Line 5 Wisconsin Segment Relocation Project
Storm Water Pollution Prevention Plan

Attachment 1
Project Narrative

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Wisconsin Department of Natural Resources
Storm Water Pollution Prevention Plan
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September 2020

Table of Contents

List of Tables

List of Acronyms

Name	Description
Bad River Band	Bad River Band of Lake Superior Chippewa Tribe
ECDs	Erosion Control Devices
Enbridge	Enbridge Energy, Limited Partnership
EPP	Environmental Protection Plan
Project	Line 5 Wisconsin Segment Relocation Project
Reservation	Bad River Reservation
ROW	Right-of-way
WDNR	Wisconsin Department of Natural Resources

1 PROJECT SUMMARY

Enbridge Energy's ("Enbridge") existing Line 5 pipeline crosses through approximately 12 miles of the Bad River Reservation ("Reservation") of the Bad River Band of Lake Superior Chippewa Tribe ("Bad River Band"). In July 2019, the Bad River Band terminated mediation discussion with Enbridge regarding the renewal of pipeline easement and filed a lawsuit in federal court for the removal of the Line 5 segment from the Reservation. In response to this litigation and discussions with the Bad River Band regarding its preferences for Line 5 to be removed from the Reservation, Enbridge developed the Line 5 Wisconsin Segment Relocation Project ("Project") to reroute the existing Line 5 pipeline. The proposed Project will replace approximately 20 miles of the existing Line 5 pipeline with approximately 41.1 miles of a new pipeline segment located entirely outside the exterior boundaries of the Reservation. Additionally, the Project will include the installation of cathodic protections, AC mitigation facilities, seven mainline block valves, four pipe yards and contractor yards, and minor modifications to the existing Ino Pump station.

1.1 CONSTRUCTION RIGHT-OF-WAY

The Project is located in Ashland, Bayfield, Douglas, and Iron County, Wisconsin. Enbridge proposes to use a 120-foot-wide construction right-of-way ("ROW") to allow for temporary storage of topsoil and spoil as well as accommodate safe operation of construction equipment. To minimize wetland disturbance, Enbridge will reduce the construction ROW to 95-feet-wide in wetlands where practicable based on site-specific conditions. Land disturbance along the construction ROW and the associated temporary workspace will impact approximately 736.2 acres. The ROW and associated temporary workspace will be restored to approximate pre-construction conditions.

1.2 ABOVEGROUND FACILITIES

Enbridge proposes to install seven mainline block valves as part of the Project, each will be approximately 0.1 acre in size and will include an associated access road. The seven mainline block valves will result in permanent conversion of land use type to approximately 0.9 acre of land. Additionally, Enbridge will make minor modifications to the Ino Pump Station at the existing facility; however, activities at the Ino Pump Station will be within the existing facility fence line. All land affected is currently impervious industrial land and no increase to impervious area will occur. No other aboveground facilities are required for the Project.

1.3 PIPE STORAGE AND CONTRACTOR YARDS

During construction, Enbridge will temporarily use off-right-of-way areas for pipe and material storage. Additionally, construction contractors will require off-right-of-way contractor yards to park equipment and stage construction activities. Enbridge has identified four pipe yards or contractor yards (totaling approximately 57.9 acres). Enbridge has assessed sensitive environmental features when planning the placement and use of these pipe yards to minimize potential sensitive resource impacts. Enbridge and/or the Contractor will lease the sites and will restore them upon the completion of the Project unless the landowner and applicable agencies otherwise permit or authorize.

1.4 ACCESS ROADS

Enbridge typically uses existing public and private roads to access the ROW and facilities to the extent practicable to limit impacts attributed to construction of new temporary roads. However, Enbridge identified areas where new temporary access roads will be necessary for equipment, material deliveries, and personnel access. Enbridge will obtain applicable landowner and regulatory approvals prior to using

the new access roads. Enbridge may leave newly constructed temporary roads and existing private roads upgraded for use by the Project intact through mutual agreement with the landowner unless otherwise restricted by federal, state, or local regulations. Where temporary access roads are removed, the area will be restored as near as practical to the pre-construction conditions. Enbridge will utilize 93 temporary access roads (approximately 117.2 acres), of which eight will be new or partially new access roads (approximately 4.3 acres). Enbridge will utilize seven permanent access roads (approximately 3.4 acres) associated with the permanent mainline valves, of which six will be new or partially new access roads (approximately 1.9 acres). Existing temporary or permanent access roads may require improvements.

2 CONSTRUCTION SCHEDULE

Subject to receipt of required regulatory approvals and permit authorizations, Enbridge proposes to begin construction of the Project in February of 2021. Enbridge anticipates the pipeline replacement segment to be connected to the existing Line 5 and to be placed in-service in September of 2021. Table 2.0-1 provides the construction schedule. Enbridge will continue restoration efforts until Project areas have been restored in accordance with permit conditions and landowner agreements.

