NYSDEC OHMS Document No. 201469232-00008

CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

Project Site

Figure 2: Project Site

June 2012
Notes: Base Map: USGS 2-Foot Orthoimagery, 2008.

edr COMPANIES
www.edrcompanies.com

CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

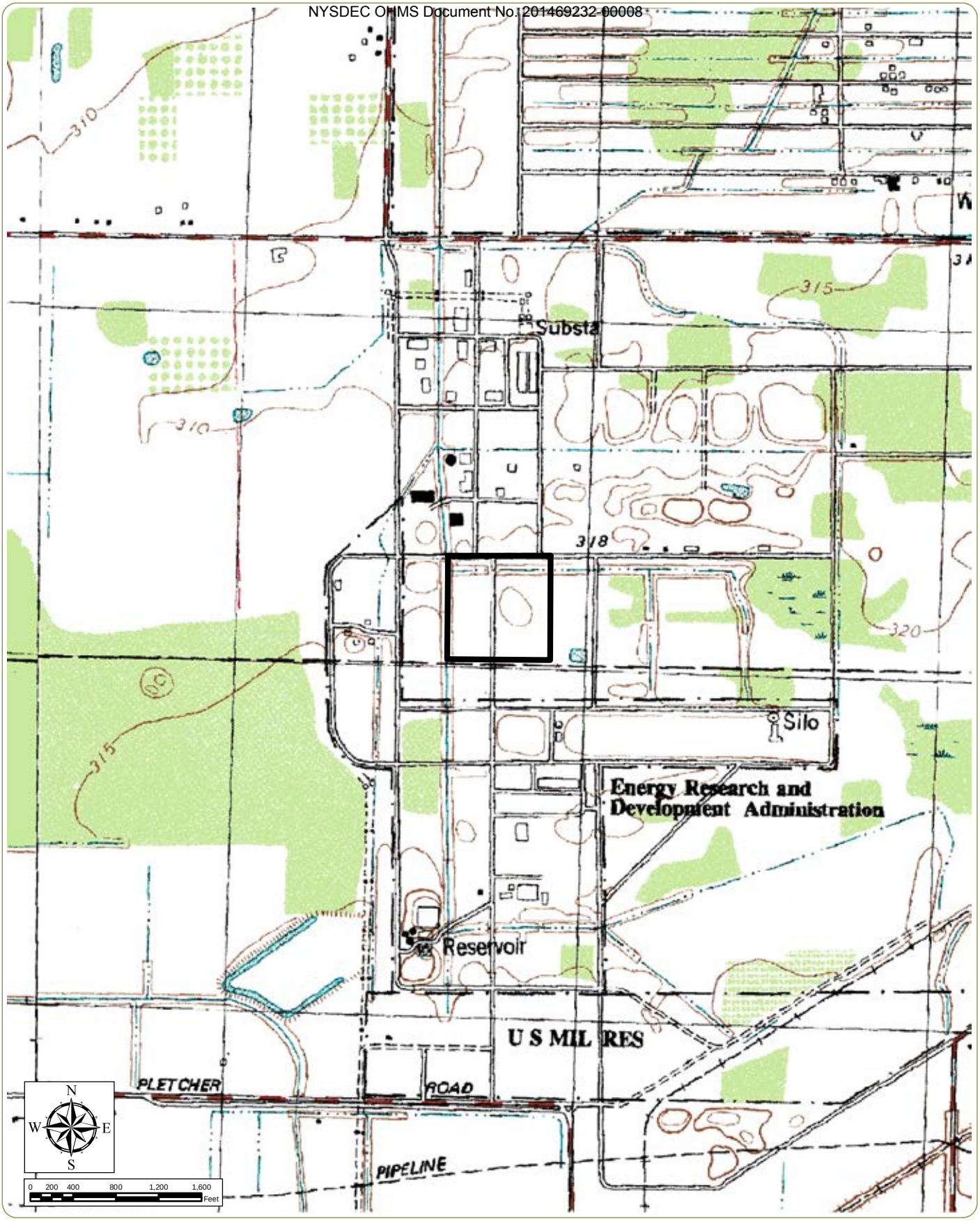
Figure 3: On-Site Ecological Communites

June 2012

Notes: Base Map: USGS 2-Foot Orthoimagery 2008.

