4966/34124 #2


**Remediation and Liability Management Company Inc.**

**James F. Hartnett**
**Program Manager**

January 30, 2006

Gerald Rider, P.E., Chief
Operation & Maintenance Section
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7014

Re: Ley Creek PCB Dredgings Site (Registry # 7-34-044)
NYSDEC Order on Consent Index # D-7-0008-97-06
2005 Annual OM&M Inspection Report

Dear Mr. Rider,

The purposes of this letter are to submit documentation pertaining to the Operation, Maintenance, and Monitoring (OM&M) site inspections that were conducted at the Ley Creek PCB Dredgings Site (Site) in 2005 and present REALM's proposed modifications regarding continued OM&M activities at the Site. The 2005 OM&M site inspections were performed in accordance with the NYSDEC-approved OM&M Manual (O'Brien & Gere 2001) for the Site. The documentation enclosed consists of three letter reports, one each for the two semi-annual site inspections and one for the annual wetland evaluation. Deficiencies identified in the site inspections and wetland evaluation reports will be addressed by REALM during the upcoming 2006 construction season, as site conditions allow.

As set forth in Section 2.1.3 of the NYSDEC-approved OM&M Manual for the Site, an evaluation was performed after the fifth year of OM&M activities (2005) regarding inspection frequency for the Site. Since the first year (2001) of OM&M implementation at the Site, only minor deficiencies to the Site features have been observed in the semi-annual site inspections. The minor deficiencies have included localized cover erosion, debris accumulation around catch basins, and the presence of burrowing animals, which have been addressed by REALM. With the absence of major deficiencies, REALM therefore proposes that the monitoring frequency for routine site inspections be modified from semi-annual to annual, beginning in 2006.

As set forth in Section 2.6.3 of the NYSDEC-approved OM&M Manual for the Site, an assessment of the continued need for wetland monitoring was performed after the fifth year of wetland monitoring (2005). As documented in the annual wetlands evaluations, there has been a positive trend toward meeting the target restoration goal of 90% ground cover within the sample plots of seeded and wetland-dependent species. The percent of sample plots meeting the target criterion at the site has increased over the five-year monitoring period. In 2001 and 2002, only one of the four sample plots met the target criterion. In 2003 and 2004 two of the sample plots met the criterion and in 2005, three of the sample plots met the criterion. Based on this positive trend, REALM proposes to continue the wetland monitoring efforts for

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one additional year (Year 2006 evaluation). Upon completion of this additional wetland evaluation year, the need for continued monitoring efforts and maintenance activities will be assessed. If the target restoration goals are met in 2006, monitoring will be concluded.

REALM would appreciate NYSDEC's concurrence with the proposed modifications contained herein. Upon approval of the proposed modifications by NYSDEC, REALM will prepare and distribute revised pages for the OM&M Manual. Should you or your staff have any questions regarding the contents of this annual OM&M inspection report, in particular the proposed modifications, please contact me at (315) 463-2391

Sincerely,

James F. Hartnett/cpz

James F. Hartnett
Remediation Program Manager

Enclosure
cc: James Burke (NYSDEC)
Douglas Crawford, P.E. (O'Brien & Gere)
Robert Nunes (USEPA)

O'BRIEN & GERE

January 4, 2006

Mr. James F. Hartnett
General Motors Corporation
One General Motors Drive STE2
Syracuse, NY 13206-1127

Re: Ley Creek PCB Dredgings Site
2005 OM&M Wetland Evaluation

File: 4966/34124 #2

Dear Jim:

This letter presents the results of wetland evaluation efforts performed at the Ley Creek PCB Dredgings Site (the Site), located in Syracuse, New York. Abby Morton and Ron Chiarello of O'Brien & Gere performed the evaluation on October 21, 2005, in accordance with Section 2.6 of the September 2001 *Operation, Maintenance, and Monitoring Manual* (OM&M Manual), which was approved by the New York State Department of Environmental Conservation (NYSDEC).

The OM&M Manual specifies that a wetland evaluation is to be performed following the first full growing season (2001) and the subsequent four years (2002 through 2005). This wetland evaluation (Year 2005 Evaluation) represents the fifth full growing season following NYSDEC approval of the *Remedial Action Engineering Report* in 2001.

## BACKGROUND

As documented in the *Wetland Assessment Report* for the Site (O'Brien & Gere 1998), eight emergent wetlands, totaling approximately 1.4 acres and dominated by dense stands of common reed (*Phragmites australis*) were identified at the Site prior to implementation of the Remedial Action. These wetlands were considered fringe wetlands based on their location adjacent to Ley Creek. The implementation of the Remedial Action at the Site temporarily eliminated these wetlands. A Wetland Mitigation Plan (letter report dated September 15, 2000), which consisted of the planting of reed canary grass (*Phalaris arundincea*), was prepared by O'Brien & Gere on behalf of General Motors Corporation and approved by NYSDEC and the United States Environmental Protection Agency for the impacted wetlands at the Site. The Wetland Mitigation Plan was based on an evaluation of pre-remediation site conditions and anticipated post-remediation site conditions. The wetland mitigation was incorporated in the Remedial Design. Figures 1 through 5 of this letter report depict the locations of the restored wetland areas at the Site.

## INSPECTION ACTIVITIES

In accordance with the OM&M Manual, a site visit was performed by qualified O'Brien & Gere wetland scientists on October 21, 2005 to evaluate the fifth year conditions of the restored wetlands and to identify maintenance activities that would be recommended to support the success of the wetland mitigation.

## RESTORATION EVALUATION OBJECTIVES AND CRITERIA

This letter report presents the results of the fifth evaluation effort for the restored wetlands at the Site. Restoration success is based on the target percentage of ground cover and the density of planted species (reed canary grass). The restoration goal for restored wetlands at the Site, as specified in Section 2.6 of the OM&M Manual, is 90% ground cover within the sample plots of seeded (reed canary grass) and wetland species. The performance standard for wetlands restoration at the Site is measured by the percent of established ground cover, either through planting or natural recruitment.

Consistent with the OM&M Manual, four 9 square-foot sample plots were used to evaluate ground cover in the restored wetlands during the 2005 evaluation. Data collected for these sample plots were recorded on field data forms developed by O'Brien & Gere; the completed forms are included as Attachment 1 of this letter report. The sample plot locations are identified on Figures 1 through 5 of this letter report.

In accordance with the OM&M Manual, percent ground cover evaluation plots were located randomly in representative areas along the access road at the Site. The percent vegetative ground cover and percent ground cover by species was visually estimated within each plot and recorded on field data forms (Attachment 1). The data forms included:

- species observed within the sample plot
- percent ground cover for each species observed
- the United States Fish and Wildlife Service (USFWS) indicator status for each species as described in the USFWS NERC-99/18.21 document dated 1988 - *National List of Plant Species That Occur in Wetlands* and the 1995 Northeast Supplement
- total percent ground cover
- percent of the total ground which are hydrophytic species based on their USFWS indicator status.

## RESULTS AND DISCUSSION

Four ground cover sample plots were evaluated within the restored wetlands at the Site. Data collected from the sample plots are presented on the field data forms included as Attachment 1. The comparison of observed percent ground cover to the restoration goal is presented in Table 1. As depicted on the field data forms and Table 1, Plots #2, #3 and #4 met or exceeded the target ground cover percentage of 90% for seeded (reed canary grass) and wetland species, excluding invasive wetland species such as *Phragmites australis* (common reed), *Lythrum salicaria* (purple loosestrife), and non-wetland species.

In Plot #2, reed canary grass and other desirable wetland species made up 90% of the total ground cover, with reed canary grass comprising 45% of the total in this plot. In Plots #3 and #4, reed canary grass and other desirable wetland species made up 95% of the total ground cover for both plots, with reed canary grass comprising 15% of the total in Plot #3 and 70% of the total in Plot #4. Sample Plot #1 did not meet the target ground cover percentage. Plot #1 had a total desirable ground cover of 35%, of which reed canary grass made up 30% of the total ground cover. The dominant species in Plot #1 is Lathco flat pea (*Lathyrus sylvestris*). Lathco flat pea was a component of the seed mix used to stabilize and vegetate the main site area. The presence of this species in Plot #1 is likely a result of this species encroaching into the wetland area from the main site area. Lathco flat pea is not included on the USFWS wetland indicator listings and is therefore a non-indicator (NI) species with regards to wetlands.

In the 2004 evaluation, Plots #3 and #4 met the target ground cover percentage and Plots #1 and #2 did not. This variability in Plot success from year to year may be attributed to the randomness of the plot selection for each evaluation. As previously noted, in accordance with the OM&M Manual, percent ground cover evaluation plots are located randomly in representative restored wetland areas along the access road at the Site for each inspection.

As these sample plot results indicate, 75% of the Site restored wetlands have met the target ground cover percentage of 90% reed canary grass and other desirable wetland species, which is an improvement compared with the success rate observed in 2004 (50%). The sample plots evaluated indicated that the seeded species (reed canary grass) along with other desirable wetland species, which are present due to natural recruitment, have been established in three of the four evaluated areas. A photograph log of the sample plot areas is included as Attachment 2.

Common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*), two highly invasive species, were generally observed in large numbers along the banks of Ley Creek in the Site area; however, it did not appear that these species were dominating the restored wetlands. Neither of these species was present in the sample plots evaluated in 2001. In 2002, both were present in Plot #3, and common reed was present in Plot #4. In 2003, both were present in Plot #3 and neither of these species was observed in the sample plots in 2004. Common reed was observed in Plot #1 in 2005. This variability in the presence of invasive species within the sample plots from year to year may be attributed to the randomness of the plot selection for each evaluation.

## CONCLUSIONS AND RECOMMENDATIONS

Evaluation efforts performed during the fifth full growing season (Year 2005 evaluation) indicated that the restored wetlands have improved in 2005 as compared to the observations made during the 2004 evaluation. The restoration goal was met in three of the four sample plots evaluated in 2005 as compared to two of the four sample plots meeting the established goal in 2004.

Although the vegetation within the restored wetlands has become well established and a high percentage of desirable species is present, O'Brien & Gere recommends the following activities be performed within the restored wetlands at the times presented below to deter the establishment of two highly invasive species within the restored wetlands. As previously noted, although one of these species (common reed) was observed in only one of the sample plots (Plot #1), common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*) were observed in portions of the restored wetland and along Ley Creek:

- Additional seeding of herbaceous wetland species (reed canary grass) is recommended in the emergent portion of this wetland, and should be performed in Spring 2006. Fertilizer 6-44-12 should be applied at a rate of 300 lbs per acre and FINN HST soil conditioner should be applied at a rate of 2.5 gallons per acre. Conwed HYDRO MULCH 2000 should be applied at a rate of 2,500 lbs per acre to minimize the potential of newly applied seed/fertilizer/soil conditioner being carried away during high discharge periods within Ley Creek.

