COMPREHENSIVE SITE PROFILE FOR

CENTERVILLE – PECK INDUSTRIAL SITE

September 2011

TOWN OF RICHLAND

OSWEGO COUNTY, NEW YORK

Prepared for:

Operation Oswego County, Inc.
44 West Bridge Street
Oswego, New York 13126

Operation Oswego County
An Economic and Job Development Corporation Serving Oswego County, NY

Prepared by:

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Engineers • Environmental Scientists • Planners • Landscape Architects

DRAFT
CENTERVILLE-PECK INDUSTRIAL SITE
COMPREHENSIVE SITE PROFILE

MAP FIGURES:

APPENDICES:

PROPERTY SUMMARY

Centerville-Peck Road Industrial Site Property Summary	
General Location:	Northeast quadrant of Centerville Road and Peck Road Intersection, Town of Richland, New York
Site Ownership:	Oswego County IDA site – approximately 14.25 acres
Address:	Peck Road, Richland, New York 13142
Access:	Access to the Property is currently off of Peck Road via an informal gravel access drive
Road Frontage:	Approximately 1,615 feet total (590+/- off Peck Road; 1,025 feet off Centerville Road)
Topography:	Generally level to gently sloping
Hydrology:	Two drainage pathways are present that appear to drain the wooded area north of the site
Land Use:	Undeveloped agricultural property
Crops Grown:	None
Utilities:	Public water, telephone, electric, natural gas approximately 530' to the west of the property
Zoning:	Residential Recreational 2 (RR2)
Site Improvements:	A large concrete manhole in SW corner of site. Gravel parking area off Peck Road. Stone wall at northern edge of site. Two drainage ways running southwesterly through middle of site.
Tax Map #'s:	071.00-02-28.01

Image 1: 14.25 Acre +/- Centerville – Peck Industrial Site

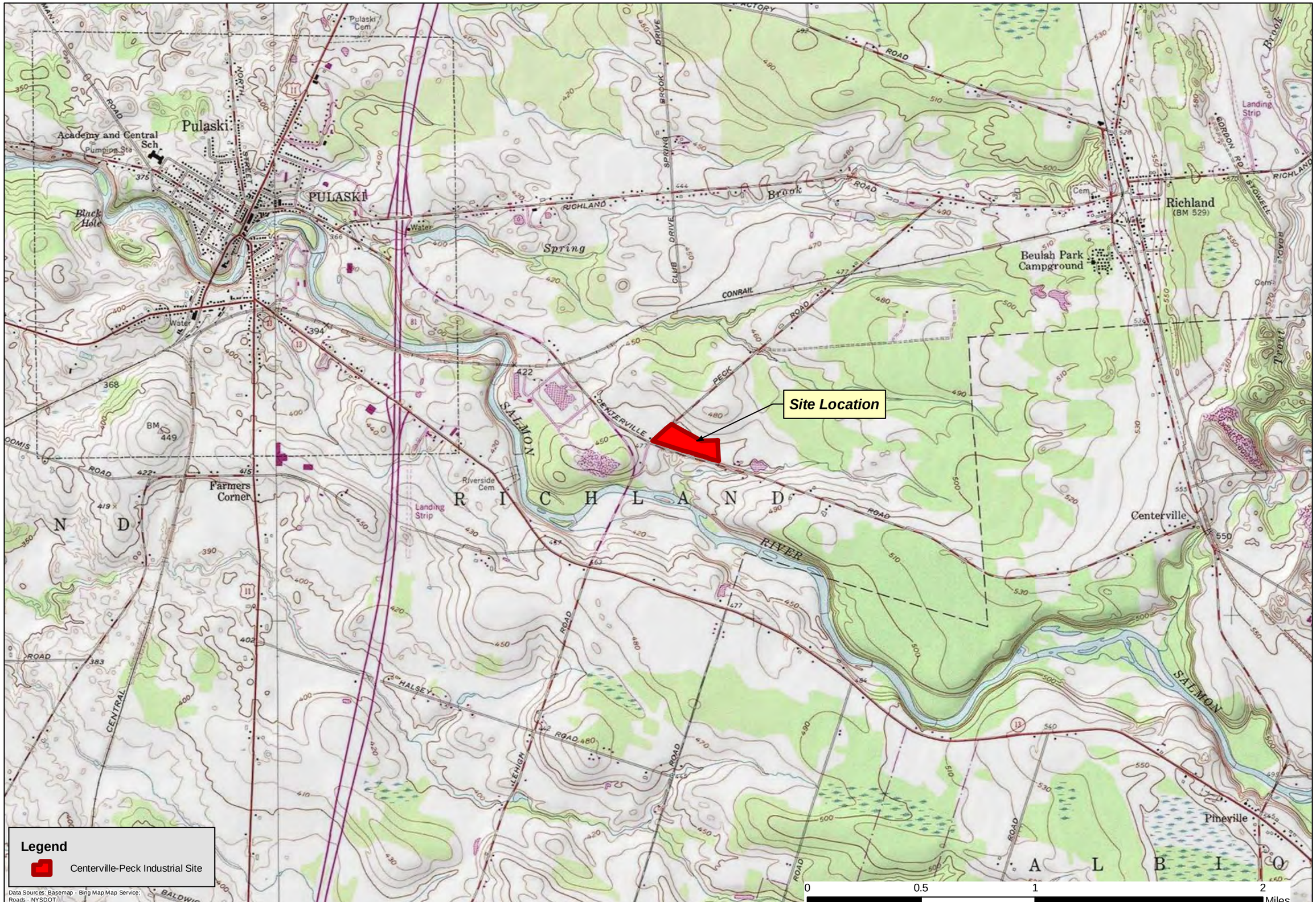
1.0 INTRODUCTION & BACKGROUND

Operation Oswego County, Inc (OOC) identified the marketing and development of key industrial properties as a major priority in the economic development strategy of Oswego County. Specifically, the development of a vacant parcel to the east of the Village of Pulaski in the Town of Richland, New York has become a high priority with several developers requesting site information pertaining to environmental, topographical, and utility data.

The property owned by the Oswego County Industrial Development Agency (IDA) that is the subject of this Site Profile document is an approximately 14.25-acre vacant parcel located east of the Peck Road and Centerville Road intersection as illustrated on Figures 1 and 2. In order to make the site more attractive to development interests and industry leaders, Operation Oswego County has authorized Barton & Loguidice, P.C (B&L) to develop a comprehensive informational package to identify and summarize necessary information in order to foster OOC's marketing efforts for the site.

B&L's investigation of the Centerville-Peck Industrial Property (the property) was conducted using a two-part process; an evaluation of published maps, plans and environmental records, and a site visit. Aerial photos, soil maps, utility and infrastructure maps and plans, USGS topographic maps, wetland and floodplain data, sanborn maps, boring samples, and other published information was reviewed as part of this Comprehensive Site Profile investigation.

The objective of this document is to clearly summarize findings associated with the site evaluation of the property for prospective purchasers whom are interested in developing the site for industrial or commercial uses. A Phase I Environmental Site Assessment (ESA) was prepared as a separate standalone document. Furthermore, two full-size exhibits, Exhibit A – Site Analysis, and Exhibit B – Site Program, have been prepared to graphically illustrate the findings of this study and to spatially organize site limitations and opportunities in an effort to more clearly convey information and to foster the marketing viability of the Centerville-Peck Industrial site (half size exhibits included in Appendix A). Lastly, boring log data for the site is included in Appendix B, along with results of boring samples taken along Centerville and Peck Roads from a previous water main installation project.



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Centerville - Peck Industrial Site Profile

Property Location Map

Oswego County, New York

Date
September 2011

Scale
As Shown

Figure Number
1

File Number
556.006

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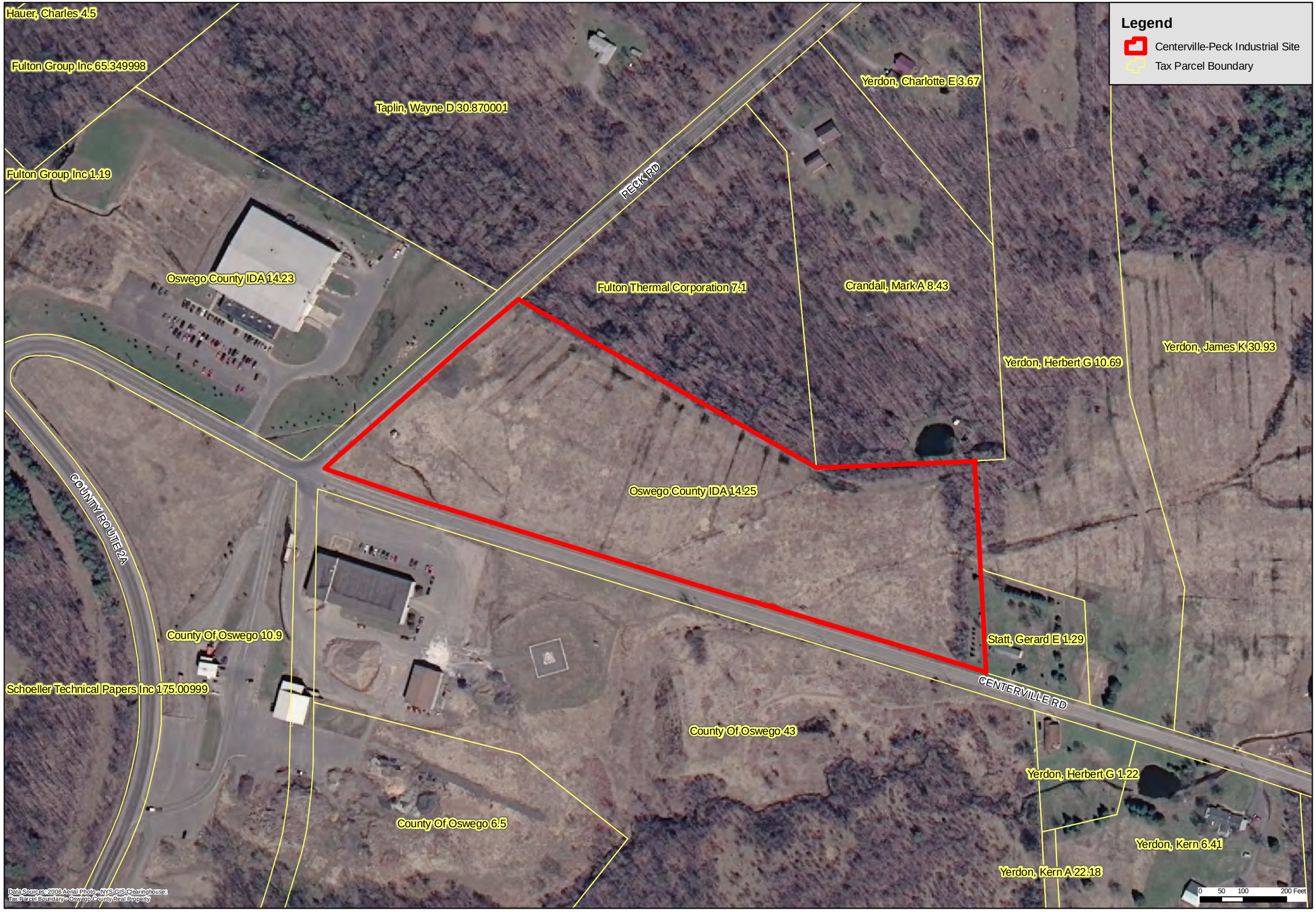

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Site Map

Oswego County New York

Date	September 2011
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Figure Number	2
File Number	556.006

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2.0 SITE PROFILE

The information that follows is a summary of existing conditions on the property which is organized to effectively profile the site for OOC and prospective developers.

