# INDUSTRIAL COMMISSION OF NORTH DAKOTA

Kelly Armstrong
Governor

Drew H. Wrigley
Attorney General

Doug Goehring
Agriculture Commissioner

Tuesday, September 30, 2025
Governor's Conference Room or Microsoft Teams – 8:30 am
Join on your computer or mobile app
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Or call in (audio only)
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## I. Roll Call and Pledge of Allegiance

(approximately 8:30 am)

## II. Industrial Commission Administrative Office – Karen Tyler, Jordan Kannianen

A. **Consideration of Approval of June 26, 2025, Industrial Commission Meeting Minutes** (Attachment 22)
B. **Consideration of Approval of Professional Services Contract Renewal** (Attachment 23)
C. Other Office of Industrial Commission Business

(approximately 8:45 am)

## III. North Dakota Building Authority – DeAnn Ament

A. Presentation of June 30, 2025, Financial Audit – Mindy Piatz, Brady Martz (Attachment 1)
B. Other Building Authority Business

## IV. North Dakota Public Finance Authority – DeAnn Ament

A. **Consideration of Approval of the Following State Revolving Fund Loans:**
   **i.** City of Burlington – Capital Financing Program - $1,400,000 (Attachment 2A-E)
   **ii.** City of Bowman – Clean Water - $3,967,000 (Attachment 3A-F)
   **iii.** City of Grand Forks – Drinking Water - $12,825,000 Increase to previously approved $1,050,000 (Attachment 4A-F)

**iv.** City of Grand Forks – Clean Water - $50,000,000 increase to previously approved $54,620,000 loan (Attachment 5A-F)

**v.** City of Lisbon – Clean Water - $9,880,000 (Attachment 6A-F)

B. Presentation of Memo from NDPFA Advisory Committee Regarding SRF Loans Approved Under Policy P-3B (Attachment 7)

**i.** City of Lisbon - Drinking Water -$1,296,000 (Attachment 7A)

**ii.** City of Dickinson – Drinking Water - $1,000,000 (Attachment 7B)

**iii.** City of Dickinson – Clean Water - $1,000,000 (Attachment 7C)

**iv.** City of Valley City – Clean Water - $600,000 (Attachment 7D)

C. Other NDPFA Business

(approximately 9:15 am)

## V. Department of Mineral Resources – Nathan Anderson, Ed Murphy, Mark Bohrer

A. Geological Survey Quarterly Report – Ed Murphy (Attachment 8)

B. **Order 34956 in Case 32201** Regarding the authorization for the Department of Mineral Resources to proceed with the administrative hearing process and publish for hearing and comment the draft rules amendments to the "General Rules and Regulations for the Conservation of Crude Oil and Natural Gas" codified as Title 43 North Dakota Administrative Code – Mark Bohrer (Attachment 9)

C. **Order 34448 in Case 31712** – Regarding application of Hess Bakken Investments II, LLC to amend orders for Truax-Bakken Pool for overlapping standup 2560 spacing unit and authorize one horizontal well and such further relief as appropriate (Attachment 10)

D. **Order 34826 in Case 32073 –** Regarding application of Roger E. and Marilyn J. Baker for order to suspend and post hearing revoke certain XTO Energy permits or other such relief as appropriate (Attachment 11)

E. **Order 34753 in Case 32000 –** Motion of the Commission to consider confiscation of injection related equipment and salable oil at SV Noonan 1 well operated by Sakakawea Ventures, LLC or any working interest owner (Attachment 12)

F. **Order 34754 in Case 32001 –** Motion of the Commission to consider confiscation of injection related equipment and salable oil at the SV McGregor 1 well operated by Sakakawea Ventures, LLC or any working interest owner (Attachment 13)

G. **Order 34755 in Case 32002 –** Motion of the Commission to consider confiscation of injection related equipment and salable oil at the SV

McGregor 2 well operated by Sakakawea Ventures, LLC or any working interest owner (Attachment 14)

H. **Order 34756 in Case 32003 –** Motion of the Commission to consider confiscation of all treating plant-related equipment and salable oil at the SV McGregor Treating Plant 1 facility operated by Sakakawea Ventures, LLC or any working interest owner (Attachment 15)

I. Other DMR Business

(approximately 10:00 am)

**VI. North Dakota Transmission Authority and State Energy Research Center – Claire Vigesaa, Daisy Selvaraj, Sr. Research Engineer, EERC, and Peter Koegel, PE, Director of Transmission & Planning, Power Systems Engineering**

A. Presentation of Transmission Capacity and Large Load Impact Study, Funded Under SERC Task 2, "Provide Prompt Expertise for North Dakota – Timely Scientific and Engineering Studies to Support the State's Interests" (Attachment 16)

B. Other NDTA/SERC Business

## Meeting Closed to the Public for Executive Session Pursuant to NDCC 6-09-35, 44-04-18.4, 44-04-19.2 and 54-63-02

(approximately 10:45 am)

**VII. Renewable Energy Program Confidentiality Request – Jordan Kannianen**

A. **"Empowering the Critical Minerals for Novel Cathode Materials-Based Drone Batteries", University of North Dakota** (Confidential Attachment 17)

B. Other REP Confidential Business

(approximately 10:50 am)

**VIII. Bank of North Dakota Confidential Business– Don Morgan, Gus Staahl**

A. CEO Report (Confidential Attachment 18)

- **i.** Executive Summary
- **ii.** Three Strategic Partnership Updates
- **iii.** Three Loan Updates

B. Presentation of Confidential Advisory Board and Committee Minutes **–** (Confidential Attachment 19)

C. Other BND Confidential Business

## Meeting Returns to Public Session

(approximately 11:30 am)

## IX. Action on Executive Session Items

## X. Bank of North Dakota – Don Morgan

A. CEO Report (Attachment 20)
   i. Executive Summary
   ii. Strategic
   iii. Financials
   iv. Risk
   v. Policy and Program Approvals

B. Presentation of Non-Confidential Advisory Board and Committee Minutes (Attachment 21)

C. Other BND Business

## XI. Adjournment

Next Regular Industrial Commission Meeting – Monday, October 27, 2025
2:00 am – 5:30 pm
Executive Board Room
Bank of North Dakota
1200 Memorial Highway, Bismarck ND

September 15, 2025

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its September 15, 2025 meeting, reviewed, discussed, and recommends approval of a $1,400,000 Capital Financing Program loan to the City of Burlington.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips

NORTH Dakota | Public Finance Authority
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**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management

**From:** DeAnn Ament, Executive Director

**Date:** August 15, 2025

**Re:** City of Burlington
Capital Financing Program Loan

**Purpose of the Project:** Expand the primary lagoon cell south into the existing dead cells and design improvements to accommodate future aeration. This will all the city to meet the 180-day storage requirement and allow for a future capacity project should the city continue to grow.

**Project Amount:**

| | |
|---|---|
| **CFP Request** | $1,400,000 |
| **Local Funds** | 1,087,353 |
| **Project Total** | $2,487,353 |

**Population to Benefit from the Project:** 1,334
**Population Served by the System:** 1,334

The requested term for the Capital Financing Program (CFP) loan is 20 years. The City will issue revenue bonds payable with sewer user fees. The estimated average annual payment for the revenue bonds will be $107,786. The estimated 120% coverage requirement will be $129,343 and the estimated required debt service reserve will be $222,000.

The City has 433 sewer connections which pay a base rate of $15 per connection. The 13 commercial connections pay also pay $1.40/1,000 gallons. On August 4, 2025, the City raised the base rate $15 to $30 which will annually generate revenue of approximately $77,940.

**Enterprise Fund:**

| | 2022 | 2023 | 2024 |
|---|---|---|---|
| Operating Revenue | $440,086 | $455,245 | $582,443 |
| Operating Expenses | 422,265 | 466,191 | 483,041 |
| Net Operating Revenue (Expense) | 17,821 | -10,945 | 96,402 |
| Proforma Rate Increase Revenue | $77,940 | $77,940 | $77,940 |
| Proforma CFP Bond Payment | $107,786 | $107,786 | $107,786 |
| Proforma Net Operating Coverage | 89% | 62% | 162% |

Existing net revenues coupled with the new rate increase should allow the City to meet the net operating coverage requirement.

**Outstanding Debt August 31, 2025:**

| | Original Amount | Outstanding Amount |
|---|---|---|
| Improvement Bonds | $4,465,000 | $2,305,000 |
| | $4,465,000 | $2,305,000 |

The average annual payment of all bond debt, including this request, is $465,196 or $349 per resident.

The City of Burlington is located in Ward County 14 miles northwest of Minot. Based on the 2020 census, the total population was 1,291; this is an increase of 231 from the 2010 census. The current estimated population is 1,334. The largest employers in the City are United School District with 56 employees, Hacienda (restaurant) with 25 employees and Idle Hour Bar (bar and restaurant) which employs 9.

**Burlington School pre-K-6 Enrollment:**

| | | | | Projected |
|---|---|---|---|---|
| 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| 387 | 419 | 415 | 402 | 410 |

The City's 2024 taxable valuation was $5,140,541. This is an increase of $820,417 from the 2020 taxable valuation.

**Property Taxes Levied & Collected 7/31/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $422,140 | $389,494 | 92% |
| **2023** | $378,032 | $374,820 | 99% |
| **2022** | $373,115 | $372,460 | 100% |

**Special Assessments Levied & Collected 7/31/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $876,500 | $222,928 | 25% |
| **2023** | $349,222 | $250,877 | 72% |
| **2022** | $349,191 | $249,926 | 72% |

**City of Burlington Mill Levy History:**

| Year | City | School | State and County | Other | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 82.12 | 127.07 | 64.76 | 10.00 | 283.95 |
| **2023** | 76.37 | 119.84 | 60.43 | 10.00 | 266.64 |
| **2022** | 77.47 | 127.02 | 60.35 | 10.00 | 274.84 |
| **2021** | 70.13 | 121.24 | 62.85 | 10.00 | 264.22 |
| **2020** | 73.01 | 119.83 | 62.88 | 10.00 | 265.72 |

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**MEMORANDUM**

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Capital Financing Program
City of Burlington

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The City of Burlington (the "City") has presented a financing to the Authority for participation in the Capital Financing Program ("CFP"). The proposed financing for the County exceeds $500,000 and, accordingly, a marketplace analysis has been included in the memorandum.

The City has requested a 20-year loan totaling $1,400,000 for inclusion in the CFP. The proceeds of the loan will be used to expand the primary lagoon cell south into the existing dead cells and design improvements to accommodate future aeration, which will allow the City to meet the 180-day storage requirement and provide for a future capacity project should the City continue to grow.

A market analysis has been completed because the proposed size of the this issue requires the Industrial Commission ("Commission") to adopt a resolution which states that the Commission has determined that private bond markets will not be responsive to the needs of the political subdivision concerning its securities or which states other reasons if it appears that the municipal securities can be sold through private markets without the Authority's involvement.

## *Financing Alternatives*

In general, there are three primary financing alternatives available to Political Subdivisions: competitive sale, negotiated sale and private placement.

Each Political Subdivision has two options with respect to a competitive sale: they may choose to conduct a stand-alone public sale or they may sell their municipal securities competitively through the Authority's program. Under the competitive option, an official statement containing relevant disclosure information would be published and distributed to potential underwriters. These firms would be invited to submit competitive bids which conform to certain terms and conditions on a specified day and time.

With a negotiated financing, the Political Subdivision would likely select a single underwriting firm with which to negotiate all of the specific terms and conditions associated with the issue. Generally, certain parameters with respect to underwriting spread, or discount, interest rates and some structural features will be established by the issuer up front, with these details finalized at, or prior to, the time the bonds are priced.

A private placement is a variation of the negotiated sale. In this scenario, an issuer, usually with the help of a financial advisor or placement agent, will attempt to place the entire issue directly with an investor. The investor will negotiate the specific terms and conditions associated with the financing before agreeing to purchase the issue.

We did not examine a negotiated issue or a private placement. We assume that a negotiated issuance would be of the same or higher cost than a competitive issue. Furthermore, it is not possible to accurately estimate what the interest rate or loan terms would be if the City privately placed its bonds directly with a local bank.

## *Assumptions*

**Size:** The issues have been sized to include the following elements as required: net proceeds in an amount which when deposited into the construction fund will net $1,400,000, costs of issuance, underwriter's discount and a small rounding amount to allow sizing of the issues in marketable $5,000 increments. The CFP option includes a letter of credit fee estimated to be approximately 0.50% of par paid to the Bank of North Dakota ("BND") and an administration fee of 0.10% paid to the Authority.

**Term:** The issues have been structured to mature on June 1, 2045.

**Security:** The bonds are secured by sewer user fees.

**Costs of Issuance:** Costs of issuance have been estimated at $60,000 for the stand-alone issuance and $15,000 to issue through the Authority. Issuance costs may include bond counsel fees, financial advisory fees, rating agency fees, official statement printing and distribution, bond printing, publication costs, overnight mail and a small contingency amount. The Authority's costs of issuance are lower because the Burlington CFP loan is being issued together with a larger CFP refunding and the Burlington portion represents approximately 3% of the total par amount of the CFP Series 2025A Bonds.

**Underwriter's Discount:** Underwriter's discount has been estimated at $8.00 per bond when issuing competitively through the Authority and $10.00 per bond when issuing stand-alone.

**Interest Rates:** Interest rates are based on the current market.

## *Comparison of Financing Alternatives*

The following table summarizes certain key features related to the two financing options available for the proposed issue.

| | ***CFP*** | ***Stand-Alone*** |
|---|---|---|
| Par Amount: | $1,290,000 | $1,370,000 |
| All-in True Interest Rate: | 4.044% | 4.724% |
| Total Debt Service: | $2,052,992 | $2,181,753 |
| Maximum Annual Debt Service: | $106,750 | $114,000 |

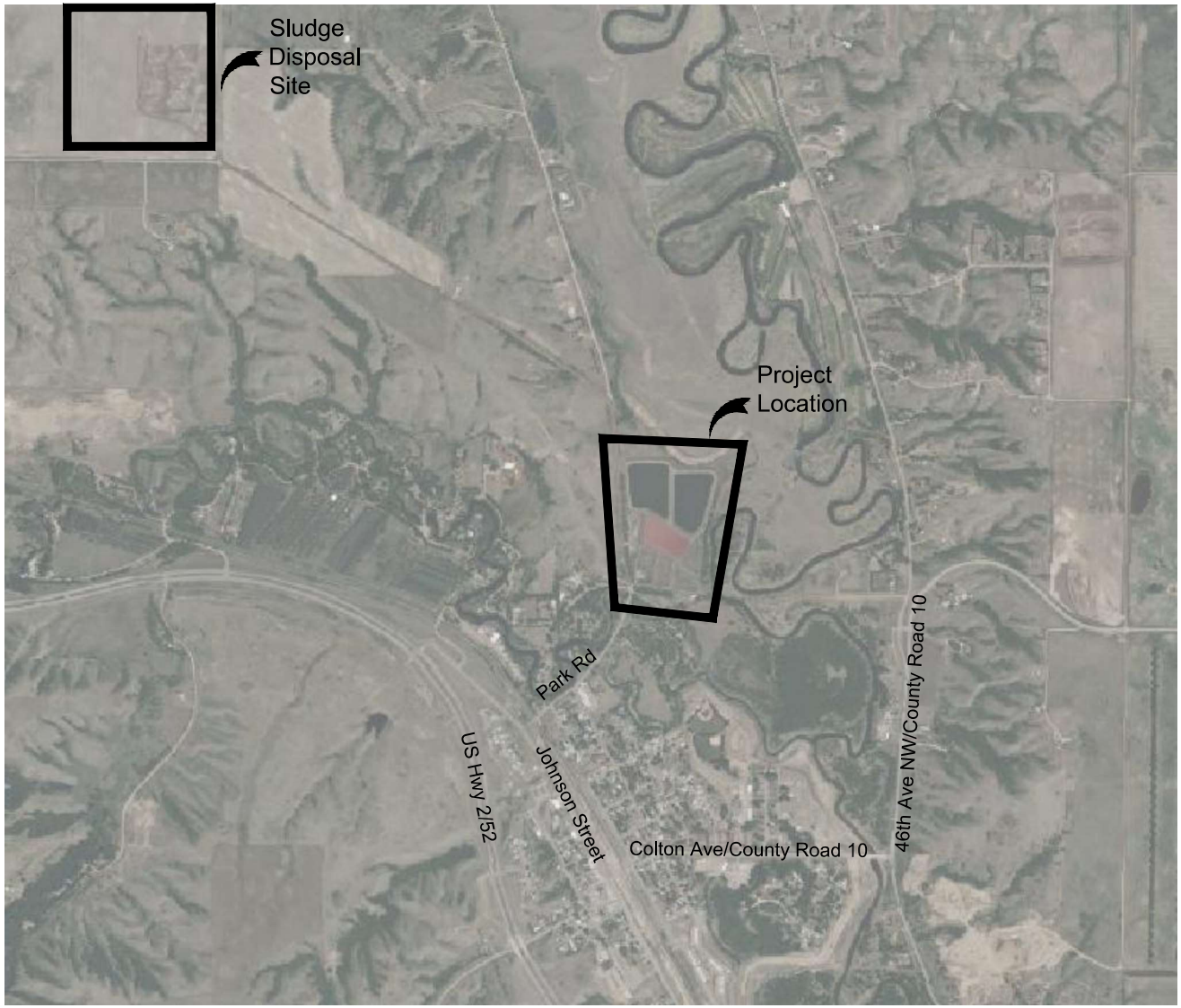
## *Conclusion*

When comparing with the other alternative, the Authority option offers a lower cost. Consequently, it appears that completing this financing through the Authority's CFP program would offer a benefit to the City.

Given the timing and flexibility needed by the City and the current state of the financial markets, the Authority provides the City with an optimal financing at a reasonable cost. In addition, bundling the City’s loan with a larger CFP refunding transaction will help lower the issuance costs associated with the City’s loan. Consequently, based upon the information available at this time, it appears that completing this financing through the Authority's CFP program would offer a benefit to the City.

# LAGOON MODIFICATION & EXPANSION
# WARD COUNTY ARPA PROJECT NO. 63
## CITY OF BURLINGTON, NORTH DAKOTA

Attachment 2E




September 15, 2025

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its September 15, 2025 meeting, reviewed, discussed, and recommends approval of a $3,967,000 Clean Water State Revolving Fund Program loan to the City of Bowman.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips

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**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management LLC
Kylee Merkel, Bank of North Dakota

**From:** DeAnn Ament, Executive Director

**Date:** September 10, 2025

**Re:** City of Bowman
Clean Water State Revolving Fund

**Purpose of the Project:** Replace and rehabilitate existing sanitary sewer main using cured-in-place liner.

**Project Amount:**

| | |
|---|---|
| **CWSRF Request** | $ 3,967,000 |
| **CWSRF Loan Forgiveness** | (2,975,250) |
| **CWSRF Net Loan** | $ 991,750 |

**Population to Benefit from the Project:** 1,424
**Population Served by the System:** 1,424

The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 30 years. The City will issue revenue bonds payable with sewer user fees. The average annual payment for the revenue bonds will be $41,788. The 110% coverage requirement will be $45,967 and the required debt service reserve will be $50,750.

The City has 717 residential and 127 commercial sanitary sewer connections which pay a monthly base rate of $12.50. The City anticipates raising the monthly rate $10. This should generate approximately $101,280 of revenue annually.

**Sewer Fund:**

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Operating Revenue | $112,814 | $109,235 | $110,763 | $110,714 |
| Operating Expenses | 62,238 | 81,981 | 73,129 | 53,843 |
| Net Operating Revenue | 50,576 | 27,254 | 37,634 | 56,871 |
| Depreciation | 5,406 | 4,357 | 3,873 | 4,816 |
| Adjusted Net Operating Revenue | $55,982 | $31,611 | $41,507 | $61,687 |
| Proforma CWSRF Payment | $41,788 | $41,788 | $41,788 | $41,788 |
| Proforma Net Operating Coverage | 134% | 76% | 99% | 148% |
| Proforma Rate Increase Revenue | $101,280 | $101,280 | $101,280 | $101,280 |
| Proforma Net Operating Coverage | 376% | 318% | 342% | 390% |

With the anticipated rate increase, the net operating revenues should be sufficient to meet the 110% net operating coverage.

The City has no outstanding debt as of August 31, 2025.

The City of Bowman is located in Bowman County 74 miles southwest of Dickinson. Based on the 2020 census, the total population is 1,470; this is a decrease of 180 from the 2010 census. The largest employers in the City are Southwest Healthcare (health services) which has 131 employees, Bowman County School employs 100 and Bowman County with 45 employees.

**Bowman County School PK-12 School Enrollment:**

| | | | | Projected |
|---|---|---|---|---|
| 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 | 2026-20275 |
| 521 | 498 | 510 | 508 | 508 |

The City's 2024 taxable valuation was $5,696,428. This is an increase of $407,292 over the 2020 taxable valuation.

**Property Tax Collections 8/31/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $562,609 | $527,665 | 94% |
| **2023** | $515,724 | $510,427 | 99% |
| **2022** | $480,009 | $480,009 | 100% |

**Special Assessment Collections 8/31/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | - | - | - |
| **2023** | $1,476 | $1,476 | 100% |
| **2022** | $975 | $975 | 100% |

**Mill Levy History:**

| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 98.76 | 93.31 | 36.64 | 58.61 | 287.32 |
| **2023** | 93.82 | 89.82 | 33.88 | 55.52 | 273.04 |
| **2022** | 90.90 | 89.65 | 35.41 | 53.81 | 269.77 |
| **2021** | 87.94 | 86.78 | 35.25 | 52.43 | 262.40 |
| **2020** | 81.45 | 85.00 | 34.25 | 52.17 | 252.87 |

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# Memorandum

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Clean Water State Revolving Fund Program
City of Bowman

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The City of Bowman ("City") has presented a request to the Authority and the North Dakota Department of Environmental Quality ("Department") for a $3,967,000 loan of which $2,975,250 will be loan forgiveness, for a total of $991,750 under the Clean Water State Revolving Fund Program ("CWSRF Program"). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds to replace and rehabilitate existing sanitary sewer main using cured-in-place liner.

The municipal securities to be acquired by the Authority will be revenue bonds payable with sewer user fees. The City's average annual payment under the proposed loan will be approximately $41,788 indicating a 110% net revenue coverage requirement of approximately $45,967. The City will be required to deposit $50,750 into a reserve fund with payments of $10,150 per year for the first five years of the loan. The current sewer connection monthly base rate is $12.50 and the City anticipates raising the rate by $10, which will generate approximately $101,280 of annual revenue. Pro forma net operating coverage of the sewer fund was 3.76x, 3.18x, 3.42x and 3.90x for 2021-2024, respectively. The anticipated monthly base rate increase and existing sewer fund revenues will provide sufficient net revenues to meet the 110% coverage requirement.

The City has no outstanding debt as of August 31, 2025.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

BND
Bank of North Dakota

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Attachment 3E

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: September 11, 2025

RE: City of Bowman
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a $3,967,000 loan to the City of Bowman under the Clean Water State Revolving Fund (CWSRF). This project is eligible for $2,975,250 of CWSRF loan forgiveness, making the net loan amount $991,750. The project will replace and rehabilitate existing sewer mains.

The City will issue revenue bonds payable with sewer user fees. The annual payment will average $41,788. The requested loan term is 30 years. The City currently serves 717 residential connections and 127 commercial connections. All users pay a monthly base rate of $12.50. The City anticipates raising the monthly base rate by $10 per connection. Existing revenues, combined with the rate increase, will generate sufficient coverage to service the proposed debt service requirements.

**Debt Service Coverage:**

| Sewer Fund | 2022 | 2023 | 2024 | Projected |
|---|---|---|---|---|
| Operating Revenue | 109,235 | 110,763 | 110,714 | 110,714 |
| Rate Increase | | | | 101,280 |
| Operating Expenses | -81,981 | -73,129 | -53,843 | -53,843 |
| Net Operating Revenue | 27,254 | 37,634 | 56,871 | 158,151 |
| Add: Depreciation | 4,357 | 3,873 | 4,816 | 4,816 |
| Adjusted Net Operating Income | 31,611 | 41,507 | 61,687 | 162,967 |
| | | | | |
| Proposed Debt Service | | | | 41,788 |
| | | | | |
| Debt Service Coverage | | | | 390% |

The City does not have any outstanding debt as of August 31, 2025. The proposed annual debt service per resident will be $28.42.

BND
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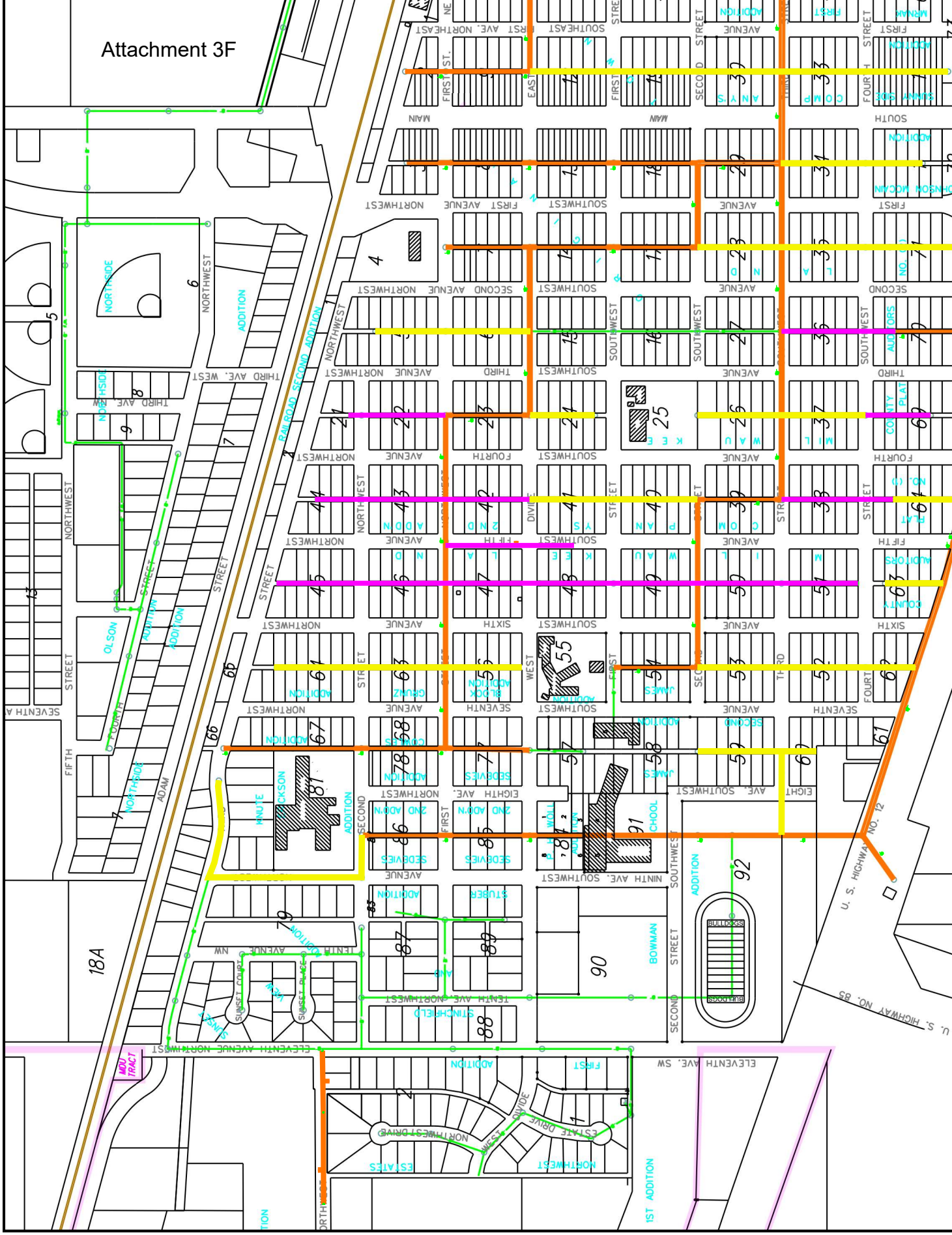
Historical census populations for the City of Bowman were 1,470 in 2020, 1,650 in 2010 and 1,600 in 2000. The largest employers in the City are Southwest Healthcare, Bowman County School and Bowman County Courthouse.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.

Kylee Merkel
Business Banker

Attachment 3F



September 15, 2025

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its September 15, 2025 meeting, reviewed, discussed, and recommends approval of a $12,825,000 increase to a previously approved $1,050,000 (total $13,875,000) Drinking Water State Revolving Fund Program loan to the City of Grand Forks.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips

NORTH Dakota | Public Finance Authority
Be Legendary.

**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management
Kylee Merkel, Bank of North Dakota

**From:** DeAnn Ament, Executive Director

**Date:** September 11, 2025

**Re:** City of Grand Forks
Drinking Water State Revolving Fund

**Purpose of the Project:** Begin the process of replacing some of the 700 known lead service lines.

**Project Amount:**

| DWSRF | Original | Increase | Total |
|---|---|---|---|
| **Loan Amount** | $ 1,050,000 | $ 12,825,000 | $13,875,000 |
| **Loan Forgiveness** | (787,500) | (8,464,500) | (9,252,000) |
| **Net Loan** | $ 262,500 | $ 4,360,500 | $ 4,623,000 |

**Population to Benefit from the Project:** 700
**Population Served by the System:** 59,166

The requested term for the Drinking Water State Revolving Fund (DWSRF) loan is 30 years. The City of Grand Forks will issue revenue bonds payable with water user fees. The average annual payment for the revenue bonds will be $153,817. The 110% coverage requirement will be $169,198 and the required debt service reserve will be $165,000.

The City monthly water base charge for the 14,167 residential users is $9.26 and $4.78/1,000 gallons. The 1,844 commercial users pay a wastewater base charge of $10.16 and $4.68/1,000 gallons. The City annually reviews and adjusts the rates.

**Water Fund:**

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Interest Revenue | $48,996 | $69,846 | $587,637 | $ 771,050 |
| Operating Revenue | 13,212,174 | 12,915,729 | 13,684,826 | 14,250,144 |
| Operating Expenses | 9,319,609 | 11,356,989 | 11,694,756 | 12,598,807 |
| Net Operating Revenue | 3,941,561 | 1,628,586 | 2,577,707 | 2,422,387 |
| Infrastructure Sales Tax Transfer | 1,810,836 | 2,138,360 | 2,030,000 | 2,854,599 |
| Noncash: Pension Adjustment | - | 193,078 | - | - |
| Adjusted Net Operating Revenue | $5,752,397 | $3,960,024 | $4,607,707 | 5,276,986 |
| Revenue Bond Payments | $3,150,298 | $3,277,856 | $3,091,806 | 3,228,637 |
| Net Operating Coverage | 183% | 121% | 149% | 163% |
| Proforma DW Payments | | | | $ 153,817 |
| Proforma Net Operating Coverage | | | | 156% |

The City annually reviews and adjusts the base and volume rates. The existing net operating revenue coupled with the regular rate increases will be sufficient to meet the 110% net operating coverage.

The City outstanding indebtedness as of August 31, 2025:

| | Original Amount | Outstanding Amount |
|---|---|---|
| General Obligation Bonds | $ 2,735,000 | $ 565,000 |
| Special Assessment Bonds [1] | 171,466,989 | 120,966,734 |
| Water/Sewer Revenue Bonds [1] | 175,848,141 | 152,435,123 |
| Sales Tax Revenue Bonds | 140,380,000 | 26,420,000 |
| | $ 490,430,130 | $300,386,857 |

[1] All payments have been made as agreed. The City has nine CWSRF and three DWSRF loans with outstanding balances of $139,059,230 as of August 31, 2025. There also is a $1,316,000 CWSRF improvement bond which was approved in 2025 but has not yet closed.

The average annual debt payments including these two new requests is $25,213,649 which is $426 per resident.

The City of Grand Forks is located in Grand Forks County 82 miles north of Fargo on Interstate 29. Based on the 2020 census, the total population is 59,166; this is an increase of 6,328 from the 2010 census. The largest employers in the City are University of North Dakota which has 3,464 employees, Altru Health Services with 3,950 employees, and Grand Forks Air Force Base employs 1,643.

**K-12 School Enrollment:**

| | | | Current | Estimated |
|---|---|---|---|---|
| **2022-2023** | **2023-2024** | **2024-2025** | **2025-2026** | **2026-2027** |
| 7,407 | 7,440 | 7,428 | 7,679 | 7,679 |

The City's 2024 taxable valuation was $285,657,667. This is an increase of $51,148,346 over the 2020 taxable valuation.

**Property Tax Collections 5/31/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | 25,195,471 | 22,805,709 | 91% |
| **2023** | 25,847,192 | 24,561,187 | 95% |
| **2022** | 24,347,205 | 23,250,265 | 95% |

**Special Assessment Collections 5/31/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | 10,161,885 | 9,423,991 | 93% |
| **2023** | 9,286,257 | 8,857,595 | 95% |
| **2022** | 9,270,607 | 9,265,636 | 100% |

**Mill Levy History:**

| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 92.25 | 130.50 | 36.79 | 87.00 | 346.54 |
| **2023** | 96.37 | 131.69 | 37.31 | 87.16 | 352.53 |
| **2022** | 96.84 | 110.79 | 37.80 | 82.63 | 328.06 |
| **2021** | 97.02 | 111.00 | 37.88 | 79.29 | 325.19 |
| **2020** | 97.87 | 100.94 | 38.19 | 80.82 | 317.82 |

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Suite 2250
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# Memorandum

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Drinking Water State Revolving Fund Program
City of Grand Forks

---

The City of Grand Forks ("City") has presented a request to the Authority and the North Dakota Department of Environmental Quality ("Department") for a $12,825,000 increase to their previously approved $1,050,000 loan for a total of $13,875,000 of which $9,252,000 will be loan forgiveness, for a final total of $4,623,000 under the Drinking Water State Revolving Fund Program ("DWSRF Program"). The DWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various water treatment, distribution and storage facilities as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds to begin the process of replacing a portion of the 700 known lead service lines.

The municipal securities to be acquired by the City will be revenue bonds payable from water user fees. The City's average annual payment under the proposed loan will be approximately $153,817 indicating a 110% net revenue coverage requirement of approximately $169,198. The City will be required to deposit $165,000 into a reserve fund with payments of $33,000 per year for the first five years of the loan. Net operating coverage of the waster fund was 1.83x, 1.21x, 1.49x and 1.63x for 2021-2024, respectively. The existing net operating revenues will provide sufficient net revenues to meet the 110% coverage requirement.

As of August 31, 2025, the City has $565,000 of General Obligation Bonds, $120,966,734 of Special Assessment Bonds, $26,420,00 of Sales Tax Revenue Bonds and $152,435,123 of Water/Sewer Revenue Bonds outstanding. The City currently has nine Clean Water and three Drinking Water loans outstanding totaling $139,059,230. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the Authority's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the DWSRF Program, the Authority will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the DWSRF Program.

BND
Bank of North Dakota

PO BOX 5509, 1200 Memorial Hwy.
Bismarck, ND 58506-5509

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800.366.6888 TTY
701.328.5600

bnd.nd.gov

Attachment 4E

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: September 12, 2025

RE: City of Grand Forks
Drinking Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a $12,825,000 increase to an existing loan (from $1,050,000 to $13,875,000) to the City of Grand Forks under the Drinking Water State Revolving Fund (DWSRF). This project is eligible for an additional $8,464,500 of DWSRF loan forgiveness, for a total of $9,252,000 of loan forgiveness. The total net DWSRF loan amount is $4,623,000. The increase is to begin the replacement of some 700 known lead service lines.

The City will issue revenue bonds payable with water user fees. The annual payment will average $153,817. The requested loan term is 30 years. The City currently serves 14,167 residential connections which pay a monthly base rate of $9.26 and a usage charge of $4.78 per 1,000 gallons. The City currently serves 1,844 commercial connections which pay a monthly base rate of $10.16 and a usage charge of $4.68 per 1,000 gallons. The City annually reviews and adjusts both the base rate and usage charge. Existing revenues will generate sufficient coverage to service both the proposed and existing debt service requirements.

**Debt Service Coverage:**

| Water Fund | 2022 | 2023 | 2024 | Projected |
|---|---|---|---|---|
| Operating Revenue | 12,915,729 | 13,684,826 | 14,250,144 | 14,250,144 |
| Interest Revenue | 69,846 | 587,637 | 771,050 | 771,050 |
| Operating Expenses | -11,356,989 | -11,694,756 | -12,598,807 | -12,598,807 |
| Net Operating Revenue | 1,628,586 | 2,577,707 | 2,422,387 | 2,422,387 |
| Infrastructure Sales Tax Transfer | 2,138,360 | 2,030,000 | 2,854,599 | 2,854,599 |
| Plus: Pension Adjustment | 193,078 | 0 | 0 | 0 |
| Adjusted Net Operating Income | 3,960,024 | 4,607,707 | 5,276,986 | 5,276,986 |
| | | | | |
| Current Debt Service | 3,277,856 | 3,091,806 | 3,228,637 | 3,228,637 |
| Proposed Debt Service | | | | 153,817 |
| Total Debt Service | | | | 3,382,454 |
| | | | | |
| Debt Service Coverage | 121% | 149% | 163% | 156% |

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Bank of North Dakota

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Bismarck, ND 58506-5509

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**Outstanding Debt (as of August 31, 2025):**

| | Original Amount | Current Balance |
|---|---|---|
| General Obligation Bonds | 2,735,000 | 565,000 |
| Special Assessment Bonds | 171,466,989 | 120,966,734 |
| Sales Tax Revenue Bonds | 140,380,000 | 26,420,000 |
| Water & Sewer Revenue Bonds | 175,848,141 | 152,435,123 |
| | 490,430,130 | 300,386,857 |

Average annual debt service requirements are estimated at $25,213,649, which is an average of $426.15 per resident.

The system currently serves 59,845 people. Historical census populations for the City of Grand Forks were 59,166 in 2020, 52,838 in 2010 and 49,342 in 2000. The largest employers in the City are Altru Health System, University of North Dakota and Grand Forks Air Force Base.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.

Kylee Merkel
Business Banker

Attachment 4F

GREATER Grand Forks CONVENTION & VISITORS BUREAU

# Street Guide

## Grand Forks, ND/East Grand Forks, MN

## www.visitgrandforks.com


Map printed for free distribution, courtesy of
**Greater Grand Forks Convention and Visitors Bureau**
4251 Gateway Drive
Grand Forks, ND 58203
701-746-0444
1-800-866-4566
www.visitgrandforks.com


**Visitor Information Center**
Junction Hwy. 2 and I-29 at Exit 141

Scale: 0 .25 .50 1 mile

Not all roads may be shown or named on map or listed in street index. Some roads may be private, proposed, or under construction.

Au = Autumn Ct
Aw = Allwood Ct
Bw = Burntwood Ct
Cw = Charwood Ct
Dw = Dellwood Ct
HL = Highland Ct
Ss = Summerset Ct
Wg = Wintergreen Ct

B = Big Sky Cir
D = Dawn Cir
E = Ella Cir
H = Horizon Cir
P = Promenade Ct
O = Omega Cir
S = Selkirk Cir

B = Burbank Cir
M = Meadow Dr
O = Orchard Cir
Ra = Raindale Ct
R = Russet Cir

B = Broadway Blvd
C = Central Ct
Q = Queens Ct
T = Times Square Ct

A = Adams
C = Cleveland
F = Fillmore
G = Garfield
Ha = Harrison
Ho = Hoover
Mc = McKinley
Mo = Monroe
T = Taft

BH = Breezy Hills Cv
Cv = Clearview Cir
GP = Great Plains Ct
Hr = Harvest Cir
HP = High Plains Ct
LwH = Leeward Hills Ln
LP = Level Plains Cir
LH = Loamy Hills Pl
ST = Single Tree Ln
Sv = Skyview Cir
WL = Wheatlands Cir
WwH = Windward Hills Ave

CP = Cypress Point Dr
FV = Fountain Vista Dr
PC = Pinehurst Ct
SH = Sand Hills Ave

K = Kembles Cir
M = Morgan Pl
S = Sherlock Cir

L = Lynnbrook Ln
P = Patterson Ln
R = Ridgewood Ln
S = Sherwood Ln

L = Lark Cir
Mb = Meadowbrook Ct
Mw = Mistwood Ct

M = Manitoba Ave
S = Swathmore Ave

SP = Sherlock Pkwy
TD = Terrace Dr

CC = Cedar Cir
D = Dakota Dr

GREATER Grand Forks CONVENTION & VISITORS BUREAU

September 15, 2025

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its September 15, 2025 meeting, reviewed, discussed, and recommends approval of a $50,000,000 increase to a previously approved $54,620,000 (total $104,620,000) Clean Water State Revolving Fund Program loan to the City of Grand Forks.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips

NORTH Dakota | Public Finance Authority
Be Legendary.

**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management
Kylee Merkel, Bank of North Dakota

**From:** DeAnn Ament, Executive Director

**Date:** September 9, 2025

**Re:** City of Grand Forks
Clean Water State Revolving Fund

**Purpose of the Project:** Wastewater treatment plant improvements including pipe routes, mechanical and egress improvements, septage reception, and solids handling. The bioreactors will be expanded and improved for new capacity as well as installation of integrated fixed-film activated sludge modules.

**Project Amount:**

| | |
|---|---|
| **CWSRF Request** | $ 50,000,000 |
| **CWSRF Original Request** | 54,620,000 |
| **Total CWSRF Request** | $104,620,000 |
| **Local Funds** | 5,356,000 |
| **Project** | $109,976,000 |

**Population to Benefit from the Project:** 59,166
**Population Served by the System:** 59,166

The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 30 years. The City of Grand Forks will issue revenue bonds payable with sewer user fees. The average annual payment for the revenue bonds will be $4,418,223. The 110% coverage requirement will be $4,860,045 and the required debt service reserve will be $4,663,925.

The City monthly wastewater base charge for the 13,746 residential users is $16.27 and $3.67/1,000 gallons. The 1,844 commercial users pay a wastewater base charge of $17.61 and $3.96/1,000 gallons. The City annually reviews and adjusts the rates.

**Wastewater Fund:**

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Interest Revenue | $12,380 | -$86,788 | $476,239 | $680,659 |
| Operating Revenue | 11,150,301 | 11,579,177 | 11,894,346 | 13,515,700 |
| Operating Expenses [1] | 7,326,374 | 7,049,512 | 7,944,167 | 7,430,007 |
| Net Operating Revenue | 3,836,307 | 4,442,877 | 4,426,418 | 6,766,352 |
| Economic Dev Sales Tax Transfer In | 649,429 | 278,033 | 247,000 | 247,000 |
| Noncash: Pension Adjustment | - | 160,770 | - | - |
| Adjusted Net Operating Revenue | $4,485,736 | 4,881,680 | 4,673,418 | 7,013,352 |
| Revenue Bond Payments | $3,122,902 | 1,653,969 | 1,698,482 | 1,785,588 |
| Net Operating Coverage | 144% | 295% | 275% | 393% |
| Proforma CWSRF Payment | | | | $4,418,223 |
| Proforma Net Operating Coverage | | | | 113% |

[1] Repairs, operations and maintenance are expected to increase with the completion of this project. However, the number customers and rates increases as well. It is anticipated that those increases will cover the increases in expenses.

The sewer fund net operating revenues should be sufficient to meet the 110% net operating coverage.

The City outstanding indebtedness as of August 31, 2025:

| | Original Amount | Outstanding Amount |
|---|---|---|
| General Obligation Bonds | $ 2,735,000 | $ 565,000 |
| Special Assessment Bonds [2] | 171,466,989 | 120,966,734 |
| Water/Sewer Revenue Bonds [2] | 175,848,141 | 152,435,123 |
| Sales Tax Revenue Bonds | 140,380,000 | 26,420,000 |
| | $ 490,430,130 | $300,386,857 |

[2] All payments have been made as agreed. The City has nine CWSRF and three DWSRF loans with outstanding balances of $139,059,230 as of August 31, 2025. There also is a $1,316,000 CWSRF improvement bond which was approved in 2025 but has not yet closed.

The average annual debt payments including this new request are $25,059,832 which is $424 per resident.

The City of Grand Forks is located in Grand Forks County 82 miles north of Fargo on Interstate 29. Based on the 2020 census, the total population is 59,166; this is an increase of 6,328 from the 2010 census. The largest employers in the City are University of North Dakota which has 3,464 employees, Altru Health Services with 3,950 employees, and Grand Forks Air Force Base employs 1,643.

**K-12 School Enrollment:**

| | | | Current | Estimated |
|---|---|---|---|---|
| **2022-2023** | **2023-2024** | **2024-2025** | **2025-2026** | **2026-2027** |
| 7,407 | 7,440 | 7,428 | 7,679 | 7,679 |

The City's 2024 taxable valuation was $285,657,667. This is an increase of $51,148,346 over the 2020 taxable valuation.

**Property Tax Collections 5/31/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | 25,195,471 | 22,805,709 | 91% |
| **2023** | 25,847,192 | 24,561,187 | 95% |
| **2022** | 24,347,205 | 23,250,265 | 95% |

**Special Assessment Collections 5/31/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | 10,161,885 | 9,423,991 | 93% |
| **2023** | 9,286,257 | 8,857,595 | 95% |
| **2022** | 9,270,607 | 9,265,636 | 100% |

**Mill Levy History:**

| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 92.25 | 130.50 | 36.79 | 87.00 | 346.54 |
| **2023** | 96.37 | 131.69 | 37.31 | 87.16 | 352.53 |
| **2022** | 96.84 | 110.79 | 37.80 | 82.63 | 328.06 |
| **2021** | 97.02 | 111.00 | 37.88 | 79.29 | 325.19 |
| **2020** | 97.87 | 100.94 | 38.19 | 80.82 | 317.82 |

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# Memorandum

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Clean Water State Revolving Fund Program
City of Grand Forks

---

The City of Grand Forks ("City") has presented a request to the Authority and the North Dakota Department of Environmental Quality ("Department") for a $50,000,000 increase to a previously approved $54,620,000 loan for a total of $104,620,000 under the Clean Water State Revolving Fund Program ("CWSRF Program"). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds for a myriad of wastewater treatment plant improvement that include: pipe routes, mechanical and egress improvements, septage reception, solids handling, bioreactor expansion and new capacity, and installation of integrated fixed-film activated sludge modules.

The municipal securities to be acquired by the Authority will be revenue bonds payable from sewer user fees. The City's average annual payment under the proposed loan will be approximately $4,418,223 indicating a 110% net revenue coverage requirement of approximately $4,860,045. The City will be required to deposit $4,663,925 into a reserve fund with payments of $932,785 per year for the first five years of the loan. Net operating coverage of the wastewater fund was 1.44x, 2.95x, 2.75x and 3.93x for 2021-2024, respectively. The existing net operating revenues will provide sufficient net revenues to meet the 110% coverage requirement.

As of August 31, 2025, the City has $565,000 of General Obligation Bonds, $120,966,734 of Special Assessment Bonds, $26,420,00 of Sales Tax Revenue Bonds and $152,435,123 of Water/Sewer Revenue Bonds outstanding. The City currently has nine Clean Water and three Drinking Water loans outstanding totaling $139,059,230. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

BND
Bank of North Dakota

PO BOX 5509, 1200 Memorial Hwy.
Bismarck, ND 58506-5509
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800.366.6888 TTY
701.328.5600
bnd.nd.gov

Attachment 5E

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: September 9, 2025

RE: City of Grand Forks
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a $50,000,000 increase to an existing loan (from $54,620,000 to $104,620,000) to the City of Grand Forks under the Clean Water State Revolving Fund (CWSRF). The entire cost of the project is $109,976,000, with the City providing $5,356,000 of local funds. The increase is for phase two of a larger project which includes wastewater treatment plant improvements, bioreactor expansion and installation of activated sludge modules to allow for increased capacity.

The City will issue revenue bonds payable with sewer user fees. The annual payment will average $4,418,223. The requested loan term is 30 years. The City currently serves 13,746 residential connections which pay a monthly base rate of $16.27 and a usage charge of $3.67 per 1,000 gallons. The City currently serves 1,844 commercial connections which pay a monthly base rate of $17.61 and a usage charge of $3.96 per 1,000 gallons. The City annually reviews and adjusts both the base rate and usage charge. Existing revenues will generate sufficient coverage to service both the proposed and existing debt service requirements.

**Debt Service Coverage:**

| **Wastewater Fund** | **2022** | **2023** | **2024** | **Projected** |
|---|---|---|---|---|
| Operating Revenue | 11,579,177 | 11,894,346 | 13,515,700 | 13,515,700 |
| Interest Revenue | -86,788 | 476,239 | 680,659 | 680,659 |
| Operating Expenses | -7,049,512 | -7,944,167 | -7,430,007 | -7,430,007 |
| Net Operating Revenue | 4,442,877 | 4,426,418 | 6,766,352 | 6,766,352 |
| Sales Tax Transfer In | 278,033 | 247,000 | 247,000 | 247,000 |
| Noncash Pension Adjustment | 160,770 | 0 | 0 | 0 |
| Adjusted Net Operating Income | 4,881,680 | 4,673,418 | 7,013,352 | 7,013,352 |
| | | | | |
| Current Debt Service | 1,653,969 | 1,698,482 | 1,785,588 | 1,785,588 |
| Proposed Debt Service | | | | 4,418,223 |
| Total Debt Service | | | | 6,203,811 |
| | | | | |
| Debt Service Coverage | 295% | 275% | 393% | 113% |

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701.328.5600

bnd.nd.gov

**Outstanding Debt (as of August 31, 2025):**

| | Original Amount | Current Balance |
|---|---|---|
| General Obligation Bonds | 2,735,000 | 565,000 |
| Special Assessment Bonds | 171,466,989 | 120,966,734 |
| Sales Tax Revenue Bonds | 140,380,000 | 26,420,000 |
| Water & Sewer Revenue Bonds | 175,848,141 | 152,435,123 |
| | 490,430,130 | 300,386,857 |

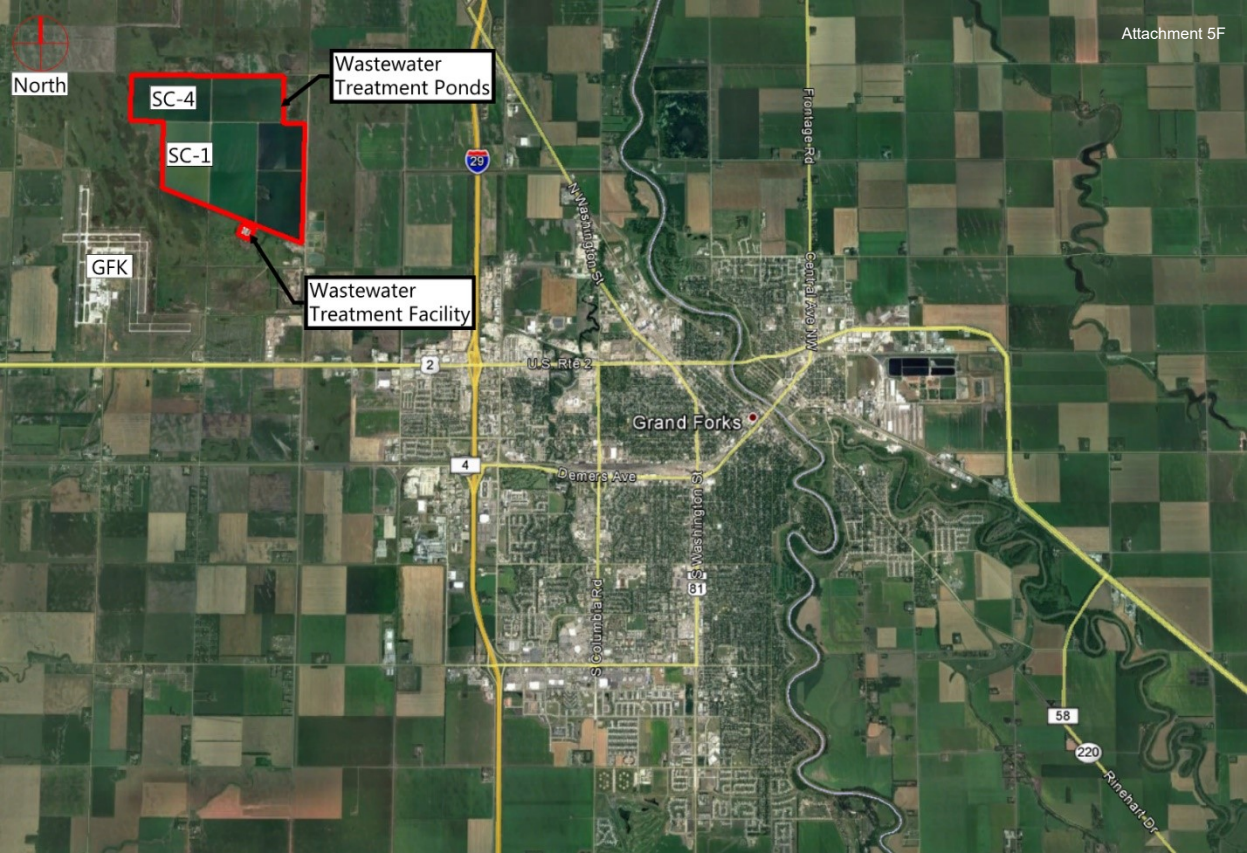
Average annual debt service requirements are estimated at $25,059,832, which is an average of $423.55 per resident.

