Agenda

Manlius Town Board

June 10, 2020

6:30 PM

1. Pledge Of Allegiance

2. Approval Of Minutes - May 13, 2020

   Documents:

   5-13-20.PDF

3. Approval Of Abstract # 11

4. 6:35 PM Public Hearing - Zone Change - Brolex Properties, LLC 7430 Highbridge Rd., Manlius NY Zone Change From R1 (Residential District 1) To R3 (Residential District 3)

   Documents:

   BROLEX - FREEMAN ZONE CHANGE - AMENDMENT.PDF
   OCPB RESOLUTION - HIGHBRIDGE RD..PDF

5. 6:40 PM Public Hearing - Zone Change For Central New York Inland Port - From RA (Restricted Agricultural) To ID (Industrial) (Tax Map #'s 054.-01-28.1, 054.-01-06.1, 054.-01-4.1 And 054.-01-02.1)

   Documents:

   1- 3GI - KIRKVILLE ROAD - COMMENT RESPONSE LETTER 2019-12-10.PDF
   2- 3GI - KIRKVILLE ROAD - PROJECT NARRATIVE.PDF
   3- 3GI - KIRKVILLE ROAD - SITE PLAN APPLICATION - SIGNED.PDF
   4- 3GI - KIRKVILLE ROAD - ZONE CHANGE APPLICATION (3GI SIGNED).PDF
   5- 3GI - KIRKVILLE ROAD - PROPERTY LEGAL DESCRIPTIONS.PDF
   6- 3GI - KIRKVILLE ROAD - EIS REPORT_2019-08-27.PDF
   7- 3GI - KIRKVILLE ROAD - SITE PLANS 2019-12-18.PDF
   8- 3GI - KIRKVILLE ROAD- LEHR - ZONE CHANGE MAPS.PDF
   9- 3GI - KIRKVILLE ROAD- LEHR - SURVEY TOPO MAPS.PDF
   10- 3GI - KIRKVILLE ROAD - SHORT EAF - SIGNED.PDF

6. Set Date Public Hearing - Local Law Delegating Special Permits To Planning Board

7. Speed Reduction Request Of 55mph To 35mph On E. Seneca Turnpike, 1/2 Mile From Sweet Rd. Toward The Village Of Manlius To Match The Existing 35mph.

8. Tree Commission Co-Chair Appointment

9. Correspondence/ New Business

10. Highway Superintendent

11. Planning & Development

12. Attorney

13. Town Clerk

13.I. Special Permit Renewal - Lyndon Golf Course, Highbridge Rd., Fayetteville NY (Tax Map # 092.-1-11.0)

14. Police Chief

15. Town Manager

15.I. Budget Transfer - Town Of Manlius Police Department

Documents:

BUDGET TRANSFER - MAY 22.PDF

15.II. New Bank Account - Trust & Agency - Currency Property

16. Town Board

17. Supervisor

18. Adjournment

MINUTES
TOWN BOARD
May 13, 2020

The Town of Manlius Town Board live streaming from their homes, with Supervisor Edmond Theobald presiding and the following Board members present:

Karen Green, Councilor
Sara Bollinger, Councilor
Elaine Denton, Councilor
John Deer, Councilor
Heather Waters, Councilor
Katelyn M. Kriesel, Councilor

The following Town Officers were present:

Tim Frateschi, Attorney for the Town
Mike Crowell, Police Chief
Doug Miller, Town Engineer
Randy Capriotti, Director of Codes
Allison A. Weber, Town Clerk
Rob Cushing, Highway Superintendent
Ann Oot, Town Manager

Introduction of Zoom Attendees: Drazen Gasic, LaBella Associates. Andrew Day, Source Renewables. Don Hoefler, LaBella Associates. Jodi Hunt, Tetra Tech. Teddy Epstein, Falk Renewables. Chris Carrick, CNYRPDB. Josh Stack, NY Stretch Presenter. Kevin Stack, NY Stretch Presenter.

The Pledge of Allegiance

The Town Board recited the Pledge of Allegiance. Supervisor Theobald, called the meeting to order at 6:30 pm.

Approval of Abstract # 9

Councilor Deer made a motion, seconded by Councilor Green, to approve Abstract # 9 as submitted by Town Clerk Weber.

	TOWN OF MANLIUS	
	Fund Summary	
	Abstract # 9 - 2020	
CODE	**FUND**	**TOTALS**
A	General Fund Townwide	$ 206,000.07
B	General Fund Town	$ 5,865.23
DA	Highway Fund Townwide	$ 16,934.17
DB	Highway Fund Town	$ 27,962.51
SL1	Overhead Lighting	$ 1,512.61
SL2	Underground Lighting	$ 2,202.02
SL3	Entry Lighting	$ 97.64
SL4	Garden Park Lighting	$ 614.05
SL5	Ratnaur Bridge Lighting	$ 2,515.51
SR1	Manlius Trash District	$ 168.44
SR2	Manlius Res Brush District	$ 168.44
SS1	Manlius Con Sewer District	$ 907.69
TA2	Trust & Agency - Other	420.00

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Approval of Minutes – April 8, 2020

Councilor Green made a motion, seconded by Councilor Denton, to approve the minutes of April 8, 2020 as submitted by Town Clerk Weber.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Approval of Minutes – April 22, 2020

Councilor Denton made a motion, seconded by Councilor Bollinger, to approve the minutes of April 22, 2020 as submitted by Town Clerk Weber.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Supervisor Theobald gave an update on Covid-19 Pandemic:

- The Town of Manlius has 64 covid case and 49 recoveries.
- The 2020 Memorial Day Parades have been cancelled and each village will have a private service and laying of the wreath.
- The Village of Manlius has cancelled the 2020 4th of July celebration and is hopeful that maybe a fall festival may be scheduled.

Ann Oot, Town Manager gave a review of the phased opening for town hall based on the Federal, State and County guidelines for restarting. The town has designated a COVID Response Team and a restart checklist will be made public when it is finalized.

Continuation of the Public Hearing for Local Law 2020-2 Amending Chapter 139 Entitled "Vehicles & Traffic" of the Code of the Town of Manlius to install Stop Signs on Quarterhorse Run, Strawmount Trail & Harness Hook Lane

Supervisor Theobald reviewed the information for the continuation of the public hearing for stops signs on Quarterhorse Run, Strawmount Trail & Harness Hook Lane.

Town Clerk Weber stated that she has not received any new comments or concerns from residents concerning the proposed local law.

Councilor Waters made a motion, seconded by Councilor Deer, to close the public hearing regarding proposed Local Law 2020-2 Amending Chapter 139 Entitled "Vehicles & Traffic" of the Code of the Town of Manlius to install Stop Signs on Quarterhorse Run, Strawmount Trail & Harness Hook Lane at 6:41 PM.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Councilor Bollinger made a motion, seconded by Councilor Denton, to enact Local Law 2020-2 Amending Chapter 139 Entitled "Vehicles & Traffic" of the Code of the Town of Manlius to install Stop Signs on Quarterhorse Run, Strawmount Trail & Harness Hook Lane

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Public Hearing – Special Permit – Taft Road Solar, LLC, Taft Rd., E. Syracuse

Drazen Gasic, LaBella Associates reviewed the special permit application and discussed the proposed changes.

Special Permit – Taft Road Solar Project Overview:

- 4.35-megawatt solar array.
- Single access tracker to protect the wetlands on site with 7-foot intervals between.
- Security Fencing part of the Site Plan.
- Pervious access roads on site.
- Single battery storage location.

Mr. Gasic Stated that the proposed changes will minimize the carbon footprint.

Councilor Bollinger asked further information on the single access tracker. Mr. Gasic stated the single access tracker would be aligned on a north south axis and the panels would pivot along a single point facing east to west as the sun crosses the horizon. Mr. Gasic stated that the equipment will be following the sun.

Councilor Bollinger ask if the panels move and does that require more maintenance? Mr. Gasic stated it does require maintenance of the material.

Supervisor Theobald asked why they changed from a fixed tracker to a single access tracker. Mr. Gasic stated the NYS DEC took jurisdiction of the wetlands and imposed a 100-foot buffer with no construction of solar equipment within that buffer. Mr. Gasic stated that the original footprint will be reduced by about a quarter.

Andrew Day, Source Renewables, discussed the benefit of trackers.

There was a further discussion about the different types of panels and the cost and maintenance for each.

The Town Board also discussed the potential sound that is made by the tracker and what that would sound is like for the entire array.

Councilor Denton asked if there was a time restriction on when an application can build a solar array from the time the permit is granted.

Attorney Frateschi answered the permit lasts for 7 years from the date it is approved by the board. If the project is not built in the 7-year period, then the special permit expires. Attorney Frateschi stated the Town Board can put a provision in the special permit that if a building permit is not obtained within 1 year, the special permit would then lapse.

Councilor Bollinger made a motion, seconded by Councilor Green, to waive the reading of the public notice in the matter of the Special Permit by Taft Road Solar, LLC, to construct a solar array at 6996 Taft Rd., E. Syracuse.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Councilor Bollinger made a motion, seconded by Councilor Kriesel, to open the public hearing at 6:58 pm in the matter of the application for a Special Permit by Taft Road Solar, LLC, to construct a solar array at 6996 Taft Rd., E. Syracuse.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Facebook Attendee: Debra DeSocio stated Sustainable energy is important to our future in the Town of Manlius. This will allow us to take a part in a contribution to reduce climate change.

Town Engineer Miller stated the town code may require an additional 25-foot buffer in addition to the DEC 100 foot buffer.

Councilor Bollinger stated that the public hearing would be held open until recommendations are received from the Town Planning Board and County Planning Board.

Facebook Attendee: Steven Winschelhaus: How many solar panels are going to be installed and is this a commercial application and is it appropriate for a residential area?

Mr. Gasic answered 11,060 modules (panels). The application would be for community solar purposes. For residents and businesses to share solar power allowing them to purchase solar power.

Mr. Day stated he believes that participants would receive a 10% credit applied to their power bill if they participate.

Facebook Attendee: Renee Bennett What happens if somebody else within that one-mile rule wants to put in a solar farm?

Attorney Frateschi stated the 1-mile rule (limiting solar farms within 1-mile of each other) was put in the code because the Town was concerned there could be a saturation of these facilities in one neighborhood.

Facebook Attendee: William Towsley: I wanted to know if the contractor is going to use local labor, they filled out an application with OCEBA and on page 16 they did not answer yes or no.

Mr. Gasic stated it is hard to determine what type of labor is going to be used, weather is will be an electrical or a civil portion. Mr. Gasic stated that the preference is to use local labor.

Facebook Attendee: Steven Winschelhaus asked, Are there other more appropriate areas in the town for the placement? This is directly in front of my home on Townsend Road, will this negatively impact the value of my home? Is the company a commercial company or is it owned by residents?

Mr. Gasic answered that the Source Renewables is a local company Andrew Day the representative lives in New York.

Facebook Attendee: Renee Bennett asked if a better more private spot could be ruled out if this gets approved. Many people are being contacted that have land on power lines some are much more private.

Supervisor Theobald asked if Source Renewables owns the property. Mr. Day answered that Source Renewables has an option agreement with the current owner of the property. Mr. Day stated that the company to close on the property when the permits and approvals are in place.

Councilor Green asked what the life span of the solar panels are. Mr. Day stated it is about 20 to 30 years. Councilor Green asked how are the panels are recycled or reused? Mr. Day stated there are companies that at the end of the period would recycle most of the panels.

Facebook Attendee: Steve Winschelhaus stated the N. Eagle Village project is in front of his house and is a huge scale project.

Facebook Attendee: Aaran Kollar our average project site spans 20-40 acres. Next Generation Solar would love an opportunity to work on/bid/review any project opportunities. We have extensive experience working on large scale projects and are located in Liverpool.

Facebook Attendee: Mary Jensen would like to know more about this solar project. I think it is smart to invest in renewable energy.

Supervisor Theobald asked what the life span of the different panels would be. Mr. Day answered there is no difference in the life span of the different panels.

Councilor Bolling made a motion, seconded by Councilor Kriesel, to adjourn the public hearing in the matter of Special Permit by Taft Road Solar, LLC, to construct a solar array at 6996 Taft Rd., E. Syracuse until May 27, 2020.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Public Hearing – To Consider the Matter of a Proposed Local Law to Amend Sections of Local Law 2016-8 Regarding Solar Photovoltaic Systems

Councilor Kriesel reviewed the proposed local law to amend sections of Local Law 2016-8 Regarding Solar Photovoltaic Systems. Councilor Kriesel stated that the amendment will change 2 parts of the existing code.

- Adopt the unified solar permit – which requires the details of solar arrays ensure the systems are safe.
- To remove the requirement for fencing around a solar array.

Councilor Kriesel made a motion, seconded by Councilor Bollinger, to waive the reading of the public notice in the matter of the proposed local law to Amend Sections of Local Law 2016-8 Regarding Solar Photovoltaic Systems

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries

Councilor Kriesel made a motion, seconded by Councilor Denton, to open the public hearing at 7:28 pm in the matter of the proposed local law to Amend Sections of Local Law 2016-8 Regarding Solar Photovoltaic Systems

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Councilor Waters stated this local law will help to streamline the solar array permit process.

There being no comment from the public, Councilor Bolling made a motion, seconded by Councilor Kriesel, to adjourn the public hearing in the matter of the proposed local law to Amend Sections of Local Law 2016-8 Regarding Solar Photovoltaic Systems until May 27, 2020.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Falck Renewables – Solar Array – 8507 Green Lakes Road, Fayetteville NY 13066 (tax map # 082.-02-15.1) – Special Permit Application

Teddy Epstein, Development Director at Falk Renewables North America introduced the proposed solar array. Mr. Epstein also stated that Falck Renewables develops, manufactures, builds, and operates solar farms.

Jodie Hunt, Tetra Tech, presented the proposed special permit application and discussed the previous application that was approved in 2017. Ms. Hunt reviewed the changes that have been made to the original plan.

Ms. Hunt gave an overview of the proposed solar farm project for 8507 Green Lakes Rd., Fayetteville NY which is owned by Chuck Hafner's Farm and is 147.43 acres. Ms. Hunt reviewed the following:

- The 3-step process Tetra Tech undertakes for a site selection.
- The proposed solar array would be 23.4 acres and would be a community solar farm.
- The prior project was going to be a Distributed Generation Solar Farm which means it would not be for public use of the community. The power produced would have gone to Anheuser-Busch which is no longer the case.
- There will be a permeable access road which will meet New York State DOT and Town standards.
- The project will have fixed tilt solar panels that don't move.
- The project will use string invertors – which puts the invertor on the back of the panel and takes up less ground space.
- There will be a security Fence.
- Stormwater Pollution Prevention Plan (SWPPP) was submitted with the application.
- Reviewed the Viewshed/Line-of-Sight (LoS) Analysis.
- Reviewed the Glare Analysis & FAA Screening.
- The company will be using local labor when possible.

Attorney Frateschi stated that because the project has been increased by about 1/3, the special permit issued by the Town in 2017 would need to be amended. Attorney Frateschi stated that a public hearing would be needed for the amended Special Use Permit.

Councilor Bollinger made a motion, seconded by Councilor Green, to refer the application by Falck Renewable to construct a Solar Array at 8507 Green Lakes Road, Fayetteville NY 13066 (tax map # 082.-02-15.1) Planning Board for its recommendation.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Discussion ensued regarding how the new special permit application differs from the special permit application in 2017.

Falck Renewables – Solar Array – 5062 North Eagle Village Road, Manlius NY 13104 – Special Permit Application

Jodie Hunt, Tetra Tech gave an overview of the proposed solar project for 5062 N. Eagle Village Rd., Manlius NY, with a property size of 44.71 acres.

- Proposed Solar Facility would be on 21.3 acres.
- Stationary tracking system solar panels.
- String invertors.
- Permeable access road which will meet State DOT and Town standards.
- Existing vegetative screening which is almost covers the entire space except for the frontage on N. Eagle Village Rd.
- Glare Analysis & FAA Screening.
- Viewshed/Line-of-sight (LoS) Analysis.

Supervisor Theobald asked how close the solar array would be to the road. Ms. Hunt stated at minimum about 200 feet from the property boundary and about 500 feet to the center line of Townsend Dr.

Councilor Bollinger asked if the vision analysis was done from the homes on Townsend Rd. that sit up on a hill?

Ms. Hunt stated that the project will be visible from certain locations and further explained that the panels do blend in but are not invisible.

Supervisor Theobald asked if this will be a community solar project? Ms. Hunt answered yes, anybody that is connected to National Grid can participate.

Councilor Waters asked if residents beyond 1000 feet of the project can be notified. Town Clerk Weber reviewed the procedure for notifications.

Councilor Waters stated she would like to have the board discuss reviewing the notification process in the future.

Councilor Green asked if the company would be leasing the properties on Green Lakes Rd. and N. Eagle Village Rd? Mr. Epstein answered that both properties would be leased for 35 years and will have scheduled maintenance.

Discussion ensued regarding the site selection process for solar arrays.

Director Capriotti asked if the well on the property would be near the solar farm? Ms. Hunt responded that the well is closer to the house and not the open field where the solar panels would be.

Councilor Bollinger made a motion, seconded by Councilor Green, to refer the application by Falck Renewables to construct a Solar Array at 5062 North Eagle Village Road, Manlius NY 13104 (tax map # 098.-01-15.0) Planning Board for its recommendation.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Central New York Regional Planning and Development Board – Inter-Municipal Agreement for Solarize CNY Initiative

Chris Carrick, CNYRPDB gave a presentation on the proposed inter-municipal agreement.

Mr. Carrick discussed the following:

- Mr. Carrick gave an overview of the company Abundant Solar Power Inc., based in Canada
- Abundant Solar through a bid process with CNYRPDB was selected as the preferred developer of solar projects on municipally owned sites.
- There will be 13 acres of disturbed land.
- The solar array will be a ballasted poured in place or concrete blocks laid on top.
- Stormwater SWPPP will be prepared.
- Solar built on landfills is considered a Type II action, with the town as lead agency.
- 4 mega-watt ac array.
- Mr. Carrick reviewed the financials of the proposed lease agreement with the town.
- This would be a community solar project.
- The project is projected to be completed by Spring 2021.

Councilor Bollinger asked if they could include a line of site study for the house located on Clark Hill. Mr. Carrick answered that a LoS study would be completed.

Supervisor Theobald asked how much larger DeWitt's project is compared to this project? Mr. Carrick stated the Manlius project would be about twice the size of DeWitt's.

Councilor Denton asked if there would be a savings on the energy bill for the town? Mr. Carrick stated the town (town facilities) could subscribe and get about a 10 % saving on the power bill.

Supervisor Theobald asked if the Town of Manlius could hook onto the Town of DeWitt's array? Mr. Carrick explained that the DeWitt project is only for the town facilities and is not open to the community.

Councilor Denton asked about the projected timeline for this project? Mr. Carrick stated at this point it depends on how quickly we receive approval from the town.

Attorney Frateschi asked if any parts of the project can move forward before the inter-municipal agreement is executed? Mr. Carrick answered no, nothing can proceed until the agreement is accepted.

Mr. Carrick stated that the agreement does have a provision to release the town from the agreement by giving a 30-day notice.

The board discussed the pros and cons of doing more research before signing the Inter-Municipal Agreement for Solarize CNY Initiative.

Councilor Kriesel made a motion, seconded by Councilor Deer, to sign the Central New York Regional Planning and Development Board – Inter-Municipal Agreement for Solarize CNY Initiative.

Ayes: Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: Supervisor Theobald, Councilor Green, Councilor Bollinger

Motion Carries. 4-3

The Board appointed Councilor Kriesel and Town Engineer Miller to be town representatives as required by the agreement.

New York State Stretch Code, Josh Stack presented information about the New York Stretch Code.

- NY Stretch Code is a more efficient and readily available energy code. More efficient than the 2020 code that just went into effect on May 12. This is an overlay of the 2018 International Energy code. The NY Stretch Code would modify certain sections of the International Energy Code.
- NY Stretch enhances human health in buildings.
- 3rd Party verified performance testing.
- Financial Incentives to builders for plan review, inspection & performance testing.

Kevin Stack gave an overview of the system.

- Balanced (Energy Recovery Ventilator) ERV/ (Heat Recovery Ventilator) HRV brings in outside fresh air.
- NY Stretch Code requires verification of the duct testing.

Director Capriotti stated that he is concerned about the costs that the NYS Stretch Code would place upon builders. Mr. Capriotti asked if the town code officer can be trained to do these inspections or would a 3rd party inspector need to be paid.

Councilor Denton stated she would like to investigate the Stretch Code in more depth is see what the impact might be on the builders and residents.

Councilor Waters asked if the Planning Board could inform builders at the Planning Board Level that the Stretch Code is preferred/encouraged. Attorney Frateschi stated that the building permits are issued by the Code Office.

Councilor Bollinger asked about a possible informational public meeting for all builders in the area on the Stretch Code.

Attorney Frateschi stated the town could hold an informational meeting before the local law is considered by the town. Supervisor Theobald asked if Town Clerk Weber, Code Officer Capriotti and Josh and Kevin Stack would work together to organize an informational meeting in June.

Planning Board Recommendations – May 11th Meeting

Attorney Frateschi stated the Planning Board and issued positive recommendations for both the Freeman Interiors Zone Change on Highbridge Rd. and the Medical Building on N. Burdick St. Attorney Frateschi stated the Town Board can now set dates for public hearing on both of the requests.

Councilor Kriesel made a motion, seconded by Councilor Green, to set a date for a public hearing in the matter of a Zone Change application for 5538 N Burdick, LLC, 5538 N Burdick St., Fayetteville NY (tax map # 086.-02-07.1) for a Zone Change from RA (Restricted Agriculture) to RM (Residential Multiple Use.) For May 27, 2020 at 6:45 PM.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Councilor Kriesel made a motion, seconded by Councilor Green, to set a date for a public hearing in the matter of a Zone Change application by Brolex Properties, LLC, 7430 Highbridge Rd., Manlius NY (tax map # 101.-02-02.1) for a Zone Change from of R1 (Residential District 1) to R3 (Residential District 3) with the remainder of the parcel to stay RA (Restricted Agriculture) for June 10, 2020 at 6:35 PM.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Correspondence/New Business

A) Highway Superintendent

Superintendent Cushing stated he is hopeful that updates on the CHIPS funding will be coming soon.

B) Planning & Development

- Work is picking up in the department
- Director Capriotti stated he had received the ISO (Insurance Services Office) report for his office and they gave a change in the rating from 9 (with 10 being the worst) to a current rate of 3.

Town Engineer Miller stated that the MS4 semi-annual report was completed.
A Public Meeting for the MS4 Stormwater report will be held on Zoom on May 28, 2020 at 12:00 PM.

C) Town Clerk – No New Business

D) Police Chief

- All employees at Police Department are healthy.
- ESM has requested to have both SIRO's back for a limited time right now.
- Court in the Village of Manlius is operating in a limited capacity.
- The Police Department will have a 4-phase reopening plan.
- Temporary Office Trailer has been ordered.
- Worked on cost estimates for IT to move operations to trailer.

E) Town Board

Councilor Green congratulated the High School seniors of 2020.

Councilor Bollinger stated that the Fayetteville Senior Center is providing meals on Fridays that are take home for the weekend as a supplement what the Manlius Senior Center is doing Monday through Friday.

Councilor Waters wanted people to know:

- Mary Ellen Letterman has resigned as co-chair of the Town of Manlius Tree Commission.
- The comprehensive planning committee is getting ready to apply for money for the comprehensive plan.
- The report on the Muirfield Drainage Study will be provided soon.
- A thank you to the Recreation Department for their work during this time and planning for virtual programs.

Councilor Denton stated they will no longer be using pesticides at town hall for landscaping purposes.

Councilor Kriesel reported:

- She is working with the Village of Manlius on a new park with the Village of Manlius and progress is being made.
- Councilor Kriesel congratulated Randy and Lisa in the Planning and Development Department for lowering their ISO (Insurance Services Office) score from 9 to 3.

F) Supervisor

Supervisor Theobald read part of the U. S Department of Justice proclamation for Police Week.

There being no further business to come before the Board, upon motion duly made by Councilor Kriesel and seconded by Councilor Green the Board voted unanimously to adjourn regular session at 10:24 PM to enter executive session to discuss the potential employment of an individual or corporation.

Ayes: Supervisor Theobald, Councilor Green, Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: 0 All in Favor. Motion Carries.

Respectfully Submitted by:

Allison A. Weber
Town Clerk

EXECUTIVE SESSION MEETING MINUTES
Executive Session
May 13, 2020

There being no further business to come before the Board, upon motion duly made by Councilor Green and seconded by Councilor Kriesel, the Board unanimously voted to adjourn the executive session at 10:35 PM.:

Councilor Bollinger made a motion, seconded by Councilor Denton, to engage the services of Barton and Loguidice for a specific project to form a water district, not to exceed $16,500.

Ayes: Councilor Bollinger, Councilor Denton, Councilor Deer, Councilor Waters, Councilor Kriesel

Nayes: Councilor Green

Abstained: Supervisor Theobald

Motion Carries.

Upon motion duly made by Councilor Green and seconded by Councilor Kriesel, the Board unanimously agreed to adjourn at 10:36 PM.

Submitted by:
Town Clerk
Allison Weber

Additional Comments made on Facebook:

Facebook Attendee: Cheryl Matt Renewable energy projects are smart projects for the Town to support. Solar energy has so many positives for the community. Thank you.

Facebook Attendee: Mark Lavine: What are the safety issues. Such as poor installation, fire hazards etc.! What agency is responsible for inspections? Is this the best time to invest in this project. Are there infrastructure issues in the town that are a priority. Are there ongoing budgets that have deadlines to be discussed? At what cost will this be for the town. Including study time and implementation? What is the projected implementation date for this project. Thank you, Kaitlyn.

Facebook Attendee: Ingrid Gonzalez-McCurdy, thank you for making this possible. Chris Carrick – thanks for you presentation.

Facebook Attendee, RuthAnn Winschel: From my parents' house on Townsend Road I would be able to see the solar panels very well.

Facebook Attendee: Andrea DeBernardis, when was the landfill site leased to Abundant Solar? AC Power has worked to propose a Community Solar project for the site since about August 2019

offering about double Abundant's proposal in the agenda minutes. Unfortunately, we have reached out to CNY in the past but they were not considering any new developers for their RFP process. Is the Board still open to review our proposal.

Councilor Kriesel Response: Mark – Would you like to give me a call tomorrow and I can help to answer your questions? I'd be happy to discuss this with you further. You've got several great questions!

Facebook Attendee: Steven Winschelhaus: Sounds like an appropriate approach. Look for landfills etc. to place these projects. Very little screening in front of our home on Townsend Road. I support Solar Energy! No one ever stopped at my home or the neighbors! I can see all of the project!

Facebook Attendee: Brad Sauve, Nice presentation, Jodi. It helped my understanding tremendously. Community solar sounds great!

BROLEX PROPERTIES, LLC.

5912 North Burdick Street
East Syracuse, NY 13057

Town of Manlius Town Board
Town of Manlius Planning Board
301 Brooklea Drive
Fayetteville, NY 13066

May 6, 2020

Re: Zone Change, Freeman Property Rt. 92

Dear Board Members,

It has recently come to our attention that the wrong zoning designation was used in our application for a zone change on the Freeman property located on NYS Route 92. In error, the design consultant indicated a request for a zone change to "R-5", multi family or apartment use. In fact, the desired zone change for this project should be "R-3" zoning for the single family attached homes that are contemplated.

Consistent with other residential projects in the vicinity, we would like to obtain an R-3 zone change for this property together with the application of §278 of New York's Town Law. The R-3 zoning that is being requested, together with §278 consideration would allow for over half this 20+ acre site to remain undisturbed as recreational "green-space".

At this time we are enclosing a density plan for the site based on a strict application of the Town's R-3 zoning. Based on the density shown, we would like to cluster the residential housing on that portion of the property currently being used and occupied by Freeman Interiors. The project would utilize all public utilities and private driveway/access road maintained by a homeowners association.

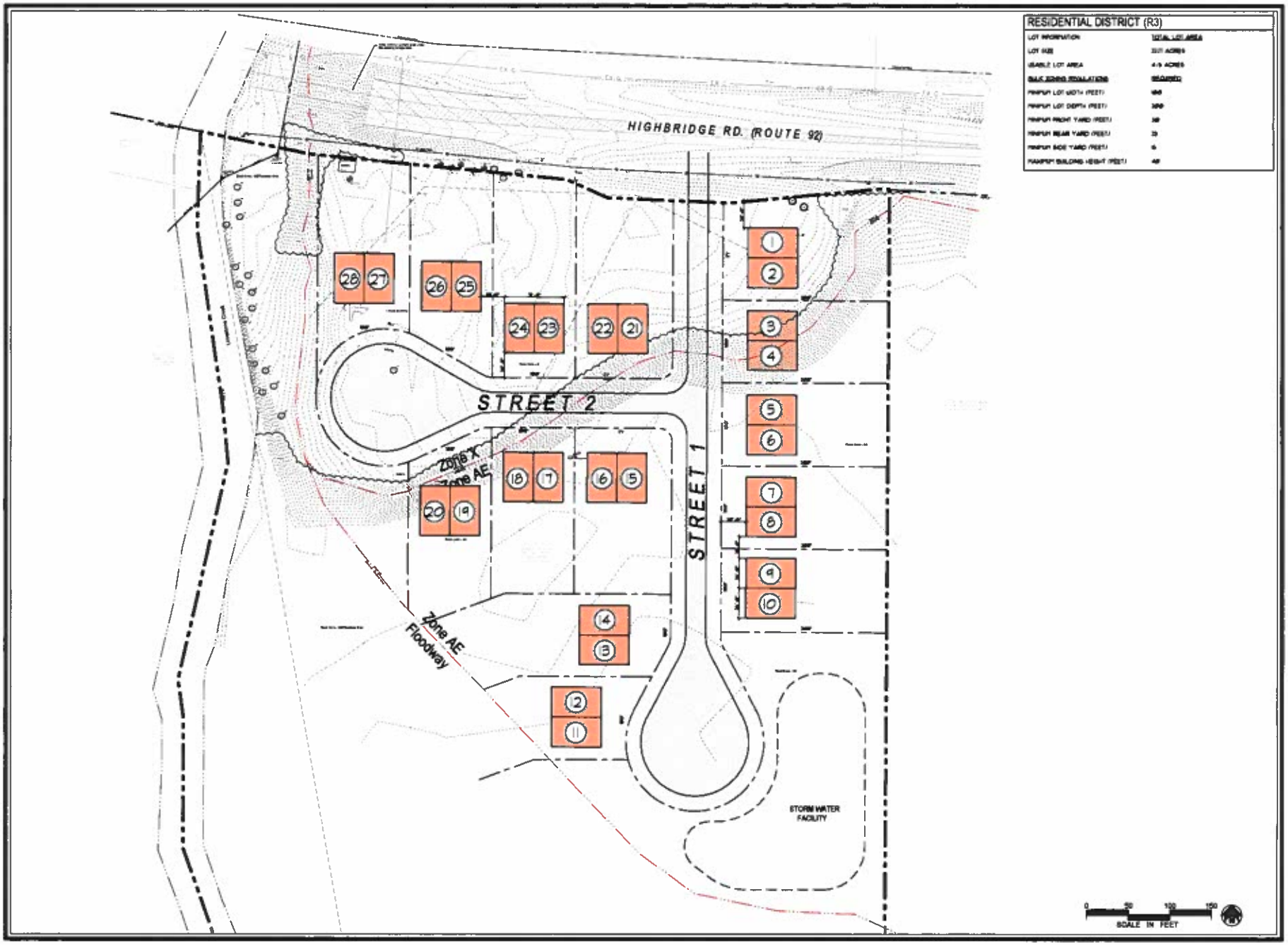
We believe the proposed zone change and housing project to be an excellent use of this property while allowing for the perpetual preservation of over one half the site.

Based upon the forgoing, we respectfully ask that our earlier petition for a zone on this property be amended to a request for an "R-3" zoning designation rather than the R-5 that was shown. Accordingly, if this letter can serve as our formal request to amend the earlier submission it would be greatly appreciated. If we need to correct this earlier submission by some other means, please let us know as soon as possible so that we may complete the same?

If there are any questions, or if anything further is needed at this time, please let me know?
Your cooperation and assistance in this matter is appreciated.

Respectfully Yours,

Brandon Jacobson



RESIDENTIAL DISTRICT (R3)	
LOT INFORMATION	TOTAL LOT AREA
LOT SIZE	[illegible] ACRES
USABLE LOT AREA	4.5 ACRES
BULK ZONING REGULATIONS	REQUIRED
MINIMUM LOT WIDTH (FEET)	[illegible]
MINIMUM LOT DEPTH (FEET)	[illegible]
MINIMUM FRONT YARD (FEET)	[illegible]
MINIMUM REAR YARD (FEET)	[illegible]
MINIMUM SIDE YARD (FEET)	[illegible]
MAXIMUM BUILDING HEIGHT (FEET)	[illegible]

KEPLINGER FREEMAN ASSOCIATES
LANDSCAPE ARCHITECTURE & LAND PLANNING
CONSULTANTS

FREEMAN ESTATES HOUSING

HIGHBRIDGE STREET
TOWN OF MANLIUS, NY

CLIENT:
Smiles Properties, LLC

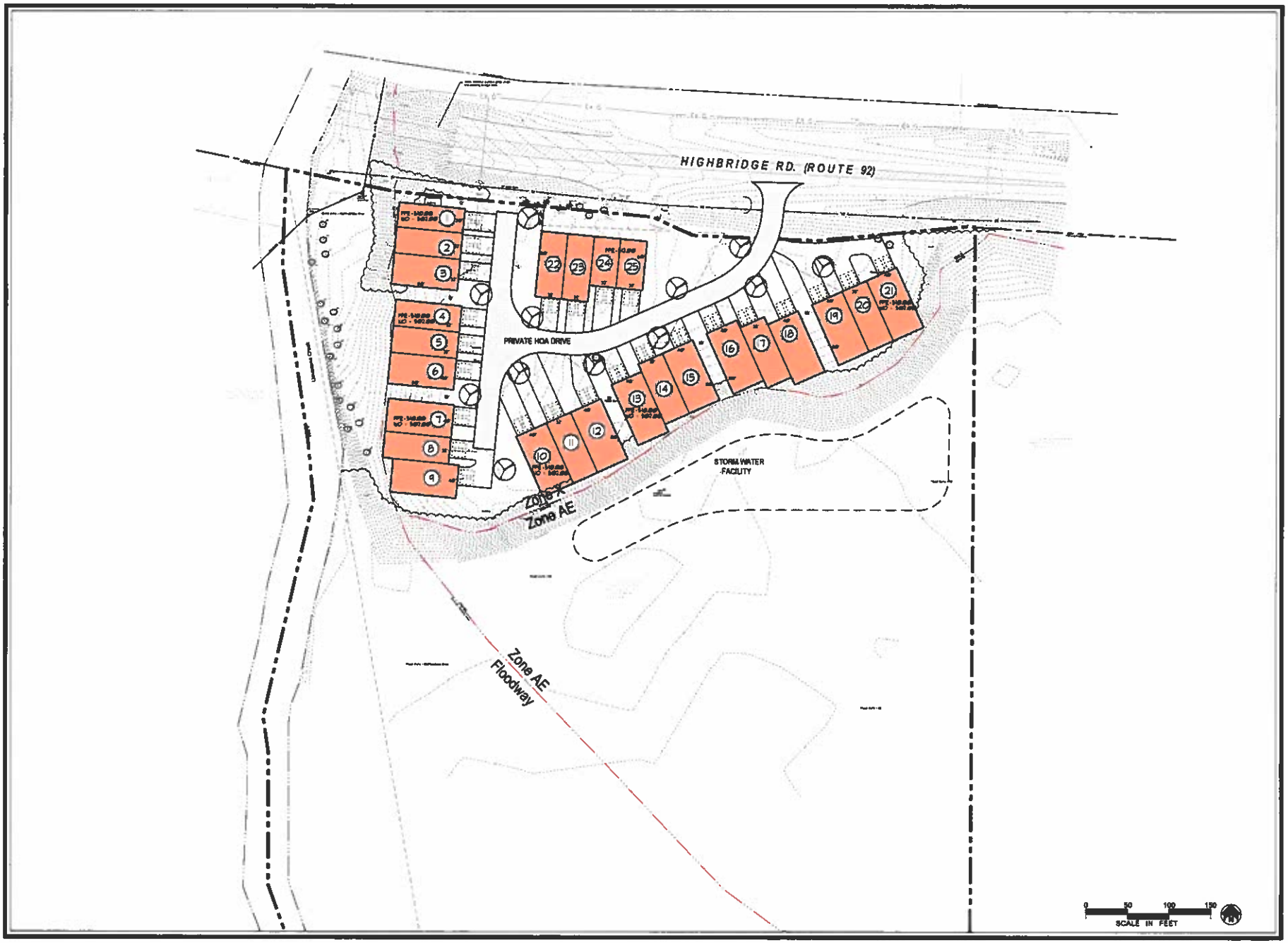
ISSUED AND REVISIONS NOTIFICATION

No.	Rev.	Description	Date
1		Municipal Review	2-21-20
2		Municipal Review	5-08-20
3			
4			
5			
6			
7			

Drawn by: E.G.K.
Checked by: E.G.K.
Date: 06 FEB. 2020
Scale: AS NOTED

CONVENTIONAL PLAN (R-3)

L2



KEPLINGER FREEMAN ASSOCIATES
LANDSCAPE ARCHITECTURE & LAND PLANNING

CONSULTANTS

FREEMAN ESTATES HOUSING

HIGHBRIDGE STREET
TOWN OF MANLIUS, NY

CLIENT:
Brolan Properties, LLC

ISSUED AND REVISIONS NOTIFICATION

No.	Rev.	Description	Date
1		Municipal Review	2-21-20
2		Municipal Review	5-06-20
3			
4			
5			
6			
7			

Drawn By: EGK
Checked By: EGK
WFA Proj. No.: 39867
Date: 06 FEB. 2020
Scale: AS NOTED

Title:

CLUSTER PLAN

L1

Onondaga County Planning Board

J.Ryan McMahon II
County Executive

RESOLUTION OF THE
ONONDAGA COUNTY PLANNING BOARD

Meeting Date: May 20, 2020
OCPB Case # Z-20-136

WHEREAS, the Onondaga County Planning Board, pursuant to General Municipal Law, Section 239 l, m and n, has considered and reviewed the referral for a ZONE CHANGE from the Town of Manlius Town Board at the request of Brolex Properties, LLC for the property located at 7430 Highbridge Road; and

WHEREAS, General Municipal Law Section 239-m allows the County Planning Board to review the adoption or amendment of a zoning ordinance or local law and the site is located within 500 feet of Highbridge Road (Route 92), a state highway, and Highbridge Street (Route 109), a county highway; and

WHEREAS, the applicant is requesting a zone change on a 23.17-acre parcel from Residential 1 and Restricted Agriculture to Residential 5 and Restricted Agriculture; and

WHEREAS, the Board is concurrently reviewing a site plan referral (Z-20-137) to construct a 24-unit multi-family complex on the site as part of the proposed project; and

WHEREAS, the site is located along Highbridge Road (NYS Route 92) with surrounding residential land uses; the site is bound to the south and west by Limestone Creek, a classification C(T) stream and impaired waterbody (per EAF Mapper); and

WHEREAS, the submitted survey map dated February 20, 2020 shows roughly 4 acres at the front of the site is maintained lawn and contains an existing building, to be demolished; there is an existing driveway onto Highbridge Road; the remainder of the site appears to be undeveloped and treed; and

WHEREAS, the submitted Site Plan dated February 6, 2020 shows the 24 proposed multi-family units will be constructed in the cleared area at the front of the site; the units are distributed among 7 buildings, each made up of 2 to 5 attached units; the units appear to be townhouse-like in structure, each with its own driveway to the front of the unit; individual driveways are connected by an internal road network with full access to Route 92 via a proposed driveway; the proposed access has a landscape median that separates the driveway into lanes for ingress and egress; new trees are shown along the frontage of the site and adjacent to the individual driveways that serve each housing unit;
ADVISORY NOTE: the proposed driveway onto Route 92 requires highway access and work permits from the NYS Department of Transportation and will be subject to the availability of sight distance; any work to remove the existing driveway will require a work permit from the Department; and

WHEREAS, the local application notes that the front of the site is currently zoned Residential 1 and the remainder of the site is Restricted Agriculture; the requested zone change would change the Residential 1 area to Residential 5, where multiple-family dwelling units are a permitted use; the remainder of the site would remain in the Restricted Agriculture zoning district; and

WHEREAS, per the submitted Environmental Assessment Form (EAF) dated February 11,

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202 (315) 435-2611, Fax (315) 435-2439

E-mail Address: countyplanning@ongov.net

2020, 4.8 acres of the site will be disturbed by the proposed project and stormwater discharges will be directed to storm inlets and conveyed to a stormwater facility; no additional information regarding stormwater management was included;
ADVISORY NOTES: per the NYS Department of Transportation, additional stormwater runoff into the state's drainage system is prohibited; any project that cumulatively disturbs one acre or more of land must be covered under the NYS SPDES Permit, and the municipality is advised to ensure that the applicant has obtained the appropriate permits from the NYS Department of Environmental Conservation prior to municipal approval; and

WHEREAS, the site is served by public drinking water and sewers and is located in the Meadowbrook-Limestone Wastewater Treatment Plant service area; the EAF notes that the proposed project will connect to the existing public drinking water and sewer infrastructure;
ADVISORY NOTES: per the Onondaga County Department of Water Environment Protection, any and all demolition of buildings requires a permit for sewer disconnects, and the applicant must contact Plumbing Control to ensure appropriate permits are obtained; the Onondaga County Department of Water Environment Protection asks that the applicant contact the Department's Flow Control office to determine sewer availability and capacity; the applicant is advised to contact OCWA's Engineering Department to determine the activities and structures permitted within OCWA easements/right-of-ways, water availability and service options, obtain hydrant flow test information, evaluate backflow prevention requirements, and/or request that the Authority conduct hydrant flow testing to assess fire flow availability; and

WHEREAS, per the Onondaga County Department of Water Environment Protection, the submitted project is located in an area designated as flow constrained or impacted by excessive wet weather flow or is tributary to a Combined Sewer Overflow (CSO);
ADVISORY NOTE: per the Onondaga County Department of Water Environment Protection, the applicant must develop a 2 gallon to 1 gallon sanitary flow offset plan/project in coordination with the municipal engineer; and

WHEREAS, current FEMA Flood Insurance Rate Maps (FIRM) indicate that almost the entirety of the site, excluding the 4-acre cleared area, is located within the 100-year floodplain, which may require elevation of structures and other mitigation; lands along the western lot line and Limestone Creek and also located in the more restrictive floodway; the Onondaga County Hazard Mitigation Plan has identified flooding as one of five primary natural hazards of local concern, with the potential to cause extensive threat to property and safety; buildings within the floodplain can negatively affect the free flow of nearby waterways and drainage, and building within a floodplain is therefore discouraged; and

WHEREAS, the site is located near the following natural communities: Northern White Cedar Swamp and Marl Fen (per EAF Mapper);
ADVISORY NOTE: per the NYS Department of Environmental Conservation (DEC), a careful on-site evaluation should be done to confirm the size, status, and specific locations of any natural communities on the parcel, and to document the presence of any significant plants or wildlife; the applicant is advised to contact

the DEC to determine if the project should be reviewed as part of the State Environmental Quality Review (SEQR) process; and

WHEREAS, the site may contain the Indiana bat or Northern long-eared bat, or their associated habitats, which have been listed by the state or federal government as threatened or endangered animal species (per EAF Mapper); impacts to bat species are often associated with tree clearing and from aerial imagery it appears that the site contains some significant wooded areas;
ADVISORY NOTE: per the NYS Department of Environmental Conservation (DEC), if the site contains a threatened or endangered species and/or associated habitat, and the project requires review under the State Environmental Quality Review Act (SEQRA), a request for a project screening should be submitted to the New York Natural Heritage Program or to the regional DEC Division of Environmental Permits office; and

WHEREAS, the site or a portion of it is located in or adjacent to an area designated as sensitive for archaeological sites on the NYS Historic Preservation Office archaeological site inventory (per EAF Mapper);
ADVISORY NOTE: the applicant and/or municipality is advised to contact the NYS Historic Preservation Office to determine if the project should be submitted to the Office for review as part of the State Environmental Quality Review (SEQR) process; and

NOW THEREFORE BE IT RESOLVED, that the Onondaga County Planning Board has determined that said referral will have no significant adverse inter-community or county-wide implications. The Board has offered the following COMMENT(S) in regards to the above referral:

While the Board offers no position with regard to the proposed zone change, the following comments are intended for the project as a whole:

1. The applicant is required to coordinate Route 92 access plans with the New York State Department of Transportation. To further meet Department requirements, the applicant must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP), traffic data, and a lighting plan to the Department for review. The municipality must ensure any mitigation as may be determined by the Department is reflected on the project plans prior to, or as a condition of, municipal approval.

2. The site plan must be modified to show the location and scale of stormwater management facilities to serve the development. The Board discourages the expansion of the disturbed area or further tree removal for installation of stormwater accommodations.

3. The Onondaga County Department of Transportation requests a copy of any traffic, drainage, and lighting data submitted to the New York State Department of Transportation.

4. The municipality is encouraged to minimize exposure to damage from natural hazards and uphold local flood ordinance requirements, as required for good

standing in the National Flood Insurance Program, by ensuring that any proposed development would not negatively affect drainage patterns in or near the floodplain.

5. Given the proximity of the development to Limestone Creek and its associated floodplain and floodway, the applicant is encouraged to 1) retain as much existing tree cover as possible, 2) reduce impermeable surfaces, and 3) utilize green infrastructure (roof gardens, rain gardens, etc.) wherever possible to reduce stormwater and protect stormwater quality.

6. The Town and applicant are encouraged to consider potential accommodations for public use and enjoyment of Limestone Creek and the remaining lands, through the creation of a trail system, dedicated access, or donation/sale of, or easement to, the Town or a land trust for the remaining undevelopable lands.

Daniel Cupoli, Chairman
Onondaga County Planning Board
Transmittal Date: 05-20-2020

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202 (315) 435-2611, Fax (315) 435-2439

E-mail Address: countyplanning@ongov.net

GML 239 Report of Final Action

NYS GML § 239-m.6. and n.6. require the referring body to file a report of the final action it has taken on a referred matter with the county planning agency within 30 days after the final action (separate from the minutes taken at the meeting). A referring body which acts contrary to a County Planning Board recommendation of MODIFICATION or DISAPPROVAL of a referred matter shall also set forth the reasons for the contrary action in such report.

