

November 1, 2016

Mr. Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
127 Seventh Place East, Suite 350
Saint Paul, MN 55101-2147

RE: EERA Comments and Recommendations on Application Completeness
Fergus Falls Pipeline Replacement Project
Docket No. G-004/GP-16-685

Dear Mr. Wolf:

Attached are comments and recommendations of Minnesota Department of Commerce, Energy Environmental Review and Analysis (EERA) staff in the following matter:

In the Matter of the Application of Great Plains Natural Gas Company for a Route Permit for the Fergus Falls Pipeline Replacement Project in Ottertail County

The route permit application was filed on October 10, 2016 by:

<p>Duane Mahlum District Manager Great Plains Natural Gas Company 705 West Fir Avenue Fergus Falls, MN 56538</p> <p>Phone: 218-79-6607 Email: Duane.Mahum@gpng.com</p>	<p>Jesse Volk, P.E. Region Gas Engineer Great Plains Natural Gas Company 705 West Fir Avenue Fergus Falls, MN 56538</p> <p>Phone: 218-79-6616 Email: Jesse.volk@gpng.com</p>
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EERA recommends the Minnesota Public Utilities Commission (Commission) accept the application for the Fergus Falls Pipeline Replacement Project as complete.

Staff is available to answer any questions the Commission might have.

Sincerely,

/s/ **Larry B. Hartman**

Larry B. Hartman
Energy Environmental Review and Analysis

Enclosure

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF
MINNESOTA DEPARTMENT OF COMMERCE
ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS

Docket No. G-004/GP-16-685

Date: November 1, 2016

Staff: Larry Hartman 651-539-1839
Andrew Levi 651-539-1840

In the Matter of the Application of Great Plains Natural Gas Company for a Pipeline Routing Permit for the Fergus Falls Pipeline Replacement Project in Ottertail County

Issues addressed: These comments and recommendations address the completeness of the route permit application submitted for the project, and the presence of disputed issues.

Attachments

- Map 1 Route Location
- Map 2 Construction Methods (4 pages)
- Figure 1 Partial Exemption Pipeline Flowchart
- Figure 2 Application Completeness Checklists (3 pages)

Additional documents and information can be found on eDockets by searching “16” for year and “658” for number at: <https://www.edockets.state.mn.us/EFiling/search.jsp>, and on the EERA webpage at: <http://www.mn.gov/commerce/energyfacilities/Docket.html?Id=34588>.

This document can be made available in alternative formats (that is, large print or audio) by calling (651) 539-1530 (voice).

Introduction and Background

On October 10, 2016, Great Plains Natural Gas Company, a Division of Montana Dakota Utilities (MDU) Resources Group (Great Plains or applicant), filed a Route Permit Application to construct and operate an approximately 3.0-mile long, 8.625-inch-outside-diameter, high pressure natural gas pipeline from its Fergus Falls Town Border Station (TBS) to its Green Plains Ethanol valve site, north and west of the city of Fergus Falls in Ottertail County, Minnesota. The proposed pipeline will have an operating pressure of 500 to 720 pounds per square inch gauge (psig). The Project will replace and reroute a 2.2 mile segment of an existing pipeline between the Fergus Falls TBS and the Green Plains Ethanol valve site.¹

The Minnesota Public Utilities Commission (Commission) issued a notice soliciting comments on completeness of the application, and whether any contested issues of fact exist on October 18, 2016.²

Project Purpose

The proposed project, referred to as the Fergus Falls Pipeline Replacement Project (Project) would replace a section of Great Plains' existing natural gas pipeline that requires replacement according to Pipeline and Hazardous Material Safety Administration (PHSMA) pipeline integrity management regulations. After conducting integrity assessments of its transmission system, Great Plains determined there was a need to replace a 2.2 mile-segment of the existing 6-inch pipeline that cannot accommodate the use of an internal inspection tool between it Fergus Falls TBS and its Green Plains Ethanol valve site. Two High Consequences Areas (HCAs) were identified along this section of the existing pipeline that can pose a potential safety issue due to the requirements of the Direct Inspection methods referred to in Title 49 code of federal regulations (CFR) 192.903 as locations, based on population densities, where a release from a pipeline could have the most significant consequences. PHSMA regulations 49 CFR 192 require that pipelines be tested for structural integrity by either passage of electronic internal inspection tools (also known as "smart pigs") or through direct assessment, i.e. excavation and visual inspection.

The direct assessment method requires Great Plains to assess the pipeline for external and internal corrosion, stress corrosion cracking, pipe materials anomalies, defective welds, etc. Cyclical or routine excavations to expose the pipeline increase the risk for pipeline damage through unintended settlement and potential excavation or mechanical damages, i.e., dents and cracks.

¹ Great Plains Natural Gas Company, Application to the Minnesota Public Utilities Commission for a Route Permit for the Fergus Falls Pipeline Replacement Project, October 10, 2016, eDockets, Document ID Nos. [201610-125581-01 \(Cover Letter\)](#), [201610-125581-02 \(Application Text & Maps\)](#), [201610-125581-03 \(Appendix A-Safety Data Sheets\)](#), [201610-125581-04 \(Appendix B-Agency Consultations\)](#), [201610-125581-05 \(Appendix C-Natural Resources Survey Report\)](#), [201610-125581-06 \(Appendix D-Phase 1 Archaeological Reconnaissance Survey Report\)](#), [201610-125581-07 \(Appendix E-Unanticipated Discoveries Plan\)](#), (Hereinafter "Application").