The implementation of this recommendation in the 2006 growing season should assist in deterring the establishment of invasive species within the wetlands; accelerate the restoration of the wetlands towards meeting the restoration in portions of the wetlands that do not currently meet the goal (area of Plot #1); and maintain the current wetland success observed in the areas of Plots #2, #3 and #4. It is possible that the wetland restoration will succeed in meeting the restoration goal and invasive species will not become established within the restored wetlands without the implementation of this recommendation.

If you should have any questions pertaining to the information presented in this letter, please feel free to contact Maureen Markert or me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Bradley A. Kubiak, P.E.
Senior Project Engineer

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cc: Ronald P. Chiarello – O'Brien & Gere
Douglas M. Crawford, P.E. – O'Brien & Gere
Maureen S. Markert, P.E.- O'Brien & Gere

**Table 1.** *Summary of Evaluation Criteria Comparisons*

| Sample Plot # | **Desirable Ground Cover Criterion**[a] | Observed Ground Cover | Observed Desirable Ground Cover[b] |
|---|---|---|---|
| 1 | **90%** | 100% | 35% |
| 2 | **90%** | 96% | 90% |
| 3 | **90%** | 100% | 95% |
| 4 | **90%** | 100% | 95% |

[a] Ground cover of seeded and wetland-dependent species.

[b]Calculated by subtracting % cover of undesirable wetland species, *i.e., Lythrum salicaria, Phragmites australis*, if present, and non-wetland species from total % ground cover.

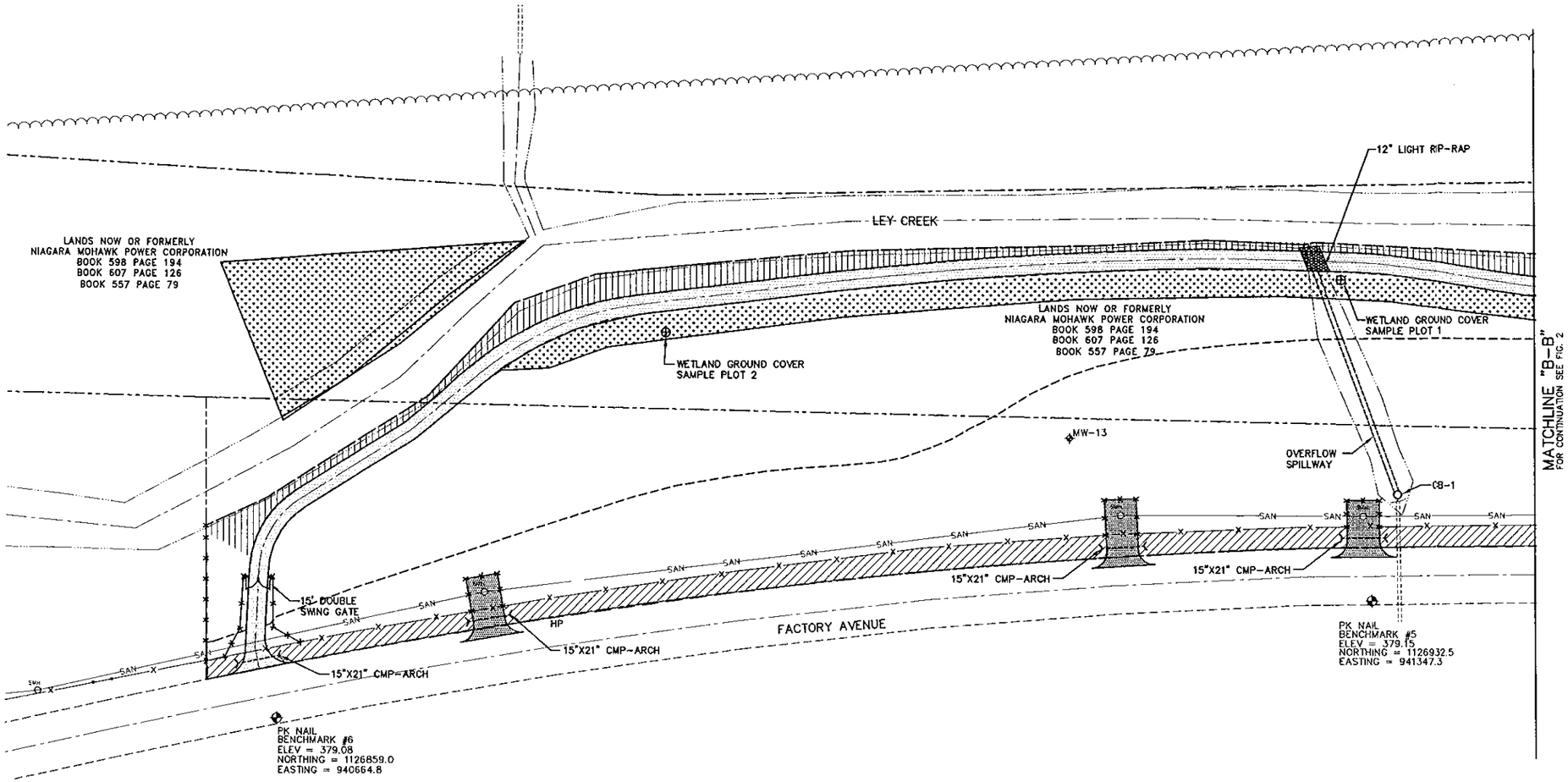


FIGURE 1

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C — MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OM&M PARTIAL SITE PLAN WETLAND EVALUATION

1"=40' 40 0 40

FILE NO. 4966.34124.020
DECEMBER 2005

O'BRIEN & GERE ENGINEERS, INC.

Dec 15, 2005 - 11:05am

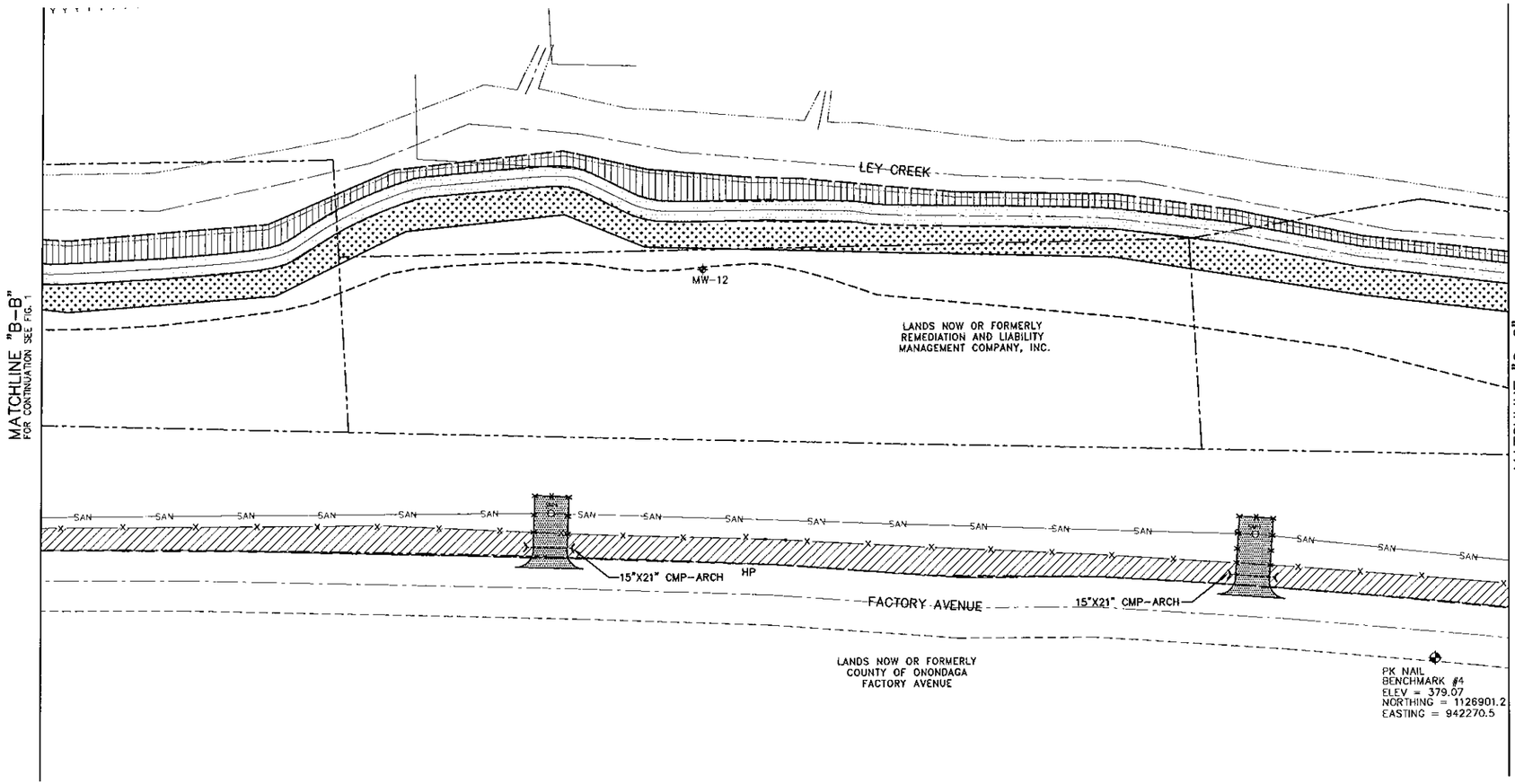


FIGURE 2

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
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- PAVEMENT
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- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OM&M PARTIAL SITE PLAN WETLAND EVALUATION

1"=40' 40 0 40

FILE NO. 4966.34124.021
DECEMBER 2005

O'BRIEN & GERE
ENGINEERS, INC.

