

Information for File #2013-04598-RMG

Applicant: Enbridge Energy, Limited Partnership

Corps Contact: Rebecca Graser

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Phone: (651) 290-5728

Primary Counties: Douglas, Rusk, Clark, and Wood Counties, WI

Section, Township, Range: Douglas County (Hawthorne Station): S. 9, T. 45N, R. 12W
Rusk County (Ladysmith Station): S. 5, T. 34N, R. 6W
Clark County (Owen Station): S. 8, T. 28N, R. 1W
Wood County (Marshfield Station): S. 5, T. 24N, R. 3E
Wood County (Vesper Station): S. 6, T. 22N, R. 5E

Information Complete On: December 24th, 2013

Posting Expires On: March 1st, 2014

Authorization Type: Section 404 Clean Water Act, WI Letter of Permission

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above. If requested, an approved jurisdictional determination will be made prior to reaching a permit decision, and will be posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

Project Description:

The applicant proposes to optimize the capacity of its existing Line 61 (formerly referred to as the Southern Access) pipeline by upgrading three existing pump stations and constructing nine new pump stations. No additional mainline pipe work is proposed. The proposed project would increase capacity of Line 61 from an average of 560,000 barrels per day (bpd) to an average capacity of 1,200,000 bpd of crude oil. This increase would meet rising demands for western Canadian crude oil to the Midwest, eastern United States, Canada, and the Gulf Coast.

Of the work proposed at the twelve stations, only five locations require Section 404 authorization from the Corps for proposed discharges of dredged or fill material into waters of the United States. In sum, approximately 0.96 acres of permanent wetland loss is proposed to occur at the Hawthorne Station (Douglas County), the Marshfield Station (Wood County), and the Vesper Station (Wood County). An additional 0.88 acre of temporary fresh meadow wetland impact is proposed to occur at the Hawthorne Station (Douglas County), the Ladysmith Station (Rusk County), and the Owen Station (Clark County). A detailed list of impacts proposed at each station is provided below, and is depicted on the attached drawings.

Station Name	County	Proposed Impact Duration	Proposed Impact Acreage	Community Proposed to be Impacted	Mitigation Site Proposed	Mitigation Proposed	Other Info
Hawthorne	Douglas	Permanent	0.79	fresh (wet) meadow/shrub swamp	Permittee-responsible, Bluff Creek Phase II	7.6 acres of preservation	In BSA (Lake Superior)
Hawthorne	Douglas	Temporary	0.50	fresh (wet) meadow	N/A	None	
Marshfield	Wood	Permanent	0.03	fresh (wet) meadow	H.G. Randall Wetland Mitigation Bank	0.20 fresh (wet) meadow credits	In BSA (Lower WI River)
Vesper	Wood	Permanent	0.14	shallow marsh			
Ladysmith	Rusk	Temporary	0.24	fresh (wet) meadow	N/A	None	
Owen	Clark	Temporary	0.14	fresh (wet) meadow	N/A	None	

The applicant has proposed to provide compensatory mitigation for the permanent wetland losses proposed at the Hawthorne, Vesper, and Marshfield pump stations as shown above. Additional compensatory mitigation information will be required from the applicant prior to any decision to authorize the proposed project. Temporary wetland impacts are proposed to impact only fresh (wet) meadow communities, and the applicant has proposed to restore all impacted areas after construction activities are completed. No additional compensatory mitigation is proposed for temporary impact areas.

No federally threatened or endangered species, or their habitat, is expected to be affected by the proposed project. Douglas County is home to two federally threatened, two federally endangered, and one candidate endangered species. Two bird species, the Kirtland's Warbler and Piping Plover, are endangered and one plant species, Fassett's locoweed is listed as threatened. Two mammal species are known to exist in the county, the Canada lynx (threatened) and the Northern Long-Eared bat (also known to exist in Wood, Clark, and Rusk Counties), which is a candidate endangered species. Wood and Clark Counties are home to a non-essential experimental population of Whooping Cranes, as well as home to the Karner Blue butterfly (endangered). The Eastern Massasauga, a candidate species, is known to exist in Wood County.

(2013-04598-RMG)

Enbridge Energy Line 61 upgrade

No additional species are known to exist in Rusk County relative to this proposal. This notice is being provided to the United States Fish and Wildlife Service to solicit their feedback regarding the proposed project.

