

## **MCINTYRE ROAD MITIGATION PLAN EASTERN ST. LAWRENCE RIVER SERVICE AREA Ducks Unlimited New York In-Lieu Fee Program**

To be considered by:

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## **0.0 INTRODUCTION**

Ducks Unlimited, Inc. (DU) established the Ducks Unlimited, Inc. New York In-Lieu Fee Program (DU-NY ILF Program) to provide a third party compensatory mitigation option to permit applicants under the permit programs of the U.S. Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC). The DU-NY ILF Program has sold 7.39 credits to permit applicants to compensate for wetland impacts in the Eastern St. Lawrence Service Area. Credits were purchased to compensate for impacts to 5.66 acres of wetlands in the Eastern St. Lawrence Service Area (Appendix A).

DU identified and evaluated an extensive list of potential mitigation sites in coordination with State, Federal and other NGO partners. The McIntyre Road site (hereinafter Mitigation Site) was selected as having the highest opportunity for restoration and meaningful preservation based on location, size, likelihood of success, and types of existing and potential aquatic resources. The following mitigation plan has been prepared and will be implemented by DU in accordance with 33 CFR 332.4, the “U.S. Army Corps of Engineers New York District Compensatory Mitigation Guidelines” and the “Guidelines for Mitigation Banking in Ohio” (currently used by the U.S. Army Corps of Engineers Buffalo District).

## **1.0 GOALS AND OBJECTIVES**

The overall goal of this compensatory wetland mitigation plan is to generate 27.11 credits in the Eastern St. Lawrence Service Area (Appendix A). The functions and values that will be realized by this proposed wetland mitigation plan aim to replace, at a minimum, the functions and values of the wetlands impacted. These functions and values include groundwater recharge/discharge, floodflow alteration, sediment retention, nutrient removal and wildlife habitat.

The wetland mitigation plan will take into consideration the priority issues and recommendations set forth by the New York State Wildlife Action Plan (SWAP). Priority issues in the St. Lawrence Valley are habitat loss and fragmentation, degraded water quality, altered hydrology, and invasive species.

Most of the Mitigation Site is classified as prime farmland or farmland of statewide importance. Given the size, cost, and location of the property, it is expected the Mitigation Site would be attractive to buyers looking for agricultural land. The Mitigation Site is adjacent to agricultural land, therefore present and ongoing agricultural land use is a threat to the Mitigation Site’s conservation value. Restoring and protecting wetlands at the Mitigation Site will increase wildlife habitat and prevent further habitat fragmentation.

The wetland mitigation plan will protect at-risk biodiversity because the Mitigation Site supports northern white cedar swamps, which are classified as imperiled or vulnerable in New York (Edinger et al., 2014). Cedar is an attractive wood to the Amish for making furniture. The Amish have increased their presence in the St. Lawrence Valley within the past five years, and the Mitigation Site would be desirable to Amish furniture makers for its cedar.

The history of agricultural activity in the St. Lawrence Valley has negatively affected water quality. Agriculture is the greatest source of impacts to stressed water bodies in the St. Lawrence

River Basin. Nutrients and sediment enter streams in the watershed due to agricultural runoff. Restoring wetlands at the Mitigation Site will improve water quality by removing nutrients and retaining sediment from surface flow.

This wetland mitigation plan will provide breeding and migration habitat for waterfowl species such as black duck and wood duck. Other species that will benefit from this project include New York State Department of Conservation (NYSDEC) Species of Greatest Conservation Need (SGCN) such as golden-winged warbler, cerulean warbler and American woodcock.

Freshwater wetlands in the St. Lawrence Valley are critical habitats and the NYSDEC recommends protection and restoration of these critical habitats. (NYSDEC, 2015). The objectives of this mitigation work plan are to re-establish 14.96 acres of palustrine emergent (PEM) and palustrine forested (PFO) wetlands, rehabilitate 29.82 acres of PEM/SS wetlands, preserve 12.72 acres of palustrine scrub-shrub (PSS) and PFO wetlands and preserve 29.36 acres of upland buffer.

## **2.0 MITIGATION SITE SELECTION**

The mitigation site was selected for the following reasons:

1. It is in the Eastern St. Lawrence Service Area
2. It has the hydric soils, adequate hydrology, and topography conducive to successful wetland restoration.
3. The site presents a cost-effective opportunity to create a greater amount of wetland habitat than the minimum required amount and with a high likelihood of success in replacing wetland functions lost at the impact sites.
4. Wetland mitigation at this site will realize positive impacts to a diversity of wildlife species and will not negatively impact known endangered or threatened plants or animals.
5. The site will not negatively impact cultural resources.
6. There are no logistical or design constraints at the site that would inhibit successful wetland re-establishment.
7. The site is under threat of continued agricultural use, logging and residential development.

## **3.0 BASELINE INFORMATION**

### Location (Appendix B, Figs. 1 & 2)

The Mitigation Site is located at Latitude: 44.94723° and Longitude: -74.72517° off of McIntyre Road in the Town of Brasher, St. Lawrence County, New York in the St. Regis River watershed (HUC 0415030604).

### Site Information

The Mitigation Site encompasses 95.2 acres of privately owned land. DU currently has a purchase agreement in place with the current landowner to purchase the entire property with a



proposed closing date of March 14, 2016. The land use composition of the work area and protected area of the Mitigation Site is detailed in the Table 1 and Appendix B, Fig 9.

**Table 1.** Land use composition of Mitigation Site.

Land Type	Acres	Percent
Emergent Wetlands	13.8	14.5
Forested Wetlands	22.0	23.1
Upland Forests	36.0	37.8
Cropland	19.9	20.9
Open Water	3.5	3.7
<b>Total</b>	<b>95.2</b>	<b>100%</b>

Adjacent properties are primarily existing wetlands and agriculture. The Mitigation site was used for hay production. A former rock quarry is adjacent to the Mitigation Site. There are no known hazardous material sites in the vicinity of the Mitigation Site. There are no known contaminants in the soil or water at the Mitigation Site.

#### Cultural Resources

A request for an environmental review was submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and a response was received. According to (OPRHP), no cultural resources will be affected by the wetland mitigation activities (Appendix C).

#### Wildlife Usage

The Mitigation Site is part of the Atlantic Coast Joint Venture (ACJV) Lower Great lakes/St. Lawrence Plain Bird Conservation Region's (BCR 13) St. Lawrence Plain Waterfowl Focus Area, which is a high priority landscape to advance conservation objectives for waterfowl in BCR 13. The St. Lawrence Plain Waterfowl Focus Area is considered the most important breeding habitat for mallards in the eastern U.S. (ACJV, 2005 (Waterfowl Implementation Plan)). According to the NYS Breeding Bird Atlas 2000 – 2005 survey, the site is in an area where several species of greatest conservation need (SGCN) addressed in the New York State Department of Conservation's (NYSDEC) State Wildlife Action Plan (NYSDEC, 2015) were observed. These SGCN were American kestrel, ruffed grouse, wood thrush, American woodcock, Eastern meadowlark, and bobolink. The mitigation work plan will benefit American kestrel, wood thrush and American woodcock by providing habitat associated with these species. The Mitigation Site supports an extensive shrub community, and shrublands in the St. Lawrence Plain Waterfowl Focus Area support high priority SGCN such as golden-winged warbler and brown thrasher.

According to the US Fish and Wildlife Service's (USFWS) Official Species List for the Mitigation Site (Appendix D), the federally and state-listed threatened northern long-eared bat may occur within the Mitigation Site's boundary. According to the NYSDEC mapper, no known occurrences of federally-listed species are within the boundary or vicinity of the Mitigation Site. The northern long-eared bat's primary habitats are caves and mines. It is unlikely there is

suitable habitat for northern long-eared bat at the Mitigation Site, because caves and mines are not present at the Mitigation Site. The proposed wetland mitigation activities will have no effect on Northern Long-Eared Bat. Efforts will be made within the restoration area to improve northern long-eared bat habitat if possible.

### Watershed (Appendix B, Fig 1)

The Mitigation Site is part of the St. Regis sub-basin (HUC 04150306), which is a watershed in the St. Lawrence basin (HUC 041503). All surface waters in the St. Regis sub-basin drain into the St. Lawrence River, which is one of the largest rivers in North America. Part of the St. Regis River is within the Environmental Protection Agency's (EPA) St. Lawrence River at Massena Area of Concern (AOC). Approximately 60% of the St. Regis sub-basin is within the Adirondack Park.

Most of the land in the St. Regis sub-basin is forested (69.5% area) and has a high potential for forest stewardship opportunities (USDA-NRCS, 2010). Land used for grassland and agriculture is relatively low (6.4% area). Most of the agricultural land is found in the northern section of the watershed. Most of the farms are horse farms and hay is the primary crop. Wetlands compose 16.8% of the St. Regis sub-basin (USDA-NRCS, 2010a).

### Wetlands

According to the National Wetland Inventory (NWI), the Mitigation Site supports a palustrine emergent/scrub-shrub (PEM/PSS) wetland (Appendix B, Figure 5). Additional wetlands were identified during the wetland delineation including PFO, PSS, PEM wetlands and a wetland/upland mosaic. The wetland delineation of the Mitigation Site (Appendix E, Fig. 1) shows the exact locations of these wetlands. The wetlands in the wetland/upland mosaic should be classified as PEM wetlands due to the prevalence of emergent hydrophytic vegetation. Approximately 53.25 acres (56%) of the Mitigation Site delineates as wetlands.

### Hydrology

The primary inputs of water to the Mitigation Site are direct precipitation, surface runoff and groundwater seepage. The Mitigation Site drains an area of 138.1 acres including the footprint of the Mitigation Site (Appendix B, Fig. 10).

According to the NOAA NCDC, the Mitigation Site is in an area where the average annual precipitation is 34.80 inches. A field study conducted with reed canary grass (*Phalaris arundinacea*) in Iowa (Schilling and Kiniry, 2007) was used as a conservative approach to estimating water loss due to evapotranspiration. The value of 23.9 inches of water loss due to evapotranspiration during the growing season (May – October) will be used. In an average year the mitigation wetlands will have enough water from direct precipitation to overcome the water lost due to evapotranspiration by 10.9 inches.

A high water table will help the re-established/rehabilitated wetlands retain water and contribute to the Mitigation Site's hydrology. Water table information was collected through soil borings at several locations at the Mitigation Site in December, 2015. Based on the timing of this data, it is anticipated that a higher water table will be present early in the growing season. Monitoring wells with pressure transducers will be installed to gather more data regarding the water table

prior to restoration of the project and will be maintained throughout the monitoring period (Appendix F). The Mitigation Site is on the New York and New England carbonate-rock principal aquifer, which may provide groundwater inputs.

### Vegetation

The Mitigation Site is currently used for hay production. Vegetation communities were surveyed during the wetland delineation (Appendix E). The existing vegetation in the field east of the railroad includes hydrophytic vegetation such as sedges (*Carex* spp.) along with upland vegetation such as clover and grasses. The shrub community of the delineated wetlands consisted of silky dogwood (*Cornus amomum*). The tree community of the Mitigation Site consisted of trees such as Eastern white pine (*Pinus strobus*), gray birch (*Betula populifera*) and white cedar (*Thuja occidentalis*). The herbaceous community of the wetlands included emergent vegetation such as sedges and cattails (*Typha* spp.).

### Soils

The following soil series and soil map units are present at the Mitigation Site based on the soil map (Appendix B, Fig 3).

Adjidaumo series consists of very deep, poorly drained and very poorly drained soils formed in fine sediments deposited in marine and lacustrine environments. Adjidaumo silty clay, 0 – 3% slopes (Ak) and Adjidaumo mucky silty clay, 0 – 3% slopes, frequently ponded (Am) are classified as hydric soils with hydric ratings of 93% and 91% respectively. Ak has a depth to water table of 3.2 inches and Am has a water table at the soil surface. Saturated hydraulic conductivity is moderately low for both Ak and Am.

Hogansburg series consists of very deep, moderately well drained soils formed in till. Grenville series consists of very deep, well drained soils formed in dense till. Hogansburg and Grenville soils, 0 – 8% slopes, very stony (HrB) and Hogansburg fine sandy loam, 3 – 8% slopes (HnB) are classified as hydric soils with hydric ratings of 3% and 2% respectively. Both HrB and HnB have a depth to water table of 21 inches. Saturated hydraulic conductivity is moderately high for both HrB and HnB.

Munuscong series consists of very deep, poorly drained and very poorly drained soils formed in loamy glaciofluvial deposits over calcareous clayey materials on lake plains and ground moraines. Munuscong mucky fine sandy loam (Mn) is classified as a hydric soil and has a hydric rating of 87%. Mn has a water table at the soil surface. Saturated hydraulic conductivity is moderately high for Mn.

Muskellunge series consists of very deep, somewhat poorly drained soils formed in water deposited materials. Muskellunge silty clay loam, 0 – 3% slopes (MsA) is classified as a hydric soil with a hydric rating of 5%. MsA has depth to water table of 16 inches. Saturated hydraulic conductivity is moderately low for MsA.

Udorthents series consist of deep, well drained and moderately well drained soils. The soil material is fill or is what was left after surface removal. Udorthents, clayey (Uf) is classified as a hydric soil with a hydric rating of 2%. Uf has a depth to water table of 48 inches. Saturated hydraulic conductivity is moderately low for Uf.

Wetland re-establishment will occur primarily on Ak and MsA soil map units. Both of these soil map units already support wetlands west of the railroad at the Mitigation Site. Both of these soil map units have features very favorable for holding water behind an embankment. Ak and MsA soil map units are suitable for wetland re-establishment.

#### **4.0 MITIGATION WORK PLAN**

##### **4.1 CONSTRUCTION AND PLANNED HYDROLOGY**

The following work plan is for a wetland mitigation plan based on site visits and existing data including USGS topographic maps, USDA soil surveys, state and federal wetland and floodplain maps, tax maps, aerial photos and topographic survey. The preliminary wetland design plan has been attached to this plan (Appendix F). The preliminary and final design will include a full-size construction plan with the following components:

1. Overall property map showing the property boundary and Mitigation Site boundary. The overall map will show areas to be re-established, rehabilitated, and protected.
2. Project site plan and grading plan showing the proposed restored wetland areas including current and proposed elevations.
3. Details for the construction of water control structures and embankment.
4. Cross sections of proposed earth moving activities.
5. A planting plan showing the areas of different planting regimes.
6. An Erosion and Sediment Control Plan.
7. A Monitoring Plan detailing the location of monitoring plots, photo points, and hydrology sampling points.
8. Specifications that include applicable construction methods and materials.

Construction of the mitigation wetlands shall commence in summer 2016, depending on permit approval and appropriate site conditions. DU will secure a qualified contractor to construct the wetland mitigation plan. An erosion and sediment control plan will be implemented and maintained during construction. DU staff shall be on-site during critical parts of construction to monitor construction of the wetland mitigation areas to ensure compliance with the mitigation plan and to make adjustments when appropriate to meet mitigation goals.

- Wetland re-establishment will occur in the agricultural fields east of the railroad.
- Wetland rehabilitation will occur in the wetlands already present.
- Areas not re-established or rehabilitated will be preserved.

A low-level berm will be constructed in along the eastern border of this agricultural field. This berm will allow surface water to accumulate which will promote ponding in the area planned for re-establishing and rehabilitating PEM wetlands.

## **4.2 PLANNED VEGETATION AND HABITAT FEATURES**

During the wetland delineation hydrophytic vegetation was observed in the agricultural field, thus providing evidence of a robust hydrophytic seed bank. A hydrophytic seed source at the site guarantees the presence and natural recruitment of desirable wetland vegetation.

Seeding and planting will be used to supplement the existing seed bank to establish diverse wetland plant communities. The planting plan is included in Appendix F.

- The planned PEM wetlands will be seeded with a seed mix to re-establish wet meadows grading into shallow emergent marshes as described in “Ecological Communities of New York State” (New York State Heritage Program, 2014). (Table 2)
- The planned PSS wetlands will be planted and seeded to re-establish shrub swamps as described in “Ecological Communities of New York State” (New York State Heritage Program, 2014). (Table 3 and 5)
- The planned PFO wetlands will be planted and seeded to re-establish hardwood swamps. (Table 3, 4 and 5)
- The planned berm will be seeded with cool season grasses, warm season grasses and ground cover suitable for erosion control. (Table 6)



**Table 2.** Seeding list for planned PEM wet meadow/shallow emergent marsh wetland plant community with an estimated VIBI-FQ metric of 50.

Common Name	Scientific Name	WIS*	CoC**	Percent by weight
Several-Vein Sweetflag	<i>Acorus americanus</i>	OBL	6	2
American Water Plantain	<i>Alisma subcordatum</i>	OBL	4	4
Bearded Sedge	<i>Carex comosa</i>	OBL	4	5
Shallow Sedge	<i>Carex lurida</i>	OBL	3	15
Common Fox Sedge	<i>Carex vulpinoidea</i>	OBL	2	20
Common Spike-Rush	<i>Eleocharis palustris</i>	OBL	5	2
Rattlesnake Manna Grass	<i>Glyceria canadensis</i>	OBL	5	2
Lamp Rush	<i>Juncus effusus</i>	OBL	2	5
Rice Cut-Grass	<i>Leersia oryzoides</i>	OBL	3	4
Fowl Blue Grass	<i>Poa palustris</i>	FACW	4	15
Hard-stem Club-rush	<i>Schoenoplectus acutus</i>	OBL	7	1
Three-square	<i>Schoenoplectus pungens</i>	OBL	7	1
Dark-Green Bulrush	<i>Scirpus atrovirens</i>	OBL	5	5
Cottongrass Bulrush	<i>Scirpus cyperinus</i>	OBL	5	3
Broad-Fruit Burr-Reed	<i>Sparganium americanum</i>	OBL	5	4
American Burr-Reed	<i>Sparganium eurycarpum</i>	OBL	5	4
Simpler's Joy	<i>Verbena hastata</i>	FACW	4	8
Seed mix application rate			20 lbs. per acre	

\*WIS: Wetland Indicator Status

\*\*CoC: Coefficient of Conservatism

**Table 3.** Planting list for shrub community in the planned PSS and PFO wetlands (all plantings are 3 – 4’ tall BRP)

Common Name	Scientific Name	WIS	CoC	PFO Shrubs/Acre	PSS Shrubs/Acre
Speckled Alder	<i>Alnus incana</i>	FACW	3	15	30
Black Chokeberry	<i>Aronia melanocarpa</i>	FAC	6	25	0
Common Hackberry	<i>Celtis occidentalis</i>	FAC	7	25	0
Common Buttonbush	<i>Cephalanthus occidentalis</i>	OBL	6.5	0	70
Red Osier	<i>Cornus alba</i>	FACW	3	25	50
Silky Dogwood	<i>Cornus amomum</i>	FACW	4	25	50
Spicebush	<i>Lindera benzoin</i>	FACW	7	30	60
Swamp Rose	<i>Rosa palustris</i>	OBL	6	0	50
Silky Willow	<i>Salix sericea</i>	OBL	3.5	0	30
White Meadowsweet	<i>Spiraea alba</i>	FACW	5	30	60
American Bladdernut	<i>Staphylea trifolia</i>	FAC	7	25	0
<b>TOTAL</b>				200	400

**Table 4.** Planting list for planned PFO hardwood swamp wetland plant community (all plantings are 3 – 4’ tall BRP)

Common Name	Scientific Name	WIS	CoC	Trees per acre
Red Maple	<i>Acer rubrum</i>	FAC	2.5	15
Silver Maple	<i>Acer saccharinum</i>	FACW	5	20
Black Gum	<i>Nyssa sylvatica</i>	FAC	7	25
American Sycamore	<i>Platanus occidentalis</i>	FACW	6.5	25
Eastern Cottonwood	<i>Populus deltoides</i>	FAC	3	20
Swamp White Oak	<i>Quercus bicolor</i>	FACW	5	35
Pin Oak	<i>Quercus palustris</i>	FACW	7.5	30
Pussy Willow	<i>Salix discolor</i>	FACW	3	15
Black Willow	<i>Salix nigra</i>	OBL	4.5	15
<b>TOTAL</b>				200

**Table 5.** Seeding list for PSS and PFO wetlands with an estimated VIBI-FQ of 54.

Common Name	Scientific Name	WIS	CoC	Percent by weight
Greater Bladder Sedge	<i>Carex intumescens</i>	FACW	4	10
Pointed Broom Sedge	<i>Carex scoparia</i>	FACW	2	10
Squarrose Sedge	<i>Carex squarrosa</i>	OBL	4	10
Common Buttonbush	<i>Cephalanthus occidentalis</i>	OBL	6.5	10
Red Osier	<i>Cornus alba</i>	FACW	3	10
Silky Dogwood	<i>Cornus amomum</i>	FACW	4	10
Spotted St. John's-Wort	<i>Hypericum punctatum</i>	FAC	5	2
Lesser Poverty Rush	<i>Juncus tenuis</i>	FAC	2	3
Spicebush	<i>Lindera benzoin</i>	FACW	7	20
Narrow-leaf Mountain-Mint	<i>Pycnanthemum tenuifolium</i>	FAC	5	1
Swamp Rose	<i>Rosa palustris</i>	OBL	6	5
Crooked-Stem American-Aster	<i>Symphotrichum prenanthoides</i>	FAC	5	4
Golden Alexanders	<i>Zizia aurea</i>	FAC	4	5
Seeding rate			15 lbs./acre	

**Table 6.** Seeding list for planned berm

Common Name	Scientific Name	WIS	Percent by weight
Rough Bent	<i>Agrostis scabra</i>	FAC	5
Big Bluestem	<i>Andropogon gerardii</i>	FAC	10
Nodding Wild Rye	<i>Elymus canadensis</i>	FACU	20
Red fescue	<i>Festuca rubra</i>	FACU	10
Perennial Rye Grass	<i>Lolium perenne</i>	FACU	30
Garden Bird's-Foot-Trefoil	<i>Lotus corniculatus</i>	FACU	5
Wand Panic Grass	<i>Panicum virgatum</i>	FAC	5
Kentucky Blue Grass	<i>Poa pratensis</i>	FACU	10
Red Clover	<i>Trifolium pratense</i>	FACU	5

## 5.0 PERFORMANCE AND SUCCESS STANDARDS

The following performance standards are based on the goals and objectives of the mitigation project as well as the character of existing wetlands surrounding the mitigation site. These standards will be used to evaluate development and overall success of the mitigation project:

1. Construction has been completed in accordance with approved plans and specifications in the permit.

2. The soils on the site will be stable and any non-biodegradable erosion controls will be removed.
3. The wetland re-establishment areas will have soil saturation and/or evidence of inundation via water potential, water height measurements during the growing season and water table measurements from monitoring wells.
4. At the end of the 10-year monitoring period:
  - a. The wetlands shall have 90% relative coverage by native perennial hydrophytic plants (those with a regional indicator status of FAC, FACW, or OBL in the report entitled “Northcentral and Northeast 2014 Regional Wetland Plant List”).
  - b. The vegetation index of biotic integrity “floristic quality” (VIBI-FQ) of the rehabilitated and re-established wetlands will be equal to or greater than 40.
  - c. The planned PFO and PSS areas will have at least 400 woody stems per acre. The PFO area will have at least 200 trees per acre.
  - d. The planned wetland areas shall have no more than 5% coverage of the following invasive plant species: purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha angustifolia* and *Typha x glauca*), and Japanese knotweed (*Polygonum cuspidatum*).
  - e. The re-established and rehabilitated wetlands will meet the federal wetland criteria outlined in the report entitled “Corps of Engineers Wetlands Delineation Manual”, dated January, 1987, with current Corps of Engineers Northcentral and Northeast Regional Supplement.

In addition to the performance standards mentioned above, three interim goals must be met during the 10-year monitoring period. Each interim goal will release 15% of the credits for re-establishment and rehabilitation when the goal has been met.

#### 1<sup>st</sup> Interim Goal:

- The planned wetland areas will have 50% coverage by native perennial hydrophytes.
- The planned PFO and PSS areas will have at least 150 trees/shrubs per acre.
- The planned wetland areas will have no more than 25% coverage of the following invasive plant species: purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha angustifolia* and *Typha x glauca*), and Japanese knotweed (*Polygonum cuspidatum*).
- The wetland habitats demonstrate progress in vegetative development towards meeting the final VIBI-FQ goal.
- The upland buffer rehabilitation area will have no more than 35% coverage of the following invasive plant species: buckthorn (*Rhamnus cathartica*), honeysuckles (*Lonicera* spp.), and reed canary grass (*Phalaris arundinacea*).

#### 2<sup>nd</sup> Interim Goal:

- The planned wetland areas will have 60% coverage by native perennial hydrophytes.
- The planned PFO and PSS areas will have at least 250 trees/shrubs per acre.

- The planned wetland areas will have no more than 20% coverage of the following invasive plant species: purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha angustifolia* and *Typha x glauca*), and Japanese knotweed (*Polygonum cuspidatum*).
- The wetland habitats demonstrate progress in vegetative development towards meeting the final VIBI-FQ goal.

### 3<sup>rd</sup> Interim Goal:

- The planned wetland areas will have 75% coverage by native perennial hydrophytes.
- The planned PFO and PSS areas will have at least 350 trees/shrubs per acre.
- The planned wetland areas will have no more than 15% coverage of the following invasive plant species: purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha angustifolia* and *Typha x glauca*), and Japanese knotweed (*Polygonum cuspidatum*).
- The wetland habitats demonstrate progress in vegetative development towards meeting the final VIBI-FQ goal.

The success of this wetland mitigation project will be assessed based on the performance standards and interim goals outlined above and include any additional conditional standards identified and agreed upon by the USACE upon final design and during the permitting process.