² Minnesota Public Utilities Commission, Notice of Comment Period on Pipeline Routing Permit Application Completeness for the Great Plains Pipeline Replacement Project Application, October 18, 2016, eDockets Document ID No. [201610-125794-01](#).

The existing pipeline will be de-rated and reclassified from transmission to distribution in accordance with 49 Code of Federal Regulations (CFR) Part 192.5 to allow continued service to customers from taps along its length. This section of the pipeline will be operated at a pressures less than 20% SMYS which will allow for the elimination of the current HCAs and any further direct inspection methods.

Project Description

The applicant proposes to construct the proposed pipeline north and west of the city of Fergus Falls in Ottertail County as illustrated in **Map 1 – Route Location (attached)**.

The proposed pipeline will include installation of approximately 3.0 miles of 8.625-inch outside diameter steel pipeline (Grade X-52) with a .250-inch wall thickness and designed to a Class 3 standard.³ The planned operating pressure will be 500 to 720 psig and the maximum allowable operating pressure (MAOP) will be 720 psig.⁴

The proposed project also includes a tap and pig launcher/receiver facility at the beginning and ending points of the replacement pipeline. The launcher and receiver facilities will be protected within a gravel-covered, fenced enclosure. No buildings are required.⁵

The planned average natural gas throughput of the Project will be approximately 550,000 cubic feet per hour. The proposed pipeline will carry processed natural gas (methane) from the Viking Gas Transmission Pipeline system that Great Plains connects with at Vergas, Minnesota. Viking Gas Transmission in turn receives its gas from the TransCanada Corporation pipeline system.⁶

Land and Right-Of-Way Requirements

The applicant is requesting a route permit for a variable route width of 120 to 500 feet and temporary workspace outside of the route. Within this proposed route width Great Plains will acquire a new permanent right-of-way of 50-feet in width and a temporary construction workspace of 25-feet adjacent to the permanent right-of-way. **Table 1**, illustrates the proposed land requirements for this project.

³ Application, page 6.

⁴ Application, pages 5-9.

⁵ Application, page 8.

⁶ Application, page 8.

Table 1⁷			
Land Requirements			
Project Component	Width (feet)	Length (feet)	Area (acres)
Pipeline Facilities			
Permanent right-of-way	50	15,940	18.3
Temporary construction workspace			
Pipeline	25	14,580	8.4
Additional temporary workspace			
Pipe stringing area near launcher	25	1,600	0.9
Drill workspace on WMA ¹	Irregular	Irregular	0.3
Pipe stringing area west of WMA	50	1,800	2.1
Above Ground Facilities			
Launcher Facility ²	50	50	0.06
Receiver Facility ²	75	137	0.24
Total Acres Impacted			30.3
¹ WMA = Wildlife Management Area ² Included within the permanent right-of-way			

Three additional temporary workspaces (ATWS) are required outside of the 75-foot wide construction workspace to complete horizontal directional drills (HDD) in certain areas. One ATWS is needed for staging drill equipment at MP 0.3, and two ATWS locations are needed for pipe pull back areas; i.e., where a section of the pipeline is assembled in alignment with the drill paths so the section can be pulled through the borehole continuously without stopping. The total land area required for ATWS is estimated to be approximately 3.3 acres. The locations of ATWS are illustrated on **Map 2 – Construction Methods (attached 4 pages)**.

Construction is anticipated to begin in 2017 and be completed in 2017. The Project is expected to cost approximately \$2.7 million.

Regulatory Process and Procedures

In Minnesota, no person may construct a pipeline designed to transport natural gas at a pressure of more than 275 pounds per square inch (psi) without first obtaining a route permit from the Commission,⁸ unless the pipeline is excluded or exempted from the Commission’s routing authority.⁹ The proposed project is designed to operate at pressures of 500 to 720 psig. As a result, the proposed project requires a route permit from the Commission.

The pipeline routing permit requirements are outlined in Minnesota Rules, chapter 7852.

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⁸ Minnesota Statute [216G.02](#), subdivision 1.

⁹ Minn. Stat. [216G.02](#), subd. 3(b) (7), Minnesota Rule [7852.0300](#).

If the applicant does not expect the proposed pipeline and associated facilities to have significant impacts on humans or the environment, they can submit an application for a partial exemption from pipeline route selection procedures, as provided for in Minnesota Rules, part 7852.0600, described below and illustrated in **Figure 3 – Partial Exemption Process (attached)**.

Minnesota Statute 216G.02 Subdivision 3(b) (8) requires the Commission to decide whether to grant or deny the partial exemption within 90 days after Commission acceptance of the partial exemption application.

The Commission shall conduct a public information meeting in each county in which the pipeline and associated facilities are proposed to be located. The purpose of the public information meeting(s) is to assist the Commission in determining whether to grant or deny the partial exemption.

A person may file comments with the Commission stating reasons why the Commission should grant or deny the partial exemption.

In deciding whether to grant or deny the partial exemption, the commission shall consider any comments that are filed, the record of the public information meeting(s), and the information contained in the application relevant to the criteria for partial exemption in Minnesota Rules, part 7852.0700.

If the Commission does not grant the partial exemption, the applicant may (re)submit an application for review pursuant to the Pipeline Route Selection Procedures of Minnesota Rules, parts 7852.0600, and 7852.2100 to 7852.3100.

Pursuant to Minnesota Statutes 216E.10, subdivision 3(b), an applicant for a permit under chapter 216G will notify the Commissioner of Agriculture if the proposed project will impact cultivated agricultural land. The Department of Agriculture shall be the lead agency on the development of any agricultural mitigation plan required for the project.

