

PU-18-399  
ONEOK Bakken Pipeline, L.L.C.  
Demicks Lake, 20-inch NGL Pipeline  
As-Built Inspection Report



*Prepared for:*

North Dakota  
Public Service Commission

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- 1-19 Observation Point Map

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- A Field Observation Coordinates
- B Observation Point Photolog

**Table 1: Cross Reference Matrix**

Source of Project Specification	Description of Project Specification	Written Verification	3 <sup>rd</sup> Party Verification
<b>GENERAL</b>			
FINDINGS OF FACT 1.	ONEOK Bakken Pipeline, L.L.C. is a Delaware limited liability company. ONEOK Bakken Pipeline, L.L.C. has been authorized to do business in the State of North Dakota, as evidenced by the corporate papers filed with the Commission on February 7, 2019, in Case No. PU-13-739.	PU-13-739 - Docket 2: Corporate Papers	Section 3.1
<b>SIZE, TYPE &amp; LOCATION</b>			
FINDINGS OF FACT 2.	The Project consists of approximately 77 miles of 20-inch diameter steel pipeline, with approximately 74.3 miles located in McKenzie County, North Dakota. The Project includes seven mainline block valves, one pig launcher facility, and one pig launcher with receiver facility. The Project is capable of transporting up to 40,000 barrels of NGLs per day.	Docket 1: Consolidated Application	Section 3.2.1
FINDINGS OF FACT 3.	The Project will originate at the Demicks Lake Natural Gas Processing Plant in McKenzie County and terminate in Richland County, Montana at a planned interconnection with a ONEOK affiliate pipeline.	Docket 1: Consolidated Application	Section 3.2.2
FINDINGS OF FACT 4.	The proposed facility corridor and pipeline route is identified in Hearing Exhibit 5.	Docket 1: Consolidated Application	Section 3.2.2
FINDINGS OF FACT 5.	The pipeline has a maximum operating pressure of 1,480 pounds per square inch.	Docket 1: Consolidated Application	Section 3.2.1
FINDINGS OF FACT 6.	The estimated cost of the Project is \$125 million dollars.	Docket 1: Consolidated Application	Section 3.2.1
FINDINGS OF FACT 7.	ONEOK anticipates a fourth quarter 2019 in-service date for the facility.	Docket 1: Consolidated Application	Section 3.2.1
<b>STUDY OF PREFERRED LOCATION</b>			
FINDINGS OF FACT 8.	ONEOK conducted a Class I cultural resource literature review and a desktop analysis for wetlands, waterbodies, woodlands, and other sensitive environmental resources across a one-mile wide area centered on the pipeline route (Study Area).	Docket 1: Consolidated Application	Section 3.3.1.1

FINDINGS OF FACT 9.	ONEOK conducted several surveys and a habitat assessment across an approximately 300-foot-wide area generally centered on the Project route (Survey Area). ONEOK conducted a natural resources survey, which included wetland and waterbody surveys, noxious weed surveys, and a general habitat assessment for state- and federally-listed species. ONEOK also conducted a Dakota skipper survey, a tree/sapling/shrub survey, an eagle and raptor nest survey, and a biological survey. In addition, ONEOK conducted a Forest Service Sensitive Species Survey for sensitive plants, wildlife, and plant and species habitats across the Survey Area through the Little Missouri National Grasslands (LMNG). Surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5.	Docket 1: Consolidated Application	Section 3.3.2
FINDINGS OF FACT 10.	ONEOK conducted a Class III cultural resource inventory across the Survey Area. The Class III reports were submitted to the North Dakota State Historic Preservation Office. Surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5.	Docket 1: Consolidated Application; Dockets 49-52: Exhibits 9-12, Letter(s) from North Dakota SHPO dated 3/4/19, 3/4/19, 3/12/19, and 4/2/19 respectively	Section 3.3.1.2
FINDINGS OF FACT 11.	Section 49-22.1-13(4) of the North Dakota Century Code provides that a site shall not be designated that violates the rules of any state agency, and that compliance with an agency's rules shall be presumed if the agency fails to present its position with respect to the proposed facility at the public hearing.	NDCC 49-22.1-13(4)	Section 3.3.3.1
FINDINGS OF FACT 12.	ONEOK initiated correspondence with federal, state and local departments, agencies and entities as follows: a. Federal: (i) U.S. Forest Service (USFS); (ii) U.S. Fish and Wildlife Service (USFWS); (iii) U.S. Army Corps of Engineers; (iv) U.S. Air Force; and (v) U.S. Department of Agriculture. b. State: (i) North Dakota State Historic Preservation Office (NDSHPO); (ii) North Dakota Parks and Recreation Department; (iii) North Dakota Department of Trust Lands; (iv) North Dakota Department of Health; (v) North Dakota Geological Survey (NDGS); (vi) North Dakota State Water Commission; and (vii) North Dakota Game and Fish Department (NDGFD); c. Local: (i) The McKenzie County Board of Commissioners; (ii) McKenzie County Water Resource District; (iii) The McKenzie County Weed Control Board; and (iv) Western Area Water Supply.	Docket #1, Consolidated Application, Table 6.01-1	Section 3.3.3.2

**SITING CRITERIA**

**Exclusion Areas**

FINDINGS OF FACT 14.	The Commission has developed criteria pursuant to North Dakota Century Code section 49-22.1-03 to guide the site, corridor, and route suitability evaluation and designation process. The criteria, as set forth in North Dakota Administrative Code 69- 06-08-02 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.	NDCC 49-22.1-03; NDAC 69-06-08-02	<i>Section 3.4</i>
FINDINGS OF FACT 15.	ONEOK evaluated the Survey Area and route regarding the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria.	Docket 1: Consolidated Application	<i>Section 3.4</i>
FINDINGS OF FACT 16.	An Exclusion Area is a geographic area that must be excluded in the consideration of a route for a transmission facility. An Exclusion Area may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor unless there is no reasonable alternative. A transmission facility route must not be sited within an Exclusion Area.	NDAC 69-06-08-02(1)	<i>Section 3.4.1</i>
FINDINGS OF FACT 17.	State designated archeological sites are an Exclusion Area. One eligible cultural resource site on record with the NDSHPO is located within the Project Corridor. ONEOK testified that construction will not impact the portions of the site which contribute to its eligibility. For the surveyed areas in Hearing Exhibit 5, NDSHPO concurred with a "no significant sites affected determination". NDSHPO identified other sites to be avoided by construction, and ONEOK will avoid those sites. ONEOK will file NDSHPO concurrence for un-surveyed areas of the Survey Area prior to beginning construction in those areas.	Docket 1: Consolidated Application, Sec. 7.1.1; Dockets 49-52: Exhibits 9-12, Letter(s) from North Dakota SHPO dated 3/4/19, 3/4/19, 3/12/19, and 4/2/19 respectively	<i>Section 3.4.1.2</i>

FINDINGS OF FACT 18.	ONEOK's studies and surveys did not record any other Exclusion Areas within the Survey Area.	Docket 1: Consolidated Application, Section 7.1.1; Docket 46: Exhibit 6, Updated Application Exclusion Area Table 7.1-1; Docket 74: USFWS Concurrence Letter	Section 3.4.1
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**Avoidance Areas**

FINDINGS OF FACT 19.	An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant demonstrates that under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes. Economic considerations alone will not justify approval of these areas.	NDAC 69-06-08-02(2)	Section 3.4.2
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FINDINGS OF FACT 20.	Designated or registered national grasslands are an Avoidance Area. The Project crosses the Little Missouri National Grasslands (LMNG). Seven out of nine miles of the proposed route that crosses the LMNG are collocated with existing pipeline corridors. ONEOK testified that the proposed pipeline was collocated to the furthest extent possible with their existing Garden Creek Pipeline located within the LMNG. ONEOK also testified that the route has to cross the LMNG in order to terminate at a planned interconnection and that ONEOK selected a route in a way that avoided parcels of the LMNG. ONEOK will obtain a Special Use Permit from the USFS prior to commencing construction at this crossing. There is no reasonable alternative to crossing the LMNG based on the origination and termination points of the Project. ONEOK has collocated the route to the extent possible and avoided the LMNG where possible in areas where collocation did not occur. Including the areas of the route that are collocated within the LMNG, approximately fifty-one total miles of the pipeline is collocated. Collocation promotes orderly siting of facilities and efficient use of resources. In addition, no alternative route has been suggested or is apparent based on the evidence, and the proposed route through the LMNG is not based on economic considerations alone.	Docket 1: Consolidated Application; Docket 117: Forest Service Special Use Permit (MCK18033) & the Decision Notice and FONSI	Section 3.4.2.1
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FINDINGS OF FACT 21.	Areas that are geologically unstable or potentially unstable are an Avoidance Area. Based on North Dakota Geological Survey data, one landslide deposit area is within the proposed corridor; however, this landslide deposit area will be avoided by the Project route. NDGS's August 21, 2018 letter identified several potentially unstable areas and recommended additional engineering evaluations. ONEOK will conduct engineering evaluations prior to construction in those areas. To the extent the additional engineering evaluations indicate any of these areas are geologically unstable, ONEOK will reroute to avoid construction in any geologically unstable area or will file with the Commission its analysis supporting that there is no reasonable alternative to construction in the applicable area including what measures are being taken to avoid impacts of construction and operation of the Project in any area that is determined to be geologically unstable.	Docket 1: Consolidated Application; Docket 86: Geotechnical evaluations for HDD sites at mile posts 38.1 & 47.2; Docket 96: Final Comprehensive Field Reconnaissance Report	Section 3.4.2.4
FINDINGS OF FACT 22.	Areas within five hundred feet of a residence, school, or place of business are an Avoidance Area. ONEOK testified that it identified three occupied structures within five hundred feet of the Project route. ONEOK has obtained waivers for two of these structures and submitted copies as Exhibit E to Hearing Exhibit 2. ONEOK testified it will obtain the remaining landowner waiver prior to constructing the Project within 500 feet of said area, or ONEOK will file a route adjustment with the Commission to be outside 500 feet of the occupied area.	Docket 1: Consolidated Application, Sec. 7.2.5	Section 3.4.2.5
FINDINGS OF FACT 23.	ONEOK's surveys did not identify any other Avoidance Areas within the Survey Area.	Docket 1: Consolidated Application, Table 7.2-1	Section 3.4.2
<b>Selection Criteria</b>			
FINDINGS OF FACT 24.	The Commission's Selection Criteria is set forth in North Dakota Administrative Code section 69-06-08-02(3). A corridor or route shall be approved only if it is determined that any significant adverse effects that will result from the location, construction and operation of the facility as they relate to the selection criteria will be at an acceptable minimum, or will be managed and maintained at an acceptable minimum. ONEOK analyzed the effects that may result from the location, construction, and operation of the Project.	NDAC 69-06-08-02(3); Docket 1: Consolidated Application, Sec. 7.3	Section 3.4.3
FINDINGS OF FACT 25.	Wetlands, woodlands, and wooded areas are Selection Criteria. The route crosses 16 wetlands and 12 waterbodies. ONEOK will avoid wetlands and waterbodies, or will employ horizontal directional drilling, boring, or where the open-cut technique is used, will following best practice management policies to minimize impacts.	Docket 1: Consolidated Application, Sec. 7.3.5, Exhibit B.3, Exhibit B.4, Sec. 9, and Exhibit C	Section 3.4.3.2

FINDINGS OF FACT 26.	During construction, the increase in ambient sound will primarily be from the use of heavy equipment and trucks. Ambient sound will be minimal during pipeline operation.	Docket 1: Consolidated Application, Sec. 7.3.2	Section 3.4.3.2
FINDINGS OF FACT 27.	The proposed Project will affect 694 acres of private land in North Dakota, of which approximately 331 acres consist of cropland. Once construction is complete, ONEOK will restore land to its pre-construction contours and land use. ONEOK will also provide settlements to landowners for crop loss caused by construction.	Docket 1: Consolidated Application, Sec. 7.3.1; Docket 18: Amendment to Consolidated Application, Sec. 7.3.1	Section 3.4.3.1
FINDINGS OF FACT 28.	The proposed Project will not have significant adverse impacts to extractive and storage resources, visual effects on adjacent areas, ground water flow patterns, or radio, television, and other communication or electronic facilities. If drainage patterns are disturbed during construction, ONEOK will restore those affected areas to their original local topography. Furthermore, the visual effect will be minimal and mainly consist of the installation of seven above-ground mainline block valves.	Docket 1: Consolidated Application, Sec. 7.3.1, 7.3.3, 7.3.4, and 7.3.6	Section 3.4.3.2
FINDINGS OF FACT 29.	ONEOK testified they routinely inspect the pipeline, including right-of-way inspections using an aerial patrol every other week. Furthermore, ONEOK will promote public awareness of pipelines and pipeline safety through public education and an outreach program. Construction right-of-ways will be watered down if necessary to control for fugitive dust emissions. ONEOK's Construction Mitigation and Restoration Plan guides their construction techniques, and the document will be finalized prior to construction.	Docket 1: Consolidated Application, Sec. 7.3.7 and 8.6; Docket #73 Construction Mitigation and Restoration Plan	Section 3.4.3.2

**Policy Criteria**

FINDINGS OF FACT 30.	The Commission's Policy Criteria is set forth in North Dakota Administrative Code section 69-06-08-02(4). The Commission may give preference to an applicant demonstrating certain benefits from the proposed transmission facility.	NDAC 69-06-08-02(4); Docket 1, Consolidated Application, Sec. 7.4	Section 3.4.4
FINDINGS OF FACT 31.	ONEOK testified they have maximized the benefits set forward by the Policy Criteria set forth in Section 69-06-08-02(4) of the North Dakota Administrative Code.	NA	Section 3.4.4

**Additional Mitigative Measures**

FINDINGS OF FACT 32.	ONEOK has agreed to a number of measures to mitigate potential Project impacts, as indicated by the attached Certification Relating to Order Provisions - Transmission Facility Siting along with the attached Tree and Shrub Mitigation Specifications.	Docket 1: Consolidated Application; Docket 33: Certification Relating to Order Provisions; Docket 57: Findings of Fact, Conclusions of Law and Order	Section 3.5.1
FINDINGS OF FACT 33.	ONEOK is developing several documents that will be used to minimize and mitigate impacts to environmental resources. These draft documents are included in Exhibit 3. The documents will be finalized and filed with the Commission prior to construction.	Docket #1 Consolidated Application, Sec. 9.0; Docket #43 Exhibit 3	Section 3.5.1
FINDINGS OF FACT 34.	NDSHPO has approved ONEOK's Unanticipated Discoveries Plan, which provides response measures to be followed in the event of a discovery of cultural or human remains.	Docket 77: SHPO Concurrence	Section 3.5.2
FINDINGS OF FACT 35.	ONEOK will participate in the North Dakota One-Call Excavation Notice System.	Docket 1: Consolidated	Section 3.5.3.1

		Application, Sec. 4.1.3 &7.4.9	
FINDINGS OF FACT 36.	ONEOK requires construction equipment to be cleaned before arriving on the construction site to address the spread of noxious weeds.	Docket 1: Consolidated Application, Sec. 5.5, 9.4	<i>Section 3.5.1.5</i>
FINDINGS OF FACT 37.	ONEOK conducted Dakota skipper habitat and occupancy studies. No designated critical Dakota skipper habitat is located within the Survey Area. ONEOK testified that after consultation with the USFWS and the USFS, and as part of the USFS's process to review the application for a Special Use Permit, ONEOK will take measures to avoid impacts to suitable occupied Dakota skipper habitat that has not been designated. The route and associated construction activities will be at least one kilometer away from occupied suitable habitat areas during the species' flight period. For habitat areas that are not designated, not occupied, but suitable habitat, ONEOK proposes to use the trenching method of construction and will provide a seed mix that would restore the habitat, pending landowner approval. ONEOK will obtain any necessary permits from the USFS prior to commencing construction on the portion of the Project that crosses the LMNG.	Docket 1: Consolidated Application, Sec. 5.3, 5.3.1, 6.1, 7.1.4, 9.4; Docket 74: USFWS Concurrence; Docket 117: USFS Special Use Permit and FONSI	<i>Section 3.5.1.6</i>
FINDINGS OF FACT 38.	ONEOK collocated approximately 69% of the route in North Dakota within an existing pipeline corridor in an effort to minimize environmental disruption.	Docket 1: Application	<i>Section 3.5.1.7</i>
FINDINGS OF FACT 39.	ONEOK testified they will follow NDGFD's recommendations to avoid impacts to raptor nests and wetlands, and ONEOK indicated to NDGFD that they will mitigate in kind any unavoidable destruction or degradation of wetlands. ONEOK plans to use line-of- sight surveys versus aerial surveys per the advice of USFS to identify raptor nests and then to implement buffers around any active nest.	Docket 1: Consolidated Application, Sec. 6.7, Exhibit D.	<i>Section 3.5.1.8</i>
FINDINGS OF FACT 40.	ONEOK testified that they will comply with all applicable safety laws and standards.	Docket 1: Consolidated Application, Sec. 7.4.1	<i>Section 3.5.3</i>
FINDINGS OF FACT 41.	The Project will be designed, constructed, maintained, and inspected to the USDOT Pipeline and Hazardous Materials Safety Administration regulations utilizing industry standards.	Docket 1: Consolidated Application, Sec. 2.5	<i>Section 3.5.3.2</i>
FINDINGS OF FACT 42.	A Supervisory Control and Data Acquisition (SCADA) system will allow ONEOK to monitor the pipeline 24 hours a day, 7 days a week, and 365 days a year by trained controls personnel. The system will monitor the flow and pressure of the system, and the system will allow ONEOK to identify and respond to situations outside normal operating conditions. Two of the seven valves can be remotely shut off.	Docket 71: Emergency Official Agency Response	<i>Section 3.5.3.3</i>

		Information Book	
FINDINGS OF FACT 43.	ONEOK will employ one or more environmental inspectors on site every day during construction, and will employ 3rd party inspectors to monitor the construction activities and ensure activities are in compliance with company processes and practices.	Docket 1: Consolidated Application, Sec. 9	Section 3.5.1.9
FINDINGS OF FACT 44.	ONEOK testified they have meetings to educate emergency response officials about how to react to pipeline emergencies. ONEOK sends yearly mailings to local emergency response officials detailing how to identify and respond to a leak, and they include with the mailings the emergency contact phone numbers.	Docket 1: Consolidated Application Sec. 7.4.9	Section 3.5.3.4
FINDINGS OF FACT 45.	ONEOK's emergency response group will reach out to the McKenzie County Emergency Manager to discuss coordinating emergency responses.	Docket 1: Application	Section 3.5.3.4
<b>COMMISSION ORDERS</b>			
COMISSION ORDER 1	ONEOK shall construct, operate, and maintain the Project in accordance with the Commission's Findings of Fact.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.1
COMISSION ORDER 2	Certificate of Site Compatibility No. 209 is issued to ONEOK Bakken Pipeline, L.L.C., designating a corridor for the construction, operation, and maintenance of approximately 74.3 miles of 20-inch diameter natural gas liquids pipeline and associated facilities in McKenzie County, North Dakota. For purposes of this Certificate, the designated corridor generally consists of a 300-foot wide area centered on the designated route. A few segments of the designated corridor extend beyond 300 feet, and the specific corridor is as depicted in Hearing Exhibit 5.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.2
COMISSION ORDER 3	Route Permit No. 219 is issued to ONEOK Bakken Pipeline, L.L.C., designating a route for the construction, operation, and maintenance of approximately 74.3 miles of 20-inch diameter natural gas liquids pipeline and associated facilities in McKenzie County, North Dakota. For purposes of this Permit, the designated route is the route of the Project as depicted in Hearing Exhibit No. 5.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.3
COMISSION ORDER 4	The Certification Relating to Order Provisions - Transmission Facility Siting with accompanying Tree and Shrub Mitigation Specifications executed March 28, 2019 is incorporated by reference and attached to this Order.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.4

COMISSION ORDER 5	To the extent there are any conflicts or inconsistencies between ONEOK's Application and the Certification, the Certification provisions control.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.5
COMISSION ORDER 6	ONEOK shall complete field surveys for the un-surveyed areas within the designated corridor as identified in Hearing Exhibit 5, Map Set Exhibit 8.4. ONEOK shall file copies of all environmental field surveys with the Commission prior to beginning construction in those areas.	Docket 96: Natural Resources Addendum; Docket 97: Delineated Features Mapbook	Section 4.6
COMISSION ORDER 7	ONEOK shall complete a Class III Cultural Resource Survey for un-surveyed areas within the Project Corridor as identified in Hearing Exhibit 5, Map Set Exhibit 8.4. ONEOK shall submit cultural resources finds to NDSHPO for review and file a copy of NDSHPO's concurrence with the Commission prior to beginning construction in those areas.	Docket 81: NDSHPO Concurrence on Second Addendum Report	Section 4.7
COMISSION ORDER 8	ONEOK shall obtain all remaining landowner easements and 500-foot waiver(s) prior to constructing the Project in said areas. If ONEOK is unable to obtain the required easement agreements and waiver(s), ONEOK shall change the route and comply with the applicable filing requirements contained in North Dakota Century Code chapter 49- 22.1.	NA	Section 4.8
COMISSION ORDER 9	ONEOK shall obtain all other necessary licenses and permits prior to commencing construction on such portion of the Project for which the license and/or permit is required, and shall provide copies to the Commission prior to construction.	NA	Section 4.9
COMISSION ORDER 10	ONEOK shall conduct engineering evaluations of potentially unstable areas and provide copies of those evaluations to the Commission for review prior to beginning construction in those areas.	Docket 57: Findings of Fact, Conclusions of Law and Order; Docket 86: Geotechnical evaluations for HDD sites at miles posts 38.1 and 47.2; Docket 96: Final	Section 4.10

		Comprehensive Field Reconnaissance Report	
COMMISSION ORDER 11	ONEOK is required to comply with all applicable laws, rules, and regulations in the event it desires to construct another or a different transmission pipeline facility than was specified in the Application within the corridor designated in this proceeding.	Docket 57: Findings of Fact, Conclusions of Law and Order	Section 4.11

**CERTIFICATION RELATING TO ORDER PROVISIONS**

**Transmission Facility Siting**

CERTIFICATION RELATING TO ORDER PROVISIONS 1.	Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22.1 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules	NA	Section 5.1
CERTIFICATION RELATING TO ORDER PROVISIONS 2.	Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.	NA	Section 5.1.2
CERTIFICATION RELATING TO ORDER PROVISIONS 3.	Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.	NA	Section 5.1.2
CERTIFICATION RELATING TO ORDER PROVISIONS 4.	Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.	NA	Section 5.1.1.1
CERTIFICATION RELATING TO ORDER PROVISIONS 5.	Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission 's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.	NA	Section 5.1.1.2

CERTIFICATION RELATING TO ORDER PROVISIONS 6.	Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.	NA	<i>Section 5.1.1.3</i>
<b>Construction</b>			
CERTIFICATION RELATING TO ORDER PROVISIONS 7.	Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.	Docket 76: Preconstruction Conference Call Minutes and NOI to Commence Construction	<i>Section 5.2.1</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 8.	Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.	Docket 77: NDSHPO Concurrence	<i>Section 5.2.2</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 9	Company understands and agrees that topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference.	Docket 76: Preconstruction Conference Call Minutes and NOI to Commence Construction; Docket 119: Topsoil Inspection Report	<i>Section 5.2.3</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 10.	Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis.	Docket 76: Preconstruction Conference Call Minutes and NOI to Commence Construction; Docket 119: Topsoil	<i>Section 5.2.4</i>

		Inspection Report	
CERTIFICATION RELATING TO ORDER PROVISIONS 11.	Company understands and agrees that the pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines.	Docket Item 125: Construction Inspection Report	<i>Section 5.2.5</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 12.	Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages, and must be protected from water erosion. Care must be taken to prated topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.	Docket 119: Topsoil Inspection Report	<i>Section 5.2.6</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 13.	Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.	Docket 97; Docket 123 (road permits)	<i>Section 5.2.7</i>
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.	NA	<i>Section 5.2.8</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 15.	Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society.	Docket 1: Consolidated Application, Sec. 9.6; Docket 65: Unanticipated Discoveries Plan	<i>Section 5.2.9</i>

CERTIFICATION RELATING TO ORDER PROVISIONS 16.	Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company.	Docket 73: Construction Mitigation and Restoration Plan	<i>Section 5.2.10</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 17.	Company understands and agrees that the Commission has authority to stop Project construction activities in the event of a probable violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm.	NA	<i>Section 5.2.11</i>
<b>Restoration and Maintenance</b>			
CERTIFICATION RELATING TO ORDER PROVISIONS 18.	Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.	Docket 73: Construction Mitigation and Restoration Plan; and this submittal	<i>Section 5.3.1</i>
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.	Docket 73: Construction Mitigation and Restoration Plan; and this submittal	<i>Section 5.3.2</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 20.	Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.	Docket 67: Revegetation Plan	<i>Section 5.3.3</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 21.	Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.	NA	<i>Section 5.3.4</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 22.	Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.	Docket 73: Construction Mitigation and Restoration	<i>Section 5.3.5</i>

		Plan; and this submittal	
CERTIFICATION RELATING TO ORDER PROVISIONS 23.	Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.	Docket 73: Construction Mitigation and Restoration Plan; and this submittal	<i>Section 5.3.6</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 24.	Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.	Docket 57: Findings of Fact, Conclusions of Law and Order	<i>Section 5.3.7</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 25.	Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.	Docket 1: Consolidated Application, Sec. 9.1; Docket 73: Construction Mitigation and Restoration Plan; and this submittal	<i>Section 5.3.8</i>
CERTIFICATION RELATING TO ORDER PROVISIONS 26.	Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.	Docket 73: Construction Mitigation and Restoration Plan	<i>Section 5.3.9</i>
<b>Communication with Landowners and PSC</b>			
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.	NA	<i>Section 5.4.1</i>

