or supported directly from the exterior wall of the building, then be ducted through the envelope and terminate at open end ducts, at capture hoods or at filtered intake structures as necessary. Outdoor air to replace the exhausted airflow will be drawn through louvers in the exterior walls or roof mounted ventilators located to induce cross-flow through the spaces.

The office areas are proposed to be ventilated through a Dedicated Outdoor Air System (DOAS) which will be located on the roof and able to run independent of the space heating & cooling system. Each designated office area, comprised of work spaces, break rooms, conference rooms, locker rooms and restrooms, will be served by a DOAS operating based on occupancy per the normal business schedule of the facility. The office area DOAS units will include energy recovery and be balanced to maintain a positive space pressurization relative to any adjacent storage areas.

Where new “A2L” refrigerants are utilized in the HVAC systems, appropriate integral gas sensors and space gas monitoring systems will be provided. These systems will shutdown fan operation and close refrigerant gas circuit valves upon leak detection or initiate purge exhaust ventilation systems as appropriate.

Heating and Space Conditioning

The main storage areas will be served by a combination of Rooftop Units (RTUs) with either gas-fired heating and DX cooling or hydronic heating and cooling coils, exhaust fans and terminal units to maintain space temperature and relative humidity levels. The RTU’s will provide ventilation to the space, incorporating energy recovery heat exchanger where necessary to conserve energy and to maintain a maximum relative humidity level of 50%. The various spaces will be minimally conditioned, maintaining 50°F during the heating season and 85°F during the cooling season. Individual RTUs will be communicate status and allowing for adjustable set points through the building Energy Management

System (EMS) and monitor conditions in each area or zone through wall mounted thermostat/sensor(s). Airflow will be circulated to the spaces through insulated supply ductwork or fabric ductwork and return to the units through ductwork stubs near each RTU. Destratification of air in these spaces will be accomplished by combination of high throw devices on supply air streams and indoor fans designed to induce vertical air movement.

The accessory support areas will be served by a combination of Rooftop Units, terminal heating units and exhaust fans to maintain space temperature. The RTU's will be natural gas-fired heating and DX cooling or hydronic type and terminal units will be either electric or hydronic type. For a hydronic system the hot water and chilled water to the unit coils will be supplied through the a central hot water plant using air to water source heat pumps and either fuel fired or electric boilers during low temperature conditions. The DOAS unit will provide ventilation to the spaces incorporating a fixed plate or enthalpy wheel energy recovery heat exchanger and gas-fired heating and DX cooling or hydronic heating and cooling coils supplied with hot and chilled water through the central plant system. The various spaces will be fully conditioned, maintaining 70°F during the heating season and 75°F during the cooling season with set-backs of 10°F during periods of unoccupied operation. Individual RTU's and terminal units will be operated by wall mounted controller/thermostat(s) in each room or zone, communicating status and allowing for adjustable set points through the building Energy Management System (EMS). Airflow will be circulated to the corresponding spaces through insulated supply and return ductwork from the RTU's. Ventilation air will be carried through insulated ductwork from the DOAS located on the roof and operate based on building occupancy schedule.

The mechanical rooms are expected to contain water piping and equipment, both domestic and HVAC related, and will be maintained at a minimum space temperature of 50°F to prevent freezing and provided with general exhaust to avoid over-heating within the space. Space tempering shall be through a horizontal style unit heater(s), either electric or hydronic, operated by integral or space mounted thermostat. Ventilation to the space will be provided through the DOAS unit and general exhaust will be provided through a ceiling mounted exhaust fan operated through a reverse acting thermostat. Combustion air and flue vents as necessary for central plant boilers will be ducted through the roof and terminate per appliance manufacturer guidelines and in accordance with local code requirements.

The electrical rooms are expected to contain a significant amount of panels and heat generating equipment, will be maintained at a minimum space temperature of 50°F and provided with general exhaust to avoid over-heating within the space. Space tempering shall be through a horizontal style electric unit heater(s) operated by integral or space mounted thermostat. Ventilation to the space will be provided through the DOAS unit and general exhaust will be provided through a ceiling or roof mounted exhaust fan(s) operated through a reverse acting thermostat. If necessary, supplemental cooling will be provided in electrical utility rooms through dedicated split DX systems or air handler with chilled water coil.

