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Our Ref: 30178743.00038
Date: December 1, 2023
Subject: 2023 Transloading Area Restoration Monitoring Report
NYSEG Binghamton Court Street Former Manufactured Gas Plant Site
NYSDEC Site No. 7-04-031

Dear Mr. Starr,

On behalf of NYSEG, this letter presents the 2023 restoration monitoring report for the Transloading Area that was temporarily constructed (and subsequently restored) during the 2019 interim remedial measures (IRM) completed at the NYSEG Court Street Former Manufactured Gas Plant (MGP) Site, Operable Unit No. 2 (OU-2), located in Binghamton, New York.

Restoration monitoring has been completed in accordance with the Transloading Area Restoration Plan (Revised) (Restoration Plan), prepared by Arcadis and submitted to the New York State Department of Environmental Conservation (NYSDEC) on September 10, 2019, and approved by NYSDEC via a September 12, 2019, letter to NYSEG.

Objectives

The monitoring report objectives are to:

- Detail the completed restoration
- Summarize the methodologies used to evaluate the restoration effectiveness
- Summarize the recent monitoring data compared to performance metrics
- Summarize the completed corrective actions (if any) and proposed path forward for future restoration monitoring

The following sections discuss the completed restoration activities, monitoring methods, current site conditions and monitoring results, completed corrective actions, and an overall summary and path forward for restoration monitoring.

Restoration Area

As detailed in the Restoration Plan, the restoration effort generally consisted of installing vegetative cover materials and riprap. The restored transloading area is approximately 0.48 acres, which includes approximately 0.45 acres of seeded upland and bank areas and 0.03 acres of lower bank area restored with rip rap. The restoration limits are shown on Figure 1.

An approximately 20 foot-wide strip of upland and bank area along the existing flood wall was restored using a grass seed mix containing species of Kentucky blue grass, creeping red fescue, and perennial rye grass (applied

at 1.5 pounds per 1,000 square feet), along with fertilizer (5-10-5) applied at 15 pounds per 1,000 square feet, and mulch (straw or timothy hay) covering applied at 100 pounds per 1,000 square feet (as required by the NYSDEC's Article 16 Flood Control Land Use Permit). The remainder of the restored upland and bank area was restored with the wildflower and grass mix specified in the Restoration Plan (Specification Section 32 92 00, Turfs and Grasses). Additionally, as noted in the December 21, 2020, 2020 Transloading Area Restoration Monitoring Report (2020 Restoration Monitoring Report), overseeding was completed in the upland restored areas in September 2020 using a grass seed mix.

Along with the vegetated ground cover, a total of 14 trees (8 red maple [*Acer rubrum*] and 6 silver maple [*Acer saccharinum*]) were planted in the Transloading Area (see Figure 1). Additionally, select trees were removed during construction of the original/former Transloading Area (Figure 2) located at the upstream end of the former access road. The original/former Transloading Area was restored with eight silver maples. As noted in the 2020 Restoration Monitoring Report, eight trees were replaced in June and September 2020 (due to beaver damage) and beaver cages were installed around new and existing trees.

Rip rap with a D_{50} of 8 inches was placed along the lower bank of the Transloading Area, from the approximate pre-construction vegetation/scour line (at an approximate elevation of 835', as observed at adjacent non-disturbed bank areas) down to the toe of slope (at an approximate elevation of 829'). An estimated 90 cubic yards of rip rap was placed, in a manner that resulted in no net fill below the mean high-water level (i.e., keyed into the bank), with an approximate thickness of 2 feet (i.e., more than 1.5 times the D_{50}), covering approximately 1,250 square feet.

Monitoring Requirements and Methods

The Transloading Area is monitored and maintained to evaluate the restoration status relative to performance objectives presented in the Restoration Plan and to identify proposed maintenance or corrective actions (if necessary). Monitoring includes a quantitative vegetation evaluation for total percent cover and tree survival, and a qualitative restored riverbank stability assessment.