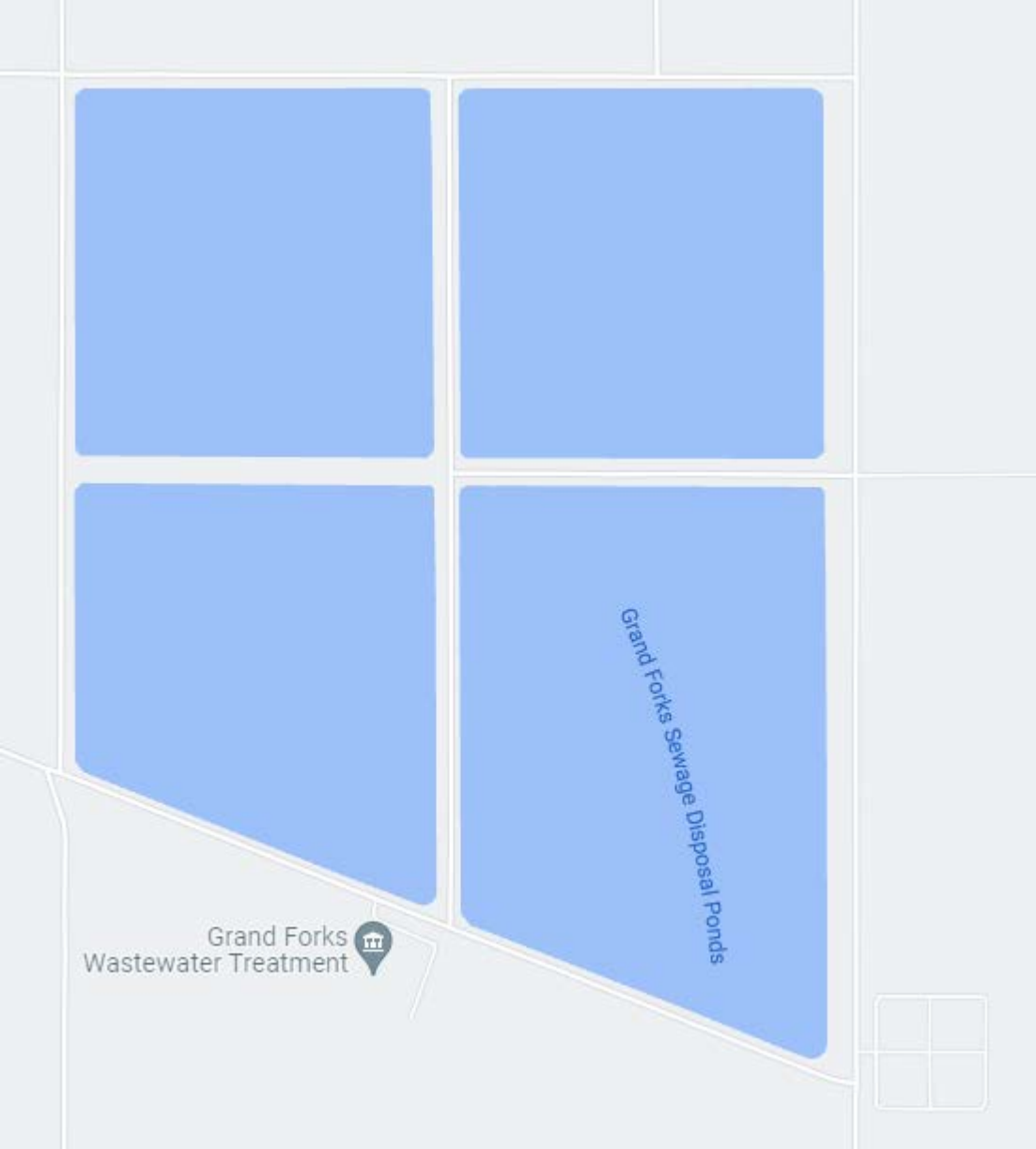
The system currently serves 59,845 people. Historical census populations for the City of Grand Forks were 59,166 in 2020, 52,838 in 2010 and 49,342 in 2000. The largest employers in the City are Altru Health System, University of North Dakota and Grand Forks Air Force Base.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.

Kylee Merkel
Business Banker

Attachment 5F




Grand Forks Sewage Disposal Ponds
Grand Forks
Wastewater Treatment

September 15, 2025

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its September 15,2025 meeting, reviewed, discussed, and recommends approval of a $9,880,000 Clean Water State Revolving Fund Program loan to the City of Lisbon.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips

NORTH Dakota | Public Finance Authority
Be Legendary.

**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Finance Management
Kylee Merkel, Bank of North Dakota

**From:** DeAnn Ament, Executive Director

**Date:** September 2, 2025

**Re:** City of Lisbon
Clean Water State Revolving Fund Program Loan Application

**Purpose of the Project:** Full replacement of sixteen blocks of water mains, storm and sanitary sewer and streets.

**Project Amount:**

| | |
|---|---|
| **CWSRF Request** | $ 9,880,000 |
| **DWSRF Request** | 1,296,000 |
| **DWR Cost Share** | 1,304,267 |
| **BND IRLF** | 2,840,000 |
| **Project Total** | $ 15,320,267 |

**Population to Benefit from the Project:** 2,204
**Population Served by the System:** 2,204

The requested term for the Clean Water State Revolving Fund loan is 30 years. Accordingly, the average annual payment will be approximately $420,802. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The City currently serves approximately 934 users that pay a monthly water base rate of $10.60 which includes 128 $ft^3$ plus $0.00823/$ft^3$ over 128 $ft^3$. The sewer users pay a monthly base rate of $12.90 which includes 600 $ft^3$ plus $0.108/$ft^3$ for residential users and $0.09/$ft^3$ for commercial users.

**Water and Sewer Fund:**

| | 2021 | 2022 | 2023 |
|---|---|---|---|
| Operating Revenue | $1,347,018 | $1,303,481 | $1,351,688 |
| Operating Expenses | 1,217,898 | 1,256,916 | 1,395,174 |
| Net Operating Revenue (Expense) | 129,120 | 46,565 | -43,486 |
| Transfer in Sales Tax | 265,954 | 275,430 | 313,647 |
| Depreciation | 399,479 | 399,479 | 406,640 |
| Adjusted Net Operating Revenue | $794,554 | $721,475 | $676,801 |
| Revenue Bond Payments | $473,191 | $416,993 | $387,130 |
| Net Operating Coverage | 168% | 173% | 175% |

**Outstanding Debt as of December 31, 2024:**

| | Original Debt | Outstanding Debt |
|---|---|---|
| Improvement Bonds [1] | $ 9,549,405 | $ 6,328,124 |
| Revenue Bonds [1] | 2,738,524 | 1,078,000 |
| **Total** | **$ 12,287,929** | **$ 7,406,124** |

[1] All payments have been made as agreed. The City has four CWSRF and five Drinking Water SRF loans with a total outstanding balance of $2,233,000.

The average annual payment of all outstanding debt including this request, the Drinking Water State Revolving Fund and BND IRLF requests is $1,495,020 which is $678 per resident.

The City of Lisbon is located in Ransoms County on Interstate 94. Based on the 2020 census, the total population is 2,204; this is an increase of 50 over the 2010 census. The largest employers in the City are ND Veterans Home with 150 employees, Lisbon Public Schools employs 75 CHI Lisbon Health with 30 employees.

**K-12 School Enrollment:**

| | | | | Projected |
|---|---|---|---|---|
| 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| 612 | 628 | 611 | 599 | 610 |

The City's 2024 taxable valuation was $6,6670,984. This is an increase of $1,665,055 over the 2020 taxable valuation.

**Property Tax Levies and Collections as of 8/29/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $814,594 | $765,101 | 94% |
| **2023** | $769,920 | $756,844 | 98% |
| **2022** | $769,950 | $767,753 | 100% |

**Special Assessment Levies and Collections 8/29/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $263,162 | $242,393 | 92% |
| **2023** | $266,494 | $259,307 | 97% |
| **2022** | $281,100 | $278,334 | 99% |

**City of Lisbon Mill Levy:**

| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 122.11 | 98.21 | 26.24 | 97.44 | 344.00 |
| **2023** | 120.99 | 94.46 | 37.56 | 85.52 | 338.53 |
| **2022** | 128.26 | 92.22 | 28.99 | 80.82 | 330.29 |
| **2021** | 125.92 | 92.49 | 37.46 | 78.58 | 334.45 |
| **2020** | 136.40 | 91.10 | 28.28 | 78.67 | 334.45 |

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# Memorandum

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Clean Water State Revolving Fund Program
City of Lisbon

---

The City of Lisbon ("City") has presented a request to the Authority and the North Dakota Department of Environmental Quality ("Department") for a $9,880,000 loan under the Clean Water State Revolving Fund Program ("CWSRF Program"). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds for the full replacement of sixteen blocks of water mains, storm and sanitary sewer and streets.

The municipal securities to be acquired by the Authority will be improvement bonds of the City payable from special assessments levied against the benefited property. The proposed term of the loan is 30 years with a subsidized interest rate of 1.50%. The City's average annual payment under the proposed loan will be approximately $420,802. The improvement bonds will be a contingent general obligation of the City, which will be required by law to levy a general deficiency tax if the revenues collected from the levy of special assessments are insufficient to make the debt service payments.

As of December 31, 2024, the City has $6,328,124 of Improvement Bonds and $1,078,000 of Revenue Bonds outstanding. The City currently has four Clean Water and five Drinking Water loans outstanding totaling $2,233,000. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

BND
Bank of North Dakota

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Bismarck, ND 58506-5509
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800.366.6888 TTY
701.328.5600
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Attachment 6E

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: September 2, 2025

RE: City of Lisbon
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a $9,880,000 loan to the City of Lisbon under the Clean Water State Revolving Fund (CWSRF). The entire cost of the project is $15,320,267, with Drinking Water State Revolving Fund providing a $1,296,000 loan, BND Infrastructure Revolving Loan Fund providing a $2,840,000 loan and Department of Water Resources providing a $1,304,267 grant.

The project consists of full replacement of 16 blocks of watermains, storm and sanitary sewer and streets. The requested loan term is 30 years. The City will issue an improvement bond payable with special assessment collections. The annual payment will average $420,802.

**Water & Sewer Fund:**

| Water and Sewer Fund | 2021 | 2022 | 2023 |
|---|---|---|---|
| Operating Revenue | 1,347,018 | 1,303,481 | 1,351,688 |
| Operating Expenses | -1,217,898 | -1,256,916 | -1,395,174 |
| Net Operating Revenue | 129,120 | 46,565 | -43,486 |
| Plus: Sales Tax Transfer | 265,954 | 275,430 | 313,647 |
| Plus: Depreciation | 399,479 | 399,479 | 406,640 |
| Adjusted Net Operating Income | 794,554 | 721,475 | 676,801 |
| | | | |
| Current Debt Service | 473,191 | 416,993 | 387,130 |
| | | | |
| Debt Service Coverage | 168% | 173% | 175% |

BND
Bank of North Dakota

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The City currently serves 934 users. The monthly sewer base rate is $12.90. In addition, residential users pay a sewer volume charge of $0.108 per cubic foot over 600 cubic feet and commercial users pay a sewer volume charge of $0.09 per cubic foot over 600 cubic feet. The monthly water base rate is $10.60. All users pay a water volume charge of $0.00823 per cubic foot over 128 cubic feet.

**Outstanding Debt (as of December 31, 2024):**

| | Original Amount | Current Balance |
|---|---|---|
| Improvement Bonds | 9,549,405 | 6,328,124 |
| Revenue Bonds | 2,738,524 | 1,078,000 |
| | 12,287,929 | 7,406,124 |

Average annual debt service requirements are estimated at $1,495,020, which is an average of $678.32 per resident.

Historical census populations for the City of Lisbon were 2,204 in 2020, 2,154 in 2010 and 2,292 in 2000. The largest employers in the City are ND Veteran's Home, Lisbon Public Schools and CHI Lisbon Health.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.

Kylee Merkel
Business Banker

Attachment 6F

## Legend

Parcels

City Limits

Location

### Improvement Type

- Sanitary Sewer Reline
- Sanitary Sewer Replacement
- Sanitary Reline and Storm Replacement
- Sanitary Reline and Water Services
- Sanitary Replacement and Reline
- Sanitary and Storm Replacement
- Sanitary and Water Replacement
- Storm Sewer Replacement
- Roadway Only
- Water Main Replacement

# FIGURE 1 - PROPOSED IMPROVEMENTS SEWER, WATER AND STORM LISBON, NORTH DAKOTA

Created By: TJS Date Created: 11/12/18 Date Saved: 10/15/24 Date Plotted: NEVER Date Exported: 10/15/24
Plotted By: kelsey.kline Parcel Date: N/A Aerial Image: 2017 County NAIP SIDS Elevation Data: Lidar
Horizontal Datum: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet Vertical Datum: NAVD1988
T:\Projects\20300\20337\20337_Lisbon_Figure_1_SS_W_ST_Improvements.mxd

N W E S

0 500 1,000 Feet

1 in = 866.5 feet

moore engineering, inc.

NORTH Dakota | Public Finance Authority
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**Memorandum**

**To:** Industrial Commission: Governor Kelly Armstrong, Attorney General Drew H. Wrigley, Agriculture Commissioner Doug Goehring

**From:** DeAnn Ament, Executive Director

**Date:** September 15, 2025

**Re:** Lisbon, Drinking Water State Revolving Fund
Dickinson, Drinking Water State Revolving Fund
Dickinson, Clean Water State Revolving Fund
Valley City, Clean Water State Revolving Fund

Under current policy, the Public Finance Authority can make loans under the State Revolving Fund Program in an amount not to exceed $2,000,000 and under the Capital Financing Program in an amount not to exceed $500,000 without seeking the final approval of the Industrial Commission. Within this policy, once the loan has been approved, the Public Finance Authority is required to provide the details of the loan to the Industrial Commission. Accordingly, the Public Finance Authority and its Advisory Committee used this policy to approve the following loans.

The committee reviewed the City of Lisbon's Drinking Water State Revolving Fund (DWSRF) application for a $1,296,000 loan towards a $15,320,267 project. Clean Water State Revolving Fund (CWSRF) will lend $9,880,000, DWR Cost Share will fund $1,304,267 and the BND IRLF provide a $2,840,000 loan. The requested term for the loan is 30 years. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The committee reviewed the City of Dickinson's DWSRF application for a $1,000,000 loan towards a $5,000,000 project. CWSRF will lend $1,000,000, DWR Cost Share will fund $959,700 and $2,040,300 of local funds will be used. The requested term for the loan is 20 years. The project will replace cast-iron water main with PVC piping from 2nd Street to 9th Street East and increase the storm sewer capacity from 2nd Street to 5th Street East. The City will issue revenue bonds payable with 50% of the 1% city sales tax dedicated to infrastructure. Also, oil and gas gross production tax (GPT) will be a secondary source of security.

The committee reviewed the City of Dickinson's CWSRF application for a $1,000,000 loan towards a $5,000,000 project. DWSRF will lend $1,000,000, DWR Cost Share will fund $959,700 and $2,040,300 of local funds will be used. The requested term for the loan is 20 years. The project will increase the storm sewer capacity from 2nd Street to 5th Street East and replace cast-iron water main with PVC piping from 2nd Street to 9th Street East. The City will issue revenue bonds payable with 50% of the 1% city sales tax dedicated to infrastructure. Also, GPT will be a secondary source of security.

The committee reviewed the City of Valley City's CWSRF application for a $600,000 loan towards a $1,274,900 project with $674,900 of local money used to fund the balance. This project will replace clay tile sanitary sewer mains when completing road reconstruction and reline any deteriorating sewer lines where the roads still have an adequate life span. The requested term for the loan is 20 years. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The Public Finance Authority's Advisory Committee approved these loans at their September 15, 2025, meeting.

NORTH Dakota | Public Finance Authority
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**Memorandum**

**To:** Public Finance Authority Advisory Committee
Miles Silbert, Public Finance Management
Kylee Merkel, Bank of North Dakota

**From:** DeAnn Ament, Executive Director

**Date:** September 2, 2025

**Re:** City of Lisbon
Drinking Water State Revolving Fund Program Loan Application

**Purpose of the Project:** Full replacement of sixteen blocks of water mains, storm and sanitary sewer and streets.

**Project Amount:**

| | |
|---|---|
| **DWSRF Request** | $ 1,296,000 |
| **CWSRF Request** | 9,880,000 |
| **DWR Cost Share** | 1,304,267 |
| **BND IRLF** | 2,840,000 |
| **Project Total** | $ 15,320,267 |

**Population to Benefit from the Project:** 2,204
**Population Served by the System:** 2,204

The requested term for the Drinking Water State Revolving Fund (DWSRF) loan is 30 years. Accordingly, the average annual payment will be approximately $55,198. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The City currently serves approximately 934 users that pay a monthly water base rate of $10.60 which includes 128 $ft^3$ plus $0.00823/$ft^3$ over 128 $ft^3$. The sewer users pay a monthly base rate of $12.90 which includes 600 $ft^3$ plus $0.108/$ft^3$ for residential users and $0.09/$ft^3$ for commercial users.

**Water and Sewer Fund:**

| | 2021 | 2022 | 2023 |
|---|---|---|---|
| Operating Revenue | $1,347,018 | $1,303,481 | $1,351,688 |
| Operating Expenses | 1,217,898 | 1,256,916 | 1,395,174 |
| Net Operating Revenue (Expense) | 129,120 | 46,565 | -43,486 |
| Transfer in Sales Tax | 265,954 | 275,430 | 313,647 |
| Depreciation | 399,479 | 399,479 | 406,640 |
| Adjusted Net Operating Revenue | $794,554 | $721,475 | $676,801 |
| Revenue Bond Payments | $473,191 | $416,993 | $387,130 |
| Net Operating Coverage | 168% | 173% | 175% |

**Outstanding Debt as of December 31, 2024:**

| | Original Debt | Outstanding Debt |
|---|---|---|
| Improvement Bonds [1] | $ 9,549,405 | $ 6,328,124 |
| Revenue Bonds [1] | 2,738,524 | 1,078,000 |
| **Total** | **$ 12,287,929** | **$ 7,406,124** |

[1] All payments have been made as agreed. The City has five DWSRF and four Clean Water SRF loans with a total outstanding balance of $2,233,000.

The average annual payment of all outstanding debt including this request, the Clean Water State Revolving Fund and BND IRLF requests is $1,495,020 which is $678 per resident.

The City of Lisbon is located in Ransoms County on Interstate 94. Based on the 2020 census, the total population is 2,204; this is an increase of 50 over the 2010 census. The largest employers in the City are ND Veterans Home with 150 employees, Lisbon Public Schools employs 75 CHI Lisbon Health with 30 employees.

**K-12 School Enrollment:**

| | | | | Projected |
|---|---|---|---|---|
| 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| 612 | 628 | 611 | 599 | 610 |

The City's 2024 taxable valuation was $6,6670,984. This is an increase of $1,665,055 over the 2020 taxable valuation.

**Property Tax Levies and Collections as of 8/29/2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $814,594 | $765,101 | 94% |
| **2023** | $769,920 | $756,844 | 98% |
| **2022** | $769,950 | $767,753 | 100% |

**Special Assessment Levies and Collections 8/29/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $263,162 | $242,393 | 92% |
| **2023** | $266,494 | $259,307 | 97% |
| **2022** | $281,100 | $278,334 | 99% |

**City of Lisbon Mill Levy:**

| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 122.11 | 98.21 | 26.24 | 97.44 | 344.00 |
| **2023** | 120.99 | 94.46 | 37.56 | 85.52 | 338.53 |
| **2022** | 128.26 | 92.22 | 28.99 | 80.82 | 330.29 |
| **2021** | 125.92 | 92.49 | 37.46 | 78.58 | 334.45 |
| **2020** | 136.40 | 91.10 | 28.28 | 78.67 | 334.45 |

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# Memorandum

**TO:** DeAnn Ament, Executive Director
North Dakota Public Finance Authority

**FROM:** PFM Financial Advisors LLC

**DATE:** September 15, 2025

**RE:** Marketplace Analysis - Drinking Water State Revolving Fund Program
City of Lisbon

---

The City of Lisbon (the "City") has presented a request to the Authority and the North Dakota Department of Environmental Quality ("Department") for a $1,296,000 loan under the Drinking Water State Revolving Fund Program ("DWSRF Program"). The DWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various water treatment, distribution and storage facilities as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds for the full replacement of sixteen blocks of water mains, storm and sanitary sewer and streets.

The municipal securities to be acquired by the Authority will be improvement bonds of the City payable from special assessments levied against the benefited property. The proposed term of the loan is 30 years with a subsidized interest rate of 1.50%. The City's average annual payment under the proposed loan will be approximately $55,198. The improvement bonds will be a contingent general obligation of the City, which will be required by law to levy a general deficiency tax if the revenues collected from the levy of special assessments are insufficient to make the debt service payments.

As of December 31, 2024, the City has $6,328,124 of Improvement Bonds and $1,078,000 of Revenue Bonds outstanding. The City currently has four Clean Water and five Drinking Water loans outstanding totaling $2,233,000. The City is current in its payments for its outstanding Authority loans.

Funding the construction of the City's improvements has been included in a list of approved uses as prepared and updated by the Department. As an authorized participant in the DWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the DWSRF Program.

BND
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Attachment 7A.2

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: September 2, 2025

RE: City of Lisbon
Drinking Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a $1,296,000 loan to the City of Lisbon under the Drinking Water State Revolving Fund (DWSRF). The entire cost of the project is $15,320,267, with Clean Water State Revolving Fund providing a $9,880,000 loan, BND Infrastructure Revolving Loan Fund providing a $2,840,000 loan and Department of Water Resources providing a $1,304,267 grant.

The project consists of full replacement of 16 blocks of watermains, storm and sanitary sewer and streets. The requested loan term is 30 years. The City will issue an improvement bond payable with special assessment collections. The annual payment will average $55,198.

**Water & Sewer Fund:**

| Water and Sewer Fund | 2021 | 2022 | 2023 |
|---|---|---|---|
| Operating Revenue | 1,347,018 | 1,303,481 | 1,351,688 |
| Operating Expenses | -1,217,898 | -1,256,916 | -1,395,174 |
| Net Operating Revenue | 129,120 | 46,565 | -43,486 |
| Plus: Sales Tax Transfer | 265,954 | 275,430 | 313,647 |
| Plus: Depreciation | 399,479 | 399,479 | 406,640 |
| Adjusted Net Operating Income | 794,554 | 721,475 | 676,801 |
| | | | |
| Current Debt Service | 473,191 | 416,993 | 387,130 |
| | | | |
| Debt Service Coverage | 168% | 173% | 175% |

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The City currently serves 934 users. The monthly water base rate is $10.60. All users pay a water volume charge of $0.00823 per cubic foot over 128 cubic feet. The monthly sewer base rate is $12.90. In addition, residential users pay a sewer volume charge of $0.108 per cubic foot over 600 cubic feet and commercial users pay a sewer volume charge of $0.09 per cubic foot over 600 cubic feet.

**Outstanding Debt (as of December 31, 2024):**

| | Original Amount | Current Balance |
|---|---|---|
| Improvement Bonds | 9,549,405 | 6,328,124 |
| Revenue Bonds | 2,738,524 | 1,078,000 |
| | 12,287,929 | 7,406,124 |

Average annual debt service requirements are estimated at $1,495,020, which is an average of $678.32 per resident.

Historical census populations for the City of Lisbon were 2,204 in 2020, 2,154 in 2010 and 2,292 in 2000. The largest employers in the City are ND Veteran's Home, Lisbon Public Schools and CHI Lisbon Health.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.

Kylee Merkel
Business Banker

Attachment 7A.3

## Legend

Parcels

City Limits

Location

### Improvement Type

- Sanitary Sewer Reline
- Sanitary Sewer Replacement
- Sanitary Reline and Storm Replacement
- Sanitary Reline and Water Services
- Sanitary Replacement and Reline
- Sanitary and Storm Replacement
- Sanitary and Water Replacement
- Storm Sewer Replacement
- Roadway Only
- Water Main Replacement

# FIGURE 1 - PROPOSED IMPROVEMENTS SEWER, WATER AND STORM LISBON, NORTH DAKOTA

Created By: TJS Date Created: 11/12/18 Date Saved: 10/15/24 Date Plotted: NEVER Date Exported: 10/15/24
Plotted By: kelsey.kline Parcel Date: N/A Aerial Image: 2017 County NAIP SIDS Elevation Data: Lidar
Horizontal Datum: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet Vertical Datum: NAVD1988
T:\Projects\20300\20337\20337_Lisbon_Figure_1_SS_W_ST_Improvements.mxd

N W E S

0 500 1,000 Feet

1 in = 866.5 feet

moore engineering, inc.

NORTH Dakota | Public Finance Authority
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**Memorandum**

**To:** Public Finance Authority Advisory Committee

**From:** DeAnn Ament, Executive Director

**Date:** September 10, 2024

**Re:** City of Dickinson
Drinking Water State Revolving Fund

**Purpose of the Project:** Replace cast-iron water main with PVC piping from 2nd Street to 9th Street East and increase the storm sewer capacity from 2nd Street to 5th Street East.

**Project Amount:**

| | |
|---|---|
| **DWSRF Request** | $ 1,000,000 |
| **CWSRF Request** | 1,000,000 |
| **DWR Cost Share** | 959,700 |
| **Local Funds** | 2,040,300 |
| **Project Total** | $ 5,000,000 |

**Population to Benefit from the Project:** 200
**Population Served by the System:** 25,679

The requested term for the Drinking Water State Revolving Fund (DWSRF) loan is 20 years. The City of Dickinson will issue revenue bonds payable with 50% of the 1% city sales tax dedicated to infrastructure. Also, oil and gas gross production tax (GPT) will be a secondary source of security. The average annual payment for the revenue bonds will be $58,064. The reserve requirement will be $62,700 and the 110% coverage requirement will be $63,870.

**1% City Sales Collections:**

| | 8/31/2025 | 2024 | 2023 | 2022 | 2021 |
|---|---|---|---|---|---|
| **1% City Sales Tax** | $5,082,869 | $7,359,227 | $7,457,917 | $6,749,860 | $5,934,039 |
| **50% of 1%** | $2,541,434 | $3,679,613 | $3,728,959 | $3,374,930 | $2,967,019 |
| **SRF Payments** [1] | $768,006 | $768,006 | $768,006 | $768,006 | $768,006 |
| **Excess Sales Tax** | $1,773,428 | $2,911,607 | $2,960,953 | $2,606,924 | $2,199,013 |

[1] Includes three CWSRF and two DWSRF annual payments plus the new DWSRF and CWSRF payments.

The City collects 1½% city sales tax with 50% of 1% dedicated to infrastructure. Currently, three CWSRF loans and two DWSRF loan secured with the city sales tax and there are no other pledges of the 50% of 1% dedicated to infrastructure. The new DWSRF and CWSRF requests will include a pledge of this city sales tax. The current 50% of 1% city sales tax dedicated to infrastructure will be sufficient to meet the 110% net operating coverage requirement.

**Oil & Gas Gross Production Tax (GPT) Collections:**

| | 8/31/2025 | 2024 | 2023 | 2022 | 2021 |
|---|---|---|---|---|---|
| **GPT** | $10,283,589 | $17,518,368 | $16,565,258 | $17,303,256 | $13,516,796 |
| **SRF Payments** [2] | $5,496,199 | $5,496,199 | $5,496,199 | $5,496,199 | $5,496,199 |
| **Excess GPT** | $4,787,390 | $12,022,169 | $11,069,059 | $11,807,057 | $8,020,597 |

[2] Includes seven CWSRF and three DWSRF annual payments and the new DWSRF and new CWSRF payment.

Currently, all SRF bond payments are made from GPT. This will serve as the secondary security for four CWSRF and three DWSRF bonds and does not secure any other debt.

Existing GTP will be sufficient to meet the 110% coverage requirement and city sale tax will provide a sufficient back stop.

| **Water Fund:** | | | **Unaudited** | |
|---|---|---|---|---|
| | **2021** | **2022** | **2023** | **2024** |
| Operating Revenue | $7,195,111 | $7,012,591 | $7,045,630 | $9,036,781 |
| Operating Expenses | 9,298,670 | 9,019,164 | 7,300,952 | 7,848,315 |
| Net Operating Revenue | -2,103,559 | -2,006,573 | -255,322 | 1,188,466 |
| Depreciation | 1,694,480 | 1,850,219 | - | - |
| Transfer In (GPT) | 516,200 | 9,440 | - | - |
| Adjusted Net Operating Revenue | $107,121 | -$146,914 | -$255,322 | $1,188,466 |

The outstanding indebtedness as of August 31, 2025:

| | **Original Debt Amount** | **Outstanding Debt Amount** |
|---|---|---|
| Sales Tax Revenue Bonds [3] | $19,507,360 | $11,395,475 |
| Sewer Revenue Bonds [3] | 78,571,961 | 41,182,252 |
| **Total** | $98,079,321 | $52,577,727 |

[3] All payments have been made as agreed. The City has six CWSRF loans and three DWSRF with outstanding balances of $50,517,727.

The average annual debt payments with the new requests is $7,334,932 which is $286 per resident.

The City of Dickinson is located in Stark County 100 miles west of Bismarck on Interstate 94. Based on the 2020 census, the total population is 25,679; this is an increase of 7,892 from the 2010 census. The largest employers in the City are Dickinson Public School with 700 employees, Walmart Supercenter has approximately 300 employees and Steffes Solutions (manufacturing) employs 400.

**K-12 School Enrollment:**

| | | | Current | Projected |
|---|---|---|---|---|
| **2022-2023** | **2023-2024** | **2024-2025** | **2025-2026** | **2026-2027** |
| 3,793 | 3,875 | 3,977 | 4,087 | 4,190 |

The City's 2024 taxable valuation was $142,095,233. This is an increase of $23,097,416 over the 2019 taxable valuation.

**Property Tax Collections 8/20/2025:**

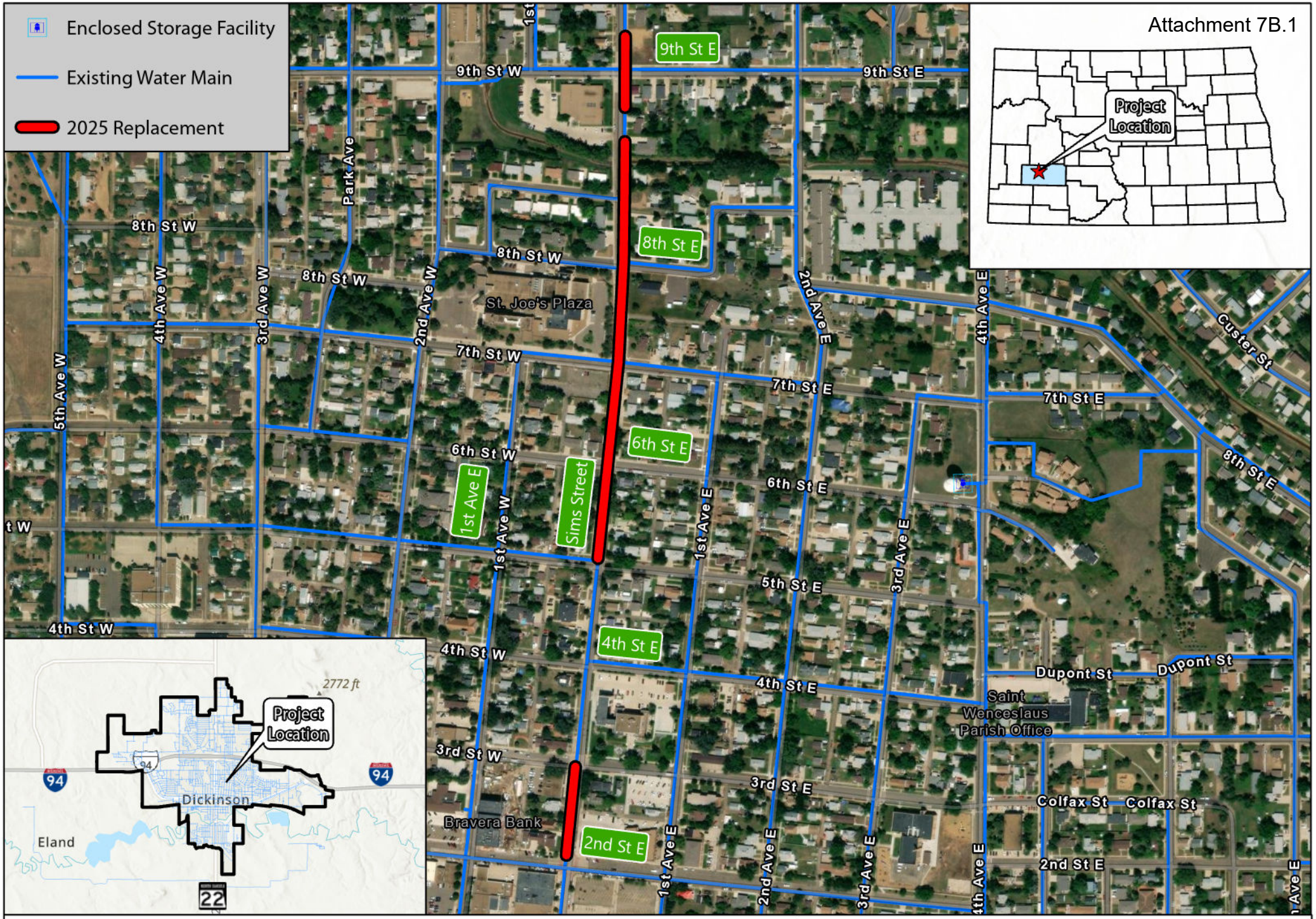
| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $5,724,000 | $5,387,179 | 94% |
| **2023** | $5,575,833 | $5,557,036 | 100% |
| **2022** | $5,642,962 | $5,637,151 | 100% |

**Special Assessment Collections 8/20/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $483,023 | $463,232 | 96% |
| **2023** | $599,338 | $591,714 | 99% |
| **2022** | $561,166 | $543,689 | 97% |

**Dickinson Mill Levy History:**

| Year | City | School | Park District | State and County | Other | Total for Each Year |
|---|---|---|---|---|---|---|
| **2024** | 40.27 | 146.79 | 19.42 | 52.62 | 1.00 | 260.10 |
| **2023** | 42.45 | 113.70 | 18.16 | 55.44 | 1.00 | 230.75 |
| **2022** | 44.64 | 113.70 | 17.25 | 56.12 | 1.00 | 232.71 |
| **2021** | 47.01 | 113.70 | 17.45 | 61.46 | 1.00 | 240.62 |
| **2020** | 47.37 | 113.70 | 17.42 | 64.44 | 1.00 | 243.93 |




# Sims Street Improvements Phase 3
## 2nd St. East to 9th St. East

Apex Engineering Group

CITY OF Dickinson North Dakota

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Created: 2/14/2025

NORTH Dakota | Public Finance Authority
Be Legendary.

**Memorandum**

**To:** Public Finance Authority Advisory Committee

**From:** DeAnn Ament, Executive Director

**Date:** September 10, 2024

**Re:** City of Dickinson
Clean Water State Revolving Fund

**Purpose of the Project:** Replace cast-iron water main with PVC piping from 2nd Street to 9th Street East and increase the storm sewer capacity from 2nd Street to 5th Street East.

**Project Amount:**

| | |
|---|---|
| **CWSRF Request** | $ 1,000,000 |
| **DWSRF Request** | 1,000,000 |
| **DWR Cost Share** | 959,700 |
| **Local Funds** | 2,040,300 |
| **Project Total** | $ 5,000,000 |

**Population to Benefit from the Project:** 200
**Population Served by the System:** 25,679

The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 20 years. The City of Dickinson will issue revenue bonds payable with 50% of the 1% city sales tax dedicated to infrastructure. Also, oil and gas gross production tax (GPT) will be a secondary source of security. The average annual payment for the revenue bonds will be $58,064. The reserve requirement will be $62,700 and the 110% coverage requirement will be $63,870.

**1% City Sales Collections:**

| | 8/31/2025 | 2024 | 2023 | 2022 | 2021 |
|---|---|---|---|---|---|
| **1% City Sales Tax** | $5,082,869 | $7,359,227 | $7,457,917 | $6,749,860 | $5,934,039 |
| **50% of 1%** | $2,541,434 | $3,679,613 | $3,728,959 | $3,374,930 | $2,967,019 |
| **SRF Payments** [1] | $768,006 | $768,006 | $768,006 | $768,006 | $768,006 |
| **Excess Sales Tax** | $1,773,428 | $2,911,607 | $2,960,953 | $2,606,924 | $2,199,013 |

[1] Includes three CWSRF and two DWSRF annual payments plus the new CWSRF and DWSRF payments.

The City collects 1½% city sales tax with 50% of 1% dedicated to infrastructure. Currently, three CWSRF loans and two DWSRF loan secured with the city sales tax and there are no other pledges of the 50% of 1% dedicated to infrastructure. The new CWSRF and DWSRF requests will include a pledge of this city sales tax. The current 50% of 1% city sales tax dedicated to infrastructure will be sufficient to meet the 110% net operating coverage requirement.

**Oil & Gas Gross Production Tax (GPT) Collections:**

| | 8/31/2025 | 2024 | 2023 | 2022 | 2021 |
|---|---|---|---|---|---|
| **GPT** | $10,283,589 | $17,518,368 | $16,565,258 | $17,303,256 | $13,516,796 |
| **SRF Payments** [2] | $5,496,199 | $5,496,199 | $5,496,199 | $5,496,199 | $5,496,199 |
| **Excess GPT** | $4,787,390 | $12,022,169 | $11,069,059 | $11,807,057 | $8,020,597 |

[2] Includes seven CWSRF and three DWSRF annual payments and the new CWSRF and new DWSRF payment.

Currently, all SRF bond payments are made from GPT. This will serve as the secondary security for four CWSRF and three DWSRF bonds and does not secure any other debt.

Existing GTP will be sufficient to meet the 110% coverage requirement and city sale tax will provide a sufficient back stop.

| **Wastewater Fund** | | | **Unaudited** | |
|---|---|---|---|---|
| | **2021** | **2022** | **2023** | **2024** |
| Operating Revenue | $3,278,231 | $3,154,670 | $4,400,584 | $5,536,127 |
| Operating Expenses | 6,024,257 | 6,662,556 | 2,986,845 | 2,970,230 |
| Net Operating Revenue | -2,746,026 | -3,507,886 | 1,413,739 | 2,565,896 |
| Depreciation | 3,609,019 | 3,694,016 | - | - |
| Transfer In (GPT) | 6,354,542 | 6,079,011 | 4,479,750 | 5,211,617 |
| Adjusted Net Operating Revenue | $7,217,535 | $6,265,141 | $5,893,489 | $7,777,514 |
| Revenue Bond Payments | $5,096,205 | $5,099,599 | $5,115,877 | $5,211,617 |
| Net Operating Coverage | 142% | 123% | 115% | 149% |

The outstanding indebtedness as of August 31, 2025:

| | **Original Debt Amount** | **Outstanding Debt Amount** |
|---|---|---|
| Sales Tax Revenue Bonds [3] | $19,507,360 | $11,395,475 |
| Sewer Revenue Bonds [3] | 78,571,961 | 41,182,252 |
| **Total** | $98,079,321 | $52,577,727 |

[3] All payments have been made as agreed. The City has six CWSRF loans and three DWSRF with outstanding balances of $50,517,727.

The average annual debt payments with the new requests is $7,334,932 which is $286 per resident.

The City of Dickinson is located in Stark County 100 miles west of Bismarck on Interstate 94. Based on the 2020 census, the total population is 25,679; this is an increase of 7,892 from the 2010 census. The largest employers in the City are Dickinson Public School with 700 employees, Walmart Supercenter has approximately 300 employees and Steffes Solutions (manufacturing) employs 400.

**K-12 School Enrollment:**

| | | | Current | Projected |
|---|---|---|---|---|
| **2022-2023** | **2023-2024** | **2024-2025** | **2025-2026** | **2026-2027** |
| 3,793 | 3,875 | 3,977 | 4,087 | 4,190 |

The City's 2024 taxable valuation was $142,095,233. This is an increase of $23,097,416 over the 2019 taxable valuation.

**Property Tax Collections 8/20/2025:**

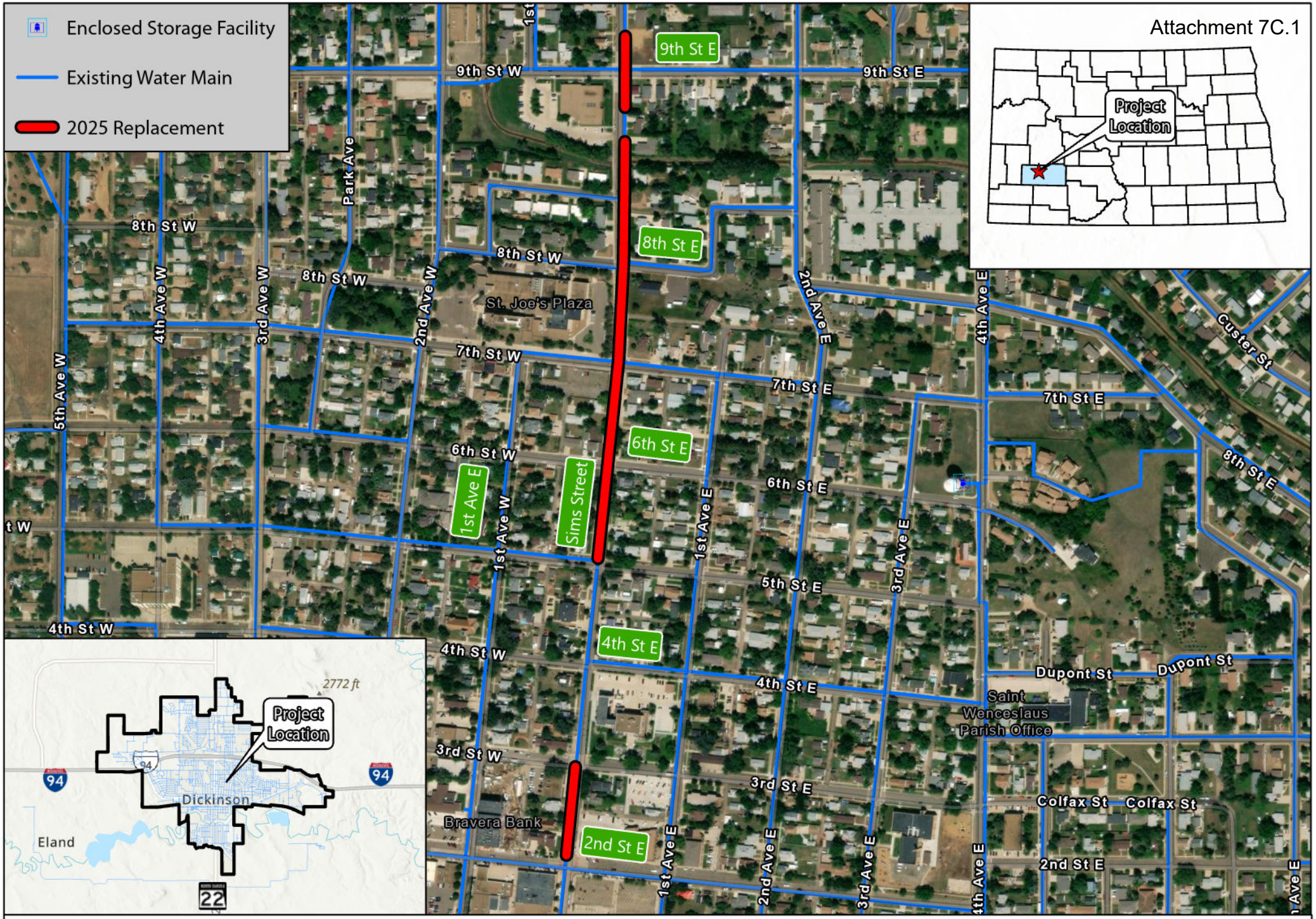
| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $5,724,000 | $5,387,179 | 94% |
| **2023** | $5,575,833 | $5,557,036 | 100% |
| **2022** | $5,642,962 | $5,637,151 | 100% |

**Special Assessment Collections 8/20/2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $483,023 | $463,232 | 96% |
| **2023** | $599,338 | $591,714 | 99% |
| **2022** | $561,166 | $543,689 | 97% |

**Dickinson Mill Levy History:**

| Year | City | School | Park District | State and County | Other | Total for Each Year |
|---|---|---|---|---|---|---|
| **2024** | 40.27 | 146.79 | 19.42 | 52.62 | 1.00 | 260.10 |
| **2023** | 42.45 | 113.70 | 18.16 | 55.44 | 1.00 | 230.75 |
| **2022** | 44.64 | 113.70 | 17.25 | 56.12 | 1.00 | 232.71 |
| **2021** | 47.01 | 113.70 | 17.45 | 61.46 | 1.00 | 240.62 |
| **2020** | 47.37 | 113.70 | 17.42 | 64.44 | 1.00 | 243.93 |




# Sims Street Improvements Phase 3
## 2nd St. East to 9th St. East

Apex Engineering Group

CITY OF Dickinson North Dakota

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Created: 2/14/2025

NORTH Dakota | Public Finance Authority
Be Legendary.

**Memorandum**

**To:** Public Finance Authority Advisory Committee

**From:** DeAnn Ament, Executive Director

**Date:** September 3, 2025

**Re:** City of Valley City
Clean Water State Revolving Fund

**Purpose of the Project:** Replace clay tile sanitary sewer mains when completing road reconstruction and reline any deteriorating sewer lines where the roads still have an adequate life span.

**Project Amount:**

| | |
|---|---|
| **CWSRF Request** | $ 600,000 |
| **City Renew & Replacement Funds** | 674,900 |
| **Project Total** | $ 1,274,900 |

**Population to Benefit from the Project:** 450
**Population Served by the System:** 6,575

The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 20 years. Accordingly, the average annual payment will be approximately $35,334. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The City's sanitary sewer users pay a monthly sewer base rate of $17.75 and a consumption charge of $1.50 per 100 cubic feet. Their south side users pay a fixed monthly charge of $46.65.

**Sewer Fund:**

| | 2021 | 2022 | 2023 |
|---|---|---|---|
| Interest Revenue | $207 | -$18 | $67 |
| Operating Revenue | 796,948 | 775,610 | 773,681 |
| Operating Expenses | 697,823 | 692,244 | 764,546 |
| Net Operating Revenue | 99,332 | 83,348 | 9,202 |
| Depreciation | 352,546 | 358,467 | 352,867 |
| Adjusted Net Operating Revenue | $451,878 | $441,815 | $362,069 |
| Revenue Bond Payments | $16,550 | $16,613 | $16,250 |
| Net Operating Coverage | 2730% | 2659% | 2228% |

The City outstanding indebtedness as of September 1, 2025:

| | Original Debt Amount | Outstanding Debt Amount |
|---|---|---|
| Certificate of Indebtedness | $ 500,000 | $ 422,902 |
| Improvement Bonds [1] | 14,413,675 | 7,864,271 |
| Sales Tax Revenue Bond | 9,542,514 | 5,375,248 |
| Tax Increment Revenue Bond | 2,557,742 | 1,094,815 |
| Water & Wastewater Revenue Bonds [1] | 15,124,241 | 13,333,229 |
| **Total** | $42,138,172 | $28,090,465 |

[1] All payments have been made as agreed. The City has four CWSRF and three Drinking Water SRF loans with outstanding balances of $2,110,000.

The average annual payment of all debt, including this request, is $2,441,587 which is $371 per person. The City has debt service reserves of $941,658. There are 191 parcels to be assessed for this project and the average annual assessment per parcel will be approximately $219.

The City of Valley City is in Barnes County, on Interstate 94, 60 miles west of Fargo. The total population according to the 2020 census is 6,575; this is a decrease of 10 from the 2010 census. The largest employers in the City are John Deere Seeding Group (manufacturing) with 425 employees, Valley City State University with 210 employees and SMP Health (long term care center) with 170 employees.

**K-12 School Enrollment:**

| | | | | Projected |
|---|---|---|---|---|
| 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 | 2025-2026 |
| 1,044 | 1,027 | 969 | 940 | 910 |

The City's 2024 taxable valuation was $22,039,851. This is an increase of $3,901,086 over the 2020 taxable valuation.

**Property Tax Collections as of July 1, 2025:**

| Levy Year | Dollar Amount of Levy | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $1,647,038 | $1,421,540 | 86% |
| **2023** | $1,599,242 | $1,571,698 | 98% |
| **2022** | $1,542,587 | $1,517,298 | 98% |

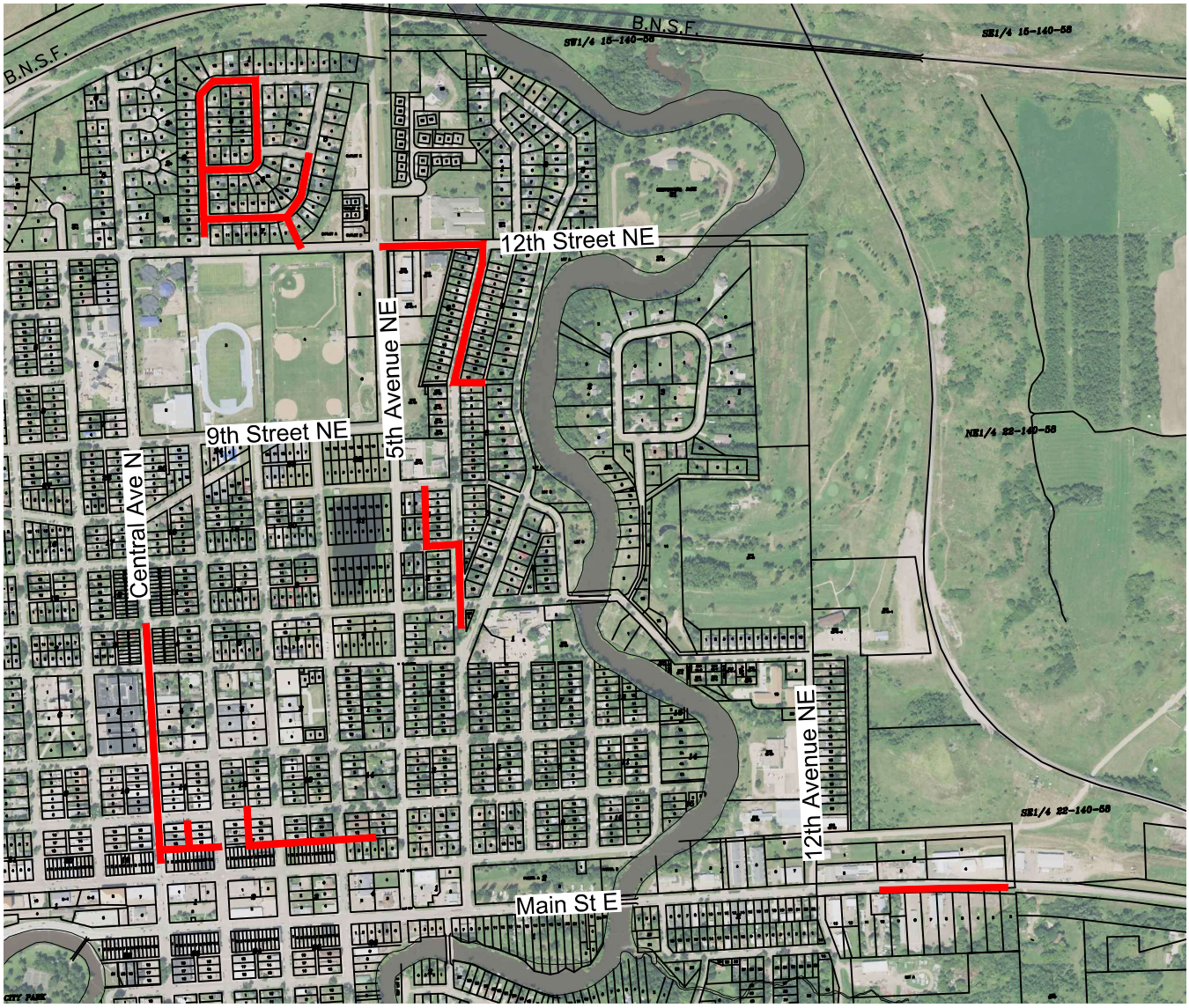
**Special Assessment Collections as of July 1, 2025:**

| Year | Dollar Amount | Amount Collected to Date of Application | Percentage Collected |
|---|---|---|---|
| **2024** | $928,417 | $848,144 | 91% |
| **2023** | $904,138 | $889,604 | 98% |
| **2022** | $945,562 | $922,534 | 98% |

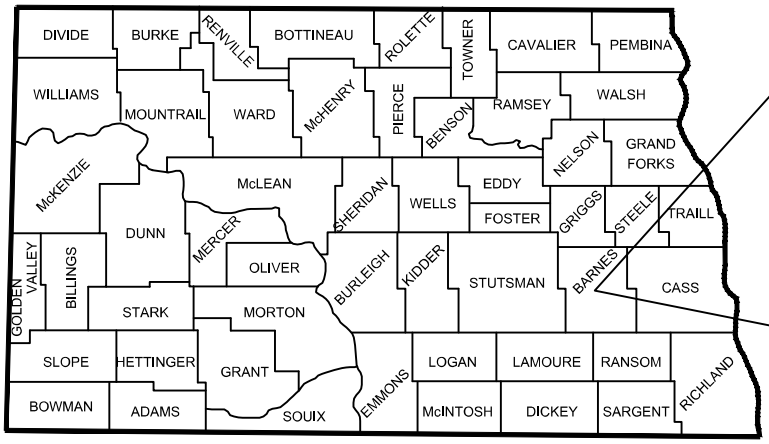
**Mill Levy History:**

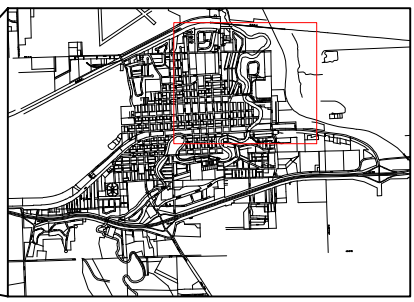
| Year | City | School | Park District | State and County | Total for Each Year |
|---|---|---|---|---|---|
| **2024** | 74.73 | 97.92 | 43.20 | 117.88 | 333.73 |
| **2023** | 76.95 | 96.32 | 43.93 | 118.00 | 335.20 |
| **2022** | 76.74 | 104.95 | 42.88 | 115.28 | 339.85 |
| **2021** | 76.83 | 98.41 | 42.85 | 115.33 | 333.42 |
| **2020** | 72.39 | 100.36 | 39.56 | 110.98 | 323.29 |

# PROPOSED LOCATION MAP
## Sanitary Sewer Improvement District 72
## City of Valley City, North Dakota




**Proposed Project**



Valley City, ND

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# GEOLOGICAL SURVEY QUARTERLY REPORT

*April 1, 2025 to June 30, 2025*
*to the*

# NORTH DAKOTA INDUSTRIAL COMMISSION

Edward C. Murphy
State Geologist
Geological Survey
Department of Mineral Resources
North Dakota Industrial Commission

September 30, 2025

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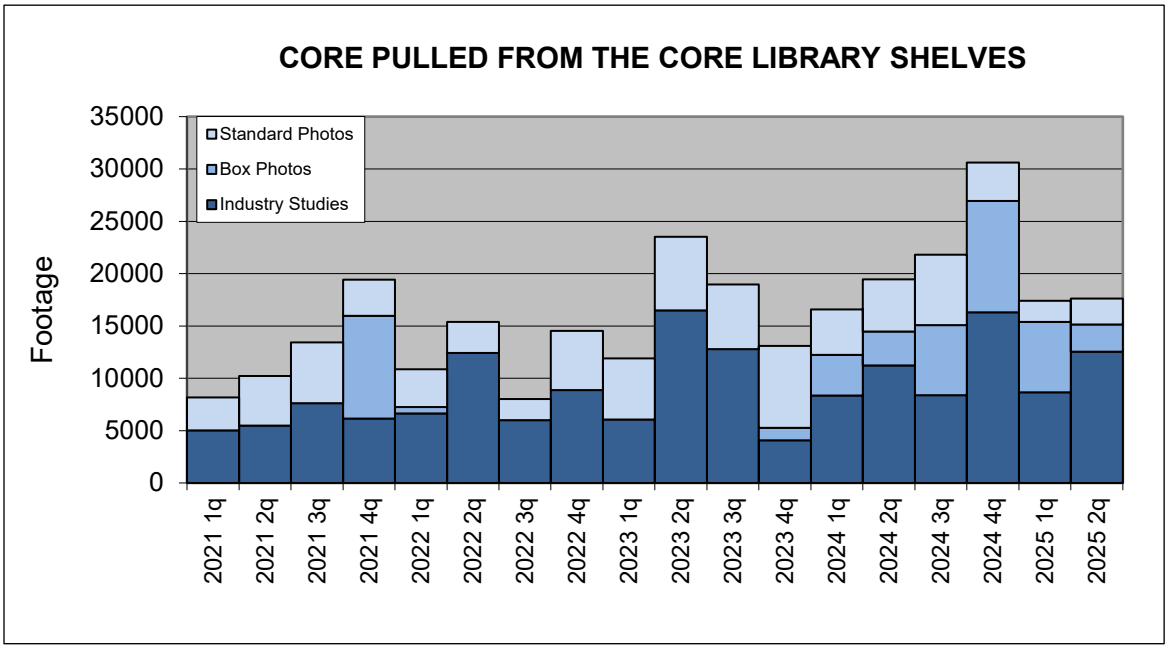
**Wilson M. Laird Core and Sample Library**

During the second quarter of 2025, geologists from four companies, the Geological Survey, the Energy and Environmental Research Center, as well as students and/or professors from the University of North Dakota studied 7,888 feet of core. Additionally, 4,654 feet of core was shipped out for study and testing. A total of 2,467 feet of core was photographed generating 3,497 standard photographs and 2,610 feet of core was photographed with a tripod generating 253 photographs for the subscription site.