## **6.0 CREDIT DETERMINATION**

The mitigation site will generate 27.71 credits based on the following ratios and acreages for each mitigation activity.

<b>Mitigation Activity</b>	<b>Acres</b>	<b>Ratio</b>	<b>Credits</b>
Wetland Re-Establishment	13.61	1:1	13.6
Wetland Rehabilitation (within 50 m of roads and railroads)	1.35	4:1	0.34
Wetland Rehabilitation	29.82	3:1	9.94
Preservation (Wetland)	12.72	10:1	1.27
Preservation (Upland)	29.36	15:1	1.96

The credit release schedule will include:

- All of the credits associated with the preservation will be released upon documentation of preservation (recorded Notice of Mitigation Agreement on the deed) with associated approved stewardship plan (long-term management plan).
- 10% of the credits for re-establishment and rehabilitation will be released upon approval of this mitigation plan
- 20% of the credits for re-establishment and rehabilitation will be released at as-built production and approval by the IRT.



- 15% of the credits for re-establishment and rehabilitation will be released after meeting the first interim goal.
- 15% of the credits for re-establishment and rehabilitation will be released after meeting the second interim goal.
- 15% of the credits for re-establishment and rehabilitation will be released after meeting the third interim goal.
- 25% of the credits for re-establishment and rehabilitation will be released after the final vegetation goals have been met for 10-year monitoring period.

## **7.0 MITIGATION SITE PROTECTION**

The Mitigation Site will be owned by Wetlands America Trust, Inc. (WAT). WAT, a wholly owned subsidiary of DU, is a non-profit conservation organization that is an Accredited Land Trust.

Ownership of the Mitigation Site by WAT meets the site protection requirements of 332.7(a)(1). In addition to ownership, WAT will record a Notice of Mitigation Agreement (Appendix G) in the land records of St. Lawrence County upon approval of this Mitigation Plan. The Notice of Mitigation Agreement will give the USACE the ability to enforce compliance with the approved Mitigation Plan.

Upon the future sale or transfer of the property, WAT will retain a conservation easement in the form provided in Appendix G.

A long-term protection endowment will be established per the approved project budget for long-term protection monitoring in perpetuity.

## **8.0 MONITORING**

DU staff, experienced with wetland restoration and mitigation, will coordinate and oversee monitoring activities. A surveyed drawing showing the As-Built conditions of the mitigated area will be submitted within 60 days following the completion of the mitigation project. The site will be monitored and a monitoring report will be submitted annually to the USACE for years 1, 2, 3, 5, 7, and 10 or when performance and success standards have been met. Observations will occur in late summer/early fall.

The reports will address the performance standards in the summary data section and will address the additional items noted in the monitoring report requirements, in the appropriate section. The reports will also include the monitoring-report appendices. The first year of monitoring will be the first year that the Mitigation Site has been through a full growing season after completion of construction and planting. Each annual monitoring report, in the format provided in the New York District Compensatory Mitigation Guidelines, will be submitted to the Corps, Regulatory Division, Policy Analysis and Technical Support Branch, no later than December 15 of each monitoring year and include the following information:

1. A copy of the USACE permit referencing the approved mitigation plan.
2. A copy of the approved mitigation plan including the goals, objectives and performances standards.
3. Identification of any structural failures or external disturbances to the Mitigation Site.
4. A description of management activities and remedial actions implemented during the past year.
5. A surveyed drawing of the mitigation area, including water level elevations and acreage of wetlands. The locations of focused 20 m x 50 m VIBI-FQ plots and random 10 m x 10 m plots, vegetation communities, and planting zones will also be identified on the drawings. The plans will include overlays to show pre-construction conditions and changes from monitoring year to monitoring year. A sample focused 20 m x 50 m VIBI-FQ plot is attached in Appendix H.
6. Color photographs from monitoring stations and a photograph location map showing all representative areas of each cover type within the mitigation site.
7. A plant species list that gives USFWS Wetland Indicator Status and strata (herb, shrub, tree). Dominant plants will be highlighted and the percent of the aerial cover noted. Plants introduced through seeding or planting will be indicated. A vegetation cover map based on the collected plant data will be provided.
8. Water depth and the date of measurement from fixed locations within the wetland will be recorded. These sample points will be plotted on the survey drawings.
9. Anecdotal list of wildlife species observed using the wetlands.
10. Methodologies used to control nuisance vegetation (e.g., *Phalaris arundinacea*, *Phragmites australis*, and *Lythrum salicaria*).
11. A quantitative assessment of monitoring data (e.g., VIBI-FQ, percent coverage of invasive species, and woody stems per acre) and a statement as to whether or not the goals of the mitigation project are being met and a plan with an implementation time table to correct any deficiencies.
12. A narrative summary of the monitoring data and conclusions of the monitoring.

A post-construction assessment report and wetland delineation survey will be submitted to the USACE in conjunction with the monitoring reports for the fifth and tenth years of the monitoring period.

## **9.0 MAINTENANCE AND ADAPTIVE MANAGEMENT PLAN**

DU will conduct adaptive management during the monitoring period. When monitoring indicates that a performance standard is not being met, then that standard will be evaluated to determine if simply more time is needed or a remedial action may be required. This will be accomplished by consulting wetland experts and permitting agencies to determine an appropriate course of action. Remedial actions may include seeding or planting, non-native plant control, and erosion control measures. Remedial actions requiring earth movement or changes in hydrology will not be implemented without written approval from the USACE. Once the monitoring period is over, the completed wetland will be managed by the long-term steward and managed only as needed and specified in the site management plan.

## **10.0 LONG-TERM STEWARDSHIP PLAN**

DU will be responsible for the maintenance and management of the Mitigation Site.

A long-term management endowment will be established per the approved project budget for long-term management of the Mitigation Site in perpetuity using DU-NY-ILF program funds.

Long-term management for this site to ensure it is maintained as a high quality wetland will include invasive species management every 3 years. It is anticipated that the only threat to the wetland beyond the initial 10 years of the project will be encroachment by invasive species.

Although sufficient efforts will be made to eradicate invasive species from the site, it is likely that they will recolonize and need control. DU will provide written notice to the USACE if ownership of the Mitigation Site is transferred to a third party by WAT. (A transfer prior to attaining the final performance standard will require the approval of the USACE.)

For said transfer to also include responsibility for the Long term stewardship of the Mitigation Site, it will only occur upon approval of the USACE. If the Long term stewardship responsibility is transferred, the Long term management endowment will also be transferred.

## **11.0 FINANCIAL ASSURANCES**

Financial assurances for the construction and performance of the Mitigation Site will be provided by DU in the form of a “letter of credit.” The letter of credit will extend sufficient financial resources to complete significant alterations to the project if necessary to achieve success. The letter of credit will be in the full amount of the construction estimate (for a maximum of three years) and for the replanting of 25% of the PSS and PFO areas if these areas fail to meet stem count performance objectives (for the duration of the monitoring period). The letter of credit will not be called upon unless DU has exhausted the existing project budget, including all money set aside for contingency and wetland maintenance.

## References:

- Edinger, G. J., Evans, D. J., Gebauer, S., Howard, T. G., Hunt, D. M., and Olivero, A. M. (Eds.). (2014) *Ecological communities of New York State. Second Edition: A revised and expanded edition of Carol Reschke's Ecological communities of New York State* (2<sup>nd</sup> e.d.). New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.
- New York State Department of Environmental Conservation. (2015). *State wildlife action plan*. Retrieved from [http://www.dec.ny.gov/docs/wildlife\\_pdf/swapfinaldraft2015.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/swapfinaldraft2015.pdf)
- Schilling, K.E, and Kiniry, J. R. (2007). Estimation of evapotranspiration by reed canarygrass using field observations and model simulation. *Journal of Hydrology*, 337(3), 356 – 363.
- United States Department of Agriculture – Natural Resources Conservation Service. (2010). *New York rapid watershed assessment profile: Seneca watershed*. Retrieved from: <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ny/technical/dma/rwa/?cid=stelprdb1246990>

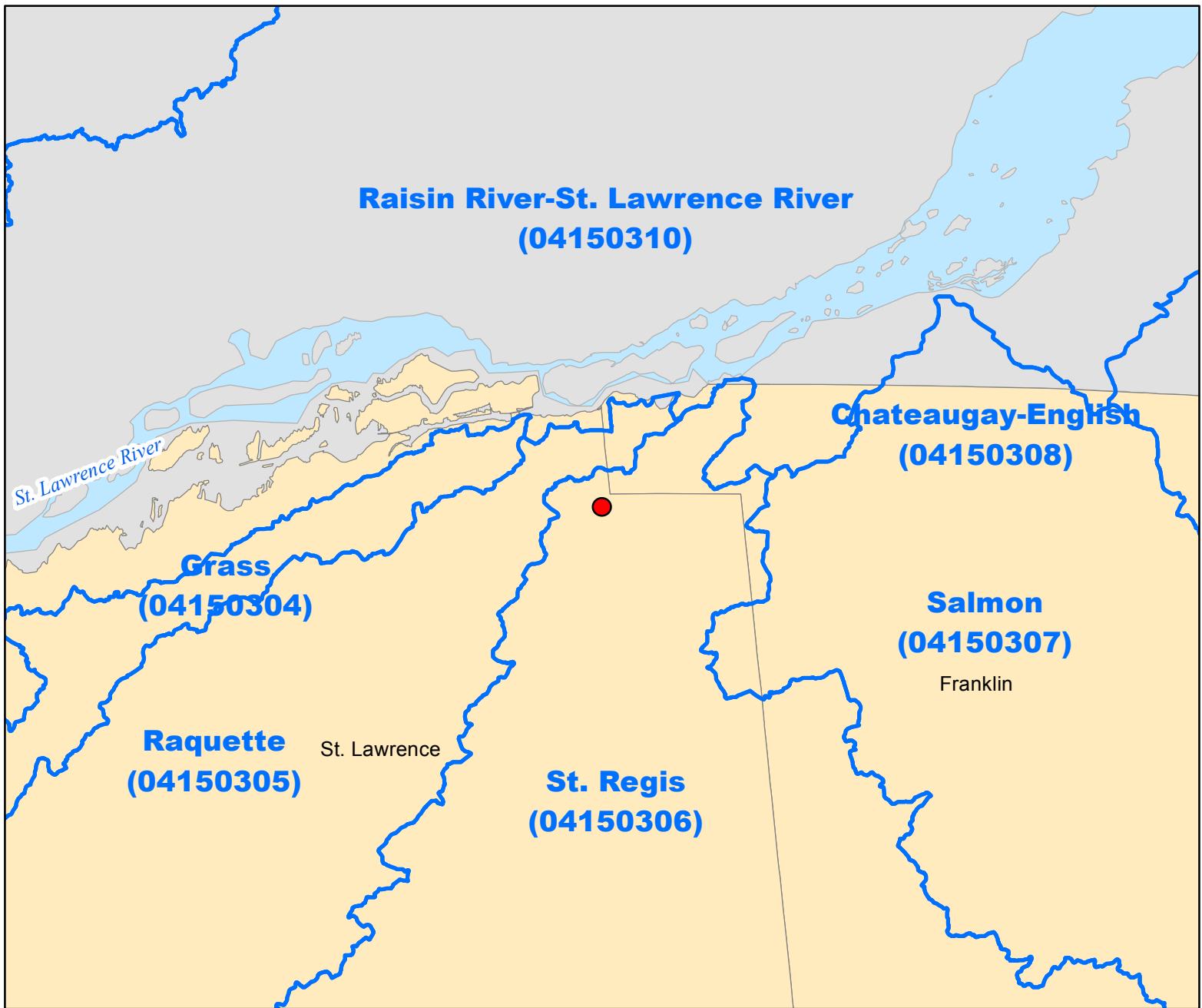
**APPENDIX A**  
**SUMMARY OF IMPACTS**



**Table 1.** Summary of impacts

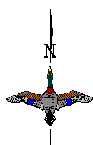
<b>DA Permit Number</b>	<b>HUC 8</b>	<b>Resource Type</b>	<b>Acres Impacted</b>	<b>Credits Purchased</b>
<b>2013-00796</b>	04150305	PEM	0.48	0.5
<b>2013-01246</b>	04150305	PEM, PFO, PSS, POW	3.44	4.30
<b>2014-01219</b>	04150305	PEM	0.45	0.59
<b>2004-00556</b>	04150306	PEM, PSS, PFO	1.0	1.0
<b>NAN-2011-00186-M2</b>	04150305, 04150306, 04150307, 04150308	PFO	0.29	1.0
<b>TOTAL</b>			<b>5.66</b>	<b>7.39</b>

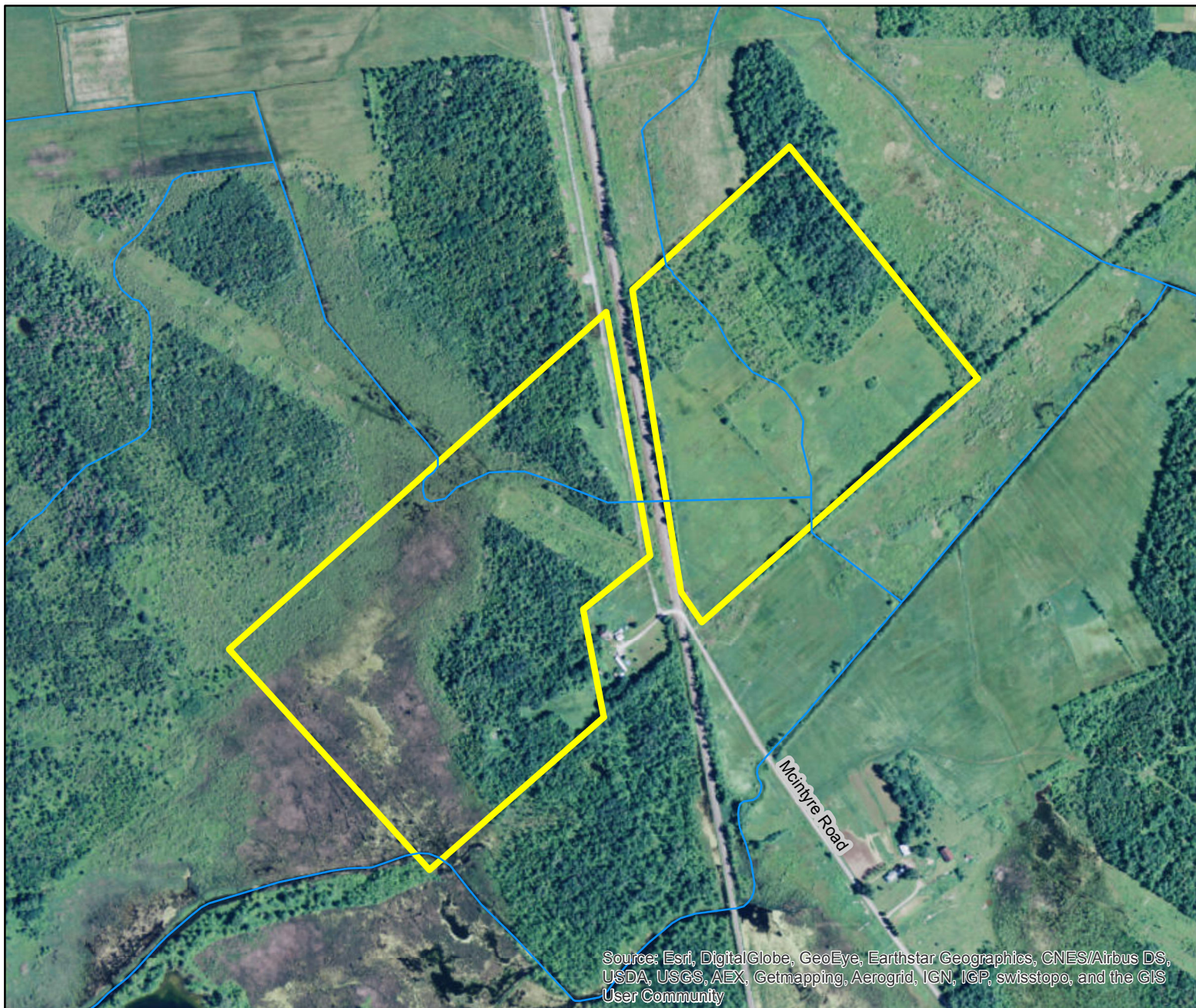
**APPENDIX B:**  
**BASELINE INFORMATION**



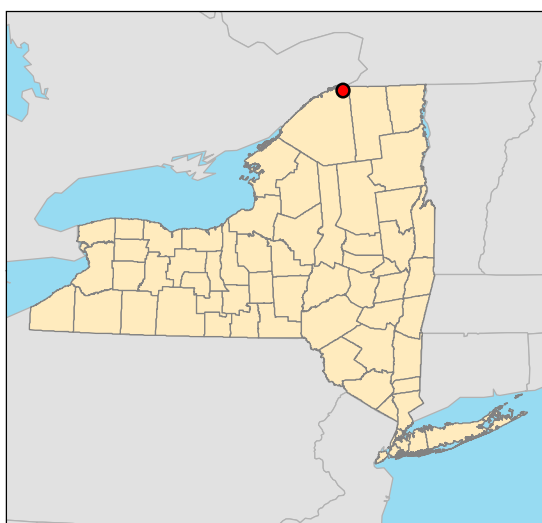
**Fig. 1: DU NY-ILF Eastern St. Lawrence Mitigation Site Watershed**

- Mitigation Site
- ⬮ Watershed (HUC8)

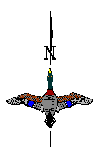




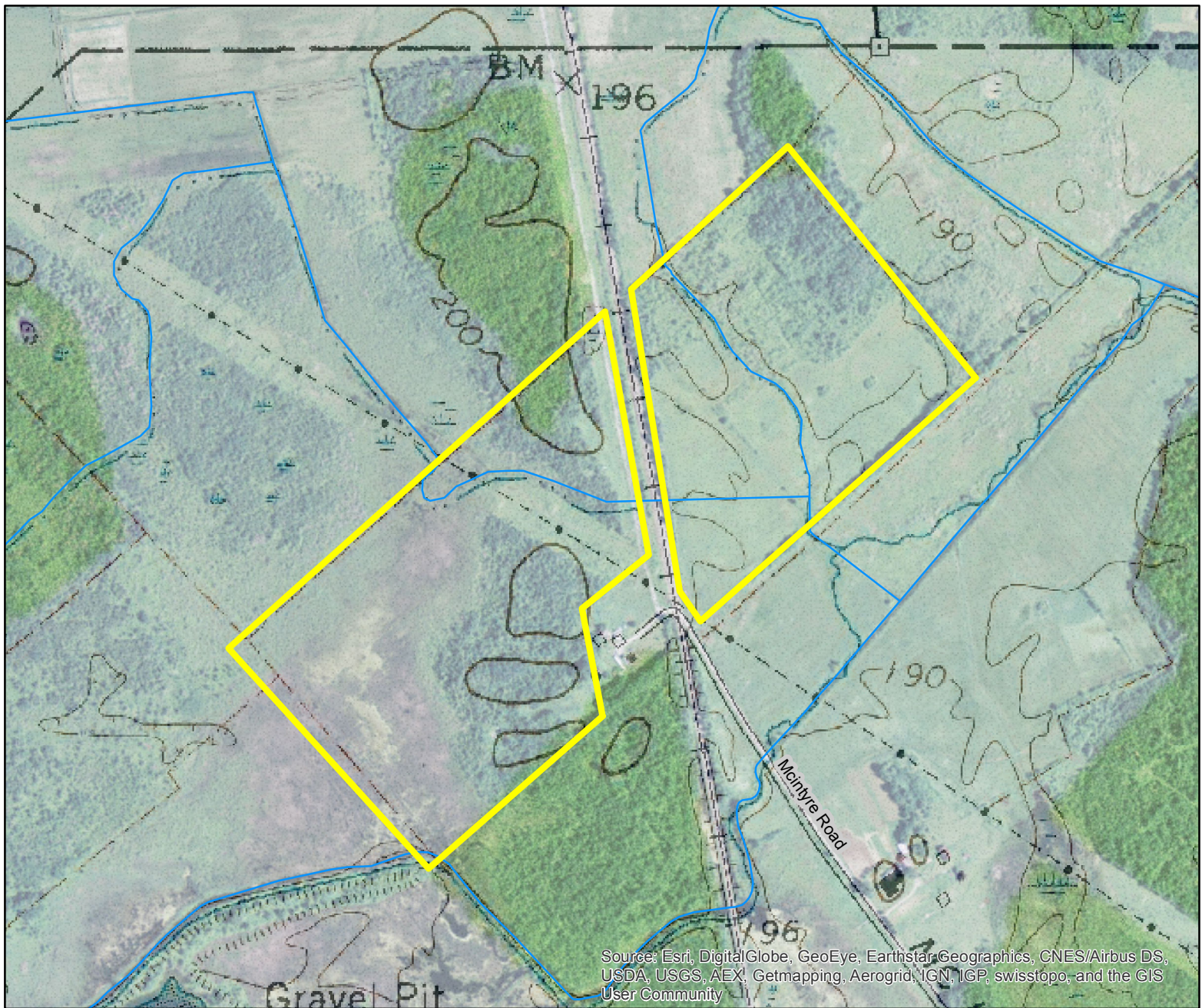
**Fig. 2: DU NY-ILF Eastern St. Lawrence Mitigation Site Aerial**



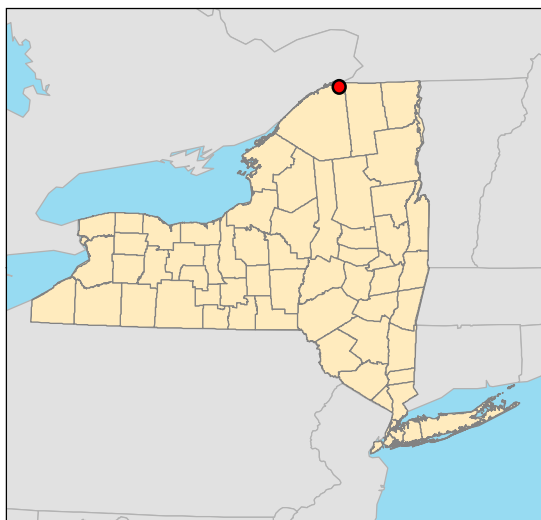
 Property Boundary (95.2 Acres)



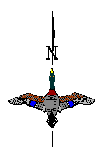




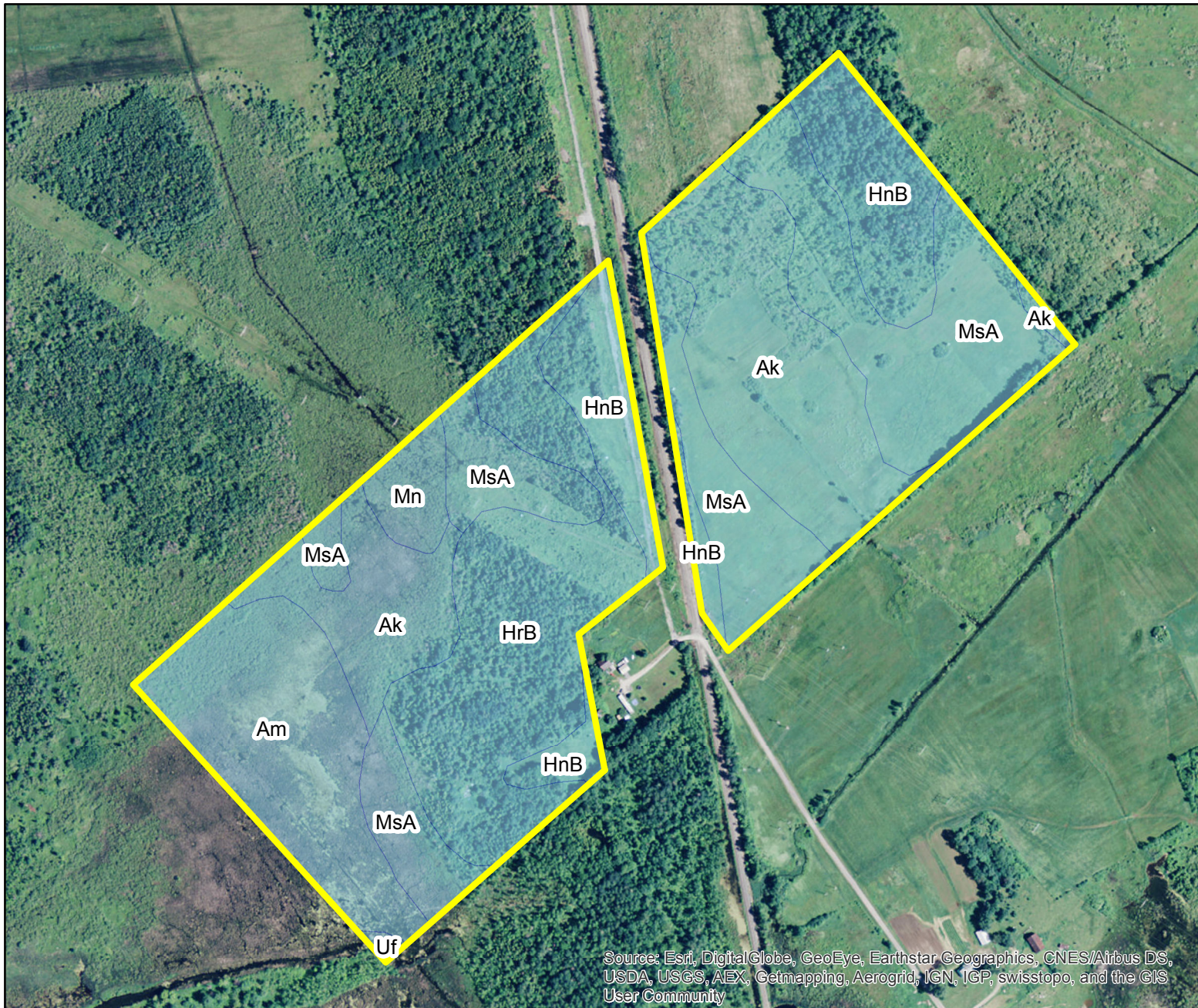
**Fig. 3 DU NY-ILF Eastern St. Lawrence Mitigation Site Topography**