2.1 General Site Characteristics and Surrounding Land Use

The site, currently owned by Oswego County IDA, consists of a 14.25-acre parcel located on the northern side of Centerville Road, east of Peck Road. The parcel has no physical address but is identified by Tax Map ID 071.00-02-28.01. The site is located in the Town of Richland, Oswego County, New York. Figure 2 provides a generalized site plan of the property and surrounding parcels.

The parcel is irregular in shape and is currently undeveloped. A large concrete manhole is located along Peck Road near the intersection with Centerville Road; this feature appears to be related to local water and sewer service.

The northern property boundary adjoins a wooded area. Pastures and a residence adjoin the site to the east. Centerville Road bounds the site to the south, and Peck Road bounds the site to the west. The property is situated in a rural area surrounded by a mixture of residential and industrial uses.

Image 2 (left): View looking southwesterly from center of site
Image 3 (right) View looking south along Peck Road, property to the left

Fulton Thermal Corporation, an important major employer in Oswego County, is located just west of the site across Peck Road. Residential property with fenced pastures adjoin the site to the east. The Oswego County Highway Department Pulaski Garage is located south of the site across Centerville Road.

2.2 Site Topography

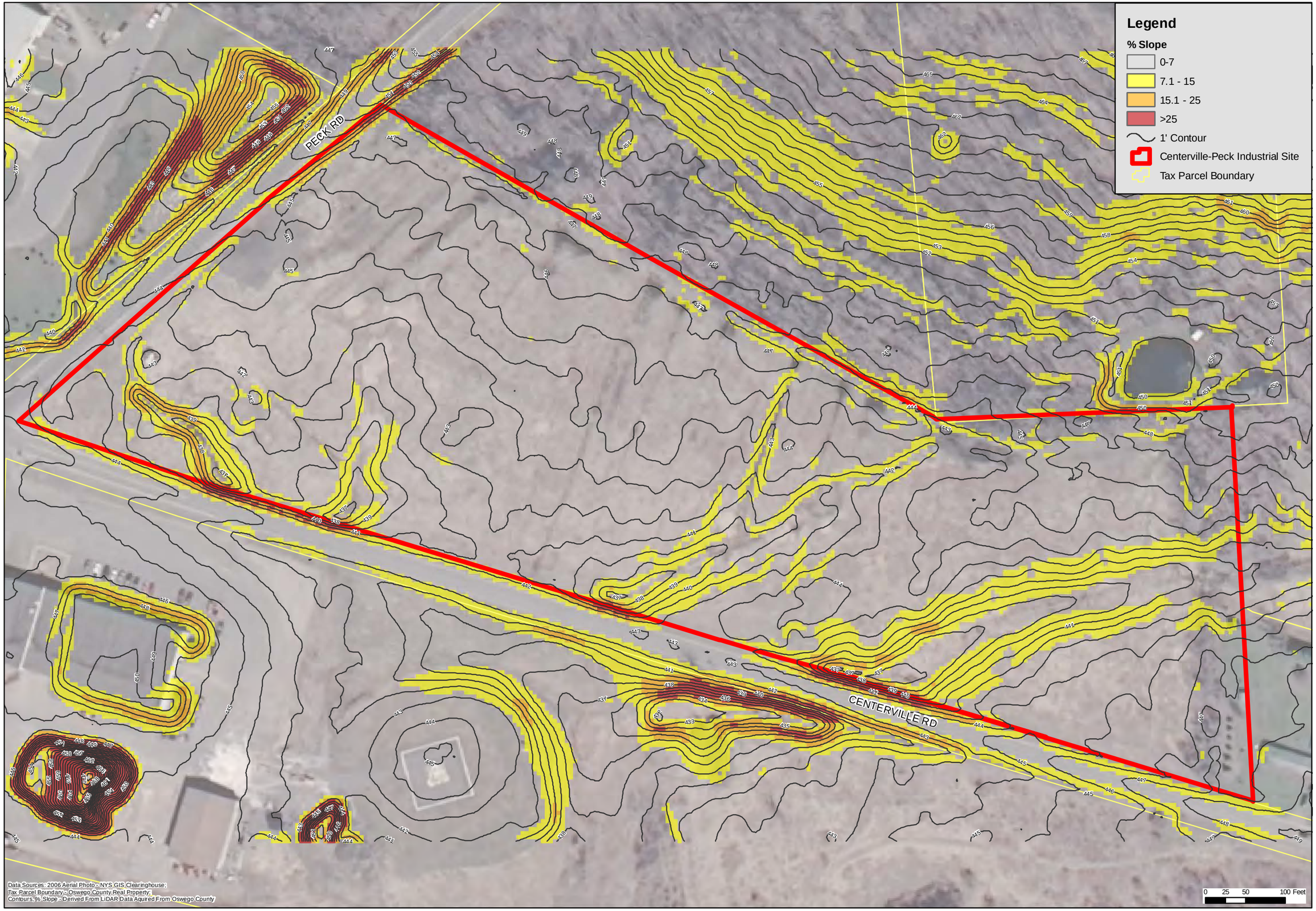
According to the 1992 USGS 30-minute Pulaski quadrangle and county GIS data, the site topography appears to be mainly level with gradual slopes toward Centerville Road. The maximum mean sea level (MSL) elevation on the site ranges from a high elevation of 447 feet on the northern end of the site, to a low elevation of 439 feet along the edge of Centerville Road. Figure 3 illustrates the site's topography with slope gradients highlighted.

Two drainage swales were observed along the trail at the northern end of the site. These drainage swales run southerly towards Centerville Road. Culverts were observed in each of these drainages and appear to drain the wooded area north of the site. No water was flowing from these drainage structures, although ponded water was observed near one of the culverts. Two additional drainage structures were observed running southwesterly through the site. These drainage swales are vegetated and did not appear to be wet.

A roadside drainage swale runs along the southern property boundary parallel to Centerville Road. Culverts were observed in the swale, directing water from the swale beneath Centerville Road to off-site catch basins on the Oswego County Highway Department property south of the site. These catch basins discharge to a wet area where cattails were observed.

Image 4 (left): A stone wall is located in the wooded area along the northern property boundary.
Image 5 (right): Two drainage swales run from the northern property boundary southerly towards Centerville Road.

Image 6 (left): Ponded water was observed near one of the culverts at the northern end of the site.
Image 7 (right): A roadside drainage swale runs along the southern property boundary along Centerville Road.



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Topographic Map

Oswego County, New York

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2.3 Environmental Features

A Phase I Environmental Site Assessment was performed by B&L pursuant to general accordance with the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM Designation E 1527-05). The Phase I ESA is provided separately in Appendix B and it is suggested users of this document refer to Appendix B for detailed environmental information and findings. Outlined below however, is a summary of findings from the Phase I ESA and other environmental findings as a result of site investigations.

- The site has been used for agricultural purposes since prior to 1960, based on historic aerial photographs.
- The site contains a manhole and electric pole reportedly related to a former well house north of the intersection of Centerville and Peck Roads.
- A parking area is located north of the manhole, constructed by the Oswego County DPW from asphalt millings.
- A barn was located near the intersection of Centerville and Peck Roads. This barn was reported demolished by the Oswego County DPW sometime around 2000.
- A structure appears to have been located near the current parking area, based on aerial photographs. No signs of a structure were observed during site reconnaissance.
- A rock wall is located along the northern property boundary and a low path or drainage parallels this boundary.
- A pond and a small shelter are located in a clearing northeast of the site.
- A residence and pasture adjoin the site to the east.
- Fulton Thermal adjoins the site to the west; according to aerial photographs, it was formerly used for residential and agricultural purposes prior to redevelopment between 1994 and 2006.
- The Oswego County Highway Department Pulaski Garage is located south of the site and was developed between 1986 and 1994.
- Registered tanks and a closed spill were identified at the Oswego County Highway Department Pulaski Garage by the EDR report.
- B&L has additional knowledge of an open NYSDEC spill at the garage (02-60072) that does not appear in the EDR report. This spill file was opened in 2003 and has been the subject of an on-

going remedial investigation that involves a petroleum plume that has migrated off-site towards the target property. Three piezometers are located in the southwest corner of the site and are currently being monitored as part of the on-going spill investigation.