The performance criteria for 2023 (i.e., monitoring year four) are as follows:

- 90% minimum vegetative cover
- 100% tree survival
- No invasive plant species currently listed as prohibited on the list of New York State Prohibited and Regulated Invasive Plants
- Less than 5% of any other invasive plant species not identified as prohibited

Quantitative measures of the vegetative cover were performed using a 1-meter square (1 m²) quadrat at five randomly placed locations within the seeded upland and bank portions of the Transloading Area (see Figure 1) to assess:

- Overall vegetative cover
- Percent coverage by species
- Predominant species observed
- Observations of invasive species
- Signs of stress or impacts from herbivory

Individual tree counts were performed to assess survivability.

The qualitative restored riverbank assessment (made during inspections in May and September 2023) consisted of a visual inspection for signs of significant erosion, areas of excessive settlement, or drainage issues that may impact the restored Transloading Area.

These observations were used to evaluate the need for potential corrective actions for maintenance of the restored areas.

Monitoring Results

A summary of the vegetation monitoring results and bank stability observations is provided in the following subsections.

Vegetation Monitoring

Arcadis performed both qualitative and quantitative vegetative cover assessments (i.e., herbaceous ground cover and trees) in the Transloading Area (and original Transloading Area) on May 30, 2023, and September 21, 2023, respectively. Observations and assessment results are discussed below.

At the request of the NYSDEC, during the May 2023 qualitative inspection, tree health and height were assessed, along with verifying the current spatial extent of Japanese knotweed (*Polygonum cuspidatum*) within the restoration areas. These observations were made to determine the continued need for invasive plant species control activities. The May 2023 site inspection results were provided to NYSDEC in a memorandum dated June 27, 2023.

The qualitative inspection memorandum concluded the following:

- Consistent with past observations, bank stability within the restored bank area showed some signs of erosion but had not significantly changed from the last inspection in November 2022. The current bank erosion area was approximately 43.5 feet in length with an exposed face height that ranged from 1.4 to 4.3 feet. The lower bank area is stable and sloughed material has settled. The existing restored bank is well vegetated, and the root zone is stabilizing the bank near the erosion line.
- All trees in the Transloading Areas are in good health.
- Japanese knotweed is primarily outside the restored Transloading Area limits. Encroachment on the lower banks and in adjacent top of bank areas is present, but it is not impacting the existing maples that were planted within the restored area.
- Upland and bank herbaceous ground cover exceeds the total cover criteria (i.e., 90%) and is well vegetated with abundant wildflowers and warm season grasses observed.
- Natural recruitment of staghorn sumac within the bank area that had been treated for Japanese knotweed is increasing its canopy and spread within areas adjacent to the Transloading Area restored bank and upland area. The establishment of this native tree species may help to reduce future Japanese knotweed advancement.

In a letter to NYSEG dated September 14, 2023, the NYSDEC approved NYSEG's request to discontinue the use of herbicide control measures for Japanese knotweed in the Transloading Areas and noted that continued monitoring and the potential for corrective actions as it pertains to riverbank stability and tree survivability are still in effect.

Herbaceous Ground Cover

Herbaceous ground cover monitoring was performed at the seeded Transloading Area at five randomly placed 1 m² quadrat locations within the non-disturbed upland and bank restored area. The non-disturbed upland area is defined as the restored area not subjected to disturbances observed from dredge spoils removal or storage. This disturbed area was reseeded by the NYSDEC and is shown on Figure 1.

To evaluate the herbaceous layer, the total percent cover of each species identified in each 1 m² quadrat was visually estimated using a cover class system (see Table 1), based on the Daubenmire cover class system (Barbour et al 1999). The revised cover class system provides a more refined percent cover estimation by providing two additional cover classes and modification to class ranges into seven classes. The percent cover type was also visually estimated for each 1 m² quadrat by assigning an absolute percent cover value (ranging from 0% to 100%) as viewed from above, that does not account for overlap of cover types. Cover type categories included: vegetation, bare soil, woody debris, boulders/rock. This data was used to calculate percent cover of target species and invasive species, and total cover of vegetation in the herbaceous layer.

Photos of the quadrats and general site conditions are included in Attachment 1 (see photos 1 through 10). A summary of the vegetation monitoring quadrat data by plot is provided in Table 2. The vegetation monitoring inspection checklist is provided in Attachment 2.