CERTIFICATION RELATING TO ORDER PROVISIONS 28.	Company understands and agrees that it will file with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility.	Docket 76: Preconstruction Conference Call Meeting Minutes and NOI	Section 5.4.1
CERTIFICATION RELATING TO ORDER PROVISIONS 29.	Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.	Docket 1: Consolidated Application, Exhibit A, Engineering Documents	Section 5.4.2
CERTIFICATION RELATING TO ORDER PROVISIONS 30.	Company understands and agrees that it shall advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person.	NA	Section 5.4.3
CERTIFICATION RELATING TO ORDER PROVISIONS 31.	Company agrees to report to the Commission , as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered species of which Company becomes aware and which were not previously reported to the Commission	Docket 82: Lost time Injury Report	Section 5.4.4
CERTIFICATION RELATING TO ORDER PROVISIONS 32.	Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility.	NA	Section 5.4.5
CERTIFICATION RELATING TO ORDER PROVISIONS 33.	Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAO 83) UTM Zone 13N or 14N feet (NAO 83), or geographic coordinate system (WGS 84) feet. The	Docket 127: Final Monthly Construction Report and As-Built maps	Section 5.4.6

	vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed .		
CERTIFICATION RELATING TO ORDER PROVISIONS 34.	Company shall notify the Commission as soon as reasonably possible if any damage , as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined.	NA	Section 5.4.7
<b>Route Adjustments Before or During Construction</b>			
CERTIFICATION RELATING TO ORDER PROVISIONS 35.	Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of the pipeline, pursuant under N.D.C.C.	NA	Section 5.4.8
CERTIFICATION RELATING TO ORDER PROVISIONS 36.	Company will specifically identify which subsection of NDCC 49-22.1-15 it is requesting the adjustment under. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application.	NA	Section 5.4.8
CERTIFICATION RELATING TO ORDER PROVISIONS 37.	ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED. ( <i>Refer to Certification Relating to Order Provisions for all compliance measures</i> ).	Dockets 85, 95, 99, 104, 107: Certification and documentation relating to NDCC Sec. 49-22.1-15(1); Docket 115: Letter withdrawing certification for route adjustment - mileposts 9 - 19.3	Section 5.4.8

CERTIFICATION RELATING TO ORDER PROVISIONS 38.	ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED. <i>(Refer to Certification Relating to Order Provisions for all compliance measures).</i>	NA	Section 5.4.8
CERTIFICATION RELATING TO ORDER PROVISIONS 39.	ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED. <i>(Refer to Certification Relating to Order Provisions for all compliance measures).</i>	Docket 84: Certification and documentation relating to NDCC Sec. 49-22.1-15(3)	Section 5.4.8
CERTIFICATION RELATING TO ORDER PROVISIONS 40.	ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED. <i>(Refer to Certification Relating to Order Provisions for all compliance measures).</i>	NA	Section 5.4.8
CERTIFICATION RELATING TO ORDER PROVISIONS 41.	When applicable, Company may submit the field studies from the original application for the corridor and route provided they cover the adjustment area.	NA	Section 5.4.8

**TREE AND SHRUB MITIGATION SPECIFICATIONS**

**Inventory**

Tree and Shrub Mitigation Inventory	Prior to cutting or clearing trees or shrubs for construction: <ul style="list-style-type: none"> <li>• All trees one-inch or greater in diameter at breast height must be inventoried to record the location, number, and species.</li> <li>• All shrubs and all coniferous trees of any diameter must be inventoried to record the location, number, and species.</li> </ul>		<i>Section 3.5.1.2</i>
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**Clearing**

Tree and Shrub Mitigation Clearing	The maximum width of tree and shrub removal is 50 feet, unless otherwise approved by the Commission.		<i>Section 3.5.1.3</i>
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**Replacement**

Tree and Shrub Mitigation Replacement 1-6

1. Landowners must be given the option to have trees and shrubs that are removed from their property replaced on their property. The landowner may waive this option in writing. If the landowner waives this option, the company shall plant replacement trees and shrubs in an alternate location in the same region, if practical. 2. Trees and shrubs must be replaced on a minimum two-to-one basis. The company shall develop a Tree and Shrub Mitigation Plan (Plan) in consultation with landowners who are seeking replacement trees and shrubs and in accordance with USDA-NRCS-North Dakota Field Office Technical Guide: Windbreak and Woodland Tree Care and Management. The guidelines outlined in the Technical Guide shall be followed until filing of the Plan summary outlined in number 5 below. 3. The purpose of the company's Tree and Shrub Mitigation Plan is to create sustainable plantings, appropriate for the local soil and growing conditions that will provide long-term benefit to landowners, farmers and ranchers, the community, wildlife and the environment. 4. The Plan, including the proposed number, variety, type, location, and approximate date for plantings, shall be filed with and approved by the Commission. 5. Two years after completion of the plan, the company must file a summary documenting how the plan achieved the purpose outlined in number 3 above. The summary must also report the number of surviving replacement trees and shrubs. 6. The Commission will consider, on a limited basis as conditions warrant, mitigation plans that provide long-term wildlife habitat and conservation benefits but do not involve the replanting of trees and shrubs.

Section 3.5.1.4

**\*Note: Green shaded boxes represent potential non-compliance issues.**

**\*\*Note: PSC PU-18-399 Findings of Fact, Conclusions of Law and Order skips Finding of Fact #13.**

**\*\*\*Note: Table does not include Conclusions of Law, as Conclusions of Law are held to be self-evident.**

# 1.0 Executive Summary

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The North Dakota Public Service Commission (PSC) retained Wenck Associates, Inc. (Wenck) to complete site inspections for the construction of the Demicks Lake 20-inch Natural Gas Liquids (NGL) Pipeline (Project), constructed by ONEOK Bakken Pipeline, LLC (ONEOK). The Project is comprised of three pipeline segments, all within McKenzie County. The first segment, Spread 1, is approximately 36.3 miles originating from Demicks Lake Gas Processing Plant in McKenzie County T151N, R96W, Section 20. The second segment, Spread 2, is broken down into 3 subsegments, Spreads 2A, 2B, and 2C and is alternated with segment 3, Spreads 3A and 3B. Spread 3 comprises the portions of the Project within the National Forest System-Little Missouri National Grassland. Jomax Construction Company has conducted the pipeline construction of all identified project spreads. 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.

A pre-construction conference call was held for the Project 9 May 2020; Wenck attended the call. Wenck reviewed Project documents and plans to become familiar with applicable PSC Orders. Construction of the project was completed in January 2020, as documented by the Final Monthly Construction report (Docket Item 127, 4 February 2020). Commissioning of the pipeline occurred during the previous December report to the Commission. Wenck conducted an as-built inspection of the Project area May 27 & 28 2020.

At the time of the as-built inspection, the pipeline trench had been backfilled, soils had been recontoured, topsoil replaced (with a few isolated exceptions of areas with remaining topsoil piles), croplands had been mostly planted, and reseeding had been initiated or completed in non-cropland areas. Non-cropland areas of the last remaining 20-miles had not been reseeded at the time of the as-built inspection due to previous construction delays. According to a personal email correspondence with Blake Holland, OneOK on 26 May, 2020, it was reported that the restoration contractor (H2 enterprises) was continuing work to complete soil decompaction and seeding on the remaining 20 miles that were not able to complete before demobilizing the previous winter, and that environmental inspectors doing periodic inspections were identifying and relaying any items to the mainline and restoration contract to be addressed. Wenck observed topsoil stockpiles present along a small portion of the route which had yet to be re-spread.

As-built conditions in various settings along the route were generally acceptable. However, vegetation was not yet growing well in most grassland areas inspected, and croplands had been recently planted. In general, no excessive erosion was observed, however a few areas of minor erosion were noted as well as the need for additional or repaired BMPs. Soil appeared to be restored to original contours, and topsoil replacement was adequate, except in a few areas as noted within this report. Reclamation as stated above was not entirely complete at the time of inspection and a revegetation and reclamation inspection is to follow.

The Project was well-maintained and appeared to have been constructed as planned with efforts to minimize impacts. Some issues need to be resolved for the Project to be considered complete and in full compliance, including 1) obtaining written documentation of several items (listed below), 2) a few areas potentially needing additional erosion control or repair, 3) final grading and vegetation establishment throughout the project area, and 4) verification of final reclamation activities (to be determined during the subsequent

Reclamation and Revegetation inspection) . Wenck recommends the PSC take the following steps to resolve these issues.

### **Recommended Action Steps**

#### **→ Request Now**

- Status of reclamation activities, re-grading of poorly graded areas, maintenance of BMPs, and potential need for additional BMPs
- USACE Permit (Section 3.3.2.1)
- USFWS and NDGF required construction MBTA and BGEPA surveys (Section 3.3.2.5 and 3.3.2.6)
- USFWS required re-route concurrences and correspondence of determination update after 1 year (Section 3.4.1.4)
- USFWS concurrence on wetland and grassland easements within the Project corridor (Section 3.4.2.1)
- Occupied Structure waiver or proof of re-route avoidance (Section 3.4.2.5 & 4.8)
- WAWSA concurrence on rural water supplies (Section 3.4.2.7)
- Tree and Shrub Mitigation Plan (Section 3.5.1.2)
- Un-surveyed Environmental Resources (Section 4.6)
- Correspondence Verification (Section 5.1.2)
- Permit Verification (Section 5.1.2)
  - USACE, Section 404 Permit
  - Department of Transportation, Federal Highway Administration, Permit to Cross
  - NDDEQ, SWPPP Permit & NOI
  - McKenzie County, Conditional Use Permit

#### **→ Future Verification**

- Final soil reclamation and grading of areas not yet completed
- Successful re-seeding and revegetation in summer of 2021

## 2.0 Background and Scope

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### 2.1 INTRODUCTION

The Project is comprised of three pipeline segments, all within McKenzie County. The first segment, Spread 1, is approximately 36.3 miles originating from Demicks Lake Gas Processing Plant in McKenzie County T151N, R96W, Section 20. The second segment, Spread 2, is broken down into 3 subsegments, Spreads 2A, 2B, and 2C and is alternated with segment 3, Spreads 3A and 3B. Spread 2A is approximately 14.4 miles beginning in T149N, R100W, Section 8, north of the sectional road. Spread 3A is approximately 8.7 miles beginning in T148N, R103W, Section 13. Spread 2B is approximately 3.9 miles beginning in T147N, R103W, Section 7. Spread 3B is approximately 3.7 miles beginning in T147N, R104W, Section 25. The final subsegment, Spread 2C, is approximately 7.25 miles to the boundary of North Dakota and Montana. Spread 2C begins in T146N, R104W, Section 10 and ends in T146N, R105W, Section 22. Spread 3 comprises the portions of the Project within the National Forest System-Little Missouri National Grassland.

In North Dakota, the Route is approximately 74.3 miles in length, approximately 9.5 miles of which crosses the Little Missouri National Grasslands (LMNG), which is managed through the United States Forest Service (USFS). The total length of the project is approximately 77.1 miles. In North Dakota, approximately 70 percent of the Route is co-located with existing linear infrastructure.

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-18-399 on 1 May 2019, granting Certificate of Corridor Compatibility No. 209 and Route Permit No. 219 for the Project.

### 2.2 PURPOSE

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. Post-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 PSC Findings of Fact, Conclusions of Law, and Order (Order). The PSC retained Wenck Associates, Inc. (Wenck) to complete an as-built, post-construction inspection of the Project.

### 2.3 METHODS AND SCOPE OF INSPECTION

#### 2.3.1 Project Compliance Identification

Wenck's intent was to ensure the Projects obligations of compliance with specifications found in the Findings of Fact, Conclusions of Law and Order, Certifications Relating to Order Provisions, and Tree and Shrub Mitigation. These "Project Specifications" are listed in Table 1, column 1 (Source of Project Specification). Project Specifications originate 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 (Application),

3) Project plans described in the Findings of Fact, Conclusions of Law, and Order 4) Certification Relating to Order Provisions, and 5) regulations or recommendations from other agencies. A description of the Project Specification as it was written in the submitted docket is provided in Table 1, column 2 (Description of Project Specification).

### 2.3.2 Document Review

Wenck staff reviewed publicly-available Project documents in the PSC Online Case Search (ND PSC 2020) to find written verification of compliance for the Project Specifications listed in Table 1. If written verification was filed, the source and name of the documentation is listed in Table 1, column 3 (Written Verification). The findings of written verification are further elaborated upon in the section of this document as stated in Table 1, column 4 (3<sup>rd</sup> Party Verification). Project Specifications that require on-site inspection verification are elaborated upon in the associated sections of this document identified in Table 1, column 4 (3<sup>rd</sup> Party Verification). Green shaded boxes in the table represent Project specifications that are potentially non-compliant because they have no written verification, or there is an issue with the findings in 3<sup>rd</sup> Party Verification.

### 2.3.3 On-Site Inspection

Joseph Sander, Wenck environmental scientist, inspected the Project route on May 27 & 28, 2020. A representative from ONEOK was not available to accompany the site visit; however, Blake Holland of ONEOK did make himself available via phone or email should any questions arise during the site visit.

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 ESRI ArcGIS Collector and Survey123 software applications on a tablet utilizing internal satellite triangulation software or paired with a Trimble Global Positioning System (GPS) (**Appendix A**). Digital photographs were taken with the tablet utilizing the Survey123 application to geotag photo locations and associate all collected data from each Observation Point (Figures 1-19). Photographs were taken showing representative portions of the route, aboveground Project infrastructure, and problem areas (**Appendix B**).

If on-site inspection of a Project Specification was completed, the findings are described in the referenced section in Table 1, column 4 (3<sup>rd</sup> Party Verification). Green shaded boxes in the table represent Project specifications that are potentially non-compliant or may require additional documentation to be filed with the Commission.

## 3.0 Findings of Fact

### 3.1 NORTH DAKOTA AUTHORIZED BUSINESS

*ONEOK Bakken Pipeline, L.L.C. is a Delaware limited liability company. ONEOK Bakken Pipeline, L.L.C. has been authorized to do business in the State of North Dakota, as evidenced by the corporate papers filed with the Commission on February 7, 2019, in Case No. PU-13-739 (Finding of Fact 1).*

Corporate papers filed on February 7, 2019, in Case No. PU-13-739 exist in the docket and are evidence of the above stated fact.

### 3.2 SIZE, TYPE, AND PREFERRED LOCATION OF FACILITY

The following subsections address Findings of Fact 2 through 7.

#### 3.2.1 Size and Type

*The Project consists of approximately 77 miles of 20-inch diameter steel pipeline, with approximately 74.3 miles located in McKenzie County, North Dakota. The Project includes seven mainline block valves, one pig launcher facility, and one pig launcher with receiver facility. The Project is capable of transporting up to 40,000 barrels of NGLs per day (Finding of Fact 2; Docket 1: Application). The pipeline has a maximum operating pressure of 1,480 pounds per square inch (Finding of Fact 5; Docket 1: Application). The estimated cost of the Project is \$125 million dollars (Finding of Fact 6; Docket 1: Application). ONEOK anticipates a fourth quarter 2019 in-service date for the facility (Finding of Fact 7; Docket 1: Application).*

Multiple points along the as-built corridor of the pipeline were observed. The site inspection observations coincided well with the as-built shapefiles (**Figure 1; Appendix A, Field Observation Coordinates**). Construction Inspections confirm pipe diameter. Mainline block valves and pig launcher/receiver aboveground facilities were observed (**Photo Observation Point 22**). Observed aboveground structures were constructed upon engineered and graded aggregate pads with access roads constructed through roadway Right-of-Way (ROW) and chain link fences exist around the aboveground structures restricting access to authorized personnel only. Aboveground structures were found to be in good condition.

#### 3.2.2 Preferred Location

*The Project will originate at the Demicks Lake Natural Gas Processing Plant in McKenzie County and terminate in Richland County, Montana at a planned interconnection with a ONEOK affiliate pipeline (Finding of Fact 3; Docket 1: Application). The proposed facility corridor and pipeline route is identified in Hearing Exhibit 5 (Finding of Fact 4).*

The Project was observed to originate at the Demicks Lake Natural Gas Processing Plant in McKenzie County. The original proposed pipeline route and corridor identified in the Application and at the hearing is matched closely by the as-built alignment with minor adjustments, as indicated in Section 5.4.8.

### 3.3 STUDY OF PREFERRED LOCATION

The following subsections address Findings of Fact 8 through 12.

#### 3.3.1 Cultural Resources

*ONEOK conducted a Class I cultural resource literature review and a desktop analysis for wetlands, waterbodies, woodlands, and other sensitive environmental resources across a one-mile wide area centered on the pipeline route (Study Area) (Finding of Fact 8). ONEOK conducted a Class III cultural resource inventory across the Survey Area. The Class III reports were submitted to the North Dakota State Historic Preservation Office. Surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5 (Finding of Fact 10).*

ONEOK submitted Dockets 49-52 and 78: Letter(s) from North Dakota SHPO dated 3/4/19, 3/4/19, 3/12/19, 4/2/19, and 5/10/19; respectively. According to Finding of Fact 10, at the time of application submittal, surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5 (see Section 4.7 for additional information on un-surveyed cultural resources, relating to Commission Order 10).

#### 3.3.2 Environmental Resources

*ONEOK conducted several surveys and a habitat assessment across an approximately 300-foot-wide area generally centered on the Project route (Survey Area). ONEOK conducted a natural resources survey, which included wetland and waterbody surveys, noxious weed surveys, and a general habitat assessment for state- and federally-listed species. ONEOK also conducted a Dakota skipper survey, a tree/sapling/shrub survey, an eagle and raptor nest survey, and a biological survey. In addition, ONEOK conducted a Forest Service Sensitive Species Survey for sensitive plants, wildlife, and plant and species habitats across the Survey Area through the Little Missouri National Grasslands (LMNG). Surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5 (Finding of Fact 9).*

According to Finding of Fact 9, at the time of application submittal, surveys have not been completed in areas so identified in Hearing Exhibit 5, pages 2 through 5 (see Section 5.6 Un-Surveyed Environmental Resources), related to Commission Order 6 for additional information and regulatory compliance.

The following sub-sections outline the findings of environmental resource surveys mentioned above and the Project Specifications and plans to avoid and mitigate impacts to stated environmental resources, and the results of inspections to confirm adherence to Project specifications and plans.

##### 3.3.2.1 Wetlands and Waterbodies

*Field surveys identified and recorded 31 wetlands and 20 waterbodies within the Survey Area, (Docket 1: Application, Section 5.2, Table 5.2-1). ONEOK will implement appropriate minimization and mitigation measures at these features, which may include avoidance (e.g., workspace modification or HDD) or use of construction mats and other best management practices (BMPs) to minimize impacts when working in or around wetlands. Refer to the Project maps in Exhibit B.4 for the location of each feature and Section 9 for information regarding additional minimization measures (Docket 1: Application, Section 5.2).*

ONEOK submitted Docket 73: Construction Mitigation and Restoration Plan and Docket 64: Storm Water Pollution Plan on 5/8/2019, prior to construction.

These plans elaborate upon waterbody crossings and protections. Wenck cannot locate a USACE permit or final concurrence within the dockets. Therefore, Wenck cannot confirm if USACE regulatory guidance was followed with respect to specific waterbody crossings.

During inspections, multiple locations were observed where the pipeline was horizontally bored underneath stream channels, open cut, or temporary bridges were constructed (Docket 125: Construction Inspection Report). Most observed wetlands were bored via HDD techniques, but some were trenched. Wenck did not observe any major issues of adverse effects to Wetland or Waterbodies. In general, these inspections found the methods and controls utilized to be adequate. During as-built inspections, waterbody crossings were inspected and found to be generally in good conditions with a few minor exceptions. Additional reclamation activities are recommended at some observed wetland/waterbody areas (**Photo Observation Points 18 and 23**).

### 3.3.2.2 Noxious Weeds

*Field surveys identified and recorded 88 areas of noxious weeds within the Survey Area. Canada thistle comprised 84 of the areas, while common burdock comprised 3 areas and field bindweed comprised 1 area (Docket 1: Application, Section 5.5). ONEOK will minimize the potential for the establishment of undesirable species by minimizing the time duration between final grading and permanent seeding. ONEOK will also require that construction equipment be cleaned before arriving on the construction spread to prevent the introduction of undesirable species to the Project area, as described in the Project's Weed Management Plan and Revegetation Plan, which addresses weed control. The McKenzie County Weed Board requires a Weed Management Plan be prepared and submitted for approval. ONEOK has developed a draft of this plan, which will be finalized and submitted to McKenzie County for review and approval prior to construction (Docket 1: Application, Section 5.5)*

ONEOK submitted Docket 70: Weed Management Plan and Docket 75: McKenzie County Weed Management Plan Approval on 5/8/2019, prior to construction.

Noxious weeds were marked appropriately during the October 8<sup>th</sup>, 2019 construction inspection at Spread 3 X-56 location (Docket 125). Wenck was unable to observe or confirm if all specific protocols outlined in the plans were followed during inspections due to the nature and timing of inspections and construction schedules. No noxious weeds were observed at Observation Points during the as-built inspection; however, annual weeds dominated the ROW in some areas of the corridor (**Photo Observation Points 30, 36 and 42**). Noxious weeds will continue to be monitored next year during revegetation inspections.

### 3.3.2.3 Trees and Shrubs

*During the natural resource surveys described above, crews noted general areas where trees and shrubs are present, but the crews did not conduct a formal inventory. A formal tree and shrub inventory was initiated in fall 2018 and is ongoing. Additional field work may occur prior to construction as the workspace is finalized and pending final regulatory authorization of the Project. The inventory will record the pre-construction status of these resources, which would form the baseline for restoration and mitigation reconciliation (Docket 1: Application, Section 5.4).*

Wenck cannot locate a final tree and shrub inventory; however, it is not required to be filed with the PSC, as noted from previous communications with the PSC (see Section 3.5.1.1 for more information on Tree and Shrub Mitigation).

### **3.3.2.4 Threatened and Endangered Species and Habitats**

*Field surveys for listed species and a general habitat assessment of the Project Corridor were conducted in the summer of 2018. Details regarding the wildlife observed during field surveys are provided in the Natural Resources Survey Report included in Exhibit C. Suitable habitat for the Dakota skipper was found within the Project Corridor, and presence/absence surveys conducted during the Dakota skipper flight period identified individuals within the Project Corridor. Individual Dakota skipper were observed along a concentrated, approximately 0.6 mile section of the Project. A Dakota Skipper Individual Survey Report was completed and submitted to the USFS on October 30, 2018. The USFS will submit the report to the USFWS during their Section 7 consultation, as part of ONEOK's application for a Special Use Permit for crossing the LMNG (Docket 1: Application, Section 5.3.1).*

ONEOK submitted Docket 74: U.S. Fish and Wildlife Service Concurrence Letter on 5/8/2019, prior to construction. Within the concurrence, USFWS agreed with the Biological Assessment, and provided a determination of "may affect, but is not likely to adversely affect" with regards to impacts related to the Dakota skipper. ONEOK submitted Docket 117 Forest Service Special Use Permit (MCK18033) & the Decision Notice and FONSI on 9/4/2019, prior to construction in the LMNG (see Section 3.5.1.6 for additional information on Dakota skipper mitigation, relating to Finding of Fact 37).

### **3.3.2.5 Migratory Birds and Habitats**

*Surveys of the Project Corridor were conducted in the summer of 2018, which confirmed that suitable nesting habitat for migratory birds is present within the Project Corridor or within line-of-site of the Project Corridor. ONEOK has developed a MBTA Plan to outline measures it will implement to avoid, minimize, and reduce possible impacts on migratory birds. Conservation measures will be developed in consideration of statutory authority, regulatory guidance, and through experience with state and federal agencies on past projects in the region. ONEOK would conduct surveys in spring 2019 to determine if the eight historic sharp-tailed grouse leks which have been documented within one mile of the Project area are active (USFS, 2018a). If active, a line-of-site and Project-level analysis would then be completed in coordination with the USFS to determine the appropriate disturbance buffer and/or timing restriction to prevent disruption of reproductive activities. These surveys would be coordinated with the USFS and would be conducted concurrently with eagle nest surveys. Prior to initiating pre-clearing activities and construction, ONEOK will also conduct environmental training for company and contractor supervisory personnel. Where constructing the Project outside of the peak nesting season for migratory birds is not feasible, ONEOK will conduct ground surveys to identify migratory bird nests that could be impacted by construction activities. Varying activity restriction buffers around active nests will be utilized as conservation measures for the plan. A summary of ONEOK's consultation with USFWS with respect to MBTA is included in Section 6.1 (sic) and in Exhibit D (Docket 1: Application, Section 5.3.2).*

ONEOK submitted Docket 68: Migratory Bird Conservation and Compliance Plan on 5/8/2019, prior to construction. Wenck observed portions of project construction were postponed, presumably around nesting occupancy schedules during pipeline construction

during 2019 on-site construction inspections. However, Wenck cannot locate any submittals in the Dockets for documentation of any sharp-tailed grouse lek surveys, migratory bird presence/absence surveys of active nests, or coordination with the USFS.

Additionally, no documentation of extra consultation with the USFWS with regard to the MBTA was filed for the Project. According to Docket 1: Application, Section 5.3.2 (above), a summary of USFWS consultation on MBTA is included in Section 6.1 and in Exhibit D; however, it is located in Section 6.2; this section or Exhibit D, does not include a final decision.

### **3.3.2.6 Bald and Golden Eagles and Habitats**

*Surveys of the Project Corridor were conducted in the summer of 2018, which confirmed suitable eagle nesting habitat is present within the Project Corridor or within line-of-site of the Project Corridor. Field crews visited three golden eagle (*Aquila chrysaetos*) nest locations (previously documented by USFS) in the Project vicinity. These nests were visited to confirm their presence and determine, if applicable, their condition and activity. Only one of the nests was successfully relocated and found to be in good condition. The general location of the nest is depicted on page 23 of the delineated features mapbook in the Natural Resource survey report (see Exhibit C). No eagles were observed near any of the nest locations at the time of survey. ONEOK would conduct surveys prior to construction activities to determine whether this nest is active, per USFS survey guidelines. ONEOK would coordinate with the USFS to determine if new eagle nest sites have been identified within 1 mile of the project area. If any nests are active, a line-of-site and project-level analysis would then be completed in coordination with the USFS to determine the appropriate disturbance buffer and/or timing restriction to prevent disruption of reproductive activities. A summary of ONEOK's consultation with USFWS with respect to BGEPA is included in Section 6.1 and in Exhibit D (Docket 1: Application, Section 5.3.3 Bald and Golden Eagle Protection Act).*

ONEOK submitted Docket 68: Migratory Bird Conservation and Compliance Plan on 5/8/2019, prior to construction. This plan covers Bald and Golden Eagles. Wenck observed portions of project construction were postponed, presumably around nesting occupancy schedules during pipeline construction during 2019 on-site construction inspections. However, Wenck cannot locate any submittals in the Dockets for documentation of any eagle presence/absence surveys of active nests, coordination with the USFS on BGEPA.