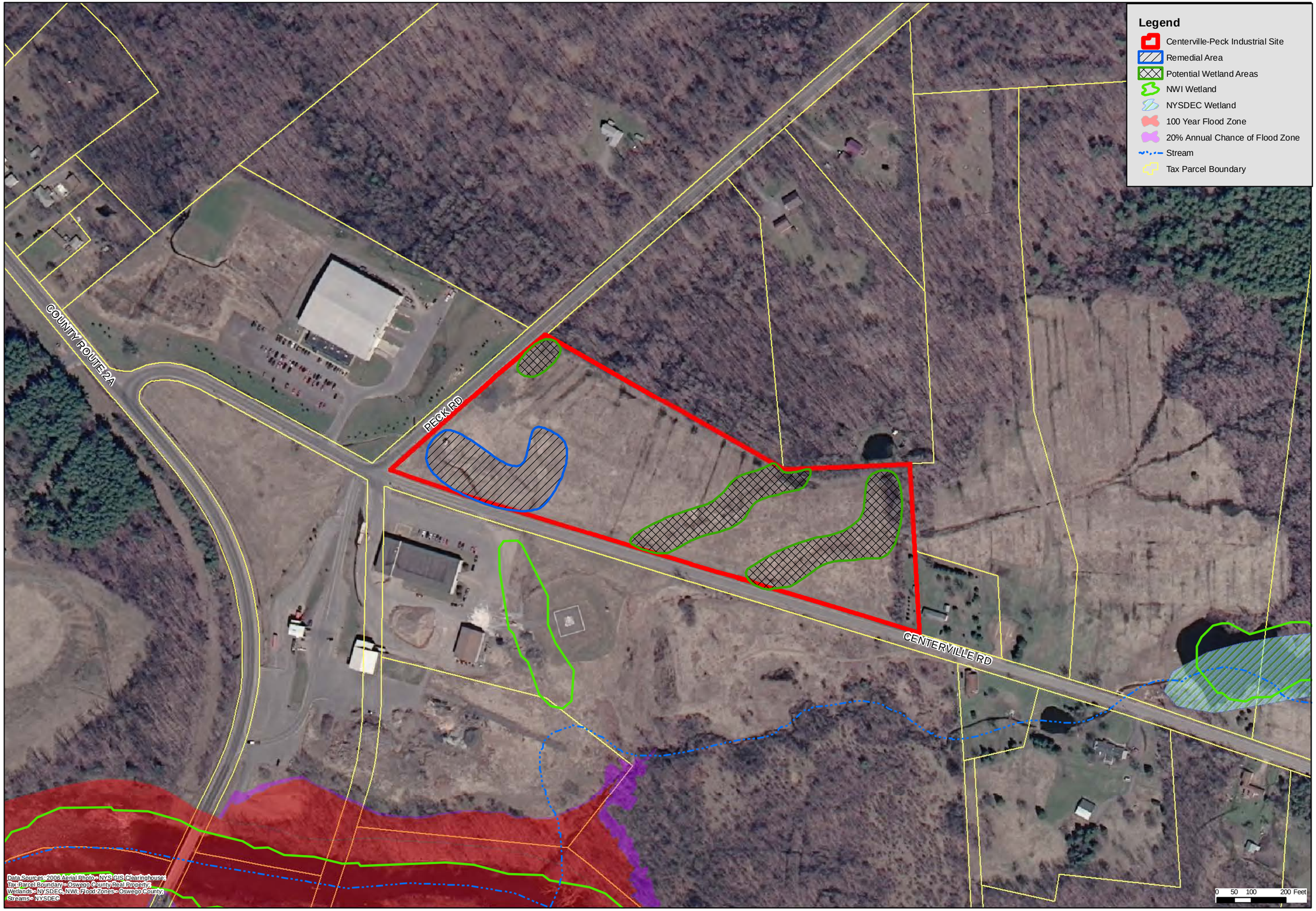
Furthermore, based on a review of soil mapping, aerial photographs of the property, and field observations, it is the opinion of B&L that the site may contain federally jurisdictional areas (waters or wetlands) on portions of the property. As illustrated on Figure 4, there are at least three (3) distinct and defined drainage areas within the limits of the property that may meet the definition of Waters of the U.S., and therefore would be regulated under Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers (USACOE). The Corps has issued 45+ Nationwide Permits to cover activities which have been determined to result in insignificant impacts to wetlands and waters. These permits include a series of general conditions and, on a regional basis, regional conditions which establish their applicability. In addition to these permits issued under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, the New York State Department of Environmental Conservation (NYSDEC), under their delegated authority for Section 401 (Water Quality Certification) and 402 (NPDES), was required to make determinations regarding issuance of Water Quality Certifications for each of these permits. For some of these they issued blanket certifications, for others certification with conditions, and for others no certification.

Image 8 (left): The western drainage swale running southwesterly through the site. The drainage did not appear to be wet.
Image 9 (right): The eastern drainage swale running southwesterly through the site. The drainage did not appear to be wet.

Prior to the preliminary design of a development project, a formal wetland site visit should be completed by a qualified individual to determine the extent of any potential state and/or federally regulated areas and decide which permits may apply to the project. The proposed site use will determine the appropriate Nationwide Permit to obtain and the conditions and thresholds that will be applied to the project. If greater than 0.5 acres of wetlands are impacted, an Individual Permit will be required from the USACOE instead of a Nationwide. Greater than 0.1 acres of permanent wetland disturbance will require a wetland mitigation component of the proposed project.

2.4 Soils Characteristics / Bearing Capacity

According to the Oswego County Soil Survey and as illustrated on Figure 5, the soils on the property consist primarily of Naumburg loamy fine sand (Na), Williamson very fine sandy loam (WIA), Raynham



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Centerville - Peck Industrial Site Profile

Environmental Features

Oswego County New York

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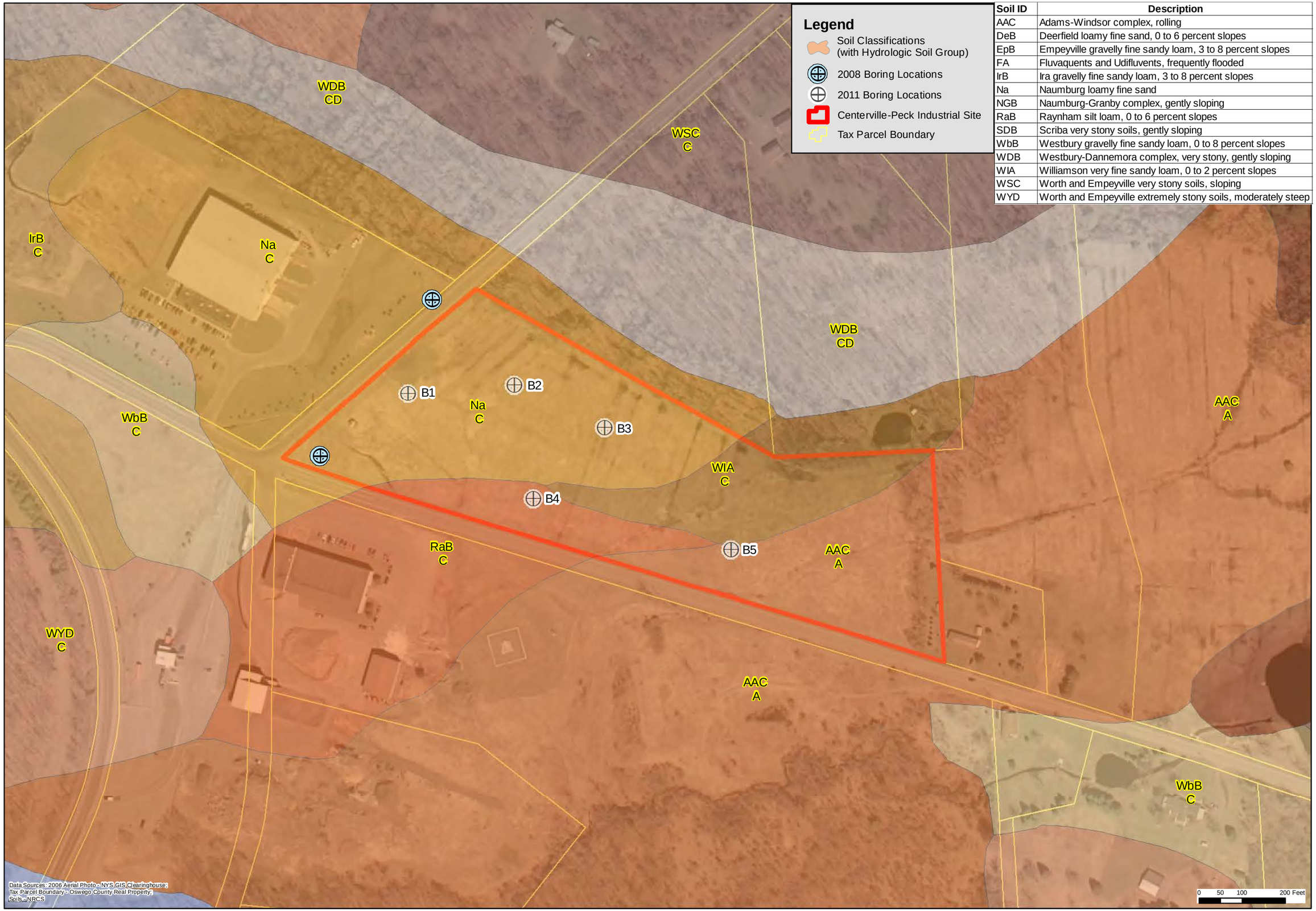

Soil ID	Description
AAC	Adams-Windsor complex, rolling
DeB	Deerfield loamy fine sand, 0 to 6 percent slopes
EpB	Empeyville gravelly fine sandy loam, 3 to 8 percent slopes
FA	Fluvaquents and Udifluvents, frequently flooded
IrB	Ira gravelly fine sandy loam, 3 to 8 percent slopes
Na	Naumburg loamy fine sand
NGB	Naumburg-Granby complex, gently sloping
RaB	Raynham silt loam, 0 to 6 percent slopes
SDB	Scriba very stony soils, gently sloping
WbB	Westbury gravelly fine sandy loam, 0 to 8 percent slopes
WDB	Westbury-Dannemora complex, very stony, gently sloping
WIA	Williamson very fine sandy loam, 0 to 2 percent slopes
WSC	Worth and Empeyville very stony soils, sloping
WYD	Worth and Empeyville extremely stony soils, moderately steep

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Soil Classifications

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silt loam (RaB), and Adams-Windsor complex (AAC). The predominant soil type on site is Naumburg loamy fine sand covering much of the western half of the site off of Peck Road. This area likely exhibits the best practicable portion of the site for future development of structures and foundations due to the potential wetland and spill areas (noted in other sections of this report) on the eastern half and southern portion of the site, respectively.

Five (5) soil borings were completed to a depth of approximately 25 ft. by Lyon Drilling on September 8 and 9, 2011 to determine the site specific soil conditions. The soil boring logs are included in Appendix B, as are the logs from samples taken on April 22, 2008 in areas along Peck Road and Centerville Road (during previous water line project), as shown on Figure 5. The soil borings revealed a layer of clay from approximately 10 feet to 24 feet deep. Based on the boring data, the onsite soils would accommodate presumptive soil bearing loads of approximately 2000 pounds per square foot at a depth of 6 feet. Conventional concrete spread footings could be utilized for future light to medium industrial building developments. Heavier loads would likely require a deep foundation system, which may require obtaining soils borings to a greater depth. The depth of the ground water varied at the five borings due to the presence of clay soils. From the data collected, it is estimated that the groundwater table is approximately 20 ft. below the surface.

2.5 Site Utilities

Existing utility information was obtained through as-built plans and contact with individual service providers. Approximate utility locations are shown on Figure 6 and further summarized below.