A search of the Wisconsin Historical Society database revealed one contributing property deemed ineligible for listing on the National Register of Historic Places (NRHP) located within one mile of the proposed Ladysmith pump station. The Corps has made a preliminary determination that no properties listed or eligible for listing on the NRHP would be affected by the possible issuance of a Corps permit. Our preliminary determination will be coordinated with the State Historic Preservation Office prior to reaching a permit decision.

Alternatives Considered:

SYSTEM ALTERNATIVES: New Pipeline, Trucking, Rail.

New 36-inch pipe generally running parallel to the existing Line 61 was considered, as it would utilize existing right-of-way and existing facilities to the extent practicable. However, the costs, time, and environmental impact associated with construction of a new pipeline is anticipated to be greater than the limited facility expansions proposed by the applicant.

Tanker trucks were considered to accommodate the proposed capacity increase. However, this alternative would require thousands of trucks to transport 640,000 bpd. With the exception of truck loading/unloading facilities, this alternative is not anticipated to require Section 404 authorization. The applicant dismissed this alternative because of the number of trucks required, the anticipated effects to roadways and air quality, the reliability (based on weather conditions) of this mode of transport, and the additional costs associated with this alternative.

Rail tanker cars were also evaluated as a way to increase capacity. Considering round trip travel times for rail transport (assuming tanker capacity of 600 barrels), the applicant anticipates that just over 1,400 cars would be required. Further, additional spur lines, rail sidings, and terminal facilities would be needed. The applicant dismissed this alternative due to the limited economic life of the alternative (10-15 years), the increased cost and the decreased reliability of rail transport compared to pipeline transport.

ROUTE ALTERNATIVES: No alternate pipeline route alternatives were evaluated because the applicant does not propose to install new pipeline, only to optimize existing pipe.

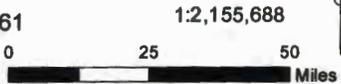
STATION SITING ALTERNATIVES: The search for pump stations extended out 2 miles from the existing pipeline, as distances over 2 miles would not meet pipeline hydraulic requirements. Locations were additionally reviewed for electrical access, land availability, environmental impacts, and economic costs. Near site, offsite, onsite, and adjacent site alternatives were evaluated for the existing Hawthorne, Marshfield, and Vesper stations. After sites were selected, the configuration was optimized to reduce impacts to aquatic resources.

Drawings: See attached pages 1-11, 2013-04598-RMG.



This map is for environmental review purposes only.

- Non-Jurisdictional Stations
- ◻ Jurisdictional Stations
- Enbridge Line 61



Proposed Station Locations
Line 61 Enhancement Project
Enbridge Energy, Limited Partnership



 Enbridge Line 61	 Temporary Impact
 Permanent Development	
 Enbridge Parcel	
 Parcel Boundary	
 Delineated Wetland	