The results of the five quadrats indicated that the overall vegetative cover by cover class was approximately 93% within the Transloading Area. The bank cover was slightly lower than 2022, but some seasonal timing differences influenced the species coverage; however, 90% absolute vegetative cover estimates with approximately 5% litter and 5% bare soil were noted. Using the mid-point cover class, the approximate vegetative cover in the bank was 86%. The species richness ranged from 4 to 9 herbaceous species found. The three dominant herbaceous species were Kentucky bluegrass (*Poa pratensis*), birds-foot trefoil (*Lotus corniculatus*), and red fescue (*Festuca rubra*). The average height of the herbaceous vegetation found within the quadrats was 9.4 inches; with a range from 6 to 12 inches. The average maximum height of the herbaceous vegetation found within the quadrats was 28.8 inches; with a range from 19 to 40 inches.

Although Japanese knotweed (*Polygonum cuspidatum*) was not observed in the measured quadrats, as detailed below, this invasive species is present throughout the area. Previous invasive species control measures used along the Transloading Area perimeter have decreased the encroachment and stunted Japanese knotweed growth (see Attachment 1, photo 14) and have promoted native recruitment of staghorn sumac (*Rhus typhina*) to establish in areas formerly covered by this invasive species (see Attachment 1, photo 15).

Trees

During both the qualitative assessment on May 30, 2023, and the quantitative assessment on September 21, 2023, the six silver maples and eight red maples planted (or replanted) in the Transloading Area appeared to be in good health, were fully leaved with beaver cages intact, and exhibited no signs of stress or herbivory. Within the Transloading Area, one silver maple had recovered from a broken crown observed in the spring and was fully leaved and appeared to be healthy. Tree photos are included in the photograph log provided as Attachment 1 (see Photos 8 and 9).

All trees at the original Transloading Area inspected during the September 21, 2023, assessment were found to be in good health and fully leaved with beaver cages intact. Tree photos are included in the photograph log provided as Attachment 1 (see Photos 16, 17, and 18).

Bank Stability

As previously mentioned, qualitative bank inspections were conducted by Arcadis in May and September 2023 to document the stability of the restored rip rap and bank areas at the Transloading Area. The restored area appears to be stable and the remaining erosion control fabric netting, and coir logs are stable and functioning. Riverbank erosion was noted during the May 2023 visit near the upstream end of the restored bank area. The bank erosion area extended linearly approximately 43.5 feet and had an exposed bank erosion face height that ranged from 1.4 to 4.3 feet. During the September 2023 inspection, no further expansion, settlement, or soil instability was observed within the restored bank area or within the previously observed riverbank erosion area. Bank photos are included as part of the photograph log provided as Attachment 1 (see photos 11, 12, and 13).

Corrective Actions

No corrective actions were implemented in 2023.

Summary

Observations throughout monitoring year four indicate that restoration has been implemented successfully. Key observations include:

- The restored bank area is showing suitable vegetative coverage and is successfully stabilizing the bank materials. Vegetation growth within both the bank and upland portions of the Transloading Area are performing well (i.e., 93% cover), in comparison to the 90% total cover criteria.
- All planted (or replanted) trees in the Transloading Area (and original Transloading Area) remain in good health.
- The bank stability and controls for erosion and surface water runoff, as well as rip rap placement and anchoring, were observed to be stable and functioning as designed; No further expansion, settlement, or soil instability was observed within the previously observed riverbank erosion area.
- Invasive plant species control measures implemented prior to 2023 to control the existing stands of Japanese knotweed and other nuisance species from encroaching on the restored Transloading Area are still effective. Natural recruitment of native species (e.g., staghorn sumac) within the lower and upper bank area of the Transloading Area has provided canopy to limit the encroachment of Japanese knotweed into the restored areas.

Overall, the restoration has shown successful stabilization of the previously disturbed area, with sufficient signs that vegetation growth is restoring the site to pre-disturbance conditions.

Path Forward

The Restoration Plan notes that NYSEG may request to cease monitoring activities if performance criteria are being met after monitoring year three. To date, restored vegetation (i.e., trees, herbaceous vegetation), including replacement trees, have completed three full growing seasons, as such, NYSEG requests to cease vegetation monitoring and corrective actions based on the following:

- The herbaceous cover installed as part of the initial restoration efforts is healthy, as documented by the total % coverage within the disturbed bank and upland areas. Perennial grasses and a diversity of seasonal flowers (i.e., oxeye daisy and lanceleaf tickseed) are present and healthy for pollinator species.