2.5.1 Electric Service

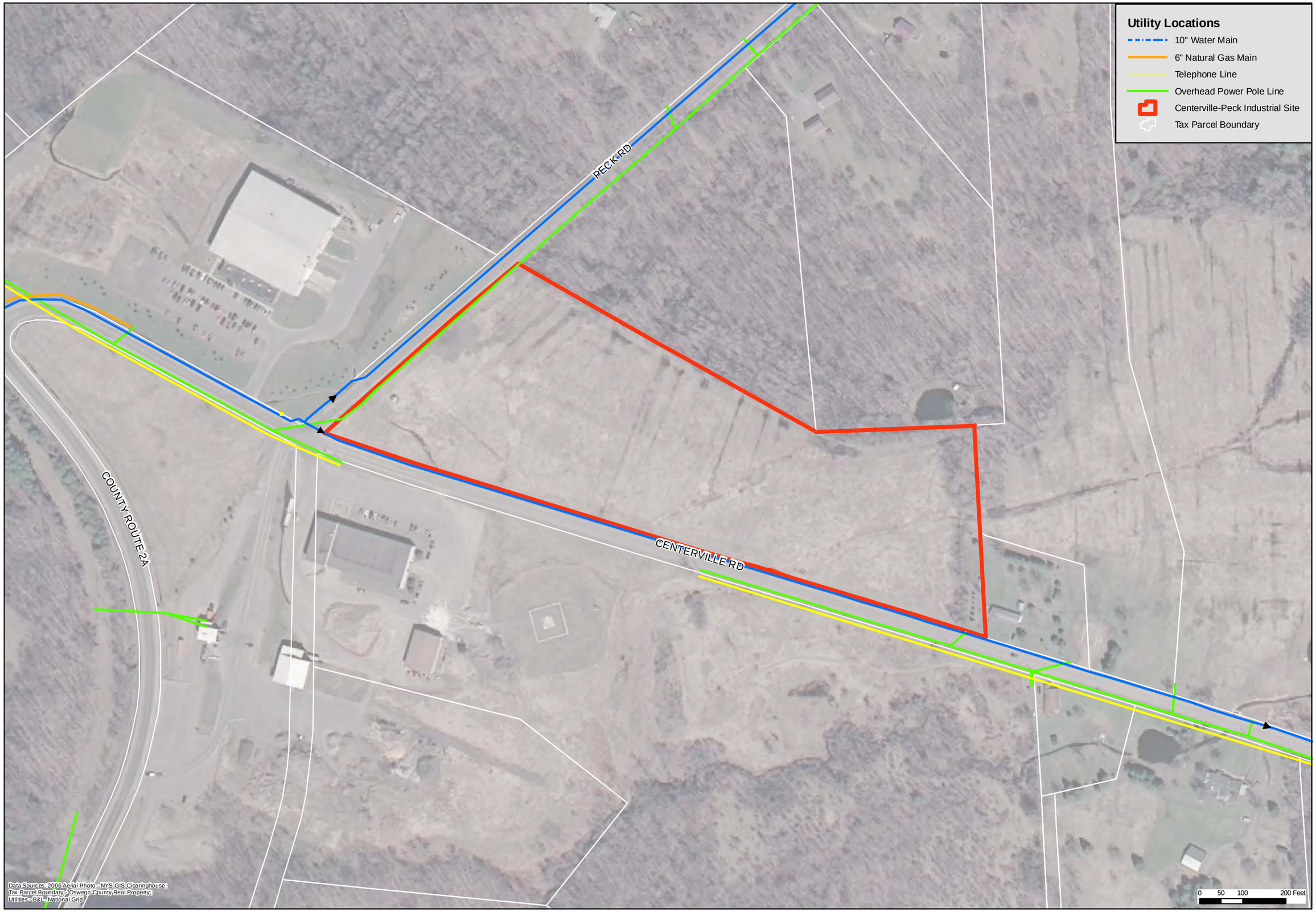
Overhead electrical service is provided to the property by National Grid. This 35 KVA line is present along the western end of the site down the Peck Road property frontage.

2.5.2 Water Supply

A 10" water main (Town of Richland) is present along Peck Road and Centerville Road, essentially providing potable water service along all road frontage of the site. The Town of Richland Water District No. 2 receives high quality Tug Hill Aquifer water from the town's two well sites located near the hamlets of Richland and Fernwood, with a third back-up interconnect with the Village of Pulaski. The District's permitted water source capacity is approximately 1.6 million gallons per day (MGD) with current average demands of approximately 0.25 to 0.30 mgd. The District's potential source capacity is in excess of 2.0 MGD. A 300,000 gallon water storage tank located at the Richland Well Site approximately three miles to the east and large diameter water transmission mains enable fire flows in excess of 2,000 gallons per minute at the intersection of Peck and Centerville Road.

2.5.3 Sewage Treatment

The Town of Richland's industrial area surrounding the property in proximity to County Route 2A includes two (2) major industrial facilities consisting of the Felix Schoeller Technical Papers plant



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Utility Locations

Oswego County, New York

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(Schoeller) and the Fulton Thermal manufacturing facility. Also within the immediate area, as mentioned throughout this report, are two (2) significant municipal facilities consisting of a County-owned transfer station and the highway garage across from the property.

Felix Schoeller Technical Papers is currently served by an on-site wastewater treatment plant with the capacity to treat over 2 million gallons per day of industrial wastewater. Currently, the plant is treating only domestic wastewater (approximately 5,000 gpd) as the facility no longer manufactures paper. In addition to the domestic sewage, approximately 20,000 gpd of clean water is also sent to the on-site plant to maintain minimum hydraulic flows necessary for the adequate operation of the plant.

Fulton Thermal, located across Peck Road from the property, currently relies on a subsurface sewage disposal system. A significant expansion of the facility is largely complete and therefore options for sewage disposal needed to be addressed. B&L performed a Preliminary Engineering Study in September of 2009 to identify options for sewage disposal based on possible expansion of Fulton Thermal's operation, which included construction of a larger subsurface treatment system, construction of their own small treatment plant, discharge of their sewage to Schoeller's existing treatment plant or connection to a potential public sewer system.

Based on information provided by Fulton Thermal, the facility currently employs approximately 55 people. With the expansion, there is an estimated average daily wastewater flow of 5,100 gpd. As such, it opted to expand the existing on-site subsurface disposal system at the Fulton Thermal facility to accommodate the expansion.

Given the lack of public sewer infrastructure in the area, any future development on the property must consider on-site sewage treatment via septic systems. However, as can be seen on Figure 5 and on the map in Appendix C, soil types on site vary depending on the data source. Regardless of these differences, the predominant soil type remains Naumburg, which, according to the National Resource Conservation Service, is a soil type that exhibits limited capacity for septic tank absorption fields. Thus, an engineered leach field design would be required for any on-site septic systems to accommodate future development on the property unless it was determined a more feasible approach would be the construction of a sewer main along Centerville Road to handle wastewater treatment from future operations. In this case, it is suggested Operation Oswego County revisit the September 2009 Preliminary Engineering Study to evaluate the feasibility of public sewer installation and district formation that could foster and promote long-term economic development in the area.

2.5.4 Telecommunications

Telephone, high-speed data, and mobile service is provided to the Property by Time Warner Cable.

2.5.5 Natural Gas

Although there is not a presence of natural gas mains directly adjacent to the property, there is a 6" plastic gas main approximately 530' to the west which terminates along Centerville Road servicing Fulton Thermal's operation and expansion.

2.6 Zoning

The property, being located within the Town of Richland, is subject to local Town zoning regulations and coverage requirements. The property is currently zoned Residential Recreation 2 (RR2) as illustrated on Figure 7. Although the Town of Richland's zoning code does not specifically provide intent for each zoning district, the following uses are identified as permitted uses within the RR2 district:

- Agricultural use
- Camp
- Dwelling, Earth Shelter
- Dwelling, Factory Manufactured
- Dwelling, Multiple, One-Family, Two-Family
- Modular Home
- Private, Non-commercial marina

Furthermore, several non-industrial or commercial uses are permitted with the issuance of a special permit. Therefore, coverage and area requirements specified under the RR2 district regulatory controls do not pertain to industrial and/or commercial uses. As such, any industrial or commercial development proposed for the site would require a zone change or use variance from the Town of Richland. Given the adjacent industrial zoning designation on the Fulton Thermal site across Peck Road from the property, there is precedent for zone changes from RR2 to Industrial. Also, minimum lot requirements for properties in the Industrial Zone is 10 acres, thus, making the Centerville-Peck Site eligible for such a zone change because of its 14.25 acre size.

2.7 Transportation Infrastructure

Summarized below is an overview of the transportation infrastructure in proximity to the Centerville-Peck Site, and as illustrated on Figure 8.

2.7.1 Highway

The Property is located strategically in close proximity to both County and State highways. Interstate 81 is located less than two miles to the west of the site. State Route 13 is located about a mile to the south, and County Route 2A passes the property just to the west and south, providing direct access to I-81 at the Pulaski exit approximately two miles to the northwest. Also, the New York State Thruway is located approximately 35 miles to the south of the property near the City of Syracuse.

2.7.2 Railroad

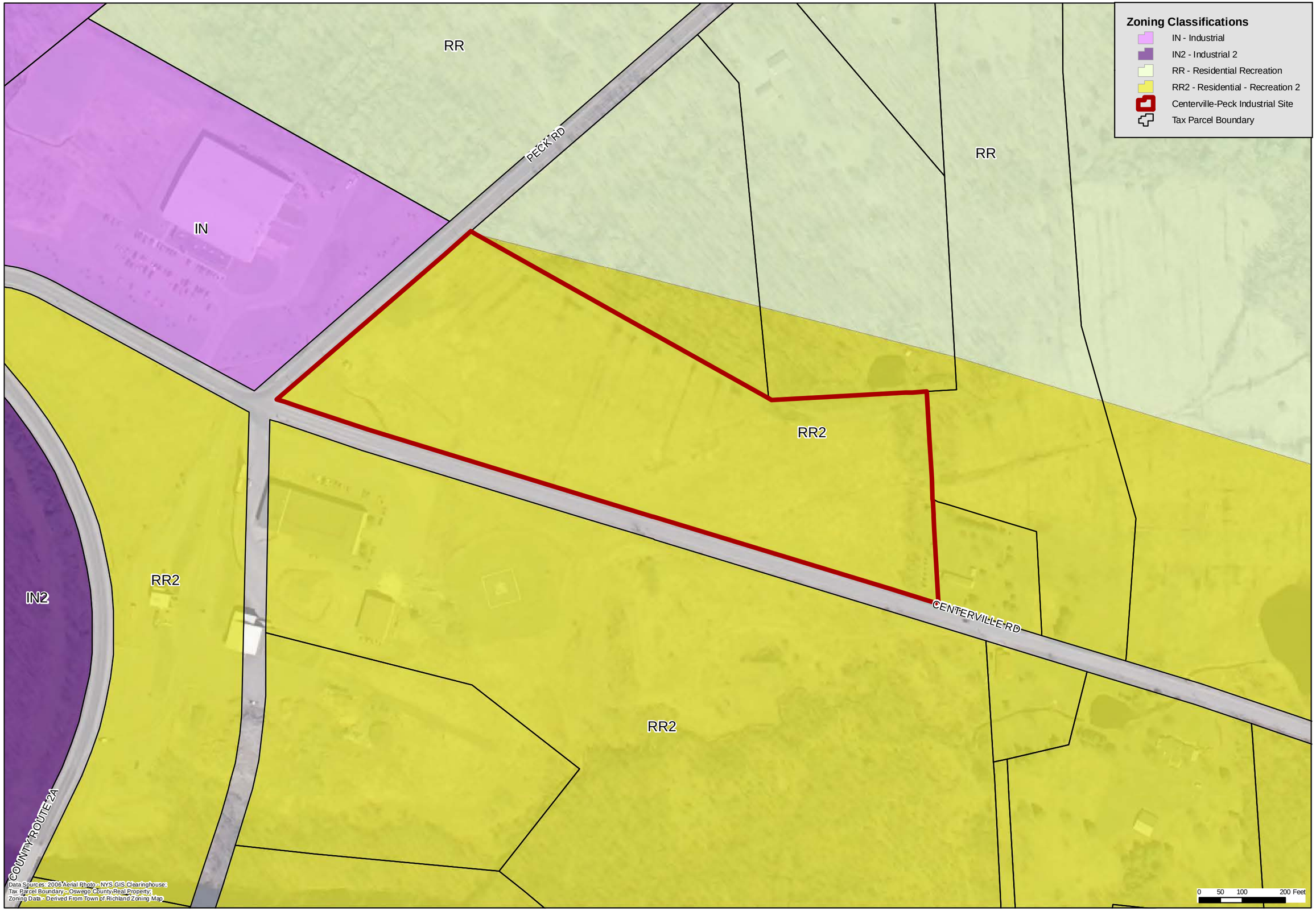
A Penn Central Rail line is located less than a mile to the north of the property that traverses the area northward, connecting the general area with points north toward Watertown an south toward Syracuse and beyond.