 McIntyre Rd. (95.2 Acres)







**Fig. 4: DU NY-ILF Eastern St. Lawrence Mitigation Site Soils**



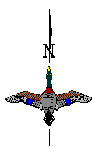
McIntyre Rd. (95.2 Acres)  Hydric Soils

**Map Unit Symb**

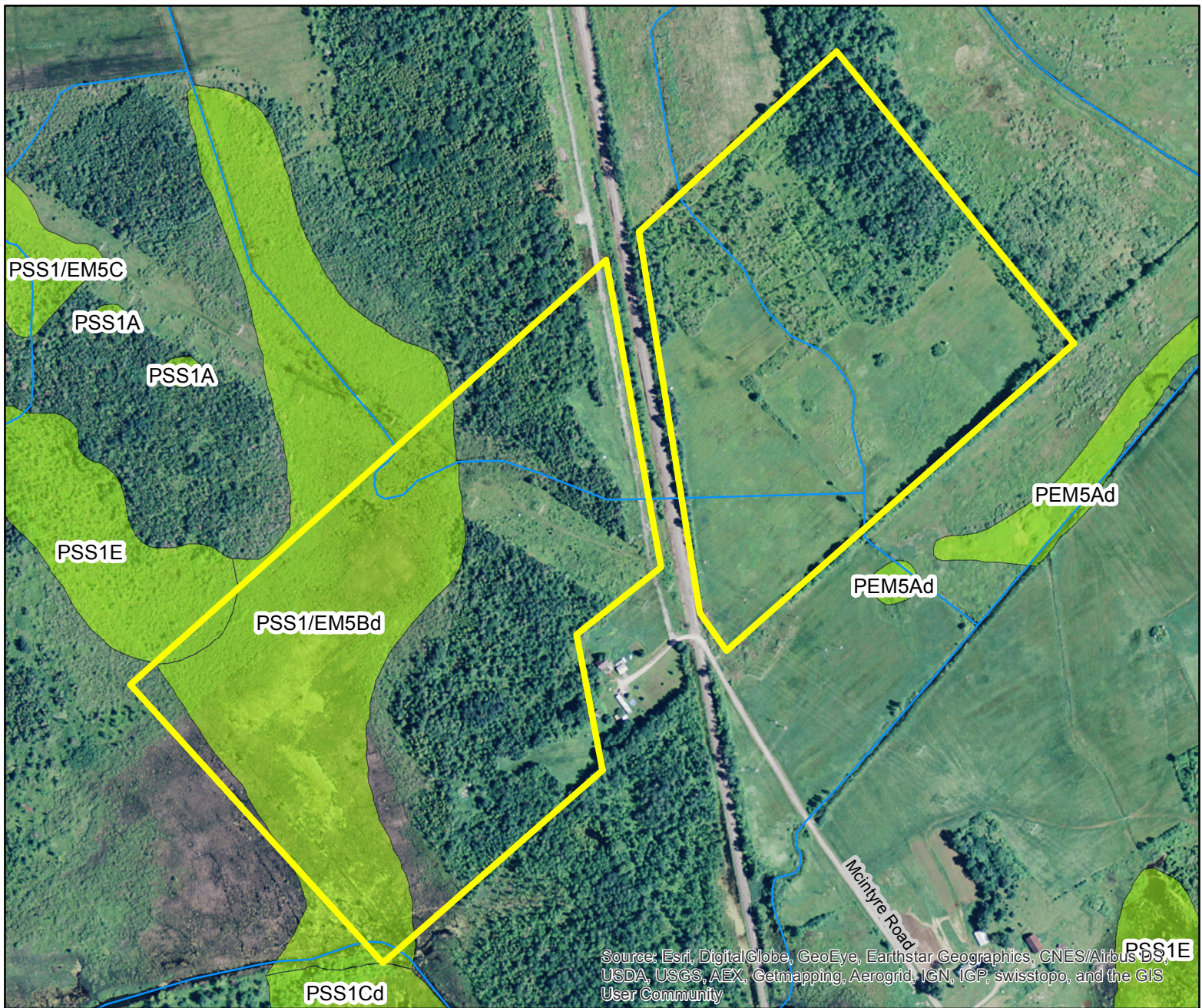
Ak  
Am  
HnB  
HrB  
Mn  
MsA  
Uf

**Map Unit Name**

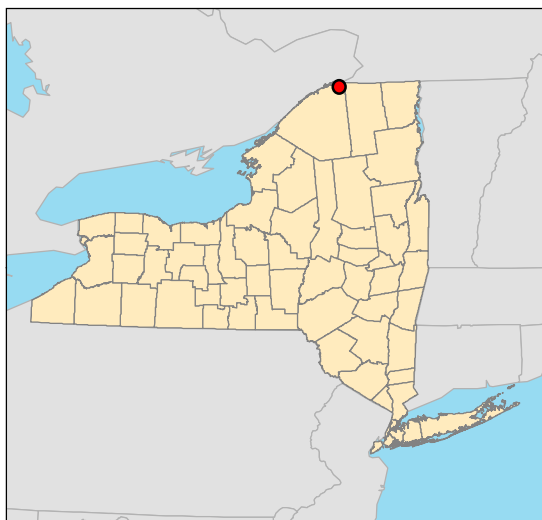
Adjidaumo silty clay  
Adjidaumo mucky silty clay  
Hogansburg fine sandy loam, 3 to 8 percent slope  
Hogansburg and Grenville soils, 0 to 8 percent slo  
Munuscong mucky fine sandy loam  
Muskellunge silty clay loam, 0 to 2 percent slopes  
Udorthents, clayey





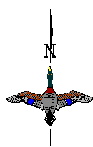


**Fig. 5: DU NY-ILF Eastern St. Lawrence Mitigation Site Wetlands (NWI)**

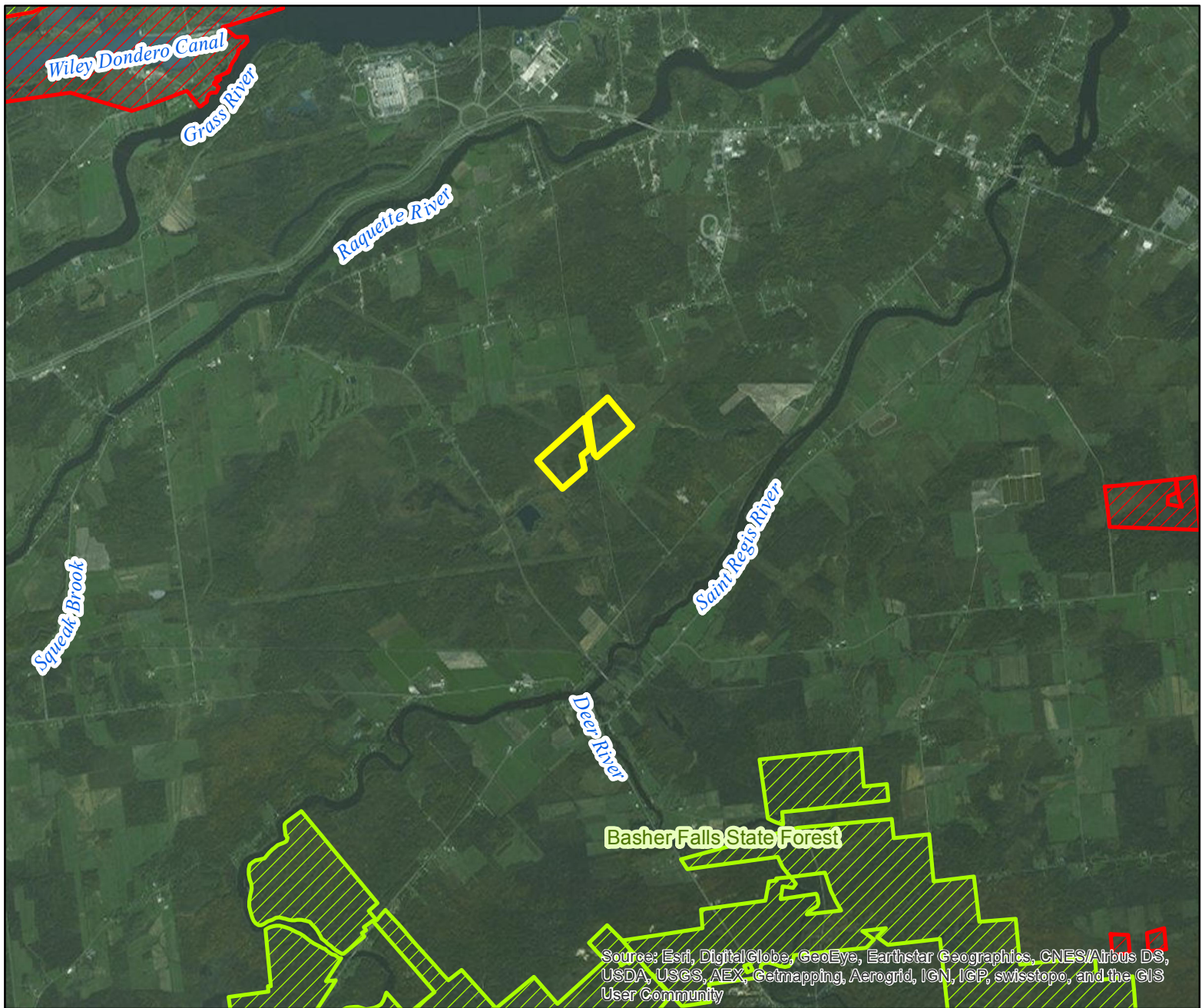


McIntyre Rd. (95.2 Acres)

Wetlands (NWI)



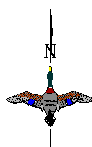




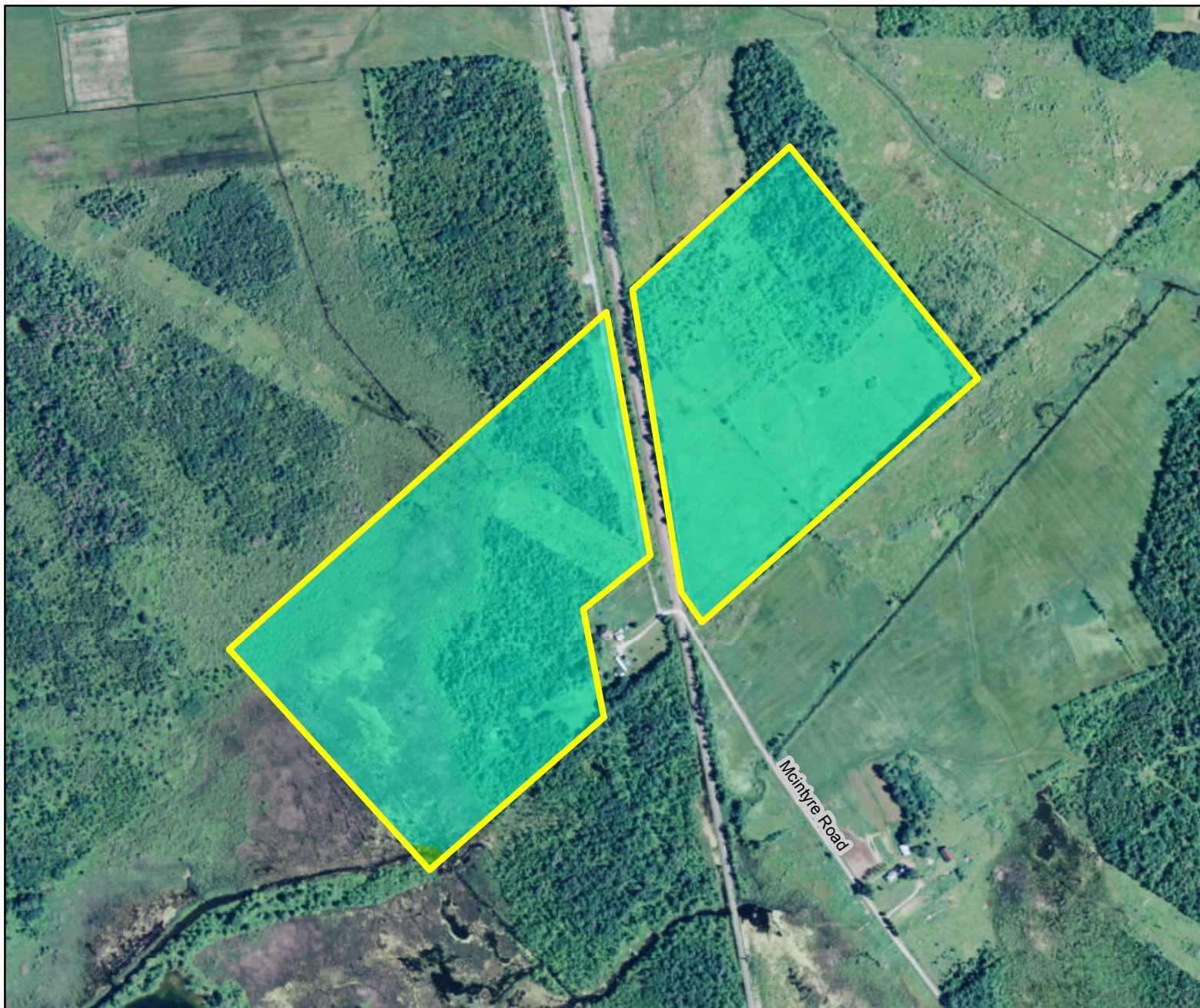
**Fig. 6: DU NY-ILF Eastern  
St. Lawrence Mitigation Site  
Protected Lands**



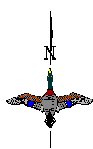
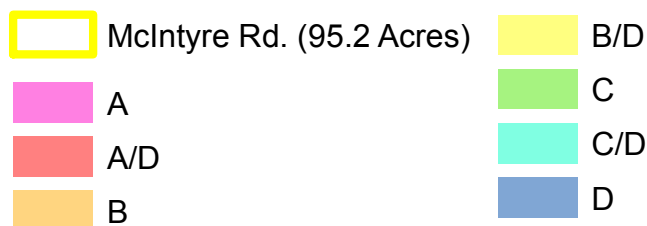
Note: The closest protected land to the site is Brasher Falls State Forest 1.4 miles away.



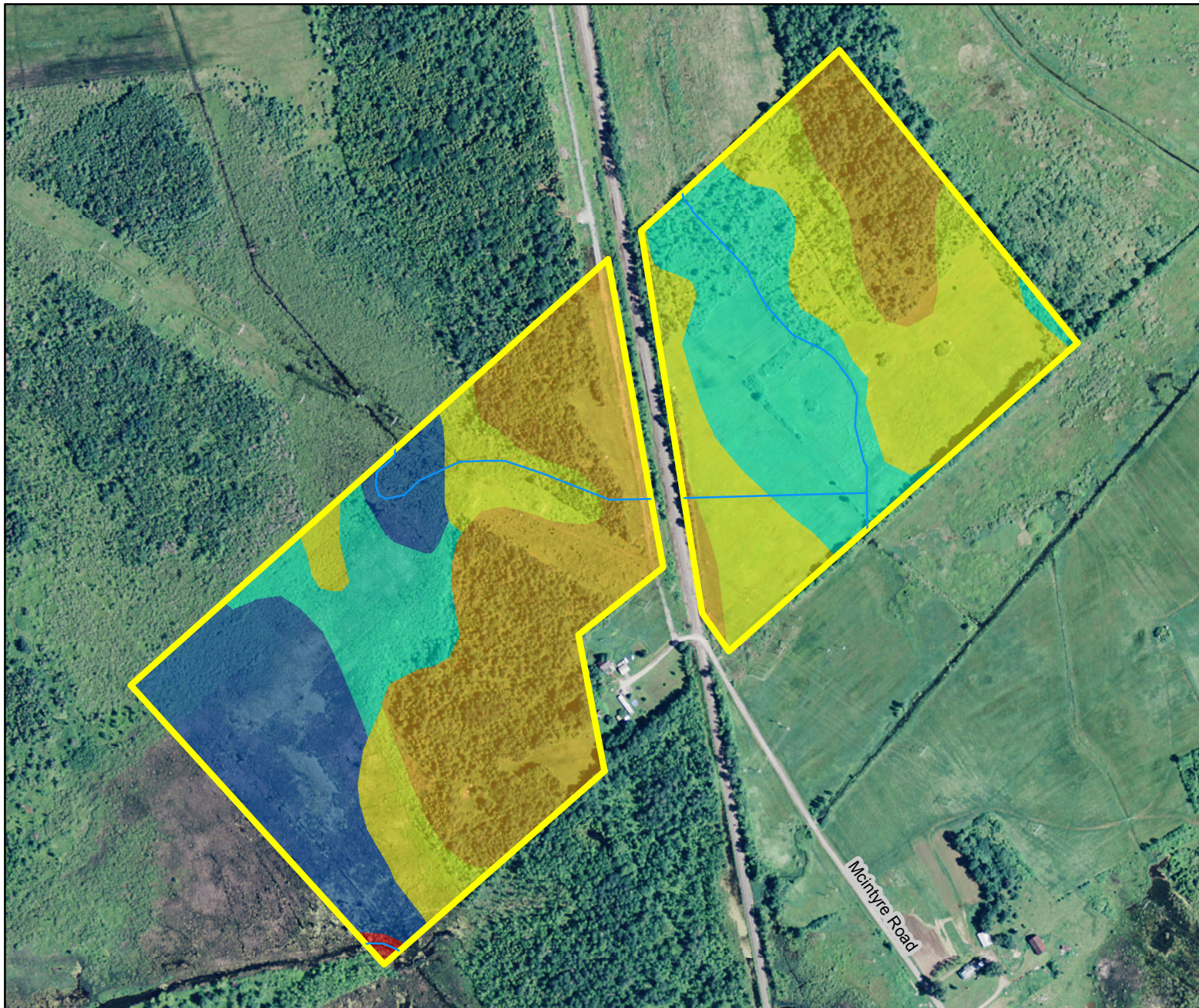




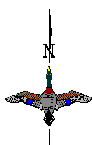
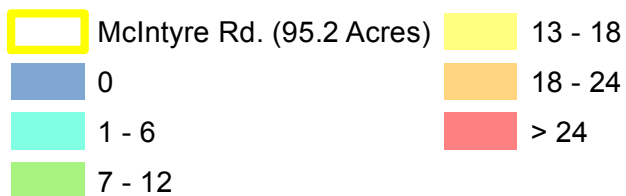
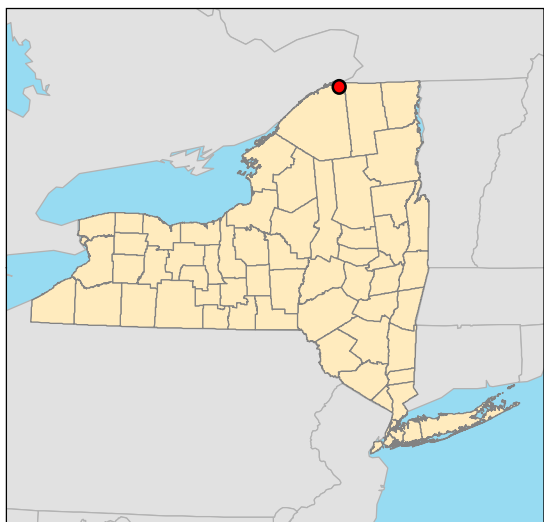
**Fig. 7: DU NY-ILF Eastern St. Lawrence Mitigation Site Hydrologic Soils Group**



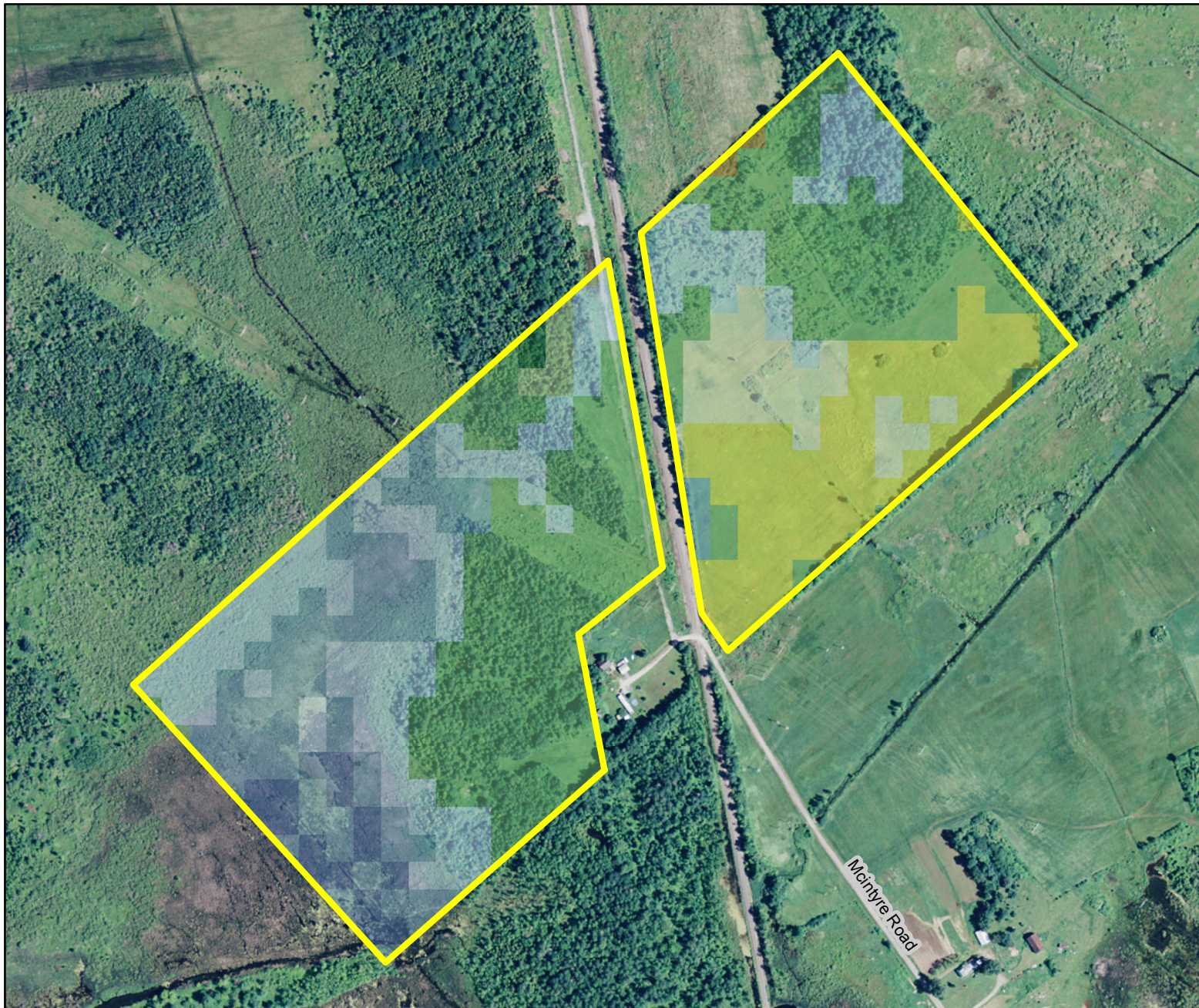




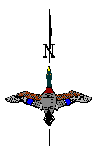
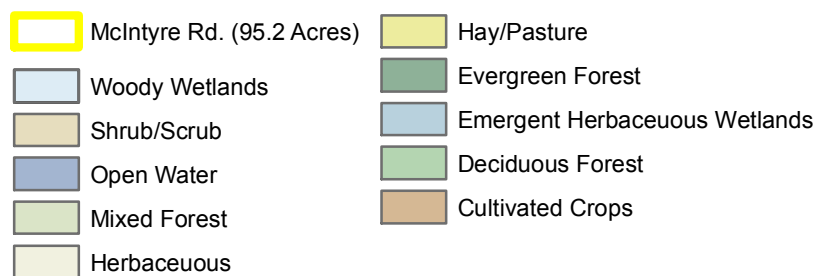
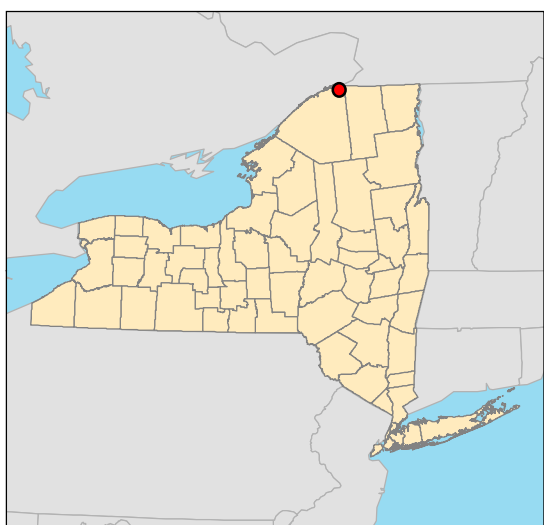
**Fig. 8: DU NY-ILF Eastern St. Lawrence Mitigation Site Depth to Water Table (inches)**