Zoning

The various spaces in the office area will be grouped into zones based on similar use and occupancy periods to the extent possible. Unless otherwise noted, zone equipment will be operated and scheduled through the EMS or shall be furnished with a space mounted thermostat/controller with heating and cooling modes having adjustable set points as well as seven-day programmable occupancy scheduling.

The storage areas will be apportioned as is practical to control multiple rooftop units, exhaust fans, dampers and heaters through a minimal number of devices. Unit heaters and fans in ancillary spaces will be operated by dedicated thermostats and switched controllers.

PLUMBING SERVICES AND DOMESTIC WATER HEATING

The site will be served by municipal water with meter and appropriate backflow prevention device installed at the service entrance(s). Restrooms, service sinks, kitchenettes and other plumbing fixtures will be supplied off the domestic cold water service and provided with hot water generated through electric, instantaneous heaters located at the specific fixture(s) or through tank-type electric water heaters located near groups of fixtures. Cold and hot water will be distributed through Type L Copper piping and fittings to each fixture. Each fixture will discharge to the sanitary waste system and be vented above the roof, through cast iron drain, waste and vent piping. The sanitary waste system will connect to municipal sewer. Storm water flow on the roof will be directed through roof drains and internal rain leaders to the site storm drain system. Emergency overflow drains will be provided on the various roof areas and levels, directed through piping within the building and discharging through the exterior walls above grade. Storm water flow on the roof will be directed through roof drains and internal rain leaders to the site storm drain system. Emergency overflow drains will be provided on the various roof areas and levels, directed through piping within the building and discharging through the exterior walls above grade.

HVAC SYSTEM DESIGN CRITERIA

Sizing / Diversity / Redundancy

The new HVAC systems and equipment will be sized based upon the calculated space heating and cooling loads as applicable as well as the minimum exhaust and ventilation air flow rates required by code. Central system equipment, such as heat pumps and circulation pumps, may be sized to provide for redundancy in the interest of practical maintenance or future expansion. Equipment serving zone level spaces will generally be of the smallest capacity that satisfies space demands.

Hydronic piping serving the water source heat pump system will be sized to maintain a maximum velocity of 5 feet/sec for upply and return water. To minimize noise, pressure drop (and associated pump energy) and erosion, pipe will be sized for approximately 70% of these values.

Air Temperature Criteria

The HVAC equipment serving storage and staff areas will generally be sized for the following air conditions:

Condition	Ambient Air Temperature	Return Air Temperature	Supply Air Temperature	Relative Humidity
Summer	87°F-db/71°F-wb	75°F-db/56°F-wb	75°F-db/56°F-wb	50%
Dehumidification	80°F-db/76°F-wb	75°F-db/56°F-wb	75°F-db/56°F-wb	50%
Winter	-22°F-db/-18°F-wb	70°F-db/53°F-wb	70°F-db/53°F-wb	50%

The HVAC equipment serving conditioned spaces (office areas) will generally be sized for the following air temperature values, with supply air being cooled to 55°F to provide latent cooling (moisture removal).

Condition	Ambient Air Temperature	Return Air Temperature	Supply Air Temperature	Temperature Change
Summer	84°F-db/69°F-wb	75°F-db/62°F-wb	55°F-db/55°F-wb	20°F
Winter	-22°F	50°F	90°F	40°F

The HVAC equipment serving tempered spaces (utility and mechanical rooms) will generally be sized to maintain a minimum space temperature of 50°F while ambient temperature is -22°F to prevent freezing.

Water Temperature Criteria

Hydronic coils and equipment will be sized based on a hot water supply temperature of 120°F and a chilled water supply temperature of 45°F. The hot and chilled water will be generated by air to water source heat pump, ground source heat pump and/or hot water boilers. When ambient conditions are in the range of 100°F to 10°F the heat pumps will generate hot and chilled water to satisfy building demands, with energy recovery to the extent possible for simultaneous demands. When ambient conditions are below 10°F, the hot water boilers will operate to supplement the heat pumps and ensure that consistent hot water supply temperature is maintained down to the design conditions. The gas-fired boilers utilize the condensing process to maximize efficiency and lower resulting fuel use. The lower temperature range does increase the physical dimensions of hot water terminal units, coils and associated costs.