*Workers pulled 17,619 feet of core from library shelves during the second quarter of 2025.*

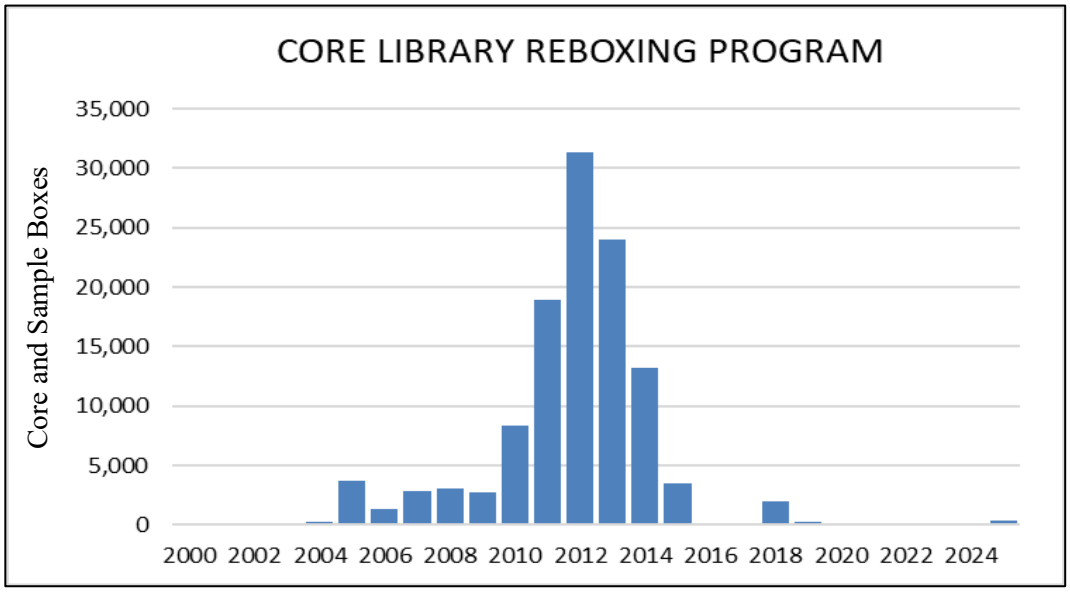
**Reboxing of Cores and Samples**

In 2005, we began a reboxing campaign in the core library because many of the core and sample boxes were in bad shape and could not be stored efficiently. We estimated that of the 130,000 core and sample boxes stored in the core library, 41,000 were damaged and would need to be replaced. For decades, the boxes had been housed in a quonset hut on the UND campus that was not climate controlled. Additionally, the boxes had been repeatedly moved on and off of the shelves and some had been damaged during shipping to the core library.

We reboxed an average of 3,000 boxes per year from 2005 to 2009, giving us a space savings of approximately 15% or 90 total bins. With additional core coming in from the Bakken play and all available space in the core library quickly filling up, we increased our reboxing efforts to an average of 17,000 boxes per year from 2010 through 2015. We ended up reboxing 113,000 boxes, almost three times more than what we initially set out to do, clearing 420 bins. Those empty bins were quickly filled with sample and core boxes as the Bakken play expanded. Luckily, the much needed core library expansion was completed in 2016.

*Only 32 core boxes could be stacked in this bin due to the damaged core boxes.*

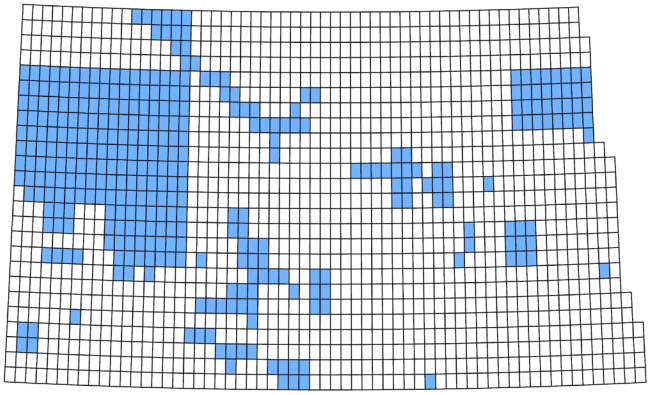

*Forty core boxes can be stacked in a bin when the boxes are in good shape.*



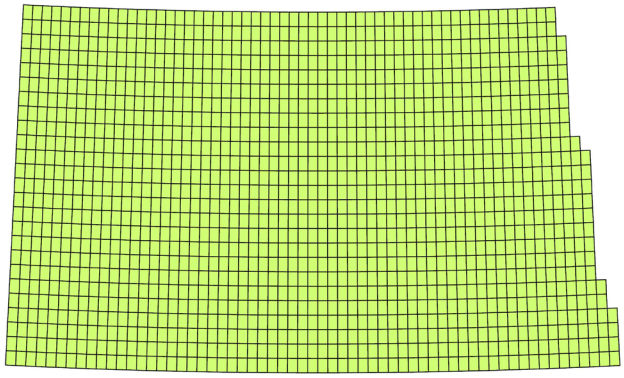

*The 2005-2014 reboxing program in the core library.*

**Landslide Program**

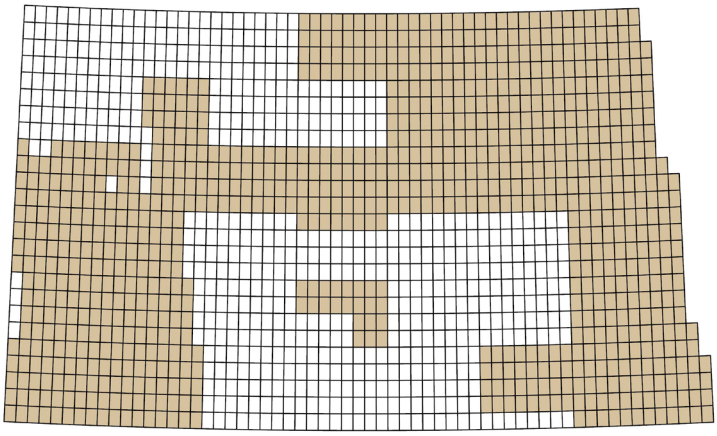
For decades, Survey geologists routinely mapped landslides at the same time as the surface geology. However, generating surface geology maps takes considerably more time than it does to generate a much more focused landslide map. Given the need for landslide data, especially in areas of expanding infrastructure, we began generating stand-alone landslide maps in the mid-1990s. These maps were generated by the stereographic study of paper copies of black and white aerial photographs in stereo pairs from flightlines that were typically flown sometime between 1957 and 1965. The Phase I series of maps were all done on paper, landslide boundaries were traced on the paper photographs with a grease pencil and then transferred by eye to paper quadrangles. In 21 years, we completed 349 Phase I landslide maps. In 2016, we launched the Phase II program by augmenting the aerial photographs with GoogleEarth images and LiDAR coverages and transferred three of our surface geologists into the program. By July 1, 2021, we had completed Phase II landslide mapping across the state (1,430 quadrangles) and had mapped 45,911 landslides, becoming one of the first states in the nation to complete landslide mapping at a scale of 1;24,000. During the fourth quarter of 2021, we began our Phase III landslide mapping program which compares two existing LiDAR coverages for a given area, the first flown sometime between 2008 -2016 and the second flown 2016-2025. This comparison enables us to determine which slopes experienced movement during the interval between the LiDAR coverages. We have currently completed 727 Phase III maps and have now mapped a total of 78,994 landslides.



*Phase I Mapping Program (1995-2016)*



*Phase II Mapping Program (2016-2021)*



*Phase III Mapping Program (2021-present)*

**The Medora Public Fossil Dig**

The Medora Public Fossil Dig ran from June 21 – June 29 and rain was a big factor this year. There were three rain days and a fourth day when it looked like it would likely be rained out so only half the diggers showed up. In all, fifty-one people were able to participate while another 51 attendees were rained out. Additionally, we typically have about 90 high school summer biology students attend the Medora dig for part of a day, but this year only 34 students attended because Legacy High School did not offer that course this summer and the bus that was transporting the Mandan High School summer biology students broke down in the Theodore Roosevelt National Park. Even with the reduced number of days, the diggers encountered a rich pocket of champsosaur and crocodile bones and collected 27 fossil field jackets.

A special fossil dig was held at the site on the 4th of July for Vice President J. D. Vance and family. Unfortunately, an inch of rain fell the night before and the site was so muddy that the footing was extremely treacherous. To assist with the dig: Billings County Highway Superintendent Pat Redmond provided a motor grader; Robbie Lauf, executive director of the Theodore Roosevelt Presidential Library, sent over a skid-steer loader; and State Senator Greg Kessel brought over a second skid-steer along with his sons, Grant and Garett, to operate both skid-steers. Without all of their help, on very short notice, we would have had to cancel the fossil dig.

*Public dig registrants digging for fossils at the Medora site on June 24, 2025.*

*Front to back: Survey Paleontologists Clint Boyd, Jeff Person, and Cathy Lash, remove overburden above the fossil rich-organic zone at the Medora fossil site on July 3, 2025.*

*Geological Survey personnel and the Secret Service were slipping and sliding around the Medora fossil site in the early morning of July 4, 2025.*

*A road grader (operated by Mark Kasian, Billings County road maintenance) made it possible for numerous vehicles to travel the road and trail to the fossil dig site.*

*Survey paleontologists removed the wet clay with shovels and built a two-track using the dry rock the grader had churned up. The skid-steer loader, from the construction company working on the TR Presidential Library, is stuck along the edge of the entrance into the dig site.*

*Survey paleontologists (left to right: Clint Boyd, Cathy Lash, and Jeff Person) dig a shallow trench to drain water from the site and begin to remove wet clay to create a stable surface.*


*Grant and Garett Kessel put down dry rock creating a stable pad at the Medora dig site at 11:00 am (mst) on July 4, just moments before our deadline to inform the Secret Service whether this was a go or no-go situation. The tarp at the left was laid down the night before to keep the fossil bed dry in case of rain.*

*The Medora site immediately after the dig had concluded. The fossil bed was then backfilled to protect it from the elements until the 2026 public dig season.*

## Regulatory Programs (April 1 to June 30, 2025)

| | |
|---|---|
| Coal Exploration Program | Two permits were issued this quarter. |
| Subsurface Mineral Program | One permit was issued this quarter. |
| UIC Class III Well Program | No permits were issued this quarter. |
| Geothermal Program | Five permits (0 residential, 5 commercial) were issued this quarter. |
| Paleontological Resource Program | No permits were issued this quarter. |

## Publications This Quarter (April 1 to June 30, 2025)

Anderson, F. A., 2025, Investigation and Testing of Sand Deposits in the Hofflund Flats Area for Proppant Use: North Dakota Geological Survey, Geologic Investigations no. 287, 10 pp.

Chittick, S.D., 2025, Static Temperatures on Formation Surface Structures, Williston Basin, North Dakota: North Dakota Geological Survey, Geologic Investigations no. 284, 14 plates.

Kruger, N.W., 2025, K2O Grades of the Potash-containing Members of the Prairie Formation, Williston 100K Sheet, North Dakota: North Dakota Geological Survey, Geologic Investigations no. 283, 6 maps.

Kruger, N.W., 2025, K2O Grades of the Potash-containing Members of the Prairie Formation, Watford City 100K Sheet, North Dakota: North Dakota Geological Survey, Geologic Investigations no. 286, 5 maps.

Maike, C.A., 2025, Areas of Landslides Langdon West Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Lgdn W - l3.

Maike, C.A., 2025, Areas of Landslides Langdon East Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Lgdn E - l3.

Maike, C.A., 2025, Areas of Landslides Calio Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Clio - l3.

Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Rolla NE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Rlla NE - l3.

Maike, C.A., 2025, Areas of Landslides Hansboro Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnbr - l3.
Maike, C.A., 2025, Areas of Landslides Hansboro NE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnbr NE - l3.
Maike, C.A., 2025, Areas of Landslides Rock Lake NW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. RckL NW - l3.
Maike, C.A., 2025, Areas of Landslides Rock Lake NE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. RckL NE - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Lake Upsilon Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LkUp - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Saint John Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. StJn - l3.
Maike, C.A. and Anderson, F. J., 2025, Areas of Landslides Maida Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mada - l3.
Maike, C.A., 2025, Areas of Landslides Hansboro SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnbr SE - l3.
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Maike, C.A., 2025, Areas of Landslides Rolla Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Rlla - l3.
Maike, C.A., 2025, Areas of Landslides Hansboro SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnbr SW - l3.
Maike, C.A., 2025, Areas of Landslides Rock Lake SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. RckL SE - l3.
Maike, C.A., 2025, Areas of Landslides Belcourt Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bcrt - l3.
Maike, C.A., 2025, Areas of Landslides Lake Upsilon SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LkUp SE - l3.
Maike, C.A., 2025, Areas of Landslides Lake Upsilon SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LkUp SW - l3.
Maike, C.A., 2025, Areas of Landslides Big Coulee Dam Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BgCD - l3.
Maike, C.A., 2025, Areas of Landslides Snyder Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. SnyL - l3.
Maike, C.A., 2025, Areas of Landslides Egeland Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Egld - l3.
Maike, C.A., 2025, Areas of Landslides Mylo NW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mylo NW - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Easby Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Esby - l3.
Maike, C.A., 2025, Areas of Landslides Rolette Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Rltt - l3.
Maike, C.A., 2025, Areas of Landslides Egeland SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Egld SE - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Billings Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BlgL - l3.
Maike, C.A., 2025, Areas of Landslides Egeland SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Egld SW - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Osnabrock SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Osnb SW - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Nekoma Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nkma - l3.
Maike, C.A., 2025, Areas of Landslides Nanson Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nnsn - l3.
Maike, C.A., 2025, Areas of Landslides Island Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. IldL - l3.
Maike, C.A., 2025, Areas of Landslides Mylo SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mylo SE - l3.
Maike, C.A. and Moxness, L. D., 2025, Areas of Landslides Rolette SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Rltt SW - l3.
Maike, C.A., 2025, Areas of Landslides Considine Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Cnsn - l3.

Maike, C.A., 2025, Areas of Landslides Carpenter Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. CrpL - l3.
Maike, C.A., 2025, Areas of Landslides Bisbee North Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bsbe N - l3.
Maike, C.A., 2025, Areas of Landslides Mylo Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mylo - l3.
Maike, C.A., 2025, Areas of Landslides Thorne Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Thrn - l3.
Maike, C.A. and Anderson, F. J., 2025, Areas of Landslides Waterloo Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. WloL - l3.
Maike, C.A., 2025, Areas of Landslides Bisbee South Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bsbe S - l3.
Maike, C.A., 2025, Areas of Landslides Sarles Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Srls - l3.
Maike, C.A., 2025, Areas of Landslides Sarles NE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Srls NE - l3.
Maike, C.A., 2025, Areas of Landslides Mount Carmel Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. MtCr - l3.
Maike, C.A., 2025, Areas of Landslides Hannah Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnnh - l3.
Maike, C.A., 2025, Areas of Landslides Wales Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Wals - l3.
Maike, C.A., 2025, Areas of Landslides Sarles SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Srls SE - l3.
Maike, C.A., 2025, Areas of Landslides Hannah SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnnh SW - l3.
Maike, C.A., 2025, Areas of Landslides Calvin Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Clvn - l3.
Maike, C.A., 2025, Areas of Landslides Hannah SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnnh SE - l3.
Maike, C.A., 2025, Areas of Landslides Alsen Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Alsn - l3.
Maike, C.A., 2025, Areas of Landslides Munich Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mnch - l3.
Maike, C.A., 2025, Areas of Landslides Loma Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Loma - l3.
Maike, C.A., 2025, Areas of Landslides Nekoma NW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nkma NW - l3.
Maike, C.A., 2025, Areas of Landslides Munich SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mnch SE - l3.
Maike, C.A., 2025, Areas of Landslides Hampden Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hmpn - l3.
Maike, C.A., 2025, Areas of Landslides Alsen SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Alsn SE - l3.
Maike, C.A., 2025, Areas of Landslides Munich SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mnch SW - l3.
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Nesheim, T.O., 2025, Examination of the Mississippian-Pennsylvanian Boundary within the Williston Basin of Western North Dakota: North Dakota Geological Survey, Geologic Investigations no. 285, 10 pp.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Upham SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Uphm SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Willow City SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. WlwC SW - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Bottineau SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Btnu SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Lords Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LrdL - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Dunseith Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Dnsh - l3.
York, B.C., Moxness, L.D., Anderson, F.J., and Maike, C.A. 2025, Areas of Landslides Harmon Quadrangle, ND Quadrangle:

North Dakota Geological Survey 24K Map Series No. Hrmn - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Keever Butte Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. KvrB - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Clear Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. ClrL - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Stony Slough Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. StnS - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Solberg Butte Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. SbgB - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides McKenzie NW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. McKn NW - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Sibley Butte Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. SblB - l3.
York, B.C., Anderson, F.J., Moxness, L.D., and Maike, C.A. 2025, Areas of Landslides Burnt Butte Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BrtB - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Menoken SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mnkn SW - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Driscoll Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Drsl - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Menoken Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mnkn - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Lake Geneva Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LkGn - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Braddock NW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Brdk NW - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Braddock NE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Brdk NE - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Braddock Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Brdk - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Dana Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Dana - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Souris Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Sors - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Carbury Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Crby - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Landa Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Lnda - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Roth Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Roth - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Metigoshe Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. MtgL - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Boundary Lake Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BndL - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Landa SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Lnda SW - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Landa SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Lnda SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Souris SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Sors SW - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Souris SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Sors SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Bottineau Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Btnu - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Willow City Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. WlwC - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Newburg Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nwbg - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Deep Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Deep - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Kramer Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Krmr - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Upham NE Quadrangle, ND Quadrangle: North Dakota Geological

Survey 24K Map Series No. Uphm NE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Gardena Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Grdn - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Omemee Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Omme - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Bismarck Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bsmk - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides McKenzie Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. McKn - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Sterling Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Stlg - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Mandan Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mndn - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Moffit Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mfft - l3.
York, B.C. and Anderson, F.J., 2025, Areas of Landslides Moffit SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Mfft SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Lake McArthur Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LkJs - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides International Pce Gdn Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. InPC - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Overly Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Ovrl - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Fonda Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Fnda - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Newburg SW Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nwbg SW - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Newburg SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Nwbg SE - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Barton Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Brtn - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Upham Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Uphm - l3.
York, B.C. and Maike, C.A., 2025, Areas of Landslides Overly SE Quadrangle, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Ovrl SE - l3.

## Presentations This Quarter (April 1 to June 30, 2025)

J. Person, Paleontology exhibits, lab, and collections tour, U of Mary Evolution class tour, April 1.
T. Starns & S. Chittick, Science and engineering judge, ND Science and Engineering Fair, UND, April 1.
J. Person, Paleontology laboratory and collections tour, VIP, Heritage Center, April 1.
J. Person, B. Barnes, & C. Lash, Earth Day, Simle & Wachter Jr. High 6th graders, Bismarck Civic Center, April 29.
C. Boyd, & C. Lash, Earth Day (evening program), General Public, Bismarck Civic Center, April 29.
J. Person, Paleontology lab and collections tour, Center-Stanton 5th graders, Heritage Center, May 2.
J. Person, Geology and Paleontology of ND, Lignite Energy Council Teacher Seminar, Heritage Center, June 10.
J. Person, Paleo lab & collections tour, Lignite Energy Council Teacher Seminar, Heritage Center, June 10.
J. Person, Paleontology lab & collections tour, Legacy HS Special Needs class, Heritage Center, June 11.
J. Person, Geology and Paleontology of ND, High School Summer Biology students, Heritage Center, June 16.
L. Moxness, Critical Minerals in ND lignite, North American Royalty Owners Mtg, Bismarck Hotel, June 18.
L. Moxness, NDGS Field Activities (REE & Proppant), Oil & Gas Division Field Staff mtg, Teams, June 19.

**Notice of Intent to Amend Administrative Rules**

**Case No. 32201, Order No. 34956:** Regarding approval by the Commission to authorize the Department of Mineral Resources to proceed with the administrative hearing process and publish for hearing and comment the draft rules amendments to the "General Rules and Regulations for the Conservation of Crude Oil and Natural Gas" and "Geological Storage of Carbon Dioxide" codified as Articles 43-02-04 and 43-05-01 of the North Dakota Administrative Code.

Attachment 9A

# NORTH DAKOTA INDUSTRIAL COMMISSION
# DEPARTMENT OF MINERAL RESOURCES
# OIL AND GAS DIVISION

## SUMMARY OF PROPOSED 2026 RULES

| NDAC CITE | RULE | Page(s) | PROPOSED CHANGE |
|---|---|---|---|
| **43-02-03 GENERAL RULES** | | | |
| 43-02-03-01 | Definitions | 3 | Clarify and modernize definition for "Log or well log" |
| 43-02-03-14.2 | Oil and gas metering systems | 9 | Require email submission of meter test reports |
| | | 9 | Allows Director to verbally grant variance to section of rules |
| | | 9 | Clarify meter owner must file variance request |
| 43-02-03-16 | Application for permit to drill and recomplete | 10 | Clarify plat is format for pad layout |
| | | 10 | Require submission of production facilities layout plat |
| 43-02-03-18 | Drilling units-well locations | 12 | Allow for larger drilling units for deeper horizontal wells |
| 43-02-03-19 | Site construction | 13 | Acknowledge NorthSTAR form names "well or facility sundry notice" |
| | | 13 | Require sites to be stable |
| | | 13 | Require immediate reporting of unstable sites |
| | | 13 | Acknowledge NorthSTAR form names "well or facility sundry notice" |
| 43-02-03-21 | Casing, tubing, and cementing requirements | 14 | Require cementing of all strings while drilling rig is on well but allows Director discretion |
| 43-02-03-22 | Defective casing or cementing | 15 | Require verbal notification to the Director |
| | | 15 | Acknowledge NorthSTAR form name "well sundry notice" |
| | | 15 | Require filing of well sundry notice if required by Director |
| | | 15 | Clarify tests include well logs |
| | | 15 | Clarify defects include casing and cementing |
| | | 15 | Clarify Director can require well logs |
| | | 15 | Emphasize follow-up report required |
| 43-02-03-27.1 | Hydraulic fracture stimulation | 18 | Require notice if unexpected pressure loss or event occurs during fracture stimulation |
| 43-02-03-28 | Safety regulation | 18 | Director can shut in well if serious threat to the environment |
| 43-02-03-29 | Well and lease equipment and gas gathering pipelines | 19, 20 | Require prior notification of gas pipeline installation; include GIS shape file and design drawings including associated above ground equipment |
| | | 20 | Require notice to Director if other pipeline hit during construction |
| | | 20, 21 | Require submission of any shape files created for gas pipelines |
| | | 19, 20, 21, 22 | Add section titles |
| 43-02-03-29.1 | Crude oil and produced water underground gathering pipelines | 23 | Require statement on presence of shading bucket or other means of removing rocks from backfill material |
| | | 24 | Require notice to Director if abandoned pipeline hit during construction |
| | | 25 | Director may require casing of pipelines borings for good cause |
| 43-02-03-31 | Well log, completion, and workover reports | 33 | Acknowledge NorthSTAR form name "well plugging report" |
| | | 33 | Acknowledge NorthSTAR form name "well completion report" |
| | | 33 | Allow transport of crude oil from well site before completion report filed without verbal approval from Director |
| | | 33 | Acknowledge NorthSTAR form name "well sundry notice" |
| | | 33 | Require reporting of remedial cementing |
| | | 33 | Acknowledge NorthSTAR form name "well sundry notice" |
| | | 34 | Remove requirement of reporting pre and post daily production after remedial work |
| | | 34 | Require reporting of cement volume used (if applicable) |
| | | 34 | Require reporting of any other information required by Director |
| | | 34 | Acknowledge NorthSTAR form name "well sundry notice" |
| | | 34 | Remove requirement of reporting pre and post daily production after pump change |
| 43-02-03-44 | Metered casinghead gas | 34, 35 | Combine 43-02-03-44 and 43-02-03-45 |
| | | 34, 35 | Move requirement to burn gas from 43-02-03-45 to 43-02-03-44 |
| | | 34 | Acknowledge NorthSTAR form name "well sundry notice" |
| | | 34 | Acknowledge NorthSTAR form name "gas report" |
| 43-02-03-45 | Vented casinghead gas | 35 | Repeal and combine with 43-02-03-44 |
| 43-02-03-47 | Produced water | 35 | Acknowledge NorthSTAR form name "oil report" |
| | | 35 | Clarify report due be 5 p.m. on date due |
| 43-02-03-48.1 | Central production facility-commingling of production | 36 | Remove requirement of hearing for diverse ownership commingling; allow Director approval |
| | | 36 | Hearing can still be required |
| | | 36 | Clarify information required for meters installed; emphasize testing frequency for common ownership facilities |
| | | 36 | Require reporting of provings and calibrations within 30 days of test |
| | | 36 | Clarify common ownership facilities require 24-hour test |
| | | 37 | Clarify applies to allocation meters; clarify applies to oil meters; emphasize testing frequency for diverse ownership facilities |
| | | 37 | Clarify diverse ownership facilities require 72-hour test |
| | | 37 | Clarify information required for meters installed at commingled produced water facilities; require installation and calibration of meters in accordance with API or manufacturer |
| | | 37, 38 | Adds testing duration for common and diverse ownership commingled produced water facilities |
| | | 38 | Acknowledge NorthSTAR form name "facility sundry notice" |
| | | 38 | Allow Director to revoke commingling authorization |
| 43-02-03-49 | Oil production equipment, dikes, and seals | 38 | Oil vessels diking added |
| | | 38 | Clarify all dikes that are required must be erected and maintained unless waived by Director |
| | | 38 | Add oil vessels to dike volume calculation |
| 43-02-03-52 | Report of oil production | 39 | Clarify report due be 5 p.m. on date due |
| | | 39 | Acknowledge NorthSTAR form name "oil report" |
| | | 39 | Remove signature requirement |
| 43-02-03-52.1 | Report of gas produced in association with oil | 39 | Clarify report due be 5 p.m. on date due |
| | | 39 | Acknowledge NorthSTAR form name "gas report" |
| | | 39 | Remove signature requirement |
| 43-02-03-53.3 | Saltwater handling facility construction and operation requirements | 41 | Acknowledge NorthSTAR form name "skim oil report" |
| 43-02-03-59 | Production from gas wells to be measured and reported | 42 | Acknowledge NorthSTAR form name "gas report" |
| | | 42 | Clarify report due be 5 p.m. on date due |
| 43-02-03-80 | Reports of purchasers and transporters of crude oil | 42 | Clarify report due be 5 p.m. on date due |
| | | 42 | Acknowledge NorthSTAR form name "oil purchasers monthly report" |
| | | 42 | Acknowledge NorthSTAR form name "oil transporters monthly report" |
| | | 42 | Acknowledge NorthSTAR form name "oil transporters and storers monthly report" |
| | | 42 | Acknowledge NorthSTAR form name "authorization to purchase and transport oil" |
| 43-02-03-80.1 | Gas purchaser report | 43 | New section: Require gas purchaser to file gas purchasers report (form 12a) of all gas purchased from each well or central production facility by 5 p.m. on the fifth day of the second month succeeding the month in which gas is purchased; sets measurement parameters; requires measurement equipment and volume determinations according to API, AGA, or meter manufacturers recommendations |
| 43-02-03-81 | Authorization to transport oil from a well, treating plant, central production facility, or saltwater handling facility | 43 | Clarifies crude oil cannot be transported from a well or central production facility prior to approval of the authorization to purchase and transport oil and grants director authority to verbally approve transport |
| | | 43 | Acknowledge NorthSTAR form name "authorization to purchase and transport oil" |
| | | 43 | Reordering of paragraphs |
| 43-02-03-83 | Gas processing plant reports | 43 | Removes reporting of gas from each well or lease since this is now reported by gas purchaser and adds requirement of reporting gas liquids |
| | | 43 | Add full form name "gas processing plant report (form 12)" |
| | | 43 | Acknowledge NorthSTAR form name "oil report" |
| | | 43 | Clarify report due be 5 p.m. on date due |
| | | 43 | Clarify form 12 due be 5 p.m. on date due |
| 43-02-03-88.1 | Special procedures for increased density wells, pooling, flaring exemption, underground injection, commingling, converting mineral wells to freshwater wells, and unopposed recovery of a risk penalty applications | 44 | Removes central tank battery or central production facility cases since director can approve |
| | | 44 | Adds unopposed risk penalty cases |
| | | | |
| 43-02-03-88.2 | Hearing participants by telecommunication | 45 | Change "telephone" to "telecommunication" |
| | | 45 | Allows telecommunication by applicant even if written request not made |
| | | 45 | Allows telecommunication by interested party even if written request and notice to applicant not made |
| | | 45 | Hearing examiner may disallow telecommunication participation and schedule in-person hearing; remove need to notify if telecommunication is granted or denied |
| | | 45 | Removed requirement for attorney or representative to call party |
| | | 45 | Allow hearing examiner discretion to waive requirement for attorney or representative for applicant to be present at hearing |
| | | 45 | Clarify role of hearing examiner and Commission |
| | | 45 | Change "speaker telephone" to "telecommunication equipment" |
| | | 45 | Removed requirement for party to pay for cost of telecommunication |

27 Rules

| | | | |
|---|---|---|---|
| **43-05-01 GEOLOGIC STORAGE OF CARBON DIOXIDE** | | | |
| 43-05-01-01 | Definitions | 47 | Add definition of "carbon dioxide storage complex" |
| 43-05-01-08 | Storage facility permit hearing | 51 | Change rule to match statute |
| 43-05-01-09 | Well permit application requirements | 53 | Clarify application filed with director |
| | | 53 | Removed form name for permit to drill since it does not exist |
| | | 54 | Remove requirement to file permit to inject within 30 days of well completion |
| | | 54 | Clarify permit to inject is filed on well sundry notice |
| 43-05-01-11.4 | Testing and monitoring requirements | 56, 57 | Allow Commission to require passive seismicity monitoring |
| 43-05-01-18.1 | Abandonment of wells | 58 | Refers to section 43-02-03-34.1 for reclamation requirements |
| 43-05-01-19 | Postinjection site care and facility closure | 59 | Require flowlines to be properly abandoned |
| | | 59 | Removes reference to NDCC 38-08-04.12, refers to section 43-02-03-34.1 for reclamation requirements |

6 rules

**43-02-03-01. Definitions.**

The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-08 except:

1. "Adjusted allowable" means the allowable production a proration unit receives after all adjustments are applied.

2. "Allocated pool" is one in which the total oil or natural gas production is restricted and allocated to various proration units therein in accordance with proration schedules.

3. "Allowable production" means that number of barrels of oil or cubic feet of natural gas authorized to be produced from the respective proration units in an allocated pool.

4. "Barrel" means forty-two United States gallons [158.99 liters] measured at sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter].

5. "Barrel of oil" means forty-two United States gallons [158.99 liters] of oil after deductions for the full amount of basic sediment, water, and other impurities present, ascertained by centrifugal or other recognized and customary test.

6. "Bottom hole or subsurface pressure" means the pressure in pounds per square inch gauge under conditions existing at or near the producing horizon.

7. "Bradenhead gas well" means any well capable of producing gas through wellhead connections from a gas reservoir which has been successfully cased off from an underlying oil or gas reservoir.

8. "Casinghead gas" means any gas or vapor, or both gas and vapor, indigenous to and produced from a pool classified as an oil pool by the commission.

9. "Certified or registered mail" means any form of service by the United States postal service, federal express, Pitney Bowes, and any other commercial, nationwide delivery service that provides the mailer with a document showing the date of delivery or refusal to accept delivery.

10. "Commercial injection well" means one that only receives fluids produced from wells operated by a person other than the principal on the bond.

11. "Common purchaser for natural gas" means any person now or hereafter engaged in purchasing, from one or more producers, gas produced from gas wells within each common source of supply from which it purchases, for processing or resale.

12. "Common purchaser for oil" means every person now engaged or hereafter engaging in the business of purchasing oil in this state.

13. "Common source of supply" is synonymous with pool and is a common accumulation of oil or gas, or both, as defined by commission orders.

14. "Completion" means an oil well shall be considered completed when the first oil is

produced through wellhead equipment into tanks from the ultimate producing interval after casing has been run. A gas well shall be considered complete when the well is capable of producing gas through wellhead equipment from the ultimate producing zone after casing has been run. A dry hole shall be considered complete when all provisions of plugging are complied with as set out in this chapter.

15. "Condensate" means the liquid hydrocarbons recovered at the surface that result from condensation due to reduced pressure or temperature of petroleum hydrocarbons existing in a gaseous phase in the reservoir.

16. "Cubic foot of gas" means that volume of gas contained in one cubic foot [28.32 liters] of space and computed at a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius].

17. "Director" means the director of oil and gas of the industrial commission, the assistant director of oil and gas of the industrial commission, and their designated representatives.

18. "Enhanced recovery" means the increased recovery from a pool achieved by artificial means or by the application of energy extrinsic to the pool, which artificial means or application includes pressuring, cycling, pressure maintenance, or injection to the pool of a substance or form of energy but does not include the injection in a well of a substance or form of energy for the sole purpose of:

    a. Aiding in the lifting of fluids in the well; or

    b. Stimulation of the reservoir at or near the well by mechanical, chemical, thermal, or explosive means.

19. "Exception well location" means a location which does not conform to the general spacing requirements established by the rules or orders of the commission but which has been specifically approved by the commission.

20. "Flow line" means a pipe or conduit of pipes used for the transportation, gathering, or conduct of a mineral from a wellhead to a separator, treater, dehydrator, tank battery, or surface reservoir.

21. "Gas lift" means any method of lifting liquid to the surface by injecting gas into a well from which oil production is obtained.

22. "Gas-oil ratio" means the ratio of the gas produced in cubic feet to a barrel of oil concurrently produced during any stated period.

23. "Gas-oil ratio adjustment" means the reduction in allowable of a high gas-oil ratio proration unit to conform with the production permitted by the limiting gas-oil ratio for the particular pool during a particular proration period.

24. "Gas transportation facility" means a pipeline in operation serving one or more gas wells for the transportation of natural gas, or some other device or equipment in like operation whereby natural gas produced from gas wells connected therewith can be transported.

25. "Gas well" means a well producing gas or natural gas from a common source of gas supply as determined by the commission.

26. "High gas-oil ratio proration unit" means a proration unit with a producing oil well with a gas-oil ratio in excess of the limiting gas-oil ratio for the pool.

27. "Inactive pipeline" means any underground gathering pipeline system or portion thereof that has not transported fluid for more than one year.

28. "Injection or input well" means any well used for the injection of air, gas, water, or other fluids into any underground stratum.

29. "Injection pipeline" means a pipe or conduit of pipes used for the transportation of fluids, typically via an injection pump, from a storage tank or tank battery directly to an injection well.

30. "Limiting gas-oil ratio" means the gas-oil ratio assigned by the commission to a particular oil pool to limit the volumes of casinghead gas which may be produced from the various oil-producing units within that particular pool.

31. "Log or well log" means a systematic, detailed, and ~~correct~~ accurate record of one or more properties as a function of depth in an open or cased well bore. This includes but is not limited to geophysical, petrophysical, image, or engineered/composite logs, or other well bore measurements acquired while drilling or by wireline operations recorded in paper or digital format~~formations encountered in the drilling of a well, including commercial electric logs, radioactive logs, dip meter logs, and other related logs~~.

32. "Multiple completion" means the completion of any well so as to permit the production from more than one common source of supply.

33. "Natural gas or gas" means and includes all natural gas and all other fluid hydrocarbons not herein defined as oil.

34. "Occupied dwelling" or "permanently occupied dwelling" means a residence which is lived in by a person at least six months throughout a calendar year.

35. "Official gas-oil ratio test" means the periodic gas-oil ratio test made by order of the commission and by such method and means and in such manner as prescribed by the commission.

36. "Offset" means a well drilled on a forty-acre [16.19-hectare] tract cornering or contiguous to a forty-acre [16.19-hectare] tract having an existing oil well, or a well drilled on a one hundred sixty-acre [64.75-hectare] tract cornering or contiguous to a one hundred sixty-acre [64.75-hectare] tract having an existing gas well; provided, however, that for wells subject to a fieldwide spacing order, "offset" means any wells located on spacing units cornering or contiguous to the spacing unit or well which is the subject of an inquiry or a hearing.

37. "Oil well" means any well capable of producing oil or oil and casinghead gas from a common source of supply as determined by the commission.

38. "Operator" is the principal on the bond covering a well and such person shall be responsible for drilling, completion, and operation of the well, including plugging and reclamation of the well site.

39. "Overage or overproduction" means the amount of oil or the amount of natural gas produced during a proration period in excess of the amount authorized on the proration schedule.

40. "Potential" means the properly determined capacity of a well to produce oil, or gas, or both, under conditions prescribed by the commission.

41. "Pressure maintenance" means the injection of gas or other fluid into a reservoir, either to increase or maintain the existing pressure in such reservoir or to retard the natural decline in the reservoir pressure.

42. "Proration day" consists of twenty-four consecutive hours which shall begin at seven a.m. and end at seven a.m. on the following day.

43. "Proration month" means the calendar month which shall begin at seven a.m. on the first day of such month and end at seven a.m. on the first day of the next succeeding month.

44. "Proration schedule" means the periodic order of the commission authorizing the production, purchase, and transportation of oil or of natural gas from the various units of oil or of natural gas proration in allocated pools.

45. "Proration unit for gas" consists of such geographical area as may be prescribed by special pool rules issued by the commission.

46. "Recomplete" means the subsequent completion of a well in a different pool.

47. "Reservoir" means pool or common source of supply.

48. "Saltwater handling facility" means and includes any container and site used for the handling, storage, disposal of substances obtained, or used, in connection with oil and gas exploration, development, and production and can be a stand-alone site or an appurtenance to a well or treating plant.

49. "Shut-in pressure" means the pressure noted at the wellhead when the well is completely shut in, not to be confused with bottom hole pressure.

50. "Spacing unit" is the area in each pool which is assigned to a well for drilling, producing, and proration purposes in accordance with the commission's rules or orders.

51. "Stratigraphic test well" means any well or hole, except a seismograph shot hole, drilled for the purpose of gathering information with no intent to produce oil or gas from or inject into such well.

52. "Subsurface observation well" means a well used to observe subsurface phenomena, including the presence of carbon dioxide, pressure fluctuations, fluid levels and flow, temperature, and in situ water chemistry.

53. "Tank bottoms" means that accumulation of hydrocarbon material and other substances which settle naturally below crude oil in tanks and receptacles that are used in handling and storing of crude oil, and which accumulation contains basic sediment and water in an amount rendering it unsalable to an ordinary crude oil purchaser; provided, that with respect to lease production and for lease storage tanks, a tank bottom shall be limited to that volume of the tank in which it is contained that lies below the bottom of the pipeline outlet thereto.

54. "Treating plant" means any plant permanently constructed or portable used for the purpose of wholly or partially reclaiming, treating, processing, or recycling tank bottoms, waste oils, drilling mud, waste from drilling operations, produced water, and other wastes related to crude oil and natural gas exploration and production. This is not to be construed as to include saltwater handling and disposal operations which typically recover skim oil and solids from their operations, treating mud or cuttings at a well site during drilling operations, treating flowback water during completion operations at a well site, or treating tank bottoms at the well site or facility where they originated.

**History:** Amended effective January 1, 1983; May 1, 1992; July 1, 1996; December 1, 1996; September 1, 2000; July 1, 2002; January 1, 2008; April 1, 2014; October 1, 2016; April 1, 2018; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-14.2. Oil and gas metering systems.**

1. **Application of section.** This section is applicable to all allocation and custody transfer metering stations measuring production from oil and gas wells within the state of North Dakota, including private, state, and federal wells. If these rules differ from federal requirements on measurement of production from federal oil and gas wells, the federal rules take precedence.

2. **Definitions.** As used in this section:

   a. "Allocation meter" means a meter used by the producer to determine the volume from an individual well before it is commingled with production from one or more other wells prior to the custody transfer point.

   b. "Calibration test" means the process or procedure of adjusting an instrument, such as a gas meter, so its indication or registration is in satisfactorily close agreement with a reference standard.

   c. "Custody transfer meter" means a meter used to transfer oil or gas from the producer to transporter or purchaser.

   d. "Gas gathering meter" means a meter used in the custody transfer of gas into a gathering system.

   e. "Meter factor" means a number obtained by dividing the net volume of fluid (liquid or gaseous) passed through the meter during proving by the net volume registered by the meter.

f. "Metering proving" means the procedure required to determine the relationship between the true volume of a fluid (liquid or gaseous) measured by a meter and the volume indicated by the meter.

3. **Inventory filing requirements.** The owner of meter proving equipment shall file with the director an inventory of all conventional pipe provers or master-meter provers used to test the accuracy of oil meters. Inventories must be updated on an annual basis, and filed with the director on or before the first day of each year, or they may be updated as frequently as monthly, at the discretion of the operator. Inventories must include the following:

a. Meter information:

(1) Prover:

(a) Type.

(b) Serial number.

(c) Prover volume.

(d) Most recent water draw certificate.

(2) Master meter:

(a) Make and model.

(b) Size.

(c) Serial number.

(d) Master meter factor.

(e) Most recent meter proving certificate.

(3) An inventory of all meters used for custody transfer and allocation of production from oil and gas wells, or both must be filed with the director upon request.

4. **Installation and removal of meters.** The director must be notified of all custody transfer meters placed in service. The owner of the custody transfer equipment shall notify the director of the date a meter is placed in service, the make and model of the meter, and the meter or station number. The director must also be notified of all metering installations removed from service. The notice must include the date the meter is removed from service, the serial number, and the meter or station number. The required notices must be filed with the director within thirty days of the installation or removal of a meter.

All allocation meters must be approved prior to installation and use. The application for approval must be on a facility sundry notice and shall include the make and model

number of the meter, the meter or station number, the serial number, the well name, its location, and the date the meter will be placed in service.

Meter installations for measuring production from oil or gas wells, or both, must be constructed to American petroleum institute or American gas association standards or to meter manufacturer's recommended installation. Meter installations constructed in accordance with American petroleum institute or American gas association standards in effect at the time of installation shall not automatically be required to retrofit if standards are revised. The director will review any revised standards, and when deemed necessary will amend the requirements accordingly.

5. **Registration of persons proving or testing meters.** All persons engaged in meter proving or testing of oil and gas meters must be registered with the director. Those persons involved in oil meter testing, by flowing fluid through the meter into a test tank and then gauging the tank, are exempted from the registration process. However, such persons must notify the director prior to commencement of the test to allow a representative of the director to witness the testing process. A report of the results of such test shall be filed with the director within thirty days after the test is completed. Registration must include the following:

   a. Name and address of company.

   b. Name and address of measurement personnel.

   c. Qualifications, listing experience or specific training.

   Any meter tests performed by a person not registered with the director will not be accepted as a valid test.

6. **Calibration requirements.** Oil and gas metering equipment must be proved or tested to American petroleum institute or American gas association standards or to the meter manufacturer's recommended procedure to establish a meter factor or to ensure measurement accuracy. The owner of a custody transfer meter or allocation meter shall notify the director at least ten days prior to the testing of any meter.

   a. Oil allocation meter factors shall be maintained within two percent of original meter factor. If the factor change between provings or tests is greater than two percent, meter use must be discontinued until successfully reproven after being repaired or replaced.

   b. Oil custody transfer meter factors must be maintained within one-quarter of one percent of the previous meter factor. If the factor change between provings or tests is greater than one-quarter of one percent, meter use must be discontinued until successfully reproven after being repaired or replaced.

   c. Copies of all oil allocation meter test procedures are to be filed with and reviewed by the director to ensure measurement accuracy.

   d. All gas meters must be tested with a minimum of a three-point test for static and differential pressure elements and a two-point test for temperature elements. The test reports must include an as-found and as-left test and a

detailed report of changes.

e. Test reports must include the following:

(1) Company name of test contractor.

(2) Pipeline company name.

(3) Meter owner name.

(4) Producer name.

(5) Well or central tank battery (CTB) name.

(6) Well file number or CTB number.

(7) Test personnel's name.

(8) Station or meter number.

f. Unless required more often by the director, minimum frequency of meter proving or calibration tests are as follows:

(1) Oil meters used for custody transfer shall be proved monthly for all measured volumes which exceed two thousand barrels per month. For volumes two thousand barrels or less per month, meters shall be proved at each two thousand barrel interval or more frequently at the discretion of the operator.

(2) Quarterly for oil meters used for allocation of production in a diverse ownership central production facility. Semiannually for oil meters used for allocation of production in a common ownership central production facility.

(3) Semiannually for gas meters used for allocation of production in a diverse ownership central production facility. Annually for gas meters used for allocation of production in a common ownership central production facility.

(4) Semiannually for gas meters in gas gathering systems.

(5) For meters measuring more than one hundred thousand cubic feet [2831.68 cubic meters] per day on a monthly basis, orifice plates shall be inspected semiannually, and meter tubes shall be inspected at least every five years to ensure continued conformance with the American gas association meter tube specifications.

(6) For meters measuring one hundred thousand cubic feet [2831.68 cubic meters] per day or less on a monthly basis, orifice plates shall be inspected annually.

g. Accuracy of all equipment used to test oil or gas meters must be traceable to the standards of the national institute of standards and technology. The equipment must be certified as accurate either by the manufacturer or an independent testing facility. The certificates of accuracy for all equipment used to test gas meters must be made available upon request. The owner of a conventional pipe prover or master meter prover shall notify the director at least ten days prior to the testing of any prover. Certification of the equipment must be updated as follows:

(1) Annually for all equipment used to test the pressure and differential pressure elements.

(2) Annually for all equipment used to determine temperature.

(3) Biennially for all conventional pipe provers.

(4) Annually for all master meters.

(5) Five years for equipment used in orifice tube inspection.

h. All meter test reports, including failed meter test reports, must be filed within thirty days of completion of proving or calibration tests unless otherwise approved, and must be submitted by email in a portable document format (.pdf) or another format approved by the director. Test reports are to be filed on, but not limited to, all meters used for allocation measurement of oil or gas, all meters used in custody transfer, conventional pipe provers, and master meter provers.

7. **Variances.** Variances from all or part of this section may be granted by the director provided the variance does not affect measurement accuracy. ~~All R~~requests for variances may be granted verbally by the director but must be filed by the meter owner on a facility sundry notice.

A register of variances requested and approved must be maintained by the director.

**History:** Effective May 1, 1994; amended effective July 1, 1996; September 1, 2000; July 1, 2002; April 1, 2018; April 1, 2020; April 1, 2022; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-16. Application for permit to drill and recomplete.**

Before any person shall begin any well-site preparation for the drilling of any well other than surveying and staking, such person shall obtain approval from the director. An application for permit to drill must be filed with the director, together with a permit fee of one hundred dollars. Site construction, or appurtenance or road access thereto, may not commence until such application is approved and a permit to drill is issued by the director. Verbal approval may be given for site preparation by the director in extenuating circumstances to include contractual obligations, an expiring lease, or an expiring right- of-way. The application must be accompanied by the bond pursuant to section 43-02-03-15 or the applicant must have previously filed such

bond with the director, otherwise the application is incomplete. An incomplete application received by the director has no standing and will not be deemed filed until it is completed.

The application for permit to drill shall be accompanied by an accurate plat certified by a registered surveyor showing the location of the proposed well with reference to true north and the nearest lines of a governmental section, the latitude and longitude of the proposed well location to the nearest tenth of a second, the ground elevation, and the proposed road access to the nearest existing public road. Information to be included in such application shall be the proposed depth to which the well will be drilled, estimated depth to the top of important markers, estimated depth to the top of objective horizons, the proposed mud program, the proposed casing program, including size and weight thereof, the depth at which each casing string is to be set, the proposed amount of cement to be used, including the estimated top of cement, the proposed pad layout plat, including cut and fill diagrams, and the proposed production facilities layout plat. ~~and the proposed amount of cement to be used, including the estimated top of cement~~.

For wells permitted on new pads built after July 31, 2013, permit conditions imposed by the director may include, upon request of the owner of a permanently occupied dwelling within one thousand feet of the proposed well, requiring the location of all flares, tanks, and treaters utilized in connection with the permitted well be located at a greater distance from the occupied dwelling than the well head, if the location can be reasonably accommodated within the proposed pad location. If the facilities are proposed to be located farther from the dwelling than the well bore, the director can issue the permit without comment from the dwelling owner. The applicant shall give any such owners written notice of the proposed facilities personally or by certified mail, return receipt requested, and addressed to their last-known address listed with the county property tax department. The director must receive written comments from such owner within five business days of the owner receiving said notice. An application for permit must include an affidavit from the applicant identifying each owner's name and address, and the date written notice was given to each owner. The owner's notice must include:

1. A copy of North Dakota Century Code section 38-08-05.

2. The name, telephone number, and if available the electronic mail address of the applicant's local representative.

3. A sketch of the area indicating the location of the owner's dwelling, the proposed well, and location of the proposed flare, tanks, and treaters.

4. A statement indicating that any such owner objecting to the location of the flare, tanks, or treaters, must notify the director within five business days of receiving the notice.

Prior to the commencement of recompletion operations or drilling horizontally in the existing pool, an application for permit must be approved by the director. Such application shall be filed to reenter a well by drilling horizontally, deepening, or plugging back to any source of supply other than the producing horizon in an existing well. Such notice shall include the name and file number and exact location of the well, the approximate date operations will begin, the proposed procedure, the estimated completed total depth, the anticipated hydrogen sulfide content in produced gas from the proposed source of supply, the weight and grade of all casing currently installed in the well unless waived by the director, the casing program to be followed, and the original total depth with a permit fee of fifty dollars. The director may deny any application if it is determined, in accordance with the latest version of ANSI/NACE MR0175/ISO 15156, that the

casing currently installed in the well would be subject to sulfide stress cracking.

The applicant shall provide all information, in addition to that specifically required by this section, if requested by the director. The director may impose such terms and conditions on the permits issued under this section as the director deems necessary.

The director shall deny an application for a permit under this section if the proposal would cause, or tend to cause, waste or violate correlative rights. The director of oil and gas shall state in writing to the applicant the reason for the denial of the permit. The applicant may appeal the decision of the director to the commission.

A permit to drill automatically expires one year after the date it was issued, unless the well is drilling or has been drilled below surface casing. A permit to recomplete or to drill horizontally automatically expires one year after the date it was issued, unless such project has commenced. The director may extend a permit to drill and a permit to recomplete or drill horizontally for up to one year upon request.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; May 1, 1994; September 1, 2000; July 1, 2002; April 1, 2010; April 1, 2012; April 1, 2014; October 1, 2016; April 1, 2020; April 1, 2024.