Project Site
Forested Wetlands
Emergent Wetlands
Disturbed
Old Field
Forested Upland

edr COMPANIES
www.edrcompanies.com



CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

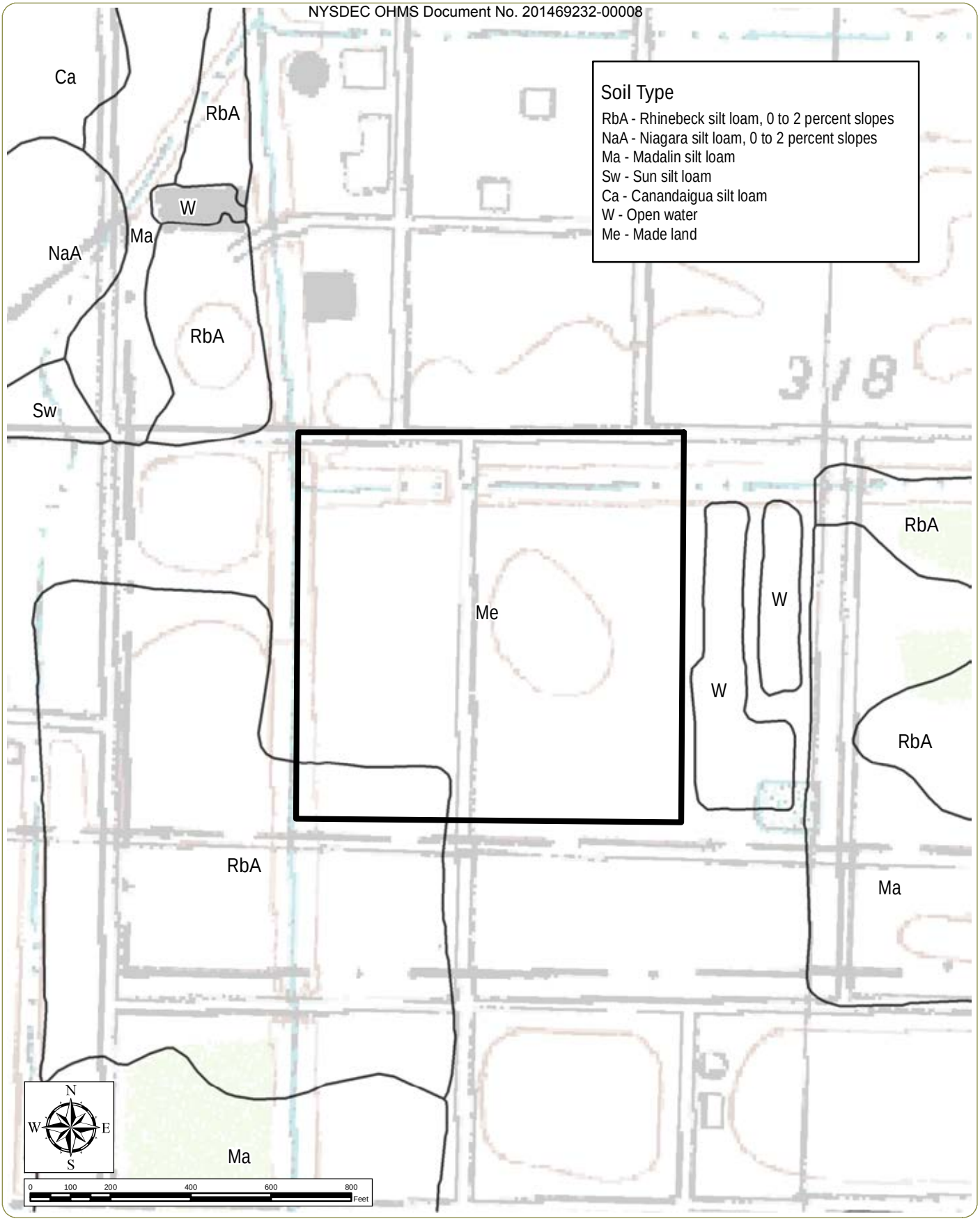
Figure 4: USGS Topographic Mapping

June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.

