

New Town Expansion Project
Mountrail County
Certificate of Corridor Compatibility Application
June 2015



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July 2012 – pp. 47-49 only

APPENDIX 2.B North Dakota Pipeline Authority
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May 23, 2013 – pp. 1-24 only

APPENDIX 2.C Lynn Helms, NDIC
Director’s Cut Presentation
May 13, 2015

INTRODUCTION

Hiland Crude, LLC (“Hiland”), submits this Certificate of Corridor Compatibility Application to the North Dakota Public Service Commission (“Commission”) for the conversion of an approximately 42.5-mile-long, 8-inch existing crude oil gathering pipeline to a transmission line and construction of additional above ground facilities. The pipeline is located within Mountrail County in North Dakota and is known as the New Town Extension Pipeline (the “New Town Pipeline”), which connects to Hiland’s Market Center Pipeline System (“Market Center System”). The existing Market Center System is currently the only system capable of transporting crude oil from lease sites in Williams, McKenzie, and Mountrail Counties, North Dakota with connections to transmission pipelines that can transport the crude oil to refineries located on the Gulf Coast, Midwest, Rockies and Northeastern U.S. without utilizing truck or rail transport. Proposed construction necessitating conversion includes a proposed interconnect facility (hereinafter referred to as the “New Town Interconnect”) with a third party New Town Terminal and a modification of the existing New Town Receipt Station. The conversion of the New Town Pipeline, the modification of the existing New Town Receipt Station, and the New Town Interconnect will collectively be referred to as the “New Town Expansion Project.”

The New Town Pipeline currently provides gathering services for producers seeking to move crude oil to points near the southern terminus of the New Town Pipeline. Various take-away options for producers gathering production to the New Town Terminal include rail and pipeline facilities. Recently, Hiland has placed in service a long haul crude oil transportation pipeline (the “Double H Pipeline”), which originates in Dore, North Dakota, and transports crude oil to a terminus at Guernsey, Wyoming. The Double H Pipeline has a current transportation capacity of approximately 75,000 barrels per day to move crude oil out of North Dakota to Guernsey, where producers have a variety of options to further move crude oil to Cushing, Oklahoma or other ultimate markets.

The Double H Pipeline provides critical transportation infrastructure to provide producers a much needed, permanent outlet for crude oil produced in the Bakken Shale to ultimate markets in the mid-continent. With the Double H Pipeline being placed in-service, producers now desire to use the Hiland Market Center System to move crude oil to the Double H Pipeline as a potential destination point, which is interconnected with the Market Center System at its most westerly point. This desire has created commercial demand for Hiland’s customers to use the New Town Pipeline for south-to-north flow, bringing barrels of crude oil from the New Town Terminal and other nearby points into the Market Center System, to ultimate destination points at or near the Double H Pipeline. To facilitate the requirements of Hiland’s customers producing crude oil to use the New Town Pipeline to move barrels of crude oil to westerly destination points on the Market Center System, Hiland is filing this Application for the New Town Expansion Project.

In accordance with Chapter 49-22 of the North Dakota Century Code, Section 69-06-08-02 of the North Dakota Administrative Code, and the Commission’s Energy Conversion and Transmission Facility Siting Guidelines, Hiland provides the following information to support its request for a Certificate of Corridor Compatibility for the New Town Expansion Project.

SECTION A DESCRIPTION OF PROPOSED FACILITY

A.1 Type and Size of Facility

A.1 (a) Type

The New Town Expansion Project consists of a modification to the existing New Town Receipt Station and installation of interconnect facilities to the third party storage facility at the New Town Terminal. The modification of the New Town Receipt Station will result in the conversion of an existing 42.5-mile-long crude oil gathering pipeline to transmission service.

For clarity in this document, the three portions of the New Town Expansion Project will be referred to as follows:

New Town Interconnect – The proposed interconnect will be constructed within the pre-existing third party Targa Badlands LLC (“Targa”) New Town Terminal. The interconnect will consist of measurement facilities, interconnecting piping for receipt of crude from Targa’s existing 30,000 barrel (“bbl”) tank, and associated above-ground appurtenances and ancillary electrical control systems. Piping will then connect the proposed equipment to Hiland’s existing New Town Pipeline where the right-of-way (“ROW”) abuts the Targa facility. All construction and associated activities will occur on previously disturbed areas.

New Town Receipt Station – A modification of Hiland’s pre-existing 5 acre facility, which consists of valves, pumping, metering, traps, a 1,200 bbl pressure relief tank, and associated appurtenances. The proposed project involves conversion of the 1,200 bbl pressure relief tank to an inline supply tank, with the addition of associated above-ground appurtenances and ancillary electrical and control systems. The purpose of this conversion is to improve suction pressure control to the pumps at the existing New Town Receipt Station.

