

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Savage Bakken Connector, Inc.
10-Inch Crude Pipeline Project – Williams County
Siting Application

Case No. PU-16-753

AFFIDAVIT OF SERVICE BY REGULAR OR ELECTRONIC MAIL

STATE OF NORTH DAKOTA
COUNTY OF BURLEIGH

Geralyn R. Schmaltz deposes and says that:

she is over the age of 18 years and not a party to this action and, on the **2nd** day of **March, 2017**, she deposited in the United States Mail, Bismarck, North Dakota, **2** envelopes by first class mail, fully prepaid and **42** addressees electronically mailed a copy of:

- **Order on Recommended Findings of Fact, Conclusions of Law and Order**

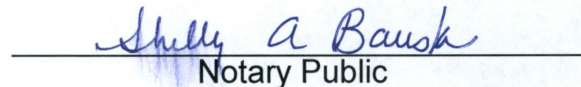
The envelopes and electronic mails respectively were addressed as follows:

See attached list.

Each post office address shown is the respective addressee's last reasonably ascertainable post office address and each email address is the respective addressee's last reasonably ascertainable electronic mailing address.

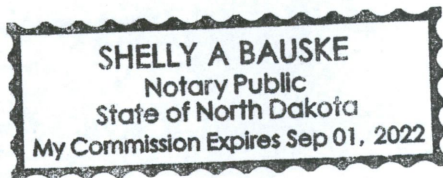


Subscribed and sworn to before me
this **2nd** day of **March, 2017**.



Notary Public

SEAL



**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Savage Bakken Connector, Inc.
10-Inch Crude Oil Pipeline – McKenzie County
Siting Application**

Case No. PU-16-753

**ORDER ON RECOMMENDED FINDINGS OF FACT, CONCLUSIONS OF LAW AND
ORDER**

March 1, 2017

The evidence of record has been considered and appraised.

The North Dakota Public Service Commission (Commission) Orders:

1. The Hearing Officer's February 21, 2017 Recommended Findings of Fact, Conclusions of Law and Order, a copy of which is attached to and made a part of this Order, is ADOPTED as the Public Service Commission's Findings of Fact, Conclusions of Law and Order.
2. Certificate of Corridor Compatibility No. 197 is issued to Savage Bakken Connector, Inc. designating a corridor for the construction, operation, and maintenance of approximately 2 miles of 10-inch inside diameter crude oil transmission pipeline and associated facilities in Williams County, North Dakota. The corridor designated for this purpose is depicted as outlined in red on page A-1 of Appendix A in Hearing Exhibit 2.
3. Route Permit No. 208 is issued to Savage Bakken Connector, Inc. designating a route for the construction, operation, and maintenance of approximately 2 miles of 10-inch inside diameter crude oil transmission pipeline and associated facilities in Williams County, North Dakota. The route designated for this purpose is depicted in green on page A-1 of Appendix A of Hearing Exhibit 2.
4. Thirty days prior to commencing construction, Savage Bakken Connector, Inc. shall inform the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration of the intent to start construction.
5. Savage Bakken Connector, Inc. shall provide the name(s) of landowner contact(s), verification that Savage Bakken Connector, Inc. has complied with 49 CFR Part 195.440 (d) through (g) and has notified Williams County emergency responders prior to the start of construction.
6. Prior to commencing construction of any portion of the proposed Project, Savage Bakken Connector, Inc. shall obtain all other necessary licenses and permits for construction of such portion, and provide copies to the Commission prior to construction of that portion of the Project.

7. Savage Bakken Connector, Inc. shall comply with the requirements noted by the North Dakota State Water Commission, the North Dakota Department of Health and the United States Department of Agriculture in their comments regarding the Project during construction and operation of this pipeline.

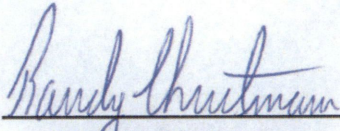
8. Savage Bakken Connector, Inc. shall conduct a noise study prior to beginning operation of the pumps associated with this Project. The noise study shall be submitted to the Commission upon completion.