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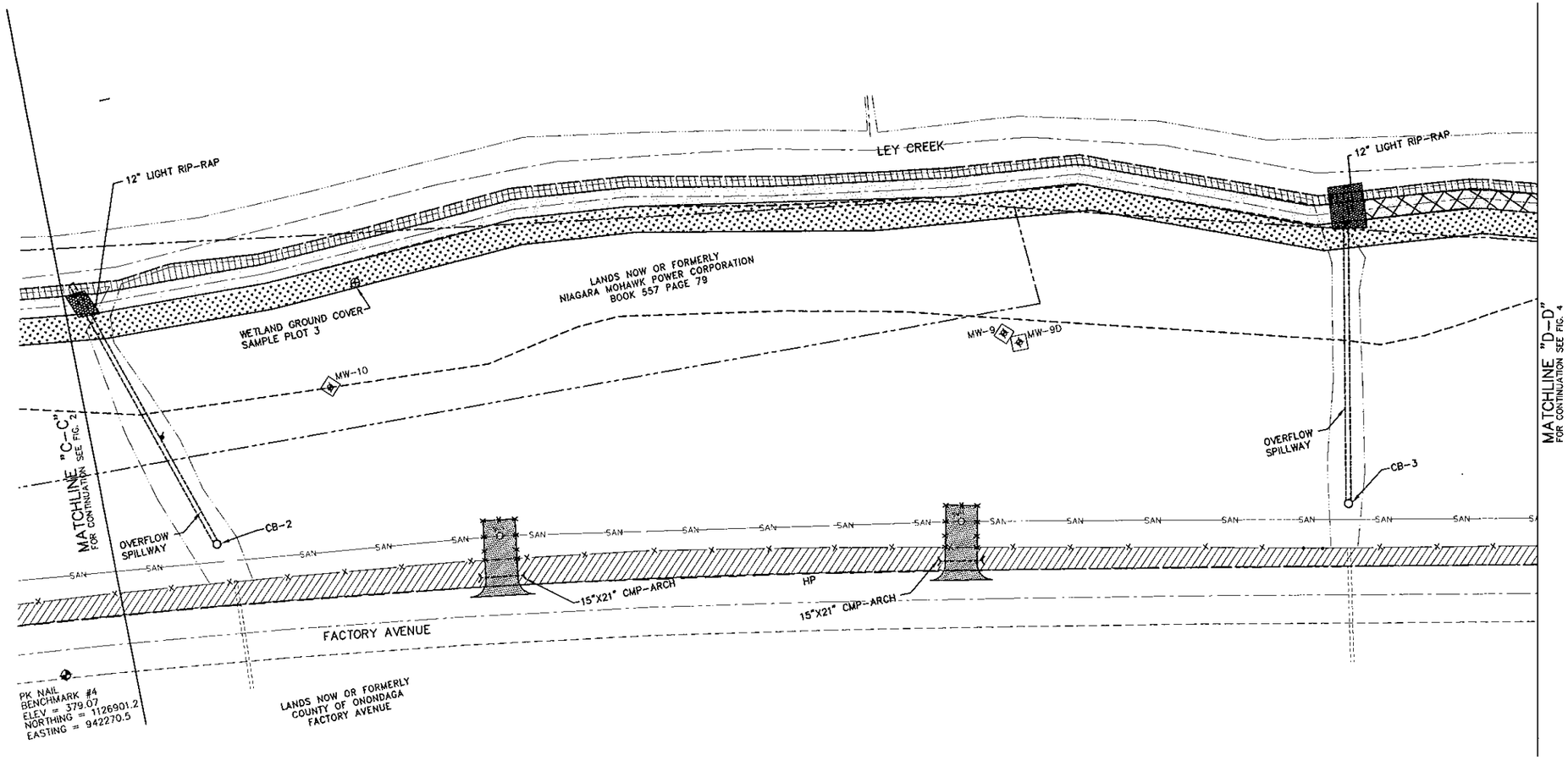
FIGURE 3




LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
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- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OM&M PARTIAL SITE PLAN WETLAND EVALUATION

1"=40' 40 0 40

FILE NO. 4966.34124.022
DECEMBER 2005

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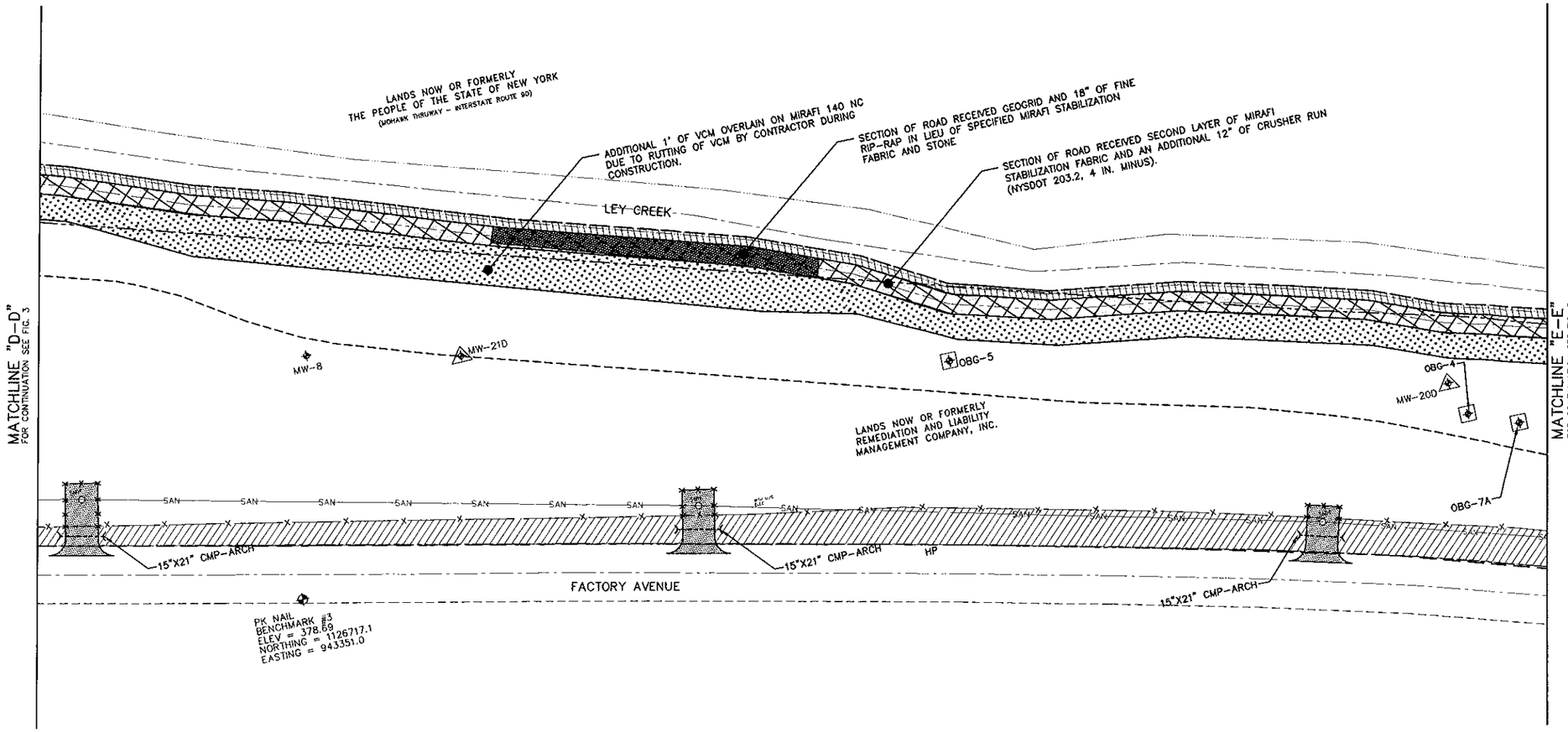


FIGURE 4

**LEGEND**

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
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LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OM&M PARTIAL SITE PLAN WETLAND EVALUATION

1"=40' 40 0 40

FILE NO. 4966.34124.023
DECEMBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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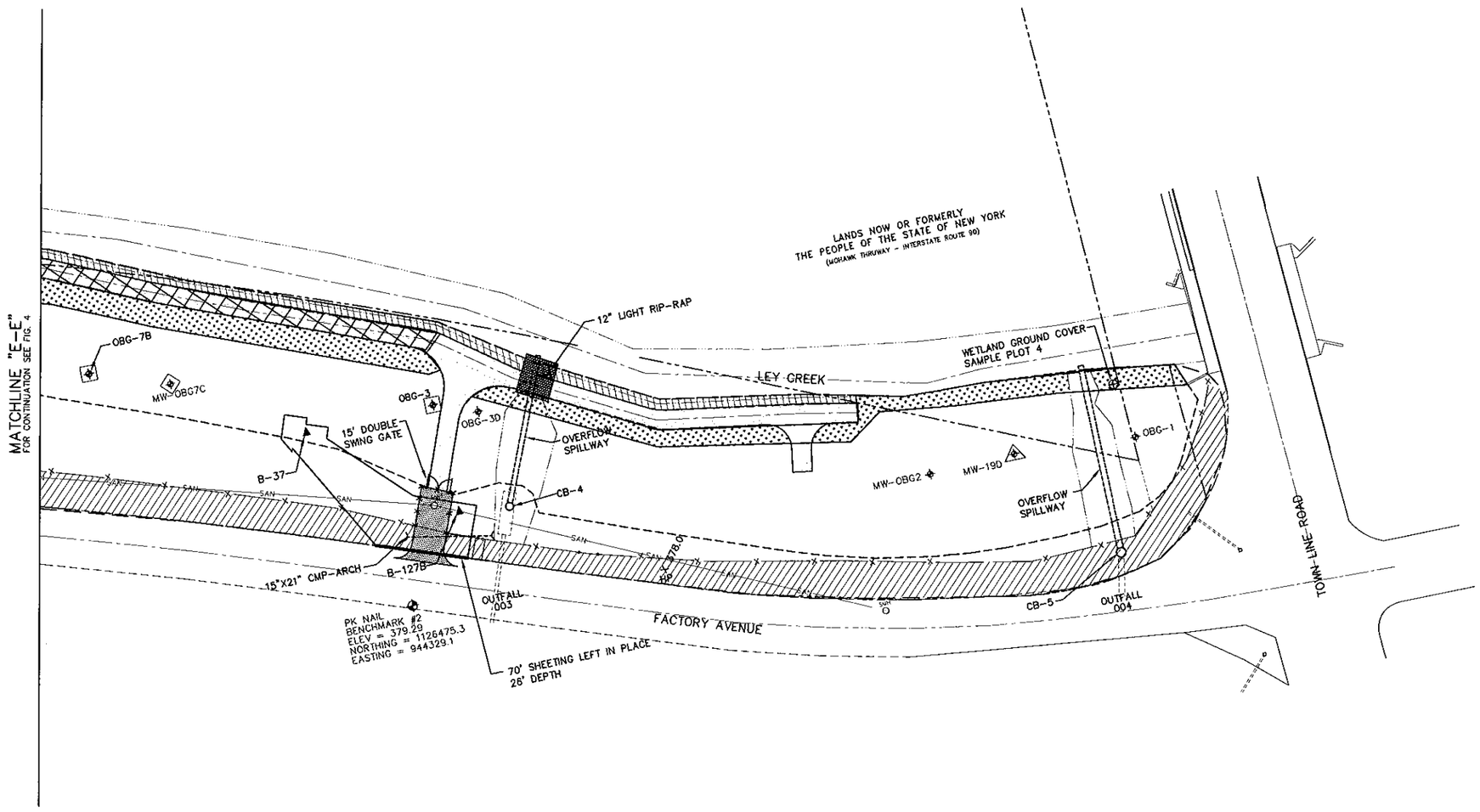