New Town Pipeline – The existing 42.5 mile gathering pipeline requiring conversion to transmission service. There will be no modification to the New Town Pipeline. This pipeline runs from the Dakota Plains Rail Terminal Interconnect north to the White Earth Injection Station, which connects the New Town Pipeline to the Market Center System. Other surface facilities located within the ROW along the New Town Pipeline include pipeline markers, valves, and other ancillary facilities along the length of the pipeline. All of these facilities are pre-existing.

Due to the increased volume of crude oil being gathered through the New Town Pipeline and the changing market dynamics of where producers wish to move their crude oil, as described in more detail above, it is necessary for Hiland to install the New Town Interconnect and convert the New Town Receipt Station tank to facilitate the movement of crude oil across the Market Center System and to facilitate ultimate destinations on that system, thereby converting the New Town Pipeline from a gathering line into a transmission line. Because the system is bi-directional, this conversion affects the pipeline both to the north and to the south of the New Town Receipt Station.

A.1 (b) Size

Construction of the New Town Pipeline as a gathering line involved the installation of an 8-inch nominal diameter pipeline with a nominal wall thickness of 0.188 inches. The maximum

operating pressure (“MOP”) of the New Town Pipeline is 1,440 pounds of pressure per square inch gauge (“psig”).

For construction of the New Town Pipeline, 8-inch ANSI 600, flange end by flange end, full port, rising stem gate valves and similar ball valves were utilized for the New Town Pipeline. These valves were manufactured in accordance with American Petroleum Institute (“API”) Standard 6D “API Specification for Steel, Gate, Plug, Ball and Check Valves for Pipeline Service.” The MOP of the valves is 1,440 psig. Any valves necessary for the proposed New Town Expansion Project construction will be consistent with these specifications.

The steel pipe utilized for construction of the New Town Pipeline meets United States Department of Transportation (“US DOT”) regulations, specifically the design criteria outlined in 49 C.F.R. Subpart 195(C). The New Town Pipeline was originally constructed as a gathering line per 49 C.F.R. Subpart 195(D). Upon conversion to a transmission line, the New Town Pipeline will be operated and maintained per 49 C.F.R. Subpart 195(F).

Upon conversion of the gathering line to a transmission line, the maximum temperature of the crude will be 120°F, which is within design parameters. However, the New Town Pipeline will typically operate between 60°F and 120°F.

The New Town Expansion Project will have a maximum design flow rate of 36,000 barrels per day (“bbls/day”).

A.1 (c) Length

Construction of the New Town Pipeline included installation of approximately 42.5 miles of pipe. Hiland seeks the conversion of the entirety of the gathering pipeline and associated facilities to a transmission line, with the addition of proposed above ground facilities necessary for conversion at the New Town Receipt Station and the New Town Interconnect.

A.2 Purpose of Facility

Upon conversion, the purpose of the New Town Expansion Project will be to transport crude oil from smaller crude gathering systems and truck facilities to existing rail and pipeline network destinations. The New Town Expansion Project will enable the transportation of crude oil produced in northwestern North Dakota to multiple shipping points for out of state sale.

The New Town Expansion Project will provide needed capacity to transport increased production of petroleum from western North Dakota where oil production has more than doubled in the last three years.¹ The New Town Expansion Project will transport crude oil from Mountrail County to major markets via (1) Hiland’s Market Center System using a connection at the White Earth Injection Station; and (2) Dakota Plains Holdings Inc.’s Pioneer rail terminal near New Town, North Dakota.

As noted above, the New Town Pipeline currently provides gathering services for producers seeking to move crude oil to points near the terminus of the New Town Pipeline near the New Town Terminal. Various take-away options for producers gathering production to the New Town

¹ ND Department of Mineral Resources, “ND Historical Barrels of Oil Produced by County,” *available at* <https://www.dmr.nd.gov/oilgas/stats/countymot.pdf> (accessed January 23, 2015).

Terminal include rail and truck facilities. With the Double H Pipeline recently becoming operational, producers now desire to use the Hiland Market Center System to move crude oil to the Double H Pipeline as a potential destination point, which is interconnected with the Market Center System at its most westerly point. This desire has created commercial demand for Hiland's customers to use the New Town Pipeline to bring barrels of crude oil from the New Town Terminal and other nearby points into the Market Center System, to ultimate destination points at or near the Double H Pipeline. The conversion of the New Town Pipeline to a transmission line will facilitate the requirements of Hiland's customers producing crude oil to move barrels of crude oil to westerly destination points on the Market Center System.