9. Savage Bakken Connector, Inc. shall ensure that the pumps will be located within an insulated, enclosed structure and that noise from the pumps will not exceed 55 decibels audible (dBa) at the nearest noise sensitive area.

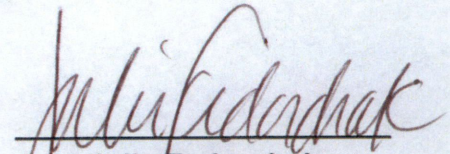
10. Savage Bakken Connector, Inc. shall comply with the Tree and Shrub Mitigation Specifications which require, among other things, all shrubs removed as a result of construction be inventoried and replaced at a two for one ratio.

PUBLIC SERVICE COMMISSION

**Vacant
Commissioner**



**Randy Christmann
Chairman**



**Julie Fedorchak
Commissioner**

PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA

Certificate of Corridor Compatibility Number 197

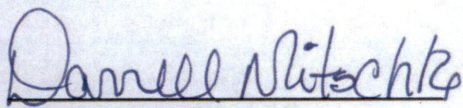
This is to certify that the Commission has designated a transmission facility corridor for Savage Bakken Connector, Inc. for the construction, operation, and maintenance of approximately 2 miles of 10-inch inside diameter crude oil pipeline and associated facilities in Williams County, North Dakota.

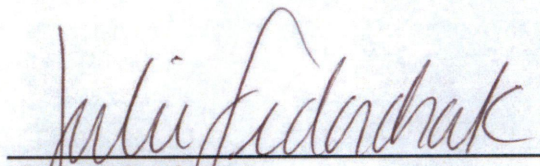
This certificate is issued in accordance with the Order of the Commission dated March 1, 2017 in Case No. PU-16-753 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, March 1, 2017.

ATTEST:

PUBLIC SERVICE COMMISSION


Executive Secretary


Commissioner

PUBLIC SERVICE COMMISSION
STATE OF NORTH DAKOTA

Route Permit Number 208

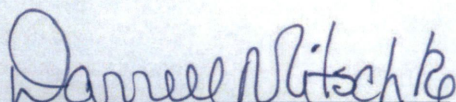
This is to certify that the Commission has designated a transmission facility route for Savage Bakken Connector, Inc. for the construction, operation, and maintenance of approximately 2 miles of 10-inch inside diameter crude oil pipeline and associated facilities in Williams County, North Dakota.


This permit is issued in accordance with the Order of this Commission dated March 1, 2017, in Case No. PU-16-753 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, March 1, 2017.

ATTEST:

PUBLIC SERVICE COMMISSION


Executive Secretary


Commissioner

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Savage Bakken Connector, Inc.
10-Inch Crude Pipeline Project – Williams County
Siting Application**

Case No. PU-16-753

RECOMMENDED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

February 21, 2017

Appearances

Brian R. Bjella, Attorney at Law, Crowley Fleck PLLP, 100 West Broadway, Suite 250, Bismarck, North Dakota 58501, on behalf of Savage Bakken Connector, Inc.

Brian Schmidt, Special Assistant Attorney General, 122 E. Broadway Ave., Bismarck, North Dakota 58501, on behalf of the North Dakota Public Service Commission.

Timothy J. Dawson, Administrative Law Judge, Director of the Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, North Dakota 58503, as Substantive Hearing Officer.

Preliminary Statement

On November 22, 2016, Savage Bakken Connector, Inc. (Savage), filed applications for a certificate of corridor compatibility and a route permit concerning approximately 2 miles of 10-inch inside diameter steel pipeline and associated facilities for the transportation of crude oil (Project). The Project is to be located in Williams County, North Dakota.

Also on November 22, 2016, Savage filed an application for waiver of procedures and time schedules established under North Dakota Century Code Sections 49-22-07.2, 49-22-08, 49-22-08.1, and 49-22-13, and North Dakota Administrative Code chapter 69-06-06 and section 69-06-01-02, requiring separate filings, separate notices and separate hearings on the certificate of corridor compatibility and route permit applications.