FIGURE 5

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
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LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OM&M PARTIAL SITE PLAN WETLAND EVALUATION

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FILE NO. 4966.34124.024
DECEMBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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Attachment 1

# Field Data Forms

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland
**Date:** 10/21/2005
**Investigator(s):** A. Morton & R. Chiarello
**Plot:** Plot #1
**Wetland type:** Emergent

| Species | Wetland Indicator Status | Percent cover |
|---|---|---|
| *Phalaris arundinacea* | FACW+ | 30 |
| *Lathyrus sylvestris* | NI | 60 |
| *Phragmites australis* | FACW | 5 |
| *Fraxinus pennsylvanica* | FACW | 5 |
| **Total ground cover (%)** | | 100 |
| **% desirable ground cover** | | 35[a] |
| **% ground cover hydrophytic (FAC, FACW and OBL)** | | 40[b] |

Note
[a]Calculated by subtracting % cover of undesirable wetland species, *i.e., Lythrum salicaria, Phragmites australis*, if present, non-wetland (FACU, FACU- and UPL), and non-indicator (NI) species from total % ground cover.
[b]Calculated by adding percent cover for hydrophytic indicator status and dividing by total ground cover %. This value is an indicator of the predominant vegetation type (hydrophytic or upland) in the sample plot.

*Wetland Indicator Status Range*
UPL (obligate upland) = probability of occurrence in wetland <1%
FACU (facultative upland) = probability of occurrence in wetland in the range 1 to 33%
FACU- (facultative upland -) = probability of occurrence in wetland in the lower part of the range 1 to 33%
FACU+ (facultative upland +) = probability of occurrence in wetland in the upper part of the range 1 to 33%
FAC (facultative) = probability of occurrence in wetland in the range 34 to 66%
FAC- (facultative -) = probability of occurrence in wetland in the lower part of the range 34 to 66%
FAC+ (facultative +) = probability of occurrence in wetland in the upper part of the range 34 to 66%
FACW (facultative wetland) = probability of occurrence in wetland in the range 67 to 99%
FACW- (facultative wetland -) = probability of occurrence in wetland in the lower part of the range 67 to 99%
FACW+ (facultative wetland +) = probability of occurrence in wetland in the upper part of the range 67 to 99%
OBL (obligate wetland) = probability of occurrence in wetland >99%
NI = non indicator species (not included on indicator listing)

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland
**Date:** 10/21/2005
**Investigator(s):** A. Morton & R. Chiarello
**Plot:** Plot #2
**Wetland type:** Emergent

| Species | Wetland Indicator Status | Percent cover |
|---|---|---|
| *Phalaris arundinacea* | FACW+ | 45 |
| *Aster vimineus* | FAC | 45 |
| *Plantago major* | FACU | 5 |
| *Trifolium repense* | FACU- | 1 |
| **Total ground cover (%)** | | 96 |
| **% desirable ground cover** | | 90[a] |
| **% ground cover hydrophytic (FAC, FACW and OBL)** | | 90[b] |

Note
[a]Calculated by subtracting % cover of undesirable wetland species, *i.e., Lythrum salicaria, Phragmites australis*, if present, non-wetland (FACU, FACU- and UPL), and non-indicator (NI) from total % ground cover.
[b]Calculated by adding percent cover for hydrophytic indicator status and dividing by total ground cover %. This value is an indicator of the predominant vegetation type (hydrophytic or upland) in the sample plot.

*Wetland Indicator Status Range*
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FAC (facultative) = probability of occurrence in wetland in the range 34 to 66%
FAC- (facultative -) = probability of occurrence in wetland in the lower part of the range 34 to 66%
FAC+ (facultative +) = probability of occurrence in wetland in the upper part of the range 34 to 66%
FACW (facultative wetland) = probability of occurrence in wetland in the range 67 to 99%
FACW- (facultative wetland -) = probability of occurrence in wetland in the lower part of the range 67 to 99%
FACW+ (facultative wetland +) = probability of occurrence in wetland in the upper part of the range 67 to 99%
OBL (obligate wetland) = probability of occurrence in wetland >99%

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland
**Date:** 10/21/2005
**Investigator(s):** A. Morton & R. Chiarello
**Plot:** Plot #3
**Wetland type:** Emergent

| Species | Wetland Indicator Status | Percent cover |
|---|---|---|
| *Phalaris arundinacea* | FACW+ | 15 |
| *Aster lateriflorus* | FACW- | 55 |
| *Salix* sp. | FACW - OBL | 25 |
| *Solidago canadensis* | FACU | 5 |
| | **Total ground cover (%)** | 100 |
| | **% desirable ground cover** | 95[a] |
| | **% ground cover hydrophytic (FAC, FACW and OBL)** | 95[b] |

Note
[a]Calculated by subtracting % cover of undesirable wetland species, *i.e., Lythrum salicaria, Phragmites australis*, if present, non-wetland (FACU, FACU- and UPL), and non-indicator (NI) species from total % ground cover.
[b]Calculated by adding percent cover for hydrophytic indicator status and dividing by total ground cover %. This value is an indicator of the predominant vegetation type (hydrophytic or upland) in the sample plot.

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FACU+ (facultative upland +) = probability of occurrence in wetland in the upper part of the range 1 to 33%
FAC (facultative) = probability of occurrence in wetland in the range 34 to 66%
FAC- (facultative -) = probability of occurrence in wetland in the lower part of the range 34 to 66%
FAC+ (facultative +) = probability of occurrence in wetland in the upper part of the range 34 to 66%
FACW (facultative wetland) = probability of occurrence in wetland in the range 67 to 99%
FACW- (facultative wetland -) = probability of occurrence in wetland in the lower part of the range 67 to 99%
FACW+ (facultative wetland +) = probability of occurrence in wetland in the upper part of the range 67 to 99%
OBL (obligate wetland) = probability of occurrence in wetland >99%

# GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland
**Date:** 10/21/2005
**Investigator(s):** A. Morton & R. Chiarello
**Plot:** Plot #4
**Wetland type:** Emergent

| Species | Wetland Indicator Status | Percent cover |
|---|---|---|
| *Phalaris arundinacea* | FACW+ | 70 |
| *Aster lateriflorus* | FACW- | 5 |
| *Galium tinctorium* | OBL | 15 |
| *Solidago canadensis* | FACU | 5 |
| *Boehmeria cylindrica* | FACW+ | 5 |
| **Total ground cover (%)** | | 100 |
| **% desirable ground cover** | | 95[a] |
| **% ground cover hydrophytic (FAC, FACW and OBL)** | | 95[b] |

Note
[a]Calculated by subtracting % cover of undesirable wetland species, *i.e., Lythrum salicaria, Phragmites australis*, if present, non-wetland (FACU, FACU- and UPL), and non-indicator (NI) species from total % ground cover.
[b]Calculated by adding percent cover for hydrophytic indicator status and dividing by total ground cover %. This value is an indicator of the predominant vegetation type (hydrophytic or upland) in the sample plot.

*Wetland Indicator Status Range*
UPL (obligate upland) = probability of occurrence in wetland <1%
FACU (facultative upland) = probability of occurrence in wetland in the range 1 to 33%
FACU- (facultative upland -) = probability of occurrence in wetland in the lower part of the range 1 to 33%
FACU+ (facultative upland +) = probability of occurrence in wetland in the upper part of the range 1 to 33%
FAC (facultative) = probability of occurrence in wetland in the range 34 to 66%
FAC- (facultative -) = probability of occurrence in wetland in the lower part of the range 34 to 66%
FAC+ (facultative +) = probability of occurrence in wetland in the upper part of the range 34 to 66%
FACW (facultative wetland) = probability of occurrence in wetland in the range 67 to 99%
FACW- (facultative wetland -) = probability of occurrence in wetland in the lower part of the range 67 to 99%
FACW+ (facultative wetland +) = probability of occurrence in wetland in the upper part of the range 67 to 99%
OBL (obligate wetland) = probability of occurrence in wetland >99%

Attachment 2

# Photograph Log

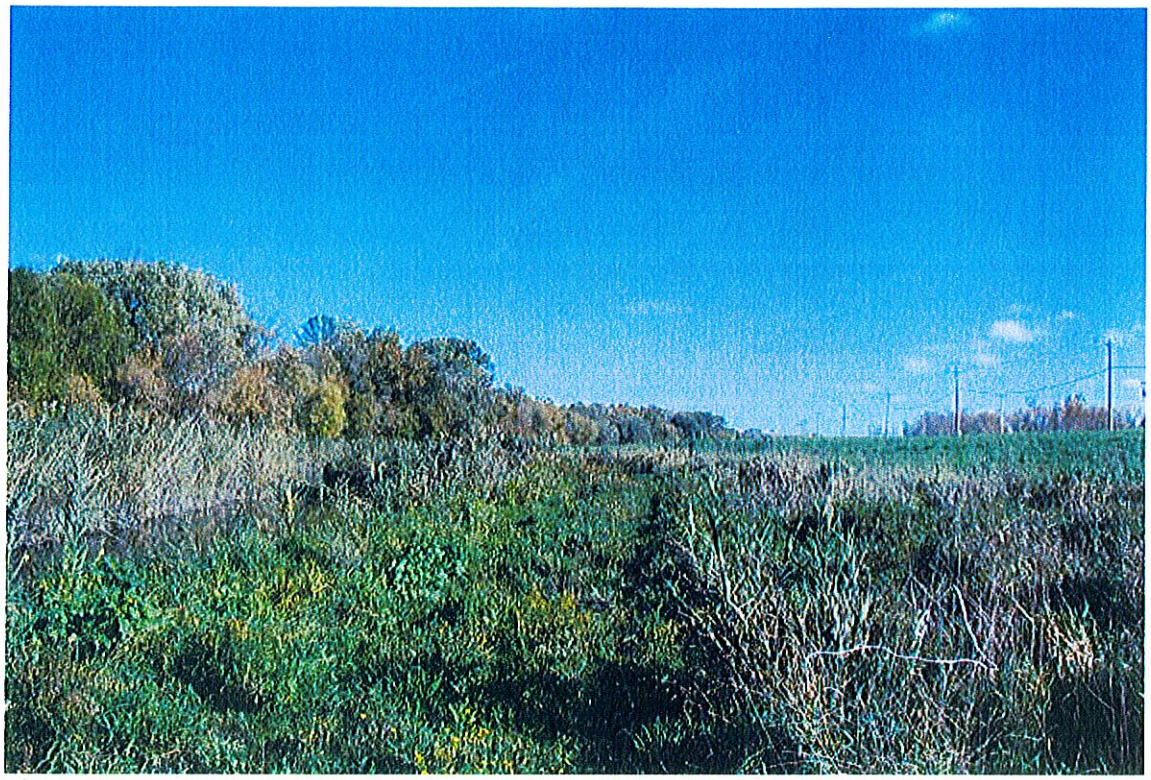

Photo 1: Looking east at area of restored wetland evaluation Plot #1.
Date photo taken: 10/21/2005