Upon conversion from a gathering line to a transmission line and installation of interconnect facilities, the New Town Expansion Project will have a maximum capacity of 36,000 bbls/day. Generally, liquid pipelines are designed at a specified capacity for a known liquid. Most liquid pipelines transport a variety of different liquids. The change in fluid characteristics (density, viscosity, etc.) of the transported liquids will affect the capacity of the pipeline.

Historically Hiland has operated a light sweet common stream system and will continue to accept sweet crude oil into its common stream. This specification is consistent with the quality of crude oil produced from the Bakken formation which is currently the largest exploration play in the region.

Execution of the New Town Expansion Project will add (1) additional pipeline shipping capacity in North Dakota; (2) more access to liquid delivery options on Hiland's Market Center System for its customers; and (3) a pipeline transportation alternative to trucking or railing crude oil to other shipping points and markets.

The total cost of the New Town Expansion Project is estimated to be \$15 million.

A.3 Location

The New Town Pipeline originates five miles southwest of Ross, North Dakota at Hiland's White Earth Injection Station and runs 42.5 miles to the south-southwest, terminating at the Dakota Plains Holdings Inc.'s Pioneer rail terminal, approximately 1.5 miles southeast of New Town, North Dakota.

The New Town Expansion Project is entirely located within Mountrail County, North Dakota. Figure 1.A.1 shows the general location of the New Town Expansion Project.

The New Town Pipeline construction ROW was generally 75 feet wide to allow adequate room for topsoil separation, work equipment, and pipe stringing. This consisted of a 50-foot-wide permanent ROW easement and 25-foot-wide temporary workspace. The temporary workspace was utilized only during construction and included material staging areas and temporary access roads. The construction ROW width was required to provide areas for prefabrication of a section of pipeline and storage of topsoil/subsoil material. Hiland used existing public roads to access the ROW, and did not modify existing roads or construct new permanent access roads.

Hiland acquired a 50-foot-wide permanent easement prior to construction of the New Town Pipeline, as well as for possible future liquid pipeline(s) installation. The permanent easement width was selected based on the following criteria:

- Provision of adequate space and line separation for future line maintenance; and
- Allowance for adequate space to facilitate construction of additional lines, while minimizing potential damage to the existing line(s), if additional lines are installed in the future.

A.4 Aboveground Facilities

Construction associated with the New Town Expansion Project will occur at two locations:

- The existing New Town Receipt Station, near the southern end of the New Town Pipeline in the SESW of Section 21, Township 152 North, Range 92 West.
- The proposed New Town Interconnect, at the Targa New Town Terminal in the SW of Section 21, Township 152 North, Range 92 West.

Figure 1.A.2 shows the locations of the New Town Receipt Station and the proposed New Town Interconnect.

Other pre-existing above ground facilities that are associated with the New Town Expansion Project but will not be modified are:

- White Earth Injection Station - the existing connection from the New Town Pipeline to the Market Center System and the northern terminus of the New Town Pipeline.
- Dakota Plains Rail Terminal Interconnect – the existing connection from the New Town Pipeline to the Dakota Plains Holdings Inc.'s Pioneer rail terminal, and the southern terminus of the New Town Pipeline.
- Pipeline markers, valves, and other ancillary facilities within the existing pipeline ROW along the length of the New Town Pipeline.