**General Authority:** NDCC 38-08-05
**Law Implemented:** NDCC 38-08-05

**43-02-03-18. Drilling units - Well locations.**

In the absence of an order by the commission setting spacing units for a pool:

1. a. Vertical or directional oil wells projected to a depth not deeper than the Mission Canyon formation must be drilled upon a governmental quarter-quarter section or equivalent lot, located not less than five hundred feet [152.4 meters] to the boundary of such governmental quarter-quarter section or equivalent lot. No more than one well shall be drilled to the same pool on any such governmental quarter-quarter section or equivalent lot, except by order of the commission, nor shall any well be drilled on any such governmental quarter-quarter section or equivalent lot containing less than thirty-six acres [14.57 hectares] except by order of the commission.

   b. Vertical or directional oil wells projected to a depth deeper than the Mission Canyon formation must be drilled on a governmental quarter section or equivalent lots, located not less than six hundred sixty feet [201.17 meters] to the boundary of such governmental quarter section or equivalent lots. No more than one well shall be drilled to the same pool on any such governmental quarter section or equivalent lots, except by order of the commission, nor shall any well be drilled on any such governmental quarter section or equivalent lots containing less than one hundred forty-five acres [58.68 hectares] except by order of the commission.

2. a. Horizontal wells with a horizontal displacement of the well bore drilled at an angle of at least eighty degrees within the productive formation of at least five hundred feet [152.4 meters], projected to a depth not deeper than the Mission Canyon formation, must be drilled upon a drilling unit described as a governmental section

or described as two adjacent governmental quarter sections within the same section or equivalent lots, located not less than five hundred feet [152.4 meters] to the outside boundary of such tract. The horizontal well proposed to be drilled must, in the director's opinion, justify the creation of such drilling unit. No more than one well may be drilled to the same pool on any such tract, except by order of the commission.

b. Horizontal wells with a horizontal displacement of the well bore drilled at an angle of at least eighty degrees within the productive formation of at least five hundred feet [152.4 meters], projected to a depth deeper than the Mission Canyon formation, must be drilled upon a drilling unit described as a governmental section or adjacent governmental sections, located not less than five hundred feet [152.4 meters] to the outside boundary of such tract. The horizontal well proposed to be drilled must, in the director's opinion, justify the creation of such drilling unit. No more than one well may be drilled to the same pool on any such tract, except by order of the commission.

3. a. Gas wells projected to a depth not deeper than the Mission Canyon formation shall be drilled upon a governmental quarter section or equivalent lots, located not less than five hundred feet [152.4 meters] to the boundary of such governmental quarter section or equivalent lots. No more than one well shall be drilled to the same pool on any such governmental quarter section or equivalent lots, except by order of the commission, nor shall any well be drilled on any such governmental quarter section or equivalent lot containing less than one hundred forty-five acres [58.68 hectares] except by order of the commission.

b. Gas wells projected to a depth deeper than the Mission Canyon formation shall be drilled upon a governmental quarter section or equivalent lots, located not less than six hundred sixty feet [201.17 meters] to the boundary of such governmental quarter section or equivalent lots. No more than one well shall be drilled to the same pool on any such governmental quarter section or equivalent lots, except by order of the commission, nor shall any well be drilled on any such governmental quarter section or equivalent lot containing less than one hundred forty-five acres [58.68 hectares] except by order of the commission.

4. Within thirty days, or a reasonable time thereafter, following the discovery of oil or gas in a pool not then covered by an order of the commission, a spacing hearing shall be docketed. Following such hearing the commission shall issue an order prescribing a temporary spacing pattern for the development of the pool. This order shall continue in force for a period of not more than three years at the expiration of which time a hearing shall be held at which the commission may require the presentation of such evidence as will enable the commission to determine the proper spacing for the pool.

During the interim period between the discovery and the issuance of the temporary order, no permits shall be issued for the drilling of an offset well to the discovery well, unless approved by the director. Approval shall be consistent with anticipated spacing for the orderly development of the pool.

Any well drilled within one mile [1.61 kilometers] of an established field shall conform to the spacing requirements in that field except when it is apparent that the well will not produce from the same common source of supply. In order to assure uniform and orderly development, any well drilled within one mile [1.61 kilometers] of an

established field boundary shall conform to the spacing and special field rules for the field, and for the purposes of spacing and pooling, the field boundary shall be extended to include the spacing unit for such well and any intervening lands. The foregoing shall not be applicable if it is apparent that the well will not produce from the same common source of supply as wells within the field.

5. If the director denies an application for permit, the director shall advise the applicant immediately of the reasons for denial. The decision of the director may be appealed to the commission.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; May 1, 1994; July 1, 1996; July 1, 2002; January 1, 2006; April 1, 2010; April 1, 2012; _____.

**General Authority:** NDCC 38-08-04, 38-08-07
**Law Implemented:** NDCC 38-08-04, 38-08-07

**43-02-03-19. Site construction.**

In the construction of a well site, saltwater handling facility, treating plant, access road, and all associated facilities, the topsoil shall be removed, stockpiled, and stabilized or otherwise reserved for use when the area is reclaimed. "Topsoil" means the suitable plant growth material on the surface; however, in no event shall this be deemed to be more than the top twelve inches [30.48 centimeters] of soil or deeper than the depth of cultivation, whichever is greater. Soil stabilization materials, liners, fabrics, and other materials to be used onsite, on access roads or associated facilities, must be reported on a well or facility sundry notice ~~(form 4)~~ to the director within thirty days after application. The reclamation plan for such materials shall also be included.

When necessary to prevent pollution of the land surface and freshwaters, the director may require the site to be sloped and diked.

Sites shall not be located in, or hazardously near, bodies of water, nor shall they block natural drainages. Sites and associated facilities shall be designed and built to be stable, divert surface drainage from entering the site, and prevent erosion. Sites exhibiting instability shall be reported to the director immediately.

Sites or appropriate parts thereof shall be fenced if required by the director.

Within six months after the completion of a well or construction of a saltwater handling facility or treating plant, the portion of the site not used for operations shall be reclaimed, unless waived by the director. Operators shall file a well or facility sundry notice ~~(form 4)~~ detailing the work that was performed and a current site diagram, which identifies the stockpiled topsoil location and its volume. ~~Sites shall be stabilized to prevent erosion.~~

**History:** Amended effective March 1, 1982; January 1, 1983; May 1, 1992; July 1, 2002; January 1, 2008; April 1, 2010; April 1, 2012; April 1, 2014; October 1, 2016; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-21. Casing, tubing, and cementing requirements.**

All wells drilled shall be constructed with strings of casing which must be properly cemented at sufficient depths to adequately protect and isolate all formations containing water, oil, or gas or any combination of these; protect the pipe through salt sections encountered; and isolate the uppermost sand of the Dakota group. Cementing must be by the pump and plug method while the drilling rig is on the well or other methods approved by the director.

Drilling of the surface hole must be with freshwater-based drilling mud or other method approved by the director which will protect all freshwater-bearing strata. This includes water used during the cementing of surface casing for displacement. The surface casing must consist of new or reconditioned pipe that has been previously tested to one thousand pounds per square inch [6900 kilopascals]. The surface casing must be set and cemented at a point not less than fifty feet [15.24 meters] below the base of the Fox Hills formation. Sufficient cement must be used on surface casing to fill the annular space behind the casing to the bottom of the cellar, if any, or to the surface of the ground. If the annulus space is not adequately filled with cement, the director must be notified immediately. The operator shall diligently perform remedial work after obtaining approval from the director. All strings of surface casing must stand cemented under pressure for at least twelve hours before drilling the plug. The term "under pressure" as used herein must be complied with if one float valve is used or if pressure is otherwise held. ~~Cementing must be by the pump and plug method while the drilling rig is on the well or other methods approved by the director~~. An appropriate accurate gauge must be maintained on the surface casing of any well, not properly plugged and abandoned, to detect any buildup of pressure caused by the migration of fluids. Surface casing pressure must be monitored and maintained to keep the hydrostatic pressure at the surface casing shoe below the pressure the formation integrity test was performed at.

Surface casing strings must be allowed to stand under pressure until the tail cement has reached a compressive strength of at least five hundred pounds per square inch [3450 kilopascals]. All filler cements utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within twenty-four hours and at least three hundred fifty pounds per square inch [2415 kilopascals] within seventy-two hours. All compressive strengths on surface casing cement must be calculated at a temperature of eighty degrees Fahrenheit [26.67 degrees Celsius].

Production or intermediate casing strings must consist of new or reconditioned pipe that has been previously tested to two thousand pounds per square inch [13800 kilopascals]. Such strings must be allowed to stand under pressure until the tail cement has reached a compressive strength of at least five hundred pounds per square inch [3450 kilopascals]. All filler cements utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within twenty-four hours and at least five hundred pounds per square inch [3450 kilopascals] within seventy-two hours, although in any horizontal well performing a single stage cement job from a measured depth of greater than thirteen thousand feet [3962.4 meters], the filler cement utilized must reach a compressive strength of at least two hundred fifty pounds per square inch [1725 kilopascals] within forty-eight hours and at least five hundred pounds per square inch [3450 kilopascals] within ninety-six hours. All compressive strengths on production or intermediate casing cement must be calculated at a temperature found in the Mowry formation using a gradient of 1.2 degrees Fahrenheit per one hundred feet [30.48 meters] of depth plus eighty degrees Fahrenheit [26.67 degrees Celsius]. At a formation temperature at or in excess of two hundred thirty degrees Fahrenheit [110 degrees Celsius], cement blends must include additives to address compressive strength regression.

Each surface casing string must be tested by application of pump pressure of at least one thousand pounds per square inch [6900 kilopascals] and each other casing string shall be tested by application of pump pressure of at least one thousand five hundred pounds per square inch [10350 kilopascals] immediately after cementing, while the cement is in a liquid state, or the casing string must be pressure tested after all cement has reached five hundred pounds per square inch [3450 kilopascals] compressive strength. If, at the end of thirty minutes, this pressure has dropped more than ten percent, the casing must be repaired after receiving approval from the director. Thereafter, the casing again must be tested in the same manner. Further work may not proceed until a satisfactory test has been obtained. The casing in a horizontal well may be tested by use of a mechanical tool set near the casing shoe after the horizontal section has been drilled.

All flowing wells must be equipped with tubing. A tubing packer must also be utilized unless a waiver from the director is obtained after demonstrating the casing will not be subjected to excessive pressure or corrosion. The packer must be set as near the producing interval as practicable, but in all cases must be above the perforations.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996; January 1, 1997; September 1, 2000; July 1, 2002; May 1, 2004; January 1, 2006; April 1, 2010; April 1, 2012; April 1, 2020; April 1, 2022; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-22. Defective casing or cementing.**

In any well that appears to have defective casing or cementing, the operator shall ~~conduct a mechanical integrity test, unless deemed unnecessary by the director, and~~ report the ~~test and~~ defect to the director verbally and file a well ~~on a~~ sundry notice ~~(form 4)~~ if required by the director. To properly evaluate the condition of the well, the operator shall proceed with diligence to conduct tests or run logs as approved or required by the director. Prior to attempting remedial work to correct any defect~~on any casing~~, the operator must obtain approval from the director ~~and proceed with diligence to conduct tests, as approved or required by the director, to properly evaluate the condition of the well bore and correct the defect~~. The director is authorized to require subsequent pressure tests and logs to verify casing integrity if its competence is questionable. The director may allow the well ~~bore~~ condition to remain if correlative rights can be protected without endangering potable waters. The well shall be properly plugged if requested by the director.

After the completion of any remedial work or attempted remedial work, a report on the operation shall be filed on a well sundry notice with the director pursuant to section 43-02-03-31.

Any well with open perforations above a packer shall be considered to have defective casing.

**History:** Amended effective January 1, 1983; May 1, 1992; September 1, 2000; July 1, 2002; May 1, 2004; January 1, 2008; April 1, 2018; _____.

**General Authority:** NDCC 38-08-04

**Law Implemented:** NDCC 38-08-04

**43-02-03-27.1. Hydraulic fracture stimulation.**

1. Prior to performing any hydraulic fracture stimulation, including refracs, through a frac string run inside the casing string:

   a. Remedial work must be performed on all casing strings deemed defective pursuant to section 43-02-03-22 prior to performance at the discretion of the director.

   b. The frac string must be either stung into a liner with the hanger/packer located in cemented casing or run with a packer set at a minimum depth of one hundred feet [30.48 meters] below the top of cement or a minimum depth of one hundred feet [30.48 meters] below the top of the Inyan Kara formation, whichever is deeper.

   c. The casing-frac string annulus must be pressurized and monitored during frac operations. If there is a suspected frac string or casing failure, the operator of the well shall verbally notify the director as soon as practicable.

   d. An adequately sized, function tested pressure relief valve must be utilized on the treating lines from the pumps to the wellhead, with suitable check valves to limit the volume of flowback fluid should the relief valve open. The relief valve must be set to limit line pressure to no more than eighty-five percent of the internal yield pressure of the frac string.

   e. An adequately sized, function tested pressure relief valve and an adequately sized diversion line must be utilized to divert flow from the casing to a pit or containment vessel in case of frac string failure. The relief valve must be set to limit annular pressure to no more than eighty-five percent of the lowest internal yield pressure of the casing string or no greater than the pressure test on the intermediate casing, less one hundred pounds per square inch gauge, whichever is less.

   f. The surface casing must be fully open and connected to a diversion line rigged to a pit or containment vessel.

   g. An adequately sized, function tested remote operated frac valve must be utilized at a location on the christmas tree that provides isolation of the well bore from the treating line and must be remotely operated from the edge of the location or other safe distance.

   h. Notify the director within twenty-four hours after the commencement of hydraulic fracture stimulation operations, in an electronic format approved by the director, identifying the subject well and verifying a frac string was run in the well.

   i. Within sixty days after the hydraulic fracture stimulation is performed, the owner, operator, or service company shall post on the fracfocus chemical disclosure registry all elements made viewable by the fracfocus website.

2. Prior to performing any hydraulic fracture stimulation, including refracs, through a casing string:

   a. Remedial work must be performed on all casing strings deemed defective pursuant to section 43-02-03-22 prior to performance at the discretion of the director.

   b. The maximum treating pressure may not be greater than eighty-five percent of the American petroleum institute rating of the affected casing string.

   c. Casing evaluation tools to verify adequate wall thickness of any affected casing string must be run from the wellhead to a depth as close as practicable to one hundred feet [30.48 meters] above the completion formation and a visual inspection with photographs shall be made of the top joint of the casing and the wellhead flange. The visual inspection and photograph requirement may be waived by the director for good cause.

      If the casing evaluation tool or visual inspection indicates wall thickness is below the American petroleum institute minimum or a lighter weight of casing than the well design called for, calculations must be made to determine the reduced pressure rating. If the reduced pressure rating is less than the anticipated treating pressure, a frac string must be run inside the casing.

   d. Cement evaluation tools to verify adequate cementing of each casing string shall be run from the wellhead to a depth as close as practicable to one hundred feet [30.48 meters] above the completion formation.

      (1) If the cement evaluation tool indicates defective casing or cementing, a frac string must be run inside the casing.

      (2) If the cement evaluation tool indicates the casing string cemented in the well fails to satisfy section 43-02-03-21, a frac string must be run inside the casing.

   e. Each affected casing string and the wellhead must be pressure tested for at least thirty minutes with less than five percent loss to a pressure equal to or in excess of the maximum frac design pressure.

   f. If the pressure rating of the wellhead does not exceed the maximum frac design pressure, a wellhead and blowout preventer protection system must be utilized during the frac.

   g. An adequately sized, function tested pressure relief valve must be utilized on the treating lines from the pumps to the wellhead, with suitable check valves to limit the volume of flowback fluid should be the relief valve open. The relief valve must be set to limit line pressure to no greater than the test pressure of the casing, less one hundred pounds per square inch [689.48 kilopascals].

   h. The surface casing value must be fully open and connected to a diversion line rigged to a pit or containment vessel.

i. An adequately sized, function tested remote operated frac valve must be utilized between the treating line and the wellhead.

j. If there is a suspected casing failure, the operator of the well shall verbally notify the director as soon as practicable.

k. Notify the director within twenty-four hours after the commencement of hydraulic fracture stimulation operations, in an electronic format approved by the director, identifying the subject well and verifying all logs and pressure tests have been performed as required.

l. Within sixty days after the hydraulic fracture stimulation is performed, the owner, operator, or service company shall post on the fracfocus chemical disclosure registry all elements made viewable by the fracfocus website.

3. If during the stimulation, an unexpected pressure loss occurs, the pressure in the casing-surface casing annulus exceeds three hundred fifty pounds per square inch [2413 kilopascals] gauge, or other unexpected event occurs, the owner or operator shall verbally notify the director as soon as practicable but no later than twenty-four hours following the incident.

**History:** Effective April 1, 2012; amended effective April 1, 2014; April 1, 2020; April 1, 2022; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-28. Safety regulation.**

During drilling operations all oil wells must be cleaned into a pit or tank, not less than forty feet [12.19 meters] from the derrick floor and one hundred fifty feet [45.72 meters] from any fire hazard.

All flowing oil wells must be produced through an approved oil and gas separator or emulsion treater of ample capacity and in good working order. No boiler, electric generator, flare, or treater may be placed nearer than one hundred fifty feet [45.72 meters] to any producing well or oil tank that is not an oil processing vessel as defined in American Society of Mechanical Engineers (ASME) section VIII. Placement as close as one hundred twenty-five feet [38.10 meters] may be allowed if a spark or flame arrestor is utilized on the equipment. Placement of an oil processing vessel as defined in ASME section VIII as close as fifty feet [15.24 meters] may be allowed if approved by the director. The required distances above must be measured horizontally from closest vessel edge to closest edge of the boiler, generator, flare, or treater or closest vessel edge to flame arrestor or burner air inlet edge. Any rubbish or debris that might constitute a fire hazard must be removed to a distance of at least one hundred fifty feet [45.72 meters] from the vicinity of wells and tanks. All waste must be burned or disposed of in such manner as to avoid creating a fire hazard. All vegetation must be removed to a safe distance from any production or injection equipment to eliminate a fire hazard.

The director may require remote operated or automatic shutdown equipment to be installed on, or shut in for no more than forty days, any well that is likely to cause a serious threat of pollution or injury to the environment or the public health ~~or~~ and safety.

Surface casing may not be plumbed into the production flow line to relieve pressure without approval from the director.

No well shall be drilled nor production or injection equipment installed nor saltwater handling facility or treating plant constructed less than five hundred feet [152.40 meters] from an occupied dwelling unless agreed to in writing by the owner of the dwelling or authorized by order of the commission.

Subsurface pressure must be controlled during all drilling, completion, and well-servicing operations with appropriate fluid weight and pressure control equipment. The operator conducting any well hydraulic fracture stimulation shall give prior written notice, up to thirty-one days and not less than twenty-one days, to any operator of a well completed in the same or adjacent pool, if publicly available information indicates or if the operator is made aware, if the completion intervals are within two thousand six hundred and forty feet [804.67 meters] of one another. Notice must include twenty-four- hour emergency contact information, planned start and end dates, and contact information for scheduling updates.

**History:** Amended effective January 1, 1983; May 1, 1990; September 1, 2000; January 1, 2006; January 1, 2008; April 1, 2012; April 1, 2014; October 1, 2016; April 1, 2020; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-29. Well and lease equipment and gas gathering pipelines.**

Wellhead and lease equipment with a working pressure at least equivalent to the calculated or known pressure to which the equipment may be subjected shall be installed and maintained. Equipment on producing wells shall be installed to facilitate gas-oil ratio tests, and static bottom hole or other pressure tests. Valves shall be installed and maintained in good working order to permit pressure readings to be obtained on both casing and tubing.

All newly constructed underground gas gathering pipelines must be devoid of leaks and constructed of materials resistant to external corrosion and to the effects of transported fluids. All such pipelines installed in a trench must be installed in a manner that minimizes interference with agriculture, road and utility construction, the introduction of secondary stresses, the possibility of damage to the pipe, and tracer wire shall be buried with any nonconductive pipes installed. When a trench for an underground gas gathering pipeline is backfilled, it must be backfilled in a manner that provides firm support under the pipe and prevents damage to the pipe and pipe coating from equipment or from the backfill material.

1. Notifications.

a. The underground gas gathering pipeline owner shall notify the director, at least seven days prior to commencing new construction of any underground gas gathering pipeline. The notice of intent to construct automatically expires after one year and for any project not built within one year; a new notice of intent to construct must be submitted.

(1) The notice of intent to construct an underground gas gathering pipeline

must include the following:

(a) The proposed date construction is scheduled to begin.

(b) A statement that the director will be verbally notified approximately forty-eight hours prior to commencing the construction.

(c) A statement on the presence of a shading bucket or other means to remove rocks from the backfill material.

(d) A geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the proposed route of the pipeline from the point of origin to the termination point.

(e) The proposed underground gas gathering pipeline design drawings, including all associated above ground equipment.

[1] The proposed pipeline composition, specifications (i.e. size, weight, grade, wall thickness, coating, and standard dimension ratio).

[2] The type of fluid to be transported.

[3] The method of testing pipeline integrity (e.g. hydrostatic or pneumatic test) prior to placing the pipeline into service.

[4] Proposed burial depth of the pipeline.

[5] The location and type of all road crossings (i.e. bored and cased or bored only).

[6] The location of all environmentally sensitive areas, such as wetlands, streams, or other surface waterbodies that the pipeline may traverse, if applicable.

~~a.~~b. If damage occurs to any underground gathering pipeline, flow line, or other underground equipment used to transport crude oil, natural gas, carbon dioxide, or water produced in association with oil and gas, during construction, operation, maintenance, repair, or abandonment of an underground gas gathering pipeline, the responsible party shall verbally notify the director immediately. This is to include any line strikes of already abandoned underground gathering pipelines, regardless of any fluid release.

~~1.~~2. Underground gas gathering pipeline as built.

~~2.~~ The operator of any underground gas gathering pipeline placed into service on August 1, 2011, to June 30, 2013, shall file with the director, by January 1, 2015, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the pipeline centerline. Any shape files that have been created for any underground

gas gathering pipeline placed into service prior to August 1, 2011 shall also be filed with the director. The operator of any underground gas gathering pipeline placed into service after June 30, 2013, shall file with the director, within one hundred eighty days of placing into service, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of all compressor sites, buried drip tanks, and the pipeline centerline. An affidavit of completion shall accompany each layer containing the following information:

a. A statement that the pipeline was constructed and installed in compliance with section 43-02-03-29.

b. The outside diameter, minimum wall thickness, composition, internal yield pressure, and maximum temperature rating of the pipeline, or any other specifications deemed necessary by the director.

c. The anticipated operating pressure of the pipeline.

d. The type of fluid that will be transported in the pipeline and direction of flow.

e. Pressure to which the pipeline was tested prior to placing into service.

f. The minimum pipeline depth of burial.

g. In-service date.

h. Leak detection and monitoring methods that will be utilized after in-service date.

i. Pipeline name.

j. Accuracy of the geographical information system layer.

3. Pipeline abandonment method. When an underground gas gathering pipeline or any part of such pipeline is abandoned, the operator shall leave such pipeline in a safe condition by conducting the following:

a. Disconnect and physically isolate the pipeline from any operating facility or other pipeline.

b. Cut off the pipeline or the part of the pipeline to be abandoned below surface at pipeline level.

c. Purge the pipeline with fresh water, air, or inert gas in a manner that effectively removes all fluid.

d. Remove cathodic protection from the pipeline.

e. Permanently plug or cap all open ends by mechanical means or welded means.

4. Pipeline abandonment reporting. Within one hundred eighty days of completing the abandonment of an underground gas gathering pipeline the operator of the pipeline shall file with the director a geographical information system layer utilization North

American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the pipeline centerline and an affidavit of completion containing the following information:

a. A statement that the pipeline was abandoned in compliance with section 43-02-03-29.

b. The type of fluid used to purge the pipeline.

5. Pipeline markers. Aboveground pipeline markers must be placed and maintained over each buried underground gas gathering pipeline or portion thereof at the discretion of the director when necessary to protect public health and safety. The markers must contain at least the following on a background of sharply contrasting color: the word "Warning", "Caution", or "Danger" followed by the fluid transported pipeline, the name of the operator, and current emergency phone number.

The requirement to submit a geographical information system layer is not to be construed to be required on buried piping utilized to connect flares, tanks, treaters, or other equipment located entirely within the boundary of a well site or production facility.

**History:** Amended effective January 1, 1983; January 1, 2006; April 1, 2014; October 1, 2016; April 1, 2022; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-29.1. Crude oil and produced water underground gathering pipelines.**

1. Application of section. This section is applicable to all underground gathering pipelines designed for or capable of transporting crude oil or produced water from an oil and gas production facility for the purpose of disposal, storage, or for sale purposes. If these rules differ from the pipeline manufacturer's prescribed installation and operation practices, the pipeline manufacturer's prescribed installation and operation practices take precedence.

The requirements in this section are not applicable to flow lines, injection pipelines, pipelines operated by an enhanced recovery unit for enhanced recovery unit operations, or on piping utilized to connect wells, tanks, treaters, flares, or other equipment located entirely within the boundary of a well site or production facility.

If these rules differ from or are preempted by federal requirements on federally regulated pipelines, the federal rules take precedence. The pipeline owner shall provide sufficient documentation to the director confirming the pipeline is federally regulated.

2. Definitions. The terms used throughout this section apply to this section only.

a. "Crude oil or produced water underground gathering pipeline" means an underground gathering pipeline designed or intended to transfer crude oil or produced water from a production facility for disposal, storage, or sale purposes.

b. "New construction" means a new gathering pipeline installation project or an alteration or reroute of an existing gathering pipeline where the location, composition, size, design temperature, or design pressure changes.

c. "Pipeline repair" is the work necessary to restore a pipeline system to a condition suitable for safe operations that does not change the design temperature or pressure.

d. "Gathering system" is a group of connected pipelines which have been designated as a gathering system by the operator. A gathering system must have a unique name and must be interconnected.

e. "In-service date" is the first date fluid was transported down the underground gathering pipeline for disposal, storage, or sale purposes after construction.

3. Notifications.

a. The underground gathering pipeline owner shall notify the director, at least seven days prior to commencing new construction of any underground gathering pipeline. The notice of intent to construct automatically expires after one year and for any project not built within one year; a new notice of intent to construct must be submitted.

(1) The notice of intent to construct a crude oil or produced water underground gathering pipeline must include the following:

(a) The proposed date construction is scheduled to begin.

(b) A statement that the director will be verbally notified approximately forty-eight hours prior to commencing the construction.

~~(b)~~(c) A statement on the presence of a shading bucket or other means to remove rocks from the backfill material.

~~(c)~~(d) A geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the proposed route of the pipeline from the point of origin to the termination point.

~~(d)~~(e) The proposed underground gathering pipeline design drawings, including all associated above ground equipment.

[1] The proposed pipeline composition, specifications (i.e. size, weight, grade, wall thickness, coating, and standard dimension ratio).

[2] The type of fluid to be transported.

[3] The method of testing pipeline integrity (e.g. hydrostatic or pneumatic test) prior to placing the pipeline into service.

[4] Proposed burial depth of the pipeline.

[5] The location and type of all road crossings (i.e. bored and cased or bored only).

[6] The location of all environmentally sensitive areas, such as wetlands, streams, or other surface waterbodies that the pipeline may traverse, if applicable.

b. The underground gathering pipeline owner shall file a sundry notice (form 4 or form provided by the director) with the director providing notification of any underground gathering pipeline system or portion thereof that has been removed from service for more than one year.

c. If damage occurs to any underground gathering pipeline, flow line, or other underground equipment used to transport crude oil, natural gas, carbon dioxide, or water produced in association with oil and gas, during construction, operation, maintenance, repair, or abandonment of an underground gathering pipeline, the responsible party shall verbally notify the director immediately. This is to include any line strikes of already abandoned underground gathering pipelines regardless of any fluid release.

d. The pipeline owner shall file a sundry notice (form 4 or form provided by the director) within thirty days of the in-service date reporting the date of first service.

4. Design and construction.

The following applies to newly constructed crude oil and produced water underground gathering pipelines, including tie-ins to existing systems:

a. Underground gathering pipelines must be devoid of leaks and constructed of materials resistant to external corrosion and to the effects of transported fluids.

b. Underground gathering pipelines must be designed in a manner that allows for line maintenance, periodic line cleaning, and integrity testing.

c. Installation crews must be trained in all installation practices for which they are tasked to perform.

d. Underground gathering pipelines must be installed in a manner that minimizes interference with agriculture, road and utility construction, the introduction of secondary stresses, and the possibility of damage to the pipe. Tracer wire must be buried with any nonconductive pipe installed.

e. Unless the manufacturer's installation procedures and practices provide guidance, pipeline trenches must be constructed to allow for the pipeline to rest on undisturbed native soil and provide continuous support along the length of the pipe. Trench bottoms must be free of rocks greater than two inches in diameter, debris, trash, and other foreign material not required for pipeline installation. If a trench bottom is over excavated, the trench bottom must be backfilled with appropriate material and compacted prior to installation of the pipe to provide continuous support along the length of the pipe.

The width of the trench must provide adequate clearance on each side of the pipe. Trench walls must be excavated to ensure minimal sluffing of sidewall material into the trench. Subsoil from the excavated trench must be stockpiled separately from previously stripped topsoil.

f. Underground gathering pipelines that cross a township, county, or state graded road must be bored unless the responsible governing agency specifically permits the owner to open cut the road. The director, for good cause, may require any bore to be cased and be of adequate size to allow for casing spacers.

g. No pipe or other component may be installed unless it has been visually inspected at the site of installation to ensure that it is not damaged in a manner that could impair its strength or reduce its serviceability.

h. The pipe must be handled in a manner that minimizes stress and avoids physical damage to the pipe during stringing, joining, or lowering in. During the lowering in process the pipe string must be properly supported so as not to induce excess stresses on the pipe or the pipe joints or cause weakening or damage to the outer surface of the pipe.

i. When a trench for an underground gathering pipeline is backfilled, it must be backfilled in a manner that provides firm support under the pipe and prevents damage to the pipe and pipe coating from equipment or from the backfill material. Sufficient backfill material must be placed in the haunches of the pipe to provide long-term support for the pipe. Backfill material that will be within two feet of the pipe must be free of rocks greater than two inches in diameter and foreign debris. Backfilling material must be compacted as appropriate during placement in a manner that provides support for the pipe and reduces the potential for damage to the pipe and pipe joints.

j. Cover depths must be a minimum of four feet [1.22 meters] from the top of the pipe to the finished grade. The cover depth for an undeveloped governmental section line must be a minimum of six feet [1.83 meters] from the top of the pipe to the finished grade.

k. Underground gathering pipelines that traverse environmentally sensitive areas, such as wetlands, streams, or other surface waterbodies, must be installed in a manner that minimizes impacts to these areas. Any horizontal directional drilling plan prepared by the owner or required by the director, must be filed with the director, prior to the commencement of horizontal directional drilling.

l. Clamping or squeezing as a method of connecting any produced water underground gathering pipeline must be approved by the director. Prior to clamping or squeezing the pipeline, the owner shall file a sundry notice (form 4 or form provided by the director) with the director and obtain approval of the clamping or squeezing plan. The notice must include documentation that the pipeline can be safely clamped or squeezed as prescribed by the manufacturer's specifications. Any damaged portion of a produced water underground gathering pipeline that has been clamped or squeezed must be replaced before it is placed into service.

5. Pipeline reclamation.

   a. When utilizing excavation for pipeline installation, repair, or abandonment, topsoil must be stripped, segregated from the subsoils, and stockpiled for use in reclamation. "Topsoil" means the suitable plant growth material on the surface; however, in no event shall this be deemed to be more than the top twelve inches [30.48 centimeters] of soil or deeper than the depth of cultivation, whichever is greater.

   b. The pipeline right-of-way must be reclaimed as closely as practicable to original condition. All stakes, temporary construction markers, cables, ropes, skids, and any other debris or material not native to the area must be removed from the right-of-way and lawfully disposed of.

   c. During right-of-way reclamation all subsoils and topsoils must be returned in proper order to as close to the original depths as practicable. Right-of-way reclamation must be completed within one year of the pipeline being placed into service. An extension may be granted at the director's discretion.

   d. The reclaimed right-of-way soils must be stabilized to prevent excessive settling, sluffing, cave-ins, or erosion.

   e. The crude oil and produced water underground gathering pipeline owner is responsible for their right-of-way reclamation and maintenance until such pipeline is released by the director from the pipeline bond pursuant to section 43-02-03-15.

6. Inspection.

   All newly constructed crude oil and produced water underground gathering pipelines must be inspected by third-party independent inspectors to ensure the pipeline is installed as prescribed by the manufacturer's specifications and in accordance with the requirements of this section. A list of all third-party independent inspectors and a description of each independent inspector's qualifications, certifications, experience, and specific training must be provided to the director upon request. A person may not be used to perform inspections unless that person has been trained and is qualified in the phase of construction to be inspected. The third-party independent inspector may not be an employee of the gathering pipeline owner/operator or the contractor hired to construct and install the pipeline. The number of third-party independent inspectors must be adequate for the size of the pipeline construction project to ensure proper pipeline installation.

7. Associated pipeline facility.

   No associated above ground equipment may be installed less than five hundred feet [152.40 meters] from an occupied dwelling unless agreed to in writing by the owner of the dwelling or authorized by order of the commission.

   All associated above ground equipment used to store crude oil or produced water must be devoid of leaks and constructed of materials resistant to the effects of crude oil, produced water, brines, or chemicals that may be contained therein. The above

materials requirement may be waived by the director for tanks presently in service and in good condition. Unused tanks and associated above ground equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

Dikes must be erected around all produced water or crude oil tanks at any new facility prior to placing the associated underground gathering pipeline into service. Dikes must be erected and maintained around all crude oil or produced water tanks or above ground equipment, when deemed necessary by the director. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid throughput. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction. Discharged crude oil or produced water must be properly removed and may not be allowed to remain standing within or outside of any diked areas.

The underground gathering pipeline owner shall take steps to minimize the amount of solids stored at the pipeline facility, although the remediation of such material may be allowed onsite, if approved by the director.

8. Underground gathering pipeline as built.

The owner of any underground gathering pipeline placed into service after July 31, 2011, shall file with the director, as prescribed by the director, within one hundred eighty days of placing into service, a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point. An affidavit of completion shall accompany each layer containing the following information:

a. A third-party inspector certificate that the pipeline was constructed and installed in compliance with section 43-02-03-29.1.

b. The outside diameter, minimum wall thickness, composition, and maximum temperature rating of the pipeline, or any other specifications deemed necessary by the director.

c. The maximum allowable operating pressure of the pipeline.

d. The specified minimum yield strength and internal yield pressure of the pipeline if applicable to the composition of pipe.

e. The type of fluid that will be transported in the pipeline.

f. Pressure and duration to which the pipeline was tested prior to placing into service.

g. The minimum pipeline depth of burial from the top of the pipe to the finished grade.

h. In-service date.

i. Leak protection and monitoring methods that will be utilized after in-service date.

j. Any leak detection methods that have been prepared by the owner.

k. The name of the pipeline gathering system and any other separately named portions thereof.

l. The geographical information system layer must be within twenty feet [6.10 meters] of horizontal accuracy.

9. Operating requirements.

The maximum operating pressure for all crude oil and produced water underground gathering pipelines may not exceed the manufacturer's specifications of the pipe or the manufacturer's specifications of any other component of the pipeline, whichever is less. The maximum operating pressure of any portion of an underground gathering system may not exceed the test pressure from the most recent integrity test demonstration following modification or repair for which it was tested.

The crude oil or produced water underground gathering pipeline must be equipped with adequate controls and protective equipment to prevent the pipeline from operating above the maximum operating pressure.

10. Leak protection, detection, and monitoring.

All crude oil and produced water underground gathering pipeline owners shall file with the director any leak protection and monitoring plan prepared by the owner or required by the director, pursuant to North Dakota Century Code section 38-08-27.

If any leak detection plan has been prepared by the owner, it must be submitted to the director. All crude oil or produced water underground gathering pipeline owners shall develop and maintain a data sharing plan and file a copy with the director. The plan must provide for real- time sharing of data between the operator of the production facility, the crude oil or produced water underground gathering pipeline owner, and the operator at the point or points of disposal, storage, or sale. If a discrepancy in the shared data is observed, the party observing the data discrepancy shall notify all other parties and action must be taken to determine the cause. A record of all data discrepancies must be retained by the crude oil or produced water underground gathering pipeline owner. If requested, copies of such records must be filed with the director.

11. Spill response.

All crude oil and produced water underground gathering pipeline owners shall maintain a spill response plan during the service life of any crude oil or produced water underground gathering pipeline. The plan should detail the necessary steps for an effective and timely response to a pipeline spill. The spill response plan should be tailored to the specific risks in the localized area. Response capabilities should address access to equipment and tools necessary to respond, as well as action steps

to protect the health and property of impacted landowners, citizens, and the environment.

12. Corrosion control.

a. Underground gathering pipelines must be designed to withstand the effects of external corrosion and maintained in a manner that mitigates internal corrosion.

b. All metallic underground gathering pipelines installed must have sufficient corrosion control.

c. All coated pipe must be electronically inspected prior to placement using coating deficiency (i.e. holiday) detectors to check for any faults not observable by visual examination. The holiday detector must be operated in accordance with manufacturer's instructions and at a voltage level appropriate for the electrical characteristics of the pipeline system being tested. During installation all joints, fittings, and tie-ins must be coated with materials compatible with the coatings on the pipe. Coating materials must:

(1) Be designed to mitigate corrosion of the buried pipeline;

(2) Have sufficient adhesion to the metal surface to prevent under film migration of moisture;

(3) Be sufficiently ductile to resist cracking;

(4) Have enough strength to resist damage due to handling and soil stress;

(5) Support any supplemental cathodic protection; and

(6) If the coating is an insulating type, have low moisture absorption and provide high electrical resistance.

d. Cathodic protection systems must meet or exceed the minimum criteria set forth in the National Association of Corrosion Engineers standard practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems.

e. If internal corrosion is anticipated or detected, the underground gathering pipeline owner shall take prompt remedial action to correct any deficiencies, such as increased pigging, use of corrosion inhibitors, internal coating of the pipeline (e.g. an epoxy paint or other plastic liner), or a combination of these methods. Corrosion inhibitors must be used in sufficient quantity to protect the entire part of the pipeline system that the inhibitors are designed to protect.

13. Pipeline integrity.

A crude oil or produced water underground gathering pipeline owner may not operate a pipeline unless it has been pressure tested and demonstrated integrity. In addition, an owner may not return to service a portion of pipeline which has been repaired, replaced, relocated, or otherwise changed until it has demonstrated integrity.

a. The crude oil and produced water underground gathering pipeline owner shall notify the director at least forty-eight hours prior to commencement of any pipeline integrity test to allow a representative of the director to witness the testing process and results. The notice must include the pipeline integrity test procedure.

b. The crude oil and produced water underground gathering pipeline owner shall submit within sixty days of the underground gathering pipeline being placed into service the integrity test results which must include the following:

(1) The name of the pipeline gathering system and any other separately named portions thereof;

(2) The date of the test;

(3) The duration of the test;

(4) The length of pipeline which was tested;

(5) The maximum and minimum test pressure;

(6) The starting and ending pressure;

(7) A copy of the appropriately scaled chart recorder or digital log results;

(8) A geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the centerline of the portion of the pipeline that was tested;

(9) A copy of the test procedure used; and

(10) A third-party inspector certificate summarizing the pipeline has been pressure tested and whether it demonstrated integrity, including the identification of any leaks, ruptures, or other integrity issues encountered, and an explanation for any substantial pressure gain or losses during the integrity test, if applicable.

c. All crude oil and produced water underground gathering pipeline owners shall maintain a pipeline integrity demonstration plan during the service life of any crude oil or produced water underground gathering pipeline. The director, for good cause, may require a pipeline integrity demonstration on any crude oil or produced water underground gathering pipeline.

14. Pipeline repair.

Each owner, in repairing an underground gathering pipeline or pipeline system, shall ensure that the repairs are made in a manner that prevents damage to persons or property.

An owner may not use any pipe, valve, or fitting, for replacement or repair of an

underground gathering pipeline, unless it is designed to meet the maximum operating pressure.

a. At least forty-eight hours prior to any underground gathering pipeline repair or replacement, the underground gathering pipeline owner shall notify the director, except in an emergency.

b. Within one hundred eighty days of repairing or replacing any underground gathering pipeline the owner of the pipeline shall file with the director a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the centerline of the repaired or replaced pipeline and an affidavit of completion containing the following information:

(1) A statement that the pipeline was repaired in compliance with section 43-02-03-29.1.

(2) The reason for the repair or replacement.

(3) The length of pipeline that was repaired or replaced.

(4) Pressure and duration to which the pipeline was tested prior to returning to service.

c. Clamping or squeezing as a method of repair for any produced water underground gathering pipeline must be approved by the director. Prior to clamping or squeezing the pipeline, the owner shall file a sundry notice (form 4) with the director and obtain approval of the clamping or squeezing plan. The notice must include documentation that the pipeline can be safely clamped or squeezed as prescribed by the manufacturer's specifications. If an emergency requires clamping or squeezing, the owner or the owner's agent shall obtain verbal approval from the director and the notice shall be filed within seven days of completing the repair. Any damaged portion of a produced water underground gathering pipeline that has been clamped or squeezed must be replaced before it is returned to service.

15. Pipeline abandonment.

a. At least forty-eight hours prior to abandoning any underground gathering pipeline, the underground gathering pipeline owner shall notify the director verbally.

b. When an underground gathering pipeline or any part of such pipeline is abandoned as defined under subsection 1 of North Dakota Century Code section 38-08-02 after March 31, 2014, the owner shall leave such pipeline in a safe condition by conducting the following:

(1) Disconnect and physically isolate the pipeline from any operating facility, associated above ground equipment, or other pipeline.

(2) Cut off the pipeline or the part of the pipeline to be abandoned below surface at pipeline level.

(3) Purge the pipeline with fresh water, air, or inert gas in a manner that effectively removes all fluid.

(4) Remove cathodic protection from the pipeline.

(5) Permanently plug or cap all open ends by mechanical means or welded means.

(6) The site of all associated above ground equipment must be reclaimed pursuant to section 43-02-03-34.1.

(7) If the bury depth is not at least three feet below final grade, such portion of pipe must be removed.

c. Within one hundred eighty days of completing the abandonment of an underground gathering pipeline the owner of the pipeline shall file with the director a geographical information system layer utilizing North American datum 83 geographic coordinate system (GCS) and in an environmental systems research institute (Esri) shape file format showing the location of the pipeline centerline and an affidavit of completion containing the following information:

(1) A statement that the pipeline was abandoned in compliance with section 43-02-03-29.1.

(2) The type of fluid used to purge the pipeline.

(3) The date of pipeline abandonment.

(4) The length of pipeline abandoned.

16. Pipeline markers.

a. Aboveground pipeline markers must be placed and maintained over each buried crude oil or produced water underground gathering pipeline or portion thereof at the discretion of the director when necessary to protect public health and safety. The markers must contain at least the following on a background of sharply contrasting color: the word "Warning", "Caution", or "Danger" followed by the name of the fluid transported pipeline, the name of the operator, and current emergency phone number.

**History:** Effective October 1, 2016; amended effective April 1, 2020; April 1, 2022; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-31. Well log, completion, and workover reports.**

After the plugging of a well, a well plugging ~~record (form 7)~~report must be filed with the director. After the completion of a well, recompletion of a well in a different pool, or drilling horizontally in an existing pool, a well completion report ~~(form 6 or form provided by the director~~) must be filed with the director. ~~In no case shall oil or gas be transported from the lease prior to the filing of a completion report unless approved by the director.~~ The operator shall cause to be run an open hole electrical, radioactivity, or other similar log, or combination of open hole logs, of the operator's choice, from which formation tops and porosity zones can be determined. The operator shall cause to be run a gamma ray log from total depth to ground level elevation of the well bore. Within six months of reaching total depth and prior to completing the well, the operator shall cause to be run a cement evaluation log from which the presence and quality of bonding of cement can be determined in every well in which production or intermediate casing has been set. The initial cement evaluation log must be run without the addition of pressure at surface, except at depths where the cement evaluation tool may need appropriate pressure applied to function properly. The obligation to log may be waived or postponed by the director if the necessity therefor can be demonstrated to the director's satisfaction. Waiver will be contingent upon such terms and conditions as the director deems appropriate. All logs run must be available to the director at the well site prior to proceeding with plugging or completion operations. All logs run shall be submitted to the director free of charge. Logs must be submitted as one digital TIFF (tagged image file format) copy and one digital LAS (log ASCII) formatted copy, or a format approved by the director. In addition, operators shall file one copy of drill stem test reports and charts, formation water analyses, core analyses, geologic reports, and noninterpretive lithologic logs or sample descriptions if compiled by the operator.

All information furnished to the director on permits, except the operator name, well name, location, permit date, confidentiality period, spacing or drilling unit description, spud date, rig contractor, central tank battery number, any production runs, or volumes injected into an injection well, must be kept confidential from the date a request by the operator is received in writing until the six-month confidentiality period has ended. The six-month period commences on the date the well is completed or the date the written request is received, whichever is earlier. If the written request accompanies the application for permit to drill or is filed after permitting but prior to spudding, the six-month period commences on the date the well is spudded. The director may release such confidential completion and production data to health care professionals, emergency responders, and state, federal, or tribal environmental and public health regulators if the director deems it necessary to protect the public's health, safety, and welfare.

All information furnished to the director on recompletions, restimulation wells, or reentries, except the operator name, well name, location, permit date, confidentiality period, spacing or drilling unit description, spud date, rig contractor, any production runs, or volumes injected into an injection well, must be kept confidential for not more than six months if requested by the operator in writing. The six-month period shall commence on the date the well is completed, recompleted, or restimulated or the date a request by the operator is received in writing, whichever is earlier. Any information furnished to the director prior to approval of the recompletion, restimulation, or reentry must remain public.

Approval must be obtained on a well sundry ~~form~~ notice from the director prior to perforating or recompleting a well in a pool other than the pool in which the well is currently permitted.

After the completion of any remedial work, or attempted remedial work such as plugging back or drilling deeper, acidizing, shooting, formation fracturing, squeezing operations, remedial cementing, setting liner, perforating, reperforating, or other similar operations not specifically covered herein, a report on the operation shall be filed on a well sundry notice ~~(form 4)~~ with the

director. The report must present a detailed account of all work done and the date of such work; ~~the daily production of oil, gas, and water both prior to and after the operation~~; the shots per foot, size, and depth of perforations; the quantity of cement, sand, crude, chemical, or other materials employed in the operation; ~~and~~ any other pertinent information or operations which affect the original status of the well and are not specifically covered herein, and any other information required by the director.

Upon the installation of pumping equipment on a flowing well, or change in type of pumping equipment designed to increase productivity in a well, the operator shall submit a well sundry notice ~~(form 4)~~ of such installation. The notice must include all pertinent information on the pump and the operation thereof including the date of such installation~~, and the daily production of the well prior to and after the pump has been installed~~.

All forms, reports, logs, and other information required by this section must be submitted within thirty days after the completion of such work, although a completion report must be filed immediately after the completion or recompletion of a well in a pool or reservoir not then covered by an order of the commission.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; May 1, 1994; July 1, 1996; September 1, 2000; July 1, 2002; January 1, 2006; January 1, 2008; April 1, 2010; April 1, 2012; October 1, 2016; April 1, 2020; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-44. Vented, flared, and ~~M~~metered casinghead gas.**

Pending arrangements for disposition for some useful purpose, all vented casinghead gas shall be burned. Each flare shall be equipped with an automatic ignitor or a continuous burning pilot, unless waived by the director for good reason.

All casinghead gas produced must be reported monthly to the director in units of one thousand cubic feet [28.32 cubic meters] computed at a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius]. Associated gas production may not be transported from a well premises or central production facility until its volume has been determined through the use of properly calibrated measurement equipment. All measurement equipment and volume determinations must conform to American gas association standards. The operator of a well shall notify the director within thirty days on a well sundry ~~form~~ notice of the connection date to a gas gathering system, the metering equipment, transporter, and purchaser of the gas. Any gas produced and used on lease for fuel purposes or flared may be estimated or measured and must be reported on a gas ~~production~~ report ~~(form 5b)~~ in accordance with section 43-02-03-52.1. Meters used to determine the use on lease or flared gas volumes must be installed and calibrated in accordance with American petroleum institute or American gas association standards or to the meter manufacturer's recommendations.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996; September 1, 2000; April 1, 2024; _____.

**General Authority:** NDCC 38-08-04

**Law Implemented:** NDCC 38-08-04

~~**43-02-03-45. Vented casinghead gas.**~~

~~Pending arrangements for disposition for some useful purpose, all vented casinghead gas shall be burned. Each flare shall be equipped with an automatic ignitor or a continuous burning pilot, unless waived by the director for good reason. The estimated volume of gas used and flared shall be reported to the director on a gas report (form 5b) on or before the fifth day of the second month succeeding that in which gas is produced.~~

~~**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; September 1, 2000~~Repealed effective April 1, 2026.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-47. Produced water.**

Monthly water production from each well must be determined through the use of properly calibrated meter measurements, tank measurements, or an alternate measurement method approved by the director. This includes allocating water production back to individual wells on a monthly basis, provided the method of volume determination and allocation procedure results in reasonably accurate production volumes. Operators shall report monthly to the director the amount of water produced by each well on ~~form 5~~an oil report. The reports must be filed by five p.m. on ~~or before~~ the first day of the second month following that in which production occurred.

**History:** Amended effective January 1, 1983; May 1, 1992; May 1, 1994; September 1, 2000; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-48.1. Central production facility - Commingling of production.**

1. The director may approve requests to consolidate production equipment at a central location. The applicant shall provide all information requested by the director. The director may impose such terms and conditions as the director deems necessary.

2. Commingling of oil and gas production from two or more wells in a central production facility is prohibited unless approved by the director. There are two types of central production facilities in which production from two or more wells is commingled that may be approved by the director.

    a. A central production facility in which all production going into the facility has common ownership. For purposes of this section, production with common ownership is defined as production from wells that do not have diverse ownership.

    b. A central production facility in which production going into the facility has diverse ownership. For purposes of this section, production with diverse ownership is defined as production from wells that are:

(1) In different drilling or spacing units; and

(2) Which have different mineral ownership.

3. The commingling of oil and gas production in a central production facility from two or more wells having common or diverse ownership may be approved by the director provided the production from each well can be accurately determined at reasonable intervals. The Commission may act upon its own motion or upon the application of an affected party to schedule a hearing to consider the approval of commingling in a central production facility. ~~Commingling of oil and gas production in a central production facility from two or more wells having diverse ownership may be approved by the director provided the production from each well is accurately metered prior to commingling. Commingling of oil and gas production in a central production facility from two or more wells having diverse ownership that is not metered prior to commingling may only be approved by the commission after notice and hearing.~~

a. Common ownership central production facility. The application for permission to commingle oil, gas, or both in a central production facility with common ownership must be submitted on a facility sundry notice and shall include the following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) An affidavit executed by a person who has knowledge indicating that common ownership as defined above exists.

~~(3)~~(4) The name of the manufacturer, size, and type of allocation meters to be used. Oil meters must be proved at least semiannually and gas meters must be calibrated at least annually. The results must be reported to the director within thirty days following the completion of the test.

~~(4)~~(5) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed at least ~~once every three months~~quarterly for at least twenty-four consecutive hours.

~~(5) List of all allocation meters to be used and the meter type.~~

A copy of all tests are to be filed with the director on a central tank battery well test form within thirty days after the tests are completed.

b. Diverse ownership central production facility. The application for permission to commingle oil, gas, or both in a central production facility having diverse ownership must be submitted on a facility sundry notice and shall include the

following:

(1) A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well, and flow lines from each well that will produce into the facility.

(2) A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

(3) The name of the manufacturer, size, and type of allocation meters to be used. ~~The~~ Oil meters must be proved at least once every three months and gas meters must be calibrated at least semiannually. ~~the~~ The results must be reported to the director within thirty days following the completion of the test.

(4) An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed monthly for at least seventy-two consecutive hours.

(5) ~~List of all allocation meters to be used and the meter type.~~

A copy of all tests are to be filed with the director on a central tank battery well test form within thirty days after the tests are completed.

4. The commingling of produced water in a central production facility from two or more wells may be approved by the director provided the produced water production can be accurately determined at reasonable intervals. The application for permission to commingle water in a central production facility must be submitted on a facility sundry notice and shall include the following:

a. A plat or map showing thereon the location of the central facility and the name, well file number, and location of each well, and flow lines from each well that will produce into the facility.

b. A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. All pertinent items such as treaters, tanks, flow lines, valves, meters, recycle pumps, etc., should be shown.

c. An affidavit executed by a person who has knowledge indicating that common ownership as defined above exists; or an indication that it is not common ownership.

~~c~~d. The name of the manufacturer, size, and type of allocation meters to be used. Allocation meters must be installed and calibrated in accordance with American petroleum institute or to the meter manufacturer's recommendations.

~~d~~e. An explanation of the procedures or method to be used to determine, accurately, individual well production at periodic intervals. Such procedures or method shall be performed quarterly for common ownership central production facilities for at

least twenty-four consecutive hours and monthly for diverse ownership central production facilities for at least seventy-two consecutive hours.

~~e. List of all allocation meters to be used and the meter type.~~

5. Any changes to a previously approved central production facility must be reported on a facility sundry notice ~~(form 4)~~ and approved by the director.

~~5.~~6. The director may revoke the authorization to commingle production in a central production facility for failure to comply with this section or any terms, conditions, or directives imposed by the director.

**History:** Effective May 1, 1992; amended effective September 1, 2000; May 1, 2004; April 1, 2020, April 1, 2024; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-49. Oil production equipment, dikes, and seals.**

Storage of oil in underground or partially buried tanks or containers is prohibited. Surface oil tanks and production equipment must be devoid of leaks and constructed of materials resistant to the effects of produced fluids or chemicals that may be contained therein. Unused tanks and production equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

Dikes must be erected around oil tanks, oil vessels, flowthrough process vessels, and recycle pumps at any new production facility prior to completing any well. Such ~~D~~dikes must be erected and maintained ~~around oil tanks~~ at all facilities unless a waiver is granted by the director. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes around oil tanks and oil vessels as defined in American Society of Mechanical Engineers (ASME) section VIII must be of sufficient dimension to contain the total capacity of the largest tank or oil vessel plus one day's fluid production. Dikes around flowthrough process vessels must be of sufficient dimension to contain the total capacity of the vessel. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction.

