

LAW OFFICES OF

FLECK, MATHER & STRUTZ, LTD.

400 East Broadway, Suite 600, Wells Fargo Bank Building

P. O. Box 2798, Bismarck, North Dakota 58502

Telephone: 701-223-6585 Facsimile: 701-222-4853 E-Mail: fms@flecklaw.com Website: www.flecklaw.com

GARY R. WOLBERG+
PAUL W. SUMMERS
BRIAN R. BJELLA**
JOHN W. MORRISON
CURTIS L. WIKE**
CRAIG C. SMITH**

ALSO LICENSED IN:

+ Iowa
* Minnesota
° Montana
□ Nebraska
• South Dakota
▼ Texas
^ Wyoming

SHANE A. HANSON*
MICHAEL C. WALLER°
PETRA H. MANDIGO°
CHRISTOPHER D. FRIEZ
CRAIG B. BURNS▼
WADE C. MANN*

October 13, 2008

RECEIVED

OCT 13 2008

PUBLIC SERVICE COMMISSION

ERNEST R. FLECK
(1921-1995)
RUSSELL R. MATHER
(RETIRED)
WILLIAM A. STRUTZ
(RETIRED)

Mr. Darrell Nitschke
Executive Director
North Dakota Public
Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

Dear Mr. Nitschke:

In re: Enbridge Pipelines (North Dakota) LLC
Stanley Station Upgrades
Mountrail County, North Dakota
Our File No. 120-29074

Enclosed please find original and ten copies of Consolidated Application of Enbridge Pipelines (North Dakota) LLC for Waiver or Reduction of Procedures and Time Schedules for an Amended Corridor Certificate and Route Permit; two CD's of the Application; check for \$30,000.00 for filing fee; and copy of Affidavit of Service by Mail.

Very truly yours,


BRIAN R. BJELLA

bw
Enc.
cc: Joan M. Hollekim
Mountrail County Auditor

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE APPLICATION
OF ENBRIDGE PIPELINES (NORTH
DAKOTA) LLC FOR THE UPGRADING OF
THE STANLEY STATION LOCATED IN
MOUNTRAIL COUNTY, NORTH DAKOTA.

Case No. PU-08-812

AFFIDAVIT OF SERVICE
BY MAIL

STATE OF NORTH DAKOTA)
)§
COUNTY OF BURLEIGH)

Beth Wald, being first duly sworn on oath, deposes and says: That she is a citizen of the United States over the age of eighteen years and not a party to, nor interested in, the above entitled action.

That on the 13th day of October, 2008, this affiant did deposit in the United States Post office at Bismarck, North Dakota, a true and correct copy of the following document:

**CONSOLIDATED APPLICATION OF ENBRIDGE PIPELINES
(NORTH DAKOTA) LLC FOR WAIVER OR REDUCTION
OF PROCEDURES AND TIME SCHEDULES FOR AN
AMENDED CORRIDOR CERTIFICATE AND ROUTE PERMIT**

That the document with postage prepaid was mailed, directed to the person to be served at her last known post office address as follows:

Ms. Joan M. Hollekim
Mountrail County Auditor
P.O. Box 69
Stanley, ND 58784

To the best of affiant's knowledge, the address above given is the actual post office address of the party intended to be served.

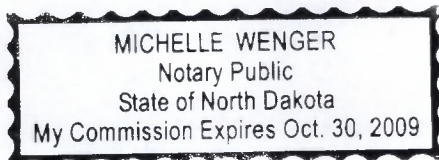
Beth Wald

Beth Wald

Subscribed and sworn to before me this 13th day of October, 2008.

Michelle Wenger

Michelle Wenger, Notary Public
Burleigh County, North Dakota
My Commission Expires:





Enbridge Pipelines (North Dakota) LLC
Before the North Dakota Public Service Commission
Docket No. 08-812



Stanley Station Injection Upgrade Project

TABLE OF CONTENTS

<u>EXPLANATION</u>	<u>TAB</u>
Application Summary and Waiver Request	A
Application to Amend Certificate of Corridor Compatibility	B
Application to Amend Route Permit for a Crude Oil Pipeline	C
Exhibits to Applications to Amend Corridor Certificate and Route Permit	D
Exhibit A – Enbridge Pipelines (North Dakota) LLC System Map	
Exhibit B - Maps	
Exhibit B.1 –Stanley Station Plot Plan Map	
Exhibit B.2 – Stanley Station Topographical and Aerial Maps	
Exhibit B.3 – Stanley Station Avoidance Area Map	
Exhibit C – State Historical Society of North Dakota Study	
Exhibit D – National Wetlands Inventory & SSURGO Soils Data	
Exhibit E – North Dakota Game and Fish Department Correspondence	
Exhibit F – Enbridge Pipelines (North Dakota) LLC 10 Year Plan	
Exhibit G – Environmental Guidelines for Construction	
Exhibit H – Spill Prevention, Containment, and Control Plan	
Exhibit I – Management of Discovered Historic Containment	

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE
APPLICATION OF ENBRIDGE
PIPELINES (NORTH DAKOTA) LLC
FOR THE UPGRADING OF THE
STANLEY STATION LOCATED IN
MOUNTRAIL COUNTY, NORTH
DAKOTA.

Case No. PU-08-812

**CONSOLIDATED APPLICATION OF ENBRIDGE PIPELINES
(NORTH DAKOTA) LLC FOR WAIVER OR REDUCTION
OF PROCEDURES AND TIME SCHEDULES FOR AN
AMENDED CORRIDOR CERTIFICATE AND ROUTE PERMIT**

Enbridge Pipelines (North Dakota) LLC (“Enbridge”) whose address for purposes of this Application is 2625 Railway Avenue, Minot, North Dakota 58703, pursuant to the Energy Conversation and Transmission Facility Siting Act codified at North Dakota Century Code Chapter 49-22 (“Act”), hereby submits this Consolidated Letter Application for Waiver or Reduction of Procedures and Time Schedules and for an Amended Corridor Certificate and/or Route Permit (“Application”). Enbridge requests the North Dakota Public Service Commission (“Commission”) waive and/or reduce procedures and time schedules required by the Act or in the Commission’s regulations set forth in Title 69-06 of the North Dakota Administrative Code to accomplish the purposes as requested herein. These include, but are not limited to: (1) waive or reduce the time period required for separate filing of a Letter of Intent and the one year time period provided for in § 69-06-03-01, North Dakota Administrative Code, for the filing of an Application to one day; (1) waive, pursuant to North Dakota Century Code §§ 49-22-07.2, 49-22-13(2) and North Dakota Administrative Code § 69-06-01-02(3) and Chapter 69-06-06,

provisions of North Dakota Century Code §§ 49-22-08(5), 49-22-08.1(5), 49-22-13 and North Dakota Administrative Code § 69-06-01-02 which requires separate filings of such applications, separate notices of such applications, hearings on such applications and certain time schedules as set forth in said statutes and rules; (2) not hold a public hearing on this application, but pursuant to North Dakota Century Code § 49-22-13(2) and North Dakota Administrative Code § 69-06-01-02(3), publish a notice of opportunity for hearing as provided for therein; (3) find that the proposed facilities are of such design, location and purpose that they will produce minimal adverse effects; (4) that pursuant to North Dakota Century Code § 49-22-13(4), provide in the notice of opportunity for hearing that any request for a hearing be made in not more than ten days; and (5) designate and approve the requested facilities as identified in this Application, and issue the appropriate amended corridor certificate and route permit.

The Commission's application guidelines for waiver of procedures and time schedules requires a description of the facility, the need for the facility, the cost of the facility and separate justification for each provision of the Act for which the Applicant is requesting a waiver, together with evidence that the project will produce minimal adverse effects or that a demonstrable emergency exists. As demonstrated in this Application, and summarized below, Enbridge's requests for waivers or reduction of procedures and time schedules and the issuance of an amended corridor certificate and route permit are justified as the proposed facilities are of such design, location and purpose that they will produce minimal adverse effects, and that the urgent demand for additional pipeline capacity in the Williston Basin requires immediate construction.

DESCRIPTION

The upgrades to the Stanley Station are described in detail in this Application. All construction will take place on land already owned by Enbridge, with the majority of construction occurring within the existing Stanley Station fenced yard. The Commission has recently twice reviewed upgrades to the Stanley Station in Case No. PU-06-317 and Case No. PU-07-719. In both instances the Commission approved amended corridor certificates and route permits for the requested facilities. Enbridge hereby seeks amendments to said corridor certificates and route permits to allow construction of the facilities described in this Application.

Enclosed with this Application are maps of the proposed station upgrades. Enbridge requests that these maps be accepted as a substitute for Mylar maps required by Commission application guidelines.

Enbridge desires to begin construction as soon as possible. The time schedule for completion is set forth in this Application.

NEED

Enbridge has received urgent requests from oil producers in the Williston Basin of North Dakota for immediate pipeline capacity to transport increased production of crude oil, primarily from the Bakken Formation. Mountrail County, North Dakota, is currently experiencing substantial drilling activity resulting in greatly increased production of crude oil being received at the Enbridge Stanley Pump Station. For that reason, the construction of additional pumping units, and the reconfiguration and replacement of certain station piping are needed in order to increase the injection capacity of the Stanley Pump Station for the ultimate delivery of such volumes into the Enbridge Mainline System. At this time, Enbridge is not proposing to increase

the pipeline capacity of its mainline system only its ability to inject additional crude oil volumes by the upgrades at the Stanley Station.

COSTS

The estimated cost for the upgrades for the Stanley Station is approximately six million dollars.

JUSTIFICATION

As previously noted, the Commission has twice considered upgrades to the Stanley Station, which included substantial materials concerning cultural resources reviews. Enbridge has updated said survey material for purposes of this Application. The North Dakota State Historic Preservation Office (SHPO) has already approved the Stanley Station site.

The cultural resource survey materials demonstrate there will be minimal adverse affects by construction.

For the foregoing reasons, Enbridge submits there is substantial justification for waivers and/or reduction of time schedules and procedures as these pipeline facilities will produce minimal adverse effects.

Enbridge respectfully requests the Commission to grant the aforementioned waivers and/or reductions of time schedules and procedures, and to render an expeditious decision approving the amended corridor certificate and route permit.



NORTH DAKOTA PUBLIC SERVICE COMMISSION

**APPLICATION OF
ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
To Amend
CERTIFICATE OF CORRIDOR COMPATIBILITY**

**STANLEY STATION INJECTION UPGRADE PROJECT
October 2008**



TABLE OF CONTENTS

SECTION A	<u>DESCRIPTION OF PROPOSED FACILITY</u>	1
A.1.	DESCRIBE THE TYPE OF FACILITY AND ITS PURPOSE.....	1
A.2.	DESCRIBE THE TYPE, SOURCE AND FINAL DESTINATION OF THE PRODUCT	2
A.3.	SIZE AND DESIGN	3
A.4.	TIME SCHEDULE	6
SECTION B	<u>STUDIES</u>	7
B.1.	CULTURAL RESOURCES INVESTIGATIONS	7
B.2.	WETLAND ASSESSMENT	7
B.3.	BIOLOGICAL RESOURCES.....	8
SECTION C	<u>NEED FOR THE FACILITY</u>	
C.1.	RELATIVE VALUE AND EFFECTS UPON EACH CRITERION INCLUDING LOCATION, CONSTRUCTION, AND OPERATION OF THE FACILITY	9
C.2.	ALTERNATIVES TO THE PROPOSED FACILITY	10
C.3.	STATEMENT CONCERNING DEVIATIONS FROM MOST RECENT 10-YEAR PLAN.....	15
SECTION D	<u>LOCATION</u>	
D.1.	STUDY AREA	16
D.2.	EVALUATION CRITERIA LEADING TO SITE SELECTION.....	16
D.3.	RELATIVE VALUE OF EVALUATION CRITERION.....	24
D.4.	CRITERIA TO EVALUATED	25
D.5.	GENERAL MITIGATIVE MEASURES TO BE TAKEN	25
D.6.	QUALIFICATIONS OF PERSONS CONTRIBUTING TO THE STUDY	25
D.7.	MAPS	26



LIST OF TABLES

TABLE 1 EXCLUSION AREAS CONSIDERED 16

TABLE 2 AVOIDANCE AREAS CONSIDERED 17

TABLE 3 AVOIDANCE AREAS WITHIN 500 FEET OF THE STANLEY STATION
INJECTION UPGRADE PROJECT..... 19

TABLE 4 SELECTION CRITERIA CONSIDERED 19



APPLICATION TO AMEND CORRIDOR CERTIFICATE

SECTION A

DESCRIPTION OF PROPOSED FACILITY

- A.1. DESCRIBE THE TYPE OF FACILITY ADDRESSED IN THIS APPLICATION. THE DESCRIPTION SHALL INCLUDE THE PURPOSE OF THE FACILITY AND THE TECHNOLOGY TO BE EMPLOYED.

