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September 11, 2015

North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
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Attn: Julie Prescott

Meadowlark Midstream Company, LLC
10-inch Crude Oil Pipeline
Global Stampede Pipeline Project
Divide and Burke Counties, ND
ND PSC Case No. PU-14-823
Keitu Project No. 569-1062

In accordance with your request, Keitu Engineers & Consultants, Inc. (Keitu) is pleased to submit for your use two hardcopies and one electronic copy of the Global Stampede Pipeline Construction Report #2.

Keitu appreciates the opportunity to work with you on this project and I hope this report meets with your complete approval. If you have questions or comments, please contact me at the phone number above or via email at ngaffrey@keitu.com.

Sincerely,

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

Nathan J. Gaffrey, PE
Project Engineer

Enclosure: Construction Inspection Report #2 (2 Copies)
CD-ROM copy of associated files

50 **PU-14-823** Filed: 9/15/2015 Pages: 15
Construction inspection report No. 2

Keitu Engineers & Consultants, Inc.
Nathan Gaffrey, PE

Meadowlark Midstream Company, LLC
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Construction Inspection Report #2

September 2015



Prepared By:
Keitu Engineers & Consultants, Inc.
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Meadowlark Midstream Company, LLC
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Prepared by Keitu Engineers & Consultants, Inc.

Executive Summary

The State of North Dakota, acting through its North Dakota Public Service Commission (NDPSC), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for construction and post-construction siting inspections. This report represents the findings of the construction inspection performed on Wednesday, July 22, 2015. The Global Stampede Pipeline (Project) is located in Divide and Burke counties in the State of North Dakota. Construction for the Project began in June 2015 with anticipated completion in October 2015. The purpose of the construction inspection was to ensure the Project was being constructed in compliance with the siting laws, rules, and the applicable PSC Order for the Project. Prior to the construction inspection, Keitu reviewed all Project documents to identify any and all aspects requiring site verification.

The Project was visually inspected on September 10, 2015 by Keitu Engineers & Consultants, Inc. (Keitu) staff Nathan Gaffrey, PE, Project Engineer and Jeremiah Trnka, Staff Engineer. In addition, the Keitu staff was escorted around the project by Dean Blikre, Construction Manager, and Nathan Brady, Land Acquisition, both with Summit Midstream Partners, LLC. Mr. Blikre has been overseeing the construction of the project since its inception.

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 Global Stampede Pipeline is currently under construction at the time of this report. The Project will be operated by Meadowlark Midstream Company, LLC. The Project will be a 10-inch crude oil pipeline, approximately 46 miles long and is intended to deliver approximately 50,000 barrels per day under normal operation conditions between the Divide Pump Station (DPS), Divide Co. and the Basin Transload Facility (BTRF), Burke Co. 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-14-823 on May 13, 2015, granting a Certificate of Site Compatibility for Corridor Compatibility No. 166 and Route Permit No. 178.

Purpose and Scope of Inspection

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission 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 (Order).

The North Dakota PSC retained Keitu Engineers & Consultants, Inc. (Keitu) to complete construction inspections and post-construction inspections of the Project. The inspection process included a review of the Application for a Certificate of Site Compatibility, 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, if any, that should be addressed for the Project to be considered in full compliance.

Methods

Keitu reviewed North Dakota siting laws and rules, the Application for a Certificate of Site Compatibility, and the Order for the Project to identify what Project-specific documentation was required for compliance.

Nathan Gaffrey, Project Engineer, and Jeremiah Trnka, Staff Engineer, of Keitu visited the Project site on September 10, 2015. The site was visually inspected by Keitu staff with a jobsite site survey lead by Dean Blikre, Construction Manager, and Nathan Brady, Land Acquisition, both with Summit Midstream Partners, LLC (Summit). Digital photographs were taken showing typical Project infrastructure and documenting problem areas, if any, and are located in Appendix A. Appendix B contains a map of the pipeline route with points of observation that were taken.