Total construction impacts will be minimized by performing construction in a linear fashion, to the extent feasible, with each crew moving in sequence/phase. Each construction crew will proceed along the pipeline ROW in one continuous operation from staking to backfilling and final grading. Specialty crews will be used to install select areas including horizontal directional drills, road crossings, and railroad crossings. Each construction process will be coordinated to minimize the total time an individual tract of land is disturbed to the extent practicable.

Table 2.0-1: Construction Schedule

Task Name	Start Date	End Date	Duration
Construction ROW Staking	2/9/2021	5/24/2021	15 weeks
Start ROW Clearing	2/10/2021	4/20/2021	10 weeks
Utility Sweeps	2/10/2021	4/20/2021	10 weeks
Access Grading and Site Preparation	2/10/2021	5/11/2021	13 weeks
Rock Blasting	3/1/2021	5/14/2021	11 weeks
Begin Horizontal Directional Drill Crossing	3/1/2021	6/25/2021	17 weeks
Mainline ROW Grading	5/17/2021	7/2/2021	7 weeks
Hauling and Stringing Pipe	5/27/2021	7/14/2021	7 weeks
Facilities Field Work	6/1/2021	8/9/2021	10 weeks
Pipe Bending	6/1/2021	7/19/2021	7 weeks
Welding of Pipe	6/7/2021	7/23/2021	7 weeks
Pipe Coating	6/8/2021	7/26/2021	7 weeks
Ditching	6/14/2021	7/30/2021	7 weeks
Lowering In of Pipe	6/15/2021	7/31/2021	7 weeks
Backfill Ditch	6/16/2021	8/3/2021	7 weeks
ROW Restoration	6/21/2021	11/5/2021	20 weeks
Hydrotesting of Pipe	7/26/2021	8/6/2021	2 weeks
Commissioning and Tie-in	8/4/2021	8/31/2021	4 weeks
In-Service Date	9/1/2021	9/1/2021	--

3 EROSION AND SEDIMENT CONTROL

Temporary erosion and sediment control devices (ECDs) will be installed after initial clearing and before soil disturbance at the base of sloped approaches to streams, wetlands, and roads, and in other areas as necessary to prevent sediment transport into sensitive resource areas. Temporary ECDs will also be installed at the edge of the construction ROW as necessary. Temporary erosion control measures will be replaced by permanent erosion controls during final cleanup restoration. All temporary and permanent erosion and sediment control measures will be in accordance with Enbridge's Environmental Protection Plan (EPP), the Wisconsin Department of Natural Resources (WDNR) Storm Water Construction Technical Standards, and applicable permit requirements. ECDs will be inspected, at a minimum, weekly and within 24 hours after every precipitation event that produces 0.5 inch of rain or more during a 24-hour period. Soils map units crossed by this Project are shown on the soil map set included as Attachment 8 of this application. Soil map units and associated soil characteristics crossed by this project are in a table included as Attachment 9 of this application.

3.1 BEST MANAGEMENT PRACTICES

Enbridge will implement, at a minimum, the prescriptive compliance outlined in the WDNR *Construction Site Soil Loss and Sediment Discharge Calculation Guidance* (2019) at all applicable locations to meet the sediment performance standard to discharge no more than 5 tons per acre per year of sediment. Areas along the pipeline ROW and associated facilities less than 1 acre in size and less than 10 percent of the total disturbed area are considered prescriptive compliance areas, and will achieve the WDNR soil loss and sediment discharge standards by implementing erosion and sediment control best management practices. Sediment discharge calculations for Project sites that are not considered a prescriptive compliance area are included as Attachment 3 of this application.

The best management practices related to erosion and sediment control for the project are included in section 8.0 of Enbridge's EPP, included as Attachment 7 of this application. The best management practices described in the EPP include:

- Measures to prevent soil tracking when accessing construction areas (tracking pads, timber mats, etc.)
- Installation of temporary erosion and sediment control devices
- Silt fence, straw bale, and bio-log installation
- Temporary stabilization measures (seeding and mulching, temporary erosion control matting, etc.) used to limit duration of exposed soil to less than 14 days
- Installation of erosion control blanket on steep slopes
- Use of mulch on steep slopes and areas of dry soil
- Use of cat tracking to slow surface runoff on exposed slopes
- Measures used to protect drain tile inlets from sedimentation
- Installation of temporary and permanent slope breakers

- Measures used for dust control

Enbridge's EPP outlines construction-related environmental policies, procedures, and protection measures Enbridge developed as a baseline for construction. Enbridge developed the EPP based on prior experience implementing best management practices during construction, as well as the requirements specified in the Federal Energy Regulatory Commission's Upland Erosion Control, Revegetation, and Maintenance Plan (May 2013 Version) and Wetland and Waterbody Construction and Mitigation Procedures (May 2013 Version). It is intended to meet or exceed federal, state, and local environmental protection and erosion control requirements, specifications, and practices. The EPP addresses typical circumstances that may occur along the Project. Project-specific permit conditions and/or landowner agreements may supersede the general practices described in the EPP.

