

Bakken North Crude Oil Pipeline – Williams County  
Plains Pipeline, L.P.  
*ND PSC Case No. PU-10-630*  
*Keitu Project #569-215*

Post-Construction Inspection Report

*June 2015*



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## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>2</b>
<b>PURPOSE AND SCOPE OF INSPECTION .....</b>	<b>2</b>
<b>METHODS.....</b>	<b>2</b>
<b>OBSERVATIONS/FINDINGS OF COMMISSION ORDERS .....</b>	<b>3</b>
1.    OBSERVATION/ FINDING #1.....	3
2.    OBSERVATION/ FINDING #2.....	3
3.    OBSERVATION/ FINDING #3.....	4
4.    OBSERVATION/ FINDING #4.....	4
5.    OBSERVATION/ FINDING #5.....	4
<b>ORDER PROVISIONS/ FACILITY SITING.....</b>	<b>4</b>
1.    ORDER #1.....	4
2.    ORDER #2.....	5
3.    ORDER #3.....	5
4.    ORDER #4.....	5
5.    ORDER #5.....	6
6.    ORDER #6.....	6
7.    ORDER #7.....	6
8.    ORDER #8.....	7
9.    ORDER #9.....	7
10.   ORDER #10.....	7
11.   ORDER #11.....	8
12.   ORDER #12.....	8
13.   ORDER #13.....	8
14.   ORDER #14.....	9
15.   ORDER #15.....	9
16.   ORDER #16.....	9
17.   ORDER #17.....	10
18.   ORDER #18.....	10
19.   ORDER #19.....	10
20.   ORDER #20.....	11
21.   ORDER #21.....	11
22.   ORDER #22.....	11
23.   ORDER #23.....	12
24.   ORDER #24.....	12
25.   ORDER #26.....	12
26.   ORDER #26.....	12
27.   ORDER #27.....	13
28.   ORDER #28.....	13
29.   ORDER #29.....	13
30.   ORDER #30.....	14
31.   ORDER #31.....	14
32.   ORDER #32.....	15
33.   ORDER #33.....	15
34.   ORDER #34.....	15



35. ORDER #35.....16  
36. ORDER #36.....16  
37. ORDER #37.....16

**CONCLUSIONS.....17**

**APPENDIX A: SITE PHOTOS.....18**

**APPENDIX B: FIGURES.....22**



**Plains Pipeline, L.P.**  
**Bakken North Crude Oil Pipeline**  
**Williams County, ND**

Prepared by Keitu Engineers & Consultants, Inc.

## **Executive Summary**

The State of North Dakota, acting through its North Dakota Public Service Commission, Division of the Public Utilities, has acquired Keitu Engineers & Consultants, Inc. to perform consulting services to perform construction inspections applying engineering and science principles for the purpose of ensuring that energy conversion and transmission facilities authorized by the NDPSC are constructed in compliance with the siting laws (N.D.C.C 49-22) and rules (N.D. Administrative Code Article 69-09) and applicable Commission orders for Case No. PU-10-630. Prior to the inspection, Keitu reviewed construction standards and issues and developed a PSC field observation report to be complete at an inspection for a crude oil pipeline.

The State of North Dakota, acting through its North Dakota Public Service Commission (PSC), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for post-construction siting inspections. This report addresses the Orders established by the PSC and issues established in File No. PU-10-630. The Crude Oil Pipeline (Project) is located in Williams County, ND. The pipeline is owned and operated by Plains Pipeline, L.P. (Plains Pipeline). Construction for the Project began in May of 2012 and was completed in March 2014. The purpose of the post-construction inspection was to ensure the Project was constructed in compliance with the siting laws, rules, and the applicable PSC Orders for the Project. Prior to the post-construction inspection, Keitu reviewed all Project documents to identify any and all aspects requiring site verification.

The site was visually inspected on June 10, 2015 by Keitu staff. Overall, the project was very well-maintained and in good condition. It appeared to be constructed as planned with numerous efforts to minimize impacts.