A.1.a Type of Facility

Enbridge Pipelines (North Dakota) LLC ("EPND")¹ owns and operates a 950-mile existing underground petroleum pipeline system that extends from eastern Montana through North Dakota to Clearbrook, Minnesota. Part of the system, known as the 8-inch Beaver Lodge/Alexander segment in Williams and McKenzie Counties, was placed in service in the mid 1980s by Portal Pipeline Company under the North Dakota Public Service Commission's Order in Case No. 10,472. EPND acquired this pipeline from Portal Pipeline Company in 1996.

In this application, EPND is proposing to optimize the injection capacity of its Stanley Pump Station through the installation of new pumping units, and other appurtenant facilities referred to hereinafter as the Stanley Station Injection Upgrade Project. No new pipeline is being proposed herein except for the reconfiguration and replacement of certain minor station piping. This project will enable EPND to increase its injection capacity into its existing mainline system by May 2009 as described in more detail in Section A.3 below. No new land will be required as all construction will take place on land already owned in fee by Enbridge, with the majority of construction occurring within the existing Stanley Station fenced yard.

A.1.b Purpose of Proposed Facilities

The purpose of the Stanley Station Injection Upgrade Project is to optimize the injection capacity of the Stanley Pump Station through the installation of new pumping units, and the reconfiguration and replacement of certain station piping. Such upgrades, as proposed herein, will enable EPND to timely respond to the market demands by increasing the injection capacity of its Stanley Pump Station to

¹ EPND is a wholly owned subsidiary of Enbridge Energy Partners, L.P. (Enbridge Partners), which is a Delaware master limited partnership headquartered at 1100 Louisiana, Suite 3300, Houston, Texas 77002 (ph. 713-821-2000; www.enbridgepartners.com).



deliver an incremental 15,000 barrels per day (bpd) of crude petroleum into its mainline system.

As proposed, the Stanley Station Injection Upgrade Project is the most reliable, efficient, and cost effective alternative to meet forecast nominations on the EPND system, as described in more detail in Section C.1.

A.2 DESCRIBE THE TYPE, SOURCE AND FINAL DESTINATION OF THE PRODUCT TO BE TRANSMITTED BY THE PROPOSED FACILITY.

As defined in its FERC Tariff on Rules and Regulations, EPND currently transports the following commodities within its multi-pipeline system:

- Mixed Blend Sweet Crude (SW)
- Mixed Blend Sour Crude (SO)

The primary source of supply for the EPND System is production from the Williston Basin spanning Montana, North Dakota, South Dakota and Wyoming, as well the provinces of Saskatchewan and Manitoba.

The primary geographical sources for SO and SW that will be transported on the EPND System are those regions of Montana and North Dakota that comprise the western and central portion of the Williston Basin. As previously stated above, the Stanley Station Injection Upgrade Project is designed to optimize the injection capacity of the Stanley Pump Station to deliver an incremental 15,000 bpd into the EPND's mainline system. The proposed project will not alter the design pipeline capacity of EPND's mainline system for ultimate delivery of crude petroleum into the Enbridge Clearbrook Terminal Facility in Clearbrook, Minnesota, as approved by the Commission in Docket No. PU-07-719. At Clearbrook, EPND will continue to have the ability to deliver such volumes of crude oil to the pipeline facilities of the non-affiliated Minnesota Pipe Line Company for ultimate redelivery to refineries in the Minneapolis/St. Paul area, or the ability to deliver such volumes to the Enbridge Lakehead System² for further

² Enbridge Energy, Limited Partnership, a wholly owned subsidiary of Enbridge Partners, owns and operates the U.S. portion of the Enbridge Mainline System, which is commonly referred to as the "Lakehead System." Enbridge Pipelines Inc., owns and operates the Canadian portion of the Enbridge Mainline System which interconnects with and delivers into Enbridge Energy, Limited Partnership's "Lakehead System" at the International Border near Neche, North Dakota. These operationally integrated pipeline systems together form the longest liquid petroleum pipeline in the world. Together, these two systems are referred to as the "Enbridge Mainline System." During 2007, the Lakehead System transported an average of 1.543 million bpd.



transportation into Midwestern markets via the Lakehead System. Currently the Lakehead System is being expanded in stages to increase capacity by 400,000 bpd between Superior, Wisconsin and the Chicago area through completion of the Southern Access Project. Additionally, the Enbridge Mainline System will be expanded by early 2010 to increase capacity by 450,000 bpd between Alberta, Canada and Superior, Wisconsin (including capacity increases downstream of the EPND interconnect at Clearbrook), subject to receiving appropriate regulatory approvals for the Alberta Clipper Project. The Alberta Clipper Project is slated to be in-service during the first quarter of 2010. Thus, the EPND system expansion will allow access through Clearbrook to a vast network of pipeline infrastructure to allow Williston Basin producers and EPND shippers market access to a variety of refinery hubs in Minnesota, the greater Chicago area, Michigan, Cushing and through an interconnect with ExxonMobil line in Illinois, all the way to the U.S. Gulf Coast refinery hub.

A.3 SIZE AND DESIGN:

A.3.a Electric Facility – Not Applicable.

A.3.b Provide a description of the size and design of the PIPELINE facility including, but not limited to, the following:

- A.3.b.(1) Width of right-of-way;
 - A.3.b.(2) Estimated distance between surface structures such as manholes or block valves;
 - A.3.b.(3) Pipe size;
 - A.3.b.(4) Approximate length of facility;
 - A.3.b.(5) Maximum design operating pressure and temperature;
 - A.3.b.(6) Maximum design flow rate; and
 - A.3.b.(7) The number and general location of compressor or pumping stations
-



A.3.b Description of size and design of pipeline facility

As stated in Section A.1, no new pipeline is being proposed as part of the Stanley Station Injection Upgrade Project. EPND proposes to maximize the injection capacity of its Stanley Pump Station through the construction of new pumping units and the reconfiguration and replacement of certain station piping all within the existing station site, as described in more detail below in Section A.3.b.(7). All upgrades to the station site will be constructed on land already owned by EPND and no new land will be required.

A.3.b.(1) Width of the Right of Way

Not Applicable.

A.3.b.(2) Estimated Distances Between Surface Structures

Pumping stations are spaced approximately 28 miles apart, on average.

A.3.b.(3) Pipe Size

Not Applicable.

A.3.b.(4) Approximate Length of Facility

Not Applicable.

A.3.b.(5) Maximum Design Operating Pressure and Temperature

The maximum allowable operating pressure of the EPND system is 1480 psig. The maximum temperature of the petroleum is anticipated to be 104°F.

A.3.b.(6) Maximum Design Flow Rate

Generally, liquid pipelines are designed at a specified capacity for a known liquid. Most liquids pipelines transport a variety of liquids. The change in fluid characteristics (density, viscosity, etc.) of the transported liquids will affect the capacity of the pipeline. Liquids are also batched in a pipeline in a repeatable sequence. Both the fluid characteristics and batch sequence will affect the capacity of the pipeline.



Two definitions are used to describe pipeline capacity: "Design Capacity" and "Annual Capacity".

- Design Capacity is the theoretical capacity of the pipeline for given types of liquids and their batch sequence. Design Capacity is calculated assuming theoretically ideal operating conditions. With respect to the Stanley Station Injection Upgrade Project, the Design Capacity of the EPND mainline system will remain the same as previously filed and approved by this Commission in June 4, 2008 in Docket No. PU-07-791.
- Annual Capacity is the average sustainable throughput over a year. Annual Capacity is calculated assuming historic average annual and operating conditions. These operating conditions include scheduled and unscheduled maintenance, normal operating problems and crude supply availability. Annual Capacity of a pipeline is typically 95% of Design Capacity. With respect to the Stanley Station Injection Upgrade Project, the Annual Capacity of the EPND mainline system will remain the same as previously filed and approved by this Commission in June 4, 2008 in Docket No. PU-07-791.

A.3.b.(7) The Number and General Location of Pumping Stations

The Stanley Station Injection Upgrade Project will consist of the following: (See Exhibit B for detailed mapping.)

Location, Size and Design of Proposed Upgrades

Location

6150 Hwy 8
Stanley, ND 58784

Legal Description:

The existing Stanley Station lies on 40.14 acres of land owned by EPND located in NW/4-SW/4, Sec. 27, T-156-N, R-91-W, Mountrail Co., ND

Station Upgrades

- Installation of two new 200 HP booster pumps
- Installation of two new 300 HP VFD's



- SCADA upgrades
- Replace existing 6" and 10" station piping with 12" and 16" station piping

Land Upgrades

- Upgrades: All Station Injection Upgrades as described above will be constructed on land owned by EPND. No new land will be required at this station site.

Aerial, Topo and Plot Plan Maps of Proposed Upgrades at Stanley Pump Station Site

- See Exhibit B.

A.4 TIME SCHEDULE

A.4.a Certificate of Corridor Compatibility

Expected on or before November 17, 2008.

A.4.b Route Application

Route application was submitted in October 2008 as part of this consolidated Application to amend Certificate of Corridor Compatibility and Route Permit.

A.4.c Route Permit

Expected before November 17, 2008.

A.4.d Construction Start Date

Proposed commencement of construction is immediate upon receiving all appropriate approvals. Expected start construction date is November 2008.

A.4.e Construction Complete

Estimated construction completion date is on or before later part of May 2009.

A.4.f In-Service Date

Estimated in-service date is on or before May 2009.



APPLICATION TO AMEND CORRIDOR CERTIFICATE

SECTION B

STUDIES

B.1 CULTURAL RESOURCE INVESTIGATIONS

Merjent, Inc. of Minneapolis, Minnesota, completed a search of the North Dakota State Historic Preservation Office (ND SHPO) files on August 14, 2008 for Section 27, T-156-N, R-91-W, Mountrail County, North Dakota. This research covered the entire 40 acre tract of the Stanley Station site which is owned by Enbridge and the project location for the proposed Stanley Station Injection Upgrade Project. The file search revealed two previously recorded cultural resource sites within Section 27. One of the cultural resource sites is over 1,000 feet from EPND's property. This site would not be affected by construction activities within EPND's property. The same investigation identified a cultural resource site within 100 feet of EPND's property. Through informal consultation, the ND SHPO suggested a site review was necessary to determine the exact location of the previously recorded site.

Metcalf Archaeological Consultants, Inc (MAC) completed a Class III Site Review of EPND's property on August 26, 2008. MAC also surveyed the area immediately east and adjacent to EPND's property to relocate and classify the previously recorded site. No cultural resource sites were found on EPND property. The previously recorded site was found to be about 50 east of EPND property.

The Class III survey report was submitted to the ND SHPO for their review and recommendations. The ND SHPO responded on September 8, 2008 that "...No Historic Properties or Significant Sites Would Be Affected". The Class III survey report and response from the NDSHPO is provided in Exhibit C.

B.2 WETLAND ASSESSMENT

Merjent, Inc. completed a desktop review of the entire 40 acre tract of the Stanley Station site using aerial photographs, USGS 7.5 minute topographic maps, soil survey data, National Wetlands Inventory (NWI) data, and recent site photographs. The NWI data did not identify any wetlands within EPND's property (see Exhibit D). Interpretation of aerial photography identified two vegetation signatures that vary from their surroundings and correspond to depressional areas on the site plan.



Recent photographs of these two areas confirm the areas as upland and identify the dominant plant species as brome grass, stiff goldenrod, and western snowberry. These dominant species do not meet the wetland vegetation criteria established by the U.S. Army Corp of Engineers. No other potential wetland areas are present within EPND's property.

B.3 BIOLOGICAL RESOURCES

As part of a previous EPND expansion project (PSC Docket #PU07-791), the North Dakota Game and Fish Department (NDGFD) was asked to review the SW $\frac{1}{4}$ of Section 27, T-156-N, R-91-W for concerns related to unique or rare animal or plant species that may occur within the project area. This review covered the entire 40 acre tract of the Stanley Station site. A response from the NDGFD was received on December 21, 2007 stating that the expansion project would not result in significant adverse impacts on wildlife or wildlife habitat, including endangered species. A copy of the NDGFD response is enclosed as Exhibit E.