Within one hundred eighty days from the date the operator is notified by the commission, a perimeter berm, at least six inches [15.24 centimeters] in height, must be constructed and maintained.

The berm must be constructed of sufficiently impermeable material to provide emergency containment and to divert surface drainage away from the site around all storage facilities and production sites that include storage tanks, have a daily throughput of more than one hundred barrels of fluid per day, and include production equipment or load lines that are not contained within secondary containment dikes. The director may consider an extension of time to implement these requirements if conditions prevent timely construction, or a modification of these requirements if other factors are present that provide sufficient protection from environmental impacts. Prior to removing any perimeter berm, the operator or owner shall obtain approval by the director.

Numbered weather-resistant security seals shall be properly utilized on all oil access valves and access points to secure the tank or battery of tanks.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; September 1, 2000; July 1, 2002; May 1, 2004; April 1, 2010; April 1, 2012; October 1, 2016; April 1, 2018; April 1, 2020; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-52. Report of oil production.**

The operator of each well completed in any pool shall, by five p.m. on ~~or before~~ the first day of the second month succeeding the month in which production occurs or could occur, file with the director ~~–~~the amount of production made by each such well ~~up~~on ~~form 5 or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]~~ an oil report. ~~The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.~~ Wells for which reports of production are not received by ~~the close of business~~five p.m. on said first day of the month may be shut in for a period not to exceed thirty days. The director shall notify, by certified mail, the operator and authorized transporter of the shut-in period for such wells. Any oil produced during such shut-in period shall be deemed illegal oil and subject to the provisions of North Dakota Century Code section 38-08-15.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; December 1, 1997; September 1, 2000; October 1, 2016; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-52.1. Report of gas produced in association with oil.**

The operator of each well completed in any pool shall, by five p.m. on ~~or before~~ the fifth day of the second month succeeding the month in which production occurs or could occur, file with the director the amount of gas produced by each such well ~~up~~on ~~form 5b or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]~~a gas report. ~~The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.~~ Wells for which reports of production are not received by ~~the close of business~~five p.m. on said fifth day of the month may be shut in for a period not to exceed thirty days. The director shall notify, by certified mail, the operator and authorized transporter of the shut-in period for such wells. Any gas produced during such shut-in period must be deemed illegal gas and subject to the provisions of North Dakota Century Code section 38-08-15.

**History:** Effective May 1, 1992; amended effective December 1, 1997; September 1, 2000; October 1, 2016; _____.

**General Authority:** NDCC 38-08-04

**Law Implemented:** NDCC 38-08-04

**43-02-03-53.3. Saltwater handling facility construction and operation requirements.**

1. Bond requirement. Before construction of a saltwater handling facility, saltwater handling facility site, or access road begins, the operator shall file with the director a surety bond or cash bond conditioned upon compliance with all laws, rules and regulations, and orders of the commission. The bond must be in the amount of fifty thousand dollars and must be payable to the industrial commission. The commission, after notice and hearing, may require a higher bond amount. Such additional amounts for bonds must be related to the economic value of the facility and the expected cost of decommissioning and site reclamation, as determined by the commission. The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with all laws, rules and regulations, and orders of the commission; if a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

2. Saltwater handling facility sites or appropriate parts thereof must be fenced if required by the director. All fences installed within or around any facility must be constructed in a manner that promotes emergency ingress and egress.

3. All waste, recovered solids, and fluids must be stored and handled in such a manner to prevent runoff or migration offsite.

4. Surface tanks may not be underground or partially buried, must be devoid of leaks, and constructed of, or lined with, materials resistant to the effects of produced saltwater liquids, brines, or chemicals that may be contained therein. The above materials requirement may be waived by the director for tanks presently in service and in good condition. Unused tanks and equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year.

5. Dikes must be erected and maintained around saltwater tanks at any saltwater handling facility. Dikes must be erected around saltwater tanks at any new facility prior to introducing fluids. Dikes as well as the base material under the dikes and within the diked area must be constructed of sufficiently impermeable material to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid throughput. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction. The operations of the saltwater handling facility must be conducted in such a manner as to prevent leaks, spills, and fires. Discharged liquids or brines must be properly removed and may not be allowed to remain standing within or outside of any diked areas. All such incidents must be properly cleaned up, subject to approval by the director. All such reportable incidents must be promptly reported to the director and a detailed account of any such incident must be filed with the director in accordance with section 43-02-03-30.

6. Within one hundred eighty days from the date the operator is notified by the commission, a perimeter berm, at least six inches [15.24 centimeters] in height, must be constructed of sufficiently impermeable material to provide emergency containment around the facility and to divert surface drainage away from the site. The director may consider an extension of time to implement these requirements if conditions prevent

timely construction or a modification of these requirements if other factors are present that provide sufficient protection from environmental impacts.

7. The operator shall take steps to minimize the amount of solids stored at the facility.

8. Within thirty days following construction or modification of a saltwater handling facility, a facility sundry notice ~~(form 4)~~ must be submitted detailing the work and the dates commenced and completed. The facility sundry notice must be accompanied by a schematic drawing of the saltwater handling facility site drawn to scale, detailing all facilities and equipment, including the size, location, and purpose of all tanks; the height and location of all dikes as well as a calculated containment volume; all areas underlain by a synthetic liner; any leak detection system installed; the location of all flowlines; the stockpiled topsoil location and its volume; and the road access to the nearest existing public road.

9. Immediately upon the commissioning of the saltwater handling facility, the operator shall notify the director in writing of such date.

10. The operator of a saltwater handling facility shall provide continuing surveillance and conduct such monitoring and sampling as the director may require.

11. Storage pits, waste pits, or other earthen storage areas must be prohibited unless authorized by an appropriate regulatory agency. A copy of said authorization must be filed with the director.

12. Burial of waste at any saltwater handling facility site is prohibited. All residual water and waste, fluid or solid, must be disposed of in an authorized facility.

13. If deemed necessary by the director, the operator shall cause to be analyzed any waste substance contained onsite. Such chemical analysis must be performed by a certified laboratory and must adequately determine if chemical constituents exist which would categorize the waste as hazardous by department of environmental quality standards.

14. Saltwater handling facilities must be constructed and operated so as not to endanger surface or subsurface water supplies or cause degradation to surrounding lands and must comply with section 43-02-03-28 concerning fire hazards and proximity to occupied dwellings.

15. All proposed changes to any saltwater handling facility are subject to prior approval by the director.

16. Any salable crude oil recovered from a saltwater handling facility must be reported on a ~~form 5 SWD~~skim oil report.

17. The operator shall comply with all laws, rules and regulations, and orders of the commission. All rules in this chapter governing oil well sites also apply to any saltwater handling facility site.

18. The operator shall immediately cease operations if so ordered by the director for the failure to comply with the statutes of North Dakota, commission rules or orders, or

directives of the director.

**History:** Effective October 1, 2016; amended effective April 1, 2018; April 1, 2020; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-59. Production from gas wells to be measured and reported.**

Gas production may not be transported from gas well premises until its volume has been determined through the use of properly calibrated measurement equipment. All measurement equipment and volume determinations must conform to American gas association standards and corrected to a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius]. Gas produced, used on lease, or flared shall be reported pursuant to sections 43-02-03-44 and 43-02-03-52.1. ~~production reports (form 5b) shall be filed with the director on or before the fifth day of the second month succeeding that in which production occurs.~~

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; May 1, 1994; July 1, 1996; September 1, 2000; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-80. Reports of purchasers and transporters of crude oil.**

~~On or before~~By five p.m. on the first day of the second month succeeding that in which oil is removed, purchasers and transporters, including truckers, shall file with the director the appropriate monthly reporting forms. The purchaser shall file on ~~form 10~~the oil purchasers monthly report and the transporter on ~~form 10a~~the oil transporters monthly report the amount of all crude oil removed and purchased by them from each well, central production facility, treating plant, or saltwater handling facility during the reported month. The transporter shall report the disposition of such crude oil on an oil transporters and storers monthly report (form 10b). All meter and tank measurements, and volume determinations of crude oil removed and purchased from a well or central production facility must conform to American petroleum institute standards and corrected to a base temperature of sixty degrees Fahrenheit [15.56 degrees Celsius] and fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter].

Prior to removing any oil, purchasers and transporters shall obtain an approved copy of a producer's authorization to purchase and transport oil ~~(form 8)~~ from either the producer or the director.

The operator of any oil rail facility shall report the amount of oil received and shipped out of such facility on form 10rr.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1990; May 1, 1992; May 1, 1994; July 1, 1996; September 1, 2000; April 1, 2014; October 1, 2016; _____.

**General Authority:** NDCC 38-08-04

**Law Implemented:** NDCC 38-08-04

**43-02-03-80.1. Gas Purchaser Report.**

By five p.m. on the fifth day of the second month succeeding the month in which gas is purchased from a well or central production facility, gas purchasers shall file with the director a gas purchasers report (form 12a) of all gas purchased from each well or central production facility during the reported month. All volumes of gas shall be reported in units of one thousand cubic feet [28.32 cubic meters] computed at a pressure of fourteen and seventy-three hundredths pounds per square inch absolute [1034.19 grams per square centimeter] at a base temperature of sixty degree Fahrenheit [15.56 degrees Celsius]. All measurement equipment and volume determinations must conform to American petroleum institute or American gas association standards, or with the meter manufacturer's recommendations.

**43-02-03-81. Authorization to transport oil from a well, treating plant, central production facility, or saltwater handling facility.**

~~Before~~ In no case shall any crude oil ~~is~~ be transported from a well, treating plant, central production facility, or saltwater handling facility, ~~the operator shall file with the director, and obtain~~prior to the director's approval~~, an~~ of the authorization to purchase and transport oil form ~~(form 8)~~ unless verbally approved by the director.

The director may revoke the authorization to purchase and transport oil for failure to comply with any rule, regulation, or order of the commission.

Oil transported before the authorization is obtained or if such authorization has been revoked shall be considered illegal oil.

~~The director may revoke the authorization to purchase and transport oil for failure to comply with any rule, regulation, or order of the commission.~~

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; July 1, 1996; September 1, 2000; April 1, 2014; October 1, 2016; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-83. Gas processing plant reports.**

Each operator of a gas processing plant, cycling plant, or any other plant at which natural gas is received and ~~processing~~processed shall report~~, gasoline, butane, propane, condensate, kerosene, oil, or other products are extracted from gas shall furnish~~ to the director ~~a report containing~~ the amount of natural gas received, disposition of the natural gas, and the plant production that includes condensate, ethane, propane, butane, natural gasoline, kerosene, oil, sulfur, or other products ~~from each lease or well~~ on a gas plant report (form 12)~~a~~ by five p.m. on the fifth day of the second month following that in which gas is processed.

Crude oil recovered shall be reported to the director, on ~~form 5~~an oil report by five p.m. on ~~or before the close of business on~~ the first day of the second month succeeding that in which oil is removed. Other operations shall be reported to the director, on form 12~~ and 12a~~, by five p.m. on ~~or before~~ the fifth day of the second month following that in which gas is processed.

**History:** Amended effective April 30, 1981; January 1, 1983; May 1, 1992; _____.

**General Authority:** NDCC 38-08-04
**Law Implemented:** NDCC 38-08-04

**43-02-03-88.1. Special procedures for increased density wells, pooling, flaring exemption, underground injection, commingling, converting mineral wells to freshwater wells, and ~~central tank battery or central production facilities~~unopposed recovery of a risk penalty applications.**

1. Applications to amend field rules to allow additional wells on existing spacing units, for pooling under North Dakota Century Code section 38-08-08, for a flaring exemption under North Dakota Century Code section 38-08-06.4 and section 43-02-03-60.2, for underground injection under chapter 43-02-05, for commingling in one well bore the fluids from two or more pools under section 43-02-03-42, for converting a mineral well to a freshwater well under section 43-02-03-35, and for ~~establishing central tank batteries or central production facilities under section 43-02-03-48.1~~recovery of a risk penalty for which there is no known opposition under section 43-02-03-16.3, must be signed by the applicant or the applicant's representative. The application must contain or refer to attachments that contain all the information required by law as well as the information the applicant wants the commission to consider in deciding whether to grant the application. The application must designate an employee or representative of the applicant to whom the commission can direct inquiries regarding the application.

2. The commission shall give the county auditor notice at least fifteen days prior to the hearing of any application in which a request for a disposal under chapter 43-02-05 is received.

3. The applications referred to in subsection 1 will be advertised and scheduled for hearing as are all other applications received by the commission. The applicant, however, unless required by the director, need not appear at the hearing scheduled to consider the application, although additional evidence may be submitted prior to the hearing. Any interested party may appear at the hearing to oppose or comment on the application. Any interested party may also submit written comments on or objections to the application prior to the hearing date. Such submissions must be received no later than five p.m. on the last business day prior to the hearing date and may be part of the record in the case if allowed by the hearing examiner.

4. The director is authorized, on behalf of the commission, to grant or deny the applications referred to in subsection 1.

5. In any proceeding under this section, the applicant, at the hearing, may supplement the record by offering testimony and exhibits in support of the application.

6. In the event the applicant is not required by the director to appear at the hearing and an interested party does appear to oppose the application or submits a written objection to the application, the hearing examiner shall continue the hearing to a later date, keep the record open for the submission of additional evidence, or take any other action necessary to ensure that the applicant, who does not appear at the hearing as the result of subsection 3, is accorded due process.

**History:** Effective May 1, 1992; amended effective May 1, 1994; May 1, 2004; April 1, 2012; April 1, 2014; April 1, 2018; April 1, 2022; _____.

**General Authority:** NDCC 38-08-04, 38-08-11
**Law Implemented:** NDCC 38-08-04, 38-08-08

**43-02-03-88.2. Hearing participants by ~~telephone~~telecommunication.**

In any hearing, the commission may, at its ~~option~~discretion, allow ~~telephonic communication~~telecommunication of witnesses and interested parties. The procedure shall be as follows:

1. ~~Telephonic communication~~Notice of an applicant's witness appearing through telecommunication ~~will only~~should be ~~considered if a written request is made~~submitted in writing at least two business days prior to the hearing date.

2. ~~Telephonic communication~~Notice of an interested party appearing through telecommunication ~~will only~~should be ~~considered if said party notifies~~submitted in writing to the applicant and the commission ~~in writing~~ at least three business days prior to the hearing date. Such notice shall include the subject hearing, the name and telephone number of the interested party, and the name and telephone number of the interested party's attorney or representative that will be present at the hearing.

3. ~~In the event an objection to any party's telephonic communication is received, the~~The hearing examiner may disallow such ~~communication by telephone~~telecommunication and may schedule or reschedule for an in-person hearing. ~~The commission will notify all parties whether or not the request to participate by telephone is granted or denied.~~

4. All parties participating by ~~telephone~~ telecommunication shall have an attorney or representative present at the hearing who shall be responsible for ~~actually calling said party once the case is called for hearing, for~~ providing the commission at the time of the hearing with any documentary evidence requested to be included in the record, and for any other matters necessary for the party to participate by ~~telephone~~telecommunication. This requirement may be waived at the discretion of the hearing examiner for good cause.

5. All parties participating by ~~telephone~~ telecommunication shall file an affidavit verifying the identity of such party. The record of such ~~telephonic communication~~telecommunication shall not be considered evidence in the case unless said affidavit is received by the ~~examiner~~ commission prior to an order being issued by the commission. The commission shall provide a form affidavit. The commission has the discretion to refuse to consider all or any part of the information received from any party participating by ~~telephone~~telecommunication.

6. For all hearings allowing ~~communication by telephone~~telecommunication, the commission shall provide a hearing room equipped with ~~a speaker telephone~~telecommunication equipment.

~~7. The cost of telephonic communication shall be paid by the party requesting its use.~~

**History:** Effective July 1, 2002; amended effective May 1, 2004; _____.

**General Authority:** NDCC 38-08-11
**Law Implemented:** NDCC 28-32-11

**43-05-01-01. Definitions.**

The terms used throughout this chapter have the same meaning as in chapter 43-02-03 and North Dakota Century Code chapter 38-08 except:

1. "Abandoned well" means a well whose use has been permanently discontinued or which is in a state of disrepair such that it cannot be used for its intended purpose or for observation purposes.

2. "Activity" means any activity related to the geological storage of carbon dioxide subject to regulation under this chapter and North Dakota Century Code chapter 38-22.

3. "Aquifer" means a geologic formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well, spring, or other point of discharge.

4. "Area of review" means the region surrounding the geologic sequestration project where underground sources of drinking water may be endangered by the injection activity.

5. "Bond rating" means a rating assigned to any long-term senior secured indebtedness issued by or on behalf of the storage operator, including any indebtedness issued by any governmental authority with respect to which the storage operator is obligor.

6. "Carbon dioxide plume" means the extent underground, in three dimensions, of an injected carbon dioxide stream.

~~6.~~7. "Carbon dioxide storage complex" means the formations or parts of formations of the storage reservoir including the injection zone plus confining zones and any intervening geologic strata.

~~7.~~8. "Carbon dioxide stream" means carbon dioxide that has been captured from an emission source (e.g., a coal-burning power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process. This does not apply to any carbon dioxide stream that meets the definition of a hazardous waste.

~~8.~~9. "Casing" means a pipe or tubing of varying diameter and weight, which is installed into a well to maintain the structural integrity of that well.

~~9.~~10."Cementing" means the operation whereby a cement slurry is pumped into a drilled hole and forced behind the casing.

~~10.~~11. "Closure period" means that period from permanent cessation of carbon dioxide injection until the commission issues a certificate of project completion.

~~11.~~12. "Confining zone" means a geologic formation, group of formations, or part of a formation stratigraphically overlying the injection zone that acts as a barrier to fluid movement. For injection wells operating under an injection depth waiver, confining zone means a geologic formation, group of formations, or part of a formation stratigraphically overlying and underlying the injection zone.

~~12.~~13. "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water.

~~13.~~14. "Corrective action" means the use of commission-approved methods to ensure that wells within the area of review do not serve as conduits for the movement of fluids into underground sources of drinking water.

~~14.~~15. "Draft permit" means a document prepared under section 43-05-01-07.2 indicating the commission's tentative decision to issue a storage facility permit or modify, revoke and reissue, or terminate an existing storage facility permit.

~~15.~~16. "Exempted aquifer" means an "aquifer" or its portion that meets the criteria in the definition of "underground sources of drinking water" but which has been exempted according to the procedures in section 43-05-01-02.4.

~~16.~~17. "Facility area" means the areal extent of the storage reservoir.

~~17.~~18. "Fault" means a surface or zone of rock fracture along which there has been displacement.

~~18.~~19. "Flow lines" means pipelines transporting carbon dioxide from the carbon dioxide injection facilities to the wellhead.

~~19.~~20. "Fluid" means any material or substance which flows or moves, whether in a semisolid, liquid, sludge, gas, or any other form or state.

~~20.~~21. "Formation" means a body of rock characterized by a degree of lithologic homogeneity which is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.

~~21.~~22. "Formation fluid" means fluid present in a formation under natural conditions as opposed to introduced fluids.

~~22.~~23. "Formation fracture pressure" means the pressure, measured in pounds per square inch, which, if applied to a subsurface formation, will cause that formation to fracture.

~~23.~~24. "Geologic sequestration" means the geologic storage of a gaseous, liquid, or supercritical carbon dioxide stream in a storage reservoir. This term does not apply to carbon dioxide capture or transport.

~~24.~~25. "Geologic sequestration project" means an injection well or wells used to emplace a carbon dioxide stream beneath the lowermost formation containing underground sources of drinking water; or, wells used for geologic sequestration that have been granted a waiver of the injection depth requirements; or, wells used for geologic sequestration that have received an expansion to the areal extent of an existing enhanced oil or gas recovery aquifer exemption. It includes the subsurface three-dimensional extent of the carbon dioxide plume, as well as the associated pressure front.

~~25.~~26. "Ground water" means water occurring beneath the surface of the ground that fills available openings in rock or soil materials such that they may be considered saturated.

~~26.~~27. "Injection well" means a nonexperimental well used to inject carbon dioxide into or withdraw carbon dioxide from a reservoir.

~~27.~~28. "Injection zone" means a geologic formation, group of formations, or part of a formation that is of sufficient areal extent, thickness, porosity, and permeability to receive carbon dioxide through a well or wells associated with a geologic sequestration project.

~~28.~~29. "Mechanical integrity" means the absence of significant leakage within an injection well's tubing, casing, or packer (internal mechanical integrity), or outside of the casing (external mechanical integrity).

~~29.~~30. "Minerals" means coal, oil, and natural gas.

~~30.~~31. "Model" means a representation or simulation of a phenomenon or process that is difficult to observe directly or that occurs over long time frames. Models that support geologic sequestration can predict the flow of carbon dioxide within the subsurface, accounting for the properties and fluid content of the subsurface formations and the effects of injection parameters.

~~31.~~32. "Operational period" means the period during which injection occurs.

~~32.~~33. "Packer" means a device lowered into a well, which can be expanded or compressed to produce a fluid-tight seal.

~~33.~~34. "Person" means an individual, association, partnership, corporation, municipality, state, federal, or tribal agency, or an agency or employee thereof.

~~34.~~35. "Plug" or "plugging" means the act or process of sealing the flow of fluid into or out of a formation through a borehole or "well" penetrating that formation.

~~35.~~36. "Postclosure period" means that period after the commission has issued a certificate of project completion.

~~36.~~37. "Postinjection site care" means appropriate monitoring and other actions, including corrective action, needed following cessation of injection to ensure that underground sources of drinking water are not endangered. Postinjection site care may occur in the closure or postclosure periods.

~~37.~~38. "Pressure" means the total load or force per unit area acting on a surface.

~~38.~~39. "Pressure front" means the zone of elevated pressure and displaced fluids created by the injection of carbon dioxide into the subsurface. The pressure front of a carbon dioxide plume refers to a zone where there is a pressure differential sufficient to cause the movement of injected fluids or formation fluids into underground sources of drinking water.

~~39.~~40. "Project completion" means the point in time, as determined by the commission at which the certificate of project completion is issued and the storage operator is released from all regulatory requirements associated with the storage facility.

~~40.~~41. "Stratum" (strata plural) means a single sedimentary bed or layer, regardless of thickness, that consists of generally the same kind of rock material.

41.42. "Subsurface observation well" means a well used to observe subsurface phenomena, including the presence of carbon dioxide, pressure fluctuations, fluid levels and flow, temperature, and in situ water chemistry.

42.43. "Surface casing" means the first string of well casing to be installed in the well.

43.44. "Transmissive fault or fracture" means a fault or fracture that has sufficient permeability and vertical extent to allow fluids to move between formations.

44.45. "Trapping" means the physical and geochemical processes by which injected carbon dioxide is sequestered in the subsurface. Physical trapping occurs when buoyant carbon dioxide rises in the formation until it reaches impermeable strata that inhibits further upward and lateral migration or is immoblized in pore spaces due to capillary forces. Geochemical trapping occurs when chemical reactions between the injected carbon dioxide and natural occurring minerals in the formation lead to the precipitation of solid carbonate minerals or dissolution in formation fluids.

45.46. "Underground source of drinking water" means an aquifer or any portion of an aquifer that supplies drinking water for human consumption, or in which the ground water contains fewer than ten thousand milligrams per liter total dissolved solids and is not an exempted aquifer as determined by the commission under section 43-02-05-03.

46.47. "Well" means a bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension; or an improved sinkhole; or a subsurface fluid distribution system.

**History:** Effective April 1, 2010; amended effective April 1, 2013.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**43-05-01-08. Storage facility permit hearing.**

1. The commission shall hold a public hearing before issuing a storage facility permit. At least forty-five days prior to the hearing, the applicant shall give notice of the hearing to the following:

    a. Each operator of mineral extraction activities within the facility area and within one-half mile [.80 kilometer] of its outside boundary;

    b. Each mineral lessee of record within the facility area and within one-half mile [.80 kilometer] of its outside boundary;

    c. Each owner of record of the surface within the facility area and one-half mile [.80 kilometer] of its outside boundary;

    d. Each owner of record of minerals within the facility area and within one-half mile [.80 kilometer] of its outside boundary;

    e. Each owner and each lessee of record of the pore space within the storage reservoir and within one-half mile [.80 kilometer] of the reservoir's boundary; and

f. Any other persons as required by the commission.

2. The notice given by the applicant must contain:

   a. A legal description of the land within the facility area.

   b. The date, time, and place that the commission will hold a hearing on the permit application.

   c. A statement that a copy of the permit application and draft permit may be obtained from the commission.

   d. A statement that all comments regarding the storage facility permit application must be in writing and submitted to the commission prior to the hearing or presented at the hearing.

   e. A statement that amalgamation of the storage reservoirs pore space is required to operate the storage facility, that the commission may require that the pore space owned by nonconsenting owners be included in the storage facility and subject to geologic storage, and the amalgamation of pore space will be considered at the hearing.

3. The commission shall give at least a thirty-day public notice and comment period for a draft storage facility permit, except in an emergency, including notice of the time and place of hearing thereon by ~~one~~ publication of such notice for two consecutive weeks in a newspaper of general circulation in Bismarck, North Dakota, and in a newspaper of general circulation in the county or counties where the land affected or some part thereof is situated, unless in some particular proceeding a longer period of time or a different method of publication is required by law, in which event such period of time and method of publication shall prevail. The notice shall issue in the name of the commission and shall conform to the other requirements provided by law. The public notice must state that an application has been filed with the commission for permission to store carbon dioxide and describe the location of the proposed facility area and the date, time, and place of the hearing before the commission at which time the merits of the application and draft permit will be considered.

4. The public notice given by the commission must contain the following:

   a. Name and address of the commission;

   b. Name and address of the applicant;

   c. A brief description of the nature and purpose of the hearing, including the applicable rules and procedures;

   d. A brief description of the activity described in the storage facility permit application or the draft storage facility permit;

   e. Name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft storage

facility permit, fact sheet, and the storage facility permit application;

f. A brief description of the comment procedures and other procedures by which the public may participate in the final permit decision;

g. The date of any previous public notices relating to the storage facility; and

h. Any additional information that the commission requires.

5. Public notice shall be given by the following methods:

a. By mailing or e-mailing a copy of the notice, the fact sheet, the storage facility permit application, and draft permit to the following:

(1) The applicant;

(2) The department of environmental quality;

(3) The state geological survey;

(4) The state water commission;

(5) The United States environmental protection agency; and

(6) Federal and state agencies with jurisdiction over fish and wildlife resources, the advisory council on historic preservation, and state historical preservation officers, including any affected Indian tribes and the bureau of Indian affairs.

b. By mailing or e-mailing of copy of the public notice to the following:

(1) To any unit of local government having jurisdiction over the area where the storage facility is proposed to be located and to each state agency having any authority under state law with respect to the construction or operation of such facility.

(2) Any other person or group either upon request or on a departmental mailing list to receive geologic storage of carbon dioxide public notices:

(a) Including those who request in writing to be on the list;

(b) Persons on "area lists" from past permit proceedings in that area; and

(c) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as state-funded newsletters, environmental bulletins, or state law journals. The commission may update the mailing list from time to time by requesting written indication of continued interest from those listed. The commission may delete from the list the name of any person who fails to respond to such a request.

6. During the public comment period any interested person may submit written comments on the draft storage facility permit or the storage facility permit application. All comments shall be considered in making the final decision and shall be answered when a final storage facility permit is issued. The response to comments must include:

   a. Provisions, if any, of the draft permit that have been changed in the final permit decision, and the reasons for the change; and

   b. A brief description and response to all significant comments on the draft permit or the permit application.

7. The response to all applicable comments shall be available to the public.

**History:** Effective April 1, 2010; amended effective April 1, 2013.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**43-05-01-09. Well permit application requirements.**

1. Following receipt of a storage facility permit, the storage operator shall obtain a permit to drill, deepen, convert, operate, or, upon demonstration of mechanical integrity, reenter a previously plugged and abandoned well for storage purposes.

2. Application for permits to drill, deepen, convert, operate, or reenter a well must be ~~submitted on form 25 provided by the commission~~ filed with the director and ~~must~~ include at a minimum:

   a. An accurate plat certified by a registered surveyor showing the location of the proposed injection or subsurface observation well. The plat must be drawn to the scale of one inch [25.4 millimeters] equals one thousand feet [304.8 meters], unless otherwise directed by the commission, and must show distances from the proposed well to the nearest facility area boundary. The plat must show the latitude and longitude of the proposed well location to the nearest tenth of a second. The plat must also show the location and status of all other wells that have been drilled within one-fourth mile [402.34 meters], or any other distance deemed necessary by the commission, of the proposed injection or subsurface observation well;

   b. The drilling, completion, or conversion procedures for the proposed injection or subsurface observation well;

   c. A well bore schematic showing the name, description, and depth of the storage reservoirs and the depth of the deepest underground source of drinking water; a description of the casing in the injection or subsurface observation well, or the proposed casing program, including a full description of cement already in place or as proposed; and the proposed method of testing casing before use of the injection well;

   d. A geophysical log, if available, through the storage reservoir to be penetrated by the proposed injection well or if an injection or subsurface observation well is to be drilled, a complete log through the reservoir from a nearby well is permissible.

Such log must be annotated to identify the estimated location of the base of the deepest underground source of drinking water, showing the stratigraphic position and thickness of all confining strata above the reservoirs and the stratigraphic position and thickness of the reservoir; and

e. The proposed pad layout, including cut and fill diagrams.

3. ~~Within thirty days after the conclusion of well drilling and completion activities, a permit application~~Before injection commences, a well sundry notice shall be submitted to operate an injection well and must include at a minimum:

a. A schematic diagram of the surface injection system and its appurtenances;

b. A final well bore diagram showing the name, description, and depths of the storage reservoir and the base of the deepest underground source of drinking water and a diagram of the well depicting the casing, cementing, perforation, tubing, and plug and packer records associated with the construction of the well;

c. The well's complete dual induction or equivalent log through the storage reservoir. Such a log shall be run prior to setting casing through the storage reservoir. Logs must be annotated to identify the estimated location of the base of the deepest underground source of drinking water, showing the stratigraphic position and thickness of all confining strata above the storage reservoir and the reservoir's stratigraphic position and thickness unless that information has been previously submitted. When approved in advance by the commission, this information can be demonstrated with a dual induction or equivalent log run in a nearby well or by such other method acceptable to the commission;

d. An affidavit specifying the chemical constituents, their relative proportions and the physical properties of the carbon dioxide stream, and the source of the carbon dioxide stream;

e. Proof that the long string of casing of the well is cemented adequately so that the carbon dioxide is confined to the storage reservoirs. Such proof must be provided in the form of a cement bond log or the results of a fluid movement study or such other method specified by the commission;

f. The results of a mechanical-integrity test, if applicable to well type, of the casing in accordance with the pressure test requirements of this section if a test was run within one calendar year preceding the request for a conversion permit for a previously drilled well;

g. The final area of review based on modeling, using data obtained during logging and testing of the well and the formation, including any relevant updates on the geologic structure and hydrogeologic properties of the proposed storage reservoir and overlying formations;

h. Information on the compatibility of the carbon dioxide stream with fluids in the injection zone and minerals in both the injection and the confining zone, based on the results of the formation testing program, and with the materials used to construct the well;

i. The results of the formation testing program;

j. The status of corrective action on wells in the area of review;

k. All available logging and testing program data on the well;

l. Any updates to the proposed area of review and corrective action plan, testing and monitoring plan, injection well plugging plan, postinjection site care and facility closure plan, and the emergency and remedial response plan, which are necessary to address new information collected during logging and testing of the well; and

m. Any other information that the commission requires.

**History:** Effective April 1, 2010; amended effective April 1, 2013.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**43-05-01-11.4. Testing and monitoring requirements.**

The storage operator shall prepare, maintain, and comply with a testing and monitoring plan to verify that the geologic sequestration project is operating as permitted and is not endangering underground sources of drinking water. The requirement to maintain and implement a commission-approved plan is directly enforceable regardless of whether the requirement is a condition of the permit. The plan must be submitted with the storage facility permit application for commission approval and must include a description of how the storage operator will meet the requirements of this section, including accessing sites for all necessary monitoring and testing during the life of the project.

1. The testing and monitoring plan must include:

   a. Analysis of the carbon dioxide stream in compliance with applicable analytical methods and standards generally accepted by industry and with sufficient frequency to yield data representative of its chemical and physical characteristics;

   b. Installation and use, except during well workovers, of continuous recording devices to monitor injection pressure, rate, and volume; the pressure on annulus between the tubing and the long string casing; and the annulus fluid volume added;

   c. Corrosion monitoring of the well materials for loss of mass, thickness, cracking, pitting, and other signs of corrosion, which must be performed on a quarterly basis to ensure that the well components meet the minimum standards for material strength and performance by:

      (1) Analyzing coupons of the well construction materials placed in contact with the carbon dioxide stream;

      (2) Routing the carbon dioxide stream through a loop constructed with the material used in the well and inspecting the materials in the loop; or

(3) Using an alternative method approved by the commission;

d. Periodic monitoring of the ground water quality and geochemical changes above the confining zone that may be a result of carbon dioxide movement through the confining zone or additional identified zones, including:

(1) The location and number of monitoring wells based on specific information about the geologic sequestration project, including injection rate and volume, geology, the presence of artificial penetrations, and other factors; and

(2) The monitoring frequency and spatial distribution of monitoring wells based on baseline geochemical data and on any modeling results in the area of review evaluation;

e. A demonstration of external mechanical integrity at least once per year until the injection well is plugged; and, if required by the commission, a casing inspection log at a frequency established in the testing and monitoring plan;

f. A pressure fall-off test at least once every five years unless more frequent testing is required by the commission based on site-specific information;

g. Testing and monitoring to track the extent of the carbon dioxide plume and the presence or absence of elevated pressure (e.g., the pressure front) by using:

(1) Direct methods in the injection zone; and

(2) Indirect methods (e.g., seismic, electrical, gravity, interferometric synthetic aperture radar or electromagnetic surveys and down-hole carbon dioxide detection tools), unless the commission determines, based on site-specific geology, that such methods are not appropriate;

h. The commission may require surface air monitoring and soil gas monitoring to detect movement of carbon dioxide that could endanger an underground source of drinking water. Regarding these requirements:

(1) Design of surface air and soil gas monitoring must be based on potential risks to underground sources of drinking water within the area of review;

(2) The monitoring frequency and spatial distribution of surface air monitoring and soil gas monitoring must be based on using baseline data, and the monitoring plan must describe how the proposed monitoring will yield useful information on the area of review; and

(3) Surface air monitoring and soil gas monitoring methods are subject to the commission's approval;

i. The commission may require passive seismicity monitoring to detect induced seismicity that could compromise the containment of the stored carbon dioxide within the carbon dioxide storage complex that could endanger an underground

source of drinking water.

~~i.~~j. Any additional monitoring, as required by the commission, necessary to support, upgrade, and improve computational modeling of the area of review evaluation;

~~j.~~k. Periodic reviews of the testing and monitoring plan by the storage operator to incorporate monitoring data collected, operational data collected, and the most recent area of review reevaluation performed. The storage operator shall review the testing and monitoring plan at least once every five years. Based on this review, the storage operator shall submit an amended testing and monitoring plan or demonstrate to the commission that no amendment to the testing and monitoring plan is needed. Any amendments to the testing and monitoring plan are subject to the commission's approval, must be incorporated into the permit, and are subject to the permit modification requirements. Amended plans or demonstrations must be submitted to the commission as follows:

(1) Within one year of an area of review reevaluation;

(2) Following any significant changes to the facility, such as addition of monitoring wells or newly permitted injection wells within the area of review, on a schedule determined by the commission; or

(3) When required by the commission; and

~~k.~~l. A quality assurance and surveillance plan for all testing and monitoring requirements.

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual who performed the sampling or measurements;

   c. The date analyses were performed;

   d. The individual who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

4. All permits shall specify:

   a. Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods, including biological monitoring methods when appropriate;

   b. Required monitoring, including type, intervals, and frequency sufficient to yield data, which are representative of the monitored activity, including when

appropriate, continuous monitoring; and

c. Applicable reporting requirements based upon the impact of the regulated activity and as specified throughout this chapter. Reporting shall be no less frequent than specified in section 43-05-01-18.

**History:** Effective April 1, 2013.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**43-05-01-18.1. Abandonment of wells.**

1. The removal of injection equipment or the failure to operate an injection well for one year constitutes abandonment of the well. An abandoned well must be plugged in accordance with the plugging plan and its site must be reclaimed pursuant to section 43-02-03-34.1.

2. The commission may waive for one year the requirement to plug and reclaim an abandoned well by giving the well temporarily abandoned status. This status may only be given to wells that are to be used for purposes related to the geologic storage of carbon dioxide. If a well is given temporarily abandoned status, the well's perforations must be isolated, the integrity of its casing must be proven, and its casing must be sealed at the surface, all in a manner approved by the commission. The commission may extend a well's temporarily abandoned status beyond one year. A fee of one hundred dollars shall be submitted for each application to extend the temporary abandonment status of any well.

3. In addition to the waiver in subsection 2, the commission may also waive the duty to plug and reclaim an abandoned well for any other good cause found by the commission. If the commission exercises this discretion, the commission shall set a date or circumstance upon which the waiver expires.

**History:** Effective April 1, 2013.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**43-05-01-19. Postinjection site care and facility closure.**

The storage operator shall submit and maintain the postinjection site care and facility closure plan as a part of the storage facility permit application to be approved by the commission. The requirement to maintain and implement a commission-approved plan is directly enforceable regardless of whether the requirement is a condition of the permit.

1. The postinjection site care and facility closure plan must include the following information:

   a. The pressure differential between preinjection and predicted postinjection pressures in the injection zone;

   b. The predicted position of the carbon dioxide plume and associated pressure front at cessation of injection as demonstrated in the area of review evaluation;

c. A description of postinjection monitoring location, methods, and proposed frequency;

d. A schedule for submitting postinjection site care monitoring results to the commission; and

e. The duration of the postinjection site care monitoring time frame that ensures nonendangerment of underground sources of drinking water.

2. The storage operator shall specify in the postinjection site care and facility closure plan which wells will be plugged and which will remain unplugged to be used as subsurface observation wells. Subsurface observation and ground water monitoring wells as approved in the plan must remain in place for continued monitoring during the closure and postclosure periods.

3. Upon cessation of injection, the storage operator shall either submit an amended postinjection site care and facility closure plan or demonstrate to the commission through monitoring data and modeling results that no amendment to the plan is needed. Any amendments to the postinjection site care and facility closure plan are subject to the commission's approval and must be incorporated into the storage facility permit.

4. At any time during the life of the geologic sequestration project, the storage operator may modify and resubmit the postinjection site care and facility closure plan for the commission's approval within thirty days of such change.

5. Upon cessation of injection, all wells not associated with monitoring must be properly plugged and abandoned in a manner which will not allow movement of injection or formation fluids that endanger underground sources of drinking water in accordance with section 43-05-01-11.5. All storage facility equipment, appurtenances, and structures not associated with monitoring must be removed, and all flowlines properly abandoned. Following well plugging and removal of all surface equipment, the surface must be reclaimed to the commission's specifications that will, in general, return the land as closely as practicable to original condition pursuant to ~~North Dakota Century Code~~ section ~~38-08-04.12~~43-02-03-34.1.

6. The well casing must be cut off at a depth of five feet [1.52 meters] below the surface and a steel plate welded on top identifying the well name and that it was used for carbon dioxide.

7. The commission shall develop in conjunction with the storage operator a continuing monitoring plan for the postclosure period, including a review and final approval of wells to be plugged.

8. The storage operator shall continue to conduct monitoring during the closure period as specified in the commission-approved postinjection site care and facility closure plan. The storage operator may apply for project completion with an alternative postinjection site care monitoring time frame pursuant to North Dakota Century Code section 38-22-17. Once it is demonstrated that underground sources of drinking water are no longer endangered, the final assessment under subsection 9 is complete, and

upon full compliance with North Dakota Century Code section 38-22-17, the storage operator may apply to the commission for a certificate of project completion. If the storage operator is unable to meet the requirements of North Dakota Century Code section 38-22-17 and is unable to demonstrate that underground sources of drinking water are no longer being endangered, the storage operator shall continue monitoring the storage facility for fifty years or until full compliance is met and such demonstration can be made.

9. Before project completion, the storage operator shall provide a final assessment of the stored carbon dioxide's location, characteristics, and its future movement and location within the storage reservoir. The storage operator shall submit the final assessment to the commission within ninety days of completing all postinjection site care and facility closure requirements.

   a. The final assessment must include:

      (1) The results of computational modeling performed pursuant to delineation of the area of review under section 43-05-01-05.1;

      (2) The predicted time frame for pressure decline within the injection zone, and any other zones, such that formation fluids may not be forced into any underground sources of drinking water or the time frame for pressure decline to preinjection pressures;

      (3) The predicted rate of carbon dioxide plume migration within the injection zone and the predicted time frame for the cessation of migration;

      (4) A description of the site-specific processes that will result in carbon dioxide trapping, including immobilization by capillary trapping, dissolution, and mineralization at the site;

      (5) The predicted rate of carbon dioxide trapping in the immobile capillary phase, dissolved phase, or mineral phase;

      (6) The results of laboratory analyses, research studies, or field or site-specific studies to verify the information required in paragraphs 4 and 5;

      (7) A characterization of the confining zone, including a demonstration that it is free of transmissive faults, fractures, and microfractures, and an evaluation of thickness, permeability, and integrity to impede fluid (e.g., carbon dioxide, formation fluids) movement;

      (8) Any other projects in proximity to the predictive modeling of the final extent of the carbon dioxide plume and area of elevated pressures. The presence of potential conduits for fluid movement, including planned injection wells and project monitoring wells associated with the proposed geologic sequestration project;

      (9) A description of the well construction and an assessment of the quality of plugs of all abandoned wells within the area of review;

(10) The distance between the injection zone and the nearest underground source of drinking water above and below the injection zone;

(11) An assessment of the operations conducted during the operational period, including the volumes injected, volumes extracted, all chemical analyses conducted, and a summary of all monitoring efforts. The report must also document the stored carbon dioxide's location and characteristics and predict how it might move during the postclosure period;

(12) An assessment of the funds in the carbon dioxide storage facility trust fund to ensure that sufficient funds are available to carry out the required activities on the date on which they may occur, taking into account project-specific risk assessments, projected timing of activities (e.g., postinjection site care), and interest accumulation in the trust fund; and

(13) Any additional site-specific factors required by the commission.

b. Information submitted to support the demonstration in subdivision a must meet the following criteria:

(1) All analyses and tests for the final assessment must be accurate, reproducible, and performed in accordance with the established quality assurance standards. An approved quality assurance and quality control plan must address all aspects of the final assessment;

(2) Estimation techniques must be appropriate and test protocols certified by the United States environmental protection agency must be used where available;

(3) Predictive models must be appropriate and tailored to the site conditions, composition of the carbon dioxide stream, and injection and site conditions over the life of the geologic sequestration project;

(4) Predictive models must be calibrated using existing information when sufficient data are available;

(5) Reasonably conservative values and modeling assumptions must be used and disclosed to the commission whenever values are estimated on the basis of known, historical information instead of site-specific measurements;

(6) An analysis must be performed to identify and assess aspects of the postinjection monitoring time frame demonstration that contribute significantly to uncertainty. The storage operator shall conduct sensitivity analyses to determine the effect that significant uncertainty may contribute to the modeling demonstration; and

(7) Any additional criteria required by the commission.

10. The storage operator shall provide a copy of an accurate plat certified by a registered

surveyor which has been submitted to the county recorder's office designated by the commission. The plat must indicate the location of the injection well relative to permanently surveyed benchmarks. The storage operator must also submit a copy of the plat to the United States environmental protection agency regional administrator office.

11. The storage operator shall record a notation on the deed to the property on which the injection well was located, or any other document that is normally examined during title search, that will in perpetuity provide any potential purchaser of the property the following information:

    a. The fact that land has been used to sequester carbon dioxide;

    b. The name of the state agency, local authority, or tribe with which the survey plat was filed, as well as the address of the United States environmental protection agency regional office to which it was submitted; and

    c. The volume of fluid injected, the injection zone or zones into which it was injected, and the period over which injection occurred.

**History:** Effective April 1, 2010; amended effective April 1, 2013; April 1, 2018.
**General Authority:** NDCC 28-32-02
**Law Implemented:** NDCC 38-22

**TIMETABLE FOR ADOPTING OIL AND GAS RULES** (tentative in RED FONT) Attachment 9C

**2025**

**Jul 3:** Requested staff ideas for rule changes

**Jul 14:** Received interoffice comments for proposed rules

**Sep 9**: Sent legal ads to North Dakota Newspaper Association for rules notice
(Notices published between Sep 13 – Sep 19) Cost was $_X__ ($X/53Cty=$X/County)

**Sep 13:** Wrote regulatory analysis on or before first published date for rules impacting industry > $50,000/yr

**Sep 19**: All papers (10 daily + 42 weekly) published proposed rules notice Sep 13 – Sep 19

**Sep 30:** Industrial Commission meeting—receive approval to proceed with proposed rulemaking

**Sep 30:** File full notice and rules with Legislative Council (LC) via email
LC sends rules notice to interested parties within 15 business days after receiving them

**Oct 3**: Send Notice (via email) sent to sponsors of bills (not applicable)

**Oct 20**: 8:30am CDT: Rules hearing (Case 32201) Oil and Gas Division Office, 1000 E Calgary Ave, Bismarck
(Hearing must be no sooner than 20 days from the date of last publication)
1:30pm MDT: Rules hearing, Oil and Gas Division Field Office, 926 E Industrial Drive, Dickinson

**Oct 21**: 8:30am CDT: Rules hearing, Bakken Airport Hotel, 5813 Jefferson Lane, Williston
**2**:00pm CDT: Rules hearing, Oil and Gas Division Field Office, 7 Third St SE, Suite 107, Minot
Minimum ten-day comment period starts (to receive input on proposed rules)

**Oct 31**: Comment period ends from hearing—10 days from final hearing date (ten-day mandatory)

**Nov 21:** Finalize responses to all comments received (oral at hearing plus written comments)
Finalize appropriate amendments to rules

**Nov 25**: IC meeting—approval of rule amendments with ICO 34956 (Case 32201)

**Dec 1:** Mail ICO 34956 to all interested parties including sponsors (NA); prepare affidavit of mailing to all parties

**Dec 22**: Complete small entity regulatory analysis—required to minimize adverse impact on small entities

**Dec 22**: Complete small entity impact statement—required if has an adverse impact on small entities

**2026**

**Jan 2**: Submit final rules to Attorney General for legal opinion

**Jan 26**: Receive opinion from Attorney General's office

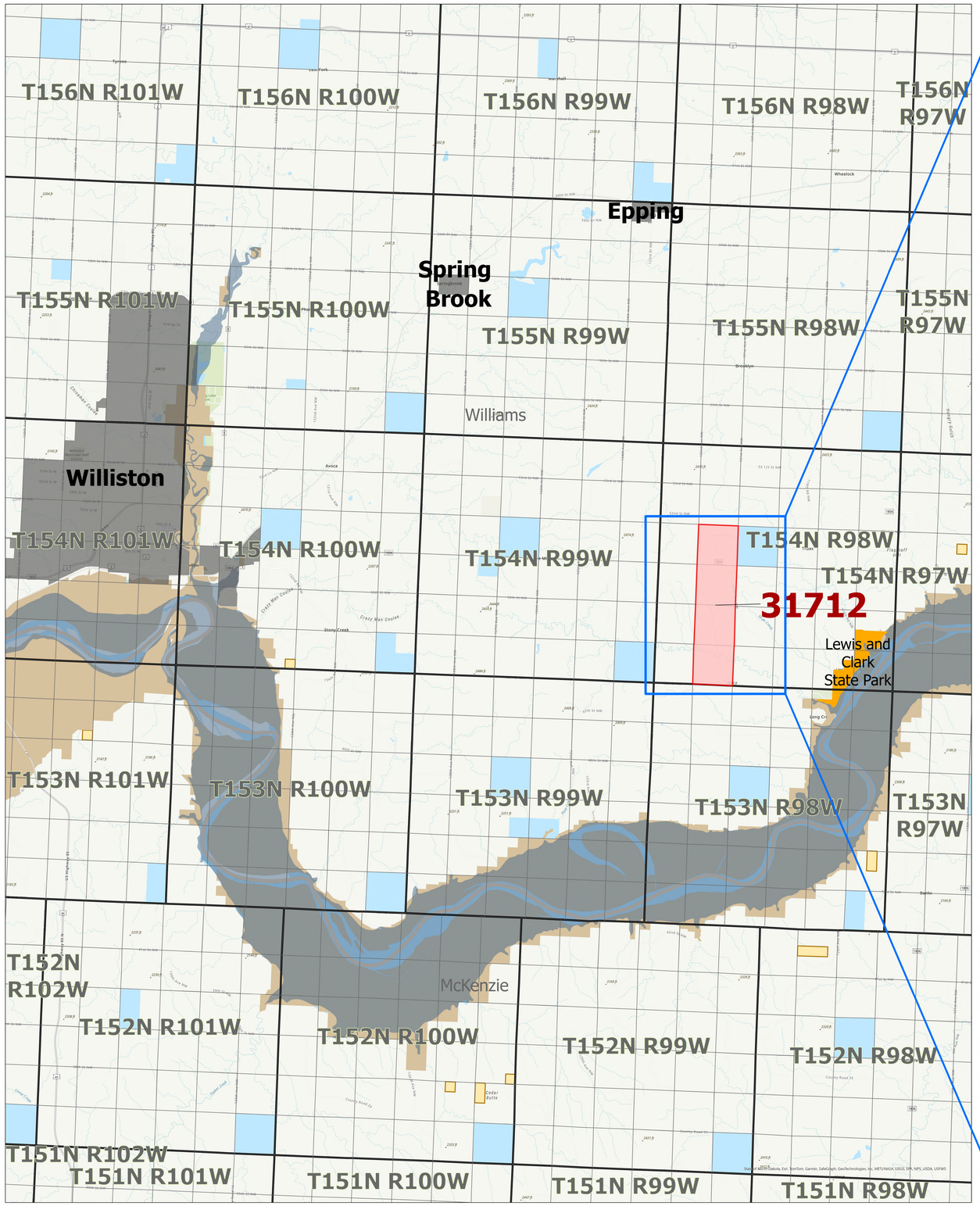
**Jan 29:** File rules and Attorney General opinion with Legislative Council
(Rules filed with LC between Nov 2 and Feb 1 become effective Apr 1)

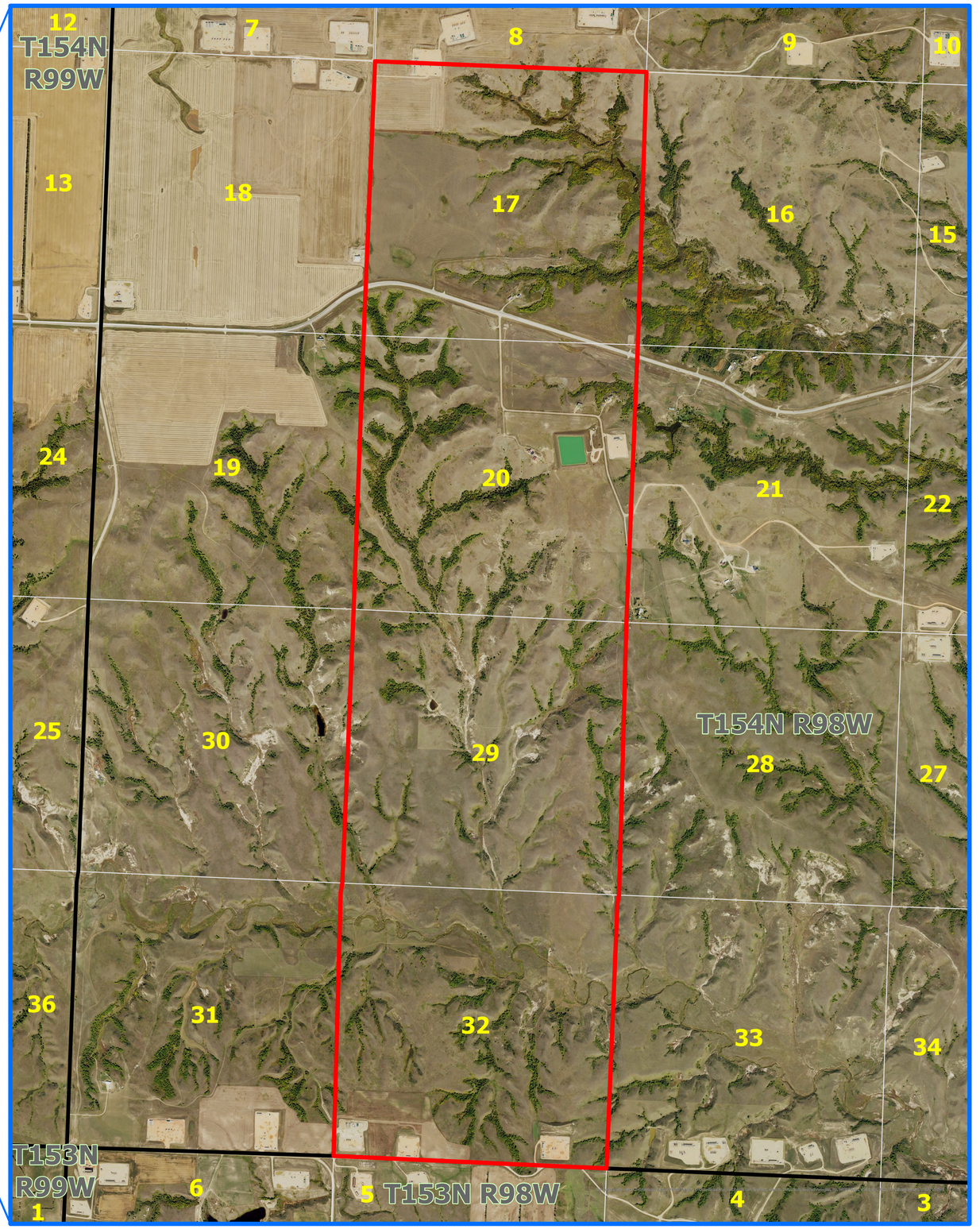
**Feb 12**: Notify all interested parties (and post on web) of the Administrative Rules Committee hearing
(Note: also notice sponsors if implementing past legislation being adopted in rules)