Project Site

edr COMPANIES
www.edrcompanies.com



CWM Model City Facility

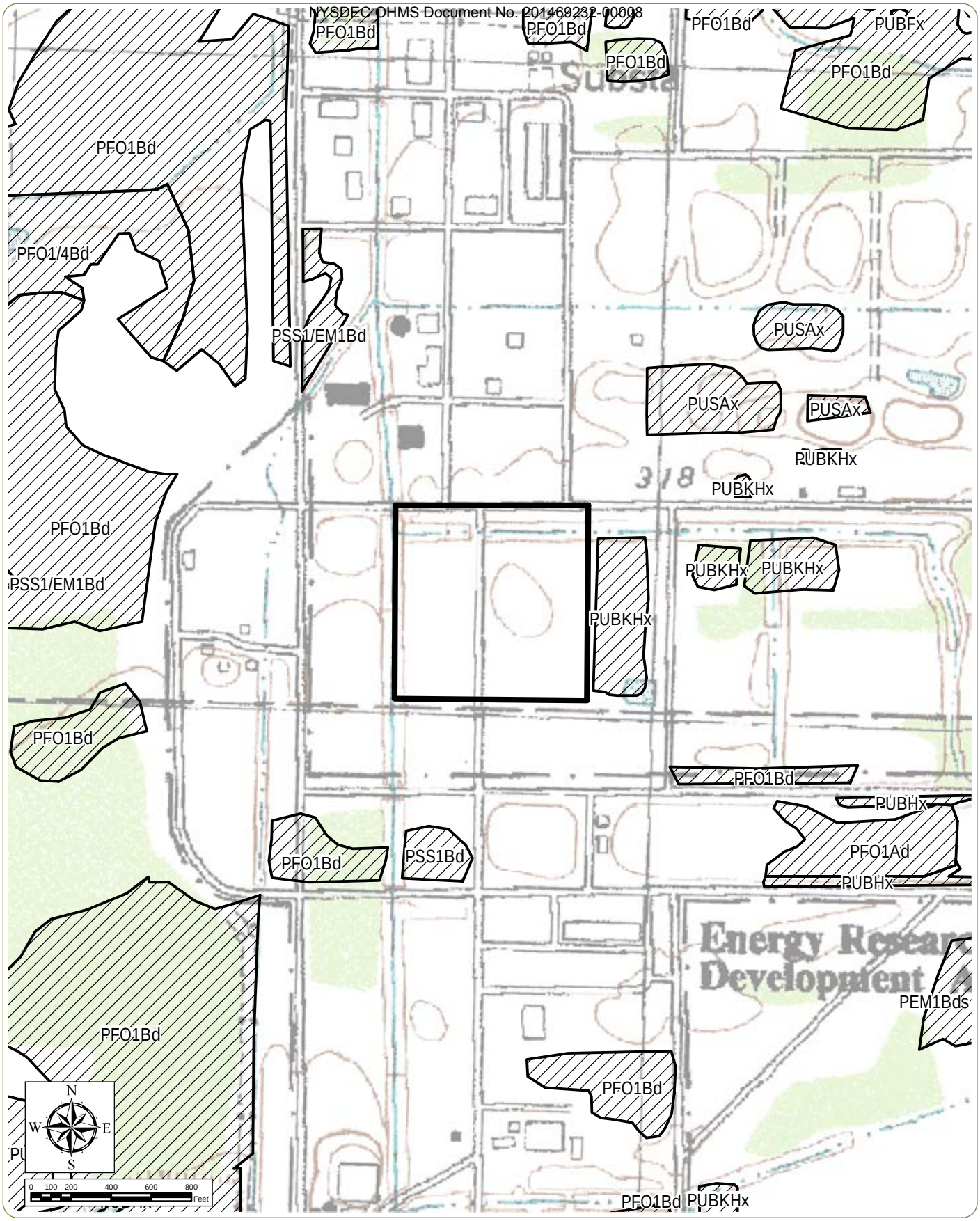
Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

Figure 5: On-Site Soils
June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.
Source: NRCS Soil Survey Geographic Database - Niagara County