Route Permit Application and Acceptance

The applicant is seeking review under the partial exemption procedures. These procedures are outlined in Minnesota Rules 7852.0600 [Exemption from Route Selection Procedures], and 7852.2100 to 7852.300 [Application Contents].

Applicants must submit a route permit application consistent with the filing requirements of Minnesota Rule 7852.2000. The application must contain the information required in Minnesota Rules 7852.2100 to 7852.3000. This includes, but is not limited to, applicant information, route description, proposed pipeline and associated facilities description, and potential environmental impacts and mitigation measures. The applicant must identify a preferred route.¹⁰

¹⁰ Minn. Stat. [216G.02](#), subd. 3(b) (1), Minn. R. [7852.2200](#).

Upon receiving a route permit application for a pipeline, the Commission may accept it as complete, accept it as complete upon filing of supplemental information, or reject it and require that additional information be submitted.¹¹ After acceptance of the application, the applicant must provide any additional relevant information the Commission considers necessary to process the application.¹² If the Commission determines that a route permit application is complete, the review process begins.

The Commission is required to make a decision within 90 days from the date an application is accepted.¹³

EERA Staff Analysis and Comments

EERA staff participated in pre-filing discussions with the applicant, as well as provided numerous comments on drafts of the route permit application. Subsequently, EERA staff conducted a completeness review of the Great Plains Fergus Falls Pipeline Replacement Project route permit application as filed on October 10, 2016, relative to the application content requirements specified in Minnesota Rules 7852.2100 to 7852.3000. See **Table 1 – Completeness Checklist (attached)**.

EERA staff believes that its comments on the draft application have been largely addressed and that the filed application meets the content requirements of Minnesota Rules 7852.2100 to 7852.3000 and, therefore, is substantially complete.

Disputed Issues of Fact

EERA is not aware of any disputed issues of fact at this time. Staff believes that any issues that surface can be addressed through the partial exemption review process.

Project Budget

Minnesota Rule 7852.4000 requires an application fee to cover actual costs necessarily and reasonably incurred in processing an application for a pipeline routing permit, permit compliance activities, administrative overhead, and legal and other expenses.

EERA has included staff time, travel, hearing costs, and administrative law judge and attorney general fees in developing an initial budget estimate. EERA requests the Commission approve a budget of up to \$25,000. EERA staff believes this estimate will cover all actual costs associated with Commission review of this project; however, this initial estimate may change during the course of administrative review.

¹¹ Minn. R. [7852.2000](#), subp. 4.

¹² Minn. R. [7852.2000](#), subp. 4.

¹³ Minn. Stat. [216G.02](#), subd. 3(b) (8).

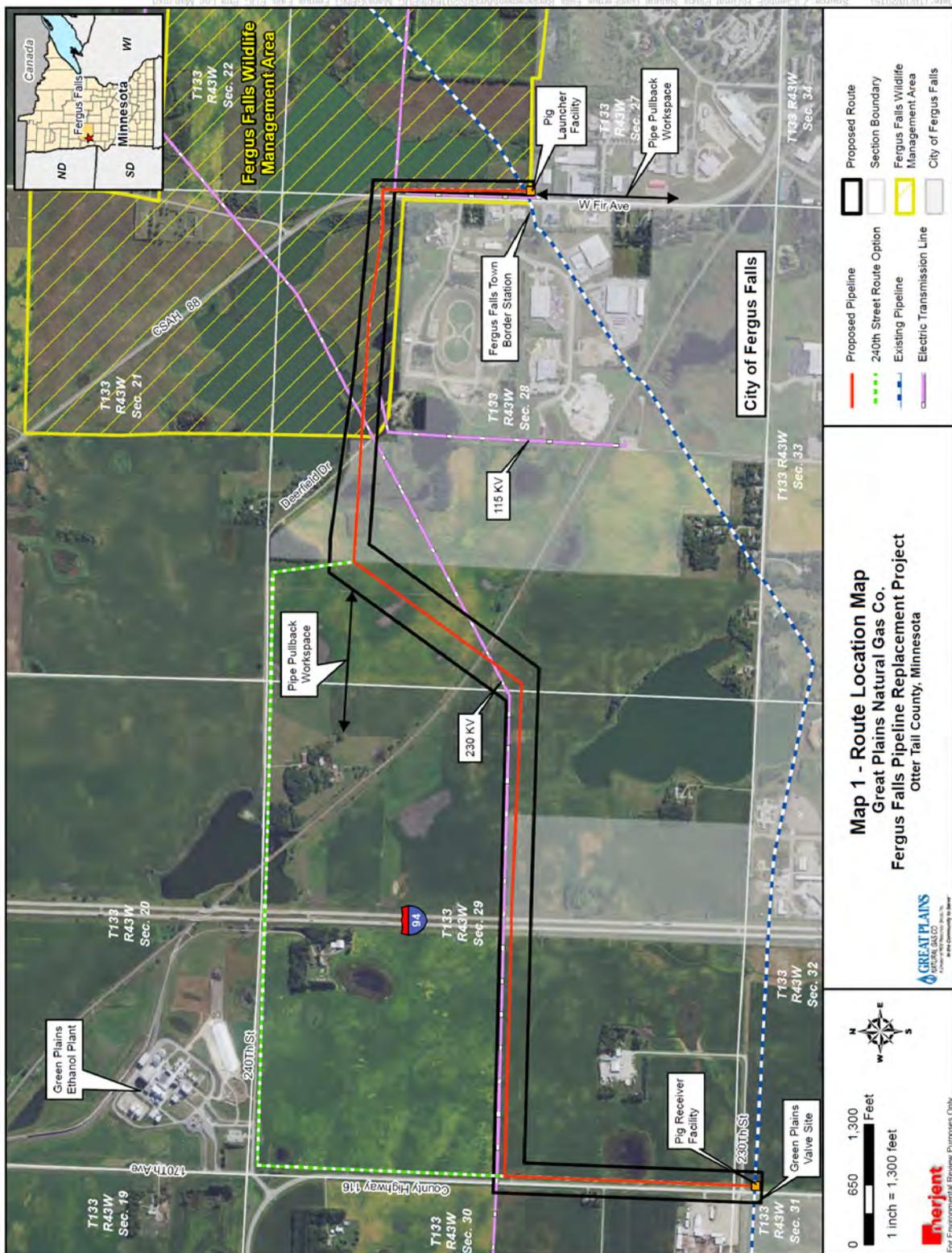
The rules require that the budget be reviewed with the applicant and approved by the Commission. The budget estimate was provided to the applicant on October 7, 2016. The applicant will be provided with an accounting of all expenditures and may present objections to the Commission. Any unspent funds will be returned to the applicant.