**Mar ?**: Administrative Rules Committee Hearing

**Apr 1**: Adopt final rules

# Industrial Commission c31712



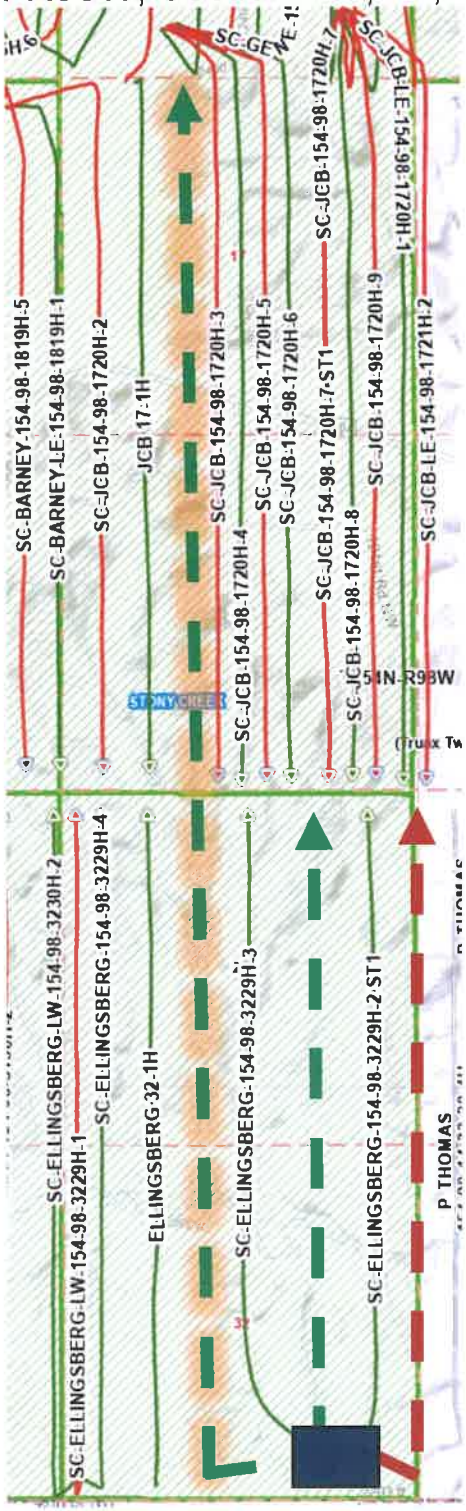

Sections
Townships
City Boundary
Surface Trust Land
Bureau of Land Management
Army Corps of Engineers

NORTH DAKOTA OIL AND GAS DIVISION

9/17/2025

# Proposed 2,560 Development in Williams County, ND

T154N-R98W; Sections 17, 20, 29, & 32




INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 5/28/25 CASE NO. 31712
Introduced By Hess
Exhibit 5
Identified By Hoy

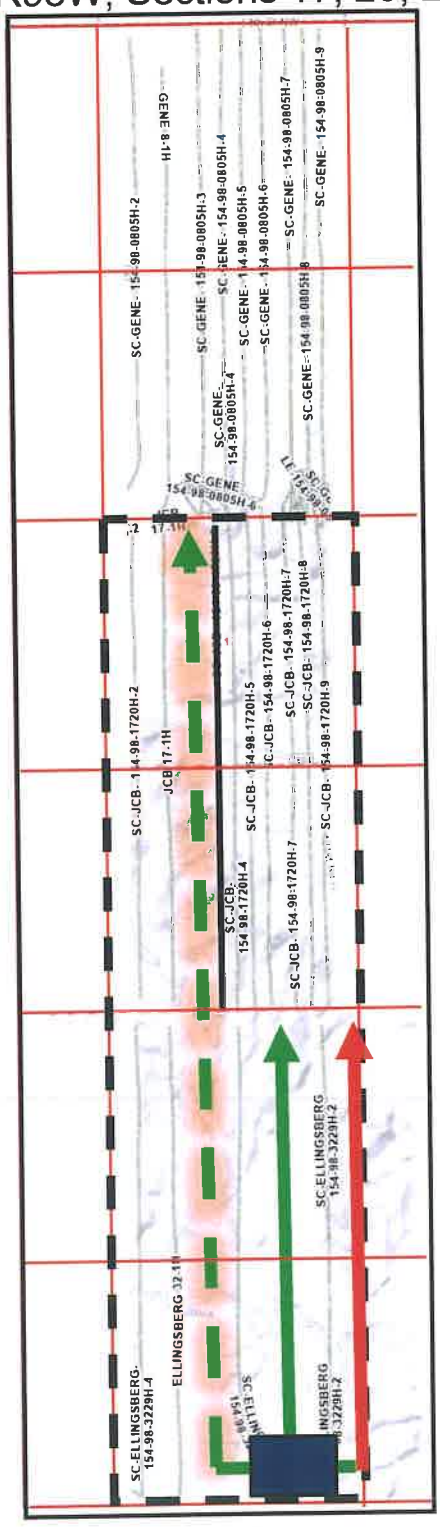
**Note: Surface location, lateral placement, and casing set-points approximate only**

- Existing MB Well
- New Planned MB Well
- Existing TF Well
- New Planned TF Well
- Surface location

**Case # 31712**
**May 28, 2025**
**Exhibit # 5**

# Proposed 2,560 Development in Williams County, ND

T154N-R98W; Sections 17, 20, 29, & 32



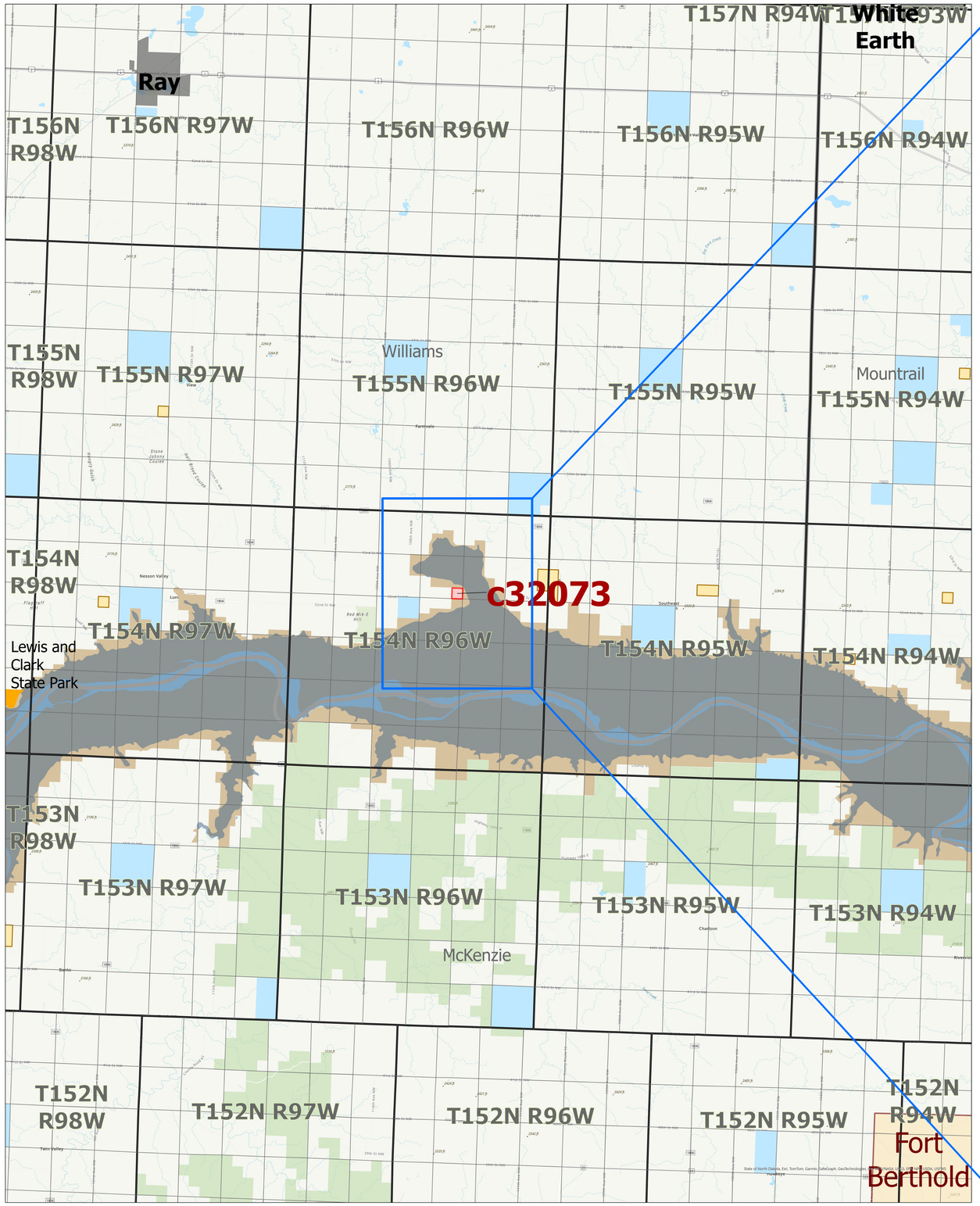

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 5/28/25 CASE NO. 31712
Introduced By Hess
Exhibit 6
Identified By Gray

**Note: Surface location, lateral placement, and casing set-points approximate only**

- Producing Wells
- AB Well
- Surface location
- Planned MB Well
- Planned TF Well
- Proposed MB 4-Mile Well

**Case # 31712**
**May 28, 2025**
**Exhibit # 6**

# Industrial Commission c32073

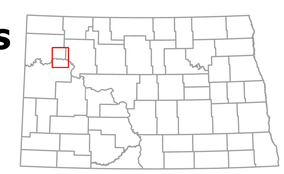


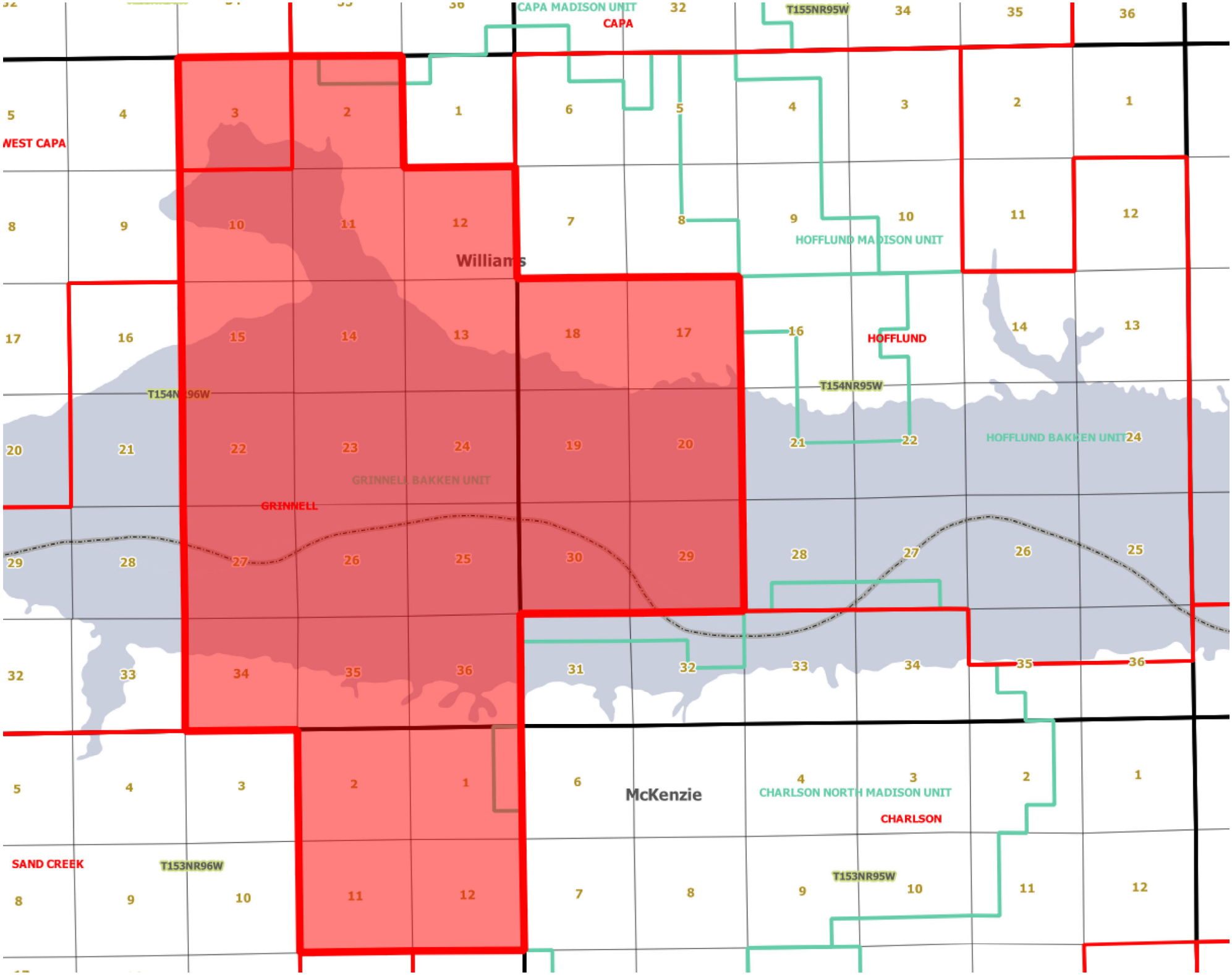


**Sections** **Townships** **City Boundary** **Surface Trust Land** **Bureau of Land Management** **National Grasslands** **Army Corps of Engineers** **Reservations**

NORTH DAKOTA
OIL AND GAS DIVISION

9/17/2025




CAPA MADISON UNIT
CAPA
T155NR95W
WEST CAPA
Williams
HOFFLUND MADISON UNIT
HOFFLUND
T154NR95W
HOFFLUND BAKKEN UNIT
GRINNELL BAKKEN UNIT
GRINNELL
McKenzie
CHARLSON NORTH MADISON UNIT
CHARLSON
SAND CREEK
T153NR96W
T153NR95W

## 11. PLAN OF OPERATION.

It is recognized and agreed by the parties hereto that the Unit Area is reasonably assumed to be geologically defined and productive, and additional drilling to further develop the Unit Area is contemplated. Inasmuch as the primary purpose of this Agreement is to permit the Unit Operator to develop the Unit Area as a single spacing unit thus allowing the NDIC to grant elimination of setbacks within Unit Area while protecting correlative rights in order to help facilitate the prudent development of the Unit Area, which is topographically challenging, in order to reduce environmental impact in the Unit Area and maximize economic production of Unitized Substances consistent with good engineering and conservation practices, Unit Operator, concurrently with the filing of this Unit Agreement for final approval, shall submit to the AO for approval a plan of operation for the Unitized Land, and upon approval thereof by the AO, such plan shall constitute the future operating obligations of the Unit Operator under this Unit Agreement for the period specified therein. Thereafter, from time to time, as determined by the AO, before the expiration of any existing plan, the Unit Operator shall submit for like approval a plan for an additional specified period of operation. These subsequent plans should normally be filed on a calendar year basis not later than March 1 each year. Said plan or plans shall be supplemented when necessary to meet changed conditions, or to protect the interest of all parties to this Unit Agreement. Reasonable diligence, as determined by the AO, shall be exercised in complying with the obligations of any approved plan of operation.

The Unit Operator shall have the right to inject into the Unitized Formation any substances for further development and enhanced recovery purposes in accordance with a plan of operation approved by the AO, including the right to drill and maintain injection wells on the Unitized Land and completed in the Unitized Formation for said purpose, and the parties hereto, to the extent of their rights and interests, hereby grant to the Unit Operator the right to use as much of the surface of the land within the Unit Area as may be reasonably necessary for the operation and development of the Unit Area hereunder. Unit Operator shall have free use of water from the Unitized Land for operations hereunder and for operation on adjacent lands as may be reasonably necessary for the operation and the development of the Unit Area hereunder, except water from surface owner's and royalty owner's fresh water wells, private lakes, ponds, or irrigation ditches.

**RATIFICATION AND JOINDER OF UNIT AGREEMENT**
**FOR THE GRINNELL-BAKKEN UNIT**
**WILLIAMS AND MCKENZIE COUNTIES, NORTH DAKOTA**

In consideration of the execution of the Unit Agreement, Grinnell-Bakken Unit Area, Williams and McKenzie Counties, North Dakota, dated February 1, 2018, the undersigned (whether one or more) hereby expressly joins said Unit Agreement and ratifies, consents and agrees to the terms of said Unit Agreement as fully as though the undersigned had executed the original instrument, as the same is finally approved by order of the North Dakota Industrial Commission.

This Ratification and Joinder shall be effective as to the undersigned's interests in any lands and leases, or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering any lands within the Unit Area in which the undersigned has an oil or gas interest as provided by the Unit Agreement.

This Ratification and Joinder of Unit Agreement shall be binding upon the undersigned, his, her, or its heirs, devisees, assigns, or successors in interest.

EXECUTED this 17 day of December, 2018.

By: Roger Baker Marilyn Baker
Roger E. Baker & Marilyn J. Baker

Address: 11001 Hwy 1804
Ray ND 58849

**PLEASE RETURN EXECUTED COPY TO:**

XTO Energy Inc.
C/O Bakken Oil LLC
P.O. Box 471
Sidney, MT 59270

ROYALTY INTEREST



63083045.1

BY: .....

# Hofflund Bakken Unit
# Preliminary Development Plan

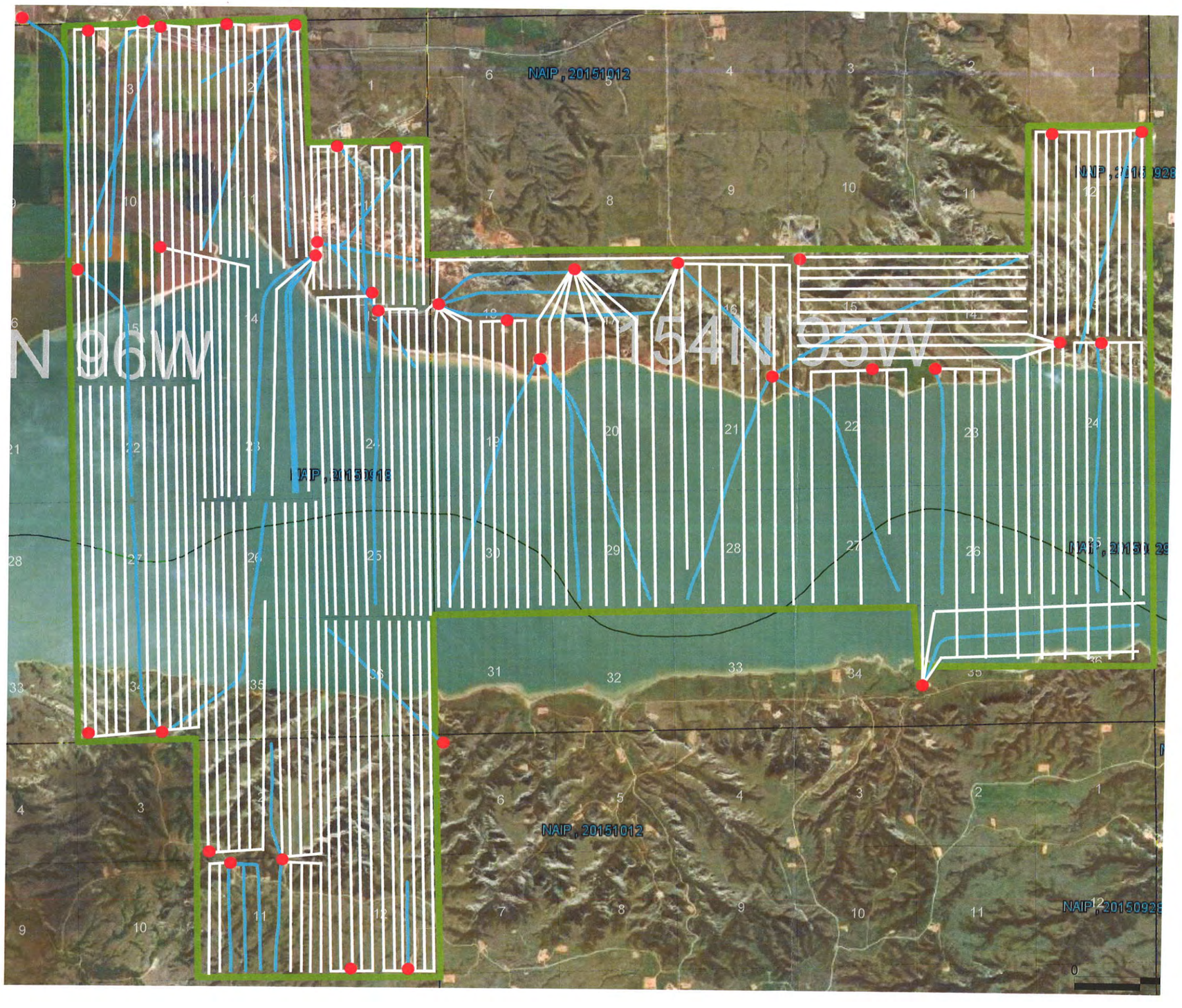



Exhibit E8

Exhibit 9

## Anticipated Full Development Map of Units

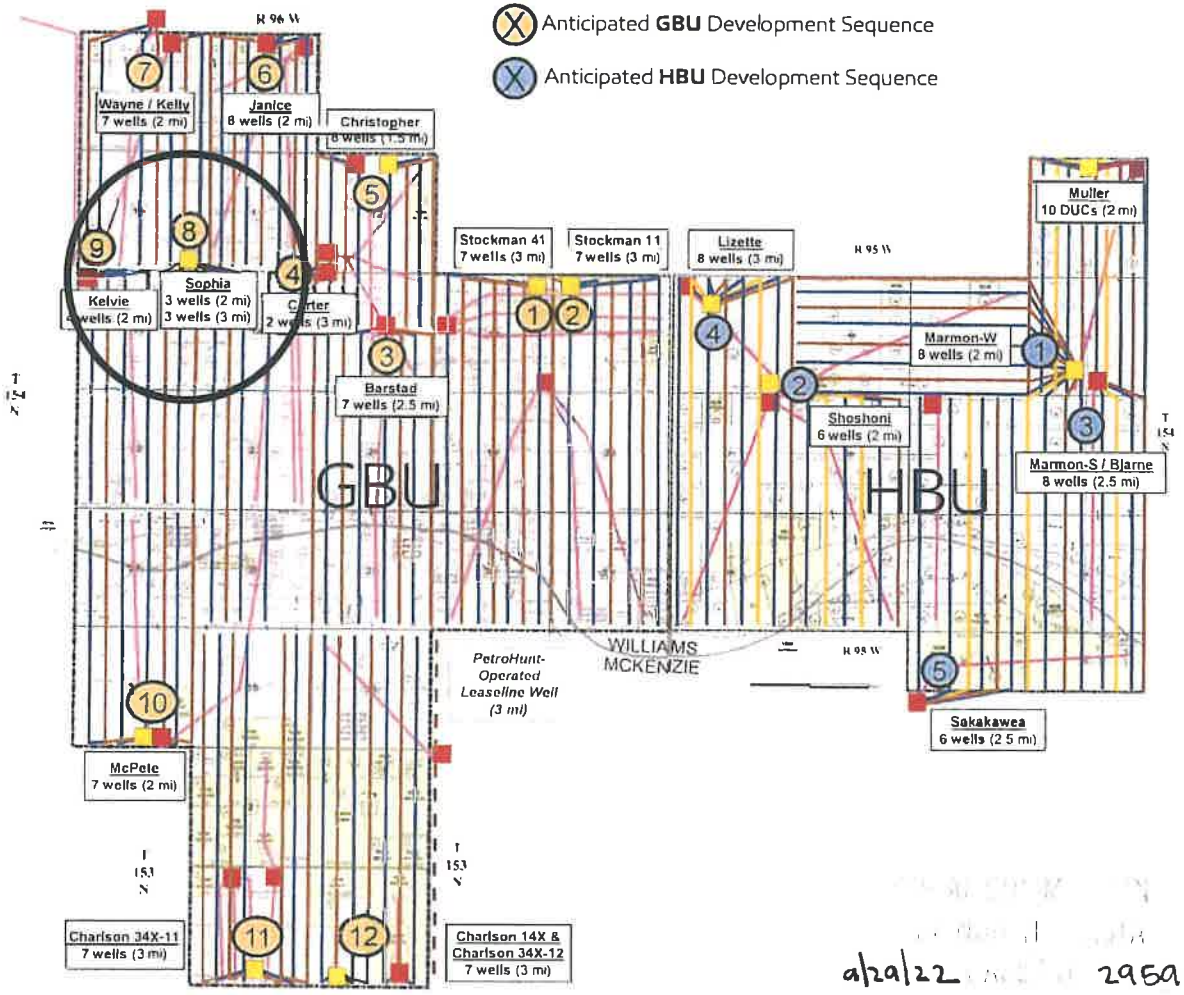
| PAD LOCATIONS | | GBU | HBU |
|---|---|---|---|
| | Existing Pads (Pre-Unit) | 16 | 6 |
| | New Pads (Post-Unit) | 7 | 4 |
| **Total Pads** | | **23** | **10** |

| WELLS | | GBU | HBU |
|---|---|---|---|
| | Existing Wells (Pre-Unit) | 26 | 8 |
| | New Wells (Post-Unit) | 78* | 46** |
| **Total Wells** | | **104** | **54** |

* Includes PetroHunt-Operated Leaseline Well – – –
** Includes Muller DUCs

| NEW WELLS BY FORMATION | | GBU | HBU |
|---|---|---|---|
| | New Well: Middle Bakken | 42 | 24 |
| | New Well: Three Forks | 36 | 13 |
| | New Well: Three Forks - 2B | 0 | 9 |
| **Total New Wells** | | **78** | **46** |

| NEW WELLS BY LATERAL | GBU | HBU |
|---|---|---|
| 1.5 miles | 8 | 0 |
| 2 miles | 29 | 24 |
| 2.5 miles | 7 | 14 |
| 3.0 miles | 34 | 8 |
| **Total New Wells** | **78** | **46** |




a/29/22 29599+ 29029
XTO
9
Initials by Levreault-Lopez

Exhibit 8

## Anticipated Full Development Map of HBU & GBU Units

| PAD LOCATIONS | | GBU | HBU |
|---|---|---|---|
| | Existing Pads (Pre-Unit) | 16 | 6 |
| | New Pads (Post-Unit) | 7 | 4 |
| **Total Pads** | | **23** | **10** |

| WELLS | | GBU | HBU |
|---|---|---|---|
| | Existing Wells (Pre-Unit) | 26 | 8 |
| | New Wells (Post-Unit) | 78* | 46** |
| **Total Wells** | | **104** | **54** |

* Includes PetroHunt-Operated Leaseline Well – – –
** Includes Muller DUCs

| NEW WELLS BY FORMATION | | GBU | HBU |
|---|---|---|---|
| | New Well: Middle Bakken | 42 | 24 |
| | New Well: Three Forks | 36 | 13 |
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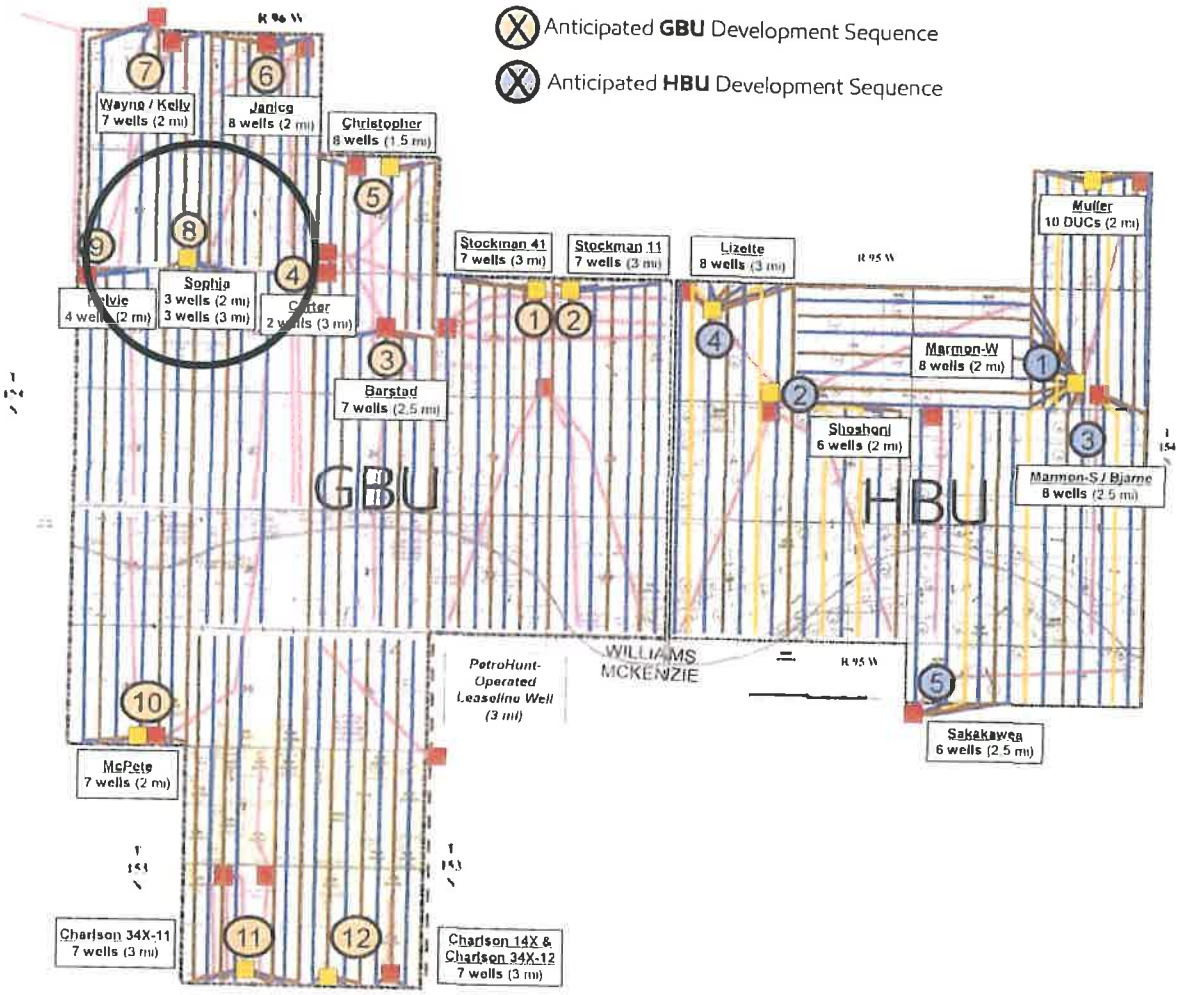
| **Total New Wells** | | **78** | **46** |

| NEW WELLS BY LATERAL | GBU | HBU |
|---|---|---|
| 1.5 miles | 8 | 0 |
| 2 miles | 29 | 24 |
| 2.5 miles | 7 | 14 |
| 3.0 miles | 34 | 8 |
| **Total New Wells** | **78** | **46** |

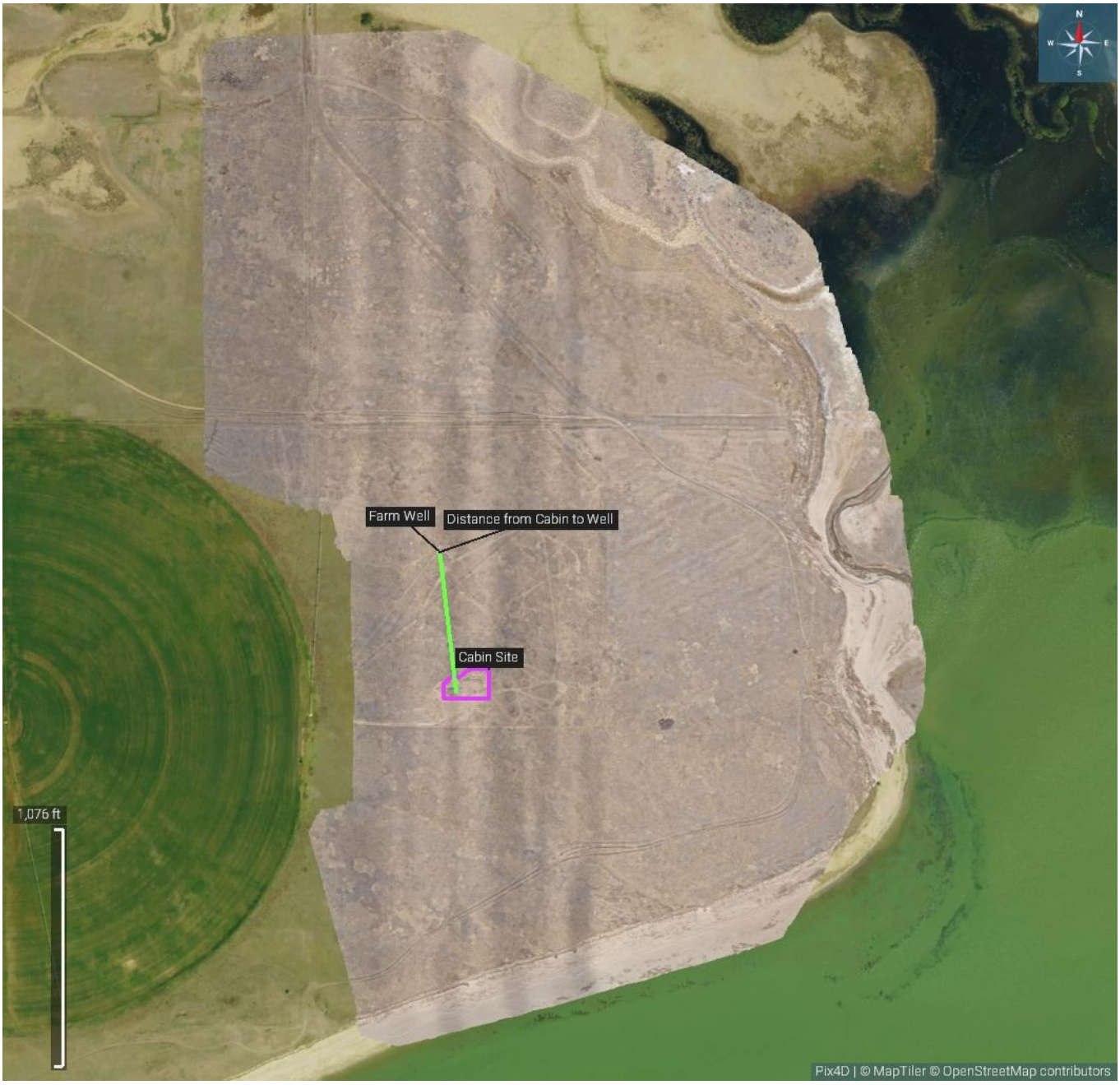



INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 12/14/23 CASE NO 30567/30568
Introduced By XTO
Exhibit 8
Identified By Thelen

**BAKER SUPPLEMENTAL EXHIBIT P13**

# Orthomosaic

with 3 annotations

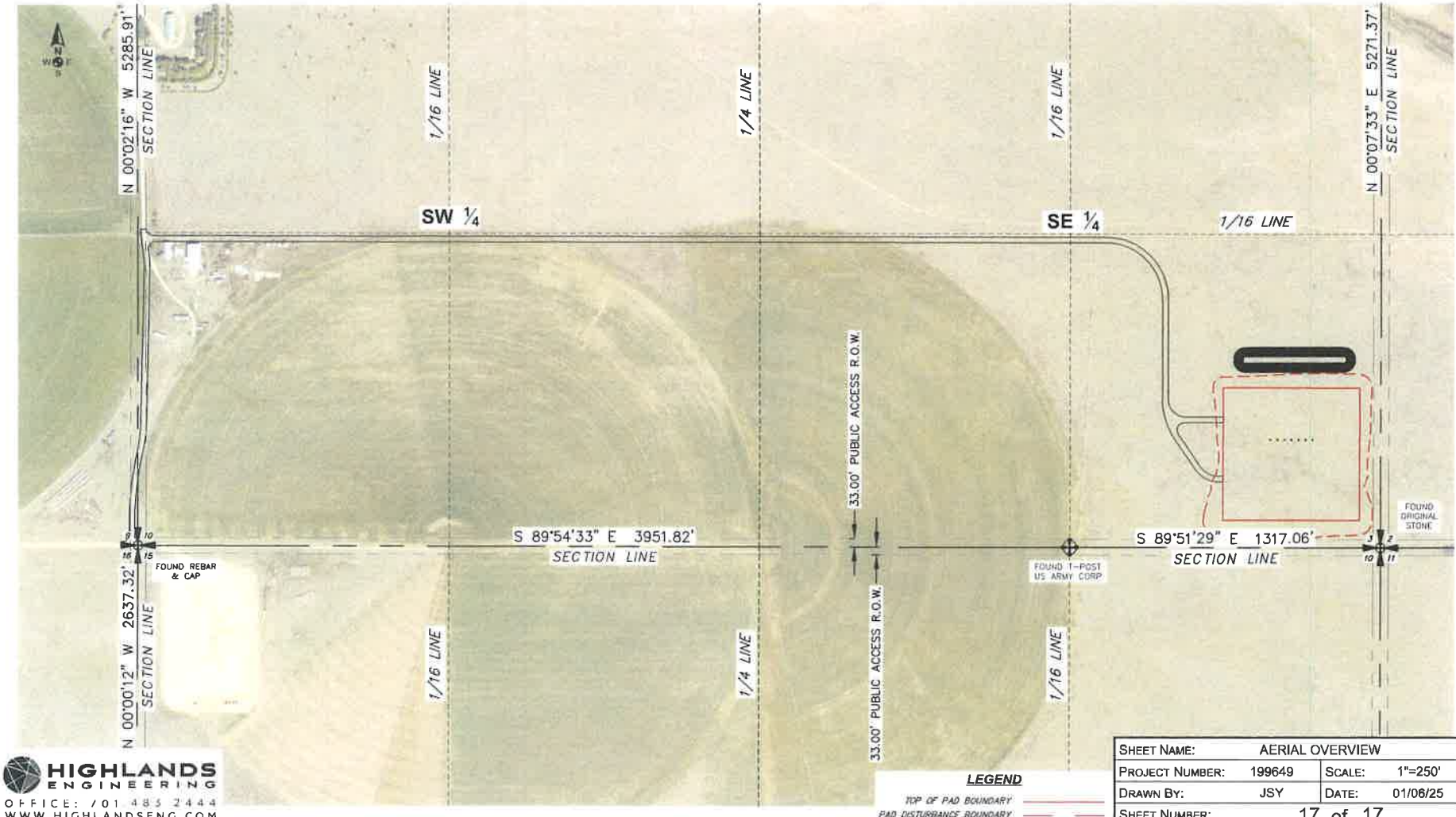



| | |
|---|---|
| All area annotations | 0.497 ac |

XTO ENERGY, INC.

# GBU SOPHIA FEDERAL 44X-10A-S, E-S, B-S, B-N, F-N
# GBU SOPHIA 44X-10A-N, E-N

*SE1/4 Section 10, T154N, R96W - 5th Principal Meridian*
*Williams County, North Dakota*




**LEGEND**

TOP OF PAD BOUNDARY
PAD DISTURBANCE BOUNDARY

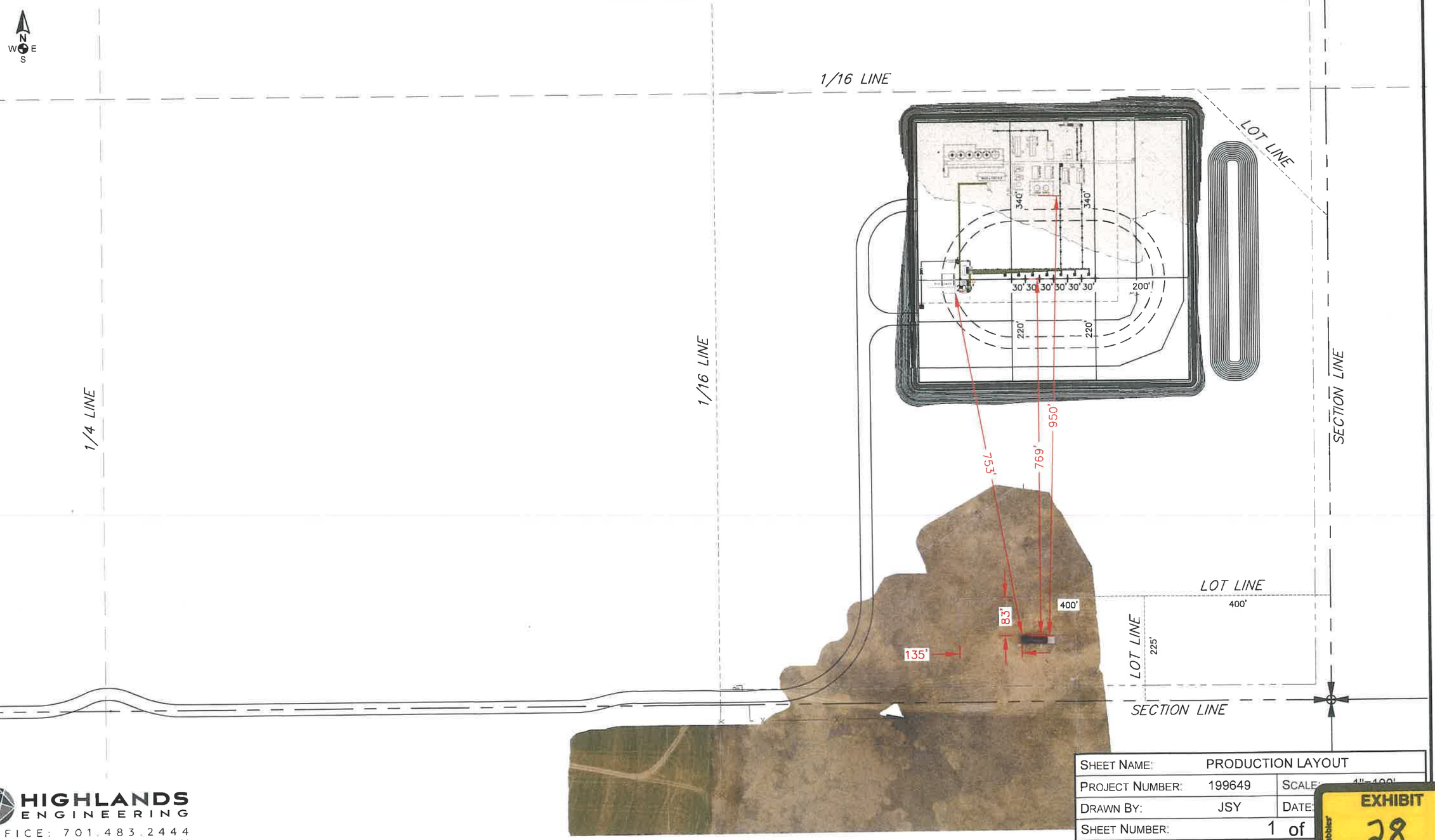

HIGHLANDS ENGINEERING
OFFICE: 701 485 2444
WWW.HIGHLANDSENG.COM


| | | | |
|---|---|---|---|
| SHEET NAME: | AERIAL OVERVIEW | | |
| PROJECT NUMBER: | 199649 | SCALE: | 1"=250' |
| DRAWN BY: | JSY | DATE: | 01/06/25 |
| SHEET NUMBER: | 17 of 17 | | |

XTO ENERGY, INC.

# GBU SOPHIA FEDERAL 44X-10A-S, E-S, B-S, B-N, F-N
# GBU SOPHIA 44X-10A-N, E-N

*SE1/4 Section 10, T154N, R96W - 5th Principal Meridian*
*Williams County, North Dakota*

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OFFICE: 701.483.2444
WWW.HIGHLANDSENG.COM

| | | | |
|---|---|---|---|
| SHEET NAME: | PRODUCTION LAYOUT | | |
| PROJECT NUMBER: | 199649 | SCALE: | 1"=100' |
| DRAWN BY: | JSY | DATE: | |
| SHEET NUMBER: | 1 of | | |

LAST SAVED: 06/09

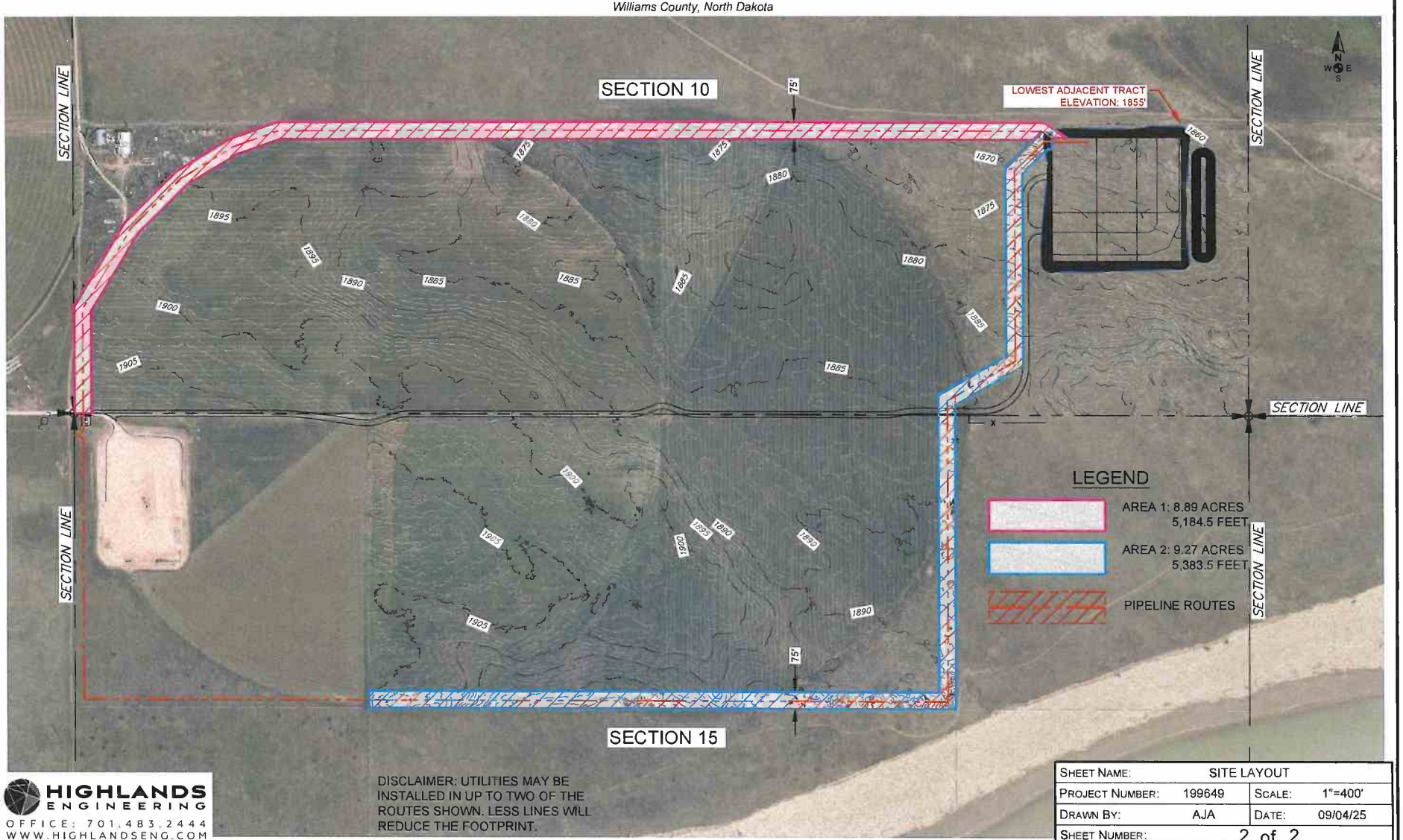
H:\199649\PROJECT CAD\CURRENT\199649 PL.DWG

EXHIBIT 28

*XTO ENERGY, INC.*

# GBU SOPHIA FEDERAL 44X-10

*SE1/4 Section 10, T154N, R96W - 5th Principal Meridian*
*Williams County, North Dakota*




DISCLAIMER: UTILITIES MAY BE INSTALLED IN UP TO TWO OF THE ROUTES SHOWN. LESS LINES WILL REDUCE THE FOOTPRINT.


HIGHLANDS ENGINEERING
OFFICE: 701.483.2444
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| | | | |
|---|---|---|---|
| SHEET NAME: | SITE LAYOUT | | |
| PROJECT NUMBER: | 199649 | SCALE: | 1"=400' |
| DRAWN BY: | AJA | DATE: | 09/04/25 |
| SHEET NUMBER: | 2 of 2 | | |

H:\199649\PROJECT CAD\CURRENT\199649 X-DESIGN_D_STR_ROAD - EXC.DWG

EXHIBIT
S-2
tabbies

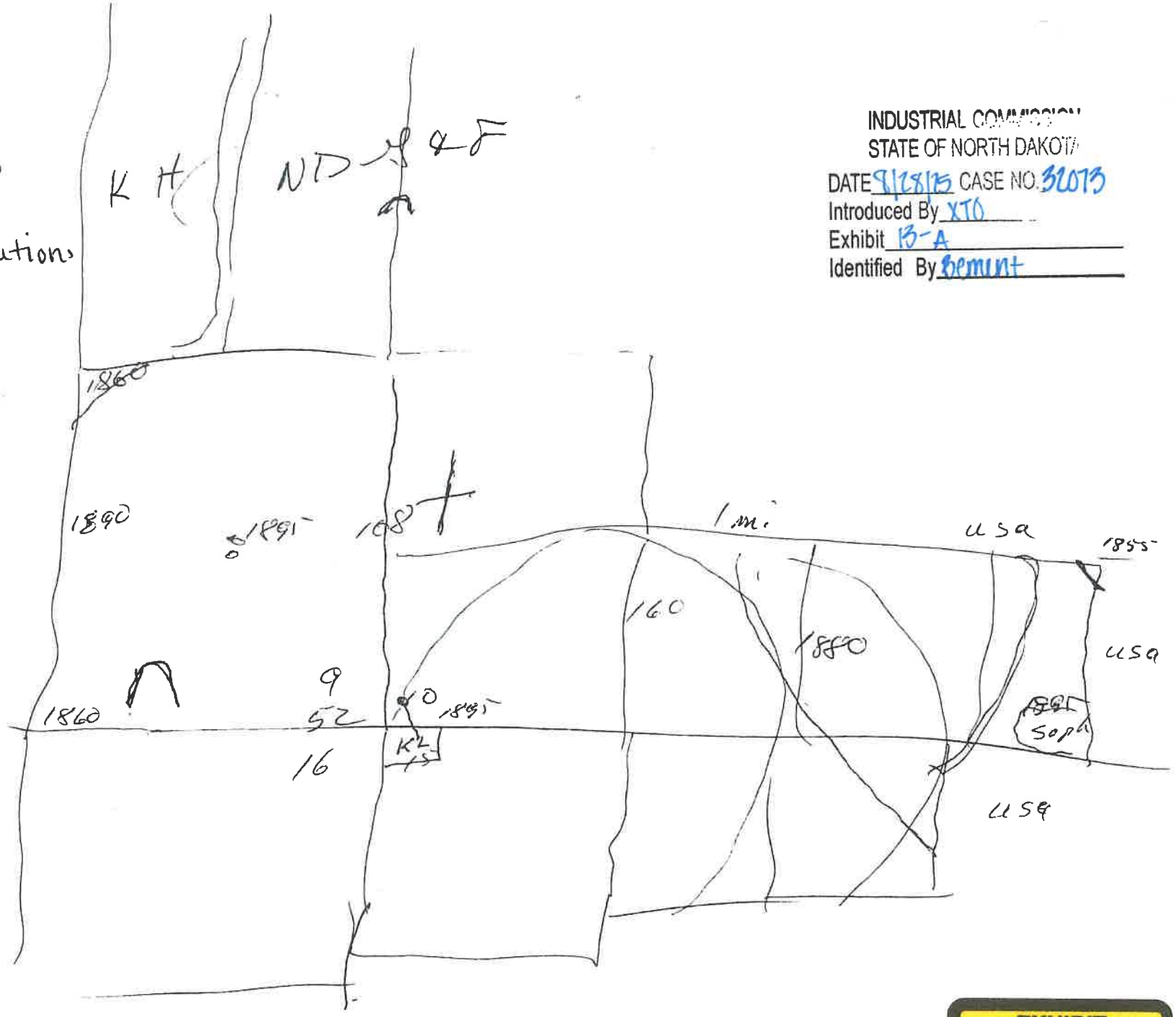
INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 5/19/15 CASE NO. 24073
Introduced By XTO
Exhibit 4
Identified By: Bernt

JW Sheldon Land LLC
Hartsoch
USA
USA
10
10
11
5244 108TH AVE NW
WestcottTrust
5225 108TH AVE NW
Beaver Creek Lutheran Congregation
USA
USA
USA
USA
Schmidt
Roger Baker
USA
5204 105TH
10711 52ND ST NW
10852 52ND ST NW
10794 52ND ST NW
USA
USA
HOFFLUND 154N 96W
State of North Dakota
Kessler
Lalim Trust
USA
USA
16
15
15
14

EXHIBIT
4

Andy Thomas

Energy Sand Solutions




INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 9/28/15 CASE NO. 32073
Introduced By XTO
Exhibit 13-A
Identified By Bement

EXHIBIT
tabbies
13-A

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 8/28/25 CASE NO. 32013
Introduced By XTO
Exhibit 33
Identified By Beutler

# Bakken Drilling Technical Considerations

## Directional Complexity & Challenges

- Standard well design has been evaluated and recommended based on wellbore trajectory and drilling technical limits.