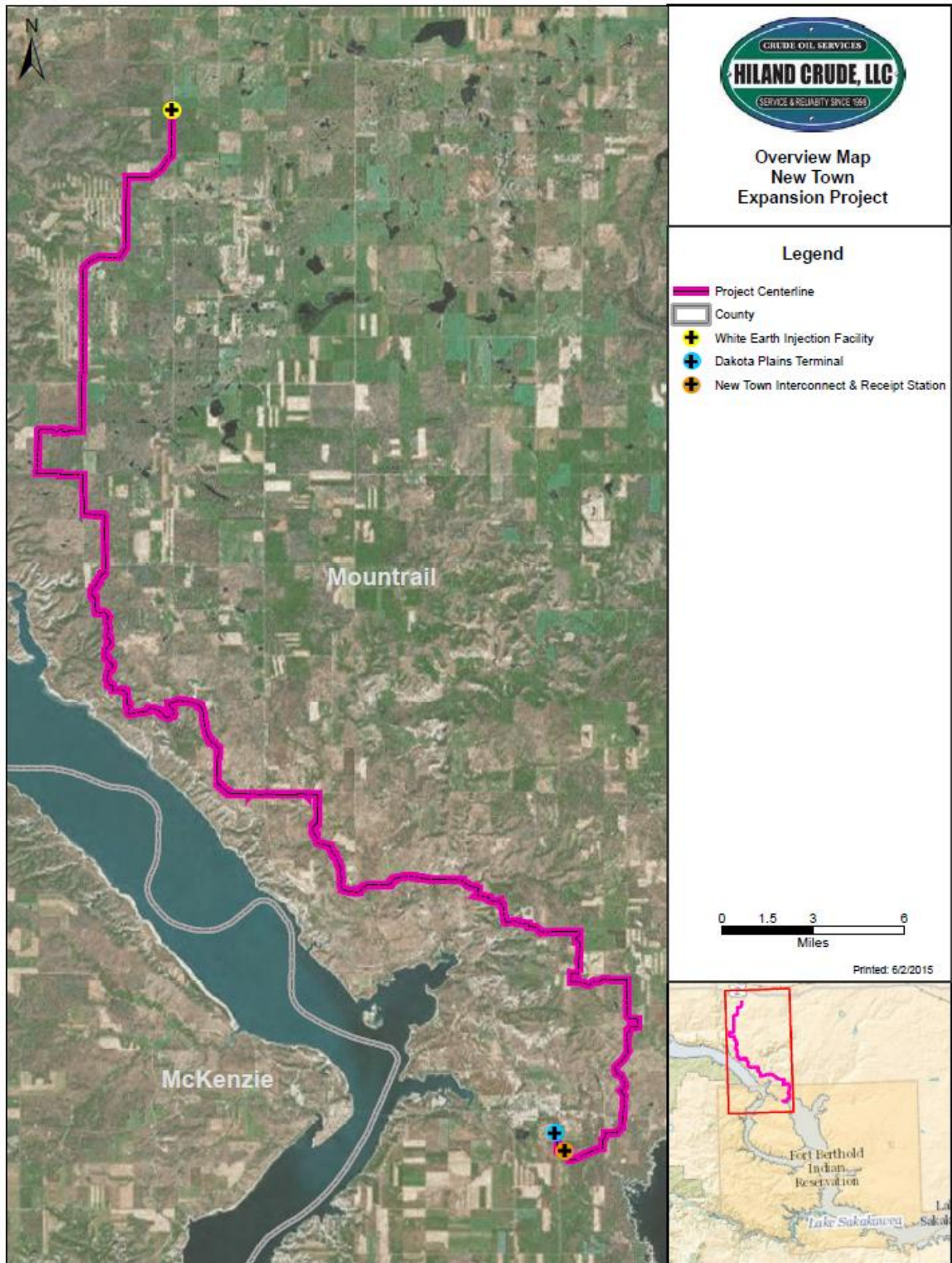


FIGURE 1.A.1 – General New Town Expansion Project Location Map

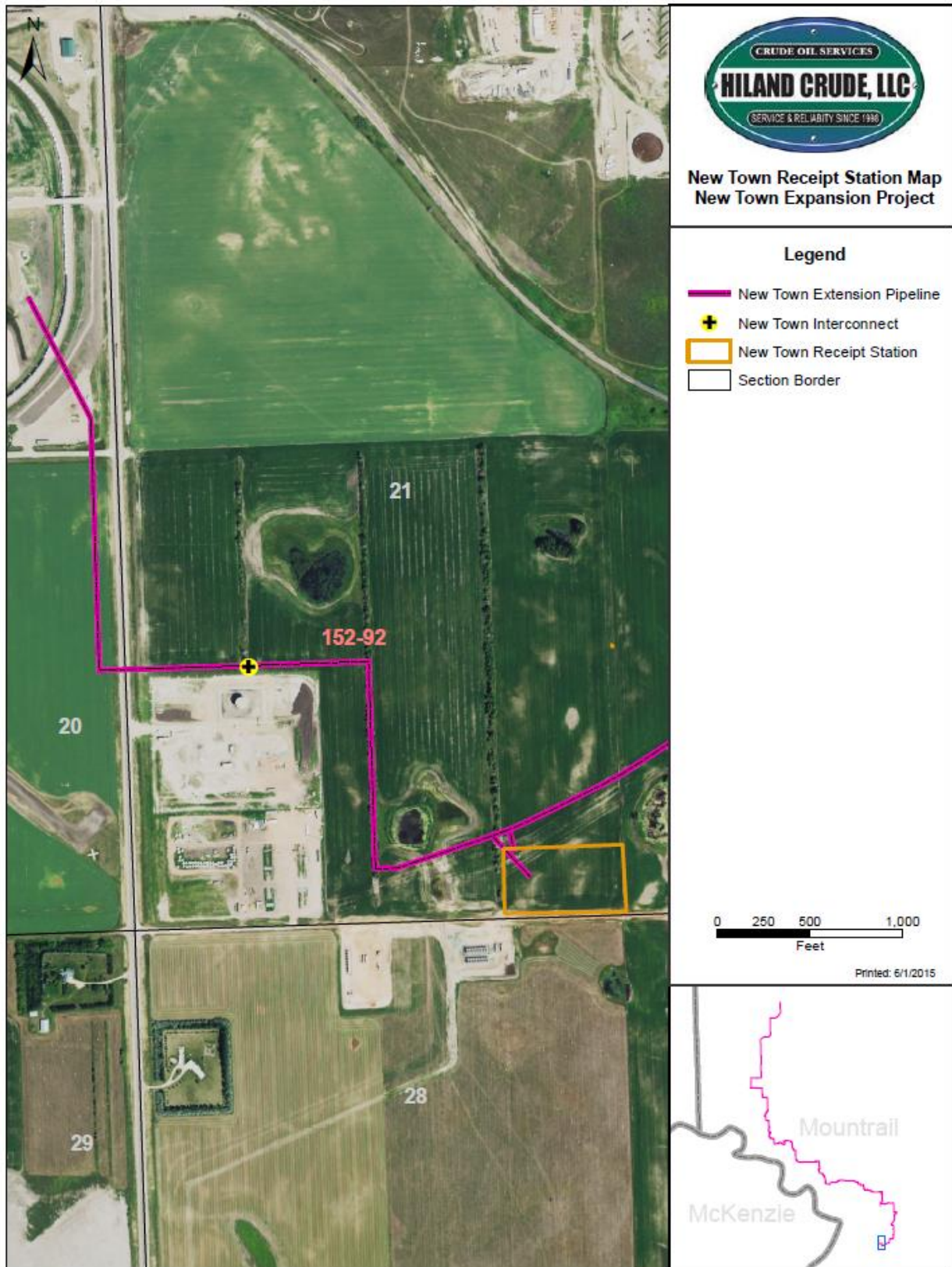


FIGURE 1.A.2 – New Town Expansion Project Facility Location

A.5 Project Schedule

Hiland proposes to develop the New Town Expansion Project on the following time schedule:

A.5 (a) Certificate of Corridor Compatibility

The Certificate of Corridor Compatibility Application is being submitted in June of 2015 as part of this Consolidated Certificate of Corridor Compatibility and Route Permit Application.

A.5 (b) Route Application

The Route Permit Application is being submitted in June of 2015 as part of this Consolidated Certificate of Corridor Compatibility and Route Permit Application.

A.5 (c) Land Acquisition Date

Right-of-Way acquisition was completed prior to construction of the New Town Pipeline, and the property for the New Town Receipt Station was acquired prior to construction of the facility.

Easement for construction of the New Town Interconnect has been acquired.

A.5 (d) Issuance of Certificate of Corridor Compatibility and Route Permit

A Certificate of Corridor Compatibility and a Route Permit for the New Town Expansion Project are expected to be issued in September of 2015.

A.5 (e) Construction Start Date

Construction for the New Town Expansion Project is expected to begin in September of 2015.

A.5 (f) Construction Complete

Construction for the New Town Expansion Project is anticipated to last approximately six months following application approval, or until approximately March of 2016.

A.5 (g) Test Operations

Test operations will occur following construction of the proposed New Town Expansion Project facilities, with possible test operations to occur in March of 2016.

A.5 (h) In-Service Date

All facilities are estimated to be in-service in or before March of 2016.