Justin Starr, P.G.
New York State Department of Environmental Conservation
December 1, 2023

- The additional grass seed planted in the upland area in September 2020 by the NYSDEC remains in good condition.
- All planted (or replanted) trees are in good condition and protected with beaver cages with continued visual monitoring to coincide with ongoing site monitoring activities (i.e., sheen monitoring, NAPL gauging).
- Bank stability issues were observed in a small upstream portion of the restored bank area, likely caused by natural high-water and/or ice scour conditions from past winters. The remainder of the bank area is stable and functioning as designed with continued bank monitoring to coincide with ongoing site monitoring activities.
- Japanese knotweed continues to be present, however, previous control measures have significantly reduced its presence and improved the natural recruitment of native species within the bank canopy area. Note that continued visual monitoring will coincide with ongoing site monitoring activities.

Please contact Levia Terrell at 607-423-1652 or lterrell@nyseg.com if you have any questions or require any additional information.

Sincerely,
Arcadis of New York, Inc.



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Senior Environmental Engineer

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CC. Benjamin Girtain-Plowe, NYSDEC
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Tracy Blazicek, NYSEG, CHMM
Mark Gravelding, PE, Arcadis
Jason Vogel, Arcadis

Enc.

Tables

- 1 Cover Class System
- 2 2023 Vegetation Monitoring Quadrat Data

Figures

- 1 Transloading Area Restoration
- 2 Upstream Transloading Area Restoration

Attachments

- 1 Photo Log
- 2 Vegetation Monitoring Forms

Tables

Table 1
Cover Class System
2023 Transloading Area Restoration Monitoring Report
Binghamton Court Street Former MGP Site – Operable Unit No. 2



Percent Cover Classes		
Range of Cover (%)	Cover Class Midpoint	Class
<1%	0.5	0
1-5%	3.0	1
6-15%	10.5	2
16-25%	20.5	3
26-50%	38.0	4
51-75%	63.0	5
76-95%	85.5	6
>95%	98.0	7

Notes:

1. Based on the Daubenmire cover class system (Barbour et al 1999).

Reference:

Barbour, M. G., J.H. Burk, W.D. Pitts, F.S. Gilliam and M.W. Swartz. 1999. Terrestrial Plant Ecology. Third Edition. California: Benjamin/Cummings.

Table 2
Vegetation Monitoring Quadrat Data
2023 Transloading Area Restoration Monitoring Report
Binghamton Court Street Former MGP Site – Operable Unit No. 2