## **Introduction**

The construction of the Crude Oil Pipeline (Project) was completed in the March 2014. The Project is operated by Plains Pipeline, L.P. (Plains Pipeline). The Project comprises approximately of 79 mile long, 12.75-inch outside diameter underground crude oil pipeline that extends from the Plains Pipeline Trenton Station near Trenton, North Dakota, to an interconnection point with the existing Wascana Pipeline approximately 2.5 miles north of the town of Outlook, Montana in Sheridan County, Montana. The North Dakota portion of the Project will be approximately 32.1 miles in length and will extend from the Trenton Station to the North Dakota/ Montana border. The portion of the Project in North Dakota will be located entirely in Williams County. The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC), which issued its Findings of Fact, Conclusions of Law, and Order on Case No. PU-10-630 on February 1, 2012, granting a Certificate of Corridor Compatibility No. 127 and Route Permit No. 136 for the Project.

## **Purpose and Scope of Inspection**

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the PSC to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and welfare of the citizens of North Dakota. Construction inspections ensure the Project is constructed in compliance with siting laws, rules, and the applicable Commission Findings of Fact, Conclusions of Law, and Order Provisions (Order).

The North Dakota PSC retained Keitu Engineers & Consultants, Inc. (Keitu) to complete a post-construction inspection of the Project. The inspection process included a review of the Application for Corridor Compatibility and Route Permit, Order, and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, site visit observations, documentation of compliance deficiencies, and a summary of issues that should be addressed for the Project to be considered complete and in full compliance.

## **Methods**

Keitu reviewed North Dakota siting laws and rules, the Application for Certificate of Corridor Compatibility and Route Permit (Application), and the Order for the Project to identify what Project-specific documentation was required for compliance. Keitu then reviewed Project documents in the PSC Online Case Search to identify those siting laws, rules, and Application and Order assertions that already had written verification, those that still required documentation, and those that required physical site verification.

Samantha Swanberg, Staff Consultant, and Ryan Schaner, Field Technician of Keitu visited the Project area on June 10, 2015. The site was visually inspected along portions of the transmission line route by accessing as many points as feasible where road access was available. The inspection began at the Trenton Station in Section 35 of Township 154N, Range 102W, in Williams County and followed the line to the North Dakota / Montana border in Section 30 of Township 158N, Range 103W in Williams County. Digital photographs were taken showing typical Project infrastructure and documenting any problem areas (Appendix A). Geographic coordinates were recorded at observation points or potential problem areas using a handheld Global Positioning System (GPS) (Trimble GeoExplorer 6000 series). A map showing the location of the observation points is attached as Figure 1 in Appendix B.

## **Observations/Findings of Commission Orders**

The following section includes discussion of a list of components of the Project that were asserted in the Application and Orders which could be documented during the post-construction inspection to verify compliance with siting laws, rules and the Orders for the Project, via either written documentation or physical site verification. Included are detailed findings and observations from Keitu personnel involved in the post-construction inspection for the Plains Pipeline, L.P. Crude Oil Pipeline – Williams County.

### **1. Plains Pipeline, L.P.'s application for a waiver of procedures and time schedules is granted.**

In a September 7, 2011 motion (Docket #8), Patrick J. Fahn moved the Commission to deem the applications complete and issue a Notice of Filing and Notice of Hearing in the request of Plains Pipeline for a waiver of procedures and time schedules, a corridor certificate and a route permit for the construction of approximately 32 mile long, 12 inch underground crude oil pipeline from the Plains Pipeline Trenton Station near Trenton, ND to the North Dakota / Montana boundary, all in Williams County, ND, Case No. PU-10-630.

Observation #1 is deemed complete.

### **2. Certificate of Corridor Compatibility No. 127 is issued to Plains Pipeline, L.P., designating a corridor for the construction, operation, and maintenance of the proposed pipeline and associated facilities in Williams County, North Dakota. For purposes of the Certificate, the Corridor consists of the field survey corridor identified in late-filed Exhibit 10, which is incorporated by reference.**

On February 1, 2012 the Commission designated a transmission facility corridor for Plains Pipeline, L.P.'s approximately 32.1 miles of 12.75-inch outside diameter pipeline in Williams County, North Dakota for the transmission of crude oil. The certificate (Docket #41), was issued

in accordance with the Order of the Commission dated February 1, 2012 in Case No. PU-10-630 and was subject to the conditions and limitations noted in the Order.

Observation #2 is deemed complete.

- 3. Route Permit No. 136 is issued to Plains Pipeline, L.P., granting authority to construct and operate a 12.75-inch crude oil pipeline and associated facilities in Williams County, North Dakota. For purpose of the Permit, the Route is identified in late-filed Exhibit 10, which is incorporated by reference.**

On February 1, 2012, the Commission designated a transmission facility route for Plains Pipeline, L.P. for the construction of approximately 32.1 miles of 12.75-inch outside diameter pipeline in Williams County, North Dakota. The permit (Docket #41) was issued in accordance with the Order of the Commission dated February 1, 2012 in Case No. PU-10-630 and was subject to the conditions and limitations noted in the Order.