EERA Staff Recommendation

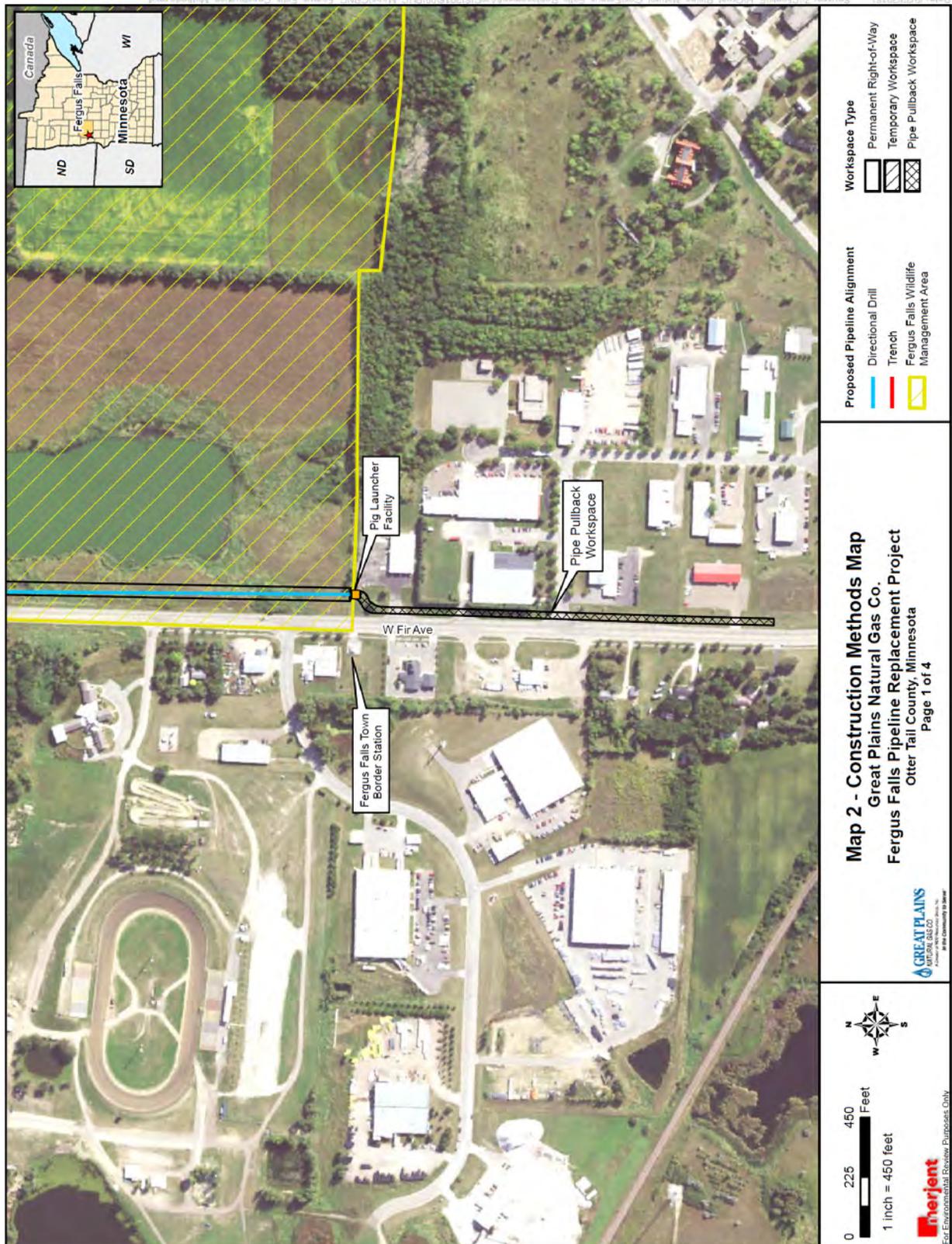
EERA staff recommends that the Commission accept the route permit application for the Fergus Falls Pipeline Replacement Project as complete.