Additionally, no documentation of extra consultation with the USFWS with regard to the BGEPA was filed for the Project. According to Docket 1: Application, Section 5.3.3 (above), a summary of USFWS consultation on BGEPA is included in Section 6.1 and in Exhibit D; however, it is located in Section 6.2; this section or Exhibit D, does not include a final decision.

### **3.3.2.7 Sensitive Species and Habitats Survey**

A survey for sensitive species upon USFS lands was conducted and several sensitive species were recorded within the Project corridor. ONEOK has exhibited on-going consultation with the USFS. ONEOK submitted Docket 117 Forest Service Special Use Permit (MCK18033) & the Decision Notice and FONSI on 9/4/2019, prior to construction in the LMNG. Within the permit exist a number of requirements, including utilizing qualified consultants to ensure Project compliance. Wenck, can only assume all conditions of the permit were met as evidenced by the lack of revocation or suspension of said permit and the requirements of additional 3<sup>rd</sup> party inspectors, ONEOK's own environmental inspectors, and the USFS monitoring.

### **3.3.3 Interagency Notification and Correspondence**

See Section 5.1.2 Interagency Compliance; for information pertaining to procured licenses and permits.

#### **3.3.3.1 Presumption of State Agency Compliance**

*Section 49-22.1-13(4) of the North Dakota Century Code provides that a site shall not be designated that violates the rules of any state agency, and that compliance with an agency's rules shall be presumed if the agency fails to present its position with respect to the proposed facility at the public hearing (Finding of Fact 11).*

No State agency presented a position of non-compliance at the public hearing; therefore, it is presumed the facility complies with all State agency rules (see Section 5.1.2).

#### **3.3.3.2 Agency Correspondence**

*ONEOK initiated correspondence with federal, state and local departments, agencies and entities as follows: a. Federal: (i) U.S. Forest Service (USFS); (ii) U.S. Fish and Wildlife Service (USFWS); (iii) U.S. Army Corps of Engineers; (iv) U.S. Air Force; and (v) U.S. Department of Agriculture b. State: (i) North Dakota State Historic Preservation Office (NDSHPO); (ii) North Dakota Parks and Recreation Department; (iii) North Dakota Department of Trust Lands; (iv) North Dakota Department of Health; (v) North Dakota Geological Survey (NDGS); (vi) North Dakota State Water Commission; and (vii) North Dakota Game and Fish Department (NDGFD); c. Local: (i) The McKenzie County Board of Commissioners; (ii) McKenzie County Water Resource District; (iii) The McKenzie County Weed Control Board; and (iv) Western Area Water Supply (Finding of Fact 12).*

ONEOK initiated correspondence with all agencies stated in Finding of Fact 12, as evidenced by Docket 1: Application, Section 6.0 and Exhibit D.

## **3.4 SITING CRITERIA**

*The Commission has developed criteria pursuant to North Dakota Century Code section 49-22.1-03 to guide the site, corridor, and route suitability evaluation and designation process. The criteria, as set forth in North Dakota Administrative Code 69-06-08-02 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria (Finding of Fact 14). ONEOK evaluated the Survey Area and route regarding the Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria (Finding of Fact 15).*

Siting criteria (exclusion, avoidance, selection, and policy criteria) were analyzed in detail in the Application (Docket 1: Application) for the Project. The following subsections address Findings of Fact 16 through 31.

### **3.4.1 Exclusion Areas**

*The following geographical areas must be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width to protect the integrity of the area must be included. Natural screening may be considered in determining the width of the buffer zone [NDAA 69-06-08-02(1)].*

*An Exclusion Area is a geographic area that must be excluded in the consideration of a route for a transmission facility. An Exclusion Area may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor unless there is no reasonable alternative. A transmission facility route must not be sited within an Exclusion Area (Finding of Fact 16). ONEOK's studies and surveys did not record any other Exclusion Areas within the Survey Area (Finding of Fact 18).*

The route encounters one exclusion area, an eligible archeological site. This site does not comprise at any given point more than fifty percent of the corridor. Justification for the route is given below in the Section 3.4.1.2. Wenck did not identify any other Exclusion Areas within the proposed route.

#### **3.4.1.1 Designated or Registered National Assets**

*Designated or registered national parks; memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas (NDAA 69-06-08-02(1)a).*

The route does not cross any designated or registered national parks; memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas (Docket 1: Application). Wenck did not observe the corridor to occupy any designated or registered national assets during on-site inspections.

#### **3.4.1.2 Designated or Registered State Assets**

*Designated or registered State Parks, historic sites, monuments, historical monuments, archaeological sites, and nature preserves (NDAA 69-06-08-02(1)b).*

*State designated archeological sites are an Exclusion Area. One eligible cultural resource site on record with the NDSHPO is located within the Project Corridor. ONEOK testified that construction will not impact the portions of the site which contribute to its eligibility. For the surveyed areas in Hearing Exhibit 5, NDSHPO concurred with a "no significant sites affected determination". NDSHPO identified other sites to be avoided by construction, and ONEOK will avoid those sites. ONEOK will file NDSHPO concurrence for un-surveyed areas of the Survey Area prior to beginning construction in those areas (Finding of Fact 17).*

ONEOK submitted Dockets 49-52: Exhibits 9-12, Letter(s) from North Dakota SHPO dated 3/4/19, 3/4/19, 3/12/19, and 4/2/19; respectively (see Section 4.7 for additional information on un-surveyed cultural resources, relating to Commission Order 10).

The route does not cross any other designated or registered State Parks, historic sites, monuments, historical monuments, archaeological sites, and nature preserves (Docket 1:

Application). Wenck did not observe the corridor to occupy any other designated or registered state assets during on-site inspections.

### **3.4.1.3 Local Governmental Assets**

*County parks and recreational areas; municipal parks; and parks owned or administered by other governmental subdivisions (NDAA 69-06-08-02(1)c).*

The route does not cross county parks and recreational areas; municipal parks; and parks owned or administered by other governmental subdivisions (Docket 1: Application). Wenck did not observe the corridor to occupy any local governmental assets during on-site inspections.

### **3.4.1.4 Threatened and Endangered**

Areas critical to the life stages of threatened or endangered animal or plant species (NDAA 69-06-08-02(1)d) or areas where animal or plant species that are unique or rare to this state would be irreversibly damaged (NDAA 69-06-08-02(1)e).

ONEOK submitted Docket 74: U.S. Fish and Wildlife Service Concurrence Letter on 5/8/2019, prior to construction. Within the concurrence, USFWS agreed with the Biological Assessment, and provided a determination of "may affect, but is not likely to adversely affect" with regards to impacts related to the Dakota skipper, rufa red knot, piping plover, whooping crane, and gray wolf. USFWS provided a determination of "may affect" with regards to impacts related to the northern long-eared bat, for which the USFWS provided an additional conservation recommendation to "Conduct tree removal activities outside of the NLEB pup season (June 1 to July 31)."

The USFWS Concurrence Letter dated May 6, 2019, further states that ONEOK must report any departures from plans submitted, results of surveys conducted, or any dead, injured, or sick NLEB that are found to the USFWS, and if the project is not complete within one year of the letter ONEOK must update the determination and resubmit the required information.

Wenck understands this language to infer that re-routes outside of the designated corridor are a departure from submitted plans, which require additional survey, and both are required to be submitted to the USFWS. ONEOK submitted Docket 84: Certification and documentation relating to NDCC Sec. 49-22/1-15(3) on 6/20/2019, which is a re-route outside of the designated corridor. Wenck cannot locate any submittals in the Dockets confirming coordination or concurrence with the USFWS.

Wenck also understands this language to infer that if any type of activity related to construction of the pipeline is on-going 1 year past the date of the letter, such as reclamation and seeding activities, ONEOK is required to update the determination and resubmit required information. Wenck cannot locate any submittals in the Dockets confirming coordination or concurrence with the USFWS.

ONEOK submitted Docket 117 Forest Service Special Use Permit (MCK18033) & the Decision Notice and FONSI on 9/4/2019, prior to construction in the LMNG.

The route does not cross any other areas critical to the life stages of threatened or endangered animal or plant species or areas where animal or plant species that are unique or rare to this state would be irreversibly damaged (Docket 1: Application). Wenck did not

observe the corridor to occupy any previously unidentified areas important to Federal or State listed species of importance during on-site inspections. No reports of observations of threatened or endangered species were filed during construction.

### **3.4.1.5 Intercontinental Ballistic Missile Facility**

*Areas within one thousand two hundred feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility [NDAA 69-06-08-02(1)f]. Areas within thirty feet on either side of a direct line between intercontinental ballistic missile (ICBM) launch or launch control facilities to avoid microwave interference [NDAA 69-06-08-02(1)g].*

ONEOK has confirmed the absence of ICBM launch or launch control facilities located within 1,200 feet of the Route. This was confirmed through consultation with the USDOD as described in Section 6.6 (Docket 1: Application, Section 7.1.6). Wenck cannot independently confirm the proposed corridor or subsequent re-routes do not occupy an area violating the buffers referenced above during on-site inspections or docket searches due to the sensitive nature of military installments.

### **3.4.2 Avoidance Areas**

*The following geographical areas may not be considered in the routing of a transmission facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility, the commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. Economic considerations alone will not justify approval of these areas. A buffer zone of a reasonable width to protect the integrity of the area will be included unless a distance is specified in the criteria. Natural screening may be considered in determining the width of the buffer zone [NDAA 69-06-08-02(2)].*

*An Avoidance Area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant demonstrates that under the circumstances, there is no reasonable alternative. In determining whether an Avoidance Area should be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes. Economic considerations alone will not justify approval of these areas (Finding of Fact 19). ONEOK's surveys did not identify any other Avoidance Areas within the Survey Area (Finding of Fact 23).*

The route encounters three avoidance areas (National Grasslands, Geologically Unstable Areas, and Within 500-feet of a Residence, School, or Place of Business). Justification for the route is given below in the appropriate subsections. Wenck did not identify any other Avoidance Areas within the proposed route.

### **3.4.2.1 Designated or Registered National Assets**

*Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands [NDAA 69-06-08-02(2)a].*

*Designated or registered national grasslands are an Avoidance Area. The Project crosses the Little Missouri National Grasslands (LMNG). Seven out of nine miles of the proposed route that crosses the LMNG are collocated with existing pipeline corridors. ONEOK testified that the proposed pipeline was collocated to the furthest extent possible with their existing Garden Creek Pipeline located within the LMNG. ONEOK also testified that the route has to cross the LMNG in order to terminate at a planned interconnection and that ONEOK selected a route in a way that avoided parcels of the LMNG. ONEOK will obtain a Special Use Permit from the USFS prior to commencing construction at this crossing. There is no reasonable alternative to crossing the LMNG based on the origination and termination points of the Project. ONEOK has collocated the route to the extent possible and avoided the LMNG where possible in areas where collocation did not occur. Including the areas of the route that are collocated within the LMNG, approximately fifty-one total miles of the pipeline is collocated. Collocation promotes orderly siting of facilities and efficient use of resources. In addition, no alternative route has been suggested or is apparent based on the evidence, and the proposed route through the LMNG is not based on economic considerations alone (Finding of Fact 20).*

The route crosses approximately 9-miles of the LMNG. According to Conclusion of Law 4 (Docket 57: Findings of Fact, Conclusions of Law and Order), there is no other reasonable alternative; thereby, satisfying NDAA 69-06-08-02(2) and Finding of Facts 19 and 20.

ONEOK indicated it had been in consultations with the USFWS concerning wetland and grassland easements; however, it had not received a response (Docket 1: Application, Section 6.2). Wenck cannot locate a concurrence as to the status of easements within the corridor. Wenck recommends the PSC inquire with ONEOK about USFWS wetland and grassland easements within the corridor.

The route does not cross any other designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands (Docket 1: Application). Wenck did not observe the corridor to occupy any previously unidentified designated or registered national assets during on-site inspections.

### **3.4.2.2 Designated or Registered State Assets**

*Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands [NDAA 69-06-08-02(2)b].*

The route does not cross any designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands (Docket 1: Application). Wenck did not observe the corridor to occupy any designated or registered state assets during on-site inspections.

### 3.4.2.3 Historical Resources

Historical resources which are not specifically designated as exclusion or avoidance areas [NDAA 69-06-08-02(2)c].

The route does not cross any historical resources which are not specifically designated as exclusion or avoidance areas (Docket 1: Application). Wenck did not observe the corridor to occupy any historical resources during on-site inspections.

### 3.4.2.4 Geologically Unstable

Areas which are geologically unstable [NDAA 69-06-08-02(2)d].

*Areas that are geologically unstable or potentially unstable are an Avoidance Area. Based on North Dakota Geological Survey data, one landslide deposit area is within the proposed corridor; however, this landslide deposit area will be avoided by the Project route. NDGS's August 21, 2018 letter identified several potentially unstable areas and recommended additional engineering evaluations. ONEOK will conduct engineering evaluations prior to construction in those areas. To the extent the additional engineering evaluations indicate any of these areas are geologically unstable, ONEOK will reroute to avoid construction in any geologically unstable area or will file with the Commission its analysis supporting that there is no reasonable alternative to construction in the applicable area including what measures are being taken to avoid impacts of construction and operation of the Project in any area that is determined to be geologically unstable (Finding of Fact 21).*

ONEOK submitted Docket 86: Geotechnical evaluations for HDD sites at mile posts 38.1 & 47.2; Docket 96: Final Comprehensive Field Reconnaissance Report. These reports on geologically unstable areas satisfy Finding of Fact 21 and Commission Order 10 and provided guidance on avoidance and mitigation. As part of the construction inspection process, Wenck reviewed the "Final Comprehensive Field Reconnaissance Report" by Braun Intertec (July 3, 2019) concerning potential geological unstable areas. The geotechnical evaluations provided in the July 2019 Braun Report determined that the proposed depths of HDD in these areas is sufficient. Wenck visited multiple identified locations of potential geological instability during field inspections to verify HDD methods were being used, as proposed (Docket 87: Interim Topsoil and Construction Inspection Report; Docket 125: Construction Inspection Report). Wenck did not observe the corridor to occupy any other recognized geologically unstable areas during on-site inspections.

### 3.4.2.5 Occupied Structures

*Within five hundred feet [152.4 meters] of a residence, school, or place of business. This criterion shall not apply to a water pipeline transmission facility [NDAA 69-06-08-02(2)e].*

*Areas within five hundred feet of a residence, school, or place of business are an Avoidance Area. ONEOK testified that it identified three occupied structures within five hundred feet of the Project route. ONEOK has obtained waivers for two of these structures and submitted copies as Exhibit E to Hearing Exhibit 2. ONEOK testified it will obtain the remaining landowner waiver prior to constructing the Project within 500 feet of said area, or ONEOK will file a route adjustment with the Commission to be outside 500 feet of the occupied area (Finding of Fact 22).*

Wenck cannot locate within the Dockets the third and final waiver for occupied structure avoidance. Additionally, Wenck cannot determine from information within the Dockets, if any of the certifications for re-routes address the occupied structure specifically. Wenck compared the as-built with the proposed location of the pipeline and it does not appear to deviate in a significant way to allow for any re-routes to avoid encroachment of the buffer around occupied structures. Wenck did not observe the corridor to encroach any other occupied structure buffers during on-site inspections.

#### **3.4.2.6 Water Supplies**

*Reservoirs and municipal water supplies [NDAA 69-06-08-02(2)f].*

ONEOK has confirmed the absence of reservoirs or municipal source water protection areas for community water supply sources within the Project Corridor (Docket 1: Application, Section 7.2.6) Wenck did not observe the corridor to occupy any recognized reservoirs or municipal water supplies during on-site inspections.

#### **3.4.2.7 Rural Water Districts**

*Water sources for organized rural water districts [NDAA 69-06-08-02(2)g].*

*ONEOK has confirmed the absence of known water sources for organized rural water districts within the Project Corridor. A response from WAWSA is pending and will be included in Exhibit D when received (see Section 6.15) (Docket 1: Application, Section 7.2.7).*

Wenck cannot locate in the dockets a response from WAWSA.

#### **3.4.2.8 Irrigated Land**

*This criterion shall not apply to an underground transmission facility [NDAA 69-06-08-02(2)h].*

#### **3.4.2.9 Areas of Recreational Significance**

*Areas of recreational significance which are not designated as exclusion areas [NDAA 69-06-08-02(2)i].*

ONEOK has confirmed the absence of areas of recreational significance within the Project Corridor (Docket 1: Application, Section 7.2.9). Wenck did not observe the corridor to occupy any areas of recreational significance during on-site inspections.

#### **3.4.3 Selection Criteria**

*A corridor or route shall be designated only when it is demonstrated to the commission by the applicant that any significant adverse effects which will result from the location, construction, and maintenance of the facility as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum. The effects to be considered include [NDAA 69-06-08-02(3):*

*The Commission's Selection Criteria is set forth in North Dakota Administrative Code section 69-06-08-02(3). A corridor or route shall be approved only if it is determined that any significant adverse effects that will result from the location, construction and operation of*

*the facility as they relate to the selection criteria will be at an acceptable minimum, or will be managed and maintained at an acceptable minimum. ONEOK analyzed the effects that may result from the location, construction, and operation of the Project (Finding of Fact 24).*

### **3.4.3.1 Agricultural Impacts**

*Agricultural production, Family farms and ranches, Land economically suitable for irrigation, Surface drainage patterns and ground water flow patterns [NDAA 69-06-08-02(3)a].*

*The proposed Project will affect 694 acres of private land in North Dakota, of which approximately 331 acres consist of cropland. Once construction is complete, ONEOK will restore land to its pre-construction contours and land use. ONEOK will also provide settlements to landowners for crop loss caused by construction (Finding of Fact 27).*

The proposed alignment impacted a total of approximately 791 acres of land, of which approximately 331 acres consist of cropland. The land use of properties crossed by the as-built alignment of the Project was primarily cropland or rangeland as proposed. ONEOK negotiated easements with affected landowners and would not be expected to have permanent impacts to farm/ranch operations (Docket 18: Amendment to Consolidated Application, Section 7.3.1).

At the time of the inspection, the land had been restored to its pre-construction contours. Generally, areas impacted by pipeline construction (except aboveground facilities) were returned to previous land use, including both cropland, hayland/CRP, and rangeland.

### **3.4.3.2 Other Impacts**

*Sound-sensitive land uses, visual effect on the adjacent area, extractive and storage resources, wetlands, woodlands, and wooded areas, radio and television reception, and other communication or electronic control facilities, human health and safety, animal health and safety, plant life [NDAA 69-06-08-02(3)b].*

*Wetlands, woodlands, and wooded areas are Selection Criteria. The route crosses 16 wetlands and 12 waterbodies. ONEOK will avoid wetlands and waterbodies, or will employ horizontal directional drilling, boring, or where the open-cut technique is used, will following best practice management policies to minimize impacts (Finding of Fact 25).*

*During construction, the increase in ambient sound will primarily be from the use of heavy equipment and trucks. Ambient sound will be minimal during pipeline operation (Finding of Fact 26).*

*The proposed Project will not have significant adverse impacts to extractive and storage resources, visual effects on adjacent areas, ground water flow patterns, or radio, television, and other communication or electronic facilities. If drainage patterns are disturbed during construction, ONEOK will restore those affected areas to their original local topography. Furthermore, the visual effect will be minimal and mainly consist of the installation of seven above-ground mainline block valves (Finding of Fact 28).*

*ONEOK testified they routinely inspect the pipeline, including right-of-way inspections using an aerial patrol every other week. Furthermore, ONEOK will promote public awareness of pipelines and pipeline safety through public education and an outreach program. Construction right-of-ways will be watered down if necessary to control for fugitive dust*

*emissions. ONEOK's Construction Mitigation and Restoration Plan guides their construction techniques, and the document will be finalized prior to construction (Finding of Fact 29).*

Wenck finds all impacts of Selective Criteria to be sufficiently protected and addressed from Docket 1: Application, and other mitigative documentation throughout, as well as the results of inspections.

#### **3.4.4 Policy Criteria**

*Location and design, training and utilization of available labor in this state for the general and specialized skills required, economies of construction and operation, use of citizen coordinating committees, A commitment of a portion of the transmitted product for use in this state, labor relations, the coordination of facilities, monitoring of impacts, utilization of existing and proposed rights of way and corridors, Other existing or proposed transmission facilities [NDAA 69-06-08-02(3)c].*

*The Commission's Policy Criteria is set forth in North Dakota Administrative Code section 69-06-08-02(4). The Commission may give preference to an applicant demonstrating certain benefits from the proposed transmission facility (Finding of Fact 30). ONEOK testified they have maximized the benefits set forward by the Policy Criteria set forth in Section 69-06-08-02(4) of the North Dakota Administrative Code (Finding of Fact 31).*

Wenck is of the opinion, Policy Criteria non-compliances are out of the scope of as-built construction inspections.

### **3.5 ADDITIONAL MITIGATIVE MEASURES**

The following subsections address Findings of Fact 32 through 45.

#### **3.5.1 Environmental Resources**

*ONEOK has agreed to a number of measures to mitigate potential Project impacts, as indicated by the attached Certification Relating to Order Provisions - Transmission Facility Siting along with the attached Tree and Shrub Mitigation Specifications (Finding of Fact 32). ONEOK is developing several documents that will be used to minimize and mitigate impacts to environmental resources. These draft documents are included in Exhibit 3. The documents will be finalized and filed with the Commission prior to construction (Finding of Fact 33).*

ONEOK submitted the Dockets 64-73: SWPPP, Unanticipated Discoveries Plan, SPCC Plan, Revegetation Plan, Migratory Bird Conservation and Compliance Plan, HDD Inadvertent Release Control Plan, Weed Management Plan, Emergency Official Agency Response Information Book, Dust Control Plan, and Construction Mitigation and Restoration Plan; respectively, on 5/8/2019, prior to construction.

##### **3.5.1.1 Tree and Shrub Mitigation**

##### **3.5.1.2 Inventory**

*Prior to cutting or clearing trees or shrubs for construction, all trees one-inch or greater in diameter at breast height must be inventoried to record the location, number, and species*

*and, all shrubs and all coniferous trees of any diameter must be inventoried to record the location, number, and species (Tree and Shrub Mitigation Specifications, PSC).*

Wenck cannot locate a final tree and shrub inventory (not required to be filed with the PSC), neither the Tree and Shrub Mitigation Plan, which was to be filed with the Commission within the Dockets. It is suggested to follow up with ONEOK upon the status and timing of the inventory and the Tree and Shrub Mitigation Plan.

### **3.5.1.3 Clearing**

*The maximum width of tree and shrub removal is 50 feet, unless otherwise approved by the Commission (Tree and Shrub Mitigation Specifications, PSC).*

ONEOK refined or necked down the construction ROW through woody areas so that tree and shrub loss was mitigated during construction. During inspections, Wenck observed this to be accurate in multiple areas. In general, major woody areas or planted shelterbelts were cleared in 50-foot construction ROWs.

### **3.5.1.4 Replacement**

It appears that ONEOK has not filed a tree and shrub replacement plan with the PSC.

#### **3.5.1.4.1 Landowner Option**

It appears that ONEOK has not provided information on providing landowner options or waivers.

#### **3.5.1.4.2 Replacement Ratio 2:1**

ONEOK has indicated replacement will be performed at the 2:1 ratio (Docket 1: Application, Section 9.4)

### **3.5.1.5 Noxious Weed Control**

*ONEOK requires construction equipment to be cleaned before arriving on the construction site to address the spread of noxious weeds (Finding of Fact 36).*

ONEOK submitted Docket 70: Weed Management Plan and Docket 75: McKenzie County Weed Management Plan Approval on 5/8/2019, prior to construction. Wenck was unable to observe this specific protocol due to the nature of the protocol timing occurring before initiation of construction.

### **3.5.1.6 Dakota Skipper Habitat Mitigation**

*ONEOK conducted Dakota skipper habitat and occupancy studies. No designated critical Dakota skipper habitat is located within the Survey Area. ONEOK testified that after consultation with the USFWS and the USFS, and as part of the USFS's process to review the application for a Special Use Permit, ONEOK will take measures to avoid impacts to suitable occupied Dakota skipper habitat that has not been designated. The route and associated construction activities will be at least one kilometer away from occupied suitable habitat areas during the species' flight period. For habitat areas that are not designated, not occupied, but suitable habitat, ONEOK proposes to use the trenching method of construction*

*and will provide a seed mix that would restore the habitat, pending landowner approval. ONEOK will obtain any necessary permits from the USFS prior to commencing construction on the portion of the Project that crosses the LMNG (Finding of Fact 37).*

Wenck observed proper avoidance of suitable habitat (i.e., ESA's), and was made aware that portions of project construction were postponed, presumably around the flight period, during 2019 on-site construction inspections. Wenck cannot locate specific mitigation measures in dockets regarding Finding of Fact 37. Wenck assumes the mitigation statements were made at the hearing as a result of consultations with USFWS and USFS and ONEOK's experience on similar projects. ONEOK's compliance with USFS and USFWS concurrence, permits, and timing is found in Section 3.3.2.4).