Observation #3 is deemed complete.

- 4. The October 28, 2011 Certification Relating to Order Provisions - Transmission Facility Siting (Certification), is incorporated by reference and attached to this Order.**

On October 28, 2011, Daniel Nerbonne of Plains Pipeline, L.P. signed the Certification Relating to Order Provisions-Transmission Facility Siting and accompanying Tree and Shrub Mitigation Specifications (Docket #41), binding Plains Pipeline to requirements set forth by the Commission in its Order.

Observation #4 is deemed complete.

- 5. To the extent there are any conflicts or inconsistencies between the Application and the Certification provisions, the Certification provisions control.**

Observation #5 was followed.

## **Order Provisions/ Facility Siting**

- 1. Plains Pipeline understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission 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 Plains Pipeline shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.**

On February 1, 2012 the Commission designated a corridor for Plains Pipeline, L.P., for the construction, operation, and maintenance of the proposed pipeline and associated facilities in William County, North Dakota. The certificate (Docket # 41) was issued in accordance with the

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Order of the Commission dated February 1, 2012 in Case No. PU-10-630 and was subject to the conditions and limitations noted in the order.

Order #1 is deemed complete.

- 2. Plains Pipeline agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Plains Pipeline representative, its construction supervisor, and a representative of Commission Staff, to ensure that Plains Pipeline fully understands the conditions set forth in the Commission's order.**

A preconstruction meeting was held on April 17, 2012 (Docket #48) and included the following personnel: Jim Fleetwood (Project Engineer with Plains Pipeline), Mark Bordelon (Project Manager with Plains Pipeline), Mike Bondurant (Contractor Project Manager with Tomahawk Pipeline), Kyle Thomas (Contractor with Plains Pipeline), Mike Walcavich (Plains Pipeline), Ron McCreery (Construction Field Superintendent with Plains Pipeline), Patrick Fahn (The ND Public Service Commission), Tim Spilman (Inspector with Keitu Engineers), William McCarthy (Environmental Compliance with E3 Environmental) and Katie Schmidt (E3 Environmental).

The conference included a review of the order's findings of fact and ordering clauses, a review of penal provisions in the siting statute, and a question and answer period.

Order #2 is deemed complete.

- 3. Plains Pipeline 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.**

On August 12, 2011, Lawrence Bender provided the Commission with an Application for Waiver or Reduction of Procedures and Time Schedules & Certificate of Corridor Compatibility & Route Permit as prepared by E3 Environmental, LLC (Docket # 5). Within the report, numerous State and Federal agencies including; but not limited to, State Historical Society of North Dakota, North Dakota Parks and Recreation, North Dakota Game and Fish Department, North Dakota State Land Department and the U.S. Fish and Wildlife Service were contacted.

Order #3 is deemed complete.

- 4. Plains Pipeline 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.**

According to the preconstruction meeting minutes (Docket #48), William McCarthy with E3 Environmental was asked to provide copies of the permits/authorizations for the project which have not previously been submitted to the Commission. These include but are not limited to:

U.S. Army Corps of Engineers Nationwide Permit #12 Authorization, North Dakota Department of Health (ND DoH) Construction Stormwater Permit Authorization and ND DoH Hydrostatic Test Water Discharge Permit Authorization. On May 5, 2012 the Commission received copies of U.S. Army Corps of Engineers Nationwide Permit #12 Authorization and the North Dakota Department of Health (ND DoH) Construction Stormwater Permit Authorization (Docket #47). The discharge permit for hydrostatic testing of pipe was in process, but not yet required. After an online docket review of the Commission's Project files, it appears not all permits have been supplied to the Commission. The Commission can request documentation of permits, if required.

Order #4 is complete contingent on permits being supplied to the Commission upon request.

- 5. Plains Pipeline agrees to inform the Commission of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Plains Pipeline shall keep the Commission update on construction activities on a weekly basis.**

On May 22, 2012 Plains Pipeline informed the Commission of their intent to start construction on May 23, 2012 (Docket #49). Plains Pipeline submitted weekly progress reports via email to the Commission starting with Docket # 50 throughout the construction process. The weekly progress reports for the weeks ending 12-23-2012 and 12-30-2012 are missing due to the office being closed. By comparing the progress reports from before and after the construction activities can be interpreted. It is at the discretion of the Commission to decide whether or not to request this additional documentation.