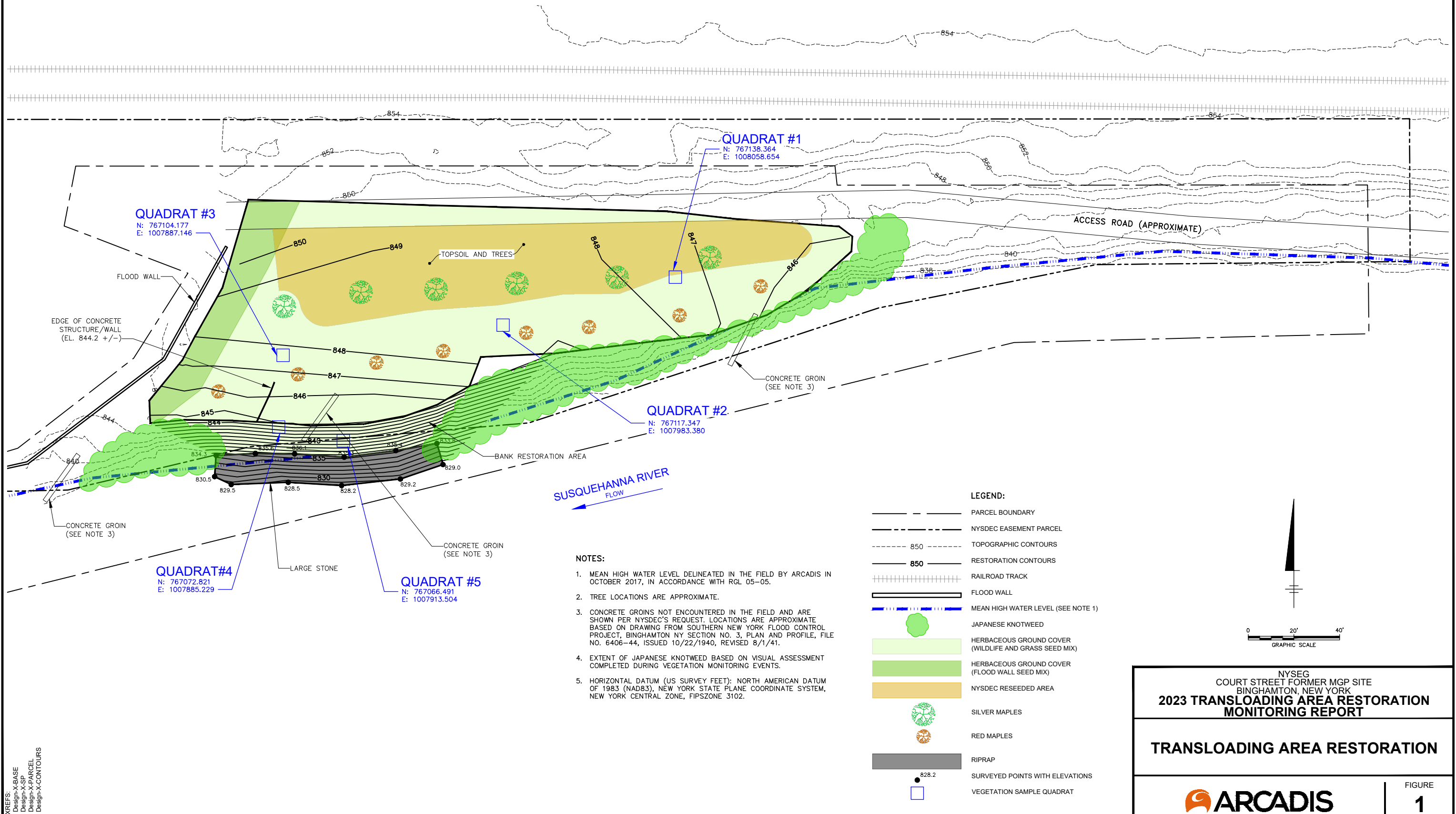
Quadrat I.D.	Common Name	Growth Form	Indicator Status	Target Species (Y/N)	Invasive (Y/N)	Canopy Cover Class					Canopy Cover (%)	Species Composition
Scientific Name						Q1	Q2	Q3	Q4	Q5		
<i>Poa pratensis</i>	Kentucky bluegrass	herbaceous	FACU	Y	N	4	2	5			22.3	18.8
<i>Lotus corniculatus</i>	Birds-foot trefoil	herbaceous	FACU	N	N	4	4	3		2	21.4	18.1
<i>Festuca rubra</i>	Red fescue	graminoid	FACU	Y	N				4	5	20.2	17.0
<i>Coreopsis lanceolata</i>	Lanceleaf tickseed	herbaceous	FACU	Y	N				5	1	13.2	11.1
<i>Setaria pumila</i>	Yellow foxtail	graminoid	FAC	Y	N	4	2	2			11.8	10.0
<i>Achillea millefolium</i>	Common yarrow	herbaceous	FACU	Y	N	1	2	3	1	1	8	6.8
<i>Solidago altissima</i>	Tall goldenrod	herbaceous	FACU	Y	N	1	2	2		2	6.9	5.8
<i>Leucanthemum vulgare</i>	Oxeye daisy	herbaceous	UPL	Y	N		1	1	1	2	3.9	3.3
<i>Trifolium pratense</i>	Red clover	herbaceous	FACU	Y	N	1	1	2			3.3	2.8
<i>Plantago lanceolata</i>	English plantain	herbaceous	FACU	Y	N			2			2.1	1.8
<i>Euphorbia nutans</i>	Upright spurge	herbaceous	FACU	Y	N		2				2.1	1.8
<i>Melilotus officinalis</i>	Yellow sweetclover	herbaceous	FACU	Y	N	2					2.1	1.8
<i>Cirsium vulgare</i>	Bull thistle	herbaceous	FACU	N	N			1			0.6	0.5
<i>Galium album</i>	Hedge bedstraw	herbaceous	FACU	Y	N	1					0.6	0.5
Cover Type - % Cover												
Vegetation (Cover Class)						7	7	7	6	6	93.0	
Vegetation (Raw Estimates)						98	95	95	90	90	93.4	
Plant Height/Species Richness												
Plot Height Average (inches)						9.6	12	6	10.8	8.4	9.4	
Plot Height Maximum (inches)						30	39.6	21.6	19.2	33.6	28.8	
Species Richness						8	8	9	4	6	7	