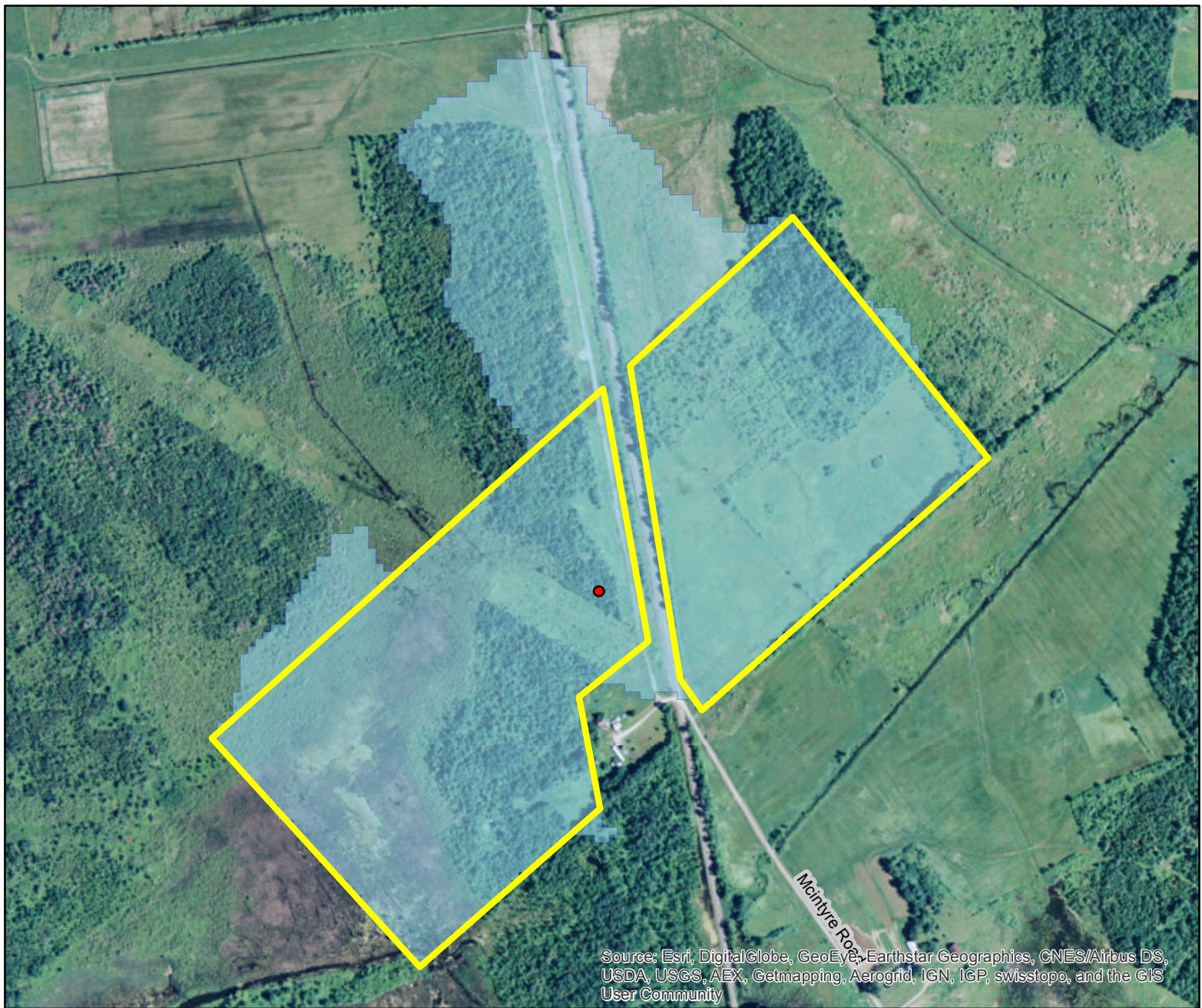




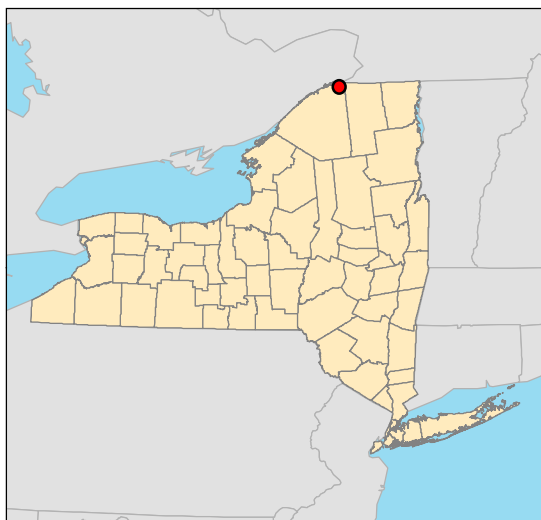
**Fig. 9: DU NY-ILF Eastern St. Lawrence Mitigation Site Land Use (NLCD)**



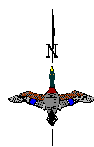




**Fig. 10: DU NY-ILF Eastern St. Lawrence Mitigation Site Drainage Area**



- Property Boundary (95.2 Acres)
- Drainage area (138.1 Acres)



**APPENDIX C**  
**CULTURAL RESOURCES**





## Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO  
Governor

ROSE HARVEY  
Commissioner

December 22, 2015

Mr. Matthew Regan  
Wetland Mitigation Specialist  
Ducks Unlimited  
159 Dwight Park Circle  
Suite 205  
Syracuse, NY 13210

Re: USACE  
McIntyre Road Wetland Restoration Project  
Located in the field at the end of McIntyre Road , Brasher, St. Lawrence County, NY  
15PR07512

Dear Mr. Regan:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the New York SHPO has determined that no historic properties will be affected by this undertaking.

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

Sincerely,

Ruth L. Pierpont

Deputy Commissioner for Historic Preservation

**APPENDIX D**  
**WILDLIFE USAGE**



## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

New York Ecological Services Field Office

3817 LUKER ROAD

CORTLAND, NY 13045

PHONE: (607)753-9334 FAX: (607)753-9699

URL: [www.fws.gov/northeast/nyfo/es/section7.htm](http://www.fws.gov/northeast/nyfo/es/section7.htm)

Consultation Code: 05E1NY00-2016-SLI-0706

January 11, 2016

Event Code: 05E1NY00-2016-E-01554

Project Name: McIntyre Rd.

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (

[http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: McIntyre Rd.

## Official Species List

**Provided by:**

New York Ecological Services Field Office

3817 LUKER ROAD

CORTLAND, NY 13045

(607) 753-9334

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

**Consultation Code:** 05E1NY00-2016-SLI-0706

**Event Code:** 05E1NY00-2016-E-01554

**Project Type:** LAND - RESTORATION / ENHANCEMENT

**Project Name:** McIntyre Rd.

**Project Description:** Wetland Mitigation Project

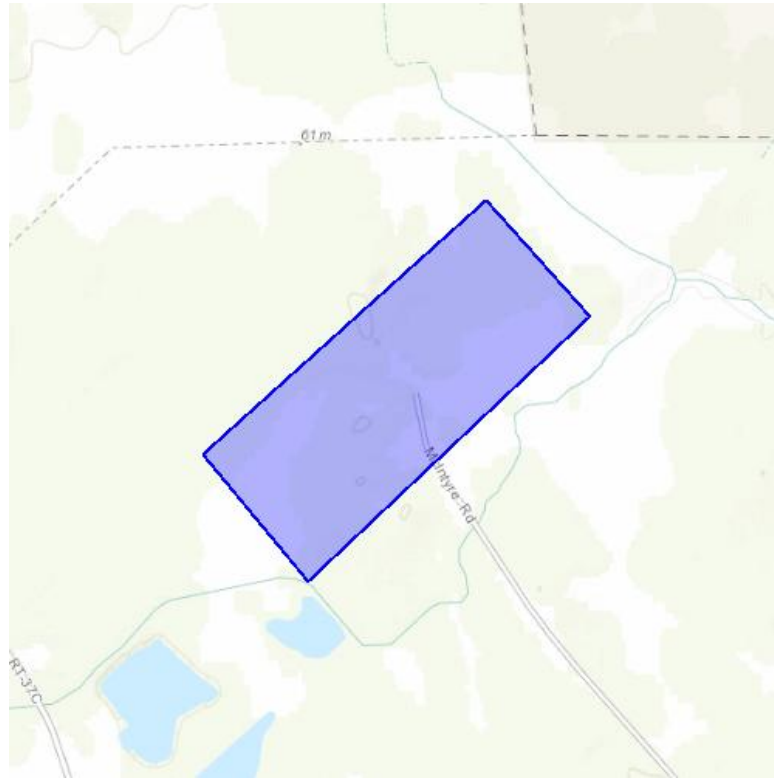
**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior  
Fish and Wildlife Service

Project name: McIntyre Rd.

### Project Location Map:



**Project Coordinates:** MULTIPOLYGON (((-74.71848964691162 44.948930353443636, -74.72190141677856 44.95166383738495, -74.73123550415039 44.94572593707827, -74.72775936126709 44.94277953859121, -74.71848964691162 44.948930353443636)))

**Project Counties:** St. Lawrence, NY



United States Department of Interior  
Fish and Wildlife Service

Project name: McIntyre Rd.

## Endangered Species Act Species List

There are a total of 1 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Mammals	Status	Has Critical Habitat	Condition(s)
Northern long-eared Bat ( <i>Myotis septentrionalis</i> )	Threatened		



United States Department of Interior  
Fish and Wildlife Service

Project name: McIntyre Rd.

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.



**APPENDIX E**  
**WETLAND DELINEATION REPORT**

## **1.0 INTRODUCTION**

Ducks Unlimited, Inc. (DU) investigated site conditions at the McIntyre Road site (hereinafter Mitigation Site). The wetland delineation was performed to estimate total restorable acreage and if wetlands existing on the Mitigation Site are federal jurisdictional wetlands.

The goal of the Mitigation Site's work plan is to re-establish and rehabilitate wetlands to compensate for wetland impacts to 5.66 acres of wetlands in the Eastern St. Lawrence River Service Area (Appendix A).

## **2.0 METHODS**

Onsite data collection and wetland boundary flagging of the 95.2 acre delineation area was performed by DU on December 8 – 10, 2015. Climatic/hydrologic conditions were non typical for this time of year. According to the National Oceanic and Atmospheric Association (NOAA), the temperature for the week of November 1 – November 7, 2015 was 9 - 15° F above the 1981 – 2010 normal for the area. According to NOAA, the precipitation for the week of November 1 – November 7, 2015 was extremely dry compared to the 1981 – 2010 normal for the area. The boundaries were delineated following the protocols outlined in the United States Army Corps of Engineers' (USACE) 1987 "Wetland Delineation Manual" and data were collected on the "Regional Supplement to the Corps of Engineers Wetland Delineations Manual: Northcentral and Northeast Region (Version 2.0)" (Regional Supplement). A routine on-site determination was performed as specified in Section D of Chapter IV of the 1987 Delineation Manual. Prior to the delineation survey, the property was walked to identify general topography, drainage patterns, major plant communities, and potential areas of disturbance. A representative data point was selected in each plant community. A total of 10 data points were sampled for the delineation. Vegetation, soils, and hydrology data were collected at each data point using the USACE's methods for vegetation, soils, and hydrology. Where wetlands and uplands were too closely associated to be effectively delineated, the procedures for sampling wetland/non-wetland mosaics according the Regional Supplement were used.

Data were collected for each vegetation stratum (i.e., herb, sapling/shrub, tree, and woody vine stratum). The size (i.e., radius in feet) for sampling each stratum at each data point followed USACE guidelines unless topography or other site conditions restricted the sampling area, (i.e., herb: 5 ft, sapling/shrubs: 15 ft, trees: 30 ft, and woody vines: 30 ft). Hydrophytic plants had an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC) as listed on the USACE's "Northcentral and Northeast 2014 Regional Wetland Plant List" (Lichvar, Butterwick, Melvin and Kirchner, 2014).

An assessment of the vegetation began with a rapid field test for hydrophytic vegetation to determine if there was a need to collect additional detailed vegetative data. If there was a need to collect additional detailed vegetation data, then the percent coverage of all plant species classified in each stratum were visually estimated, recorded, and ranked in decreasing order of percent coverage. The presence/absence of wetland vegetation was determined by a quantitative assessment of the dominance and prevalence of hydrophytic plants across all strata at each data point. The plant community was evaluated using hydrophytic vegetation indicator procedures (i.e., indicators 1-4), as outlined in the Regional Supplement. Hydrophytic vegetation was present wherever any of these indicators were met.

Soils data were collected by observing soil profiles. Soil pits were dug to a depth of 12 – 20 inches with a sharpshooter shovel to observe soil profiles. Characteristics of the soil profiles were described by using the Munsell soil color chart, identifying soil texture, and measuring the depth and thickness of each soil matrix layer. The soil profiles were evaluated for hydric soil indicators as defined in the Regional Supplement. The soil data collected from the field were compared with a soil map of the Mitigation Site according to the National Resource Conservation Services' (USDA-NRCS) Web Soil Survey.

Hydrology was evaluated based on direct field observations, and primary and secondary indicators of wetland hydrology as defined in the Regional Supplement.

Data points and wetland boundary points were recorded with a hand-held GPS unit accurate to within 3 meters.

### 3.0 RESULTS

Normal circumstances were not present in the fields due to a plant community managed for hay production and grazing.

The most prevalent type of wetland delineated the Mitigation Site was palustrine emergent/scrub-shrub (PEM/SS, 27.07 acres) wetlands. A relatively large palustrine scrub scrub (PSS, 10.20 acres) and several palustrine forested (PFO; 3.33 acres) wetlands were delineated at the site. A wetland/upland mosaic (UPL/PEM; 5.43 acres) occurred over an area of 11.32 acres. The PEM portion of the mosaic was approximately 48% of the 11.32 acres.

**Table 1. Delineated Wetlands at the Mitigation Site**

Wetland Name	Wetland Type	Wetland Acres
Wetland A	PSS	10.20
Wetland B	PEM	1.33
Wetland C	PSS/PEM	27.07
Wetland D	PFO	0.88
Wetland E	PFO	1.63
Wetland F	PFO	0.82
Mosaic A	UPL/PEM	5.43

The herbaceous stratum in the PEM, PSS and PEM/PSS wetlands were characterized by lakebank sedge (*Carex lacustris*, OBL) and hybrid cat-tail (*Typha x glauca*, OBL). The shrub stratum in the PSS and PEM/SS wetland were characterized by silky dogwood (*Cornus amomum*, FACW). The tree community in the PFO wetlands and upland forests were characterized by eastern arborvitae (*Thuja occidentalis*, FACW), gray birch (*Betula populifera*, FAC). The herb stratum in the upland areas of the upland/wetland mosaic was characterized by red clover (*Trifolium pratense*, FACU).

**Table 2.** Dominant vegetation in the delineated wetlands

Scientific Name	Common Name	WIS
<i>Betula populifera</i>	Gray Birch	FAC
<i>Carex lacustris</i>	Lakebank Sedge	OBL
<i>Cornus amomum</i>	Silky Dogwood	FACW
<i>Solidago altissima</i>	Tall Goldenrod	FACU
<i>Thuja occidentalis</i>	Eastern Arborvitae	FACW
<i>Typha X glauca</i>	Hybrid Cat-tail	OBL

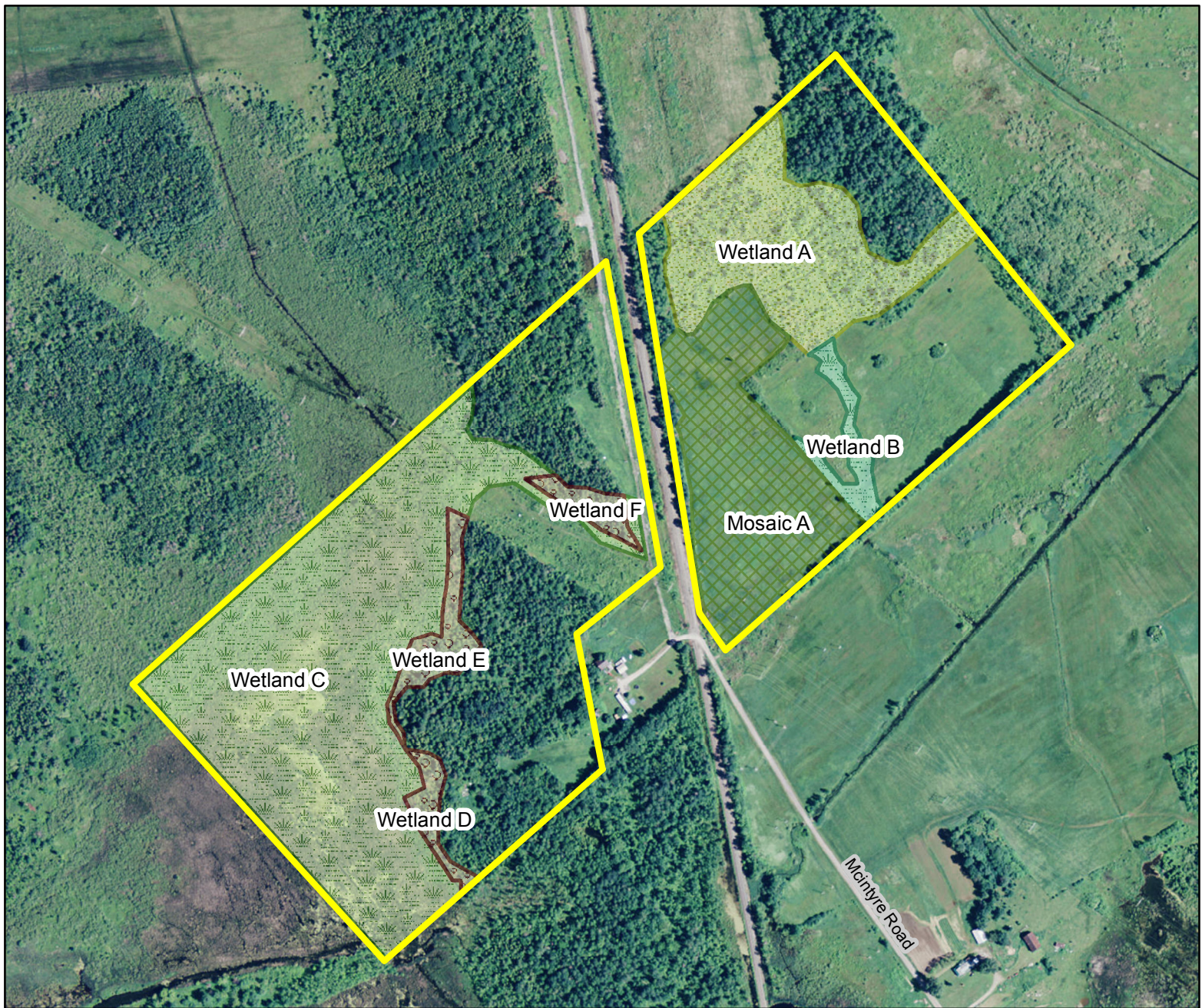
Field observations of soil profiles at the Mitigation Site confirmed the hydric soils listed at the site on NRCS Web Soil Survey based on texture and soil color. The texture of the soils were typically loamy and clayey, therefore the hydric soil indicators for loamy and clayey soils detailed in the Regional Supplement were used. One of the soil profiles had sandy soils, and for therefore the hydric soil indicators for sandy soils detailed in the Regional Supplement were used in this instance. Three of the soil profiles had layer with a depleted matrix where 60% or more of the matrix had a chroma of 2 or less, a layer above the depleted matrix with a value of 3 and chroma of 2 or less, and met the minimum thickness requirements for hydric soil indicator A11: depleted below dark service. Two of the soil profiles where A11: depleted below dark service was observed co-occurred with the hydric soil indicator F3: depleted matrix. Other hydric soil indicators present at the mitigation site were F2: loamy gleyed matrix and S1: sandy mucky mineral. Prominent redox concentrations were observed in one of the soil profiles starting at 8 inches below the soil surface.

The mitigation site was visited during a time of normal precipitation. The most observed primary wetland hydrology indicator was a high water table. The observed depth to water table ranged from 0 – 16 inches below the soil surface. Surface water was observed in three of the data points and ranged from 3 – 16 inches deep.

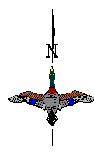
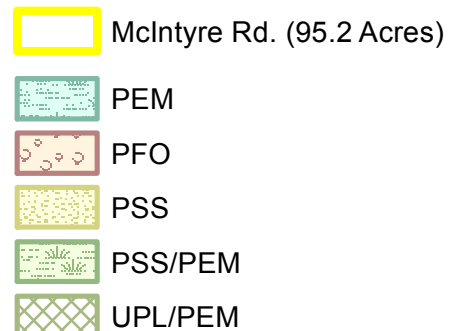
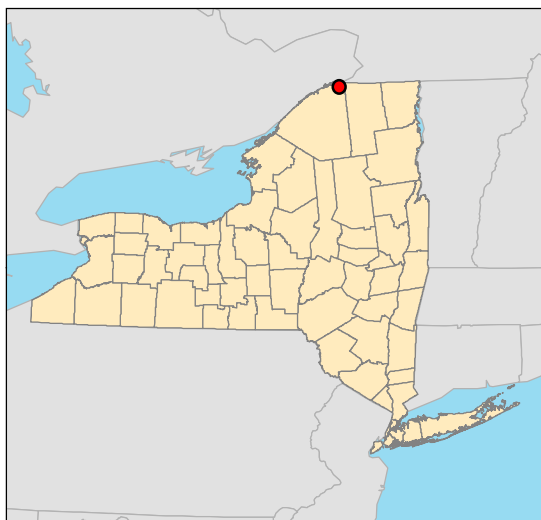
#### **4.0 CONCLUSIONS**

Soil saturation and hydrological conditions at the Mitigation Site were of sufficient frequency and duration to support hydrophytic vegetation and wetland conditions for the PEM, PEM/SS, PSS, PFO and UPL/PEM wetlands. Most of the Mitigation Site delineated as wetlands (53.25 acres). The different wetlands are hydrologically connected. The Mitigation Site supported narrow strips of PFO wetlands abruptly transitioning to a large PEM/SS wetland. A relatively large (>10 acres) PSS wetland was delineated adjacent to the large agricultural fields. The upland/wetland mosaic was due to a combination of factors; most notably a plant community managed for upland vegetation and changes in microtopography allowing hydrophytic vegetation to establish in depressions.