Although the project footprint and impacts from the Stanley Station Injection Upgrade Project is slightly different from the previously reviewed project, EPND believes that construction activities within the SW $\frac{1}{4}$ of Section 27 would not impact animals or plant species that are unique or rare to the state. Further discussion regarding potential impacts to wildlife are provided in Section D.2.c.(2).



APPLICATION TO AMEND CORRIDOR CERTIFICATE

SECTION C

NEED FOR FACILITY

C.1 AN ANALYSIS OF THE NEED FOR THE PROPOSED FACILITY BASED ON PRESENT AND PROJECTED DEMAND FOR THE PRODUCT TRANSMITTED BY THE FACILITY, INCLUDING THE MOST RECENT SYSTEM STUDIES SUPPORTING THE ANALYSIS OF THE NEED.

C.1.a Planned Use and Purpose

As the demand for the crude oil production from the Williston Basin of North Dakota continues to increase so does the demand for additional pipeline capacity for crude oil transportation on the Enbridge Pipelines (North Dakota) LLC System. Most recently, Enbridge has received urgent requests from oil producers in the Williston Basin of North Dakota for immediate pipeline capacity to transport increased production of crude oil, especially from the Mountrail County region of the Bakken Formation. Today, the Mountrail County, North Dakota area is currently experiencing substantial drilling activity resulting in greatly increased production of crude oil being received at the Enbridge Stanley Pump Station. For that reason, the construction of additional pumping units, and the reconfiguration and replacement of certain station piping are immediately needed, to meet the increasing crude oil volumes that are being nominated at the Stanley Station receipt point for delivery into the EPND Mainline System. EPND continues to work diligently to respond to this market demand for additional flexibility on its existing pipeline system by undertaking small station expansion projects to help address the immediate and forecasted transportation needs of its shippers. Moreover, the Stanley Station Injection Upgrade Project continues to build upon the numerous expansion projects³, which this Commission has approved in various docketed proceedings since 2005. Enbridge is not proposing to increase the pipeline capacity of its mainline system only its ability to inject additional crude oil volumes through the proposed upgrades at the Stanley Pump Station.

³ In Docket No. PU-05-274, EPND's Phase 1 and 2 Expansion Projects were approved by the North Dakota Public Service Commission (ND-PSC) and placed in-service in 2005 and April 2007 respectively.

In Docket Nos. PU- 06-317; PU-06-330; and PU-06-349, EPND's Phase 3, 4 and 5 Expansion Projects were approved by the ND-PSC and was fully placed in-service on January 2008.

In Docket No. PU-07-791, EPND's Phase 6 approved by the ND-PSC in July, 2008 and is currently under construction in North Dakota.



C.1.b Future North Dakota System Expansion(s)

At this time, EPND has no further plans to expand its North Dakota System. However, as forecasts for production from the Williston Basin continue to be updated and through ongoing planning with shippers, EPND will periodically review the long term sustainable need for even more pipeline capacity beyond this EPND Project.

C.2 ALTERNATIVES TO THE PROPOSED FACILITY

EPND has performed a reasonable and defensible alternative analysis that involves consideration of environmental, engineering and economic factors in a multi-disciplinary and iterative fashion. Thus, the following alternatives to the Stanley Station Injection Upgrade Project were considered:

C.2.a Action Alternative:

In light of the overall increase in Williston Basin production, the requirements by shippers to increase pipeline capacity and the current apportionment that is being experienced on the EPND System today, a “no action” alternative is unacceptable to EPND and its shippers.

C.2.b Trucking Alternative:

Currently, there is not sufficient tanker trailer truck capacity to transport the incremental 15,000 barrels of crude oil per day. Moreover, the trucking alternative significantly overburdens current public road capacity. Additionally, should the truck capacity issue be resolved, EPND or its shippers would need to expand trucker loading/unloading facilities at suitable locations to allow receipt into the Enbridge Clearbrook Tank Farm and Terminal Facility. While trucks are a vital part of the crude gathering and distribution network, pipelines are a safer and more economical alternative for transporting this volume of crude oil for these distances. The potential in-service date of additional trucking, road and off-loading capacity is not known. The reliability of this alternative in northern climates is compromised by periodic restriction in truck traffic due to winter storms and spring road restrictions or other weather related or capacity availability restrictions.

- **a discussion of the design and the geographical area affected:**
In order to transport an incremental 15,000 bpd of crude oil proposed by the Project, a fleet of hundreds of tractors and trailers would be required as detailed below:



Computation of Trucking Requirements

Crude oil volumes = 15,000 bpd

Per Truck capacity = 150 barrels per truck

Number of trucks required = $15,000 / 150 = 100$ trucks per day

Assume each truck requires loading, in-transit full (1 day), in-transit empty (1 day) and unloading time

Number of trucks in transit = 100×1 day = 100 trucks

Number of trucks returning empty = 100×1 day = 100 trucks

20% of the in-transit trucks loading and unloading = 40 trucks

Total truck requirements = $100+100+40 = 240$ trucks

(ignoring scheduled/unscheduled down time)

Number of drivers required for 2-day round trip including loading/unloading = 240×1 driver/truck = 240 drivers

Number of drivers required for 1-day round trip including loading/unloading = 240×2 driver/truck = 480 drivers

In order to facilitate this operation, significant truck loading and offloading terminal facilities would have to be constructed at the Stanley Station and Clearbrook. In addition, it is likely that substantial upgrades and ongoing maintenance would be required (at public expense) to the connecting roadways along the entire route.

▪ **an estimate of the in-service date:**

EPND believes that it is impossible for the required terminal facilities at both Stanley Station and Clearbrook to be constructed on the same timeline as the Stanley Station Injection Upgrade Project. Additionally, EPND does not have an estimate of the time required to acquire the trucking fleet described above, how long it would take to attract and train the associated drivers, nor how extensive the roadway upgrade program would be.

• **a discussion of the method of operation:**

This operation would be highly labor intensive, with a significant workforce required at both terminal locations to allow for the constant loading and offloading requirements. This option would require a significant driver pool to maintain the constant movement of the entire truck fleet.



- **its costs:**

Based on the North Dakota Petroleum Council's "Williston Basin Crude Oil Transportation Bottleneck White Paper" dated March 2006, the approximate transportation costs to move 15,000 bpd by truck would range from \$6.00 to \$10.00 per barrel. Therefore, the estimated transportation costs would range between \$32.8 and \$54.7 million dollars per year (ignoring the costs of new vehicles and infrastructure facilities necessary).

- **its economic life:**

With mileage that the trucks would incur in steady service, EPND estimates that the economic life of a truck would not exceed 4 to 5 years. The truck loading and unloading terminals would have an estimated economic life of 25 years. EPND does not have an assessment of the impact that this amount of incremental truck traffic would have on the various roadways.

- **its reliability:**

This operation would be inherently much less reliable than the Stanley Station Injection Upgrade Project as truck traffic is affected by weather conditions, mechanical failure, manpower (driver shortages), road maintenance or closures. Trucks have a significantly higher rate of accidents affecting driver and public safety than compared to pipelines, according to the National Transportation Safety Board.

Trucking cannot compete with pipelines for volumes over long distances given physical limitations on truck and unloading facilities that are required to sustain operations of this nature. Therefore this alternative was not further considered.

C.2.c Rail Alternative:

Currently, there is insufficient rail tanker car capacity to transport the incremental 15,000 bpd to Clearbrook. The rail tanker car alternative would require the construction (by EPND or its shippers) of rail car loading and off-loading facilities. Also, the construction of new lateral above ground rail service that poses additional risk and impact to landowners and the public. While rail tanker cars are a vital part of the short-haul distribution network for crude oil, pipelines are a safer and more economic transportation alternative. The potential in-service date of additional truck-to-rail, rail tanker car, rail line,



and off-loading capacity is not known. The reliability of this alternative in northern climates is compromised by periodic restriction in truck traffic to deliver to rail due to winter storms and spring road restrictions or other weather related or capacity availability restrictions.

- **a discussion of the design and the geographical area affected;** in order to transport 15,000 bpd of heavy oil, a fleet of rail cars would be required as detailed below:

Computation of Railcar Requirements

Crude oil volumes = 15,000 bpd

Rail car capacity = 600 barrels per rail car

Tank cars required = $15,000/600 = 25$ rail cars per day

Estimated time to move each rail car from Stanley Station to Clearbrook (various carriers and through various rail assembly yards) = 2-3 days

Number of cars in transit = 25×3 days = 75 cars

Number of cars returning empty = 25×3 days = 75 cars

20% of the in-transit cars loading and unloading = 30 cars

Total tank car requirements = $75+75+30 = 180$ cars
(ignoring scheduled/unscheduled down time)

Approximately 180 rail cars would have to be in route each day, making the roundtrip between those two locations in approximately 6 days. In order to facilitate this operation, significant spur lines, rail sidings, and terminal facilities would have to be constructed at Stanley Station and Clearbrook. In addition, substantial upgrades and ongoing maintenance would be required to the connecting railways.

- **an estimate of the in-service date:**

EPND believes that it is impossible for terminal facilities at both Stanley Station and Clearbrook to be constructed on the same timeline as the Stanley Station Injection Upgrade Project. Additionally, EPND does not know if the number of rail cars required is available, nor do we have an estimate of the time that would be required to manufacture them. Moreover, EPND does not have an estimate of the time required to construct the necessary upgrades associated with the railway infrastructure.



- **a discussion of the method of operation:**

This operation would be highly labor intensive, with a significant workforce required at both terminal locations to allow for the constant loading and offloading requirements and railcar operation.

- **its costs:**

Based on the North Dakota Petroleum Council's "Williston Basin Crude Oil Transportation Bottleneck White Paper" dated March 2006, the approximate transportation costs to move 15,000 bpd by rail would range from \$6.00 to \$10.00 per barrel. Therefore the estimated transportation costs would range between \$32.8 and \$54.7 million dollars per year (without considering the costs of new rolling stock and infrastructure facilities necessary).

- **its economic life:**

With mileage that the cars would incur in steady service, the applicant estimates that the economic life of a rail car would not exceed 10 to 15 years. The rail loading and unloading terminals would have an estimated economic life of 25 years.

- **its reliability:**

This operation would be inherently much less reliable than the Stanley Station Injection Upgrade Project. The entire operation would be subject to weather related delays, delays caused by scheduling conflicting rail traffic, and a significant mechanical/maintenance requirement exposure based on the number of rail cars involved in this operation.

C.2.e Alternative EPND Pipeline route:

Since EPND does not propose to install a new pipeline as part of its Stanley Station Injection Upgrade Project, no alternative EPND Pipeline route was considered.

EPND proposes to increase its injection capacity through the proposed Stanley Station Injection Upgrade Project as described in more detail in Section A.3. EPND believes this is the most efficient and cost effective combination of capital cost and pumping horsepower requirements for the required injection capacity.

- The in-service date for the Stanley Station Injection Upgrade Project is on or before May 2009.



- The Stanley Station Injection Upgrade Project operations will be operationally integrated with the existing EPND System.
- The cost of the Stanley Station Upgrade Project is approximately \$6 million.
- The economic life of the Stanley Station Injection Upgrade Project for this purpose is based on a 25-year depreciation; however, the functional life of the proposed facilities are indefinite following normal maintenance and inspection practices of the federal regulated interstate pipeline system.
- The EPND System operates year-round, round-the-clock, with the exception of planned system down-time for inspection, maintenance or repair purposes or unplanned down-time due to interruptions in receipts or refinery outages and/or operational disruptions caused by regional power outages or other reasons.

C.2.f A summary of the conclusions reached with respect to the alternative and the reason for its rejection

The objective of providing a cost effective and efficient method to optimize the injection capacity of the Stanley Station and help to alleviate a potential bottleneck area on the EPND's mainline is accomplished with the Stanley Station Injection Upgrade Project as presented in this Application. As proposed, this project minimizes environmental and landowner impacts and, when integrated with the existing EPND System, provides the safest, most efficient and cost effective alternative to link the growing demand for crude oil supplies in the Midwest with increased and reliable domestic supplies from North Dakota and Montana. Thus, all other alternatives discussed herein were rejected.

C.3. STATEMENT CONCERNING DEVIATION FROM MOST RECENT 10-YEAR PLAN

EPND's currently filed 10-year plan with the ND-PSC is enclosed herein as Exhibit F. At the time of filing, EPND did anticipate the need for the proposed project as disclosed in Schedule H and I of this plan.