Photo 2: Looking west at area of restored wetland evaluation Plot #2.
Date photo taken: 10/21/2005

Photo 3: Looking west at area of restored wetland evaluation Plot #3.
Date photo taken: 10/21/2005

Photo 4: Looking northwest at area of restored wetland evaluation Plot #4.
Date photo taken: 10/21/2005

O'BRIEN & GERE

December 21, 2005

James F. Hartnett
Remediation and Liability Management Company, Inc.
1 General Motors Drive
Suite 2
Syracuse, New York 13206-1127

Re: Ley Creek PCB Dredgings Site
October 2005 OM&M Inspection

File: 4966/34124 #2

Dear Jim:

The purpose of this letter report is to document the Operation, Maintenance, and Monitoring (OM&M) site inspection conducted on October 28, 2005 by O'Brien & Gere at the Ley Creek PCB Dredgings Site (the Site), located in Syracuse, New York. This inspection was performed in accordance with the NYSDEC-approved OM&M Manual, dated September 2001.

## SITE INSPECTION

On October 28, 2005, an OM&M site inspection was performed at the Site. The inspection checklist with comments is attached. The inspection photographs are also attached with descriptions of the photographs. The approximate locations of where the photographs were taken are shown in the attached site figures.

The following outstanding issues have been observed during previous site inspections and should be addressed as soon as practicable (referenced photographs are from the October 2005 inspection):

- Rutting of the stone access road (Figure 2)
- Delineation of the wetland area with signage
- Damage to the site security fence (Figures 4 and 5)
- Exposed erosion control fabric (Figure 3)
- Evidence of the presence of burrowing animals

- Vegetation through pavement/cracks in asphalt (Photographs 9 and 11 - Figure 3)
- A significant amount of vegetation within the stone access road throughout the Site and the stone access road turnaround at the eastern end of the Site (Photograph 3-Figure 5)
- Tree establishment along the fence line (Photograph 5-Figure 4 and Photograph 10-Figure 3).

Additional issues observed in the October 2005 inspection that require action are as follows:

- Burrowing animal in vegetative cover (Photograph 4-Figure 5)
- Excessive bank scour due to clogged catch basin (Photograph 14-Figure 1)
- Exposed erosion control fabric (Photograph 1-Figure 5)
- Pavement depression (Photograph 9-Figure 3)
- Clogged catch basins (Photograph 12-Figure 3, and Photograph 13-Figure 1)
- Mowing/trimming around catch basins (Photographs 12-Figure 3, and Photograph 13-Figure 1).

## RECOMMENDATIONS

Below is a list of recommended measures to address the observations made during the OM&M inspection:

- Repair the area of rutting of the stone access road by placement of additional crushed stone, and improve drainage of the stone access road by constructing small drainage channels to convey ponded water from the stone access road to Ley Creek. This could be performed by removal of less than 1 foot of vegetative cover material with subsequent replacement of crushed stone.
- Delineate wetland area with signage to discourage mowing of this area
- Repair the damaged site security fence
- Place topsoil over exposed erosion control fabric with subsequent seeding/fertilization and placement of erosion control fabric
- Remove burrowing animal(s) from the Site; place topsoil in the hole; and apply seed and fertilizer
- Remove vegetation from asphalt and repair cracks

- Remove vegetation from the stone access road and the stone access road turnaround
- Remove trees from fence line
- Unclog and replace grates in catch basins with trash racks to minimize clogging
- Place topsoil and seed over scoured areas
- Remove excessive vegetation around catch basins
- Repair pavement depression with like asphalt.

The next semi-annual OM&M inspection is scheduled to occur in the late spring/early summer of 2006.

If you should have any questions pertaining to the information presented in this letter, please feel free to contact me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Bradley A. Kubiak, P.E.
Senior Project Engineer

I:\DIV71\Projects\4966\34124\2_corres\Client\October 2005 O&M Inspection\jh OMM ltr 122105.doc

cc: Douglas Crawford, P.E.
Maureen Markert, P.E.
Nathyn Knipe

*Inspection checklist*

| | |
|---|---|
| Date Performed: **October 28, 2005** | Weather: **Cloudy 50 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Nathyn M. Knipe** |
| Site Location: **Syracuse, New York** | Inspector Signature: Nathyn M. Knipe |

| Item | Task | Response Yes | Response No | Comments |
|---|---|---|---|---|
| **Vegetative Cover** | **Visually inspect surface conditions.** | | | |
| | 1. Areas of settlement? | | X | |
| | 2. Areas of erosion? | X | | Refer to Figures 3 and 5 and Photograph 1. |
| | 3. Areas where geotextile visible due to erosion? | | X | |
| | 4. Areas of slope instability? | | X | |
| | 5. Lack or thinning vegetation? | | X | |
| | 6. Presence of burrowing animals? | X | | Refer to Photograph 4-Figure 5 and Photograph 8-Figure 4. |
| | 7. Areas of damage? | | X | |
| | 8. Drainage problems? | | X | |
| | 9. Mowing required? | X | | Mowing required around catch basins (Photograph 12-Figure 3 and Photograph 13-Figure 1) |
| **Access Road** | **Visually inspect conditions.** | | | |
| | 1. Areas of settlement? | | X | |

*Inspection checklist*

| | |
|---|---|
| Date Performed: **October 28, 2005** | Weather: **Cloudy 50 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Nathyn M. Knipe** |
| Site Location: **Syracuse, New York** | Inspector Signature: |

| Item | Task | Response | | Comments |
|---|---|---|---|---|
| | | Yes | No | |
| **Access Road** | 2. Areas of erosion? | | X | |
| | 3. Areas rutted or potholes present? | X | | Refer to Figure 2 for location of rutting. |
| | 4. Areas of damage? | | X | |
| **Surface Water Drainage** | **Visually inspect ditches, catch basins, etc.** | | | |
| | 1. Accumulation of debris? | X | | Refer to Photograph 12-Figure 3 and Photograph 13-Figure 1. |
| | 2. Excessive scouring? | X | | Refer to Photograph 14-Figure 1 |
| | 3. Areas of damage? | | X | |
| **Ground Water Wells** | **Visually inspect conditions.** | | | |
| | 1. Casings secure and locked? | X | | |
| | 2. Areas of damage? | | X | |
| **Sanitary sewer access paths** | **Visually inspect conditions.** | | | |
| | 1. Cracks in asphalt? | X | | Plant growth through asphalt. Refer to Figure 3 and Photographs 9 and 11. |
| | 2. Manhole covers in place? | X | | |

*Inspection checklist*

| | |
|---|---|
| Date Performed: **October 28, 2005** | Weather: **Cloudy 50 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Nathyn M. Knipe** |
| Site Location: **Syracuse, New York** | Inspector Signature: Nathyn M. Knipe |

| Item | Task | Response Yes | Response No | Comments |
|---|---|---|---|---|
| **Sanitary sewer access paths** | 3. Debris accumulating in access paths? | | X | |
| **Physical Site Security** | **Visually inspect fences and gates** | | | |
| | 1. Signs intact? | X | | |
| | 2. Fence breached? | | X | |
| | 3. Access gates locked? | X | | |
| | 4. Areas of damage? | X | | Refer to Figures 4 and 5. |

**Note any additional comments.**

Vegetation is established in the stone access road.

Erosion at CB-3 overflow spillway and burrowing animal holes.

Repairs to the site fence remain to be done.

Tree establishment needs to be removed along fenceline.

Photograph 1: Exposed erosion fabric in CB-5/Outfall 004 spillway.

Photograph 2: View looking west from CB-5/Outfall 004 outlet.

Photograph 3: Vegetation in access road between CB-5 and CB-4 near turnaround area.

Photograph 4: Burrowing animal hole

Photograph 5: Tree establishment.

Photograph 6: Looking west near CB-3.

Photograph 7: Looking east near CB-3.

Photograph 8: Burrowing animal hole.

Photograph 9: Pavement depression/erosion with debris.

Photograph 10: Tree establishment.

Photograph 11: Vegetation through asphalt.

Photograph 12: Blocked catch basin grate at CB-2.

Photograph 13: Blocked catch basin at CB-1.

Photograph 14: Scour at CB-1 spillway into Ley Creek.

Dec 21, 2005 - 9:18am

LANDS NOW OR FORMERLY
NIAGARA MOHAWK POWER CORPORATION
BOOK 598 PAGE 194
BOOK 607 PAGE 126
BOOK 557 PAGE 79

LEY CREEK

12" LIGHT RIP-RAP

14

LANDS NOW OR FORMERLY
NIAGARA MOHAWK POWER CORPORATION
BOOK 598 PAGE 194
BOOK 607 PAGE 126
BOOK 557 PAGE 79

OVERFLOW SPILLWAY

MW-13

13
CB-1

MATCHLINE "B-B"
FOR CONTINUATION SEE FIG. 2

15' DOUBLE SWING GATE

15"X21" CMP-ARCH

HP

15"X21" CMP-ARCH

15"X21" CMP-ARCH

FACTORY AVENUE

PK NAIL
BENCHMARK #5
ELEV = 379.15
NORTHING = 1126932.5
EASTING = 941347.2

PK NAIL
BENCHMARK #6
ELEV = 379.08
NORTHING = 1126859.0
EASTING = 940664.8

FIGURE 1

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (13) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OCTOBER 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.036
OCTOBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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Dec 21, 2005 - 9:17am

FIGURE 2

MATCHLINE "B-B"
FOR CONTINUATION SEE FIG. 1

MATCHLINE "C-C"
FOR CONTINUATION SEE FIG. 3

LEY CREEK

AREA OF RUTTING IN STONE ACCES ROAD

MW-12

LANDS NOW OR FORMERLY REMEDIATION AND LIABILITY MANAGEMENT COMPANY, INC.

