

Interim As-Built Construction Inspection Report Cenex 10" Refined Fuels Pipeline PU-17-97

Prepared for:
**North Dakota Public Service
Commission**

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1.0 Executive Summary

The North Dakota Public Service Commission (PSC) retained Wenck Associates, Inc. (Wenck) to complete an interim as-built inspection of the Cenex 10" Refined Fuels Pipeline (the Project) in Williams, Mountrail, and Ward Counties North Dakota (ND), constructed by Cenex Pipeline L.L.C. (Cenex). The purpose of the inspections was to ensure the project was constructed in compliance with the siting laws and rules and the applicable PSC Orders for the Project.

Wenck reviewed Project documents to identify those aspects that required compliance, and visually inspected the Project area on 9 October, 2019 and 21-22 January, 2020. The October 2019 inspection focused on the completed portions of Spread 1 (West) contracted by Frontier Services. The January 2020 inspections focused on winter construction activities and completed portions of Spread 2 (East) contracted by Loenbro, including those portions sub-contracted to Stealth Energy Group.

Overall, the completed portions of the project appeared satisfactory. However, on-site inspections revealed some issues with on-going construction activities along the Spread 2 portion of the project. The construction issues observed are summarized below:

- Topsoil and subsoil were mixed at isolated areas of excavation, which included topsoil removal, at HDD (Horizontal Directional Drilling) bore tie-ins (i.e., entry/exit areas);
- Erosion controls/BMPs appeared lacking in some areas to mitigate expected spring weather and thaw.

To address these above-mentioned issues, and overall limitations of winter construction work, Wenck recommends the following:

- Conduct follow-up reclamation monitoring at observed mixed soil areas;
- Company to delay HDDs not previously prepped by topsoil stripping until spring, unless approval is obtained from the Commission to strip topsoil over winter;
- Monitor areas of trench backfilled during the winter for subsidence in the spring;
- Contractor should take necessary actions to monitor and mitigate against potential soil erosion in the spring.

Wenck conducted a preliminary review of the pertinent PSC Case Docket information for future determination of overall project compliance. Wenck identified project requirements that may be required for the Project which have not been supplied to the Commission. These requirements are outlined in Section 3.2, Table 3-1 of this report.

2.0 Background and Scope

2.1 INTRODUCTION

The Cenex 10" Refined Fuels Pipeline (Project) in Williams, Mountrail, Ward counties, ND, is comprised of two spreads. Spread 1, constructed by Frontier, is approximately 59.2 miles in ND, originating in Section 34, T156N, R97W, Williams County heading west and intersecting with the North Dakota and Montana border in Section 22, T153N, R104W, Williams County. Spread 1 ends in Richland County, Montana (MT). Spread 2, constructed by Loenbro, is approximately 90.5 miles originating in Section 35, T156N, R97W, Williams County heading east through Williams, Mountrail, and Ward Counties, ending at the CHS terminal approximately one mile west of Minot in Section 20, T155N, R83W, Ward County. The total distance of the pipeline is approximately 181.5 miles, of which 149.7 miles is in North Dakota.

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 in Case No. PU-17-97 on 14 March 2018, granting Certificates of Corridor Compatibility No. 202 and Route Permit No. 212 for the Project.

2.2 REGULATORY PURPOSE & SCOPE OF WORK

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 the welfare of citizens of North Dakota. Construction inspections ensure that such projects are constructed in compliance with the siting laws (North Dakota Century Code Chapter 49-22) and rules (North Dakota Administrative Code Article 69-06) and the applicable Commission Findings of Fact, Conclusions of Law, and Order (Order). The North Dakota PSC retained Wenck Associates, Inc. (Wenck) to provide construction inspections and associated reports for the Project.

This report fulfills the contracted Interim As-Built Construction Inspection Report for the Project. Wenck's scope of work was to perform and document on-site inspections after the construction phase of the Project to verify that the project was constructed in compliance with the siting laws, siting rules, and applicable Commission Orders. Due to the unanticipated winter construction at the Project, this Interim As-Built Construction Report included contractor inspections of on-going winter construction along portions of the Project.

2.3 METHODS AND SCOPE OF INSPECTION

Wenck identified the "Project Specifications", which Cenex is obligated or responsible to follow and that can be verified either in written documentation or by an on-site inspection. These items were taken from 1) siting laws and rules, 2) Project activities or specifications proposed in the Consolidated Application for a Certificate of Corridor Compatibility and Route Permit and Application for Route Permit (Application), 3) Project plans described in the Findings of Fact, Conclusions of Law, and Order and the Findings of Fact, Conclusions of Law, and Order on Amended Corridor and Amended Route 4) Certification Relating to Order Provisions, and 5) regulations or requirements from other agencies.

2.3.1 On-Site Inspection

Jeremy Hackley, Wenck Field Inspector, inspected portions of the Project route on 9 October 2019. Matt Retka and Joseph Sander, Wenck Field Inspectors, visited portions of the Project on 21 & 22 January 2020.

The site was inspected by driving to access points and visually inspecting the route within the Project area from those points. Geographic coordinates were recorded at observation points and potential problem areas using a handheld Global Positioning System (GPS) (Trimble GEOXT, submeter accuracy, NAD83 datum) (**Figures 1-7**) (**Appendix A**). Digital photographs were taken showing representative portions of the route, aboveground Project infrastructure, and problem areas (**Appendix B**).

2.3.2 Initial Document Review

As part of the Interim As-Built Report, Wenck staff reviewed select publicly available Project documents in the PSC Online Case Search (January 2020) to find written verification of compliance for applicable Project specifications. If written verification was filed, the Project was assumed in compliance with the specification. Specifications which may warrant further information from Cenex or a decision by the PSC are provided in **Table 3-1**, along with additional comments for consideration. It is acceptable that not all Project requirements are currently filed, as the Project is not yet complete. Wenck is providing this initial document review to allow Cenex and the PSC an opportunity to rectify potential missing requirements prior to the Final As-Built Report. An inclusive list and assessment of overall project compliance will be included in the subsequent Final As-Built Construction Inspection and Report.

3.0 Inspection Findings

3.1 ON-SITE INSPECTION OBSERVATIONS

3.1.1 Spread 1-Frontier

Initial Spread 1 on-site as-built inspections were conducted on 9 October 2019 in conjunction with construction inspections and the previously submitted Construction Inspection Report (Wenck, October 2019). Mr. Hackley visited Spread 1 of the project and met with KLJ Environmental Inspector, Nute Bishop. The project Right-of-Way (ROW) was observed graded back to approximate original contours at multiple locations. Fences along the ROW appeared to be replaced and were in good order. Pipe placement was complete within the State of North Dakota for Spread 1 at the time of the October inspection and construction is now 100% complete through the Spread 1 portion of the Project. See **Appendix A, Observation Points 208, 210, 211 and 213.**

3.1.2 Spread 2-Loenbro

Wenck inspected completed segments and on-going construction of the Spread 2 portions of the Project on 21 and 22 January 2020. Mr. Retka and Mr. Sander visited Spread 2 of the project and met with KLJ Environmental Inspector, Derek Nagel near the Flying S Ranch grass airstrip, Section 36, Township 155N, Range 84W, near the eastern end of the Project on 21 January. Loenbro construction crews in the area were conducting trenching activities consisting of subsoil excavation, laying pipe, and subsoil replacement/backfill. The pipeline installation under the grass runways in this area were previously completed using HDD (**Appendix A, Observation Point 2793-2797**). Ground frost and frozen soil was observed to a depth of 20-inches at an area being actively trenched (**Appendix A, Observation Point 2799 & 2800**). ROW clearing and topsoil stripping had been previously completed, presumably prior to impeding frozen soil conditions, as the topsoil stockpiles appeared appropriately segregated and were frozen solid.

On-site inspections continued east along the Project to Sections 10 and 11, Township 145N, Range 85W, where construction crews were similarly actively trenching the pipeline. Wenck inspectors observed an issue of improper topsoil segregation where trenched subsoil was being placed near the edge of the ROW on top of what appeared to be an area lacking previous topsoil removal and segregation (**Appendix A, Observation Point 2808**). This issue appeared minor in extent, and it is possible that proper replacement of only subsoil into the trench is achievable due to the frozen condition of the in-situ un-stripped topsoil. Another issue of improper topsoil/subsoil segregation was observed at an HDD tie-in excavation area. It appeared an approximately 150-foot long area was trenched between the previously cleared ROW and HDD tie-in. This area showed evidence of recent excavation and trenching along a portion of the ROW not previously stripped of topsoil. Topsoil and subsoil were not segregated and were mixed within the adjacent soil stockpile (**Appendix A, Observation Points 2809, 2811, and 2812**). Mr. Nagel explained that the proposed HDD tie-in at this area was likely moved from its original proposed location to account for the above normal precipitation and subsequent wet conditions encountered during fall ROW construction work. A review of the Aquatic Resource Delineation for the Project (KLJ, June 2017) did not identify a Delineated Wetland at this area, thus, wetland construction methods would not have been appropriate.