HVAC SYSTEM CONTROLS

The building is proposed to include a central direct digital control (DDC) system, which will allow for adjustement of all space temperature and humidity set points as well as monitor all equipment status and operations. Additional features to include remote monitoring, data trending and alarm notification.

PROPOSED HVAC SYSTEM OPTIONS

Packaged Gas and Direct Expansion (DX) Rooftop Units Option

The baseline system option for heating, cooling and ventilation to the building will consist of packaged Rooftop Units with supply fans, exhaust/relief fans, filters, natural gas fired furnace sections and heat pump section interconnected with DX coils. Electric resistance heating sections may be considered in lieu of gas-fired heating if advantageous or practical at this location. The RTU's will be provide with digital control interfaces capable communication and adjustment of all set points through the building

Energy Management System. The RTU's will be provided with differential economizer operation and energy recovery to satisfy Energy Conservation Code requirements and be balanced to normally incorporate approximately 10% outdoor air with the supply airflow to each space. Based on preliminary HVAC demand calculations, the ancillary spaces will be served by a total of ten (10) small RTU's with nominal cooling capacity of 10 Tons and heating input of 150 MBH each. The storage areas in the building will be served by thirty-two (32) large RTU's with 50 ton nominal cooling capacity and heating input of 800 MBH each. This option has a mechanical conditioning load of 3,653KW plus the other building loads would have an approximate total electrical connected load of 8,125kW with a demand load of 4,880kW. This option would require (3) 4000A, 480V, 3-phase electrical services.

Air to Water Source Heat Pump & Electric Boiler HVAC System Option

The fully electrified system option for heating, cooling and ventilation to the building will consist of Rooftop Units with supply fans, exhaust/relief fans, filters and hydronic coils fed from the central chilled and hot water plants. The RTU's will be provided with differential economizer operation and energy recovery to satisfy Energy Conservation Code requirements and be balanced to normally incorporate approximately 10% outdoor air with the supply airflow to each space. The chilled and hot water will be circulated through various pumps and generated through air to water source heat pump units which will be supplemented by electric resistance hot water boilers to ensure uninterrupted heating capacity during extreme low temperatures. The heat pump units will be located on the exterior grade or roof mounted in proximity to the Mechanical room, associated pumps and hydronic accessories. The Boilers will be located within the Mehanical Room. All hot and chilled water system pumps will be arranged/operated in lead-lag fashion for system redundancy, all pump and fan motors wil be provided with variable speed drives. The RTU's, boilers and pumps will be provide with digital control interfaces capable communication and adjustment of all set points through the building Energy Management System. Based on preliminary HVAC demand calculations, the ancillary spaces will be served by a total of ten (10) small RTU's with chilled water coils sized for a total cooling capacity of 10 Tons and hot water coils with a heating capacity of 180 MBH each. The storage areas in the building will be served by thirty-two (32) large RTU's with chilled water coils sized for a total cooling capacity of 50 Tons and hot water coils with a heating capacity of 840 MBH each. The central chilled and hot water plant will be comprised of approximately twenty-four (24) heat pump modules, three electric boilers and dedicated hydonic pumps for each unit/circuit. The heat pump units shall be capable of producing 1,620 Tons of cooling and 15,500 MBH of heating at ambient temperature of 10F while the electric boilers shall be capable of producing 34,300 MBH of heating (3,360 kW each). The hydronic pump serving each boiler is estimated to have motor size of 30 Hp, two hydronic pumps serving each heat pump unit are estimated to have motors of 75 Hp, the (2) hot and (2) chilled water system pumps are estimated to have motor sizes of 250 Hp each. This option has a mechanical conditioning load of 17,781KW plus the other building loads would have an approximate electrical connected load of 22,253kW with a demand load of 16,889kW. This option would require (7) 4000A, 480V, 3-phase electrical services.