General Project Information

General Contractor: Summit Midstream Partners, LLC

Additional Pertinent Onsite Contractors:

Pipeline X-Ray Contractor: Braun InterTech, Minneapolis, MN

Pipeline Survey Contractor: LW Survey Company, Denver, CO

Pipeline Environmental Contractor: Benchmark Environmental, Dallas, TX

Site Visit Observations

Temperature: 37 °F, Calm-No Wind

Time: 8:00 AM

At the time of the inspection, the project was in numerous stages of construction depending on which section of the project was visited. The project construction has been started at both the west end and the east end and will eventually meet in between the two ends. The inspection started on the west end of the pipeline, where the existing Meadowlark Midstream Divide County Lateral Pipeline and new Global Stampede Pipeline meet together. At this location there is an existing 20,000 barrel crude oil storage tank, a new 55,000 barrel crude oil storage tank under construction and also a Lease Automatic Custody Transfer (LACT) station under construction. The LACT station will have a total of six transfer stations where tractor trailers can load and unload crude oil.

It was previously mentioned that the containment dike containing both storage tanks was currently not large enough in capacity in the July 2015 construction report. Since then the containment dike has been enlarged to meet adequate capacity, with the final containment capacity calculations having been prepared by Summit. In addition, two eighteen-inch diameter manually operated berm drains have been placed in the northwest portion of the containment to allow precipitation freeboard to be drained out. Per EPA standards for a nonproduction site, the containment must have the capacity for a secondary means of containment sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

Pipeline installation was viewed from initial trenching to backfilling. The pipeline is welded, inspected, and hydro tested to 125% of its maximum operating pressure. Inspection of the pipeline welds is being performed using the X-Ray method which detects any defects in the weld. The pipes' epoxy coating thickness is tested three separate times. It is tested upon material arrival to the job site, after coating the weld joint, and lastly before it is lowered in to the trench. The pipes' epoxy coating must test to be 13 mils along the length of the pipe and 30 to 45 mils at

each coated and welded joint to meet the project requirements. In instances where the piping fails the test, the pipe is both recoated and retested.

At the time of this inspection, the right-of way had been cleared the full length of the pipeline route. Piping was placed in the trench for all of the route with exception of a few miles. During the inspection, underground road borings were being completed at a few locations. Boring under the road crossings allows for a much cleaner, non-destructive method of construction. A special type of pipe is being used at the bored locations that has additional epoxy coating with a thickness of 30 to 45 mils on the pipe that allows it to be more durable when being pulled through the borehole. The pipeline installation contractor was in the process of setting and installing all of the 5 block valve stations. Cathodic protect was also being installed at these block valve stations.

The backfilling of soil has been performed for much of the pipeline route. Top soil is being placed in the pipeline trench last and graded as close as possible to the existing grade. Due to a recent 4-inch rain event, much of the pipe trench that hadn't been previously backfilled was having the water pumped out of it before backfill could take place. The pipeline is being buried at a minimum depth of 5 feet below grade. The topsoil had not been seeded to have native species of the area at the time of the site visit. This aspect will be addressed in the final post-construction report after one full growing season has taken place. It is anticipated that a final-post construction report will be completed in the summer of 2016.

Many erosion control measures were being employed along the construction right-of-way. Silt fences are being used in probable high erosion areas in order to prevent the trenching soil to flow out of the right-of-way during precipitation events. Throughout the project the construction crews were diligent in laying down matting where excessive rutting could occur. The environmental contractor inspects the erosion control measures every 14 days or after a rainfall event greater than 0.25 inches to verify that they are intact and working properly.

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.



Certification

I declare that, I have the specific qualifications based on education, training, and experience to assess a property of the nature, I believe to the best of my professional knowledge the contents of this report accurate represents the condition of this project to date.