**Fig. 1: DU NY-ILF Eastern St. Lawrence Mitigation Site Delineated Wetlands**

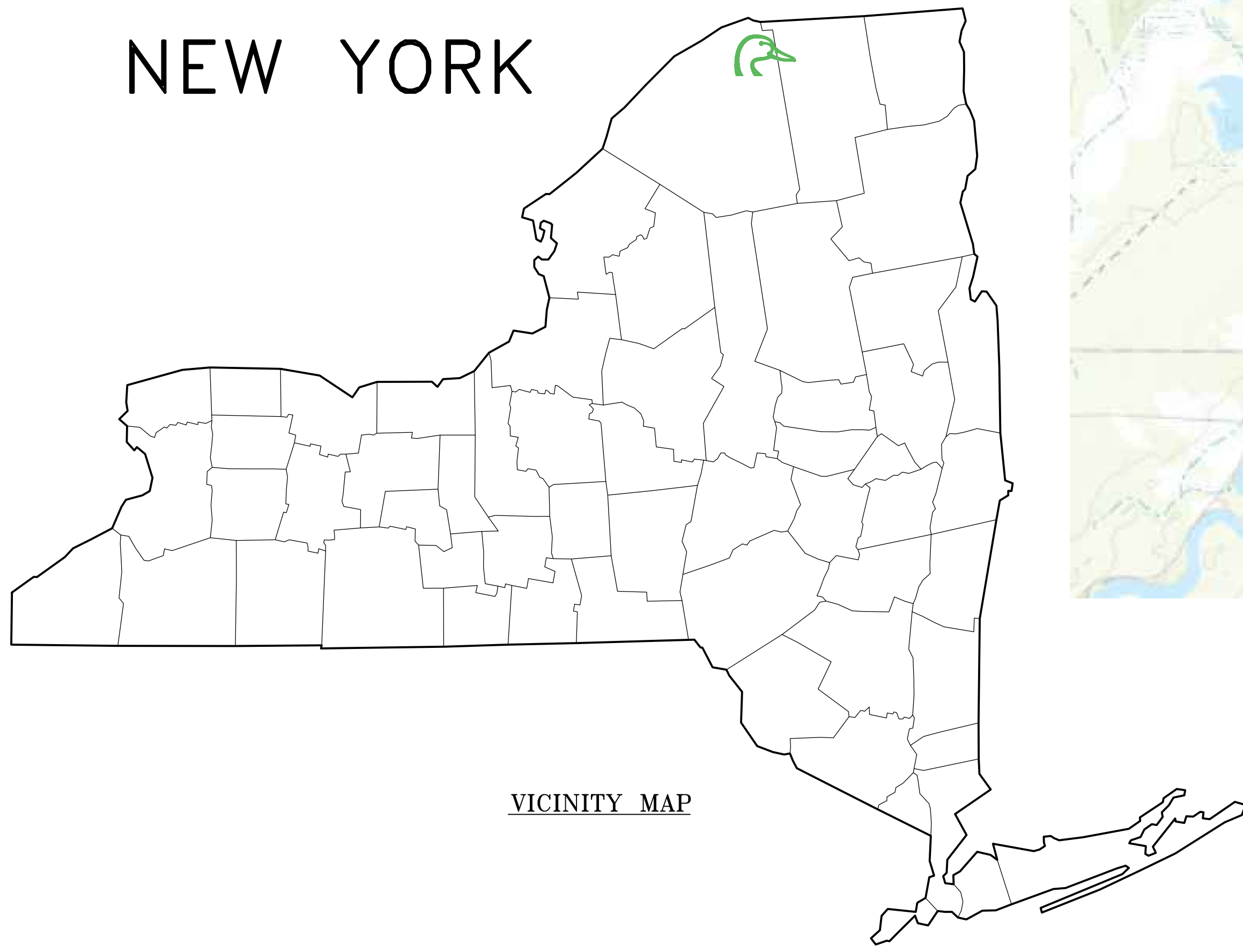
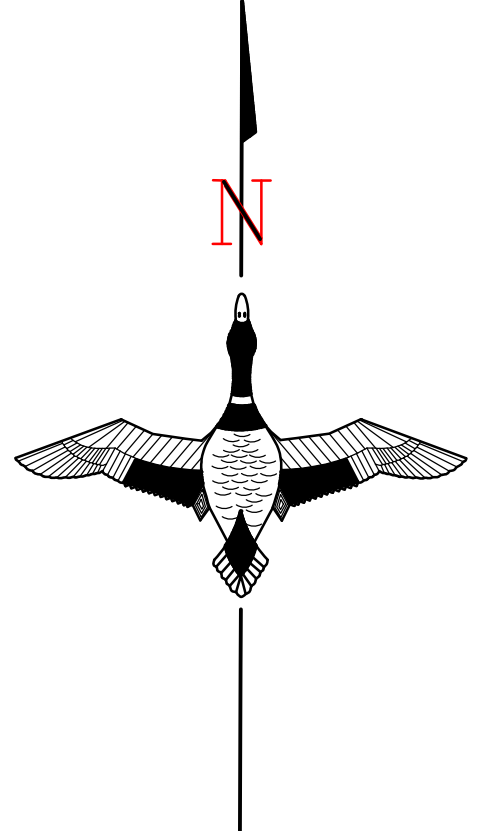


**APPENDIX F**  
**MITIGATION WORK PLAN**





DUCKS UNLIMITED  
NEW YORK IN-LIEU FEE PROGRAM  
EASTERN ST LAWRENCE RIVER SERVICE AREA  
**McINTYRE ROAD**  
**MITIGATION SITE**  
ST. LAWRENCE COUNTY, NEW YORK



LOCATION MAP  
SCALE: 1" = 2000'

SPECIFICATIONS

- 101 GENERAL CONDITIONS
- 102 SUPPLEMENTAL CONDITIONS
- 201 MOBILIZATION
- 202 SITE PREPARATION
- 203 EXCAVATION
- 204 EMBANKMENT CONSTRUCTION
- 205 WATER
- 206 CONSTRUCTED TOPOGRAPHY
- 301 WATER CONTROL STRUCTURES
- 302 STRUCTURE AND CULVERT APPURTENANCES
- 401 SOIL EROSION AND POLLUTION CONTROL
- 402 SEEDING AND MULCHING

INDEX

- 1. COVER SHEET
- 2. OVERALL SITE PLAN
- 3. EMBANKMENT AND PROFILE
- 4. WATER CONTROL STRUCTURE DETAIL SHEET 1
- 5. WATER CONTROL STRUCTURE DETAIL SHEET 2
- 6. WATER CONTROL STRUCTURE DETAIL SHEET 3
- 7. MITIGATION GRADING PLAN
- 8. MITIGATION GRADING PLAN CROSS SECTIONS
- 9. PLANTING PLAN
- 10. MONITORING PLAN
- 11. WETLAND DELINEATION
- 12. CREDIT GENERATION
- 13. EROSION CONTROL PLAN

PRELIMINARY

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DUCKS UNLIMITED

COVER SHEET

McINTYRE ROAD MITIGATION SITE  
NEW YORK IN-LIEU FEE PROGRAM  
EASTERN ST LAWRENCE RIVER  
SERVICE AREA  
ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	Revisions	Date	By
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CAD FILE:  
COVER\_NY-182-1

DESIGNED BY: PW

DRAWN BY: JA

SURVEYED BY: JP

BIOLOGIST: SF

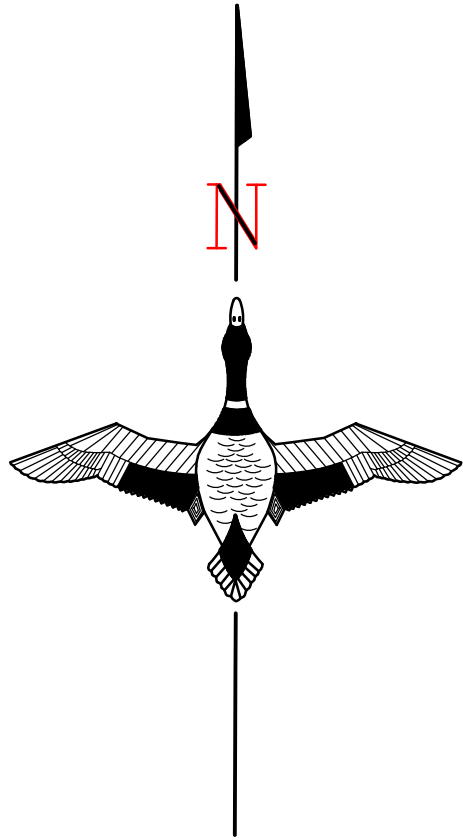
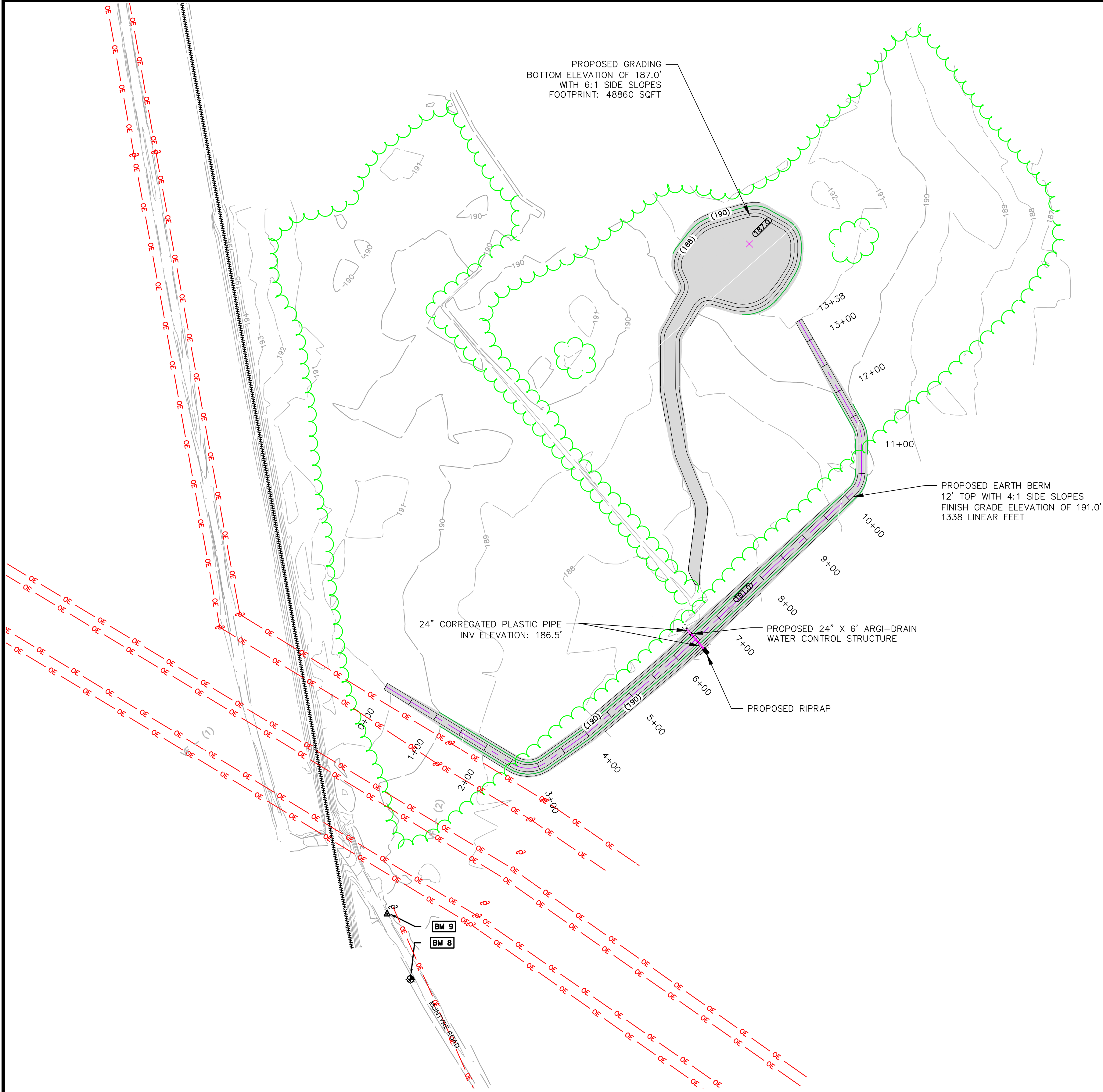
DATE:  
02/09/2016

PROJECT NO:  
US-NY-182-1

GLARO-NY-1-024-01

©GLARO C&D ProjectsNEW YORKUS-NY-182-1 McIntyre C&D/C&D\_DRAWINGCOVER\_NY-182-1.dwg, 2/16/2016 9:55:38 AM, GLARO





UNIT 1  
TOP OF DIKE - 191.0  
FSL = 189.0  
STRUCTURE INLET INVERT EL. = 186.5'

NOTES:  
BERMS HAVE 12' TOP WITH 4:1 SIDESLOPES, ANGLE POINTS SHOULD HAVE 50' MINIMUM RADIUS  
ALL CONSTRUCTED TOPOGRAPHY AND BERM FOOTPRINTS MUST HAVE 6" OF TOPSOIL STRIPPED AND REPLACED  
PLANTING PLAN SHEET SHALL SHOW THE DIFFERENT HABITAT TYPES  
STRUCTURES ARE 24" PIPE AGRIDRAIN STRUCTURES, PIPE LENGTHS BASED ON BERM WIDTH AND HEIGHT BETWEEN  
INVERT AND TOP OF BERM

DATUM STATEMENT  
TNAD 83, NY SPC EAST ZONE #3101  
US SURVEY FEET, NAVD 88  
ESTABLISHED BY OPUS

CP #8 1R W/ DU ALUM. CAP  
NORTHING 2227089.9840 US FT  
EASTING 434292.3830 US FT  
ELEVATION 190.83 NAVD88

CP #9 CUT "X" IN CONCRETE  
NORTHING 2227203.5480 US FT  
EASTING 434253.1170 US FT  
ELEVATION 192.17 NAVD88

PROPOSED EARTH BERM  
12' TOP WITH 4:1 SIDE SLOPES  
FINISH GRADE ELEVATION OF 191.0'  
1338 LINEAR FEET

24" CORRUGATED PLASTIC PIPE  
INV ELEVATION: 186.5'

PROPOSED 24" X 6' ARGIDRAIN  
WATER CONTROL STRUCTURE

PROPOSED RIPRAP

LEGEND

- EXISTING CHANNEL CL
- EXISTING DITCH CL
- EXISTING SPOT ELEVATION
- HORIZONTAL & VERTICAL CONTROL
- BENCHMARK
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- EDGE OF VEGETATION LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- PROPOSED MINOR CONTOUR
- PROPOSED BERM CL
- PROPOSED DITCH CL
- EDGE OF RIPRAP
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- ROAD OR TRAIL CL
- EXISTING FENCE LINE
- APPROX. BOUNDARY LINE
- APPROX. RIGHT OF WAY LINE
- FOUND PROPERTY CORNER
- SOIL BORING
- WATER CONTROL STRUCTURE
- RAILROAD TRACK CL

PRELIMINARY

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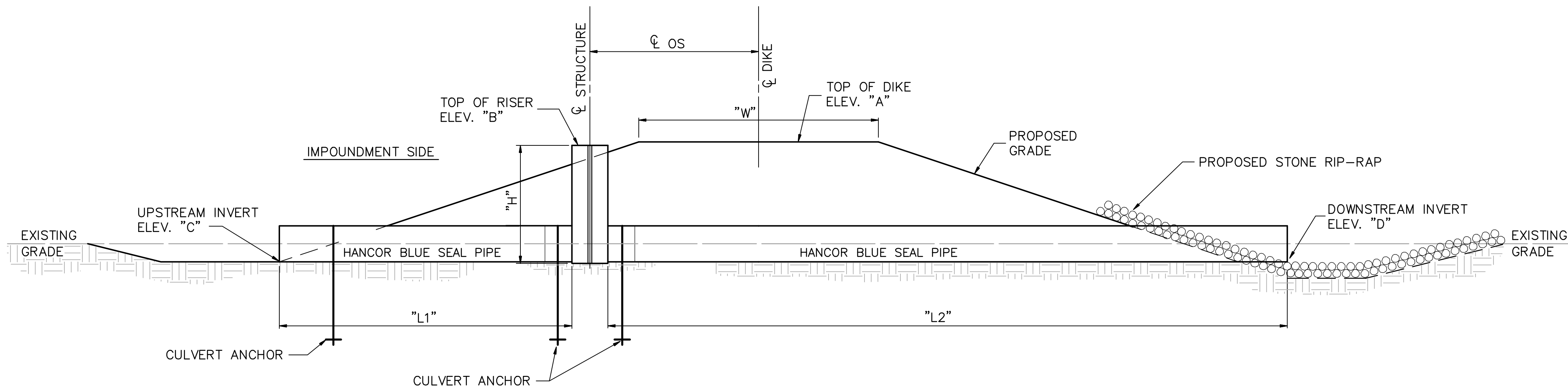
OVERALL SITE PLAN  
McINTYRE ROAD MITIGATION SITE  
NEW YORK IN-LIEU FEE PROGRAM  
EASTERN ST LAWRENCE RIVER  
SERVICE AREA  
ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	By	Date	Revisions	CAD FILE:	DESIGNED BY:	DRAWN BY:	SURVEYED BY:	BIOLOGIST:	DATE:	PROJECT NO:	
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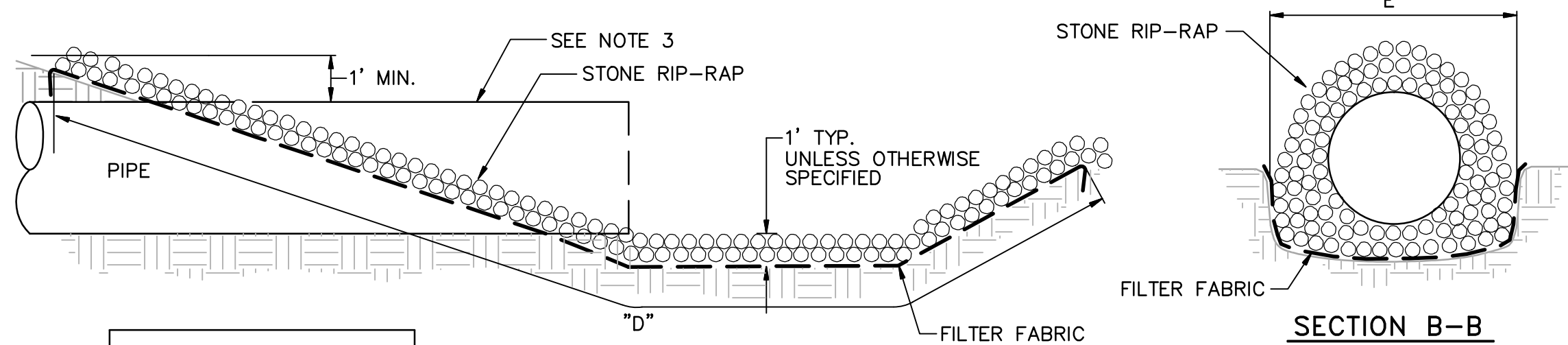
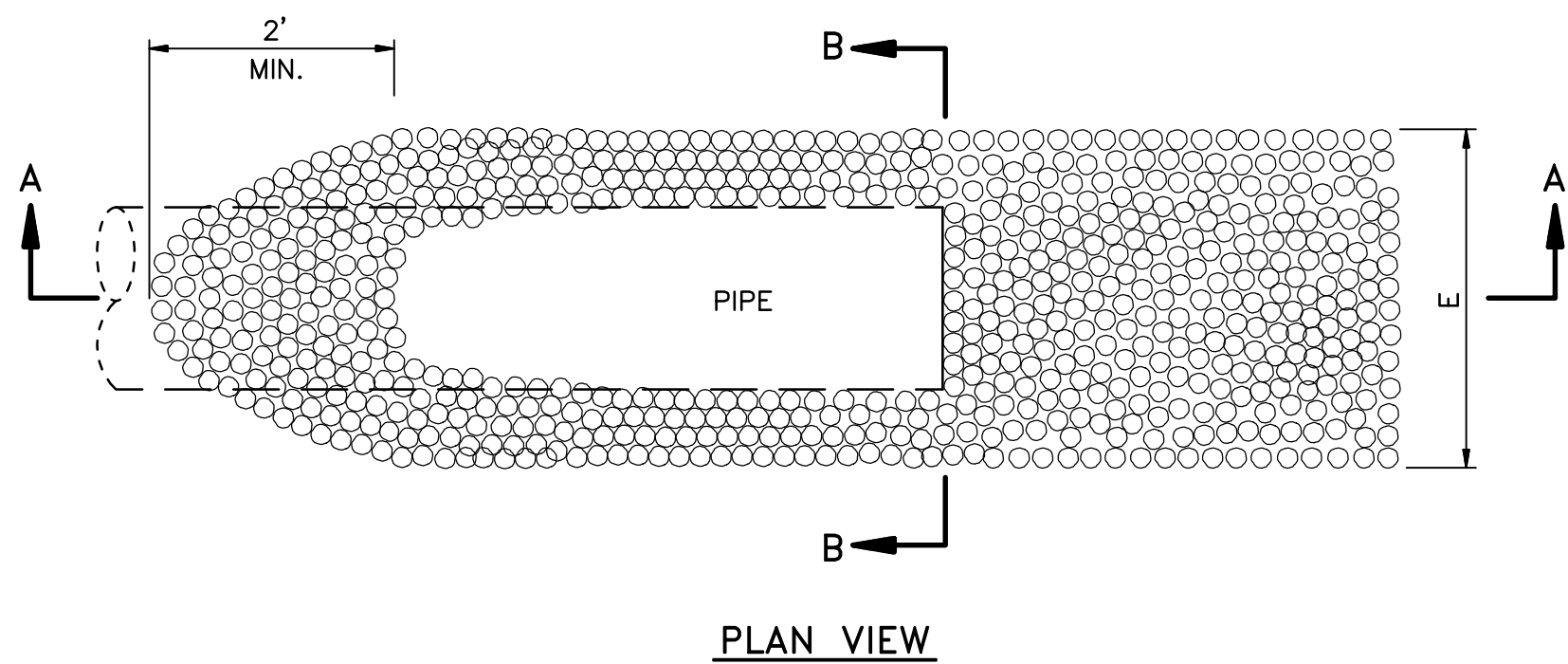






**PROFILE OF AGRI-DRAIN® WATER CONTROL STRUCTURE**  
NOT TO SCALE

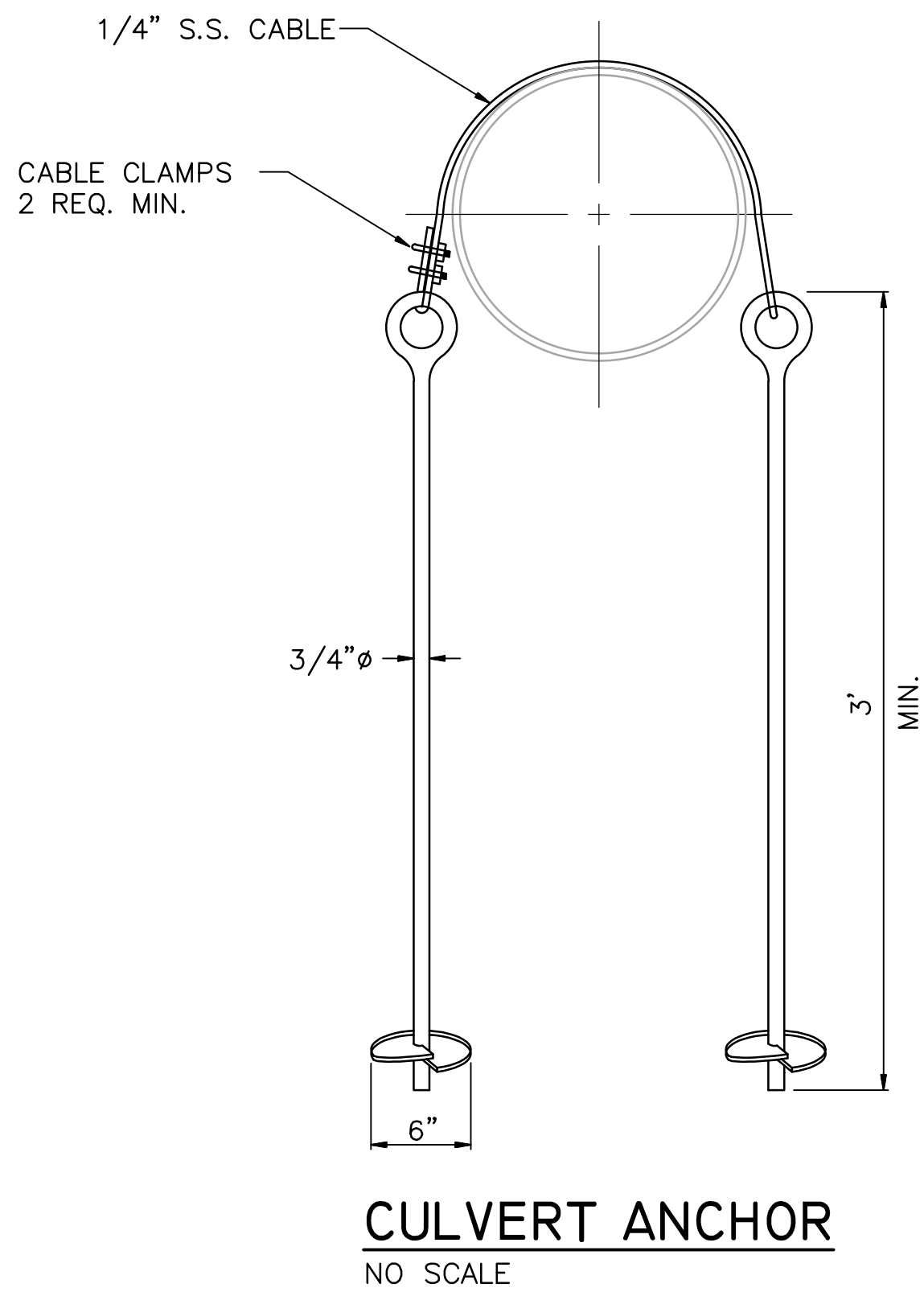
STRUCTURE	PIPE SIZE	RISER SIZE	TOP OF DIKE EL. "A"	TOP OF RISER EL. "B"	FULL SERVICE LEVEL	INLET I.E. EL. "C"	OUTLET I.E. EL. "D"	TOP WIDTH "W"	INLET LENGTH "L1"	OUTLET LENGTH "L2"	Q - Q OFFSET	RISER HEIGHT "H"
STR-1	24"	24" X 6'	191.0	192.42	189.0	186.5	186.5	12'	10'	36'	12.5'	6'



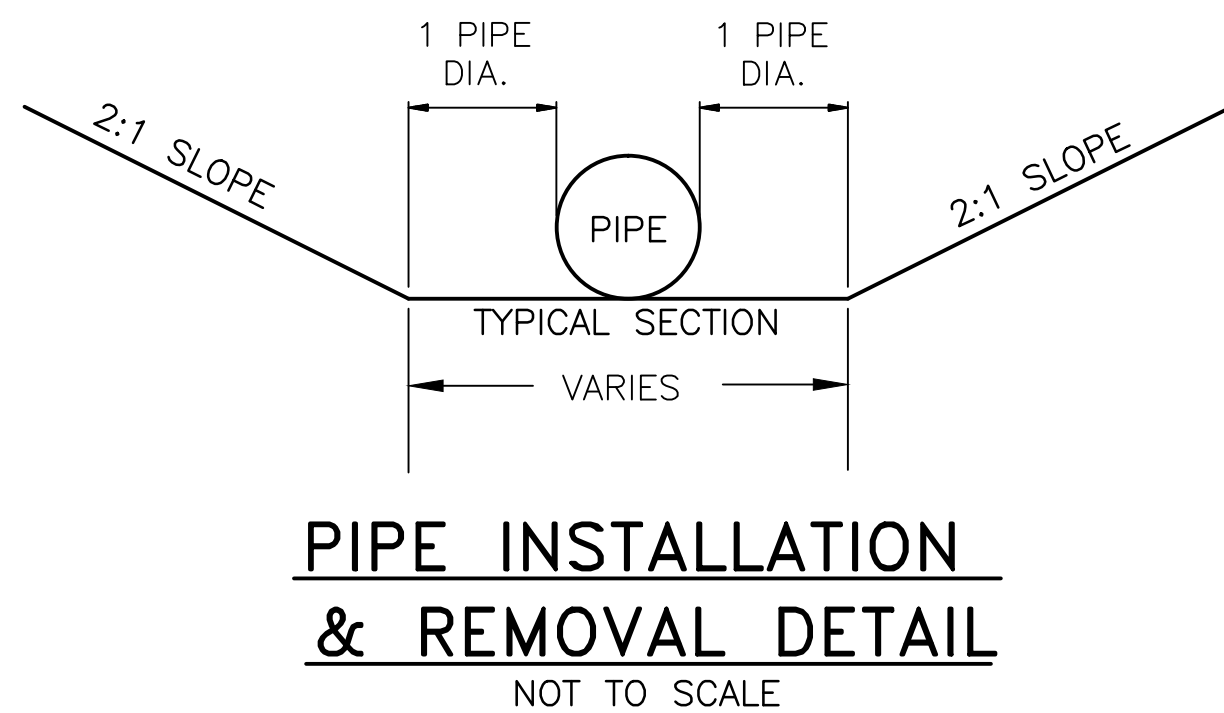
CLASS I STONE			
PIPE DIA.	D	E	Sq.Yds.
12"	17'	3'	5.5
15"	18'	3.75'	7.2
18"	19'	4.5'	8.3
21"	20'	5.25'	11.0
24"	21'	6'	13.2
27"	22'	6.75'	15.4
30"	27'	10'	28.7
36"	29'	10'	30.3
42"	31'	10'	31.8
48"	33'	10'	33.2
54"	35'	10'	34.5
60"	37'	10'	35.7