This section to be completed by the Syracuse-Onondaga County Planning Agency

To: Onondaga County Planning Board **From:** Town of Manlius Town Board

Fax: 435-2439 **Phone:** 435-2611

Re:
Applicant: Brolex Properties, LLC
Address: at 7430 Highbridge Road
Referral Type: ZONE CHANGE
OCPB Date: May 20, 2020
OCPB Action: No Position With Comment
OCPB Case #: Z-20-136

The local board took the following action regarding the above referenced referral (Check one box. If checking Other, please specify the final action taken. Use the space at the bottom of the report to identify reasons if acting contrary to the OCPB recommendation.):

☐ Approved the proposed action with regard to the OCPB's No Position or No Position with Comment.
☐ Approved the proposed action as modified by the OCPB.
☐ Approved the proposed action contrary to some of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to all of the modifications recommended by the OCPB.*
☐ Approved the proposed action contrary to the disapproval recommended by the OCPB.*

☐ Disapproved the proposed action with regard to the OCPB's no position or no position with comment.
☐ Disapproved the proposed action with regard to the recommended modification(s) by the OCPB.
☐ Disapproved the proposed action as recommended and for reasons set forth by the OCPB.
☐ Disapproved the proposed action as recommended but for reasons other than those set forth by the OCPB. (Please list reasons below for local disapproval.)

☐ Other _____

Local Board Date: _____

*List reasons for acting contrary to the OCPB recommendation and include a copy of the local board resolution. Attach additional reasons on a separate sheet of paper as necessary.

_____
_____
_____
_____

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING

110 FAYETTE STREET
MANLIUS, NEW YORK 13104

December 18, 2019

Randy Capriotti, Director of Code Enforcement
Town of Manlius, Planning and Development
301 Brooklea Drive
Fayetteville, NY 13066

Re: 3Gi – Central New York Inland Port Project

Dear Mr. Capriotti,

Enclosed for your review is a complete set of plans and documents for a zone change request and site plan review for the 3Gi property north of the CSX rail yard. We look forward to presenting to the Town of Manlius Planning Board meeting on January 6th, 2020. Below are responses to the submission comment letter from Miller Engineers dated September 11th, 2019.

1) *The site is currently zoned Restricted Agricultural (RA) and the proposed warehousing and storage container parking is not an allowable use.*
   This submission contains the necessary application and materials to apply for a zone change.

2) *Submission of site plan and supporting data is required should a zone change be requested… and shall include at a minimum the following information…*
   a) *A properly certified survey of the property…*
      A certified survey of the subject parcels is included in this submittal and includes site features and existing topography. Additionally, zone change maps of the properties are also included.

   b) *The site plan showing proposed building locations and land use areas.*
      A site plan of the proposed container pooling operation is included in this submittal.

   c) *Traffic circulation, parking and loading spaces, and pedestrian walks.*
      The proposed access driveway off of Fremont Road is included on the site plan. There are no associated parking spaces or pedestrian facilities required for the current proposal.

   d) *Landscaping plans, including site grading and landscape design.*
      A landscaping and grading plan is included in this submittal.

   e) *Preliminary architectural drawings for buildings…*
      For the current proposal, only a small prefabricated modular office building is proposed. Colors and materials have yet to be determined. Some examples of what this office building could look like are shown on the following page. Warehouse buildings are included in the master development plan for the property and are shown only as an example of potential future proposals.

PH 315-682-5580 • FAX 315-682-5544 • EMAIL:MNAP@NAPCON.COM

Figures 1&2: Examples of prefabricated modular office buildings.

f) *Preliminary engineering plans, including street improvements, drainage systems, and public utility extensions.*
All proposed improvements have been included in the site plan. The only utilities proposed at this time are several pole-mounted site lights. Placeholders for stormwater management are shown on the site plan to mitigate future impervious area on the site.

3) *For more specific detailed information, the applicant should be directed to reference the Town Zoning Code, procedures for zone change and site plan submission requirements.*
We have reviewed section §155-28 'Site Plan Review' in the Town of Manlius zoning code, and believe that we have addressed all of the applicable requirements.

Any and all future comments will be addressed accordingly. If you have any questions or if you need any other additional information, please contact us.

Respectfully submitted,

NAPIERALA CONSULTING
Professional Engineer, P.C.

Matthew R. Napierala

Matthew R. Napierala, P.E.
Managing Engineer / President

Zone Change Application

For:

CENTRAL NEW YORK INLAND PORT
TOWN OF MANLIUS, NY

Prepared for:

3Gi
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

Prepared by:

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
Telephone: (315) 682-5580
Fax: (315) 682-5544

December 2019

EXECUTIVE SUMMARY

A. INTRODUCTION

3Gi CNYIP Inc. (3Gi) is the leading private entity responsible for the development of the Central New York Inland Port (CNYIP), which will offer increased opportunities for importing and exporting by providing infrastructure for dedicated international intermodal service to and from the Port Authority of New York and New Jersey (PANYNJ). By increasing the amount of materials that are transported via rail relative to the amount transported by truck, the project will contribute to more efficient use of energy and reduction in greenhouse gas emissions while enhancing the import/export markets in NYS. 3Gi's CNYIP will be integrated into the existing Dewitt Rail Yard located south of Kirkville Road between Girden Road and Fremont Road in the Town of Manlius. The Dewitt Rail Yard has been operated by CSX since 1857 and is located along a route that extends from Boston to Cleveland. The rail yard and subject site is on a Class 1 railroad, is a part of the NYS Transportation Master Plan, and is also within the Federal Intermodal Corridor, making the project eligible for federal funding. In 2018, New York State funded $19 million to CSX to make improvements to the DeWitt Rail Yard in order to allow for international container service, which will commence in September of 2019. By developing a functional CNYIP, 3Gi plans to take advantage of the economic opportunity presented by international container service and therefore provide numerous socioeconomic and environmental benefits to the Central New York region.

B. ECONOMIC INCENTIVES

3Gi, in business with Intransit Container, Inc., (ICI), will provide logistic services that match international import containers with exporters who need empty containers. Coordinating importers and exporters to take full advantage of round trip empty international containers is the primary business opportunity filled by 3Gi CNYIP and ICI Port of Worcester. Together, 3Gi and ICI fill a need for regional importers and exporters to send and receive a greater volume of goods from international markets in a more cost-effective and fuel-efficient manner. This business relationship will provide a streamlined alternative to shipping via truck, which is far more time and cost intensive.

C. FACILITY OPERATIONS

The CNYIP will be set up to provide management of incoming and outgoing cargo for the Dewitt Rail Yard, where there is none today. CSX is in the business of transporting cargo; they do not manage cargo once it reaches its destination. The inland port will store, organize, coordinate, distribute, and manage the cargo from the transporter to and from the manufacturer and the buyer. The establishment of an effective inland port will start with the development of an international container yard for CSX containers. The container yard will take in off-loaded international containers, store them in a yard, and mitigate the truck transport of the containers to their final destination. The container yard will also take in empty containers and coordinate their distribution to Central New York exporters for filling. Once they are loaded with product, the containers will be returned to the CNYIP for export via rail back to the PANYNJ for international distribution on container ships.

Future expansion of CNYIP is unknown at this time but could potentially include the development of on-site warehousing for the short-term aggregation of products and the infrastructure required to coordinate the exporting of those products. It could also include the laying of track inside the CNYIP owned property, enabling CSX to switch the rail cars into the 3Gi operated container yard and thereby allow for the control of export loading and the ability to aggregate large numbers of containers to be shipped on the same train.

D. ENVIRONMENTAL IMPACT

The implementation of a Central New York Inland Port will have a positive impact on the environment. Currently, CNY exporters have to transport their goods via truck (tractor trailer) down and through New York City to the PANYNJ. Not only is truck transport more expensive (greater than 5 times the cost of rail transport), but it is harmful to the environment due to excessive carbon emission from the trucks. Rail transport has significantly lower carbon emissions and therefore a smaller environmental impact.

Adjacent to the proposed site there are several NYSDEC freshwater wetlands and a FEMA 100-year floodplain area. The proposed project will avoid much of the jurisdictional wetland areas and only require a small impact for the

road extension from the container yard to Kirkville Road. The project will include properly sized stormwater mitigation basins to mitigate any effects to storm water runoff conditions resulting from the proposed development. A wetland delineation and determination report has been compiled and is included in Appendix C of this report.

E. TRAFFIC IMPACT

As it exists today, the main route for international truck traffic that is entering or exiting the CSX operated DeWitt Rail Yard is via North Central Avenue and Fremont Road. Beginning in September of 2019, CSX will use this existing route for all international cargo transportation by truck. The long-term plan for the CNYIP is to reroute this truck traffic through the 3Gi site onto Girden Road before accessing Kirkville Road. This will alleviate the potential traffic burden from the prospective increase in international container service, thus avoiding the two schools and residential neighborhood located along Fremont Road. The traffic improvement proposed by 3Gi is a great enhancement to the existing condition. The temporary access road (Temp Road 1) proposed in Phase 1 will access the international container yard from Fremont Road. The first permanent option for site access from Girden Road (Perm Road 1) will be via an existing easement directly west of the site. The second permanent option for site access from Girden Road (Perm Road 2) will be to the northwest across the northern part of the wetland area. Perm Road 2 will require coordination with NYS in order to obtain funding, but will have a much smaller impact on the adjacent wetlands.

The intersection of Girden Road and Kirkville Road is only a three quarter-mile drive to Interstate 481. The connection to the NYS Thruway (Interstate 90) is only two miles north of this point and is only another 6 miles from Interstate 81. Therefore, from the future road improvement on Girden Road, international cargo will have a direct connection from the CSX railroad to the entirety of New York State, the northeastern United States, and eastern Canada. To assess the potential impact that the trip generation from the full build-out of the project will have on Girden Road and Kirkville Road, a traffic impact study has been prepared for this project and is included in Appendix D of this report.

F. PROJECT BENEFITS

The CNYIP has many potential socio-economic and environmental benefits to the Central New York Region. The greatest positive outcome is the prospective economic growth that would accompany a reduction in shipping costs associated with a shift from importing and exporting by truck to rail. Many businesses within the CNY region have indicated that transportation costs are a significant cost of sales and consideration in their growth potential as well as retaining their business in NYS. Additionally, the long-term shift to importing and exporting by rail will result in a reduction in emissions of greenhouse gases through a decrease in tractor trailers on NYS roadways.

Expected Fee: _____

TOWN OF MANLIUS
PLANNING DEPARTMENT
INITIAL APPEARANCE APPLICATION

DATE: August 27, 2019

Name of Project: 3Gi - Central New York Inland Port (CNYIP)

Applicant must submit 12 copies of all site plans, surveys, and supporting data with the final application before a planning board meeting can be scheduled.

Location of Project: Vacant rural property to the south of Kirkvile Road between Girden Rd and Fremont Rd

Type of Project:

○ Division of Land ○ Subdivision ○ Accessory Use ○ Zone Change ☒ Site Review ○ Other _____

Developer: 3Gi (Contact: Chris Beck) Phone: 315-849-0898

Address: 360 Erie Boulevard East, Syracuse, NY Zip: 13202

Tax Map Number(#)/s: 054.-01-28.1, 054.-01-06.1, 054.-01-04.1, & 054.-01-2.1

Present Zoning: Residential Agricultural Desired Zoning: Industrial

Total Acreage: 75.7 Acres Total Number of Lots: Four (4)

Property Owner/s: 3Gi CNYIP Inc. Phone: 315-475-3700

Address: 360 Erie Boulevard East, Syracuse, NY Zip: 13202

Tax Map#(s): 054.-01-28.1, 054.-01-06.1, 054.-01-04.1, & 054.-01-2.1 Owner's Signature: [signature]

Printed Name: Eckardt C. Beck, CEO

Property Owner/s: _____ Phone: _____

Address: _____ Zip: _____

Tax Map#(s): _____ Owner's Signature: _____

Printed Name: _____

Use next page for additional known property owners' information

---

Planning Board Meeting Date Assignment: _____

Fee: _____ Paid: _____ Per: ○ Credit/Debit Card ○ Check ○ Cash

TOWN OF MANLIUS

DISCLOSURE AFFIDAVIT

This affidavit is a part of and must be completed and attached to every application, petition, request submitted for a *site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license* or *permit.*

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

I. Eckardt C. Beck, being duly sworn, deposes and says that (s) he is:

CEO of 3G: CNYIP, Inc. (Property Owner)
(applicant, petitioner, corporation officer, property owner, *etc.)*

II. That deponent has read and is familiar with the provisions of the General Municipal Law, Section 809 which states:

A. Every application, petition or request submitted for a site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provisions or any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state officer or any officer or employee of such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

B. For the purpose of this action an officer or employee shall be deemed to have an interest in the applicant when (s)he, his/her spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them:

1) is the applicant, or
2) is an officer, director, partner or employee of the applicant, or
3) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
4) is a party to an agreement with such an applicant, express or implied, whereby (s) he may receive any payment or other benefit, whether or not for services rendered, or contingent upon the favorable approval of such application, petition or request.

C. Ownership of less than five percent (5%) of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

D. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

III. That no Town of Manlius officer, employee or a relative of either, as defined in Section 809 General Municipal Law has any interest in this application.

-OR-

If a Town of Manlius officer, employee or relative of either as defined in Section 809 General Municipal law has any interest in this application, the full particulars are provided on an attached sheet.

Date: August 27th, 20 19.

Eckardt C. Beck
(Print Name)

(Signature)

36: CNYIP, Inc.
(Entity Name)

CEO
By (Officer) (Title)

360 Erie Blvd. E, Syracuse, NY 13202
(Mailing Address of Applicant)

(315) 269-7767
(Telephone Number)

Date: _____, 20_____.

(Print Name)

(Signature)

(Entity Name)

By (Officer) (Title)

(Mailing Address of Applicant)

(Telephone Number)

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

On this 27th day of August in the year 20 19, before me, the undersigned, a notary public in and for said state, personally appeared Eckardt C. Beck, _____, and _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within Petition and acknowledged to me the he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the Petition, the individual or the persons upon behalf of which the individual acted executed the instrument.

Notary Public

BRENDAN V. COTTER
Notary Public, State of New York
No. 02CO6152108
Qualified in Oneida County
My Commission Expires August 28, 2022

CORPORATE ACKNOWLEDGEMENT

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

Eckardt C. Beck, being duly sworn, deposes and says the s(he) is the Chief Executive Officer of 36: CNY IP, Inc. corporation named in the within Application/Petition, that s(he) has read the foregoing affidavit and knows the contents thereof; that the same is true of s(he) own knowledge, except as to those matters therein stated to be alleged upon information and belief, and as to those matters s(he) believes it to be true.

Applicant Signature

Subscribed to me before this 27th day
Of August, 2019

Notary Public

BRENDAN V. COTTER
Notary Public, State of New York
No. 02CO6152108
Qualified in Oneida County
My Commission Expires August 28, 2022

06/29/16 LB

TOWN OF MANLIUS
ZONE CHANGE APPLICATION

1. Name of Person applying for Zone Change 3Gi (Contact: Chris Beck)
   Address of person applying 360 Erie Boulevard East, Syracuse, NY 13202
   Cell Number (315) 269-7767 Phone Number (315) 849-0898
2. Name: (owner of record) of land where Zone Change would occur 3Gi CNYIP Inc.
   Address (owner of record) 360 Erie Boulevard East, Syracuse, NY 13202
   Cell Number (owner of record) _____ Phone Number (315) 849-0898
3. Tax Map Number of property where Zone Change would occur 054.-01-28.1, 054.-01-06.1 54.-01-4.1, &054.-01-02.1
4. Is this property located in a flood hazard area? Yes
   If so, what flood area is the property in it in?
   100-Year Floodplain
5. Present zoning classification of property Residential Agricultural & Industrial
6. Desired zoning classification Industrial
   Reason for Change of Zone (use additional sheets if necessary) Lots to the east, south, and west under common ownership are industrial zoned. A zone change would provide consistent zoning for the parcels in common ownership and would allow for the proposed future use of a container pooling yard and inland port as a natural extension of the CSX rail yard
7. What is lot size? Four (4) parcels totaling 75.7 total acres
8. If the Zone Change is granted, will the use of the property conform to the District regulations as stated in Chapter 155 Article III of the Town of Manlius Municipal Code? Yes
9. Is the property within the protectively zoned area of a housing project authorized under the public housing law? No
10. Is the property within five hundred (500) feet of the boundaries of any city, village, town, county, state park or parkway? Yes
    If yes, please specify The center line of Girden Road is the Town of DeWitt boundary.
11. Is the property within five hundred (500) feet from the boundary of any existing or proposed County or State park or other recreation area, or from the right-of-way of any existing or proposed county or state parkway, thruway, expressway, road or highway, or from the existing or proposed right-of-way of any stream or drainage channel owned by the county or for which the county has established channel lines, or from the existing or proposed boundary of any county or state owned land on which a public building or institution is situated? Yes

If yes, please specify Pine Grove Middle School

12. List the uses of all abutting property Residential properties, the CSX rail yard, a self-storage unit facility, and vacant forested/wetland area.

13. The following must be included with your 12 application packets unless otherwise specified and/or specifically waived by the Town Board:

- An environmental assessment form which can be obtained from the Town Clerk, or an environmental impact statement.
- Copy of a survey of the premises certified by a New York State licensed surveyor.
- Legal description of the premises.
- This application must be signed by both the owner of record of the property and the applicant.

The failure to answer any question on this application, the failure to submit any item as specified or the failure to execute this application will result in a delay in the processing of the application.

36: CNYIP, Inc.

Date 12/17/19 By: Richard C Reed
Applicant 1 CEO

Date _____ _____
Applicant 2

Date _____ _____
Applicant

TOWN OF MANLIUS

DISCLOSURE AFFIDAVIT

This affidavit is a part of and must be completed and attached to every application, petition, request submitted for a *site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license* or *permit.*

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

I. Eckardt C. Beck being duly sworn, deposes and says that (s) he is:

CEO of 3G: CNYIP, Inc. (Applicant)

(applicant, petitioner, corporation officer, property owner, *etc.)*

II. That deponent has read and is familiar with the provisions of the General Municipal Law, Section 809 which states:

A. Every application, petition or request submitted for a site plan, variance, amendment, change of zoning, approval of a plat, exemption from a plat or official map, license or permit, pursuant to the provisions or any ordinance, local law, rule or regulation constituting the zoning and planning regulations of a municipality shall state the name, residence and the nature and extent of the interest of any state officer or any officer or employee of such municipality is a part, in the person, partnership or association making such application, petition or request (hereinafter called the applicant) to the extent known to such applicant.

B. For the purpose of this action an officer or employee shall be deemed to have an interest in the applicant when (s)he, his/her spouse, or their brothers, sisters, parents, children, grandchildren, or the spouse of any of them:

1) is the applicant, or
2) is an officer, director, partner or employee of the applicant, or
3) legally or beneficially owns or controls stock of a corporate applicant or is a member of a partnership or association applicant, or
4) is a party to an agreement with such an applicant, express or implied, whereby (s) he may receive any payment or other benefit, whether or not for services rendered, or contingent upon the favorable approval of such application, petition or request.

C. Ownership of less than five percent (5%) of the stock of a corporation whose stock is listed on the New York or American Stock Exchanges shall not constitute an interest for the purposes of this section.

D. A person who knowingly and intentionally violates this section shall be guilty of a misdemeanor.

III. That no Town of Manlius officer, employee or a relative of either, as defined in Section 809 General Municipal Law has any interest in this application.

-OR-

If a Town of Manlius officer, employee or relative of either as defined in Section 809 General Municipal law has any interest in this application, the full particulars are provided on an attached sheet.

Date: December 17th, 20 19.

Eckardt C. Beck
(Print Name)

(Signature)

36: CNY IP, Inc.
(Entity Name)

Eckardt C. Beck, Chief Executive Officer
By (Officer) (Title)

360 Erie Boulevard East, Syracuse, NY 13202
(Mailing Address of Applicant)

(315) 269-7767
(Telephone Number)

Date: _____, 20_____.

(Print Name)

(Signature)

(Entity Name)

By (Officer) (Title)

(Mailing Address of Applicant)

(Telephone Number)

ACKNOWLEDGEMENTS

STATE OF NEW YORK)
) SS:
COUNTY OF ONONDAGA)

On this 17th day of December in the year 20 19, before me, the undersigned, a notary public in and for said state, personally appeared Eckardt C. Beck, _____, and _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within Petition and acknowledged to me the he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the Petition, the individual or the persons upon behalf of which the individual acted executed the instrument.

Notary Public

BRENDAN V. COTTER
Notary Public, State of New York
No. 02CO6152108
Qualified in Oneida County
My Commission Expires August 28, 2022

CORPORATE ACKNOWLEDGEMENT

STATE OF NEW YORK)
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Eckardt C Beck
Applicant Signature

Subscribed to me before this 17th day
Of December, 2019

Notary Public

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No. 02CO6152108
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06/29/16 LB

The Central NewYork Inland Port

Central New York Inland Port (CNYIP) Project

Prepared By:

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING

For:

3rd Generation Intermodal (3Gi)
360 Erie Boulevard East
Syracuse, NY 13202

Agenda & Introductions

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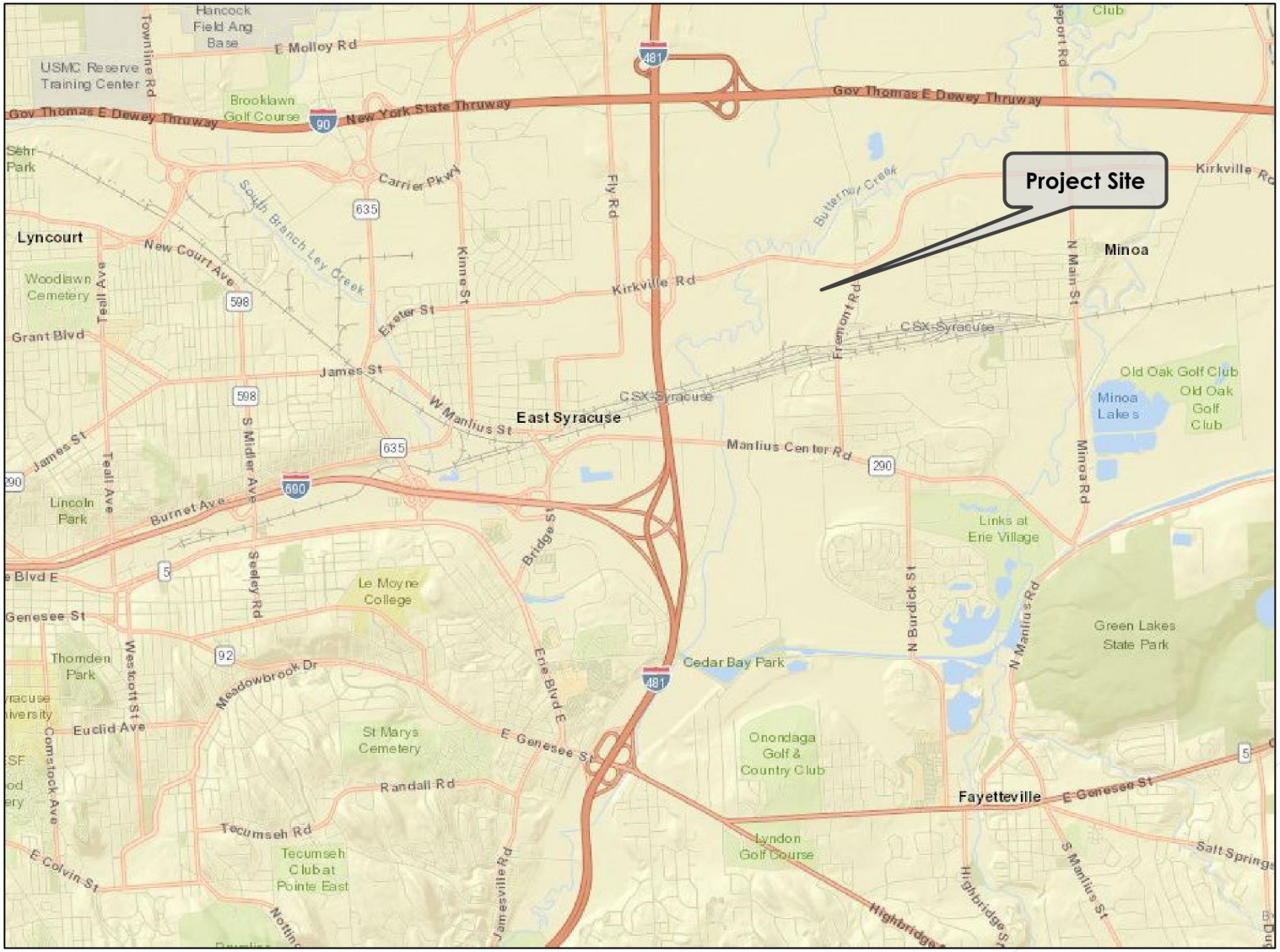
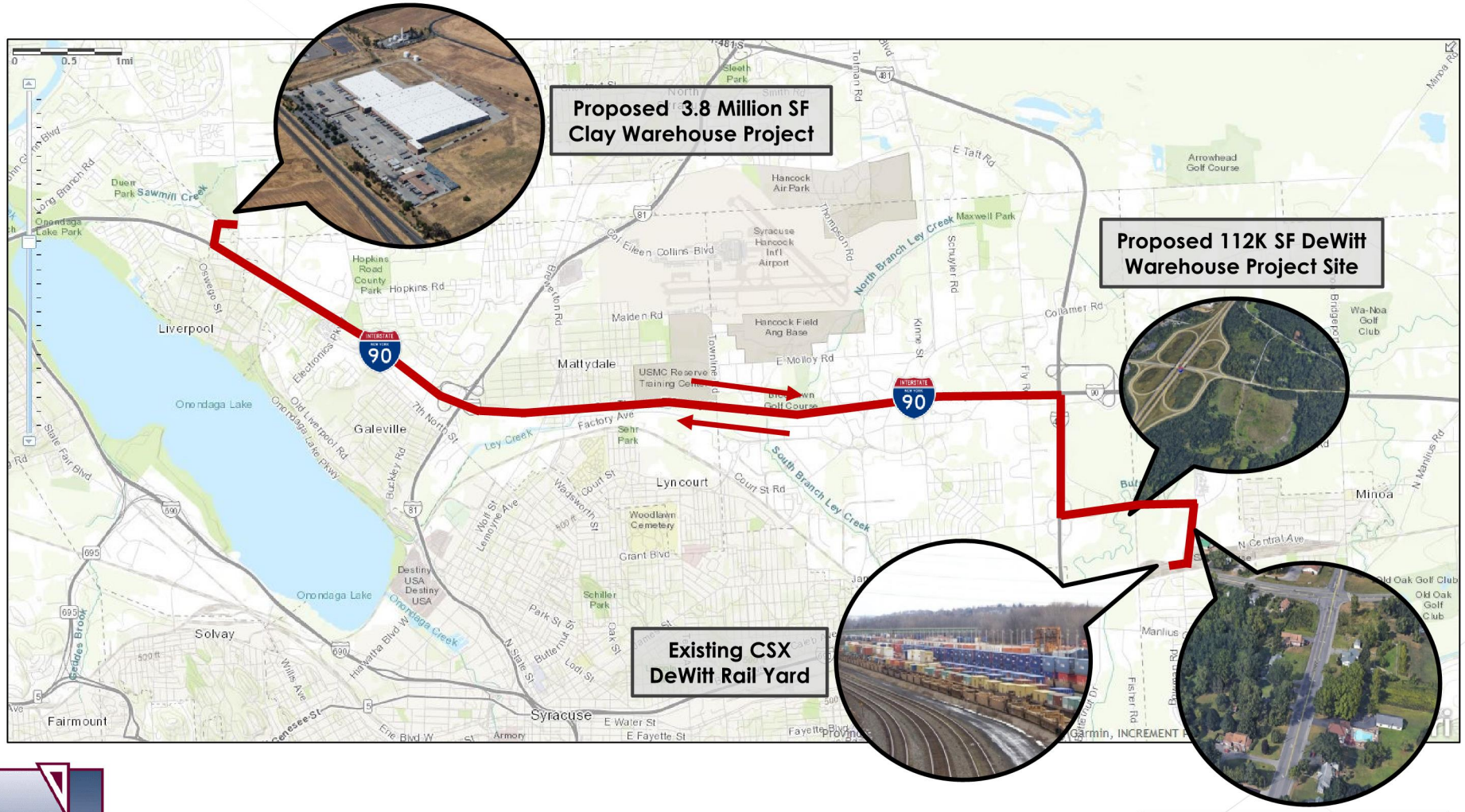
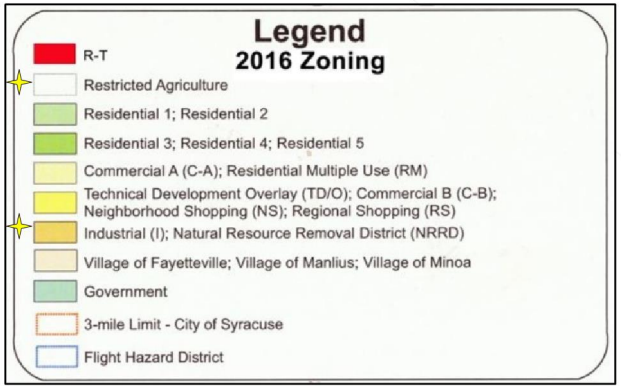
Project Location