2.7.3 Airports

The Oswego County Airport is a general aviation facility located approximately 25 miles to the southwest of the property just outside the City of Fulton. Additionally, full commercial flight service is available at Syracuse Hancock International Airport, which is located approximately 35 miles from the property to the south.

2.7.4 Water-based Ports

The Port of Oswego is located approximately 15 miles to the west of the Property in the City of Oswego. The Port includes a wharf which is an intermodal facility providing transportation connectivity from water to land via highway and railroad.



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Zoning Classfications

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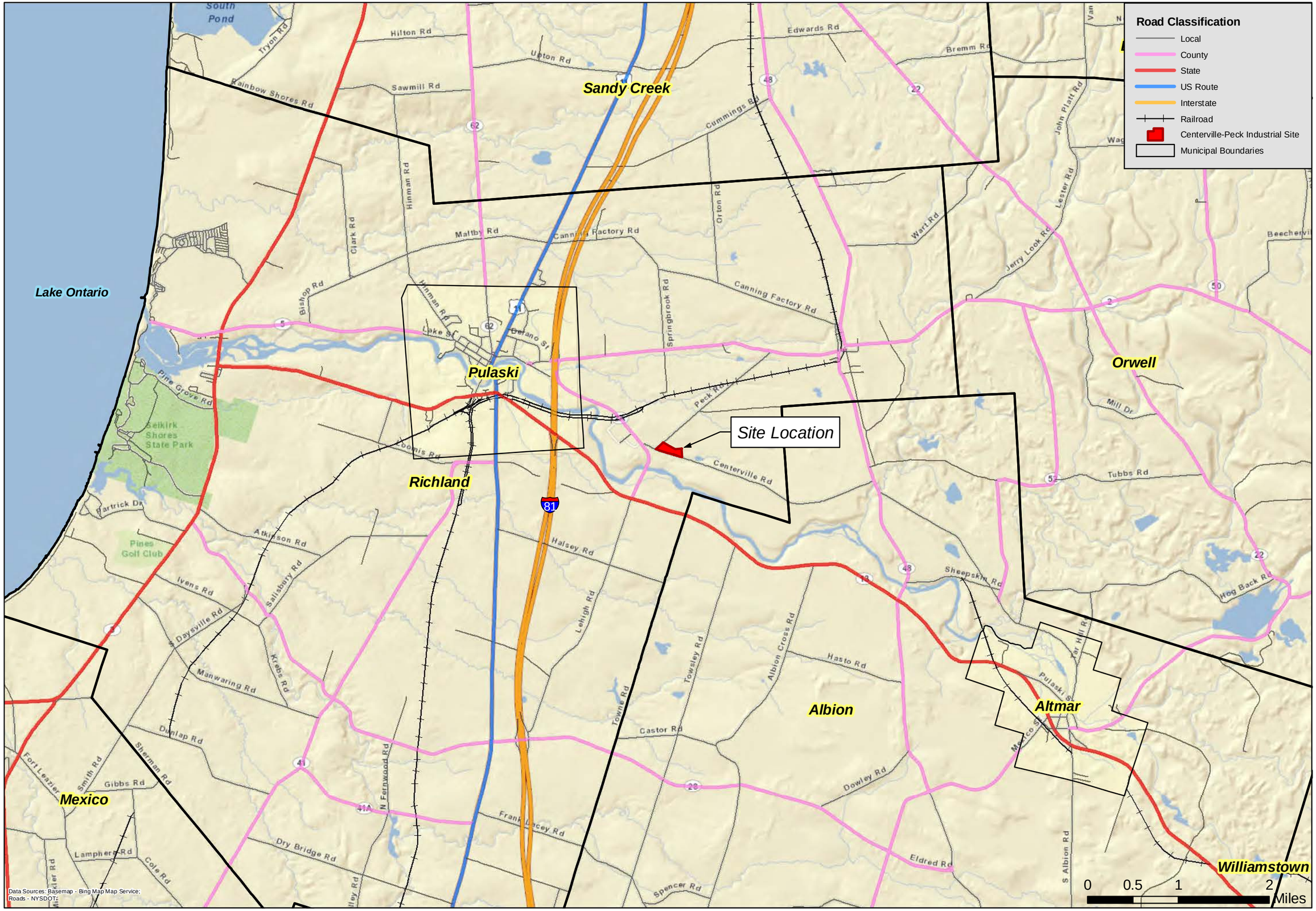

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3.0 SUMMARY OF SITE DEVELOPMENT ASSETS AND LIMITATIONS

The Centerville-Peck Industrial Site has several development assets that would benefit a potential purchaser of the property for industrial or commercial use, which outweigh the few limitations that exist from a development standpoint. Outlined below is a summary of those assets and limitations.

3.1 General Site Characteristics and Surrounding Land Use

Assets

- The Centerville-Peck industrial property has sufficient buildable area to accommodate a moderately sized industrial and/or commercial development operation including associated parking, stormwater management areas, and landscape screening or buffer features.

- Surrounding land uses are predominately compatible with the intended potential industrial and/or commercial development of the site with the exception of the residence on the parcel immediately adjacent to the east along Centerville Road.

- A healthy presence of woodland areas adjacent to the site would provide a natural buffer to neighboring property.

Limitations

- Surrounding parcels are privately owned, thus limiting the potential for future off-site expansion in immediate proximity to the property.

3.2 Site Topography

Assets

- There are very limited slopes on site that are considered excessive or an obstruction to future development. Overall, the site is generally flat.

- Natural drainage patterns gently slope towards an existing drainage swale parallel to Centerville Road, aiding in the design and construction of any future drainage and stormwater design.

Limitations

- There were no limitations identified that pertain specifically to site topography.

3.3 Environmental Features

Assets

- With the exception of the limitations identified below, the property is largely devoid of any major environmental concerns that would definitively prohibit future industrial and/or commercial development.

- B&L identified evidence of one recognized environmental condition (REC) at the Centerville-Peck site related to the ongoing remediation of NYSDEC Spill #02-60072 at the Oswego County Highway Department Pulaski Garage. This spill file was opened in 2003 and has been the subject of an on-going remedial investigation that involves a petroleum plume that has migrated off-site towards the target property. As such, three groundwater monitoring piezometers located in the southwestern corner of the site, as shown on Figure 4, are still being actively monitored as part of the NYSDEC spill remediation program. No remedial activities are proposed for the site at this time beyond the continued groundwater monitoring that is being conducted by the Oswego County Highway Department.

  However, it should be noted that although ground disturbance in this area should be avoided until the NYSDEC accepts it as a closed spill site; it is anticipated to be considered closed in late 2011 / early 2012. The benefit is that once the spill is considered closed by the NYSDEC, the former spill area becomes viable developable acreage again, which is reflected on Exhibit B in Appendix A.

Limitations

- It is the opinion of B&L that the site may contain federally jurisdictional areas (waters or wetlands) on portions of the property. As illustrated on Figure 4, there are at least three (3) distinct and defined drainage areas within the limits of the property that may meet the definition of Waters of the U.S., and therefore would be regulated under Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers (USACOE). Therefore, prior to the preliminary design of any future development on site, a formal wetland site visit should be completed by a qualified individual to determine the extent of any potential state and/or federally regulated areas and decide the extent of permits needed or mitigation measures required.

  It should be noted however, that even though wetlands are generally considered development obstacles in most instances, this site contains two separate wetlands (their connectivity would be determined as part of a formal delineation), thus, providing an ideal opportunity to mitigate wetland impacts from, say, filling the central wetland area to expand the site's developable footprint by expanding on the eastern wetland area, which would also provide increased buffers to the adjacent residential property.

3.4 Soil Characteristics / Bearing Capacity

Assets

- Based on available boring data at this time, it is the opinion of B&L that conventional concrete spread footings could be utilized for future light to medium industrial and/or building developments.

Limitations

- A potential limitation would be that heavier structural loads of future development would likely require a deep foundation system, which may require obtaining soils borings to a greater depth. This level of evaluation would be incumbent upon a future design/development team to confirm the bearing capacity at depths greater than 25 feet if necessary based upon the proposed use for the site.

3.5 Site Utilities

Assets

- Electrical, water, and telecommunication services are readily available on or adjacent to the property. With the exception of sewers, connections to future development on the property would be considered inexpensive due to the proximity of existing utility lines.

Limitations

- The property currently does not have ability to connect to public sewers due to the lack of public sewer lines in the immediate area. However, on-site septic systems could be utilized as is the case with the existing Fulton Thermal operations across the street until such time a sewer main and district formation in the area is feasible.

3.6 Zoning

Assets

- No assets were identified specific to zoning requirements for the property.

Limitations

- The property is currently zoned Residential-Recreation 2 (RR2) which does not permit the use of industrial and/or commercial development within its district boundaries. As such, a zone change for any future development of this nature would be required. There is precedent, however, that a zone change for an industrial and/or commercial use on the property would be an acceptable request based on existing compatible land uses surrounding the site to the west and south, and the presence of the Fulton Thermal site across the street that is currently zoned Industrial.

3.7 Transportation Infrastructure

Assets

- The property is located in close proximity to I-81, a major north-south interstate highway in addition to county and state roadways that are able to handle the travel demands of an industrial or commercial operation on the 14.25 acre site. Furthermore, a port and full service commercial airport is located within 30 miles of the site.

Limitations

- Peck Road is a local roadway that may require minor upgrades to accommodate site access to the property depending on the use, size and scale of any potential future development.