### **3.5.1.7 Disturbance Minimization**

*ONEOK collocated approximately 69% of the route in North Dakota within an existing pipeline corridor in an effort to minimize environmental disruption (PSC Finding of Fact 38).*

Wenck has discovered the approximate percentage of collocation varies around this number in several dockets submitted over time. Wenck cannot confirm collocation percentage of proposed or as-built conditions without prior knowledge of the as-built alignment of the other pipeline.

### **3.5.1.8 North Dakota Game and Fish**

*ONEOK testified they will follow NDGFD's recommendations to avoid impacts to raptor nests and wetlands, and ONEOK indicated to NDGFD that they will mitigate in kind any unavoidable destruction or degradation of wetlands. ONEOK plans to use line-of-sight surveys versus aerial surveys per the advice of USFS to identify raptor nests and then to implement buffers around any active nest (PSC Finding of Fact #39).*

Wenck observed portions of project construction were postponed, presumably around nesting occupancy schedules during pipeline construction during 2019 on-site construction inspections. Wenck cannot locate any submittals in the Dockets for documentation of any eagle presence/absence surveys during construction.

### **3.5.1.9 Environmental Inspectors**

*ONEOK will employ one or more environmental inspectors on site every day during construction, and will employ 3rd party inspectors to monitor the construction activities and ensure activities are in compliance with company processes and practices (Finding of Fact 43).*

Wenck observed environmental and construction inspectors employed by ONEOK on the Project.

### **3.5.2 Unanticipated Discoveries**

*NDSHPO has approved ONEOK's Unanticipated Discoveries Plan, which provides response measures to be followed in the event of a discovery of cultural or human remains (Finding of Fact 34).*

ONEOK submitted Docket 77: NDSHPO Concurrence Letter on 5/10/2019, prior to construction. The NDSHPO Concurrence letter dated 7 May 2019 (Docket 77), provides approval for ONEOK's cultural resources avoidance and monitoring plan. Wenck is of the opinion, this concurrence correlates to the document in question. ONEOK did not report any unanticipated cultural discoveries during construction. Wenck did not observe any potentially unanticipated discoveries during any inspection.

### **3.5.3 Safety**

*ONEOK testified that they will comply with all applicable safety laws and standards (Finding of Fact 40).*

During inspections, it appeared that ONEOK had implemented examples of operational safety measures during construction, including the use of equipment spotters, personal protective equipment, pipeline construction warning signs, overhead electric powerline marking, evidence of one-call flags and paint markings for underground utilities, aboveground pipeline markers along the pipeline route, cathodic protections, and fences with locked gates and warning signs were in place around all observed aboveground structures to prevent access by the public (**Photo 22**).

#### **3.5.3.1 North Dakota One-Call Excavation Notice**

*ONEOK will participate in the North Dakota One-Call Excavation Notice System (Finding of Fact 35).*

ONEOK committed to participate in North Dakota One-Call utility locates according to the Certification of Order Provisions (Docket 33) per verbal review of those provisions during the pre-construction conference call (Docket 76). ONEOK filed no notices with the PSC of broken utility lines during construction procedures.

#### **3.5.3.2 USDOT Pipeline and Hazardous Materials Safety Administration**

*The Project will be designed, constructed, maintained, and inspected to the USDOT Pipeline and Hazardous Materials Safety Administration regulations utilizing industry standards (Finding of Fact 41).*

Wenck cannot independently verify compliance with PHMSA regulations based on the scope of inspections provided to and agreed upon by the PSC. Wenck can only assume compliance through the absence of official communication to the PSC by PHMSA inspectors through docketed items.

#### **3.5.3.3 Supervisory Control and Data Acquisition**

*A Supervisory Control and Data Acquisition (SCADA) system will allow ONEOK to monitor the pipeline 24 hours a day, 7 days a week, and 365 days a year by trained controls personnel. The system will monitor the flow and pressure of the system, and the system will allow ONEOK to identify and respond to situations outside normal operating conditions. Two of the seven valves can be remotely shut off (Finding of Fact 42).*

ONEOK submitted Docket 54: Information on Employee Availability to Close Manual Valves on 4/15/19. Wenck cannot independently verify SCADA system components or operational status based on the scope of inspections provided to and agreed upon by the PSC.

### 3.5.3.4 Emergency Response

*ONEOK testified they have meetings to educate emergency response officials about how to react to pipeline emergencies. ONEOK sends yearly mailings to local emergency response officials detailing how to identify and respond to a leak, and they include with the mailings the emergency contact phone numbers (PSC Finding of Fact #44). ONEOK's emergency response group will reach out to the McKenzie County Emergency Manager to discuss coordinating emergency responses (Finding of Fact 45).*

ONEOK submitted Docket 71: Emergency Official Agency Response Information Book on 5/18/2019, detailing information and plans satisfying Finding of Fact 45. Wenck cannot independently verify communications with local emergency response officials. It appears, no spills or leaks have been reported to the PSC to date.

## 4.0 Commission Orders

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### 4.1 FINDINGS OF FACT

*ONEOK shall construct, operate, and maintain the Project in accordance with the Commission's Findings of Fact (Commission Order 1).*

Wenck has outlined the Findings of Fact and the Project's compliance as it pertains to each statement in Section 3.0, to the best of Wenck's ability given readily available information submitted to the PSC in docket review, site inspections, and communications with Project representatives. Any implied potential issues, discrepancies, or deviations from original application submittal is not intended to be interpreted as an absolute non-compliance with the Findings of Fact, but is included to inform the PSC of potential discrepancies before project closeout. Wenck provided information to the PSC through inspection reports and communications during the course of construction of potential discrepancies; however, Wenck is unaware of any non-compliances issued by the PSC.

### 4.2 CERTIFICATE OF SITE COMPATIBILITY

*Certificate of Site Compatibility No. 209 is issued to ONEOK Bakken Pipeline, L.L.C., designating a corridor for the construction, operation, and maintenance of approximately 74.3 miles of 20-inch diameter natural gas liquids pipeline and associated facilities in McKenzie County, North Dakota. For purposes of this Certificate, the designated corridor generally consists of a 300-foot wide area centered on the designated route. A few segments of the designated corridor extend beyond 300 feet, and the specific corridor is as depicted in Hearing Exhibit 5 (Commission Order 2).*

Wenck observed this to be accurate.

### 4.3 ROUTE PERMIT

*Route Permit No. 219 is issued to ONEOK Bakken Pipeline, L.L.C., designating a route for the construction, operation, and maintenance of approximately 74.3 miles of 20-inch diameter natural gas liquids pipeline and associated facilities in McKenzie County, North Dakota. For purposes of this Permit, the designated route is the route of the Project as depicted in Hearing Exhibit No. 5 (Commission Order 3).*

Wenck observed this to be accurate.

### 4.4 CERTIFICATION RELATING TO ORDER PROVISIONS

*The Certification Relating to Order Provisions - Transmission Facility Siting with accompanying Tree and Shrub Mitigation Specifications executed March 28, 2019 is incorporated by reference and attached to this Order (Commission Order 4).*

Docket 33: Certification Relating to Order Provisions with accompanying Tree and Shrub Mitigation Specifications was submitted on 3/29/2019 and is attached to Docket 57: Findings of Fact, Conclusions of Law and Order submitted on 5/1/2019.

### 4.5 CERTIFICATION PROVISION SUPREMACY

*To the extent there are any conflicts or inconsistencies between ONEOK's Application and the Certification, the Certification provisions control (Commission Order 5).*

Concerns of inconsistencies between the Application and the Certification were not raised at the public hearing or formally submitted to the case files at anytime thereafter.

#### **4.6 UN-SURVEYED ENVIRONMENTAL RESOURCES**

*ONEOK shall complete field surveys for the un-surveyed areas within the designated corridor as identified in Hearing Exhibit 5, Map Set Exhibit 8.4. ONEOK shall file copies of all environmental field surveys with the Commission prior to beginning construction in those areas (Commission Order 6).*

ONEOK submitted Docket 96: Natural Resources Addendum and Docket 97: Delineated Features Mapbook on 7/2/2019. Wenck understands these additional surveys were conducted between April 17<sup>th</sup> and June 13<sup>th</sup> and included previously unsurveyed areas, reroute corridors, and corridor expansions. Wenck also understands from Docket 96, not all unsurveyed areas were surveyed for this report, and there appears to be no additional documentation of those unsurveyed areas in the case file.

#### **4.7 UN-SURVEYED CULTURAL RESOURCES**

*ONEOK shall complete a Class III Cultural Resource Survey for un-surveyed areas within the Project Corridor as identified in Hearing Exhibit 5, Map Set Exhibit 8.4. ONEOK shall submit cultural resources finds to NDSHPO for review and file a copy of NDSHPO's concurrence with the Commission prior to beginning construction in those areas (Commission Order 7).*

ONEOK submitted Docket 78: Agency Correspondence NDSHPO Concurrence Letter on 5/13/2019 and Docket 81: NDSHPO Concurrence on Second Addendum Report on 6/6/2019. Wenck is of the opinion, all unsurveyed areas within the Project corridor have been completed with accompanying NDSHPO concurrence.

#### **4.8 EASEMENTS, WAIVERS, AND REROUTES**

*ONEOK shall obtain all remaining landowner easements and 500-foot waiver(s) prior to constructing the Project in said areas. If ONEOK is unable to obtain the required easement agreements and waiver(s), ONEOK shall change the route and comply with the applicable filing requirements contained in North Dakota Century Code chapter 49-22.1 (Commission Order 8).*

Information pertaining to ONEOK's acquisition of landowner easements is not present in the case files for review. Wenck cannot locate within the Dockets the third and final waiver for occupied structure avoidance. Additionally, Wenck cannot determine from information within the Dockets, if any of the certifications for re-routes address the occupied structure specifically. Wenck compared the as-built with the proposed location of the pipeline and it does not appear to deviate in a significant way to allow for any re-routes to avoid encroachment of the buffer around occupied structures.

#### **4.9 LICENSES AND PERMITS**

*ONEOK shall obtain all other necessary licenses and permits prior to commencing construction on such portion of the Project for which the license and/or permit is required, and shall provide copies to the Commission prior to construction (Commission Order 9).*

See Section 5.1.2 Interagency Compliance; for information pertaining to regulatory compliance with Commission Order 9.

#### **4.10 GEOLOGICALLY UNSTABLE AREAS**

*ONEOK shall conduct engineering evaluations of potentially unstable areas and provide copies of those evaluations to the Commission for review prior to beginning construction in those areas (Commission Order 10).*

ONEOK submitted Docket 86: Geotechnical evaluations for HDD sites at mile posts 38.1 & 47.2; Docket 96: Final Comprehensive Field Reconnaissance Report. These reports on geologically unstable areas satisfy Finding of Fact 21 and Commission Order 10.

#### **4.11 ALTERNATIVE USES**

*ONEOK is required to comply with all applicable laws, rules, and regulations in the event it desires to construct another or a different transmission pipeline facility than was specified in the Application within the corridor designated in this proceeding (Commission Order 11).*

At the time of the As-built inspection ONEOK constructed a single transmission pipeline of the size and type and within the specified corridor as indicated within the Siting Application for Case Number PU-18-399.

# 5.0 Certification Relating to Order Provisions

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## 5.1 REGULATORY COMPLIANCE

The following subsections address compliance with Certification Statements 1 through 6.

### 5.1.1 Public Service Commission

*Any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22.1 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules (Certification Statement 1).*

Project compliance with NDCC 69-06-08 is elaborated upon in Section 3.4, Siting Criteria. Project compliance with NDAA 49-22.1 is elaborated upon throughout the document. Refer to appropriate sections for compliance with Certification Statement 1.

#### 5.1.1.1 Suspension or Revocation

*Any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies (Certification Statement 4).*

Wenck is unaware of any PSC initiated suspensions or revocations to the Certificate of Corridor Compatibility or Route Permit.

#### 5.1.1.2 Records

*Maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice (Certification Statement 5).*

Wenck is of the opinion, several records and documents which correlate to the ability to demonstrate compliance with several PSC and other inter-agency rules and regulations are not required to be submitted to the PSC case files, and therefore, Wenck cannot independently verify complete compliance. Potential gaps in knowledge are explained throughout the document, with suggested PSC follow up, should it be deemed appropriate. Wenck also cannot verify company record maintenance.

Wenck has performed a review of the case file in comparison to statements made throughout the Application and the Findings of Fact, Conclusions of Law and Order and has made statements throughout this document regarding potential non-compliances or suggested PSC follow up, should it be deemed appropriate.

#### 5.1.1.3 Modification

Authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment (Certification Statement 6).

Wenck is unaware of any PSC initiated modifications to the Certificate of Corridor Compatibility or Route Permit.

### 5.1.2 Interagency Compliance

Comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations (Certification Statement 2). Obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit (Certification Statement 3).

A summation of applicable agencies with jurisdiction over the Project is presented in the table below, as referenced from Docket 1: Application, Section 6, Table 6.0-1. The summary includes the known responses received at the time of application submittal (including Docket 18: Amendment to Consolidated Application for Corridor Compatibility Certificate and Route Permit). It should be noted, some agency responses had been received by the original Application submittal; however, due to Project changes, additional correspondences were sent, thusly at the time of the hearing, multiple agencies did not have an official response to the Project as designed. It should also be noted, as evidenced within the table, several agencies with multiple requests for correspondence due to several potential regulatory programs, had commented only partially. The table also includes information as to whether the response exists within the case files, which includes the Application. Wenck is of the opinion, if official correspondence after the PSC issuance of the Finding of Fact, Conclusion of Law and Order is not required to be submitted to the case files, specific permit requirement compliance cannot be known.

**Table 2: Summary of Agency Correspondence, Permits, and Approvals**

Agency	Applicable Resource/Program	Response Received		Discovered in Case Files	
		Yes	No	Yes	No
USFS Little Missouri Grasslands – McKenzie Ranger District	Federally Managed Lands; LMNG – Special Use Permit	X		X	
	NRHP, Cultural Resources Consultation	X		X	
USFWS North Dakota Field Office	Federally listed threatened and endangered species	X		X	
	USFWS-managed lands		X		X
	MBTA and BGEPA consultation	X			X
USACE, Regulatory Office	Crossings of Section 408 Civil Works projects or other USACE-owned or managed lands; any special requirements, restrictions, or specifications regarding constructing pipelines across or under USACE-regulated features; and any permits issued through USACE which may be applicable to the Project to include anticipated permitting timeframes	X			X

U.S. Department of Agriculture (USDA) Natural Resources Conservation Service- McKenzie County	Identification of impacts to NRCS-administered lands and programs	X		X	
USDA Farm Services Agency (FSA)	Identification of impacts to FSA-administered lands and programs	X			X
U.S. Department of Defense (USDOD) - Cable Affairs	Identification of intercontinental ballistic missiles and launch facilities locations relative to the route	X		X	
North Dakota Game and Fish Department (NDGFD)	State Conservation Priority Species	X		X	
	Game Refuges	X		X	
	Game Management Areas	X		X	
	Private Land Open to Sportsmen	X		X	
North Dakota Parks and Recreation Department	North Dakota Natural Heritage Inventory system, State Parks, Recreation areas, Natural areas, and Land and Water Conservation Fund projects	X		X	
North Dakota SHPO	Natural Register of Historic Places, Cultural Resources Consultation	X		X	
North Dakota Geological Survey (NDGS)	Identification of impacts to NDGS-administered lands and programs	X		X	
North Dakota Department of Health (NDDH)	Identification of impacts to NDDH-administered programs	X		X	
North Dakota State Water Commission (NDSWC)	Identification of impacts to rural water supply systems and NDSWC-administered projects	X		X	
North Dakota Department of Trust Lands (NDDTL) – School Trust	Identification of impacts to NDDTL-administered School Trust lands.	X		X	
NDDTL – Mineral Trust	Identification of impacts to NDDTL-administered Mineral Trust lands	X		X	
Western Area Water Supply Authority (WAWSA)	Identification of impacts to rural water supply systems and WAWSA-administered projects		X		X
McKenzie County Board of Commissioners	Confirmation of any local ordinances or other resources under McKenzie County jurisdiction applicable to the Project; any permits issued through the Board of Commissioners office which may be applicable to the Project; and a summary of any applicable permit process and anticipated timeframes		X		X
McKenzie County Water Resource Board	Locations of any county-regulated drains, ditches, and/or other drainage features; relevant special requirements, restrictions, or specifications; relevant local ordinances and/or permits; and a summary of permit process and anticipated timeframes		X		X
McKenzie County Weed Control Board	Confirmation of current listing of noxious weeds; known locations of noxious and/or invasive weed species along the proposed route; and guidance and/or recommendations for weed control, pesticide use, and non-chemical treatment options	X		X	

Wenck recommends those agencies for which correspondence or follow up communications have not been recorded in the case files be submitted to the PSC for verification of satisfactory conditions.

Those agencies for which ONEOK filed permits within the case files:

- Docket 97: Utility Road Crossing Permits issued by McKenzie County
  - Includes NDDOT permits
- Docket 103: NDDEQ Temporary Discharge Permit & Watford City Utility Permit
- Docket 116: NDDEQ Temporary Discharge Permits
- Docket 117: USFS Special Use Permit & FONSI
- Docket 123: McKenzie County Road Crossing Permits

Wenck is of the opinion, it has identified potentially required permits for which ONEOK has not provided copies to the case file. Those agencies and permits include:

- USACE, Section 404 Permit
- Department of Transportation, Federal Highway Administration, Permit to Cross
- NDDEQ, SWPPP Permit & NOI
- McKenzie County, Conditional Use Permit

Wenck recommends the PSC request verification of these permits to enter into the file.

Those agencies which indicated additional guidance are outlined below:

- North Dakota Game and Fish Department (NDGFD) recommended the following:
  - Native prairie and wooded draws should be avoided to the extent possible.
  - Additional precautions be implemented into the designs of pipes crossing state waterways.
  - Wetlands should be avoided, but if they cannot be, no alterations should be made to existing drainage patterns.
  - Unavoidable destruction or degradation of wetland acres should be mitigated in kind.
- NDDH
  - Disturbance over 1-acre requires a permit
  - Recommended to protect against: compaction, vegetation loss, unnecessary damage to wetlands, riparian zones, and other sensitive areas
  - Avoid spills over sensitive aquifers of Tobacco Garden, Cherry Creek, Bennie Peer, and Keene
  - Protect source waters and develop Spill Plan
  - List of construction and environmental disturbance requirements

## 5.2 CONSTRUCTION

The following subsections address compliance with Certification Statements 7 through 17.

### **5.2.1 Pre-Construction Conference**

*Hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order (Certification Statement 7).*

ONEOK submitted Docket 76: Preconstruction Conference Call Minutes and NOI to Commence Construction on 10 May 2019. A pre-construction conference call was held on 9 May 2019. Meeting minutes were taken, as well as a list of attendees. Appropriate representatives were found to be in attendance and contact information for ONEOK representatives was provided during the meeting.

### **5.2.2 Cultural Resources**

*All cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area (Certification Statement 8).*

ONEOK submitted Docket 77: NDSHPO Concurrence Letter on 5/10/2019, prior to construction. The NDSHPO Concurrence letter dated 7 May 2019 (Docket 77), provides approval for ONEOK's cultural resources avoidance and monitoring plan.

### **5.2.3 Topsoil Segregation Commencement Oversight**

*Topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference (Certification Statement 9).*

ONEOK submitted Docket 58: Preconstruction Conference Call Minutes and NOI to Commence Construction on 6/12/2019. ONEOK provided the date and time for initiation of topsoil removal to Wenck.

Wenck submitted Docket 87: Interim Topsoil Removal Inspection Report; and Docket 119: Topsoil Inspection Report, within which details adherence to the date and time of topsoil removal initiation and on-going compliance inspections. Wenck submitted Docket 125: Construction Inspection Report, which details on-going observations of topsoil segregation and management. As-built inspections regarding soil management are discussed in Section 5.2.6.

### **5.2.4 Notice of Intent to Start Construction**

*Inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis (Certification Statement 10).*

ONEOK submitted Docket 76: Preconstruction Conference Call Minutes and NOI to Commence Construction on 10 May 2019. ONEOK submitted Dockets 83, 101, 114, 120,

122, 126, and 127: Monthly Construction reports, corresponding to the months of June, July, August, September, October, December, and January 2019-2020 respectively.

The timeframe of the start of construction and construction inspections was discussed during the pre-construction call. All monthly construction reports were submitted during on-going construction work on the project.

### 5.2.5 Pipeline Depth

*Pipeline will be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in range land, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines (Certification Statement 11).*

Wenck visually confirmed pipeline depth at a few locations during construction inspections and pipe depth appeared to be buried to at least the specified depth (Docket 125: Construction Inspection).

### 5.2.6 Soil Management

*All topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages, and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced. Topsoil must be segregated from subsoil (Certification Statement 12).*

Due to construction delays and USFS special use permit approval timelines, final grading was performed before persistent frozen conditions in 2019 and reclamation and permanent seeding was continued on the final remaining 20-miles after thaw and as field conditions allowed in the spring of 2020 (personal email communication with Blake Holland of ONEOK, 5/26/20). Wenck understands this portion of the construction corridor to include the LMNG and remaining mileage trending eastward toward the Demicks Lake Natural Gas Plant. As-built inspections conducted within this portion confirmed the need for further reclamation activities (see discussion below).

Wenck confirmed soil management conditions indicated that topsoil was removed, stored, and replaced properly for the majority of the length of the ROW at multiple locations during topsoil, construction, and as-built inspections. Soil management conditions appeared to be properly conducted with a few minor discrepancies (Dockets 80, 87, 119, 125 Initial Topsoil Report, Interim Topsoil and Construction Inspection Report, Topsoil Inspection Report, Construction Inspection Report; respectively). The main concerns identified in the Construction Inspection Report were occurrences of minor mixing of subsoil with topsoil. Wenck visually confirmed proper subsoil and topsoil replacement and topographical grading during as-built inspections (**Appendix B**). Observations during the as-built inspection indicated that minor issues were resolved upon backfilling of trenches, and that topsoil replacement was adequate to support establishment of crops in cropland and grasses

seeded in rangeland (**Appendix B**). However, some issues with topsoil replacement and grading were noted during as-built inspections (**Photos 6, 7, 10, 11, 12, 14, 30, 38, and 45**). Wenck understands reclamation was still on-going at the time of as-built inspections; however, noted that particularly around Observation Points 9-13, a lack of topsoil through hills in the LMNG may be a reclamation issue going forward. Wenck recommends the PSC contact ONEOK and discuss potential shortcomings of reclamation through this area.

### **5.2.6.1 Erosion and Sedimentation**

The Project Application states throughout many sections, BMPs would be used during and after construction to minimize soil erosion and protect surface water (Docket 1: Application), as well as several mitigation documents such as Dockets 73, 72, and 64: Construction Mitigation and Restoration Plan, Dust Control Plan, and SWPPP; respectively. Additionally, multiple Federal, State, and local regulatory agencies provided statements in correspondences to protect against erosion and sedimentation. Specifically the NDDEQ provided guidance (Docket 28: Agency Correspondence, NDDEQ Construction and Environmental Disturbance Requirements).

Topsoil and construction inspections did not note any locations where erosion controls were improperly installed; however, the construction report (Docket 125) did note the continued need to implement erosion controls in geologically unstable areas and topsoil piles, especially if left over the winter.

As-built inspections noted a number of deficiencies in erosion and sediment BMPs. Many BMPs were found to be in disrepair after the winter season. Large portions of the ROW had evidence of crimped straw placement; however, at the time of inspection, most had blown away, evidence of a lack of proper placement. Straw wattles, erosion control blankets, and silt fences were also found to be in disrepair, and sometimes improperly installed, or deficient for their intended use. Other areas were lacking BMPs where they should have been implemented, such as slopes or conveyances. As such, conditions have allowed erosion along the ROW at some locations. Observation Points which elaborate upon specific locations of BMPs and/or erosion include: **7, 8, 9, 10, 11, 12, 15, 23, 24, 26, 27, 28, 38, 40, 45, and 46**. Wenck recommends PSC follow up with ONEOK to address potential erosion issues and BMP maintenance.

### **5.2.7 Road Crossings**

*All buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road (Certification Statement 13).*

ONEOK stated gravel roads would be open cut or trenched (Docket 1: Application, Section 9.1). ONEOK submitted Docket 97: Utility Road Crossing Permits issued by McKenzie County on 7/9/2019; and, Docket 123: Permits on 10/23/2019. Both dockets detail road crossing permits and specifications from the county with a multitude of approval dates. Wenck visually confirmed boring operations across several roads during construction inspections (Docket 125: Construction Inspection) and also verified several additional crossings during the as-built inspections (**Photo Observation Points 6, 19, 34, 36, and 41-44**).

### **5.2.8 Staging Areas**

*Staging areas or equipment shall not be located on land owned by a person other than the Company unless otherwise negotiated with landowners (Certification Statement 14).*

Staging areas and equipment were located along the pipeline temporary construction ROW, within survey limits, typically adjacent to road crossings, and upon areas that had been stripped of topsoil prior to staging of equipment or materials. Wenck did not observe any staging areas outside of the pipeline temporary construction ROW. Details of negotiations with landowners are not submitted to the PSC case files and cannot be independently verified.

### **5.2.9 Unanticipated Discoveries**

*If any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society (Certification Statement 15).*

ONEOK did not file any notification or work stoppage as a result of an unanticipated discovery; therefore, there are no dockets detailing further professional examinations. Wenck is unaware of any unanticipated discoveries occurring throughout construction.

### **5.2.10 Weather Conditions**

*Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company (Certification Statement 16).*

Wenck submitted Docket 125: Construction Inspection Report on 11/8/2019. Within the report, ONEOK's compliance with construction suspension due to weather conditions was documented.

### **5.2.11 Stop Work Authority**

*The Commission has authority to stop Project construction activities in the event of a probable violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm (Certification Statement 17).*

Wenck is unaware of PSC initiated Stop Work Authority being implemented.

## **5.3 RESTORATION AND MAINTENANCE**

The following subsections address compliance with Certification Statements 18 through 26.