In Keitu's opinion, Order #5 is complete.

- 6. Plains Pipeline 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.**

No exposed piping existed along the route or at road crossings at the post-construction site observation points. Potholing to find the exact depth of pipe was not performed during post-construction inspection

Order #6 is complete.

- 7. Plains Pipeline 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.**

Plains Pipeline has complied with the applicable statues, rules, regulations, standards, and permits of other state or federal agencies to date. The Commission has not been suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate.

Order #7 is deemed complete.

**8. Plains Pipeline 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.**

According to the preconstruction meeting minutes (Docket #48), Mike Walcavich and Ron McCreery with Plains Pipeline was designated as the keeper of records for Plains Pipeline. During the July 17, 2012 construction inspection, records that were being kept were available for viewing (Docket #60).

Order #8 is deemed complete.

**9. Plains Pipeline agrees to construct and operate the transmission facility in the manner described in Plains Pipeline's application, in any late filed exhibits and supplemental materials, and in accordance with all applicable safety requirements.**

Plains Pipeline constructed the pipeline in accordance with the application and all applicable safety requirements. On July 17, 2012 a construction field inspection was conducted by Keitu Engineers and Consultants (Docket #60). Based on the inspection, the project was constructed as proposed to the Commission. The construction and operation of the facility is in accordance with all safety requirements.

No piping leaks were noticed along the route or at road crossings at the post-construction site observation points. This would indicate satisfactory construction practices and continuing pipeline maintenance.

Order #9 is deemed complete.

**10. Plains Pipeline agrees to report promptly to the Commission the presence in the permit area of any critical habitat or threatened species, endangered species, bald eagles, or golden eagles of which Plains Pipeline becomes aware and which were not previously reported to the Commission.**

A review of the weekly construction progress reports (Dockets #'s 50-54, 56-59, 62-63, 68-71, 74-76, 78-79, 81-, 83-105, 108-114,116, 119-124, 126-144) did not note any critical habitat in the area during construction. No report of any critical habitat of threatened or endangered species, or of bald or golden eagle's notification to the Commission was found in Case File No.

PU-10-630. There was a 3<sup>rd</sup> party inspector from On & Offshore Quality Specialists on site during all construction to monitor environmental issues as necessary.

Order #10 is deemed complete.

**11. Plains Pipeline 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.**

SWCA Environmental Consultants conducted a Class I and Class III cultural resource inventory for the proposed Bakken North Pipeline project. According to the report, two previously recorded sites were revisited and 19 cultural resources were newly recorded (Docket #5). Both of the previously recorded resources and seven of the newly recorded resources were not eligible for the National Register of Historic Places (NRHP). The six isolated finds are also recommended not eligible for the NRHP. The five prehistoric stone circle sites and the one stone cairn site have been left unevaluated due to their NRHP eligibility. Reroutes were established to avoid the sites recommended eligible. SWCA recommended a 50-foot-wide avoidance buffer be placed around four of the eligible sites and fencing near the avoidance buffers to ensure that all construction activities remain within the corridor.

These surveys supported a finding of “no historic properties affected” and “no significant sites affected” provided the project area is as located and described in the report, and stipulated avoidance measures for unevaluated and eligible sites are followed (Docket #5).

Order #11 is deemed complete.

**12. Plains Pipeline 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 and clearance to proceed is given by the Commission.**

No cultural resources, paleontological site, archeological site, historical site, or grave site was discovered during construction. This is based on the review of weekly construction progress reports and verification that no correspondence was identified in the Commission’s file.

Order #12 is deemed complete.

**13. Plains Pipeline understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Plains Pipeline to open cut the road.**

According to the preconstruction meeting minutes (Docket #48), Mark Bordelon with Plains Pipeline stated that Plains Pipeline will bore all roadway crossings, including township, County, and State roadways.

From the post-construction site observation points, it appears that all road crossings were bored. The roads over the pipe crossings appeared undisturbed and to grade.

Order #13 is deemed complete.

**14. Plains Pipeline 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.**

Existing roads and trails were to be left in a comparable or better condition than what existed before construction. A field construction inspection was conducted on July 17, 2012 by Keitu Engineers and Consultants, Inc. During the site visit all existing roads appeared to be in good working order (Docket #60). It also states that no temporary roads were required for this project.