On December 20, 2016, the Commission found the applications for a certificate of corridor compatibility and route permit complete and issued a Notice of Filings and Public Hearing (Notice) scheduling a hearing for January 19, 2017, at 1:00 p.m. Central Time,

at The Ernie French Center, NDSU Williston Research Extension Center, 14120 Hwy. 2, Williston, North Dakota 58801.

The Notice identified the following issues to be considered with respect to the Application for a Waiver of Procedures and Time Schedules:

1. Are the proposed facilities of such length, design, location, or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived?
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

The Notice identified the following issues to be considered with respect to the applications for a certificate of corridor compatibility and route permit:

1. Will the location and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On January 19, 2017, the hearing was held.

Having allowed all interested persons an opportunity to be heard, and having heard, reviewed and considered all testimony and evidence presented, the Hearing Officer makes the following:

Findings of Fact

1. Savage is a Utah corporation authorized to do business in the State of North Dakota, as evidenced by corporate papers filed with the Commission on November 22, 2016, and December 9, 2016.
2. Savage is a subsidiary of Savage Services Corporation. Savage Services Corporation owns the Savage Bakken Petroleum Hub located approximately 3.5 miles southwest of Trenton, North Dakota. The Savage Bakken Petroleum Hub is an open access unit train facility that ships crude oil to destinations served by rail.

Size, Type, and Preferred Location of Facility

3. The Project will consist of approximately 2 miles of 10-inch inside diameter steel pipeline, and associated facilities. The Project will originate at the Savage Bakken Petroleum Hub beginning in Section 36, Township 153 North, Range 103 West which is approximately 3.5 miles southwest of Trenton. The Project will end in Section 6, Township 152 North, Range 103 West, near North Dakota Highway No. 1804 where it will interconnect with the Dakota Access Pipeline. The pipe will have a wall thickness of 0.365 inches.

4. The maximum capacity of the Project will be 60,000 barrels per day. The maximum operating pressure of the pipeline will 1,480 pounds of pressure per square inch gauge and the maximum operating temperature will be 120 degrees Fahrenheit.

5. Associated facilities and equipment will include two pump stations, and launcher and receiver valve sets. The booster pump station and launcher and receiver valve sets will be located at the Savage Bakken Petroleum Hub. The pipeline is proposed to interconnect with the pipeline constructed by Dakota Access, LLC, as approved by this Commission in Case No. PU-14-842. The pump station at the Dakota Access connection site will consist of multiple 700 horsepower pumps along with associated electrical equipment. The injection pump station receiver valve set and metering station will be located 200 feet northeast of the Dakota Access pipeline interconnection.

6. The Project will be designed, constructed, operated, and maintained in compliance with Code of Federal Regulations Title 49 Part 195 Hazardous Liquids Pipeline Safety Regulations.

7. The temporary construction right-of-way will be 100 feet wide. The permanent right-of-way will be 25 feet wide.

8. The total cost of the Project is estimated to be approximately \$6 million.

Study of Preferred Location

9. Savage evaluated a one-mile wide area centered on the proposed route extending from the Savage Bakken Petroleum Hub to the Dakota Access interconnection for resources including a Class I cultural resource literature survey (Study Area) as outlined in blue on page A-1 of Appendix A of Hearing Exhibit 2.

10. Savage conducted a Class III cultural resource inventory and various natural resource field surveys including land use, wildlife, protected species, critical habitats, wetlands and water bodies, and vegetation from the Savage Bakken Petroleum Hub to the Dakota Access interconnection over a 200 foot wide area (Survey Area) centered on the proposed route. The Survey Area was expanded in the southern portion where the pump station, access road and bore areas will be located to ensure all potential impacts

would be identified. The Survey Area is outlined in red on page A-1 of Appendix A of Hearing Exhibit 2.