APPLICATION TO AMEND CORRIDOR CERTIFICATE

SECTION D

LOCATION

D.1 STUDY AREA

EPND defined its study area as the entire 40-acre parcel owned by EPND in the NW¼, SW¼, Section 27, T156N, R91W, Mountrail County, North Dakota. Although the project occurs within a small area within EPND's property, the entire property has been evaluated for the purposes of this corridor certificate application.

D.2 EVALUATION CRITERIA LEADING TO SITE SELECTION

Evaluation criteria as described in North Dakota Administrative Code (North Dakota Rules) Chapter 69-06-08-02 was used to guide and govern the siting of the proposed expansion project. Detailed discussions of these criteria, including descriptions, potential impacts, and mitigation measures where appropriate are provided below.

D.2.a. Exclusion Areas

Exclusion areas are areas that should be excluded in the consideration of a route for a transmission facility, or in the case of the proposed project, the expansion of an existing facility. No exclusion areas are located within the study areas. Table 1 below identifies exclusion areas that were considered for the project.

Table 1

EXCLUSION AREA	WITHIN STUDY AREA
National Parks	No
National Memorial Parks	No
National Historic Sites	No
National Historic Landmarks	No
National Natural Landmarks	No



EXCLUSION AREA	WITHIN STUDY AREA
National Monuments	No
National Wilderness Areas	No
State Parks	No
State Historic Sites	No
State Monuments	No
State Historical Markers	No
State Archaeological Sites	No
State Nature Preserves	No
County Parks	No
County Recreational Areas	No
Municipal Parks	No
Parks Owned or Administered by Other Governmental Subdivisions	No
Areas Critical to the Life stages of Threatened or Endangered Animal or Plant Species	No
Areas Where Animals or Plant Species that Are Unique or Rare to this State Would be Irreversibly Damaged	No

D.2.b. Avoidance Areas

Avoidance areas shall not be considered in the routing of a transmission facility, or in the case of the proposed project, the expansion of an existing facility, unless there are no reasonable alternatives. With the exception of businesses within 500 feet of the project, no avoidance areas are located within the study area. A discussion of businesses within 500 feet of the study areas is provided below. Table 2 below identifies avoidance areas that were considered for the project.

Table 2

AVOIDANCE AREA	WITHIN STUDY AREA
National Historic Districts	No
National Wildlife Areas	No



AVOIDANCE AREA	WITHIN STUDY AREA
National Wild, Scenic, or Recreational Rivers	No
National Wildlife Refuges	No
National Grasslands	No
State Wild, Scenic, or Recreational Rivers	No
State Game Refuges	No
State Game Management Areas	No
State Management Areas	No
State Forests	No
State Forest Management Lands	No
State Grasslands	No
Historical Resources Which Are Not Specifically Designated as Exclusion or Avoidance Areas	No
Areas Which Are Geologically Unstable	No
Within Five Hundred Feet [152.4 Meters] of a Residence, School, or Place of Business	Yes (Businesses)
Reservoirs and Municipal Water Supplies	No
Water Sources for Organized Rural Water Districts	No
Irrigated Land	No
Areas of Recreational Significance Which Are Not Designated as Exclusion Areas	No

D.2.b.(1) Areas within 500 feet of Farmhouse, Rural Residence, or Place of Business

Four businesses were found within 500 feet of the facilities for which EPND is proposing to install at the Stanley Station site (See Table 3 below). Stanley Station was constructed prior to the Siting Act and to the best of EPND's knowledge, the four businesses were constructed after Stanley Station was placed in operation; and as a result were voluntarily located within 500 feet of the station. As part of the Stanley Station Injection Upgrade Project, Enbridge is diligently working to secure waivers from the four businesses as required under North Dakota Century



Code 49-22-05.1 and rules promulgated thereunder, and will provide a copy of such documentation upon receipt.

The construction of the proposed facilities has been engineered to maximize the use of existing station facility and minimize the development of non-developed land within EPND's property. The new piping and pumps have been sited and designed to create an efficient and functioning pump and suction system. No other reasonable sites exist for construction of the facilities.

Table 3

AVOIDANCE AREAS WITHIN 500 FEET OF PROPOSED FACILITIES	APPROXIMATE DISTANCE FROM FACILITY (FEET)
Business #1 – Garage which was recently converted to commercial use.	396
Business #2 – House which was recently converted to commercial use.	320
Business #3 – NDSU Agricultural / Mountrail County maintenance shop	288
Business #4 – Ferlings Veterinary	360

D.2.c. Selection Criteria

Selection criteria are those environmental resources on which the project must have an acceptable minimum amount of impact, as determined by the Commission. Table 4 below identifies selection criteria that were considered for the project. Where impacts to selection criteria are possible, a discussion of potential impacts and mitigation measures that will be implemented is provided.

Table 4

SELECTION CRITERIA	POTENTIAL IMPACT WITHIN STUDY AREA
Agricultural Production	No
Family Farms and Ranches	No
Land Suitable for Irrigation	No



SELECTION CRITERIA	POTENTIAL IMPACT WITHIN STUDY AREA
Surface and Groundwater Flow Patterns	No
Noise Sensitive Areas	No
Visual Effects	No
Extractive and Storage Resources	No
Wetlands	No
Woodlands	No
Communication or Electric Control Facilities	No
Human Health and Safety	Potential
Animal Health and Safety	Potential
Plant Life	Potential

D.2.c.(1) Human Health and Safety

Despite its excellent safety record, the transportation of crude oil involves some risk to the public. Perhaps the most obvious risk to human health is the potential for fire in the event of an accident and subsequent release. Toxic exposure from crude oil through skin contact, ingestion, or vapor inhalation can also be a risk.

EPND will design, construct, test, operate, and maintain the proposed project in accordance with all applicable laws and standards. The U.S. Department of Transportation's pipeline standards are published in Part 195 of Title 49 of the Code of Federal Regulations. The regulations are intended to ensure adequate protection of the public and to prevent accidents and failures. Part 195 specifically addresses petroleum pipeline safety issues. It specifies material selection and qualification; minimum design requirements; and protection from internal, external, and atmospheric corrosion.

D.2.c.(2) Animal Health and Safety

Wildlife generally located in the study area include animals such as: white-tailed deer, coyote, woodchuck, badger, cottontail, mink, mouse, vole, hawk, kestrel, partridge, owl, flycatcher, thrush, vireo, warbler, wren, sandpiper, heron, turkey, pheasant, snake, and a variety of other mammals, birds, reptiles, and amphibians. Impacts to these species would include the temporary impacts associated with the construction of the project, and permanent impacts associated with the operation of the facility.

Impacts from construction would include the displacement of wildlife near the project site and direct mortality of some individuals. Larger or more mobile wildlife, such as birds and large mammals, would likely leave the project area during construction and relocate to similar habitats nearby. Some smaller, less mobile wildlife, such as small mammals, reptiles, and amphibians could be crushed by construction equipment or trapped in construction areas. These effects, however, would be minimal and wildlife could return to the adjacent, undisturbed habitats after construction is completed.

About 2.5 acres of grassland within EPND's property would be permanently converted to industrial use by expansion of the existing fenced station facility. About 1.5 acres of grassland would be temporarily utilized as a staging area for the expansion. Permanent and temporary loss of this habitat represents only a very small percent of available wildlife habitat in the project area. Additionally, the wildlife that inhabits the project area is generally accustomed to the visual and operation impacts associated with the existing station facilities. Therefore, impacts to wildlife are expected to be minimal.

D.2.c.(3) Plant Life

As stated above, about 1.5 acres of grassland would be temporarily disturbed by project activities and about 2.5 acres of grassland would be converted to industrial land by the project. EPND is maximizing its use of the existing Stanley Station facility to minimize the amount of disturbance to grassland within the EPND property.



D.2.d. Policy Criteria

Policy criteria are those factors which are positively affected by the project that may lead the Commission to give preference to an applicant. These factors are discussed below.

D.2.d.(1) Location and Design

As previously mentioned, EPND has designed the proposed project to take advantage of its existing facilities to the maximum extent practical.

D.2.d.(2) Training and Utilization of Available Labor in This State for the General and Specialized Skills Required

The number of construction workers that would be hired locally during construction would vary depending on the contractor selected for the project. Pipeline and station construction is a niche market and it is unlikely that there are qualified local pipeline contractors capable of completing the project. If a non-local contractor is awarded this project, it is likely that up to 75 percent of the workers would be non-local. The remaining 25 percent would be hired from the local population currently residing in nearby areas of North Dakota.

EPND does not anticipate hiring additional permanent employees to operate the Stanley Station. Operation of this facility will be managed by EPND's existing workforce.

D.2.d.(3) Economies of Construction and Operation

Crude oil and natural gas are North Dakota's leading mineral product, and North Dakota is the seventh largest producer of crude oil in the country. The lack of space on existing pipelines in North Dakota has adversely affected the state's economy. It has resulted in a significant drop in price for petroleum produced locally and has prompted some local producers to close wells and postpone production. The proposed project would boost the state's economy and allow the state to capitalize on tax revenue gathered from production and extraction taxes.

Beneficial impacts on the economy would also result during construction from temporarily hiring local employees, and from a relatively large-scale, temporary influx of non-local construction



workers. Unemployment in the area would see a temporary drop, and payroll taxes would temporarily rise.

Local businesses would benefit from the demand for goods and services generated by the temporary workforce's need for food and lodging. In addition, EPND would purchase some of the materials necessary for construction of the project locally. EPND estimates that local purchases made for construction of the project would primarily include consumables, fuel, equipment rental, and miscellaneous construction-related materials (e.g., office supplies).

EPND paid taxes of \$0.834 million during 2008 for the tax year of 2007. The total assessed value of this project which is \$6 million times the state average tax rate equals \$101,000 in incremental taxes generated by the proposed project.

D.2.d.(4) A Commitment of a Portion of the Transmitted Product for Use in This State

EPND does not own any of the crude oil in its system, and does not determine the destinations for the products transported by its system. EPND's business is to provide transportation service to its customers as a common carrier, and to receive a fee for that service pursuant to tariffs authorized by the Federal Energy Regulatory Commission under the Interstate Commerce Act.

D.2.d.(5) The Coordination of Facilities

As previously mentioned, EPND has designed the proposed expansion project to take advantage of its existing facilities to the maximum extent practical.

D.2.d.(6) Monitoring of Impacts

EPND is committed to protecting the environment and complying with all applicable environmental laws, regulations, and standards. EPND is proposing to implement environmental training and environmental inspection throughout the course of the project.



D.2.d.(6)(i) Environmental Training

To communicate the environmental requirements of the project to project personnel, EPND would require environmental training of all project personnel prior to construction. EPND would:

- require environmental training of all personnel (both contractor and EPND) visiting or working at the job site;
- require everyone who attends training to sign an acknowledgement form and be issued, as a proof-of-training, a copy of the training booklet and a hardhat sticker; and
- require all personnel to display a hardhat sticker when on a job site or dismiss personnel from the job site until it is obtained through completion of training.

D.2.d.(6)(ii) Environmental Monitoring

Environmental monitoring, in the form of ongoing site inspection, will be conducted during and following construction. Contract specifications will incorporate environmental protection and mitigation measures, and contractors will be expected to implement these measures in the field. Contractor training and project orientation will also be provided by EPND.

Environmental data has been assessed, specifically cultural resources, wetlands and protected species, as described in Section B of the Application to Amend Certificate for Corridor Compatibility. EPND will continue to work with appropriate regulatory agencies and will continue to gather comprehensive information during the permitting process.

D.2.d.(7) Utilization of Existing and Proposed Rights-of-Way and Corridors

As previously mentioned, EPND has designed the proposed expansion project to take advantage of its existing facilities and property to the maximum extent practical.

D.3 RELATIVE VALUE OF EVALUATION CRITERION

The proposed project involves the expansion of EPND's existing Stanley Station. The criteria evaluated in Section D.4 were considered in the design of the proposed expansion facilities. However, since expansion of the existing facility must be limited

to the area adjacent to the existing facility, some of the avoidance areas could not be avoided. These areas are described fully in Section D.2.

D.4 CRITERIA TO BE EVALUATED

- Exclusion areas;
- Avoidance areas;
- Selection criteria;
- Policy criteria;
- Design and construction limitations; and
- Economic considerations.

Complete descriptions, potential impacts, and mitigation measures relevant to the six criteria cited above are provided in section D.2.