### 5.3.1 Restoration

*As soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction (Certification Statement 18).*

At the time of the site inspection, the pipeline trench had been backfilled, soils had been recontoured, topsoil replaced, cropland had been planted, and reseeding had been completed in non-cropland areas. Non-cropland areas of the last remaining 20-miles had not been reseeded at the time of the as-built inspection due to previous construction delays. According to a personal communication to Wenck from Blake Holland, Demicks Lake Project Manager, ONEOK, re-seeding and other reclamation activities was on-going at the time of as-built inspections. Wenck observed crews implementing erosion controls but could not verify seeding implements within this portion of the pipeline. Vegetative growth of desired species at seeded areas was not observed; however, annual weeds had begun to establish. Wenck recommends actions in the weed management plan be implemented from now and throughout the reclamation phase.

A revegetation inspection contracted by the PSC is planned one year from the last date of seeding to document establishment of vegetation and ultimate compliance with this Certification Statement.

### 5.3.2 Roads

*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 (Certification Statement 19).*

ONEOK submitted Docket 73: Construction Mitigation and Restoration Plan. This Docket outlines the procedure and standards to reclaim damaged roads. At the time of the as-built inspection, roads appeared to be in good condition. Vegetation growth within the ROW adjacent to roads was sparse in most areas. Contouring in the ROW near roads generally matched adjacent topography; however, there were a few discrepancies (**Photo Observation Points 6, 33, 43, and 44**).

### 5.3.3 NRCS Recommendations

*Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the NRCS recommendations, unless otherwise specified by the landowner and approved by the Commission. (Certification Statement 20).*

ONEOK submitted Docket 67: Revegetation Plan. This Docket outlines compliance with NRCS recommendations. It does not appear that ONEOK has filed any deviation from recommendations as negotiated with landowners, and no PSC approvals for such deviations exist within the case files. Wenck recommends the PSC to inquire ONEOK about landowner negotiations if warranted.

### **5.3.4 Continuing Commitment**

*Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility (Certification Statement 21).*

At the time of as-built inspections, reclamation was on-going, and a reclamation and revegetation inspection is to be conducted one year from date of final seeding.

### **5.3.5 Fences and Gates**

*Repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility (Certification Statement 22).*

ONEOK committed to repairing and replacing all fences and gates (Docket 1: Application, Sections 2.18, 9.5). Existing fences or gates that were impacted by pipeline construction appeared to be replaced or repaired as needed (**Photo Observation Points 4, 5, 13, 25, 39, 41, and 43**).

### **5.3.6 Drain Tile**

*Repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility (Certification Statement 23).*

ONEOK committed to repair or replace all damaged drainage tile (Docket 1: Consolidated Application, Sec. 9.5). ONEOK submitted Docket 73: Construction Mitigation and Restoration Plan; which outlines specific protocols. Wenck did not observe any broken or damaged drainage tile during inspections. Currently there are no PSC protocols to report damaged drainage tiles to the case file, and Wenck is unaware of any landowner complaints regarding damaged drainage tiles.

### **5.3.7 Tree and Shrub Mitigation**

*Comply with the Tree and Shrub Mitigation Specifications (Certification Statement 24).*

Refer to Section 3.5.1.1 of this document for compliance with Tree and Shrub Mitigation Specifications.

### **5.3.8 Waste Disposal**

*Remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis (Certification Statement 25).*

ONEOK indicated that waste would be removed and disposed of properly before construction is completed (Docket 1: Application, Section 9.1). At the time of the as-built inspection, there was no waste, debris, or abandoned equipment observed. Equipment and staging areas in the vicinity of the as-built inspection points had been appropriately cleaned up post-construction.

### **5.3.9 Traffic Control**

*Provide any necessary safety measures for traffic control or to restrict public access to the transmission facility (Certification Statement 26).*

ONEOK submitted Docket 73: Construction Mitigation and Restoration. Traffic control measures are outlined within the document. Wenck observed traffic control measures during all inspections, near appropriate points during all phases of construction.

## **5.4 COMMUNICATION WITH LANDOWNERS AND PSC**

The following subsections address compliance with Certification Statements 27 through 41.

### **5.4.1 Right-of-Way Liaison Notifications**

*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 (Certification Statement 27). File with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility (Certification Statement 28).*

Contact information for a company representative was provided during the pre-construction conference call (Docket 76, Preconstruction Conference Call Minutes and NOI). Wenck cannot independently verify if ONEOK sent landowner notifications of company representatives as no such information exists in the case files. Wenck is unaware of any landowner or community concerns filed with the PSC to date.

### **5.4.2 Engineering Design Drawings**

*Provide the Commission with engineering design drawings of the transmission facility prior to construction (Certification Statement 29).*

Engineering design drawings were provided in the Application materials (Docket 1: Application, Exhibit A, Engineering Documents).

### **5.4.3 Extraordinary Event Notification**

*Advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person (Certification Statement 30).*

ONEOK submitted Docket 82: Lost Time Injury Report on 6/13/2019 for an injury on-site on 6/11/2019. No other concerns were identified during the docket review and Wenck is unaware of any reports of extraordinary events filed to date with the PSC.

### **5.4.4 Significant Biological Discoveries**

*Report to the Commission, as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered species of which Company becomes*

aware and which were not previously reported to the Commission (Certification Statement 31).

It appears ONEOK did not submit any reports to the PSC which describe previously unidentified critical habitat or threatened or endangered species. Wenck did not observe any significant biological discoveries during any inspections.

#### **5.4.5 Modification**

*Inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility (Certification Statement 32).*

Wenck is of the opinion, modification, does not include re-routes, which are discussed in Certification Statements 35 & 36, addressed in Section 5.4.8 of this document. Therefore, Wenck does not believe from a docket review and on-site inspections, that ONEOK performed modifications to the transmission facility.

#### **5.4.6 As-Built Documentation**

*Provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAO 83) UTM Zone 13N or 14N feet (NAO 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed (Certification Statement 33).*

ONEOK submitted Docket 127: Final Monthly Construction Report and As-Built Maps on 2/4/2020, within 3 months of construction completion. Wenck finds the docket to include paper maps and a reference to a thumbdrive with GIS files containing as-built conditions.

#### **5.4.7 Underground Facilities**

*Notify the Commission as soon as reasonably possible if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined (Certification Statement 34).*

There currently does not exist a rule, in which notifications of this manner are required to be included in case files. Therefore, Wenck cannot independently verify if ONEOK notified the PSC of such an event.

#### **5.4.8 Route Adjustments Before or During Construction**

*Utilize the following procedures if Company seeks a route adjustment before or during construction of the pipeline, pursuant under NDCC §49-22.1-15 (Certification Statement 35). Specifically identify which subsection of NDCC 49-22.1-15 it is requesting the adjustment under. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application (Certification Statement 36).*

ONEOK filed for 6 certifications of route adjustments under NDCC 49-22.1 (Dockets 84, 85, 95, 99, 104, and 107), totaling 18 adjustments, 16 within the corridor no avoidance area affected (NDCC 49-22.1-15(1) and 2 outside the corridor no avoidance area affected (NDCC 49-22.1-15(3)). ONEOK also filed Docket 115: Letter withdrawing certification for route adjustment – mileposts 19 – 19.3; in reference to Docket 104, for a total of 15 adjustments within the corridor no avoidance area affected.

Wenck compared the as-built pipeline alignment with the proposed alignment and matched re-routes approved by the PSC to confirm regulatory compliance. Wenck found that the as-built alignment matched the majority of the proposed route with the exception of the approved re-routes.

# 6.0 Issues to Resolve and Recommendations

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## 6.1 DOCUMENTATION

Wenck recommends that ONEOK submits the following documentation to the PSC:

- USACE Permit (Section 3.3.2.1)
- USFWS and NDGF required construction MBTA and BGEPA surveys (Section 3.3.2.5 and 3.3.2.6)
- USFWS required re-route concurrences and correspondence of determination update after 1 year (Section 3.4.1.4)
- USFWS concurrence on wetland and grassland easements within the Project corridor (Section 3.4.2.1)
- Occupied Structure waiver or proof of re-route avoidance (Section 3.4.2.5 & 4.8)
- WAWSA concurrence on rural water supplies (Section 3.4.2.7)
- Tree and Shrub Mitigation Plan (Section 3.5.1.2)
- Un-surveyed Environmental Resources (Section 4.6)
- Correspondence Verification (Section 5.1.2)
- Permit Verification (Section 5.1.2)
  - USACE, Section 404 Permit
  - Department of Transportation, Federal Highway Administration, Permit to Cross
  - NDDEQ, SWPPP Permit & NOI
  - McKenzie County, Conditional Use Permit

## 6.2 AS-BUILT CONDITIONS

Wenck recommends the PSC follow up with ONEOK during or prior to the reclamation phase of inspections:

- Status of current on-going reclamation (topsoil spreading, seeding, temporary approaches, timber matting)
- Removed temporary approaches or access points where minor scoria is present
- Repair/Replacement of non-functioning BMPs
- Placement of BMPs in areas prone to erosion as indicated in the SWPPP
- Areas of topsoil in-adequacy
- Management of annual weeds
- Conditions concerning Observation Points 9-13

## 7.0 References

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North Dakota Public Service Commission (ND PSC). 2020. Online Case Search. Available from: [http://www.psc.nd.gov/database/company\\_case\\_list.php](http://www.psc.nd.gov/database/company_case_list.php). Accessed June 2020.

## 8.0 Signatures

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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.

Lead Project Manager and Environmental Scientist, Matt Retka, and Environmental Scientist, Joseph Sander, prepared the report.



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Matt Retka  
Project Manager  
Environmental Scientist

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June 19, 2020  
Date



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Joseph Sander  
Environmental Scientist

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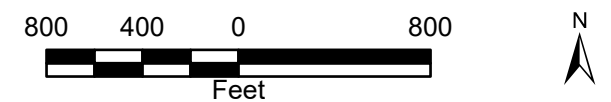
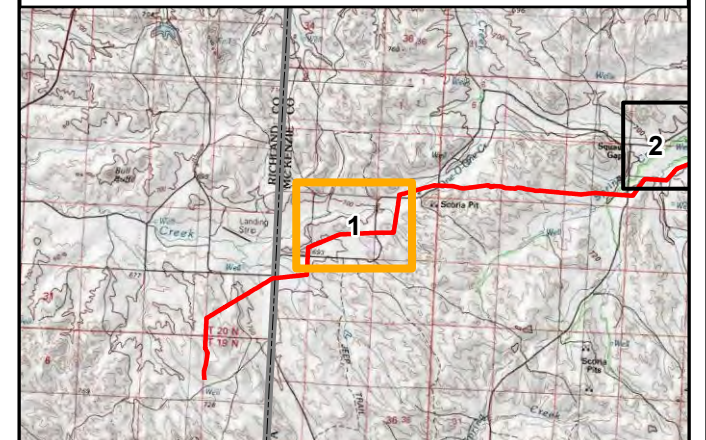
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Date

## Figures

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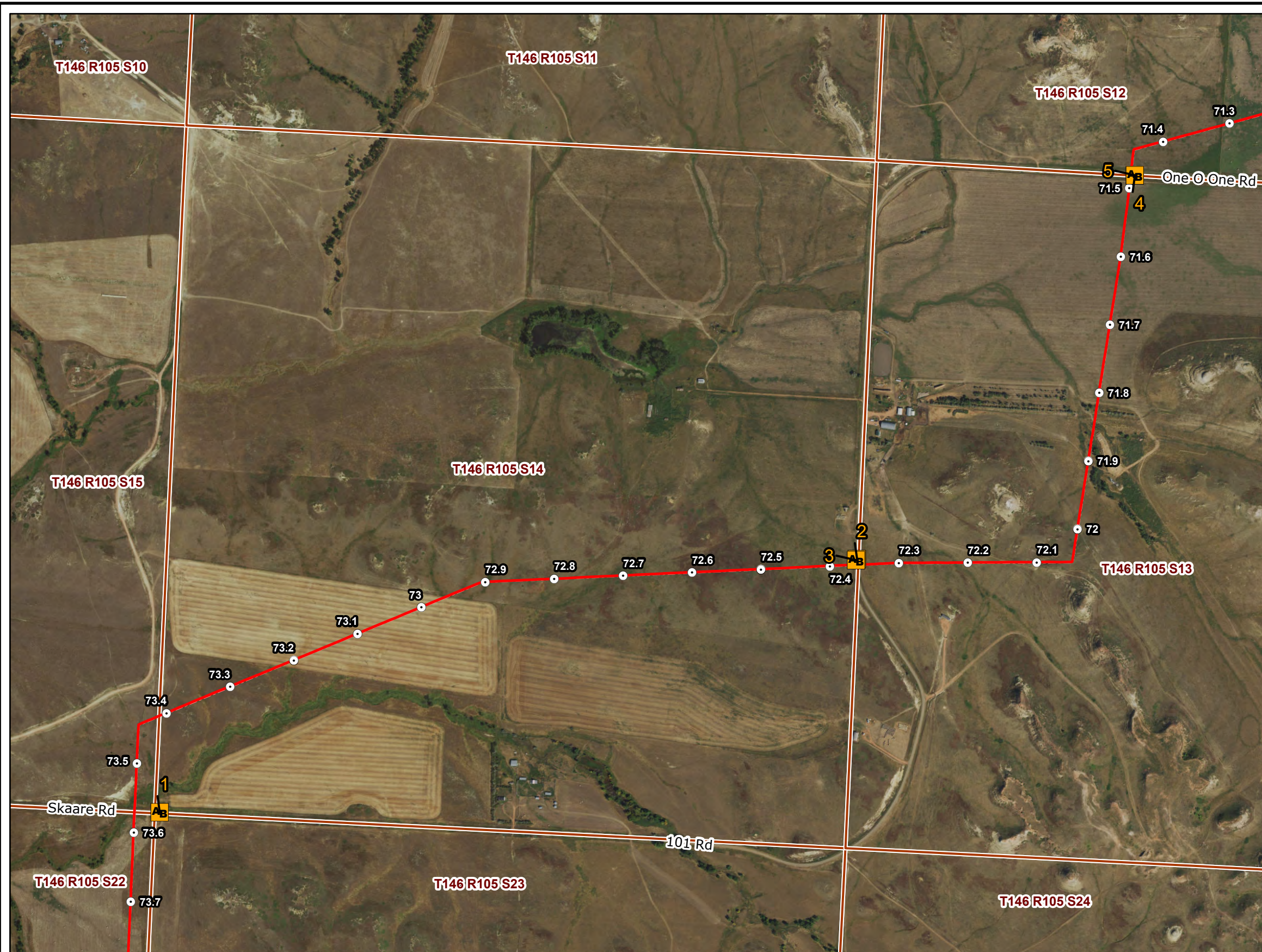
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- Milepost
- As As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

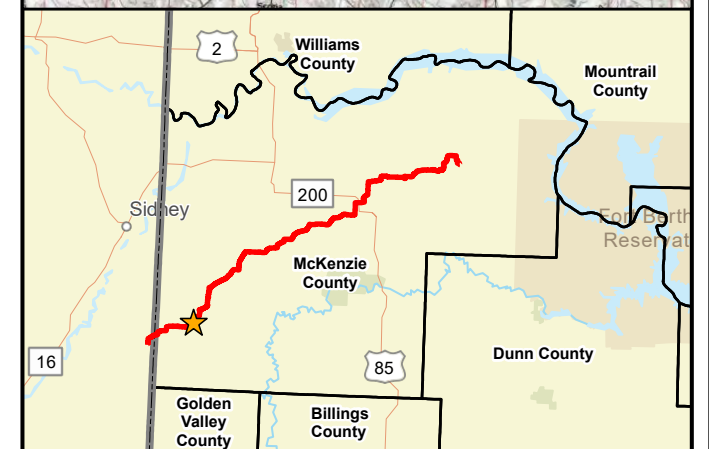
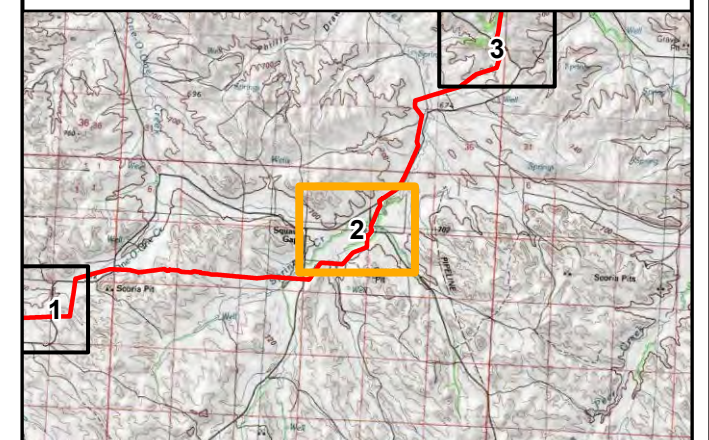


JUNE 2020

Map 1 of 19

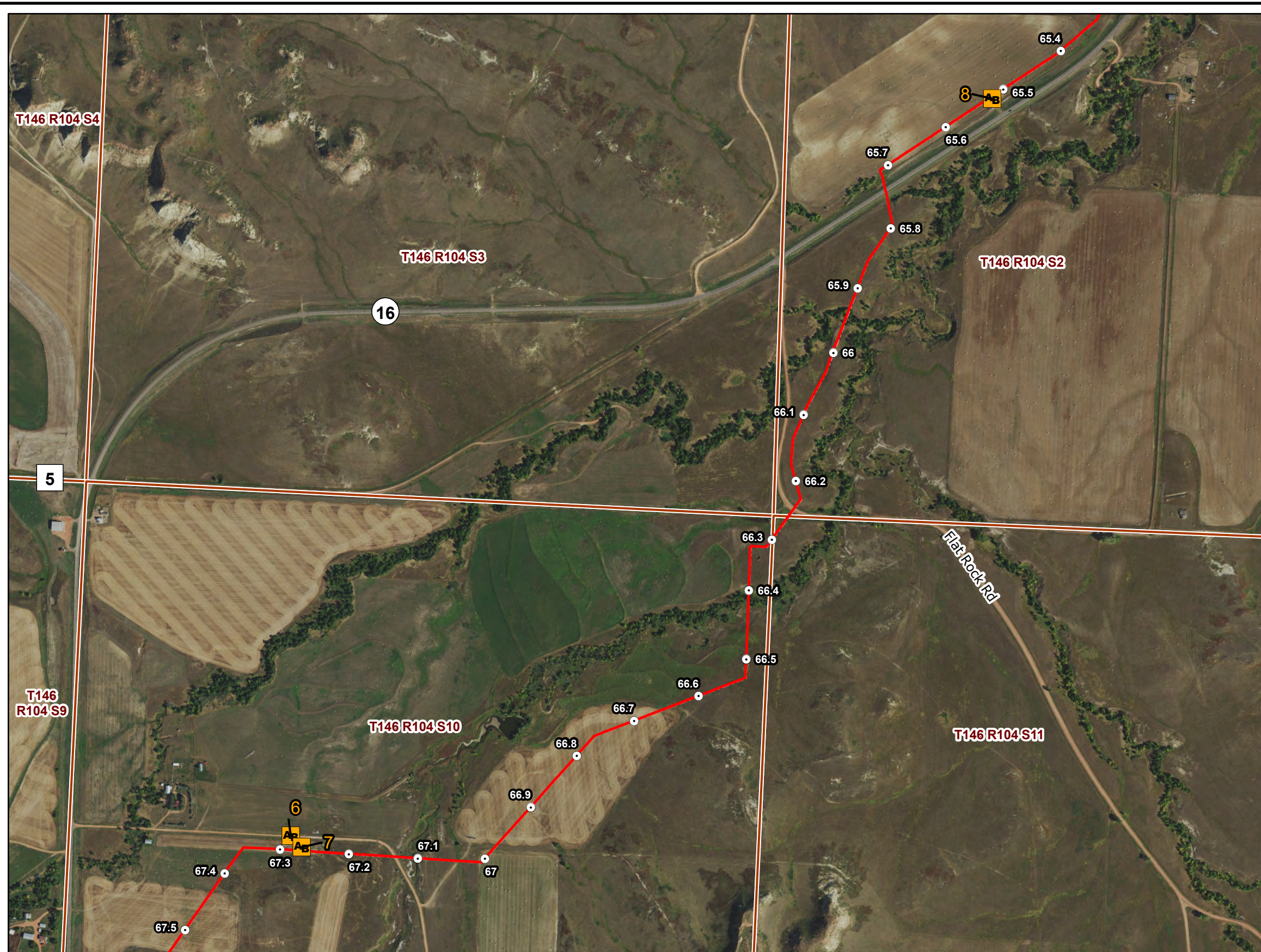
**Demicks Lake Pipeline  
Figure 2**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



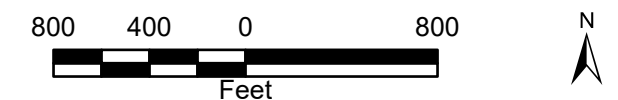
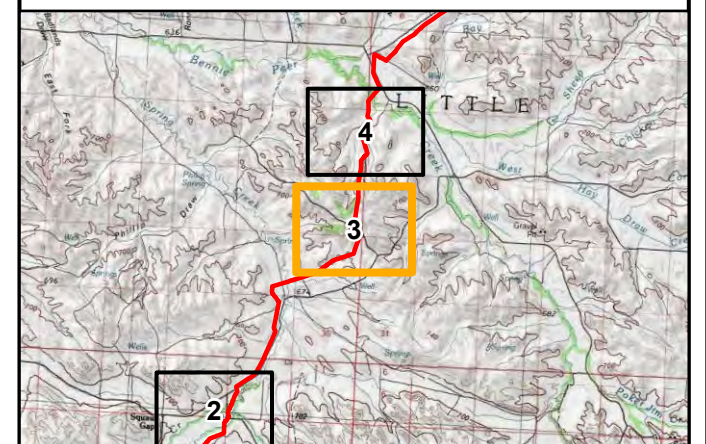
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**North Dakota  
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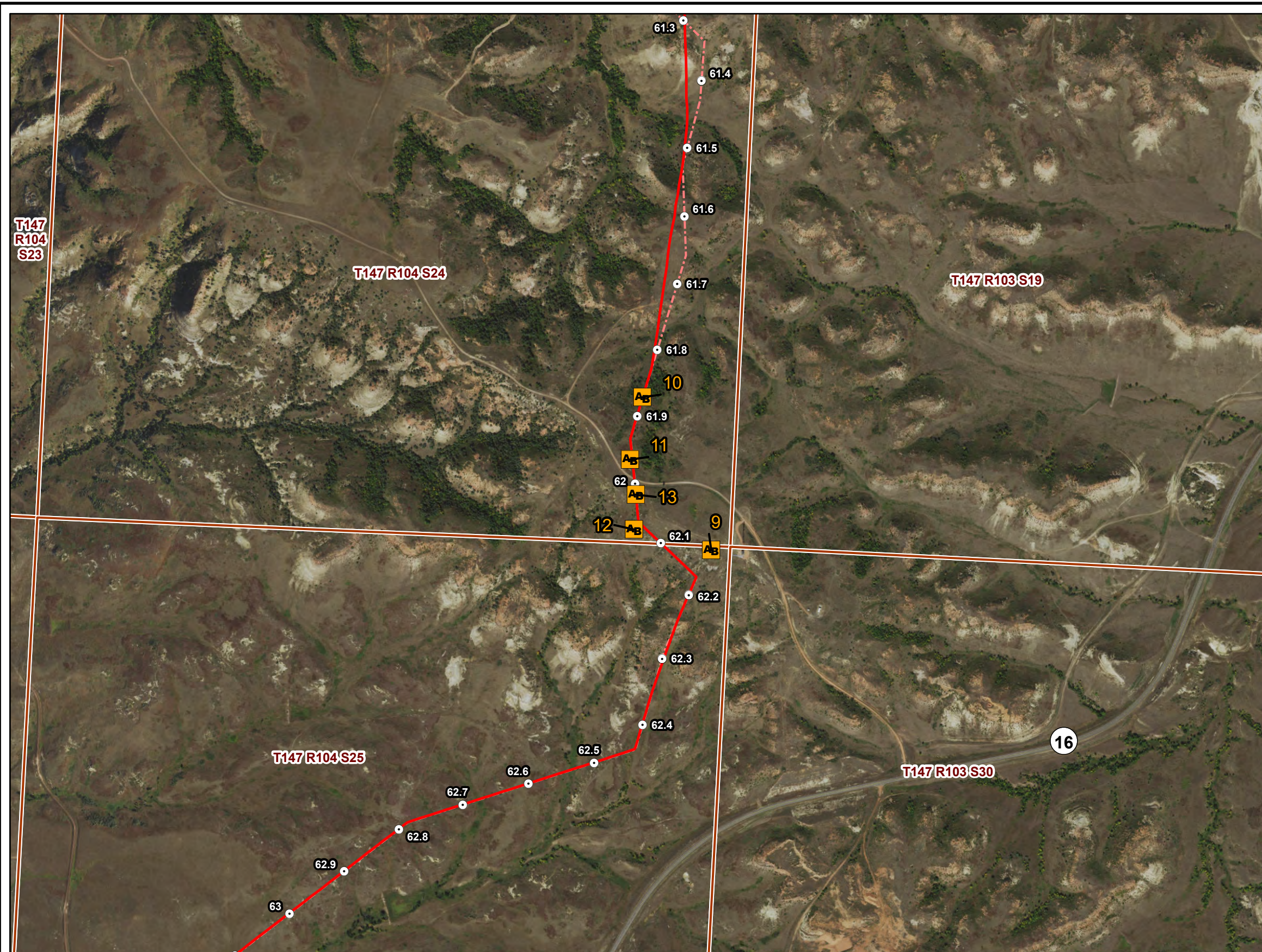
**Demicks Lake Pipeline  
Figure 3**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



Responsive partner. Exceptional outcomes.