4.0 CONCLUSION

The Centerville-Peck Industrial Site has several assets that benefit a potential buyer seeking to develop the property for future industrial or commercial use. Strategic highway access, an abundance of frontage along two roadways, several existing utilities, and sufficient buildable space on site allow for a flexible approach to future design scenarios that best fit within the context of the surrounding area. Although there are some limitations to development, they are considered minor in scope and allow for opportunities to enhance site characteristics in order to better accommodate various types of development on the property.

APPENDIX A

Site Analysis and Site Diagram

Site Analysis & Existing Conditions

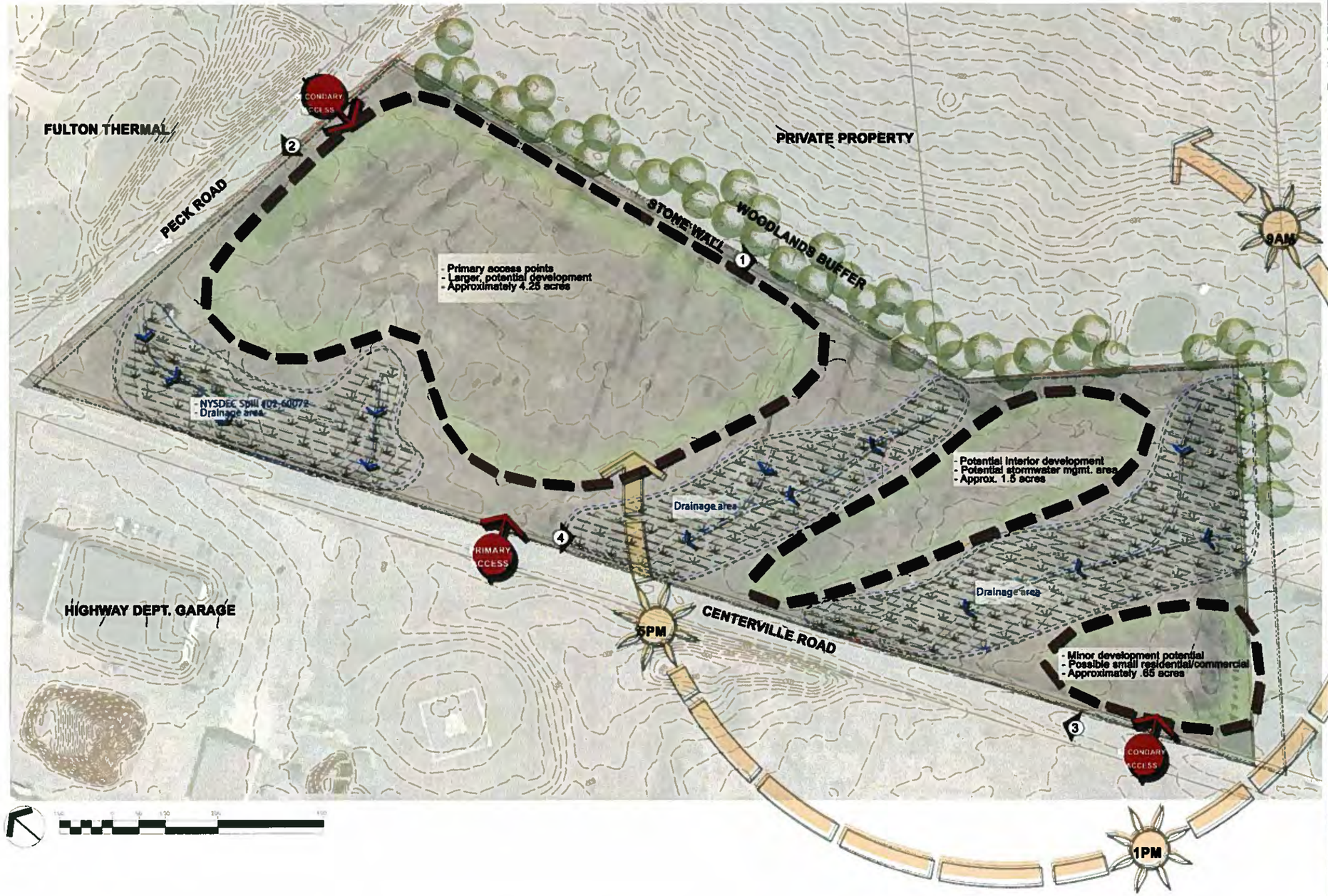


Photo 1 - Rock wall along northern property line

Photo 2 - Peck Road frontage looking south toward County Highway Garage

Photo 3 - Centerville Road frontage, looking west toward Peck Road

Photo 4 - Potential wetland area looking northeast

Operation Oswego County

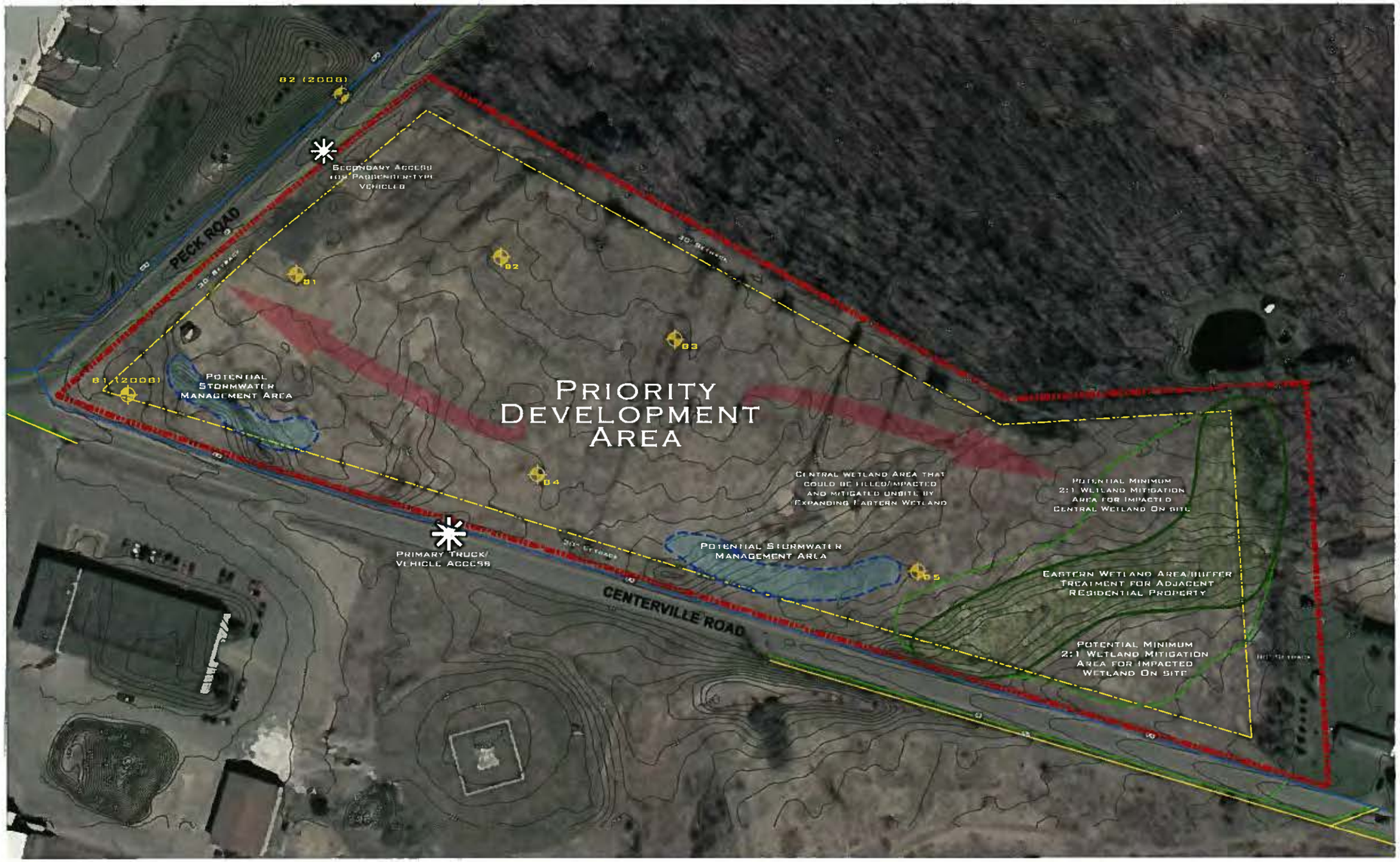
CENTERVILLE-PECK INDUSTRIAL SITE PROFILE

OPERATION OSWEGO COUNTY

EXHIBIT A - SITE ANALYSIS

558.008

Site Diagram & Priority Development Areas



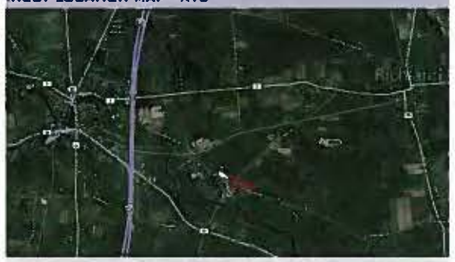
LEGEND

- PROPERTY BOUNDARY
- 15' & 80' SETBACKS
- APPROX. BORING TESTS
- 8" & 10" WATER MAINS
- 35 KVA OVERHEAD ELECTRIC
- TELEPHONE

NOTE:

A 6" PLASTIC NATURAL GAS MAIN EXTENDS FROM COUNTY ROUTE 2A TO A POINT APPROXIMATELY 530' TO THE WEST OF THE PROPERTY WHERE IT TERMINATES ALONG CENTERVILLE ROAD IN FRONT OF FULTON THERMAL.

INSET LOCATION MAP - NTS



Operation Oswego County
An Economic and Job Development Corporation
Serving Oswego County, NY

CENTERVILLE-PECK INDUSTRIAL SITE PROFILE

OPERATION OSWEGO COUNTY

EXHIBIT B - SITE DIAGRAM

APPENDIX B

Boring Test Site Logs

Client: BARTON AND LOGUIDICE

Project: OSWEGO COUNTY PROPERTY ASESSMENT

Location: CENTERVILLE AND PECK RICHLAND NY

LYON DRILLING CO.