- NOTES:**
- IF THE RIPRAP CLASS DESIGNATION IS NOT SPECIFIED ON THE CONSTRUCTION PLANS, CLASS 1 ROCK RIPRAP SHALL BE UTILIZED. THE ROCK SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
  - UNLESS OTHERWISE SPECIFIED, FILTER FABRIC SHALL BE UTILIZED IN THE INSTALLATION OF RIP RAP.
  - DOWNSTREAM PIPE OUTLET SHALL CONFORM TO SLOPE FOR PIPE DIAMETERS 30" AND LARGER

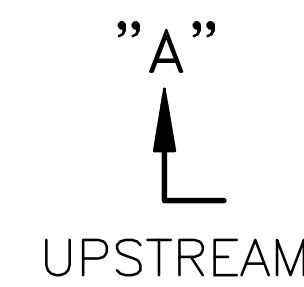
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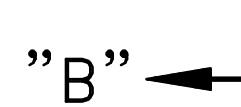
**CULVERT ANCHOR**  
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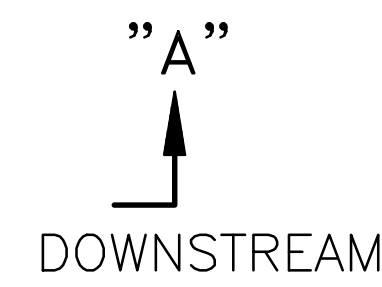
**PIPE INSTALLATION & REMOVAL DETAIL**  
NOT TO SCALE



”B” ←



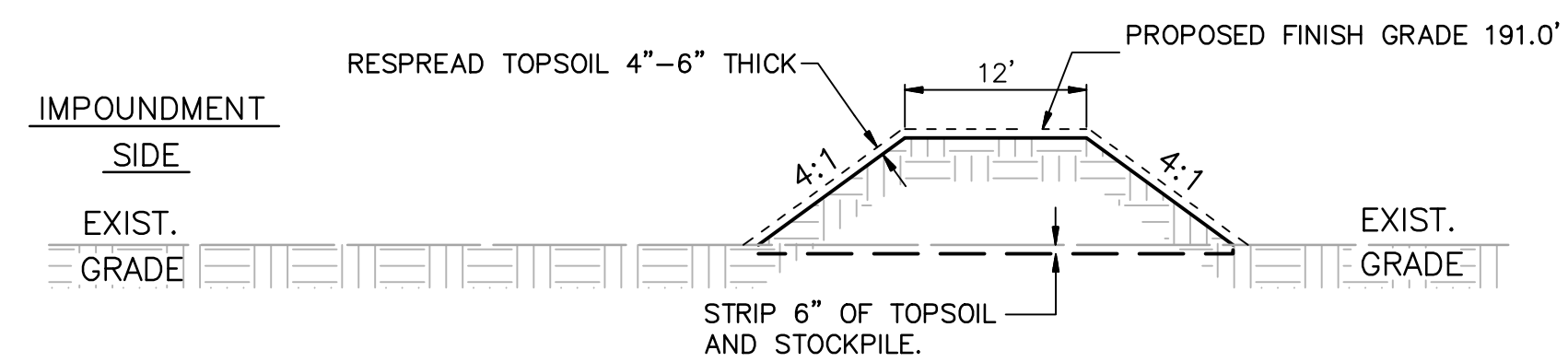
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**STOPLOG DETAIL**  
NOT TO SCALE

\* ALL APPLICATIONS WILL UTILIZE DUAL WALL HANCOR  
BLUE SEAL PIPE OR APPROVED EQUAL FOR ATTACHMENT TO INLINE WATER CONTROL STRUCTURE

NOT TO SCALE



TYPICAL SECTION OF DIKE 3' HIGH AND LESS  
NO SCALE

[illegible]

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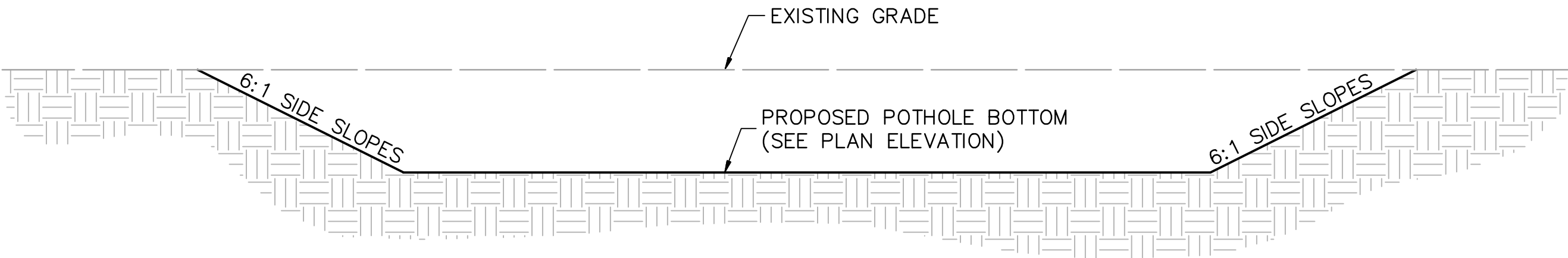
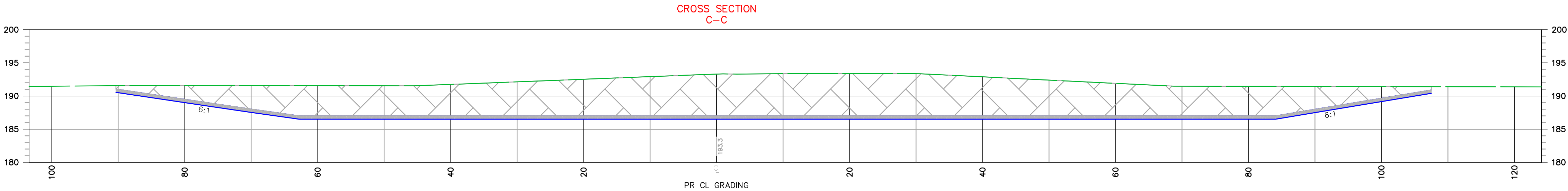
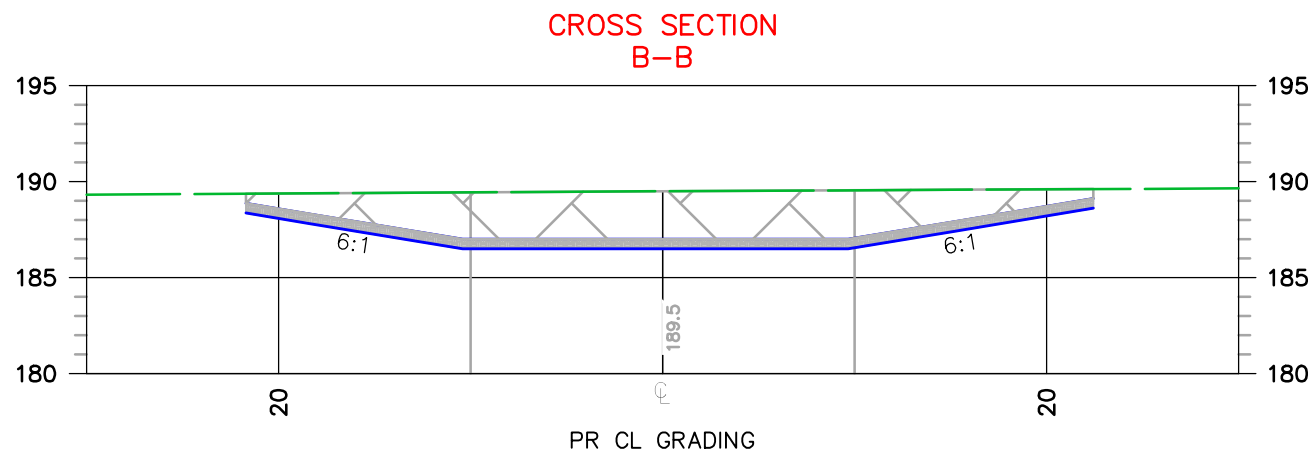
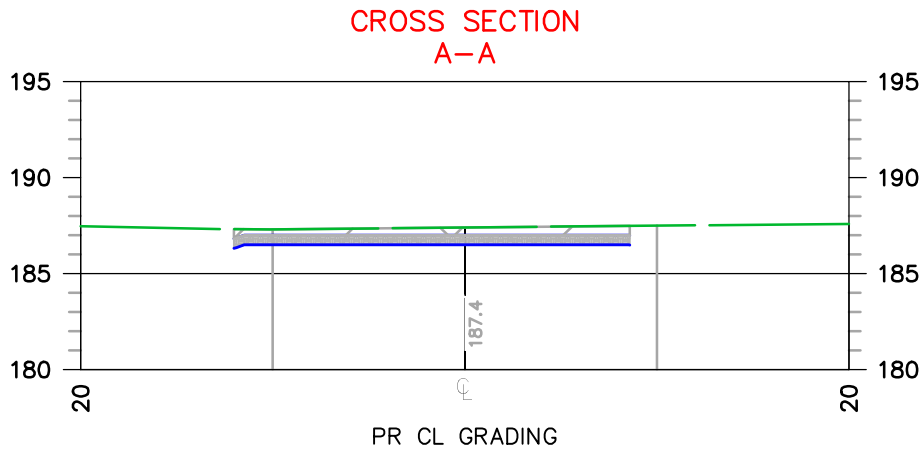
BISMARCK, NORTH DAKOTA

DUCKS UNLIMITED<sup>®</sup>





NOTES:  
TOPSOIL TO BE REMOVED AND REPLACED.  
FINISH GRADE ELEVATION OF 187.0' IS TO THE  
TOP OF REPLACED TOPSOIL.



TYPICAL POT HOLE SECTION  
NO SCALE

LEGEND

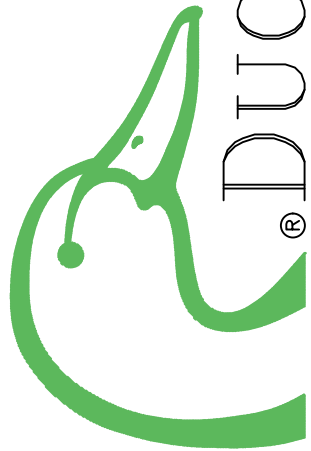
- EXISTING GROUND
- PROPOSED GROUND
- MATERIAL REMOVED
- TOPSOIL REPLACED

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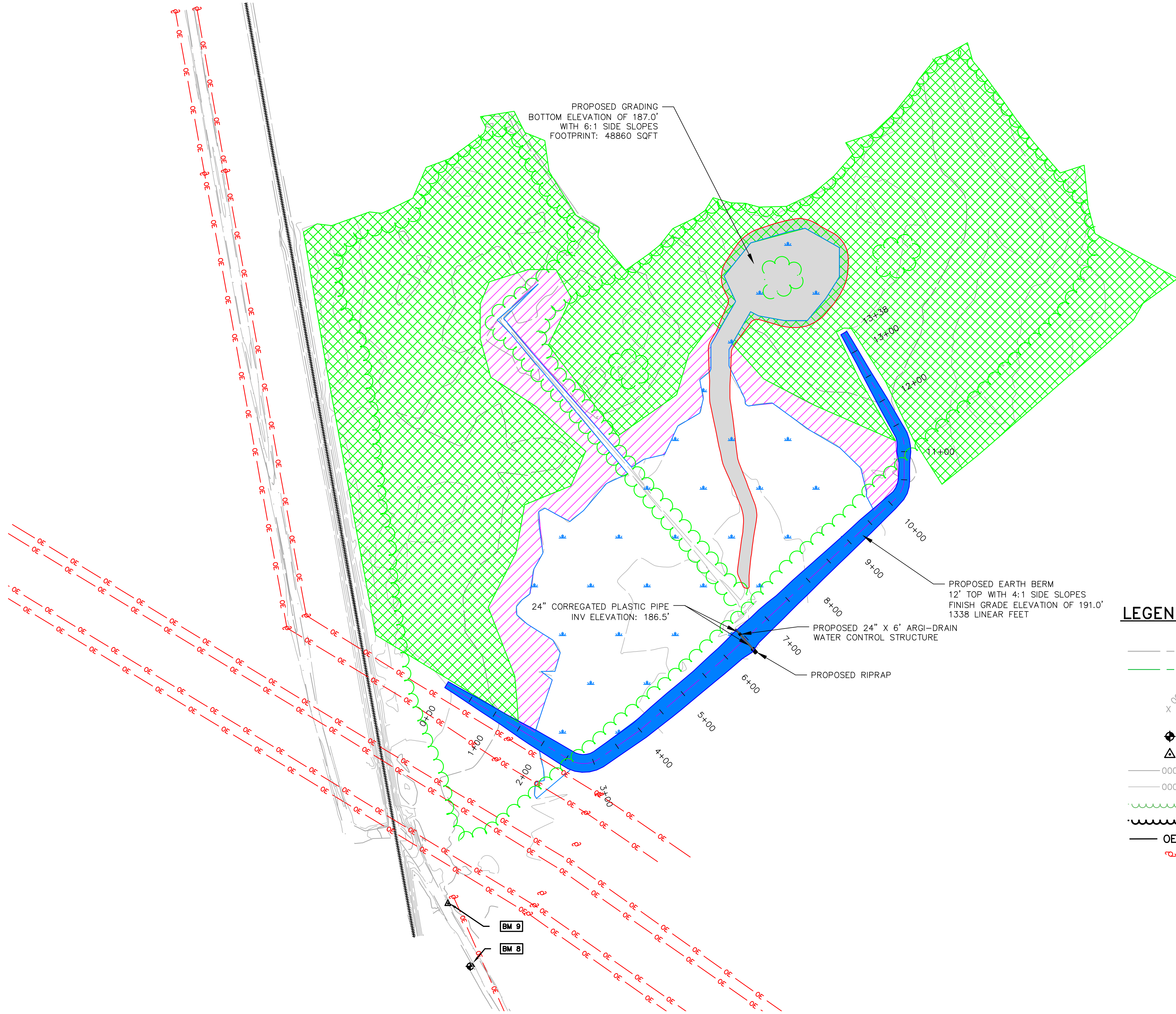


GRADING PLAN CROSS SECTIONS  
MCINTYRE ROAD MITIGATION SITE  
NEW YORK IN-LIEU FEE PROGRAM  
EASTERN ST LAWRENCE RIVER  
SERVICE AREA  
ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	Revisions	Date	By
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CAD FILE: DESIGN_NY-182-1
DESIGNED BY: PW
DRAWN BY: JA
SURVEYED BY: JP
BIOLOGIST: SF
DATE: 02/09/2016
PROJECT NO: US-NY-182-1
GLARO-NY1-024-08





PLANTING PLAN

- PFO: 676345 SQFT (15.5 ACRES)
- PEM: 256155 SQFT (5.9 ACRES)
- PSS: 19510 SQFT (0.45 ACRES)
- GRADING: 48860 SQFT (1.1 ACRES)
- EMBANKMENT: 39000 SQFT (0.9 ACRES)

LEGEND

- EXISTING CHANNEL CL
- EXISTING DITCH CL
- EXISTING SPOT ELEVATION
- HORIZONTAL & VERTICAL CONTROL
- BENCHMARK
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- EDGE OF VEGETATION LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- PROPOSED MINOR CONTOUR
- PROPOSED BERM CL
- PROPOSED DITCH CL
- EDGE OF RIPRAP
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- ROAD OR TRAIL CL
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DUCKS UNLIMITED

PLANTING PLAN

MCINTYRE ROAD MITIGATION SITE

NEW YORK IN-LIEU FEE PROGRAM

EASTERN ST LAWRENCE RIVER

SERVICE AREA

ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	Revisions	Date	By
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CAD FILE:

PLANTING\_NY-182-1

DESIGNED BY: PW

DRAWN BY: JA

SURVEYED BY: JP

BIOLOGIST: SF

DATE:

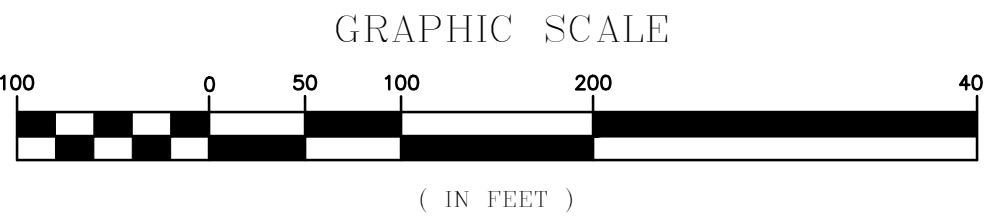
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PROJECT NO:

US-NY-182-1

GLARO-NY1-024-09

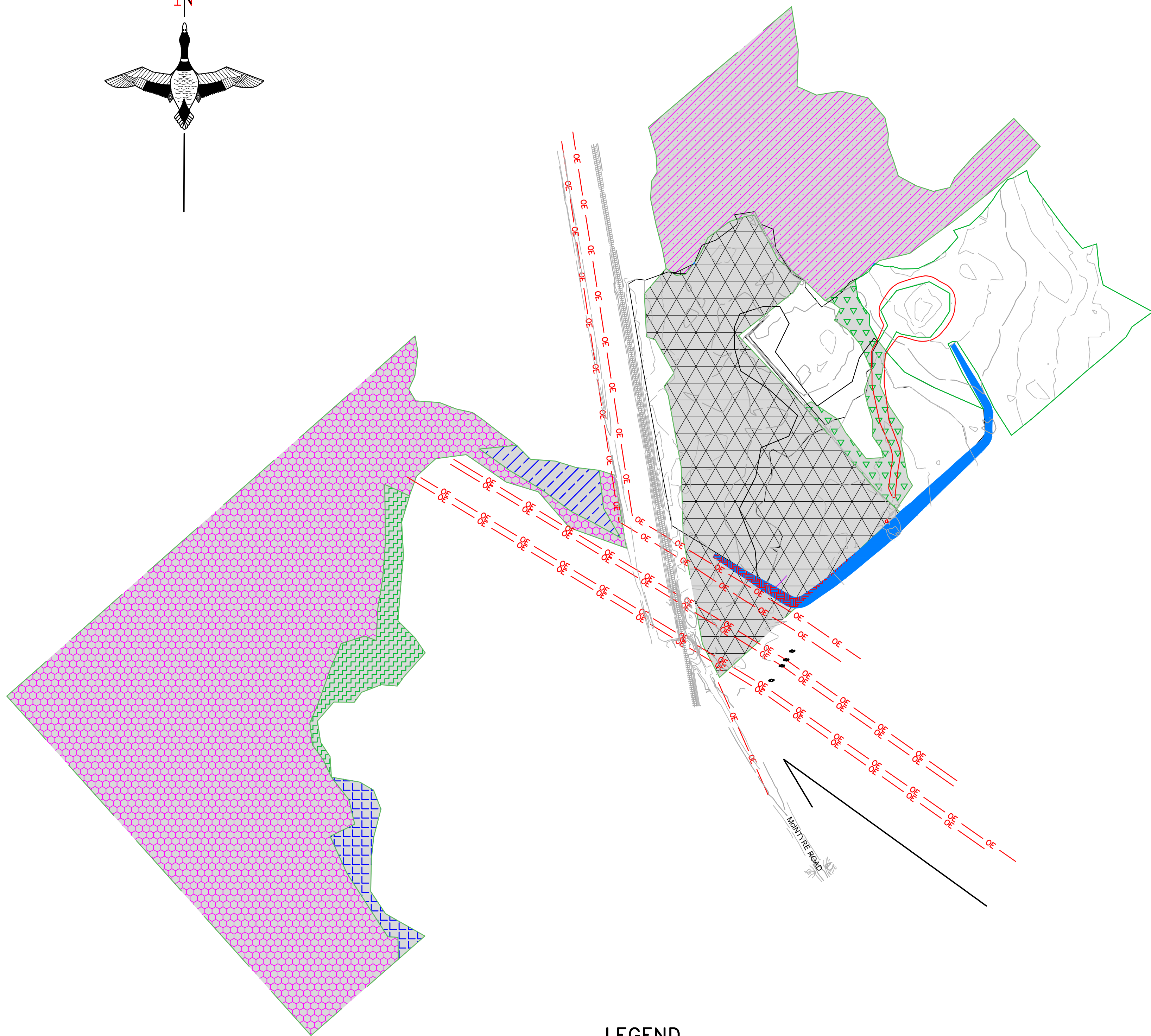
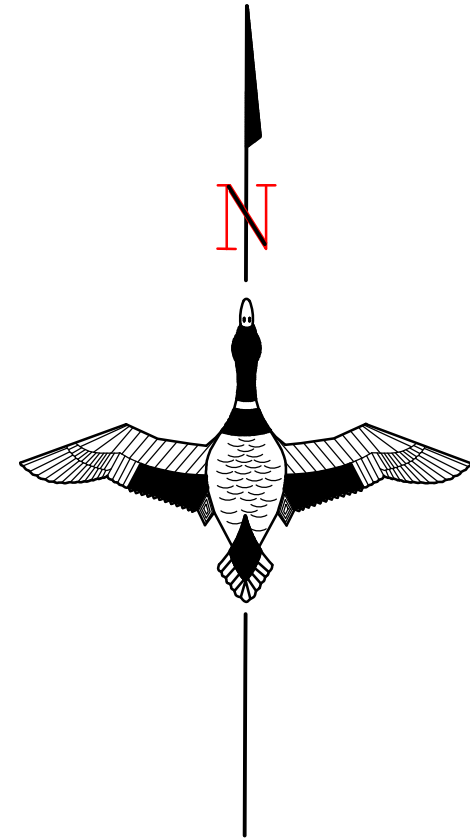
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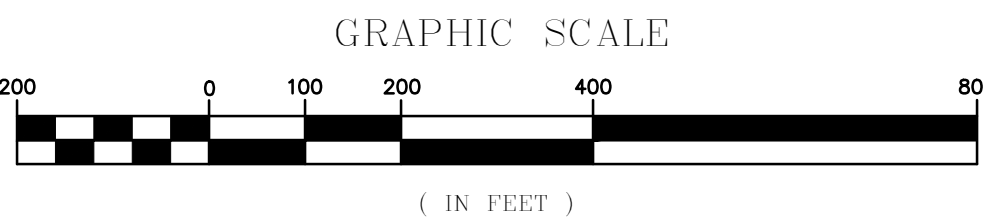




- WETLAND IMPACT AREA: 7670 SQFT
- WETLAND A - PSS AREA: 10.20 ACRES
- WETLAND B - PEM AREA: 1.33 ACRES
- WETLAND C - PSS/PEM AREA: 27.07 ACRES
- WETLAND D - PFO AREA: 0.88 ACRES
- WETLAND E - PFO AREA: 1.63 ACRES
- WETLAND F - PFO AREA: 0.83 ACRES
- MOSAIC A - UPL/PEM AREA: 5.43 ACRES
- BERM FOOTPRINT AREA: 38895 SQFT
- DELINEATED WETLANDS AREA: 47.36 ACRES

LEGEND

- EXISTING CHANNEL
- EXISTING DITCH
- EXISTING SPOT ELEVATION
- HORIZONTAL & VERTICAL CONTROL
- BENCHMARK
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- EDGE OF VEGETATION LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- PROPOSED MINOR CONTOUR
- PROPOSED BERM
- PROPOSED DITCH
- EDGE OF RIPRAP
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- ROAD OR TRAIL
- EXISTING FENCE LINE
- APPROX. BOUNDARY LINE
- APPROX. RIGHT OF WAY LINE
- FOUND PROPERTY CORNER
- SOIL BORING
- WATER CONTROL STRUCTURE
- RAILROAD TRACK



PRELIMINARY

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Global Leader in Wetlands & Wildlife Conservation

GREAT LAKES/ATLANTIC REGIONAL OFFICE

ANN ARBOR, MICHIGAN

BISMARCK, NORTH DAKOTA

(734) 623-2000

(701) 355-3500

WETLAND DELINEATION

McINTYRE ROAD MITIGATION SITE

NEW YORK IN-LIEU FEE PROGRAM

EASTERN ST LAWRENCE RIVER

SERVICE AREA

ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	By	Date
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x
x	x	x	x