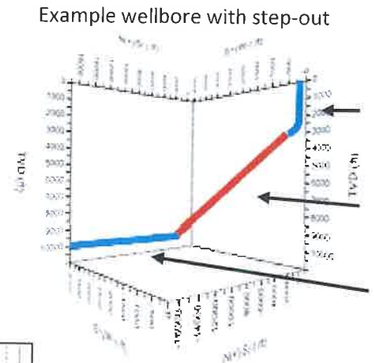
| Feasibility Check | Sophia | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Drilling Operational Envelope | 🟢 | 🟡 | 🔴 | 🔴 | 🔴 | 🔴 |
| Wellbore Trajectory | 🟢 | 🟡 | 🔴 | 🔴 | 🔴 | 🔴 |
| Resource Risk | 🟢 | 🔴 | 🔴 | 🔴 | 🔴 | 🔴 |

- Extending drilling laterals on Nesson Anticline face challenges such as:
  - High TVD uncertainty, exacerbated with longer step outs
  - Increased slide hours (e.g. 80 vs. 40), decreased slide ROP
  - Production casing setting risks

## Regional Drilling Context for 4+ mi Laterals

- Only 4 of 20 4-mile LL wells on Nesson Anticline; zero 5-mile LL
  - Pads/SHLs optimally placed
  - Limited step outs: max 1,800 ft, 14° tangent
  - Only Middle Bakken targeted; no 4-mile LL wells targeting Three Forks
  - Recently drilled, 3Q2024 & 1Q2025

Example wellbore with step-out



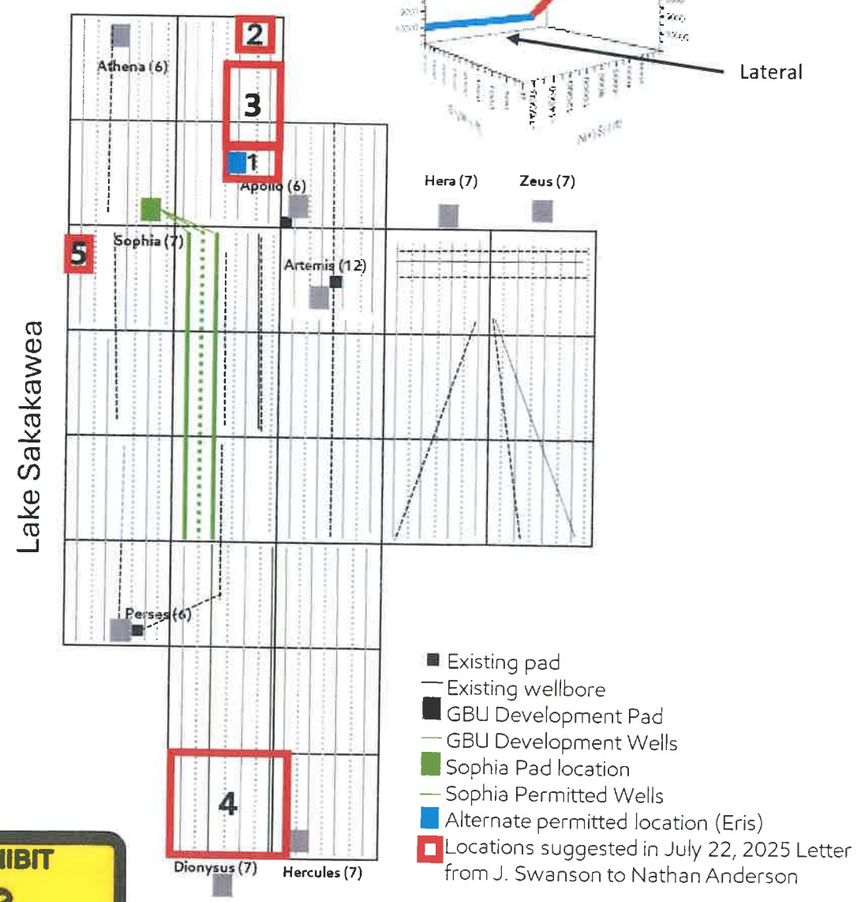
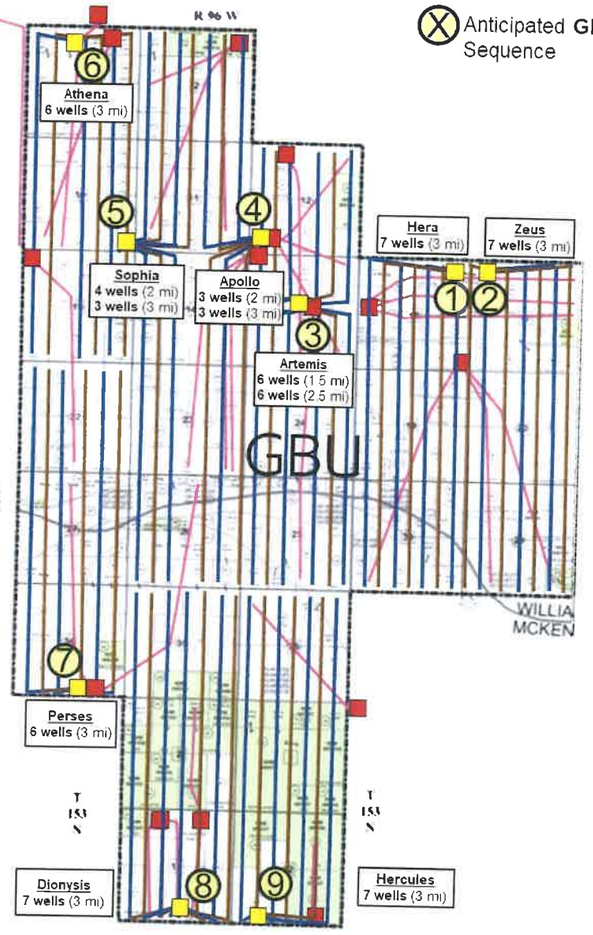



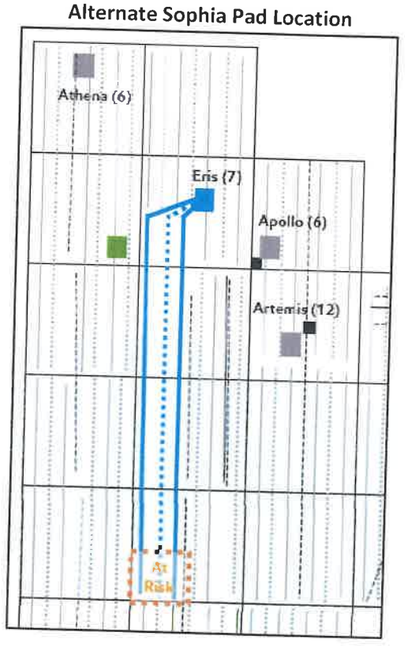

EXHIBIT
tabbies
33

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
DATE 8/19/25 CASE NO. 31073
Introduced By XTO
Exhibit 34
Identified By Johnston

# Grinnell Bakken Unit Development

## NDIC December 2024 GBU Plan Update




### Development Progress

- 6+ Years of Optimization focused on increasing value and resource recovery efficiency
- $1B invested in HBU/GBU development
- Drilling momentum: 23 of 40 HBU wells complete; 65 GBU wells planned

### Resource Recovery

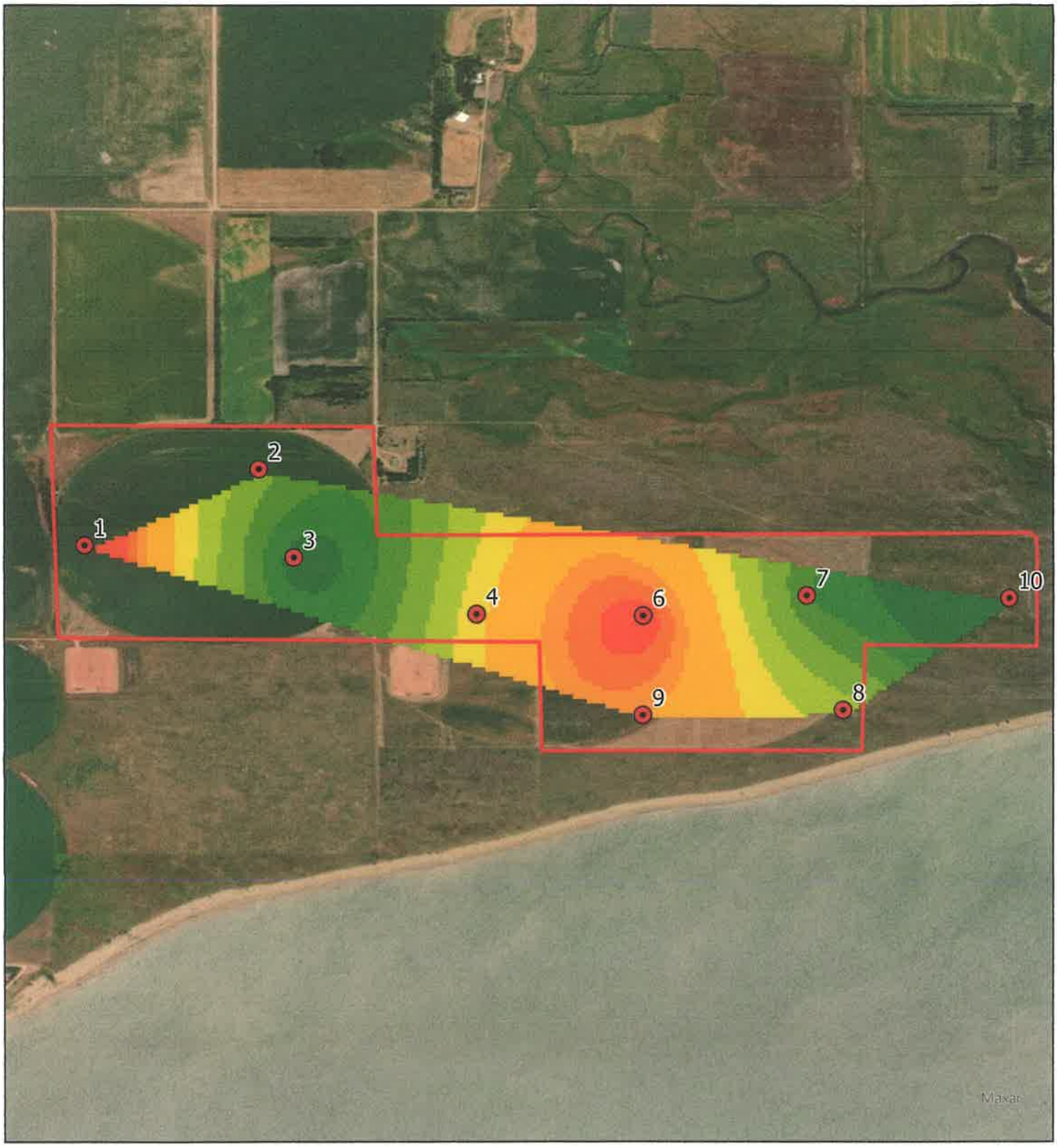
- Area features significant Three Forks reservoir thickness, with ~50% of development targeting this interval
- Up to 15% more oil recovered by co-developing Middle Bakken & Three Forks

### Alternate pad (Eris) considered but has significant risks

- Requires difficult to drill laterals
- Risk of stranding ~450 KBO under Lake Sakakawea
- Topography and environmental surveys add schedule risk

**Sophia pad location selected to optimize development plan and resource recovery; alternate considered has significant drawbacks**

EXHIBIT
34




Test Boring Location
Property
Percent 40/200
78 - 81
82 - 82
83 - 83
84 - 84
85 - 86
87 - 87
88 - 88
89 - 90
91 - 91
92 - 93
N
W
E
S
0
1,250
2,500 Feet

# Percent 40/200 Sand Resources

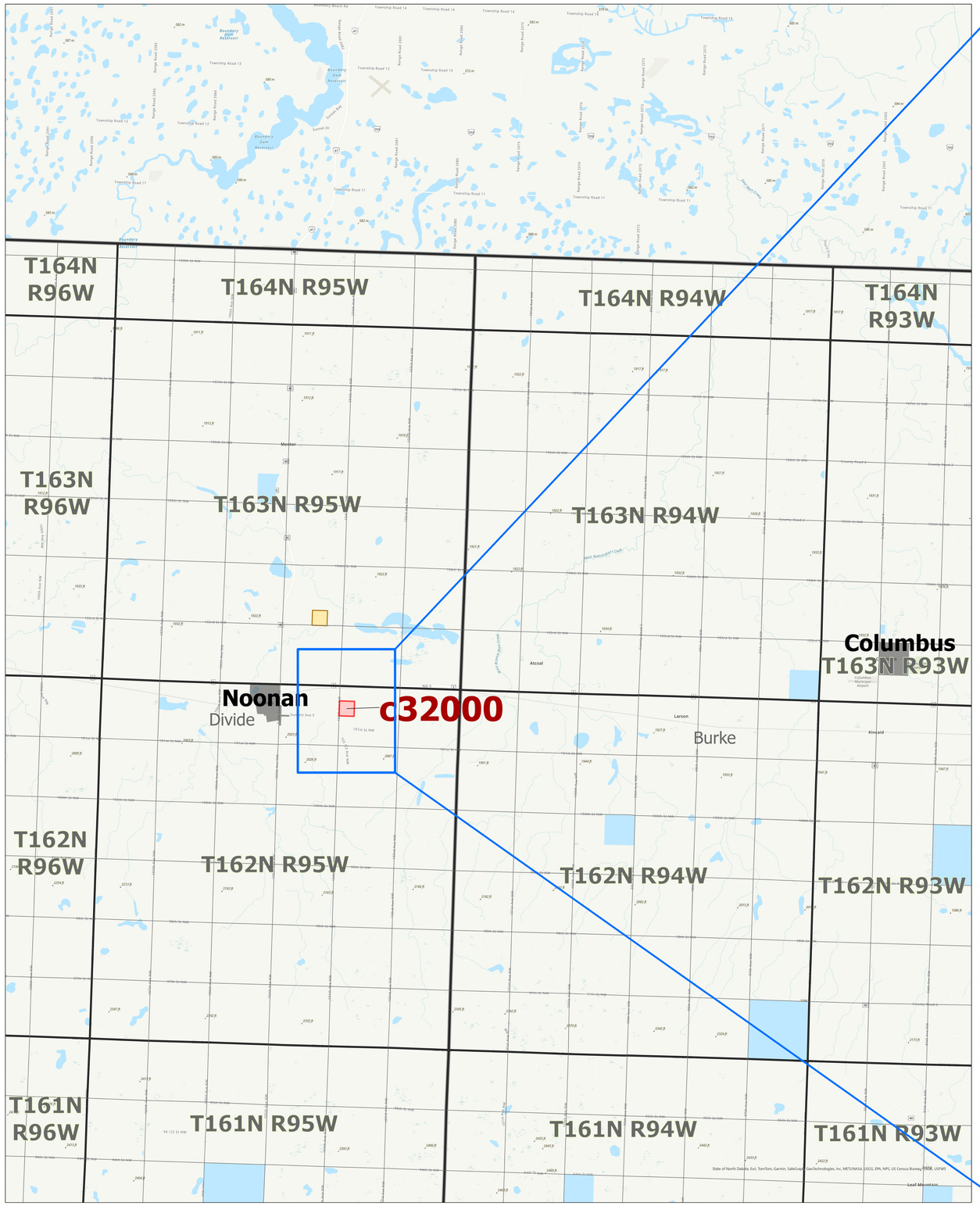
Energy Sand Solutions
Lund's Landing, North Dakota

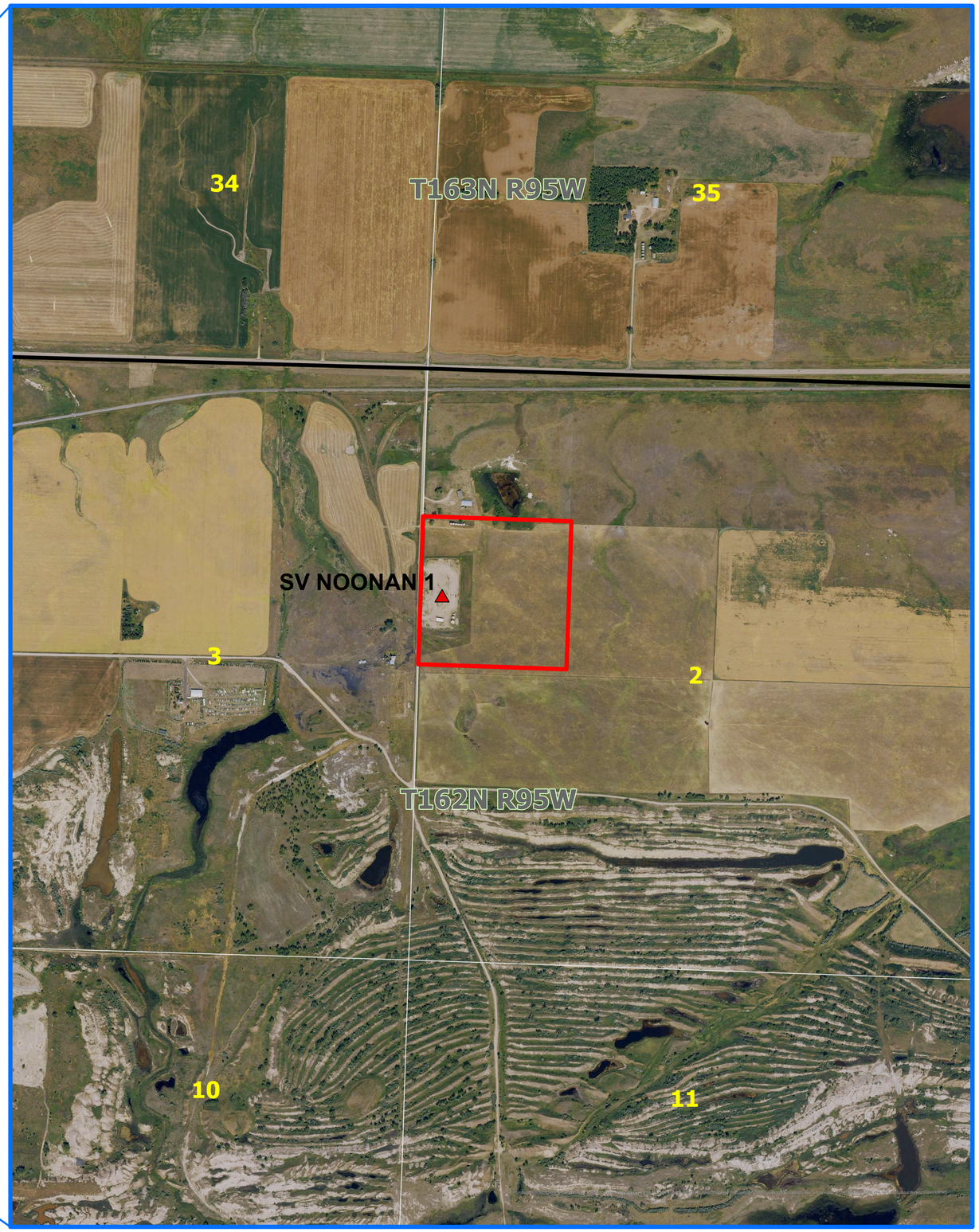
Summit Envirosolutions

## Figure 2

File: 20250825_ESS_ND
Summit Proj. No.: 9146-0001
Plot Date: 8/26/2025
Arc Operator: JED
Reviewed by: AT

# Industrial Commission c32000



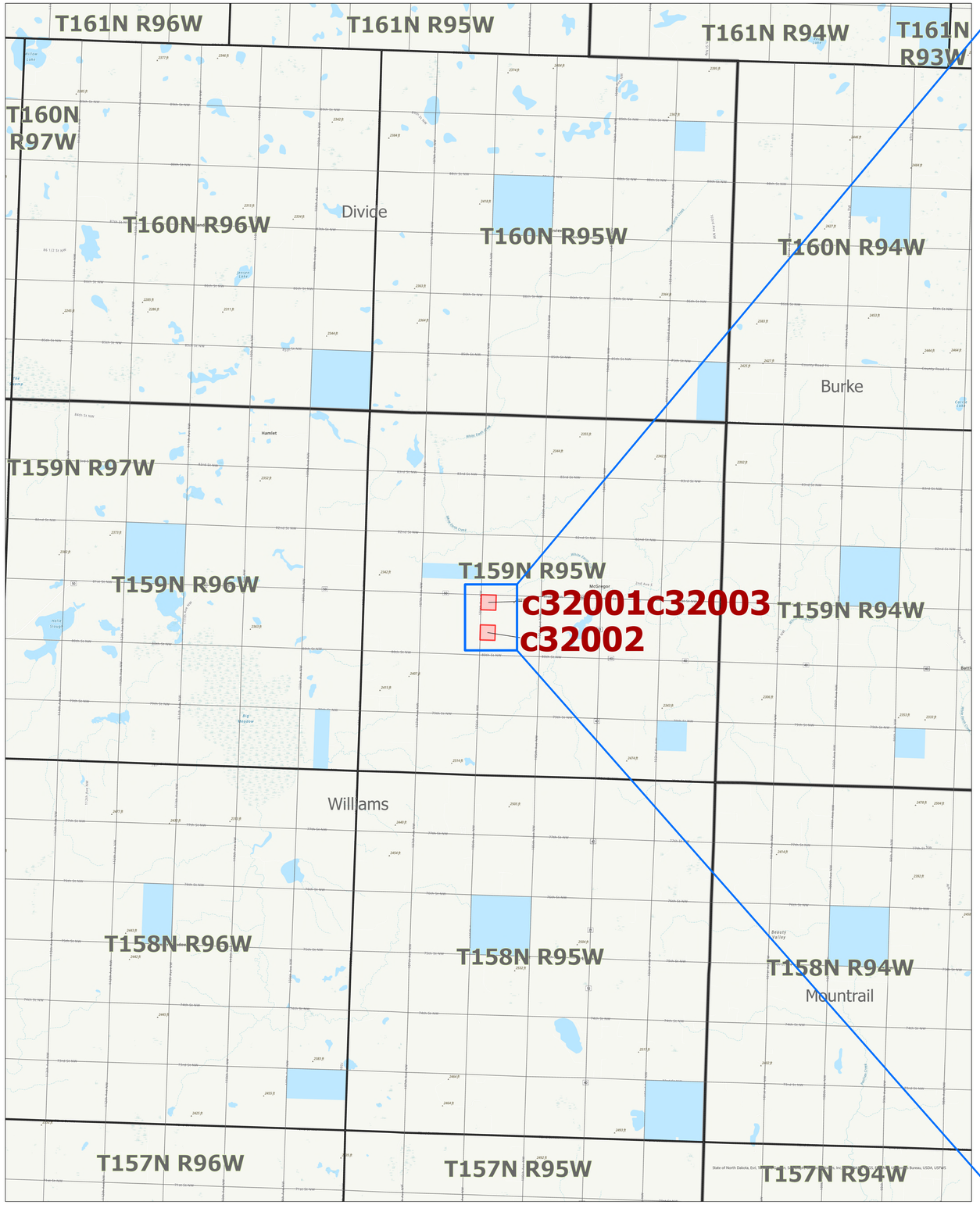



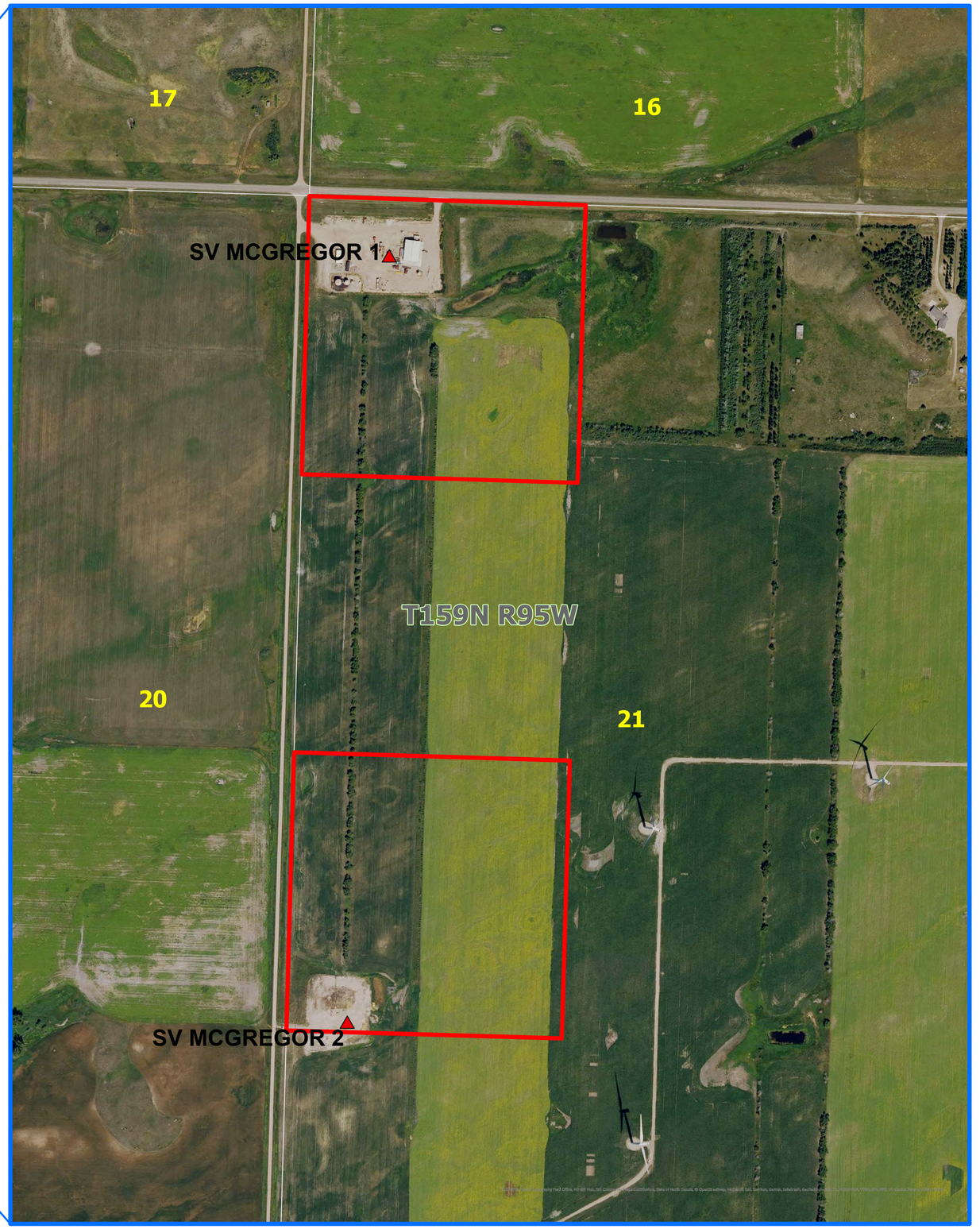

Sections
Townships
City Boundary
Surface Trust Land
Bureau of Land Management

NORTH DAKOTA
OIL AND GAS DIVISION

9/17/2025

# Industrial Commission c32001c32002c32003

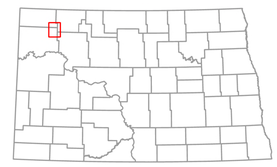



**Sections** **Townships** **Surface Trust Land**

NORTH DAKOTA OIL AND GAS DIVISION

9/17/2025



# North Dakota Industrial Commission

**Claire Vigesaa – Executive Director**
**ND Transmission Authority**
**September 30, 2025**

# Transmission Capacity – Large-Load Impact Study

**Initially transmission capacity study only (late 2023)**

Contract Power System Engineering (PSE)

Funding – Lignite Research Program- LEC EPP (budget $54,000)

**Expanded to study large-load impact/opportunities (July 2024)**

PSE – Grid reliability section

EERC – Power markets impacts/grid economics section

Funding – State Energy Research Center, Task 2 (budget $528,000)

# Abbreviations

| | |
|---|---|
| GI | generation interconnection |
| ISO | independent system operator |
| ITP25 | SPP's 2025 integrated transmission plan |
| LBA | load balancing authority |
| LMP | locational marginal pricing |
| LRZ 01 | Local Resource Zone 1 |
| MISO | Midcontinent Independent System Operator |
| MPC | Minnkota Power Cooperative |
| N-0 | transmission system intact |
| N-1 | one critical component failed |
| PROMOD | production cost modeling software tool |
| PSE | Power System Engineering |
| PSS®E | Power System Simulator for Engineering |
| RTO | regional transmission operator |
| SPP | Southwest Power Pool |
| TO | transmission operator |
| UMZ | Upper Missouri Zone |
| Violation | voltage or thermal loading exceeds design limit |

Energy & Environmental Research Center (EERC)

# FUTURE-PROOFING NORTH DAKOTA'S ELECTRICAL INFRASTRUCTURE TO ENABLE EXPANSION IN AN EVOLVING ENERGY LANDSCAPE

Daisy Selvaraj
Senior Research Engineer

September 30, 2025

# North Dakota Transmission Capacity Study

Peter A. Koegel, P.E.
Director, Transmission Planning & Interconnection
September 30, 2025

# Transmission Planning Study

- Reliability power flow model – Used to analyze system peak conditions in steady-state models. Thermal and voltage analysis is performed.
- Economic dispatch model – Used to analyze hourly generation dispatch, transmission congestion, and LMP.
- Used SPP ITP25 cases.
- Assessment study years – Year 2 (2026), Year 5 (2029), Year 10 (2034)
- Base models: Final PSS®E reliability planning models and PROMOD economic planning models from ITP25.
- Large-load scenario models: Add large loads to high-voltage substations in the 2029 and 2034 ITP25 base models.

# Generation Dispatch

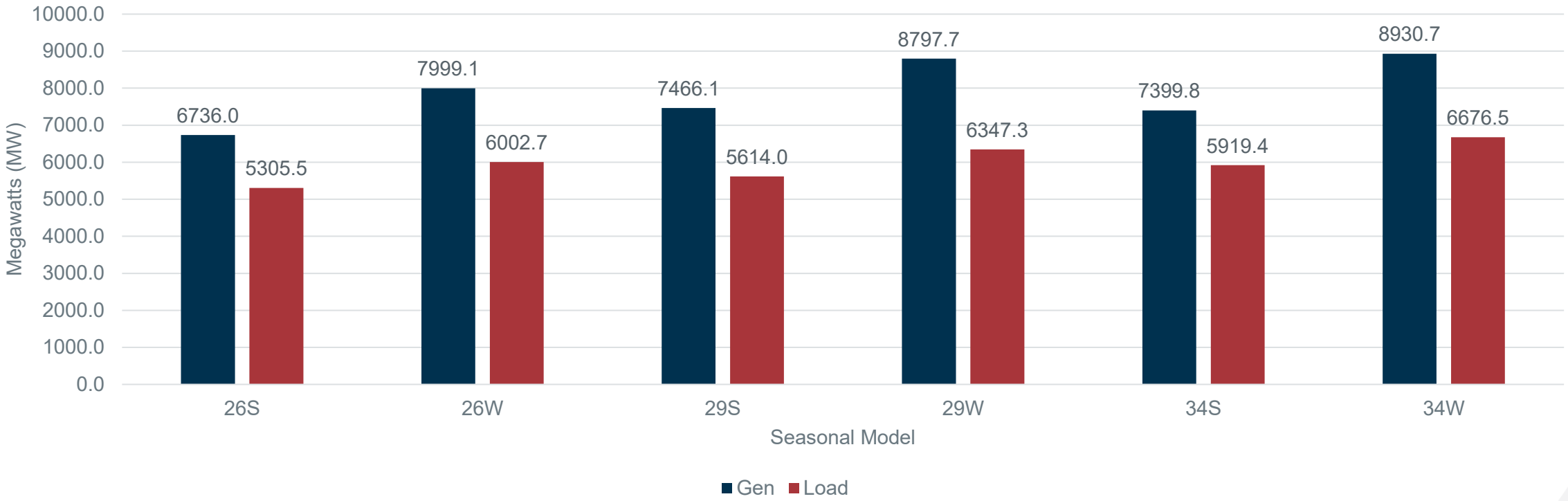
- For our analysis, existing and approved North Dakota generators including thermal (coal, gas, and oil) and renewable (solar, storage, and wind) are included in the bench and study models and dispatched as modeled in the ITP25 cases.

- The reliability models were not changed to include active MISO, MPC, and SPP generator interconnection requests.

- North Dakota area generation is projected to increase from 6700MW in summer 2026 to 7400MW in summer 2034.

# Load and Generation Modeling

- The North Dakota study area generation and load levels in the ITP25 base models were set by LBAs, TOs,  and/or ISOs/RTOs.
- The average annual demand growth rate is 1.39% in summer and 1.35% in winter.



# Transmission Expansion Planning

The MISO and SPP transmission expansion projects in the table below were identified and verified in the ITP25 models.

**MISO and SPP Transmission Expansion Projects Modeled**

| Project ID and Name | 26S | 26W | 29S | 29W | 34S | 34W |
|---|---|---|---|---|---|---|
| SPP PID 92113 (ISD 12/31/25) Roundup–Kummer Ridge 345kV | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SPP PID 92168 (ISD 12/31/25) Leland Olds–Tioga 345kV | X | ✓ | ✓ | ✓ | ✓ | ✓ |
| SPP PID 92371 (ISD 10/1/27) Tioga–New Boundary Dam 230kV | X | X | ✓ | ✓ | ✓ | ✓ |
| SPP PID 92372 (ISD 10/1/27) Wheelock–New Boundary Dam 230kV | X | X | ✓ | ✓ | ✓ | ✓ |
| SPP PID 94673 (ISD TBD ) Twelve Mile–Spring Brook 345kV | X | X | X | X | ✓ | ✓ |
| SPP PID 94681 (ISD TBD ) W Bank 115/345kV Transformer | X | X | X | X | ✓ | ✓ |
| SPP PID 94723 (ISD TBD ) Logan–Crane Creek 345kV | X | X | X | X | ✓ | ✓ |
| MTEP 23368 (ISD 12/31/28) Jamestown–Ellendale 345kV | X | X | ✓ | ✓ | ✓ | ✓ |

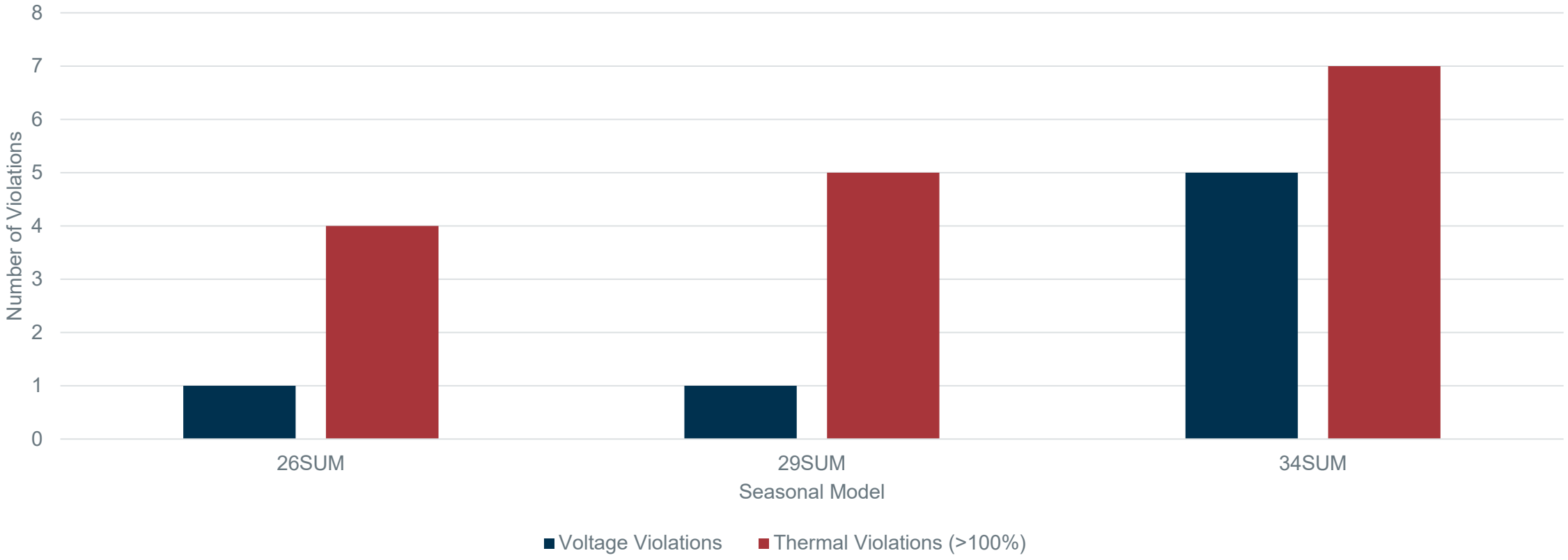
# Steady-State Transmission Analysis

- Thermal analysis
  - N-0 system intact
  - N-1 contingencies
  - Monitored North Dakota transmission >100kV
  - Monitored transmission line and transformer loadings >90%

- Voltage analysis
  - Monitored North Dakota transmission buses >100kV
  - Monitored North Dakota TO voltage criteria

# Base Transmission Results

- SPP ITP25 base analysis: Number of unique violations in North Dakota area.
- Thermal and voltage violations are few and increase in the 2034 model.



# Large-Load Sensitivity Analysis

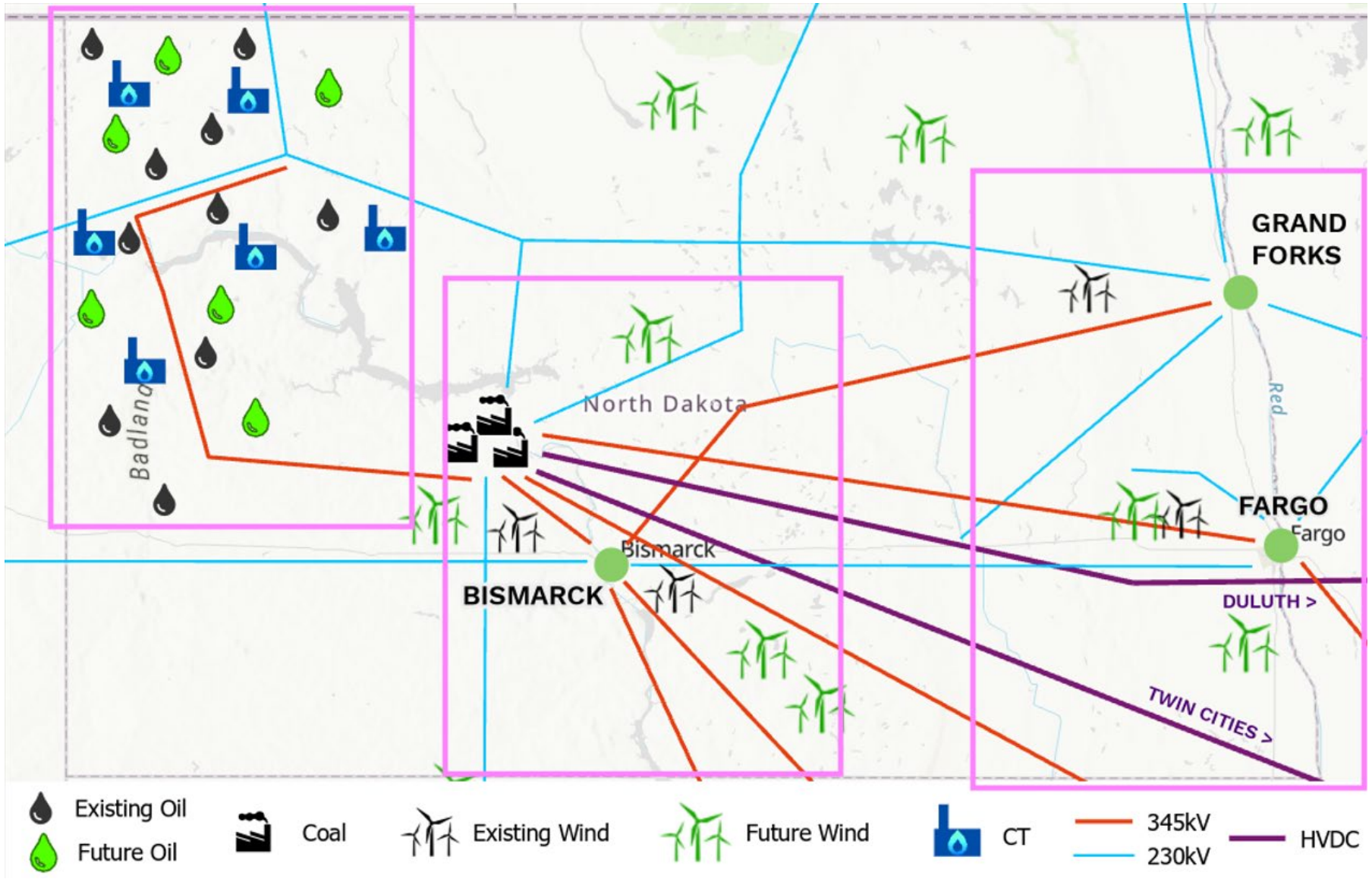
- Several large loads were added at high-voltage locations in North Dakota.
- Three scenarios were evaluated: eastern, central, and western North Dakota including 600–1400MW.
- Scenarios based in part on how much additional load the models would solve without mitigation.

Eastern 1400 MW
- Coal Creek 230kV 200MW
- Bison 345kV 200MW
- Buffalo 345kV 200MW
- Ellendale 345kV 200MW
- Jamestown 345kV 200MW
- Maple 345kV 200MW
- Prairie 345kV 200MW

Central 1100 MW
- Coal Creek 230kV 500MW total
- Center 345kV 300MW
- Leland 345kV 300MW

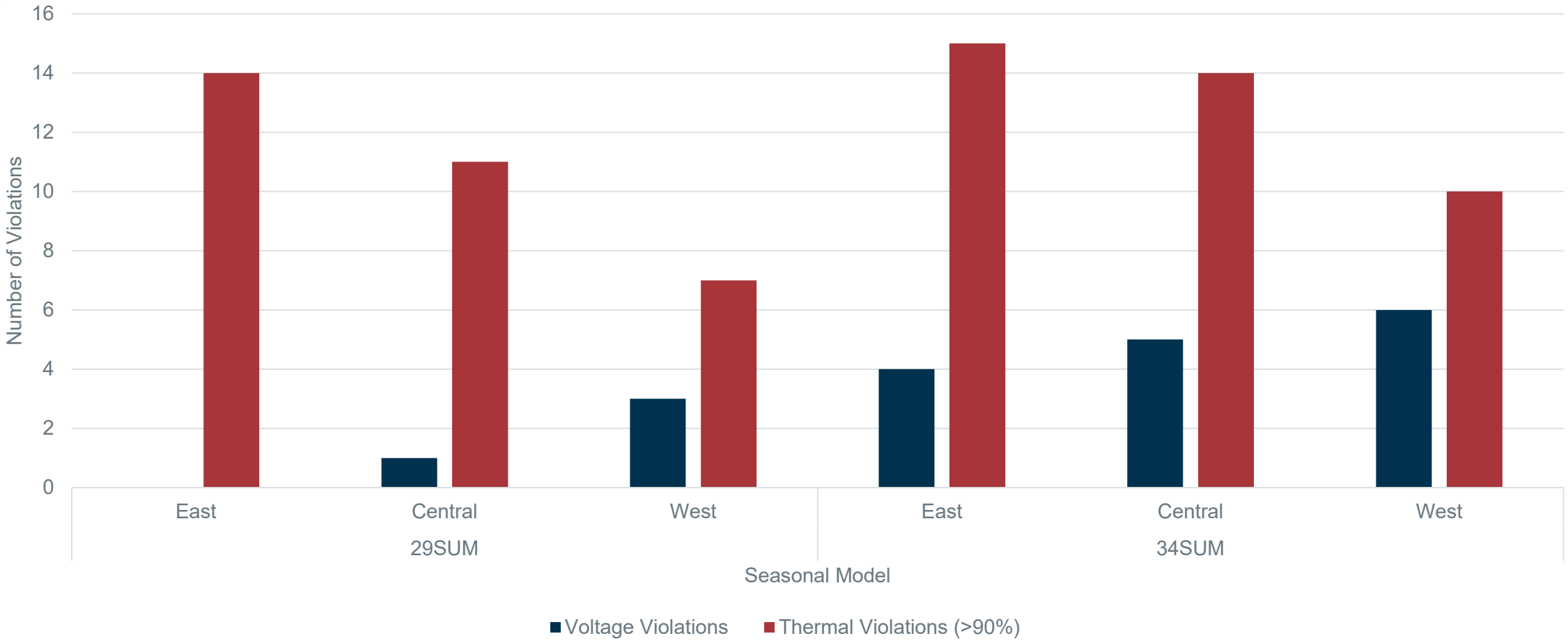
Western 600MW
- Coal Creek 230kV 200MW
- Judson 345kV 200MW
- Pioneer 345kV 200MW

# North Dakota System Map



# Sensitivity Transmission Results

- ITP25 large-load sensitivity analysis: Number of unique violations in North Dakota area.
- Thermal and voltage violations increase from the base results and rise between 2029 and 2034.



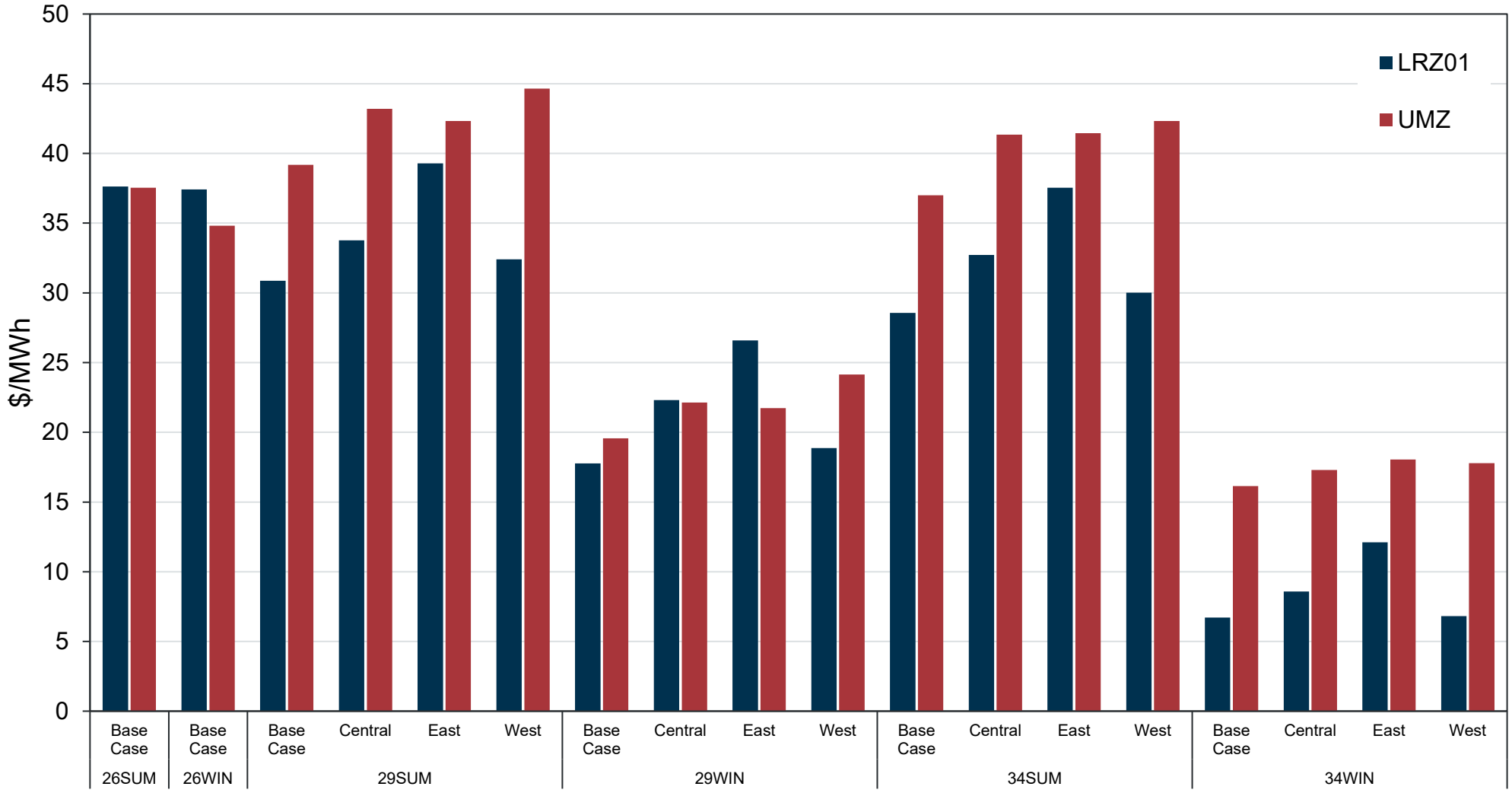
# Economic Dispatch Analysis

- Integrated electric generation and transmission market simulation
- ITP25 market economic model
  - ✓ Future 1 – Reference case
  - ✓ Study areas: MISO LRZ 01 and SPP UMZ
  - ✓ Detailed generator and load data at the nodal level; 8760 hourly profile
  - ✓ Industry forecast data for fuel and emission prices

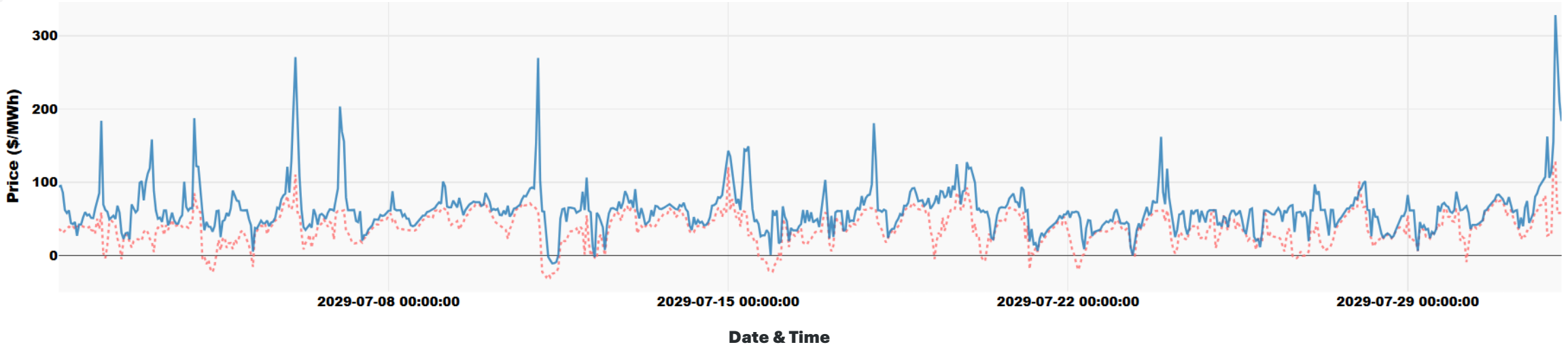
# Economic Dispatch Analysis

- LMPs
- Hourly generation dispatch
- Renewable generation and curtailment
- Transmission congestion costs

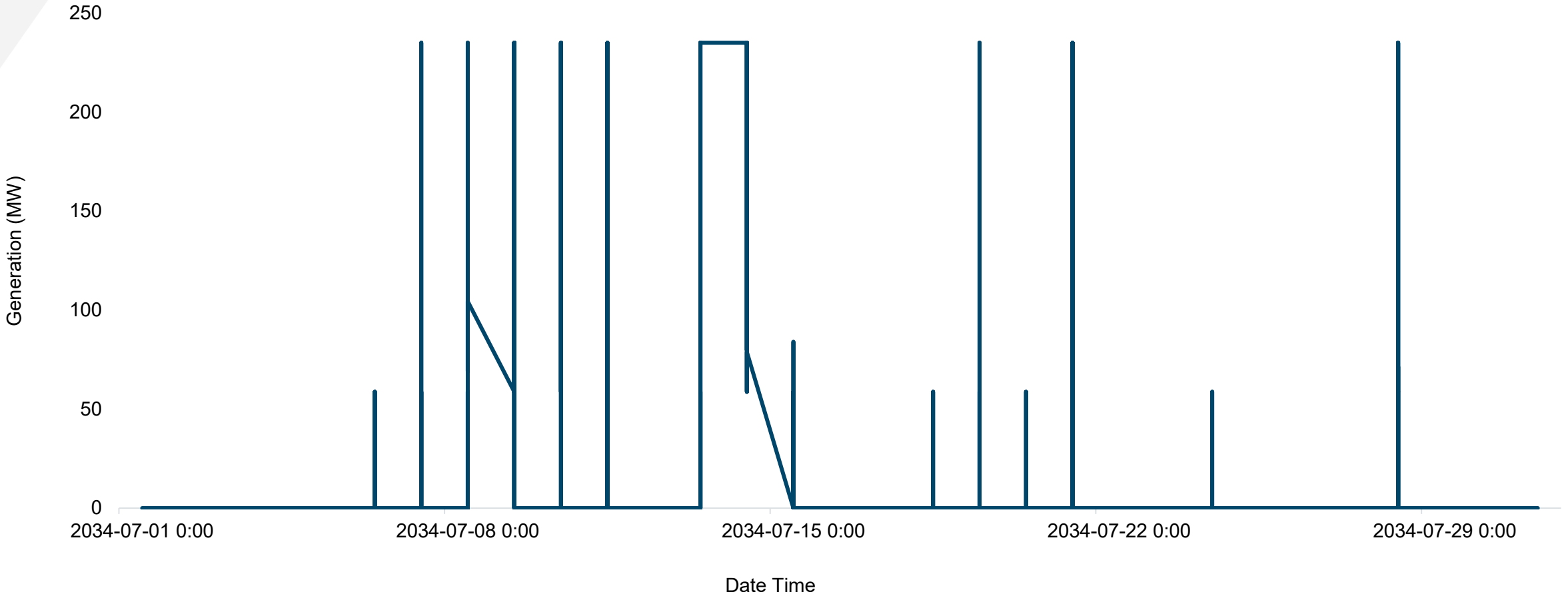
# Load-Weighted LMP – MISO LRZ 01 and SPP UMZ



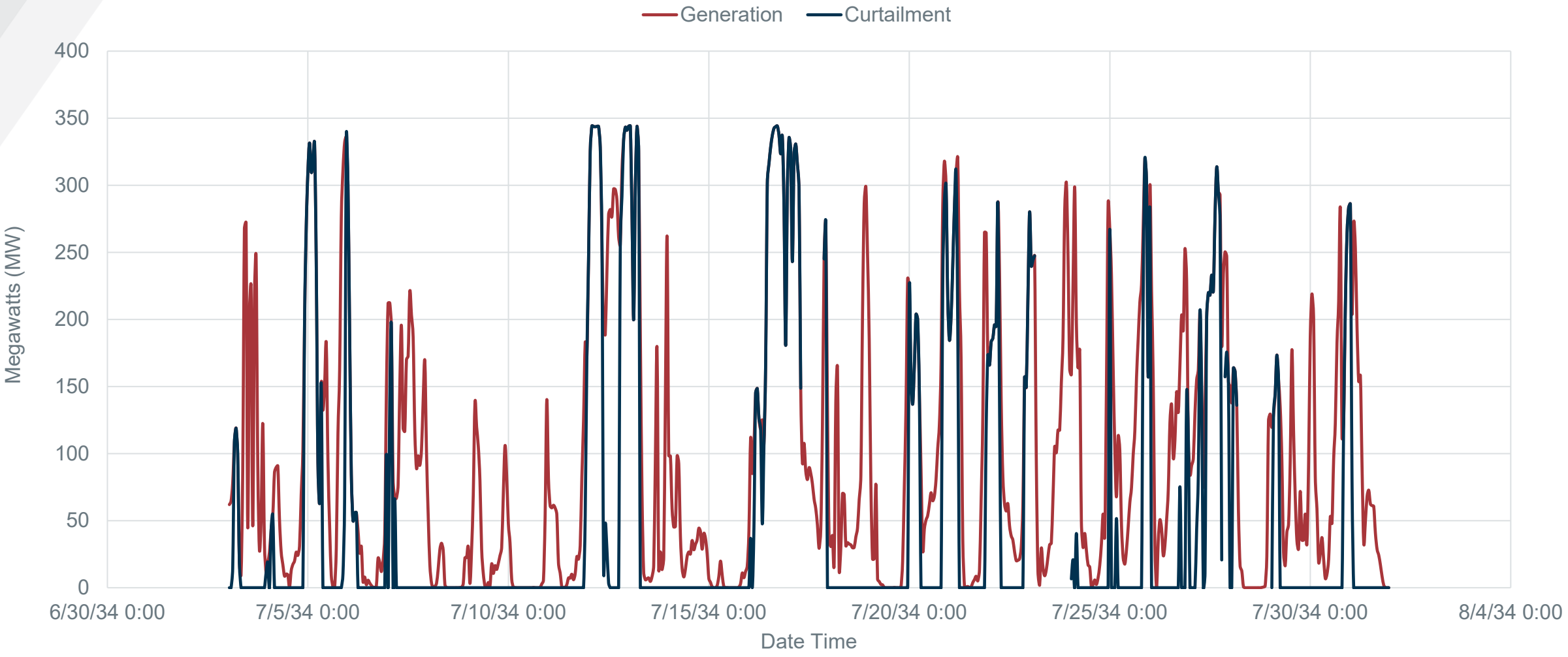
# Hourly Bus LMP Comparison (eastern location)



# Hourly Generation Dispatch (Pioneer IV CT1)



# Hourly Renewable Generation and Curtailment (Ashtabula wind farm)



# Study Observations

AC power flow analysis shows the number of thermal and voltage violations observed increases between the base and large-load scenarios. Upgrading transmission facilities may mitigate the observed violations.