Nathan J. Gaffrey, P.E.
Project Engineer

Appendix A – General Project Pictures



Picture 1 - New 55,000 barrel storage tank nearly completely constructed



Picture 2 - Piping serving future truck LACT area



Picture 3 - Tractor Trailer LACT area west end of pipeline



Picture 4 - Typical area where backfill and grading have taken place



Picture 5 - Typical piping cathodic protection point



Picture 6 - Block valve station #3 being installed



Picture 7 - Piping trencher in operation



Picture 8 - Pipe being placed in trench



Picture 9 - Typical matting set at critical areas



Picture 10 - Inside view of LACT on east side of pipeline



Appendix B – Project Map

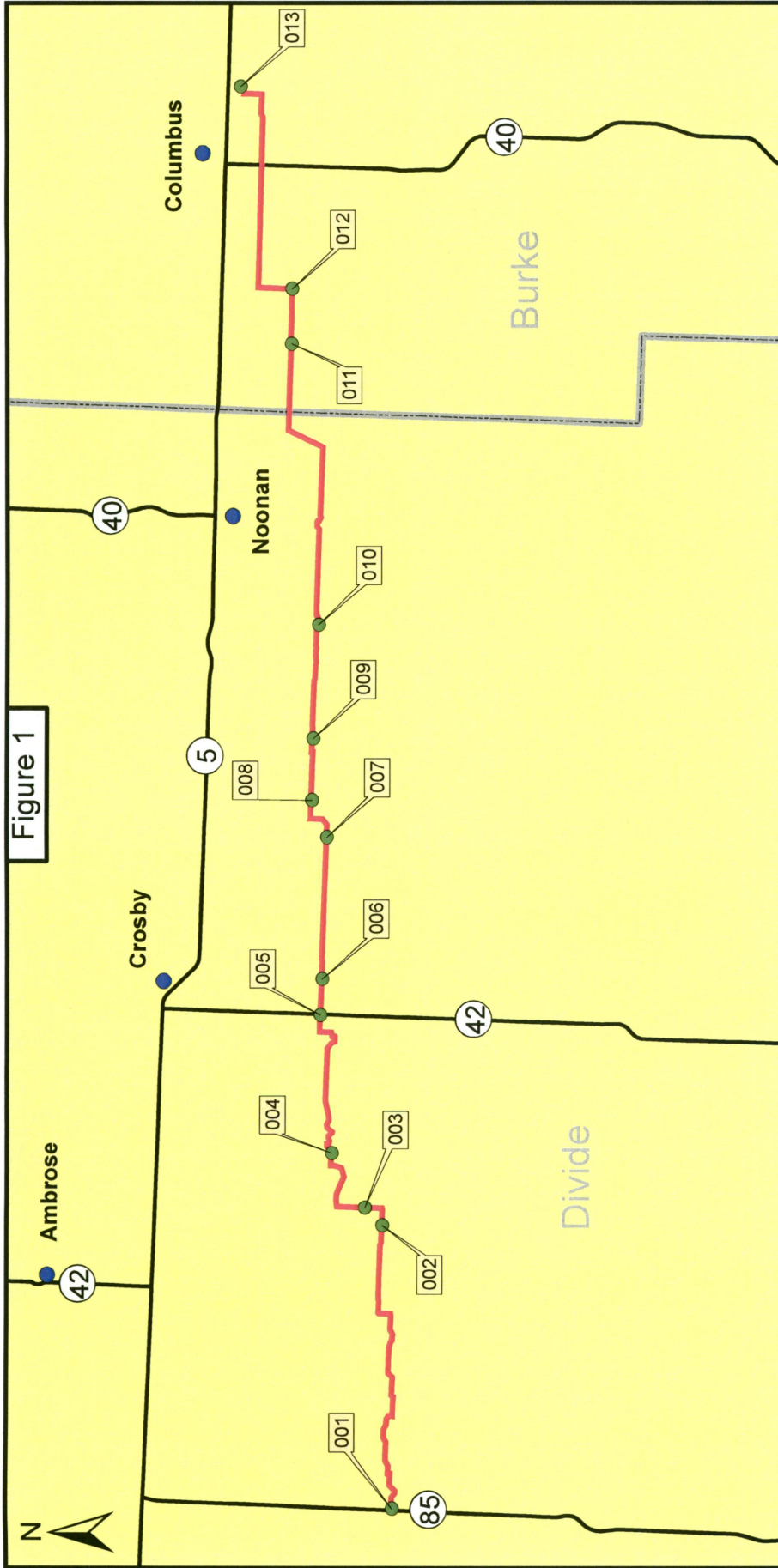


Figure 1

ND PSC Case Number PU-14-823
 Meadowlark Midstream Company, LLC

10-inch Crude Oil Pipeline
 Divide and Burke County
 Global Stampede Pipeline Project

Legend

- Observation Points
- Pipeline Route
- Counties