CAD FILE:

WETLAND DEL\_NY-182-1

DESIGNED BY: PW

DRAWN BY: JA

SURVEYED BY: JP

BIOLOGIST: SF

DATE:

02/09/2016

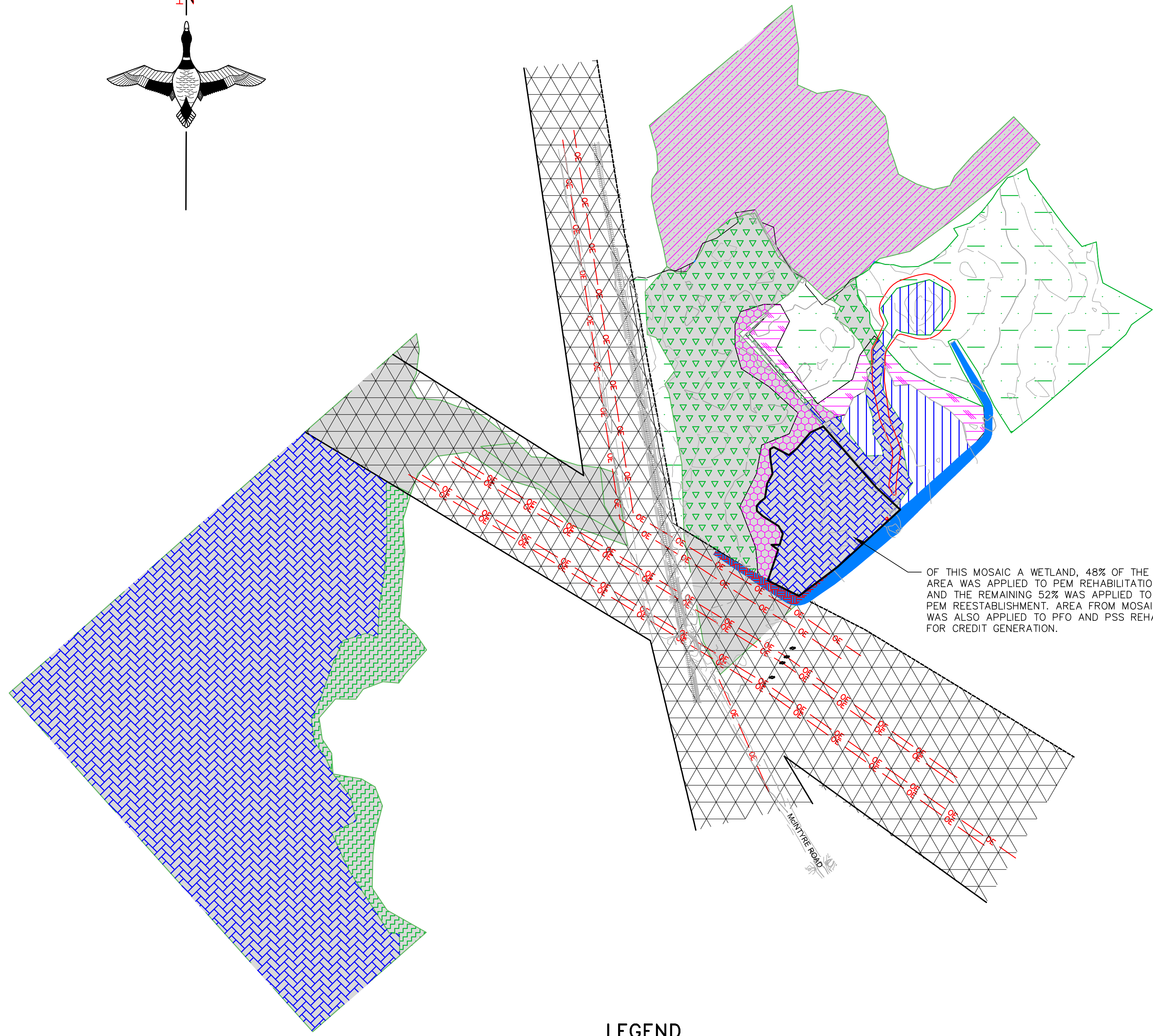
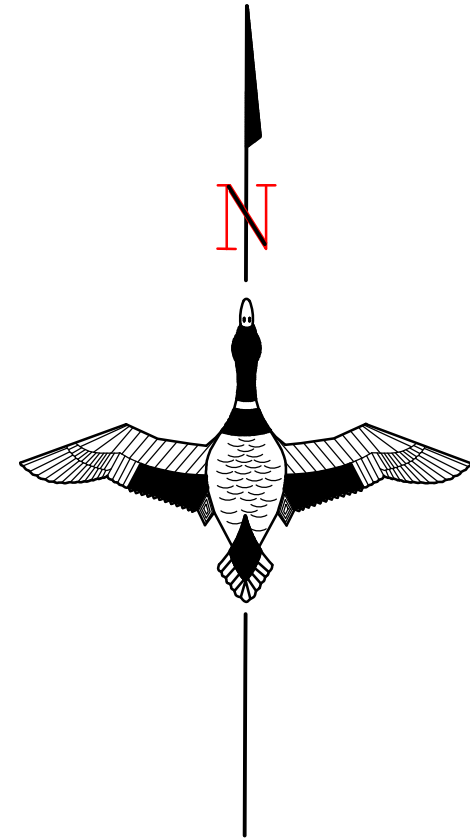
PROJECT NO:

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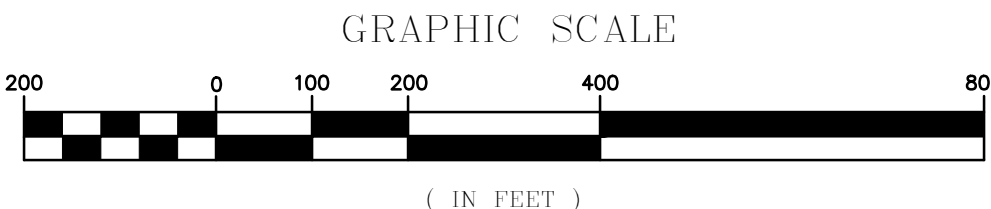
OF THIS MOSAIC A WETLAND, 48% OF THE AREA WAS APPLIED TO PEM REHABILITATION AND THE REMAINING 52% WAS APPLIED TO PEM REESTABLISHMENT. AREA FROM MOSAIC A WAS ALSO APPLIED TO PFO AND PSS REHABILITATION FOR CREDIT GENERATION.

- WETLAND IMPACT  
AREA: 7670 SQFT
- PEM REESTABLISHMENT  
AREA: 150840 SQFT (3.46 ACRES)
- PEM REHABILITATION  
AREA: 1137860 SQFT (26.12 ACRES)
- PEM PRESERVATION  
AREA: 0 SQFT
- PSS REESTABLISHMENT  
AREA: 46635 SQFT (1.07 ACRES)
- PSS REHABILITATION  
AREA: 50355 SQFT (1.16 ACRES)
- PSS PRESERVATION  
AREA: 444600 SQFT (10.21 ACRES)
- PFO REESTABLISHMENT  
AREA: 395445 SQFT (9.08 ACRES)
- PFO REHABILITATION  
AREA: 266655 SQFT (6.12 ACRES)
- PFO PRESERVATION  
AREA: 109300 SQFT (2.51 ACRES)
- EXCLUSION (SEE NOTE)
- BERM FOOTPRINT  
AREA: 38895 SQFT
- DELINEATED WETLANDS  
AREA: 47.36 ACRES

**NOTES:**  
THE EXCLUSION AREA IS THAT IS PART OF THE EXISTING UTILITY AND OR RIGHT OF WAY EASEMENT AND OR OWNED BY EITHER THE RAILROAD OR UTILITY COMPANY. IT HAS BEEN EXCLUDED FROM THE AREAS USED FOR CREDIT GENERATION AND OR THE MITIGATION SITE.

### LEGEND

- EXISTING CHANNEL
- EXISTING DITCH
- EXISTING SPOT ELEVATION
- HORIZONTAL & VERTICAL CONTROL
- BENCHMARK
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREE LINE
- EDGE OF VEGETATION LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- PROPOSED MINOR CONTOUR
- PROPOSED BERM
- PROPOSED DITCH
- EDGE OF RIPRAP
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- ROAD OR TRAIL
- EXISTING FENCE LINE
- APPROX. BOUNDARY LINE
- APPROX. RIGHT OF WAY LINE
- FOUND PROPERTY CORNER
- SOIL BORING
- WATER CONTROL STRUCTURE
- RAILROAD TRACK



# PRELIMINARY

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GREAT LAKES/ATLANTIC REGIONAL OFFICE

ANN ARBOR, MICHIGAN (734) 623-2000

BISMARCK, NORTH DAKOTA (701) 355-3500

CREDIT GENERATION

McINTYRE ROAD MITIGATION SITE

NEW YORK IN-LIEU FEE PROGRAM

EASTERN ST LAWRENCE RIVER

SERVICE AREA

ST. LAWRENCE COUNTY, NEW YORK

Revision No.	Sheet No.	Revisions	Date	By
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x
x	x		x	x

CAD FILE:

CREDIT GEN\_NY-182-1

DESIGNED BY: PW

DRAWN BY: JA

SURVEYED BY: JP

BIOLOGIST: SF

DATE:

02/09/2016

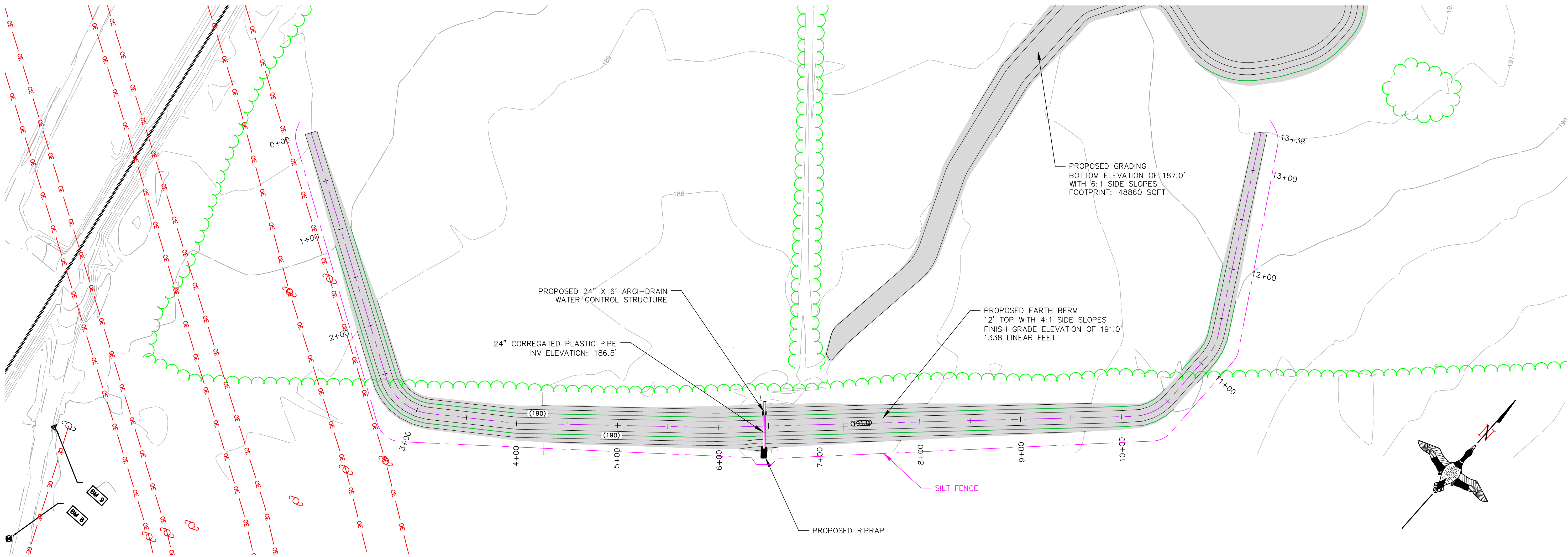
PROJECT NO:

US-NY-182-1

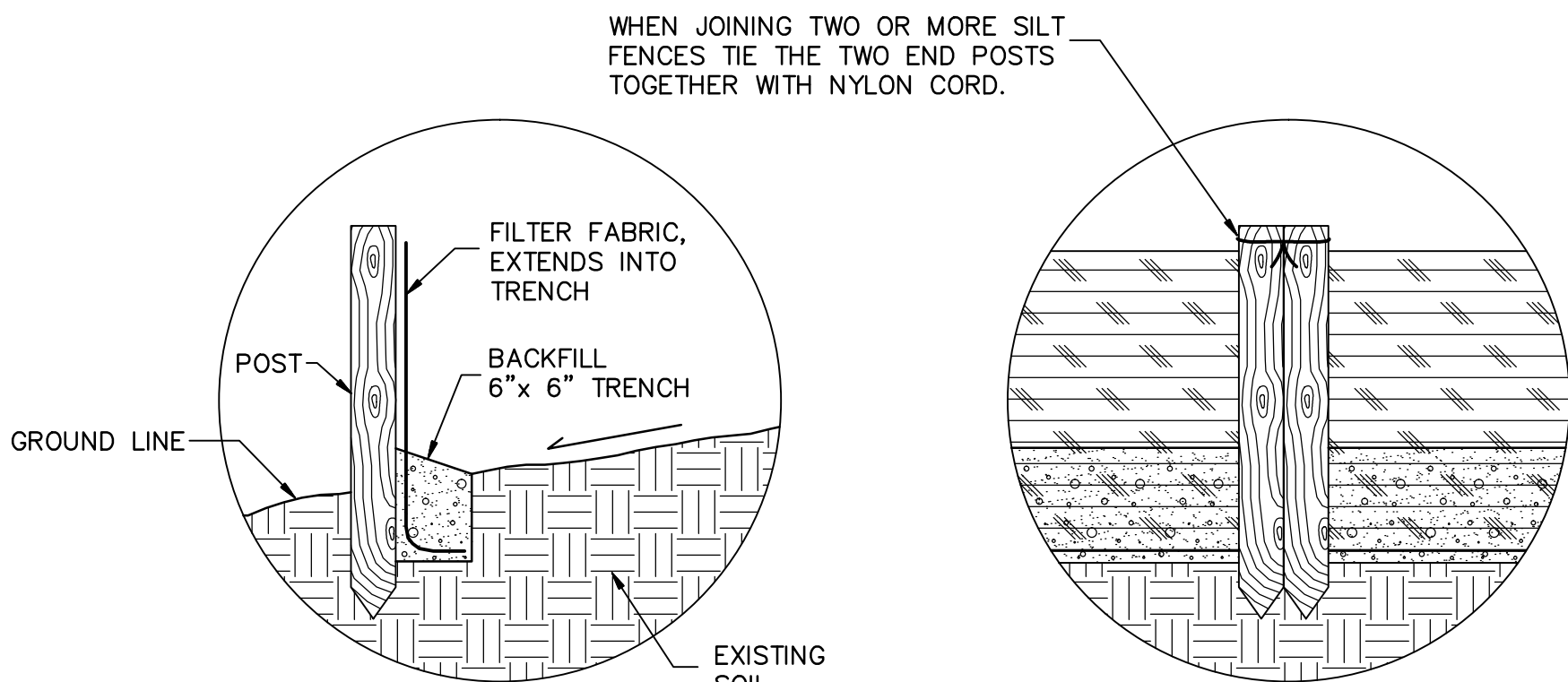
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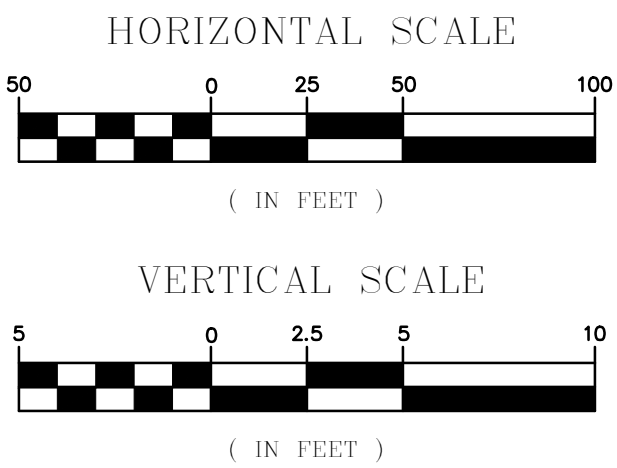
EROSION CONTROL NOTES:  
PLACEMENT AND INSTALLATION TECHNIQUES TO BE APPROVED BY THE DUCKS UNLIMITED ENGINEER PRIOR TO INSTALLATION.  
SEDIMENT CONTROL FENCE TO BE AT LEAST 1.5' ABOVE EXISTING GRADE UNLESS OTHERWISE SPECIFIED BY THE DUCKS UNLIMITED ENGINEER.



GEOTEXTILE SILT FENCE DETAIL  
NO SCALE

LEGEND

- |  |                               |  |                           |  |                            |
|--|-------------------------------|--|---------------------------|--|----------------------------|
|  | EXISTING GROUND PROFILE       |  | EXISTING TREE LINE        |  | EXISTING OVERHEAD ELECTRIC |
|  | PROPOSED GROUND PROFILE       |  | EDGE OF VEGETATION LINE   |  | EXISTING UTILITY POLE      |
|  | EXISTING BERM                 |  | EDGE OF CULTIVATION       |  | EXISTING GUY WIRE          |
|  | EXISTING SPOT ELEVATION       |  | APPROXIMATE WATERLINE     |  | EXISTING LIGHT POLE        |
|  | HORIZONTAL & VERTICAL CONTROL |  | EDGE OF RIPRAP            |  | EXISTING TELEPHONE PED     |
|  | BENCHMARK                     |  | EDGE OF PAVEMENT          |  | SOIL BORING                |
|  | EXISTING MAJOR CONTOUR        |  | EDGE OF GRAVEL            |  | WATER CONTROL STRUCTURE    |
|  | PROPOSED MAJOR CONTOUR        |  | ROAD OR TRAIL             |  | EXISTING SINGLE SIGN       |
|  | PROPOSED BERM                 |  | EXISTING FENCE LINE       |  | EXISTING CATCH BASIN       |
|  | PROPOSED DITCH                |  | APPROX. BOUNDARY LINE     |  | EXISTING MANHOLE           |
|  |                               |  | APPROX. RIGHT OF WAY LINE |  | EXISTING WELL              |
|  |                               |  | FOUND PROPERTY CORNER     |  | EXISTING HYDRANT           |



PRELIMINARY

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BISMARCK, NORTH DAKOTA

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EROSION CONTROL PLAN  
McINTYRE ROAD MITIGATION SITE  
NEW YORK IN-LIEU FEE PROGRAM  
EASTERN ST LAWRENCE RIVER  
SERVICE AREA  
ST. LAWRENCE COUNTY, NEW YORK

Revision No.	By	Date	Revisions	Sheet No.
1	x	x		x
2	x	x		x
3	x	x		x
4	x	x		x
5	x	x		x
6	x	x		x
7	x	x		x
8	x	x		x
9	x	x		x
10	x	x		x
11	x	x		x
12	x	x		x
13	x	x		x
14	x	x		x
15	x	x		x
16	x	x		x
17	x	x		x
18	x	x		x
19	x	x		x
20	x	x		x

CAD FILE:  
DESIGN\_NY-182-1

DESIGNED BY: PW

DRAWN BY: JA

SURVEYED BY: JP

BIOLOGIST: SF

DATE:  
02/09/2016

PROJECT NO:  
US-NY-182-1

GLARO-NY1-024-13

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## **APPENDIX G**

### **Mitigation Site Protection Instruments**

**RECORD AND RETURN TO:**

WETLANDS AMERICA TRUST, INC.  
ONE WATERFOWL WAY  
MEMPHIS, TENNESSEE 38120

**NOTICE OF MITIGATION REQUIREMENTS**

- 1.01 In-Lieu Fee Program. **DUCKS UNLIMITED, INC.**, a non-profit corporation organized under the laws of the District of Columbia, with an address of One Waterfowl Way, Memphis, Tennessee 38120, operates a New York In-Lieu Fee Program (“**Program**”) to provide a third-party, compensatory mitigation option for unavoidable impacts to waters of the United States (including both wetlands, streams and other aquatic resources). The Program was approved on September 28, 2012 by the Army Corps of Engineers under authority established by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (Buffalo District Permit No. 2010-00673).
- 1.02 Fee-Title Ownership. On [ENTER RECORDED DATE OF ACQUISITION], **WETLANDS AMERICA TRUST, INC.**, a supporting organization of Ducks Unlimited, Inc. and a non-profit corporation organized under the laws of the District of Columbia, with an address of One Waterfowl Way, Memphis, Tennessee 38120 (“**Land Trust**”), became the owner in fee simple of approximately \_\_\_\_ acres, more or less, of real property (“**Property**”) located in [insert county name] County, New York, and more particularly described in **Exhibit A**.
- 1.03 Restoration Project. Ducks Unlimited, Inc. has developed and implemented a wetland restoration plan (“**Project**”) to restore and protect [xx] acres, more or less, of wetland and associated upland habitat located on the Property to provide wetland mitigation credits under the Program.
- 1.04 Long-Term Protection. In accordance with requirements of the Program, Ducks Unlimited, Inc. shall establish long-term protection of the Project through the transfer of title to, or through real-estate instruments such as conservation easements held by, entities such as non-profit conservation organizations or federal, tribal, state, or local resource agencies.
- 1.05 Notice Requirements. The Land Trust agrees to notify the **BUFFALO DISTRICT ENGINEER OF THE U.S. ARMY CORPS OF ENGINEERS**, with an address of 1776 Niagara Street, Buffalo,

New York 14207 (“**District Engineer**”), at least sixty (60) days in advance of transferring ownership of the Property. The Land Trust, and its successors and assigns, hereby agrees to be bound by requirements of the Program to ensure the long-term protection of the Project as described in Section 1.04. In the event title to the Property is transferred to an entity other than those described in Section 1.04, the Land Trust hereby agrees that its transfer of ownership shall be contingent upon recording at or prior to the transfer of ownership of the Property a conservation easement or other protection instrument that is approved by the District Engineer to ensure long-term protection of the Project.

1.06 Termination. The requirements of this Notice shall be satisfied at the time of transfer of title from the Land Trust to another entity as the requirements in Section 1.05 are met. This Notice shall automatically expire upon such transfer.

In witness whereof the Wetlands America Trust, Inc. has set its hand and seal this \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
By: Earl H. Grochau  
Its: Assistant Secretary  
DULY AUTHORIZED

STATE OF TENNESSEE  
COUNTY OF SHELBY

On this \_\_\_\_\_ day of \_\_\_\_\_, 2016, before me personally appeared Earl H. Grochau, to me personally known, who, being by me duly sworn did state that he is the Assistant Secretary of the corporation named in the foregoing instrument; and acknowledged said instrument to be the free act and deed of said corporation.