On 22 January 2020, Mr. Retka and Mr. Sander met with Mr. Nagel and Shilo Shelton, Superintendent for Stealth Energy Group (Stealth) further west along the Project route. Stealth was sub-contracted by Loenbro for pipeline construction in the areas in and around

the White Earth River. Wenck inspected portions of the project that were previously completed near the White Earth River. Open cut areas appeared properly covered and final grading seemed adequate, aside from some additional rock picking needed in the spring prior to seeding activities. Fences along the ROW were properly replaced. Separate HDDs were conducted through the valley toward Highway 1804 in Section 26, Township 155N, Range 94W, under the White earth River, and under identified Dakota Skipper habitat (referred to as an ESA area) and geologically unstable areas in Section 27, Township 155N, Range 94W (**Appendix A, Observation Points 2817-2822**). Wenck collected GPS points from select areas of the presumed HDD tie-in locations as shown on **Figure 5**. Stealth constructed an access road in Section 21, Township 155N, Range 94W to access this area of the Project. The location of this access road, as collected by Wenck during the on-site inspections, is included on **Figure 4**. Mr. Shilo explained that the landowner has requested that this access road be left in place after Project completion. Stealth construction crews were actively trenching nearby to the west in Section 20, Township 155N, Range 94W. Wenck observed appropriate avoidance of an ESA area which was fenced off and avoided near the ROW work. ROW clearing and topsoil stripping appeared to be completed prior to the onset of frozen soil conditions. Aside from one isolated area actively being trenched, where it appeared some topsoil was being mixed with subsoil during trench excavation as a result of likely inadequate topsoil stripping depths (**Appendix A, Observation Points 2826 and 2827**), construction work conducted by Stealth appeared satisfactory.

3.1.3 Summary of Inspections and Recommendations

Spread 1 construction work was completed before winter and the on-set of frozen soil conditions. Construction is ongoing over the winter months at Spread 2. Overall, the contractors appear to be adhering to the Certification Relating to Order Provisions #16, which states in part: *"Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall- early winter to the point that frost inhibits proper soil segregation,"* as the majority of the ROW was stripped of topsoil prior to frozen topsoil. However, issues associated with HDD tie-in areas not previously stripped of topsoil were observed where topsoil was not properly stripped nor segregated from subsoil. Wenck recommends that any excavation that includes the removal of topsoil, including areas associated with HDDs not previously prepped by topsoil stripping, be suspended until the spring thaw. Alternatively, Cenex could seek approval from the PSC to conduct winter topsoil removal. Wenck relayed this issue and recommendation to Travis Gillett, Loebro Field Superintendent, via a phone call while on-site 22 January 2020. Wenck would further recommend the mixed topsoil issue observed at the HDD and trench in Section 10, Township 154N, Range 85W be monitored during subsequent reclamation inspections.

Other challenges that may arise from winter construction work include the potential for trench subsidence from placement of frozen backfill, and soil erosion from the inability to construct or maintain efficient erosion control measures on frozen ground. Wenck recommends that open-cut areas of the Project backfilled during winter months be monitored for subsidence during the spring thaw. Wenck noticed a general lack of installed erosion and sediment control devices to account for likely spring run-off. In some areas where installed devices were present, they may be insufficient during spring run-off, especially around exposed topsoil stockpiles and areas of steep slopes. Wenck also noticed there where areas of no installed erosion prevention measures, specifically along backfilled portions of the right-of-way, wherein spring run-off can sheet-flow along denuded slopes or cross slope overland sheeting can cause topsoil losses. Wenck therefore recommends the contractor follow the Storm Water Pollution Prevention Plan and engineering recommendations from the Project Engineer to prevent soil erosion and to mitigate sediment discharge. The responsible company or contractor should be inspecting,

maintaining, and replacing all soil erosion prevention and sediment control measures and take necessary actions to monitor and mitigate against potential soil erosion.

3.2 INITIAL DOCUMENT REVIEW DISCREPANCIES

After a precursory review of the Project information posted to the ND Public Service Commission Case Docket, including the Findings of Fact, Conclusion of Law and Order (March, 2018), Wenck has identified a list of items that may warrant further information from Cenex or a decision by PSC prior to a determination if the Project has been constructed in compliance with the siting laws, siting rules, and applicable Commission Orders (**Table 3-1**). Please note that for several items, it is not clear from the PSC rules if documentation needs to be filed with the PSC or if the Company can retain documentation internally.

Table 3-1: Project Specifications for Consideration

Source of Project Specification	Description of Project Specification	Current Written Information	Site Inspection Information	Comments for Compliance Determination
FINDINGS OF FACT 26.	<p>Three geologically unstable areas are present within the Survey Area in SW1/4, Section 33, Township 154N, Range 103W, Williams County, in NW1/4, Section 3, Township 155N, Range 96W, Williams County, and in N1/2, Section 27, Township 155N, Range 94W, Mountrail County. Cenex stated that avoiding these areas would require crossing similar geologically unstable areas. Cenex completed additional geotechnical investigations to ensure the pipe will be installed in geologically stable areas and to minimize the potential for pipeline integrity issues. For these geologically unstable areas Cenex will use the Cut and Cover method described in its and (1) align the pipeline perpendicular or nearly perpendicular to the contours, (2) bury the pipeline at 8 feet, (3) utilize trench-breakers consistent with the Trench Breaker Specification Drawing filed on November 29, 2017, (4) utilize native cohesive materials to backfill the trench, (5) compact the backfill to 95 percent of the maximum dry density and optimum moisture (-1 to +2%) per ASTM 0698, (6) provide drainage in order to prevent water from ponding or collecting near the top of the slope or along the excavation, and (7) install water bars and complete appropriate reclamation.</p>	<p>Docket #85 & #93-Terracon Report for 33-154-103; Docket #144 & #145-Certification and documentation for route adjustment under section N.D.C.C. 49-22.1-15(1)</p>	<p>The portions of the Project through the Section 33-154N-103W Williams County geological unstable area was constructed with an opened trenched using "Cut and Cover Methods." Section 3-155N-96W, Williams County, and 27-155N-94W, Mountrail County were constructed via HDD. These HDDs were documented through re-route submittals to the Commission.</p>	<p>HDD is generally considered the preferred method for construction in geologically unstable areas, but it is not clear if the Commission would require any additional approval for the deviation from the proposed "cut and cover" method outlined in the Finding of Fact for the two areas which were constructed using an alternative HDD method. Also, constructed pipe depths at these identified geologically unstable areas has not been verified.</p>
FINDINGS OF FACT 39.	<p>In the event that construction is undertaken by Cenex after topsoil has frozen to the point that frost inhibits soil segregation, Cenex has committed to the following applicable winter construction guidelines as set forth in the following documents: North Dakota State University Extension Service, Publication R1728, "Successful Reclamation of Lands Disturbed by Oil and Gas Development and Infrastructure Construction, August 2014; INGAA Foundation, Inc. Report No. 2013.04, "Planning Guidelines for Pipeline Construction During Frozen Conditions," December 2013. In addition, unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/early winter to the point that frost inhibits proper soil segregation.</p>		<p>Recent winter inspections revealed issues with isolated topsoil excavations at HDD tie-in locations, as well as identified multiple areas with potential for soil erosion during the spring thaw.</p>	<p>Cenex should obtain approval from the Commission for any topsoil removal after the topsoil has frozen to the point it inhibits proper soil segregation. Per Finding of Fact #38, Cenex testified it will use best management practices in order to minimize erosion and sediment discharge during construction.</p>