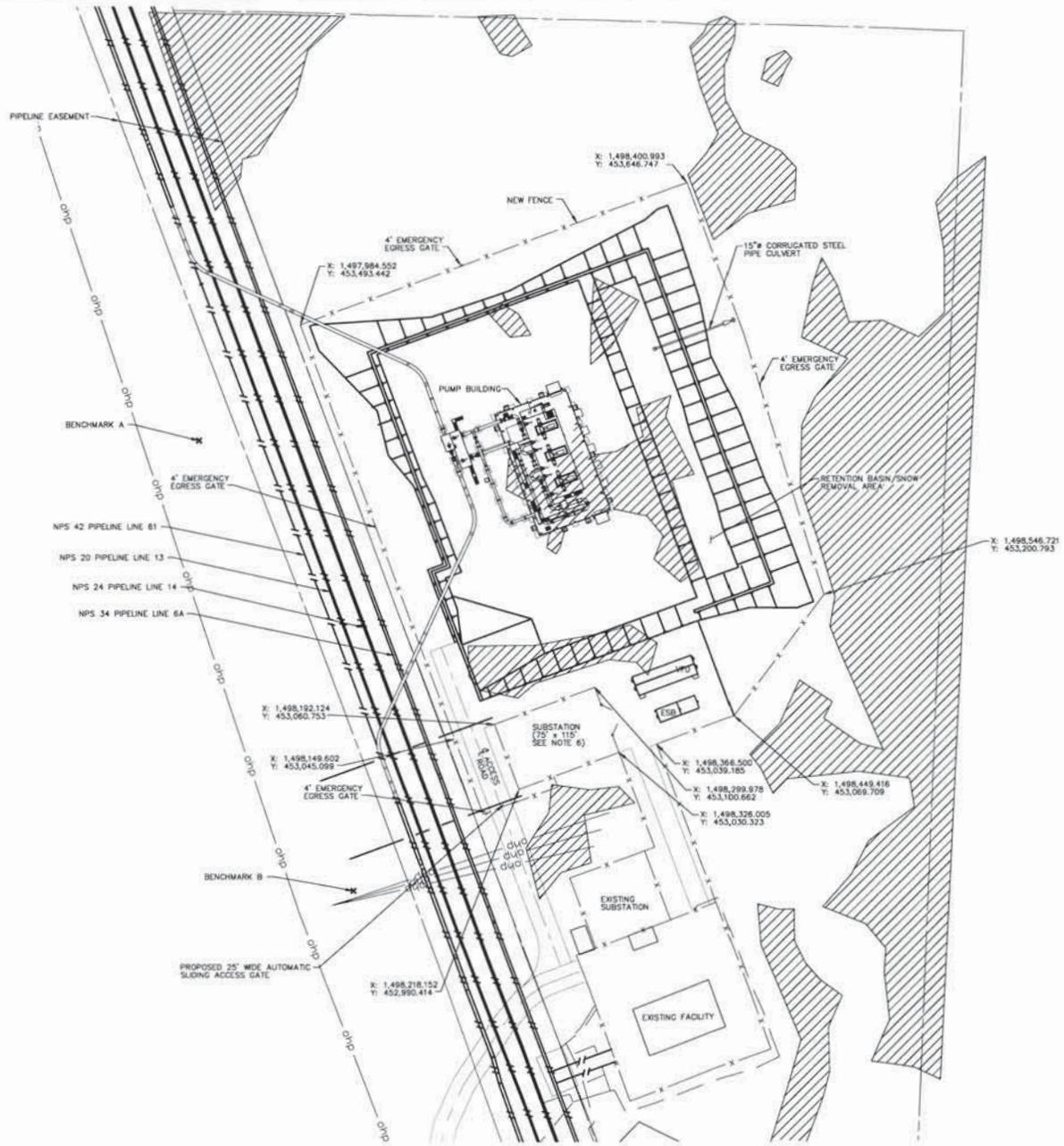
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0 250 500
Feet

Hawthorne Station
Aerial Map with Wetlands
 Line 61 Enhancement Project
 Enbridge Energy, Limited Partnership



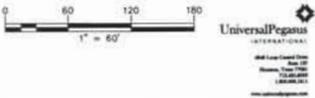




LEGEND

---	PROPERTY LINE
x - x	FENCE LINE
o-h-o	OVERHEAD POWER LINES
	EXISTING PIPE
⊠	BENCHMARK
▨	WETLANDS

- NOTES**
1. ALL COORDINATES GIVEN ON THIS DRAWING ARE BASED UPON THE NAD 83, WISCONSIN STATE PLANES, NORTH ZONE ELEVATION BASED ON NAVD 88, US SURVEY FEET COORDINATE SYSTEM.
 2. COORDINATES, GRID, AND ELEVATIONS ARE IN FEET.
 3. ALL ROADS TO BE 25 FEET WIDE UNLESS NOTED OTHERWISE.
 4. EXISTING ROAD SHOWN FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY LOCATION OF BEGINNING OF NEW ACCESS ROAD FROM EXISTING ROAD.
 5. BENCHMARKS ARE LOCATED ON WESTERN EDGE OF PROPERTY. BENCHMARK A: X: 1,497,875.391; Y: 453,368.564 BENCHMARK B: X: 1,498,038.983; Y: 452,880.948
 6. SUBSTATION ELEMENTS TO BE DESIGNED BY OTHERS EXCEPT FOUNDATIONS.