From the post-construction site observation points, it appears that all pre-existing roads and lanes used for construction were restored to their previous conditions. These areas appear to be revegetated from the observation points.

Order #14 is deemed complete.

**15. Plains Pipeline 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 approved by the Commission are taken.**

Based on review of the weekly progress reports, construction was suspended or delayed when weather conditions were such that construction activities should not occur.

Order #15 was followed.

**16. Plains Pipeline 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 stripped and segregated from the subsoil. Except along segments of the line using the double ditching method, any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling 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.**

A field construction inspection was conducted on July 17, 2012 by Keitu Engineers and Consultants, Inc. Within the construction inspection report, it was mentioned that the topsoil (Docket #60) was segregated from the subsoil as outline in this Order. During the post-construction inspection, the vegetation along the pipeline route was in favorable condition and the areas along the pipeline observed were to grade evenly to the adjacent soil level which would indicate that this Order was followed properly.

Order #16 is deemed complete.

**17. Plains Pipeline 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.**

Construction activities disturbed soils and vegetation to an extent that would require some reseeding following completion of operation. The ground was re-graded to the approximate original contour and re-vegetated (rangeland) or tilled (cropland) when the work was completed. Soils were smoothed to the natural contours of the surrounding areas. Reseeding with native perennial species compatible with the surrounding vegetation appeared to occur. If surface disturbance did not significantly impact nearby vegetation, plants regenerated or sprouted from onsite existing propagates.

Documentation at the request of the ND PSC of re-vegetation surveys and noxious weed surveys will be required for Order #17 to be complete.

**18. Plains Pipeline understands and agrees that its obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the transmission facility.**

Regular maintenance and inspection are performed during the life of the facility to ensure its continued integrity. Inspections are limited to the right-of-way. When problems are found, repairs will be scheduled. If damages to crops occurred during maintenance and repairs, reimbursement is be made to the landowner, consistent with the terms of the easement.

Based on the post construction inspection, Plains Pipeline has performed reclamation and maintenance of the right-of way and they have continued this since the facilities have been placed in operation.

Order #18 has been followed to date.

**19. Plains Pipeline understands and agrees that is obligation for reclamation and maintenance of the transmission facility, associated facilities, and roadways will continue throughout the life of the transmission facility.**

Regular maintenance and inspections are performed during the life of the facility to ensure its continued integrity. When problems are found, repairs will be scheduled. If damages to crops occurred during maintenance and repairs, reimbursement is made to the landowner, consistent with the terms of the easement.

Based on the post-construction inspection, Plains Pipeline has performed reclamation and maintenance of the facility.

Order #19 has been followed to date.

**20. Plains Pipeline agrees to comply with the Tree and Shrub Mitigation Specifications, attached.**

According to the Tree and Shrub replacement plan (Docket #146) that was prepared by SWCA, many of the trees and shrubs were avoided, due to several bores and neck downs along the pipeline route. Approximately 196 trees and shrubs were removed during construction. A total of 1,031 trees/shrubs were replanted in June 2014 as replacements, which more than fulfills the 2:1 mitigation requirements. Trees will be inspected once per year for three years following construction of the project.

Order #20 is deemed incomplete until documentation can be provided to the Commission indicating survival rates on a yearly basis for 3 years following replanting.

**21. Plains Pipeline understands and agrees that it shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the construction of the transmission facility.**

According to the Proposed Findings of Fact, Conclusions of Law, and Order (Docket #39) the route will pass within 500 feet of one occupied residence. Plains Pipeline has obtained a written waiver of the Avoidance Area criteria from the owner of the residence. After a review of the Commission's Project files, it appears that landowner waivers have not been supplied to the Commission and are available upon request (Docket #5). There was no record of television or residential radio interference found in the Commission's files.

Order #21 is deemed complete.

**22. Plains Pipeline understands and agrees that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.**

According to the field construction investigation report (Docket #60) prepared by Keitu Engineers & Consultants, Plains Pipeline has installed new fence gates at each property line along the pipeline.

During the post construction investigation on June 10, 2015 fences were observed. There was one location next to the Montana border where the fence may not have been continued as far as it was previously, or fixed properly; however, this could just be normal wear and tear, if there was no landowner complaint then this order should be complete.

Order #22 is deemed complete.