PSC Order 9	Thirty days prior to commencing construction, Cenex will inform the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration of the intent to start construction.	KLJ has provided Wenck a copy of the construction Notification and a corresponding email coordinating the start of construction with Transportation Pipeline and Hazardous Materials Safety Administration.		Unclear if this information is required to be uploaded to the Case Docket or not.
PSC Order 8	Prior to commencing construction of any portion of the proposed Project, Cenex shall obtain all necessary licenses and permits for construction of such portion, and provide copies to the Commission prior to construction of that portion of the project.	Docket # 140-Federal and County Permits and Agreements; And multiple road crossing and other Permits		Section 5.5, page 79, of the Project Application (KLJ, February 2017) lists additional potential permits that were not found on the PSC Case Docket, including Section 404 Permit (USACE) and NDPDES General Permit (NDDH).
CERTIFICATION RELATING TO ORDER PROVISIONS #14	Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.	KLJ has communicated that any areas that have been utilized as staging areas or otherwise have been negotiated with landowners and are legal documents.		Unclear if this information is required to be uploaded to the Case Docket or not.
CERTIFICATION RELATING TO ORDER PROVISIONS #19	Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.		Wenck observed an approximately 4,400-ft. long constructed access road in Section 21-155N, 94W. The contractor has stated that the landowner would like this road to be left in place after Project completion.	We assume based on the Landowner wishes that the Company can leave this road in place, but it is unclear what additional approvals or documentation, if any, are required.
CERTIFICATION RELATING TO ORDER PROVISIONS #27	Company understands and agrees that, prior to beginning construction of the transmission facility at a location, it shall send a letter to each landowner with whom an easement was executed for that location specifying the name and phone number of the company representative who is responsible for receiving and resolving landowner issues for the life of the easement.	Company has identified representative in Docket #139-Preconstruction Conference Call Minutes and Notice of Intent to Commence Construction: Mike.Stahly@chsinc.com, 406.628.5209		KLJ has communicated that letters were sent to landowners with the Cenex Representative info for Mike Stahley. However, it is unclear if this documentation is required to be uploaded to the Case Docket.
Tree and Shrub Mitigation Specification 10-16	Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with and approved by the Commission.	Docket # 143-ND DOT Utility Occupancy Application and Permits and Tree & Shrub Sampling Plan; Docket #184-Updated Tree and Shrub Sampling Plan		Currently, only the sampling plans have been submitted. The results of the Tree and Shrub Inventory nor the mitigation plan for the replacement plantings have been provided to the Commission to date.

A more detailed review of Project compliance with the additional siting laws, siting rules, and applicable Commission Orders will be conducted in conjunction with the Final As-Built Field Inspection and Report. The above table is being provided as part of this Interim report as a means to identify potential additional information that may be required of the Company to the Commission.

4.0 Signatures

The services performed by Wenck staff for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints. Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically accepted practices at the present time and location. Other than this, no warranty is implied or expressed.



Sara Simmers, Lead Project Manager

2/5/2020

Date



Matt Retka, Project Manager





2/5/2020

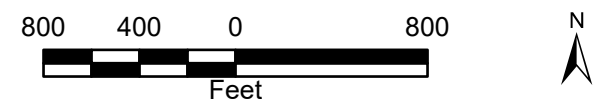
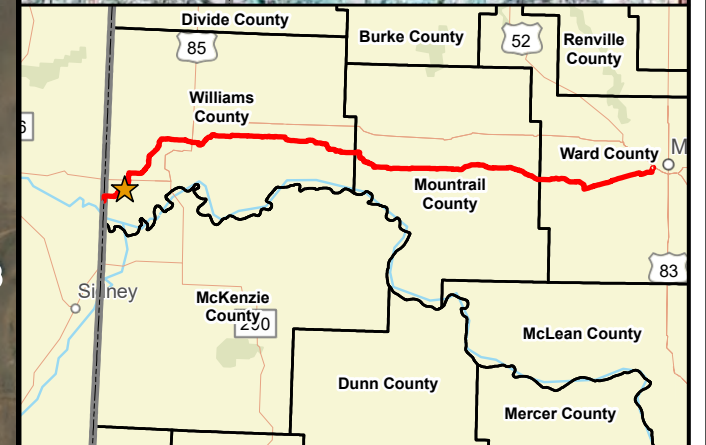
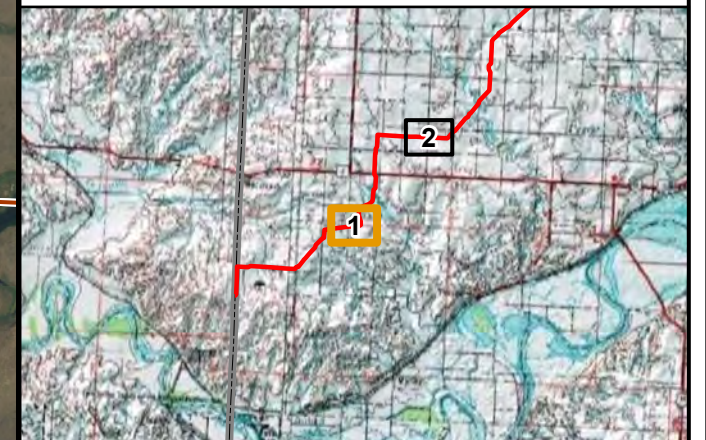
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1-7: Interim As-Built Observation Locations

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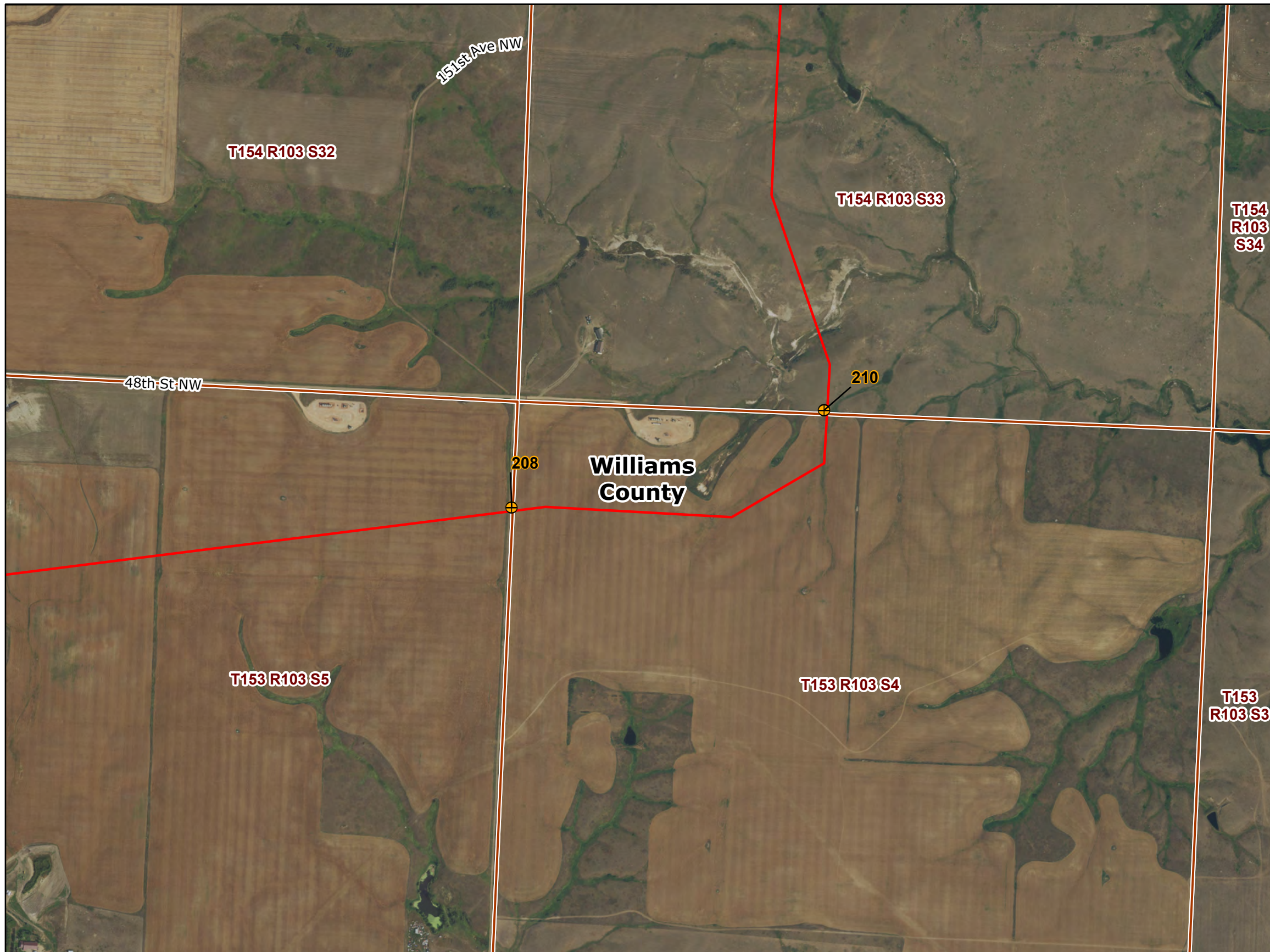
**Cenex Pipeline
Figure 1**