Project Site
Soil Map Unit Boundary

edr COMPANIES
www.edrcompanies.com



CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

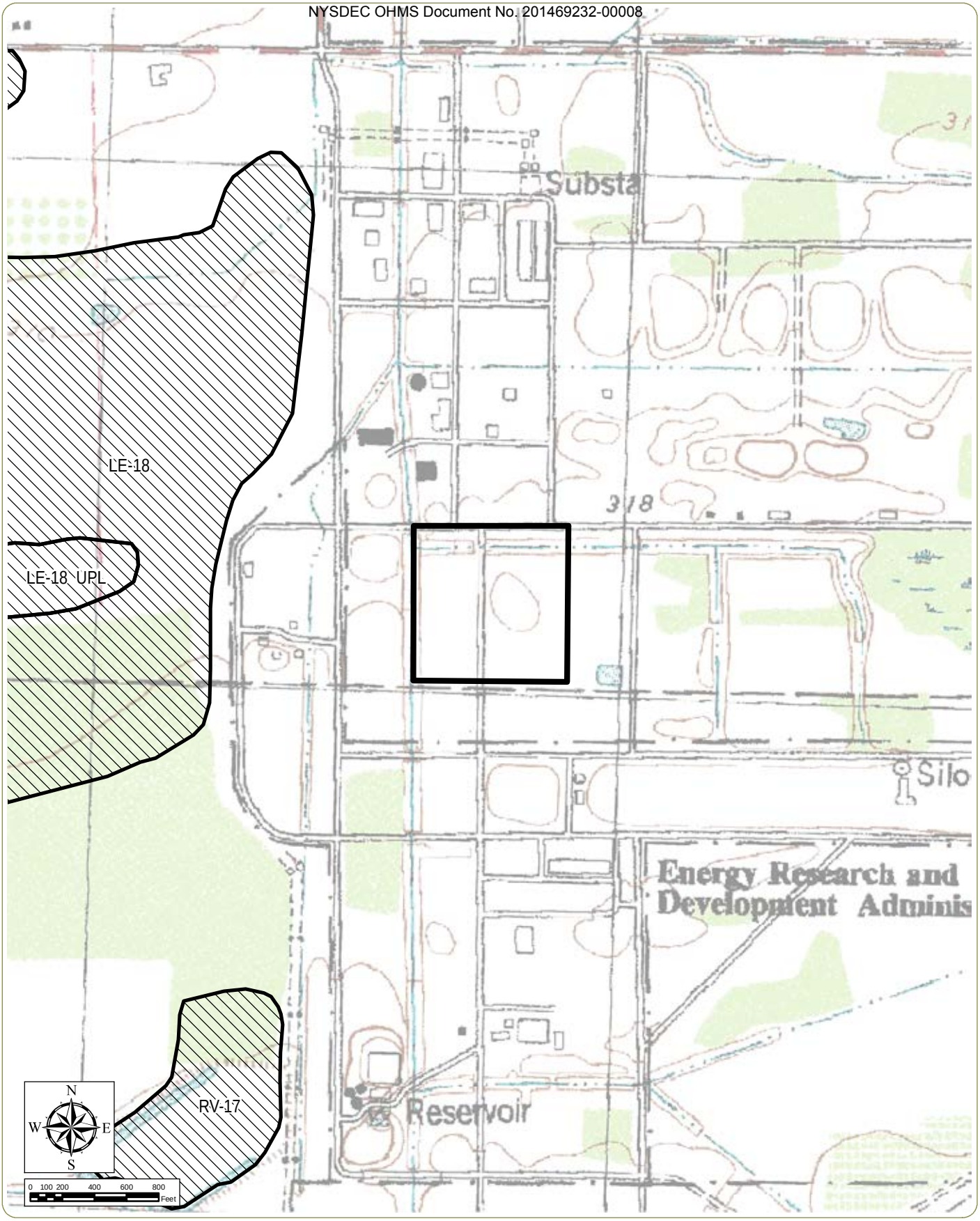
Figure 6: NWI Wetlands

June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.
Source: National Wetland Inventory Map - Ransomville Quadrangle

Project Site
NWI Wetland

edr COMPANIES
www.edrcompanies.com



CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

Figure 7: NYS DEC Freshwater Wetlands
June 2012

Notes: Base Map: USGS 1:24,000 Ransomville Quadrangle.
Source: NYS DEC Freshwater Wetland Map - Niagara County

NYSDEC Wetland
Project Site

edr COMPANIES
www.edrcompanies.com

CWM Model City Facility

Wetland Delineation - Proposed Mitigation Area
Town of Porter, Niagara County

Figure 8: Delineated Wetlands

June 2012

Notes: Base Map: USGS 2-Foot Orthoimagery, 2008.