SECTION B STUDIES

B.1 Corridor

Section 69-06-05-01(2)(f) of the North Dakota Administrative Code requires that a corridor's width be at least ten percent of the length of the proposed project (i.e., 4 miles), but not less than one mile or greater than six miles wide unless approved by the Commission. In conjunction with the application for conversion of the New Town Pipeline and proposed construction, a one- to two-mile-wide field corridor was studied for the New Town Expansion Project. The accompanying Application for Waiver or Reduction of Procedures and Time Schedules ("Application for Waiver") requests that Hiland's Certificate of Corridor Compatibility and Route Permit Applications be approved using a one- to two-mile-wide study corridor, rather than the four-mile-wide corridor required by Section 69-06-05-01(2)(f).

B.2 Environmental Analysis

Studies were undertaken prior to construction of the New Town Pipeline and in conjunction with planning for the proposed New Town Expansion Project construction to evaluate the New Town Expansion Project's potential impacts on recreational, environmental, and cultural resources. Specific study findings for the proposed corridor are discussed in detail in the Route Application (see Tab 3) and associated exhibits (see Tab 4). Significant features are depicted in Tab 4 on Figures 4.B.a which are overlaid on an aerial photograph. The New Town Pipeline route is also presented superimposed on a USGS Topographic map as Figures 4.B.b in Tab 4. This information is also presented as shapefiles on the enclosed CD-ROM disk in Tab 7 suitable for viewing with ESRI's ArcGIS mapping software.

Hiland engaged Keitu Engineers & Consultants, Inc. and Beaver Creek Archaeology, Inc. to perform the environmental and cultural resource siting studies for the New Town Expansion Project.