**23. Plains Pipeline understands and agrees that it shall repair or replace all broken or damaged drainage tile during all phases of construction and operation of the transmission facility.**

According to the field construction investigation report on July 17, 2012, Plains Pipeline did not find any drainage tile prior to this field visit (Docket #60). Landowners were contacted for their knowledge of drain tile locations prior to the pipeline installation and no one was aware of drainage tile in the area. By reviewing the weekly progress reports and the Commission's files, no encounter with drainage tile was reported.

Order #23 is deemed complete.

**24. Plains Pipeline understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Plains Pipeline unless otherwise negotiated with landowners.**

A review of the Project files did not indicate that any temporary staging areas were required on land other than owned by Plains Pipeline unless otherwise negotiated with landowners. All temporary facilities were removed, and the staging and laydown areas were cleaned up. Reclamation along the right-of-way was continuous and coordinated with construction.

Order #24 is deemed complete.

**25. Plains Pipeline 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.**

A review of the weekly construction reports showed that Plains Pipeline and its contractors kept the site clean throughout the construction of the Project. No unusual waste was noted during the post construction site visit on June 10, 2015.

Order #25 is deemed complete.

**26. Plains Pipeline 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.**

Construction activities disturbed soils and vegetation to an extent that would require some reseeded following completion of operations. The ground was re-graded to the approximate original contour and re-vegetated (rangeland) or tilled (cropland) when the work was completed. Soils were smoothed to the natural contours of the surrounding areas. Reseeding with native perennial species compatible with the surrounding vegetation appeared to occur. If surface disturbance did not significantly impact nearby vegetation, plants regenerated or sprouted from onsite existing propagates. During the site visit on June 10, 2015 no issues regarding the reclamation of the surrounding area were noted.

Order #26 is deemed complete.

**27. Plains Pipeline understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.**

During the field inspection on July 17, 2012, coning, ribbon and signing was observed on site (Docket #60). Based on the post-construction inspection, Plains Pipeline restricts public access to the facility. Signs and chain-link fence surround the main facility and the above ground valve stations.

Order #27 is deemed complete.

**28. Plains Pipeline understands and agrees that it shall advise the Commission of any extraordinary events which take place at the site of the transmission facility, including but not limited to injuries to any person, or the death of any threatened or endangered species on the site within five business days of such event.**

A review of the Project files indicated no extraordinary events that took place on site. There were a few minor events such as one small first aid incident and a truck caught on fire, not on the right-of-way, cause unknown (Docket #52), contractor cut equipment tracking road across a coulee which had been designed for a horizontal directional drill (HDD), met with landowner discussed situation, restoration began 2 days after incident, and was continuously monitored (Docket #56). While grinding a weld the spark from the grinder ignited the dry grass and approximately 60 acres and several fence posts were scorched, contractor worked with landowner to replace fence and restoration (Docket #75). There was a personal incident of a twisted knee (Docket #56). These items were noted in the weekly construction progress reports as given the Docket numbers above.

Order #28 is deemed complete.

**29. Plains Pipeline understands and agrees that it shall implement a procedure for how complaints concerning the transmission facility will be handled by Plains Pipeline.**

According to the preconstruction conference meeting minutes (Docket #48) during construction all complaints received would be directed to the appropriate Right-of-Way representative, the District Manager was designated to be the point of contact for all complaints concerning the facility after the pipeline is in service.

Order #29 is deemed complete.

**30. Upon request, Plains Pipeline agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.**

Plains Pipeline provided sufficient design specifications in the Application. The certificate of corridor compatibility and route permit and appendices including design drawings were (Docket #5) filed August 12, 2011.

Order #30 is deemed complete.

**31. Plains Pipeline 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. Plains Pipeline understands and agrees to obtain written approval from the Commission prior to any modifications to the site plan or the transmission facility. Approval may be granted after notice and opportunity for hearing.**

Plains Pipeline submitted three minor route requests to the Commission throughout the construction. The first route modification request was on July 6, 2012 (Docket #'s 55 & 57). The encroachment involved an 8-inch steel pipeline that was installed by Hiland. The installment of the line was after the siting and easement procurement by Plains, but prior to May 30, 2012.

The second route amendment application was on July 23, 2012 (Docket #61). A previously unknown encroachment was identified in the approved workspace and alignment. The encroachment involved a recently installed well pad and its associated infrastructure. The route modification created an adequate distance between the wellhead production casing and the pipeline.