SAN

15"X21" CMP-ARCH

HP

TREE GROWTH

FACTORY AVENUE

LANDS NOW OR FORMERLY COUNTY OF ONONDAGA FACTORY AVENUE

PK NAIL
BENCHMARK #4
ELEV = 379.07
NORTHING = 1126901.2
EASTING = 942270.5

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (8) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OCTOBER 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.037
OCTOBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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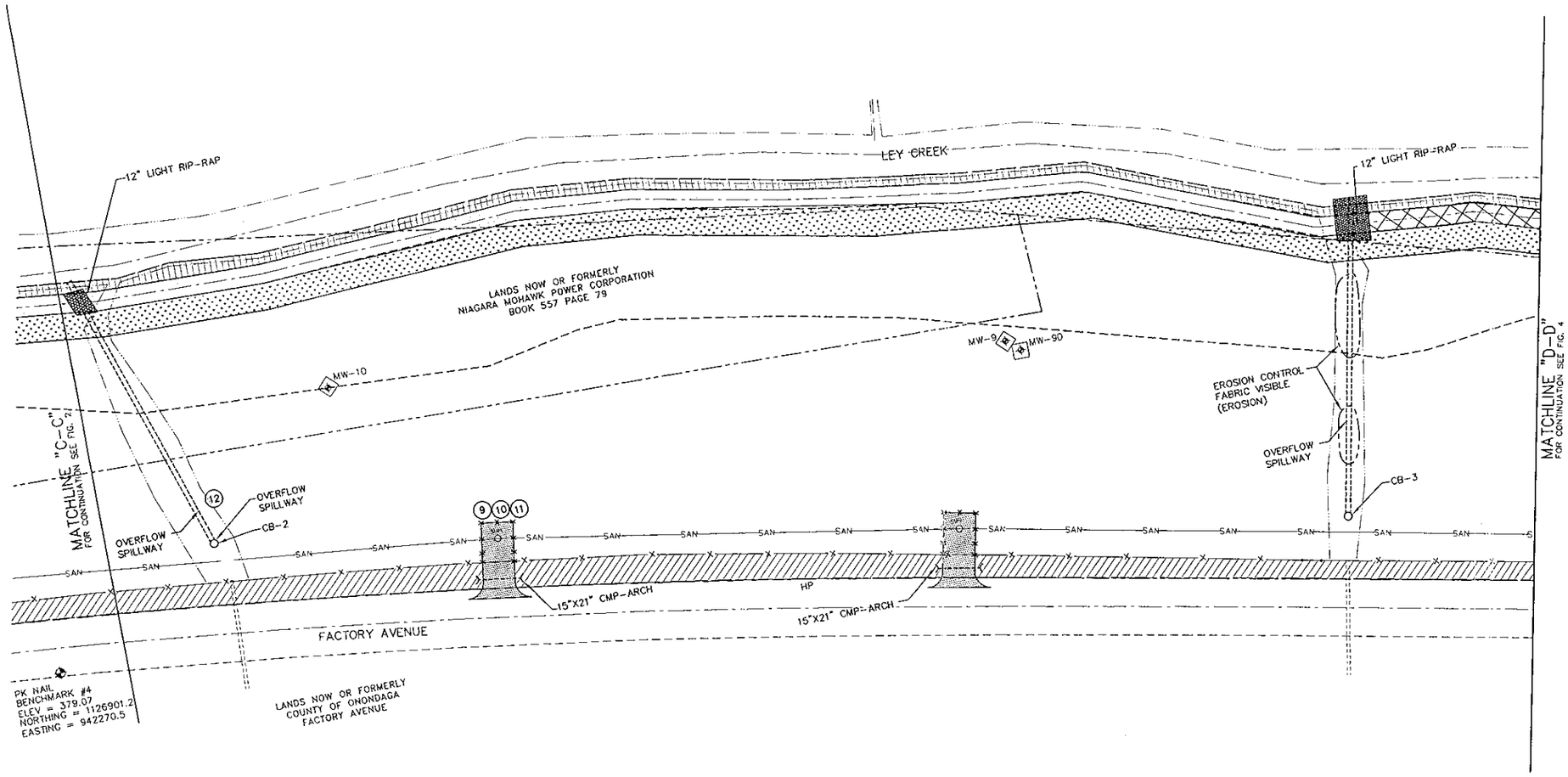
Dec 21, 2005 - 9:18am

FIGURE 3




LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (9) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OCTOBER 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.038
OCTOBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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FIGURE 4

LANDS NOW OR FORMERLY
THE PEOPLE OF THE STATE OF NEW YORK
(MOHAWK THRUWAY - INTERSTATE ROUTE 90)

SECTION OF ROAD RECEIVED GEOGRID AND 18" OF FINE RIP-RAP IN LIEU OF SPECIFIED MIRAFI STABILIZATION FABRIC AND STONE

LEY CREEK

MATCHLINE "D-D"
FOR CONTINUATION SEE FIG. 3

MATCHLINE "E-E"
FOR CONTINUATION SEE FIG. 5

MW-8

MW-21D

OBG-5

OBG-4

MW-20D

OBG-7A

LANDS NOW OR FORMERLY
REMEDIATION AND LIABILITY
MANAGEMENT COMPANY, INC.

DAMAGE TO FENCE

15"X21" CMP-ARCH

SAN

HP

FACTORY AVENUE

PK NAIL
BENCHMARK #3
ELEV = 378.68
NORTHING = 1126717.1
EASTING = 943351.0

## LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (7) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OCTOBER 2005
# OM&M INSPECTION
# PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.039
OCTOBER 2005

O'BRIEN & GERE
ENGINEERS, INC.

Dec 21, 2005 - 9:17am

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Dec 21, 2005 - 9:18am

FIGURE 5

MATCHLINE "E-E"
FOR CONTINUATION SEE FIG. 4

LANDS NOW OR FORMERLY
THE PEOPLE OF THE STATE OF NEW YORK
(MOHAWK THRUWAY - INTERSTATE ROUTE 90)

12" LIGHT RIP-RAP

LEY CREEK

OBG-7B

MW-OBG7C

OBG-3

OBG-3D

15' DOUBLE SWING GATE

OVERFLOW SPILLWAY

CB-4

DAMAGE TO FENCE

MW-OBG2

MW-19D

OVERFLOW SPILLWAY

OBG-1

TOWN LINE ROAD

15"X21" CMP-ARCH

PK NAIL
BENCHMARK #2
ELEV = 379.29
NORTHING = 1126475.3
EASTING = 944329.1

OUTFALL 003

FACTORY AVENUE

CB-5

OUTFALL 004

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (1) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# OCTOBER 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.040
OCTOBER 2005

O'BRIEN & GERE ENGINEERS, INC.

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O'BRIEN & GERE

August 30, 2005

James F. Hartnett
Remediation and Liability Management Company, Inc.
1 General Motors Drive
Suite 2
Syracuse, New York 13206-1127

Re: Ley Creek PCB Dredgings Site
June 2005 OM&M Inspection

File: 4966/34124 #2

Dear Jim:

The purpose of this letter report is to document the Operation, Maintenance, and Monitoring (OM&M) site inspection conducted on June 21, 2005 by O'Brien & Gere at the Ley Creek PCB Dredgings Site (the Site), located in Syracuse, New York. This inspection was performed in accordance with the NYSDEC-approved OM&M Manual, dated September 2001. Attached to this letter report are the OM&M checklist, inspection photographs, and site figures associated with the site inspection.

## SITE INSPECTION

On June 21, 2005, an OM&M site inspection was performed at the Site. The inspection checklist along with the comments is attached. The inspection photographs are also attached along with a description of the photographs. The approximate locations of where the photographs were taken are shown in the attached site figures.

Observations that have been identified during previous site inspection that are outstanding:

- Rutting of the stone access road (Figure 2)
- Delineation of wetland area with signage
- The two areas of the site security fence that were observed to be damaged during previous site inspections (Figures 4 and 5) have not been repaired and should be repaired as soon as practicable.

Other observations of items that require action are as follows:

- Exposed Erosion Control Fabric: (Photograph 6. Figure 3) Topsoil has eroded away resulting in the exposure of erosion control fabric
- Presence of burrowing animals: (Photograph 8, Figure 2). A burrowing animal hole was observed near MW-12
- Vegetation through pavement/cracks in asphalt: (Photograph 11. Figure 3) Vegetation was observed growing through pavement
- Vegetation within stone access road: A significant amount of vegetation was observed within the stone access road throughout the Site and the stone access road turnaround at the eastern end of the Site
- Tree establishment: (Photograph 10 and 11, Figure 1 and Figure 3) Trees were observed along the fence line.

## RECOMMENDATIONS

Below is a list of recommended measures to address the observations during the OM&M inspection:

- Repair the area of rutting of the stone access road by placement of additional crushed stone, and improve drainage of the stone access road by constructing small drainage channels to convey ponded water from the stone access road to Ley Creek. This could be performed by removal of less than 1 foot of vegetative cover material with subsequent replacement of crushed stone (as recommended in the previous inspection report)
- Delineate wetland area with signage to discourage mowing of this area (as recommended in the previous inspection report)
- Repair the damaged site security fence (as recommended in the previous inspection report)
- Place topsoil over exposed erosion control fabric with subsequent seeding/fertilization
- Remove burrowing animal from the Site, place topsoil in the hole and apply seed and fertilizer
- Remove vegetation from asphalt and repair cracks
- Remove vegetation from the stone access road and the stone access road turnaround

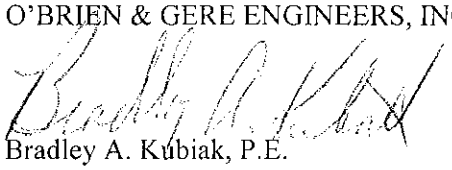
- Remove trees from fence line.

The next semi-annual OM&M inspection is scheduled to occur in the Fall of 2005.