Beaver Creek Archaeology, Inc. performed a Class I archeological file search in 2013 prior to construction of the New Town Pipeline using a 2-mile-wide study corridor of the pipeline route. A Class III field survey was performed on a 250-foot-wide corridor in the summer of 2013 and amended in the summer of 2014. The cultural resource location details are not presented here in a publicly available document per request of the North Dakota State Historic Society. Beaver Creek Archaeology has provided a redacted version of the report to be submitted as part of this application. Additional details of these sites will be provided to the North Dakota Public Service Commission staff upon request.

Keitu Engineers & Consultants, Inc. conducted a database search using a 1-mile-wide study corridor for all other exclusion or avoidance criteria, as outlined in the North Dakota Administrative Code, along the New Town Pipeline route. Items reviewed included federal and state parks, protected and sensitive plants and animals, and civil and social structures such as recreational areas, rural homes, and farmsteads. In July and August of 2013 and May of 2014, a field study was conducted using a 500-foot-wide corridor for botany and a 1-mile wide corridor for wildlife, in accordance with US Fish and Wildlife Service field study protocols.

SECTION C NEED FOR FACILITY

C.1 Need for Facility Based on Current and Projected Demand

C.1 (a) Planned Use and Purpose

Application of horizontal drilling technology and historically high crude oil prices have resulted in a resurgence of oil drilling activity in North Dakota. Unprecedented success has occurred in the Bakken oil formation, resulting in more than doubling of oil production in North Dakota in the last three years. A summary of annual crude oil production in the state is presented in Table 1.1, below.

Year	Total Crude Oil Production, Barrels	% Gain over 2010
2010	113.1 million	---
2011	153.0 million	35.3 %
2012	242.5 million	114.4 %
2013	313.2 million	176.9 %

Oil production in North Dakota is expected to continue to grow until 2025. The purpose of the New Town Expansion Project is to provide “mid-stream” transportation alternatives for the expanding volumes of crude oil produced in North Dakota and to facilitate efficient access to downstream takeaway markets. The conversion of the New Town Pipeline to a transmission line will also serve to displace trucking operations that seek to move barrels from New Town to Dore in order to access the Double H Pipeline and other takeaway pipelines to move barrels of crude oil towards Guernsey, Wyoming.

C.1 (b) Pipeline Capacity is Constrained in Western North Dakota

Crude oil produced in North Dakota is generally shipped to one of three pipeline sale outlets or demand points: (1) Tesoro’s Mandan, North Dakota refinery; (2) the Guernsey, Wyoming interconnection hub; and/or (3) the Clearbrook, Minnesota interconnection hub.

Due to the increased volume of crude oil being gathered through the New Town Pipeline and the changing market dynamics of where producers wish to move their crude oil, as described in more detail throughout this Application, it is necessary for Hiland to modify the facility to improve suction pressure control at the New Town Receipt Station to facilitate the movement of crude oil across the Market Center System and to facilitate ultimate destinations on the westerly portion of that system, thereby converting the New Town Pipeline from a gathering line into a transmission line.

² U.S. Energy Information Administration, Crude Oil Production by State, North Dakota Field Production of Crude Oil, available at <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPND1&f=A> (last visited March 2, 2015).

Construction of the New Town Interconnect will provide greater producer access to the New Town Pipeline from otherwise remote areas thus further minimizing potential trucking requirements.

Conversion of the New Town Pipeline into a transmission line through construction of the New Town Expansion Project will provide producers with greater levels of access across the Market Center System through enhanced access to the Double H Pipeline and other takeaway pipelines to move barrels of crude oil towards Guernsey, Wyoming.

Due to the constraints on pipeline capacity, rail transportation of crude oil increased more than tenfold during the period from April 2011 to April 2013 from approximately 60,000 bbls/day to over 650,000 bbls/day. Shipments are made to East Coast, West Coast and Gulf Coast destinations. Over 70% of all crude oil produced in North Dakota leaves the state by rail.³

C.1 (c) Statement Concerning Deviations from Most Recent 10-year Plan

Hiland's Ten Year Plan for 2014-2024 was filed with the Commission on July 1, 2014.

At this time, Hiland has no firm plans to construct additional transmission pipeline facilities outside the New Town Expansion Project and other related Market Center System projects within the next five years. However, Hiland's customers continue to expand their operations, which have the potential to require expanded Hiland system capacity as well as further extension of Hiland's system to accommodate the continued growth of crude oil production in western North Dakota.

C.1 (d) Other Expansions on the Hiland System

Hiland submitted an application to the Commission in December of 2014 to expand its Market Center System by looping the existing 8-inch Musket Lateral, or the Dore, segment with a 12-inch pipeline (Case No. PU-14-840). A Notice of Filings and Notice of Opportunity for Hearing was issued, with no comments received. The Commission approved the Dore Crude Oil Loop Pipeline Project by its Findings of Fact, Conclusions of Law and Order dated April 8, 2015.

Hiland will also be submitting an application to the Commission to expand its Market Center System with conversion of a gathering line and associated facilities north of Alexander, North Dakota in McKenzie County. That project includes a connection into the Market Center System and associated lateral in to the Alexander, North Dakota Tank Farm. Conversion of that facility into a transmission facility will add a new truck unloading option to the Market Center System and eliminate road traffic in the area, as well as facilitate greater access to downstream takeaway pipelines.

Market forces may open the economics of other alternatives considered. As predominately a gathering and transfer system, much of the Hiland transportation flexibility is subject to change by larger pipeline transportation companies. As the pipeline and rail transportation systems expand, more opportunities may present themselves.

³ N.D. Pipeline Authority, North Dakota Oil and Gas Research Council Presentation, Justin J. Kringstad, May 23, 2013 (see Appendix 2.B).

C.1 (e) Recent System Studies Supporting the Analysis of the Need

An excerpt from “The Williston Basin: Greasing the Gears for Growth in North Dakota” prepared by Bentek Energy, LLC under contract from the North Dakota Pipeline Authority is presented in Tab 2 as Appendix 2.A. The 129-page report released July 25, 2012 highlights that oil production from the Williston Basin, which includes the Dakotas and Montana, soared more than 400% in the five years prior to the report. Oil production from the Williston Basin is expected to continue to grow until 2025. In the report, Bentek Energy, LLC also estimates that planned refinery and pipeline projects will not be able to keep up with the increased production. Producers will therefore continue to rely on more expensive transportation options until additional pipeline capacity is available.⁴

Due in large part to production from the Bakken and Three Forks formations, the State of North Dakota is currently the second largest producer of crude oil in the United States. The state produced an all-time high of 1,227,483 bbls/day in December 2014.⁵

One challenge North Dakota faces is moving crude oil intrastate. The New Town Pipeline and proposed New Town Expansion Project will connect to the Market Center System, which touches three counties in North Dakota: McKenzie, Williams, and Mountrail Counties. In each of these counties, over 50% of the production is currently being transported by truck from the wellhead. Based on a recent analysis, Williams County had the highest rate of transport by truck, with 75% of oil production being transported by truck. McKenzie County was second with 70% of oil production transported by truck, and Mountrail Count reported 59% of oil production transported by truck.⁶ Gathering system pipelines are being encouraged throughout the state to limit truck transportation and provide a safer, more efficient solution to transporting crude oil.

C.2 Alternatives to the Proposed Facility

Three alternatives to the New Town Expansion Project were considered.

C.2 (a) No Action Alternative

The status quo could be allowed to continue, supported by trucking crude oil to existing pipeline unloading facilities and/or rail trans-ship facilities. Finding qualified cargo tank operators, already a critical issue, will continue to be difficult. Further, there will be additional wear and tear to county and state roads due to high truck traffic. Pipeline transportation (1) reduces truck traffic on the area’s road network; (2) provides access to a wider range of markets; and (3) results in a more efficient and safer mode of transportation by reducing costs and the potential for accidents.

⁴ Bentek Energy, LLC, “The Williston Basin: Greasing the Gears for Growth in North Dakota,” July 25, 2012, pp. 35, 47.

⁵ NDIC, “Director’s Cut,” available at: <https://www.dmr.nd.gov/oilgas/directorscut/directorscut-2015-05-13.pdf> (accessed June 5, 2015). This document is also presented in Tab 2 as Appendix 2.C.

⁶ N.D. Pipeline Authority, North Dakota Oil and Gas Research Council Presentation, Justin J. Kringstad, May 23, 2013. Key slides from the May 23, 2013 presentation of the North Dakota Pipeline Authority to the North Dakota Oil & Gas Research Council are presented in Tab 2 as Appendix 2.B.

C.2 (b) Alternative Pipeline Design/Size

The New Town Pipeline was originally designed and installed as an 8-inch diameter gathering system for committed producers. A tremendous surge in oil production in the area combined with the New Town Pipeline's strategic location prompted Hiland's management to revisit the decision to operate the system as a gathering system.

As noted, the purpose of the New Town Expansion Project is to provide "mid-stream" transportation alternatives for the expanding volumes of crude oil produced in North Dakota and to facilitate efficient access to downstream takeaway markets. The conversion of the New Town Pipeline to a transmission line will also serve to displace trucking operations that seek to move barrels from New Town to Dore in order to access the Double H Pipeline and other takeaway pipelines to move barrels of crude oil towards Guernsey, Wyoming. The New Town Expansion Project will present an optimization of new and existing pipeline capacity to meet the need for additional liquid petroleum transportation to this region.