11. The following agencies were contacted by Savage and provided comments regarding the Project: United States Army Corps of Engineers (USACE), State Historical Society of North Dakota (SHSND), North Dakota Game and Fish Department (NDGF), North Dakota State Water Commission (SWC), North Dakota Department of Commerce (NDDC), North Dakota Department of Health (NDDH), North Dakota Parks & Recreation, Job Service North Dakota, United States Bureau of Reclamation, United States Department of Agriculture (NRCS), and the Federal Aviation Administration (FAA). Input provided includes the following:

- a) USACE stated that permits may be required from the USACE, such as a Section 10 permit and a Section 404 permit.
- b) NRCS stated that impacts to wetlands should be avoided.
- c) NDGF stated that it did not believe that the Project will have a significant adverse effect on wildlife or wildlife habitat, as long as disturbed areas are reclaimed to pre-project conditions.
- d) With respect to the Class III cultural resources inventory report submitted in December 2016, SHSND stated in a letter dated December 8, 2016, that there has been a good faith effort to identify and avoid impacts to "Significant Sites."
- e) SWC stated that no permits relative to the National Flood Insurance Program were required and waste materials must be disposed of properly.
- f) The NDDC stated that the Project consultation letter had been reviewed through the North Dakota Federal Program Review Process and clearance had been given.
- g) The NDDH stated that it believed environmental impacts from the Project will be minor and can be controlled by proper construction methods, and provided its construction comments and construction and environmental disturbance requirements. The NDDH also stated that the project overlies the Trenton aquifer and care should be taken to avoid spills of any materials that would impact groundwater quality and that a private drinking water well was near the proposed route.
- h) North Dakota Parks & Recreation recommends that the project be accomplished with minimal impacts and all efforts to ensure critical habitats not be disturbed and any impacted areas be revegetated with species native to the project area.

- i) Job Service North Dakota stated that Savage was not liable to the construction project risk protection provision of the North Dakota Century Code and does not have to post a construction bond or letter of credit.
- j) The FAA stated it has no objection as long as the project does not affect navigable airspace.
- k) The Bureau of Reclamation stated that if the pipeline crosses Reclamation's irrigation canals, Savage would have to coordinate its construction activities with the local Irrigation District, and, if necessary, acquire a Special Use Permit; however, Savage represents that the project does not cross the irrigation canals.

Siting Criteria

12. The Commission has developed criteria pursuant to North Dakota Century Code Section 49-22-05.1 to guide the Commission in evaluating the suitability of granting a certificate of corridor compatibility and route permit. The criteria, as set forth in North Dakota Administrative Code Section 69-06-08-02, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.

13. Savage evaluated the Project with respect to the Exclusion, Avoidance, Selection and Policy Criteria of the Commission.

14. A transmission facility route must not be sited within an Exclusion Area. A buffer zone of a reasonable width to protect the integrity of the area must be included. Exclusion Areas may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor unless there is no reasonable alternative. No Exclusion Areas are present within the Survey Area.

15. A Class III Cultural Resource Inventory was completed on September 23, 2016. During this survey, three previously recorded cultural resources were identified (two historical sites and one architectural site). The SHPO issued a concurrence letter which found the report acceptable, and the concurrence letter has been filed with the Commission. Provided all work and ground disturbance stays within the survey corridor, and the one unevaluated architectural site is avoided by 50 feet or all work occurs across the road identified as 42nd Street NW, no significant sites will be impacted by the Project. The Project will avoid impacts to all three sites.

17. An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant shows that, under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a transmission facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes. Economic considerations alone are not sufficient to establish no reasonable alternative.

16. The Lewis and Clark Trail, which is part of North Dakota Highway No. 1804, intersects the Project, and is an Avoidance Area. There will be no disturbance to the trail as Savage will bore underneath the highway.

18. Pursuant to North Dakota Administrative Code section 69-06-08-02 (2) areas within five hundred feet of a residence, school or place of business are Avoidance Areas. Two structures, a church and a community building, are located within 500 feet of the pipeline route. Savage has obtained waivers from these facilities and has filed the waivers with the Commission.

19. Field wetland delineations were completed. A total of five wetlands, covering approximately 1.67 acres were delineated within the Study Area; however, there are only two wetlands (approximately 0.15 acres total) that are within the Survey Area.