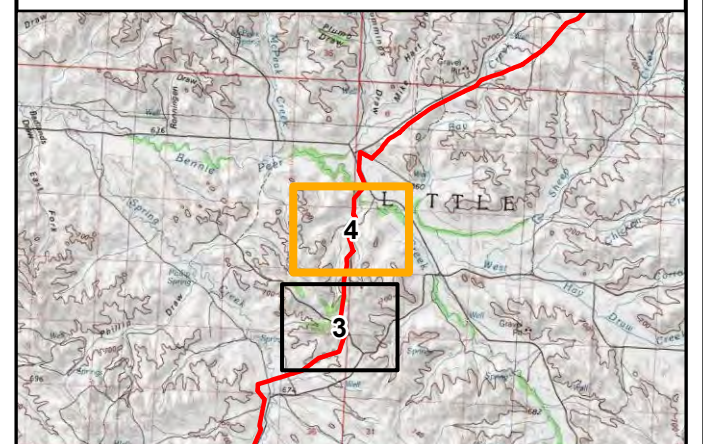
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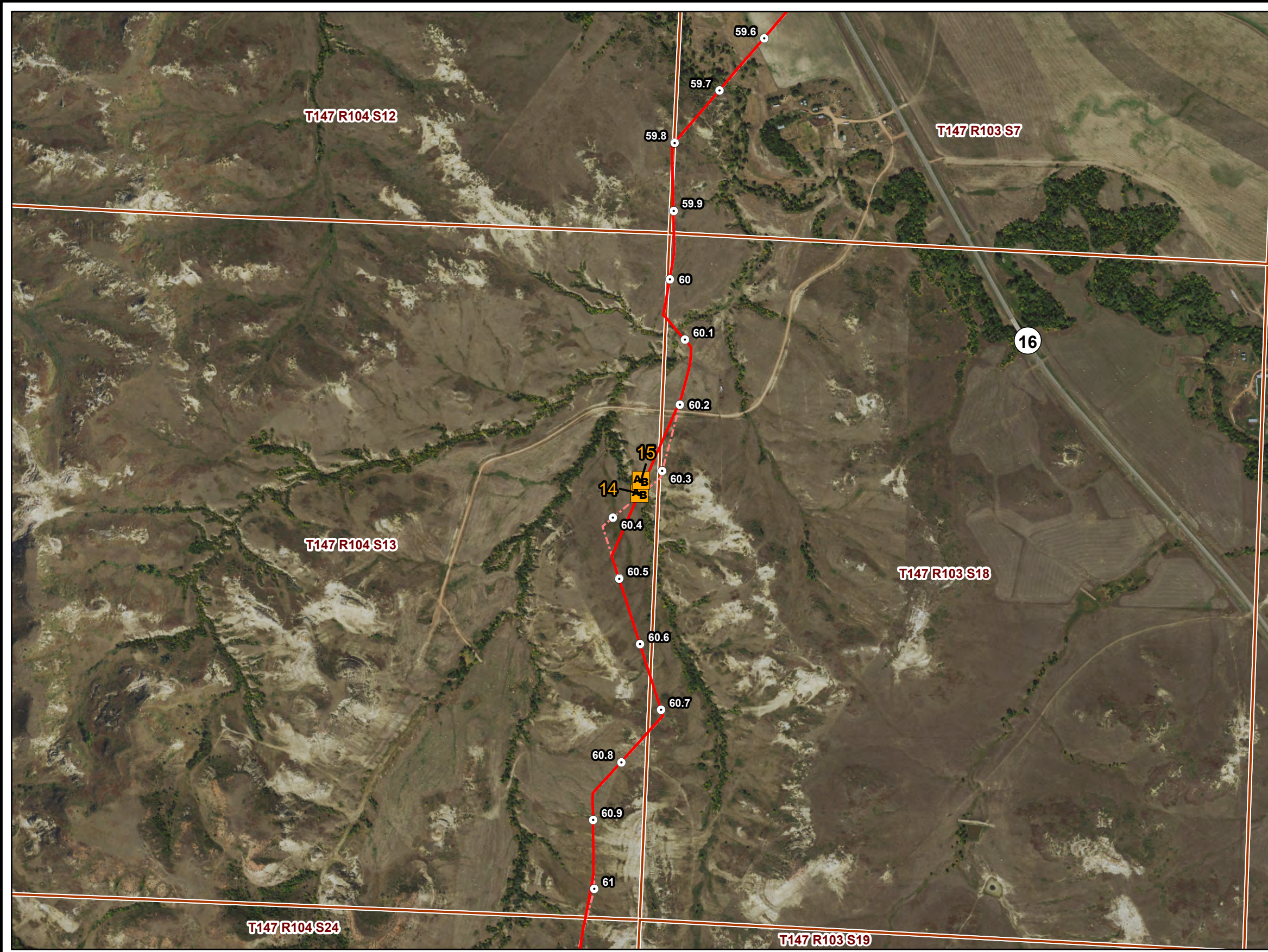
**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 4**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



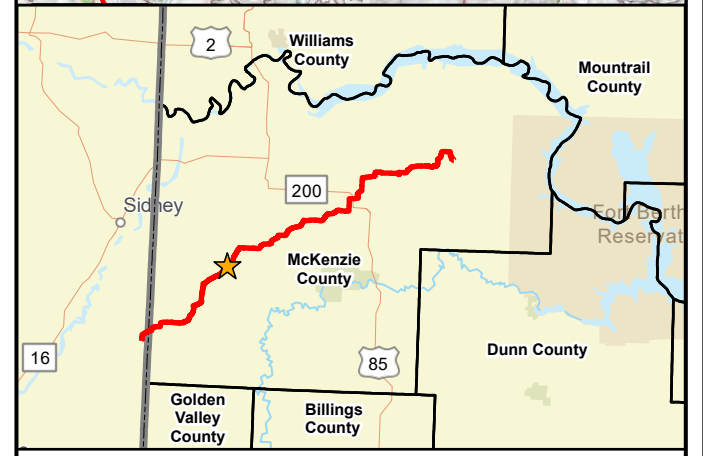
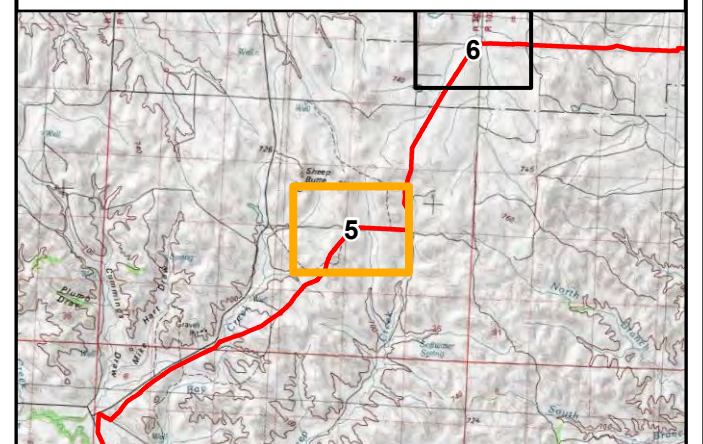
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**North Dakota  
Public Service Commission**

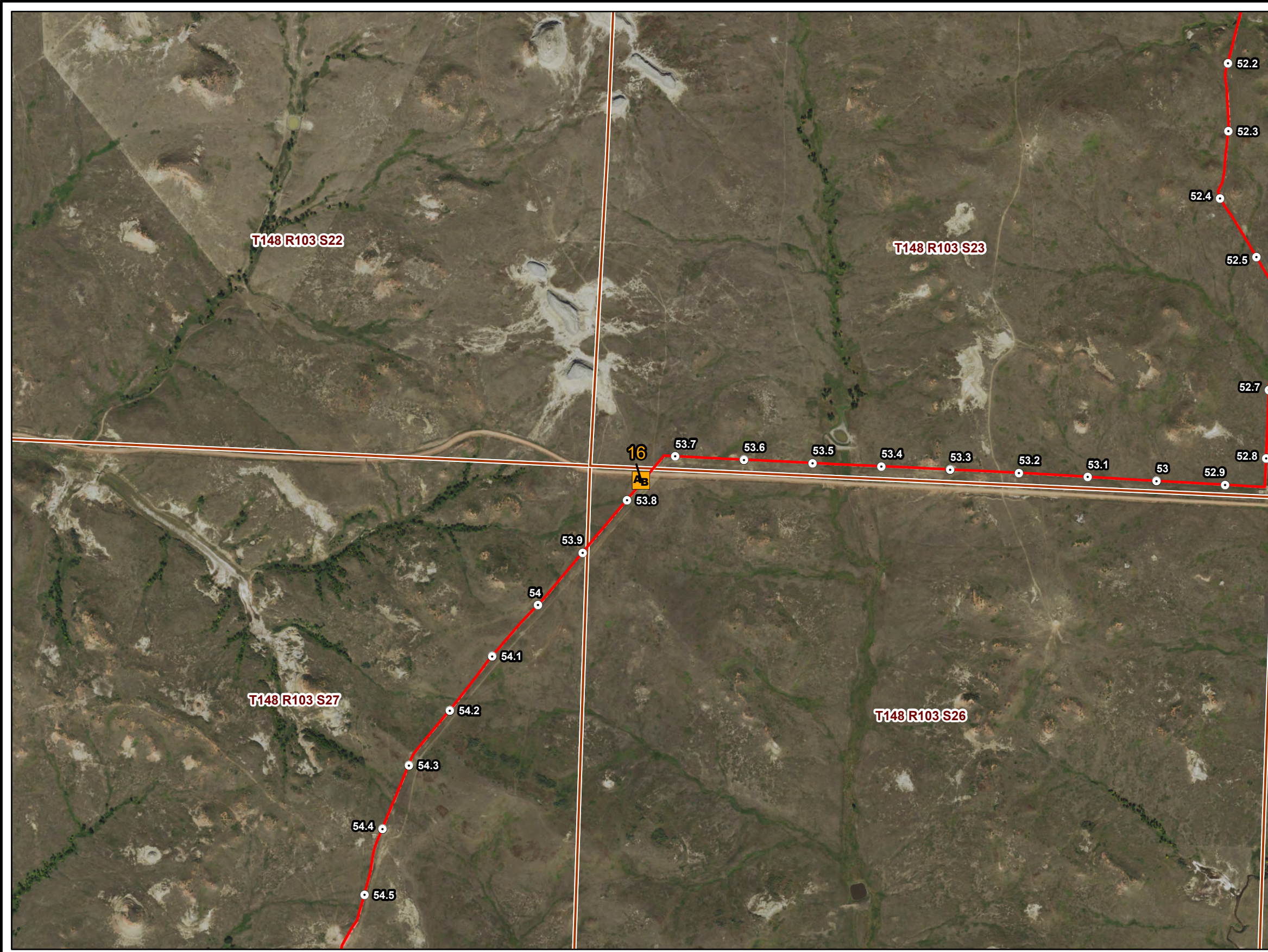
**Demicks Lake Pipeline  
Figure 5**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



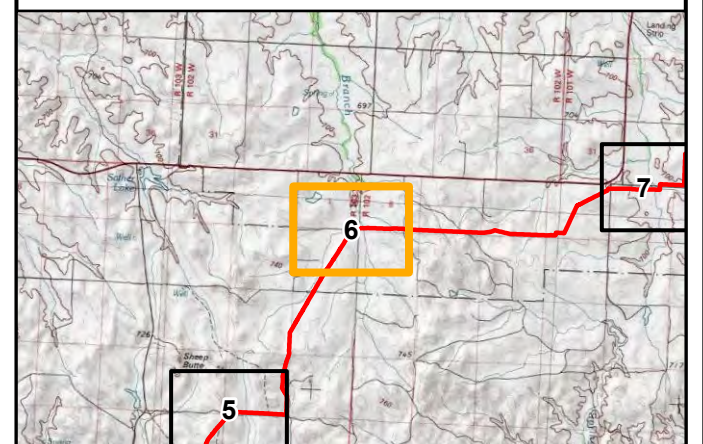
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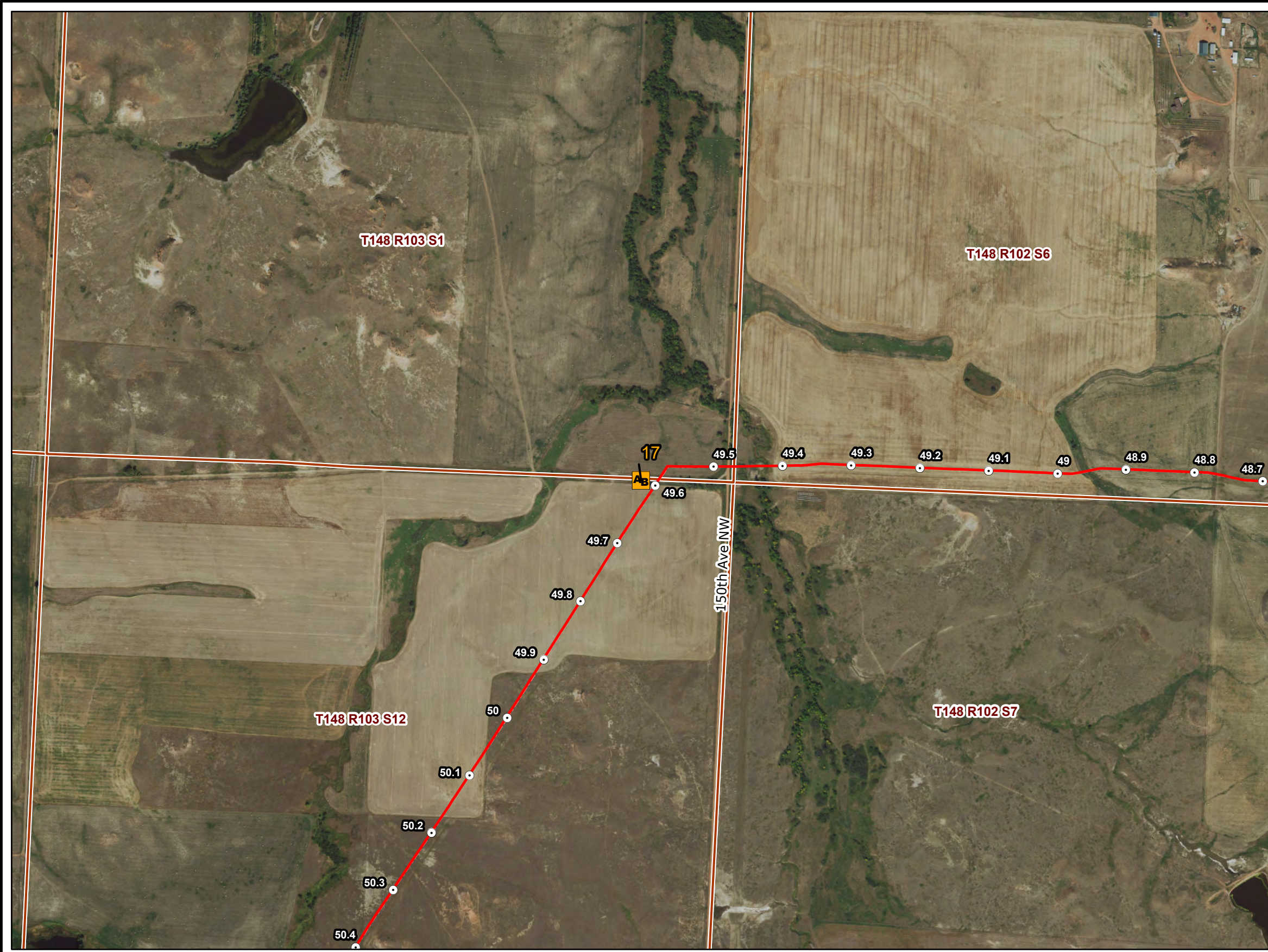
**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 6**

- Milepost
- AB** As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



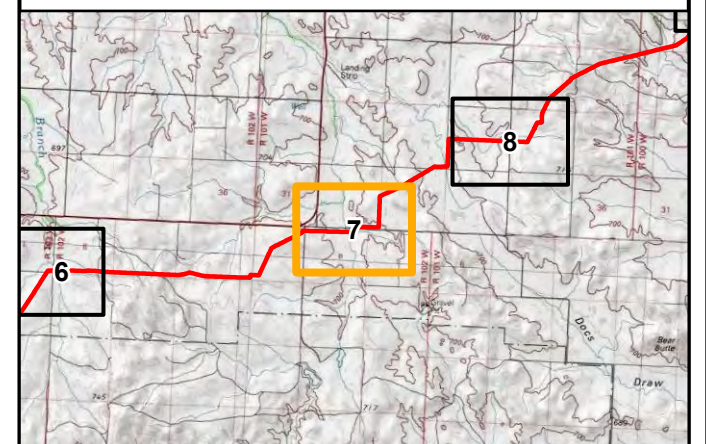
JUNE 2020

Map 6 of 19

**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 7**

- Milepost
- As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



Responsive partner. Exceptional outcomes.

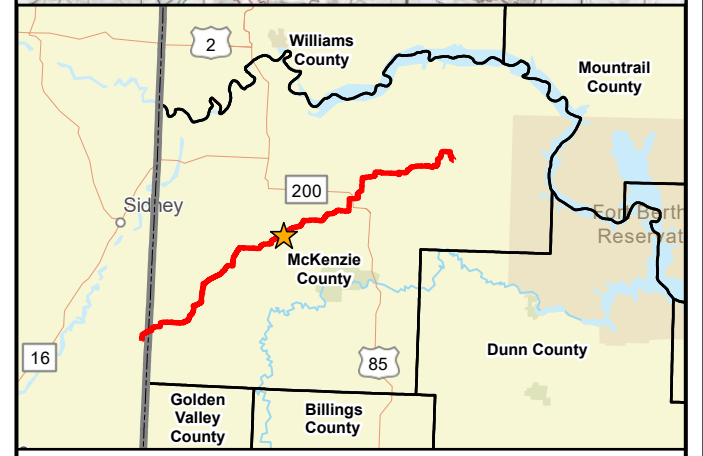
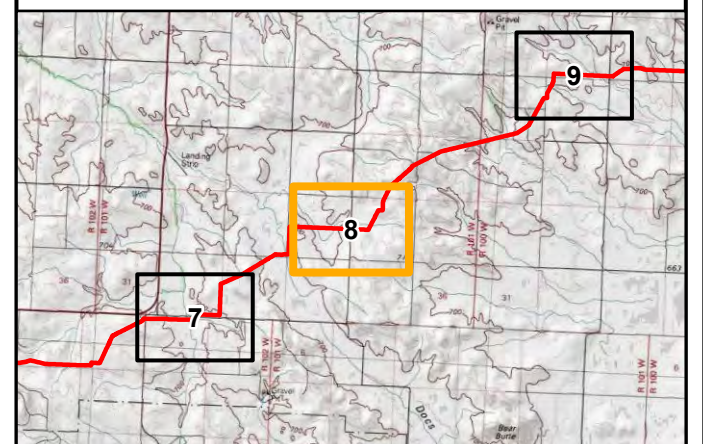
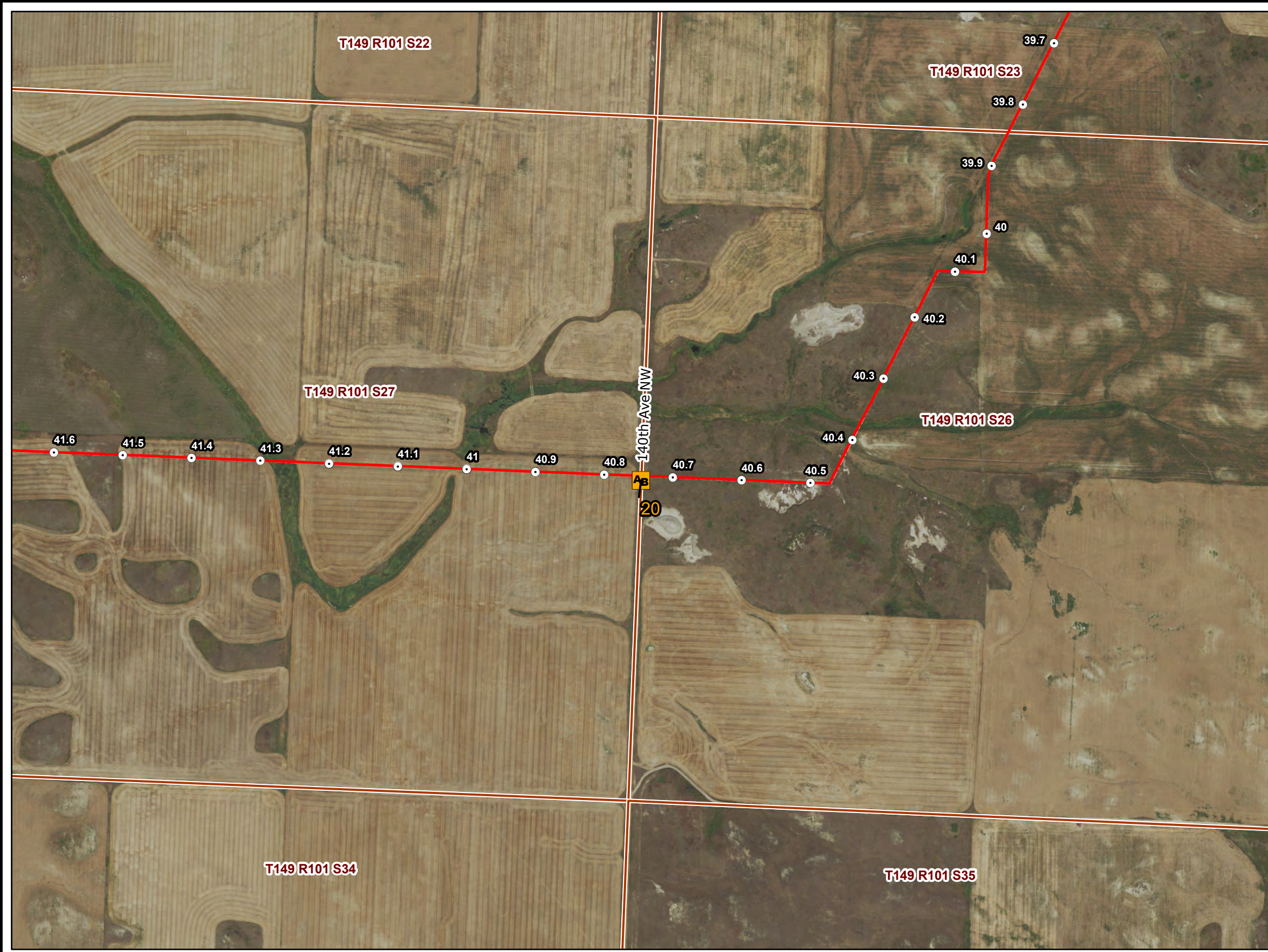
JUNE 2020

Map 7 of 19

**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 8**

- Milepost
- AB** As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

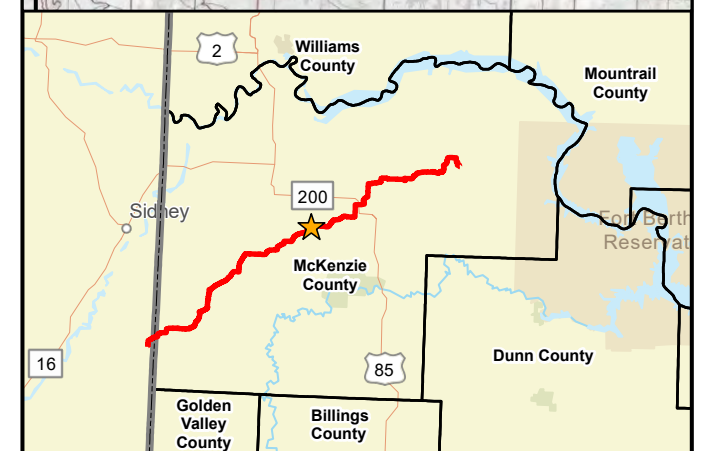
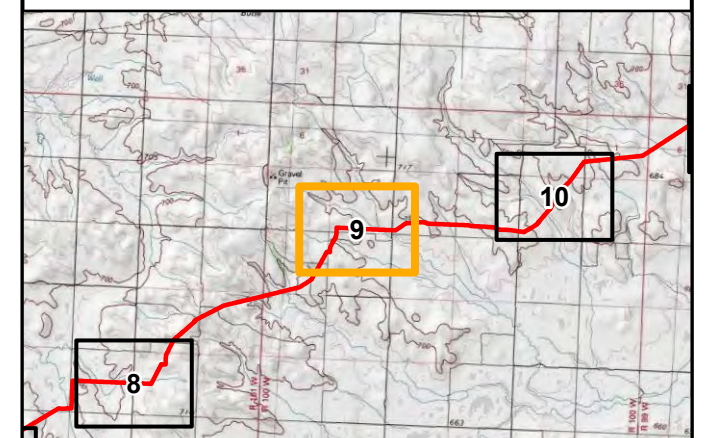