-  Photo Observation: Spread-1
-  Photo Observation: Spread-2
-  Cenex Pipeline Centerline (PU-17-97)
-  Section Boundary



2018 Aerial Photograph (Source: NAIP)

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T154
R103
S34

T153
R103
S3

PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations



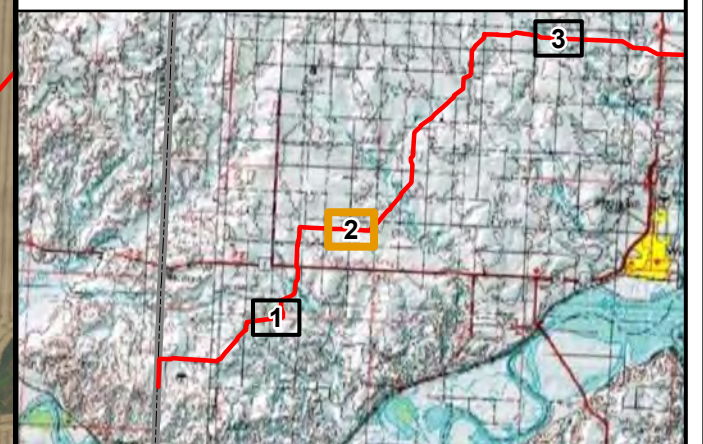
Responsive partner. Exceptional outcomes.

JAN 2020

Map 1 of 7

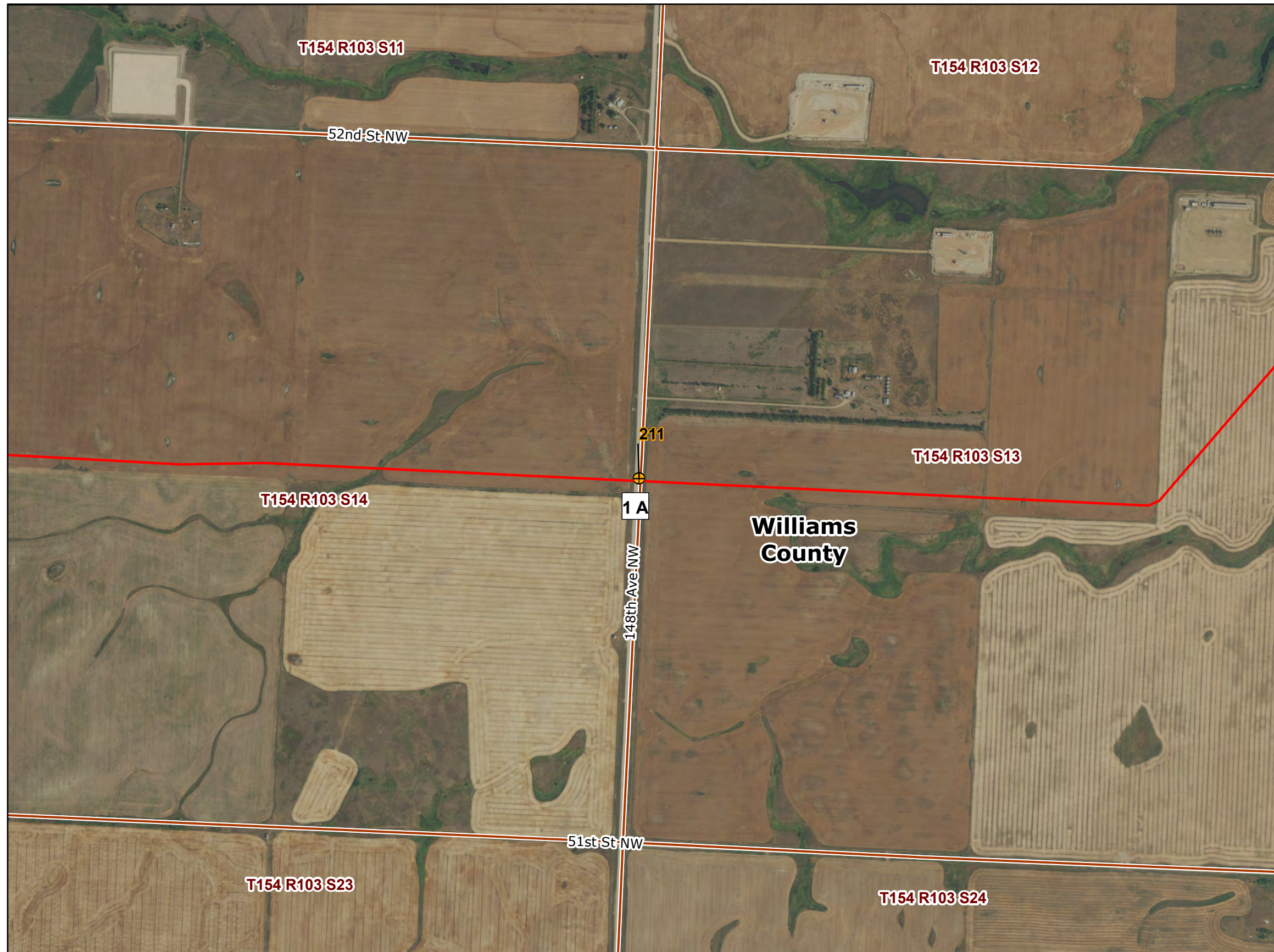
Cenex Pipeline
Figure 2

- ⊕ Photo Observation: Spread-1
- ⊕ Photo Observation: Spread-2
- Cenex Pipeline Centerline (PU-17-97)
- ▭ Section Boundary



2018 Aerial Photograph (Source: NAIP)

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PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations







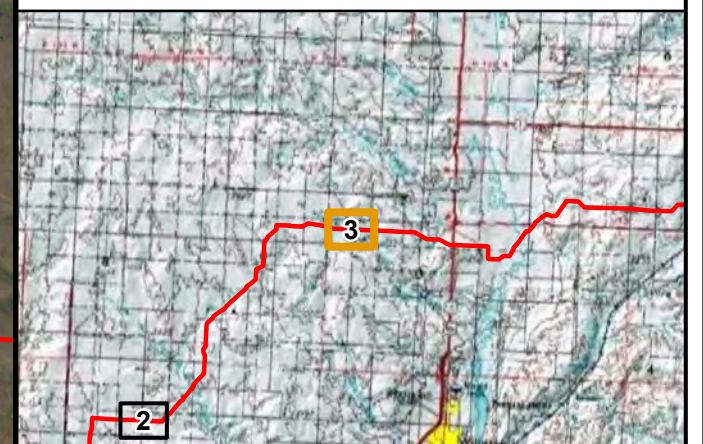
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**Cenex Pipeline
Figure 3**

-  Photo Observation: Spread-1
-  Photo Observation: Spread-2
-  Cenex Pipeline Centerline (PU-17-97)
-  Section Boundary



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PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations

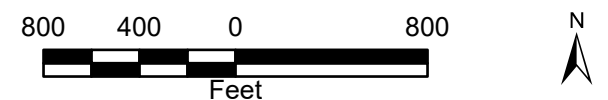
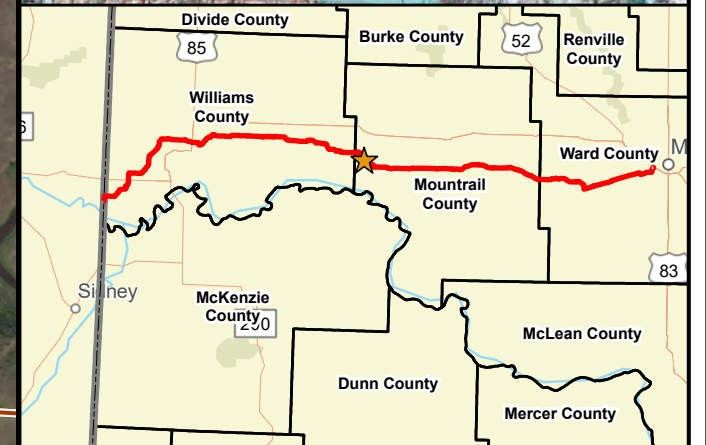