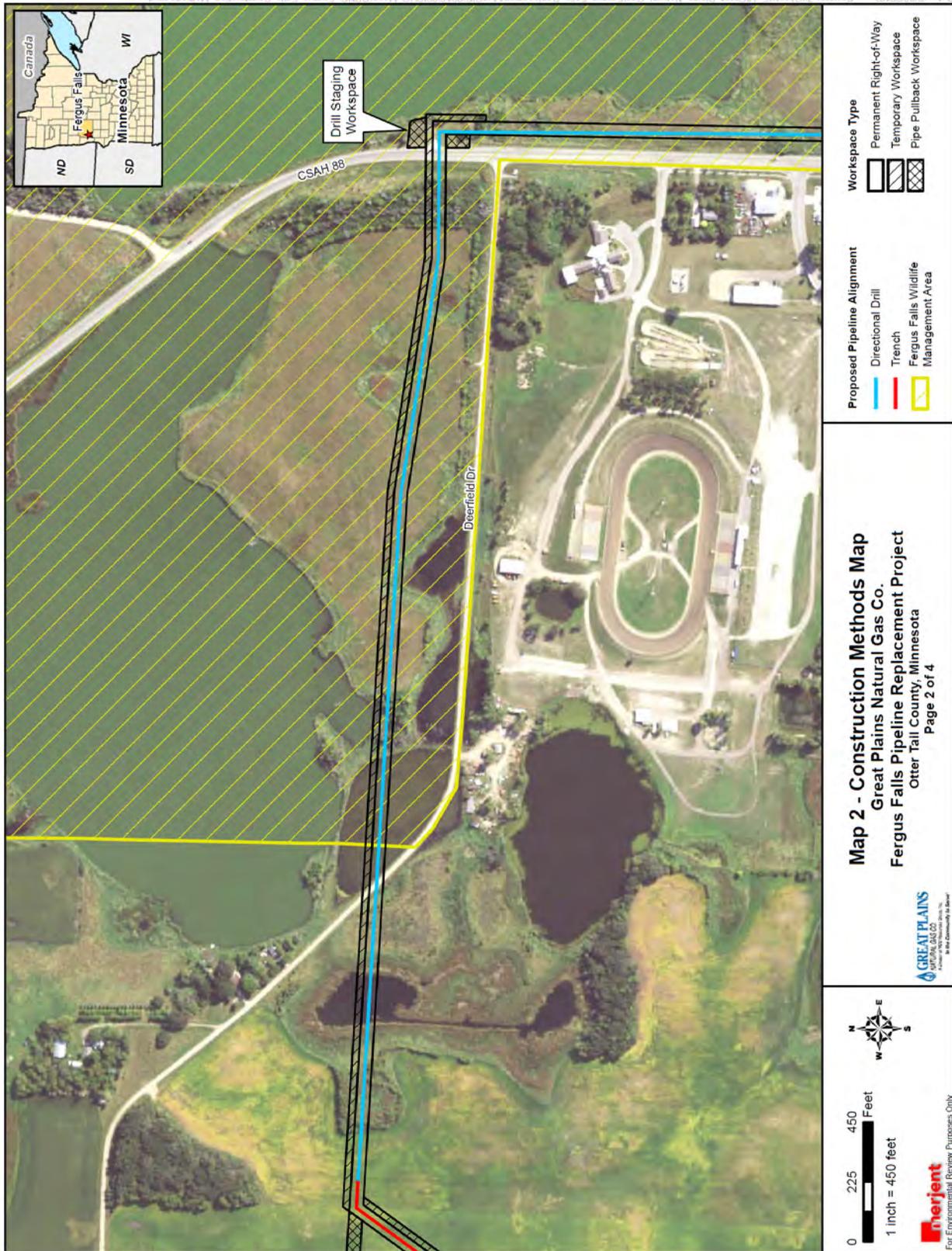
Additionally, EERA staff recommends that the Commission approve of the proposed project budget \$25,000.