BORING LOG

Boring No. B1
Project No.
Sheet 1 of 1
Date Started 09/08/11
Date Completed 09/08/11
Driller HARRY

Drill Rig: CME 55
Casing:
Casing Hammer: Wt. ____ lb. Fall ____ in.
Soil Sampler: 2" SPLIT SPOON
Sample Hammer: Wt. 140 lb. Fall 30 in.
Rock Sampler:
Other:
Weather Conditions:

Boring Location: AS STAKED, BY CLIENT
Surface Elevation:

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
09/08/11	1:40 PM	5.5	8.0	6.2
09/08/11	3:00 PM	23.5	26.0	11.2
09/08/11	3:25 PM	OUT	13.3	13.0

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	Rock Recovery Ft.	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	10	11	18	9	30				1.6	TOPSOIL	.1'	
														WET DARK BROWN FINE GRAVEL TO COURSE		
	2	2.0	4.0	S	4	4	7	8	11				NR	SAND, SOME FINE SAND	1.9'	
														WET BROWN SILT, SOME FINE SAND, TRACE		
5	3	4.0	6.0	S	3	5	8	12	13				1.7	MEDIUM SAND TO FINE GRAVEL	4.1'	
														MOIST BROWN SILT, LITTLE FINE SAND, TRACE		
	4	6.0	8.0	S	9	9	10	9	19				2.0	CLAY	6.2'	
														SATURATED BROWN VARVED SILT, LITTLE CLAY,		
	5	8.0	10.0	S	3	3	3	3	6				1.9	TRACE FINE SAND LENSES	9.3'	
10														GRADES TO SATURATED GREY CLAY, LITTLE SILT		
	6	10.0	12.0	S	2	1	2	2	3				2.0			
	7	12.0	14.0	S	2	3	4	3	7				1.6			
15	8	14.0	16.0	S	1	1	2	3	3				2.0			
	9	16.0	18.0	S	2	3	4	3	7				1.9			
	10	18.0	20.0	S	1	2	3	4	5				2.0			
20																
	11	20.0	22.0	S	2	3	4	4	7				1.7			
	12	22.0	24.0	S	3	4	6	8	10				1.9			
															24.0'	
25	13	24.0	26.0	S	4	5	7	11	12				1.7	GRADES TO SATURATED GREY SILT, LITTLE CLAY		
														BORING TERMINATED AT 26.0'		
30																
35																
40																
45																
50																

Client: BARTON AND LOGUIDICE

Project: OSWEGO COUNTY PROPERTY ASESSMENT

Location: CENTERVILLE AND PECK RICHLAND NY

LYON DRILLING CO.

BORING LOG

Boring No. B2
Project No.
Sheet 1 of 1
Date Started 09/08/11
Date Completed 09/08/11
Driller HARRY

Drill Rig: CME 55
Casing:
Casing Hammer: Wt. ____ lb. Fall ____ in.
Soil Sampler: 2" SPLIT SPOON
Sample Hammer: Wt. 140 lb. Fall 30 in.
Rock Sampler:
Other:
Weather Conditions:

Boring Location: AS STAKED, BY CLIENT
Surface Elevation:

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
09/08/11	4:15 PM	7.5'	10'	8.3'
09/08/11	5:45 PM	23.5'	26.0'	DRY
09/08/11	6:10 PM	OUT	11.5'	11.3'
09/09/11	9:05 AM	OUT	8.3'	7.5'

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	Rock Recovery Ft.	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	2	1	5	5	6				1.4	TOPSOIL	.3'	
														MOIST BROWN FINE SAND, SOME SILT		
	2	2.0	4.0	S	6	6	4	5	10				1.6		3.1'	
														WET BROWN SILT, SOME FINE SAND	4.9'	
5	3	4.0	6.0	S	2	2	3	3	5				1.4	WET BROWN SILT, LITTLE CLAY, TRACE FINE SAND		
															6.2'	
	4	6.0	8.0	S	4	6	12	15	18				1.1	WET BROWN CLAY, LITTLE SILT, TRACE GREY		
														FINE SAND LENSES	8.5'	
	5	8.0	10.0	S	5	10	18	25	28				1.5	GRADES TO SATURATED GREY FINE SAND,		
10														TRACE SILT	10.5'	
	6	10.0	12.0	S	5	3	3	3	6				1.8	GRADES TO SATURATED GREY CLAY, LITTLE SILT		
	7	12.0	14.0	S	1	2	2	3	4				1.7			
15	8	14.0	16.0	S	2	3	4	5	7				1.7			
	9	16.0	18.0	S	3	2	3	4	5				1.5			
	10	18.0	20.0	S	1	2	2	4	4				1.8			
20																
	11	20.0	22.0	S	2	3	3	2	6				1.4			
	12	22.0	24.0	S	2	4	6	6	10				1.6		23.3'	
														GRADES TO SATURATED GREY SILT, LITTLE CLAY,		
25	13	24.0	26.0	S	6	7	6	9	15				1.4	TRACE FINE SAND LENSES		
														BORING TERMINATED AT 26.0'		
30																
35																
40																
45																
50																

Client: BARTON AND LOGUIDICE

Project: OSWEGO COUNTY PROPERTY ASESSMENT

Location: CENTERVILLE AND PECK RICHLAND NY

LYON DRILLING CO.

BORING LOG

Boring No.

Project No.

Sheet 1 of 1

Date Started 09/09/11

Date Completed 09/09/11

Driller HARRY

Drill Rig: CME 55

Casing:

Casing Hammer: Wt. ____ lb. Fall ____ in.

Soil Sampler: 2" SPLIT SPOON

Sample Hammer: Wt. 140 lb. Fall 30 in.

Rock Sampler:

Other:

Weather Conditions:

Boring Location: AS STAKED, BY CLIENT

Surface Elevation:

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
09/09/11	10:15 AM	7.5'	10.0'	DRY
09/09/11	1:20 PM	OUT	19.7	DRY

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	Rock Recovery Ft.	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	1	2	3	4	5				1.6	TOPSOIL	.2'	
	2	2.0	4.0	S	8	9	6	7	15				1.4	MOIST BROWN FINE SAND, TRACE SILT, TRACE COURSE SAND TO FINE GRAVEL, TRACE ROOTS	3.4'	
5	3	4.0	6.0	S	4	5	7	7	12				1.6	GRADES TO WET BROWN AND GREY FINE SAND, LITTLE SILT, TRACE MEDIUM TO COURSE SAND	4.7'	
	4	6.0	8.0	S	5	5	6	6	11				0.9	WET BROWN AND GREY VARVED SILT, TRACE FINE SAND	6.1'	
	5	8.0	10.0	S	3	4	5	6	9				1.3	GRADES TO WET GREY VARVED SILT, TRACE FINE SAND LENSES	10.0'	
10	6	10.0	12.0	S	4	4	5	6	9				1.7	WET GREY SILT, SOME CLAY		
	7	12.0	14.0	S	8	5	9	12	21				1.3			
15	8	14.0	16.0	S	8	8	10	12	18				1.7			
	9	16.0	18.0	S	8	7	5	5	12				1.3		17.0'	
	10	18.0	20.0	S	1	2	4	4	6				1.3	SATURATED GREY SILT, LITTLE CLAY		
20	11	20.0	22.0	S	2	2	6	21	8				1.7		21.8'	
	12	22.0	24.0	S	14	11	7	8	18				1.8	SATURATED GREY FINE SAND AND SILT, TRACE COURSE SAND TO FINE GRAVEL	23.7'	
25	13	24.0	26.0	S	4	3	2	2	5				1.5	SATURATED GREY SILT, TRACE CLAY		
														BORING TERMINATED AT 26.0'		
30																
35																
40																
45																
50																

Client: BARTON AND LOGUIDICE

Project: OSWEGO COUNTY PROPERTY ASESSMENT

Location: CENTERVILLE AND PECK RICHLAND NY

LYON DRILLING CO.

BORING LOG

Boring No. B4
Project No.
Sheet 1 of 1
Date Started 09/09/11
Date Completed 09/09/11
Driller HARRY

Drill Rig: CME 55
Casing:
Casing Hammer: Wt. ____ lb. Fall ____ in.
Soil Sampler: 2" SPLIT SPOON
Sample Hammer: Wt. 140 lb. Fall 30 in.
Rock Sampler:
Other:
Weather Conditions:

Boring Location: AS STAKED, BY CLIENT
Surface Elevation:

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
09/09/11	3:10 PM	23.5'	25.5'	DRY
09/09/11	3:30 PM	OUT	21.0'	DRY

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	Rock Recovery Ft.	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	1	3	7	10	10				1.1	TOPSOIL	.4'	
														MOIST BROWN COURSE TO FINE SAND AND FINE		
	2	2.0	4.0	S	6	7	6	7	13				1.2	GRAVEL	2.5'	
														MOIST BROWN FINE SAND, SOME SILT	4.4'	
5	3	4.0	6.0	S	5	9	8	11	17				1.6	MOIST BROWN VARVED SILT, TRACE FINE SAND		
															6.1'	
	4	6.0	8.0	S	8	7	9	10	16				1.8	WET BROWN CLAY, SOME SILT		
															8.6'	
	5	8.0	10.0	S	10	12	13	17	25				1.4'	MOIST BROWN LAMINATED SILT, LITTLE FINE SANE		
10																
	6	10.0	12.0	S	10	16	8	9	18				0.9		11.0'	
														WET GREY CLAY, SOME SILT		
	7	12.0	14.0	S	4	7	7	10	14				1.4			
15	8	14.0	16.0	S	6	6	9	9	15				1.7			
	9	16.0	18.0	S	4	5	8	9	13				1.4			
															18.3'	
	10	18.0	20.0	S	3	4	5	7	9				1.6	GRADES TO WET GREY CLAY AND SILT		
20																
	11	20.0	22.0	S	3	5	6	6	11				1.9			
	12	22.0	24.0	S	5	7	7	9	14				1.8			
25	13	24.0	25.5	S	5	6	7		13				1.2			
														BORING TERMINATED AT 25.5'		
30																
35																
40																
45																
50																

Client BARTON AND LOGUIDICE	**LYON DRILLING CO.**	Boring No. B5	
Project OSWEGO COUNTY PROPERTY ASESSMENT	**BORING LOG**	Project No.	
Location CENTERVILLE AND PECK RICHLAND NY		Sheet 1 of 1	
		Date Started 09/09/11	
		Date Completed 09/09/11	
		Driller HARRY	

Drill Rig CME 55
Casing
Casing Hammer: Wt. ____ lb. Fall ____ in.
Soil Sampler 2" SPLIT SPOON
Sample Hammer: Wt. 140 lb. Fall 30 in.
Rock Sampler:
Other:
Weather Conditions:

Boring Location AS STAKED, BY CLIENT
Surface Elevation

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
09/09/11	4:10 PM	7.5'	10'	7.5'
09/09/11	5:50 PM	OUT	18.9'	DRY

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	RQD	Rock Recovery Ft.	Rock Recovery %	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	2	2	3	4	5				1.0'	TOPSOIL	.4'	
														MOIST BROWN FINE SAND, TRACE MEDIUM SAND		
	2	2.0	4.0	S	6	8	8	7	16				1.4'	AND SILT	2.6'	
														MOIST BROWN SILT, LITTLE FINE SAND, TRACE		
5	3	4.0	6.0	S	8	12	15	16	27				1.6'	MEDIUM SAND	4.0'	
														WET BROWN FINE SAND, TRACE SILT		
	4	6.0	8.0	S	10	8	8	5	16				1.5'			
															7.0'	
	5	8.0	10.0	S	7	7	8	8	15				1.7'	SATURATED BROWN FIRM FINE SAND	8.8'	
10														SATURATED GREY STIFF CLAY, SOME SILT		
	6	10.0	12.0	S	3	4	5	6	9				1.5'			
	7	12.0	14.0	S	5	6	8	8	14				1.7'			
15	8	14.0	16.0	S	4	5	6	7	11				1.8'			
	9	16.0	18.0	S	6	6	7	7	13				1.7'			
	10	18.0	20.0	S	3	5	7	8	12				1.9'			
20																
	11	20.0	22.0	S	7	7	7	9	14				1.4'			
	12	22.0	24.0	S	7	8	12	10	20				1.3'			
25	13	24.0	26.0	S	7	9	9	12	18				1.7'			
														BORING TERMINATED AT 26.0'		
30																
35																
40																
45																
50																

Client BARTON & LOGUIDICE, PC

Project RICHLAND WATER DISTRICT NO. 2

Location CENTERVILLE ROAD RICHLAND, NY

LYON DRILLING CO.