If you should have any questions pertaining to the information presented in this letter, please feel free to contact me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Bradley A. Kubiak, P.E.
Senior Project Engineer

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cc: Douglas Crawford, P.E.
Maureen Markert, P.E.
Nathyn Knipe

*Inspection checklist*

| | |
|---|---|
| Date Performed: **June 21, 2005** | Weather: **Sunny 75 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Edwin B. Rahn** |
| Site Location: **Syracuse, New York** | Inspector Signature: Edwin B Rahn |

| Item | Task | Response Yes | Response No | Comments |
|---|---|---|---|---|
| Vegetative Cover | **Visually inspect surface conditions.** | | | |
| | 1. Areas of settlement? | | X | |
| | 2. Areas of erosion? | X | | Refer to Figure 3 and Photograph 6. |
| | 3. Areas where geotextile visible due to erosion? | | X | |
| | 4. Areas of slope instability? | | X | |
| | 5. Lack or thinning vegetation? | | X | |
| | 6. Presence of burrowing animals? | X | | Refer to Figure 2 and Photograph 8. |
| | 7. Areas of damage? | | X | |
| | 8. Drainage problems? | | X | |
| | 9. Mowing required? | X | | |
| Access Road | **Visually inspect conditions.** | | | |
| | 1. Areas of settlement? | | X | |

*Inspection checklist*

| | |
|---|---|
| Date Performed: **June 21, 2005** | Weather: **Sunny 75 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Edwin B. Rahn** |
| Site Location: **Syracuse, New York** | Inspector Signature: Edwin B Rahn |

| Item | Task | Response Yes | Response No | Comments |
|---|---|---|---|---|
| **Access Road** | 2. Areas of erosion? | | X | |
| | 3. Areas rutted or potholes present? | X | | Refer to Figure 2 for location of rutting. |
| | 4. Areas of damage? | | X | |
| **Surface Water Drainage** | **Visually inspect ditches, catch basins, etc.** | | | |
| | 1. Accumulation of debris? | | X | |
| | 2. Excessive scouring? | | X | |
| | 3. Areas of damage? | | X | |
| **Ground Water Wells** | **Visually inspect conditions.** | | | |
| | 1. Casings secure and locked? | X | | |
| | 2. Areas of damage? | | X | |
| **Sanitary sewer access paths** | **Visually inspect conditions.** | | | |
| | 1. Cracks in asphalt? | X | | Plant growth through asphalt. Refer to Figures 1 and 3 and Photographs 10 and 11. |
| | 2. Manhole covers in place? | X | | |

*Inspection checklist*

| | |
|---|---|
| Date Performed: **June 21, 2005** | Weather: **Sunny 75 F** |
| Site Name: **Ley Creek PCB Dredgings Site** | Inspector Name: **Edwin B. Rahn** |
| Site Location: **Syracuse, New York** | Inspector Signature: Edwin B Rahn |

| Item | Task | Response Yes | Response No | Comments |
|---|---|---|---|---|
| **Sanitary sewer access paths** | 3. Debris accumulating in access paths? | | X | |
| **Physical Site Security** | **Visually inspect fences and gates** | | | |
| | 1. Signs intact? | X | | |
| | 2. Fence breached? | | X | |
| | 3. Access gates locked? | X | | |
| | 4. Areas of damage? | X | | Refer to Figures 4 and 5. |

**Note any additional comments.**

Vegetation is established in the stone access road.

Observations (erosion at CB-3 overflow spillway and burrowing animal holes) were made by O'Brien & Gere.

Repairs to the site fence remain to be done.

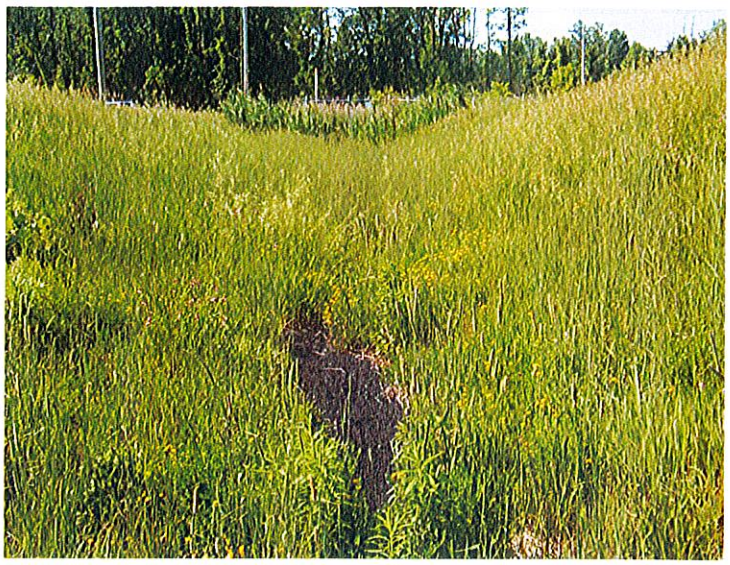
Photograph 1 - CB-5

Photograph 2 - View looking west 120 feet east from CB-4

Photograph 3 - View looking west from MW-8

Photograph 4 - View looking east from MW-8

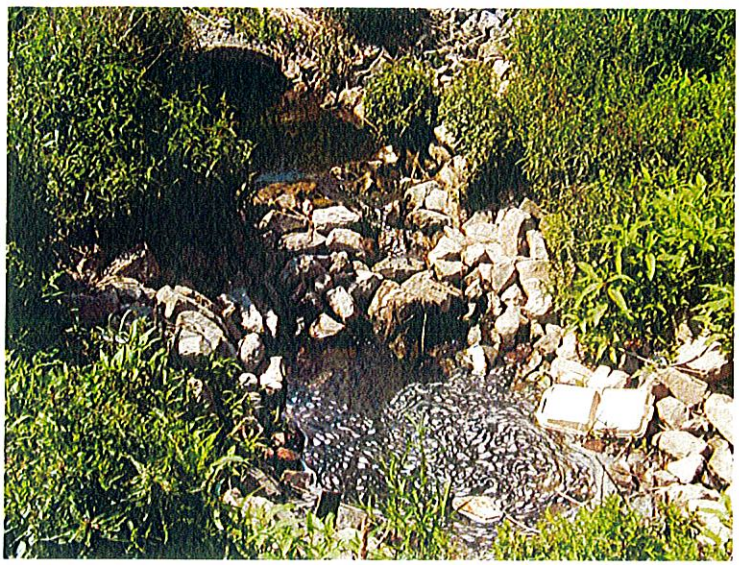
Photograph 5 - CB-3



Photograph 6 - CB-3 overflow with exposed erosion control fabric.

Photograph 7 - CB-2

Photograph 8 - Burrowing animal hole near MW-12



Photograph 9 - CB-1

Photograph 10 - Tree growing along fence line at CB-1

Photograph 11 - Vegetation in pavement and trees along fenceline

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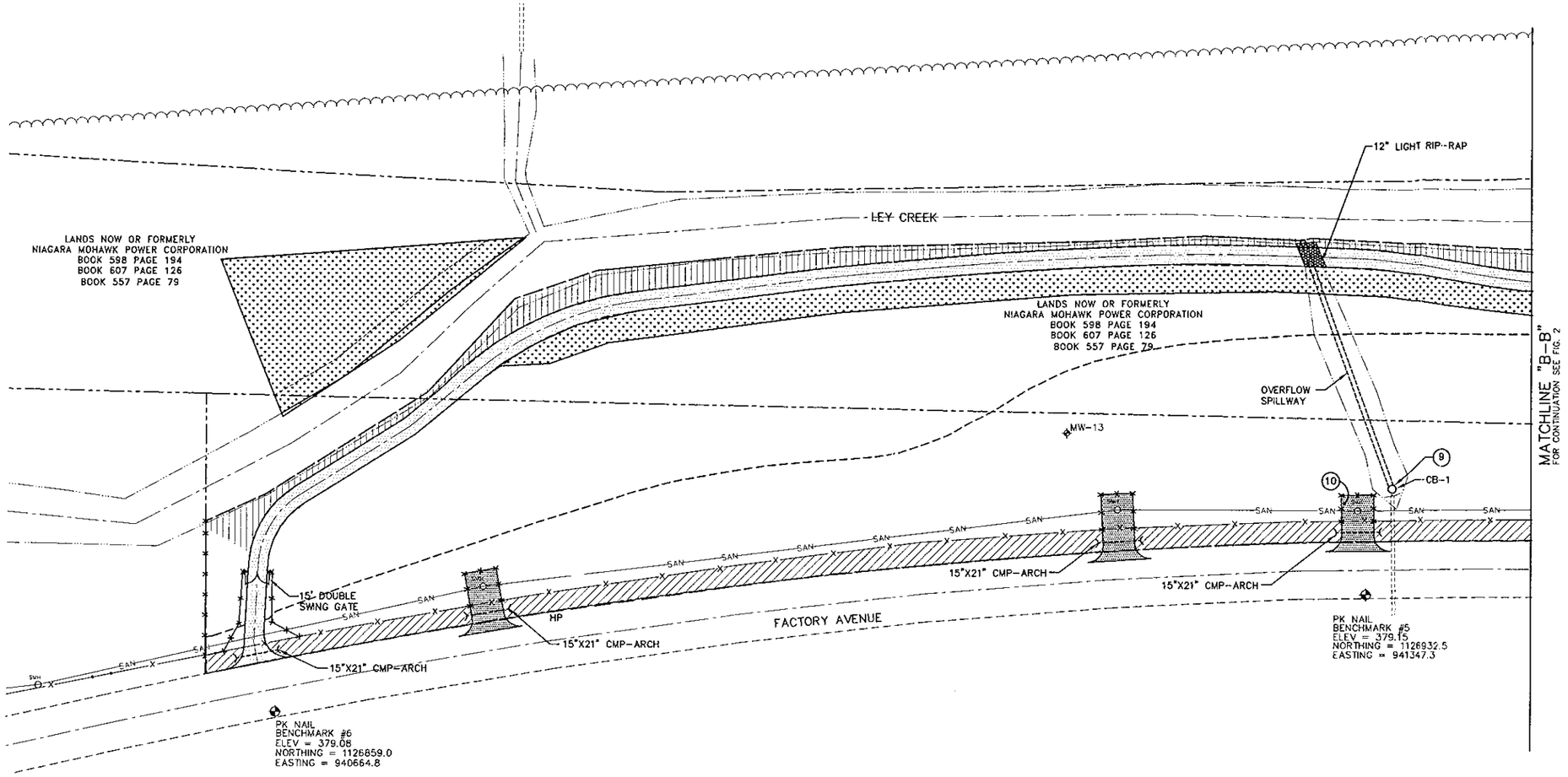
FIGURE 1




LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (11) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# JUNE 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.027
JUNE 2005

O'BRIEN & GERE ENGINEERS, INC.