D.5 GENERAL MITIGATIVE MEASURES TO BE TAKEN

Mitigation measures to minimize adverse impacts of the proposed project are identified throughout this document. In addition, EPND proposes to adopt its Environmental Guidelines for Construction (EGC), which is enclosed herewith as Exhibit G. EPND's EGC provides a more detailed discussion of the guidelines and mitigation measures that EPND would implement during this project. It was developed based on EPND's corporate experience implementing best management practices during construction.

In addition, EPND has developed a Spill Prevention, Containment and Control Plan (SPCCP) (see Exhibit H) that describes planning, prevention and control measures to minimize impacts of project-related spills. The EGC and SPCCP are comprehensive, controlling documents that will be included in contract specifications.

Prior to construction of the project, EPND will assess the potential for encountering soil or groundwater contaminants that are within 500 feet of the existing stations. If a contaminant is discovered, EPND would follow internal guidelines to report the contaminant (see Exhibit I) and if necessary, develop and implement appropriate avoidance or mitigation measures in accordance with applicable state or federal regulations.

D.6 QUALIFICATIONS OF PERSONS CONTRIBUTING TO THE STUDY

D.6.a. Jeff Mackenthun

Senior Analyst, Merjent, Inc.



Degree: BS, Environmental Studies, Bemidji State University.

Experience: 11 years experience in pipeline environmental and regulatory compliance.

Other Training and Licenses: Professional Wetland Scientist – Society of Wetland Scientist; Certified Wetland Delineator – MN; FERC Environmental Compliance; FERC Environmental Report Preparation.

D.7 MAPS

D.7.a. Map of Evaluation Criteria within Study Area

EPND is including as Exhibit B a topographic map and aerial map showing location of proposed project, and construction plans depicting the location of new facilities as described in Section A. Additionally, evaluation criteria described in Section D.2 have been mapped and are included as Exhibit B.

D.7.b. Mylar maps of study area.

Mylar maps have not been included with this application because this map producing process is no longer in use.



NORTH DAKOTA PUBLIC SERVICE COMMISSION

**APPLICATION OF
ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
To Amend
ROUTE PERMIT FOR A CRUDE OIL PIPELINE**

STANLEY STATION INJECTION UPGRADE PROJECT

October 2008



TABLE OF CONTENTS

SECTION A	<u>DESCRIPTION OF PROPOSED FACILITY</u>	1
A.1.	TYPE OF FACILITY	1
A.2.	PRODUCT	1
A.3.	SIZE AND DESIGN	1
A.4.	TIME SCHEDULE	1
SECTION B	<u>LOCATION</u>	2
B.1.	APPLICANT'S POLICIES AND COMMITMENTS TO LIMIT ENVIRONMENTAL IMPACT	2
B.2.	DISCUSS THE FACTORS LISTED IN SECTION 49-22-09 NDCC TO AID THE COMMISSION'S EVALUATION OF THE PROPOSED PIPELINE ROUTE	5
B.3.	IDENTIFY AND MAP CRITERIA LEADING TO PROPOSED PIPELINE ROUTE LOCATION WITHIN CORRIDOR	8
B.4.	RELATIVE VALUE AND EFFECTS UPON EACH CRITERION INCLUDING LOCATION, CONSTRUCTION, AND OPERATION OF THE FACILITY	8
B.5.	THE CRITERIA TO BE EVALUATED SHALL INCLUDE AT A MINIMUM ALL OF THE FOLLOWING, WHICH ARE WITHIN THE DESIGNATED CORRIDOR	8
B.6.	MITIGATION MEASURES	8
B.7.	QUALIFICATIONS OF PERSONS CONTRIBUTING TO THE STUDY	8
B.8.	MAPS	8
B.9.	OTHER MATTERS	9

APPLICATION TO AMEND ROUTE PERMIT

SECTION A

DESCRIPTION OF PROPOSED FACILITY

A.1 TYPE OF FACILITY

See Section A.1 of the Application to Amend Certificate of Corridor Compatibility.

A.2 PRODUCT

See Section A.2 of the Application to Amend Certificate of Corridor Compatibility.

A.3 SIZE AND DESIGN

See Section A.3 of the Application to Amend Certificate of Corridor Compatibility.

A.4 TIME SCHEDULE

See Section A.4 of the Application to Amend Certificate of Corridor Compatibility.

APPLICATION TO AMEND ROUTE PERMIT

SECTION B

LOCATION

B.1 APPLICANT'S POLICIES AND COMMITMENTS TO LIMIT ENVIRONMENTAL IMPACT

It is Enbridge Pipelines (North Dakota) LLC's ("EPND") policy to protect the environment as an integral element in the conduct of its business. Environmental protection efforts will span the entire project, from planning through construction, restoration, and into full operation.

B.1.a Construction

In this application, EPND is proposing to optimize the injection capacity of its Stanley Pump Station through the construction of the Stanley Station Injection Upgrade Project, as described in Section A. The project will be constructed on land already owned in fee by EPND with the majority of construction occurring within the existing Stanley Station fenced yard. (See Plot Plan map enclosed herewith as Exhibit B). No new pipeline will be required other than certain miscellaneous station piping. The proposed project will result in temporary short-term impacts, but is not expected to result in significant long-term changes to the environment.

Planning, design, construction, and restoration will incorporate the equipment and measures discussed in section B.6 and B.9. Environmental monitoring, in the form of ongoing site inspection, will be conducted during and following construction. Contract specifications will incorporate environmental protection and mitigation measures, and contractors will be expected to implement these measures in the field. Contractor training and project orientation will also be provided by EPND.

Environmental data has been assessed, specifically cultural resources, wetlands and protected species, as described in Section B of the Application to Amend Certificate for Corridor Compatibility. EPND will continue to work with appropriate regulatory agencies and will continue to gather comprehensive information during the permitting process.

B.1.b Ongoing Pipeline Operation

The North Dakota System, which was formerly owned by Portal Pipeline Company¹, has been in operation since the 1980's and is regulated by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration under 49 CFR Part 195 (and other codes). EPND has developed a comprehensive set of operating and maintenance procedures that assure pipeline inspection and commitment to pipeline safety. Additionally, EPND has a continuing commitment to conduct its operations in an environmentally responsible manner. Substantial, continual effort is placed on pipeline integrity, operational safeguards, emergency response, and landowner relationships, all of which reduce the impact of the pipeline to the environment. Moreover, EPND has personnel responsible for environmental, maintenance, and internal pipeline integrity plans for monitoring compliance with various pipeline safety and environmental regulations, and company policy. EPND also has a review program in place to ensure policies and procedures are effective and compliant.

B.1.c Energy Conservation Considerations

Energy conservation is a major concern at EPND since energy/power costs represent the largest single recurring expense in pipeline operation. Attention is continually being directed toward energy conservation.

EPND continually works with its individual energy providers to assure economical and efficient use of power for its North Dakota pipeline system. EPND also continuously reviews and tracks firm and non-firm power requirements, and works closely with electrical utilities in planning for transmission and generation needs.

EPND's energy conservation goal is to minimize power/energy unit costs through the implementation of internal programs directed at continuous improvement of energy utilization efficiency.

EPND has considered several energy efficiency and conservation programs. The following provides a brief explanation of the programs reviewed during the project development phase:

B.1.c.(1) Pipeline Diameter

In the instant application, EPND proposes no changes to the design capacity of its mainline system. As previously stated, the new station facilities proposed in this application will increase the injection capacity of the Stanley

¹ Pursuant to the North Dakota Public Service Commission's Order in Case No. 10,472.

Pump Station to deliver crude oil volumes into the North Dakota mainline system

B.1.c.(2) Variable Frequency Drives (VFDs)

The installation of variable frequency induction motor drives is a program that has been in place for approximately 16 years. VFDs allow the pipeline operator to vary the pump rotation speed thereby controlling the pressure produced to match the desired flow rate. This eliminates the need to dissipate or waste pressure (energy) with pressure control valves (PCVs). VFDs, however, do introduce energy losses and therefore are considered only when there is a range of operating conditions (primarily flow rate, density and viscosity) that would often require dissipation of pressures produced by the pumps. Ideally if operating conditions were constant, the pump would deliver constant pressures, eliminating the need for pressure dissipation. Therefore, operating conditions play a key role in designing the pumping stations for optimum efficiency.

B.1.c.(3) Pipeline Control Center

EPND pipeline control operators are trained in applied hydraulics and pipeline control through the use of a computerized pipeline control simulation system. They are trained to operate the pipeline at an optimum flow rate using efficient combinations of pumps, thereby minimizing energy consumption. Operators have the capability to start and stop pumps and monitor pipeline operating conditions to assist in achieving an energy efficient operation.

B.1.c.(4) Energy Efficient Pumps and Motors

For new installations, EPND purchases high efficiency pumps and motors at a premium initial cost in an effort to conserve long range energy requirements. For example, a pump drawing 110 hp, operating 300 days per year at 80% efficiency will consume 0.75 million kilowatt hours (kWh) of energy annually and sets a demand of 103 kW. Increasing the efficiency by only 1% translates into 9,138 kWh of energy savings. With this substantial potential for energy savings, it is desirable to optimize efficiency. Pumps are hydraulically designed and selected to obtain a high best efficiency point (BEP) at the desired flow rates. The forecasts are continually being evaluated and if the flow rate is outside the BEP range, impeller changes are typically implemented for improved efficiency.

B.2 DISCUSS THE FACTORS LISTED IN SECTION 49-22-09 NDCC TO AID THE COMMISSION'S EVALUATION OF THE PROPOSED PIPELINE ROUTE

Factors which the North Dakota Public Service Commission (NDPSC or Commission) considers in evaluating the designation of corridors and routes include the following:

B.2.a Available Research and Investigations Relating to the Effects of the Location, Construction, and Operation of the Proposed Facility on Public Health and Welfare, Natural Resources, and the Environment

A discussion of the effects of the location, construction, and operation of the proposed Project on public health and welfare, natural resources, and the environment is included in Section B of the Application to Amend Certificate of Corridor Compatibility. Research and investigation relating to these effects have included cultural resource reviews, protected species and sensitive area reviews, and wetland studies. Other environmental studies are also available in EPND's previous applications for its existing Stanley Station. (See the Commission's Findings of Fact, Conclusions of Law and Order in its August 23, 2006 Order, Case No. PU-06-317, Certificate of Site Compatibility No. 93 and Route Permit No. 103; and as amended by the Commission's June 4, 2008 Order in Case No. PU-07-791).

B.2.b The Effects of New Energy Conversion and Transmission Technologies and Systems Designed to Minimize Adverse Environmental Effects

The scope project does not include new energy conversion or transmission facility. As described in the Enbridge Environmental Guidelines for Construction (EGC), which EPND adopts herein, current construction techniques and mitigation measures will be employed to minimize the effect of construction on environmental resources (see Exhibit G). These measures are also discussed in Section D.5 of the Application to amend Certificate of Corridor Compatibility.

B.2.c The Potential for Beneficial Uses of Waste Energy from a Proposed Energy Conversion Facility

The project does not involve new energy conversion facilities; no usable waste energy will result from the project.

B.2.d Adverse Direct and Indirect Environmental Effects, Which Cannot be Avoided Should the Proposed Site or Route be Designated

Unavoidable adverse direct and indirect environmental effects may include short-term or temporary effects on vegetation, wildlife, and noise levels and permanent conversion of grassland to industrial use as described in Section D.2. of the



Application to amend Certificate of Corridor Compatibility. EPND will implement mitigation measures to minimize these impacts as described in Enbridge's EGC (see Exhibit G).

B.2.e Alternatives to the Proposed Site, Corridor or Route, Which are Developed During the Hearing Process and Which Minimize Adverse Effects

Alternatives that EPND considered when planning the project are discussed in Section C.2 of the Application to amend Certificate of Corridor Compatibility.

B.2.f Irreversible and Irretrievable Commitments of Natural Resources Should the Proposed Site, Corridor or Route be Designated

The proposed upgrades will be installed on land already owned by EPND. About 2.5 acre of grassland would be converted to industrial land should the project be constructed. EPND is maximizing its use of the existing Stanley Station facility to minimize the disturbance to grassland habitat within the EPND property. Thus only minimal irreversible or irretrievable commitments of natural resources will result from the Project.

B.2.g The Direct and Indirect Economic Impacts of the Proposed Facility

B.2.g.(1) The Project presents an optimization of existing pipeline capacity to meet the needs for additional liquid petroleum transportation in this region.

B.2.g.(2) The Project has significant economic benefits.

- Provides a stable source of crude oil supplies to the refining regions of PADD II and supports a healthy economic environment throughout the entire Upper Midwest.
- EPND paid taxes of \$0.834 million during 2008 for the tax year of 2007. The total assessed value of this project which is \$6 million times the state average tax rate equals \$101,000 in incremental taxes generated by the proposed project.

B.2.h Existing Plans of the State, Local Government, and Private Entities for Other Developments at or in the Vicinity of the Proposed Site, Corridor, or Route

EPND is not aware of other development by state, local or governmental entities at or in the vicinity of the proposed project.

B.2.i The Effect of the Proposed Site or Route on Existing Scenic Areas, Historic Sites and Structures, and Paleontological or Archaeological Sites

Please refer to Section B of the Application to Amend Certificate of Corridor Compatibility for a discussion of the effects of the proposed project on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.

B.2.j The Effect of the Proposed Route on Areas Which Are Unique Because of Biological Wealth or Because They are Habitats for Rare and Endangered Species

As part of a previous EPND expansion project (PSC Docket #PU07-791), the North Dakota Game and Fish Department (NDGFD) was asked to review the SW¼ of Section 27, T-156-N, R-91-W for concerns related to unique or rare animal or plant species that may occur within the project area. This review covered the entire 40 acre tract of the Stanley Station site. A response from the NDGFD was received on December 21, 2007 stating that the expansion project would not result in significant adverse impacts on wildlife or wildlife habitat, including endangered species. A copy of the NDGFD response is enclosed herewith as Exhibit E.

B.2.k Problems Raised by Federal Agencies, Other State Agencies, and Local Entities

To date, no problems or concerns have been raised by federal, state, and local agencies. EPND consulted with the following federal, state, and local agencies to identify potential environmental resources in the project area.

B.2.k.(1) North Dakota Public Service Commission

The North Dakota Public Service Commission has not yet concluded its evaluation of the proposed project. To date, no concerns have been expressed to EPND.

B.2.k.(2) North Dakota Department of Health

The North Dakota State Health Department has not yet concluded its evaluation of the proposed project. Applications for hydrostatic test water discharge permits and storm water discharge permits have not yet been submitted to the department. To date, no concerns have been expressed to EPND.

B.2.k.(3) State Historical Society of North Dakota (State Historic Preservation Office)

A discussion regarding cultural resource investigations are discussed in Section B.1 of the Application to amend Certificate of Corridor Compatibility.

B.3 IDENTIFY AND MAP CRITERIA LEADING TO PROPOSED PIPELINE ROUTE LOCATION WITHIN CORRIDOR

See Section D.2 of the Application to amend Certificate of Corridor Compatibility.

B.4 RELATIVE VALUE AND EFFECTS UPON EACH CRITERION INCLUDING LOCATION, CONSTRUCTION, AND OPERATION OF THE FACILITY

See Section D.3 of the Application to amend Certificate of Corridor Compatibility.

B.5 THE CRITERIA TO BE EVALUATED SHALL INCLUDE AT A MINIMUM ALL OF THE FOLLOWING, WHICH ARE WITHIN THE DESIGNATED CORRIDOR:

- Exclusion Areas;
- Avoidance Areas;
- Selection criteria;
- Policy criteria;
- Design and construction limitations; and
- Economic considerations

Complete descriptions, potential impacts, and mitigation measures relevant to the six criteria cited above are provided in Section D.2 of the Application to amend Certificate of Corridor Compatibility.

B.6 MITIGATION MEASURES

See Section D.5 of the Application to amend Certificate of Corridor Compatibility.

B.7 QUALIFICATIONS OF PERSONS CONTRIBUTING TO THE STUDY

See Section D.6 of the Application to amend Certificate of Corridor Compatibility.

B.8 MAPS

See Section D.7 of the Application to amend Certificate of Corridor Compatibility.

B.9 OTHER MATTERS

The information provided below is in accordance with North Dakota Century Code 49-22-08.1, Sections 1.e, 1.f, and 1.g.

B.9.a Right-of-Way Preparation, Construction and Reclamation Procedures

With regard to site preparation, construction and reclamation procedures, EPND proposes to adopt its EGC, which is enclosed herewith as Exhibit G. EPND's EGC provides a detailed discussion of the guidelines and mitigation measures that EPND would implement on this project. All proposed facilities will be constructed on land already owned by EPND.

B.9.b Hydrostatic Testing

All new facilities will be factory and field pressure tested as required by federal pipeline safety regulations and industry codes. Station piping proposed for this project will be tested as appropriate under these regulations and codes. The testing process will be implemented in accordance with EPND's EGC and permits issued by the North Dakota Department of Health.

B.9.c Landowner Issues

As stated above, EPND will be performing all proposed project activities on land already owned in fee by EPND. No residences are located within 500 feet of the proposed facilities; however four businesses have been identified within the five hundred foot [152.4 meter] avoidance area criteria of the facilities for which EPND proposes to install at its existing station site. (See Exhibit B.3 for aerial map showing location of businesses.) Enbridge is diligently working to secure those waivers as required under North Dakota Century Code 49-22-05.1 and will provide a copy of such documentation upon receipt.

B.9.d Operations and Safety

B.9.d.(1) Pipeline Operation and Control.

The EPND's pipeline control center is located in Estevan, Canada.

The Control Center is manned by pipeline operators 24 hours a day. A computerized pipeline control system allows these operators to remotely monitor and control the pipeline and related facilities. The Control Center also serves as an emergency center to receive calls from employees, the public or public officials reporting unusual conditions or pipeline failures. The computerized pipeline control system has been designed to control the pipeline within pre-established minimum and maximum operating pressures. Both the computer system and operating practices include procedures for abnormal operating conditions, including emergency shutdown and isolation of the pipeline and notification procedures in the event of suspected emergencies.

B.9.d.(2) Communications Capabilities

Land-lines are used to exchange the necessary computerized data for pipeline monitoring and control. EPND maintains a UHF radio system, supplemented by cellular phones as needed, to facilitate personnel communications during operation, maintenance, or emergency activities.

B.9.d.(3) Protection of the Pipe from Damage

EPND has an aggressive program in educating excavators and the public about the presence of the pipeline and preventing damage to the pipeline from excavating equipment. EPND has joined and supports the North Dakota One-Call system and other one-call systems in the states where their facilities exist.

The pipeline is protected from corrosion in a number of ways. Pipelines are covered with a protective coating. In addition, all buried or submerged metallic structures (pipeline systems) are under a cathodic protection system, as required by Pipeline Safety Regulations.

B.9.d.(4) Inspections

EPND conducts routine inspections of the pipeline and facilities to ensure that the system is operating properly, in compliance with CFR 49 Part 195.

Each calendar year (not to exceed a 15-month interval), the cathodic protection system is monitored by taking pipe/structure-to-soil and line

current (where possible) readings. Additionally, each rectifier and anode groundbed used to impose cathodic protection on the pipeline is inspected to ensure proper operation. Repairs and adjustments to the cathodic protection system are either made during the annual survey or during later maintenance activities. At least six times per year, each rectifier and critical cathodic protection interference bond to foreign structures is inspected and corrective measures taken, if needed.

In addition, EPND periodically evaluates the effectiveness of its cathodic protection system by conducting supplemental close interval surveys (*e.g.*, close interval pipe to soil, etc.) of the system. Although not required by regulation, this method allows EPND to assess the overall effectiveness of the pipeline system.

The pipeline route is patrolled by air at least 26 times per year to inspect the surface conditions of land on or adjacent to the pipeline right-of-way. If weather and other conditions permit, this aerial inspection is conducted weekly. Line walking inspection of the right-of-way is sometimes used to supplement aerial inspections in congested areas. This inspection also assists in identifying unknown construction or other unsafe activity on the pipeline right-of-way.

Isolating valves are checked at least twice per year to ensure proper operation. In the event of a leak, it is important for valves to close properly to isolate the section of pipeline and minimize the amount of petroleum that may escape. Other components of the pipeline, such as tanks and pump stations are also routinely inspected.

EPND periodically inspects the transmission segments of its pipeline system, in accordance with the integrity management standards under 49 CFR Part 195. These inspections are conducted with the use of an electronic inspection tool – called “instrument pigs.” These devices travel through the inside of the pipeline and are used to examine the condition (dents, gouges, corrosion, or cracks) of the pipe by on-board computers. Results of the inspection are analyzed, the pipe is inspected to verify preliminary findings, as necessary, and repairs are then made, as required.

All overpressure safety devices capable of limiting, regulating, controlling, and/or relieving operating pressures are inspected and tested to ensure the device is in good mechanical condition and functioning properly.

Periodically, inspectors from the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (“DOT-PHMSA”) inspect the EPND’s compliance with applicable government regulations.

Inspections of the EPND's written procedures, records, and facilities are also periodically conducted.

B.9.d.(5) Maintenance

Many other maintenance activities are performed on the pipeline and related facilities. EPND has a comprehensive preventative maintenance program that meets and, in many cases exceeds, minimum federal safety standards set forth in 49 CFR Part 195. When facilities are added or replaced, there are comprehensive standards for their design and installation in both EPND procedure manuals and contract specifications. Repair pipe is pre-tested and other components used to repair the pipeline meet national standards and regulatory requirements. Other procedures, such as welding procedures, movement of the pipe, coating repair, corrosion control, and tank maintenance are all guided by written procedures which have been reviewed by the DOT-PHMSA inspectors.

B.9.d.(6) Training of Personnel

EPND has established a comprehensive orientation, technical, safety, emergency, and on-the-job training program that is in compliance with the Operator Qualification rules issued by the DOT-PHMSA under 49 CFR Part 195. As personnel progress in pipeline operation and maintenance positions, they receive hundreds of hours of formal and on-the-job training. Demonstrations of competence are shown through review of job performance, periodic pipeline control system simulators, emergency exercises, welding certification tests, and other functions required to continue safe pipeline operation and maintenance.

B.9.d.(7) Public Awareness Program

EPND conducts a comprehensive public education program to ensure that the affected public (those who work and live in the vicinity of the pipeline), excavators, local public officials, and emergency units of government are aware of how to recognize and avoid or respond to a pipeline emergency. EPND has also been active at the local, county, and state level in emergency response planning and joint training/exercises to prepare all potential responders to deal with emergencies.

The pipeline route is marked at all public roads and railway crossings (at a minimum) to increase the public's awareness of the underground pipeline. Additional markings are posted at valves, other pipeline facilities, and stations along the pipeline route.

B.9.d.(8) Emergency Preparedness

EPND's operating and maintenance practices are aimed at preventing emergencies on the pipeline. However, it is imperative that EPND be prepared to respond to an emergency should one occur. In addition to preventative activities described above, EPND's emergency response program has been prepared in compliance with DOT-PHMSA rules under 49 CFR Part 194.

Table of Contents - Exhibits

<u>EXPLANATION</u>	<u>TAB</u>
	D
Exhibits to Corridor Certificate and Route Permit	
Exhibit A – Enbridge Pipelines (North Dakota) LLC System Map	
Exhibit B – Maps	
Exhibit B.1 - Stanley Station Plot Plan Map	
Exhibit B.2 - Stanley Station Project Topographical and Aerial Maps	
Exhibit B.3 - Stanley Station Avoidance Area Map	
Exhibit C – State Historical Society of North Dakota Study	
Exhibit D – National Wetlands Inventory and SSURGO Soils Data	
Exhibit E – North Dakota Game and Fish Department Correspondence	
Exhibit F – Enbridge Pipelines (North Dakota) LLC 10 Year Plan	
Exhibit G – Environmental Guidelines for Construction	
Exhibit H – Spill Prevention, Containment, and Control Plan	
Exhibit I – Management of Discovered Historic Containment	

Exhibit A



LEGEND
■ PIPE STATION

NO	REVISION	DATE	APPR BY
1			
2			

ENBRIDGE PIPELINES (North Dakota) LLC
MN, ND, MT SYSTEM
SYSTEM MAP
 PIPE LINE/TANKAGE INFORMATION

PROJECT:	NO SCALE	DATE: 9/13/2008	DRAWN: DJV
CHECK: CR	APPR:	DATE: 9/13/2008	

B-0-0.5-10004-1-300

Exhibit B - Maps

Exhibit B.1 - Stanley Station Plot Plan Map

Exhibit B.2 - Stanley Station Project Topographical and Aerial Maps

Exhibit B.3 - Stanley Station Avoidance Area Map

Exhibit B.1

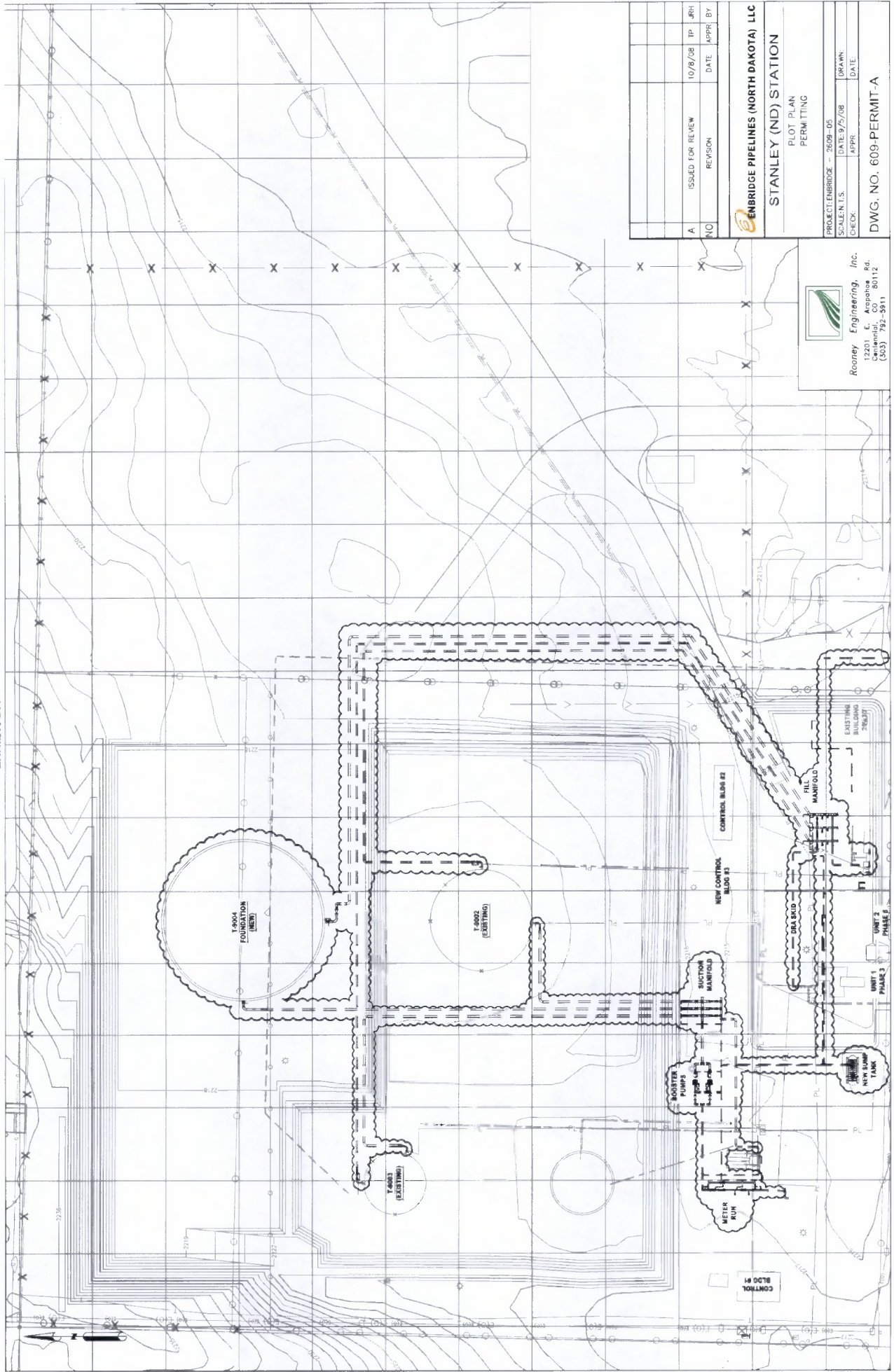
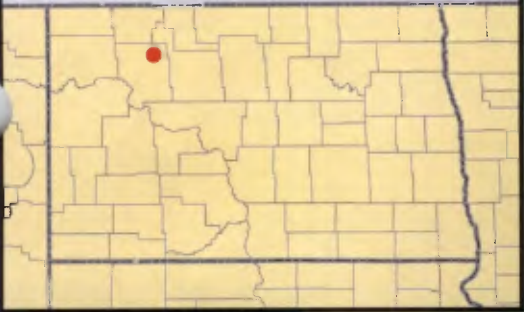


Exhibit B.2

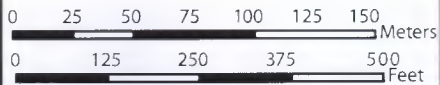


--- ENBRIDGE PROPERTY BOUNDARY

— PORTIONS OF NEW PIPING

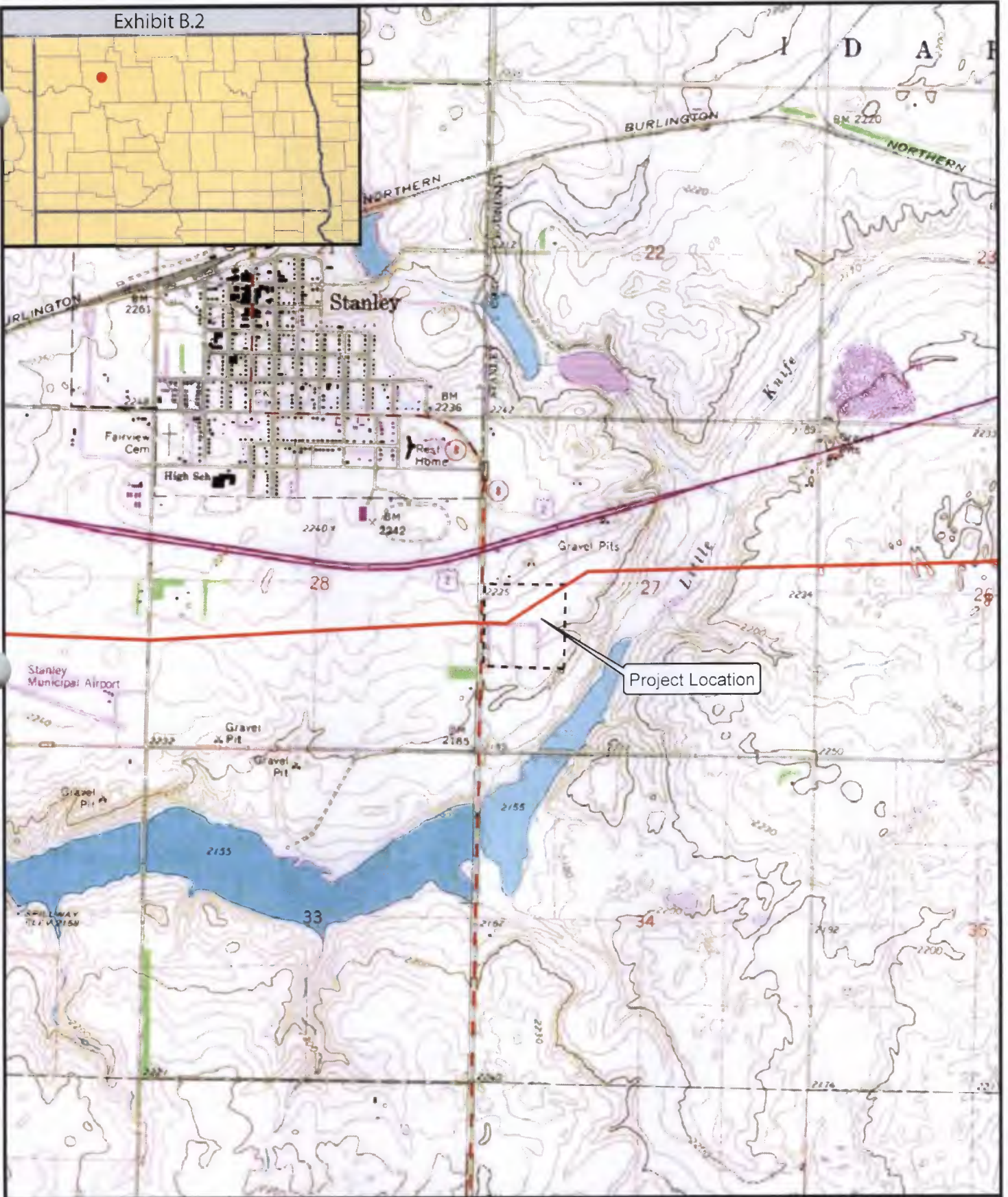
1 INCH = 250 FT

SCALE = 1:3,000



ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
STANLEY STATION INJECTION UPGRADE PROJECT
Project Location Aerial Map

T156N, R91W, Section 27, Mountrail County, North Dakota



--- ENBRIDGE PROPERTY BOUNDARY
--- EXISTING ENBRIDGE PIPELINE

1 INCH = 2,000 FEET
SCALE = 1:24,000
0 250 500 750 1,000 Meters
0 1,000 2,000 4,000 Feet

ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
STANLEY STATION INJECTION UPGRADE PROJECT
Project Location Topographical Map
T156N, R91W, Section 27, Mountrail County, North Dakota

Exhibit B.3

- #1 Garage which has recently been converted to commercial use
- #2 House which has recently been converted to commercial use
- #3 NDSU Ag / Mountrail County maintenance shop
- #4 Dresser Oil Tools - Not Applicable, outside 500 foot criteria threshold
- #5 Ferlings Veterinary

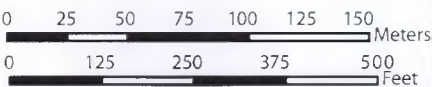


--- ENBRIDGE PROPERTY BOUNDARY

— PORTIONS OF NEW PIPING

1 INCH = 250 FT

SCALE = 1:3,000



ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
STANLEY STATION INJECTION UPGRADE PROJECT

Business and Residential Avoidance Areas
Per Rule 69-06-08-02(2)(e)

T156N, R91W, Section 27, Mountrail County, North Dakota



**STATE
HISTORICAL
SOCIETY**
OF NORTH DAKOTA

September 8, 2008

John Hoeven
Governor of North Dakota

North Dakota
State Historical Board

Albert I. Berger
Grand Forks - President

Chester E. Nelson, Jr.
Bismarck - Vice President

Gerold Gemtholz
Valley City - Secretary

A. Ruric Todd III
Jamestown

Diane K. Larson
Bismarck

Marvin L. Kaiser
Williston

Richard Kloubec
Fargo

Sara Otte Coleman
Director
Tourism Division

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Douglass Prechal
Director
Parks and Recreation
Department

Francis Ziegler
Director
Department of Transportation

Merlan E. Paaverud, Jr.
Director

Peggy J. Boden
Cultural Resources Specialist
Mergent
615 First Avenue NE, Suite 425
Minneapolis, MN 55413

**NDSHPO REF. : 08-1260 PSC Mergent/Enbridge Pipeline
Enbridge Stanley Pumping Station: Class III CRI, Determination of Effect
[T156N R91W Section 27, NW-SW]**

Dear Peggy:

We have received and reviewed correspondence and report documentation of September 5 for 08-1260: "Enbridge Stanley Station: A Class III Cultural Resource Inventory in Mountrail County, North Dakota," by Ed Stine (Metcalf Archaeological Consultants, September 2008) and find it acceptable. We concur with the scope of identification efforts undertaken in the project APE, as reported. Also, we concur with "No Historic Properties Affected" and "No Significant Sites Affected" determinations provided the project takes place in the plotted location and is of the nature stated.

Thank you and we look forward to further consultation and to further review of outstanding documents regarding the project. If you have questions please contact either Paul Picha at (701) 328-3574 or Susan Quinnell at (701) 328-3576.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota

c: Susan E. Wefald, President, Commissioner, PSC

Accredited by the
American Association
of Museums

MAC

Metcalfe Archaeological Consultants, Inc.

September 3, 2008

Ms. Peg Boden, CRS
Merjent, Inc.
615 First Avenue NE, Suite 425
Minneapolis, Minnesota 55413

RE: Enbridge Stanley Station Survey

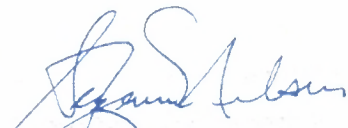
Dear Ms. Boden

Enclosed is a copy of the report discussing the results and recommendations for the cultural resources inventory our office conducted for you on behalf of Enbridge for the proposed Stanley Station expansion area "Enbridge Stanley Station: A Class III Cultural Resource Inventory in Mountrail County, North Dakota."

As your office will be submitting this report to the State Historical Society of North Dakota, please note the report must have the "Manuscript Data Record Form" attached. This form is for the State manuscript files system and is intended for no other use and is required by the State.

Again, thank you for entrusting our office with this work. Should you have any questions or need additional information, please contact the MAC Bismarck office.

Sincerely,



Suzanne Nelsen
Office Manager

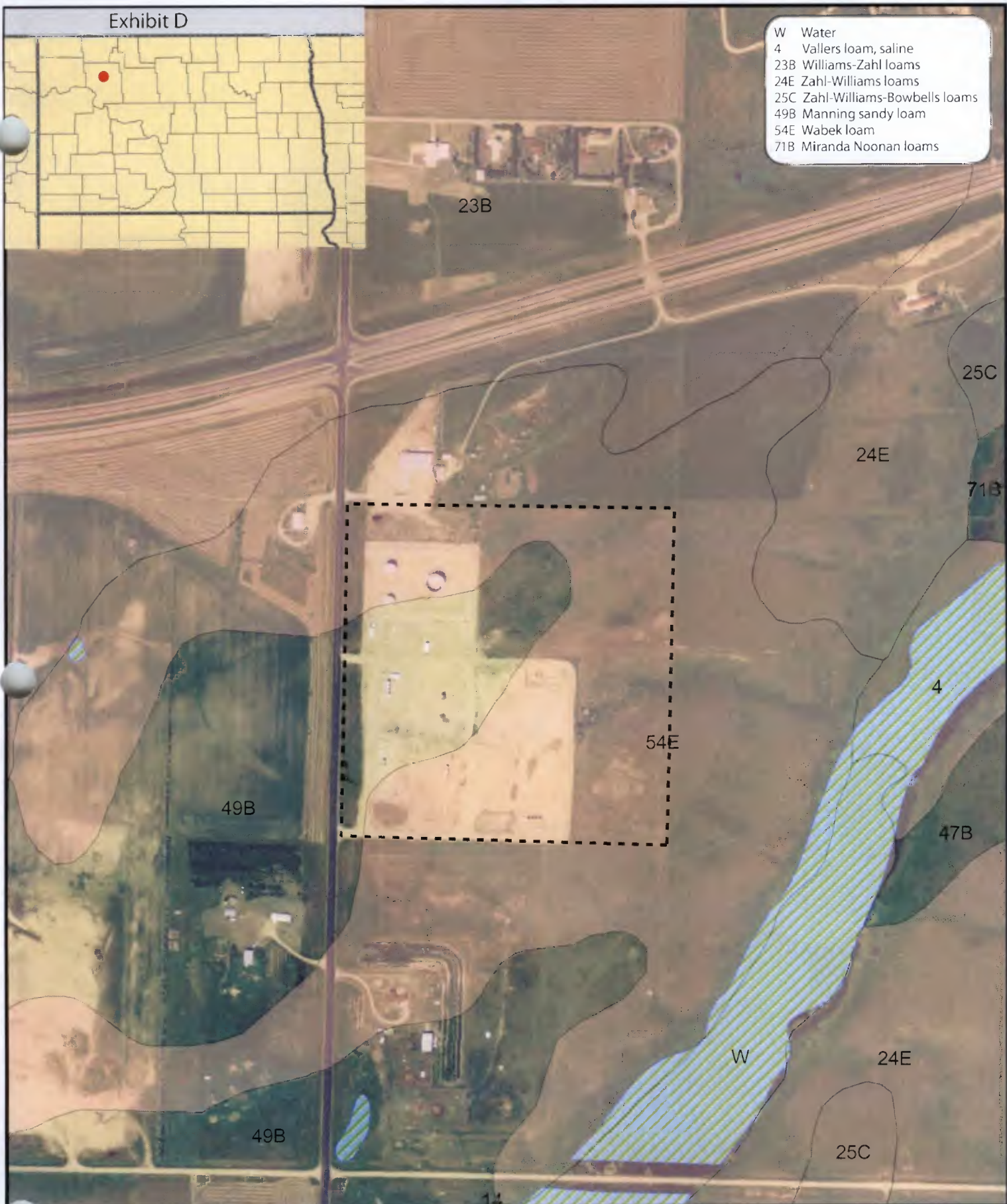
enclosures: one copy of the report (one copy on disk)

(701) 258-1215
Fax (701) 258-7156
P.O. Box 2154
Bismarck, North Dakota 58502
e-mail: macnodak@metcalfarchaeology.com

(970) 328-6244
Fax (970) 328-5623
P.O. Box 899
Eagle, Colorado 81631
e-mail: mac@metcalfarchaeology.com

Exhibit D

- W Water
- 4 Vallery loam, saline
- 23B Williams-Zahl loams
- 24E Zahl-Williams loams
- 25C Zahl-Williams-Bowbells loams
- 49B Manning sandy loam
- 54E Wabek loam
- 71B Miranda Noonan loams



- ENBRIDGE PROPERTY BOUNDARY
- NWI DATA (WETLANDS)
- HYDRIC SOILS

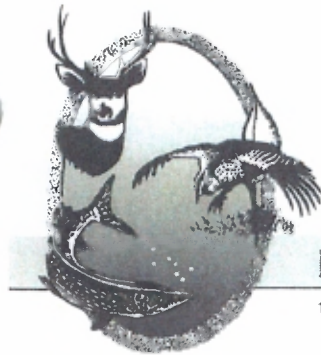
1 INCH = 500 FEET

SCALE = 1:6,000

0 100 200 300 Meters

0 250 500 1,000 Feet

ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
 STANLEY STATION UPGRADE PROJECT
 National Wetlands Inventory Data &
 SSURGO Soils Data
 T156N, R91W, Section 27, Mountrail County, North Dakota



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

December 21, 2007

Jeff Mackenthun
Environmental Consultant
Merjent
615 First Avenue NE . Suite 425
Minneapolis, MN 55413

Dear Mr. Mackenthun:

RE: Enbridge Pipelines Phase VI Expansion - North Dakota

The North Dakota Game and Fish Department has reviewed this project for wildlife concerns. We do not believe it will have any significant adverse effects on wildlife or wildlife habitat, including endangered species, based on the information provided.

Sincerely,

A handwritten signature in blue ink that reads "Steve Dyke". The signature is fluid and cursive.

(for) Michael G. McKenna
Chief
Conservation & Communication Division

js

ENBRIDGE PIPELINES (NORTH DAKOTA) LLC

TEN YEAR PLAN

NORTH DAKOTA

JUNE 30, 2008

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

- SCHEDULE A: Existing Energy Conversion Facilities

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE B: Energy Conversion Facilities Under Construction

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE C: Proposed Energy Conversion Facilities on Which Construction is
Intended Within the Ensuing Five Years

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE D: Proposed Energy Conversion Facilities During the Next Ten Year
Time Period

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE E: Existing Transmission Facilities (Electric)

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE F: Existing Transmission Facilities (Pipeline)

- 1) Enclosed is a System Map designated as Exhibit "A".
- 2) The pipeline consists of:
 - a) Product type – crude petroleum
 - b) Length of facility
 - i) 566.86 miles in service
 - c) Pipe size
 - i) 6-5/8" O.D.
 - ii) 8-5/8" O.D.
 - iii) 10-3/4" O.D.
 - iv) 12-3/4" O.D.
 - v) 16" O.D.
 - d) Maximum design operating pressure
 - i) 1440 psig for 6-5/8"
 - ii) 1440 psig for 8-5/8"
 - iii) 1440 psig for 10-3/4"
 - iv) 1440 psig for 12-3/4"
 - v) 1440 psig for 16"
 - e) Maximum design flow rate
 - i) Grenora to Beaver Lodge – 25, 000 BPD (Barrels Per Day)
 - ii) Alexander to Beaver Lodge – 93,000 BPD
 - iii) Canadian Border to Berthold – 45,000 BPD
 - iv) Beaver Lodge to Minot – 100,000 BPD
 - v) Sherwood to Maxbass – 7, 000 BPD
 - vi) Newburg to Maxbass – 4,800 BPD
 - vii) Maxbass to Minot – 16,000 BPD
 - viii) Minot to Clearbrook, Minnesota – 110, 000 BPD

f) Pump Stations

- i) Number (North Dakota) 18
- ii) Station horsepower
 - (1) Total installed horsepower – 28,115 Hp
 - (2) 2 – 1500 horsepower diesel engines (back-up)
- iii) Discharge pressure – 1440 psig
- iv) Capacity – 4,800-110,000 BPD

g) Minimum cover over pipe – 36 inches

3) Facilities “in service” dates

- a) Grenora to Beaver Lodge – 1964
- b) Alexander to Beaver Lodge – 1983
- c) Canadian Border to Berthold – 1996
- d) Beaver Lodge to Berthold – 1964
- e) Sherwood to Maxbass – 1962
- f) Newburg to Maxbass – 1960
- g) Maxbass to Minot – 1960
- h) Minot to Clearbrook Station, Minnesota – 1962
- i) Berthold to Minot – 1962
- j) Trenton to Beaver Lodge – Q4 2007

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE G: Proposed Transmissions Facilities on Which Construction is
Intended Within the Ensuing Five Years (Electric)

This schedule does not apply to Enbridge Pipelines (North Dakota) LLC

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE H: Proposed Transmission Facility on Which Construction is Intended
Within the Ensuing Five Years (Pipeline)

Planned upgrades to the EPND pipeline system in 2008 are as follows:

Alexander to Beaver Lodge

1. Upgrade pumps at Alexander
2. Upgrade pumps at Trenton
3. Add metering at Alex & Trenton

Beaver Lodge to Minot

- 1. Upgrade pumps at Beaver Lodge
2. Upgrade pumps at Stanley
3. Increase injection at Stanley to 80,000 BPD
4. Add storage tank (80,000 BBL)
5. Hydro-Test Berthold to Minot 16" line
6. Reactivate 6" line from Plaza to Stanley

Minot to Clearbrook

1. Upgrade piping and pumps at Minot
2. Upgrade pumps at Denbigh
3. Upgrade pumps at Pleasant Lake
4. Upgrade pumps at Penn
5. Upgrade pumps at Bartlett
6. Upgrade pumps at Larimore
7. Delivery & measurement point at Clearbrook, MN will be completely rebuilt in 2009.

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE I: Proposed Transmission Facilities During the Next Ten-Years Time
Period (Electric and Pipeline)

There are no definite plans to construct additional facilities during the next ten-year time
frame.

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE J: Regional Coordination

Enbridge Pipelines (North Dakota) LLC is not attempting to coordinate our plans with other utilities serving the area. However, as expansion plans develop, affected utilities have and will be contacted.

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE K: Environmental Information

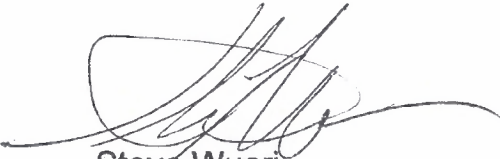
See attached policy.



Environmental Policy

Liquids Pipelines

- The protection of the environment is an integral element in the conduct of company business.
- The company will ensure adverse environmental effects are minimized through careful planning, implementation of effective protection measures, and monitoring of company activities.
- The company will comply with government regulations and standards through internal rules and procedures for environmental protection that will be consistent with industry codes and guidelines.
- The company will minimize consequences of emergency events by ensuring prompt and effective response.
- The company will provide appropriate training to ensure employees understand their responsibility to protect the environment.
- Employees and contractors must follow company environmental rules and procedures, and must carry out work in an environmentally responsible manner at all times.
- The company will provide the public and government with relevant information regarding planned activities, and will actively respond to their concerns.
- Environmental damage resulting from company actions or actions of its contractors will be repaired in a timely and efficient manner.
- Environmental research will be encouraged, supported and undertaken when necessary to improve company environmental protection and reclamation procedures.



Steve Wuori
Executive Vice President
Liquids Pipelines

Enbridge Pipelines (North Dakota) LLC
Ten Year Plan
North Dakota

JUNE 30, 2008

SCHEDULE L: Projected Demand for Service

Crude oil gathered into the Enbridge System is batched in Minot for transporting through Enbridge's mainline pipeline to Clearbrook, Minnesota. In 2008, Enbridge's mainline projection is 110,000 BPD. Enbridge's volume of business is directly related to production in the Williston basin, which is dependent on the extent of exploration being undertaken and crude oil usage, by others.