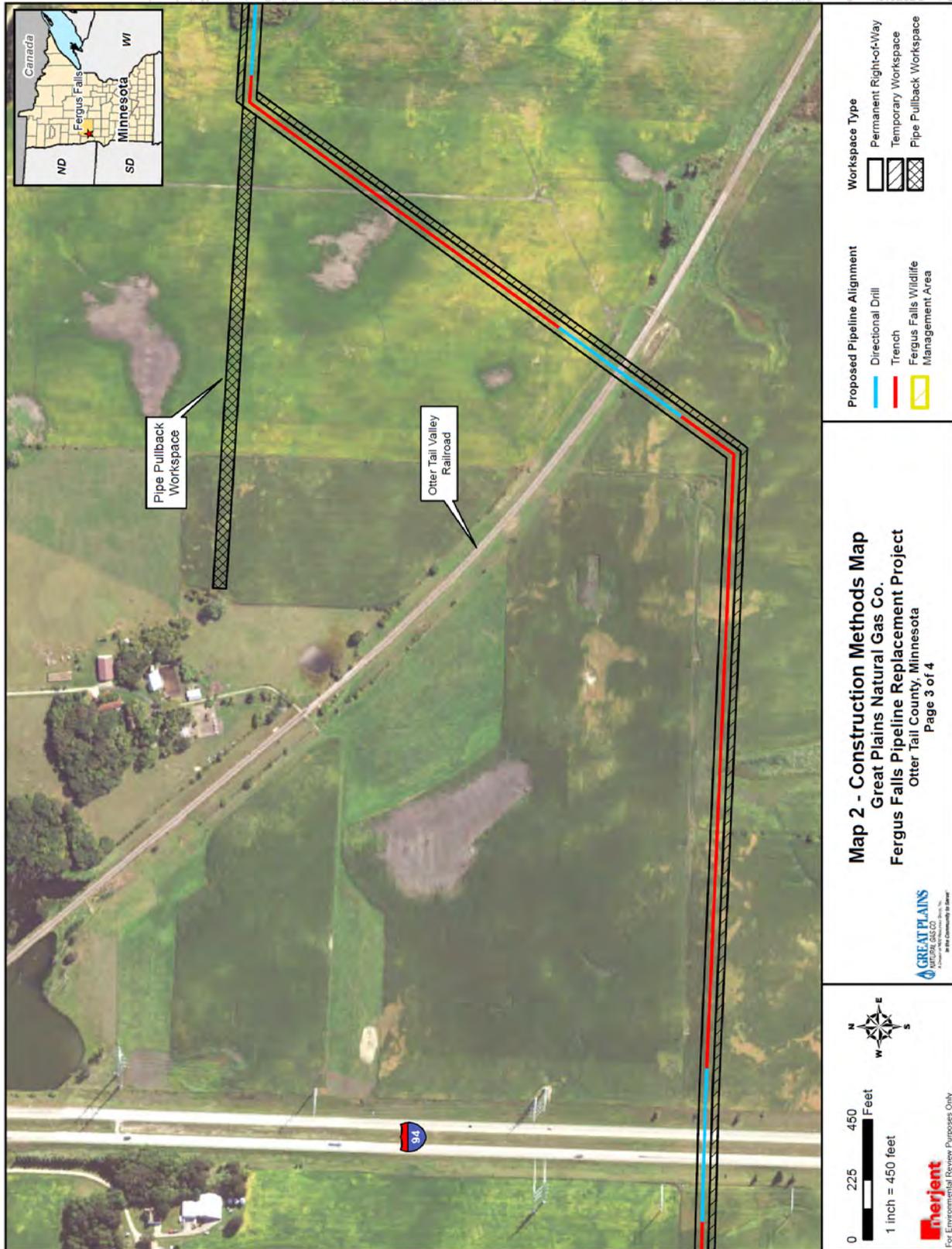
Map 1 - Route Location



Map 2 – Construction Methods (4 maps)