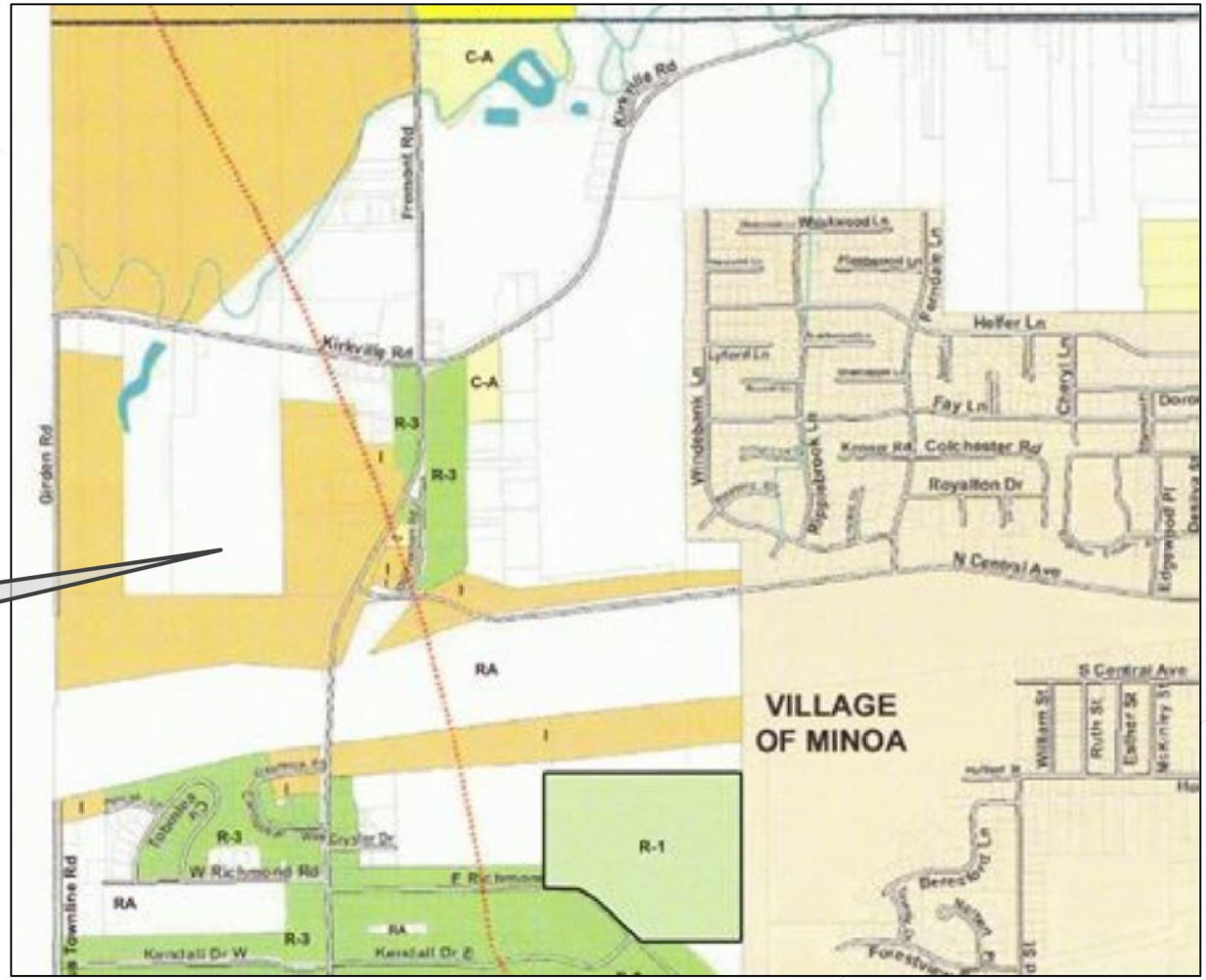


Near Future Traffic Impact

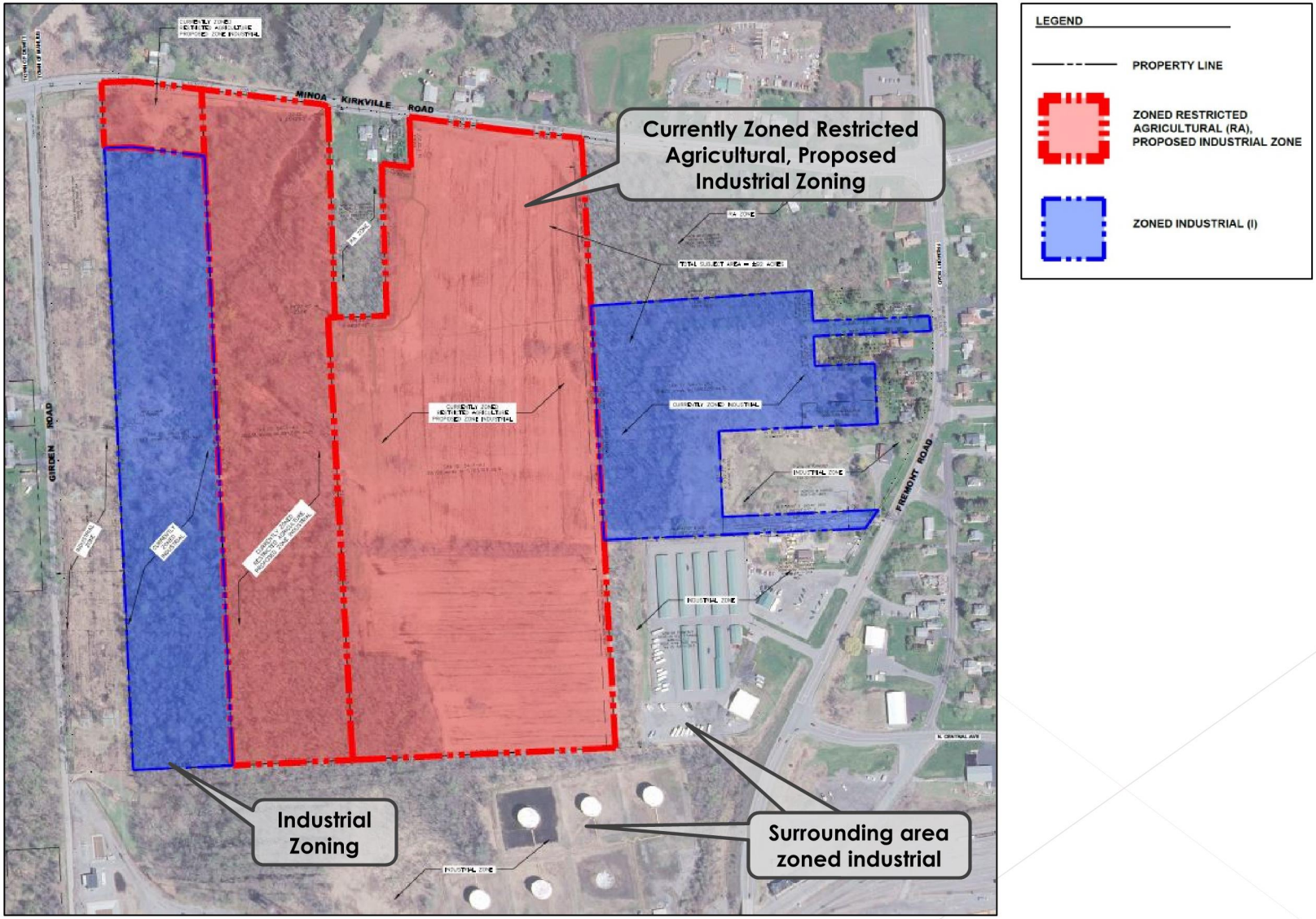


Zone Change Overview

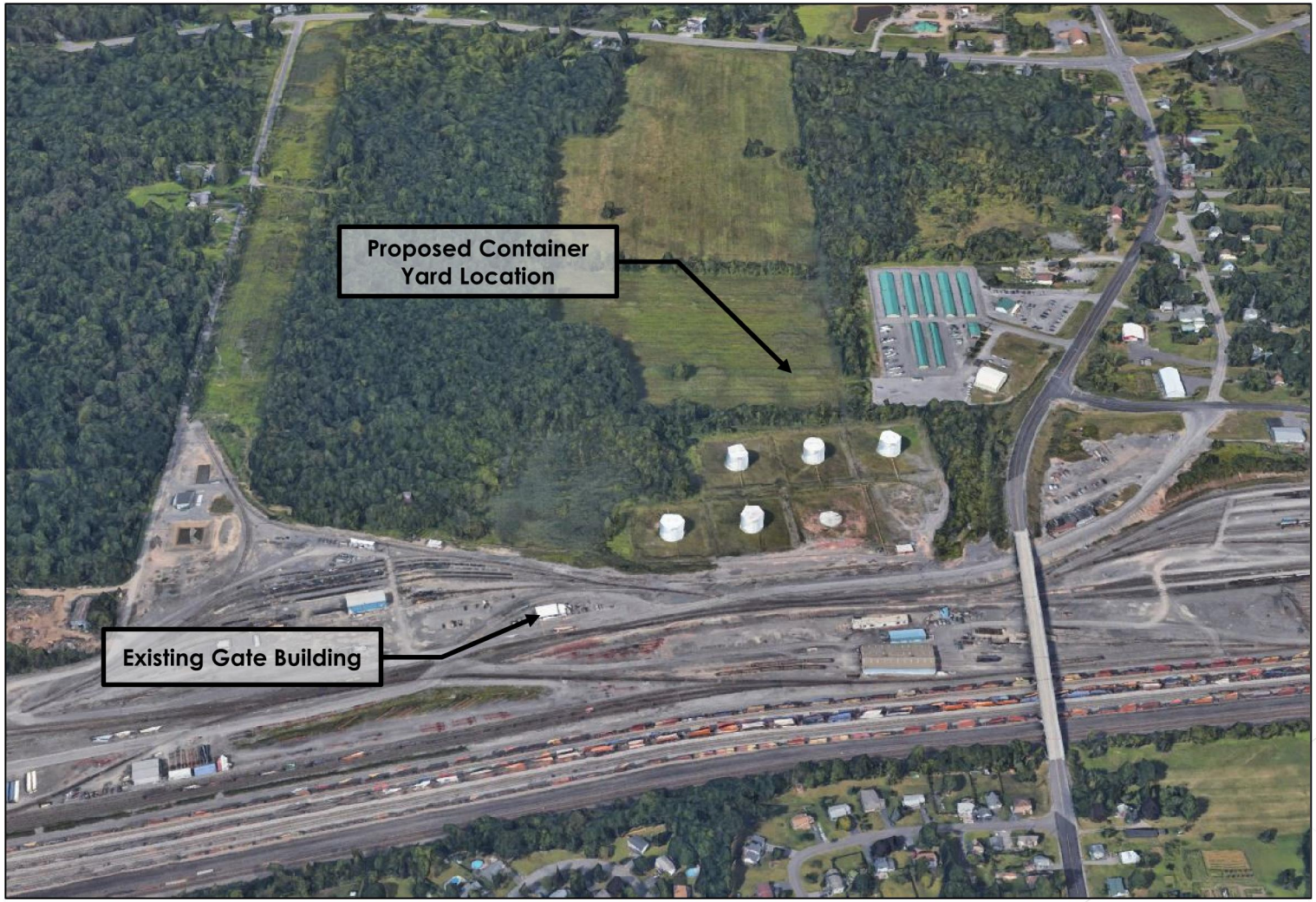




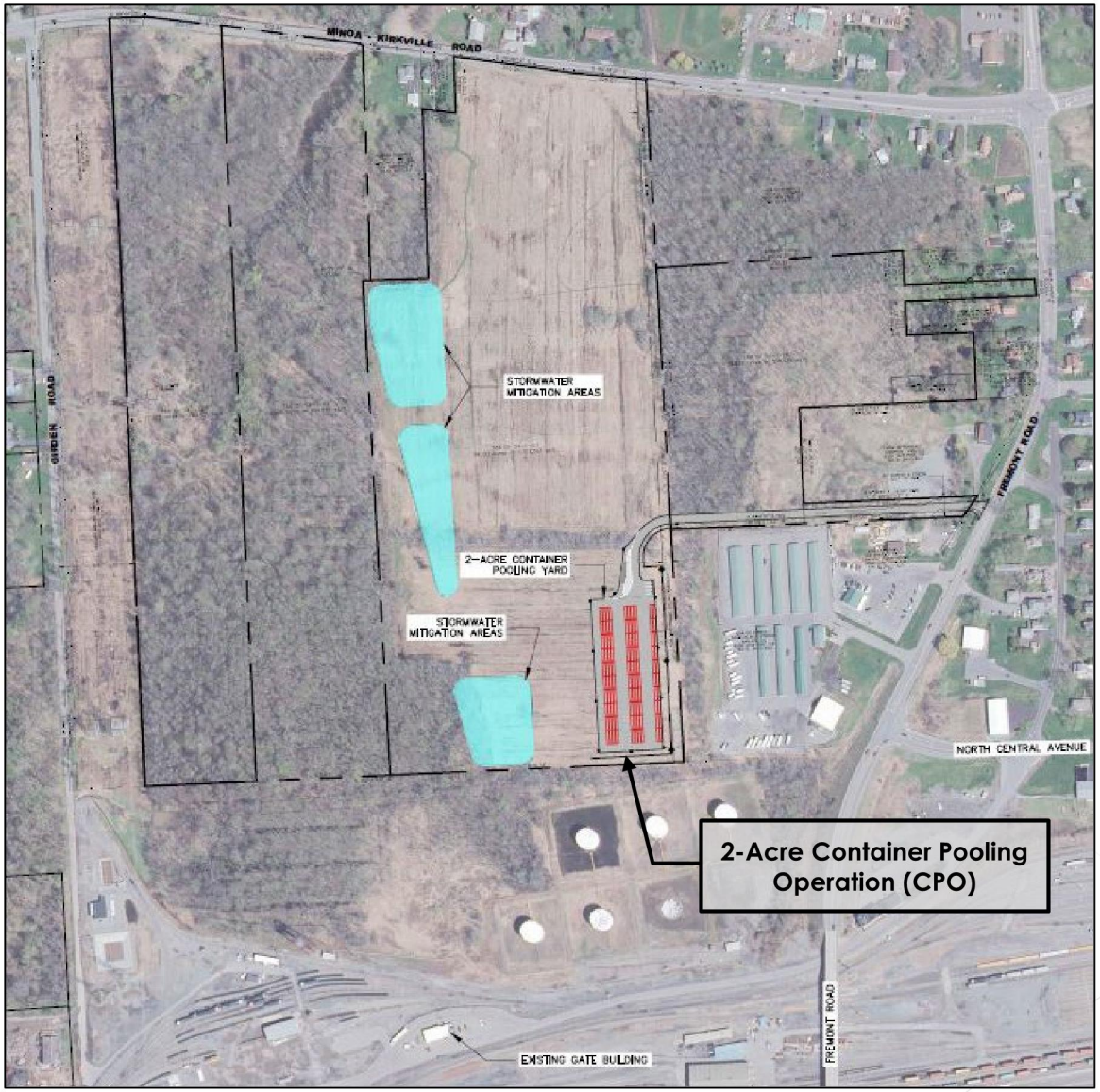
Zone Change Overview



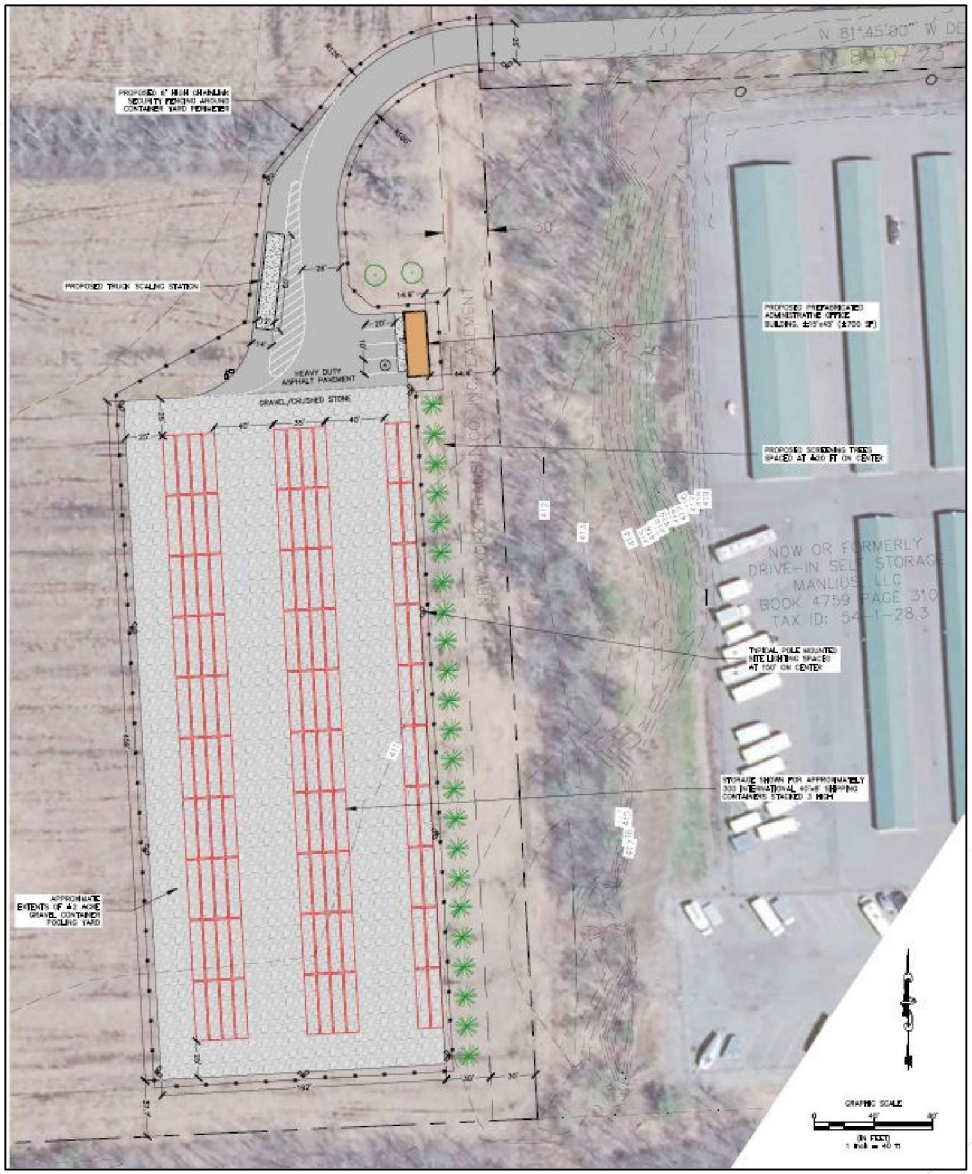
Phase 1: Container Yard

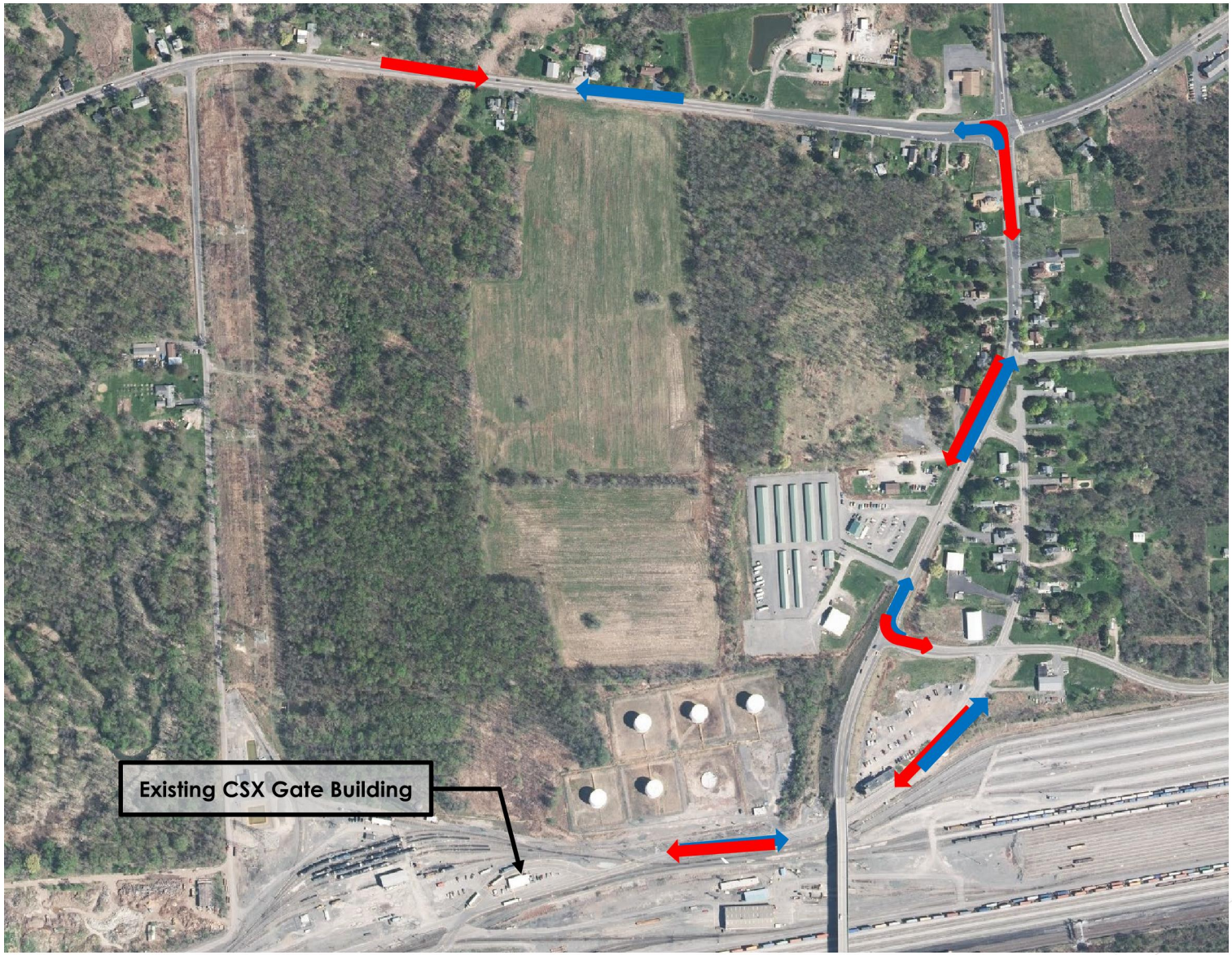


Phase 1: Container Yard

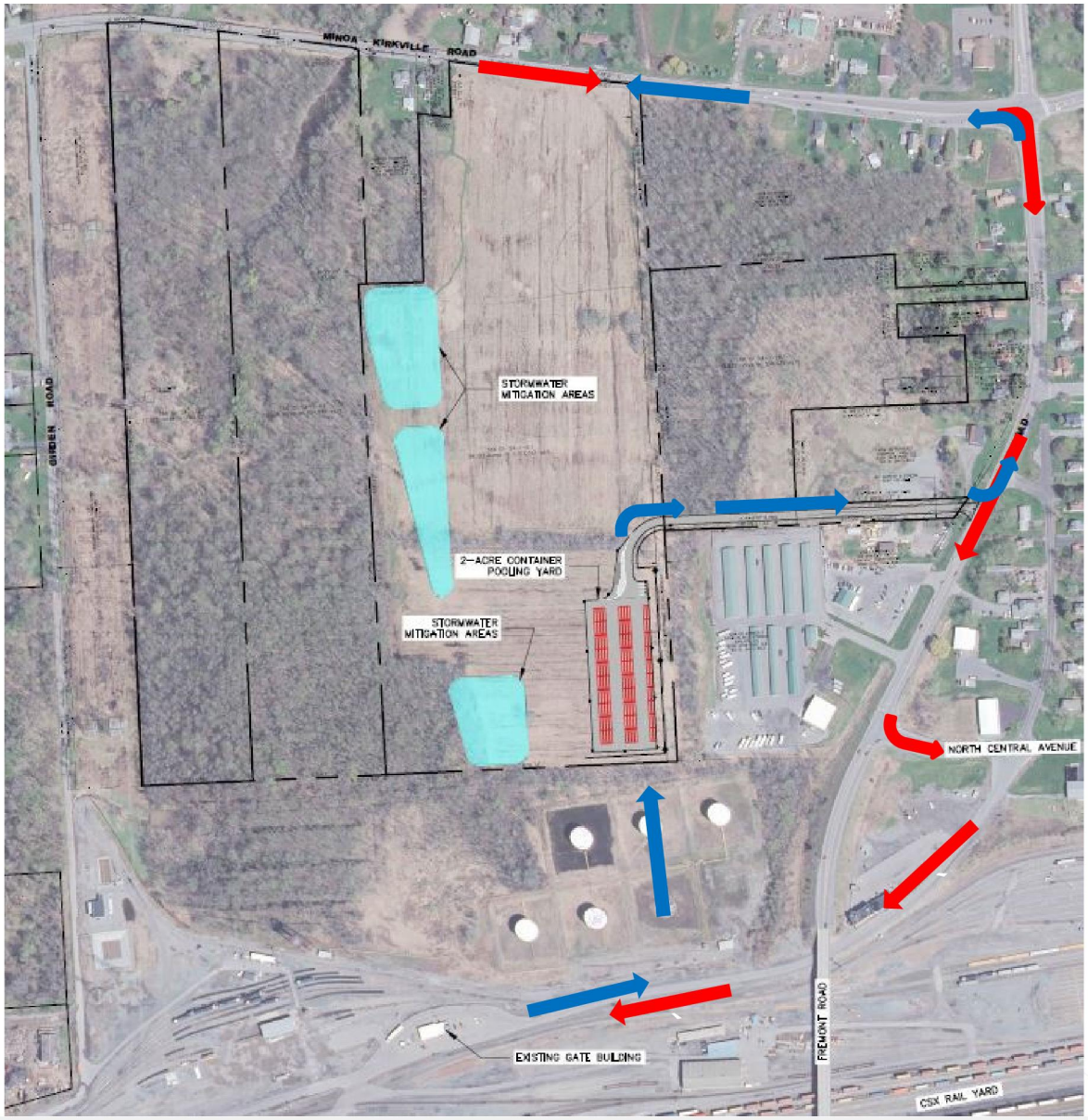


Phase 1: Container Yard

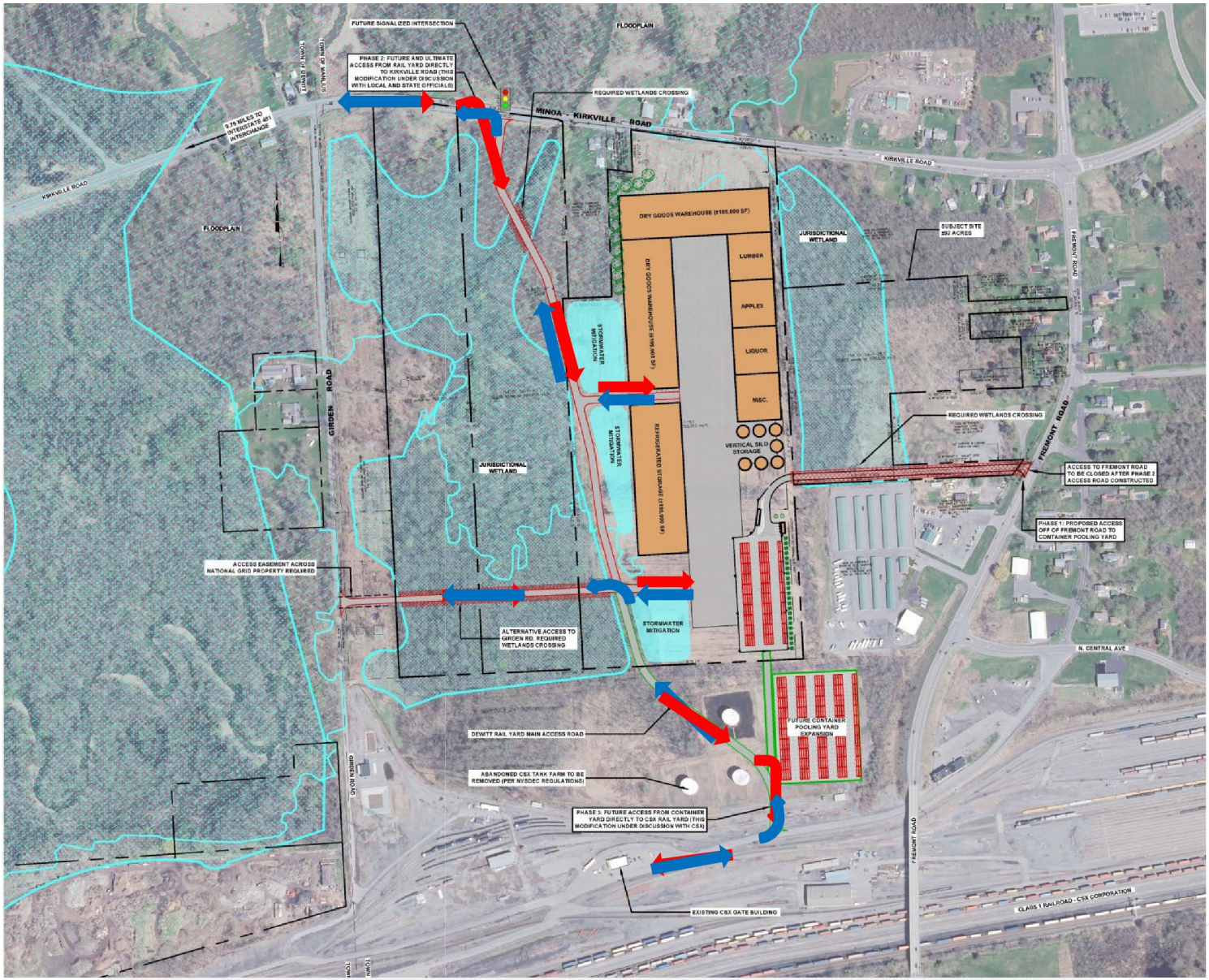




Existing Truck Flow

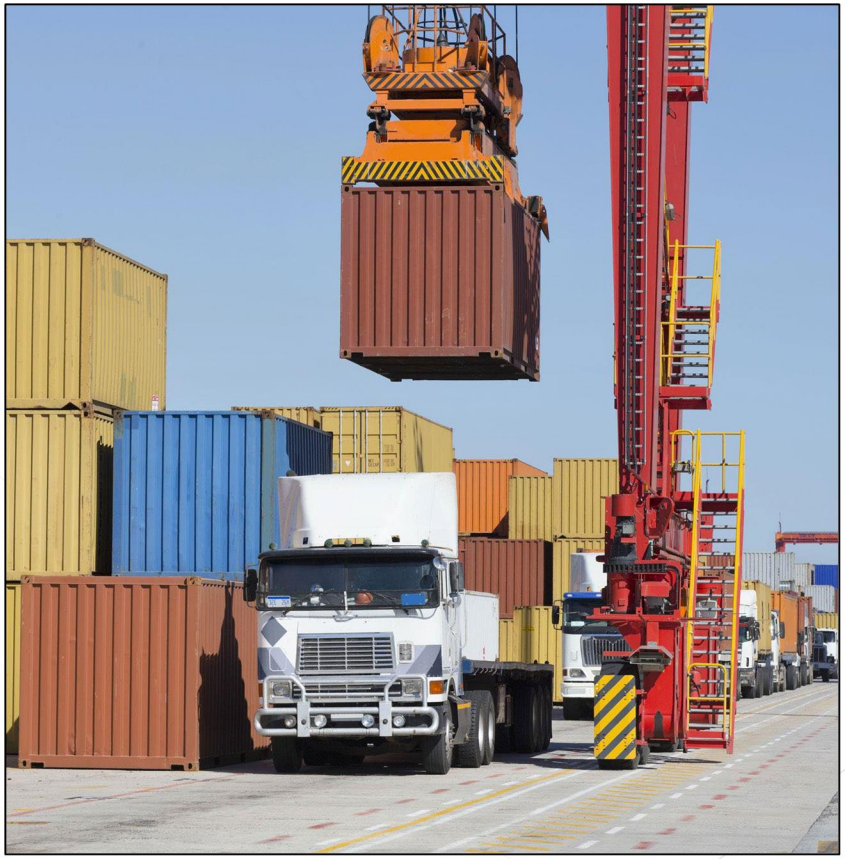


Interim Phase 1 Truck Flow

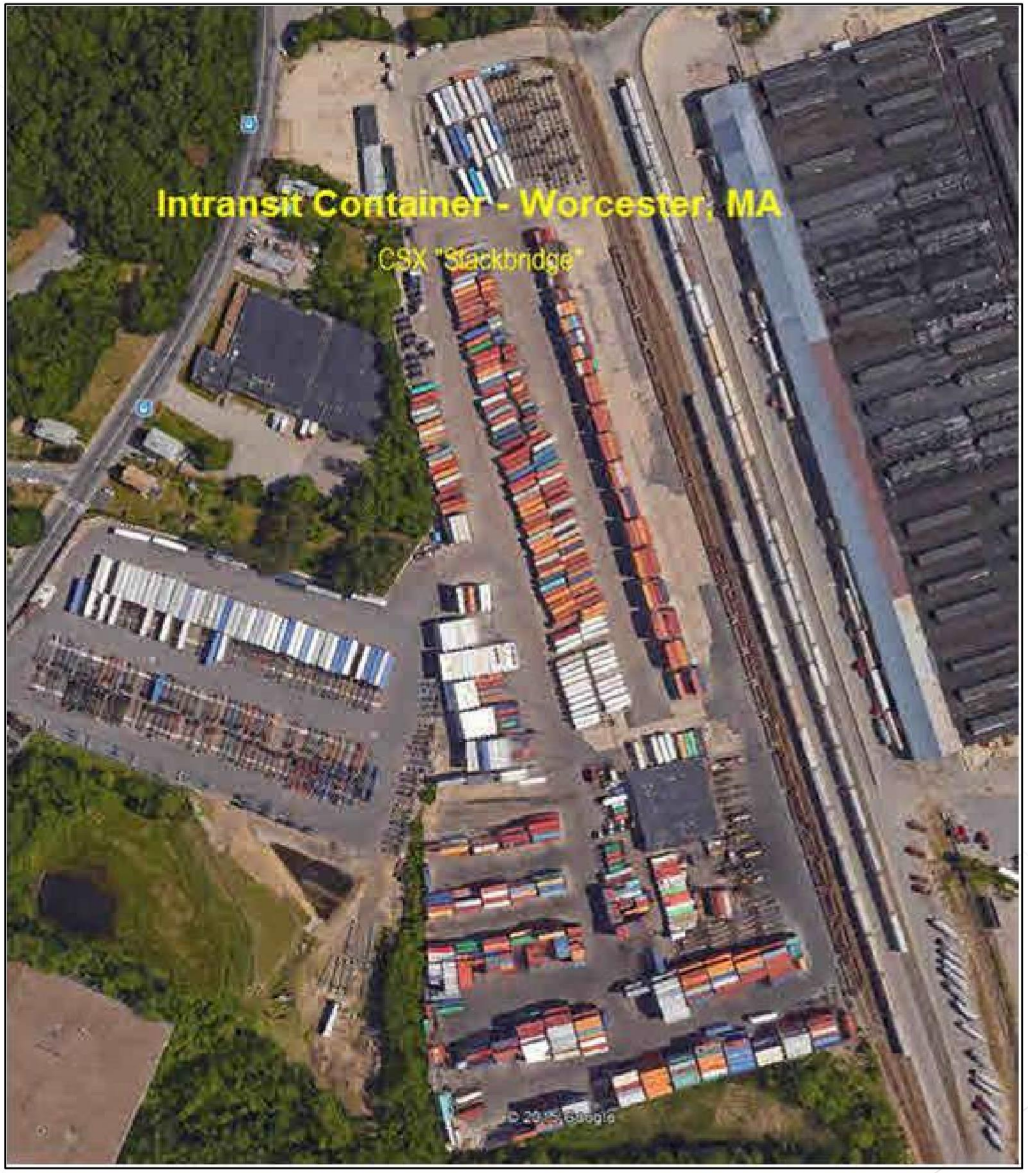


Proposed Inland Port

Inland Port Overview



Worcester Inland Port



Inland Port Overview

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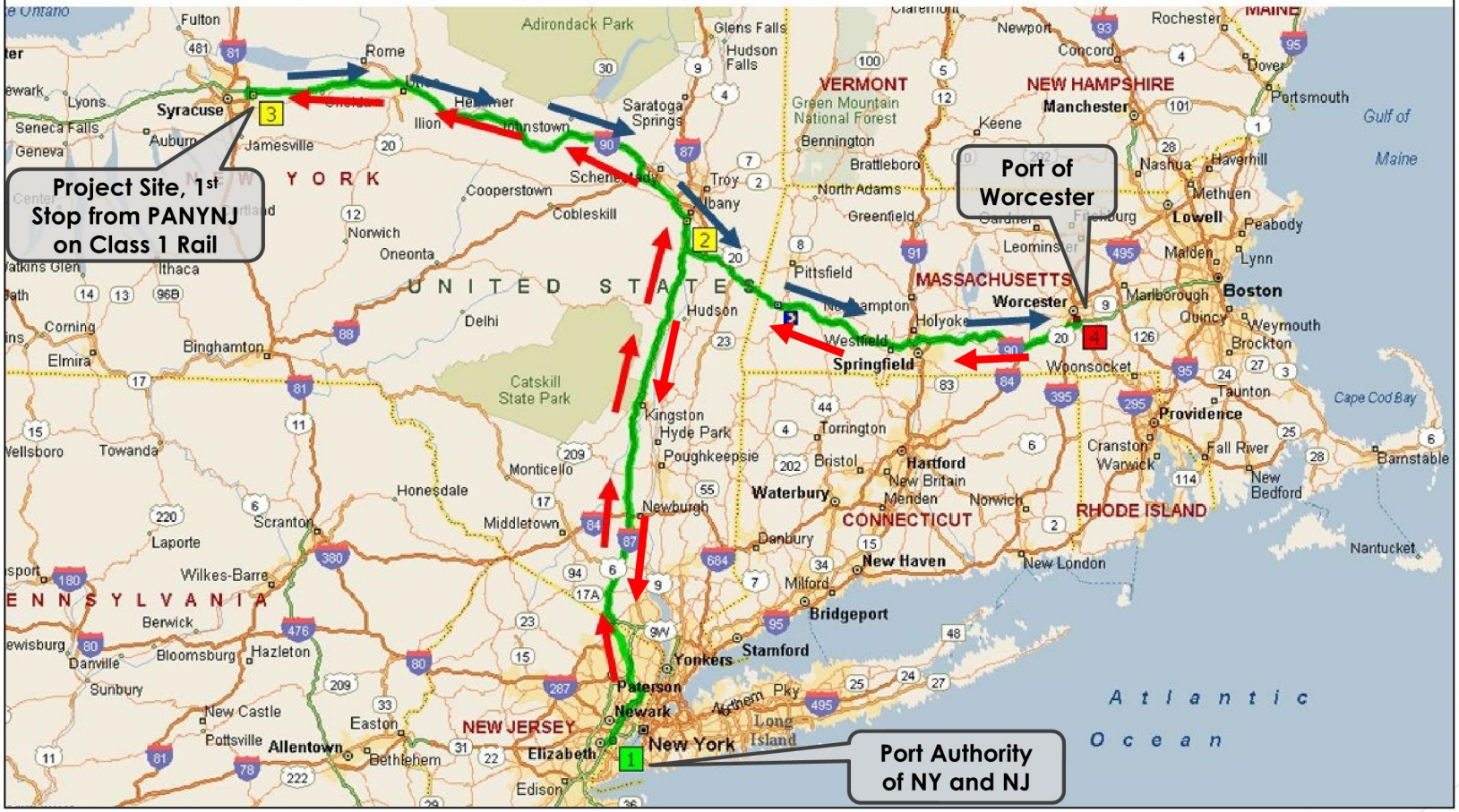
3Gi Inland Port Overview

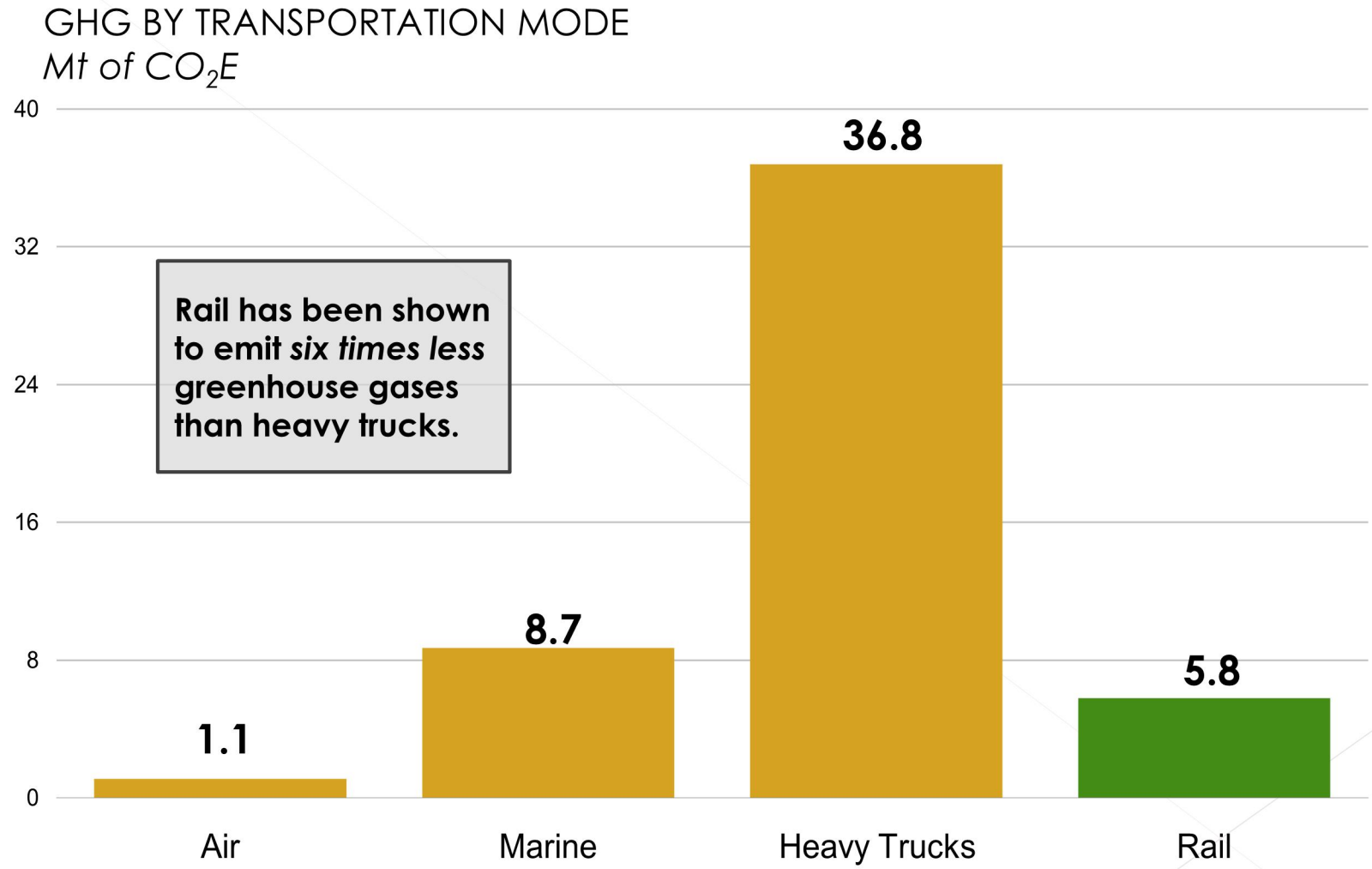
Project Overview

Elizabeth Marine Terminal (EMT) to ICI-Worcester (Stackbridge) via Syracuse



Partnership with NYSERDA

Greenhouse Gas Comparison

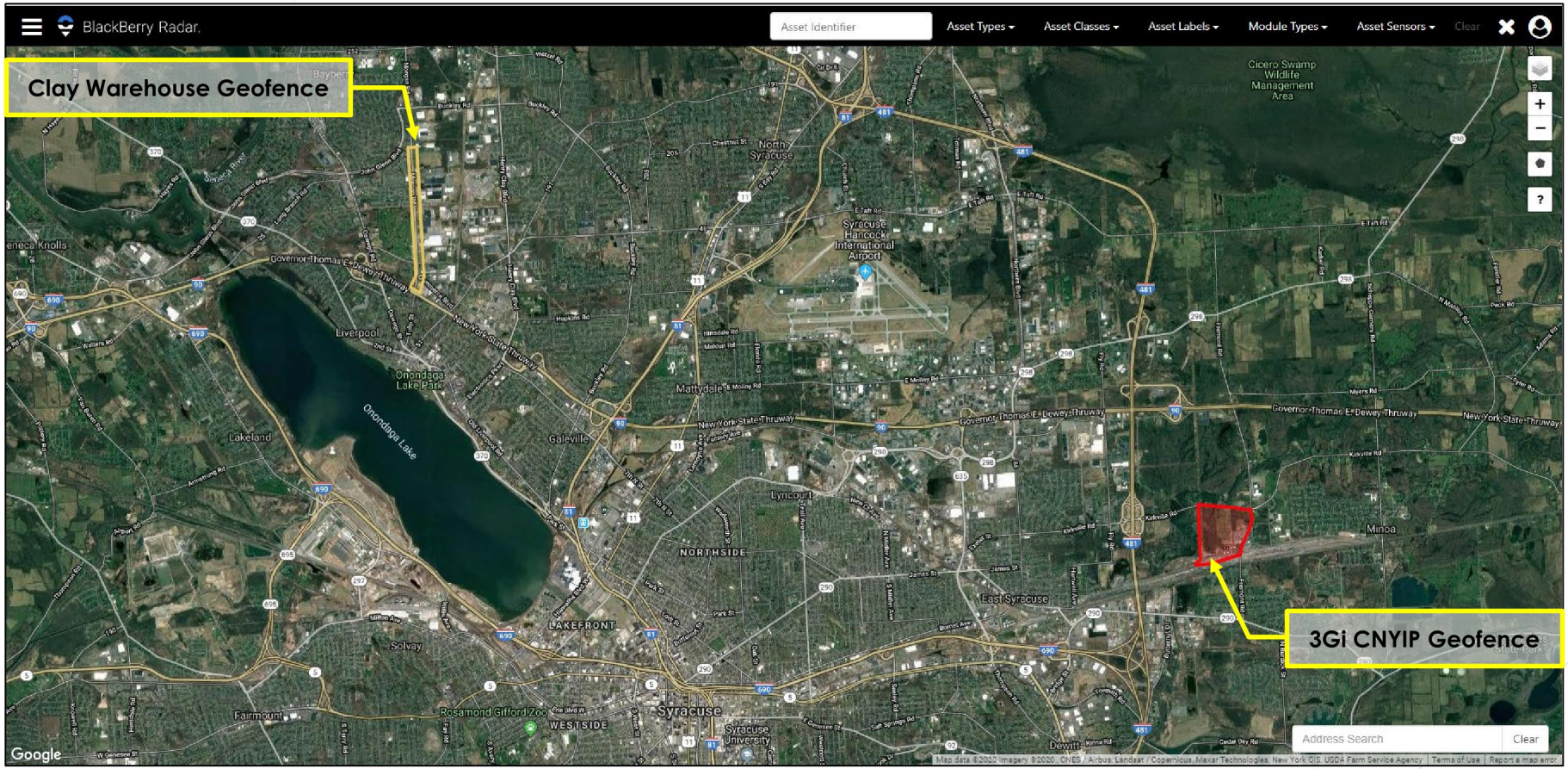


Source: National Resources Canada, Office of Energy Efficiency. Energy Use Data Handbook, August 2006.

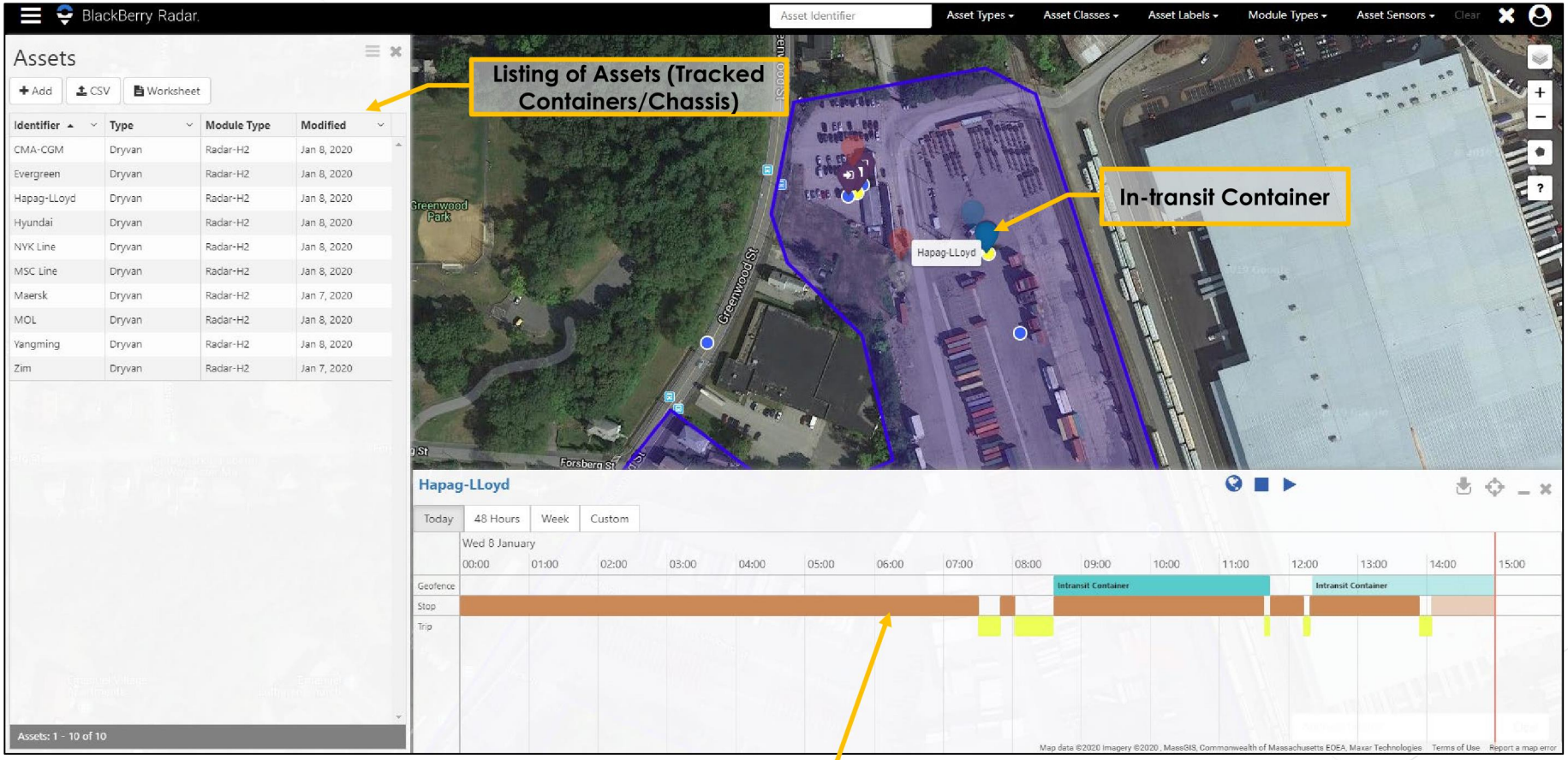
Environmental Aspects

Blackberry Tracking System

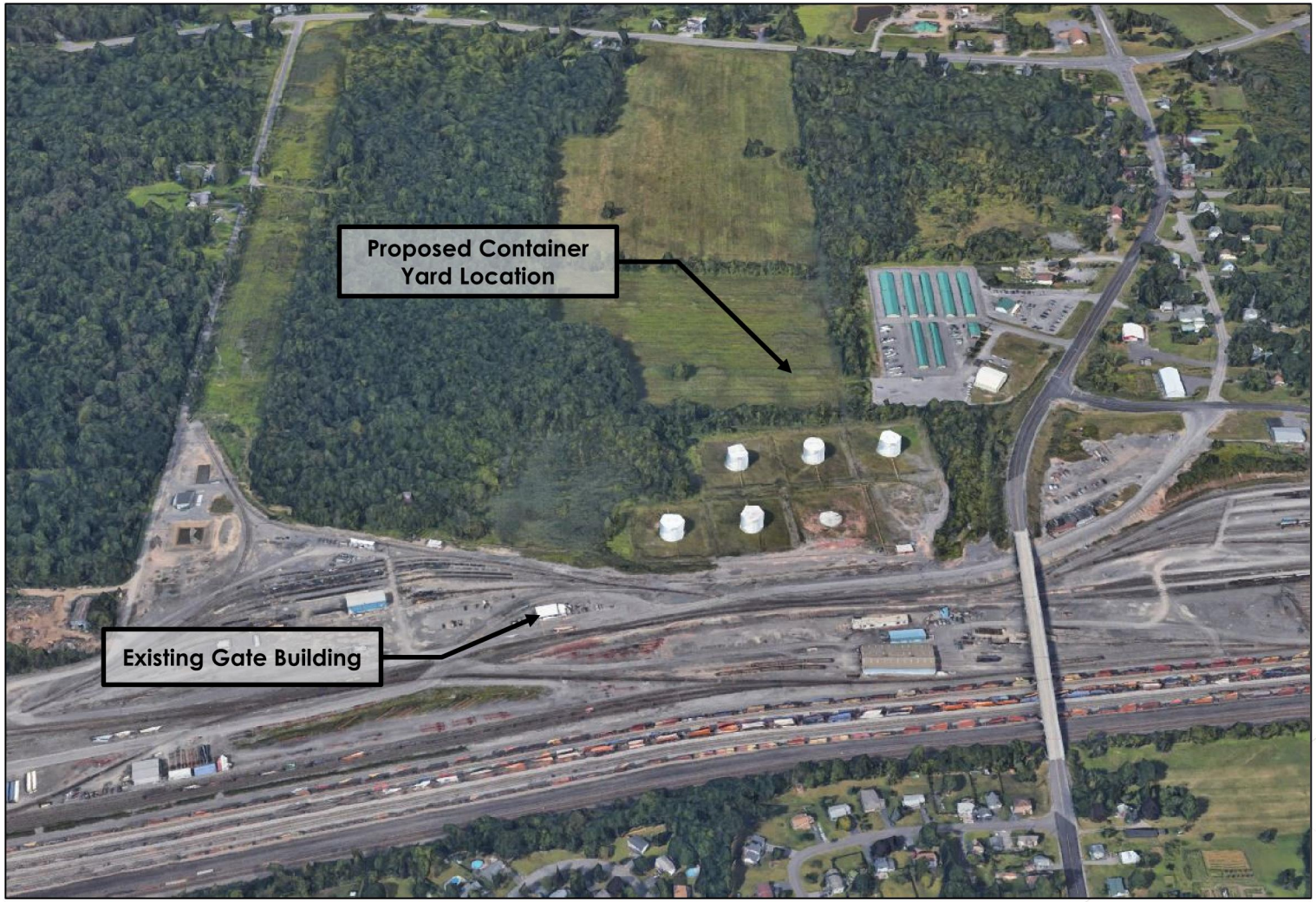
Blackberry Tracking System



Blackberry Tracking System



Discussion/ Questions?



Lehr Land Surveyors D.P.C.
Land Surveying & Planning

Suite 6
116 Salina Street
Liverpool, New York 13088
315-451-3333
FAX: 315-451-3392
EMAIL: info@lehrlandsurveyors.com

December 09, 2019

Surveyor's Description
Tax Id: 54-1-2.1
Town of Manlius

RE: Minoa-Kirkville Road

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Manlius, County of Onondaga and State of New York and being Lot No.33 in said Town, and being more particularly described as follows:

BEGINNING at a point in the southerly road boundary of Minoa – Kirkville Road, said point being easterly a distance of 200.32' from the easterly road boundary of Girden Road, said point also being the northeasterly corner of land now or formerly owned by Niagara Mohawk Power Corporation as recorded in the Onondaga County Clerk's Office in Book 2225 of Deeds, Page 384;

thence S 88º44'02" E., along the southerly road boundary of said Minoa – Kirkville Road, a distance of **112.84 feet** to an angle point in said road boundary;

thence S 79º30'00" E., continuing along the southerly road boundary of said Minoa – Kirkville Road, a distance of **223.73 feet** to a point;

thence S 0º47'08" W., a distance of **2263.50 feet** to the northerly line of lands now or formerly owned by CSX Transportation Inc.;

thence N 89º11'49" W., along the northerly line of said CSX Transportation Inc., a distance of **333.36 feet** to the easterly line of said Niagara Mohawk Power Corporation;

thence N 0º47'08" E., along the easterly line of said Niagara Mohawk Power Corporation, a distance of **2302.10 feet** to the point of beginning;

Containing 17.517 acres or 763,021 square feet of land more or less.

The hereinbefore described parcel of land is subject to any and all easements and/or rights-of-ways of record.

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December 09, 2019

Surveyor's Description
Tax Id: 54-1-4.1
Town of Manlius

RE: Minoa-Kirkville Road

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Manlius, County of Onondaga and State of New York and being Lot No.33 in said Town, and being more particularly described as follows:

BEGINNING at a point in the southerly road boundary of Minoa – Kirkville Road, said point being easterly a distance of 536.89' from the easterly road boundary of Girden Road;

thence S 79º30'00" E., along the southerly road boundary of said Minoa – Kirkville Road, a distance of **405.21 feet** to an angle point in said road boundary;

thence S 63º47'03" E., continuing along the southerly road boundary of said Minoa – Kirkville Road, a distance of **22.75 feet** to its intersection with the westerly line of lands now or formerly owned by Michael F. Deecher and Carolyn J. Mulligan as recorded in the Onondaga County Clerk's Office in Book 3298 of Deeds, Page 6;

thence S 1º32'20" W., along the westerly line of said Deecher and Mulligan, a distance of **704.80 feet** to a point;

thence N 88º27'40" W., a distance of **23.16 feet** to a point;

thence S 0º14'19" W., a distance of **1481.12 feet** to its intersection with the northerly line of lands now or formerly owned by CSX Transportation Inc.;

thence N 89º11'49" W., along the northerly line of said CSX Transportation Inc., a distance of **401.67 feet** to a point;

thence N 0º47'08" E., a distance of **2263.50 feet** to the point of beginning.

Containing 20.538 acres or 894,629 square feet of land more or less.

The hereinbefore described parcel of land is subject to any and all easements and/or rights-of-ways of record.

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Liverpool, New York 13088
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December 09, 2019

Surveyor's Description
Tax Id: 54-1-6.1
Town of Manlius

RE: Minoa-Kirkville Road

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Manlius, County of Onondaga and State of New York and being Lot No.33 in said Town, and being more particularly described as follows:

BEGINNING at a point in the southerly road boundary of Minoa – Kirkville Road, said point being the northeasterly corner of property now or formerly owned by Calvin O. Goodrich, Trustee of the Goodrich Living Trust as recorded in the Onondaga County Clerk's Office in Book 5407 of Deeds, Page 928;

thence S 78º46'12" E., along the southerly road boundary of said Minoa – Kirkville Road, a distance of **353.26 feet** to an angle point in said road boundary;

thence S 80º38'21" E., continuing along the southerly road boundary of said Minoa – Kirkville Road, a distance of **226.01 feet** to its intersection with the westerly line of lands now or formerly owned by Anita G. Santaro as recorded in the Onondaga County Clerk's Office in Book 3959 of Deeds, Page 323;

thence S 0º14'19" W., along the westerly line of said Santaro and the westerly line of lands now or formerly owned by Drive-In Self Storage Manlius, LLC as recorded in the Onondaga County Clerk's Office in Book 4759 of Deeds, Page 310 a distance of **2042.62 feet** to a its intersection with the northerly line of lands now or formerly owned by the CSX Transportation Inc.;

thence N 89º11'49" W., along the northerly line of said CSX Transportation Inc., a distance of **879.74 feet** to a point;

thence N 0º14'19" E., a distance of **1481.12 feet** to a point;

thence S 88º27'40" E., partially along the lands now or formerly owned by Michael F. Deecher and Carolyn J. Mulligan as recorded in the Onondaga County Clerk's Office in Book 3298 of Deeds, Page 6, a distance of **196.02 feet** to a point;

thence N 1º32'20" E., along the easterly line of said Deecher and Mulligan, a distance of **508.83 feet** to its intersection with the southerly line of said Goodrich;

thence S 79º30'00" E., along the southerly line of said Goodrich, a distance of **100.00 feet** to a point;

thence N 1º32'20" E., along the easterly line of said Goodrich, a distance of **169.63 feet** to the point of beginning.

Containing 39.103 acres or 1,703,313 square feet of land more or less.

The hereinbefore described parcel of land is subject to any and all easements and/or rights-of-ways of record.

ENVIRONMENTAL IMPACT STATEMENT REPORT

For:

CENTRAL NEW YORK INLAND PORT
TOWN OF MANLIUS, NY

Prepared for:

3Gi
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

Prepared by:

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
Telephone: (315) 682-5580
Fax: (315) 682-5544

August, 2019

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1.0 PROJECT SUMMARY

1.1 BACKGROUND

3Gi CNYIP Inc. (3Gi) is an intermodal infrastructure company committed to advancing global opportunities for importing and exporting goods. The goal of 3Gi is to embrace Third Generation Intermodal (3Gi) concepts and apply them to infrastructure projects that advance the foundation for the United States to compete in the global economy. 3Gi is the leading private entity responsible for the development of the Central New York Inland Port (CNYIP), which will offer increased opportunities for importing and exporting by rail in the Central New York region. The CNYIP will accomplish this by providing infrastructure for dedicated international intermodal service to and from the Port Authority of New York and New Jersey (PANYNJ). By increasing the amount of materials that are transported via rail relative to the amount transported by truck, the project will contribute to more efficient use of energy and reduction in greenhouse gas emissions. The 3Gi CNYIP business model will minimize costs and shipping times, maximize profits, and enhance the import/export markets in NYS.

1.2 PROJECT LOCATION

3Gi's Central New York Inland Port will be integrated into the existing Dewitt Rail Yard located in the Town of Manlius, Onondaga County, New York. The Dewitt Rail Yard is operated by CSX, a Class 1 Freight Railroad. 3Gi owns/controls approximately 200 acres of property that is adjacent to the existing rail yard. The subject property is located to the south of Kirkville Road between Girden Road and Fremont Road. This property will be utilized to expand into and facilitate the operations of an international inland port. The property is not only a part of the NYS Transportation Master Plan, but is also within the federally designated National Highway System Intermodal Corridor, and is therefore eligible for federal funding.

The Class 1 Rail that the CNYIP will be located on runs from the PANYNJ and Boston west to Cleveland. This is known as the Water Level Route because it runs parallel with the Hudson River and Erie Canal and thus provides minimal elevation changes. On the Water Level Route, also known as the Main Line, average travel speeds can be increased and international cargo containers can be stacked two-high, optimizing route efficiency.

Figure 1. Location Map of Project Site

1.3 BUSINESS RELATIONSHIPS

1.3.a INTRANSIT CONTAINER INC. (ICI)

3Gi has a strategic business relationship with Intransit Container, Inc., (ICI), a major northeast inland port owner/operator located in Worcester, Massachusetts, who will be the approved private operating entity for 3Gi. Presently, ICI's Port of Worcester receives more international containers as imports from the PANYNJ than it returns as exports. At the CNYIP, 3Gi plans to address the aggregation and coordination of the regional export market, with a focus on NYS agriculture, one of the region's most valuable resources. 3Gi, in business with ICI, will provide logistic services that match international import containers with exporters who need empty containers.

Coordinating importers and exporters to take full advantage of round trip empty international containers is the primary business opportunity filled by 3Gi CNYIP and ICI Port of Worcester. Currently, empty international containers are carried on the trains but are not serviced at the Dewitt Rail Yard. Thus, regional importers and exporters are not serviced, resulting in lost revenue. Importer's empty containers are available for exporters at a reduced cost to both. For exporters, availability of empty containers is a significant factor for cost effective transportation by train to the PANYNJ. For importers, the cost saving benefit is realized by eliminating one-way empty container returns to the PANYNJ.