BORING LOG

Boring No B116
Project No 418.016
Sheet 1 of 1
Date Started 04/22/08
Date Completed 04/22/08
Driller JEFFREY LYON

Drill Rig CME 45B
Casing 3 1/4" I.D. HOLLOW STEM AUGERS
Casing Hammer Wt ____ lb Fal ____ in
Soil Sampler 2" SPLIT SPOON
Sample Hammer Wt 140 lb Fal 30 in
Rock Sampler
Other
Weather Conditions

Boring Location AS STAKED, BY CLIENT
Surface Elevation

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
04/22/08	2:00 P.M.	4.0	6.0	DRY
04/22/08	2:30 P.M.	OUT	5.5	4.9

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	RQD	Rock Recovery Ft	Rock Recovery %	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	3	3	5	6	8				0.8	MOIST, BROWN, FINE SAND. TRACE FINE GRAVEL	0.3	AUGERS EASILY 0'.0 TO 10'.0
														WET, BROWN, FINE SAND. TRACE SILT. TRACE MEDIUM TO COARSE SAND		
5	2	4.0	6.0	S	1	1	1	2	2				0.7			
	3	8.0	10.0	S	2	2	16	8	18				1.2			
10															9.5	
														MOIST, GRAY CLAY. TRACE SILT. TRACE FINE GRAVEL		
														BORING TERMINATED AT 10'.0		

Client BARTON & LOGUIDICE, PC

Project RICHLAND WATER DISTRICT NO. 2

Location CORNER OF PECK & CENTERVILLE ROAD RICHLAND, NY

LYON DRILLING CO.

BORING LOG

Boring No B117
Project No 418.016
Sheet 1 of 1
Date Started 04/22/08
Date Completed 04/22/08
Driller JEFFREY LYON

Drill Rig CME 45B
Casing 3 1/4" I.D. HOLLOW STEM AUGERS
Casing Hammer Wt ____ lb Fal ____ in
Soil Sampler 2" SPLIT SPOON
Sample Hammer Wt 140 lb Fal 30 in
Rock Sampler
Other
Weather Conditions

Boring Location AS STAKED, BY CLIENT
Surface Elevation

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
04/22/08	10:15 A.M.	8.0	10.0	DRY
04/22/08	10:30 A M.	OUT	6.0	DRY

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0 5'	0 5'/1 0'	1 0'/1 5'	1 5'/2 0'	N	Rock Recovery Ft	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	2	1	3	4	4				1.7	MOIST, BROWN SILT. TRACE FINE SAND	0.5	AUGERS EASILY 0' 0 TO 10'.0
														SIMILAR. TRACE CLAY		
5	2	4 0	6.0	S	3	4	7	7	11				1.9			
	3	8.0	10.0	S	3	2	1	12	3				1.3		8.0	
10														WET, GRAY CLAY. LITTLE FINE SAND. TRACE FINE GRAVEL		
														BORING TERMINATED AT 10'.0		

Client BARTON & LOGUIDICE, PC

Project NO. 2 RICHLAND WATER DISTRICT

Location RICHLAND, NY PECK RD.

LYON DRILLING CO.

BORING LOG

Boring No. B123
Project No. 418.016
Sheet 1 of 1
Date Started 04/22/08
Date Completed 04/22/08
Driller JEFFREY LYON

Drill Rig CME 45B
Casing 3 1/4" I.D. HOLLOW STEM AUGERS
Casing Hammer: Wt. ____ lb. Fal ____ in
Soil Sampler 2" SPLIT SPOON
Sample Hammer: Wt. 140 lb. Fal 30 in
Rock Sampler:
Other.
Weather Conditions:

Boring Location AS STAKED, BY CLIENT
Surface Elevation

Ground Water Observations

Date	Time	Casing at	Hole at	Water at
04/22/08	9:45 A.M.	8.0	10.0	7.7
04/22/08	9:50 A.M.	OUT	5.3	DRY

Depth	Sample Number	Sample Depth From (Ft)	Sample Depth To (Ft)	Sample Type	SOIL Blows on Sampler 0'/0.5'	0.5'/1.0'	1.0'/1.5'	1.5'/2.0'	N	Rock Recovery Ft.	Rock Recovery %	RQD	Sample Recovery	MATERIAL DESCRIPTION	Depth of Change	REMARKS
	1	0.0	2.0	S	5	7	5	6	12				1.6	MOIST, BROWN, FINE SAND. TRACE FINE GRAVEL. TRACE COARSE SAND		
5	2	4.0	6.0	S	6	2	1	4	3				0.8		4.6	
														MOIST, BROWN, FINE SAND. TRACE CLAY. TRACE COARSE SAND. TRACE SILT		AUGERS HARD AT 7'0
	3	8.0	10.0	S	8	18	25	32	38				1.5		8.0	
10														WET, BROWN, FINE SAND		
														BORING TERMINATED AT 10'.0		

APPENDIX C

Natural Resource Conservation Service

Septic Tank Absorption Analysis

Septic Tank Absorption Fields (NY)—Oswego County, New York
(Centerville -Peck Property)

MAP LEGEND

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

Soils
- Soil Map Units

Soil Ratings
- Very limited
- Somewhat limited
- Not limited
- not rated or not available

Political Features
- Cities

Water Features
- Streams and Canals

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

MAP INFORMATION

Map Scale: 1:1,500 if printed on B size (11" × 17") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

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

Soil Survey Area: Oswego County, New York
Survey Area Data: Version 10, Mar 10, 2011

Date(s) aerial images were photographed: 7/14/2006

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.

Septic Tank Absorption Fields (NY)

Septic Tank Absorption Fields (NY)— Summary by Map Unit — Oswego County, New York (NY075)						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres in AOI**	**Percent of AOI**
AAC	Adams-Windsor complex, rolling	Very limited	Adams (50%)	Filtering capacity (1.00)	1.7	11.0%
				Seepage (1.00)		
				Slope (0.20)		
			Windsor (40%)	Filtering capacity (1.00)		
				Seepage (1.00)		
				Slope (0.20)		
Na	Naumburg loamy fine sand	Very limited	Naumburg, somewhat poorly drained (50%)	Depth to saturated zone (1.00)	8.7	58.2%
				Filtering capacity (1.00)		
				Seepage (1.00)		
			Naumburg, poorly drained (25%)	Depth to saturated zone (1.00)		
				Filtering capacity (1.00)		
				Seepage (1.00)		
RaB	Raynham silt loam, 0 to 6 percent slopes	Very limited	Raynham, poorly drained (50%)	Depth to saturated zone (1.00)	0.3	2.1%
				Restricted permeability (0.49)		
			Raynham, somewhat poorly drained (25%)	Depth to saturated zone (1.00)		
				Restricted permeability (0.49)		
WDB	Westbury-Dannemora complex, very stony, gently sloping	Very limited	Westbury (60%)	Depth to saturated zone (1.00)	1.4	9.0%
				Depth to dense material (0.83)		
				Surface rock fragments (0.60)		
				Restricted permeability (0.31)		
			Dannemora (25%)	Depth to saturated zone (1.00)		
				Depth to dense material (0.92)		
				Surface rock fragments (0.60)		
				Restricted permeability (0.31)		

Septic Tank Absorption Fields (NY)— Summary by Map Unit — Oswego County, New York (NY075)						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres in AOI**	**Percent of AOI**
WIA	Williamson very fine sandy loam, 0 to 2 percent slopes	Somewhat limited	Williamson (80%)	Depth to saturated zone (0.85)	2.9	19.6%
				Depth to dense material (0.83)		
				Restricted permeability (0.31)		
Totals for Area of Interest					**15.0**	**100.0%**

Septic Tank Absorption Fields (NY)— Summary by Rating Value		
Rating	**Acres in AOI**	**Percent of AOI**
Very limited	12.0	80.4%
Somewhat limited	2.9	19.6%
Totals for Area of Interest	**15.0**	**100.0%**

Description

Septic tank absorption fields are subsurface systems of perforated pipe or similar devices that distribute effluent from a septic tank into the soil. New York State Department of Health regulations allow installation of septic system absorption fields of varying designs, depending upon the depth of suitable soil material above any limitation in the natural soil at a site (New York State Department of Health, 1990). Where necessary, imported fill material may be used to elevate absorption trenches to at least the minimum distance of 24 inches above limiting soil horizons. The depth ranges of suitable material and corresponding types of absorption systems allowed are as follows:

Less than 12 inches-no system allowed

12 to 24 inches-alternative raised trench

24 to 48 inches-conventional shallow trench

More than 48 inches-conventional system

The ratings in this interpretation are based on evaluation of the soil between depths of 12 and 48 inches. In addition, the bottom layer of the soil is evaluated for risk of seepage. This interpretation does not evaluate bedrock below the soil. The soil properties and site features considered are those that affect absorption of the effluent, construction and maintenance of the system, and public health.

The soil properties and qualities that affect the absorption and effective treatment of wastewater effluent are saturated hydraulic conductivity (Ksat), depth to a seasonal high water table, depth to bedrock, depth to dense material, and susceptibility to flooding. Stones and boulders and a shallow depth to bedrock or dense material interfere with installation. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas. In addition, the hazards of erosion and sedimentation increase as slope increases.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 2 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, ground water may be contaminated.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations

between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen, which is displayed on the report. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the Selected Soil Interpretations report with this interpretation included from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

The information in this interpretation is based on criteria developed specifically for soils in New York. The information is not site specific and does not eliminate the need for onsite investigation of the soils.

Reference:

New York State Department of Health. 1990. Appendix 75-A of Part 75, Section 201(1)(1) of New York Public Health Law. Nassau and Suffolk Counties have a waiver from this portion of New York State Department of Health regulations.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher