ARCADIS U.S., Inc.
2 Executive Drive
Suite 303
Chelmsford
Massachusetts 01824
Tel 978 937 9999
Fax 978 937 7555
www.arcadis-us.com

ENVIRONMENTAL

New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-4500
Attn: Stephen Tomasik

United States Army Corps of Engineers
New York District
26 Federal Plaza
New York, NY 10278-0090
Attn: Steve Ryba, Regulatory Branch, Room 1937

Subject: Cricket Valley Energy Project, Dover, New York (Army Corps #2009-1043)

Date:
June 28, 2012

Contact:
Frederick M. Sellars

Phone:
978-322-4517

Email:
frederick.sellars@arcadis-us.com

Our ref:
CO001447

Dear Mr. Tomasik and Mr. Ryba:

On January 22, 2010, ARCADIS submitted a Joint Application Form and supporting information requesting authorization of wetland alteration associated with the Cricket Valley Energy (CVE) project in Dover, Dutchess County, New York. On April 7, 2011, an update to the application was submitted to include information highlighting elements of the project that had been changed since the January 22, 2010 submittal. The April 7, 2011 submittal represented CVE's continuation of refining project elements in response to New York State Department of Environmental Conservation (NYSDEC) and United States Army Corps of Engineers (USACE) comments to further mitigate wetland impacts resulting from the CVE project.

Since that time CVE has obtained an option to purchase approximately 57 additional acres to the south of the proposed project site. This adjacent parcel, formerly the location of the RASCO Materials facility (the former Rasco parcel), had not previously been available. It should be noted that the permanent project footprint remains unchanged as described in the April 7, 2011 submittal; however, previously disturbed portions of the former Rasco parcel are proposed to be used for temporary parking during the construction phase of the project.

This letter provides an update to previously submitted information and highlights those elements that have been changed since the April 7, 2011 submittal to reflect inclusion of the former Rasco parcel. The following includes a brief project description, a summary of wetland jurisdiction status, a review of alternatives considered to avoid and minimize wetland impacts, and a discussion of proposed project activities, including a proposed wetland restoration/creation and adjacent area restoration plan.

CVE previously submitted a copy of the Wetland Delineation report for the project development area on August 28, 2009, which includes representative photographs and background, as well as a copy of the Environmental Assessment Form that was submitted on November 4, 2009. On January 10, 2012 CVE also submitted materials in support of a request for a jurisdictional determination for the former Rasco parcel, including wetland data forms, representative photographs and signed seal survey drawings of surveyed wetlands. CVE is currently preparing the Final Environmental Impact Statement (FEIS) for NYSDEC review, including information to address the inclusion of the former Rasco parcel.

Project Description

The project is proposed within an approximately 57-acre portion (the Project Development Area) of the 193.5-acre property. The approximately 57-acre former Rasco parcel immediately south of the Project Development Area will predominantly remain undisturbed with the exception of temporary disturbance to approximately 13 acres; these 13 acres consist of waste material/debris from prior operations which require removal. Following removal, the 13-acre area will be used for temporary construction worker parking and laydown area, and, following construction, will be restored. Figure 1 illustrates the boundaries of the property, Project Development Area and former Rasco parcel on the Dover Plains, New York USGS quadrangle. The approximate center point of the Project Development Area is latitude 41.677027, longitude -73.580508.

The property is bounded to the north by an existing 345 kilovolt (kV) Consolidated Edison (ConEd) electric transmission corridor (an existing Iroquois natural gas pipeline right of way also extends along the ConEd corridor); to the east by State Route 22; and to the south by residential properties. To the west, the Project Development Area is bounded by an active Metro-North rail line. The property continues west from the rail line, bounded by the Swamp River on the northern portions and extending across the river in westerly and southerly portions. No project work is proposed west of the rail line. The property has been in industrial use since approximately 1942; the Project Development Area's primary building was largely destroyed by fire in 1996.

The Cricket Valley Energy project is a proposed nominal 1,000 megawatt (MW) natural gas-fired combined cycle energy facility, which will be constructed on the Project Development Area (which currently contains several abandoned industrial buildings). The project will utilize air cooling and a zero liquid discharge system;

therefore, operational impact to water resources will be limited to use of an on-site bedrock well system to supply a continuous summer demand of 60 gallons per minute (gpm), and a short-term supply of 120 gpm, discharge of stormwater (for storm events in excess of the 100-year storm), and domestic sewage to an onsite septic system. The project will utilize the existing driveway onto Route 22, and will interconnect with the ConEd 345 kV transmission line on-site. A short (approximately 500-foot) natural gas lateral will be required to interconnect to the existing Iroquois natural gas pipeline.

The approximately 13 acres of the former Rasco parcel proposed for waste material/debris removal and temporary construction worker parking and laydown represents an area that has been historically disturbed through placement of materials and debris. Of these 13 acres, approximately 5 acres are currently developed (previously used by RASCO Materials), approximately 6 acres is comprised of waste pile material (some containing overgrowth consisting of shrub and small diameter woody vegetation), and approximately 2 acres are characterized by re-growth in the form of small-diameter trees. Site clean-up and stabilization will occur prior to this temporary use, and stormwater management features will be included in the design to divert runoff from wetland resources and species habitat.

Wetland Jurisdictional Summary

In the Project Development Area, mapping indicated that NYSDEC-jurisdictional wetlands are located west of the railroad track, adjacent to the Swamp River (identified in project delineation reports as Wetlands 4 and 5). NYSDEC has determined that an additional on-site wetland (identified as Wetland 2) is state-jurisdictional. The two remaining on-site wetland resources (Wetlands 1 and 3) were determined not to be state-jurisdictional due to their isolated status.

On the former Rasco parcel, a NYSDEC jurisdictional wetland was delineated immediately east of the railroad track (identified as Wetland D {US 8}) with a direct hydrologic surface connection via a culvert under the tracks to adjacent Wetland 5. An additional 5 wetlands were delineated that were determined not to be state-jurisdictional and are designated as follows:

- Wetland A (US 5)
- Wetland B (US 6)
- Wetland C (US 7)
- Wetland E (US 9)
- Wetland F (US 4)

The United States Army Corps of Engineers (USACE) utilizes different jurisdictional criteria in reviewing wetland resources within the Project Development Area (Wetlands 4 and 5 have not been reviewed by the USACE, as no project work will occur west of the railroad track). Federal wetland jurisdiction was confirmed for Wetland 2 and a portion of Wetland 3. In addition, the onsite drainage swale was determined to be a federally jurisdictional intermittent stream. Wetland 1 and a portion of Wetland 3 were determined not to be federally jurisdictional.

On the former Rasco parcel, two of the six wetlands delineated were determined to be under federal jurisdiction. Wetland D (US 8) falls under both federal and state jurisdictions, while Wetland F (US 4) is federally regulated only. Note that, while Wetland F (US 4) is predominantly located on the former Rasco parcel and was not identifiable as a wetland resource without access to that parcel, it extends onto the Project Development Area as well.

Figures 2, 3, 4, and 5 present the surveyed wetland boundaries. The following table summarizes the jurisdictional resources within the approximately 57-acre Project Development Area and approximately 57-acre former Rasco parcel.

Wetland Resource	Parcel Location	State Jurisdictional?	Federally Jurisdictional?	Wetland Jurisdictional Area (Acres)
1	PDA	No	No	--
2	PDA	Yes	Yes	8.68
3A	PDA	No	No	--
3B	PDA	No	Yes	0.41
Drainage Swale	PDA	No	Yes	0.04
A (US 5)	FRP	No	No	--
B (US 6)	FRP	No	No	--
C (US 7)	FRP	No	No	--
D (US 8)	FRP	Yes	Yes	6.08
E (US 9)	FRP	No	No	--
F (US 4)	PDA & FRP	No	Yes	0.36 (0.03 acres in PDA)

PDA = Project Development Area
FRP = Former Rasco Parcel

Wetlands 4 and 5 are located west of the railroad track that is within the property but not within either the Project Development Area or former Rasco parcel. Note that state jurisdictional Adjacent Area (100 feet from the wetland boundary) associated with Wetlands 4 and 5 does extend onto the Project Development Area and former Rasco parcel, although no project activities are proposed in that area.

Alternatives Considered in the Project Development Area

Avoidance of impact to wetlands has been an important focus of the project site selection and design. The following narrative reviews alternatives considered to achieve that goal.

The Cricket Valley Energy site was selected based on detailed criteria that included proximity to energy infrastructure, appropriate zoning, and sufficient land to create a buffer and minimize aesthetic impacts to the surrounding community. The entire 193.5-acre site which includes the former Rasco parcel meets all of these criteria:

- Adjacent to a 345 kV electric transmission line owned by ConEd.
- Adjacent to a high-pressure natural gas pipeline owned by Iroquois Gas Transmission Company. An approximately 500-foot gas pipeline lateral will be constructed to the project site to interconnect with the existing 24-inch gas line.
- Industrially zoned. The site is one of three areas in Dover zoned for Manufacturing/Industrial purposes. It is specifically designated in the Dover Master Plan (referred to as the “Mica Plant”) to be utilized for industrial purposes.
- Natural buffer. A 300- to 400-foot buffer of vegetation will be maintained between the project development site and New York State Route 22 to mitigate visual impacts. In addition, existing topography will be maintained as buffer.

Alternative sites were identified throughout the southeast region of New York State in addition to several local alternatives in the Town of Dover. However, these sites did not adequately meet the criteria outlined above. Sites identified adjacent to the electric transmission lines and gas pipeline did not offer the appropriate zoning or buffer. Sites identified with appropriate zoning were located further away from energy infrastructure and would require the construction of new off-site electric power lines and a longer natural gas pipeline. The impact to the surrounding community

resulting from the need for potentially significant off-site construction eliminated these sites from consideration.

Once the site was selected, alternative project configurations were considered. In early May 2009, the wetland field delineation of the Project Development Area was completed, and field sketches were immediately provided to project engineers for use in developing preliminary layout alternatives. In the fall of 2011, the wetland field delineation of the former Rasco parcel was completed. As a result of this 2011 delineation, a 0.03 acre wetland ditch extending from the 0.36-acre Wetland F (US 4) was added within the limits of the Project Development Area The primary design goals were to:

- Avoid wetland impact wherever possible;
- Avoid NYSDEC wetland adjacent area impact wherever possible;
- Utilize the existing developed footprint to the greatest extent possible;
- Minimize clearing of forested areas to the greatest extent possible;
- Avoid substantial earth movement where possible; and
- Maintain practical technical equipment orientation to facilitate construction and operations in an efficient, safe and least-impact manner.

The current orientation of facility components was selected in order to use the existing driveway; minimize wetland intrusion; keep equipment aligned to ensure safe, efficient operation and to facilitate maintenance; and position louder equipment (for example, the air-cooled condensers that include numerous fans) to the south and west of the site, away from residences. Figures 6 through 9 highlight the amount of wetland impact reduction as a result of the various design alternatives and on-going effort by CVE to reduce natural resource impacts.

A significant ancillary project element is the project substation. Figure 6 (Drawing M200, Rev. B) illustrates the size of a conventional substation that would serve the project, as compared to the size of a gas insulated switchgear (GIS) style substation. Although a GIS switchyard is $10-20 million more than the cost of the conventional design, wetland impact considerations resulted in selection of a GIS switchyard for the project.

The surveyed wetland boundaries were overlain on the proposed site plan and other ancillary elements (e.g., the detention basin, gas pipeline interconnection, and ConEd substation, also selected as a GIS design at significant cost in order to reduce footprint) were added (see Figure 7, Drawing M200, Rev. F). Additional work continued towards minimizing the footprint needed for features such as the GIS substation and the detention basin.

NYSDEC review of the originally flagged wetland increased the Wetland 2 boundary to encompass a previously disturbed area where historical uses of the site eliminated natural soils and had deposited yellow sawdust like material. With this narrow finger-like area included in the wetland designation, impact to this area by the project footprint could not be avoided. Consideration for shifting the footprint or moving project elements to avoid impact to the tip of Wetland 2 continued, as follows:

- The footprint was shifted south to the extent possible given southern property line and existing drainage ditch physical constraints;
- The administration/warehouse buildings were relocated to the east;
- Further reductions were made in the size of the combined project/ConEd switchyard and substation;
- Slopes were reduced in areas near wetlands to minimize grading effects; and
- Various configurations with the potential to reduce the size of the stormwater detention basin were considered but rejected due to project layout constraints and design needs.

Figure 8 illustrates a revised layout with its associated grading (Drawing C130, Rev. A). Constraints associated with the southern property line, as well as functional and safety needs for access and keeping various pieces of equipment co-located resulted in unavoidable impact to the fingerlike projection of Wetland 2 and its state-jurisdictional adjacent area.

With the addition of the Rasco parcel, the Project examined whether the project footprint could be further shifted to eliminate or reduce encroachment on Wetland 2. However, the presence of federally jurisdictional Wetland F (US 4) as well as the federally jurisdictional intermittent stream (stormwater drainage ditch) precluded this.

Figure 9 (M200 Rev S) illustrates the currently proposed layout, which demonstrates some additional wetland impact reduction as a result of project layout modifications.

Avoidance of Impacts to Jurisdictional Wetlands and Minimization of Temporary Impacts to Adjacent Area in Former Rasco Parcel

With the acquisition of the adjacent former Rasco parcel, in tandem with clean-up and restoration activities, CVE has the opportunity to provide for a significant amount of the necessary construction worker parking and laydown on an approximately 13-acre portion of this property. This temporary use will require some modification as an approximately 2-acre area of re-growth forest dominated by relatively small diameter trees (<3" dbh) will need to be cleared.

As shown on Figure 10, one non-jurisdictional wetland (Wetland B [US 6]) will be filled with gravel to accommodate parking, and another non-jurisdictional wetland (Wetland C {US 7}) will be converted to a sediment detention control facility as shown on Figure 11. These project features would follow excavations required to remove waste piles and debris that will eliminate artificial barriers currently impounding surface waters which likely resulted in the formation of these two wetlands. As illustrated in Figure 11, remaining wetlands would be protected as a result of the temporary stormwater management system directing flows away from wetlands through extended channels prior to discharge, allowing for greater residence time to improve water quality,

As a consequence of required disturbance to complete waste pile and debris removal, approximately 1.4 acres of regulated Adjacent Area will be impacted. The remaining regulated Adjacent Area will not have to be disturbed for temporary construction worker parking usage. Following use of this 1.4-acre regulated Adjacent Area for temporary parking during construction, the site will be restored and planted with indigenous trees, shrubs and native seed mixes as shown on the restoration plan for the former Rasco parcel included in Attachment 1.

Summary of Impacts to Wetland Resource Areas and Regulated Adjacent Areas

Although the project design minimizes impacts to wetland resources as much as possible, a small amount of impacts to wetland resource areas is unavoidable. A summary of impacts to jurisdictional wetland resource areas (both jurisdictional and non-jurisdictional) is provided below. A summary of impacts to regulated Adjacent

Area (Area within 100 feet of a NYSDEC-jurisdictional wetland) is provided in a separate table below. A discussion of the proposed project actions within the jurisdictional areas is provided below.

Jurisdictional Wetlands Impacts

(a) Wetland Number	(b) Jurisdictional Status	(c) Total Wetland Area (acres)	(d) Wetland Area Temporarily Disturbed and Restored (acres)	(e) Wetland Area Permanently Altered (acres)	(f) Wetland Area Permanently Lost (acres)	(g) New Wetland Area Created (acres)	(h) Total Wetland Net Loss (f) + (g)
Wetland 2	Federal and State	8.7	0.6	0.0	-0.05	0.05	0.0
Wetland 3B	Federal	.41	0.0	0.0	0.0	0.0	0.0
Drainage Swale (Intermittent Stream)	Federal	.04	.001	.003 (rip rap within stream)[1]	0.0	0.0	0.0
Wetland D (US 8)	Federal and State	6.08	0.0	0.0	0.0	0.0	0.0
Wetland F (US 4)	Federal	0.36	0.0	0.0	0.03	0.03	0.0

[1]See Attachment 1: Plate 3 – Conceptual Subsurface Sewage Disposal System and Stormwater Management Plan

Total Adjacent Area Impacts (see Wetland Restoration/Creation Plan Sheets 1 through 3 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan)

(a) NYSDEC-Regulated Resource	(b) Adjacent Area Temporarily Disturbed/Restored Due to Facility Construction and Bioretention Areas[2]	(c) Adjacent Area Temporarily Disturbed /Restored due to Waste Excavation[3]	(d) Total Adjacent Area Temporary Disturbance/ Restoration (b)+(c)	(e) Adjacent Area Permanently Lost (due to facility construction)[4]	(f) Adjacent Area selectively replanted outside of proposed limits of construction[5]
Adjacent Area to Wetland 2	0.6	0.4	1.0	0.8	1.8
Adjacent Area to Wetland D (US 8)	0.0	1.4	1.4	0.0	0.0

[2]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 4.

[3]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 5 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan

[4]Area within Existing Adjacent Area that will be filled due to plant construction

[5]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 3.

Proposed Project Actions in Jurisdictional Areas

All state and federal jurisdictional wetland resource impact has been avoided by the project with the exception of limited impact to Wetland 2 and its associated state-jurisdictional 100-foot adjacent area, a portion of Wetland D (US 8) state-jurisdictional 100-foot adjacent area, some limited work within the intermittent stream channel and a small wetland ditch that is part of federally jurisdictional Wetland F (US 4) representing the northernmost terminus of this wetland.

Impacts associated with Wetland 2 and Wetland F (US 4) falls into three general categories: proposed wetland fill; proposed activities to address remediation and restoration of wetland quality; and proposed work within the state wetland adjacent area (of Wetland 2), including restoration and potential mitigation activities. Each is discussed below.

Intermittent Stream Impacts

The project's stormwater management system has been designed with three plunge pool/bioretention facilities in the northern portion of the Project Development Area, and a stormwater management basin – wet extended detention pond in the southern portion of the Project Development Area that will hold most stormwater rainfall (see Attachment 1, Plate 3). For storm events in excess of the 100-year frequency storm event, discharge from the stormwater management basin will occur into the intermittent stream (which is currently used for site stormwater discharge). No plans currently exist to modify the existing stormwater channel (a USACE-jurisdictional intermittent stream). However, in order to prevent erosion, it will be necessary to install rip-rap within the intermittent stream in the location of the proposed detention pond outlet (see Plate 3 inset). This small area of rip-rap (approximately 135 square feet, or 0.003 acre) is not anticipated to alter the flow of water or function of the intermittent stream. No other improvements are proposed within the federally jurisdictional intermittent stream channel.

Proposed Wetland Fill – Wetland 2 and Wetland F (US 4)

A total of 1,990 square feet (0.05 acre) of wetland fill is unavoidable for Wetland 2. In addition, a total of 1,195 square feet (0.03 acre) of Wetland F (US4) will be impacted as a result of required surface grading within this segment of the Project Development Area. Although numerous site configurations were explored, the footprint has been shifted as far south as possible to both avoid the USACE - jurisdictional Intermittent stream and significantly minimize impacts to federally

regulated Wetland F (US 4). The tip of the southerly fingerlike projection associated with Wetland 2, and northern most terminus ditch associated with Wetland F (US 4) cannot be avoided.

It should be noted that the quality of the impacted wetland segments of both Wetland 2 and Wetland F (US 4) is poor. Although wetland hydrology and vegetation is present, natural soils do not exist in this portion (and further north) of Wetland 2, nor were they observed along either lengths of two linear features representing ditches within Wetland F (US 4). Rather, soil material in Wetland 2 and both ditches within Wetland F (US 4) is comprised of a yellowish, non-toxic sediment that is not naturally occurring. Debris associated with various historical industrial uses of the site has been deposited and/or discharged into these wetlands and on the wetland banks as well, including a white slag material from previous magnesium extraction and processing activities that occurred on the site. As a part of project development, CVE intends to remove trash and debris from the wetland areas (and throughout the site), remove the "yellow material" from the impacted portion of the Wetland 2, create additional wetland and restore wetland adjacent area with selective plantings. The cleanup and restoration of these wetlands should improve wetland function and quality, while constituting work in wetland areas requiring approval, will also result in the creation of additional wetland area, as addressed below.

Wetland 2 Restoration and Creation and Adjacent Area Restoration

A wetland restoration/creation plan has been developed to compensate for both the permanent loss of the 0.08 acres of jointly regulated NYSDEC and USACE freshwater wetland and 0.8 acre of regulated Adjacent Area described above, as well as the temporary disturbance to approximately 2.4 acres of both Wetland 2 and Wetland D (US 8) regulated Adjacent Area. Narratives describing the wetland restoration/creation and adjacent area restoration plans complete with plan drawings, as well as a restoration monitoring plan have been provided in Attachment 1 to this letter.

The Restoration/Creation Plan involves the following activities:

- The creation of an Open Water area within the southernmost portion of Wetland 2 by excavation of non-native sediment, approximately 0.6 acres in size. The Open Water area will be allowed to revegetate.

- The creation of 0.08 acres of new wetland by extending the existing wetland limits to the east and west of the Open Water area. This area will be seeded and allowed to revegetate.

As a result of the newly created 0.08 wetland area, there will be no net loss of jurisdictional wetland.

In addition to the wetland restoration and creation, restoration activities within the Adjacent Area include the following:

- Restoration and replacement of 0.4 acres of Adjacent Area (Wetland 2) due to the excavation of waste material in the Project Development Area, and 1.4 acres of Adjacent Area (Wetland 4 [US 8]) within the former Rasco parcel following excavation of waste material and subsequent use of this area for temporary parking during construction.

- Restoration and replanting of approximately 0.6 acres of Adjacent Area that may be temporarily disturbed due to facility construction as well as around the bioretention basins. These areas will be planted with native tree/shrub species.

- Selective replanting of Adjacent Area between the proposed limits of construction ground disturbance and Wetland 2 (approximately 1.8 acres). Areas that are not currently densely vegetated will be selectively planted with appropriate tree/shrub species.

Plantings Adjacent to Wetland 1

In addition to the restoration of, and creation at the USACE- and NYSDEC-jurisdictional Wetland 2, CVE will replant areas between the project footprint and non-jurisdictional Wetland 1 with the same species and planting density proposed for the Wetland 2 Adjacent Area replanting to further protect this non-jurisdictional wetland.

Post-Construction Monitoring Plan

A post-construction monitoring and maintenance plan has been developed (See Attachment 1). The monitoring and maintenance plan includes monitoring for three calendar years (covering three growing seasons) to ensure that the creation and

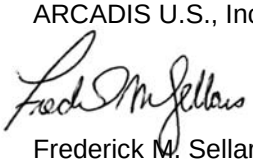
restoration plan has achieved its regulatory and contractual commitments and goals. The plan includes both a qualitative and quantitative assessment to ensure the physical health and establishment of new vegetation at the site as well as the integrity of installed erosion matting, revetments, and herbivory fencing in the restoration area. The program includes annual reports and photo documentation as well as the recommendation and performance of corrective action, if necessary.

A revised Project Description and Purpose has been prepared to address these project refinements that have been made since the original submission of the Joint Application Form. This revision is provided as Attachment 2.

We appreciate your continued review of this wetland application, and hope that the information contained herein addresses all outstanding comments on the application. Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

ARCADIS U.S., Inc.

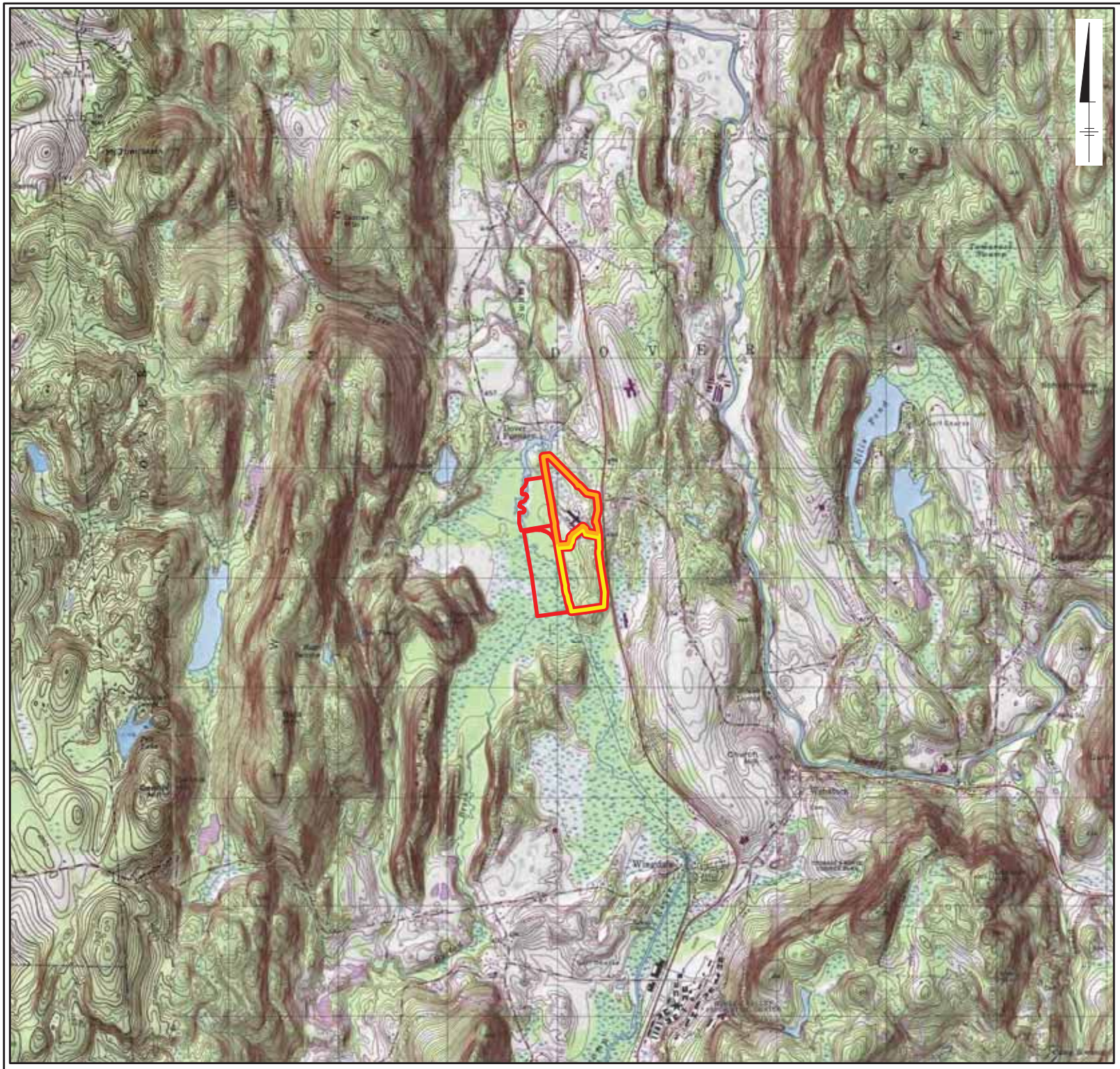


Frederick M. Sellars
Vice President

Copies:
R. De Meyere, J. Ahrens, CVE
J. Schachter, Howlands Lake Partners
R. Courtien, Town of Dover
H. Gierloff, NYSDEC Region 3

ARCADIS

Figures



Legend

- Project Development Area
- Former Rasco Parcel
- Property

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 2,000 4,000
Feet

1:48,000

1 inch = 4,000 feet

ARCADIS

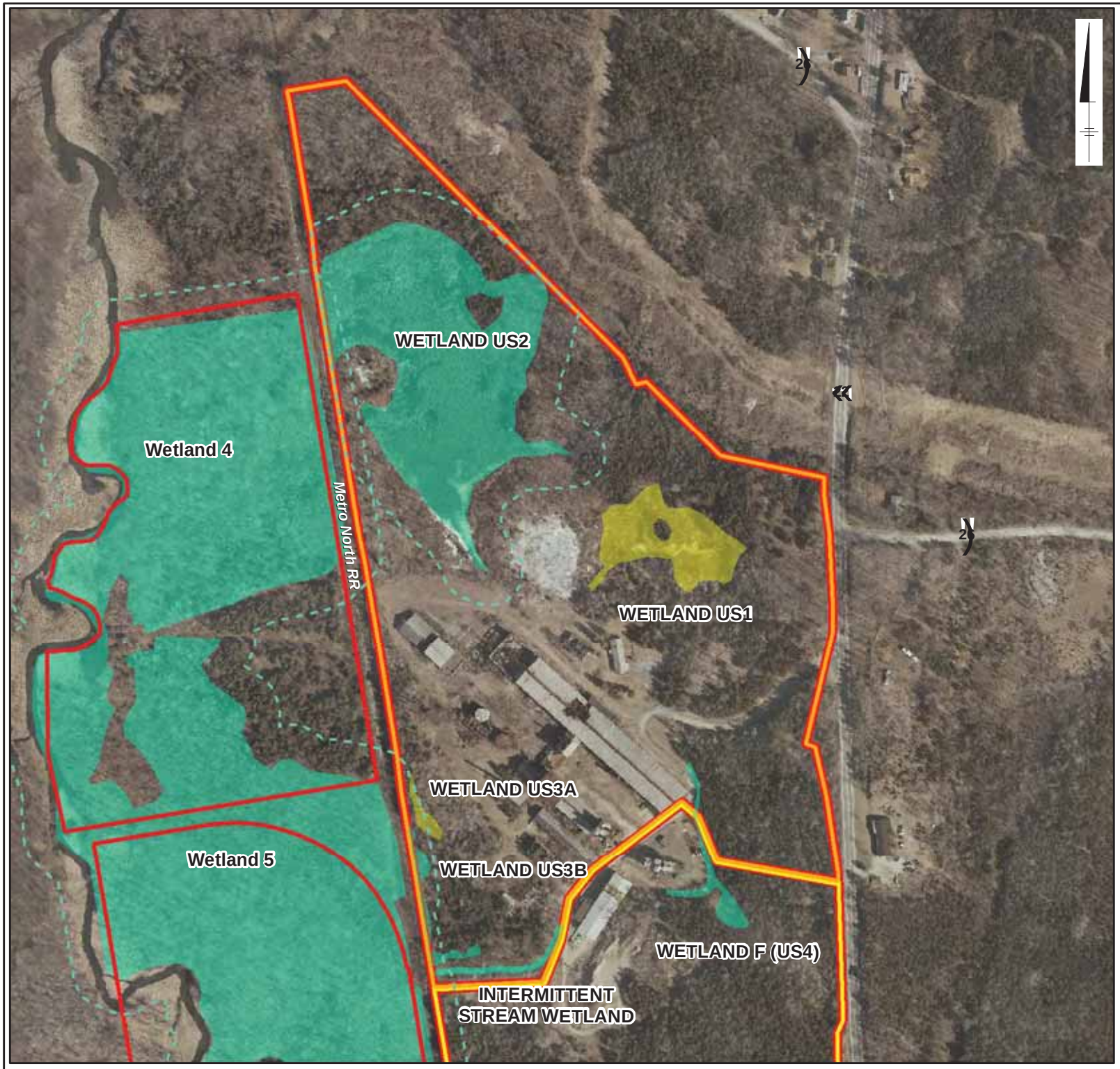
CRICKET VALLEY ENERGY

FIGURE 1

PROJECT LOCATION

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_ProjectLocation.mxd



Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 200 400
Feet

1:4,800

1 inch = 400 feet

ARCADIS

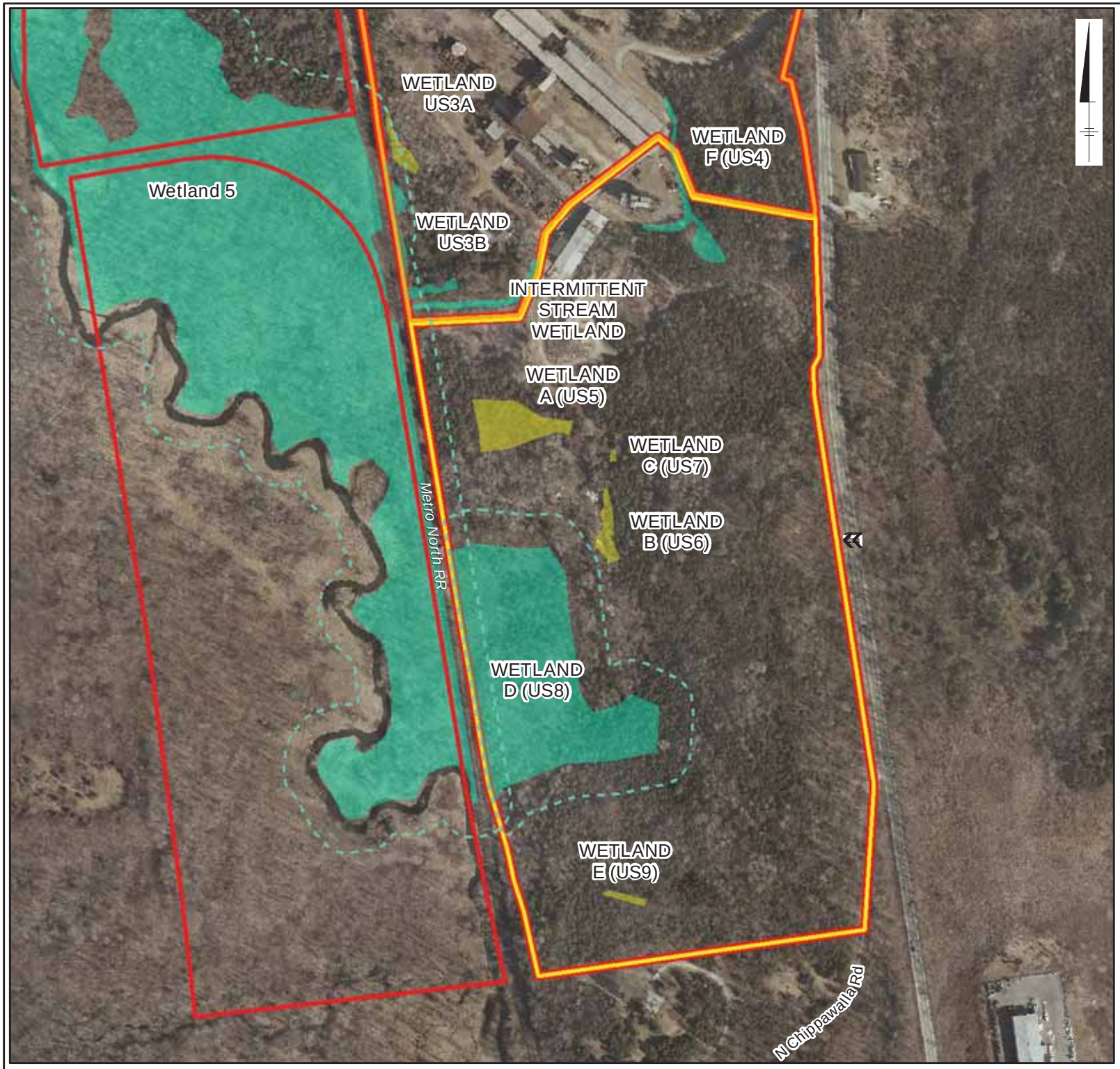
CRICKET VALLEY ENERGY

FIGURE 2

PROJECT DEVELOPMENT AREA WETLANDS

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_PDA_Wetlands.mxd



New York

PROJECT LOCATION

Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 200 400
Feet

1:4,800

1 inch = 400 feet

ARCADIS

CRICKET VALLEY ENERGY

FIGURE 3
FORMER RASCO PARCEL WETLANDS

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_RAS_Wetlands.mxd

REFERENCE :

1. "CONSOLIDATED EDISON COMPANY OF NEW YORK INC., PROPOSED TRANSMISSION LINE, PLEASANT VALLEY TO CONNECTICUT STATE LINE, TOWNS OF UNIONVALE AND DOVER, SURVEY CENTERLINE SECTION 2", FILED IN THE DUTCHESS COUNTY CLERKS OFFICE MAY 13, 1963, AS FILED MAP #3126.
2. "MAP SHOWING PROPERTY BEING CONVEYED TO WINGDALE CHEMICAL CORPORATION", FILED IN THE DUTCHESS COUNTY CLERKS OFFICE DECEMBER 4, 1948, AS FILED MAP #2189.
3. "RIGHT-OF-WAY AND TRACK MAP, NEW YORK & HARLEM RAILROAD", SHEETS 48 & 49, PREPARED JUNE 30, 1917, ON FILE WITH METRO-NORTH RAILROAD.
4. NEW YORK STATE DEPARTMENT OF TRANSPORTATION HIGHWAY No. 5460 RECONSTRUCTION MAPS, PREPARED FEBRUARY, 1937.
5. NEW YORK STATE DEPARTMENT OF TRANSPORTATION ACQUISITION OF PROPERTY, HIGHWAY NO. 5460, PREPARED JUNE, 1985.
6. FIDELITY NATIONAL TITLE INSURANCE COMPANY REPORT, FILE No.50052-D. EASEMENTS, CONDITIONS AND AGREEMENTS AS LISTED IN SCHEDULE 'B' NOTED BELOW:

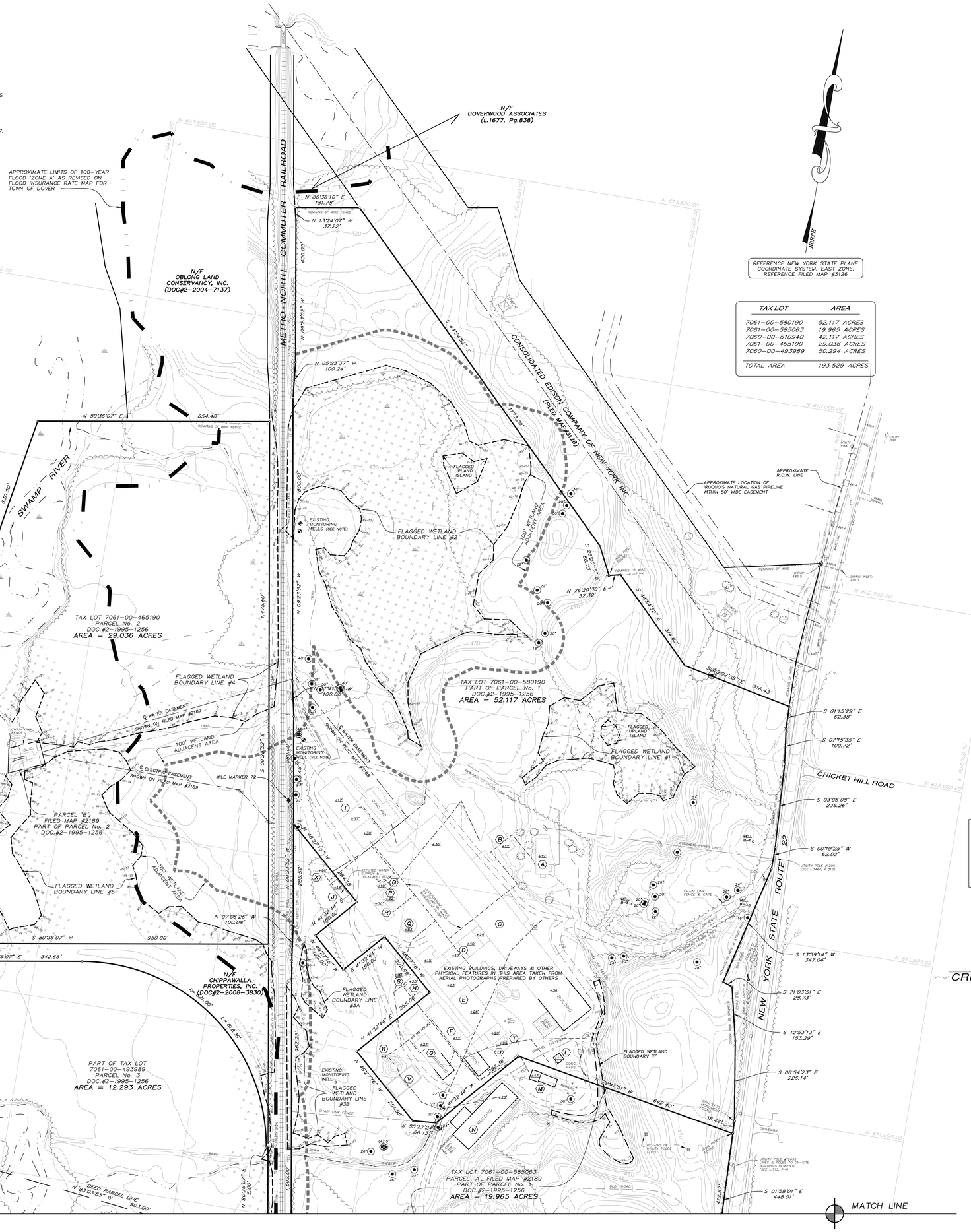
   A. ELECTRIC LIGHT AND POWER COMPANY EASEMENTS;
      LIBER 463, Pg. 219, DESCRIPTION AMBIGUOUS, LOCATION UNCERTAIN.
      LIBER 576, Pg. 305, DESCRIPTION AMBIGUOUS, LOCATION UNCERTAIN.
      LIBER 466, Pg. 398, DESCRIPTION AMBIGUOUS, LOCATION UNCERTAIN.
   B. IMPLIED EASEMENT / RIGHT-OF-WAY, LIBER 589, Pg. 165, DOES NOT AFFECT PROPERTY SHOWN.
   C. IMPLIED EASEMENT / RIGHT-OF-WAY, LIBER 588, PG. 456, DOES NOT AFFECT PROPERTY SHOWN.
   D. IMPLIED EASEMENT / RIGHT-OF-WAY, LIBER 590, PG. 543, DOES NOT AFFECT PROPERTY SHOWN.
   E. ELECTRIC LIGHT AND POWER COMPANY EASEMENT, LIBER 460, Pg. 450, DESCRIPTION AMBIGUOUS, LOCATION UNCERTAIN.
   F. COVENANTS, LIBER 110, Pg. 492;
      "PARTY OF FIRST PART (PQ) TO MAINTAIN FENCES ALONG RAILROAD"
      "PARTY OF SECOND PART (RAILROAD CO.) TO MAINTAIN CROSSINGS"
   G. NEW YORK TELEPHONE COMPANY RIGHT-OF-WAY, LIBER 406, Pg. 362, DESCRIPTION AMBIGUOUS, LOCATION UNCERTAIN.
   H. EASEMENTS AND RESERVATIONS, LIBER 515, Pg. 295;
      RIGHT OF ACCESS EXTINGUISHED UPON MERGER.
      RIGHT TO DAM BACK WATERS, STATUS UNKNOWN.
   I. COVENANTS AND RESTRICTIONS, LIBER 1020, Pg. 9, DUPLICATED HEREIN
      ADDITIONAL RESTRICTIONS AND ENCUMBRANCES;
      RIGHT TO DAM BACK WATER, STATUS UNKNOWN,
      AGREEMENTS WITH NEW YORK CENTRAL RAILROAD COMPANY, STATUS UNKNOWN,
      LEASE TO GEORGIA MARBLE COMPANY, STATUS UNKNOWN.
   J. EASEMENT AND RIGHTS-OF-WAY,
      LIBER 713, Pg. 1, DOES NOT AFFECT PROPERTY SHOWN.
      LIBER 713, Pg. 4, REMAINS OF POLES SHOWN.
   K. ELECTRIC RIGHTS, LIBER 556, Pg. 285, LOCATION UNCERTAIN.
   L. GRANTS TO ELECTRIC COMPANY;
      LIBER 1215, Pg. 601, POLES NOT FOUND.
      LIBER 1460, Pg. 312, POWER LINE SHOWN.

LEGEND

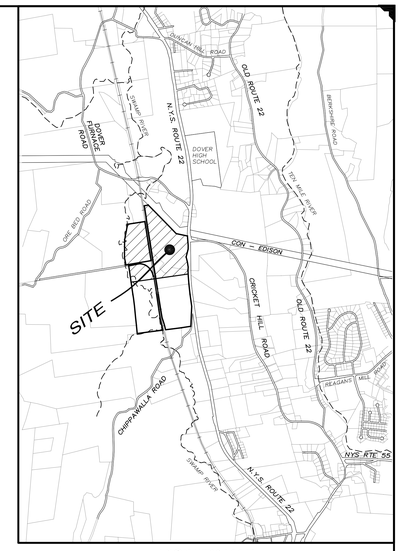
- EXISTING MONITORING WELL LOCATION FROM MAP ENTITLED, "FIGURE 3-3 SAMPLE LOCATIONS, MICA PRODUCTS, 1990 NYSDEC PHASE II INVESTIGATION", PREPARED BY LAWLER, MATUSKY & SKELLY ENGINEERS.
- +36' — HEIGHT OF BUILDINGS AT EAVE
- 24" — TREE D.B.H. IN INCHES (ONLY TREES ALONG PROPOSED CLEARING LINE HAVE BEEN LOCATED, 2-16-12)
- (B) — EXISTING BUILDINGS AND STRUCTURES (SEE TABLE)
- FLAGGED WETLANDS BOUNDARY
- TREE / VEGETATION LIMITS
- UNDERGROUND DRAINAGE, SEWAGE, & WATER LINES AS SHOWN ON PLANS PREPARED FOR AMCO MAGNESIUM CORP, DATED 1943

WETLAND AREA TABLE:

		JURISDICTIONAL ACOE	NYSDEC
WETLAND NO.1 AREA =	1.73 ACRES	NO	NO
WETLAND NO.2 AREA =	8.69 ACRES	YES	YES
WETLAND NO.3A AREA =	0.13 ACRES	NO	NO
WETLAND NO.3B AREA =	0.41 ACRES	YES	NO
INTERMITTENT STREAM AREA =	0.04 ACRES	YES	NO
WETLAND A AREA =	0.67 ACRES	NO	NO
WETLAND B AREA =	0.18 ACRES	NO	NO
WETLAND C AREA =	0.01 ACRES	NO	NO
WETLAND D AREA =	6.08 ACRES	YES	YES
WETLAND E AREA =	0.06 ACRES	NO	NO
WETLAND F AREA =	0.35 ACRES	YES	NO



TAX LOT	AREA
7061-00-580190	52.117 ACRES
7061-00-585063	19.965 ACRES
7060-00-610940	42.117 ACRES
7061-00-465190	29.036 ACRES
7060-00-493989	50.294 ACRES
TOTAL AREA	193.529 ACRES



VICINITY MAP
SCALE: 1" = 2000'

EXISTING BUILDINGS AND STRUCTURES

		LENGTH (FEET)	WIDTH (FEET)	AREA (SQUARE FEET)
A	OFFICE	100	37	3,700
B	LABORATORY	75	41	3,075
C	RETORT FURNACE BUILDING	705	100	70,500
D	BRIQUETTING BUILDING	130	53	6,890
E	FERRO SILICON & LIME PULVR'ING & CALCINING BUILDING	287	66	18,942
F	STORAGE/MAINTENANCE BLDG (COLLASPED)	236	44	10,384
G	PILOT PLANT BLDG (COLLASPED)	132	43	5,676
H	STEAM PLANT BUILDING	46	73	3,358
I	SHIPPING /MELTING & ALLOMING BLDG	206	70	14,420
J	WATER TREATMENT BUILDING	57	25	1,425
K	SETTLING BASIN/PUMP HOUSE	17	13	221
L	OIL HOUSE	21	21	441
M	SECONDARY CRUSHER BLDG	75	28	2,100
M	DOLOMITE STORAGE BINS	202	61	12,322
N	FORMER TT MATERIALS BLDG	25	19	475
O	COOLING TOWER (FND ONLY)	40' DIA.		1,256
P	WATER TANK GAS HOLDER (TANK)	40' DIA		1,256
R	GAS PRODUCER STEEL STRUCTURE	80	28	2,240
S	STEAM PLANT BUILDING STACK	10' DIA.		79
T	PULV'R'ING & CALC. BLDG EAST STACK	10' DIA.		79
U	PULV'R'ING & CALC. BLDG WEST STACK	10' DIA.		79
V	SEWER PITS	93	45	4,185
X	WATER TOWER STRUCTURE	30	30	900

TOTAL AREA = 164,003 SQUARE FEET

* BUILDING & STRUCTURE HEIGHTS SHOWN ON PLAN.

PROJECT: "CRICKET VALLEY ENERGY"

DEVELOPER: CRICKET VALLEY ENERGY CENTER, LLC

OWNER OF RECORD: HOWLANDS LAKE PARTNERS LLC
P.O.B. 285
MOUNT KISCO, N.Y. 10549

EXISTING CONDITIONS SURVEY OF PROPERTY

PREPARED FOR

CRICKET VALLEY ENERGY CENTER LLC

SITUATE IN THE
TOWN OF DOVER
DUTCHESS COUNTY, NEW YORK
JUNE 3, 2009

REVISED:
6/8/09
6/15/09
6/30/09
7/16/09
9/18/09
7/27/10
10/21/11 WETLANDS
12/6/11 ADDIT WETLANDS
2/22/12 TREES & BLDG HEIGHTS
4/18/12
5/17/12

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

CERTIFICATIONS HEREON, SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY, AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR TO SUBSEQUENT OWNERS.

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.

UNDERGROUND EASEMENTS, STRUCTURES AND/OR ENCROACHMENTS, IF ANY, NOT SHOWN HEREON.

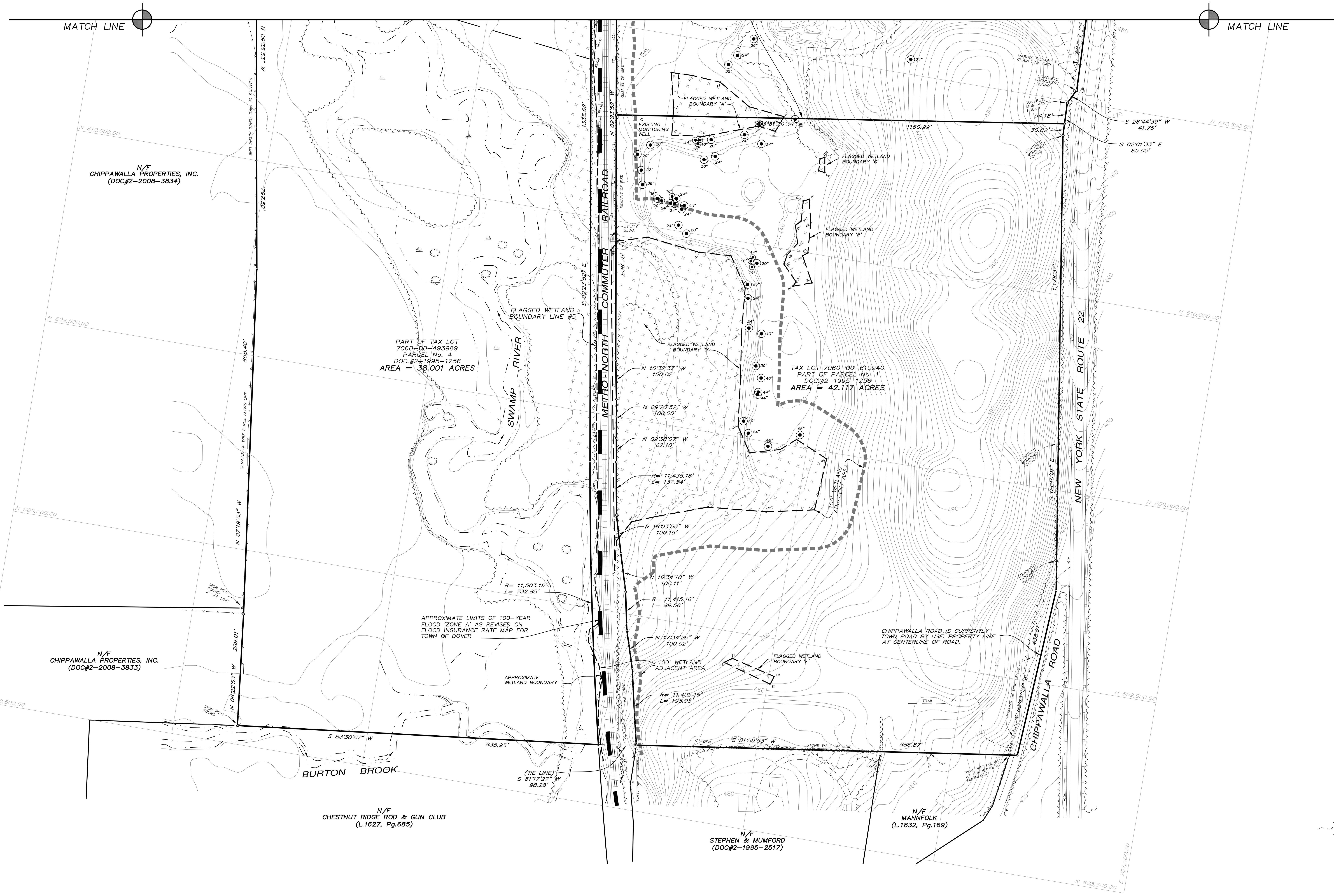
ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

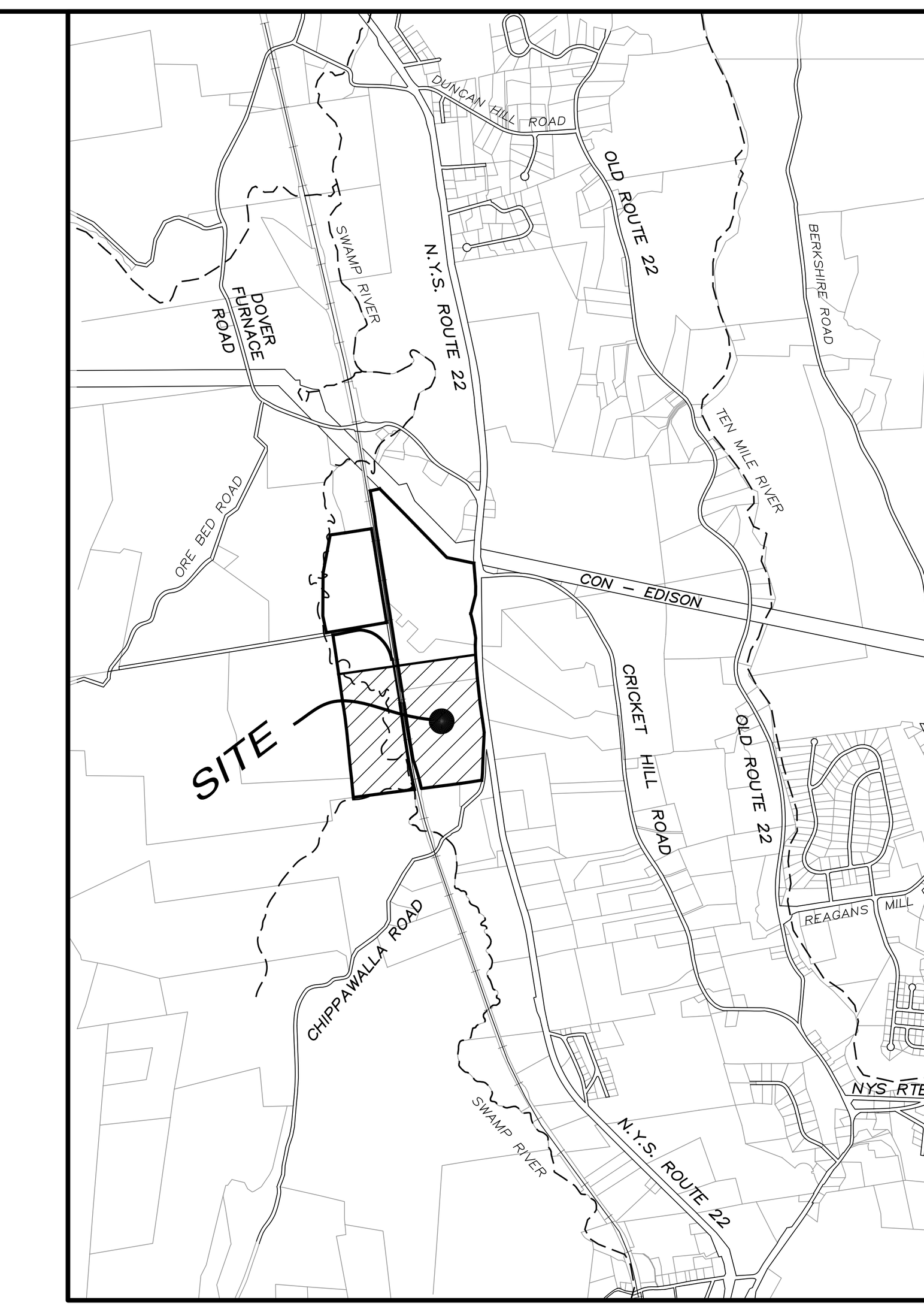
JEFFREY HECKER, L.S., NYS #50235
ZARECKI & ASSOCIATES, LLC
ENGINEERS / ARCHITECTS / SURVEYORS
11 WEST MAIN STREET, PAWLING, NEW YORK, 12564
(845) 855-3771

ENGINEERING ARCHITECTURE SURVEYING
ZARECKI & ASSOCIATES, LLC

FIGURE 4 SHEET 1 of 2

2009.017


MATCH LINE
MATCH LINE
N/F
CHIPPAWALLA PROPERTIES, INC.
(DOC#2-2008-3834)
N/F
CHIPPAWALLA PROPERTIES, INC.
(DOC#2-2008-3833)
PART OF TAX LOT
7060-00-493989
PARCEL No. 4
DOC.#2-1995-1256
AREA = 38.001 ACRES
SWAMP RIVER
METRO-NORTH COMMUTER RAILROAD
FLAGGED WETLAND BOUNDARY LINE #5
FLAGGED WETLAND BOUNDARY 'A'
FLAGGED WETLAND BOUNDARY 'B'
FLAGGED WETLAND BOUNDARY 'C'
FLAGGED WETLAND BOUNDARY 'D'
FLAGGED WETLAND BOUNDARY 'E'
EXISTING MONITORING WELL
TAX LOT 7060-00-610940
PART OF PARCEL No. 1
DOC.#2-1995-1256
AREA = 42.117 ACRES
100' WETLAND ADJACENT AREA
NEW YORK STATE ROUTE 22
CHIPPAWALLA ROAD
CHIPPAWALLA ROAD IS CURRENTLY TOWN ROAD BY USE. PROPERTY LINE AT CENTERLINE OF ROAD.
APPROXIMATE LIMITS OF 100-YEAR FLOOD 'ZONE A' AS REVISED ON FLOOD INSURANCE RATE MAP FOR TOWN OF DOVER
APPROXIMATE WETLAND BOUNDARY
BURTON BROOK
N/F
CHESTNUT RIDGE ROD & GUN CLUB
(L.1627, Pg.685)
N/F
STEPHEN & MUMFORD
(DOC#2-1995-2517)
N/F
MANNFOLK
(L.1832, Pg.169)
S 83°30'07" W
935.95'
S 81°59'53" W
986.87'
1160.99'
(TIE LINE)
S 81°17'27" W
98.28'
R= 11,503.16'
L= 732.85'
R= 11,435.16'
L= 137.54'
R= 11,415.16'
L= 99.56'
R= 11,405.16'
L= 198.95'
N 10°32'37" W
100.02'
N 09°23'52" W
100.00'
N 09°38'07" W
62.10'
N 16°03'53" W
100.19'
N 16°34'10" W
100.11'
N 17°34'26" W
100.02'
S 26°44'39" W
41.76'
S 02°01'33" E
85.00'
54.18'
30.82'
1,178.37'
895.40'
289.01'



VICINITY MAP
SCALE: 1" = 2000'

NORTH

REFERENCE NEW YORK STATE PLANE
COORDINATE SYSTEM, EAST ZONE.
REFERENCE FILED MAP #3126

TAX LOT	AREA
7061–00–580190	52.117 ACRES
7061–00–585063	19.965 ACRES
7060–00–610940	42.117 ACRES
7061–00–465190	29.036 ACRES
7060–00–493989	50.294 ACRES
TOTAL AREA	193.529 ACRES

PROJECT: "CRICKET VALLEY ENERGY"
DEVELOPER: CRICKET VALLEY ENERGY CENTER, LLC
OWNER OF RECORD: HOWLANDS LAKE PARTNERS LLC
P.O.B. 285
MOUNT KISCO, N.Y. 10549

EXISTING CONDITIONS
SURVEY OF PROPERTY
PREPARED FOR
CRICKET VALLEY ENERGY CENTER LLC
SITUATE IN THE
TOWN OF DOVER
DUTCHESS COUNTY, NEW YORK
JUNE 3, 2009

REVISED:
6/8/09
6/15/09
6/30/09
7/16/09
9/18/09
7/27/10
10/21/11 WETLANDS
12/6/11 ADDIT WETLANDS
2/22/12 TREES & BLDG HEIGHTS
4/18/12

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

CERTIFICATIONS HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR TO SUBSEQUENT OWNERS.

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.

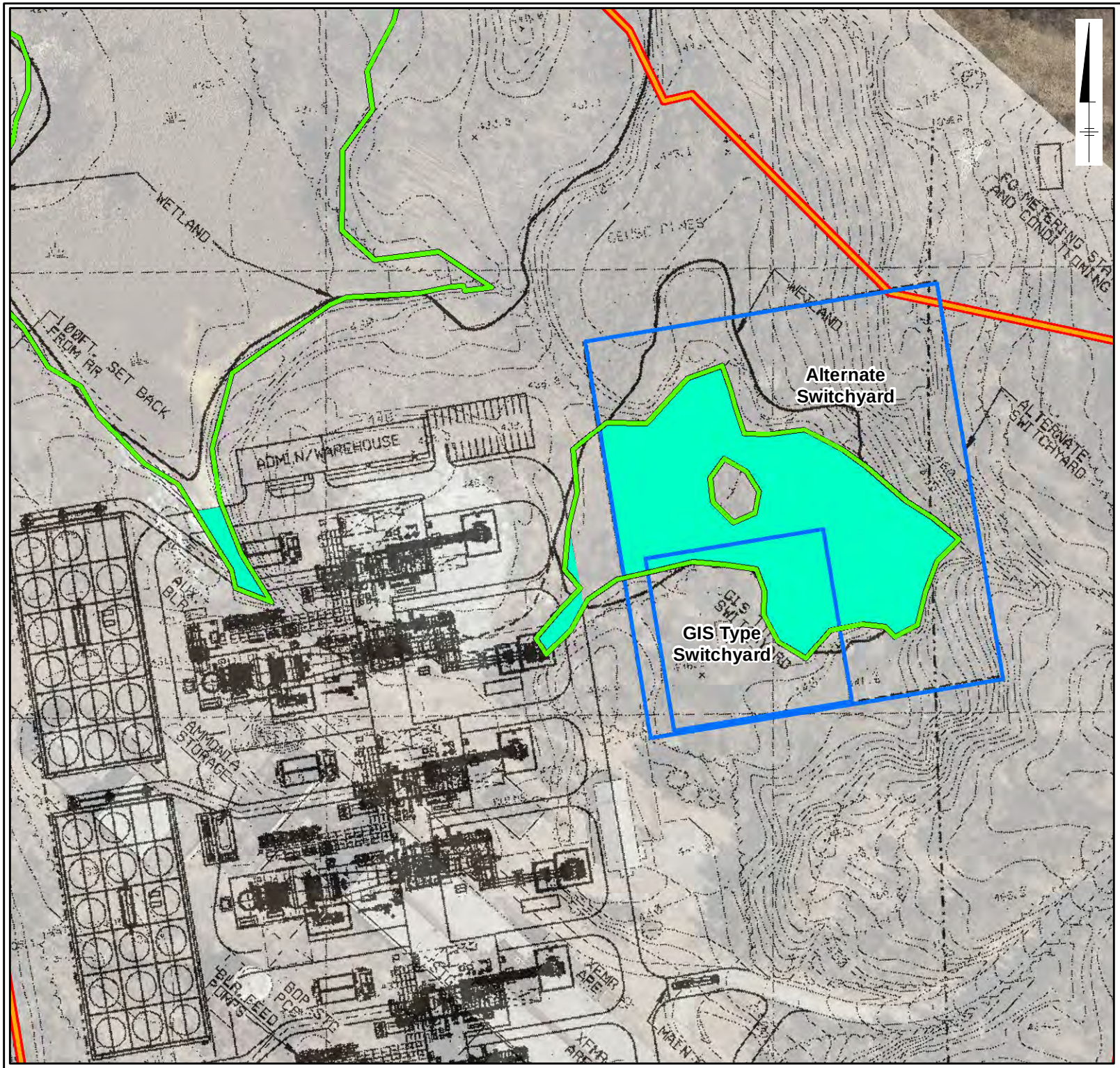
UNDERGROUND EASEMENTS, STRUCTURES AND/OR ENCROACHMENTS, IF ANY, NOT SHOWN HEREON.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

JEFFREY HECKER, L.S., NYS #50235
ZARECKI & ASSOCIATES, LLC
ENGINEERS / ARCHITECTS / SURVEYORS
11 WEST MAIN STREET, PAWLING, NEW YORK, 12564
(845) 855-3771

FIGURE 5

2009.017



New York

PROJECT LOCATION

Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

ARCADIS

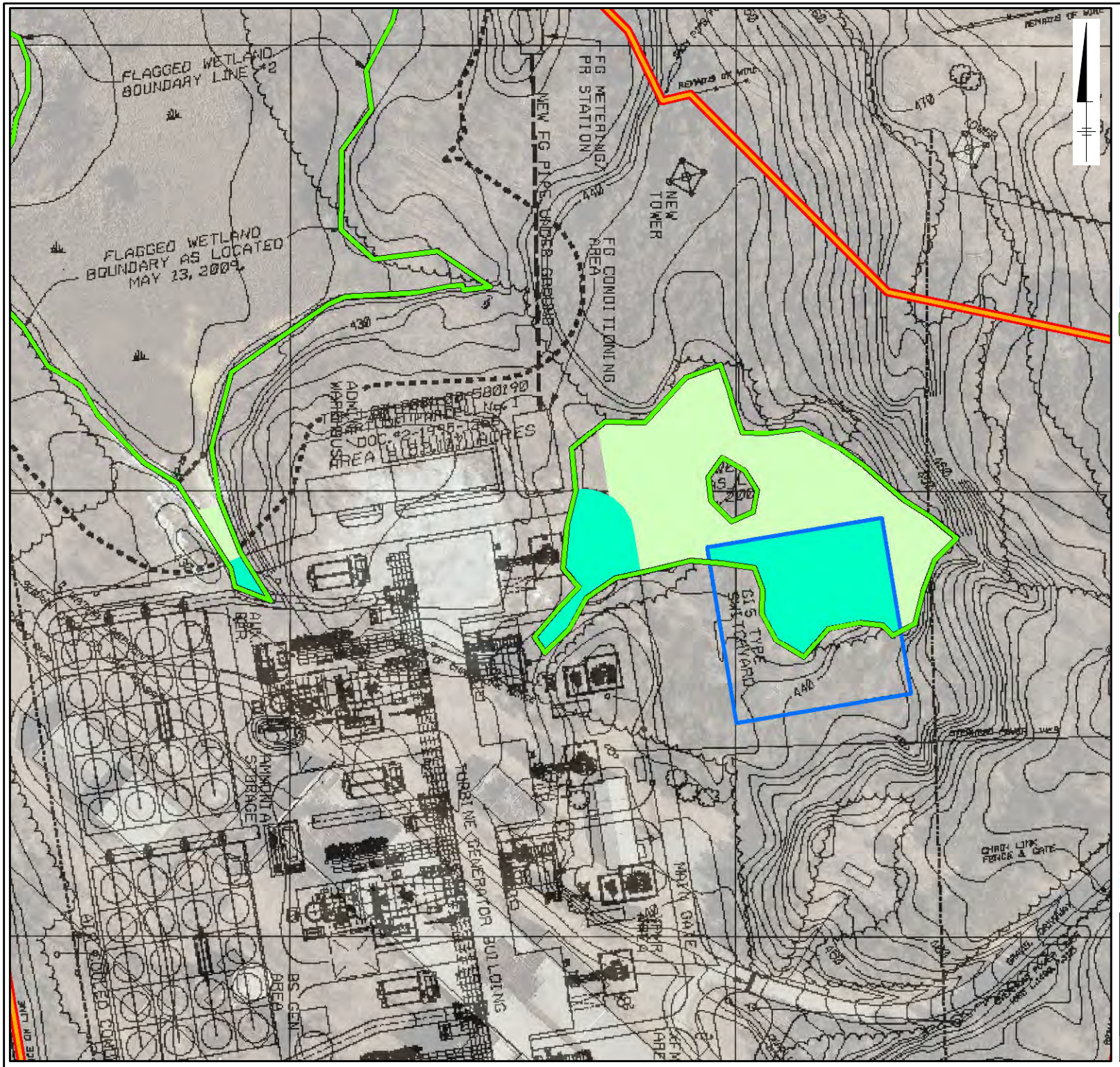
CRICKET VALLEY ENERGY

FIGURE 6

M200 REV B WETLAND IMPACT

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_PDA_WetImpactRevB.mxd



New York

PROJECT LOCATION

Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)
- Wetland Impact Avoided

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

ARCADIS

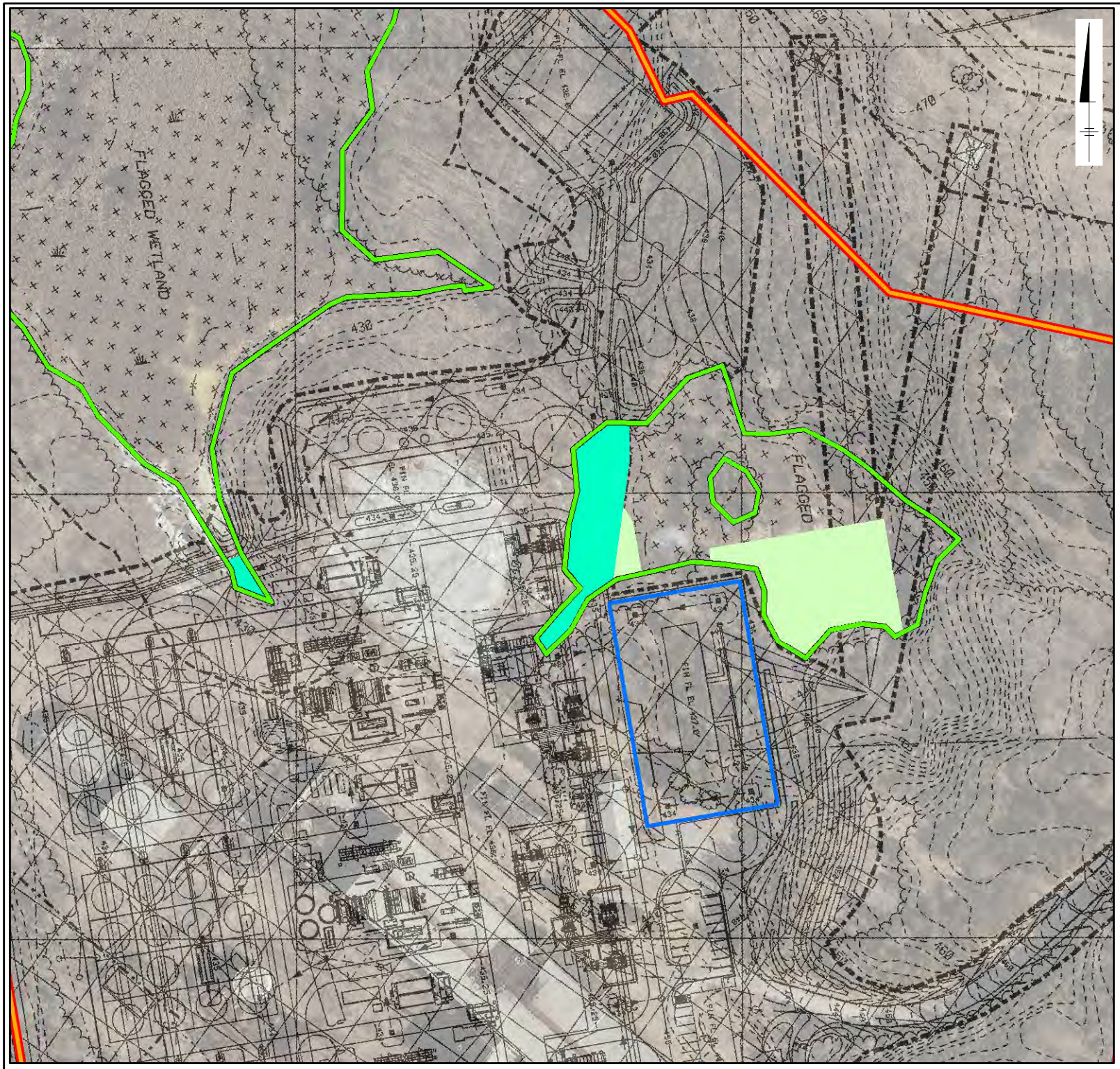
CRICKET VALLEY ENERGY

FIGURE 7

M200 REV F
WETLAND IMPACT

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_PDA_WetImpactRevF.mxd



Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)
- Wetland Impact Avoided

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

ARCADIS

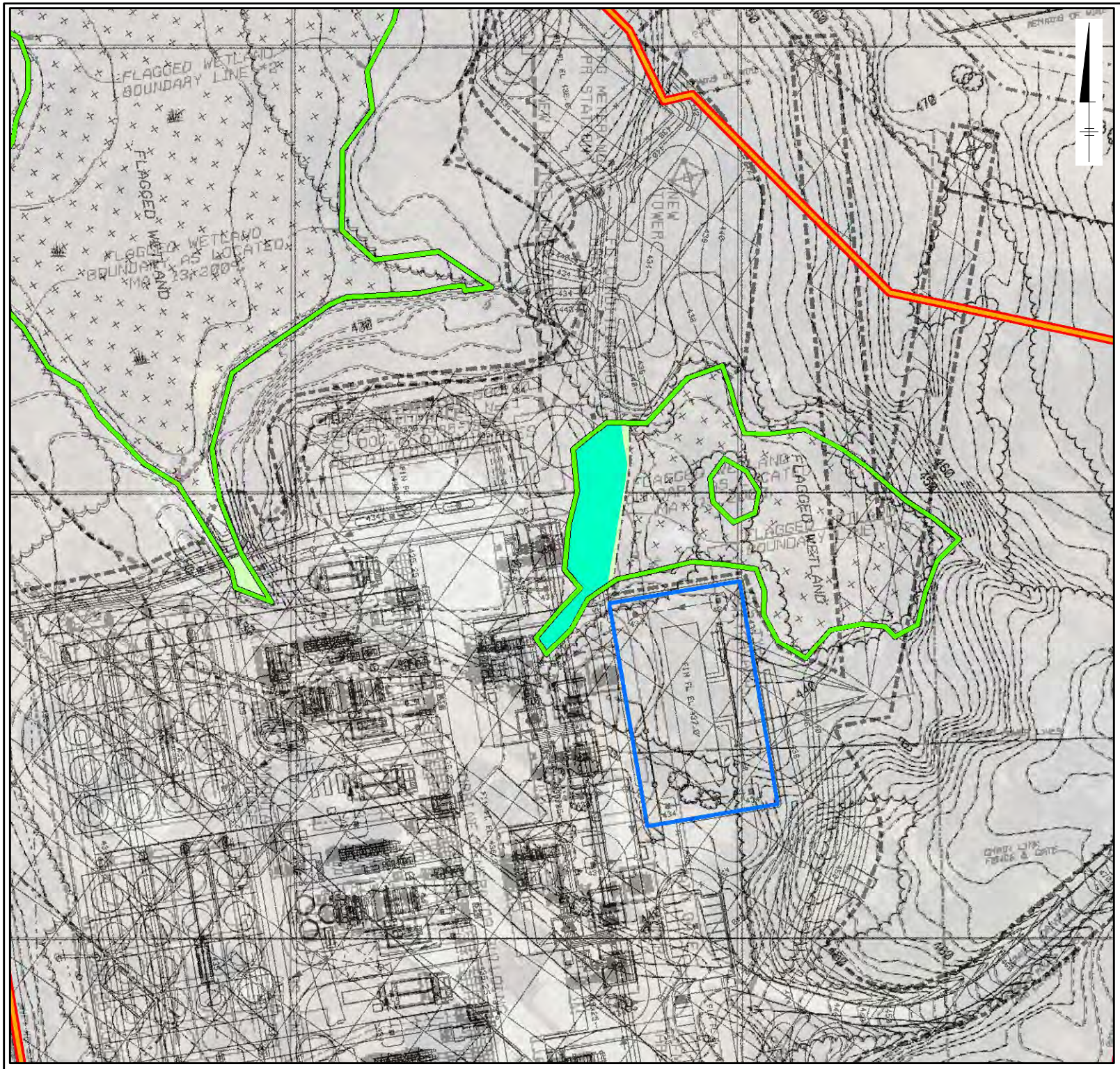
CRICKET VALLEY ENERGY

FIGURE 8

C130 REV A
WETLAND IMPACT

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_PDA_WetImpactRevA.mxd



New York

PROJECT LOCATION

Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)
- Wetland Impact Avoided

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

ARCADIS

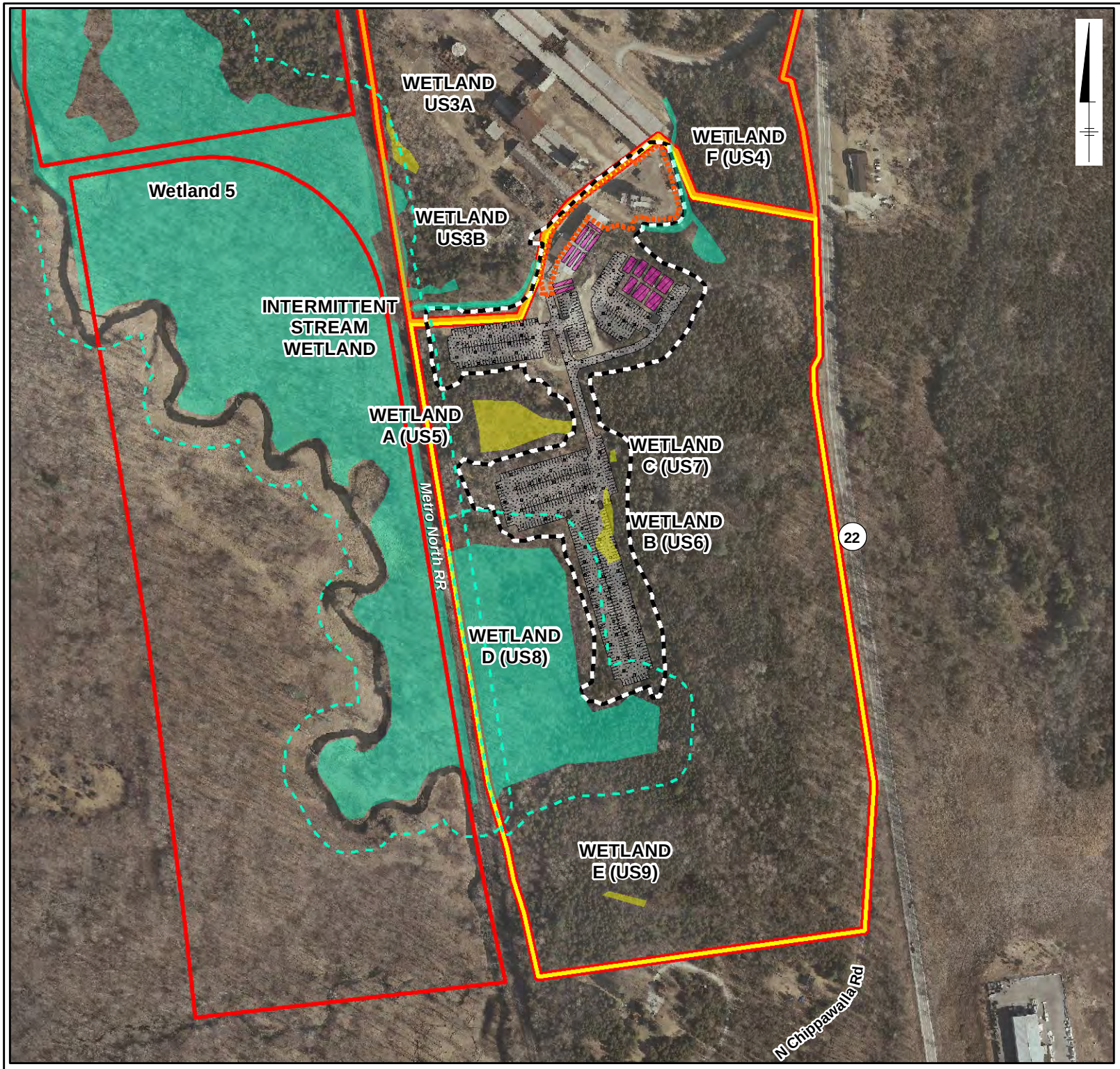
CRICKET VALLEY ENERGY

FIGURE 9

M200 REV S
WETLAND IMPACT

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_PDA_WetImpactRevS.mxd



New York

PROJECT LOCATION

Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area
- Area of Potential Effects (APE)
- Temporary Trailers
- Temporary Parking Area
- Construction Laydown Area

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 200 400
Feet

1:4,800

1 inch = 400 feet

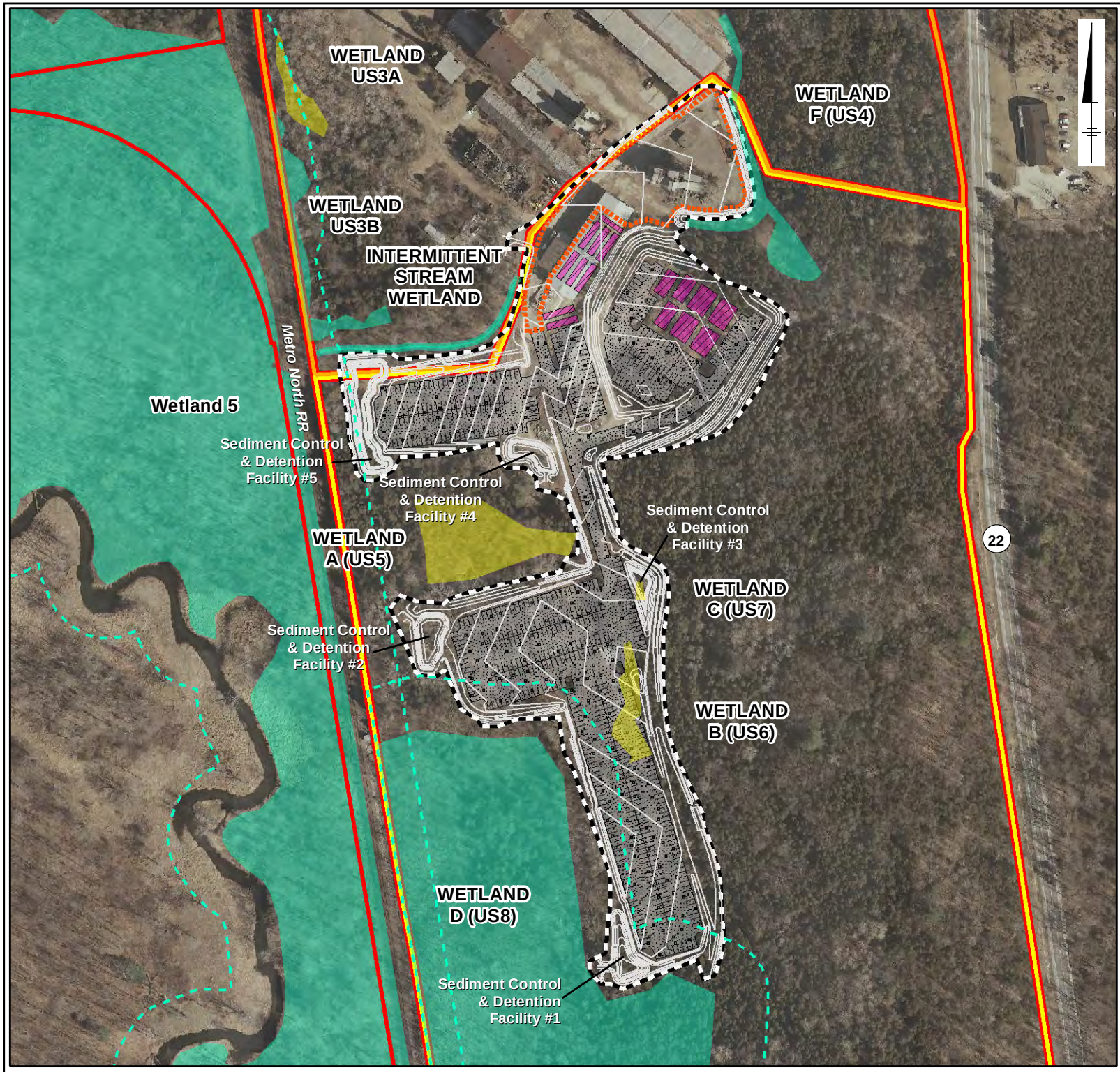
ARCADIS

CRICKET VALLEY ENERGY

FIGURE 10
AREA OF POTENTIAL EFFECT

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_RAS_APE.mxd



Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area
- Area of Potential Effects (APE)
- Temporary Trailers
- Temporary Parking Area
- Construction Laydown Area
- Grading Plan

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 125 250
Feet

1:3,000

1 inch = 250 feet

ARCADIS

CRICKET VALLEY ENERGY

FIGURE 11

AREA OF POTENTIAL EFFECT GRADING PLAN

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_RAS_APE_Grading.mxd