Together, 3Gi and ICI fill a need for regional importers and exporters to bring their goods to and receive goods from international markets in the more cost-effective and fuel-efficient manner. This business relationship will allow for significant increases in volume of both imports and exports, particularly those of NYS agriculture and manufactured goods. Given that ICI currently receives more imports than exports and 3Gi's Dewitt CNYIP will expand exports, increased profitability stands to reason.

1.3.b NYS ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (NYSERDA)

The New York State Energy Research and Development Authority (NYSERDA) is a NYS program that promotes energy efficiency and the use of renewable energy resources. The overall goal of the program is to reduce greenhouse gas emissions and to accelerate economic growth. NYSERDA partners with businesses such as 3Gi in order to cooperatively develop and foster conditions that will attract private sector capital investment while enabling New York communities to benefit from improved energy efficiency. Transportation by rail is a much more efficient form of transportation when compared to trucking and therefore presents a great opportunity to reduce statewide greenhouse gas emissions, making the project an ideal candidate for partnership with NYSERDA.

1.4 ECONOMIC DRIVERS & ADVANTAGES

The cost of transporting goods by truck has grown significantly, as well as increased limitations of the trucking industry in its practices and overall capacity. Reliance on trucking for transportation of goods over past decades has proven to be less efficient, costlier, and has negative impacts on highway and transportation maintenance and safety. This issue is further compounded by a shortage of skilled drivers. The effective use of rail in US shipping will increase profitability and improve US economics.

There are major challenges associated with the recent opening of the Panama Canal Third Lock and arrival of large capacity Panamax ships at the PANYNJ. First and foremost is the ever-increasing congestion of trucks in queue for unloading and loading. The CNYIP addresses this challenge by moving international containers that are currently transported by truck to the more efficient mode of transportation: trains. International containers can be directly loaded off the ships onto CSX rail for inland distribution, thus eliminating the need for CNY importers and exporters to truck to the PANYNJ.

The second challenge that is addressed by the CNYIP is the diminishing availability of real estate within reasonable proximity to the PANYNJ. A widespread increase in lease rates on the limited warehousing space in the greater NYC area has created a demand for land within reasonable travel distance to the PANYNJ. The Dewitt Rail Yard is the first stop for CSX on the Main Line and therefore only a few hours from the PANYNJ. The availability of property within reasonable travel time of the rail yard provides businesses with the opportunity to locate around the CNYIP, making it a magnet for both major importers and exporters.

In 2018, New York State funded $19 million to CSX to make improvements to the DeWitt Rail Yard in order to allow for international container service, which will commence in September of 2019. The commencement of

international container service at the DeWitt Rail Yard equates to an opening of international markets to importers in the CNY region. Additionally, the connection with the Port of Montreal will open up the northern trade market. The ability to reduce transportation costs by switching from trucking to rail will result in major cost savings to both importers and exporters in the area. Agricultural exporters will have access to a larger market at a lower cost, resulting in growth within the industry. By expanding the annual potential to handle upwards of 40,000 to 50,000 international shipping containers by rail directly to and from the PANYNJ, the project will result in improved capacity, profitability, regional growth, public safety, and environmental benefits from reduced CO_2.

1.5 FACILITY OPERATIONS AND PHASING

The development of the on-site operations of the facility will happen in three major phases which will happen semi-concurrently. The first step is the establishment of a container yard for all CSX international containers. CSX would load and unload the double-stack rail cars which 3Gi would immediately dray from CSX to the CNYIP where container processing, customs clearance (if applicable) and coordination between 3Gi and the steamship lines would occur. Truck access to the container yard during this phase will be via Temp Road 1off of Fremont Road.

The second phase includes the development of on-site warehousing for the short term aggregation of products. This phase will also include the construction of Perm Road 1 or Perm Road 2, thus directing traffic off of Fremont Road and re-routing it through the 3Gi subject site onto Girden Road. An easement currently exists across the property to the west of the subject site adjacent to Girden Road which would serve as the location for Perm Road 1. The location of Perm Road 2 would be across the northern part of the wetland areas to the west of the subject site.

The third phase would involve the laying of track inside the CNYIP owned property to allow for CSX to switch the rail cars into the 3Gi operated container yard. This method provides the ultimate control for 3Gi's customers, allowing control of free time, Free Trade Zones, demurrage, customs clearance, chassis pool, reefer plugs-ins, trans-load opportunities and warehouse facilities. These are generally services CSX does NOT provide. 3Gi would have control of the export loading allowing the ability to aggregate large number of containers to be shipped on the same train, a benefit for volume exporters.

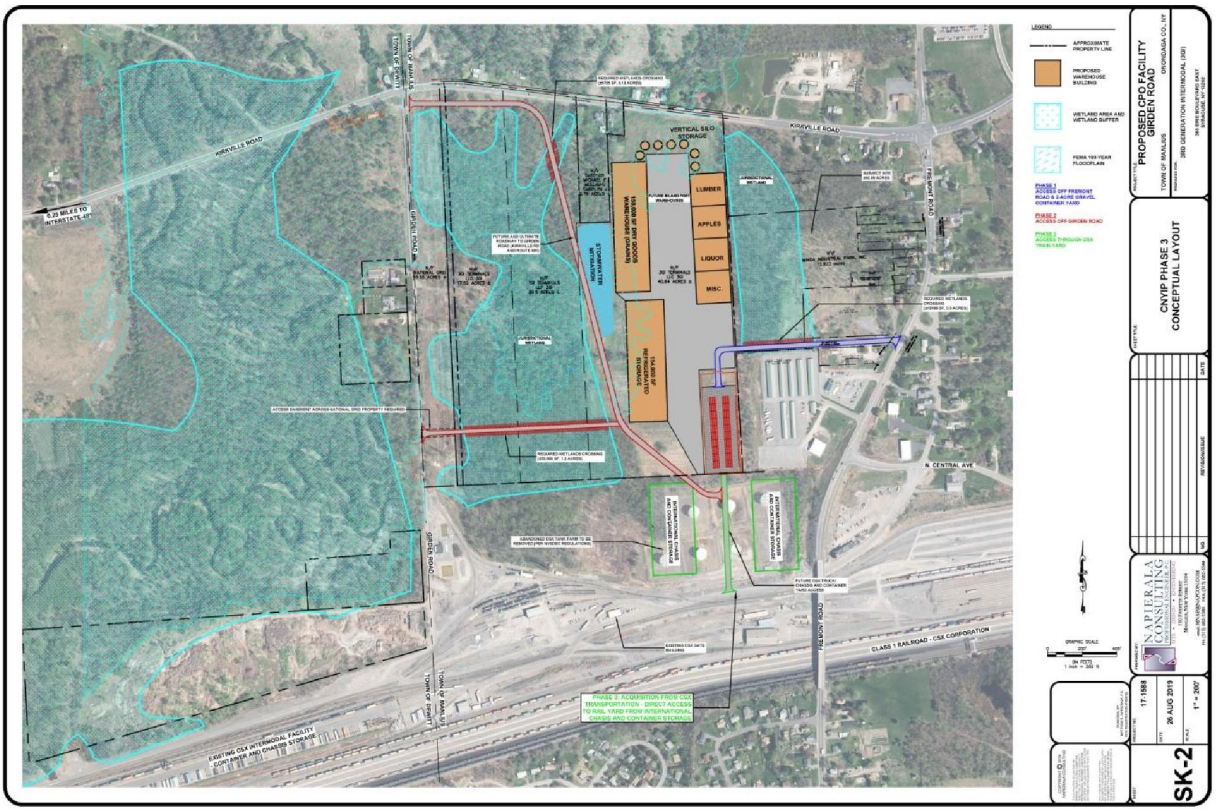

Figure 2. Conceptual Layout of the CNYIP Full Build-Out

A state of the art tracking system will be implemented in order to maximize the movement of containers within the marketplace. This will enable point-to-point control of the containers and the chassis through a GPS locating system. The technology will enable 3Gi to manage delays and other problems along the supply chain where historically chasing information has been time-consuming and expensive. It will also allow for real-time tracking of important information such as temperature control within the container. Effectively matching up importers and exporters in the New England area will help coordinate empty cargo containers from numerous shipping lines moved between the CNYIP, Worchester, and the ships. By utilizing a tracking system to more effectively coordinate cargo movement between CNY and the global marketplace, 3Gi can substantially help importers and exporters who currently pay for a one-way empty container.

By providing short term warehouse storage, primarily supporting agriculture with climate control facilities, 3Gi will maximize the ability to load a train which will also allow it to create a chain of custody from the shipper to the ultimate customer. A comprehensive survey of importers and trade associations within the regional market was performed which concluded that all were supportive of warehousing facilities that would serve as temporary aggregation of product due to the potential of major cost of sale savings.

Terminal overhead, personnel, security, paving, lighting, yard equipment, reefer plugs, a terminal operating computer system, etc., will all be required to provide the services that CNY importers and exporters will expect, as well as the shipping companies, which strictly monitor all container movement to and from the PANYNJ. These operational elements will be provided at the 3Gi CNYIP by ICI, which has proven systems and capacity.

Other responsibilities of 3Gi that will develop concurrently with the CNYIP include, but are not limited to:

• Coordination of all aspects of container logistics, rail/trucking/warehouse container handling;

• Management of gate, ocean manifests, freight releases, customs release, bookings, trucking delivery orders and reconciliation;

• Provide a customs bonded facility and free trade zone;

• Secure gate operation;

• Chassis pool operations;

• Manage notifications from steamship lines, importers, trucker notifications of cargo status;

• Security and storage;

• Direct sales and marketing; and

• Data collection from gate operations to drive market response and growth.

1.6 PROJECT PERMITTING

The Container Pooling Operations (CPO) is the first phase of the CNYIP, facilitating its ability to service the increasing regional export opportunities and aggregate exports in order to maximize cargo trains with a minimum of 50 to 100 international export containers. The project will consist of up to a 2-acre pad to provide storage of empty containers that will become available for regional international export opportunities. 3Gi expects that the CPO pad will continue to expand in 2-acre increments over time.

Phase II will be the development of on-site warehousing for the short term aggregation of products. This phase will also include the construction of an access road onto Girden Road, thus directing traffic off of Fremont Road and re-routing it through the 3Gi subject site.

The project will be phased and permitted on a local and state level through the Town of Manlius for Site Plan approval and through New York State for stormwater, floodplain, and wetland mitigation.

1.7 POTENTIAL BENEFITS

The following is a summary of the public benefits that will result by reducing the number of tractor trailers from New York State highways and conversely shipping by rail over an assumed 30-year service life of the project:

1. Highway and Bridge Avoidance Costs: The reduction of the number of tractor trailers on the highways will result in savings of tax dollars used to maintain public roads and bridges over the service life of the project.
2. Highway Congestion Avoidance: A reduction in the number of tractor trailers on New York State Highways will also result in more lane availability and space for motorists and a reduction of congestion.
3. Improved Highway Safety: By reducing the number of tractor trailer traveling on New York State Highways, it is anticipated that there will be a corresponding reduction in the number of accidents with motorists.
4. Noise Pollution Reduction: By reducing the number of tractor trailers on New York Highways, the CNYIP Project will result in a saving to taxpayers through the avoidance of construction noise mitigation structures.
5. Emission Reduction: By reducing the number of tractor trailers on New York State Highways, an avoided emission amount of 1,291 tons of Carbon Dioxide (CO_2) will be realized in the first year with a total of 28,368 tons of avoided CO_2 over the service life of the project.
6. Fuel Efficiency: Data suggests that rail transportation is approximately four (4) times more efficient than tractor trailers. The conversion to rail achieved by the CNYIP Project will result in a savings of 92,625 gallons of diesel fuel in the first year of the project.

Another major benefit is the potential to reduce pricing through the formation of buying groups. Once a large amount of product is being aggregated for export, a buying group can be formed to work with the major freight companies and syndicates to lower pricing for the exporters in the CNY region. The more product that is aggregated, the more cooperative buying power and influence the buying group will have.

3Gi CNYIP, Inc. commissioned an independent market analysis in July 2012 of CNY importers and exporters to determine the economic benefits for businesses. The data collected includes the following:

- 80% indicated the CNYIP would have a moderate to significant positive impact on their business.
- 53% indicated the increased availability of empty containers and more cost-effective shipping options would have a moderate to significant impact on their export potential.
- 73% indicated that the CNYIP would have moderate to significant job growth and/or retention potential on New York State businesses that import or export.
- 93% indicated they thought the CNYIP would have a moderate to significant positive impact on businesses overall in New York State.

In 2014 and 2015, an additional analysis was conducted by 3Gi CNYIP, Inc. at the request of CSX, to identify importers and exporters in a 50-mile radius. This was done to identify where importers and exporters would match up (by zip code) for container maximization. A total of 176 importers and exporters as well as 35 trade associations were directly visited for input on their actual container volume currently being transported by truck. This sampling alone, tallied up over 20,000 containers being trucked that could convert to rail transportation, saving costs, vehicle miles traveled, and CO_2 reduction. Many of these businesses indicated that transportation costs were a significant cost of sales and consideration in their growth potential as well as retaining their business in NYS.

2.0 ENVIRONMENTAL CONSIDERATIONS

2.1 IMPACT ON LAND

The proposed project will involve the addition of several acres of impervious area over multiple phases. The impervious area will consist of asphalt pavement, warehouse building area, and crushed stone container pads. The land being developed is at a fairly consistent slope and grass/shrub land cover. The involved construction for the proposed action will not be on slopes of 15% or greater and will not be on land where bedrock is exposed. Through all three of the phases, there will not be more than a 1,000 tons of natural material excavated and removed. This proposed action will not cause increases in erosion around the disturbed area and is not located within a Coastal Erosion hazard area.

2.1.a VEGETATION

A majority of the land being developed was previously cleared of all trees as fallow agricultural land and now has a consistent grass cover throughout. A majority of the development will not disturb large amounts of vegetation; however, the access roads into the site from Fremont Road and from Girden Road will involve the clearing of some forested area. These two access roads will also require permitting for the disturbance of land within the 100-year floodplain and DEC freshwater wetlands.

2.1.b SOILS

A majority of the soils found on the project site are classified in the NRCS Soil Map as Niagara silt loam, which is in hydrologic soil group C/D. This indicates that the soils present on site are poorly drained if undeveloped. The NRCS Soil map can be viewed in Appendix E.

2.1.c GROUNDWATER

The impact on groundwater for this project will be negligible. All improvements are on the surface with no planned sub-surface infrastructure for the development. Boring tests have not been performed to determine the average depth to groundwater across the site. This project will not result in new or additional use of ground water, or have the potential to introduce contaminates to the groundwater.

2.2 IMPACT ON GEOLOGIC FEATURES

The proposed action will not result in any modifications or destruction of, or inhibit access to, any unique or unusual land forms. No geologic features are located on the project site.

2.3 IMPACT ON SURFACE WATER

There are no open surface waters located on the project site. The closest water body in proximity to the property is Butternut Creek, which is located on the west side of Girden Road. There are currently no plans to develop on the west side of Girden Road; therefore the project will not impact any surface waters.

2.3.a FRESHWATER WETLANDS

Freshwater wetlands are located on the western portion of the project site to the immediate east of Girden Road. A Wetland Delineation/Determination Report was prepared in November of 2015 to analyze the types of wetlands present and the extents of their boundaries within the subject site. It was concluded that a wetland/upland woodland complex exists on-site which was confirmed via field work after having been initially identified in the NYSDEC and National Wetlands Inventory Maps. The exact boundaries of the wetland can be viewed in Appendix C**.** The impact to the on-site wetlands will be minimal. Perm Road 1 and Perm Road 2 will both require several smaller wetland crossings. The permitting and location of these crossings will be coordinated with the NYSDEC.

2.3.b SOIL EROSION

The soils identified on site, Niagara silt loam, has an erosion factor (k) of 0.49, giving it an above average susceptibility of sheet and rill erosion if left exposed. However, the development of this site is on a relatively flat

area with no steep slopes and no large lawn areas that would be left disturbed for long periods of time. An effective erosion and sediment control plan would minimize any potential for above average erosion on site.

2.4 IMPACT ON FLOODING

The northwestern portion of the site is located within the 100-year floodplain according to the National Flood Hazard mapping by FEMA. The only portion of the development which is located in the 100-year floodplain is the access road which connects to Girden Road. A large portion of the site is located within the 500-year floodplain, giving a 0.2% chance of flooding, which does not warrant mitigation through compensatory volume. The floodplain map can be viewed in Appendix F.

2.5 IMPACT ON AIR

The development will have a negligible effect on air quality surrounding the site. The only source of emissions on-site will be from the truck traffic through the project site. On a large scale, the increase in shipments by rail will decrease the number of tractor-trailers utilized for cargo transport, and will have a positive effect on overall air quality via a reduction in greenhouse gas emissions.

2.6 IMPACT ON PLANTS & ANIMALS

In the area of the proposed action, the Northern Long-Eared Bat is known to inhabit forested ecosystems. Coordination will need to be done with the NYSDEC to ensure that any tree clearing that will be performed for the construction of the access roads will be done at the correct time of the year so as to not disturb any potential hibernacula.

2.7 IMPACT ON AGRICULTURAL RESOURCES

There is no impact on any agricultural resources in the proposed area. The proposed site is not an active agricultural field and is not a designated agricultural soil region.

2.8 IMPACT ON AESTHETIC RESOURCES

There are no aesthetic resources located on the project site.

2.9 IMPACT ON HISTORIC AND ARCHEOLOGICAL RESOURCES

The proposed action does not occur in or adjacent to a historic or archaeological resource.

2.10 IMPACT ON OPEN SPACE & RECREATION

The development of this project will not result in the loss of recreational opportunities or a reduction of open space resources as designated in any adopted municipal open space plan.

2.11 IMPACT ON CRITICAL ENVIRONMENTAL AREAS

The proposed action is not located within or adjacent to a critical environmental area.

2.12 IMPACT ON TRANSPORTATION

Initially, the site will be accessed via Temp Road 1 off of Fremont Road. At the commencement of Phase 2, a main access to the site will be developed off of Girden Road on the south side of Kirkville Road (either Perm Road 1 or Perm Road 2). A traffic impact study has been compiled for the potential traffic volume accessing the site to and from Girden Road off of Kirkville Road. It was concluded that the proposed development will be a minor traffic generator with less than 20 total vehicles entering or exiting during each peak hour. A detailed analysis of the trip generation estimate and distribution can be viewed in Appendix D.

2.13 IMPACT ON ENERGY

The proposed action will have a small increase in the use of energy. The main source of energy usage will be from the proposed refrigerated storage warehousing. Additionally, the warehouse buildings and access drives will require necessary pole-mounted and building-mounted site lighting. This will not require a new or upgraded substation and does not require an extension of an energy transmission or supply system. This will not utilize more than 2.5 MWhrs per year of electricity.

2.14 IMPACT ON NOISE, ODOR & LIGHT

The proposed action will not result in an increase in sounds or odors, but there will be an increase in outdoor lighting once the project is completed. The foot-candles of the proposed site lighting will not shed onto adjacent properties and will not create sky-glow brighter than existing area conditions; all proposed lighting will be dark-sky compliant.

2.15 IMPACT ON HUMAN HEALTH

There will be no impact to human health and will not create any exposure to any sources of contamination.

2.16 CONSISTENCY WITH COMMUNITY PLANS

The subject property is currently within an agricultural zoning district. This will need to be changed to an industrial zone to allow for the construction and operation of warehousing. Being that the property is directly adjacent to the CSX rail yard and also that the warehousing being proposed will likely store a large amount of agricultural products, the development of this property into an inland port seems like a very logical step.

2.17 CONSISTENCY WITH COMMUNITY CHARACTER

Given the surrounding land usage and the immediate proximity to the CSX rail yard and train tracks, the development of this property into an inland port makes sense from a community character standpoint.

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APPENDIX A
SITE PLANS

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APPENDIX B
SHORT ENVIRONMENTAL ASSESSMENT FORM

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Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. 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.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:
3Gi - Central New York Inland Port

Project Location (describe, and attach a location map):
Town of Manlius - Industrial corridor adjacent to the CSX Dewitt train yard

Brief Description of Proposed Action:
The project will involve the zone change of three properties adjacent to the CSX rail yard. The construction includes a 2-acre gravel container pooling yard and a 'short term' access road off of Fremont Road to the containment yard. This will also include the construction of a +/- 700 SF modular office building and a truck scale for cargo monitoring.

Name of Applicant or Sponsor:	Telephone: 315-269-7767
3Gi-CNYIP (Contact: Chris Beck)	E-Mail: ebeck@synapsellc.com

Address:
360 Erie Blvd East

City/PO:	State:	Zip Code:
Syracuse	NY	13202

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Zone Change - Town Board of Manlius, Site Plan Approval - Manlius Planning Board, Wetland Crossing Permit - DEC, SOCPA Approval	☐	☑

3. a. Total acreage of the site of the proposed action? 92 acres
   b. Total acreage to be physically disturbed? 3.5 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 92 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☑ Rural (non-agriculture) ☑ Industrial ☐ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations? (w/ proposed zone change to industrial)	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☑

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☑	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☑	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	☑	☐

	NO	YES
12. a. 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?	☑	☐
b. 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?	☑	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☑
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ 0.3 acre impact to jurisdictional wetland to create access to Fremont Road.		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☑ Forest ☑ Agricultural/grasslands ☐ Early mid-successional

☑ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☐	☑
16. Is the project site located in the 100-year flood plan? overall project site is within 100yr flood Phase 1 project area is outside	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: Mitigated stormwater runoff will discharge to existing wetland at rates less than existing conditions	☑	☐
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: MATTHEW R NAPIERALA P.E ENGINEER AGENT FOR OWNER Date: 17 DECEMBER 2019

Signature: [signature] Title: MANAGING ENGINEER

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APPENDIX C
WETLAND DELINEATION/DETERMINATION REPORT

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The Central New York Inland Port

Wetland Delineation/Determination Report for the Central New York Inland Port Dewitt/Manlius

November 30th, 2015

(AES Project #15-0277)

Prepared by:
John L. Larson, Ph. D.
Applied Ecological Services, Inc.
17921 Smith Road
Brodhead, WI 53520
(608) 897 - 8641

Submitted to:
CNYIP, Inc
360 Erie BLVB. E.
Syracuse, NY 13202

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WETLAND DELINEATION/DETERMINATION REPORT

1.0 INTRODUCTION

Applied Ecological Services, Inc. (AES) staff conducted a wetland delineation/determination on approximately 90 acres of land on September 22 and 23, 2015. The site is located at 43.07586 North latitude and 76.03483 West longitude in Syracuse, New York (Figure 1). This report locates a large forested wetland complex in the western side of the parcel, a smaller forested wetland complex on the east side of the parcel and what has been determined to be interior fallow agricultural field wetlands. The delineation is based on AES' best professional judgment and our understanding and interpretation of the *Corps of Engineers Wetland Delineation Manual* (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (2012). No data points were collected in the fallow fields, but vegetation conditions suggests most of the fallow agricultural field areas will meet the definition of wetland. The lead investigator, Dr. John L. Larson has a Ph.D degree in biology with emphasis on wetlands ecology and has conducted over 300 wetland delineations in the past 25 years Dr. Larson also has taken 2 day and 5 day wetland delineating/training courses and is a Certified Wetland Specialist (CWS) in Lake County, Illinois. Ben Zimmerman and Mike McGraw as well as other AES staff assisted in the wetland delineation.

2.0 REGULATORY DEFINITIONS

Waters of the United States

"Waters of the United States" (WOTUS) are within the jurisdiction of the U.S. Army Corps of Engineers under the Clean Water Act, 1972. WOTUS is a broad term that includes territorial seas or waters that are used or could be used for interstate commerce. The WOTUS designation includes wetlands, ponds, lakes, rivers, tributary streams (including intermittent streams), mud flats, sloughs, and wet meadows. A "Traditional Navigable Water" (TNW) is a navigable water of the U.S. subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce (33 CFR 329.4). According to the June 5, 2007, Rapanos guidance document, a "tributary" is a natural, man-altered, or man-made water body that carries flow directly or indirectly into TNW. The Rapanos document further defines a "Relatively Permanent Water" (RPW) as a water body (i.e. tributary) with year round flow or at least seasonally (e.g. typically 3 months) continuous flow. A non-RPW is a water body (i.e. tributary) that does not have seasonally continuous flow. Easily traceable underground connections such as drain tiles and pipes can serve as sufficient hydrologic connections for a body of water to be considered a tributary to a WOTUS. A specific, detailed definition of WOTUS can be found in the Federal Register (33 CFR 328.3).

Wetlands

Wetlands are 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. A wetland type that can sometimes be problematic is Farmed Wetlands (FW), and another wetland type that may or may not be regulated by Federal, State, or local Government Agencies are Isolated Wetlands.

Farmed Wetlands (FW) are a type of jurisdictional wetlands that were drained, dredged, filled, leveled, or otherwise manipulated before December 23, 1985, to make production of an agricultural commodity possible, but are often wet enough to still be valuable wetland habitat subject to Swampbuster and Clean Water Act Section 404, 1985. Farmed wetland determinations use the procedures outlined in the National Food Security Act Manual (NFSAM) and are similar to the 1987 Corps Wetland Delineation Manual methodology for atypical wetlands.

Isolated Wetlands are a type of wetlands that generally have no surface water connections to other aquatic resources and are not regulated by the U.S. Army Corps of Engineers Clean Water Act Section 404. The USACE typically considers isolated wetlands to be those of any size that are not adjacent to or do not have a sufficient hydrologic connection to navigable waters.

The *Corps of Engineers Wetland Delineation Manual* (1987) identifies the mandatory technical criteria for wetland identification. The use of this manual along with the use of USGS Topographic Maps, National Wetlands Inventory Maps, NRCS Soil Survey Maps, aerial photos of the site, and climate data are typically used as part of the offsite analysis The three essential characteristics of a jurisdictional wetland in both the 1987 Corps Wetland Delineation Manual and the recent supplements are hydrophytic vegetation, wetland hydrology, and hydric soils.

Vegetation

The hydrophytic vegetation criteria for wetland classification are met when greater than 50% of the dominant plant species are hydrophytes (Lichvar et al. 2014). The indicator status of plant species is expressed in terms of the estimated probabilities of that species occurring in wetland conditions within a given region. Hydrophytes include all plants classified as "FAC", "FACW" or "OBL." The indicator categories as defined by the Corps are outlined below.

Obligate Wetland (OBL) – Almost always occurs under natural conditions in wetlands.

Facultative Wetland (FACW) – Usually occurs in wetlands, but occasionally found in non-wetlands.

Facultative (FAC) - Equally occurs in wetland and non-wetland.

Facultative Upland (FACU) – Usually occurs in non-wetlands, but occasionally found in wetlands.

Obligate Upland (UPL) – Almost always occurs in uplands.

Hydrology

In order for an area to have wetland hydrology, it must exhibit one or more "primary indicators" and/or two or more "secondary indicators" for Corps jurisdictional and isolated wetlands. Primary indicators include either the direct presence of water as inundation or saturation within the upper 12 inches of the soil profile, or direct evidence of recent inundation, such as water marks, drift lines, sediment deposits, or drainage patterns. Secondary indicators are conditions reflecting the presence of reducing, or anaerobic conditions produced as a consequence of saturation or inundation. Some other primary and or secondary indicators include such conditions as oxidized root channels in the upper 12 inches of the soil profile, water-stained leaves, and a positive "FAC neutral" test (i.e., the dominant vegetation is, on average, hydrophytic).

Soils

The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Nearly all hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation for more than a few days. Saturation or inundation, when combined with microbial activity in the soil, causes the depletion of oxygen. This anaerobiosis promotes certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements. These processes result in distinctive characteristics that persist in the soil during both wet and dry periods, making them particularly useful for identifying hydric soils in the field.

Some of the field indicators include dark color (low chroma), redox features, gleying and/or the presence of a sulfurous odor. Although USDA soil maps are useful for soil identification, they should be used only as general guides. Soils are evaluated directly with a soil probe or by digging a test-pit.

In this report, soil colors are described using the Munsell notation system. This method of describing soil color consists of separate notations for hue, value, and chroma that are combined in that order to form the color designation. *Hue* is the primary or secondary color of the soil (i.e. 10YR). The *value* is a measure of soil darkness. The *chroma* is a measure of soil grayness.

The symbol for *hue* consists of a number from 1 to 10, followed by the letter abbreviation of the color. Within each letter range, the hue becomes more yellow and less red as the numbers increase. The notation for *value* consists of numbers from 0 (pure black) to 5 (gray) to 10 (pure white). The notation for *chroma* consists of numbers beginning with /0 (very gray) to /8. A soil described as 10YR 3/1 has a hue of 10YR, a value of 3 and a chroma of 1.

3.0 WETLAND DETERMINATION METHODS

Map Review

Several sources of information were reviewed to evaluate the site and identify potential wetland soil units and wetlands on the parcel. The general topography and elevation of the site was reviewed using an online five foot contour map (LiDAR). Soil types were identified using the U.S Department of Agriculture Natural Resource Conservation Service (NRCS) Web Soil Survey map. Potential wetlands were identified using a *National Wetland Inventory* (NWI) NYSDEC wetland maps and previous wetland delineation wetland maps. Maps can only be used to establish the probability and approximate location of wetlands on the site; therefore, the US Army Corps of Engineers (USACE) do not accept the use of these maps to make final wetland determinations. Final wetland determinations were made with on-site observations and fieldwork. Prior to the fieldwork, background information was reviewed to establish the probability and approximate location of wetlands on the site. The following maps or photographs were reviewed offsite or onsite as part of the wetland determination.

- *Soil Survey Map* - The NRCS Web Soil Survey Map (Figure 2) identifies eight soil series within the site boundaries with five being the most abundant; Mta, Lm, Nga, Lk and Ga (A&B).

- *NWI & NYSDES Map* - The Northwest and NYSDEC Wetland Inventory Map of the area (Figure 3) shows the forested wetland along the west end of the parcel and the forested wetland on portions of the east side of the parcel.

- *Topography Map*- The five foot contour map (Figure 4) shows the general flat topography of the site, with lowest elevations on the west side and highest elevation on the east side of the parcel.

Site Investigation and Description

AES inspected the 90 acre site on September 22 and 23, 2015. The delineation of the wetlands within the site is based on the methodology described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Supplement (2012) as required by current Corps policy.

The project area was inspected with the intent of locating wetlands and determining wetland boundaries. Thirteen soil pits were dug in the western forested area. The western area is comprised of a wetland/upland wooded complex with an area of historic fill. Soil pits were dug to a sufficient depth (14-26 inches) to locate and describe the soil conditions. At each of the four soil pits a NC/NE wetland delineation data form was filled out and a determination was made for each test soil pit as to whether it

was located in a wetland or upland. The wetland boundary was flagged and GPS surveyed with a hand held Trimble unit with sub-meter accuracy. In the fallow field areas, no data points were collected as it was evident that these fields have reverted back to wetland conditions. A return visit will likely be required to further delineate and confirm wetlands in these agricultural fields. The eastern portion of the parcel also contains a wooded wetland complex, somewhat more degraded than the western woods. Historic areas of fill also occur in the eastern side of the parcel.

Site Photographs

Photographs of the site taken in 2015 are located in Exhibit 1. These photographs are the visual documentation of site conditions at the time of inspection. The photographs are intended to provide representative visual samples of soil test pits, wetlands, uplands data points, or other special features found on or near the site investigated.

Routine Wetland Delineation Data Forms

Completed Routine Wetland Delineation Data Forms- Northcentral and Northeast Region for this delineation are located in Exhibit 2. These forms are the written documentation of how the 13 Data Points meet or do not meet each of the wetland criteria.

4.0 RESULTS & DISCUSSION

Site Conditions

General

The antecedent precipitation total for the three months prior to the field delineation work (July, August and September) was 7.35 inches (Exhibit 3). The average precipitation for these three months is 11.73 inches with a 30% threshold for a "dry" condition at 8.75 inches. Thus, antecedent precipitation was outside the normal range and represented a "dry" precipitation condition at the time of the wetland field work.

The 90 acre site is comprised of a wetland/upland woodland complex on the west, a wetland woodland and fill on the east with fallow agricultural fields in the center of the parcel. The NWI and NYSDEC map identifies forested wetlands as occurring in the west and east ends of the parcel (Figure 3), which was confirmed in this field work. However, the NYSDEC wetland map did not differentiate the smaller upland knolls delineated in the western woodland complex (Figure 5). The five-foot topographic map of the area investigated shows that the parcel is essentially flat (Figure 4) with a slight gradual rise from west to east. The fallow agricultural fields represent a disturbed and problematic condition. The property's wetlands had previously been delineated by two firms and the wetland boundaries were substantially different from each other. Thus this delineation was completed to update the previous two delineation results.

Wetlands

Data Points:

Data Points 1, 3, 5, 8, 11 and 12 (Figure 5) documented the existing forested wetland condition on the west side of the parcel and had all three required indicators (vegetation, hydrology, soils). The dominant vegetation identified in the forested wetland areas was usually red maple (*Acer rubrum*), American elm (*Ulmus americana*), sensitive fern (*Onoclea sensibilis*) and calico aster (*Symphyotrichum lateriflorum*) (Exhibit 2). Examination of the soils and the test pits in the wetland found that the top layer of soil consisted of a dark colored sandy topsoil with a redox concentrations in the matrix below.

Uplands

Data Points

Upland Data Points 2, 4, 6, 7, 9, 10 & 13 (Figure 5) were sampled in upland woods within the larger wet forest community. Red maple, cherry (*Prunus serotina*) and woodbine (*Parthenocissus quinquefolia*) were the typical upland woods dominants (Exhibit 2).

5.0 SUMMARY AND CONCLUSIONS

Based on the review of soils, NWI, NYSDEC wetland maps, topography and previous delineation maps and the on-site field determination conducted on September 22 & 23 2015 it was apparent that wetlands and wetland vegetation dominant the 90 acre parcel (Figure 5). Investigations of the fallow areas in the center of the property found hydric vegetation throughout including sedges, red top grass, purple loosestrife and giant reed grass. The wetland boundary was GPS surveyed by AES. The wetlands in the fallowed farm fields likely meet the USACE definition of wetland, but will likely require confirmation during the 2016 growing season.

Literature Cited

Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. The National Wetland Plant List: 2014 update of Wetland Ratings. Phytoneuron 2014-41:1-42. Northcentral and Northeast Region

U.S. Army Corps of Engineers. 2011. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J.S. Wakeley, R. Lichvar, C.V. Noble and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

FIGURES

Figure 1. CNY Parcel Location Map

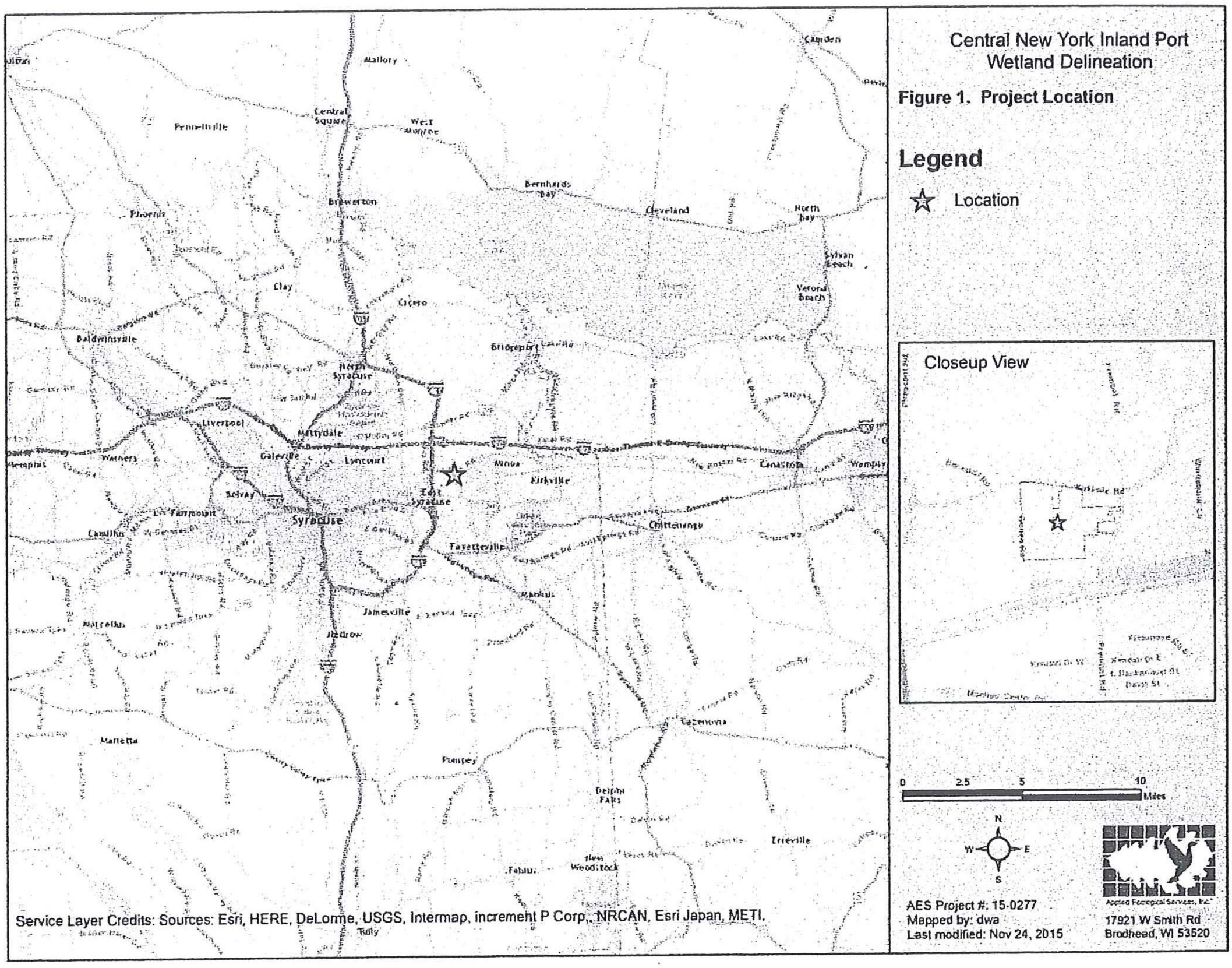


Figure 2. CNY Parcel Soils Map.

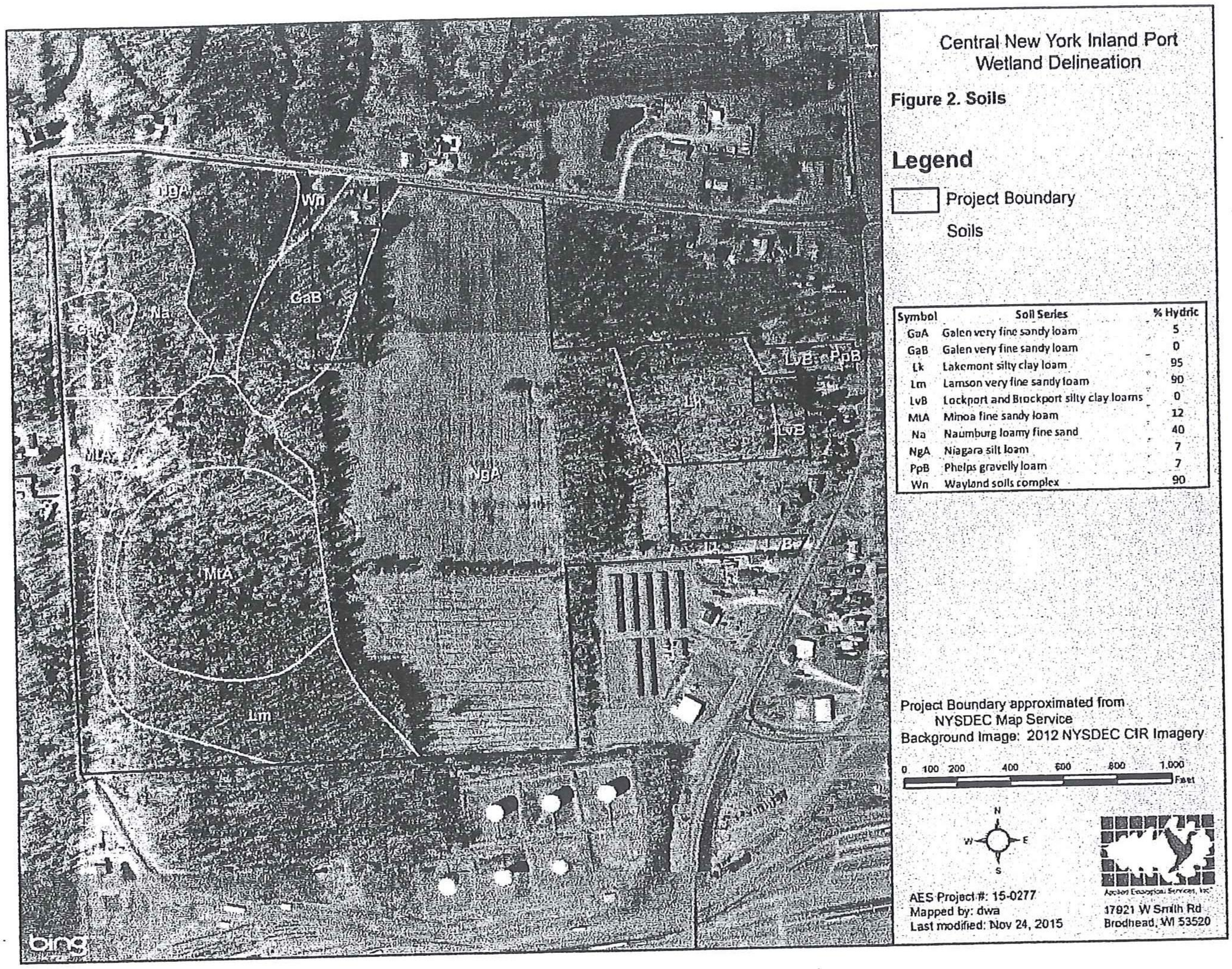


Figure 3. CNY Parcel National Wetlands and NYSDEC Inventory Map

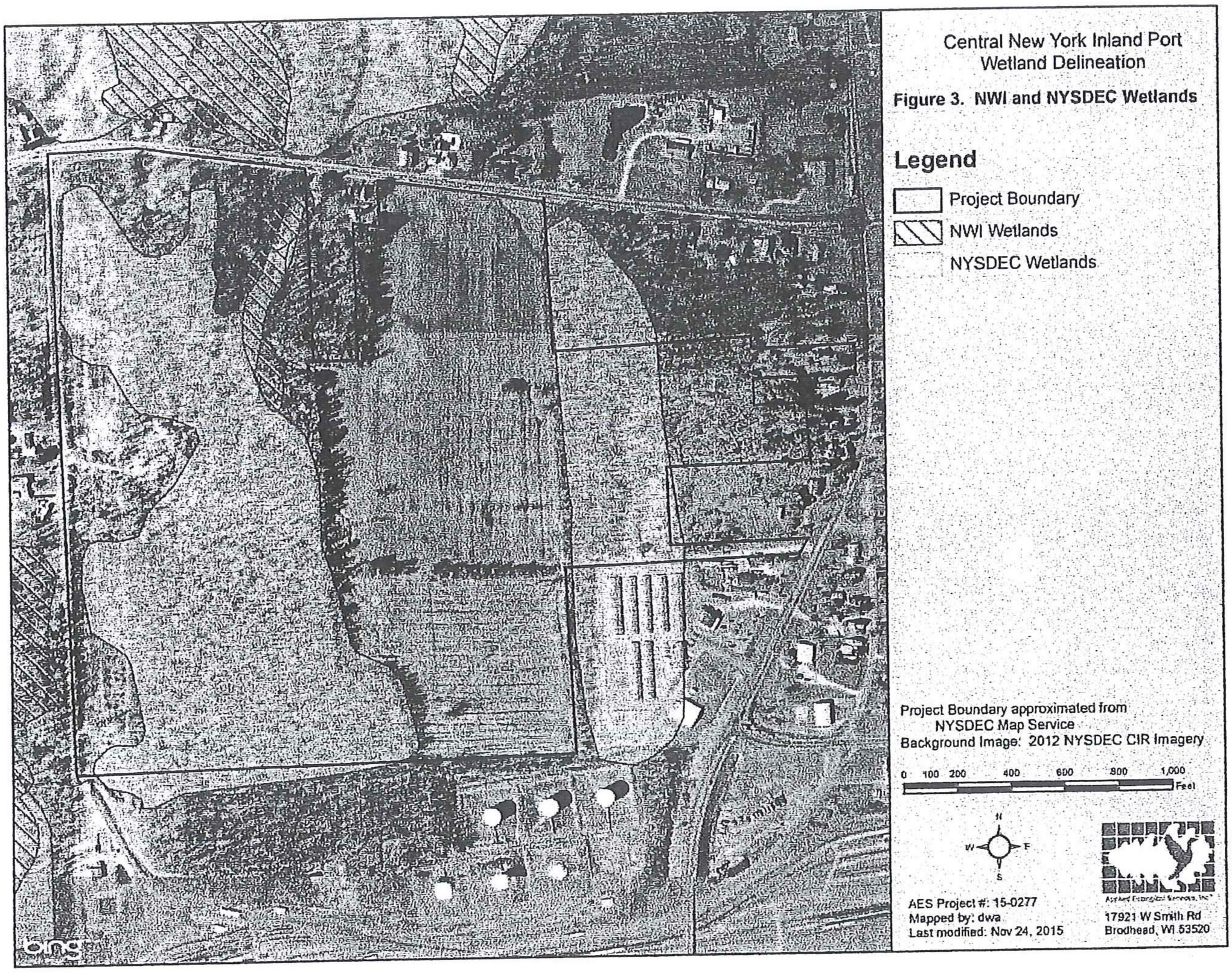


Figure 4. CNY Parcel Topography Map

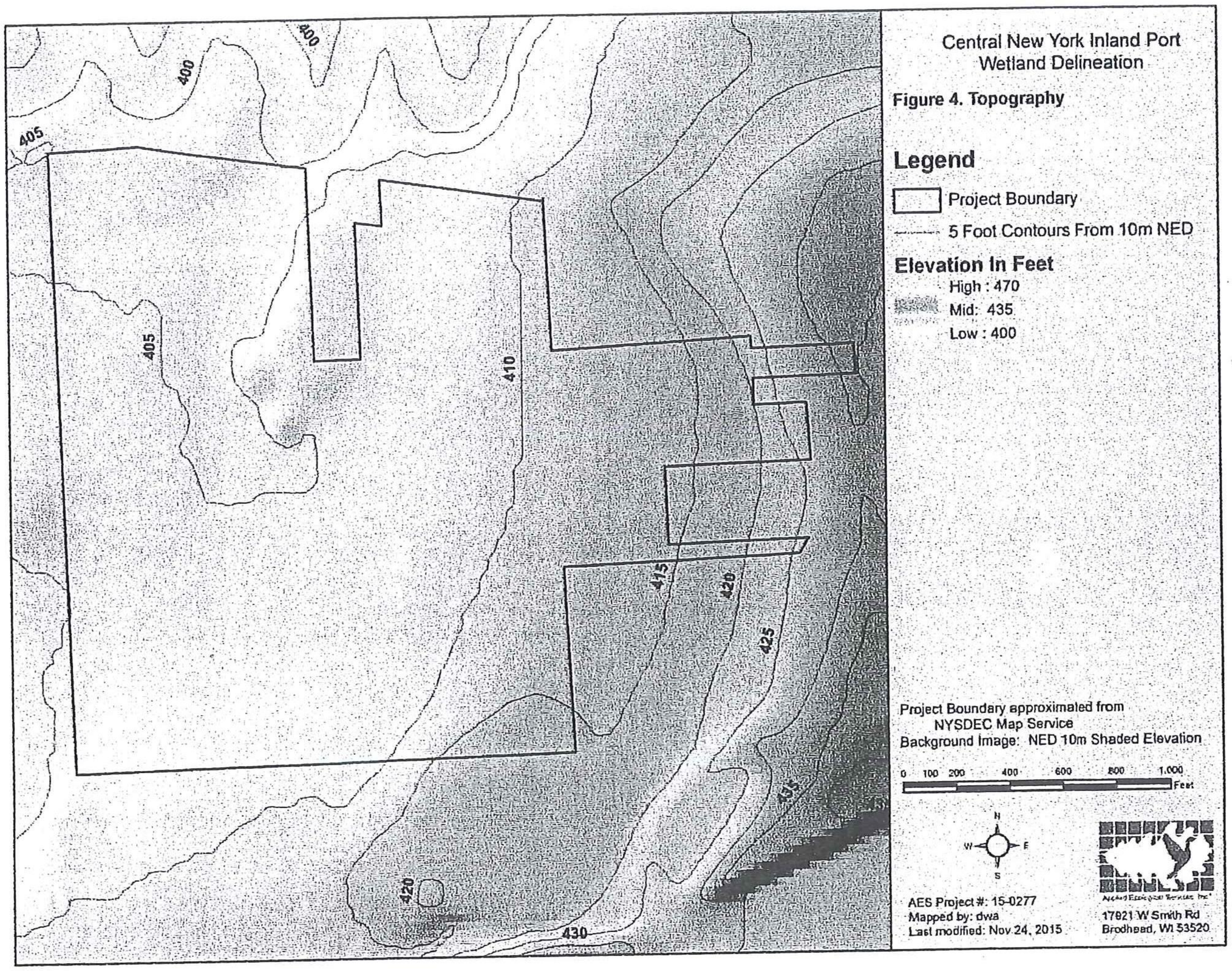
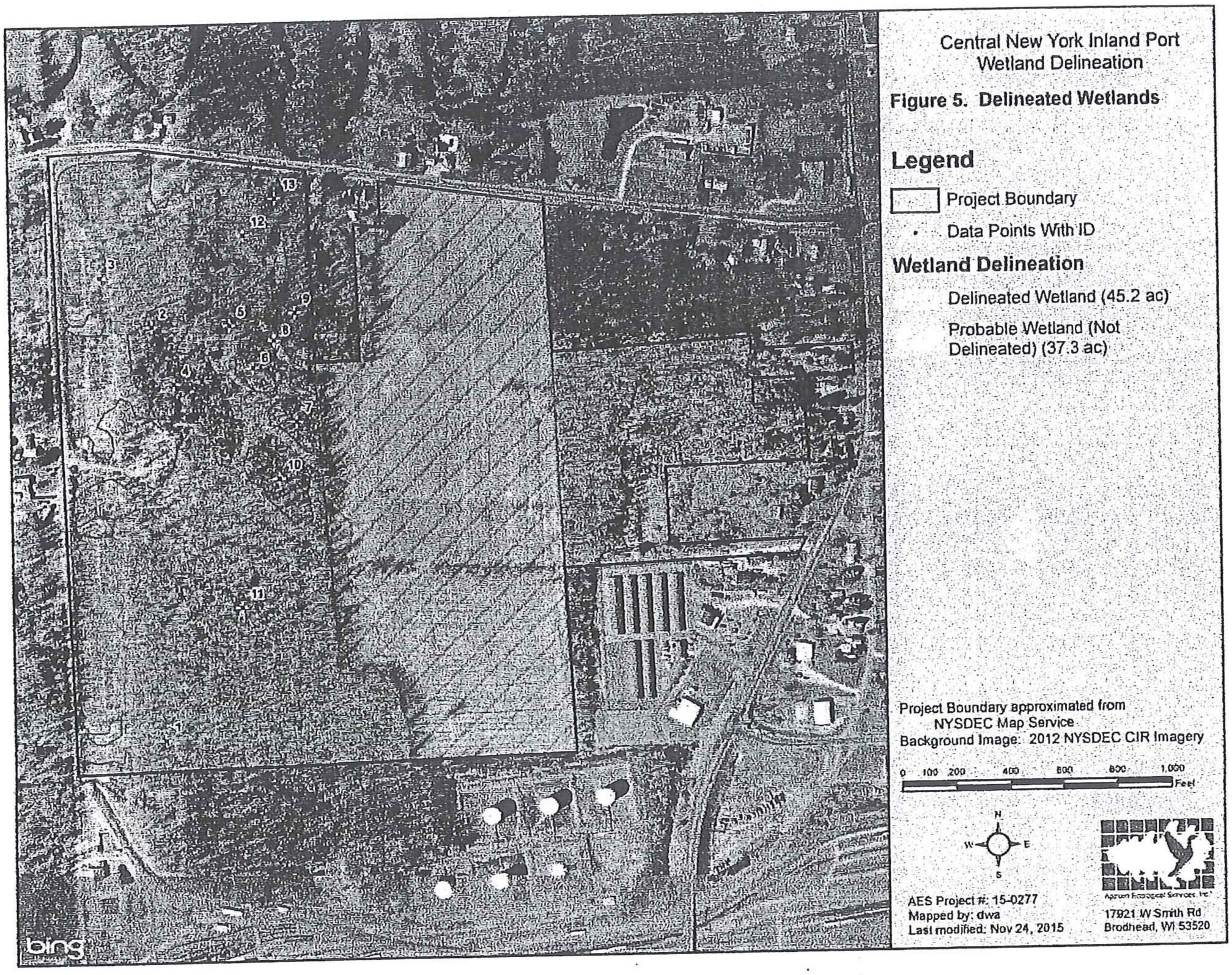


Figure 5. CNY Parcel Wetland Delineation and Wetland Determination Map



EXHIBITS

EXHIBIT 1. Site Photographs of the CNY parcel taken on September 22 and 23 , 2015.