The third minor route modification was requested on September 24, 2012 (Docket #77). A recently constructed pipeline, owned and operated by Banner Pipeline Company, was found to encroach upon the project's approved workspace and occupy portions of the permitted route. The route modification provided sufficient offset distance between each entities' pipeline to accommodate construction as well as future operations and maintenance activities.

By reviewing the Commission's report files, all the route modifications were approved (Dockets #'s 64-67, 72-73, 80, and 82).

Order #31 is deemed complete.

- 32. Plains Pipeline agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission, and will provide this information within three months of the Commission order approving the corridor. Plains Pipeline also agrees, to provide an electronic version of the approved corridor that can be imported into ESRI GIS mapping software within 3 months of the Order. 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.**

Plains Pipeline initially provided sufficient design specifications in the Application and exhibits to understand and verify the proposed transmission facility. On August 12, 2011 Plains Pipeline provided the anticipated pipeline route in Docket #5. There was no specific line item Docket #5 mentioning if the GIS electronic files were transmitted to the ND PSC; however, GIS electronic files were transmitted directly to the 3<sup>rd</sup> party inspector from the contractor for reference in inspection of the pipeline.

Order #32 is deemed complete.

- 33. Plains Pipeline agrees to provide the Commission with both an electronic and a paper copy of the design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within three months of the completion of the construction. Plains Pipeline also agrees to provide an electronic version of the as-built facility design specifications 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.**

Plains Pipeline initially provided sufficient design specifications in the Application and exhibits to understand and verify the proposed transmission facility. On April 8, 2013, the Commission received paper and electronic copies of the final as-built facility design specifications (Docket #107). The Commission received as-built overview maps located in Docket #145.

Order #33 is deemed complete.

- 34. Plains Pipeline understands and agrees that the authorization 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.**

A review of the Project files did not indicate that any authorizations granted by the Certificate of Site Compatibility for the facility were modified by the Commission to date. Should the Commission deem necessary in the future to modify the corridor certificate and route permit it can do so if deemed necessary to further protect the public or the environment. No other information was found in the case file to deem that the Commission should modify the Certificate of Corridor Compatibility (Number 127) and Route Permit (Number 136).

Order #34 is deemed complete.

**35. Plains Pipeline understands and agrees that in the event Plains Pipeline desires to construct, within any corridor granted by certificate of Corridor Compatibility in this proceeding, a transmission facility or energy conversion facility that was not included in Plain Pipeline's application in this proceeding, Plains Pipeline shall apply to the Commission for a Route Permit or Site Certificate for the facility.**

A review of the project files did not indicate that any authorizations granted by Certificate of Corridor Compatibility for a transmission facility or energy conversion facility were modified by the Commission to date.

Order #35 is deemed complete.

**36. Plains Pipeline shall notify the Commission, as soon as reasonable 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, Plains Pipeline 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 and clearance to proceed has been given by the Commission or Commission staff.**

An online review of the docketed project files did not indicate that any damages occurred to any underground facilities during construction.

Order #36 is deemed complete.

**37. Plains Pipeline understands and agrees that the corridor certificate and route permit are subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate or permit or subsequent modification, or failure to comply with applicable statutes, or rules, regulations, standards, and permits of other state or federal agencies.**



The Commission has not suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate. Plains Pipeline has complied with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies to date.

Order #37 is deemed complete.

## Conclusions

Overall, the Project appeared to be constructed as designed with minimal impacts to the surrounding natural and human environment. The Project site was in good condition and well maintained.

The project has been constructed in compliance with the siting laws and rules and applicable Commission orders. I declare that, I have the specific qualifications based on education, training, and experience to assess a project of this nature.

Sincerely,

A handwritten signature in blue ink that reads "Nathan J. Gaffrey".

Nathan J. Gaffrey, PE  
Project Engineer

## **Appendix A: Site Photos**



**Photo 1 – Trenton Station**



**Photo 2 – Typical mainline block valve station**



**Photo 3** – Shows revegetated field and typical pipeline markers



**Photo 4** – Typical pipeline markers at road crossing



**Photo 5** – Typical pipeline markers at road crossing



**Photo 6** – Fence may not have been extended as far as it was previously, or possibly just normal wear and tear

**Appendix B: Figure**

**Figure 1**

**ND PSC Case Number  
PU-10-630**

**Plains Pipeline, L.P.  
Bakken North  
Crude Pipeline**

**Legend**

- Observation Points
- Pipeline Route
- Highway
- ..... State Border