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Aug. 19, 2005 - 1:30pm

MATCHLINE "B-B"
FOR CONTINUATION SEE FIG. 1

LEY CREEK

AREA OF RUTTING IN STONE ACCES ROAD

(8) MW-12

LANDS NOW OR FORMERLY
REMEDIATION AND LIABILITY
MANAGEMENT COMPANY, INC.

SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN

15"X21" CMP-ARCH HP

TREE GROWTH

(11)

15"X21" CMP-ARCH

FACTORY AVENUE

LANDS NOW OR FORMERLY
COUNTY OF ONONDAGA
FACTORY AVENUE

PK NAIL
BENCHMARK #4
ELEV = 379.07
NORTHING = 1126901.2
EASTING = 942270.5

MATCHLINE "C-C"
FOR CONTINUATION SEE FIG. 3

FIGURE 2

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C — MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (10) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# JUNE 2005
# OM&M INSPECTION
# PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.028
JUNE 2005

O'BRIEN & GERE
ENGINEERS, INC.

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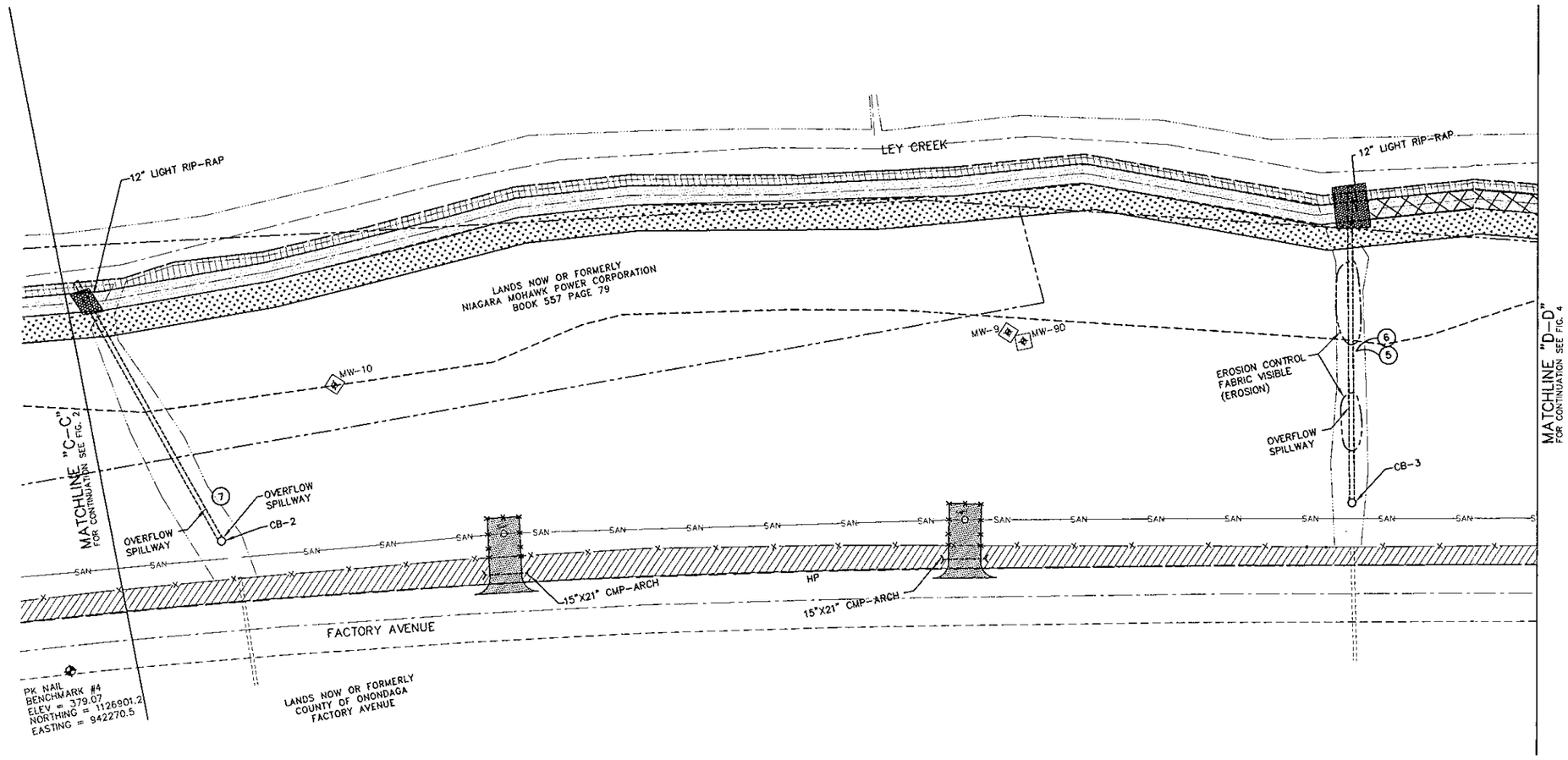


FIGURE 3

LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C — MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (7) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# JUNE 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.029
JUNE 2005

O'BRIEN & GERE ENGINEERS, INC.

FIGURE 4

LANDS NOW OR FORMERLY
THE PEOPLE OF THE STATE OF NEW YORK
(MOHAWK THRUWAY - INTERSTATE ROUTE 90)

SECTION OF ROAD RECEIVED GEOGRID AND 18" OF FINE RIP-RAP IN LIEU OF SPECIFIED MIRAFI STABILIZATION FABRIC AND STONE

LEY CREEK

MATCHLINE "D-D"
FOR CONTINUATION SEE FIG. 3

MATCHLINE "E-E"
FOR CONTINUATION SEE FIG. 5

③ MW-8 ④

MW-21D

OBG-5

OBG-4

MW-20D

OBG-7A

LANDS NOW OR FORMERLY
REMEDIATION AND LIABILITY
MANAGEMENT COMPANY, INC.

DAMAGE TO FENCE

15"X21" CMP-ARCH

15"X21" CMP-ARCH

15"X21" CMP-ARCH

SAN

HP

FACTORY AVENUE

PK NAIL
BENCHMARK #3
ELEV. = 378.68
NORTHING = 1126717.1
EASTING = 943351.0

## LEGEND

- SEEDED WITH CANARY GRASS
- OHW — OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SAN — SANITARY SEWER
- SMH — SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
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- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- ③ PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# JUNE 2005
# OM&M INSPECTION
# PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.030
JUNE 2005

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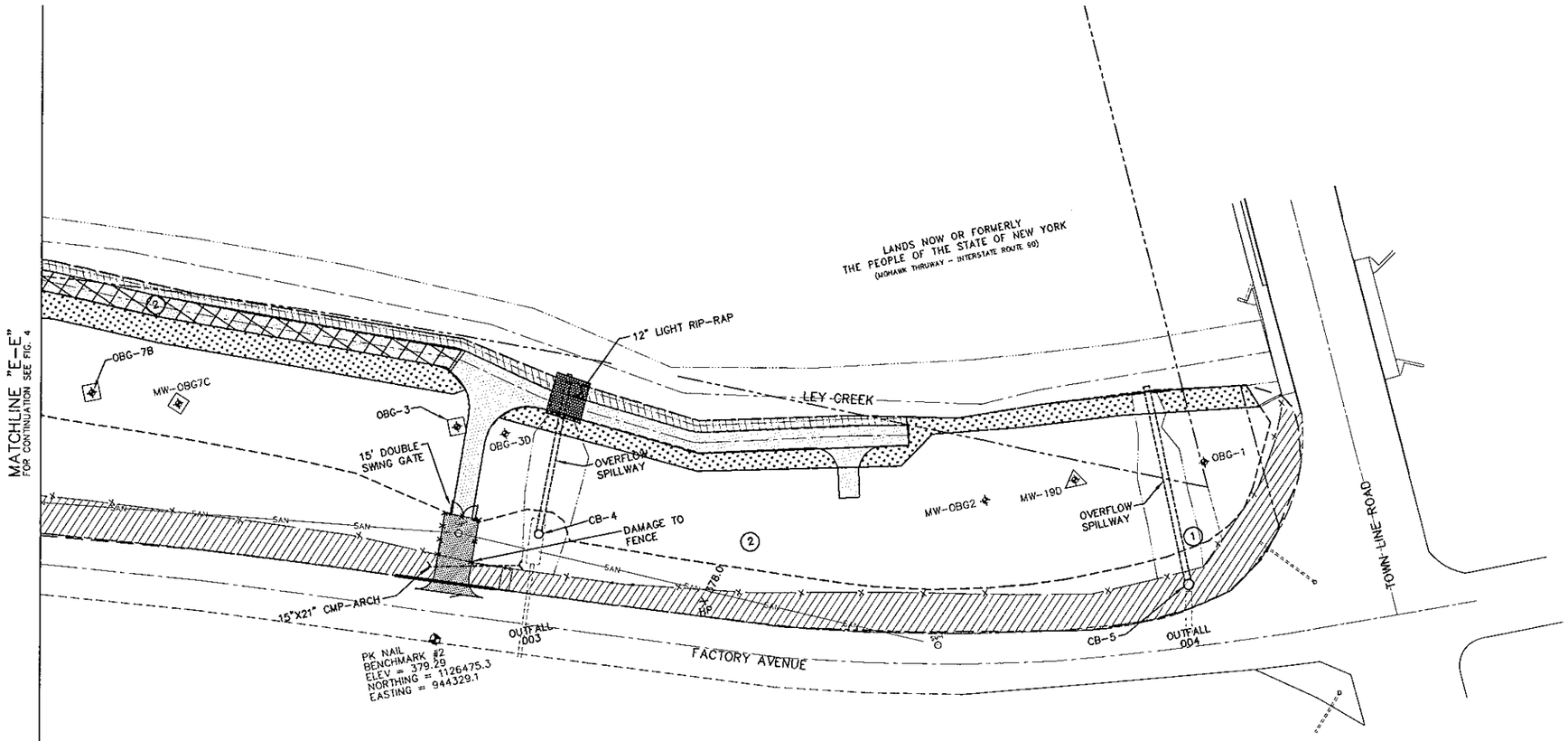


FIGURE 5

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- (1) PHOTOGRAPH LOCATION

LEY CREEK PCB DREDGINGS SITE
SYRACUSE, NEW YORK
SITE REMEDIATION PROJECT

# JUNE 2005 OM&M INSPECTION PARTIAL SITE PLAN

1"=40' 40 0 40

FILE NO. 4966.34124.031
JUNE 2005

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