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Map 3 of 7

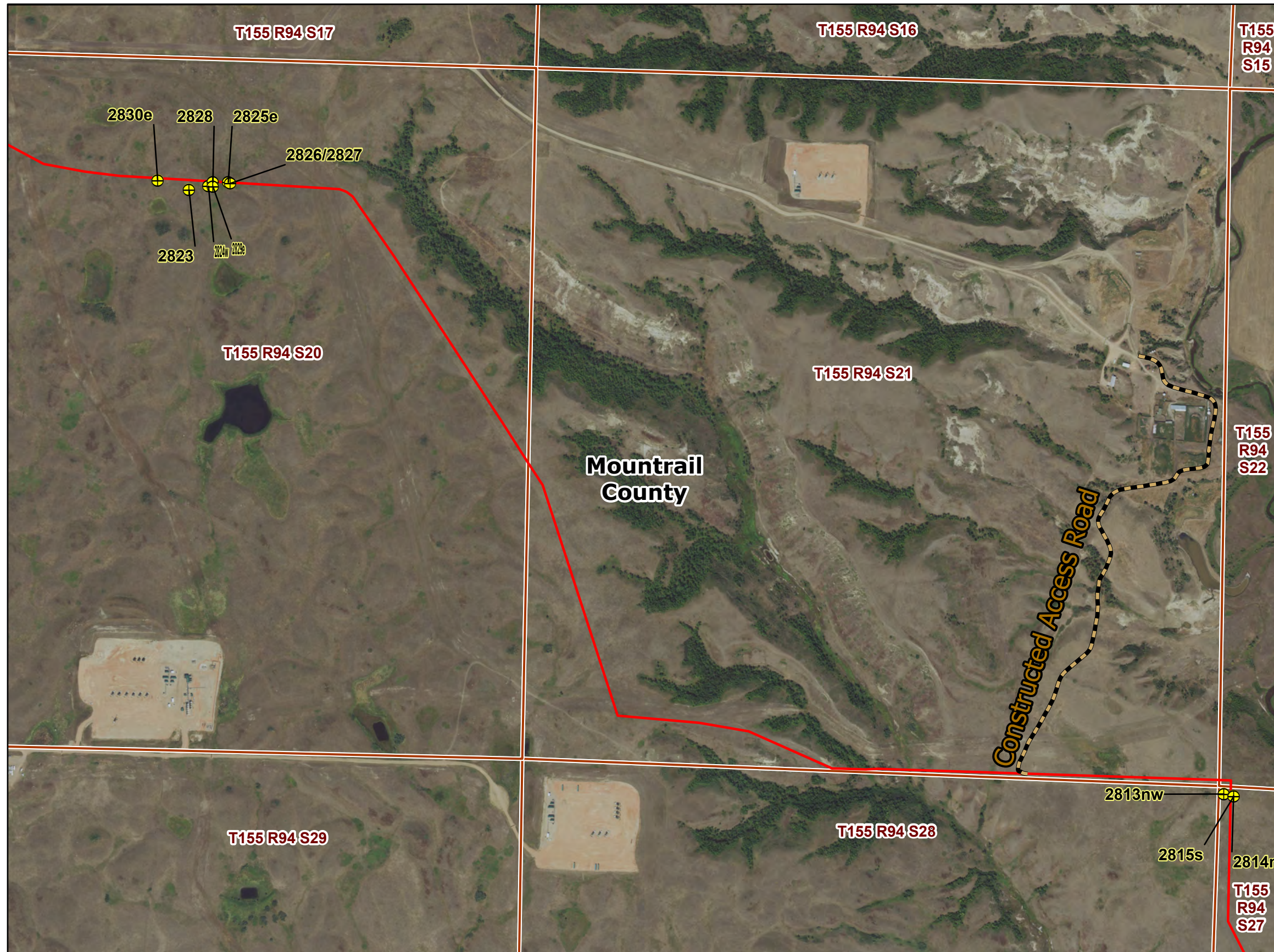
Cenex Pipeline
Figure 4

- ⊕ Photo Observation: Spread-1
- ⊕ Photo Observation: Spread-2
- Cenex Pipeline Centerline (PU-17-97)
- ▭ Section Boundary



2018 Aerial Photograph (Source: NAIP)

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PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations







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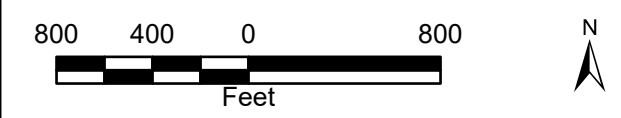
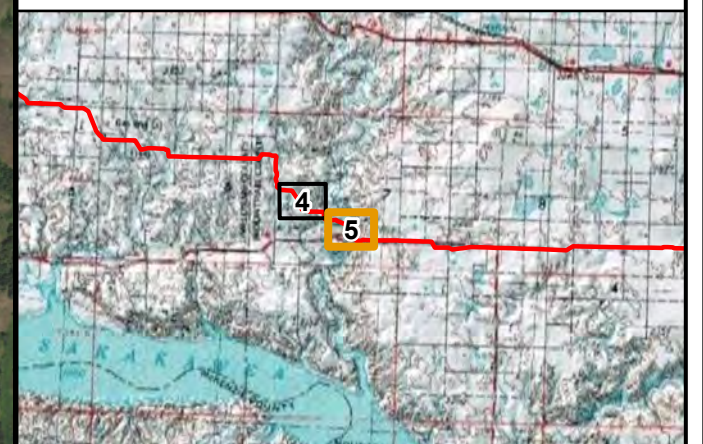
JAN 2020

Map 4 of 7

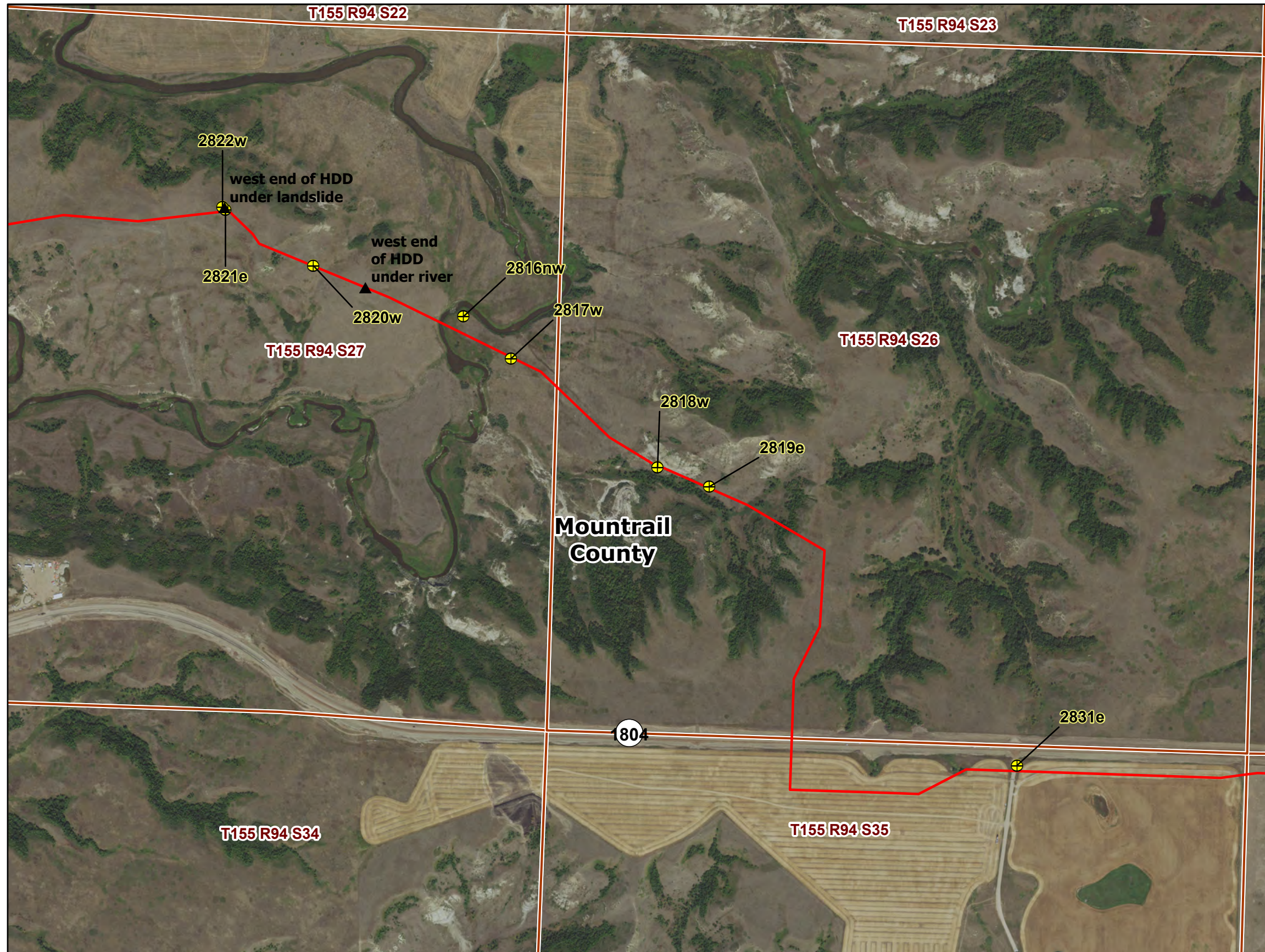
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**Cenex Pipeline
Figure 5**