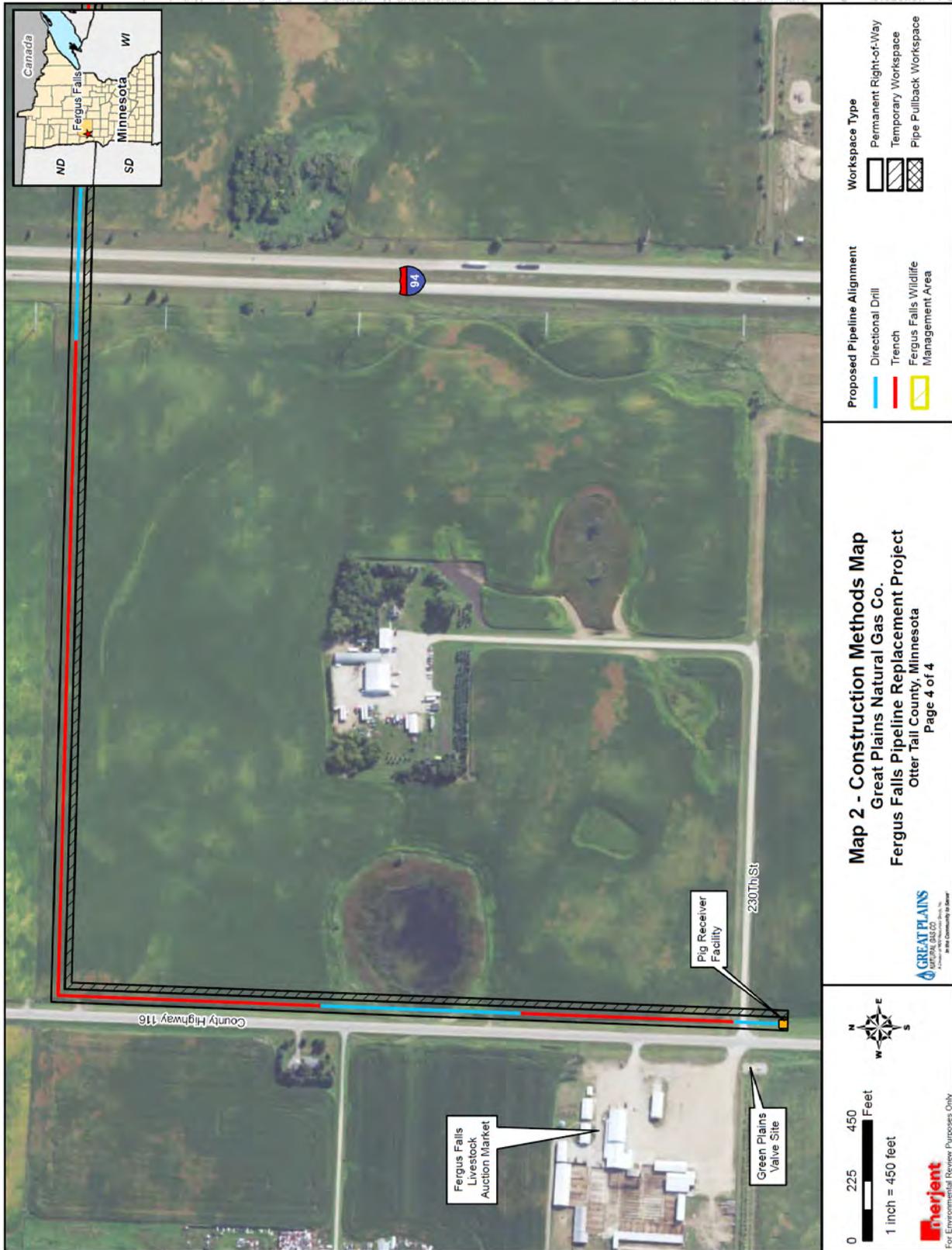


Figure 1 – Partial Exemption Process

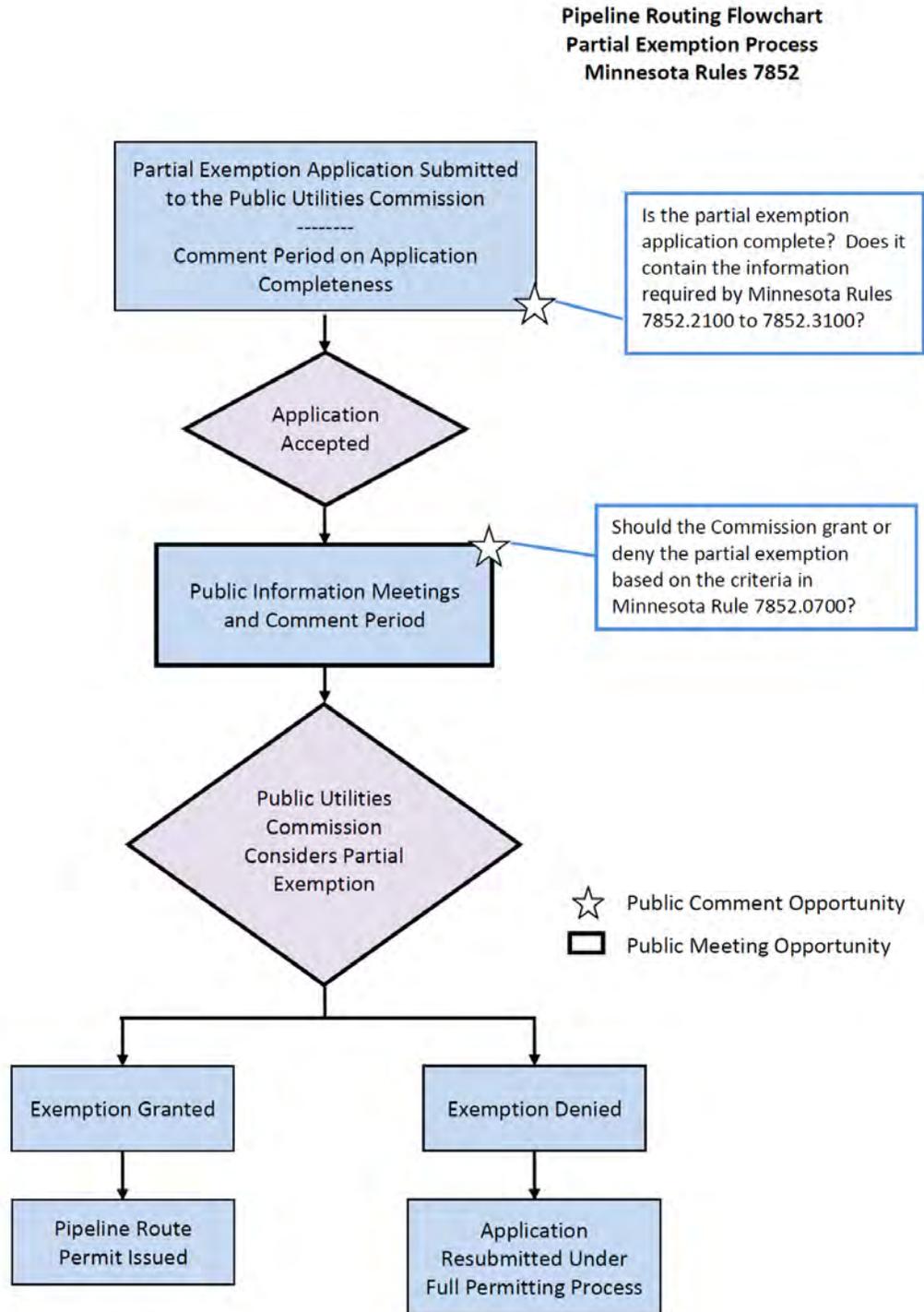


Figure 2 -- Application Completeness Checklist

Minnesota Rule 7852.0600 Application Procedures and Requirements

A person submitting an application for a pipeline routing permit must comply with the application procedures of part 7852.0600 and submit an application that contains the information required in parts 7852.2100 to 7852.3000.

Minnesota Rules	Description of Requirement	Page
7852.2100. GENERAL INFORMATION.		
Subpart 1.	Cover letter: Each application must be accompanied by a cover letter signed by an authorized representative or agent of the applicant. The cover letter must specify the type, size, and general characteristics of the pipeline for which an application is submitted.	Cover Letter Attached
Subpart 2.	Title page and table of contents: Each application must contain a title page and a complete table of contents.	Title cover, i-iv
Subpart 3.	Statement of ownership: Each application must include a statement of proposed ownership of the pipeline as of the day of filing and an affidavit authorizing the applicant to act on behalf of those planning to participate in the pipeline project.	3
Subpart 4.	Background information: Each application must contain the following information: <ol style="list-style-type: none"> A. The applicant's complete name, address, and telephone number; B. The complete, name, title, address, and telephone number of the authorized representative or agent to be contacted concerning the applicant's filing; C. The signatures and titles of persons authorized to sign the application, and the signature of the preparer of the application if prepared by an outside representative or agent; and D. A brief description of the proposed project which includes: <ol style="list-style-type: none"> 1. General location; 2. Planned use and purpose; 3. Estimated cost; 4. Planned in-service date; and 5. General design and operational specifications for the type of pipeline for which an application is submitted. 	3 - 6
7852.2200. PROPOSED PIPELINE AND ASSOCIATED FACILITIES DESCRIPTION.		
Subpart 1.	Pipeline design specifications: The specifications for pipeline design and construction are assumed to be in compliance with all applicable state and federal rules or regulations unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the anticipated pipeline design specifications must include but are not limited to: <ol style="list-style-type: none"> A. Pipe size (outside diameter) in inches; B. Pipe type; C. Nominal wall thickness in inches; 	7