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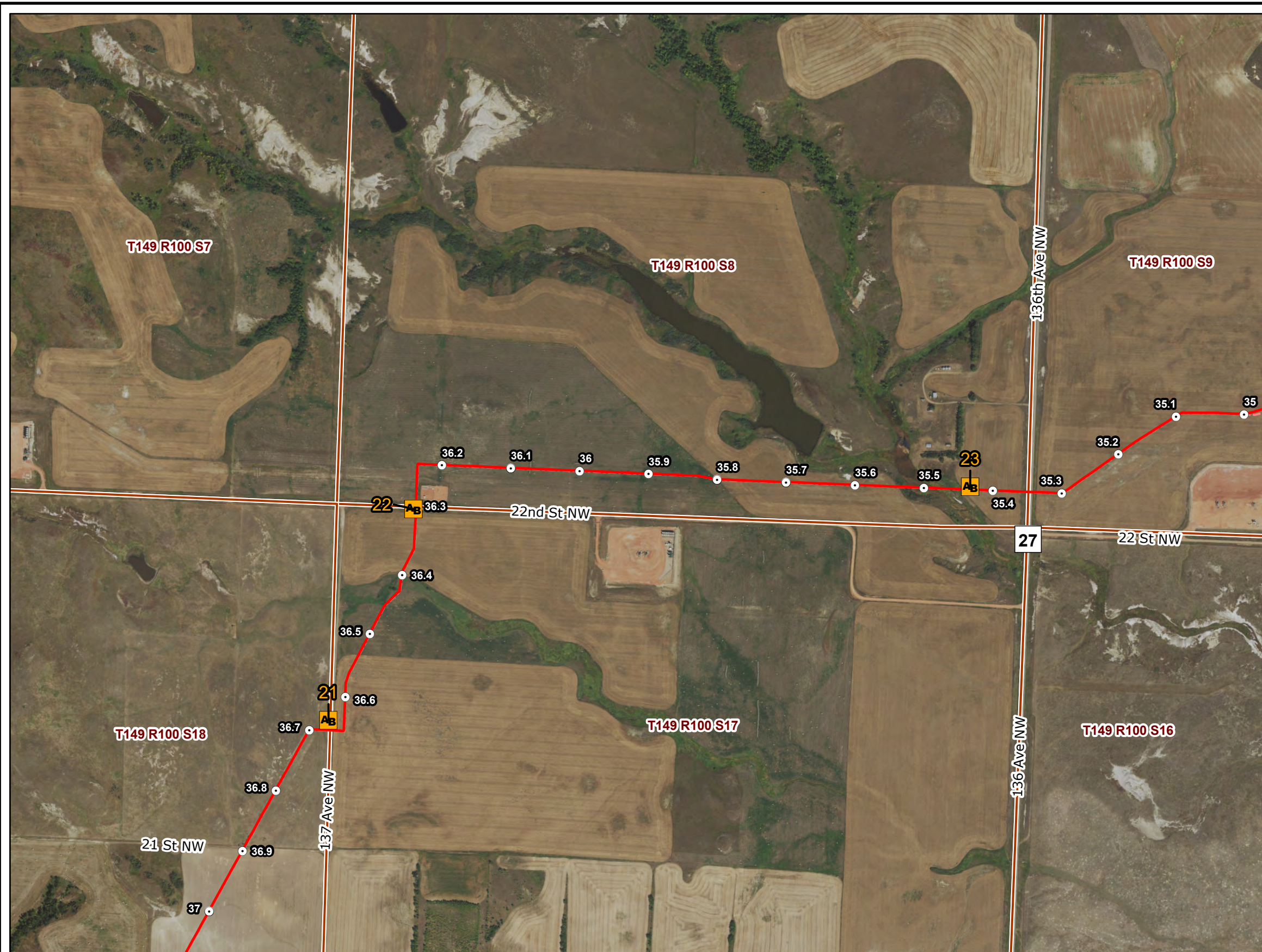
**Demicks Lake Pipeline  
Figure 9**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



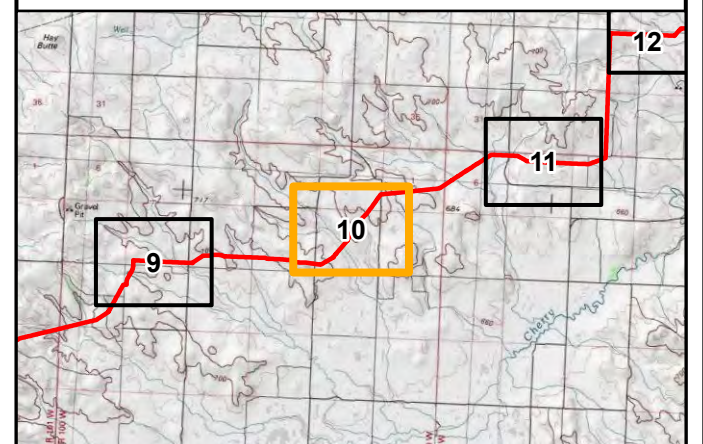
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**Demicks Lake Pipeline  
Figure 10**

- Milepost
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- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



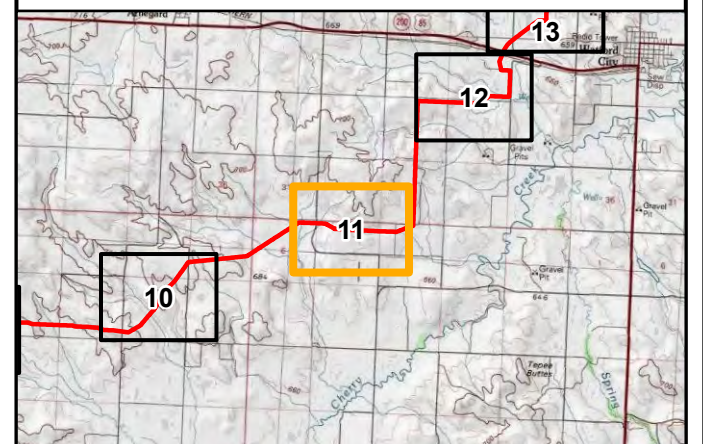
JUNE 2020

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**North Dakota  
Public Service Commission**

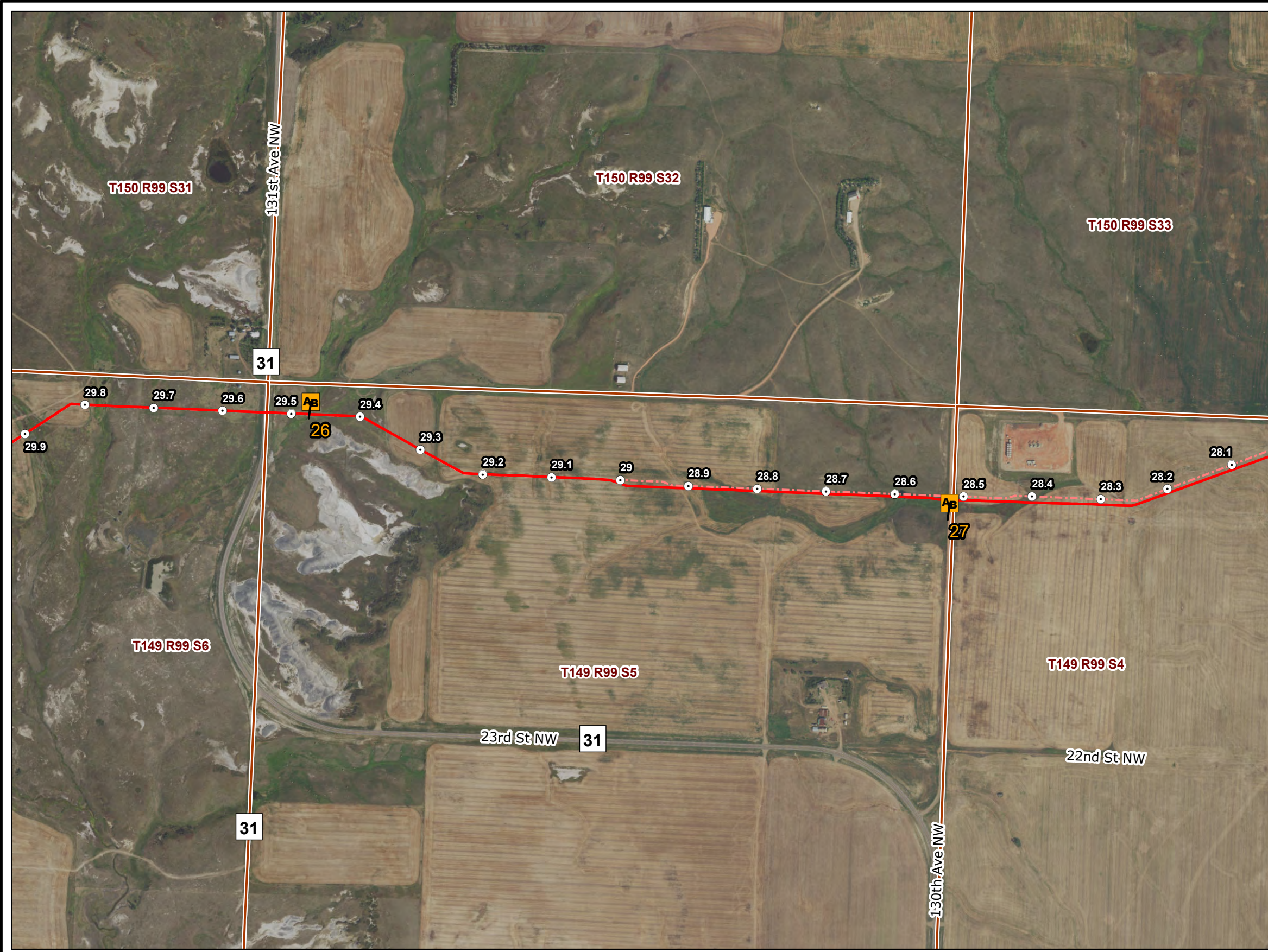
**Demicks Lake Pipeline  
Figure 11**

- Milepost
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- - - Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

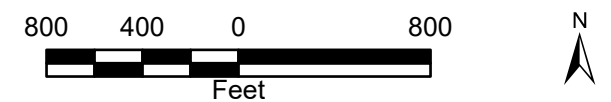
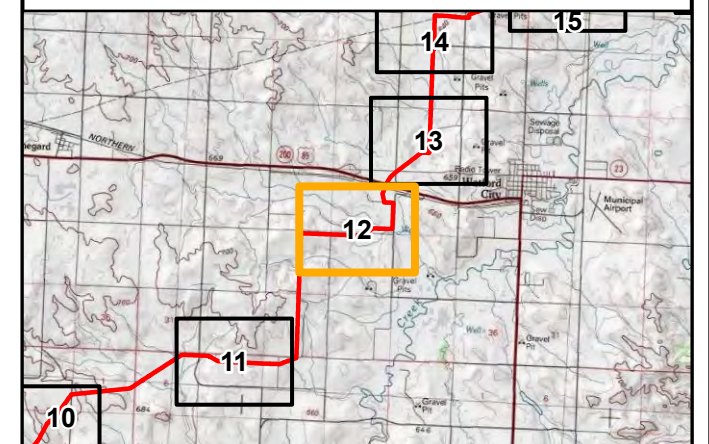


JUNE 2020

Map 11 of 19

**Demicks Lake Pipeline  
Figure 12**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:04 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

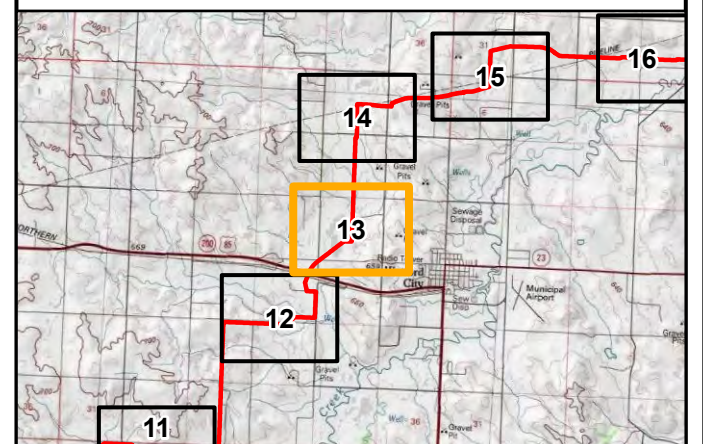


JUNE 2020

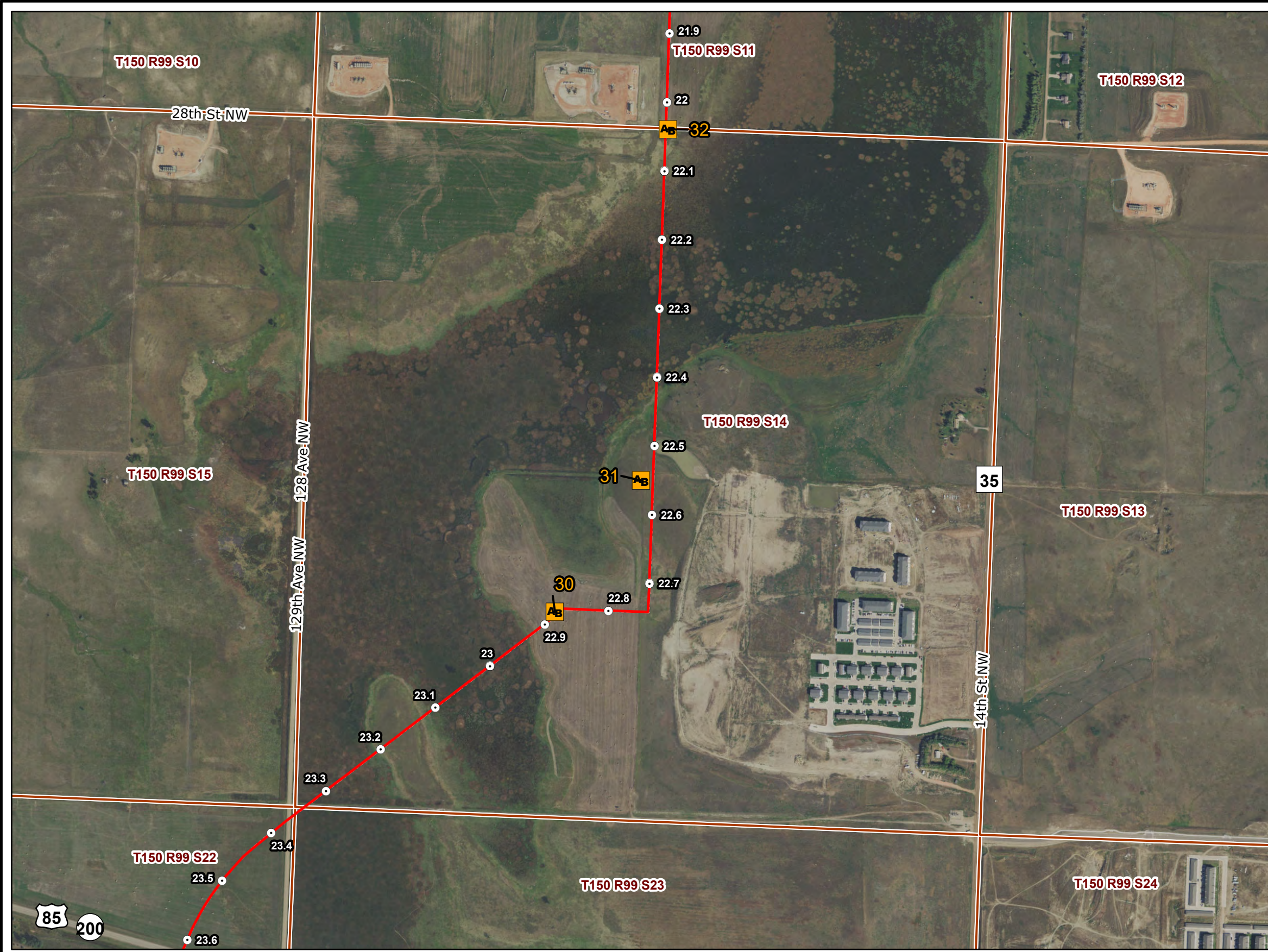
Map 12 of 19

**Demicks Lake Pipeline  
Figure 13**

- Milepost
- AB** As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)  
Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:05 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

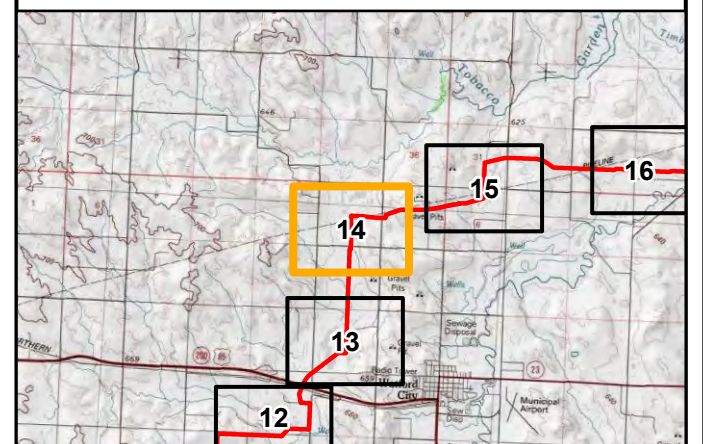


JUNE 2020

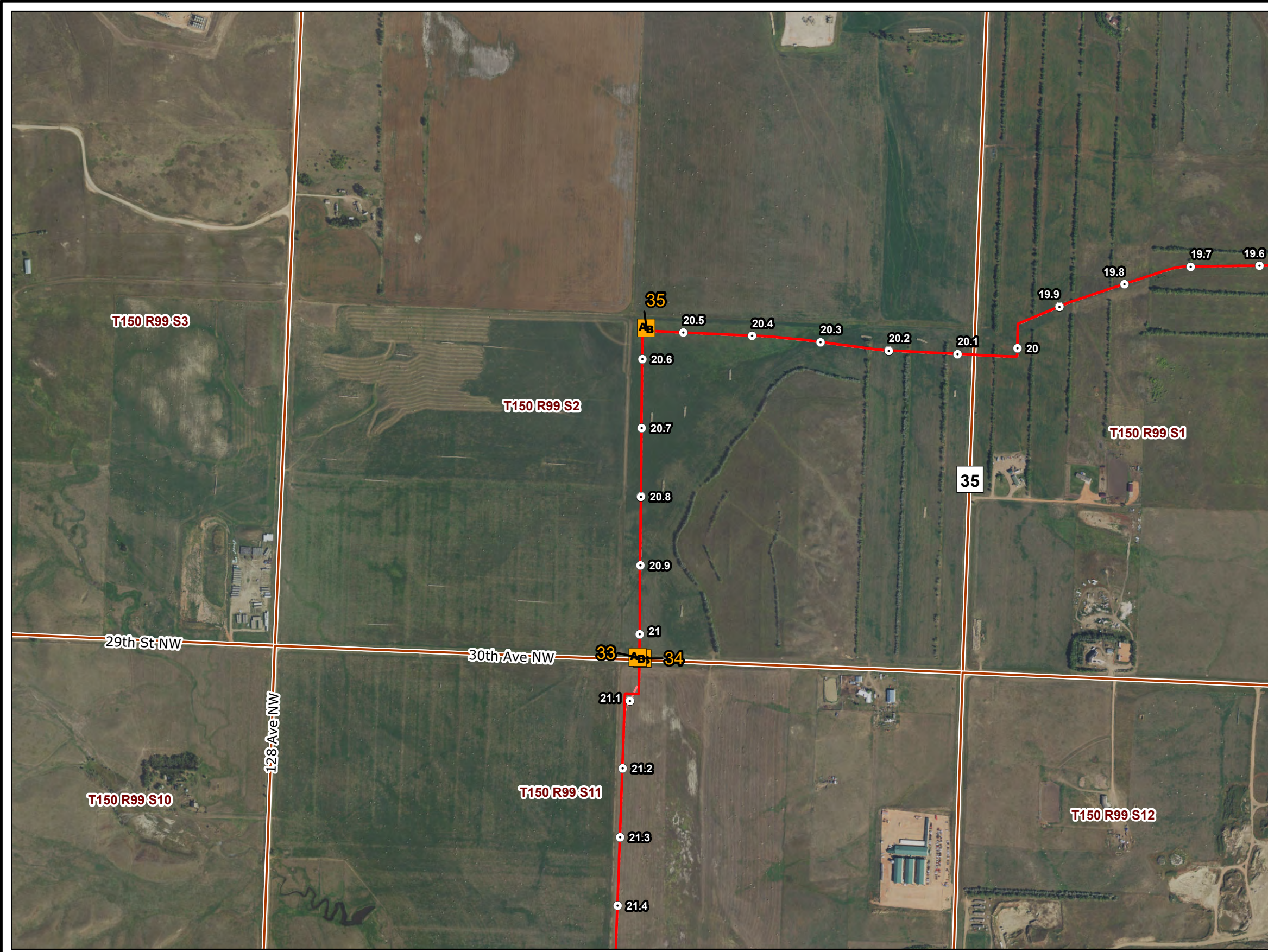
Map 13 of 19

**Demicks Lake Pipeline  
Figure 14**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)  
Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:05 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

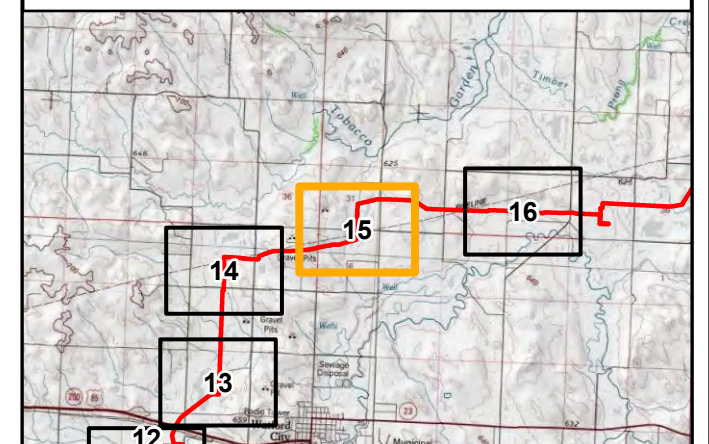


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Map 14 of 19

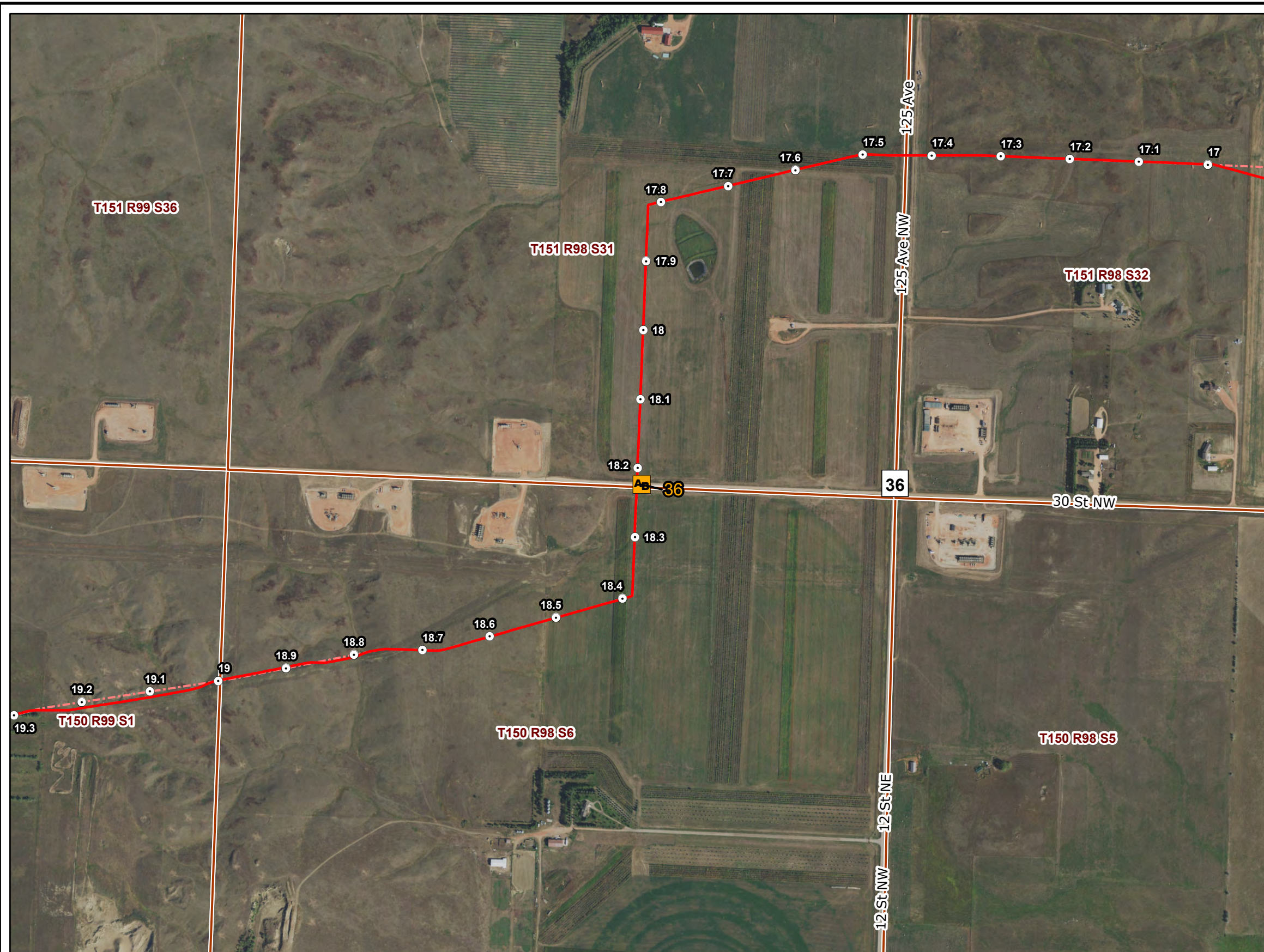
**Demicks Lake Pipeline  
Figure 15**

- Milepost
- As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:05 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