(Cover Class) Total Vegetative Percent Cover	93.0
Relative Percent Cover of Target Species	81.4
Relative Percent Cover of Invasive Species	0.0

Notes:

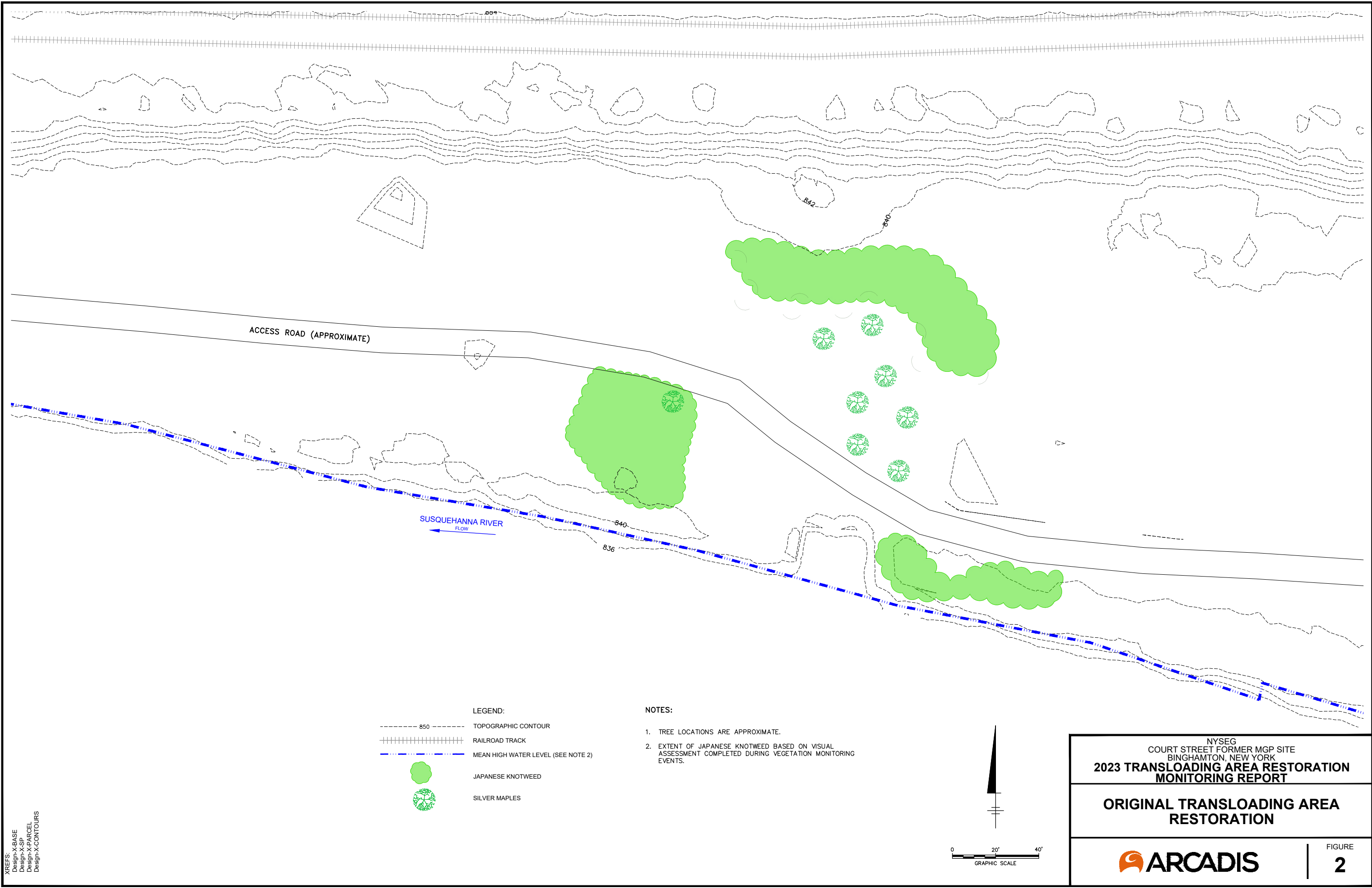
1. Vegetative cover of individual species estimated at each plot using cover class midpoints shown on Table 1 .
2. Canopy cover values can add up to greater than 100% due to overlapping vegetation.
3. Species composition is a proportional scaling of 0 to 100 percent and represents the percent a species contributes to the total vegetative cover.