Project Site

Delineated Wetland

edr COMPANIES
www.edrcompanies.com

edr Companies
217 Montgomery Street, Suite 1000
Syracuse, New York 13202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

274 North Goodman Street
Rochester, New York 14607

Project Number: '09022
Town: Porter (Model City)
Sampling Date: 5/22/2012
County: Niagara
Applicant: CWM Chemical Services, LLC
State: New York
Community: PEM
Data Point ID (i.e. 2W@Wet. G): 1W@WetA
Nearest Flag to Data Point: A-47

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope (Depressional) Riparian

Landscape Position: Flat Undulating (Sloping) Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? (Yes) No

Do Normal Circumstances exist on site? (Yes) No

Is the area a potential problem area? Yes (No)

Is the site significantly disturbed? Yes (No)

Approximate Slope (%): 0

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
X Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
X Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
X Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
X Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X
Saturated Conditions? Yes X No ___

→ Inundated further into wetland

Depth of Water (inches): ___
Depth to Sat. Soil (inches): yes
Depth to Water (inches): ___

Stream Association (Take a Stream Inventory Data Form for each stream Identified In Study Area)

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

Remarks

Project Number: 09022
Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012
Data Point ID: 1 W (2 Wet A

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix sp. black willow	70	Y	
2. Frax penn	10	N	
3.			
4.			
5			
	80 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1. Cornus race	50	Y	
2. Frax penn	10	N	
3.			
4.			
5			
	60 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Phragmites	70	Y	
2. moss	80	Y	
3. glyceria			
4.			
5			
6.			
7.			
8.			
9.			
10.			
	150 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Remarks

Project Number: 09022 Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC Data Point ID: Dw@wetland A Flag A-47

Soil Map Unit:

Soils Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

Depth (inches)	Matrix Color (moist)	%	Redux Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-16+	2.5Y 3/1		—	—	—	—	Clay loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common
[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
✓ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Remarks

Saturated soils low chroma with clay
Cobbles present throughout pedon.
See photo

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No
Hydric Soil Present? (Yes) No
Wetland Hydrology Present? (Yes) No
Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? (Yes) No N/A
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? (Yes) No N/A
Is this Wetland Potentially Isolated? Yes (No) N/A

Is the wetland mapped in the NWI? Yes (No)
Is the wetland a mapped state wetland? Yes (No)

If yes, indicate classification _____
If yes, indicate wetland ID _____

edr Companies
217 Montgomery Street, Suite 1000
Syracuse, New York 13202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

274 North Goodman Street
Rochester, New York 14607

Project Number: '09022 Town: Porter (Model City) Sampling Date: 5/22/2012

County: Niagara

Applicant: CWM Chemical Services, LLC State: New York Community: Succ. forest

Data Point ID (i.e. 2W@Wet. G): 1U@wetA Nearest Flag to Data Point: A-47

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: (Flat) Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? (Yes) No

Do Normal Circumstances exist on site? (Yes) No

Is the area a potential problem area? Yes (No)

Is the site significantly disturbed? Yes (No)

Approximate Slope (%): 0

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ Marl Deposits (B15)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D-1)
___ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ____ No X
Saturated Conditions? Yes ____ No X

Depth of Water (inches): ____
Depth to Sat. Soil (inches): ____
Depth to Water (inches): ____

Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

Remarks

No hydric indicators

Project Number: 09022
Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012
Data Point ID: 1 u @ inst A

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Robinia p-a	40		
2. Populus delt.	15		
3.			
4.			
5			
	55 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1. Lonicera morr	40		
2. Rubus occi	10		
3.			
4.			
5			
	50 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Hesperis matron	30		
2. Arctium	30		
3. Solidago	60		
4.			
5			
6.			
7.			
8.			
9.			
10.			
	120 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Remarks

No hydrophytic vegetation

Project Number: 09022 Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC Data Point ID: DP@ wetland at flag A-47

Soil Map Unit: _____

Soils Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

Depth (inches)	Matrix Color (moist)	Matrix %	Redux Features Color (moist)	Redux Features Frequency[1]	Redux Features Type[2]	Redux Features Loc[3]	Texture, Structure, Other
0-6+	10YR 4/3		—	—	\	—	Clay loam

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common
[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

Remarks

Bright soils, cobble layer throughout, no hydric soil characteristics observed.