Because the New Town Pipeline is currently operational as a gathering line, the decision to install larger or smaller diameter pipe is irrelevant. However, if the addition of mid-route booster pump stations and tankage does not offer enough additional capacity, Hiland may revisit the possibility of looping the New Town Pipeline. The decision of which line diameter is appropriate will be made at that point in time.

C.2 (c) Alternative Pipeline Route

The decision to modify the New Town Pipeline route is irrelevant because the pipe was previously constructed and is currently operational as a gathering line. The proposed facility additions to the New Town Pipeline will maximize capacity within the limits of the existing pipeline system.

SECTION D LOCATION

D.1 Study Area

The New Town Pipeline originates five miles southwest of Ross, North Dakota at Hiland's existing White Earth Injection Station and runs 42.5 miles to the south-southwest, terminating at Dakota Plains Holdings Inc.'s Pioneer rail terminal, approximately 1.5 miles southeast of New Town. The area analyzed for the conversion of the New Town Pipeline and proposed construction of the New Town Expansion Project is located in unincorporated rural areas of Mountrail County, North Dakota.

As stated in the accompanying Application for Waiver, Hiland requests the Commission waive the requirement that a study corridor width equal to ten percent of the length of the transmission pipeline be studied and instead allow a one-mile corridor, subject to deviations imposed by any exclusion or avoidance areas or other selection criteria.

D.2 Map of Proposed Corridor

Because a consolidated application for a Certificate of Corridor Compatibility and a Route Permit is being submitted, maps (including U.S.G.S. Quad and Aerial Maps) of the proposed corridor and route for the New Town Expansion Project can be found in Appendix 4.B of the Route Application (see Tab 4). The location of exclusion and avoidance areas, as defined in Section 69-06-08-02 of the North Dakota Administrative Code, within the corridor are also depicted on the maps provided.

D.3 Criteria to be Evaluated

Because this application is part of a consolidated application for a Certificate of Corridor Compatibility and a Route Permit, the criteria to be evaluated are discussed in Section C of the Route Permit portion of the application (see Tab 3).

D.4 Relative Value of Each of the Criteria

Because this application is part of a consolidated application for a Certificate of Corridor Compatibility and Route Permit, the relative value of each of the criteria considered is discussed in Section C of the Route Permit portion of the application (see Tab 3).

SECTION E GENERAL MITIGATIVE MEASURES TO BE TAKEN

Because this application is part of a consolidated application for a Certificate of Corridor Compatibility and a Route Permit, the mitigation measures that Hiland proposes to take with respect to the New Town Expansion Project are discussed in Section D of the Route Permit application (see Tab 3).

SECTION F QUALIFICATIONS OF PERSONS CONTRIBUTING TO THE STUDY

The qualifications of the personnel who contributed to the corridor location study are:

(1) Jim Suttle, Vice President – Kinder Morgan, Inc.

Degrees: Bachelor of Art — Political Science, Wichita State University
Masters of Philosophy, Houston Baptist University

Experience: 33 years in petroleum industry serving in multiple assignments including pipeline design, operation and construction. Senior Vice President of Hiland Crude, LLC since 2010.

(2) Kathleen Spilman, Managing Director — Keitu Engineers & Consultants, Inc.

Degrees: Bachelor of Science - Chemical Engineering, University of North Dakota
Masters in Management, University of Mary

Experience: 32 years' experience in petroleum refining and fuels transportation field as well as regulatory affairs and compliance.

Professional License:

Registered Professional Engineer: North Dakota, South Dakota, Montana

(3) Heather Patch, Staff Engineer (Chemical) — Keitu Engineers & Consultants, Inc.

Degree: Bachelor of Science - Chemical Engineering, University of North Dakota

Experience: 3 years' experience in regulatory affairs and compliance.

SECTION G MAPS

G.1 Map of Criteria within Study Area

Because a consolidated application for a Certificate of Corridor Compatibility and a Route Permit is being submitted, the maps (including U.S.G.S. Quad and Aerial Maps) of the proposed corridor and route of the New Town Expansion Project can be found in Appendix B of the Route Permit portion of the application (see Tab 4). The location of exclusion and avoidance areas, as defined in Section 69-06-08-02 of the North Dakota Administrative Code, within the corridor are also depicted on the maps provided.

G.2 Maps of Study Area

The GIS software currently in use by Commission staff is ESRI's ArcGIS and companion software packages. A CD-ROM containing electronic copies of ArcGIS shapefiles outlining the proposed corridor has been included with this application as Tab 7.