-  Photo Observation: Spread-1
-  Photo Observation: Spread-2
-  Cenex Pipeline Centerline (PU-17-97)
-  Section Boundary



2018 Aerial Photograph (Source: NAIP)
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PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations







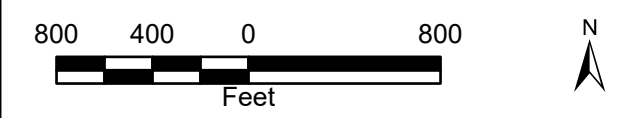
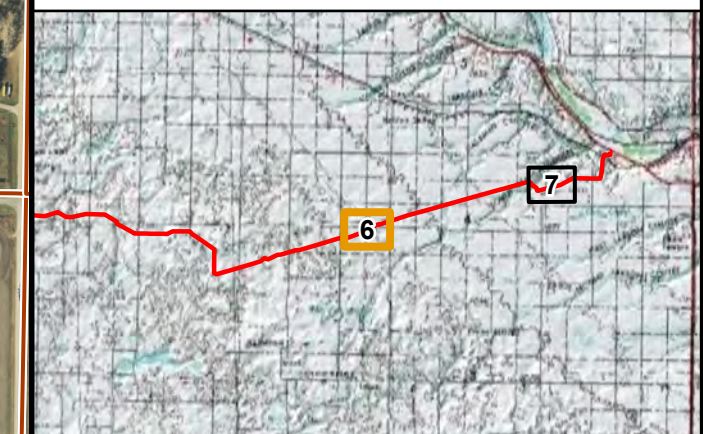
JAN 2020

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**Cenex Pipeline
Figure 6**

-  Photo Observation: Spread-1
-  Photo Observation: Spread-2
-  Cenex Pipeline Centerline (PU-17-97)
-  Section Boundary



2018 Aerial Photograph (Source: NAIP)
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PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations







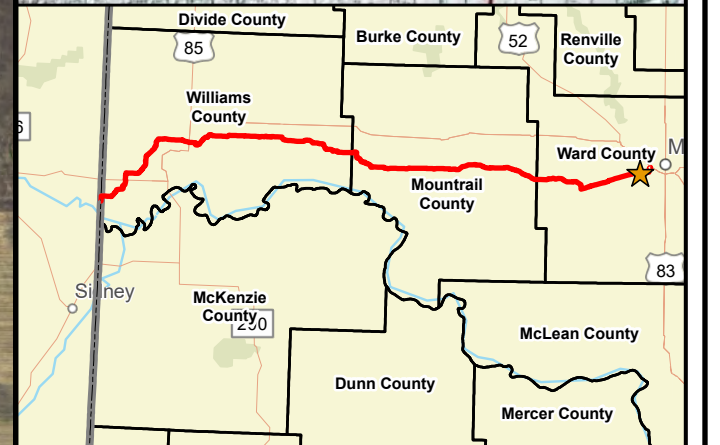
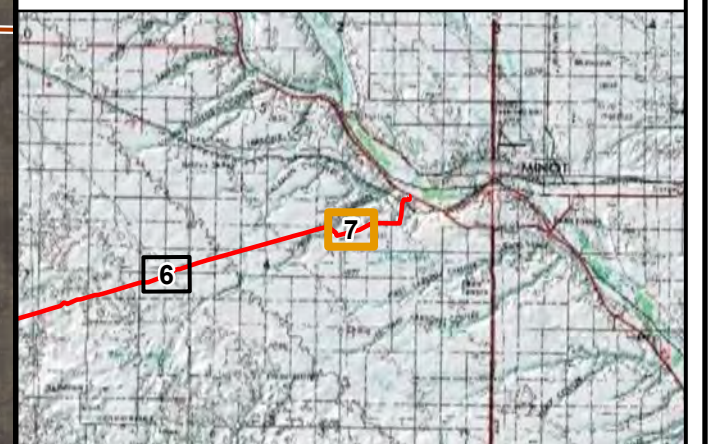
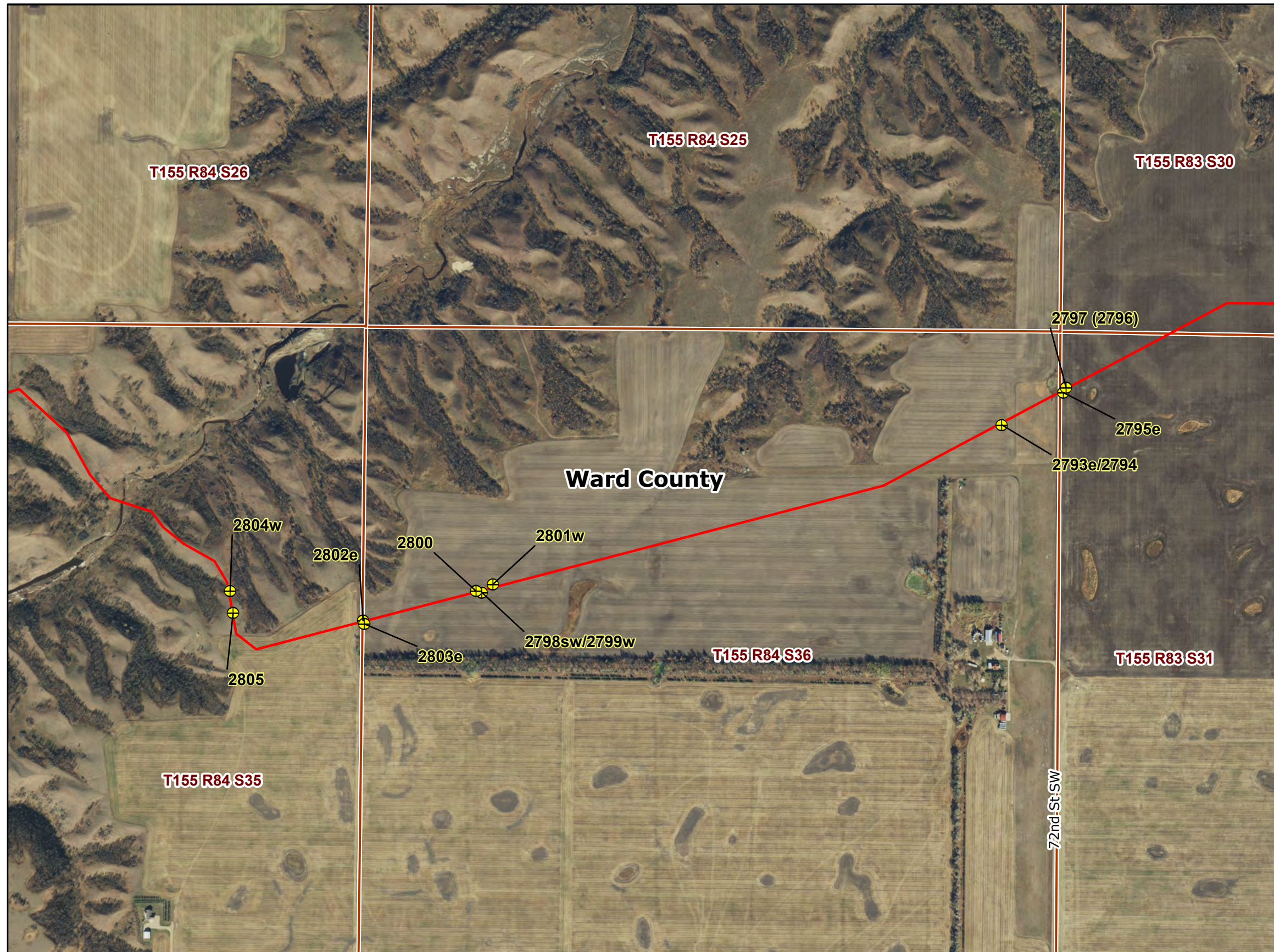
Responsive partner. Exceptional outcomes.