Figures



C:\Users\Ksartori\ACCDocs\Arcadis\AUS-NYSEG-COURT STREET-BINGHAMTON New York\Project Files\202301-In Progress\01-DWG\2023TAR\RF01-02-TAR REPORT.dwg BY: SARTORI, KATHERINE 10/19/2023 7:51 AM SAVED: 10/19/2023 7:51 AM

XREFS:
Design-X-BASE
Design-X-SP
Design-X-PARCEL
Design-X-CONTOURS



NYSEG
COURT STREET FORMER MGP SITE
BINGHAMTON, NEW YORK
**2023 TRANSLOADING AREA RESTORATION
MONITORING REPORT**

**ORIGINAL TRANSLOADING AREA
RESTORATION**

ARCADIS

FIGURE
2

Attachment 1

Photo Log

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 1

Description:

Quadrat #1, Upland quadrat
(see Figure 1)

Coordinates:

42.103526
-75.891084

Date: 09/21/2023



Photo: 2

Description:

Quadrat #2, Upland quadrat
(see Figure 1)

Coordinates:

42.103470
-75.891362

Date: 09/21/2023

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 3

Description:

Quadrat #3, Upland quadrat
(see Figure 1)

Coordinates:

42.103436
-75.891717

Date: 09/21/2023

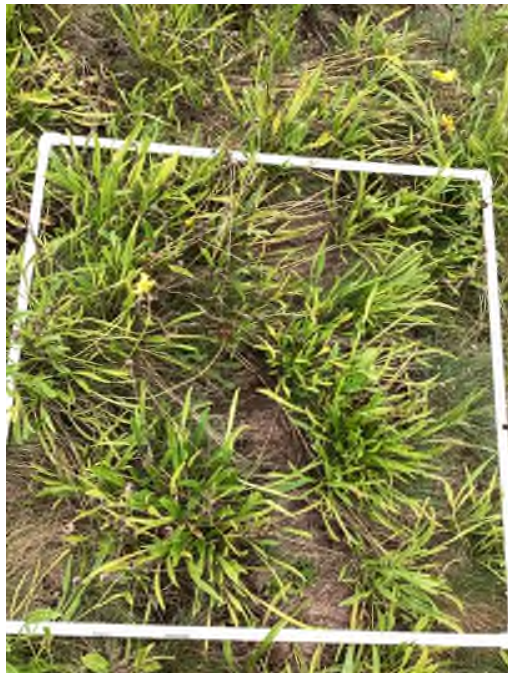


Photo: 4

Description:

Quadrat #4, Bank quadrat (see
Figure 1)

Coordinates:

42.103350
-75.891725

Date: 09/21/2023

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 5

Description:

Quadrat #5, Bank quadrat (see Figure 1)

Coordinates:

42.103332
-75.891621

Date: 09/21/2023



Photo: 6

Description:

Along flood wall and maintained grass corridor

Coordinates:

42.103399
-75.891689

Date: 09/21/2023

Notes:

Looking southwest

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 7

Description:

Looking at downstream end of
Transloading Area

Coordinates:

42.103289
-75.892085

Date: 09/21/2023

Notes:

Looking northeast



Photo: 8

Description:

Southwest corner of restored
upland in Transloading Area

Coordinates:

42.103390
-75.891924

Date: 09/21/2023

Notes:

Looking east

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 9

Description:

Northwest corner of restored upland in Transloading Area

Coordinates:

42.103481
-75.891846

Date: 09/21/2023

Notes:

Looking east



Photo: 10

Description:

Restored bank in Transloading Area

Coordinates:

42.103421
-75.891785

Date: 09/21/2023

Notes:

Looking east

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 11

Description:

Downstream end of bank erosion in Transloading Area

Coordinates:

42.103335
-75.891609

Date: 09/21/2023

Notes:

Looking northeast



Photo: 12

Description:

Upstream end of bank erosion in Transloading Area

Coordinates:

42.103348
-75.891492

Date: 09/21/2023

Notes:

Looking northwest

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 13

Description:

Upstream end of bank erosion

Coordinates:

42.103348

-75.891492

Date: 09/21/2023

Notes:

Looking north



Photo: 14

Description:

Japanese knotweed on edge of
bank restoration area

Coordinates:

42.103378

-75.891553

Date: 09/21/2023

Notes:

Looking south

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 15

Description:

Upstream end of bank area
adjacent to Transloading Area

Coordinates:

42.103504
-75.890917

Date: 09/21/2023

Notes:

Looking southwest



Photo: 16

Description:

Japanese knotweed near silver
maple in Former Transloading
Area

Coordinates:

42.103245
-75.886172

Date: 09/21/2023

Notes:

Looking south

PROJECT PHOTOGRAPHS

New York State Electric & Gas Corporation
Binghamton Court St. – 2023 Restoration Monitoring



Photo: 17

Description:

Silver maples in Former
Transloading Area

Coordinates:

42.103227
-75.885953

Date: 09/21/2023

Notes:

Looking east



Photo: 18

Description:

Silver maples in Former
Transloading Area

Coordinates:

42.103227
-75.885953

Date: 09/21/2023

Notes:

Looking northeast

Attachment 2

Vegetation Monitoring Forms

Annual Monitoring Inspection Checklist
Binghamton (Court Street) Former MGP Site

I. GENERAL INFORMATION

Inspection Date: 9/21/2023
 Conducted By: J. Vogel, A. Butler
 Weather Conditions: Partly Cloudy low to upper 50s °F

II. INSPECTION SUMMARY

1. Vegetation

A. Woody Vegetation (Note evidence of damage from trespassing or herbivory; note physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)

Transload Area - All 14 trees in good shape; no signs of herbivory, minor red gall on a couple of silver maples.

Upstream Area - All 8 trees in good shape; no signs of herbivory.

B. Herbaceous Vegetation (Note evidence of areas of bare/sparse vegetation; note any damage from trespassing or herbivory; note any physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)

Transload Area - Herbaceous vegetation growing in well within undisturbed upland and bank areas. NYSDEC re-seeded area in good condition.

Assess herbaceous vegetation using five 1-square meter quadrats within upland and bank area; see field form.

Upstream Area - Herbaceous vegetation growing reasonably well within area. Some remnant mulch, woodchips, and debris present.

C. Presence of Invasive Species (Note the invasive species present. If a quantitative assessment is performed, complete the attached field form for each planting area.)

Transload Area - Japanese Knotweed is limited primarily to lower bank area. Only a few stunted stems on edge of bank restoration.

Upstream Area - Japanese Knotweed on edges of restoration area by planted Silver Maples. Past herbicide treatment has maintained a buffer around the seven Silver Maples planted to the north of the access road. Encroachment of Japanese Knotweed on the lone Silver Maple to south of road is present.

2. Riverbank Stability (Note any physical changes since last inspection; note evidence of significant erosion [e.g., slope failure, ruts, gullies, washouts, or sloughing]; note other conditions that could jeopardize the performance of the completed remediation actions.)

Transload Area - Bank vegetation has stabilized minor sloughing and washouts noted in 2020 to 2022. Coir logs degrading, but still functioning.

Noted bank erosion in upstream end of restored bank area; primarily below the vegetated upper bank. Herbaceous vegetation cover is good and stabilizing with increase in rooted vegetation and natural recruitment of Staghorn Sumac. Rip-rap is in place. Japanese Knotweed present is stunted in growth.

Upstream Area - No riverbank disturbance/restoration in this area.

3. Other Observations (Confirm that repair/maintenance activities identified during prior inspection, if any, have been performed; note any other general observations.)

None.

III. FOLLOW-UP MAINTENANCE AND REPAIR ACTIVITIES

None.

ATTACH ADDITIONAL INFORMATION AS APPROPRIATE