\_\_\_\_\_  
Notary Public  
My commission expires:

**EXHIBIT A**  
**LEGAL DESCRIPTION**

## Model Conservation Easement

*Note: The numbers underlined in the text of the easement correspond with the subheading numbers in the commentary that follows.*

### DEED OF CONSERVATION EASEMENT 1

THIS GRANT DEED OF CONSERVATION EASEMENT is made this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ and \_\_\_\_\_, corporation, having an address at \_\_\_\_\_ (“Grantors”) in favor of \_\_\_\_\_ a nonprofit \_\_\_\_\_ [state of corporation] \_\_\_\_\_ corporation/agency organized under \_\_\_\_\_ qualified to do business in \_\_\_\_\_ [state where property is located], having an address at \_\_\_\_\_ (“Grantee”). 2

#### WITNESSETH:

WHEREAS, 3 Grantors are the sole owners in fee simple of certain property in \_\_\_\_\_ County, \_\_\_\_\_ [State] \_\_\_\_\_, more particularly described in Exhibit A attached hereto and incorporated by this reference (the “Property”); 4 and

WHEREAS, the property possesses [wetland, streams, other water resources, buffer areas, wildlife habitats, endangered species, watershed protection values, wild/scenic rivers, endangered species critical habitat areas, critical resource areas, etc.] values (collectively, “conservation values” of great importance to the Grantors, the people of [locale or region] and the people of the State of \_\_\_\_\_; 5 and

WHEREAS, in particular, \_\_\_\_\_ [describe specific conservation values] \_\_\_\_\_; 6 and

WHEREAS, the specific conservation values of the Property are documented in the inventory of relevant features of the Property, dated \_\_\_\_\_, 20\_\_, [on file at the offices of ...] and incorporated by this reference (“Baseline Documentation”), which consists of maps, reports, photographs and other documentation that the parties agree provide, collectively, an accurate representation of the Property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant; and 7

WHEREAS, Grantors intend that the conservation values of the Property be preserved and maintained by the established land use patterns, including, without limitation, those relating to [public access, parks, etc.] proposed/existing at the time of this grant and further described in Exhibit C, that do not significantly impair or interfere with those values; and 8

WHEREAS, Grantors intend to protect the Property in perpetuity as part of a mitigation requirement for Department of the Army permit number \_\_\_\_\_ affirmed



for/issued to Grantor requiring the protection of valuable public water resources. The permit was issued/affirmed in accordance with the provisions of the Water Pollution Control Act of 1972, 33 USC Sections 1251-1387; Section 1344 Wetlands permitting, aka Section 404 of the Clean Water Act. The Corps of Engineers has endorsed the area as containing wetlands pursuant to a wetland delineation performed as prescribed in the 1987 Corps of Engineers Wetland Delineation Manual; and

WHEREAS, Grantors further intend, as the owners of the property, to convey the Grantee the right to preserve and protect the conservation values of the Property in perpetuity; and

WHEREAS, Grantor agrees, in accordance with ECL Section 49-0305.5, that rights of enforcement of the terms of this Conservation Easement shall be held by the Grantee, and that third-party rights of enforcement shall also be held by the Corps of Engineers or other appropriate enforcement agencies of the United States and that these rights are in addition to, and do not limit, the rights of enforcement under the Permit; 9

WHEREAS, Grantee is a            [publicly supported, tax exempt nonprofit organization/] qualified under            [Section 501(c)(3) and 170(h) of the Internal Revenue Service Code or Chapter 15XX of the New York Revised Code ], and a New York public body or not-for-profit conservation organization qualified to hold a Conservation Easement in accordance with ECL Section 49-0305 whose primary purpose is            [the preservation, protection of land in its natural, scenic, historical, forested, etc. condition]           ; 10;

WHEREAS, Grantee agrees by accepting this grant to honor the intentions of the Grantors stated herein and to preserve and protect in perpetuity the conservation values of the Property for the benefit of this generation and the generations to come; 11

NOW, THEREFORE, in consideration of the above and mutual covenants, terms, conditions and restrictions contained herein, and pursuant to the laws of            [state where property is located] and in particular            [specific state statutory authority]           , Grantor hereby creates, gives, grants, bargains and conveys to the Grantee a perpetual easement in, to, over and across, the Protected Property for the purposes of preservation, protection, maintenance and conservation of the Protected Property and the aquatic resources thereon. Grantor shall ensure compliance with the following Restrictions on the Protected Property, which shall run with the Protected Property in perpetuity, and be binding on the Grantor, the Grantee, and their respective successors, assigns, lessees, and other occupiers and users. These Restrictions are subject to Grantor's Reserved Rights, which follow. 12

1. Purpose. It is the purpose of this easement to assure that the Property will be retained forever in its [e.g. natural, wetland, scenic, historic, forested, etc.] conditions and to prevent any use of the Property that will impair or interfere with the conservation values of the Property. Grantors intend that this Easement will confine the use of the

Property to such activities, including, without limitation, those involving [e.g. hiking, wildlife observation, etc.], as are consistent with the purpose of this Easement. 13

2. Rights of the Grantee. To accomplish the purpose of this Easement the following rights are conveyed to the Grantee and the Corps of Engineers by this Easement:

- (a) To preserve and protect the conservation values of the Property;
- (b) To enter upon the Property at reasonable times in order to monitor Grantors' compliance with and otherwise enforce the terms of this Easement; provided that such entry shall be upon prior reasonable notice to the Grantors, and Grantee shall not unreasonably interfere with the Grantors' use and quiet enjoyment of the Property; and
- (c) To prevent any activity on or use of the Property that is inconsistent with the purpose of this Easement and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use, pursuant to paragraph 6. 14

3. Prohibited Uses. Any activity on or use of the Property inconsistent with the purpose of this Easement is prohibited. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited: 15

- A. Clearing, cutting or mowing;
- B. Earthmoving, grading, removal of topsoil, cultivation, burning, filling or material changes in the topography of the land in any manner, unless associated with a permitted reserved right;
- C. Placement of refuse, wastes, sewage, dredged spoil, solid waste, incinerator residue, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, or agricultural waste on the Property;
- D. Draining, ditching, diking, dredging, channelizing, pumping, impounding, excavating;
- E. Diverting or affecting the natural flow of surface or underground waters within, or out of the Property; manipulating or altering any natural water course, body of water or water circulation and any activities or uses detrimental to water quality;
- F. All methods of surface and subsurface exploration and extraction of

oil, gas, minerals, sand, gravel, soil, and any other materials for commercial and non-commercial use on or off of the Protected Property. This includes, mining and drilling activities.

- G. Burning, systematically removing or cutting timber or otherwise materially destroying any vegetation. Upon approval from the Grantee selective pruning, unsafe trees or exotic non-native vegetation may be removed in accordance with current scientific best management practices as set out by the U.S. Forest Service or the New York Forestry Commission;
- H. Spraying with biocides or use of herbicides only in those amounts and with that frequency of application as approved by the laws and regulations of the United States and the State of New York and as constituting the minimum necessary to accomplish reasonable activities permitted by the terms of this Easement.;
- I. Introducing exotic species on the Property, altering the natural state of the wetlands or streams or causing erosion or sedimentation;
- J. Grazing or use by domesticated animals such that animal wastes enter soil and water;
- K. Releasing, generating, treating, disposing, or abandoning any substance defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation or requirement as hazardous, toxic, polluting or otherwise contaminating to the air, water, soil, or in any way harmful or threatening to human health or the environment on the Protected Property.
- L. Construction of any kind in the wetlands, streams, buffers or upland, whether temporary or permanent.
- M. Any other use of, or activity on, the Restricted Property which is or may become inconsistent with the purposes of this Declaration, the preservation of the Restricted Property substantially in its natural condition, or the protection of its environmental systems, is prohibited.
- N. As permitted or approved in writing by USACE the property may have: (1) a narrow pedestrian walking trail in the uplands or upland buffer using pervious materials, (2) minimal structures and boardwalks for the observation of wildlife and wetland/stream ecology, (3) crops for wildlife or placement of temporary hunting stands in uplands.
- O. Display of billboards, signs, or advertisements on or over the Property, except for the posting of no trespassing signs, temporary signs indicating

the property is for sale, signs identifying the trees, vegetation, wetlands or conservation values of the property and/or signs identifying the owner of the property.

- P. Conservation and wildlife habitat management plans may be implemented by the New York Department of Environmental Conservation, US Forest Service, conservation land trusts holding conservation easements, or other conservation management entities where the habitat, wildlife or forest management does not result in any impacts to the wetlands/streams/riparian corridors and its buffers, or to property protected for its historical, cultural and/or archeological value, and where the proposal would enhance the management of the property for its conservation use.

16

Reserved Rights. Grantors reserve to themselves, and their personal representatives, heirs, successors, and assigns, all rights accruing from their ownership of the property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Easement. Nothing herein shall be deemed to modify or amend any other or additional agreements between or among the Grantor, the Grantee and the Corps of Engineers. In the event any of the Grantor's acts or uses, whether on the Protected Property or on the Permitted Property, are subject to review under the New York State Environmental Quality Review Act (SEQRA), the Grantee shall be designated as an interested party and notified of the review process. [Without limiting the generality of the foregoing, the following rights are expressly reserved:] 17

[Insert Express Reservation, if desired] 18

4. Notice of Intention to Undertake Certain Permitted Actions. The purpose of requiring the Grantors to notify Grantee prior to undertaking certain permitted activities, as provided in paragraphs \_\_\_\_\_ [e.g. maintenance of constructed wetlands or streams]\_\_\_\_, is to afford Grantee an opportunity to ensure that activities in question are designed and carried out in a manner consistent with the purpose of this Easement. Whenever notice is required Grantors shall notify Grantee in writing not less than \_\_\_\_\_ days prior to the date Grantors intend to undertake the activity in question. The notice shall describe the nature, scope design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to the consistency with the purpose of this Easement.

4.1 Grantee's Approval. Where Grantee's approval is required, as set forth in paragraphs \_\_\_\_\_, Grantee shall grant or withhold its approval in writing within \_\_\_\_\_ days of receipt of the Grantors' written request therefore. Grantee's approval may be withheld only upon a reasonable determination by the Grantee that the proposed action would be inconsistent with the purpose of this Easement. 19



5.

6. Grantee's Remedies. If Grantee or the Corps of Engineers determines that the Grantors are in violation of the terms of this Easement or that a violation is threatened, Grantee shall give notice to Grantors of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If the Grantors fail to cure the violation within \_\_\_\_\_ days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot be reasonably within a \_\_\_\_\_ day period, fail to begin curing such violation within the \_\_\_\_\_ day period until finally cured, Grantee may bring an action at law or in equity in court of competent jurisdiction to enforce the terms of this Easement, to enjoin the violation, *ex parte* as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement, including damages for loss of scenic, aesthetic, or environmental values, and to require the restoration of the Property to the condition that existed prior to any such injury. Without limiting the Grantors' liability therefore, Grantee in its sole discretion, may apply any damages recovered to the cost of undertaking any corrective action. If Grantee, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to conserve the conservation values of the Property, Grantee may pursue its remedies under this paragraph without prior notice to the Grantors or without waiting for the period provided for the cure to expire. Grantee's rights under this paragraph apply equally in the event of either actual or threatened violations of the terms of this Easement, and Grantors agree that Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which the Grantee may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described in this paragraph shall be cumulative and shall be in addition to all remedies now and hereafter existing at law or in equity. 20

6.1 Costs of Enforcement. Any costs incurred by the Grantee in enforcing the terms of this Easement against Grantors, including, without limitation, costs of suit and attorneys' fees, and any costs or restoration necessitated by Grantors' violation of the terms of this Easement including Corps of Engineers costs shall be borne by Grantors.

6.2 Grantee's Discretion. Enforcement of the terms of this Easement shall be at the discretion of the Grantee or the Corps of Engineers, and any forbearance by Grantee to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantors or the Corps of Engineers shall not be deemed or construed to be a waiver of such term of any subsequent breach of the same or any other term of this Easement or of any of rights of Grantee to the Corps of Engineers under this Easement. No delay or omission by Grantee or the Corps of Engineers in the exercise of any right or remedy upon any breach by Grantors shall impair such right or remedy or be

construed as a waiver. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel or waiver.

7. Waiver of Certain Defenses. Grantors hereby waive any defense of laches, estoppel, or prescription. 22

8. Acts Beyond the Grantors' Control. Nothing Contained in this Easement shall be construed to entitle Grantee to bring any such action against Grantors for any injury to or change in the Property resulting from the causes beyond Grantors' control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by Grantors under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes. 23

9. Access. No right of access by the general public [other than those.....] to any portion of the Property is conveyed by this Easement. 24

10. Costs and Liabilities. Grantors retain all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including the maintenance of adequate comprehensive general liability insurance coverage. Grantors shall keep Property free from any liens arising out of any work performed for, materials furnished to, or obligations incurred by the Grantors. Any liens, mortgages or other encumbrances affecting the Protected Property shall be subject to the terms of this Conservation Easement. The Grantee or the Corps of Engineers shall not be responsible for any costs or liability of any kind related to the ownership, operation, insurance, upkeep, or maintenance of the Protected Property, except as expressly provided herein. Nothing herein shall relieve the Grantor of the obligation to comply with federal, state or local laws, regulations and permits that may apply to the exercise of ownership or rights under this Conservation Easement, by Grantor. 25

11. Taxes. Grantors shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "taxes"), including any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request. Grantee is authorized but in no event obligated to make or advance any payment of taxes upon \_\_\_\_ days prior written notice to Grantors, in accordance with any bill, statement, or estimated procures from appropriate authority, without inquiry into the validity of the taxes or the accuracy of the bill, statement or estimate, and the obligation created by such payment shall bear interest until paid by Grantors at the lesser of \_\_\_\_ percentage points over the prime rate of interest from time to time charged by \_\_\_\_\_ bank or the maximum rate allowed by law. 26

12. Hold Harmless. Grantors shall hold harmless, indemnify, and defend Grantee and its members, directors, officers, employees, agents, and contractors and the heirs, [personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from and against all liabilities, penalties, costs, losses, damages,

expenses, causes of action, claims, demands, or judgments, including, without limitation, reasonable attorneys' fees, arising from, or in any way connected with: (1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, unless due solely to the negligence of any of the Indemnified Parties; (2) the obligations specified in paragraphs 2 and 5; and (3) the existence or the administration of this Easement. 27

13. Extinguishment. If circumstances arise in the future such as render the purpose of this Easement impossible to accomplish, this Easement can only be terminated or extinguished, whether in whole or in part, by judicial proceeding under authority of ECL Section 49-0307 in a court of competent jurisdiction, and the amount of the proceeds to which Grantee shall be entitled, after the satisfaction of prior claims, from any sale, exchange, or involuntary conversion of all or any portion of the Property subsequent to such termination or extinguishment, shall be determined, unless otherwise provided by [state] law at the time, in accordance with paragraph 13.1. Grantee shall notify the Buffalo District Corps of Engineers of any such court-approved decision within 30 days of that decision. The Grantee shall propose, in writing to the Buffalo District Corps of Engineers and shall use all proceeds in a manner consistent with the conservation purposes of its mission. 28

13.1 Proceeds. The Easement constitutes a real property interest immediately vested in Grantee, which, for purposes of paragraph 13, the parties stipulate to have a fair market value determined by multiplying the fair market value of the Property unencumbered by the Easement (minus any increase in value after the date of this grant attributable to improvements) by the ratio of the value of the Easement at the time of this grant to be the value of the Property, without deduction for the value of the Easement, at the time of this grant. For the purposes of this paragraph, the ratio of the value of the Easement to the value of the Property unencumbered by the Easement shall remain constant. 29

13.2 Condemnation. If the Easement is taken, in whole by the exercise of the power of eminent domain, Grantee shall be entitled to compensation in accordance with applicable law. Grantee shall apply proceeds of the action of eminent domain to the purchase of additional property that meets the purpose of this Easement. Grantee shall notify and coordinate such actions with the Buffalo District Corps of Engineers within 30 days of the condemnation. Once the Buffalo District Corps of Engineers has approved the purchase of suitable easements, Grantee shall complete the new grant within \_\_\_\_ days of receipt of the approval. 30

14. Assignment. This Easement is Transferable, but Grantee may assign its rights and obligations under this Easement only but only to a Grantee qualified under ECL Section 49-0305.3 that is approved by Buffalo District Corps of Engineers for this grant. As a condition of such transfer, Grantee shall require that the conservation purposes that this grant is intended to advance continue to be carried out. Assignments

shall be accomplished by amendment of this Conservation Easement in accordance with paragraph 20. 31

15. Subsequent Transfers. Grantors agree to incorporate the terms of this Easement in any deed or other legal instrument by which they divest themselves of any interest in all or a portion of the Property, including without limitation, a leasehold interest. Grantors further agree to give written notice to Grantee of the transfer of any interest at least \_\_\_\_\_ days prior to the date of such transfer. The failure of Grantors to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way. 32

16. Estoppel Certificates. Upon request by Grantors, Grantee shall within \_\_\_\_\_ days execute and deliver to grantors any document, including an estoppel certificate, which certifies the Grantors' compliance with any obligation of Grantors contained in this Easement and otherwise evidences the status of this Easement as requested by Grantors. 33

17. Failure of Grantee. If at any time the Grantee is unable or fails to enforce this Conservation Easement, or if the Grantee ceases to be a Grantee qualified under ECL Section 49-0305, and if within a reasonable period of time after the occurrence of one of these events the Grantee fails to make an assignment pursuant to paragraph 13, then the Grantee's interest shall become vested in another grantee qualified in accordance with an appropriate (*e.g., cy pres*) proceeding, to be brought by the Grantor in a court of competent jurisdiction.

18. Recording. The Grantor shall have this Conservation Easement duly recorded and indexed as such in the Office of the County Clerk of \_\_\_\_\_ County, New York, as described in ECL Section 49-0305.4. Upon recording, the Grantor shall forward a copy of this Conservation Easement as recorded to the Grantee, to the Corps of Engineers and, as described in ECL Section 49-0305.4, the New York Department of Environmental Conservation. The Grantor's recording and transmission to the Grantee, the Corps of Engineers and the Department of Environmental Conservation shall take place prior to Grantor's commencing work as authorized by the Permit.

19. Subsequent Transfer. This Conservation Easement shall be perpetual and run with the land and shall be binding upon all future owners of any interest in the Protected Property. The conveyance of any portion of or any interest in the Protected Property, by sale, exchange, devise or gift, shall be made by an instrument which expressly provides that the interest thereby conveyed is subject to this Conservation Easement, without modification or amendment of the terms of this Easement, and such instrument shall expressly incorporate this Conservation Easement by reference, specifically setting forth the date, office, liber and page of the recording of this Conservation Easement. The failure of any such instrument to comply with the provisions hereof shall not affect the validity or enforceability of this Conservation Easement, nor shall such failure affect the Grantee's or the Corps of Engineers' rights hereunder. No less than thirty (30) days prior to conveyance of any interest in the Protected Property,



Grantor (to include any successor Grantor) shall notify the Grantee and the Corps of Engineers of such intended conveyance, providing the full names and mailing addresses of all Grantees, and the individual principals thereof, under any such conveyance.

20. No Merger of Interests. In the event the same person or entity ever simultaneously holds an interest in the Protected Property under this Conservation Easement, and holds the underlying title in fee, the parties intend that the separate interests shall not merge.

21. Amendment. This Conservation Easement may be amended in accordance with ECL Section 49-0307, but only in a writing signed by the Grantor and the Grantee, or their successors or assigns, and approved in writing by the Corps of Engineers, its successors or assigns; provided such amendment does not affect the qualification of this Conservation Easement or the status of the Grantee under ECL Section 49-0305 or any other applicable law; and provided such amendment is consistent with the conservation purposes of this grant and its perpetual duration. Any amendment to this Conservation Easement shall be recorded and provided to the Grantee, the Corps of Engineers and the New York State Department of Environmental Conservation, in the manner set forth in paragraph 24.

22. Warranties by Grantor. Grantor warrants that it owns the Protected Property in fee simple, and that Grantor owns all interests in the Protected Property that may be impaired by the granting of this Conservation Easement. Grantor further warrants that there are no outstanding mortgages, tax liens, encumbrances, or other interests in the Protected Property that have not been expressly subordinated to this Conservation Easement. Grantor further warrants that no structures of any kind, to include roads, trails or walkways, and no violations of the restrictions of this Conservation Easement exist on the Protected Property at the time of execution hereof. Grantor further warrants that the Grantee shall have the use of and enjoy all the benefits derived from and arising out of this Conservation Easement.

23. At the time conveyance of this Easement, the Property is subject to the mortgage identified in Exhibit \_\_\_\_ attached hereto and incorporated by this reference, the Grantee of which has agreed by separate instrument, will be recorded immediately after this Easement, to subordinate its rights in the Property to this Easement to the extent necessary to permit the Grantee to enforce the purpose of the Easement in perpetuity and to prevent any modification or extinguishment of this Easement by the exercise of any rights of the mortgage Grantee. The priority of the existing mortgage with respect to any valid claim on the part of the existing mortgage Grantee to the proceeds of any sale, condemnation proceedings, or insurance or to the leases, rents, and profits of the Property shall not be affected thereby, and any lien that may be created by Grantee's exercise of any of its rights under this Easement shall be junior to the existing mortgage. Upon request, Grantee agrees to subordinate its rights under this Easement to the rights of any future mortgage Grantees or beneficiaries of deeds of trust to the proceeds, leases, rents and profits described above and likewise to subordinate its rights under any lien and to execute any documents required with respect to such subordination, except that the

priority of lien created by Grantee's exercise of its rights under this easement prior to the creation of a mortgage or deed of trust shall not be affected thereby, nor shall the Easement be subordinated in any other respect. 43

24. No Gift or Dedication. Nothing contained in this Conservation Easement shall be deemed to be a gift for dedication of all or any part of either the Permitted Property or the Protected Property to the public, or for public use.

25. Notices. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and served personally or sent by first class mail, postage prepaid, addressed as follows:

To  
Grantor(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

To Grantee:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

To the Corps of Engineers:  
U.S. Army Corps of Engineers, Buffalo District  
ATTN: Regulatory Branch  
1776 Niagara Street  
Buffalo, NY 14207

or to such other address as either party from time to time shall designate by written notice to the other. 34

26. General Provisions.

(a) Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of \_\_\_\_\_.

(b) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to

effect the purpose of this Easement, of the application and the policy and the purpose of \_\_\_\_[state statute]\_\_\_\_. If any provision in this instrument is found to be ambiguous and interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(c) Severability. If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provisions to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(d) Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Easement and supercedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein. No alteration or variation shall be valid or binding unless contained in an amendment that complies with paragraph \_\_\_\_\_ (see supplementary provision re: Amendment).

(e) No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

(f) Joint Obligation. The obligations imposed by this Easement upon the Grantors shall be joint and several.

(g) Termination of Rights and Obligations. A party's rights and obligations under this Easement terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

(h) Captions. The captions in this instrument have been inserted solely for convenience of reference and are not part of this instrument and shall have no effect upon construction or interpretation.

(i) Counterparts. The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it.

TO HAVE AND TO HOLD unto Grantee, its successors, and assigns forever. 36

INTO WITNESS WHEREOF Grantors and Grantee have set their hands on the day and year first above written.

\_\_\_\_\_

Grantor(s)

\_\_\_\_\_

Grantee

By \_\_\_\_\_

Its \_\_\_\_\_ [Official  
Capacity] \_\_\_\_\_

**Execution by Mortgagee**

For Purposes of Paragraph 22 Only:

By: \_\_\_\_\_

Name:

Title: 38

STATE OF NEW YORK )) ss.:

COUNTY OF )

On the day of in the year 200\_\_ before me, the undersigned, a notary public in  
and for said state, personally appeared the Grantor \_\_\_\_\_, personally  
known to

me or proved to me on the basis of satisfactory evidence to be the individual whose name  
is

subscribed to the within instrument and acknowledged to me that he executed the same in  
his

capacity, and that by his signature on the instrument, the individual, or the person upon  
behalf of

which the individual acted, executed this instrument.

Notary Public

STATE OF NEW YORK )) ss.:

COUNTY OF )

On the day of in the year 200\_\_ before me, the undersigned,  
a notary public in and for said state, personally appeared the Grantee  
\_\_\_\_\_,

personally known to me or proved to me on the basis of satisfactory evidence to be the  
individual

whose name is subscribed to the within instrument and acknowledged to me that he  
executed the

same in his capacity, and that by his signature on the instrument, the individual, or the  
person

upon behalf of which the individual acted, executed this instrument.

Notary Public

STATE OF NEW YORK )) ss.:



COUNTY OF )

On the day of in the year 200\_\_\_ before me, the undersigned,  
a notary public in and for said state, personally appeared the Mortgagee

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personally known to me or proved to me on the basis of satisfactory evidence to be the individual

whose name is subscribed to the within instrument and acknowledged to me that he executed the

same in his capacity, and that by his signature on the instrument, the individual, or the person

upon behalf of which the individual acted, executed this instrument.

Notary Public

### **SCHEDULE OF EXHIBITS**

- A. Legal Description of Property Subject to Easement
- B. Site Descriptions, Map
- C. Identification of Prior Mortgage

### **Supplementary Provisions 39**

5.2 Arbitration. 40

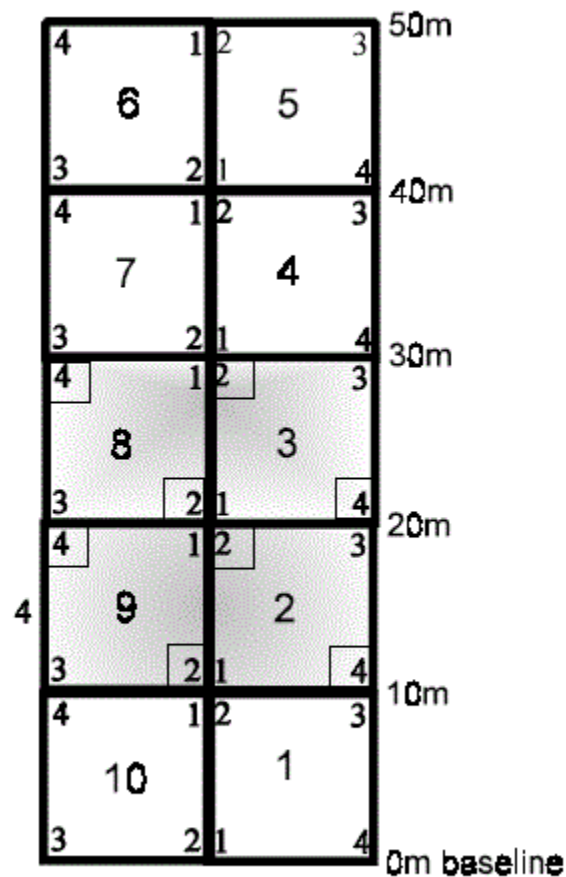
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10.1 Executory Limitation. If Grantee shall cease to exist or be qualified organization under Section 170(h) of the Internal Revenue Code, as amended, or has been determined by the Buffalo District Corps of Engineers to not hold firm the interest in protecting of water resources regulated under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, or to be authorized to acquire and hold conservation easements under state statute, and a prior assignment is not made pursuant to Paragraph 10, then the Grantee's rights and obligations under this Easement shall be immediately vested in \_\_\_[designated back-up grantee]\_\_\_. If \_\_\_[designated back-up grantee]\_\_\_ is no longer in existence at the time the rights and obligations under this Easement would otherwise vest in it, or if \_\_\_[designated back-up grantee]\_\_\_ is not qualified or authorized to hold conservation easements as provided for an assignment pursuant to paragraph 14, or if it shall refuse such rights and obligations, then the rights and obligations under this Easement shall vest in such organization as a court of competent jurisdiction shall direct pursuant to the applicable state law and with due regard to the requirements for an assignment pursuant to paragraph 14. 42



**APPENDIX H**  
**Monitoring Protocol**

Vegetation monitoring will occur in focused 20m x 50m vegetation plots (Fig. 1) and random 10m x 10m vegetation plots. Vegetation data will be collected to calculate the Vegetation Index of Biotic Integrity – Floristic Quality (VIBI-FQ).



**Figure 1.** Standard fixed 20m x 50m vegetation sampling plot.