REFERENCE DRAWINGS			
+			
+			
+			
A	ISSUED FOR 60% DESIGN REVIEW	UPI/JWR 11/27/13	ALZ MCM
NO.	REVISION	BY DATE	APPX/APPD

ENBRIDGE
HAWTHORNE (WI) STATION
 LINE 61 EXPANSION
 SITE LAYOUT PLAN

PROJECT:	LINE 61 EXPANSION - AFE-1291282101
SCALE:	1"=60'
CHECK:	UPI/PJF
APPR:	UPI/PJZ
DATE:	11/21/13
DATE:	11/21/13
D-61-1.21-13581-A-500	



- Enbridge Line 61
- Permanent Development
- Enbridge Parcel
- Parcel Boundary
- Delineated Wetland

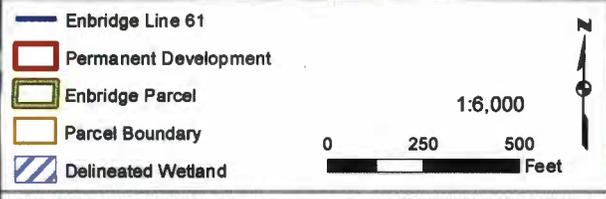
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Feet

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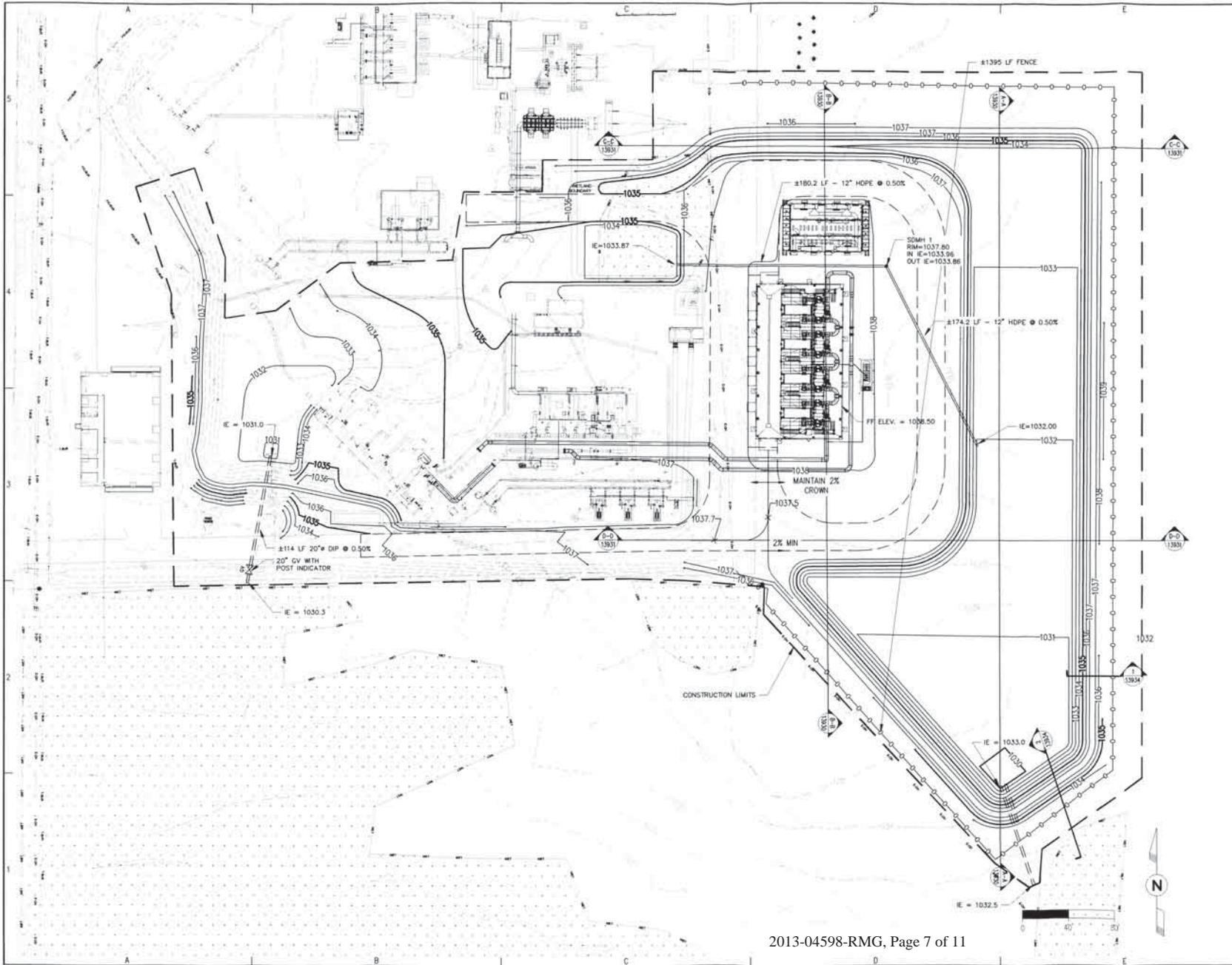
Marshfield Station
Aerial Map with Wetlands
Line 61 Enhancement Project
 Enbridge Energy, Limited Partnership