20. Impacts to the natural stream wetland (See Appendix H of Hearing Exhibit 2 for information on Wetland 3) will be avoided by means of directional drilling, and the second wetland, a man-made ditch wetland will be trenched. According to U.S. Army Corps of Engineers Nationwide Permit 12, delineated wetlands can be trenched through to lay the pipeline in compliance with stipulations of the permit. Savage stated it will comply with the stipulations of the permit. The man-made ditch wetland will be reclaimed after construction to its pre-existing condition.

21. A pedestrian survey for raptor nests was conducted within the Survey Area in September of 2016. No raptor nests were observed during the survey. The Project has been sited to avoid suitable habitat for threatened, endangered and candidate species. No sensitive botanical or zoological species or communities of ecological importance were identified within the Study Area. Construction of the Project is not anticipated to cause permanent impacts on rare or sensitive species, or irretrievable natural resources.

22. With respect to the Policy Criteria of the Commission, as a coordination of facilities and location, the Project will provide for the transportation of crude oil from the Savage Bakken Petroleum Hub to the Dakota Access pipeline. The location of the Project will allow for collection and transportation of crude oil produced from oil wells in northwestern North Dakota.

23. With respect to the Selection Criteria of the Commission, approximately 6.8 acres of farmland of statewide importance would be temporarily impacted during construction, but would be returned to its pre-existing condition following construction. In North Dakota clayey and loamy soils are classified by the Natural Resources Conservation Service as farmland of statewide importance.

24. In accordance with the Commission's Selection Criteria, a transmission facility route shall be designated if it is demonstrated that any significant adverse effects that will result from the location, construction, and maintenance of the transmission facility will be

at an acceptable minimum, or will be managed and maintained at an acceptable minimum.

25. Savage has analyzed the impacts of the Project in relation to all of the relevant Selection Criteria. No significant adverse impact will result from the location, construction and operation of the Project.

Measures to Minimize Impact

26. Savage has agreed to a number of steps to mitigate impact of the Project as indicated by the Certification Rating to Order Provisions-Transmission Facility Siting (Certification) with accompanying Tree and Shrub Mitigation Specifications, as filed in this proceeding, and which is incorporated by reference and attached to this Order.

27. Savage testified that a Supervisory Control and Data Acquisition System (SCADA), a cathodic protection system and a pipeline leak detection system will be installed on this Project. The Project will be continuously monitored from the Savage Petroleum Hub site. The Project can be shut down from the Savage Petroleum Hub site.

28. Savage testified that the Project would be constructed, maintained, and operated according to CFR Title 49, Part 195, Hazardous Liquids Pipeline Safety Regulations.

29. Savage testified that it will participate in the North Dakota One-Call Evacuation System.

30. Savage testified that it will file a copy of its Emergency Response Plan with the Commission.

31. Savage testified that all easements necessary for construction of the Project have been obtained, with the exception of one.

32. To ensure protection of any new environmental or cultural finds during topsoil removal, Savage has committed to have an environmental inspector and a cultural resources specialist on site during topsoil removal operations.

33. Savage testified that a conditional use permit for the Project is not required by Williams County, North Dakota, and has filed with the Commission a letter from the County indicating the same.

34. The Project will be constructed in compliance with the standards established by the National Electric Safety Code.

35. Savage commits to participating in a preconstruction call with Commission Staff and the Commission's third-party construction inspector. Savage commits to informing the Commission and its third-party construction inspector of the date it will begin construction. Savage commits to coordinating with the Commission's third-party

construction inspector concerning site inspections, and keeping the Commission and its third-party construction inspector informed of the Project's status on a monthly basis.

36. In the event that construction is undertaken by Savage after topsoil has frozen to the point that frost inhibits soil segregation, Savage has committed to the following applicable winter construction guidelines as set forth in the following documents: North Dakota State University Extension Service, Publication R 1728, "Successful Reclamation of Lands Disturbed by Oil and Gas Development and Infrastructure Construction, August 2014; INGAA Foundation, Inc. Report No. 2013.04, "Planning Guidelines for Pipeline Construction During Frozen Conditions," December 2013.