Hybrid Air to Water Source Heat Pump & Gas-fired Boiler HVAC System Option

The hybrid system option for heating, cooling and ventilation to the building will consist of packaged Rooftop Units with supply fans, exhaust/relief fans, filters and hydronic coils fed from the central chilled and hot water plants. The RTU's will be provided with differential economizer operation and energy recovery to satisfy Energy Conservation Code requirements and be balanced to normally incorporate

approximately 10% outdoor air with the supply airflow to each space. The chilled and hot water will be circulated through various pumps and generated through air to water source heat pump units which will be supplemented by natural gas-fired hot water boilers to ensure uninterrupted heating capacity during extreme low temperatures. The heat pump units will be located on the exterior grade or roof mounted in proximity to the Mechanical room, associated pumps and hydronic accessories. The Boilers will be located within the Mehanical Room with flue vent and combustion air intake piped directly to the outdoors for closed combustion. All hot and chilled water system pumps will be arranged/operated in lead-lag fashion for system redundancy, all pump and fan motors wil be provided with variable speed drives. The RTU's, boilers and pumps will be provide with digital control interfaces capable communication and adjustment of all set points through the building Energy Management System. Based on preliminary HVAC demand calculations, the ancillary spaces will be served by a total of ten (10) small RTU's with chilled water coils sized for a total cooling capacity of 10 Tons and hot water coils with a heating capacity of 180 MBH each. The storage areas in the building will be served by thirty-two (32) large RTU's with chilled water coils sized for a total cooling capacity of 50 Tons and hot water coils with a heating capacity of 840 MBH each. The central chilled and hot water plant will be comprised of approximately twenty-four (24) heat pump modules, five gas-fired boilers and dedicated hydonic pumps for each unit/circuit. The heat pump units shall be capable of producing 1,620 Tons of cooling and 15,500 MBH of heating at ambient temperature of 10F while the natural gas boilers will have heating input of 8,000 MBH each. The hydronic pump serving each boiler is estimated to have motor size of 20 Hp, two hydronic pumps serving each heat pump unit are estimated to have motors of 75 Hp, the (2) hot and (2) chilled water system pumps are estimated to have motor sizes of 250 Hp each. This option has a mechanical conditioning load of 7,853kW plus the other building loads would have an approximate electrical connected load of 12,325kW with a demand load of 8,450kW. This option would require (4) 4000A, 480V, 3-phase electrical services.

Geothermal Heat Pump HVAC System Option

The ground water source heat pump option for heating, cooling and ventilation to the building will consist of packaged Rooftop Units with supply fans, exhaust/relief fans, filters and hydronic coils fed from the central chilled and hot water plants. The RTU's will be provided with differential economizer operation and energy recovery to satisfy Energy Conservation Code requirements and be balanced to normally incorporate approximately 10% outdoor air with the supply airflow to each space. The chilled and hot water will be circulated through various pumps and generated through water source heat pump units coupled to the site well-field. The heat pump units will be located in the building Mechanical rooms with associated pumps and hydronic accessories. Supplemental gas fired or electric boilers may be provided as emergency back-up or for interruptions of well-field operation. All hot and chilled water system pumps will be arranged/operated in lead-lag fashion for system redundancy, all pump and fan motors wil be provided with variable speed drives. The RTU's, boilers and pumps will be provide with digital control interfaces capable communication and adjustment of all set points through the building Energy Management System. Based on preliminary HVAC demand calculations, the ancillary spaces will be served by a total of ten (10) small RTU's with chilled water coils sized for a total cooling capacity of 10

Tons and hot water coils with a heating capacity of 180 MBH each. The storage areas in the building will be served by thirty-two (32) large RTU's with chilled water coils sized for a total cooling capacity of 50 Tons and hot water coils with a heating capacity of 840 MBH each. The central chilled and hot water plant will be comprised of approximately three (3) heat pump units consisting of several modules with variable compressors, simultaneous heat and cool operation as well as dedicated hydonic pumps for each unit/circuit. The combination of heat pump units shall be capable of producing atleast 1,620 Tons of cooling and 33,830 MBH of heating at ambient temperature of -22F. The two hydronic pumps serving each heat pump unit are estimated to have motors of 75 Hp, the (2) hot and (2) chilled water system pumps are estimated to have motor sizes of 250 Hp each. (2) Natural gas boilers with heating input of 8,000 MBH each will be provide approximately 30% of the overall heating demand as assurance against degradation in well field performance or partial loss of wells. Full heating demand (back-up) would require (5) natural gas boilers. This option has a mechanical conditioning load of 7,357kW plus the other building loads would have an approximate electrical connected load of 11,829kW with a demand load of 8,028kW. This option would require (4) 4000A, 480V, 3-phase electrical services.