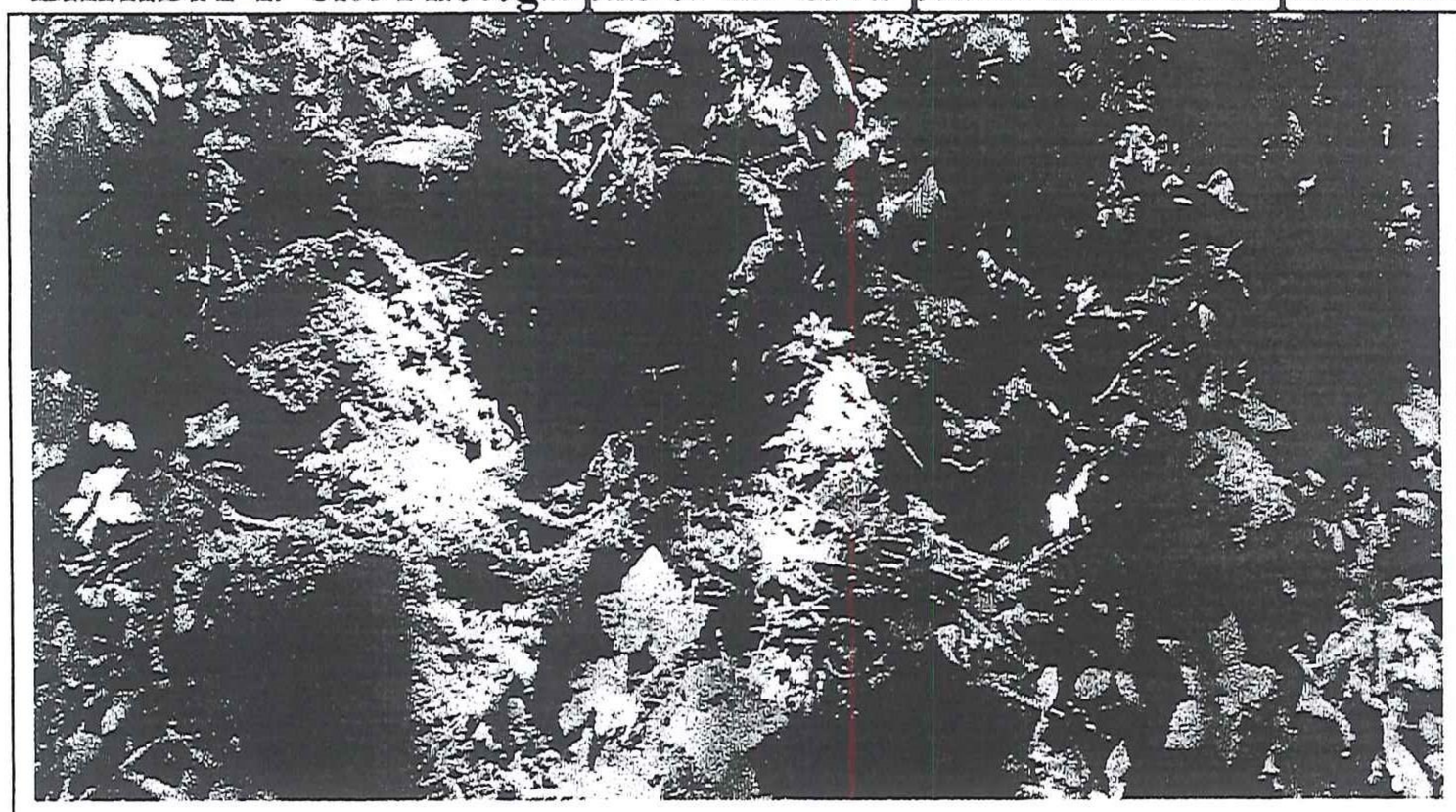


Photo 1. Wetland soils at Data Point 1.

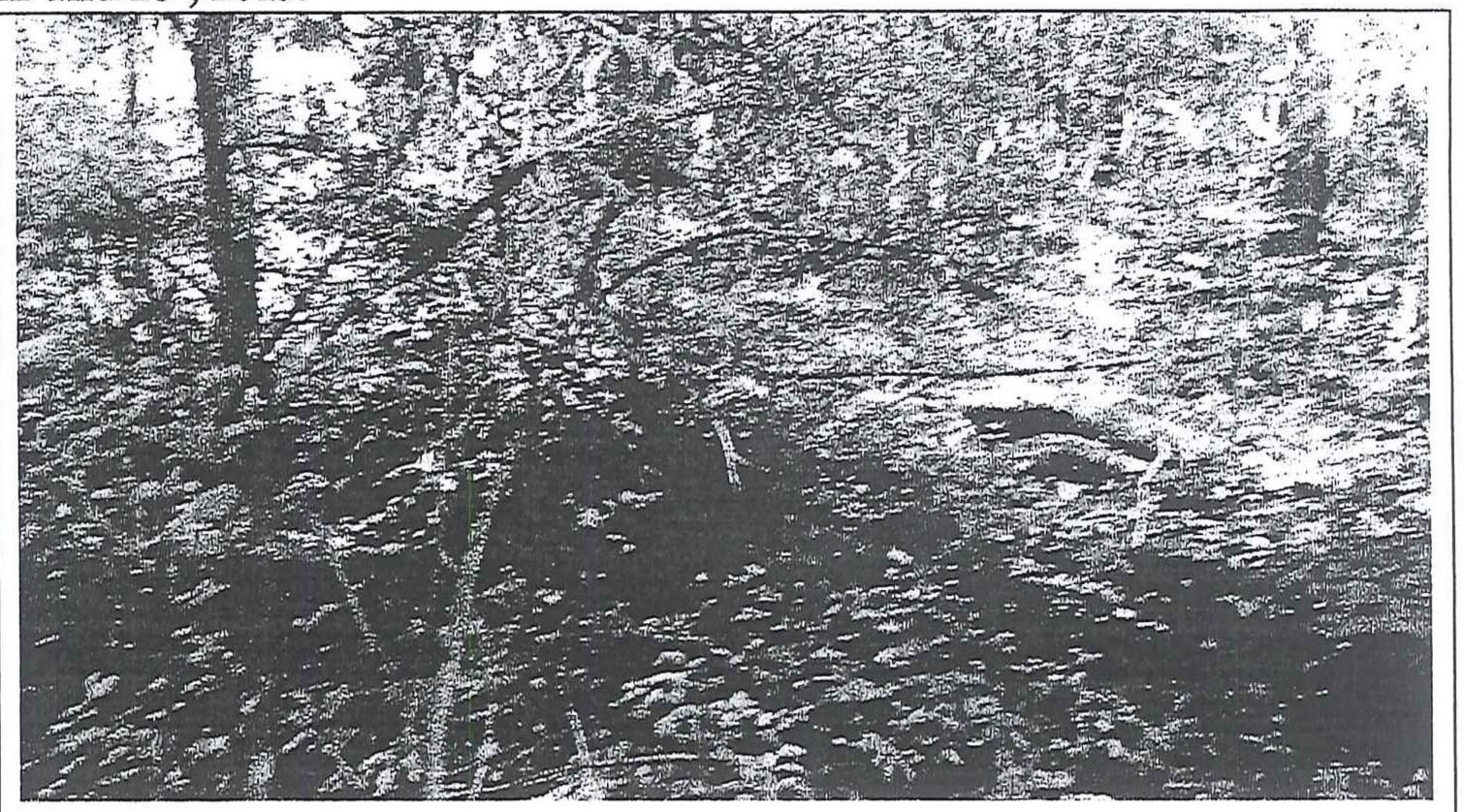


Photo 2. Wooded wetland near Data Point 1.

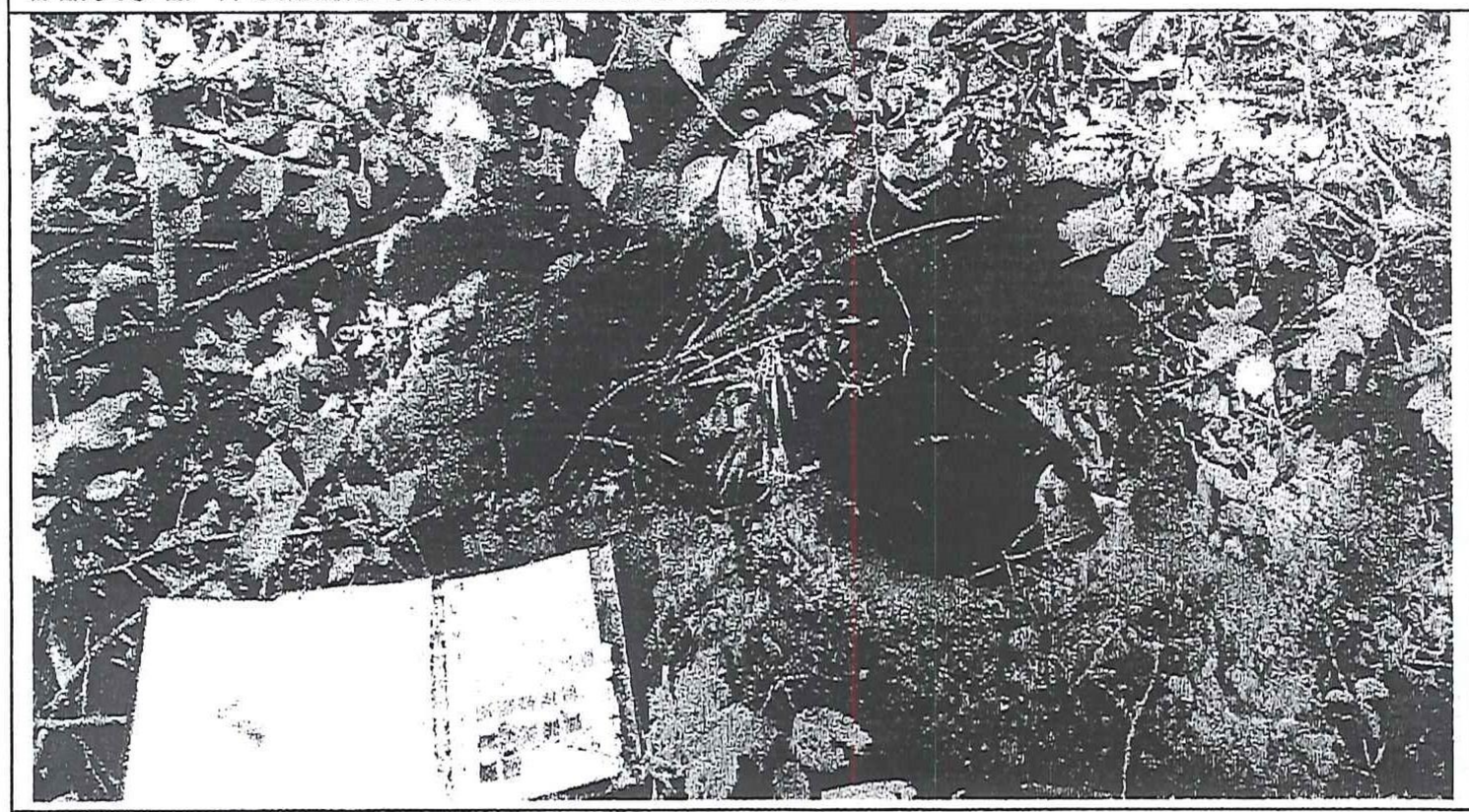


Photo 3. Upland soils at Data Point 2.

Photo 4. Upland woods at Data Point 2.

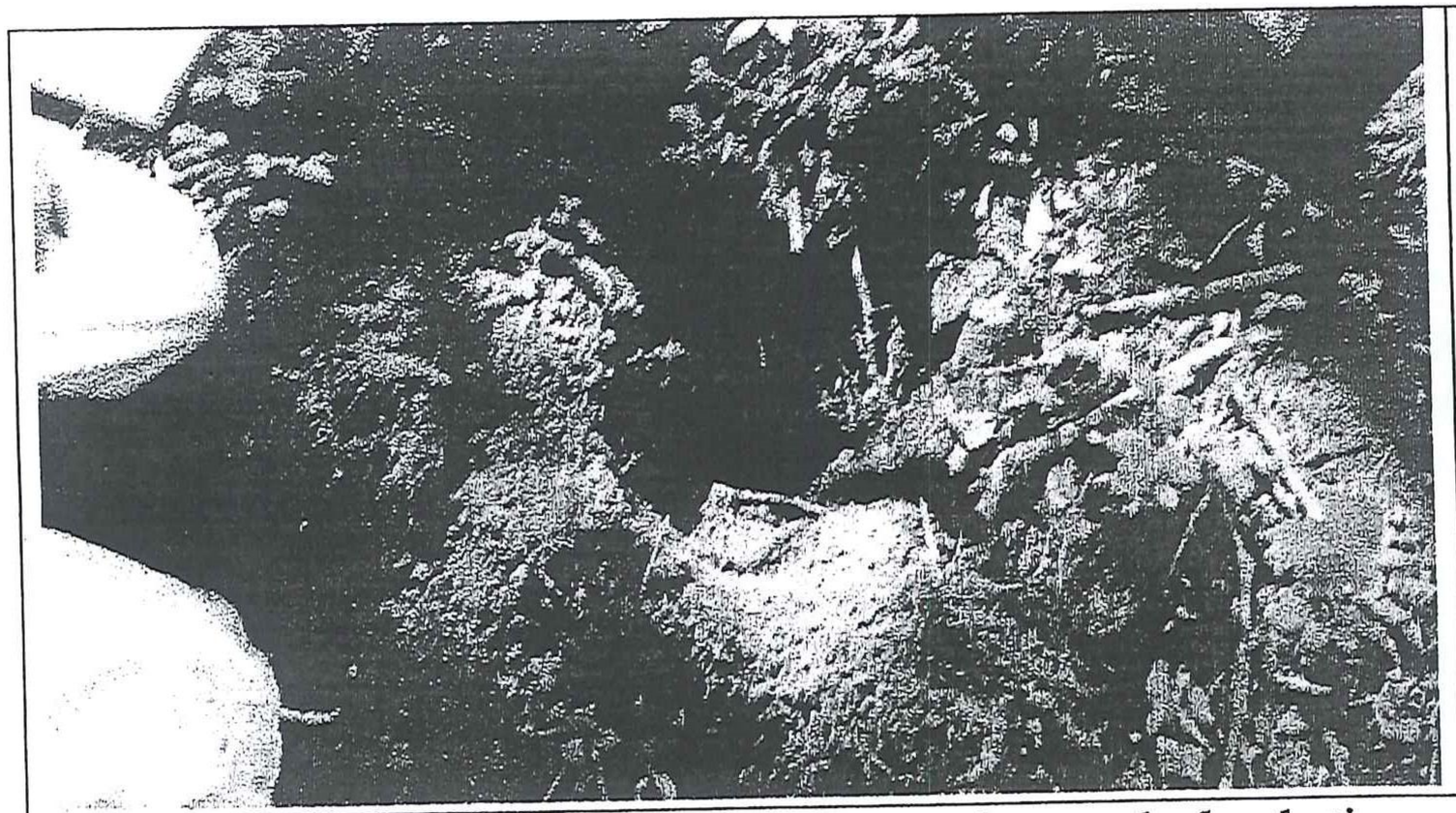


Photo 5. Upland soils at Data Point 3. Vegetation was hydrophytic

Photo 6. Forested wetland near Data Point 3

Photo 7. Wetland soils at Data Point 5

Photo 8. Forested wetland near Data Point 5

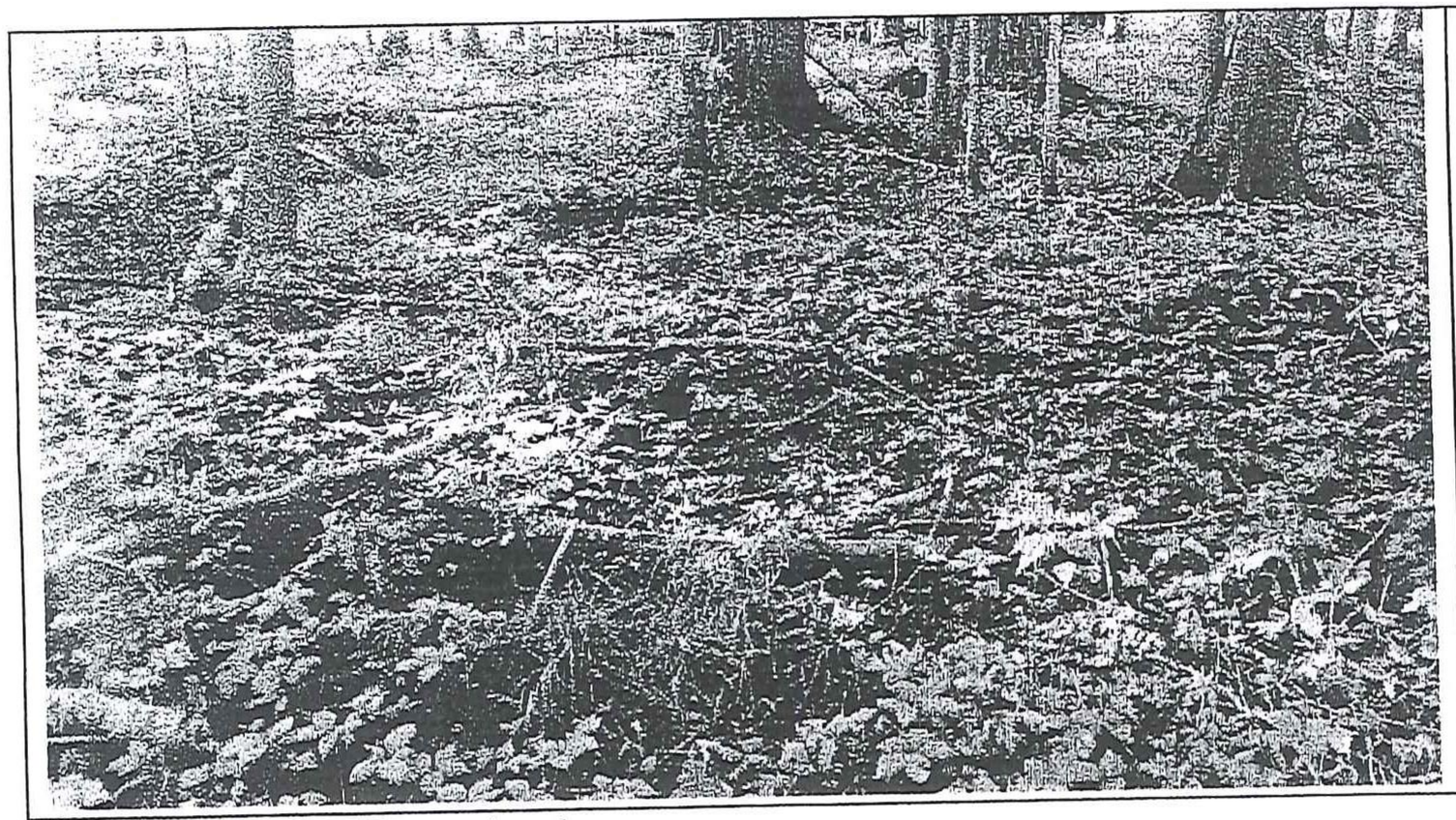


Photo 9. Forested wetland.

Photo 10. Forested wetland.

Photo 11. Forested wetland.

Photo 12. West edge of fallow field with reed canary grass and purple loosestrife.

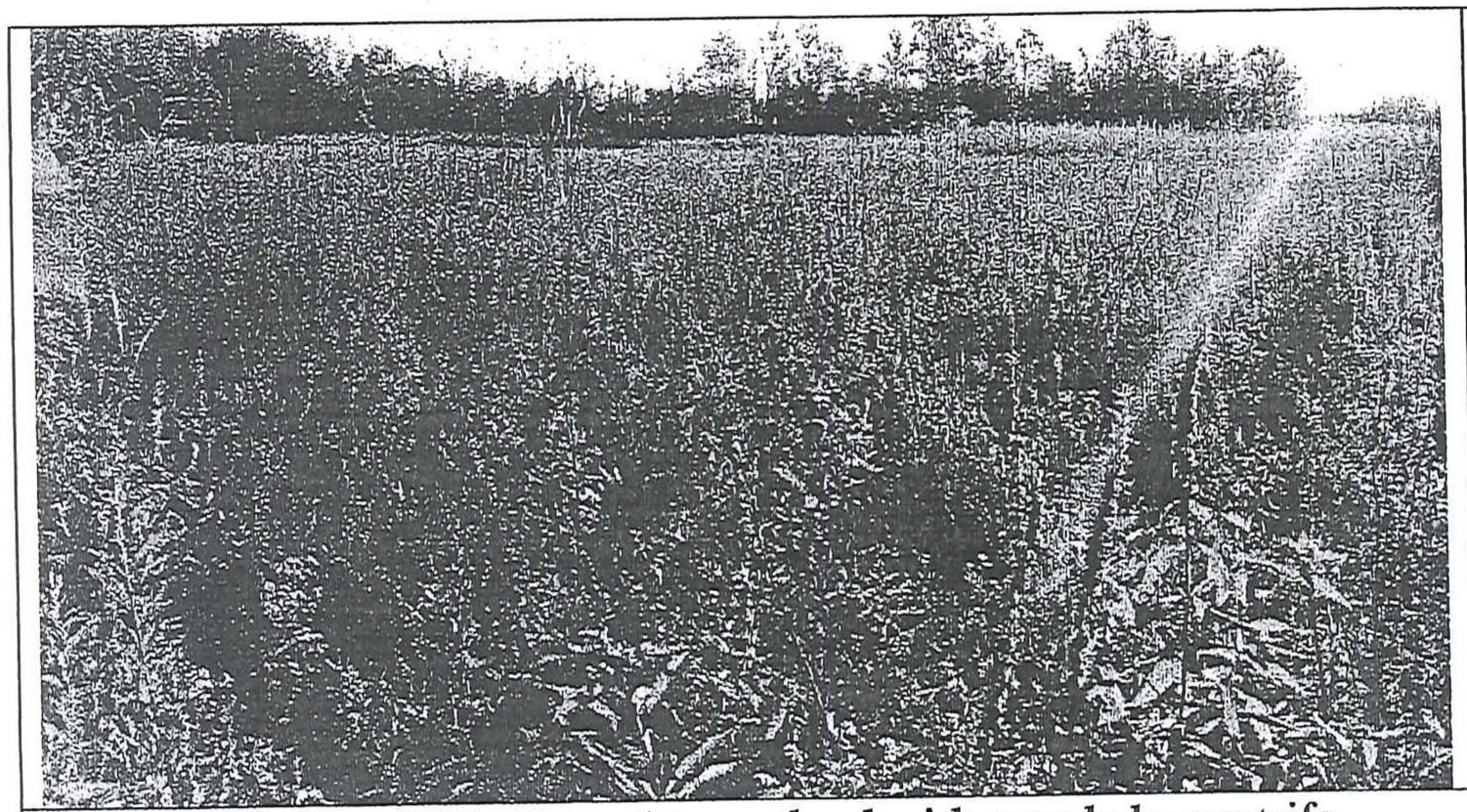


Photo 13. Fallow field reverted to wetland with purple loosestrife.

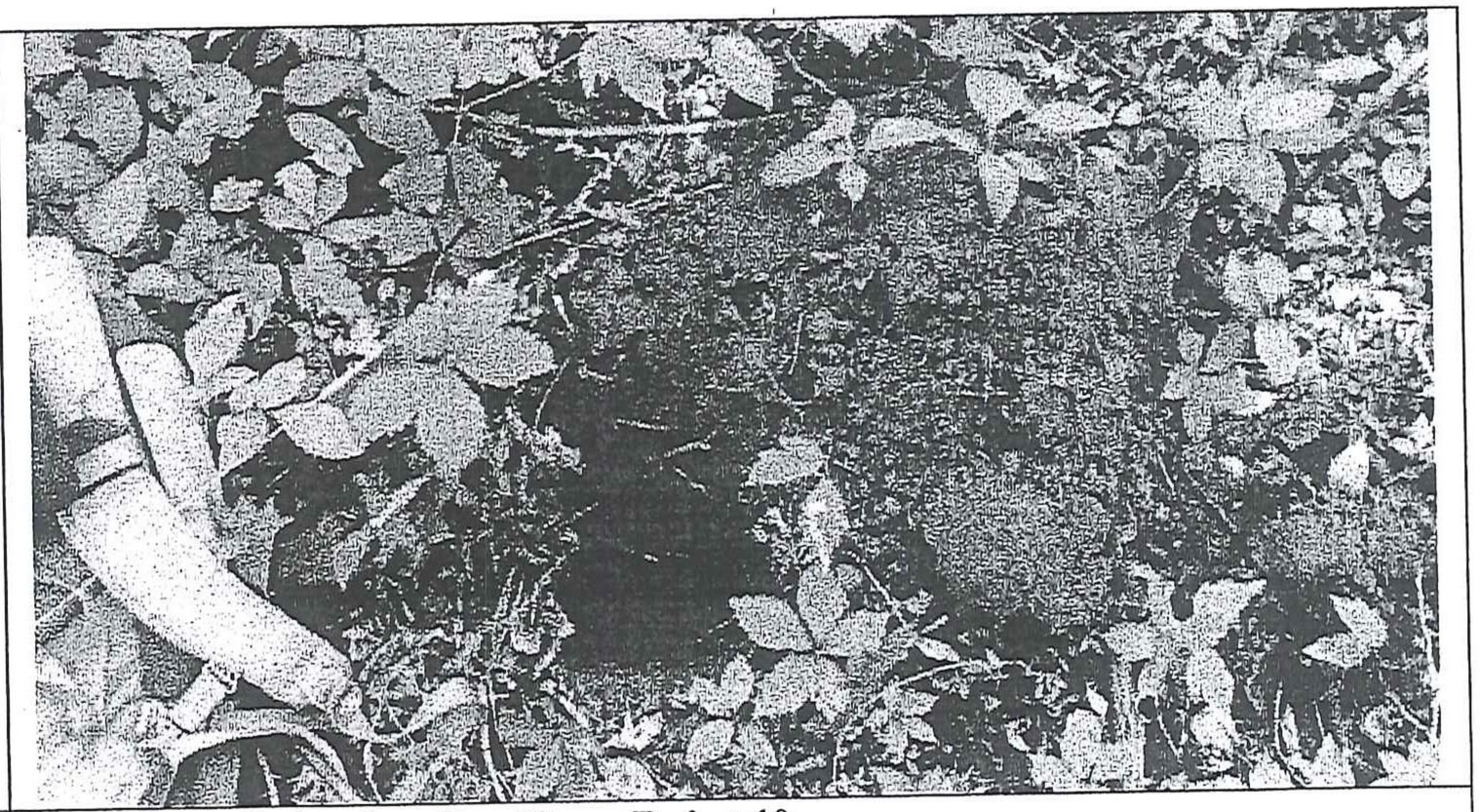


Photo 14. Upland soil at Data Point 10

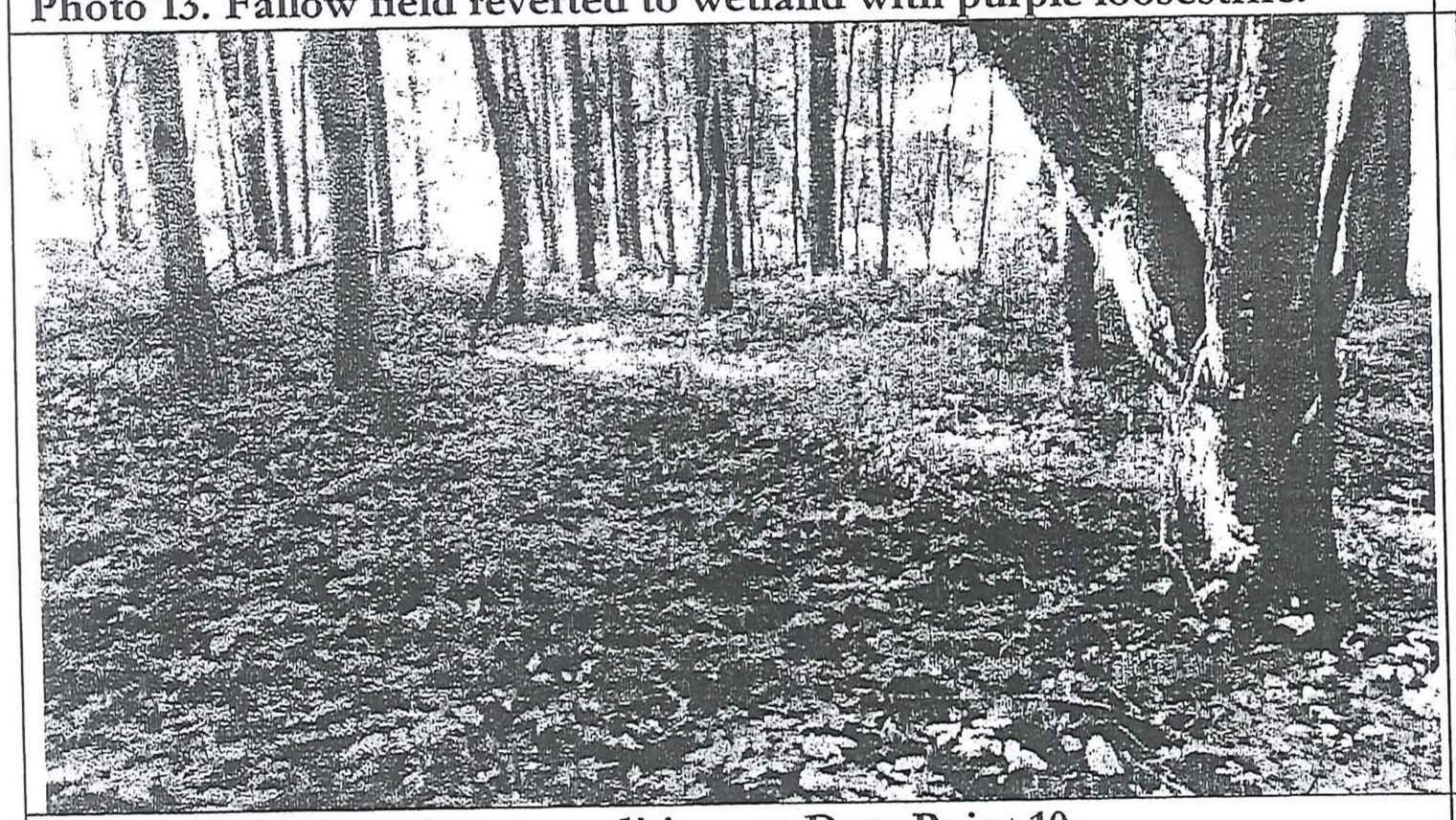


Photo 15. Upland forest conditions at Data Point 10

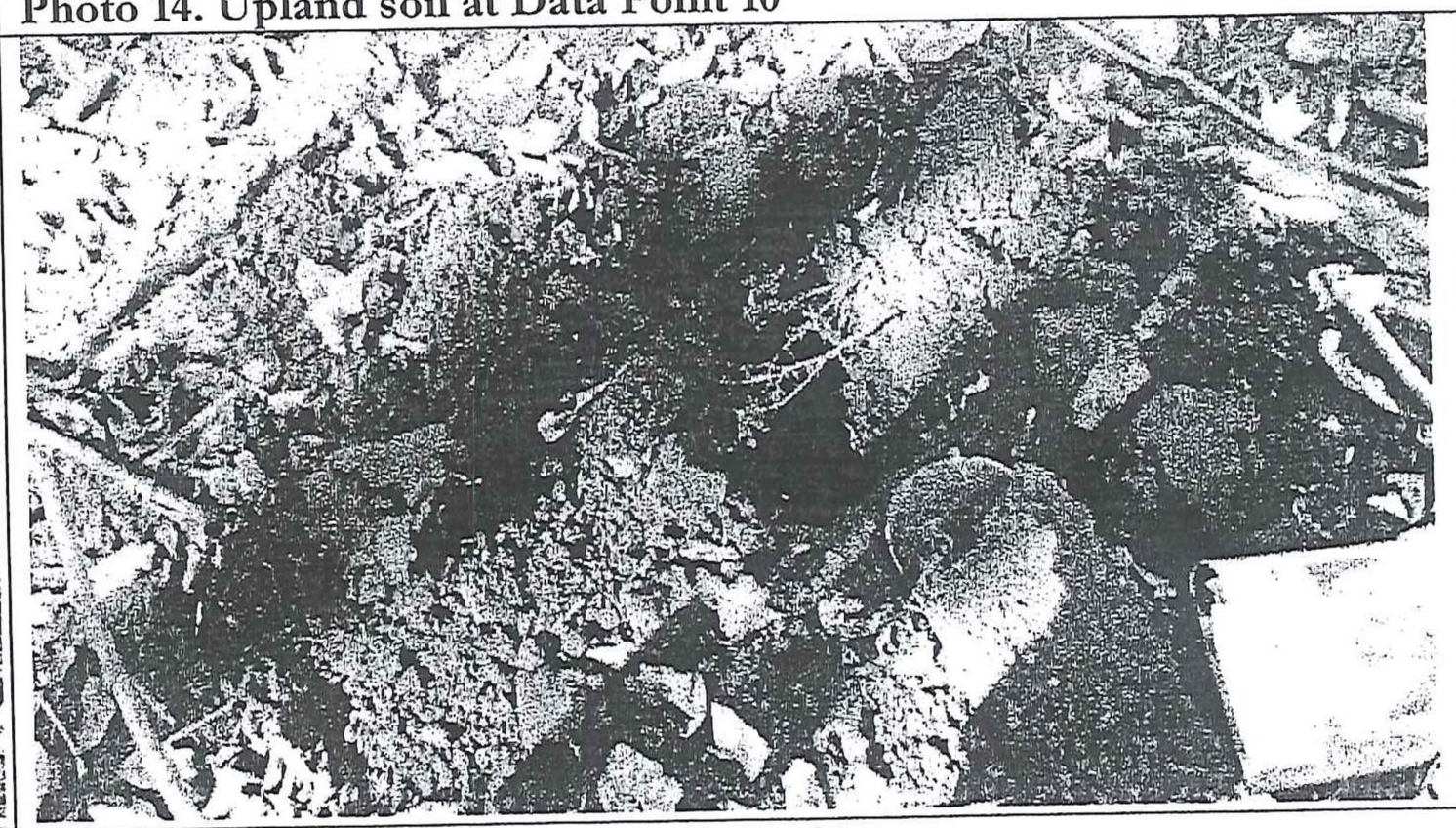


Photo 16. Wetland soils at Data Point 11

Photo 17. Wetland forest conditions near data point 11

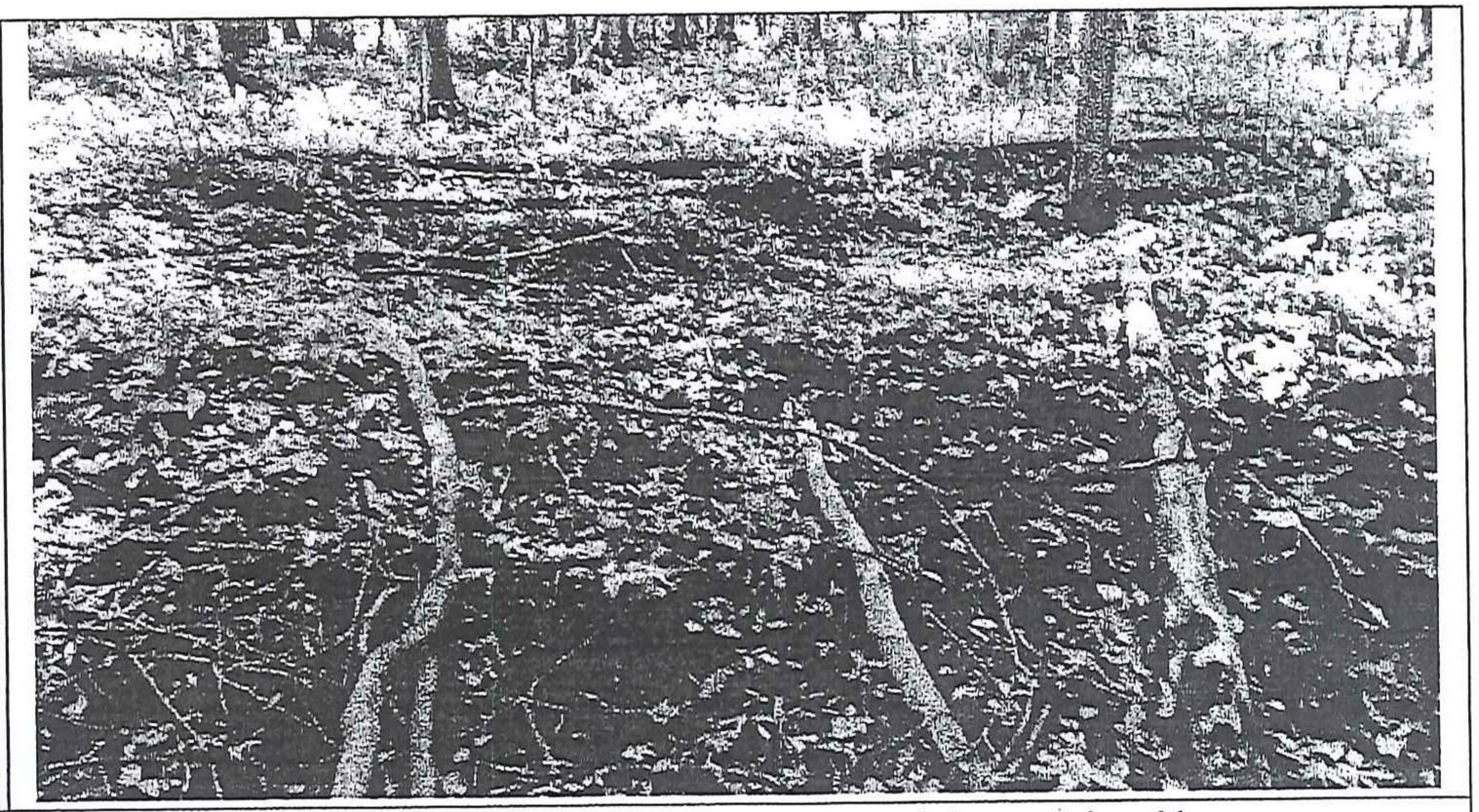


Photo 18. Forested wetland in the vicinity of data point 11.