**Vesper Station
Aerial Map with Wetlands
Line 61 Enhancement Project**

Enbridge Energy, Limited Partnership



SHEET LEGEND

- EXIST. CONTOUR (5' INTERVAL)
- EXIST. CONTOUR (1' INTERVAL)
- EXIST. FENCE
- EXIST. WETLAND BOUNDARY
- EXIST. WETLANDS
- PROP. CONTOUR (5' INTERVAL)
- PROP. CONTOUR (1' INTERVAL)
- PROP. CULVERT
- PROP. VALVE
- PROP. FENCE

NO.	REVISION	BY DATE	APPV/APPD
A	ISSUED FOR EGS REVIEW WFE #139128101 W.F. PHASE 2	LHB/KJM 11/07/13	DGS

ENBRIDGE
VESPER (W) STATION
 LINE 61 PUMP STATION
 FENCING AND GRADING
 (S) 211

PROJECT:	WFE #139128101 W.F. PHASE 2
SCALE:	AS NOTED
CHECK:	LHB/AFB
APPV:	LHB/DGS
DATE:	11/07/13

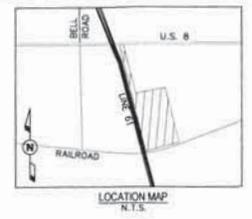
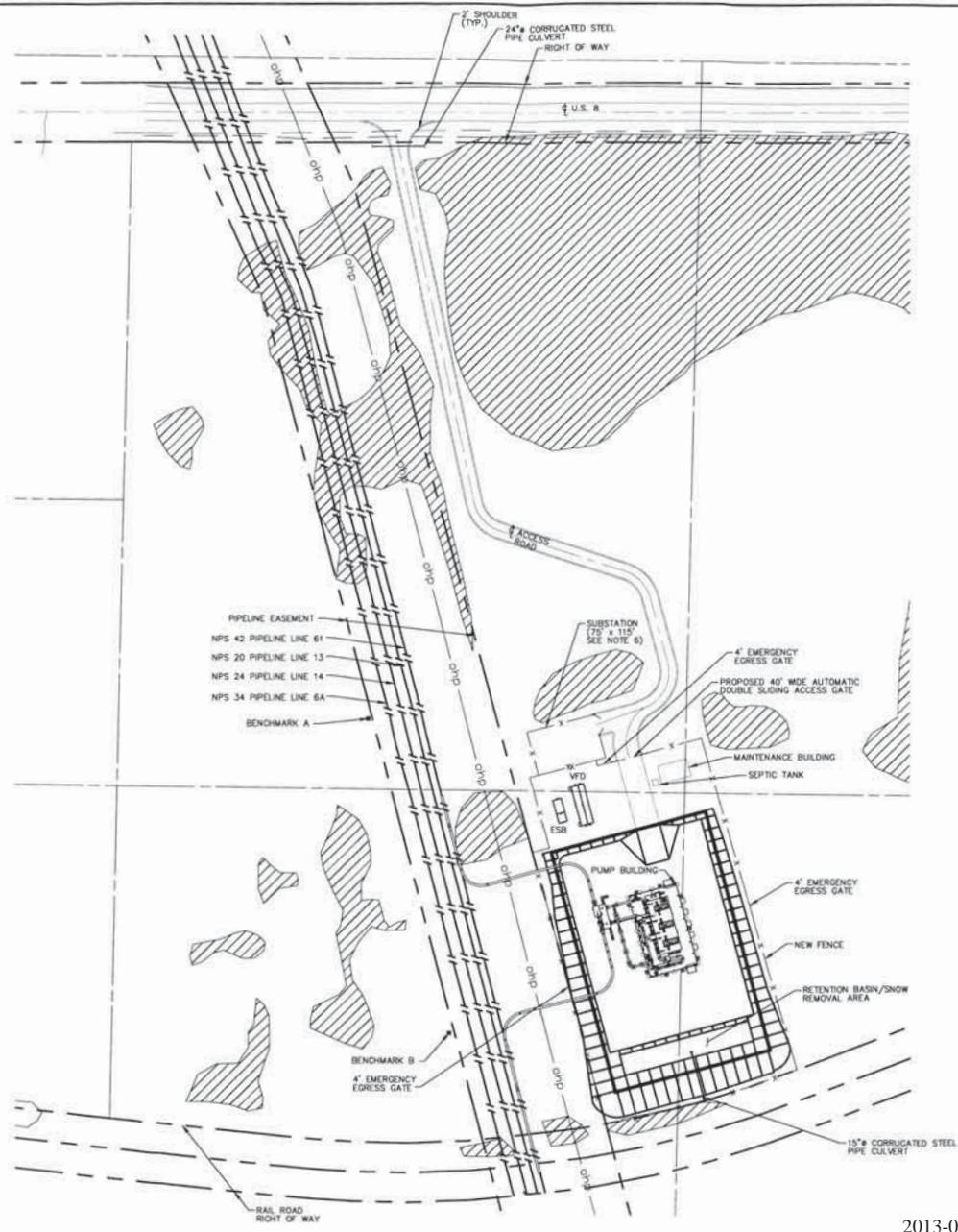