JAN 2020

Map 6 of 7

**Cenex Pipeline
Figure 7**

-  Photo Observation: Spread-1
-  Photo Observation: Spread-2
-  Cenex Pipeline Centerline (PU-17-97)
-  Section Boundary



2018 Aerial Photograph (Source: NAIP)
 Path: U:\GIS\2579\0033\pro\Cenex_Pipeline\Cenex_Pipeline.aprx
 Date: 1/28/2020 Time: 12:15 PM User: RetMH0505

PU-17-97 CENEX PIPELINE CONSTRUCTION INSPECTION

Interim As-Built Observation Locations



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Inspection Observation Point Summary

Point #	Latitude	Longitude	Date
208	48.108962	-103.949329	10/9/2019
210a	48.111269	-103.939771	10/9/2019
210b	48.111269	-103.939771	10/9/2019
211a	48.162234	-103.884582	10/9/2019
211b	48.162234	-103.884582	10/9/2019
213a	48.277155	-103.71247	10/9/2019
213b	48.277155	-103.71247	10/9/2019
2793e	48.20929608	-101.40600000	1/21/2020
2794	48.20929608	-101.40600000	1/21/2020
2795e	48.20998120	-101.40399999	1/21/2020
2796	48.21008547	-101.40399999	1/21/2020
2797	48.21008547	-101.40399999	1/21/2020
2798sw	48.20568374	-101.42199999	1/21/2020
2799w	48.20568374	-101.42199999	1/21/2020
2800	48.20570952	-101.42199999	1/21/2020
2801w	48.20585745	-101.42100000	1/21/2020
2802e	48.20506670	-101.42499999	1/21/2020
2803e	48.20500132	-101.42499999	1/21/2020
2804w	48.2056564	-101.4300000	1/21/2020
2805	48.2051953	-101.42900000	1/21/2020
2806e	48.18114525	-101.57200000	1/21/2020
2807w	48.18114524	-101.57200000	1/21/2020
2808e	48.18061809	-101.57399999	1/21/2020
2809e	48.17954319	-101.57800000	1/21/2020
2810w	48.17949868	-101.57800000	1/21/2020
2811	48.17959364	-101.57699999	1/21/2020
2812	48.17959364	-101.57699999	1/21/2020
2813nw	48.22611720	-102.76300000	1/22/2020
2814n	48.22608632	-102.76300000	1/22/2020
2815s	48.22608632	-102.76300000	1/22/2020
2816nw	48.22004008	-102.74500000	1/22/2020
2817w	48.21919443	-102.74400000	1/22/2020
2818w	48.21702279	-102.73900000	1/22/2020
2819e	48.21664925	-102.73699999	1/22/2020
2820w	48.22100450	-102.75000000	1/22/2020
2821e	48.22211863	-102.75300000	1/22/2020

Point #	Latitude	Longitude	Date
2822w	48.22217100	-102.75300000	1/22/2020
2823	48.23803668	-102.79600000	1/22/2020
2824w	48.23812273	-102.79600000	1/22/2020
2825e	48.23821881	-102.79500000	1/22/2020
2826	48.23819442	-102.79500000	1/22/2020
2827	48.23819442	-102.79500000	1/22/2020
2828	48.23820424	-102.79500000	1/22/2020
2829e	48.23812245	-102.79500000	1/22/2020
2830e	48.23821248	-102.79600000	1/22/2020
2831e	48.21104139	-102.72799999	1/22/2020

Inspection Photographs

Cenex - On-Site Photographs

	<p>Observation Point: 208 Date Taken: October 09,2019 Direction Photo is Taken: East T153R103S4 Spread 1</p> <p>Photo Description: Overview of typical conditions within right-of-way (ROW), exemplifying final work product of pipe trench backfilling and topsoil replacement construction phase.</p> <p>Latitude: 48.108962 Longitude: -103.949329</p>
	<p>Observation Point: 210a Date Taken: October 09,2019 Direction Photo is Taken: North T154R103S33 Spread 1</p> <p>Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling and topsoil replacement construction phase.</p> <p>Latitude: 48.111269 Longitude: -103.939771</p>
	<p>Observation Point: 210b Date Taken: October 09, 2019 Direction Photo is Taken: South T153R103S4 Spread 1</p> <p>Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling, topsoil replacement, and fence replacement.</p> <p>Latitude: 48.111269 Longitude: -103.939771</p>

Cenex - On-Site Photographs

**Observation Point: 211a**

Date Taken: October 09, 2019

Direction Photo is Taken: East

T154R103S13 Spread 1

Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling, topsoil replacement, and fence replacement.

Latitude: 48.162234

Longitude: -103.884582

**Observation Point: 211b**

Date Taken: October 09, 2019

Direction Photo is Taken: West

T154R103S14 Spread 1

Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling and topsoil replacement, and fence replacement. Note road appears to have been bored.

Latitude: 48.162234

Longitude: -103.884582

**Observation Point: 213a**

Date Taken: October 09, 2019

Direction Photo is Taken: East

T155R101S5 Spread1

Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling, topsoil replacement, and fence replacement. Note road appears to have been bored.

Latitude: 48.277155

Longitude: -103.71247

Cenex - On-Site Photographs

	<p>Observation Point: 213b Date Taken: October 09, 2019 Direction Photo is Taken: West T155R101S6 Spread 1</p> <p>Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling and topsoil replacement construction phase. Note fence replacement.</p> <p>Latitude: 48.277155 Longitude: -103.71247</p>
	<p>Observation Point: 2793e Date Taken: January 21, 2020 Direction Photo is Taken: East T155R84S36 Spread 2</p> <p>Photo Description: Overview of ROW and HDD bore under grass airstrip.</p> <p>Latitude: 48.20929608 Longitude: -101.40600000</p>
	<p>Observation Point: 2794 Date Taken: January 21, 2020 Direction Photo is Taken: West T155R84S36 Spread 2</p> <p>Photo Description: Overview of subsoil backfilling and topsoil pile.</p> <p>Latitude: 48.20929608 Longitude: -101.40600000</p>

Cenex - On-Site Photographs

**Observation Point: 2795e**

Date Taken: January 21, 2020

Direction Photo is Taken: East

T155R84S31 Spread 2

Photo Description: Pipe and topsoil pile along active construction of ROW.

Latitude: 48.20998120

Longitude: -101.40399999

**Observation Point: 2796**

Date Taken: January 21, 2020

Direction Photo is Taken: N/A

T155R84S31 Spread 2

Photo Description: Pipe depth at approximately 60-inches at HDD tie-in area; a minimum of 72-inches under unimproved sections lines is required, which occurs adjacent to the west of observation point. Note the pipe is at a slight downward angle towards section line, assumingly to appropriate minimum depth. Topsoil inadequately stripped, approximately 12-inches of topsoil remain in trench soil profile.

Latitude: 48.21008547

Longitude: -101.40399999

**Observation Point: 2797**

Date Taken: January 21, 2020

Direction Photo is Taken: N/A

T155R84S31 Spread 2

Photo Description: Pipe depth at approximately 60-inches; a minimum of 72-inches under unimproved sections lines is required, of which occurs immediately to the west of observation point. Note the pipe is at a slight downward angle towards section line. Topsoil inadequately stripped, approximately 12-inches of topsoil remain in trench soil profile.

Latitude: 48.21008547

Longitude: -101.40399999

Cenex - On-Site Photographs

**Observation Point: 2798sw**

Date Taken: January 21, 2020

Direction Photo is Taken: Southwest
T155R84S36 Spread 2

Photo Description: Frozen topsoil stockpile crossing slight drainage swale, no erosion control observed.

Latitude: 48.20568374

Longitude: -101.42199999

**Observation Point: 2799w**

Date Taken: January 21, 2020

Direction Photo is Taken: West
T155R84S36 Spread 2

Photo Description: Excavator actively trenching through subsoil frost layer. Topsoil has previously been appropriately stripped.

Latitude: 48.20568374

Longitude: -101.42199999

**Observation Point: 2800**

Date Taken: January 21, 2020

Direction Photo is Taken: N/A
T155R84S36 Spread 2

Photo Description: View of recent trenching activities, exemplifies topsoil was stripped properly when the activity was performed previous to frost conditions. Frost layer measured to 20-inch depth.

Latitude: 48.20570952

Longitude: -101.42199999

Cenex - On-Site Photographs



Observation Point: 2801w
Date Taken: January 21, 2020
Direction Photo is Taken: West
T155R84S36 Spread 2

Photo Description: Slight off ROW tracking observed north of the ROW.

Latitude: 48.20585745
Longitude: -101.42100000



Observation Point: 2802e
Date Taken: January 21, 2020
Direction Photo is Taken: East
T155R84S36 Spread 2

Photo Description: Trench showing properly segregated soils.

Latitude: 48.20506670
Longitude: -101.42499999



Observation Point: 2803e
Date Taken: January 21, 2020
Direction Photo is Taken: East
T155R84S36 Spread 2

Photo Description: View slightly to the south of observation point 2802e. Properly segregated topsoil and subsoil piles.