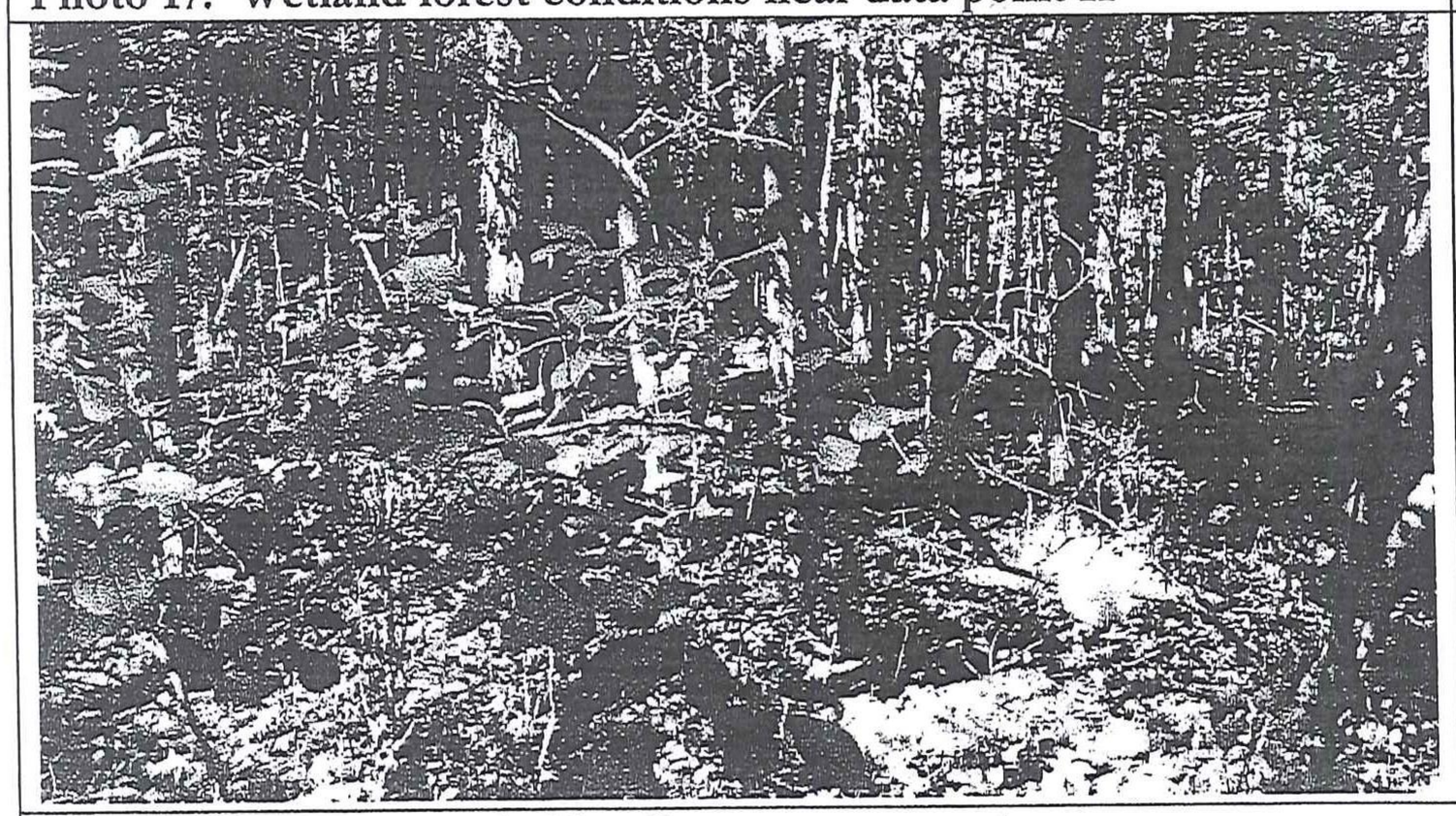


Photo 19. Upland wooded knoll

Photo 20. Young forested wetland at north end near data point 12.

Photo 21. Upland woods at north end of property near data point 13.

EXHIBIT 2. Routine Wetland Delineation Data Forms – Northcentral & Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 1
Investigator(s): JLL, SV		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none): Concave		Slope (%)
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Lamson very fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☒ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☒ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:			
Surface Water Present?	Yes ☐ No☒	Depth (inches):	Wetland Hydrology Present?
Water Table Present?	Yes☐ No☒	Depth (inches):	Yes ☒ No☐
Saturation Present? (includes capillary fringe)	Yes ☐ No☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			

Remarks:

Red maple hardwood swamp w/hummocky vegetation drainage patterns.

VEGETATION – Use scientific names of plants

Sampling Point: 1

Tree Stratum (Plot size): 15m	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Ulmus americana*	10	Yes	FACW
3. *Fraxinus pennsylvanica*	10	Yes	FACW
4.			
5.			
	45	= Total Cover	
Sapling/Shrub Stratum (Plot size): 5m			
1. *Lindera benzoin*	10	Yes	FACW
2. *Ulmus americana*	10	Yes	FACW
3. *Rhamnus cathartica*	5	No	FAC
4. *Fraxinus pennsylvanica*	2	No	FAC
5.			
	27	= Total Cover	
Herb Stratum (Plot size): 1m²			
1. *Cinna arundinacea*	3	No	FACW
2. *Polygonum virginianum*	5	No	FAC
3. *Epilobium coloratum*	2	No	OBL
4. *Geum canadense*	2	No	FAC
5. *Rhus radicans*	10	Yes	FAC
6. *Oxalis stricta*	1	No	UPL
7. *Glyceria striata*	3	No	FACW
8. *Ribes americanum*	5	No	FACW
9. *Symphyotrichum lateriflorum*	2	No	FACW
10. *Rhamnus cathartica*	2	No	FAC
11. *Onoclea sensibilis*	2	No	FACW
Total	37	= Total Cover	
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total number of dominant species across all strata: 6 (B)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Dominated by wetland plants

SOILS

Sampling Point 1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]		
0-12	10 YR 2/1						sandy silt loam	
12-	10 YR 5/2		10 YR 5/4	10			Sandy silt loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☒ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☒ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒	No ☐
Type:		
Depth (inches):		

Remarks:

Thick dark surface in swale concave swale within wetland upland complex.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 2
Investigator(s): JLL, SV, MM		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%) Flat
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Minoa fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ 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☒

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

Remarks:

Sampling Point: 2

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Prunus serotina*	10	Yes	FACU
2. *Acer rubrum*	25	Yes	FAC
3.			
4.			
5.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Nyssa sylvatica*	15	Yes	FAC
2. *Prunus virginiana*	5	Yes	FACU
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size):			
1. *Prunus virginiana*	5	No	FACU
2. *Fraxinus pennsylvanica*	3	No	FACW
3. *Rhus radicans*	20	Yes	FAC
4. *Parthenocissus quinquefolia*	25	Yes	FACU
5. *Viburnum dentatum*	5	No	UPL
6. *Fragaria virginiana*	2	No	FAC
7. *Acer rubrum*	1	No	FAC
8. *Prunus serotina*	5	No	FACU
9.			
10.			
	66	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= 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: 6 (B)

% Dominant Species that are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:
OBL Species	0	X 1 = 0
FACW Species	0	X 2 = 0
FAC Species	60	X 3 =180
FACU Species	40	X 4 =160
UPL Species	0	X 5 =0
Column Totals:	100 A)	340 (B)

Prevalence Index = B/A = 3.4

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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-8	10 YR 3/2						Silty sand loam	
8-12	10 YR 5/6						Sand	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks: bright color representing oxidized condition

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 3
Investigator(s): John Larson		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%)
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Naumburg loamy fine sand		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☒ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:			
Surface Water Present? Yes ☐ No☒ Depth (inches):			Wetland Hydrology Present?
Water Table Present? Yes☐ No☒ Depth (inches):			Yes ☒ No☐
Saturation Present? Yes ☐ No☒ Depth (inches):			
(includes capillary fringe)			
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			

Remarks:

Occasional swamp white oak-*Quercus bicolor*

Sampling Point: 3

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	50	Yes	FAC
2. *Nyssa sylvatica*	25	Yes	FAC
3.			
4.			
5.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Acer rubrum*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Rhus radicans*	20	Yes	FAC
2. *Onoclea sensibilis*	5	No	FACW
3. *Cornus racemosa*	2	No	FACW
4. *Viburnum dentatum*	2	No	UPL
5. *Spiraea alba*	1	No	FACW
6.			
7.			
8.			
9.			
10.			
	30	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= 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)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Sampling Point 3

SOILS

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]		
0-11	7.5 YR 3/2						sandy loam	
11-16	10 YR 5/6	75					Sandy loam	
	7.5 YR 4/6	25					sandy loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:
While soils appeared to be non-hydric the other two indicators were present. This could be a problem area, so delineated as wetland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY		City/County: Syracuse	Sampling Date: 9/22/15
Applicant/Owner: Working Lands		State: New York	Sampling Point: 4
Investigator(s): John Larson		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)		Local relief (concave, convex, none):	Slope (%) 2
Subregion (LRR or MLRA): Lat:		Long:	Datum: 43.07586 North latitude and 76.03483 West longitude
Soil Map Unit Name: Lamson very fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:			
Surface Water Present? Yes ☐ No☒ Depth (inches):			Wetland Hydrology Present?
Water Table Present? Yes☐ No☒ Depth (inches):			
Saturation Present? Yes ☐ No☒ Depth (inches):			Yes ☐ No☒
(includes capillary fringe)			
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: 4

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	15	Yes	FAC
2. *Populus tremuloides*	15	Yes	FACU
3. *Prunus serotina*	10	Yes	FACU
4. *Populus deltoides*	5	No	FAC
5.			
	45	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Lonicera tatarica*	5	Yes	UPL
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Parthenocissus quinquefolia*	25	Yes	FACU
2. *Fraxinus sp.*	10	Yes	NI
3. *Fragaria virginiana*	2	No	FAC
4. *Rhus radicans*	5	No	FAC
5. *Solidago ulmifolia*	5	No	UPL
6.			
7.			
8.			
9.			
10.			
	47	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= 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: 6 (B)

% Dominant Species that are OBL, FACW, or FAC: 33 (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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-8	10 YR 3/2						Sandy loam	
8-16	10 YR 4/4	95						
16+	10 YR 6/2	2-3	10 YR 5/8	2				

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 5
Investigator(s): John Larson, SV		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%) Flat
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Niagara silt loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☒ 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?	Yes ☐	No☒	Depth (inches):
(includes capillary fringe)			

Wetland Hydrology Present? Yes ☒ No☐

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

Remarks:

Sampling Point: 5

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	50	Yes	FACW
2. *Ulmus americana*	10	No	FACW
3. *Populus tremuloides*	2	No	FAC
4.			
5.			
	62	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Fraxinus pennsylvanica*	5	Yes	FACW
2. *Viburnum lentago*	5	Yes	FAC
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Onoclea sensibilis*	50	Yes	FACW
2. *Symphyotrichum umbellatum*	5	No	FACW
3. *Chelone glabra*	2	No	OBL
4. *Impatiens capensis*	2	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	59	= Total Cover	
Woody Vine Stratum (Plot size):			
1. *Rhus radicans*	5	Yes	FAC
2. *Vitis riparia*	2	Yes	FACW
	7	= 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)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-8	10 YR 2/1						Silt loam	
8-16	10 YR 2/1	80	10YR 4/2	80	D	M	silt loam	
Depletion								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☒ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒	No ☐
Type:		
Depth (inches):		

Remarks:

Depleted matrix
Gley mixed in soils

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 6
Investigator(s): John Larson, MM		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%) 2-3
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Galen very fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:				
Surface Water Present?	Yes ☐	No☒	Depth (inches):	Wetland Hydrology Present?
Water Table Present?	Yes☐	No☒	Depth (inches):	Yes ☐ No☒
Saturation Present? (includes capillary fringe)	Yes ☐	No☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

Sampling Point: 6

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Ulmus americana*	10	Yes	FACW
3. *Nyssa sylvatica*	10	Yes	FAC
4.			
5.			
	45	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Prunus serotina*	10	Yes	FACU
2. *Acer rubrum*	5	Yes	FAC
3. *Fraxinus americana*	2	No	FACU
4.			
5.			
	17	= Total Cover	
Herb Stratum (Plot size):			
1. *Parthenocissus quinquefolia*	75	Yes	FACU
2. *Solidago ulmifolia*	2	No	UPL
3. *Prunus serotina*	5	No	FACU
4. *Onoclea sensibilis*	2	No	FACW
5. *Rhus radicans*	2	No	FAC
6.			
7.			
8.			
9.			
10.			
	86	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= 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: 6 (B)

% Dominant Species that are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index Worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤ 3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Sampling Point 6

SOILS

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]		
0-10	10 YR 5/2						Sandy silt loam	
10-16	10 YR 5/6						sandy silt loam	
16+	10 YR 5/3	5	10 YR 4/6				Sandy silt loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:
Bright color (oxidized at depth)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 7
Investigator(s): JLL, MM		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none): Convex		Slope (%)
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Niagara silt loam		NYSDEC/NWI classification: No	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation? ☐	Soil? ☐	Hydrology? ☐	Are "Normal Circumstances" Present? Yes ☒ No ☐
Is Naturally Problematic:	Vegetation? ☐	Soil? ☐	Hydrology? ☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:				Wetland Hydrology Present?
Surface Water Present?	Yes ☐	No ☒	Depth (inches):	Yes ☐ No ☒
Water Table Present?	Yes ☐	No ☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				

Remarks:

Soil dry sandy.

VEGETATION – Use scientific names of plants

Sampling Point: 7

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Prunus serotina*	25	Yes	FACU
2. *Acer rubrum*	25	Yes	FAC
3. *Ulmus americana*	5	No	FACW
4.			
5.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Acer rubrum*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Parthenocissus quinquefolia*	75	Yes	FACU
2. *Rhus radicans*	5	No	FAC
3. *Quercus rubra*	1	No	FACU
4. *Rhamnus cathartica*	3	No	FAC
5. *Prunus virginiana*	2	No	FACU
6. *Rubus allegheniensis*	2	No	FACU
7.			
8.			
9.			
10.			
	88	= Total Cover	
Woody Vine Stratum (Plot size):			
1. *Vitis riparia*	3	No	FACW
2.			
	3	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total number of dominant species across all strata: 4 (B)

% Dominant Species that are OBL, FACW, or FAC: 50 (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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Convex knoll – soils not hydric

Sampling Point 7

SOILS

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	10 YR 3/2						Sandy silt loam	
8-12	10 YR 3/4		10 YR 4/4				Sandy loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:

Bright soils at depth (brownish)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 8
Investigator(s): JLL, MM		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%) concave swale
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Galen very fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☒ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☒ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:			
Surface Water Present? Yes ☐ No☒ Depth (inches):			Wetland Hydrology Present?
Water Table Present? Yes☐ No☒ Depth (inches):			Yes ☒ No☐
Saturation Present? Yes ☐ No☒ Depth (inches):			
(includes capillary fringe)			
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Swale between data points 6 and 9.			

Sampling Point: 8

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	20	Yes	FAC
2. *Ulmus americana*	70	Yes	FACW
3.			
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Ulmus americana*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Lindera benzoin*	5	Yes	FACW
2. *Rhus radicans*	2	Yes	FAC
3. *Acer rubrum*	1	No	FAC
4. *Symphyotrichum lateriflorum*	2	Yes	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	10	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: _6 (A)

Total number of dominant species across all strata: 6 (B)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-8	10 YR 2/1						Sandy loam	
8-16	10 YR 2/1		10YR 5/2	2-3	D	N	sandy loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☒ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒	No ☐
Type:		
Depth (inches):		

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 9
Investigator(s): John Larson		Section, Township, Range:	
Landform (Hillslope, terrace, etc.) Convex	Local relief (concave, convex, none): Convex		Slope (%)1-3
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Galen very fine sandy loam		NYSEDC/NWI classification: No	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ 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☒

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

Remarks:

Sampling Point: 9

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	50	Yes	FAC
2. *Prunus serotina*	20	Yes	FACU
3.			
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Prunus serotina*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size):			
1. *Parthenocissus quinquefolia*	75	Yes	FACU
2. *Prunus serotina*	2	No	FACU
3. *Rhus radicans*	5	No	FAC
4. *Carya ovata*	3	No	FACU
5. *Prunus virginiana*	3	No	FACU
6.			
7.			
8.			
9.			
10.			
	88	= Total Cover	
Woody Vine Stratum (Plot size):			
1. *Vitis riparia*	3	No	FACW
2.			
	3	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total number of dominant species across all strata: 4 (B)

% Dominant Species that are OBL, FACW, or FAC: 25 (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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 3/2						Sandy loam	
8-14	7.5 YR 4/6						Sand	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY		City/County: Syracuse	Sampling Date: 9/22/15
Applicant/Owner: Working Lands		State: New York	Sampling Point: 10
Investigator(s): John Larson		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)		Local relief (concave, convex, none): convex	Slope (%)
Subregion (LRR or MLRA):	Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude
Soil Map Unit Name: Minoa fine sandy loam			NYSDEC classification: Yes
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation? ☐	Soil? ☐	Hydrology? ☐	Are "Normal Circumstances" Present? Yes ☒ No ☐
Is Naturally Problematic:	Vegetation? ☐	Soil? ☐	Hydrology? ☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:				
Surface Water Present?	Yes ☐	No ☒	Depth (inches):	Wetland Hydrology Present?
Water Table Present?	Yes ☐	No ☒	Depth (inches):	Yes ☐ No ☒
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				

Remarks:

Upland Knoll

Sampling Point: 10

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	70	Yes	FAC
2. *Prunus serotina*	10	No	FACU
3. *Ulmus americana*	10	No	FACW
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Prunus serotina*	25	Yes	FACU
2. *Nyssa sylvatica*	10	Yes	FAC
3.			
4.			
5.			
	35	= Total Cover	
Herb Stratum (Plot size):			
1. *Parthenocissus quinquefolia*	25	Yes	FACU
2. *Rhus radicans*	20	Yes	FAC
3. *Glyceria striata*	10	No	FACW
4. *Circaea lutetiana canadensis*	2	No	FACU
5. *Onoclea sensibilis*	5	No	FACW
6. *Fragaria virginiana*	3	No	FAC
7. *Polygonum virginianum*	2	No	FAC
8.			
9.			
10.			
	67	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= 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)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 4/2						Sandy loam	
8-12+	10 YR 5/4						Clay in soils	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒	
Type:			
Depth (inches):			

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 11
Investigator(s): John Larson		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%) Concave to flat
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Lamson very fine sandy loam		NYSDEC classification: Yes	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☒ Sparsely Vegetated Concave Surface (B8)		☒ 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?	Yes ☐	No☒	Depth (inches):
(includes capillary fringe)			

Wetland Hydrology Present? Yes ☒ No☐

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

Remarks:

FW in south

Sampling Point: 11

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	60	Yes	FAC
2. *Fraxinus pennsylvanica*	10	No	FACW
3. *Tilia americana*	10	No	FACU
4.			
5.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Carpinus caroliniana*	20	Yes	FAC
2. *Ulmus americana*	5	No	FACW
3. *Hamamelis virginiana*	5	No	FACU
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size):			
1. *Rubus flagellaris*	5	No	FACU
2. *Rhus radicans*	10	Yes	FAC
3. *Polygonum virginianum*	5	No	FAC
4. *Ulmus americana*	2	No	FACW
5. *Carpinus caroliniana*	2	No	FAC
6. *Solidago flexicaulis*	2	No	FACU
7. *Leersia oryzoides*	2	No	OBL
8.			
9.			
10.			
	38	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total number of dominant species across all strata: 3 (B)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

SOILS

Sampling Point 11

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]		
0-14	10 YR 2/1						Sandy silt loam	
14+	10 YR 6/2		10 YR 5/6	5	C	N	Sandy clay loam	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☒ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒	No ☐
Type:		
Depth (inches):		

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 12
Investigator(s): John Larson, Susan Lehnhardt		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none): Flat	Slope (%)	
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Niagara silt loam		NYSEDC/NWI classification: No	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:				Wetland Hydrology Present?
Surface Water Present?	Yes ☐	No☒	Depth (inches):	
Water Table Present?	Yes☐	No☒	Depth (inches):	Yes ☒ No☐
Saturation Present? (includes capillary fringe)	Yes ☐	No☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				

Remarks:
This was a marginal wetland area.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	50	Yes	FACW
2. *Ulmus americana*	20	Yes	FACW
3.			
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Rhamnus cathartica*	15	Yes	FAC
2. *Cornus stolonifera*	20	Yes	FACW
3. *Viburnum opulus*	5	No	FACU
4. *Cornus racemosa*	25	Yes	FACW
5.			
	65	= Total Cover	
Herb Stratum (Plot size):			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		= Total Cover	
Woody Vine Stratum (Plot size):			
1. *Vitis riparia*	5	Yes	FACW
2.			
	5	= 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)

% 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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Ground cover shade suppressed and absent over large areas

SOILS

Sampling Point 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-12	10 YR 3/1						Sandy silt loam	
12-15	10 YR 3/2		10 YR 4/4				Sandy silt loam	
15+	7.5 YR 5/6		10 YR 5/2	1-2			Clay sand	

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☒	No ☐
Type:		
Depth (inches):		

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project Site: CNY	City/County: Syracuse		Sampling Date: 9/22/15
Applicant/Owner: Working Lands	State: New York		Sampling Point: 13
Investigator(s): John Larson, Susan Lehnhardt		Section, Township, Range:	
Landform (Hillslope, terrace, etc.)	Local relief (concave, convex, none):		Slope (%)
Subregion (LRR or MLRA): Lat:	Long:	Datum: 43.07586 North latitude and 76.03483 West longitude	
Soil Map Unit Name: Niagara silt loam		NYSDEC/NWI classification: No	
Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in remarks)			
Is Significantly Disturbed:	Vegetation?☐	Soil?☐	Hydrology?☐	Are "Normal Circumstances" Present? Yes ☒ No☐
Is Naturally Problematic:	Vegetation?☐	Soil?☐	Hydrology?☐	If needed, explain 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: June was very wet, July, August and September below normal.		

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required: check all that apply).		Secondary Indicators (minimum of 2 required)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☒ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)

Field Observations:				Wetland Hydrology Present?
Surface Water Present?	Yes ☐	No☒	Depth (inches):	Yes ☒ No☐
Water Table Present?	Yes☐	No☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ☐	No☒	Depth (inches):	
Described Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

VEGETATION – Use scientific names of plants

Sampling Point: 13

Tree Stratum (Plot size):	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FAC
2. Crataegus sp	10	Yes	NI
3.			
4.			
5.			
	20	= Total Cover	
Sapling/Shrub Stratum (Plot size):			
1. *Lonicera tatarica*	75	Yes	UPL
2. *Rhamnus cathartica*	15	No	FAC
3. *Ulmus americana*	5	No	FACW
4.			
5.			
	95	= Total Cover	
Herb Stratum (Plot size):			
1. *Solidago canadensis*	5	Yes	FACU
2. *Polygonum virginianum*	2	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	7	= Total Cover	
Woody Vine Stratum (Plot size):			
1.			
2.			
		= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total number of dominant species across all strata: 4 (B)

% Dominant Species that are OBL, FACW, or FAC: 50 (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)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes No☒

Definitions of Vegetation Strata:

Trees – Woody plants 3" (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.

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

Slightly convex, edge of upland/wetland

SOILS

Sampling Point 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-6	10 YR 3/2							Redox
6-7	5 YR 4/4	1-2	10 YR 6/2					
14+	10 YR 4/2		10 YR 5/6	1				

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils [3]:
☐ Histosol (A1)	☐ Stripped Matrix (S6)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Dark Surface (S7) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified layers (A5)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☐ Loamy Gleyed Matrix (F2)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Matrix (F3)	
☐ Sandy Mucky Mineral (S1)	☐ Redox Dark Surface (F6)	
☐ Sandy Gleyed Matrix (S4)	☐ Depleted Dark Surface (F7)	
☐ Sandy Redox (S5)	☐ Redox Depressions (F8)	
		☐ Iron-Manganese Masses (F12) (LRR K, L, R)
		☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
		☐ Red Parent Material (TF2)
		☐ Very Shallow Dark Surface (TF12)
		☐ Other (Explain in Remarks

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

Restrictive Layer (if observed):	Hydric Soil Present? Yes ☐	No ☒
Type:		
Depth (inches):		

Remarks:

USDA Field Office Climate Data

WETS Station : SYRACUSE HANCOCK INTL AP, NY771 Creation Date: 11/13/2015
Latitude: 4307 Longitude: 07606 Elevation: 00413
State FIPS/County(FIPS): 36067 County Name: Onondaga
Start yr. - 1971 End yr. - 2000

Month	Temperature (Degrees F.) avg daily max	avg daily min	avg	Precipitation (Inches) avg	30% chance will have less than	more than	avg # of days w/.1 or more	avg total snow fall
January	31.4	14.0	22.7	2.60	1.86	3.07	7	33.2
February	33.5	15.5	24.5	2.12	1.57	2.49	6	24.0
March	43.1	24.2	33.6	3.02	2.37	3.48	8	18.8
April	55.7	34.9	45.3	3.39	2.36	4.02	8	4.8
May	68.5	45.8	57.1	3.39	2.27	4.06	8	0.1
June	77.0	54.6	65.8	3.71	2.41	4.46	8	0.0
July	81.7	60.1	70.9	4.02	2.88	4.75	7	0.0
August	79.6	58.8	69.2	3.56	2.62	4.18	7	0.0
September	71.4	51.1	61.3	4.15	3.25	4.79	7	0.0
October	59.8	40.4	50.1	3.20	2.16	3.83	8	0.4
November	47.4	32.0	39.7	3.77	2.93	4.36	9	11.1
December	36.3	20.9	28.6	3.12	2.42	3.61	9	28.6
Annual	-----	-----	-----	------	35.82	43.60	--	----
Average	57.1	37.7	47.4	------	------	------	--	----
Average	-----	-----	-----	40.05	------	------	92	121.2

GROWING SEASON DATES

http://agacis.rcc-acis.org/36067/wets/results

Exhibit 3. WETs Table-Showing Antecedent Precipitation Conditions for July –September 2015 in Syracuse, NY. (Page 1 of 4)

Probability	Temperature: 24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *	4/ 5 to 11/ 5 213 days	4/17 to 10/24 189 days	4/27 to 10/12 168 days
70 percent *	3/31 to 11/10 223 days	4/13 to 10/28 197 days	4/23 to 10/16 176 days

* Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1950-2015 prcp

Station : NY771, SYRACUSE HANCOCK INTL AP
Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
50							2.05	2.52	4.22	3.41	3.91	3.59	19.70
51	2.73	5.38	4.65	3.79	1.97	4.21	5.22	3.33	3.17	1.86	3.76	4.34	44.41
52	2.45	2.00	2.39	2.57	3.88	1.18	4.36	2.05	1.52	2.88	2.36	3.75	31.39
53	2.91	2.71	3.75	2.07	4.35	1.51	1.93	2.39	2.11	1.64	1.74	2.61	29.72
54	2.43	3.74	3.48	4.75	3.17	3.66	1.12	7.19	3.06	1.99	4.84	4.03	43.46
55	1.61	3.32	6.84	1.81	1.90	2.43	2.85	3.80	1.87	8.29	2.69	2.53	39.94
56	2.28	3.90	4.63	3.35	3.03	1.71	3.75	8.41	4.27	1.28	2.38	3.02	42.01
57	2.19	1.76	2.01	2.60	2.88	4.18	6.13	3.45	2.28	0.93	1.86	2.90	33.17
58	4.46	5.28	1.31	3.36	3.70	5.24	3.63	2.06	4.89	3.37	3.76	1.73	42.79
59	4.59	2.22	2.93	2.51	1.97	2.53	2.54	4.48	0.93	7.15	4.34	5.01	41.20
60	3.11	4.90	2.48	2.94	3.96	1.86	1.03	2.69	2.93	2.77	1.68	1.86	32.21
61	2.30	4.14	4.22	3.74	2.40	3.68	5.08	1.78	1.21	3.59	2.99	2.45	37.58
62	2.87	2.96	1.96	3.57	1.05	1.10	2.74	4.63	1.99	3.30	2.22	2.25	30.64
63	1.85	2.05	2.79	2.22	2.84	2.49	1.21	3.59	0.85	0.21	5.65	2.06	27.81
64	2.18	1.13	3.83	3.66	2.31	1.41	2.15	3.09	0.75	1.52	2.20	2.87	27.10
65	2.28	2.82	1.63	3.53	1.61	2.04	1.34	1.95	3.60	2.70	2.97	1.92	28.39
66	3.98	2.96	2.27	3.05	1.79	2.73	2.09	2.64	4.75	0.90	2.05	3.93	33.14

67	1.47	1.49	1.34	2.11	3.33	1.56	6.33	5.00	2.73	3.52	4.48	2.66	36.02
68	2.08	1.10	3.13	2.40	3.46	6.14	3.77	4.17	3.43	5.81	4.07	4.67	44.23
69	3.37	1.49	1.08	3.95	4.34	3.74	0.90	1.77	1.13	2.30	4.56	3.42	32.05
70	1.02	1.84	2.45	3.68	2.79	2.93	4.42	4.07	4.33	3.84	3.53	3.33	38.23
71	1.90	4.07	2.90	2.19	3.40	3.26	6.49	4.01	2.56	1.62	3.52	3.26	39.18
72	1.10	2.87	2.49	4.03	6.19	12.30	3.45	3.76	4.12	4.36	6.79	3.95	55.41
73	1.85	1.64	3.45	6.91	5.58	7.07	3.62	2.97	4.57	3.81	6.73	4.38	52.58
74	2.08	1.70	4.34	3.09	5.78	4.67	9.52	4.60	4.45	1.58	4.95	3.47	50.23
75	2.54	3.05	2.67	2.01	2.74	4.08	9.32	5.35	8.81	3.69	3.54	4.10	51.90
76	2.79	2.71	4.62	8.12	7.41	7.42	5.24	6.73	3.27	6.53	1.53	1.80	58.17
77	1.84	1.62	3.47	3.04	0.75	3.30	4.76	4.93	6.54	4.75	5.31	4.33	44.64
78	5.77	0.80	3.08	1.87	1.90	3.58	2.78	3.31	3.93	2.68	1.25	4.12	35.07
79	4.70	2.54	2.73	3.89	3.07	2.33	2.33	3.69	5.25	2.91	3.25	1.84	38.53
80	1.47	1.38	4.34	3.33	1.34	4.45	2.57	1.33	3.40	2.56	2.64	3.27	32.08
81	1.34	2.72	1.01	2.04	2.61	1.89	2.68	2.63	5.58	6.66	3.09	2.96	35.21
82	3.59	1.26	2.63	1.71	2.87	4.64	3.83	2.60	4.22	0.72	4.52	2.55	35.14
83	1.92	1.07	2.30	6.34	3.33	1.50	2.31	2.80	2.98	1.98	4.30	5.50	36.33
84	1.30	2.88	2.39	3.16	4.97	2.02	3.66	5.17	2.61	1.95	3.48	4.38	37.97
85	2.49	1.55	2.61	1.22	3.39	2.80	2.75	1.44	3.88	3.39	5.18	1.80	32.50
86	2.41	2.27	2.82	3.42	2.67	4.89	5.23	3.36	5.47	3.32	3.74	3.33	42.93
87	3.03	0.63	1.86	3.31	1.41	5.04	2.16	2.12	5.99	3.13	3.02	1.99	33.69
88	1.50	2.13	1.79	2.70	3.05	2.46	5.72	3.77	1.88	3.57	3.95	1.92	34.44
89	1.06	1.71	3.13	1.52	4.27	5.41	2.20	2.68	5.96	4.08	2.78	2.13	36.93
90	2.13	3.95	3.70	4.09	5.62	2.92	3.72	5.33	3.45	6.09	3.23	5.24	49.47
91	2.44	1.54	4.07	3.90	3.90	1.67	2.86	4.03	4.20	2.62	2.72	3.10	37.05
92	2.62	2.46	3.80	3.54	5.21	1.78	8.00	2.64	4.55	2.69	3.75	2.57	43.61
93	3.08	2.45	3.75	6.55	2.25	2.93	4.76	4.71	3.83	2.91	3.20	M2.96	43.38
94	3.49	1.92	5.14	3.62	3.03	2.38	2.64	5.19	2.43	M0.77	3.50	2.52	36.63
95	1.80	2.19	1.31	1.88	1.70	1.00	1.98	3.50	2.53	6.57	4.83	2.05	31.34
96	3.35	1.25	1.74	4.28	3.02	3.05	4.24	1.71	4.38	2.14	5.78	4.45	39.39
97	1.46	2.25	3.57	1.77	2.43	1.64	2.78	4.06	2.75	1.50	4.28	4.13	32.62
98	4.76	3.14	2.94	2.09	2.37	4.62	3.63	4.77	2.41	2.53	2.06	1.74	37.06
99	5.33	1.43	3.53	1.75	0.81	1.78	2.55	1.02	5.35	2.77	3.16	1.40	30.88
0	2.80	2.46	2.37	4.24	4.75	4.46	2.73	2.48	3.13	2.25	2.98	2.36	37.01
1	1.57	1.77	5.38	1.53	2.24	3.58	2.08	4.84	4.05	2.15	2.92	2.19	34.30
2	2.13	1.44	2.75	4.38	5.77	5.35	1.75	2.71	3.55	3.98	3.61	2.84	40.26
3	1.44	2.58	2.89	2.61	5.27	2.83	3.30	3.03	3.14	4.27	3.14	3.10	37.60
4	1.86	1.12	2.04	3.72	7.82	2.42	6.95	5.09	3.23	2.28	2.81	3.80	43.14
5	2.96	1.57	1.39	5.71	0.59	1.95	4.61	5.95	1.75	6.40	4.66	2.56	40.10
6	2.96	1.66	1.86	3.93	2.25	5.09	10.12	3.21	4.04	5.70	2.62	3.76	47.20
7	4.20	M2.42	4.16	4.42	0.86	3.67	3.61	1.76	3.20	4.02	4.17	5.04	41.53
8	1.36	4.71	5.00	2.99	1.78	3.75	4.28	3.62	2.47	4.87	3.19	3.89	41.91
9	1.86	M1.27	3.80	2.31	3.53	5.24	2.04	4.57	2.27	4.08	2.16	M2.20	35.33

10	M1.21	2.02	2.54	0.84	2.87	6.57	4.28	6.36	5.26	4.11	2.93	M2.42	41.41
11	2.45	3.11	2.86	8.53	3.90	3.31	3.30	6.66	6.36	3.20	3.36	2.48	49.52
12	3.88	1.41	1.96	2.24	3.15	2.28	1.84	2.27	3.11	3.99	1.41	7.57	35.11
13	1.71	2.71	2.02	3.59	3.91	6.80	3.22	2.58	3.20	3.91	3.84	2.89	40.38
14	2.20	3.35	3.48	4.64	3.71	2.74	5.18	3.74	1.60	4.54	2.30	3.02	40.50
15	1.60	2.28	1.52	2.79	3.93	9.92	3.37	1.91	5.05	3.77	M0.80		36.94

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APPENDIX D
TRAFFIC IMPACT STUDY

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GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037
Tel: (315) 391-5110 Fax: (315) 687-6267

December 6, 2018

Romeo & Romeo, PC
314 East Fayette Street
Syracuse, NY 13202

Attn: Mr. Robert Romeo

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility Girden Road – Town of DeWitt, NY

Dear Mr. Romeo:

I have completed my review of the traffic operations associated with the proposed international container transfer facility on the west side of Girden Road in the Town of DeWitt, NY. This letter summarizes the work completed in this review as well as my findings.

Project Understanding

The proposed development is located on the west side of Girden Road, just north of the CSX railroad tracks in the Town of DeWitt. The proposed international container transfer facility encompasses approximately 9 acres with access proposed via the southern end of Girden Road. The site is expected to generate approximately 3,000 trucks per year at start up traveling exclusively to/from the I-481 interchange to the west via Kirkville Road. The overall truck generation is anticipated to grow to approximately 5,000 trucks per year by end of the first year will full operations of approximately 10,000 trucks per year in 3-5 years. With 24 hour operations, seven days per week, the site is expected to generate approximately 27 trucks per day under full operation with peak movements occurring between 7-9 in the morning and 3:30-5:30 in the evening.

This study evaluates the full build condition assuming that 25% of the daily truck traffic (7 trucks) enters and exits the site during the weekday peak morning and evening commuting hours. The trucks generated will be predominantly heavy duty 80' double-axle class 8 tractors and trailers with 40' containers. The site is expected to employ 5-10 people.

Data Collection

Site visits were conducted on Tuesday – December 4th, 2018 to collect the following:

- Existing Traffic Volume Counts – Traffic turning movement counts were collected at the intersection of Kirkville Road with Girden Road during the weekday morning (7-9am) and evening (4-6pm) peak travel periods to ensure that actual peak hours of the adjacent streets were captured. The traffic counts included car and heavy vehicle counts by movement. There was no pedestrian activity observed during the traffic count periods and all area schools were in session.

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility
Girden Road – Town of DeWitt, NY

- Kirkville Road Gap Data – Gap data was collected to assess the ability for vehicles to turn in and out of Girden Road on Kirkville Road. In order for a vehicle to turn right out of Girden Road, or left into Girden Road, the vehicle only requires a gap in the eastbound direction on Kirkville Road. A vehicle requires a gap in traffic in both directions at the same time to turn left out of Girden Road. These gaps in traffic were observed and timed on Kirkville Road during the weekday morning and evening traffic count periods. The gaps were then converted to a number of vehicles that could turn left or right out of Girden Road during each gap and then totaled for the peak hour. For example, one vehicle can turn from the side road with a 6-9 second gap in traffic, two can turn with a 10-13 second gap, 3 with a 14-17 second gap, 4 with an 18-19 second gap, etc.

- Spot Speed Measurements – 50 speed measurements were collected in each direction on Kirkville Road passing Girden Road to identify average and 85th percentile operating speeds in the area.

- Sight Distance Measurements – Sight lines looking east/west along Kirkville Road from Girden Road were collected for comparison to design standards in order to confirm that adequate sight lines are available for safe ingress and egress from the site.

- Operational Data - Other data needed to evaluate traffic operations, such as intersection geometry, control, and speeds limits were also collected.

Existing Operations

Based on the traffic counts collected, the peak hours were identified as follows:

Morning Peak Hour – 7:15am to 8:15am
Evening Peak Hour – 4:00pm to 5:00pm

The 2018 existing traffic volumes are shown in the attached Figure 1 for the morning and evening peak hours. Kirkville Road operates as an east/west arterial roadway with approximately 616 vehicles eastbound, 1,044 vehicles westbound during the morning peak hour and 1,027 vehicles eastbound/624 vehicles westbound during the evening peak hour. Girden Road is an extremely low volume dead end roadway carrying less than 10 vehicles to/from Kirkville Road during each of the peak hours. The traffic count data has been attached.

Kirkville Road has one 12 foot wide travel lane and a 9 foot wide shoulder in each direction passing Girden Road with a 45 mph speed limit.

Girden Road varies in width from 24-28 feet wide at the northern end near Kirkville Road, to approximately 20 feet wide in the middle section, to 18-20 feet wide near the southern end. The visual

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility
Girden Road – Town of DeWitt, NY

pavement condition on Girden Road is generally fair with some minor longitudinal cracking, some minor potholes and areas where patching has been completed. It is noted that there is some rutting in the pavement, particularly closer to Kirkville Road.

The peak hour traffic volumes were compared to 2014 NYSDOT AADT counts on Kirkville Road and Girden Road from the Traffic Data Viewer website. The traffic counts through the study area are all consistent with the historical traffic volume counts. The historical traffic volume data has been attached.

Based on the gap data collected, there are sufficient gaps in traffic to accommodate 399 vehicles turning right onto Kirkville Road from Girden Road during the morning peak hour and 187 vehicles turning right during the evening peak hour. These gaps would also be available for vehicles turning left onto Girden Road from Kirkville Road. There were sufficient gaps observed to accommodate 102 vehicles turning left out onto Kirkville Road during the morning peak hour and 94 vehicles turning left during the evening peak hour. While it is noted that the available gaps in traffic are limited due to the high through volumes on Kirkville Road, there are sufficient gaps to accommodate both the existing traffic on Girden Road and the projected traffic volumes from the proposed international container transfer facility given the low existing and projected traffic volumes. The gap data is attached.

The posted speed limit in the area on Kirkville Road is 45mph. The speed data collected indicates that the average speeds passing the site on Kirkville Road are 48-50 mph in both directions. The 85th percentile speed based on the data collected is 53 mph in the eastbound direction and 51 mph in the westbound direction on Kirkville Road. The 85th percentile speeds are considered the operating speeds and are typically used for design and analysis. The speed data has been attached.

The following table provides a summary of the recommended sight distances along Kirkville Road from the AASHTO A Policy on Design of Highways and Streets as well as the available sight distances based on field measurements. The speed limit in the area is 45 mph on Kirkville Road, however the 85th percentile speeds were used in the review.

Sight Distance Summary

Location	Operating Speed	Direction	AASHTO Recommended Sight Distance	Available Sight Distance
Kirkville Road @ Girden Road – Turning Left	55 mph	Looking Left	610 feet	1,200 feet
		Looking Right	610 feet	715 feet
Kirkville Road @ Girden Road – Turning Right	55 mph	Looking Left	530 feet	1,200 feet

There is more than adequate sight distance available on Kirkville Road looking both east and west from Girden Road for passenger cars. An additional review was completed for a compound tractor

trailer using an 11.5 second critical gap as opposed to the standard 7.5 second critical gap used for passenger cars. Using the longer critical gap, the recommended sight distance for a tractor trailer is 862 feet in each direction using the 51 mph westbound operating speed. While there is still more than sufficient distance looking to the west, the existing sight distance to the right is approximately 150 feet shorter than recommended. This would indicate that approaching westbound motorists on Kirkville Road may have to slow down slightly as tractor trailers are accelerating on Kirkville Road.

Capacity analysis of the existing traffic operations was completed using Synchro10, an industry accepted standard for the analysis of both signalized and unsignalized intersections that is based on methodologies developed in the Highway Capacity Manual. Intersection and individual movement operations are graded in terms of Level of Service ranging from A to F, as described in the HCM. For example, a signalized intersection movement with an average delay of 5 seconds per vehicle is considered a Level of Service A while an average delay per vehicle of 25 seconds is considered a C. A Level of Service D or better is generally considered acceptable for a signalized intersection and a Level of Service E or better is generally considered acceptable for an unsignalized intersection.

The results of the capacity analysis indicate that there are minimal delays on Kirkville Road at Girden Road during both the morning and evening peak hours. Girden Road operates at a Level of Service B during the morning peak hour but has longer existing delays with overall Level of Service F during the evening peak hour.

Although there may be some longer delays turning out onto Kirkville Road, this would be expected for a low volume approach to a high volume commuter roadway. There are sufficient existing gaps in traffic to accommodate the existing and projected traffic volumes. These findings are consistent with observations made during the data collection.

Accident Analysis

An accident analysis was completed for the study area using history reports obtained for a five year period from September 2013 through August 2018. Over the five year period, there were 5 total accidents in the study area. Two accidents occurred at the Girden Road intersection with one being a left turn accident and one being a right angle accident. There was one accident on Kirkville Road at a residential driveway to the west of Girden Road and two accidents on Kirkville Road, one being a rearend accident and one being a fixed object accident.

Assuming the evening peak hour volume in the Girden Road intersection is 9% of the average daily traffic volume, the resulting accident rate is 0.059 accidents per million entering vehicles. This rate is below the statewide average rate of 0.17 accidents per million entering vehicles for similar facilities, indicating that this is not a high accident location.

The accident data and calculations have been attached.

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility
Girden Road – Town of DeWitt, NY

2023 Background Operations

The proposed international container transfer facility is assumed to be in full operation by 2023. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project opening must first be completed. The existing traffic volumes were adjusted by a growth rate to account for any unknown development that may occur prior to completion of the project.

Historical traffic volumes along Kirkville Road between Roberts Street and Girden Road, and between Girden Road and Freemont Road, were taken from the 2016 NYSDOT Traffic Volume Report and reviewed in order to identify an appropriate background growth rate. Long term growth rates in the area have been –1.4% per year to the east of Girden Road and +1.0% per year to the west of Girden Road between 2008 and 2016. A 1% annual background growth in traffic was assumed from 2018 to 2023 in order to maintain a conservative traffic analysis. The 2023 background traffic volumes with 5% total growth are shown in Figure 1.

The capacity analyses of the 2023 background condition shows no notable increases in delay on Kirkville Road from the existing condition. Girden Road will continue to experience longer delays during the evening peak hour. The detailed Level of Service summary and the Synchro capacity analysis printouts have been attached.

Trip Generation Estimate and Distribution

The site is expected to generate approximately 3,000 trucks per year at start up traveling exclusively to/from the I-481 interchange to the west via Kirkville Road. The overall truck generation is anticipated to grow to approximately 5,000 trucks per year by end of the first year will full operations of approximately 10,000 trucks per year in 3-5 years. With 24 hour operations, seven days per week, the site is expected to generate approximately 27 trucks per day under full operation with peak movements occurring between 7-9 in the morning and 3:30-5:30 in the evening. The site is expected to employ 5-10 people.

It is assumed that 25% of the daily truck traffic (7 trucks) will enter and the site during the weekday peak morning and evening commuting hours. The trucks generated will be predominantly heavy duty 80’ double-axle class 8 tractors and trailers with 40’ containers. For a worst case analysis, it is also assumed that 10 employees enter and exit the site during each of the peak hours.

The following table summarizes the trip generation estimate for the proposed international container transfer facility.

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility
Girden Road – Town of DeWitt, NY

Trip Generation Summary

	Morning Peak Hour		Evening Peak Hour	
	Entering	**Exiting**	**Entering**	**Exiting**
Trucks	7	7	7	7
Cars (Employees)	10	10	10	10
Total Trips Generated	**17**	**17**	**17**	**17**

The proposed development will be a minor traffic generator with less than 20 total vehicles entering or exiting during each peak hour.

Based on existing traffic patterns and population centers in the area, 63% of the employee trips generated are expected to travel to/from the east on Kirkville Road, and 37% are expected to travel to/from the west on Kirkville Road. All truck traffic will travel to/from the west on Kirkville Road. The anticipated arrival/departure distribution for the facility is shown in Figure 1. The trips generated during each peak hour are and the resultant 2023 full build traffic volumes expected when the development is in full operation are also shown in Figure 1.

Build Operations

Based on the projected turning movements on Kirkville Road at Girden Road, there are sufficient gaps available to accommodate the proposed development.

Capacity analysis of the 2023 build condition continues to show minimal delays on Kirkville Road at Girden Road during both peak hours. The analysis does indicate that there may be longer delays of 1-2 minutes for vehicles to turn off Girden Road onto Kirkville Road during both peak hours. With minimal traffic volumes on Girden Road, even with the proposed transfer facility, there would be no notable queueing expected. Girden Road only has two houses on the roadway other than the operations at the southern end of the road associated with CSX. There is only expected to be 1 vehicle exiting the roadway every 2-3 minutes during the peak hours. Delays will be significantly reduced during off peak hour when volumes on Kirkville Road are lower.

The detailed Level of Service summary and capacity analysis printouts have been attached.

Intersection Turning Radius Review

Truck turning templates were reviewed for a WB-62 interstate tractor trailer turning left off Girden Road and right off Kirkville Road onto Girden Road assuming that the trucks can use the full width of Girden Road for turning movements. The turning templates indicate that some minor pavement

Re: Traffic Impact Assessment – Proposed International Container Transfer Facility
Girden Road – Town of DeWitt, NY

widening will be needed on the southwest corner of the intersection to accommodate the turning movement onto Girden Road.

The turning templates have been attached.

Conclusions

The additional traffic generated by the proposed International container transfer facility will be minor with less than 1 vehicle entering and exiting the site every 2-3 minutes during the busiest peak commuter hours. This estimate is conservative in that it assumes 10 employees are entering and exiting in addition to the truck traffic.

The minimal traffic increase will have no significant impact on traffic operations on Kirkville Road in the vicinity of the development. It is noted that westbound traffic may have to slow for accelerating trucks on Kirkville Road with slightly reduced sight lines for trucks looking to the east when exiting Girden Road. The sight distances are more than sufficient for passenger car traffic in both directions and there are no concerns with stopping sight distances.

There will be longer delays expected for vehicles turning off Girden Road, particularly during the morning and evening peak commuter hours when volumes are heavier on Kirkville Road. With little to no other traffic on Girden Road, these delays will be observed by the trucks and employee traffic generated by the site, and will have no impact on existing motorists traveling through the area.