Enbridge Line 61	Temporary Impact
Permanent Development	
Enbridge Parcel	
Parcel Boundary	
Delineated Wetland	

1:6,000

0 250 500
Feet

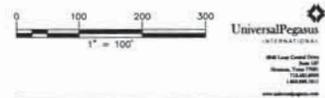
Ladysmith Station
Aerial Map with Wetlands
Line 61 Enhancement Project
 Enbridge Energy, Limited Partnership



LEGEND

---	PROPERTY LINE
x-x	FENCE LINE
ohp	OVERHEAD POWER LINES
---	EXISTING PIPE
X	BENCHMARK
///	WETLANDS

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 - BENCHMARKS ARE LOCATED AT:
BENCHMARK A: X: 1,673,643.287; Y: 595,835.417
BENCHMARK B: X: 1,673,777.556; Y: 595,308.136
 - SUBSTATION ELEMENTS TO BE DESIGNED BY OTHERS EXCEPT FOUNDATIONS.



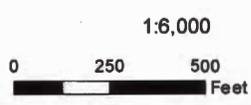
REFERENCE DRAWINGS			
NO	REVISION	BY DATE	APPR/APPR
A	ISSUED FOR 60% DESIGN REVIEW	UPJ/MCM 12/12/13	ALZ MCM
NO	REVISION	BY DATE	APPR/APPR

ENBRIDGE
LADYSMITH NORTH (IL) STATION
 LINE 61 EXPANSION
 SITE LAYOUT PLAN

PROJECT: LINE 61 EXPANSION - AFE-1291282101			
SCALE: 1"=100'	DATE: 12/09/13	DRAWN: UPJ/OJR	
CHECK: UPJ/ALZ	APPR: UPJ/MCM	DATE: 12/12/13	
APPR:		D-61-1.21-13611-A-509	