Minnesota Rules	Description of Requirement	Page
	D. Pipe design factor; E. longitudinal or seam joint factor; F. class location and requirements, where applicable; G. Specified minimum yield strength in pounds per square inch; and H. Tensile strength in pounds per square inch.	
Subpart 2.	<u>Operating pressure:</u> Operating pressure must include: A. Operating pressure (pounds per square inch gauge [psig]); and B. Maximum allowable operating pressure (psig).	8
Subpart 3.	<u>Description of associated facilities:</u> For public information purposes, the applicant shall provide a general description of all pertinent associated facilities on the right-of-way.	8
Subpart 4.	<u>Product capacity information:</u> The applicant shall provide information on planned minimum and maximum design capacity or throughput in the appropriate unit of measure for the types of product shipped as defined in part 7852.0100.	8
Subpart 5.	<u>Product description:</u> The applicant shall provide a complete listing of products the pipeline is intended to ship and a list of products the pipeline is designed to transport, if different from those intended for shipping.	9
Subpart 6.	<u>Material safety data sheet:</u> For each type of product that will be shipped through the pipeline, the applicant shall provide for public information purposes the material identification, ingredients, physical data, fire and explosive data, reactivity data, occupational exposure limits, health information, emergency and first aid procedures, transportation requirements, and other known regulatory controls.	9, Appendix A
7852.2300. LAND REQUIREMENTS.		
	For the proposed pipeline, the applicant shall provide the following information: A. Permanent right-of-way length, average width, and estimated acreage; B. Temporary right-of-way (workspace) length, estimated width, and estimated acreage; C. Estimated range of minimum trench or ditch dimensions including bottom width, top width, depth, and cubic yards of dirt excavated; D. Minimum depth of cover for state and federal requirements; and E. Right-of-way sharing or paralleling: type of facility in the right-of-way, and the estimated length, width, and acreage of the right-of-way.	10 - 11
7852.2400. PROJECT EXPANSION.		
	If the pipeline and associated facilities are designed for expansion in the future, the applicant shall provide a description of how the proposed pipeline and associated facilities may be expanded by looping, by additional compressor and pump stations, or by other available methods.	5
7852.2500. RIGHT-OF-WAY PREPARATION PROCEDURES AND CONSTRUCTION ACTIVITY SEQUENCE.		
	Each applicant shall provide a description of the general right-of-way preparation procedures and construction activity sequence anticipated for the proposed pipeline and associated facilities.	12 - 18

Minnesota Rules	Description of Requirement	Page
7852.2600. PREFERRED ROUTE LOCATION; ENVIRONMENTAL DESCRIPTION.		
Subpart 1.	<p>Preferred route location: The applicant must identify the Preferred Route for the proposed pipeline and associated facilities on any of the following documents, which must be submitted with the application:</p> <ul style="list-style-type: none"> A. United States Geological Survey topographical maps to the scale of 1:24,000, if available; B. Minnesota Department of Transportation county highway maps; or C. Aerial photos or other appropriate maps of equal or greater detail in items A and B. The maps or photos may be reduced for inclusion in the application. One full-sized set shall be provided to the Commission. 	19, Maps 3 and 4
Subpart 2.	<p>Other route locations: All other route alternatives considered by the applicant must be identified on a separate map or aerial photos or set of maps and photos or identified in correspondence or other documents evidencing consideration of the route by the applicant.</p>	19 - 20
Subpart 3.	<p>Description of environment: The applicant must provide a description of the existing environment along the Preferred Route.</p>	20 - 38
7852.2700. ENVIRONMENTAL IMPACT OF PREFERRED ROUTE.		
<p>The applicant must also submit to the Commission along with the application and analysis of the potential human and environmental impacts that may be expected from pipeline right-of-way preparation and construction practices and operation and maintenance procedures. These impacts include but are not limited to the impacts for which criteria are specified in part 7852.0700 or 7852.1900.</p>		21 - 38
7852.2800. RIGHT-OF-WAY PROTECTION AND RESTORATION MEASURES.		
Subpart 1.	<p>Protection: The applicant must describe what measures will be taken to protect the right-of-way or mitigate the adverse impacts of right-of-way preparation, pipeline construction, and operation and maintenance on the human and natural environment.</p>	40 - 41
Subpart 2.	<p>Restoration: The applicant must describe what measures will be taken to restore the right-of-way and other areas adversely affected by construction of the pipeline.</p>	41
7852.2900. OPERATION AND MAINTENANCE.		
<p>Pipeline operations and maintenance are assumed to be in compliance with all applicable state and federal rules or regulations, unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the applicant must provide a general description of the anticipated operation and maintenance practices planned for the proposed pipeline.</p>		42 - 45
7852.3000. LIST OF GOVERNMENT AGENCIES AND PERMITS.		
<p>Each application must contain a list of all the known federal, state, and local agencies or authorities and titles of the permits they issue that are required for the proposed pipeline and associated facilities.</p>		46