The pavement radius on the southwest corner of the Kirkville Road/Girden Road intersection should be widened to accommodate the truck traffic turning right onto Girden Road.

If you have any questions or need additional information, please call.

Sincerely,

Gordon T. Stansbury, P.E., P.T.O.E.
GTS Consulting

Attachments –

	Level of Service Summary	Traffic Volume Figures 1
	Truck Turning Template	NYSDOT AADT Data
	Gap Calculations	Spot Speed Data
	Growth Calculations	Accident Analysis
	Traffic Count Data	Capacity Analysis Printouts

Proposed International Container Transfer Facility – Girden Road – DeWitt, NY

Intersection Level of Service Summary

Morning Peak Hour

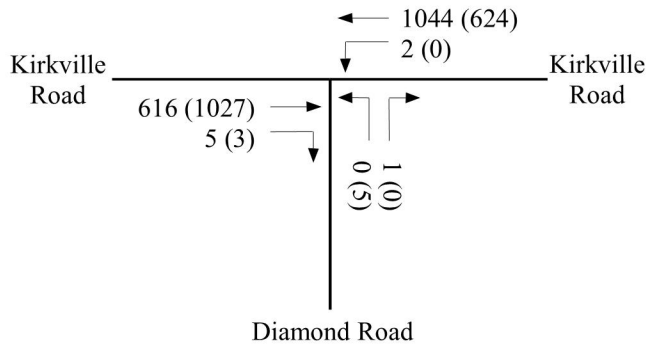
Intersection	2018 Existing	2023 Background	2023 Build
Kirkville Road @ Girden Road			
EB Through/Right	a(0)	a(0)	a(0)
WB Left/Through	a(0)	a(0)	a(1)
NB Left/Right	b(14)	b(15)	f(138)

a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds)

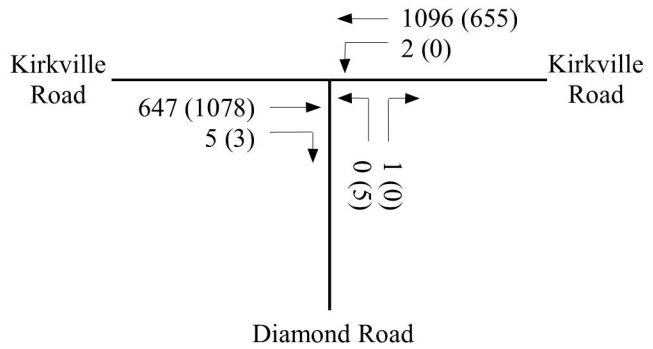
Evening Peak Hour

Intersection	2018 Existing	2023 Background	2023 Build
Kirkville Road @ Girden Road			
EB Through/Right	a(0)	a(0)	a(0)
WB Left/Through	a(0)	a(0)	a(1)
NB Left/Right	f(63)	f(72)	f(106)

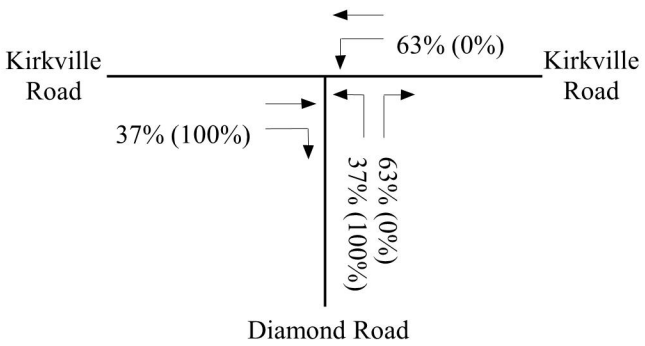
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds)



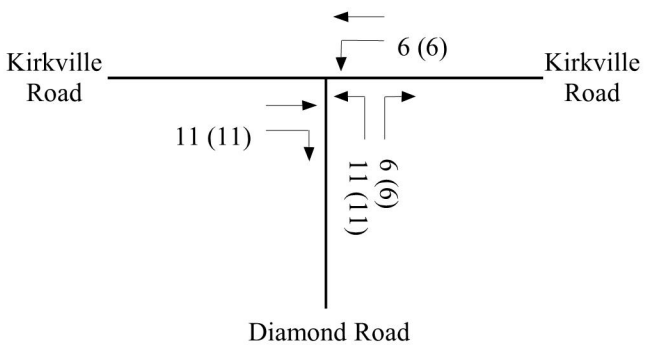
2018 Existing Traffic Volumes
Morning (Evening) Peak Hour



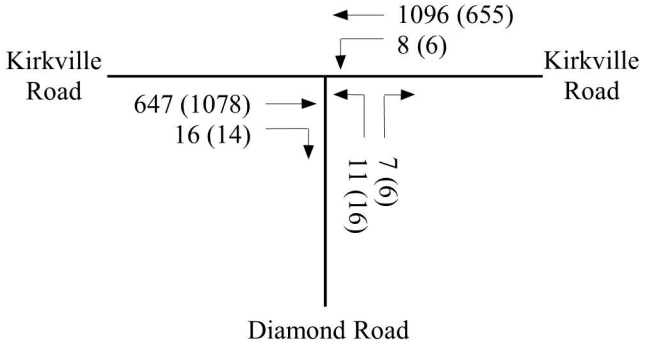
2023 Background Traffic Volumes
With 1% Growth Per Year (5% Total)
Morning (Evening) Peak Hour



Arrival /Departure Trip Distribution
Cars (Trucks)



Trips Generated
Morning (Evening) Peak Hour



2023 Build Traffic Volumes
Morning (Evening) Peak Hour

Proposed International Container Transfer Facility - Girden Road, Town of DeWitt, NY
Traffic Volume Projections

N
W E
GTS Consulting

Figure 1

NB-62 - Interstate Semi-Trailer

STATION: 336116

New York State Department of Transportation
Roadway Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	ROBERTS ST	TO:	MANLIUS TN LN	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	3, 7	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	De Witt-Town-0233
ST DIR CODE:	7	END MILEPOST:	2.78	FACTOR GROUP:	30	BIN:	3312700
DOT ID:	129988	LANES BY DIR:	1 East 1 West	CC STN:		RR CROSSING:	
BEGIN DATE:	5/7/2014	WEEK OF YEAR:	19	ADDL DATA:	CLS SPD	HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	60 FT E OF BENEDICT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Vehicle
TAKEN BY:	TTG-AJW	PROCESSED BY:	DOT-SJW	BATCH ID:	DOT-SJWR3ww19	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
5/07, Wed											694	736	802	874	1003	1486	1293	1257	1134	717	580	364	231	152	11323		
5/08, Thu	75	44	44	48	78	277	770	1649	1242	708	671	810	834	849	1008	1604	1711	1744	1036	783	604	357	279	157	17382	1744	17-18
5/09, Fri	86	53	62	62	84	260	750	1528	1218	859	845	839	945	1003	1176	1583	1732	1607	1114	758	652	431	296	243	18186	1732	16-17
5/10, Sat	108	67	45	49	50	107	249	424	680	794	871	887	869	897	930	887	858	708	666	527	490	371	283	225	12042	930	14-15
5/11, Sun	136	88	68	32	49	59	137	249	415	537	743	784	905	946	916	781	775	657	712	565	449	287	191	110	10591	946	13-14
5/12, Mon	43	26	37	46	89	265	824	1657	1349	753	734	790	841	879	1036	1484	1767	1673	1003	690	543	340	221	150	17240	1767	16-17
5/13, Tue	73	32	43	52	89	277	787	1647	1287																4287		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	78	43	50	54	84	271	783	1620	1274	773	736	794	826	867	1016	1525	1590	1558	1058	730	576	354	244	153	17055		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day	ESTIMATED AADT Roadway	East	West
6	143	3	77	1620	9.5	1032	11.8	1071	12.9	15827	8147	7680

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

STATION: 336116

New York State Department of Transportation
EB Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	ROBERTS ST	TO:	MANLIUS TN LN	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	3	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	De Witt-Town-0233
ST DIR CODE:	7	END MILEPOST:	2.78	FACTOR GROUP:	30	BIN:	3312700
DOT ID:	129988	LANES BY DIR:	1 East	CC STN:		RR CROSSING:	
BEGIN DATE:	5/7/2014	WEEK OF YEAR:	19	ADDL DATA:	CLS SPD	HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	60 FT E OF BENEDICT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Vehicle
TAKEN BY:	TTG-AJW	PROCESSED BY:	DOT-SJW	BATCH ID:	DOT-SJWR3ww19	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
5/07, Wed											368	379	425	479	537	898	858	790	590	388	301	249	147	82	6491		
5/08, Thu	53	32	19	23	30	74	242	545	511	302	327	406	446	459	529	939	1104	1128	598	396	311	234	171	85	8964	1128	17-18
5/09, Fri	64	38	37	28	31	80	244	516	498	387	412	432	525	544	612	893	1146	995	593	416	360	277	171	158	9457	1146	16-17
5/10, Sat	73	49	33	23	21	32	104	186	297	368	425	456	485	444	568	472	426	384	366	299	273	225	161	135	6305	568	14-15
5/11, Sun	84	54	50	20	23	22	54	118	186	239	369	443	509	532	497	436	433	350	347	281	249	176	114	62	5648	532	13-14
5/12, Mon	36	17	25	17	21	88	276	566	550	354	353	418	424	474	519	814	1135	1126	548	423	267	180	135	83	8849	1135	16-17
5/13, Tue	44	20	26	25	25	83	266	569	508																1566		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	54	30	27	25	29	79	257	549	517	348	365	409	432	471	528	884	1032	1015	579	402	293	221	151	83	8779		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day	ESTIMATED AADT Roadway	East	West
6	143	3	77	1620	9.5	1032	11.8	1071	12.9	15827	8147	7680

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

New York State Department of Transportation

STATION: 336116

WB Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	ROBERTS ST	TO:	MANLIUS TN LN	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	7	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	De Witt-Town-0233
ST DIR CODE:	7	END MILEPOST:	2.78	FACTOR GROUP:	30	BIN:	3312700
DOT ID:	129988	LANES BY DIR:	1 West	CC STN:		RR CROSSING:	
BEGIN DATE:	5/7/2014	WEEK OF YEAR:	19	ADDL DATA:	CLS SPD	HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	60 FT E OF BENEDICT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Vehicle
TAKEN BY:	TTG-AJW	PROCESSED BY:	DOT-SJW	BATCH ID:	DOT-SJWR3ww19	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
5/07, Wed											326	357	377	395	466	588	435	467	544	329	279	115	84	70	4832		
5/08, Thu	22	12	25	25	48	203	528	1104	731	406	344	404	388	390	479	665	607	616	438	387	293	123	108	72	8418	1104	07-08
5/09, Fri	22	15	25	34	53	180	506	1012	720	472	433	407	420	459	564	690	586	612	521	342	292	154	125	85	8729	1012	07-08
5/10, Sat	35	18	12	26	29	75	145	238	383	426	446	431	384	453	362	415	432	324	300	228	217	146	122	90	5737	453	13-14
5/11, Sun	52	34	18	12	26	37	83	131	229	298	374	341	396	414	419	345	342	307	365	284	200	111	77	48	4943	419	14-15
5/12, Mon	7	9	12	29	68	177	548	1091	799	399	381	372	417	405	517	670	632	547	455	267	276	160	86	67	8391	1091	07-08
5/13, Tue	29	12	17	27	64	194	521	1078	779																2721		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	24	13	22	29	55	192	526	1071	757	426	371	385	394	397	487	641	558	543	479	328	283	133	93	70	8276		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day	ESTIMATED AADT Roadway	East	West
6	143	3	77	1620	9.5	1032	11.8	1071	12.9	15827	8147	7680

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
5	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

STATION: 331145

New York State Department of Transportation
Roadway Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	MANLIUS TN LN	TO:	FREEMONT RD	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	3, 7	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	Manlius-Town-0506
ST DIR CODE:	7	END MILEPOST:	3.36	FACTOR GROUP:	30	BIN:	
DOT ID:	129988	LANES BY DIR:	1 East 1 West	CC STN:		RR CROSSING:	
BEGIN DATE:	4/21/2014	WEEK OF YEAR:	16	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	1200 FT W OF FREEMONT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Axle
TAKEN BY:	TST----	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03R3 WW	SPEED LIMIT:	55

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
4/21, Mon														**799**	**917**	**1098**	**1384**	**1321**	**725**	**540**	**403**	**285**	**175**	**148**	7795		
4/22, Tue	**63**	**44**	**51**	**49**	**91**	**226**	**656**	**1190**	**919**	**629**	**676**	**703**	**773**	**730**	**803**	**1133**	**1369**	**1347**	**713**	**514**	**384**	**271**	**203**	**126**	13663	1369	16-17
4/23, Wed	**62**	**30**	**56**	**54**	**86**	**264**	**627**	**1139**	**976**	**613**	**667**	**639**	**735**	**740**	**840**	**1056**	**1364**	**1400**	**775**	**518**	**409**	**310**	**234**	**128**	13722	1400	17-18
4/24, Thu	**67**	**41**	**53**	**53**	**97**	**257**	**661**	**1139**	**909**	**712**	**671**	**796**													5456		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	63	**38**	**52**	**51**	**90**	**245**	**636**	**1135**	**918**	**640**	**659**	**700**	**740**	**743**	**838**	**1076**	**1348**	**1332**	**724**	**515**	**391**	**283**	**200**	**132**	13548		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day
3	71	3	71	1348	9.9	903	12.9	818	12.5

ESTIMATED AADT Roadway	East	West
12884	6648	6237

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
4	1.05		1.00	1.00	1.00	1.00			0.98

STATION: 331145

New York State Department of Transportation
EB Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	MANLIUS TN LN	TO:	FREEMONT RD	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	3	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	Manlius-Town-0506
ST DIR CODE:	7	END MILEPOST:	3.36	FACTOR GROUP:	30	BIN:	
DOT ID:	129988	LANES BY DIR:	1 East	CC STN:		RR CROSSING:	
BEGIN DATE:	4/21/2014	WEEK OF YEAR:	16	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	1200 FT W OF FREEMONT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Axle
TAKEN BY:	TST----	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03R3 WW	SPEED LIMIT:	55

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
4/21, Mon														**402**	**503**	**653**	**885**	**894**	**413**	**312**	**246**	**174**	**111**	**90**	4683		
4/22, Tue	**39**	**30**	**29**	**20**	**25**	**63**	**183**	**328**	**330**	**276**	**328**	**345**	**392**	**381**	**453**	**674**	**868**	**936**	**399**	**310**	**241**	**181**	**129**	**89**	7049	936	17-18
4/23, Wed	**43**	**19**	**37**	**20**	**25**	**68**	**190**	**319**	**348**	**265**	**311**	**310**	**387**	**387**	**463**	**669**	**881**	**930**	**443**	**329**	**248**	**192**	**153**	**81**	7118	930	17-18
4/24, Thu	**51**	**27**	**27**	**25**	**35**	**61**	**209**	**323**	**320**	**334**	**311**	**393**													2116		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	44	**25**	**30**	**21**	**28**	**63**	**191**	**318**	**327**	**286**	**311**	**343**	**382**	**383**	**464**	**653**	**862**	**903**	**411**	**311**	**241**	**179**	**129**	**85**	6991		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day
3	71	3	71	1348	9.9	903	12.9	818	12.5

ESTIMATED AADT Roadway	East	West
12884	6648	6237

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
4	1.05		1.00	1.00	1.00	1.00			0.98

STATION: 331145

New York State Department of Transportation
WB Traffic Count Hourly Report

ROUTE/ROAD:	KIRKVILLE RD	FROM:	MANLIUS TN LN	TO:	FREEMONT RD	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	7	REF. MARKER:		FUNC. CLASS:	16 - U Minor Arterial	MUNI:	Manlius-Town-0506
ST DIR CODE:	7	END MILEPOST:	3.36	FACTOR GROUP:	30	BIN:	
DOT ID:	129988	LANES BY DIR:	1 West	CC STN:		RR CROSSING:	
BEGIN DATE:	4/21/2014	WEEK OF YEAR:	16	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	WB TRAVEL LANE	PLACEMENT:	1200 FT W OF FREEMONT RD	JURISDICTION:	02-County	1 WAY CODE:	
NOTES 2:						COUNT TYPE:	Axle
TAKEN BY:	TST----	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03R3 WW	SPEED LIMIT:	55

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
4/21, Mon														**397**	**414**	**445**	**499**	**427**	**312**	**228**	**157**	**111**	**64**	**58**	3112		
4/22, Tue	**24**	**14**	**22**	**29**	**66**	**163**	**473**	**862**	**589**	**353**	**348**	**358**	**381**	**349**	**350**	**459**	**501**	**411**	**314**	**204**	**143**	**90**	**74**	**37**	6614	862	07-08
4/23, Wed	**19**	**11**	**19**	**34**	**61**	**196**	**437**	**820**	**628**	**348**	**356**	**329**	**348**	**353**	**377**	**387**	**483**	**470**	**332**	**189**	**161**	**118**	**81**	**47**	6604	820	07-08
4/24, Thu	**16**	**14**	**26**	**28**	**62**	**196**	**452**	**816**	**589**	**378**	**360**	**403**													3340		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	19	**13**	**22**	**30**	**62**	**182**	**446**	**818**	**591**	**353**	**348**	**357**	**358**	**360**	**373**	**423**	**485**	**428**	**314**	**203**	**151**	**104**	**72**	**46**	6558		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	East High Hour	East % of day	West High Hour	West % of day
3	71	3	71	1348	9.9	903	12.9	818	12.5

ESTIMATED AADT Roadway	East	West
12884	6648	6237

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
4	1.05		1.00	1.00	1.00	1.00			0.98

New York State Department of Transportation
Roadway Traffic Count Hourly Report

STATION: 331143

ROUTE/ROAD:	GIRDEN RD	FROM:	KIRKVILLE RD	TO:	DEAD END	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	1, 5	REF. MARKER:		FUNC. CLASS:	19 - U Local System	MUNI:	De Witt-Town-0233
ST DIR CODE:	1, 2	END MILEPOST:	.61	FACTOR GROUP:	30	BIN:	
DOT ID:	131758	LANES BY DIR:	1 North 1 South	CC STN:		RR CROSSING:	
BEGIN DATE:	6/24/2013	WEEK OF YEAR:	25	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	nb travel lane	PLACEMENT:	.35 miles south of kirksvill	JURISDICTION:	03-Town	1 WAY CODE:	
NOTES 2:	sb travel lane					COUNT TYPE:	Vehicle
TAKEN BY:	TST-dnm	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03r3ww26	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
6/24, Mon													**11**	**11**	**19**	**18**	**11**	**5**	**3**	**6**	**2**	**0**	**4**	**5**	95		
6/25, Tue	**1**	**4**	**2**	**0**	**1**	**5**	**13**	**8**	**11**	**5**	**11**	**16**	**12**	**17**	**26**	**15**	**6**	**3**	**2**	**3**	**0**	**1**	**8**	**4**	174	26	14-15
6/26, Wed	**0**	**0**	**0**	**4**	**4**	**7**	**9**	**10**	**9**	**8**	**7**	**15**	**6**	**12**	**17**	**15**	**5**	**3**	**1**	**4**	**3**	**5**	**11**	**1**	156	17	14-15
6/27, Thu	**3**	**3**	**0**	**0**	**3**	**8**	**11**	**8**	**12**	**4**	**10**														62		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	1	**2**	**1**	**1**	**3**	**7**	**11**	**9**	**11**	**6**	**9**	**16**	**10**	**13**	**21**	**16**	**7**	**4**	**2**	**4**	**2**	**2**	**8**	**3**	168		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	North High Hour	North % of day	South High Hour	South % of day
3	71	3	71	21	12.5	10	13.2	10	11

ESTIMATED AADT Roadway	North	South
159	73	86

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
6	1.05		1.00	1.00	1.00	1.00			1.00

STATION: 331143

New York State Department of Transportation
NB Traffic Count Hourly Report

ROUTE/ROAD:	GIRDEN RD	FROM:	KIRKVILLE RD	TO:	DEAD END	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	1	REF. MARKER:		FUNC. CLASS:	19 - U Local System	MUNI:	De Witt-Town-0233
ST DIR CODE:	1, 2	END MILEPOST:	.61	FACTOR GROUP:	30	BIN:	
DOT ID:	131758	LANES BY DIR:	1 North	CC STN:		RR CROSSING:	
BEGIN DATE:	6/24/2013	WEEK OF YEAR:	25	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	nb travel lane	PLACEMENT:	.35 miles south of kirksvill	JURISDICTION:	03-Town	1 WAY CODE:	
NOTES 2:	sb travel lane					COUNT TYPE:	Vehicle
TAKEN BY:	TST-dnm	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03r3ww26	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
6/24, Mon													**2**	**6**	**9**	**10**	**5**	**3**	**3**	**2**	**2**	**0**	**1**	**5**	48		
6/25, Tue	**0**	**3**	**1**	**0**	**0**	**1**	**2**	**4**	**5**	**1**	**5**	**7**	**6**	**7**	**14**	**7**	**3**	**2**	**1**	**1**	**0**	**0**	**5**	**4**	79	14	14-15
6/26, Wed	**0**	**0**	**0**	**3**	**1**	**2**	**1**	**3**	**2**	**6**	**3**	**8**	**3**	**7**	**8**	**7**	**2**	**1**	**1**	**0**	**2**	**4**	**7**	**1**	72	8	14-15
6/27, Thu	**2**	**3**	**0**	**0**	**0**	**2**	**2**	**2**	**5**	**0**	**7**														23		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	1	**2**	**0**	**1**	**0**	**2**	**2**	**3**	**4**	**2**	**5**	**8**	**4**	**7**	**10**	**8**	**3**	**2**	**2**	**1**	**1**	**1**	**4**	**3**	76		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	North High Hour	North % of day	South High Hour	South % of day	ESTIMATED AADT Roadway	North	South
3	71	3	71	21	12.5	10	13.2	10	11	159	73	86

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
6	1.05		1.00	1.00	1.00	1.00			1.00

STATION: 331143

New York State Department of Transportation
SB Traffic Count Hourly Report

ROUTE/ROAD:	GIRDEN RD	FROM:	KIRKVILLE RD	TO:	DEAD END	REGION-COUNTY:	3-ONONDAGA
FED DIR CODE:	5	REF. MARKER:		FUNC. CLASS:	19 - U Local System	MUNI:	De Witt-Town-0233
ST DIR CODE:	1, 2	END MILEPOST:	.61	FACTOR GROUP:	30	BIN:	
DOT ID:	131758	LANES BY DIR:	1 South	CC STN:		RR CROSSING:	
BEGIN DATE:	6/24/2013	WEEK OF YEAR:	25	ADDL DATA:		HPMS SAMPLE:	
NOTES 1:	nb travel lane	PLACEMENT:	.35 miles south of kirksvill	JURISDICTION:	03-Town	1 WAY CODE:	
NOTES 2:	sb travel lane					COUNT TYPE:	Vehicle
TAKEN BY:	TST-dnm	PROCESSED BY:	R03-JAB	BATCH ID:	DOT-R03r3ww26	SPEED LIMIT:	

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH COUNT	HIGH HOUR
6/24, Mon													9	5	10	8	6	2	0	4	0	0	3	0	47		
6/25, Tue	1	1	1	0	1	4	11	4	6	4	6	9	6	10	12	8	3	1	1	2	0	1	3	0	95	12	14-15
6/26, Wed	0	0	0	1	3	5	8	7	7	2	4	7	3	5	9	8	3	2	0	4	1	1	4	0	84	9	14-15
6/27, Thu	1	0	0	0	3	6	9	6	7	4	3														39		
AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)																									**AWDT**		
	1	0	0	0	2	5	9	6	7	3	4	8	6	7	10	8	4	2	0	3	0	1	3	0	91		

DAYS Counted	HOURS Counted	WEEKDAYS Counted	WEEKDAY Hours	AVERAGE WEEKDAY Roadway High Hour	Roadway % of day	North High Hour	North % of day	South High Hour	South % of day
3	71	3	71	21	12.5	10	13.2	10	11

ESTIMATED AADT Roadway	North	South
159	73	86

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
6	1.05		1.00	1.00	1.00	1.00			1.00

Intersection Gap Study

Project: Proposed International Container Transfer Facility, Town of DeWitt, NY
Date: 12/4/2018

Intersection: Girden Road @ Kirkville Road
Movement: Right Turns Exiting / Left Turns Entering

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak											
7:15-7:30am	# of Gaps	21	11	7	3	3	1	0	0		
	# of Vehicles	**21**	**22**	**21**	**12**	**15**	**6**	**0**	**0**	**97**	
7:30-7:45am	# of Gaps	23	8	7	1	2	0	1	3		
	# of Vehicles	**23**	**16**	**21**	**4**	**10**	**0**	**7**	**24**	**105**	
7:45-8:00am	# of Gaps	18	6	6	2	2	2	0	0		
	# of Vehicles	**18**	**12**	**18**	**8**	**10**	**12**	**0**	**0**	**78**	
8:00-8:15am	# of Gaps	10	14	5	0	3	2	1	4		
	# of Vehicles	**10**	**28**	**15**	**0**	**15**	**12**	**7**	**32**	**119**	**399**
Evening Peak											
4:00-4:15pm	# of Gaps	15	5	5	1	1	0	0	0		
	# of Vehicles	**15**	**10**	**15**	**4**	**5**	**0**	**0**	**0**	**49**	
4:15-4:30pm	# of Gaps	22	11	3	1	0	0	0	0		
	# of Vehicles	**22**	**22**	**9**	**4**	**0**	**0**	**0**	**0**	**57**	
4:30-4:45pm	# of Gaps	15	4	5	2	1	0	0	0		
	# of Vehicles	**15**	**8**	**15**	**8**	**5**	**0**	**0**	**0**	**51**	
4:55-5:00pm	# of Gaps	15	6	1	0	0	0	0	0		
	# of Vehicles	**15**	**12**	**3**	**0**	**0**	**0**	**0**	**0**	**30**	**187**

Intersection Gap Study

GTS Consulting

Project: Proposed International Container Transfer Facility, Town of DeWitt, NY
Date: 12/4/2018

Intersection: Girden Road @ Kirkville Road
Movement: Left Turns Exiting

Time Interval		6-9 sec x 1	10-13 sec x 2	14-17 sec x 3	18-19 sec x 4	20-23 sec x 5	24-25 sec x 6	26-29 sec x 7	>29 sec x 8	Interval Total	Hour Total
Morning Peak											
7:15-7:30am	# of Gaps	10	5	3	0	1	0	0	0		
	# of Vehicles	**10**	**10**	**9**	**0**	**5**	**0**	**0**	**0**	**34**	
7:30-7:45am	# of Gaps	12	2	1	0	0	0	0	0		
	# of Vehicles	**12**	**4**	**3**	**0**	**0**	**0**	**0**	**0**	**19**	
7:45-8:00am	# of Gaps	7	0	1	1	0	0	0	0		
	# of Vehicles	**7**	**0**	**3**	**4**	**0**	**0**	**0**	**0**	**14**	
8:00-8:15am	# of Gaps	18	7	1	0	0	0	0	0		
	# of Vehicles	**18**	**14**	**3**	**0**	**0**	**0**	**0**	**0**	**35**	**102**
Evening Peak											
4:00-4:15pm	# of Gaps	12	6	2	0	0	0	0	0		
	# of Vehicles	**12**	**12**	**6**	**0**	**0**	**0**	**0**	**0**	**30**	
4:15-4:30pm	# of Gaps	16	4	1	0	0	0	0	0		
	# of Vehicles	**16**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**27**	
4:30-4:45pm	# of Gaps	11	2	0	0	0	0	0	0		
	# of Vehicles	**11**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	
4:55-5:00pm	# of Gaps	13	3	1	0	0	0	0	0		
	# of Vehicles	**13**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**22**	**94**

Proposed International Container Transfer Facility - Girden Road, Town of DeWitt, NY

Speed Study Measurements - Kirkville Road Passing Girden Road

12/4/2018

Distance Travelled (ft) = 285 50 Speed Measurements per Direction Speed Limit 45 mph

EB Time Seconds	Calculated Speed	EB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed	WB Time Seconds	Calculated Speed
4.47	43	3.88	50	5.09	38	4	49
4.38	44	3.88	50	4.72	41	4	49
4.37	44	3.87	50	4.69	41	4	49
4.34	45	3.87	50	4.53	43	3.97	49
4.31	45	3.85	50	4.47	43	3.97	49
4.25	46	3.85	50	4.46	44	3.95	49
4.21	46	3.82	51	4.38	44	3.94	49
4.19	46	3.82	51	4.35	45	3.91	50
4.18	46	3.82	51	4.32	45	3.87	50
4.15	47	3.78	51	4.31	45	3.84	51
4.13	47	3.78	51	4.25	46	3.84	51
4.1	47	3.76	52	4.21	46	3.83	51
4.1	47	3.76	52	4.19	46	3.82	51
4.06	48	3.72	52	4.19	46	3.81	51
4.06	48	3.71	52	4.16	47	3.79	51
4.06	48	3.69	53	4.15	47	3.78	51
4.03	48	3.69	53	4.15	47	3.78	51
4.01	48	3.69	53	4.13	47	3.78	51
3.97	49	3.68	53	4.13	47	3.71	52
3.97	49	3.62	54	4.09	48	3.69	53
3.97	49	3.6	54	4.07	48	3.69	53
3.94	49	3.59	54	4.05	48	3.69	53
3.94	49	3.59	54	4.05	48	3.69	53
3.93	49	3.56	55	4.02	48	3.67	53
3.92	50	3.41	57	4.02	48	3.67	53

Eastbound

Average Speed = 50 mph

85th Percentile Speed = 53 mph

Westbound

Average Speed = 48 mph

85th Percentile Speed = 51 mph

Background Traffic Growth Calculations

Proposed International Container Transfer Facility, Girden Road, Town of DeWitt, NY

Historical Traffic Counts Taken from the NYSDOT 2016 Traffic Volume Report

Kirkville Road - Between Roberts Street and Manlius Town Line (Girden Road)

2016 (Est)	2014	2011	2008
15,713 veh	15,837 veh	15,732 veh	14,572 veh

-0.4% per year | +0.2% per year | +2.7% per year

-0.0% per year

+1.0% per year

Kirkville Road - Between Manlius Town Line (Girden Road) and Freemont Road

2016 (Est)	2014	2011	2008
12,865 veh	12,966 veh	16,177 veh	14,427 veh

-0.0% per year | -6.7% per year | +4.0% per year

-4.1% per year

-1.4% per year

Use +1.0% annual growth for traffic projections

Proposed International Container Transfer Facility - Girden Road, Town of DeWitt, NY
Accident History Summaries - September 1 2013 Through August 31, 2018

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
1	10/8/2013	Kirkville / Girden	Left Turn	2	INJ	WB Left / WB	Dry	Failure to Yeild ROW
2	7/3/2014	Kirkville / Girden	Right Angle	2	PDO	NB / WB	Wet	Failure to Yeild ROW
3	8/22/2014	Kirkville / Driveway	Right Angle	2	INJ	SB Left / WB	Wet	Driver Inattention
4	2/16/2015	Kirkville Road	Rearend	3	INJ	EB / EB Stopped / WB	Dry	Unsafe Speed
5	2/2/2018	Kirkville Road	Fixed Object	1	PDO	WB / Ditch	Wet	Slippery Pavement

Kirkville Road @ Girden Road - 2 Accidents
1 - Left Turn Accident
1 - Right Angle Accident

Kirkville Road @ Girden Road Intersection - Evening Peak Hour - 1,659 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 18,433 Vehicles

Intersection Accident Rates

$$\frac{\text{\# Accidents X 1,000,000}}{\text{AADT X \# Years X 365 Days}}$$

Time Period = 5 years

Kirkville Road @ Girden Road - 2 Accidents
Accident Rate = .059 accidents per million entering vehicles
Statewide average for similar facilities = 0.17 accidents per million entering vehicles (Rural - 3 Legged Intersection - All Lanes)
Intersection Accident History is Below the Statewide Average

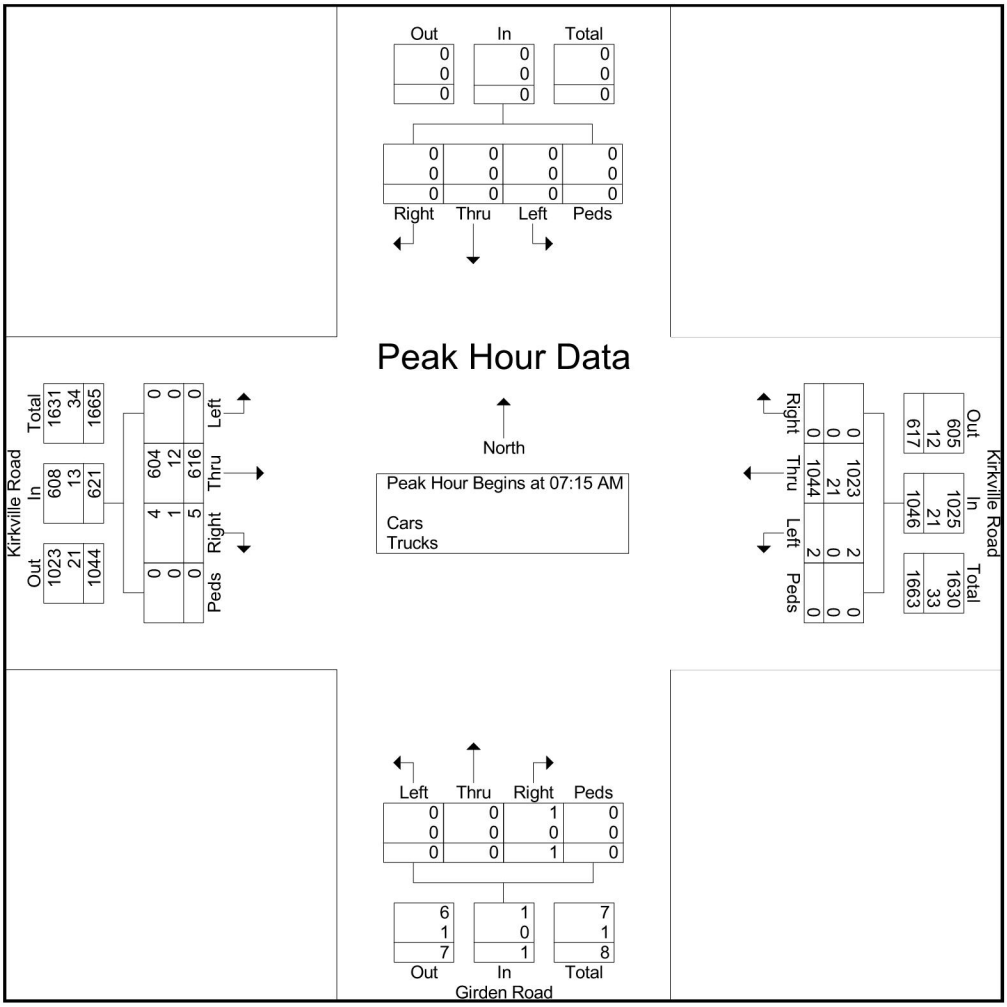
File Name : Kirkville Road @ Girden Road
Site Code : 00000001
Start Date : 12/4/2018
Page No : 1

Groups Printed- Cars - Trucks

	Southbound				Kirkville Road Westbound				Girden Road Northbound				Kirkville Road Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	202	0	0	0	0	2	0	0	102	0	0	306
07:15 AM	0	0	0	0	0	199	0	0	0	0	0	0	2	153	0	0	354
07:30 AM	0	0	0	0	0	286	0	0	0	0	0	0	1	153	0	0	440
07:45 AM	0	0	0	0	0	328	1	0	0	0	0	0	1	198	0	0	528
Total	0	0	0	0	0	1015	1	0	0	0	2	0	4	606	0	0	1628
08:00 AM	0	0	0	0	0	231	1	0	1	0	0	0	1	112	0	0	346
08:15 AM	0	0	0	0	0	147	0	0	0	0	2	0	1	109	0	0	259
08:30 AM	0	0	0	0	0	171	2	0	1	0	0	0	1	153	0	0	328
08:45 AM	0	0	0	0	0	128	0	0	0	0	0	0	1	106	0	0	235
Total	0	0	0	0	0	677	3	0	2	0	2	0	4	480	0	0	1168
04:00 PM	0	0	0	0	0	166	0	0	0	0	1	0	1	242	0	0	410
04:15 PM	0	0	0	0	0	169	0	0	0	0	1	0	0	246	0	0	416
04:30 PM	0	0	0	0	0	156	0	0	0	0	2	0	1	235	0	0	394
04:45 PM	0	0	0	0	0	133	0	0	0	0	1	0	1	304	0	0	439
Total	0	0	0	0	0	624	0	0	0	0	5	0	3	1027	0	0	1659
05:00 PM	0	0	0	0	0	112	0	0	0	0	0	0	0	292	0	0	404
05:15 PM	0	0	0	0	0	96	0	0	0	0	0	0	1	253	0	0	350
05:30 PM	0	0	0	0	0	117	0	0	0	0	0	0	0	209	0	0	326
05:45 PM	0	0	0	0	0	135	0	0	0	0	0	0	0	185	0	0	320
Total	0	0	0	0	0	460	0	0	0	0	0	0	1	939	0	0	1400
Grand Total	0	0	0	0	0	2776	4	0	2	0	9	0	12	3052	0	0	5855
Apprch %	0	0	0	0	0	99.9	0.1	0	18.2	0	81.8	0	0.4	99.6	0	0	
Total %	0	0	0	0	0	47.4	0.1	0	0	0	0.2	0	0.2	52.1	0	0	
Cars	0	0	0	0	0	2701	4	0	2	0	7	0	11	2982	0	0	5707
% Cars	0	0	0	0	0	97.3	100	0	100	0	77.8	0	91.7	97.7	0	0	97.5
Trucks	0	0	0	0	0	75	0	0	0	0	2	0	1	70	0	0	148
% Trucks	0	0	0	0	0	2.7	0	0	0	0	22.2	0	8.3	2.3	0	0	2.5

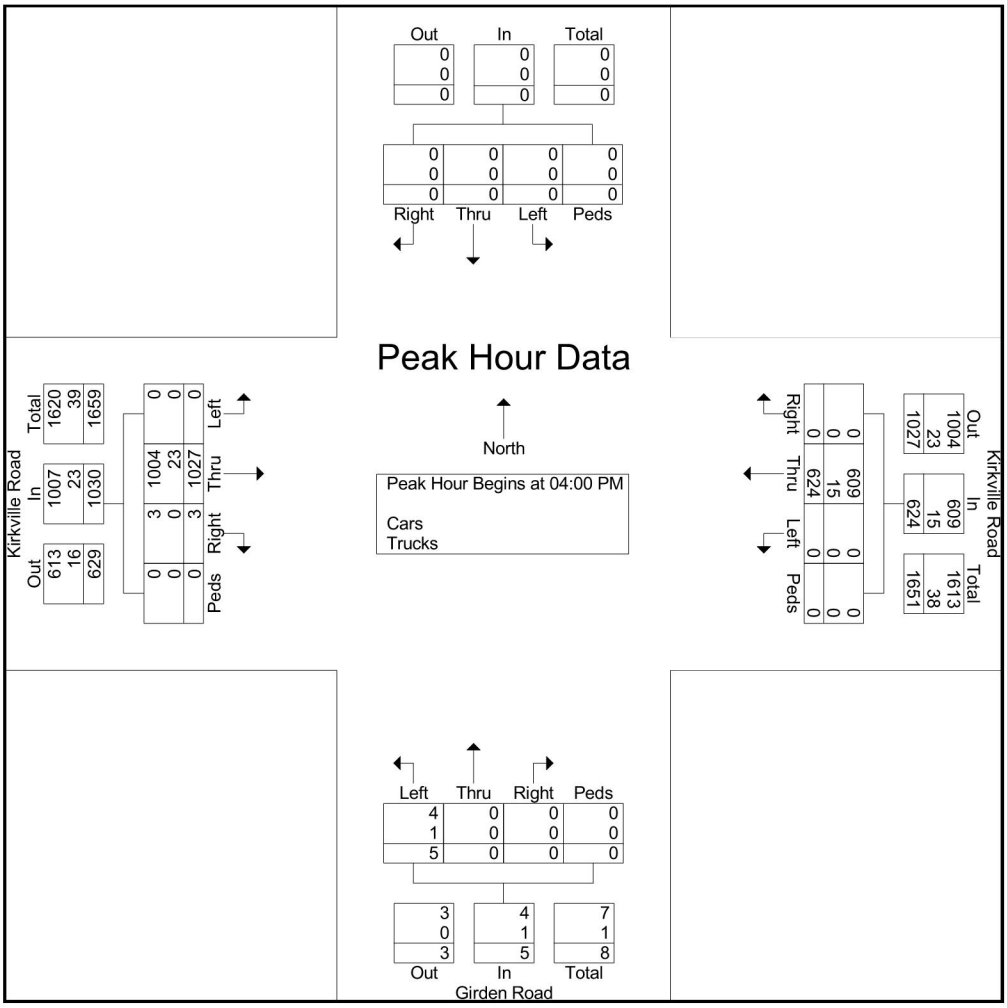
File Name : Kirkville Road @ Girden Road
Site Code : 00000001
Start Date : 12/4/2018
Page No : 2

	Southbound					Kirkville Road Westbound					Girden Road Northbound					Kirkville Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	199	0	0	199	0	0	0	0	0	**2**	153	0	0	155	354
07:30 AM	0	0	0	0	0	0	286	0	0	286	0	0	0	0	0	1	153	0	0	154	440
07:45 AM	0	0	0	0	0	0	**328**	**1**	0	**329**	0	0	0	0	0	1	**198**	0	0	**199**	**528**
08:00 AM	0	0	0	0	0	0	231	1	0	232	**1**	0	0	0	**1**	1	112	0	0	113	346
Total Volume	0	0	0	0	0	0	1044	2	0	1046	1	0	0	0	1	5	616	0	0	621	1668
% App. Total	0	0	0	0		0	99.8	0.2	0		100	0	0	0		0.8	99.2	0	0		
PHF	.000	.000	.000	.000	.000	.000	.796	.500	.000	.795	.250	.000	.000	.000	.250	.625	.778	.000	.000	.780	.790
Cars	0	0	0	0	0	0	1023														
% Cars	0	0	0	0	0	0	98.0	100	0	98.0	100	0	0	0	100	80.0	98.1	0	0	97.9	98.0
Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	1	12	0	0	13	34
% Trucks	0	0	0	0	0	0	2.0	0	0	2.0	0	0	0	0	0	20.0	1.9	0	0	2.1	2.0



File Name : Kirkville Road @ Girden Road
Site Code : 00000001
Start Date : 12/4/2018
Page No : 3

	Southbound					Kirkville Road Westbound					Girden Road Northbound					Kirkville Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	166	0	0	166	0	0	1	0	1	**1**	242	0	0	243	410
04:15 PM	0	0	0	0	0	0	**169**	0	0	**169**	0	0	1	0	1	0	246	0	0	246	416
04:30 PM	0	0	0	0	0	0	156	0	0	156	0	0	**2**	0	**2**	1	235	0	0	236	394
04:45 PM	0	0	0	0	0	0	133	0	0	133	0	0	1	0	1	1	**304**	0	0	**305**	**439**
Total Volume	0	0	0	0	0	0	624	0	0	624	0	0	5	0	5	3	1027	0	0	1030	1659
% App. Total	0	0	0	0		0	100	0	0		0	0	100	0		0.3	99.7	0	0		
PHF	.000	.000	.000	.000	.000	.000	.923	.000	.000	.923	.000	.000	.625	.000	.625	.750	.845	.000	.000	.844	.945
Cars	0	0	0	0	0	0	609	0	0	609	0	0	4	0	4	3	1004				
% Cars	0	0	0	0	0	0	97.6	0	0	97.6	0	0	80.0	0	80.0	100	97.8	0	0	97.8	97.6
Trucks	0	0	0	0	0	0	15	0	0	15	0	0	1	0	1	0	23	0	0	23	39
% Trucks	0	0	0	0	0	0	2.4	0	0	2.4	0	0	20.0	0	20.0	0	2.2	0	0	2.2	2.4



Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	616	5	2	1044	0	1
Future Vol, veh/h	616	5	2	1044	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	80	80	90	90
Heavy Vehicles, %	2	20	0	2	0	0
Mvmt Flow	790	6	3	1305	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	796	0	2104	793
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	1311	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	835	-	57	392
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	255	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	835	-	56	392
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	252	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	392	-	-	835	-
HCM Lane V/C Ratio	0.003	-	-	0.003	-
HCM Control Delay (s)	14.2	-	-	9.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1027	3	0	624	5	0
Future Vol, veh/h	1027	3	0	624	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	92	92	90	90
Heavy Vehicles, %	2	0	0	2	20	0
Mvmt Flow	1223	4	0	678	6	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1227	0	1903	1225
Stage 1	-	-	-	-	1225	-
Stage 2	-	-	-	-	678	-
Critical Hdwy	-	-	4.1	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	-	-	2.2	-	3.68	3.3
Pot Cap-1 Maneuver	-	-	575	-	68	220
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	472	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	575	-	68	220
Mov Cap-2 Maneuver	-	-	-	-	68	-
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	472	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	62.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	68	-	-	575	-
HCM Lane V/C Ratio	0.082	-	-	-	-
HCM Control Delay (s)	62.6	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	647	5	2	1096	0	1
Future Vol, veh/h	647	5	2	1096	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	80	80	90	90
Heavy Vehicles, %	2	20	0	2	0	0
Mvmt Flow	829	6	3	1370	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	835	0	2208	832
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	1376	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	807	-	49	372
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	237	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	807	-	48	372
Mov Cap-2 Maneuver	-	-	-	-	48	-
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	233	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	372	-	-	807	-
HCM Lane V/C Ratio	0.003	-	-	0.003	-
HCM Control Delay (s)	14.7	-	-	9.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1078	3	0	655	5	0
Future Vol, veh/h	1078	3	0	655	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	92	92	90	90
Heavy Vehicles, %	2	0	0	2	20	0
Mvmt Flow	1283	4	0	712	6	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1287	0	1997	1285
Stage 1	-	-	-	-	1285	-
Stage 2	-	-	-	-	712	-
Critical Hdwy	-	-	4.1	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	-	-	2.2	-	3.68	3.3
Pot Cap-1 Maneuver	-	-	546	-	59	203
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	455	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	546	-	59	203
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	455	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	72.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	59	-	-	546	-
HCM Lane V/C Ratio	0.094	-	-	-	-
HCM Control Delay (s)	72.3	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	647	16	8	1096	11	7
Future Vol, veh/h	647	16	8	1096	11	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	80	80	90	90
Heavy Vehicles, %	2	50	0	2	64	0
Mvmt Flow	829	21	10	1370	12	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	850	0	2230	840
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	1390	-
Critical Hdwy	-	-	4.1	-	7.04	6.2
Critical Hdwy Stg 1	-	-	-	-	6.04	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.2	-	4.076	3.3
Pot Cap-1 Maneuver	-	-	797	-	31	368
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	170	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	797	-	29	368
Mov Cap-2 Maneuver	-	-	-	-	29	-
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	161	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	137.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	45	-	-	797	-
HCM Lane V/C Ratio	0.444	-	-	0.013	-
HCM Control Delay (s)	137.8	-	-	9.6	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	1.6	-	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1078	14	6	655	16	6
Future Vol, veh/h	1078	14	6	655	16	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	92	92	90	90
Heavy Vehicles, %	2	50	0	2	50	0
Mvmt Flow	1283	17	7	712	18	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1300	0	2018	1292
Stage 1	-	-	-	-	1292	-
Stage 2	-	-	-	-	726	-
Critical Hdwy	-	-	4.1	-	6.9	6.2
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	-	-	2.2	-	3.95	3.3
Pot Cap-1 Maneuver	-	-	540	-	47	201
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	402	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	540	-	46	201
Mov Cap-2 Maneuver	-	-	-	-	46	-
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	394	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	106.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	58	-	-	540	-
HCM Lane V/C Ratio	0.421	-	-	0.012	-
HCM Control Delay (s)	106.4	-	-	11.7	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.6	-	-	0	-

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APPENDIX E
NRCS SOIL MAPS

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Hydrologic Soil Group—Onondaga County, New York
(CNYIP Soil Map)

Map Scale: 1:10,300 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

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

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- 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 1:20,000.