From the foregoing Findings of Fact, the Hearing Officer now makes the following:

Conclusions of Law

1. The Commission has jurisdiction over Savage and the subject matter of these applications under North Dakota Century Code chapter 49-22.
2. Savage is a utility as defined in North Dakota Century Code section 49-22-03(13).
3. The Project is a transmission facility as defined in North Dakota Century Code section 49-22-03(12).
4. The location, construction, and operation of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The location, construction, and operation of the Project are compatible with environmental preservation and the efficient use of resources.
6. The Project will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.
7. The Project is of such design and location that it will produce minimal adverse effects, as defined under North Dakota Century Code section 49-22-07.2.
8. It is appropriate for the Commission to waive those certain procedures and time schedules as requested in the waiver application under North Dakota Century Code section 49-22-07.2 and North Dakota Administrative Code chapter 69-06-06.

From the Findings of Fact and Conclusions of Law, the Hearings Officer now issues the following:

Recommended Order

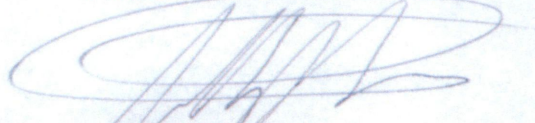
1. **Savage's application for a waiver of procedures and time schedules is granted.**
2. **A Certificate of Corridor Compatibility shall be issued to Savage designating a corridor for the construction, operation, and maintenance of an approximately 2 mile long, 10-inch inside diameter crude oil pipeline and associated facilities in Williams County, North Dakota. For purposes of the Certificate, the designated corridor is depicted as outlined in red on page A-1 of Appendix A of Hearing Exhibit 2.**
3. **A Route Permit shall be issued to Savage, designating a route for the construction, operation and maintenance of an approximately 2 miles long, 10-inch inside diameter crude oil pipeline and associated facilities in Williams County, North Dakota. For purposes of the Permit, the designated route is depicted in green on page A-1 of Appendix A of Hearing Exhibit 2.**
4. **The January 9, 2017, Certification, with accompanying Tree and Shrub Mitigation Specifications, is incorporated by reference and attached to this Order.**
5. **To the extent there are any conflicts or inconsistencies between Savage's applications in this proceeding and the Certification, as amended by paragraph 6 of this Order, the Certification provisions control.**
6. **Provision 12 of the Certification is amended to state the following:**

Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages, and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. If Company removes topsoil once topsoil freezes to the point that frost inhibits proper soil segregation, it shall follow the winter construction guidelines in the following documents: North Dakota State University Extension Service, Publication R1728, "Successful Reclamation of Lands Disturbed by Oil and Gas Development and Infrastructure Construction," August 2014; and INGAA Foundation, Inc., Report No. 2013.04, "Planning Guidelines for Pipeline Construction During Frozen Conditions," December 2013.
7. **If a spill by Savage requires notification to any other state or federal agency, Savage will also inform the Commission of such spill within 24 hours of occurrence by leaving a message at the Commission's Toll Free Number, with a follow-up email to the Commission's Executive Secretary.**

8. Savage is required to comply with all applicable laws, rules, and/or regulations in the event it desires to construct another or a different transmission facility than was specified in the application within the corridor granted in this proceeding.

Dated at Bismarck, North Dakota this 21st day of February, 2017

State of North Dakota
Public Service Commission



Timothy J. Dawson
Administrative Law Judge
Office of Administrative Hearing
2911 North 14th Street – Suite 303
Bismarck, North Dakota 58503
Telephone: (701) 328-3200

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Savage Bakken Connector, Inc.
10-Inch Crude Pipeline Project – Williams County
Siting Application

Case No. PU-16-753

CERTIFICATION RELATING TO ORDER PROVISIONS
TRANSMISSION FACILITY SITING

I am Mike Miller, a representative of Savage Bakken Connector, Inc. ("Company") with authority to bind Company to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
3. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
4. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.
5. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
6. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for

the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.

Construction:

7. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
8. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
9. Company understands and agrees that topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference.
10. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis.
11. Company understands and agrees that the pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.
12. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages, and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/ early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.

13. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
15. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society.
16. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company.
17. Company understands and agrees that the Commission has authority to stop Project construction activities in the event of a probable violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm.