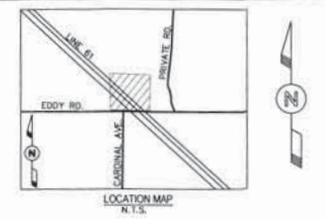
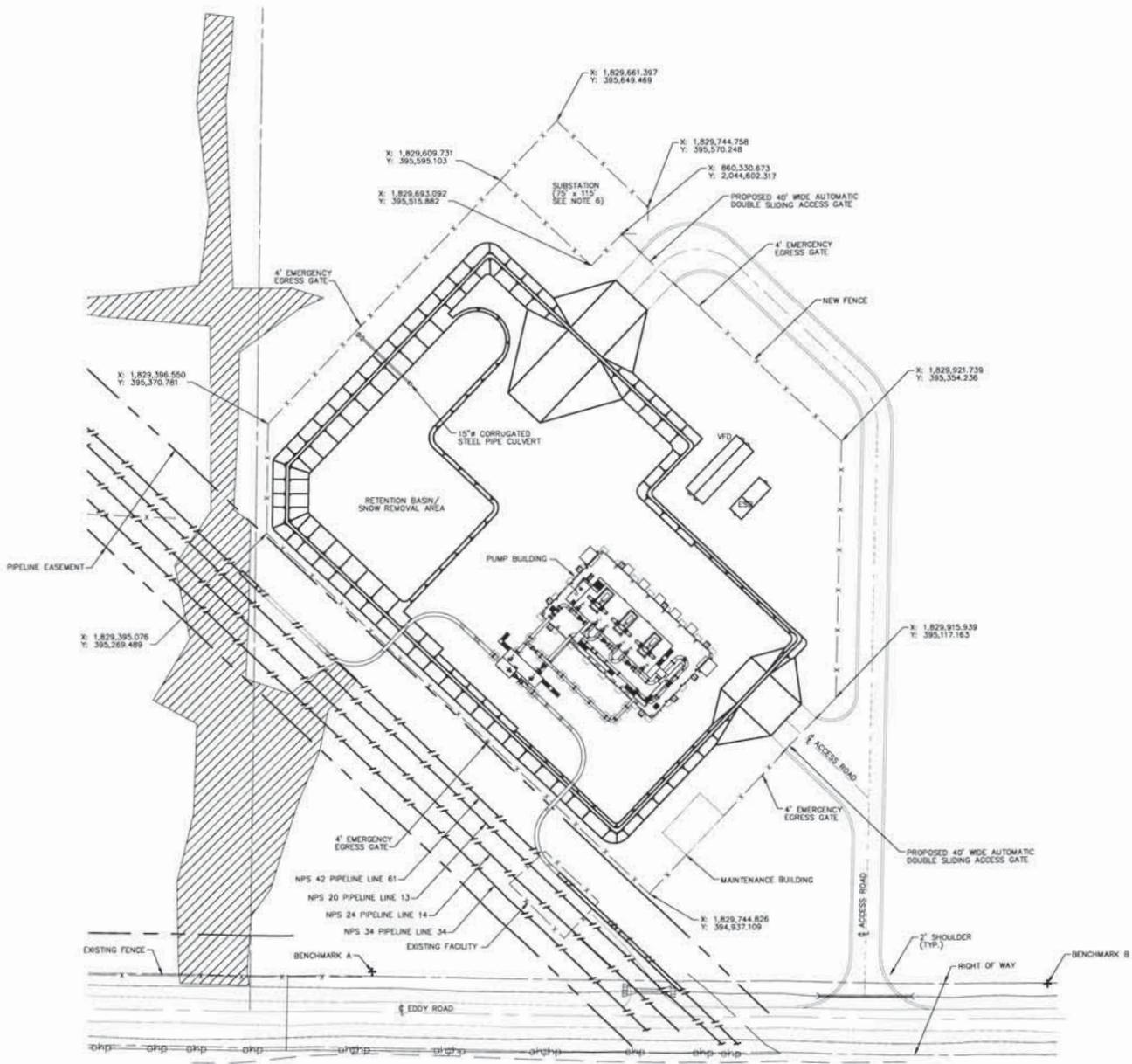
- Enbridge Line 61
- Permanent Development
- Enbridge Parcel
- Parcel Boundary
- Delineated Wetland
- Temporary Impact



Owen Station
Aerial Map with Wetlands
 Line 61 Enhancement Project
 Enbridge Energy, Limited Partnership



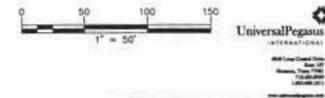
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LEGEND

---	PROPERTY LINE
-x-x-	FENCE LINE
o-h-p	OVERHEAD POWER LINES
---	EXISTING PIPE
⊗	BENCHMARK
▨	WETLANDS

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BENCHMARK A: X: 1,829,499.845; Y: 394,864.768
BENCHMARK B: X: 1,830,109.009; Y: 394,852.898
 6. SUBSTATION ELEMENTS TO BE DESIGNED BY OTHERS EXCEPT FOUNDATIONS.



UniversalPegasus INTERNATIONAL

REFERENCE DRAWINGS			
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A	ISSUED FOR 60% DESIGN REVIEW	UPJ/ALZ 12/05/13	ALZ MCM
NO	REVISION	BY DATE	APPR/APPD

ENBRIDGE
OWEN NORTH (WI) STATION
LINE 61 EXPANSION
SITE LAYOUT PLAN

PROJECT:	LINE 61 EXPANSION - AFE-1291282101
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CHECK:	UPJ/ALZ
APPR:	UPJ/MCM
DATE:	12/04/13
APPR:	

D-61-1.21-13641-A-516