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: Onondaga County, New York
Survey Area Data: Version 13, Sep 3, 2018

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

Date(s) aerial images were photographed: Dec 31, 2009—Sep 23, 2017

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GaA	Galen very fine sandy loam, 0 to 2 percent slopes	A/D	8.0	1.8%
GaB	Galen very fine sandy loam, 2 to 6 percent slopes	A/D	7.0	1.6%
LbC2	Lairdsville silty clay loam, 6 to 12 percent slopes, eroded	D	9.2	2.1%
Lk	Lakemont silty clay loam, 0 to 3 percent slopes	D	21.6	4.9%
Lm	Lamson very fine sandy loam	A/D	15.2	3.5%
LvB	Lockport and Brockport silty clay loams, 0 to 6 percent slopes	C/D	65.9	15.0%
MtA	Minoa fine sandy loam, 0 to 2 percent slopes	B/D	29.8	6.8%
Na	Naumburg loamy fine sand	A/D	5.3	1.2%
NgA	Niagara silt loam, 0 to 4 percent slopes	C/D	99.1	22.6%
OgB	Ontario loam, 3 to 8 percent slopes	B	0.1	0.0%
PpA	Phelps gravelly loam, 0 to 3 percent slopes	B/D	4.9	1.1%
PpB	Phelps gravelly loam, 3 to 8 percent slopes	B/D	15.6	3.6%
Te	Teel silt loam	B/D	4.1	0.9%
Ub	Urban land		98.3	22.4%
Wn	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	B/D	53.5	12.2%
WwB	Williamson silt loam, 2 to 6 percent slopes	D	1.2	0.3%
Totals for Area of Interest			**438.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX F
FEMA FLOODPLAIN MAP

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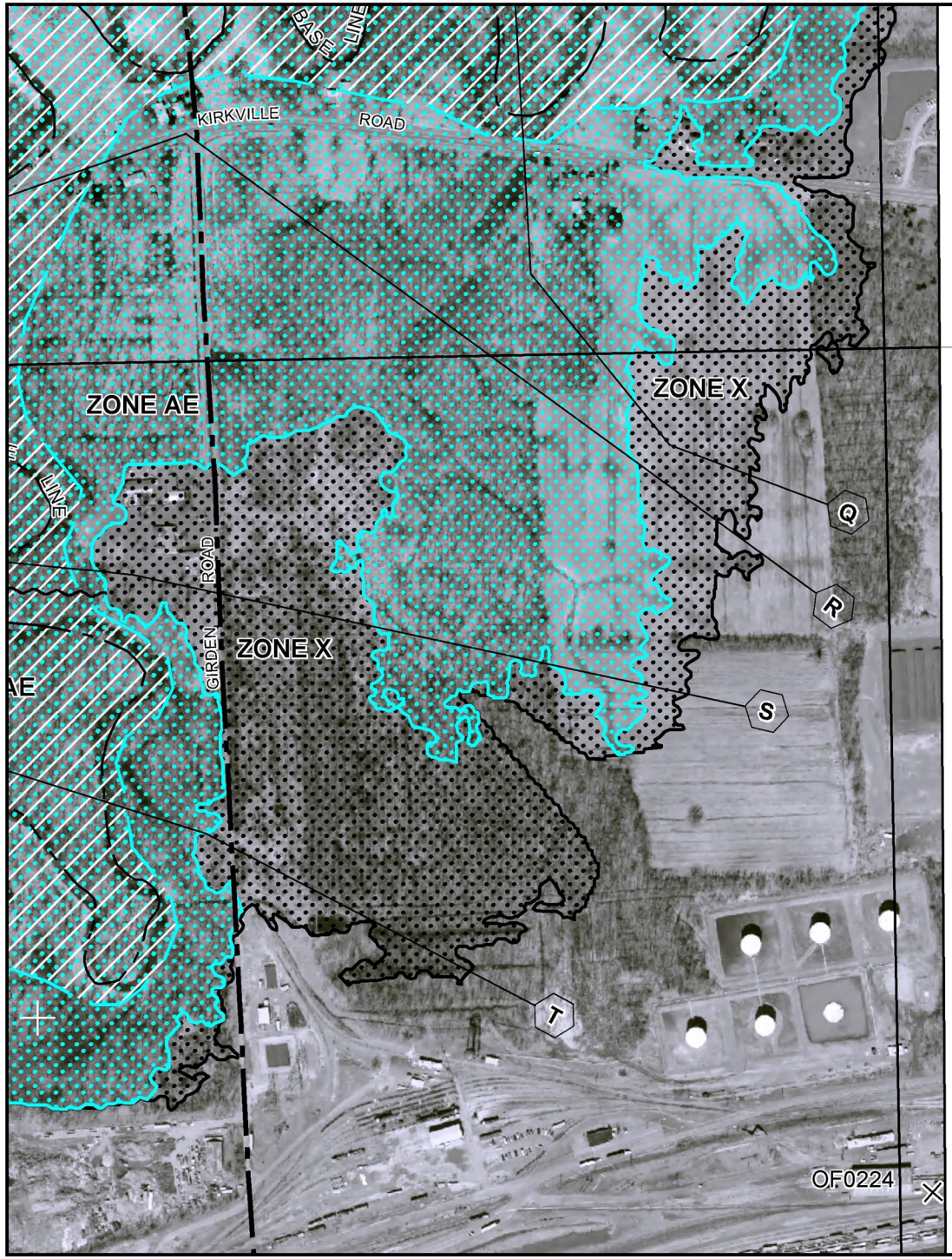

MAP SCALE 1" = 500'

250 0 500 1000 FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0233F

FIRM

FLOOD INSURANCE RATE MAP

ONONDAGA COUNTY, NEW YORK

(ALL JURISDICTIONS)

PANEL 233 OF 520

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
DEWITT, TOWN OF	360973	0233	F
EAST SYRACUSE, VILLAGE OF	360574	0233	F
MANLIUS, TOWN OF	360584	0233	F

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

MAP NUMBER
36067C0233F

EFFECTIVE DATE
NOVEMBER 4, 2016

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

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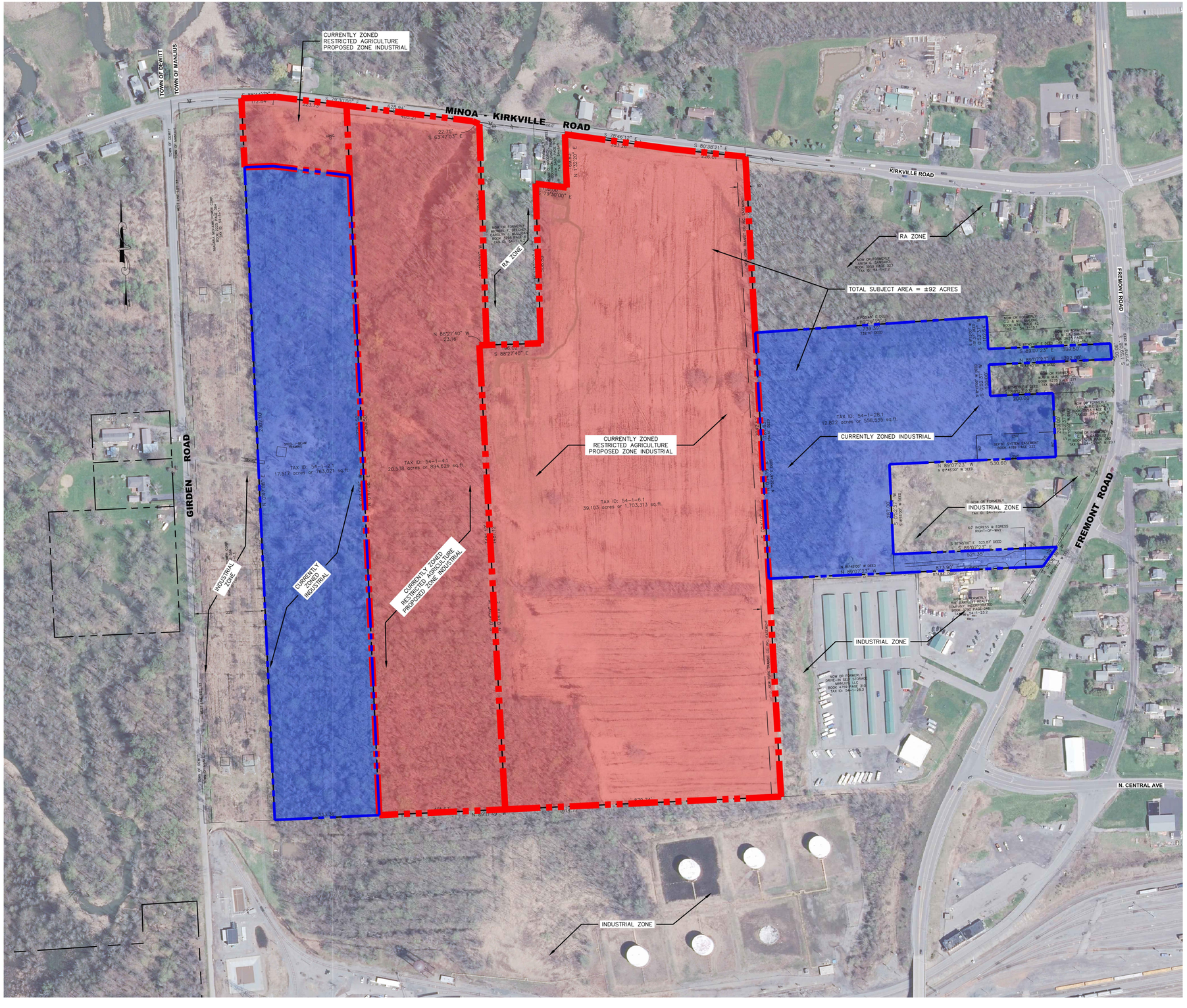

LEGEND

PROPERTY LINE

ZONED RESTRICTED AGRICULTURAL (RA), PROPOSED INDUSTRIAL ZONE

ZONED INDUSTRIAL (I)

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

GRAPHIC SCALE
0 150' 300'
(IN FEET)
1 inch = 150 ft

1 SK-1 PROPOSED ZONE CHANGE PLAN
SCALE: 1"=150'

PROJECT TITLE:
PROPOSED CPO FACILITY GIRDEN ROAD
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR:
THIRD GENERATION INTERMODAL (3GI)
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

SHEET TITLE:
CNYIP ZONE CHANGE PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
email: MNAP@NAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 17-1588
DATE 18 DEC 2019
SCALE 1"=150'

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 069153

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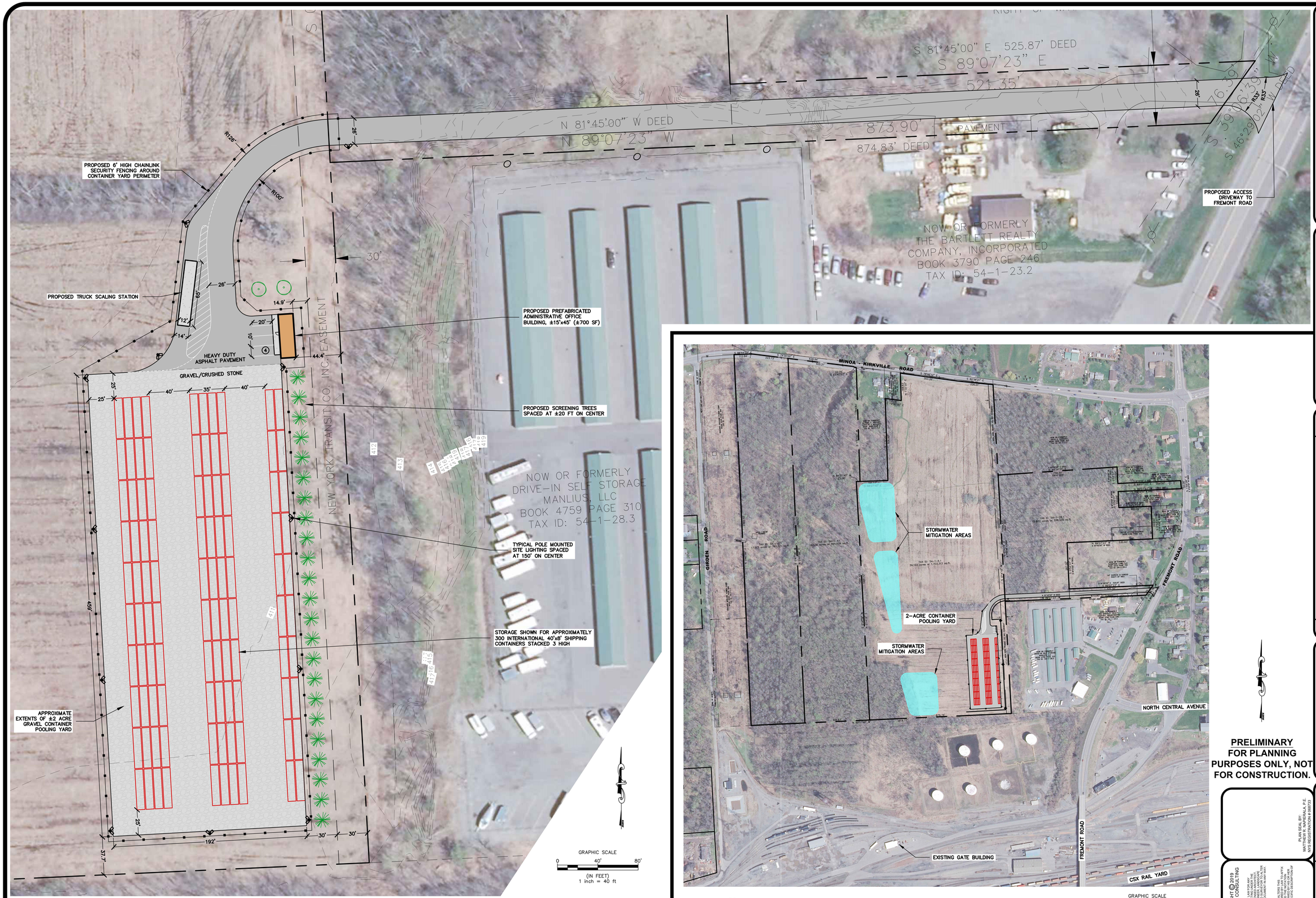
SHEET **SK-1**



1 SK-2 LAYOUT PLAN - CONTAINER POOLING YARD
SCALE: 1"=40'

2 SK-2 OVERALL LAYOUT PLAN
SCALE: 1"=250'

PRELIMINARY FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

PROJECT TITLE: **PROPOSED CPO FACILITY GIRDEN ROAD**
TOWN OF MANLIUS — ONONDAGA COUNTY, NY

PREPARED FOR: THIRD GENERATION INTERMODAL (3GI)
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

SHEET TITLE: **LAYOUT PLAN**

NO.	REVISION/ISSUE	DATE

PREPARED BY:
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PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

PROJECT NO. 17-1588
DATE 18 DEC 2019
SCALE AS SHOWN

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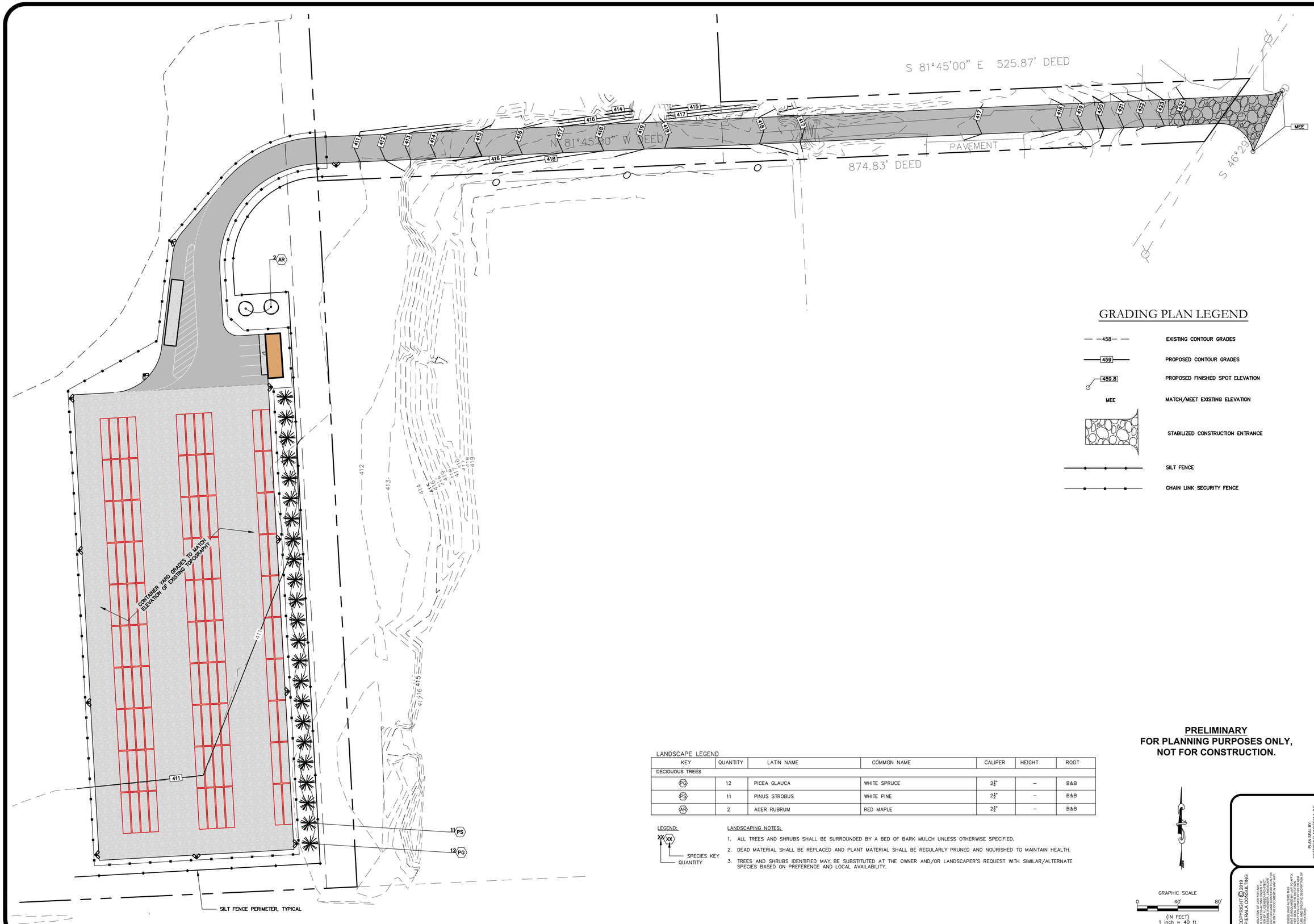
SHEET **SK-2**



GRADING PLAN LEGEND

458	EXISTING CONTOUR GRADES
459	PROPOSED CONTOUR GRADES
459.8	PROPOSED FINISHED SPOT ELEVATION
MEE	MATCH/MEET EXISTING ELEVATION
	STABILIZED CONSTRUCTION ENTRANCE
	SILT FENCE
	CHAIN LINK SECURITY FENCE

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

LANDSCAPE LEGEND

KEY	QUANTITY	LATIN NAME	COMMON NAME	CALIPER	HEIGHT	ROOT
DECIDUOUS TREES						
PG	12	PICEA GLAUCA	WHITE SPRUCE	2½"	–	B&B
PS	11	PINUS STROBUS	WHITE PINE	2½"	–	B&B
AR	2	ACER RUBRUM	RED MAPLE	2½"	–	B&B

LEGEND:

XX XX — SPECIES KEY / QUANTITY

LANDSCAPING NOTES:

1. ALL TREES AND SHRUBS SHALL BE SURROUNDED BY A BED OF BARK MULCH UNLESS OTHERWISE SPECIFIED.
2. DEAD MATERIAL SHALL BE REPLACED AND PLANT MATERIAL SHALL BE REGULARLY PRUNED AND NOURISHED TO MAINTAIN HEALTH.
3. TREES AND SHRUBS IDENTIFIED MAY BE SUBSTITUTED AT THE OWNER AND/OR LANDSCAPER'S REQUEST WITH SIMILAR/ALTERNATE SPECIES BASED ON PREFERENCE AND LOCAL AVAILABILITY.

GRAPHIC SCALE
0 40' 80'
(IN FEET)
1 inch = 40 ft

PROJECT TITLE:
PROPOSED CPO FACILITY
GIRDEN ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
THIRD GENERATION INTERMODAL (3GI)
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

SHEET TITLE:
GRADING AND LANDSCAPING PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
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110 FAYETTE STREET
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PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

PROJECT NO. 17-1588
DATE 18 DEC 2019
SCALE 1" = 40'

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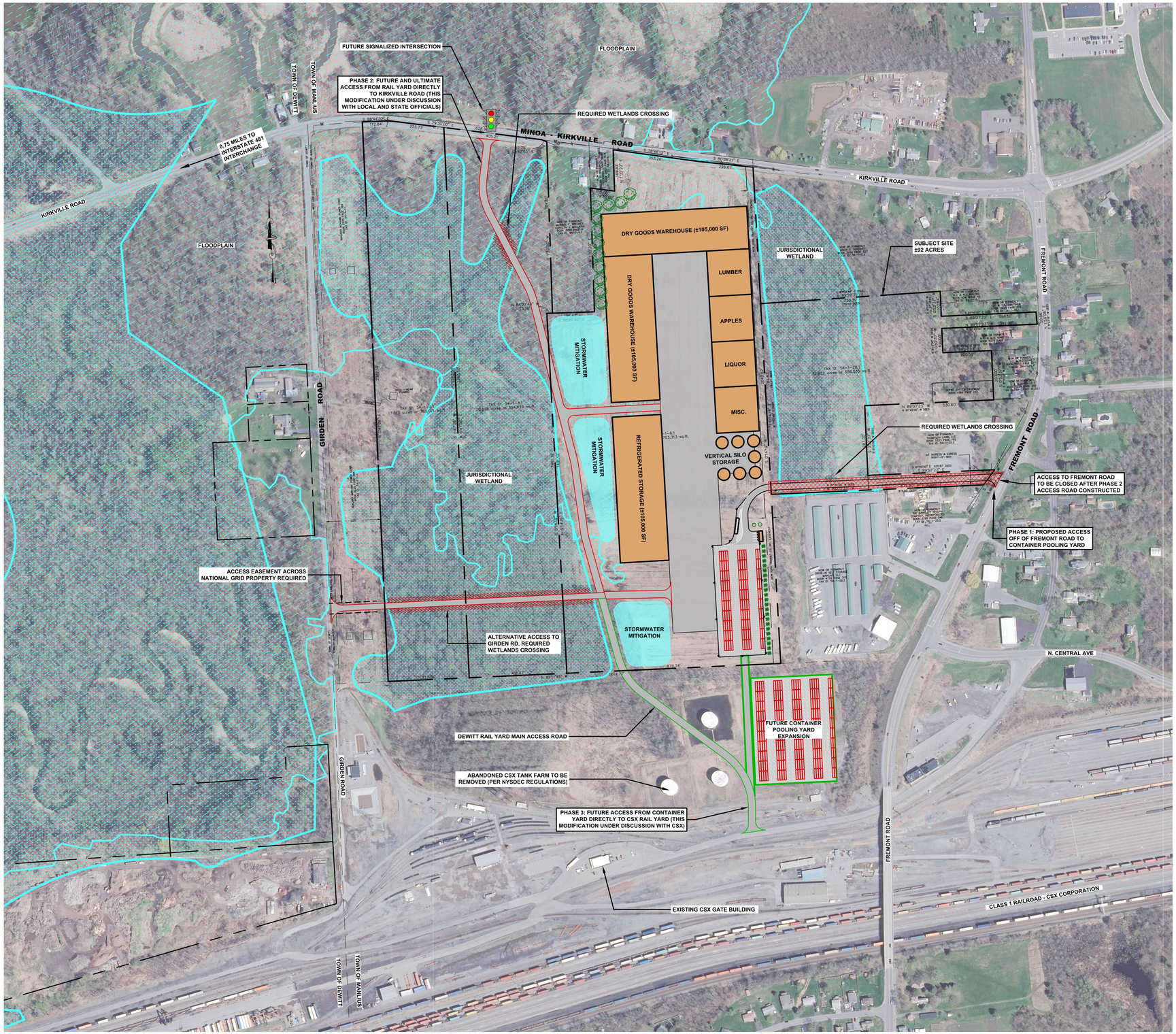
SHEET
SK-3



1 SK-4 CNYIP FUTURE CONCEPTUAL MASTER PLAN (LATER PHASE)
SCALE: 1"=200'

LEGEND

PROPERTY LINE

PROPOSED WAREHOUSE BUILDING

WETLAND AREA AND WETLAND BUFFER

FEMA 100-YEAR FLOODPLAIN

PHASE 1
ACCESS OFF FREMONT ROAD & 2-ACRE GRAVEL CONTAINER YARD

PHASE 2
ACCESS OFF KIRKVILLE ROAD

PHASE 3
ACCESS THROUGH CSX TRAIN YARD

PRELIMINARY
FOR PLANNING PURPOSES ONLY, NOT FOR CONSTRUCTION.

GRAPHIC SCALE
0 200' 400'
(IN FEET)
1 inch = 200 ft

PROJECT TITLE:
PROPOSED CPO FACILITY
GIRDEN ROAD
TOWN OF MANLIUS ONONDAGA COUNTY, NY

PREPARED FOR:
THIRD GENERATION INTERMODAL (3GI)
360 ERIE BOULEVARD EAST
SYRACUSE, NY 13202

SHEET TITLE:
FUTURE POTENTIAL INLAND PORT WAREHOUSE FACILITY

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, NEW YORK 13104
email: MNAP@NAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 068733

PROJECT NO. 17-1588
DATE 18 DEC 2019
SCALE 1"=200'

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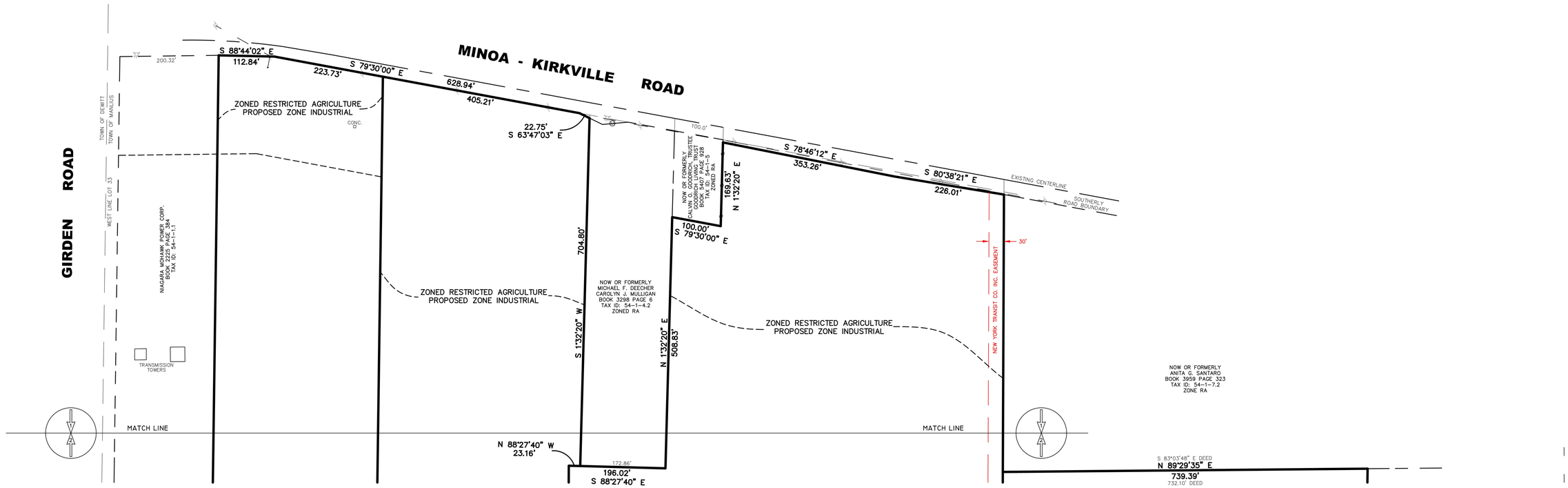
NAPIERALA CONSULTING
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, PROFESSIONAL ENGINEER, LANDSCAPE ARCHITECT OR LAND SURVEYOR, TO ALTER ANY ITEM ON THIS DOCUMENT IN ANY WAY.
ANY LICENSEE WHO ALTERS THIS DOCUMENT IS REQUIRED BY LAW TO AFFIX HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE AND SPECIFIC DESCRIPTION OF THE ALTERATIONS.

SHEET
SK-4

LEGEND:

- UTILITY POLE
- GUY WIRE
- OVERHEAD WIRES
- MANHOLE
- FIRE HYDRANT
- CHAIN LINK FENCE



ZONE CHANGE MAP
LANDS OF
3GI CNYIP, INC.

SHEET 1 OF 2

Only survey maps with the Land Surveyor's embossed seal are genuine true and correct copies of the surveyor's original work and opinion.

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.

Certifications indicated hereon shall apply only to the persons for whom this survey was performed and on their behalf to the title insurance company governing agency and lending institution and to the assignees of the lending institution and/or subsequent owners.

This map may not be used in connection with a "Survey Affidavit" or similar document, statement or mechanism to obtain insurance for any subsequent or future grantees.

Survey prepared without the benefit of an abstract.

Location surveys do not include the staking of the property corners except as shown.

No.	DATE	DESCRIPTION	BY

LEHR
LAND SURVEYORS D.P.C.
116 SALINA STREET – SUITE 6
LIVERPOOL, NEW YORK 13088
315-451-3333
info@lehrlandsurveyors.com

I HEREBY CERTIFY THAT THIS IS AN ACCURATE MAP MADE FROM AN ACTUAL SURVEY.

LICENSED LAND SURVEYOR
DOUGLAS R. LEHR NYSLS 49223

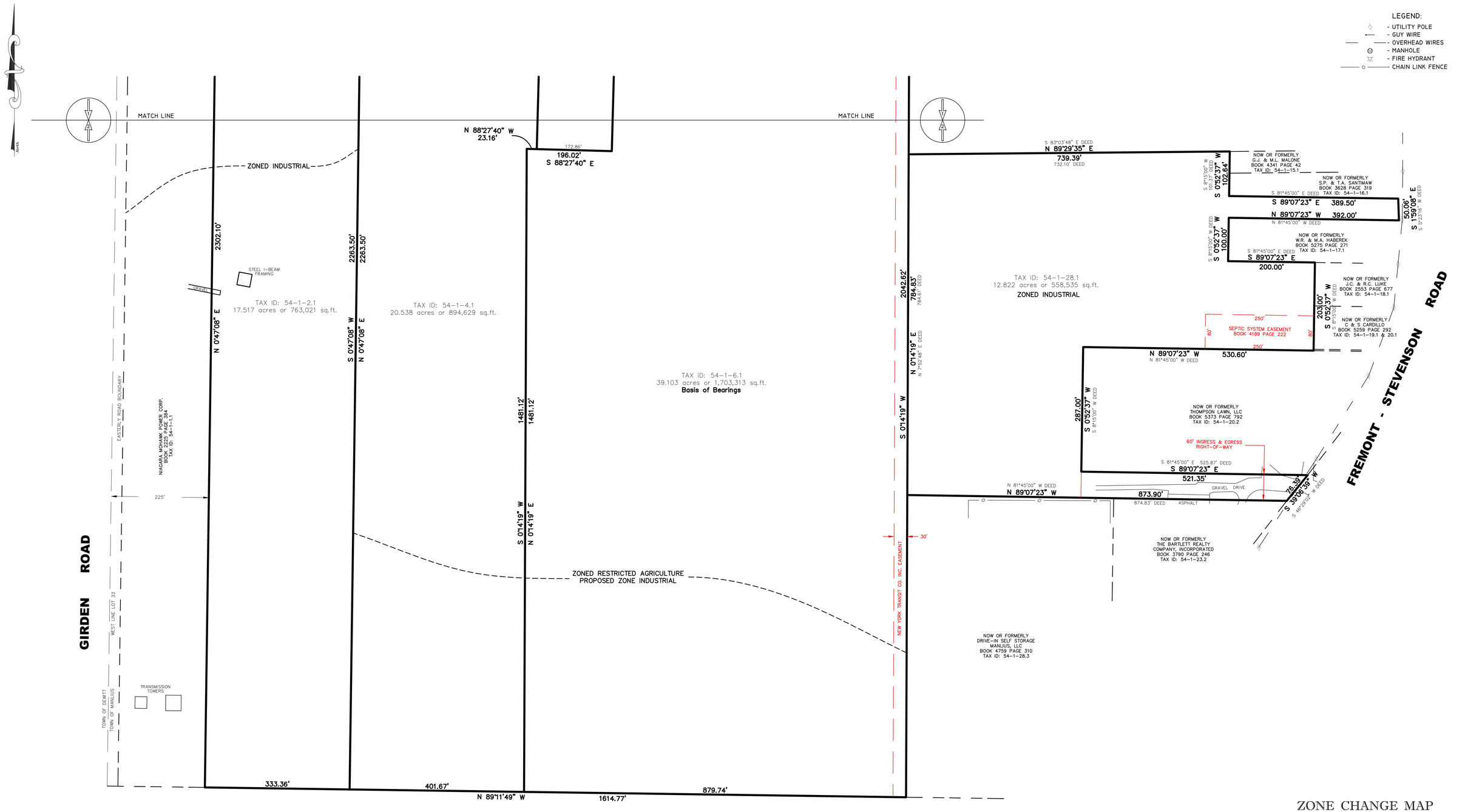
LOCATION SURVEY ON PART OF LOT No.33.
TOWN OF MANLIUS

KNOWN AS MINOA–KIRKVILLE ROAD, TOWN OF MANLIUS,
COUNTY OF ONONDAGA, NEW YORK

FIELD DATE:	MAP DATE:	SCALE:	DRAWN BY:
26 NOV 2019	3 DEC 2019	1"=100'	WJH

REVISIONS:

DRAWING No. 19–J–67
D *1*



ZONE CHANGE MAP
LANDS OF
3GI CNYIP, INC.

SHEET 2 OF 2

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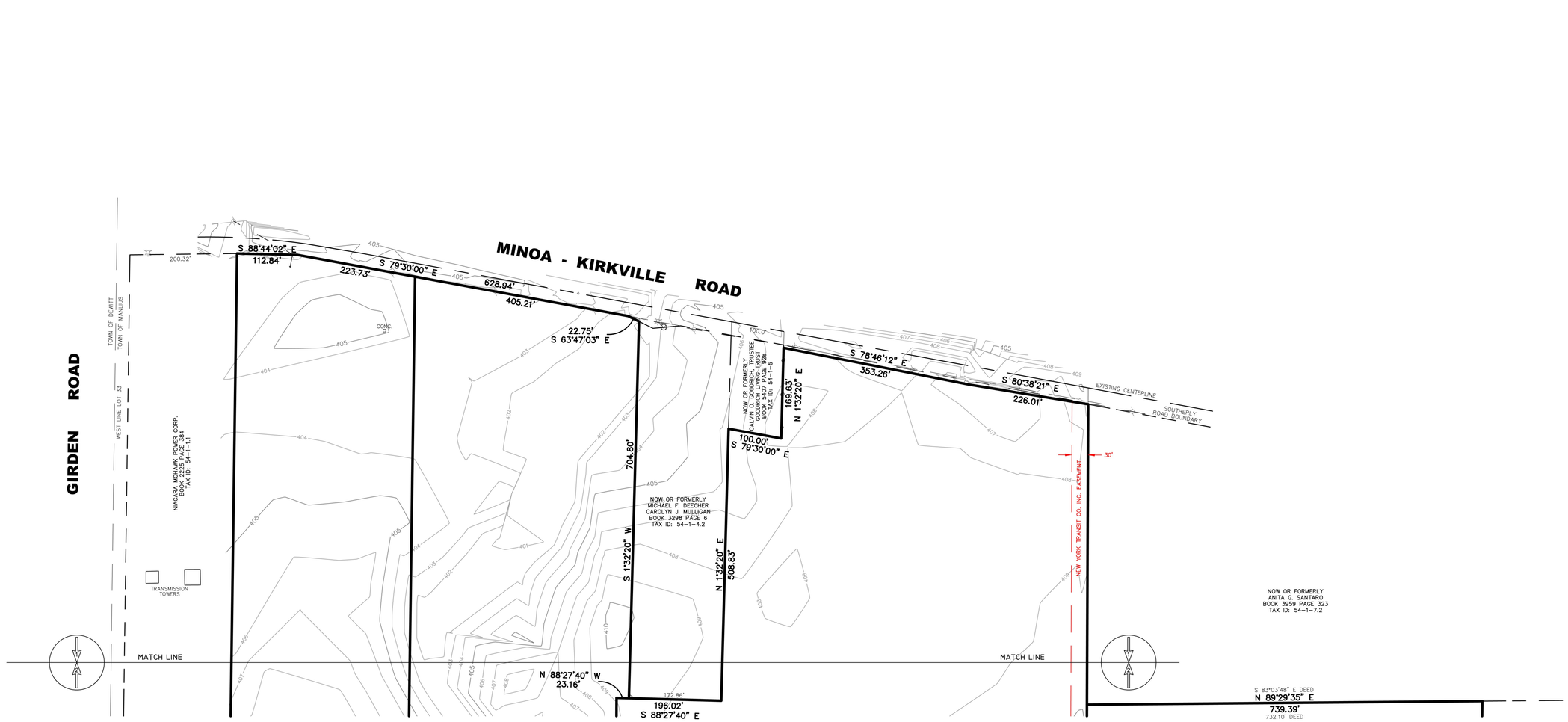
FIELD DATE: 26 NOV 2019	MAP DATE: 3 DEC 2019	SCALE: 1"=100'	DRAWN BY: WJH
REVISIONS:		DRAWING No. 19-J-67 *D* *1*	

LEGEND:

- UTILITY POLE
- GUY WIRE
- OVERHEAD WIRES
- MANHOLE
- FIRE HYDRANT
- CHAIN LINK FENCE



TOPOGRAPHICAL MAP
LANDS OF
3GI CNYIP, INC.

SHEET 1 OF 2

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Elevation and Contours based on North American Datum of 1988 (NAVD88).

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info@lehrlandsurveyors.com

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26 NOV 2019	3 DEC 2019	1"=100'	WJH

REVISIONS:

DRAWING No. 19-J-67
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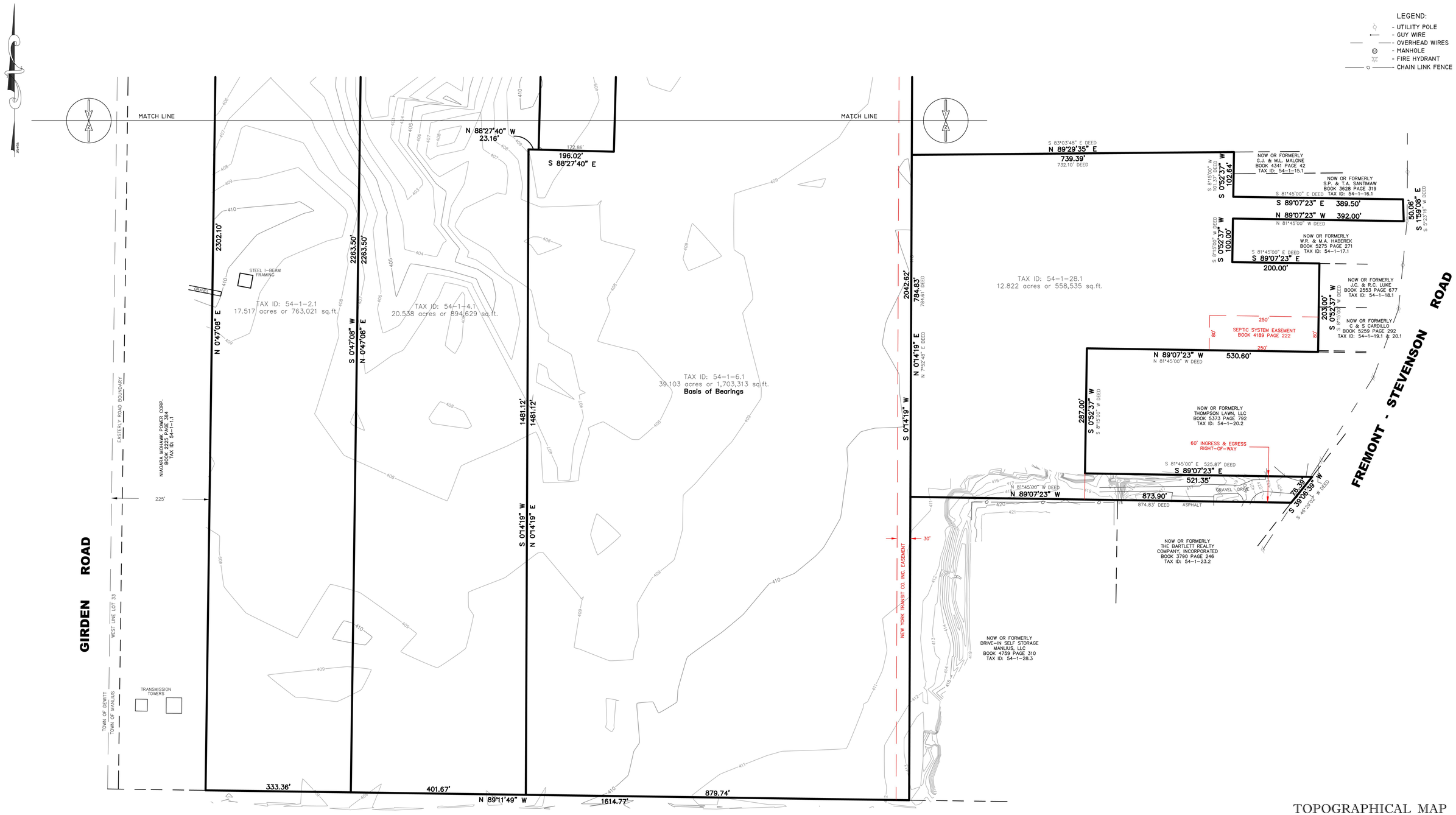

TOPOGRAPHICAL MAP
LANDS OF
3GI CNYIP, INC.

SHEET 2 OF 2

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FIELD DATE:	MAP DATE:	SCALE:	DRAWN BY:
26 NOV 2019	3 DEC 2019	1"=100'	WJH

REVISIONS:

DRAWING No. 19-J-67
D *1*

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. 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.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:
3Gi - Central New York Inland Port

Project Location (describe, and attach a location map):
Town of Manlius - Industrial corridor adjacent to the CSX Dewitt train yard

Brief Description of Proposed Action:
The project will involve the zone change of three properties adjacent to the CSX rail yard. The construction includes a 2-acre gravel container pooling yard and a 'short term' access road off of Fremont Road to the containment yard. This will also include the construction of a +/- 700 SF modular office building and a truck scale for cargo monitoring.

Name of Applicant or Sponsor:	Telephone: 315-269-7767
3Gi-CNYIP (Contact: Chris Beck)	E-Mail: ebeck@synapsellc.com

Address:
360 Erie Blvd East

City/PO:	State:	Zip Code:
Syracuse	NY	13202

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Zone Change - Town Board of Manlius, Site Plan Approval - Manlius Planning Board, Wetland Crossing Permit - DEC, SOCPA Approval	☐	☑

3. a. Total acreage of the site of the proposed action? 92 acres
   b. Total acreage to be physically disturbed? 3.5 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 92 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☑ Rural (non-agriculture) ☑ Industrial ☐ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations? (w/ proposed zone change to industrial)	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☑

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☑	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☑	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	☐	☑

	NO	YES
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	☑	☐

	NO	YES
12. a. 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?	☑	☐
b. 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?	☑	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☑
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ 0.3 acre impact to jurisdictional wetland to create access to Fremont Road.		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☑ Forest ☑ Agricultural/grasslands ☐ Early mid-successional

☑ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☐	☑
16. Is the project site located in the 100-year flood plan? overall project site is within 100yr flood Phase 1 project area is outside	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	☐	☑
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: Mitigated stormwater runoff will discharge to existing wetland at rates less than existing conditions	☑	☐
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: MATTHEW R NAPIERALA P.E ENGINEER AGENT FOR OWNER Date: 17 DECEMBER 2019

Signature: [signature] Title: MANAGING ENGINEER

PRINT FORM

Town of Manlius Police Department

Memorandum

Date: May 22, 2020
To: Chief M. Crowell
From: Captain K. Schafer
Regarding: Funds Reallocation

In the second quarter of 2020 the department received a grant for load bearing vests from the Town of Manlius workers compensation carrier, PERMA. PERMA has found that the use of load bearing vests by police officers reduces injuries by moving weight from the duty belt and more evenly distributing it on the load bearing vest.

The total cost of the project is $5,600.00 and the grant will pay 27% of the total cost which equals $1,550.00.

I am requesting a reallocation of $4,050.00 from the police budget, line 5.3120.100 (personnel) to the police budget, line 5.3120.400 (contractual) in order to match the grant and complete the purchase of twenty load bearing vests.

RECEIVED
MAY 27 2020
TOWN OF MANLIUS