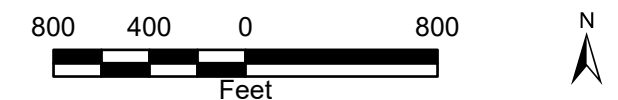
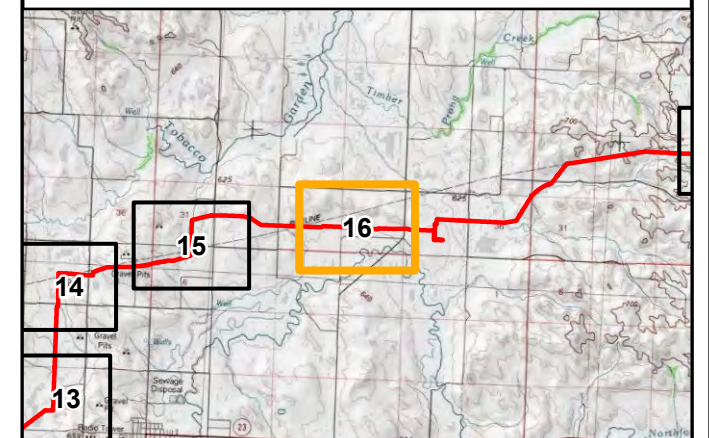
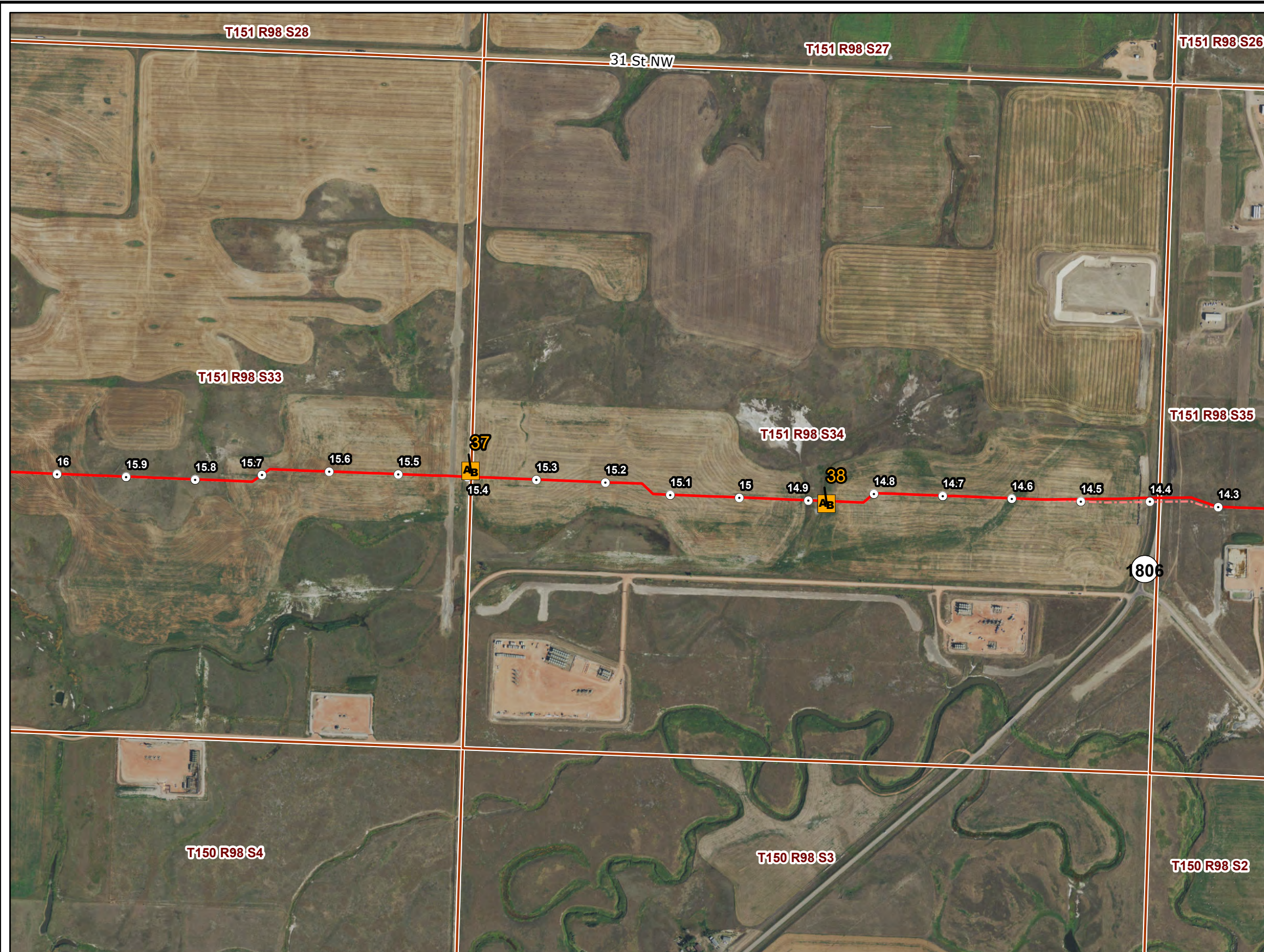
JUNE 2020

Map 15 of 19

**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 16**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:05 AM User: MueKJ0907

PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



Responsive partner. Exceptional outcomes.

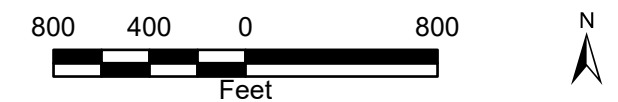
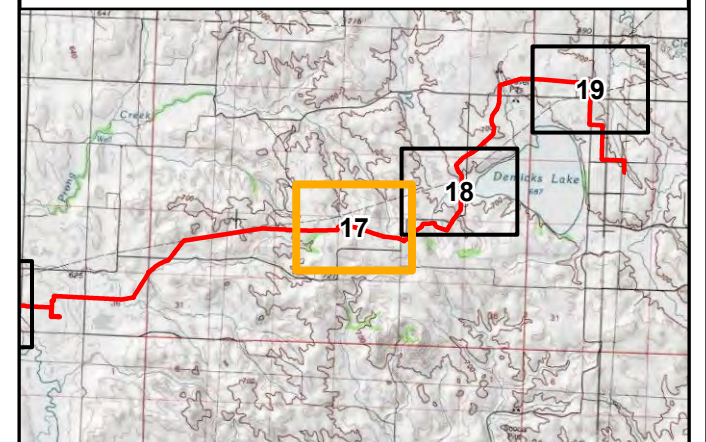
JUNE 2020

Map 16 of 19

**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 17**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)

Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:05 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



Responsive partner. Exceptional outcomes.

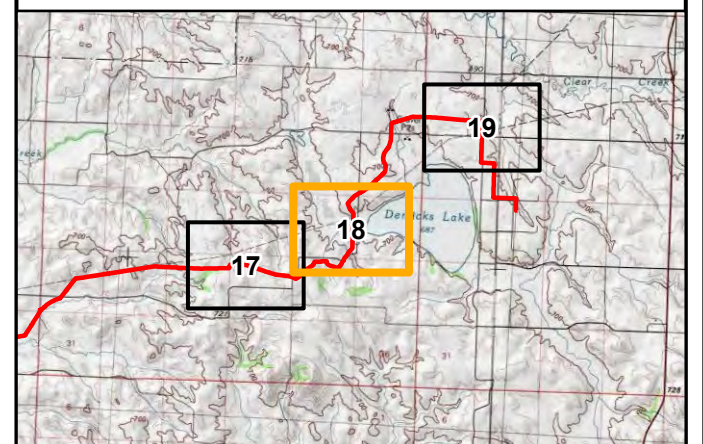
JUNE 2020

Map 17 of 19

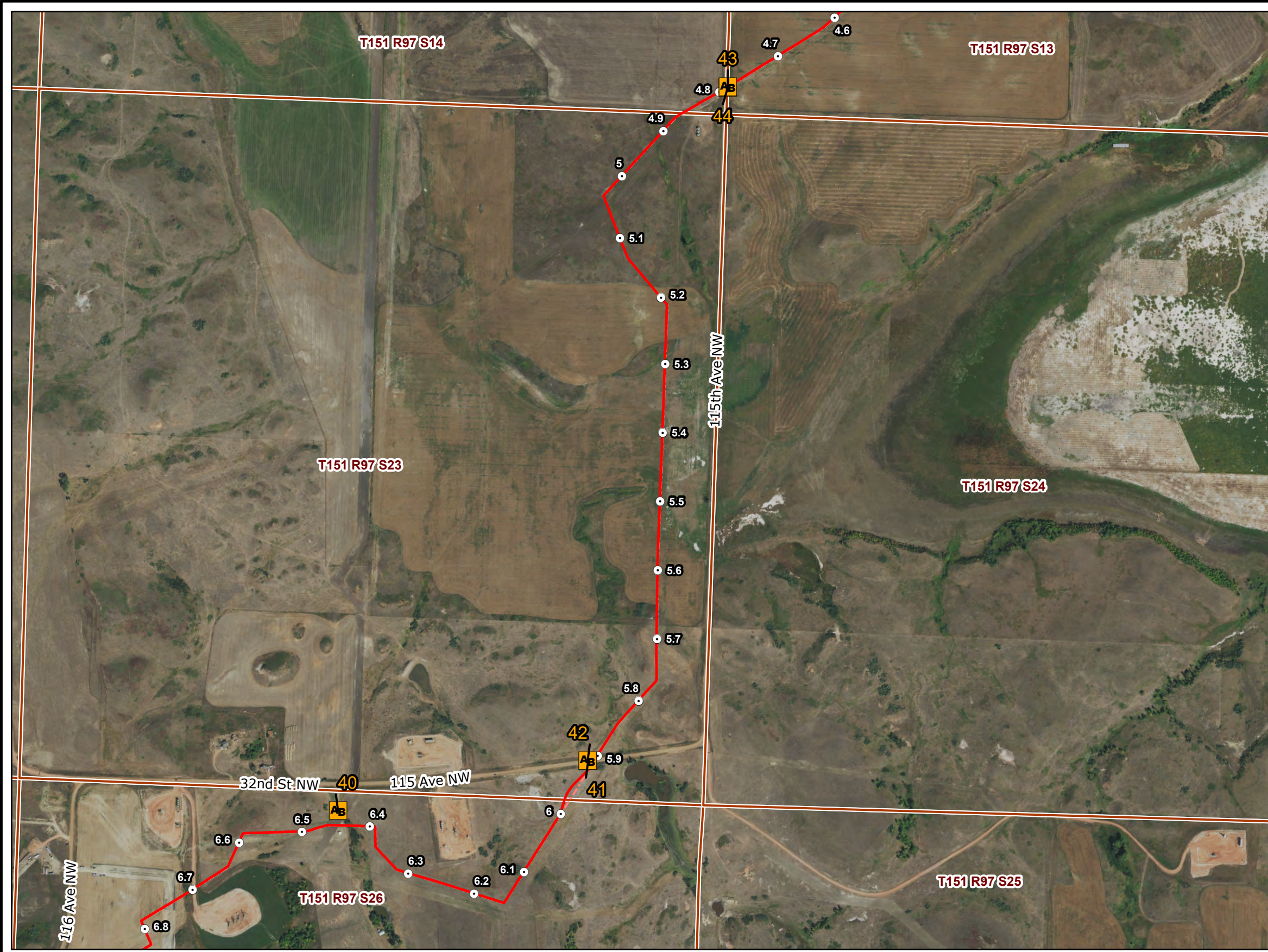
**North Dakota  
Public Service Commission**

**Demicks Lake Pipeline  
Figure 18**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)  
Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:06 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map

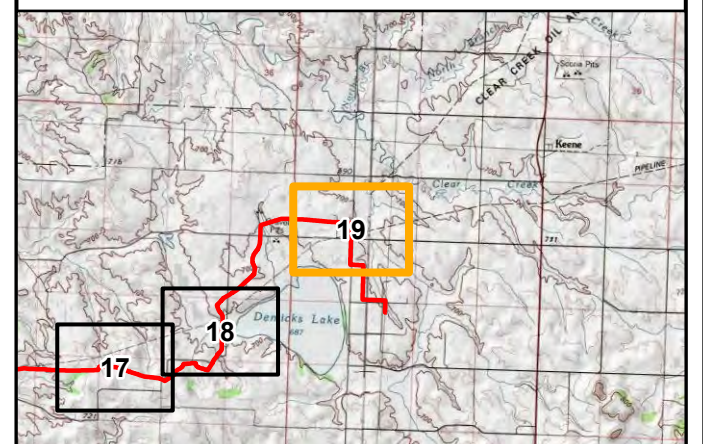


JUNE 2020

Map 18 of 19

**Demicks Lake Pipeline  
Figure 19**

- Milepost
- AB As-Built Observation Point Location
- Demicks Lake As-Built Centerline (PU-18-399)
- - - Demicks Lake Original Proposed Centerline (PU-18-399)



2018 Aerial Photograph (Source: NAIP)  
Path: U:\GIS\2579\0035\pro\ONEOK\_Demicks\ONEOK\_Demicks.aprx  
Date: 6/17/2020 Time: 9:06 AM User: MueKJ0907



PU-18-399 DEMICKS LAKE PIPELINE TOPSOIL INSPECTION

Observation Point Map



JUNE 2020

Map 19 of 19

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## Field Observation Points

Observation Point #	Latitude	Longitude
1	47.460339	-104.032852
2	47.4663105	-104.0116471
3	47.46629251	-104.0116739
4	47.474629	-104.003596
5	47.474629	-104.003596
6	47.48162612	-103.9195844
7	47.481399	-103.919231
8	47.497733	-103.898903
9	47.53198889	-103.8624885
10	47.53512948	-103.8648205
11	47.53381155	-103.8651191
12	47.53234936	-103.864904
13	47.53308503	-103.864893
14	47.555544	-103.862377
15	47.555816	-103.86235
16	47.61832125	-103.7778031
17	47.66176428	-103.7390694
18	47.67436112	-103.6351048
19	47.67458389	-103.6350784
20	47.69590273	-103.5833937
21	47.72798658	-103.5191837
22	47.7324889	-103.5167951
23	47.73341047	-103.4995133
24	47.73421001	-103.454727
25	47.75068909	-103.4333132
26	47.7609847	-103.3891303
27	47.7593563	-103.3691008
28	47.78958096	-103.3497711
29	47.79261636	-103.3267398
30	47.80900883	-103.3180052
31	47.81184171	-103.3154658
32	47.81924524	-103.3150274
33	47.83374	-103.3147509
34	47.83372368	-103.3145987
35	47.84067838	-103.3148576
36	47.84801738	-103.2700869
37	47.85364695	-103.2192437
38	47.85321774	-103.2081333
39	47.87408372	-103.0855113
40	47.87597458	-103.0591886
41	47.87718687	-103.0514293
42	47.87720347	-103.0514423
43	47.89147586	-103.0477562
44	47.89144949	-103.0477626
45	47.90747163	-103.0066547
46	47.90717191	-103.0059678

## Observation Point Photolog

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 1**

Date Taken: 05/27/2020  
Direction Photo is Taken: S

Photo Description: Fencing replaced. Well graded. Crimped straw present. Some vegetation growing.

Latitude: 47.460339  
Longitude: -104.032852



**Observation Point: 2**

Date Taken: 05/27/2020 9:49 AM  
Direction Photo is Taken: E

Photo Description: Fencing replaced. Graded well. Crimped straw present. Some vegetation growing.

Latitude: 47.4663105  
Longitude: -104.01164712



**Observation Point: 3**

Date Taken: 05/27/2020 9:52 AM  
Direction Photo is Taken: W

Photo Description: Fencing replaced. Well graded, matches topography. Some straw and vegetation present.

Latitude: 47.46629251  
Longitude: -104.01167385

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 4**

Date Taken: 05/27/2020

Direction Photo is Taken: S

Photo Description: Overlooking appropriately reclaimed ROW and replaced fence gate.

Latitude: 47.474629

Longitude: -104.003596



**Observation Point: 5**

Date Taken: 05/27/2020

Direction Photo is Taken: S

Photo Description: Overlooking appropriately reclaimed ROW and replaced fence gate.

Latitude: 47.474629

Longitude: -104.003596



**Observation Point: 6**

Date Taken: 05/27/2020 10:32 AM

Direction Photo is Taken: SW

Photo Description: Grading does not match elevation or slope in ditch. Grading ROW is rough. Fencing replaced.

Latitude: 47.48162612

Longitude: -103.91958444

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 7**

Date Taken: 05/27/2020  
Direction Photo is Taken: W

Photo Description: Grading in ROW poorly matches adjacent topography and is rough. BMP maintenance required. Seeding unknown.

Latitude: 47.481399  
Longitude: -103.919231



**Observation Point: 8**

Date Taken: 05/27/2020  
Direction Photo is Taken: NE

Photo Description: Well graded. No crimped straw.

Latitude: 47.497733  
Longitude: -103.898903



**Observation Point: 9**

Date Taken: 05/27/2020 11:28 AM  
Direction Photo is Taken: SW

Photo Description: Silt fence present at drainages, needs some repair. No BMPs present on slopes. Well graded. Scoria exposed at hilltops and slopes. Vegetation not growing. Suggested PSC follow up on reclamation.

Latitude: 47.53198889  
Longitude: -103.86248851

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 10**

Date Taken: 05/27/2020 11:47 AM

Direction Photo is Taken: NE

Photo Description: Significant evidence of subsoil and scoria mixing. No slope stabilization, erosion control blankets likely required. Waterbars present on slope. Silt fence in drainages.

Latitude: 47.53512948

Longitude: -103.86482046



**Observation Point: 11**

Date Taken: 05/27/2020 11:54 AM

Direction Photo is Taken: NE

Photo Description: Evidence of subsoil mixing. No slope stabilization, erosion control blanket likely required. Silt fence needs repair.

Latitude: 47.53381155

Longitude: -103.86511905



**Observation Point: 12**

Date Taken: 05/27/2020 12:00 PM

Direction Photo is Taken: S

Photo Description: Very little topsoil. No erosion and sediment controls in place. Suggested BMP of erosion control blanket.

Latitude: 47.53234936

Longitude: -103.86490397

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 13**

Date Taken: 05/27/2020 12:05 PM

Direction Photo is Taken: NE

Photo Description: Recommended Cathodic protection be repaired, likely dislodged by construction equipment dislodged. Fences properly replaced.

Latitude: 47.53308503

Longitude: -103.86489295



**Observation Point: 14**

Date Taken: 05/27/2020

Direction Photo is Taken: E

Photo Description: Slopes toward creek do not match topography well, strip cut present at edge of ROW. Crimped Straw present. Seeded but minimal vegetation.

Latitude: 47.555544

Longitude: -103.862377



**Observation Point: 15**

Date Taken: 05/27/2020

Direction Photo is Taken: S

Photo Description: Silt fence installed but is showing signs of potential failure as a result of improper installation.

Latitude: 47.555816

Longitude: -103.86235

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 16**

Date Taken: 05/27/2020 1:11 PM

Direction Photo is Taken: S

Photo Description: Well graded, matches topography. BMP in place. No vegetation growth.

Latitude: 47.61832125

Longitude: -103.77780308



**Observation Point: 17**

Date Taken: 05/27/2020 1:43 PM

Direction Photo is Taken: S

Photo Description: Well graded. Straw in place.

Latitude: 47.66176428

Longitude: -103.73906937



**Observation Point: 18**

Date Taken: 05/27/2020 2:11 PM

Direction Photo is Taken: S

Photo Description: Potential additional reclamation required as timber matting left behind.

Latitude: 47.67436112

Longitude: -103.6351048

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 19**

Date Taken: 05/27/2020 2:16 PM

Direction Photo is Taken: S

Photo Description: Access reclamation required; scoria approach likely needs to be removed.

Latitude: 47.67458389

Longitude: -103.63507836



**Observation Point: 20**

Date Taken: 05/27/2020 2:45 PM

Direction Photo is Taken: E

Photo Description: Well graded. Unknown seeding at staging area location.

Latitude: 47.69590273

Longitude: -103.58339373



**Observation Point: 21**

Date Taken: 05/27/2020 3:00 PM

Direction Photo is Taken: SW

Photo Description: Topsoil, straw, and seed spread, well graded, proper BMP placement in staging area.

Latitude: 47.72798658

Longitude: -103.51918367

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 22**

Date Taken: 05/27/2020 3:06 PM

Direction Photo is Taken: N

Photo Description: Aboveground piping structure.

Latitude: 47.7324889

Longitude: -103.51679507



**Observation Point: 23**

Date Taken: 05/27/2020 3:12 PM

Direction Photo is Taken: W

Photo Description: Pipe Trenched through wetland, ECB and straw roll placement on slopes diverging into wetland, straw roll not installed correctly (roll not trenched in).

Latitude: 47.73341047

Longitude: -103.49951328



**Observation Point: 24**

Date Taken: 05/27/2020 3:27 PM

Direction Photo is Taken: E

Photo Description: Well graded, topsoil and subsoil mixture present, little topsoil present prior to construction.

Latitude: 47.73421001

Longitude: -103.45472699

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 25**

Date Taken: 05/27/2020 3:38 PM

Direction Photo is Taken: W

Photo Description: ECB rolls properly installed; fence repaired as appropriate.

Latitude: 47.75068909

Longitude: -103.43331319



**Observation Point: 26**

Date Taken: 05/27/2020 4:07 PM

Direction Photo is Taken: S

Photo Description: Drainage area through pipeline crossing, no erosion control measures setup. Grading does not match previous slope, impeding drainage.

Latitude: 47.7609847

Longitude: -103.3891303



**Observation Point: 27**

Date Taken: 05/27/2020 4:20 PM

Direction Photo is Taken: W

Photo Description: No erosion control measures setup as erosion is already present, needs erosion control on both sides of access road.

Latitude: 47.7593563

Longitude: -103.36910076

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 28**

Date Taken: 05/27/2020 4:39 PM

Direction Photo is Taken: W

Photo Description: HDD and staging location under highway 85, topsoil spread and well graded, no straw and unknown seeding, no erosion control setup, minimal weed vegetation, recommend erosion control as disturbed area is along steep slope.

Latitude: 47.78958096

Longitude: -103.34977107



**Observation Point: 29**

Date Taken: 05/27/2020 4:53 PM

Direction Photo is Taken: N

Photo Description: Staging area location, topsoil spread and well graded, straw and seeding completed.

Latitude: 47.79261636

Longitude: -103.32673984



**Observation Point: 30**

Date Taken: 05/27/2020 5:14 PM

Direction Photo is Taken: E

Photo Description: HDD staging site, poorly graded, likely not seeded yet, weeds present, good amount of topsoil present.

Latitude: 47.80900883

Longitude: -103.31800519

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 31**

Date Taken: 05/27/2020 5:23 PM

Direction Photo is Taken: S

Photo Description: HDD site, well graded and topsoil spread, glacial till present in topsoil, likely not seeded yet.

Latitude: 47.81184171

Longitude: -103.31546579



**Observation Point: 32**

Date Taken: 05/27/2020 5:39 PM

Direction Photo is Taken: N

Photo Description: HDD site, topsoil stockpiles present on west end of trenching area, needs regrading and topsoil spread to obtain proper grades.

Latitude: 47.81924524

Longitude: -103.31502736



**Observation Point: 33**

Date Taken: 05/27/2020 5:49 PM

Direction Photo is Taken: SE

Photo Description: Roadside ditch grading does not match previous topography. Topsoil stockpile remaining on east side of trenching, needs topsoil spreading to obtain proper grades.

Latitude: 47.83374

Longitude: -103.31475086

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 34**

Date Taken: 05/27/2020 5:53 PM

Direction Photo is Taken: NE

Photo Description: Topsoil stockpile present on east side of trenching site, needs topsoil spreading to obtain proper grades.

Latitude: 47.83372368

Longitude: -103.31459871



**Observation Point: 35**

Date Taken: 05/27/2020 6:01 PM

Direction Photo is Taken: S

Photo Description: Topsoil stockpiles present, timber mat present, needs further reclamation.

Latitude: 47.84067838

Longitude: -103.31485763



**Observation Point: 36**

Date Taken: 05/28/2020 8:43 AM

Direction Photo is Taken: N

Photo Description: Topsoil spread and well graded, large amount of weed growth.

Latitude: 47.84801738

Longitude: -103.27008685

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 37**

Date Taken: 05/28/2020 8:57 AM

Direction Photo is Taken: E

Photo Description: Topsoil spread and well graded, some weed vegetation growth.

Latitude: 47.85364695

Longitude: -103.21924373



**Observation Point: 38**

Date Taken: 05/28/2020 9:08 AM

Direction Photo is Taken: W

Photo Description: Grading through area does not match previous topography, grade is above original topography, potential subsoil mixing, erosion control ineffective, possibly saline soils.

Latitude: 47.85321774

Longitude: -103.20813325



**Observation Point: 39**

Date Taken: 05/28/2020 9:54 AM

Direction Photo is Taken: W

Photo Description: Staging area, Topsoil spread and well graded, has been strawed, seeded and some vegetation present, fence repaired.

Latitude: 47.87408372

Longitude: -103.08551126

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 40**

Date Taken: 05/28/2020 10:07 AM

Direction Photo is Taken: S

Photo Description: Topsoil spread and well graded, likely seeded, no erosion control setup and erosion control is recommended at this location, likely erosion control blanket.

Latitude: 47.87597458

Longitude: -103.05918864



**Observation Point: 41**

Date Taken: 05/28/2020 10:14 AM

Direction Photo is Taken: SW

Photo Description: Topsoil spread and well graded, strawed and seeded, scoria pile needs to be removed, fence repaired.

Latitude: 47.87718687

Longitude: -103.05142926



**Observation Point: 42**

Date Taken: 05/28/2020 10:16 AM

Direction Photo is Taken: NE

Photo Description: Staging area, topsoil spread and well seeded, strawed and seeded, some seeded vegetation and some weed vegetation.

Latitude: 47.87720347

Longitude: -103.05144232

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 43**

Date Taken: 05/28/2020 10:22 AM  
Direction Photo is Taken: SW

Photo Description: Fence repaired, some scoria mixed into field topsoil and roadside ditch.

Latitude: 47.89147586  
Longitude: -103.04775619



**Observation Point: 44**

Date Taken: 05/28/2020 10:27 AM  
Direction Photo is Taken: E

Photo Description: Scoria mixed into field topsoil and roadside ditch

Latitude: 47.89144949  
Longitude: -103.0477626



**Observation Point: 45**

Date Taken: 05/28/2020 10:39 AM  
Direction Photo is Taken: S

Photo Description: Grading does not match previous topography. Likely saline soils, area is not properly reclaimed.

Latitude: 47.90747163  
Longitude: -103.00665465

**PU-18-399 (Oneok Demicks Lake): Observation Point Photolog**



**Observation Point: 46**

Date Taken: 05/28/2020 10:41 AM

Direction Photo is Taken: SW

Photo Description: Potential sedimentation within drainage with potential for erosion. Unknown if the result of construction activities in the area.

Latitude: 47.90717191

Longitude: -103.00596779



Responsive partner.  
Exceptional outcomes.