Table 3.1-1 summarizes the erosion and sediment control measures that will be implemented for the environmental resource areas crossed by the project (streams and wetlands), steep slope areas (greater than 20 percent slopes), and all other upland areas. These areas are included in the Erosion and Sediment Control Map Set (included as Attachment 2 of this application), and the figures associated with the erosion and sediment control measures are attached to the map set.

Table 3.1-1: Erosion and Sediment Control Measures

		Figure [a]																					
Resource area/Stream	**MP**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9/10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22/23**	**24**	**25**
Steep Slopes					X	X	X	X	X	X	X								X	X				
Non-steep slope uplands		X	X	X	X	X	X			X									X	X				
Wetland crossings					X	X	X											X	X	X				
Sensitive stream crossings					X	X	X												X	X				
Bay City Creek (sase006p)	0.6				X	X	X					X	X		X	X	X		X	X			X	
Little Beartrap Creek (sasa047i)	2.2				X	X	X					X	X		X	X	X		X	X		X		X
Beartrap Creek (sasb007i)	2.9				X	X	X					X	X		X	X	X		X	X		X	X	
Rock Creek (sasc041p)	5.1				X	X	X					X	X		X	X	X		X	X	X		X	
UNT Deer Creek (sasc039i)	5.9				X	X	X					X	X		X	X	X		X	X		X		
UNT Marengo River (sase1015i)	12.8				X	X	X					X	X		X	X	X		X	X	X			X
UNT Brunsweiler River (sasc1006p)	14.7				X	X	X					X	X		X	X	X		X	X			X	X
UNT Trout Brook (sasc1003p)	15.9				X	X	X					X	X		X	X	X		X	X		X	X	
UNT Silver Creek (sasd1017p)	19.8				X	X	X					X	X		X	X	X		X	X	X		X	
UNT Gehrman Creek (sasw011i)	28.6				X	X	X					X	X		X	X	X		X	X	X			X
Camp Four Creek (sasw005i)	29.8				X	X	X					X	X		X	X	X		X	X				
Feldcher Creek (WDH103)	31.8				X	X	X					X	X		X	X	X		X	X				
All other stream crossings [b]					X	X	X					X	X	X	X	X	X		X	X				

[a] Referenced figures are included in Attachment 2 of this application.

[b] Refer to waterbody impact table in Attachment 10 of this application for stream-specific crossing method.

Figure 1 Typical Topsoil Segregation - Full Right-of-Way
Figure 2 Typical Topsoil Segregation - Trench Line Only
Figure 3 Typical Topsoil Segregation - Modified Ditch Plus Spoil Side
Figure 4 Typical Silt Fence Installation
Figure 5 Typical Straw Bale Installation
Figure 6 Typical Biolog Installation
Figure 7 Typical Erosion Control Blanket Installation
Figure 8 Typical Cat Tracking
Figure 9 Typical Temporary or Permanent Berm (Perspective View)
Figure 10 Typical Temporary or Permanent Berms (Elevation View)
Figure 11 Permanent Slope Breakers (Perspective View)
Figure 12 Typical Span Type Bridge With or Without Instream Support
Figure 13 Typical Rock Flume Bridge
Figure 14 Typical Waterbody Crossing Method Open-Cut Wet Trench Method
Figure 15 Typical Waterbody Crossing Method Dam and Pump Method
Figure 16 Typical Waterbody Crossing Method Flume Method
Figure 17 Typical Final Stream Bank Stabilization Rip Rap & Erosion Control
Figure 18 Typical Wetland Crossing Method
Figure 19 Typical Dewatering Measures
Figure 20 Straw Bale Dewatering Structure
Figure 21 Typical for Remediation Biolog Stream Bank Stabilization
Figure 22 Typical for Remediation Rootwad Stream Bank Stabilization (Plan View)
Figure 23 Typical for Remediation Rootwad Stream Bank Stabilization (Side View)
Figure 24 Typical for Remediation Soil Wraps with Branch Layering & Willow Stake Biostabilization
Figure 25 Typical for Remediation Typical Stream Bank Regrading (Side View)

4 POST CONSTRUCTION STORM WATER MANAGEMENT

Permanent impacts to the Project workspace consists of approximately 0.9 acre that will be graveled for the seven mainline gas valves and approximately 3.4 acres that will be used for permanent access roads associated with the mainline gas valves. At the permanent valve sites and access roads, Enbridge will restore and maintain a well vegetated buffer downslope of the graveled workspace. This vegetated buffer will receive runoff and allow infiltration of storm water during operation of the facility, resulting in disconnected impervious surfaces and mitigating the impact of facility construction. These vegetated buffers will be designed so that source area flow length will not exceed 75 feet; the pervious area is covered in perennial vegetation with slopes not exceeding 8 percent; pervious area flow length is at least as long as the contributing impervious area flow length (with no additional runoff flowing into the pervious area other than the source area); and the pervious area will receive sheet flow runoff from the impervious area and be at least as wide as the contributing impervious source area. Therefore, post-construction storm water modeling and site evaluation for storm water infiltration are not required.