HVAC System Option				
HVAC Equipment	Packaged RTU	Heat Pump & Electric Boiler	Heat Pump & Gas Boiler	Geothermal Heat Pump
50T RTU	32	32	32	32
10T RTU	10	10	10	10
Heat Pump Mods	0	24	24	9
Electric Boilers	0	3	0	0
Natural Gas Boilers	0	0	5	2
Natural Gas Demand	29,500 CFH	0 CFH	40,000 CFH	16,000 CFH
HVAC Electrical Connected Load	3,653 kW	17,781 kW	7,853 kW	7,357 kW
HVAC Electrical Demand Load	3,105kW	15,114 kW	6,675 kW	6,253 kW
Total Electrical Connected Load	8,125 kW*	22,253 kW*	12,325 kW*	11,829 kW*
Total Electrical Demand	4,880 kW*	16,889 kW*	8,450 kW*	8,028 kW*

Note*: Electrical loads are building conditioning loads and other building loads combined for complete building load.

Annual Energy Consumption by HVAC System Option

To compare long term performance and costs of the four proposed HVAC systems, estimates of the annual energy consumption were prepared based on local weather data, peak heating and cooling demands, assumed equipment operating hours, minimum equipment performance/efficiencies and projected utility rates. For the purposes of comparison the Packaged RTU option represents the baseline system with greatest reliance on natural gas, the heat pump and electric boiler option is fully electrified with no natural gas use but an over 17% increase in utility cost while the hybrid system provides a reduction of almost 74% in natural gas use with a 2% reduction in overall energy costs. The geothermal heat pump system projects the largest reduction in overall energy cost at 6% with little or no use of natural gas under ideal conditions.

Estimated Annual Energy Consumption (HVAC Systems Only)				
HVAC System Option	Packaged RTU	Heat Pump & Electric Boiler	Heat Pump & Gas Boiler	Geothermal Heat Pump
Electrical (kWh)	7,340132	16,375,688	12,032,972	13,490,093
Natural Gas (Therm)	614,473	0	158,574	0
Projected Utility Cost ($)	$1,544,782	$1,801,326	$1,513,915	$1,448,016
Energy Cost vs Baseline (%)	0	17% increase	2% decrease	6% decrease

APPENDIX K

SOLID WASTE SUMMARY

RMS
Engineers • Planners • Surveyors • Soil & Material Testing
Robert M. Sutherland P.C.

Solid Waste Summary

Prepared for:

UMS Property LLC, New warehouse and Distribution Facility

Located at:

West Side New York State Route 22
Town of Plattsburgh

January 22, 2025

Prepared by:
Robert M. Sutherland P.C.

1.0 – Project Summary

The proposed building would be approximately 774,750 square-feet in size, which includes approximately 34,600 of office area. The primary use of the building will be warehousing and distribution with no manufacturing or processing occurring on site.

The facility will operate 24 hours per day, 7 days a week with three work shifts. The majority of work at the facility will occur during the morning and afternoon shifts, with approximately 100 employees each, with a smaller operational crew of approximately 22 employees for the evening or third shift.

2.0 – Solid Waste Generation

Warehouse Portion of Building:

With no production occurring at the facility, the only solid waste created by the warehouse and distribution portion of the building would be packaging material such as cardboard, plastic pallet wrapping, and wood pallet waste. There would be no hazardous waste generated at the facility, nor does the project include any on-site repair or maintenance of vehicles that will serve the project. All cardboard and wood products would be fully recycled. The estimated volume of the non-recyclable solid waste would be approximately 45 cubic yards per week.

Office Portion of Project:

As the facility will house approximately 200 employees between office and warehouse personnel, there will be additional solid waste generated from staffers. This waste will primarily consist of paper products from the office use, along with minor food and packaging waste from employee break areas. The break areas and office areas will have recycling bins for all cardboard, and plastics and returnable bottles. The estimated volume of the non-recyclable or returnable solid waste would be approximately 30 cubic yards per week.

3.0 – Summary

The total estimated volume of solid waste that would be generated by the facility as a whole is approximately 75 cubic yards per week. This material will be disposed of at the Clinton County Landfill, located in the Town of Schyler Falls, approximately 9.5 miles northwest of the proposed development. The project will also include the recycling of all products to the maximum extend possible.

With no production, vehicle maintenance or industrial activity occurring at the site, it is anticipated that there will be no hazardous material generated by the project.