Restoration and Maintenance:

18. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
19. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.
20. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

21. Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.
22. Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
23. Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.
24. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
25. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.

Communication with Landowners and PSC:

27. Company understands and agrees that, prior to beginning construction of the transmission facility at a location, it shall send a letter to each landowner with whom an easement was executed for that location specifying the name and phone number of the company representative who is responsible for receiving and resolving landowner issues for the life of the easement.
28. Company understands and agrees that it will file with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility.
29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.
30. Company understands and agrees that it shall advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person.
31. Company agrees to report to the Commission, as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered species of which Company becomes aware and which were not previously reported to the Commission.

32. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility.
33. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.
34. Company shall notify the Commission as soon as reasonably possible if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined.

Route Adjustments Before or During Construction:

35. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of the pipeline, pursuant under N.D.C.C. §49-22-16.3:
36. Company will specifically identify which subsection of NDCC 49-22-16.3 it is requesting the adjustment under. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application.
37. **ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before conducting any construction activities for any adjustment to the designated route within the designated corridor under NDCC 49-22-16.3(1), the Company will file:

- a. Certification and supporting documentation affirming that construction activities will be within the designated corridor, will not affect any known exclusion or avoidance areas within the designated corridor;
- b. Certification and supporting documentation, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, route and the route adjustment;
- c. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

38. ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED: Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(2), within the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:
 - i. the designated corridor, route and the route adjustment;
 - ii. all exclusion and avoidance areas within the portion of the designated corridor containing the route adjustment
- b. Certification and supporting documentation affirming:
 - i. That construction activities will be within the designated corridor
 - ii. That construction activities will not affect any known exclusion area
- c. All field studies performed on the portion of the designated corridor containing the route adjustment;
- d. Specific information about any mitigation measures Company will take within the adjustment area;
- e. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- f. Certification that unless the Commission previously authorized the impact to the same avoidance area, that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist;
- g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

Company acknowledges and agrees that:

1. Written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity unless the Commission fails to act within ten working days of receipt of filing a complete adjustment application, in which case the adjustment is deemed approved.
2. The initiation of the ten working days begins upon receipt of a complete filing, to include Company's certifications, supporting documentation and maps. However, Commission may extend the ten working day provision if Company, in the person of the key contact referenced above, is informed of the reason additional time is necessary for extension and has no objection to an extension.

39. ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED: Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(3), outside the designated corridor and not affecting any exclusion and avoidance area, before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. Certification and supporting documentation affirming that construction activities will not affect any known exclusion or avoidance areas,
- b. Certification and supporting documents stating the length of the proposed route outside of the corridor and a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, corridor adjustment, designated route and the route adjustment;
- c. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment; and
- d. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- e. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

40. ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED: Before adjusting the route of a gas or liquid transmission line under NDCC 49-22-16.3(4), outside the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:

- i. the designated corridor, corridor adjustment, route and the route adjustment;
 - ii. all exclusion and avoidance areas within the adjustment area
- b. Certification that construction activities will not affect any known exclusion area;
- c. Certification that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist within the designated corridor and route;
- d. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;
- e. Provide specific information about any mitigation measures Company will take within the adjustment area;
- f. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- g. Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.

Company acknowledges and agrees that:

1. Written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity unless the Commission fails to act within ten working days of receipt of filing a complete adjustment application, in which case the adjustment is deemed approved.
 2. The initiation of the ten working days begins upon receipt of a complete filing, to include Company's certifications, supporting documentation and maps. However, Commission may extend the ten working day provision if Company, in the person of the key contact referenced above, is informed of the reason additional time is necessary for extension and has no objection to an extension.
41. When applicable, Company may submit the field studies from the original application for the corridor and route provided they cover the adjustment area.

Dated this 9th day of January, 2017.

SAVAGE BAKKEN CONNECTOR, INC.

By Mike Miller - Mike Miller

Its Vice President

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Savage Bakken Connector, Inc.
10-Inch Crude Pipeline Project – Williams County
Siting Application

Case No. PU-16-753

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (e.g., *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation

population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).