Wetland Determination

Hydrophytic Vegetation Present? Yes (No)
Hydric Soil Present? Yes (No)
Wetland Hydrology Present? Yes (No)
Is this Sampling Point Within a Wetland? Yes (No)

Hydrologic Connectivity to Off-site Wetlands? Yes No N/A
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? Yes No N/A
Is this Wetland Potentially Isolated? Yes No N/A

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification _____
Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID _____

edr Companies
217 Montgomery Street, Suite 1000
Syracuse, New York 13202

DATA FORM
ROUTINE WETLAND DETERMINATION
Northcentral and Northeast Regional Supplement

274 North Goodman Street
Rochester, New York 14607

Project Number: '09022 Town: Porter (Model City) Sampling Date: 5/22/2012

County: Niagara

Applicant: CWM Chemical Services, LLC State: New York Community: ~~PFO~~ PFO

Data Point ID (i.e. 2W@Wet. G): 2W @ Wet A Nearest Flag to Data Point: A-11

Investigator(s) Pippin/Stebbins

Landform: Hillside/Seep Toe of Slope Depressional Riparian

Landscape Position: (Flat) Undulating Sloping Convex Concave

Are climatic/hydrologic conditions on the site typical for this time of year? (Yes) No

Do Normal Circumstances exist on site? (Yes) No

Is the area a potential problem area? Yes (No)

Is the site significantly disturbed? Yes (No)

Approximate Slope (%): 0

Hydrology

Primary Indicators (min. - 1 required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain In Remarks)

Secondary Indicators (min. - 2 required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D-1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations

Inundation Present? Yes ___ No X

Saturated Conditions? Yes X No ___

Depth of Water (inches): ___

Depth to Sat. Soil (inches): 0

Depth to Water (inches): ___

Stream Association (Take a Stream Inventory Data Form for each stream identified in Study Area)

Record observations (e.g. location, stream type, adjacent community type, state protected etc.) of any streams within or adjacent to the Study Area:

Remarks

Project Number: 09022
Applicant: CWM Chemical Services, LLC

Sampling Date: 5/22/2012
Data Point ID: LW @ wet A

Vegetation

Tree Stratum (Plot size: 30-foot radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Frax penn	40		
2.			
3.			
4.			
5			
	40 = Total Cover		

Sapling/Shrub Stratum (Plot size: 15-foot radius)			
1. Cornus race	25		
2. Ulmus am	5		
3. Frax penn	25		
4.			
5			
	55 = Total Cover		

Herb Stratum (Plot size: 5-foot radius)			
1. Glyceria	50		
2. Carex	20		
3.			
4.			
5			
6.			
7.			
8.			
9.			
10.			
	70 = Total Cover		

Woody Vine Stratum (Plot size: 30-foot radius)			
1.			
2.			
3.			
4.			
5			
	= Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
__ Rapid Test for Hydrophytic Vegetation
__ Dominance Test >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (provide supporting data in remarks)
__ Problematic Hydrophytic Vegetation[1] (explain in remarks)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Remarks

Project Number: 09022 Sampling Date: 5/22/2012

Applicant: CWM Chemical Services, LLC Data Point ID: dw@ wetland A

Soil Map Unit: _____

Soils Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators).

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Frequency[1]	Type[2]	Loc[3]	Texture, Structure, Other
0-6"	10YR 3/1		—	—	—	—	Silt loam
6"+	10YR 4/2		7.5YR 4/3	F	RM	M	Clay

[1]Frequency: F=Few, MA=Moderately Abundant, C=Common
[2]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
[3]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
✓ Depleted Matrix (F3)
✓ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Problematic Hydric Soil Indicators[3]

___ 2 cm Muck (A10)
___ Coast Prairie Redox (A16)
___ 5 cm Mucky Peat or Peat (S3)
___ Dark Surface (S7)
___ Polyvalue Below Surface (S8)
___ Thin Dark Surface (S9)
___ Iron-Manganese Masses (F12)
___ Piedmont Floodplain Soils F19)
___ Mesic Spodic (TA6)
___ Red Parent Material (TF2)
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in remarks)

Restrictive Layer (if observed)

Type: _____

Depth (inches): _____

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Remarks

Dark loamy soil over mottled clay.
Saturated at surface.

Wetland Determination

Hydrophytic Vegetation Present? (Yes) No
Hydric Soil Present? (Yes) No
Wetland Hydrology Present? (Yes) No
Is this Sampling Point Within a Wetland? (Yes) No

Hydrologic Connectivity to Off-site Wetlands? (Yes) No N/A
Does Any Part of this Delineated Wetland/Stream Extend Past the Flagged Boundary? (Yes) No N/A
Is this Wetland Potentially Isolated? Yes (No) N/A

Is the wetland mapped in the NWI? Yes (No) If yes, indicate classification _____
Is the wetland a mapped state wetland? Yes (No) If yes, indicate wetland ID _____