Latitude: 48.20500131
Longitude: -101.42499999

Cenex - On-Site Photographs



Observation Point: 2804w
Date Taken: January 21, 2020
Direction Photo is Taken: West
T155R84S35 Spread 2

Photo Description: Overview of subsoil backfill and silt fence.

Latitude: 48.20565640
Longitude: -101.4300000



Observation Point: 2805
Date Taken: January 21, 2020
Direction Photo is Taken: N/A
T155R84S35 Spread 2

Photo Description: Pipe depth approximately 60 inches. Trench profile appropriately shows no evidence of topsoil.

Latitude: 48.2051953
Longitude: -103.42900000



Observation Point: 2806e
Date Taken: January 21, 2020
Direction Photo is Taken: East
T154R85S11 Spread 2

Photo Description: Winter trenching, no observed issues with topsoil.

Latitude: 48.18114524
Longitude: -101.57200000

Cenex - On-Site Photographs

**Observation Point: 2807w**

Date Taken: January 21, 2020
 Direction Photo is Taken: West
 T154R85S11 Spread 2

Photo Description: Winter trenching, no observed issues with topsoil.

Latitude: 48.18114524
 Longitude: -101.57200000

**Observation Point: 2808e**

Date Taken: January 21, 2020
 Direction Photo is Taken: East
 T154R85S11 Spread 2

Photo Description: Subsoil stockpile near ROW edge, some areas of subsoil appeared placed atop in-situ topsoil.

Latitude: 48.18061809
 Longitude: -101.57399999

**Observation Point: 2809e**

Date Taken: January 21, 2020
 Direction Photo is Taken: East
 T154R85S10 Spread 2

Photo Description: Overlooking double ditch trench between appropriately stripped ROW and HDD tie-in where no topsoil segregation occurred prior to commencement of activities. Wet area to south of mixed stockpile may have impeded previous fall topsoil stripping at this area.

Latitude: 48.17954319
 Longitude: -101.57800000

Cenex - On-Site Photographs**Observation Point: 2810w**

Date Taken: January 21, 2020
Direction Photo is Taken: West
T154R85S10 Spread 2

Photo Description: Previously stripped ROW with topsoil to south (left), awaiting spring replacement; no issues.

Latitude: 48.17949868
Longitude: -101.57800000

**Observation Point: 2811**

Date Taken: January 21, 2020
Direction Photo is Taken: N/A
T154R85S10 Spread 2

Photo Description: Mixed subsoil and topsoil stockpile at HDD tie-in area.

Latitude: 48.17959364
Longitude: -101.57699999

**Observation Point: 2812**

Date Taken: January 21, 2020
Direction Photo is Taken: N/A
T154R85S10 Spread 2

Photo Description: Mixed subsoil and topsoil stockpile at HDD tie-in area.

Latitude: 48.17959364
Longitude: -101.57699999

Cenex - On-Site Photographs

**Observation Point: 2813nw**

Date Taken: January 22, 2020

Direction Photo is Taken: Northwest

T155R94S27 Spread 2

Photo Description: Backfilled subsoil and topsoil, rebuilt fence.

Latitude: 48.22611720

Longitude: -102.76300000

**Observation Point: 2814n**

Date Taken: January 22, 2020

Direction Photo is Taken: North

T155R94S27 Spread 2

Photo Description: Rebuilt fence and soils appropriately replaced along ROW.

Latitude: 48.22608632

Longitude: -102.76300000

**Observation Point: 2815s**

Date Taken: January 22, 2020

Direction Photo is Taken: South

T155R94S27 Spread 2

Photo Description: Backfilled subsoil and topsoil; rock picking windrow on west (right) edge of ROW; on contractor punch list to pick rock in the spring.

Latitude: 48.22608632

Longitude: -102.76300000

Cenex - On-Site Photographs

**Observation Point: 2816nw**

Date Taken: January 22, 2020

Direction Photo is Taken: Northwest
T155R94S27 Spread 2

Photo Description: Temporary bridge across White Earth River, silt fence, and replaced cattle fence.

Latitude: 48.22004008

Longitude: -102.74500000

**Observation Point: 2817w**

Date Taken: January 22, 2020

Direction Photo is Taken: West
T155R94S27 Spread 2

Photo Description: Overlooking HDD under White Earth River from east endpoint of boring.

Latitude: 48.21919443

Longitude: -102.74400000

**Observation Point: 2818w**

Date Taken: January 22, 2020

Direction Photo is Taken: West
T155R94S26 Spread 2

Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling and topsoil replacement construction phase.

Latitude: 48.21702279

Longitude: -102.73900000

Cenex - On-Site Photographs

**Observation Point: 2819e**

Date Taken: January 22, 2020

Direction Photo is Taken: East

T155R94S26 Spread 2

Photo Description: Overlooking HDD portion of ROW and backfilled subsoil and topsoil at ROW workspace.

Latitude: 48.21664925

Longitude: -102.73699999

**Observation Point: 2820w**

Date Taken: January 22, 2020

Direction Photo is Taken: West

T155R94S27 Spread 2

Photo Description: Overlooking east end of HDD for geological unstable area.

Latitude: 48.22100450

Longitude: -102.75000000

**Observation Point: 2821e**

Date Taken: January 22, 2020

Direction Photo is Taken: East

T155R94S27 Spread 2

Photo Description: Overlooking west end of conducted HDD near geological unstable areas and Dakota Skipper habitat.

Latitude: 48.22211863

Longitude: -102.75300000

Cenex - On-Site Photographs

**Observation Point: 2822w**

Date Taken: January 22, 2020
 Direction Photo is Taken: West
 T155R94S27 Spread 2

Photo Description: Overview of typical conditions within ROW, exemplifying final work product of pipe trench backfilling and topsoil replacement construction phase.

Latitude: 48.22217100
 Longitude: -102.75300000

**Observation Point: 2823**

Date Taken: January 22, 2020
 Direction Photo is Taken: N/A
 T155R94S20 Spread 2

Photo Description: Pipe measured at 54-inches at rerouted portion of ROW for archeological avoidance area.

Latitude: 48.23803668
 Longitude: -102.79600000

**Observation Point: 2824w**

Date Taken: January 22, 2020
 Direction Photo is Taken: West
 T155R94S20 Spread 2

Photo Description: Overview of pipe reroute to avoid archeological avoidance area.

Latitude: 48.23812273
 Longitude: -102.79600000

Cenex - On-Site Photographs

**Observation Point: 2825e**

Date Taken: January 22, 2020
 Direction Photo is Taken: East
 T155R94S20 Spread 2

Photo Description: Overview of pipe trenching and segregation of topsoil and subsoils. Minor remaining topsoil in low areas, resulting in some mixing into subsoil piles.

Latitude: 48.23821881
 Longitude: -102.79500000

**Observation Point: 2826**

Date Taken: January 22, 2020
 Direction Photo is Taken: North
 T155R94S20 Spread 2

Photo Description: Exemplification of topsoil mixed with subsoil stockpiles described in Observation Point 2825e.

Latitude: 48.23819442
 Longitude: -102.79500000

**Observation Point: 2827**

Date Taken: January 22, 2020
 Direction Photo is Taken: North
 T155R94S20 Spread 2

Photo Description: Exemplification of topsoil mixed with subsoil stockpiles described in Observation Point 2825e.

Latitude: 48.23819442
 Longitude: -102.79500000

Cenex - On-Site Photographs

**Observation Point: 2828**

Date Taken: January 22, 2020
 Direction Photo is Taken: North
 T155R94S20 Spread 2

Photo Description: Exemplification of appropriately segregated subsoil.

Latitude: 48.23820424
 Longitude: -102.79500000

**Observation Point: 2829e**

Date Taken: January 22, 2020
 Direction Photo is Taken: East
 T155R94S20 Spread 2

Photo Description: Overview of topsoil stockpile exemplifying stockpile uniformity of size. Topsoil stockpiles should vary in size based upon salvage depths described in Observation Point 2825e.

Latitude: 48.23812245
 Longitude: -102.79500000

**Observation Point: 2830e**

Date Taken: January 22, 2020
 Direction Photo is Taken: East
 T155R94S20 Spread 2

Photo Description: Overview of ROW an active trenching activities, no issues.

Latitude: 48.23821248
 Longitude: -102.79699999

Cenex - On-Site Photographs



Observation Point: 2831e

Date Taken: January 22, 2020

Direction Photo is Taken: East

T155R94S35 Spread 2

Photo Description: Overview of stripped topsoil, awaiting trenching.

Latitude: 48.21104139

Longitude: -102.72799999