The economic study indicates that the addition of large loads increases LMP. This effect is more significant in the summer than the winter.

Large load additions in North Dakota may add new economic opportunity for energy sales within the state with the addition of network upgrades. Adding significant load to the transmission system in North Dakota may reduce the amount of power generation that is exported outside the state.

# Future Study Considerations

- New gas plants or other generating resources
- Model estimated transmission mitigation and compare estimated costs with congestion/LMP prices
- Colocated generation and large loads

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University of North Dakota
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Grand Forks, ND 58202-9018

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701.777.5000

# THANK YOU

Critical Challenges. Practical Solutions.

Minutes of a Meeting of the Industrial Commission of North Dakota

Held on June 26th, 2025 beginning at 9:00 a.m.

Governor's Conference Room – State Capitol

Present: Governor Kelly Armstrong, Chairman

Attorney General Drew H. Wrigley

Agriculture Commissioner Doug Goehring

Also Present: This meeting was open through Microsoft Teams so not all attendees are known.

Agency representatives joined various portions of the meeting.

Governor Armstrong called the meeting of the Industrial Commission to order at approximately 9:03 a.m.

Ms. Karen Tyler took roll call, and Governor Armstrong, Commissioner Goehring, and Attorney General Wrigley were present.

Governor Armstrong invited the room to stand and join the Commission in saying the Pledge of Allegiance.

**NORTH DAKOTA PUBLIC FINANCE AUTHORITY**

Ms. DeAnn Ament presented for consideration of approval the Reappointment of John Phillips to the PFA Advisory Committee for a term ending July 1, 2028.

The memo reads as follows:

"North Dakota Public Finance Authority Policy P-2A establishes:

The Public Finance Authority Advisory Committee consists of three members to be named by resolution of the Industrial Commission of North Dakota (the "Commission"). The Committee members must be appointed to three-year terms but shall serve at the pleasure of the Commission.

The current term for PFA Advisory Committee member John Phillips will expire on July 1, 2025. Mr. Phillips has served on the Committee since 2019 and has provided valuable input to the Committee and the PFA Executive Director. During his career he served as Real Estate and Development Director for Lutheran Social Services Housing. He also served as development director for Beulah Jobs Development Authority and many other committees in the community and region. He is now retired. John has been an active participant in the work of the Committee. DeAnn has stated that his knowledge of the needs of rural communities and the challenges they face in funding infrastructure and his understanding of the role of the PFA contribute significantly to the work of the Authority."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission reappoint Public Finance Authority Advisory Committee member Mr. John Phillips to serve a new three-year term, expiring on July 1, 2028.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Ament presented for consideration of approval the following State Revolving Fund Loans:

i. **City of Grand Forks – Clean Water - $10,872,000**. The purpose of this loan is to construct public utilities, including storm sewer system, stormwater pond, pumpstation, forcemain and sanitary sewer, to serve properties in the Korynta-Lemm 6th Resubdivision. The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 25 years. The average annual payment for the improvement bonds will be $533,286. The City will issue improvement bonds payable with special assessments.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Clean Water State Revolving Fund loan request of $10,872,000 for the City of Grand Forks.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

A RESOLUTION WAS MADE

RESOLUTION APPROVING

LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4 and 61-28.2; and

WHEREAS, the Clean Water State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (NDPFA) and the Bank of North Dakota (the Trustee); and

WHEREAS, the City of Grand Forks (the "Political Subdivision") has requested a loan in the amount of $10,872,000 from the Program to construct public utilities, including storm sewer system, stormwater pond, pumpstation, forcemain and sanitary sewer, to serve properties in the Korynta-Lemm 6th Resubdivision; and

WHEREAS, the NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to

execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 26, 2025

ii. **City of Mapleton – Clean Water - $10,600,000.** The purpose of this loan is to install a new main lift station and approximately five miles of 14" force main to connect to West Fargo's wastewater system which ultimately receives treatment at the Fargo water reclamation facility. The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 30 years. The City will issue revenue bonds payable with sewer user fees. The average annual payment for the revenue bonds will be $448,958.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Clean Water State Revolving Fund loan request of $10,600,000 for the City of Mapleton.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

A RESOLUTION WAS MADE

RESOLUTION APPROVING

LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4 and 61-28.2; and

WHEREAS, the Clean Water State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (NDPFA) and the Bank of North Dakota (the Trustee); and

WHEREAS, the City of Mapleton (the "Political Subdivision") has requested a loan in the amount of $10,600,000 from the Program to install a new main lift station and approximately five miles of 14" force main to connect to West Fargo's wastewater system, which ultimately receives treatment at the Fargo water reclamation facility; and

WHEREAS, the NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 26, 2025

iii. **City of Fargo – Clean Water - $20,000,000**. The purpose of this loan is for Federal Aid Projects for 2025-2028 in conjunction with NDDoT reconstruction of portions of 32nd Avenue S, 17th Avenue S, Main Avenue S and 1st Avenue N roadways that intend to encompass replacement of the aging water, sanitary and storm sewer. The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 30 years. The City of Fargo will issue revenue bonds payable with sales tax and water reclamation fund revenues. The average annual payment for the revenue bonds will be $864,518.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Clean Water State Revolving Fund loan request of $20,000,000 for the City of Fargo.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

A RESOLUTION WAS MADE

RESOLUTION APPROVING

LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4 and 61-28.2; and

WHEREAS, the Clean Water State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (NDPFA) and the Bank of North Dakota (the Trustee); and

WHEREAS, the City of Fargo (the "Political Subdivision") has requested a loan in the amount of $20,000,000 from the Program for Federal Aid Projects for 2025-2028 in conjunction with ND Department of Transportation reconstruction of portions of 32nd Avenue S, 17th Avenue S, Main Avenue S, and 1st Avenue N roadways to replace the aging water, sanitary, and storm sewer; and

WHEREAS, the NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 26, 2025

iv. **City of Fargo – Drinking Water - $20,000,000**. The purpose of this loan is for Federal Aid Projects for 2025-2028 in conjunction with NDDoT reconstruction of portions of 32nd Avenue S, 17th Avenue S, Main Avenue S and 1st Avenue N roadways that intend to encompass replacement of the aging water, sanitary and storm sewer. The requested term for the Drinking Water State Revolving Fund (DWSRF) loan is 30 years. The City of Fargo will issue revenue bonds payable with sales tax and water fund revenues. The average annual payment for the revenue bonds will be $864,518.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Drinking Water State Revolving Fund loan request of $20,000,000 for the City of Fargo.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

A RESOLUTION WAS MADE

RESOLUTION APPROVING

LOAN FROM DRINKING WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Drinking Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, 61-28.1, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, the City of Fargo (the "Political Subdivision") has requested a loan in the amount of $20,000,000 from the Program for Federal Aid Projects for 2025-2028 in conjunction with ND Department of Transportation reconstruction of portions of 32nd Avenue S, 17th Avenue S, Main Avenue S, and 1st Avenue N roadways to replace the aging water, sanitary, and storm sewer; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.

2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Drinking Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 26, 2025

Ms. Ament presented a memo from the NDPFA Advisory Committee regarding SRF loans approved under Policy P-3B:

i. City of Elgin – Clean Water - $442,000.
ii. City of Elgin – Drinking Water - $668,000
iii. City of Grand Forks – Drinking Water - $1,718,000
iv. City of Napoleon – Drinking Water - $975,000

**NORTH DAKOTA MILL AND ELEVATOR**

Mr. Vance Taylor and Ms. Cathy Dub presented for consideration of approval the Mill Profit Transfer request.

The memo reads as follows:

"North Dakota Century Code § 54-18-19 and 54-18-21 state the following:

**54-18-19. Transfer of North Dakota mill and elevator profits to general fund.** The industrial commission shall transfer to the state general fund fifty percent of the annual earnings and undivided profits of the North Dakota mill and elevator association after any transfers to other state agricultural-related programs. The moneys must be transferred on an annual basis in the amounts and at the times requested by the director of the office of management and budget.

**54-18-21. Annual transfer.** Within thirty days after the conclusion of each fiscal year, the industrial commission shall transfer five percent of the net income earned by the state mill and elevator association during that fiscal year to the agricultural products utilization fund.

Mill management is planning to close their books on July 21, 2025, and is proposing to make the transfers no later than July 24, 2025. Therefore, we are requesting that the Industrial Commission authorize the transfer of 50% of the Mill FY 2025 profits to the General Fund and the 5% of net income to the Agricultural Products Utilization Fund utilizing unaudited numbers by no later than July 24, 2025, with Mill management reporting the amount of the transfers to the Commission at their July 30, 2025, meeting. "

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the North Dakota Mill is authorized to transfer 5% of the net income earned by the Mill for fiscal year 2025 to the Agricultural Products Utilization Fund (APUF) and transfer to the General Fund 50% of the annual earnings and undivided profits of the Mill after any transfers to other state agricultural-related programs per the request of the Office of Management and Budget Director noting that the transfers will be based on unaudited year-end results and reserving the right to adjust the transfer numbers once the year-end results have been audited, and further that Mill management reports the amount of the transfers to the Commission at the July 30, 2025, meeting.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Under other business, Mr. Taylor mentioned that they received responses to the RFP for the Mill policy and procedure review and are in the process for reviewing the five responses. It was noted that the Mill has reached an agreement on a new two-year union contract.

## NORTH DAKOTA HOUSING FINANCE AGENCY

Ms. Jennifer Henderson presented for consideration of approval a $9,500,000 Tax-Exempt Multifamily Housing Revenue Bond Issuance for the Pleasant Valley Apartments in Dickinson.

The memo reads in part as follows:

"The North Dakota Housing Finance Agency requests **that the Industrial Commission approve the issuance of multifamily revenue bonds Pleasant Valley Apartments Series 2025, in an aggregate amount not to exceed $9,500,000.**

Pleasant Valley Apartments is an existing 60-unit general occupancy Section 8 project. Originally constructed between 1978 and 1981, the project has not undergone any significant renovations since it was built. Renovations include full kitchen, appliances, and flooring replacement, exterior upgrades, replacement of all building systems, and improvements to grounds and parking. The total development costs are estimated at $15.5 million.

The operative documents for the tax-exempt bond transaction are:

a. A resolution authorizing the issuance of tax-exempt multifamily housing revenue bonds, Series 2025, amount not to exceed $9,500,000.

b. Trust Indenture

c. Loan Agreement

d. Regulatory Agreement

e. Bond Purchase Agreement

The Commission, by executing the authorizing resolution, is approving the operative documents in their respective current forms and authorizing the Executive Director and Chief Financial Officer (Authorized Officers) to execute the documents in their respective current forms with such changes as are consistent with the parameters set forth in the authorizing resolution and approved by the Authorized Officers, such approval being evidenced by an Authorized Officer's execution of the documents."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Housing Finance Agency issuance of multifamily revenue bonds Pleasant Valley Apartments Series 2025, in an aggregate amount not to exceed $9,500,000, and approve the execution of the authorizing resolution therefore.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Henderson presented for consideration of approval a $5,600,000 Tax-Exempt Multifamily Housing Revenue Bond Issuance for the Wild Rose Senior Housing Development in Minot.

The memo reads in part as follows:

"The North Dakota Housing Finance Agency requests **that the Industrial Commission approve the issuance of multifamily revenue bonds Wild Rose Senior Apartments Series 2025, in an aggregate amount not to exceed $5,600,000.**

Wild Rose Senior Housing is a acquisition/rehabilitation of an existing 48-unit general occupancy project currently known as Southside Living, formally Guardian Manor. Southside living is a LIHTC project built in 1993 and will finish its original period of affordability on 12/31/2026. The project is in need of significant rehabilitation updates including full interior unit updates, HVAC systems replacement, and exterior upgrades such as roofing, siding, windows, concrete repair.

The developer, American Covenant Senior Housing Foundation from Kalispell, MT, has experience owning and operating senior living communities that offer supportive services as needed. Total development costs of $8.1 million of which $3.9 million will be in hard rehabilitation costs. Completion of this project will preserve existing affordable housing for an additional 30 years.

The operative documents for the tax-exempt loan are:

a. A resolution authorizing the issuance of tax-exempt multifamily mortgage revenue note, Series 2025, amount not to exceed $5,600,000

b. Project Loan Agreement

c. Funding Loan Agreement

d. Regulatory Agreement

The Commission, by executing the authorizing resolution, is approving the operative documents in their respective current forms and authorizing the Executive Director and Chief Financial Officer (Authorized Officers) to execute the documents in their respective current forms with such changes as are consistent with the parameters set forth in the authorizing resolution and approved by the Authorized Officers, such approval being evidenced by an Authorized Officer's execution of the documents."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the North Dakota Housing Finance Agency issuance of multifamily revenue bonds Wild Rose Senior Apartments Series 2025, in an aggregate amount not to exceed $5,600,000, and approve the execution of the authorizing resolution therefore.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

**BANK OF NORTH DAKOTA**

Mr. Don Morgan presented an update on the bank's implementation of the Entrepreneurial Operating System (EOS) Traction.

Mr. Morgan presented the Non-Confidential Committee and Advisory Board Minutes for March 19th and 20th, 2025 meetings for the Commission member's review.

**It was moved by Attorney General Wrigley and seconded by Commissioner Goehring that under the authority of North Dakota Century Code Sections 6-09-35 and 44-04-19.2 the Industrial Commission enter executive session for the purpose of Bank of North Dakota confidential business.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

**The Commission is meeting in executive session pursuant to N.D.C.C. 6-09-35 and 44-04-19.2 to consider those items listed on the agenda under Bank of North Dakota confidential business. Only Commission members, their staff, Commission staff, and BND staff will participate in this executive session.**

**Any formal action taken by the Commission will occur after it reconvenes in open session.**

**Governor Armstrong reminded the Commission members and those present in the executive session that the discussion must be limited to the announced purposes. The executive session is anticipated to last approximately one hour and will begin at 10:10 a.m.**

**Meeting Closed to the Public for Executive Session Pursuant to NDCC 6-09-35 and 44-04-19.2.**

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**BANK OF NORTH DAKOTA EXECUTIVE SESSION**

**Industrial Commission Members Present**
Governor Kelly Armstrong
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

**BND Members Present**
Don Morgan
Kelvin Hullet
Craig Hanson
Gus Staahl

Others in attendance

| | |
|---|---|
| Jacy Schafer | Governor's Office |
| Karen Tyler | Industrial Commission Office |
| Jordan Kannianen | Industrial Commission Office |
| Brenna Jessen | Industrial Commission Office |
| Erin Stieg | Industrial Commission Office |

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The executive session ended at 10:24 a.m. and the Commission reconvened in open session at 10:34 a.m.

During the Bank of North Dakota executive session, the Commission discussed those items listed on the agenda. No action was taken.

## NORTH DAKOTA PIPELINE AUTHORITY

Mr. Justin Kringstad presented a summary of submissions received in response to the Request for Information (RFI) regarding the West to East Natural Gas Pipeline. The two submissions received were from WBI Energy Transmission and Intensity Infrastructure Partners. Following due diligence and a review of all relevant information, it is expected the Industrial Commission at its regularly scheduled July 2025 Industrial Commission meeting will make a determination which pipeline system(s) should be selected to move forward with capacity negotiations with the Pipeline Authority.

## STATE ENERGY RESEARCH CENTER (SERC)

Mr. Jordan Kannianen presented for consideration of approval the SERC Contract 2025-01 Pursuant to SB 2143 enacted by the 69th Legislative Assembly.

The memo reads as follows:

"In 2019, North Dakota's 66th Legislative Assembly established the Energy & Environmental Research Center (EERC) as the State Energy Research Center (SERC) through Senate Bill No. 2249. The legislation included $5 million of funding per biennium to fulfill three objectives: 1) conduct exploratory, transformational, and innovative research of technologies and methodologies that facilitate the prudent development and clean and efficient use of the state's energy resources; 2) provide greater access to energy experts for timely scientific and engineering studies to support the state's interests; and 3) educate stakeholders on issues related to the state's energy resources through public outreach.

In 2023, North Dakota's 68th Legislative Assembly passed SB 2161 to amend the law related to SERC in the following ways:

- Changed the sunset date of SERC activities and funding from its current end date of June 30, 2027, to June 30, 2029.
- Raised the SERC fund limit from $5 million per biennium to $7.5 million per biennium.

Accordingly, an amendment to the contract was then executed to address the increased funding amount.

In 2025, the legislature passed two bills related to SERC.

- SB 2143, which further extended the sunset to June 30, 2033.
- SB 2159, which removed the restriction on conducting research on high-level radioactive waste for above ground projects."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the execution of a new contract with the State Energy Research Center (SERC) to reflect changes adopted by the 69th Legislative Assembly as set forth in SB 2143, which extends the SERC sunset to June 30, 2033 and SB 2159 which removes the restriction on conducting research on high-level radioactive waste for above ground projects.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Kannianen presented for consideration of approval the following proposed project: Feasibility of Geothermal Energy in North Dakota – Evaluation of the Potential for Synergistic Opportunities to Couple Geothermal Resource Development with Oil Production and/or Geologic Storage of CO2 - $250,000.

The memo reads as follows:

"The Energy & Environmental Research Center (EERC) at the University of North Dakota proposes to conduct a scope of work to evaluate the potential for synergistic opportunities to couple geothermal resource development with oil production and/or geologic storage of CO2. The study would examine the feasibility of generating up to 600 megawatts of power from geothermal resources in North Dakota and connecting that power to the Midcontinent Independent System Operator and Southwest Power Pool electric grids.

This effort will also support the geothermal study requested by the North Dakota legislature through the enactment of Senate Bill 2360. The act states: "During the 2025–26 interim, the legislative management shall consider studying the feasibility of developing geothermal energy in the state. The study must include an evaluation of: a) the state's geology and the feasibility of resource exploration and production of geothermal energy in the state. b) Support opportunities for startup [*sic*] geothermal companies, including fostering innovation and promoting economic growth within the state's energy sector. c) The application of geothermal energy to nonproductive oil and gas wells to extend the life of the well through the use of a complementary energy extraction method. d) Other opportunities to advance geothermal energy opportunities in the state."

This study would seek to explore the feasibility of geothermal as a new energy resource for North Dakota and the region, particularly its potential contributions to oil and gas production, as well as address the four items enumerated in Senate Bill 2360 to achieve the goals of the legislative management study. The proposed scope of work will require a budget of $250,000, which, if approved, will come from the North Dakota Industrial Commission-directed portion of state energy research center funding. The proposed work will be conducted over 9 months, and the principal investigator will be James Sorensen, EERC Director of Subsurface Research and Development."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the request by EERC for $250,000 in funding under SERC contract 2025-01 Task 2: Providing Prompt Expertise for North Dakota, to assist in the study set forth under SB 2360 of the 69th Legislative Assembly directing the study of the feasibility of geothermal energy in North Dakota, and evaluate the potential for synergistic opportunities to couple geothermal resource development with oil production and/or geologic storage of CO2.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Kannianen presented for consideration of approval to execute a contract pursuant to Section 27 of SB 2014 of the 69th Legislative Assembly relating to a Business Case Analysis for the Development of Caverns in North Dakota Salt Formations - $2,000,000.

The memo reads as follows:

“In 2025, North Dakota’s 69th Legislative Assembly passed Senate Bill No. 2014. This bill contained an amendment (SECTION 27) to Section 15 of chapter 14 of the 2023 Session Laws, which previously allocated funding to the State Energy Research Center for a salt cavern underground energy storage research project. The amendment allocates $2 million for the Energy & Environmental Research Center (EERC) to conduct a business case analysis for the development of caverns in North Dakota’s underground salt formation for subsurface storage of energy resources, including natural gas, liquified natural gas, natural gas liquids (NGLs), and hydrogen. The following is the proposed scope of work and budget for the salt cavern energy storage project.

The EERC has been in discussion with several commercial entities about partnering on this effort; however, these commercial entities have expressed a need to build upon prior work to better understand specific business case scenarios for underground product storage to derisk the development of salt caverns in North Dakota. The EERC proposes to work closely with two commercial partners, ONEOK, Inc., and Basin Electric Power Cooperative, to evaluate the techno-economic feasibility of various hydrocarbon product storage scenarios in engineered salt caverns such that these findings sufficiently inform commercial investment in salt cavern development. The EERC is also the project manager for the Heartland Hydrogen Hub, under the U.S. Department of Energy’s Regional Clean Hydrogen Hubs program, tasked with developing hydrogen production and end-use deployment, which could lead to additional opportunities for salt cavern storage. The EERC and its partners believe this evaluation will provide key information needed to derisk investment in developing commercial salt caverns and related infrastructure in North Dakota.

The EERC proposes to perform the following activities as the first step toward commercial development of engineered salt caverns in North Dakota’s bedded salts: 1) partner discussions to guide the EERC’s understanding of storage product types and volumes, desired storage locations, and operational considerations; 2) in-depth petrophysical analysis of existing well logs to better estimate the quality and extent of the salt zones at particular sites of interest to our partners; 3) engineering assessment, modeling, and simulation to estimate potential cavern dimensions,

product storage volumes, and operational lifespans at potential storage sites; 4) business case scenario development and assessment informed by our partners' product storage and deliverability needs; and 5) development of guidance documents outlining the success criteria and associated risks for cavern development and hydrocarbon storage in North Dakota. Better understanding the techno-economic feasibility of salt cavern development in North Dakota's bedded salts will help to inform and derisk potential commercial ventures focused on using salt cavern storage to manage anticipated future NGL export capacity constraints and hydrocarbon product storage needs. The results will also provide critical information for commercial entities interested in petrochemical development and novel energy storage, including hydrogen or compressed air storage."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission direct the Deputy Executive Director to execute a contract with the EERC pursuant to the $2 million appropriation and directive set forth in Section 27 of SB 2014 of the 69th Legislative Assembly related to a business case analysis for the development of caverns in North Dakota salt formations.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

## NORTH DAKOTA OUTDOOR HERITAGE FUND

Ms. Brenna Jessen presented the Outdoor Heritage Fund Project Management and Financial Report. The Outdoor Heritage Fund currently has 243 cumulative projects with 67 projects currently active. There has been a total of $83.9 million granted with a $214.3 million project value. Currently, the fund cash balance is $41,418,036.01, with $27,377,823.83 in committed funds and $14,040,212.18 available. There is adequate funding available if all 17 projects, with a total request of $12,549,185, were approved by the Commission.

Ms. Jessen presented for consideration of approval the following 17 Grant Applications for Grant Round 26:

i. 26-1 (B) North Dakota Conservation District Employees Association: ND Statewide Tree Planting Initiative, **$2,500,000**
ii. 26-2 (B) North Dakota Forest Service: North Dakota Statewide Windbreak Renovation Initiative 5.0, **$900,000**
iii. 26-3 (D) Grand Forks Park District: Ryan Lake Prairie Trail & Outdoor Classroom, **$251,250**
iv. 26-4 (D) City of Grand Forks: Rivers Edge Fishing Enhancement, **$155,450**
v. 26-6 (C) McLean County Water Resource District: Lost Lake Dam Fish Passage, **$51,599**

vi. 26-7 (A) Pheasants Forever: Pheasants Forever Public Access to Habitat (PATH) Program, **$1,089,375**

vii. 26-8 (D) Fargo Park District: Fargo Southwest Pond Regional Recreation Area, **$521,250**

viii. 26-9 (C) North Dakota Parks and Recreation Dept: Enhancing State Parks Through Strategic Tree and Shrub Plantings, **$1,000,000**

ix. 26-10 (B) Ducks Unlimited, Inc: Cover Crop and Livestock Integration Project 4, **$936,000**

x. 26-11 (C) North Dakota 4-H Foundation: North Dakota 4-H Camp, **$70,978**

xi. 26-12 (B) The Nature Conservancy: Grazing Management and Habitat Enhancement, **$68,522**

xii. 26-13 (B) Ducks Unlimited, Inc: Smart Livestock Advancing Terrestrial Ecosystems, **$483,924**

xiii. 26-14 (B) United Prairie Foundation: Grazed Wildlife Habitat – Meadowlark Initiative, **$580,000**

xiv. 26-15 (C) North Dakota Natural Resources Trust: Wildlife and Livestock Dams – Wetlands Creation, Restoration, and Enhancement III, **$445,000**

xv. 26-16 (B) North Dakota Natural Resources Trust: Grazing Resiliency in North Dakota (GRND), **$1,950,000**

xvi. 26-17 (A) North Dakota Game and Fish: Western North Dakota Private Land Open to Sportsmen (PLOTS), **$1,500,000**

xvii. 26-18 (D) City of Flasher: Flasher Historical Recreation Trail, **$45,837**

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission accepts the recommendations of the Outdoor Heritage Fund Advisory Board, approves the following projects, and authorizes the Office of the Industrial Commission to enter into contracts for the following projects:**

**26-1 (B) North Dakota Conservation District Employees Association: ND Statewide Tree Planting Initiative, $2,500,000**

**26-2 (B) North Dakota Forest Service: North Dakota Statewide Windbreak Renovation Initiative 5.0, $900,000**

**26-3 (D) Grand Forks Park District: Ryan Lake Prairie Trail & Outdoor Classroom, $251,250**

**26-4 (D) City of Grand Forks: Rivers Edge Fishing Enhancement, $155,450**

**26-6 (C) McLean County Water Resource District: Lost Lake Dam Fish Passage, $51,599**

**26-7 (A) Pheasants Forever: Pheasants Forever Public Access to Habitat (PATH) Program, $1,089,375**

**26-8 (D) Fargo Park District: Fargo Southwest Pond Regional Recreation Area, $521,250**

**26-9 (C) North Dakota Parks and Recreation Dept: Enhancing State Parks Through Strategic Tree and Shrub Plantings, $1,000,000**

**26-10 (B) Ducks Unlimited, Inc: Cover Crop and Livestock Integration Project 4, $936,000**

**26-11 (C) North Dakota 4-H Foundation: North Dakota 4-H Camp, $70,978**

**26-12 (B) The Nature Conservancy: Grazing Management and Habitat Enhancement, $68,522**

**26-13 (B) Ducks Unlimited, Inc: Smart Livestock Advancing Terrestrial Ecosystems, $483,924**

**26-14 (B) United Prairie Foundation: Grazed Wildlife Habitat – Meadowlark Initiative, $580,000**

**26-15 (C) North Dakota Natural Resources Trust: Wildlife and Livestock Dams – Wetlands Creation, Restoration, and Enhancement III, $445,000**

**26-16 (B) North Dakota Natural Resources Trust: Grazing Resiliency in North Dakota (GRND), $1,950,000**

**26-17 (A) North Dakota Game and Fish: Western North Dakota Private Land Open to Sportsmen (PLOTS), $1,500,000**

**26-18 (D) City of Flasher: Flasher Historical Recreation Trail, $45,837**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Jessen presented for consideration of approval Outdoor Heritage Fund Policies and Grant Round Deadlines. The policy includes general provisions, eligibility, grant amount and matching fund requirements, application requirements, and the contract process. The next OHF grant round deadline is November 1, 2025.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the updated Outdoor Heritage Fund grant program policies and grant round deadlines.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

## LEGAL UPDATE

A. Challenges to Federal Actions:
   i. EPA - Methane OOOO Rule
   ii. EPA - ND Regional Haze Disapproval
   iii. EPA - WOTUS Rule
   iv. EPA - Legacy CCR
   v. EPA - PM2.5 Rule
   vi. EPA/DOT – Vehicle Emission Rules
   vii. BLM - Conservation Rule
   viii. BLM - Venting & Flaring Rule
   ix. OSMRE -10-Day Notice Rule
B. Defenses of State Law
   i. Pore Space Amalgamation
C. Challenges to Other States' Laws
   i. Minnesota Carbon-Free Power Law

## DEPARTMENT OF MINERAL RESOURCES

Mr. Nathan Anderson presented for consideration of approval the following case and corresponding order:

i. **Order 34323 in Case 31591**: Application of Neptune Operating LLC for an order amending the applicable orders for the Arnegard-Bakken Pool to allow a well to be drilled and completed in such a manner so as to allow the horizontal wellbore to be located not less than 300 feet from the eastern boundary of the spacing unit as and exception to applicable setback requirements and such further relief as indicated.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve Order No. 34323 issued in Case No. 31591, approving the application of Neptune Operating LLC to amend the applicable orders for the Arnegard-Bakken Pool to allow a well to be drilled and completed in such a manner so as to allow the horizontal wellbore to be located not less than 300 feet from the eastern boundary of the spacing unit comprised of Sections 25 and 36, T.150N., R.101W., McKenzie County, ND, as an exception to the applicable setback requirements, and such further relief.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Anderson presented for consideration of approval a Resolution regarding Demonstration Incentive Well Policies.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the resolution as written regarding Demonstration Incentive Well Policies.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

A RESOLUTION WAS MADE

**RESOLUTION DIRECTING DEVELOPMENT OF POLICIES RELATED TO**

**CERTIFICATION OF QUALIFIED DEVELOPMENT INCENTIVE WELLS**

**WHEREAS**, The Sixty-ninth Legislative Assembly of North Dakota passed Senate Bill No. 2397 that amended North Dakota Century Code (NDCC) 57-51.1-01 and under SECTION 3 of the bill sets forth in part as follows:

57-51.1-01- Definitions for oil extraction tax.

2. "Development incentive well" means, as determined and certified by the industrial commission, a well spud after June 30, 2025, which:

a. Utilizes a new or innovative drilling or completion technique that constitutes a technical advancement that has not been previously utilized with demonstrated success by the operator within the specific formation targeted for development by that operator;

b. Demonstrates the capability to develop reserves within the target formation that would otherwise remain underdeveloped or undeveloped under existing drilling or completion techniques; and

c. Is designed and anticipated to, more likely than not, increase the number of new wells, additional production, or the ultimate recovery of oil or gas within the target formation: and

**WHEREAS**, SECTION 4 of SB 2397 sets forth as follows:

A new subsection to section 57-51.1-03 of the North Dakota Century Code is created and enacted as follows:

a. The first two hundred fifty thousand barrels of oil produced during the first thirty-six months after completion from a development incentive well drilled and completed before July 1, 2028, and certified as a qualified well by the industrial commission, are exempt from the tax under section 57-51.1-02.

b. For purposes of the exemption under this subsection:

(1) An operator seeking certification of a well as a development incentive well shall meet the burden of demonstrating to the industrial commission that the well meets the criteria under subsection 2 of section 57-51.1- 01.

(2) An operator seeking certification of a well as a development incentive well must be classified as one of the following:

(a) An operator with between forty and ninety-nine wells within the Bakken or Three Forks formations which have been:

[1] Drilled by the operator during the period beginning July 1, 2023, and ending June 30, 2025; or

[2] Drilled during the period beginning July 1, 2023, and ending June 30, 2025, and acquired by the operator.

(b) An operator with between one hundred and one hundred forty-nine wells within the Bakken or Three Forks formations which have been:

[1] Drilled by the operator during the period beginning July 1, 2023, and ending June 30, 2025; or

[2] Drilled during the period beginning July 1, 2023, and ending June 30, 2025, and acquired by the operator.

(c) An operator with one hundred fifty or more wells within the Bakken or Three Forks formations which have been:

[1] Drilled by the operator during the period beginning July 1, 2023, and ending June 30, 2025; or

[2] Drilled during the period beginning July 1, 2023, and ending June 30, 2025, and acquired by the operator.

(3) The industrial commission may not certify more than:

(a) Four development incentive wells for an operator classified under subparagraph a of paragraph 2 of subdivision b;

(b) Eight development incentive wells for an operator classified under subparagraph b of paragraph 2 of subdivision b; and

(c) Twelve development incentive wells for an operator classified under subparagraph c of paragraph 2 of subdivision b: and

c. The tax exemption under this subsection does not apply to a well located within the exterior boundaries of a reservation, a well located on trust properties outside reservation boundaries as defined in section 57-51.2-02, or a straddle well as defined in section 57-51.1-07.10 located on reservation trust land, unless a tribe makes an irrevocable election to opt-in to the tax exemption by providing written notice to the tax commissioner. If a tribe provides notice of its election to opt-in to the tax exemption, the tax commissioner shall apply the tax exemption beginning in the month of production after the notice is received by the tax commissioner.

**NOW, THEREFORE, BE IT RESOLVED** by the Industrial Commission of North Dakota as follows:

The Commission does hereby direct the Department Of Mineral Resources to adopt a policy for operators to apply for wells to be certified as a qualified development incentive well by the Industrial Commission and does hereby grant to the Director of the Department of Mineral Resources the authority to certify such wells on behalf of the Commission.

Adopted: June 26, 2025

## INDUSTRIAL COMMISSION ADMINISTRATIVE OFFICE

Ms. Karen Tyler presented for consideration of approval the May 22, 2025, and June 2, 2025, Industrial Commission meeting minutes.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the May 22, 2025, and June 2, 2025, Industrial Commission meeting minutes.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Tyler presented for consideration of approval compensation changes for Agency Directors.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve agency leader compensation increases as appropriated by the 69th Legislative Assembly and recommended by the Industrial Commission Executive Director.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Tyler presented for consideration of approval Grant Program Professional Services Contracts.

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the renewal of the professional services contracts for the Oil and Gas Research Program Director for the term July 1, 2025, through June 30, 2027, and directs the Industrial Commission Executive Director to execute the renewed contract.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Kannianen presented for consideration of approval an Appointment of the Transmission Authority Executive Director to the Nuclear Energy Study Committee.

The memo reads in part as follows:

**"HB 1025 enacted by the 69th Legislative Assembly mandates a legislative management study relating to advanced nuclear energy. The bill requires a study committee to be formed and sets forth in part:**

The committee must consist of:

a. Two members representing the energy industry, appointed by the legislative management;

b. One member appointed by the public service commission;

**c. One member appointed by the industrial commission;**

d. One member appointed by the director of the department of water resources;

e. Three members of the house of representatives selected by the majority leader of the house of representatives, two of whom must represent the majority faction of the house of representatives and one of whom must represent the minority faction of the house of representatives; and

f. Three members of the senate selected by the majority leader of the senate, two of whom must represent the majority faction of the senate and one of whom must represent the minority faction of the senate

NDIC Staff recommend that Claire Vigesaa, Executive Director of the North Dakota Transmission Authority, be appointed as the Industrial Commission representative. Mr. Vigesaa has extensive knowledge and expertise in matters related to grid reliability and the critical need for dispatchable generation for North Dakota and the nation.

We feel Mr. Vigesaa's industry experience and NDTA executive director role position him well to provide valuable input and participation as a member of the study committee."

**It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission appoint North Dakota Transmission Authority Executive Director Claire Vigesaa to serve on the Legislative Management Study Committee on Advanced Nuclear Energy pursuant to the appointment requirements set forth in HB 1025 enacted by the 69th Legislative Assembly.**

**On a roll call vote, Governor Armstrong, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.**

With no further business, Governor Armstrong adjourned the meeting of the Industrial Commission at 11:40 a.m.

North Dakota Industrial Commission

Brenna Jessen, Recording Secretary

Karen Tyler, Executive Director

Jordan Kannianen, Deputy Director

**CONSULTING SERVICES AGREEMENT**

**LIGNITE RESEARCH DEVELOPMENT AND MARKETING PROGRAM**

**THIS AGREEMENT** is made and entered into as of September 1, 2025, between the State of North Dakota (State) acting by and through its Industrial Commission (“Commission”) and the Lignite Energy Council ("Contractor") whose address is 1016 E Owens Ave, Bismarck, ND 58501, North Dakota.

**WHEREAS,** the State through legislation adopted in 1987 has established the North Dakota Lignite Research, Development and Marketing Program (LRP) to assist with the development and wise use of North Dakota's vast lignite resources and to promote the economic, efficient, and clean uses of lignite and products derived from lignite in order to maintain and enhance development of North Dakota lignite and its products; support educational activities relating to the lignite industry; preserve and create jobs involved in the production and utilization of North Dakota lignite; ensure economic stability, growth, and opportunity in the lignite industry; and maintain a stable and competitive tax base for our state's lignite industry for the general welfare of North Dakota.

**WHEREAS,** the Commission is interested in contracting with Contractor to provide the professional services required by the Commission to implement the work of the LRP and Contractor agrees to provide the requested professional services.

**NOW, THEREFORE,** in consideration of the foregoing and the mutual covenants and conditions contained herein, and subject to the approval of the Commission as required below, the parties hereby agree as follows:

1.0 INDEPENDENT CONTRACTOR

Contractor shall perform the services specified in this Agreement as an independent contractor and not as an employee of the Commission. No part of this Agreement shall be construed as creating an employer/employee relationship between the Commission and the Contractor. As an independent contractor, Contractor shall be responsible for payroll related taxes and insurances and covenants that will be paid when due.

2.0 TERM

The effective date of this contract is September 1, 2025. The term of this contract shall be for a total of up to ten months, through June 30, 2026, or upon completion of the work required under the LRP, whichever first occurs, with a review at the end of ten months.

3.0 SCOPE OFWORK

Contractor shall provide technical professional services required by the Commission for the successful administration of the LRP. Specific responsibilities include, but are not limited to, the following:

1. Assists with the development of strategy(ies) and implementation plan(s) to facilitate development of priority opportunities to enhance the development and use of North Dakota lignite as directed in the program.

2. Maintains knowledge of laws, regulations, policies and guidelines related to the program. Communicates accurate interpretations and requirements to project applicants, to the Lignite Research Council and to the Commission.

3. Performs administrative duties and is responsible for planning and program development to ensure a cost-effective program. Reviews regular and special reports related to projects and handles correspondence as necessary. Supplies prospective applicants with necessary application information, rules and regulations and any other pertinent information related to the application and review process.

4. Ensures compliance with program requirements and coordinates completeness review of all application submittals for the Lignite Research Council and the Commission. Ensures that all applications meet regulatory requirements and communicates with applicants as appropriate.

5. Recommends selection of and communicates with qualified Independent Technical Peer Reviewers and coordinates the recommendation and comments of the peer reviewers of projects, proposed projects and proposals. Establishes schedules for peer review, collects comments and establishes peer review committees as necessary to develop reports and recommendations to the Lignite Research Council and Commission. Ensures independent and credible analysis of potential projects and projects to insure:

a. Technical merit

b. Application to North Dakota lignite

c. Marketability

d. Economic feasibility

e. Prospect for rapid commercialization

f. Likelihood for attracting private matching funds

g. Potential for preserving existing lignite production and jobs or generating additional production and economic growth

6. Assists with negotiation of contracts with successful project applicants as needed and monitors contracts to ensure compliance with Commission policies and procedures. Responsible for monitoring all funded projects. Reports on a regular basis to the Commission on the status of the funded projects.

7. Assists with development of financial recommendations for individual projects and with implementation of financing proposals by working with project partners, the state, and the federal government. Identifies specific sources of cost sharing revenue for potential projects. Works to maximize the availability of private, state, and federal funds for potential lignite research and development projects.

8. Ensures timely filing of all required reports and prepares and coordinates the preparation of regulatory or special reports as required by contract, laws, and rules or at the request of the Commission. Communicates with prospective and successful applicants about the requirements of reports.

9. Assists the Commission with promotion of lignite-based energy conversion projects through Advanced Energy Technology and related demonstration projects.

10. Assists the Commission with lignite-based Research and Development opportunities with the U.S. Department of Energy.

11. Performs other duties as assigned by the Commission.

4.0 COMPENSATION

For all services rendered by the Contractor pursuant to this Agreement, the Contractor shall be paid $15,542 per month. This rate is intended to include all of the Contractor's general overhead expense, including, but not limited to, the following: rent; office equipment; postage; e-mail; home office secretarial service; local telephone and fax; local travel and meals; employment taxes; insurance; etc. The Commission shall make payment on a monthly basis upon receipt of the Contractor's invoice and report of work completed for the invoice period.

In addition to the above-specified monthly rate, Contractor shall be separately reimbursed for travel and other extraordinary expenses incurred in connection with the performance of this Agreement and as directed by the Commission. The Contractor shall itemize expenses

incurred during the invoice period. The Contractor shall be reimbursed at the same rate for meals and lodging as is paid to State employees.

5.0 REPORTING

Contractor shall provide a written report prior to a payment for professional services being made that outline what work activities were completed in the invoice period. The Contractor shall also provide such other oral and written reports as the Commission from time-to-time may require. Further, the Contractor shall regularly meet with the Office of the Industrial Commission, either in person or by phone, as the Office determines is necessary to discuss the project objectives, goals, and milestones and shall be available to meet and provide reports to the Lignite Research Council and the Commission.

6.0 LIMITED AUTHORITY

Contractor shall have no authority to bind the Commission to any contractual arrangements and is not an agent of the Commission for any purpose.

7.0 DATA ANDWORK PRODUCT

All data, notes, memoranda, reports, and other work product, of any kind or nature, developed by Contractor pursuant to this Agreement shall be the exclusive property of the Commission. Contractor may not use the data, notes, memoranda, reports, or other work product developed by the Contractor for any purpose other than completion of the scope of work contemplated by this Agreement. Upon termination of this Agreement, all data, notes, memoranda, reports, and other work product remaining in the possession of the Contractor shall be turned over to the Commission.

From time-to-time, Contractor may be provided with confidential reports, data, and work product developed by others for the Commission and/or the State of North Dakota. Contractor may not disclose this confidential work product to third parties without the written permission of the Commission and this work product shall at all times remain the exclusive work product of the Commission. At the termination of this Agreement, all such work product shall be returned to the Commission.

8.0 ASSIGNMENT AND SUBCONTRACTING

Contractor may not assign or otherwise transfer or delegate any right or duty without State's express written consent, provided, however, that Contractor may assign its rights and obligations hereunder in the event of a change of control or sale of all or substantially all of its assets related to this Contract, whether by merger, reorganization, operation of

law, or otherwise. Should Assignee be a business or entity with whom State is prohibited from conducting business, State shall have the right to terminate in accordance with the Termination for Cause section of this Contract.

Contractor may enter subcontracts provided that any subcontract acknowledges the binding nature of this Contract and incorporates this Contract, including any attachments. Contractor is solely responsible for the performance of any subcontractor with whom Contractor contracts. Contractor does not have authority to contract for or incur obligations on behalf of State.

9.0 CANCELLATION FOR CONVENIENCE

The Commission shall have the right to terminate this Agreement at any time and for any reason upon 30 days written notice to the Contractor, which notice shall set forth the effective date for the termination. On the termination date specified in the notice, Contractor shall discontinue all work pertaining to this Agreement. Upon termination, Contractor shall be entitled to payment for all earned services up to the termination date, and payment for all reimbursable expenses properly incurred in accordance with this Agreement. The Contractor shall have the right to terminate this Agreement at any time and for any reason upon 30 days written notice to the Commission, which notice shall set forth the effective date for the termination. On the termination date specified in the notice or such date mutually agreed upon by the Commission and Contractor if less than 30 days, the Contractor shall discontinue all work pertaining to this Agreement.

10.0 CONFLICTS OF INTEREST

Contractor may not engage in other work in North Dakota during the term of this Agreement that competes or creates a conflict-of-interest with the accomplishment of the goals and objectives of the North Dakota Lignite Research, Development and Marketing Program. The Industrial Commission may grant written approval of other work by the Contractor in North Dakota upon the written request of the Contractor. The Commission acknowledges and does not object to Contractor's position as the Vice President of the Lignite Energy Council (LEC), provided that it does not conflict with the Contractor's obligations under this contract to the Commission, that the Contractor declare a conflict to the Commission for all applications by the LEC to the LRP, and that the Contractor refrain from providing administrative and technical advisory services related to LEC applications to the LRP.

11.0 FORCE MAJEURE

Neither Party shall be held responsible for delay or default caused by fire, riot, terrorism, pandemic (excluding COVID-19), acts of God, or war if the event was not foreseeable through the exercise of reasonable diligence by the affected Party, the event is beyond the Party's reasonable control, and the affected Party gives notice to the other Party promptly upon occurrence of the event causing the delay or default or that is reasonably expected to cause a delay or default. If Contractor is the affected Party and does not resume performance within fifteen (15) days or another period agreed between the Parties, then State may seek all available remedies, up to and including termination of this Contract pursuant to its Termination Section, and State shall be entitled to a pro-rata refund of any amounts paid for which the full value has not been realized.

12.0 INDEMNIFICATION

Contractor agrees to defend, indemnify, and hold harmless the State of North Dakota, its agencies, officers and employees (State of ND), from and against claims based on the vicarious liability of State of ND or its agents, but not against claims based on the State of ND's contributory negligence, comparative and/or contributory negligence or fault, sole negligence, or intentional misconduct. This obligation to defend, indemnify, and hold harmless does not extend to professional liability claims arising from professional errors and omissions. The legal defense provided by Contractor to State of ND under this provision must be free of any conflicts of interest, even if retention of separate legal counsel for State of ND is necessary. Any attorney appointed to represent the State must first qualify as and be appointed by the North Dakota Attorney General as a Special Assistant Attorney General as required under N.D.C.C. 54-12-08. Contractor also agrees to defend, indemnify, and hold State harmless for all costs, expenses and attorneys' fees incurred if State of ND prevails in an action against Contractor in establishing and litigating the indemnification coverage provided herein. This obligation shall continue after the termination of this Contract.

13.0 CONFIDENTIALITY

Contractor shall not use or disclose any information it receives from State under this Contract that State has previously identified as confidential or exempt from mandatory public disclosure except as necessary to carry out the purposes of this Contract or as authorized in advance by State. State shall not disclose any information it receives from Contractor that Contractor has previously identified as confidential and that State determines in its sole discretion is protected from mandatory public disclosure under a specific exception to the North Dakota public records law, N.D.C.C. ch. 44-04. The duty of State and Contractor to maintain confidentiality of information under this section continues beyond the Term of this Contract.

14.0 COMPLIANCE WITH PUBLIC RECORDS LAWS

Under the North Dakota public records law and subject to the Confidentiality clause of this Contract, certain records may be open to the public upon request.

Public records may include: (a) records State receives from Contractor under this Contract, (b) records obtained by either Party under this Contract, and (c) records generated by either Party under this Contract.

Contractor agrees to contact State immediately upon receiving a request for information under the public records law and to comply with State's instructions on how to respond to such request.

15.0 INDEPENDENT ENTITY

Contractor is an independent entity under this Contract and is not a State employee for any purpose, including the application of the Social Security Act, the Fair Labor Standards Act, the Federal Insurance Contribution Act, the North Dakota Unemployment Compensation Law and the North Dakota Workforce Safety and Insurance Act. Contractor retains sole and absolute discretion in the manner and means of carrying out Contractor's activities and responsibilities under this Contract, except to the extent specified in this Contract.

16.0 SPOLIATION – PRESERVATION OF EVIDENCE

Contractor shall promptly notify State of all potential claims that arise or result from this Contract. Contractor shall also take all reasonable steps to preserve all physical evidence and information that may be relevant to the circumstances surrounding a potential claim, while maintaining public safety, and grants to State the opportunity to review and inspect such evidence, including the scene of an accident.

17.0 MERGER AND MODIFICATION, CONFLICT IN DOCUMENTS

This Contract, including the following documents, constitutes the entire agreement between the Parties. There are no understandings, agreements, or representations, oral or written, not specified within this Contract. This Contract may not be modified, supplemented or amended, in any manner, except by written agreement signed by both Parties.

18.0 SEVERABILITY

If any term of this Contract is declared to be illegal or unenforceable by a court having competent jurisdiction, the validity of the remaining terms is unaffected and, if possible,

the rights and obligations of the Parties are to be construed and enforced as if this Contract did not contain that term.

19.0 APPLICABLE LAW AND VENUE

This Contract is governed by and construed in accordance with the laws of the State of North Dakota. Any action to enforce this Contract must be adjudicated exclusively in the state District Court of Burleigh County, North Dakota. Each Party consents to the exclusive jurisdiction of such court and waives any claim of lack of jurisdiction or *forum non conveniens*.

20.0 ALTERNATIVE DISPUTE RESOLUTION – JURY TRIAL

By entering this Contract, State does not agree to binding arbitration, mediation, or any other form of mandatory Alternative Dispute Resolution. The Parties may enforce the rights and remedies in judicial proceedings. State does not waive any right to a jury trial.

21.0 ATTORNEY FEES

In the event a lawsuit is instituted by State to obtain performance due under this Contract, and State is the prevailing Party, Contractor shall, except when prohibited by N.D.C.C. § 28 26 04, pay State's reasonable attorney fees and costs in connection with the lawsuit.

22.0 NONDISCRIMINATION AND COMPLIANCE WITH LAWS

Contractor agrees to comply with all applicable federal and state laws, rules, and policies, including those relating to nondiscrimination, accessibility, and civil rights. (See N.D.C.C. Title 34 – Labor and Employment, specifically N.D.C.C. ch. 34-06.1 Equal Pay for Men and Women.)

Contractor agrees to timely file all required reports, make required payroll deductions, and timely pay all taxes and premiums owed, including sales and use taxes, unemployment compensation and workers' compensation premiums.

Contractor shall have and keep current all licenses and permits required by law during the Term of this Contract.

Contractor is prohibited from boycotting Israel for the duration of this Contract. (See N.D.C.C § 54-44.4-15.) Contractor represents that it does not and will not engage in a boycotting Israel during the term of this Contract. If State receives evidence that Contractor boycotts Israel, State shall determine whether the company boycotts Israel. The foregoing

does not apply to contracts with a total value of less than $100,000 or if Contractor has fewer than ten (10) full-time employees.

Contractor's failure to comply with this section may be deemed a material breach by Contractor entitling State to terminate in accordance with the Termination for Cause section of this Contract.

23.0 STATE AUDIT

Pursuant to N.D.C.C. § 54-10-19, all records, regardless of physical form, and the accounting practices and procedures of Contractor relevant to this Contract are subject to examination by the North Dakota State Auditor, the Auditor's designee, or Federal auditors, if required. Contractor shall maintain these records for at least three (3) years following completion of this Contract and be able to provide them upon reasonable notice. State, State Auditor, or Auditor's designee shall provide reasonable notice to Contractor prior to conducting examination.

24.0 COUNTERPARTS

This Contract may be executed in multiple, identical counterparts, each of which is be deemed an original, and all of which taken together shall constitute one and the same contract.

25.0 EFFECTIVENESS OF CONTRACT

This Contract is not effective until fully executed by both Parties. If no start date is specified in the Term of Contract, the most recent date of the signatures of the Parties shall be deemed the Effective Date.

IN **WITNESS WHEREOF,** the parties have caused this Agreement to be entered into as of the date first above written.

| | |
|---|---|
| LIGNITE ENERGY COUNCIL | NORTH DAKOTA INDUSTRIAL COMMISSION |
| By:_____ | By:_____ |
| Name:_____ | Name:_____ |
| Date:_____ | Date:_____ |

## Second Addendum to Contract

This addendum to the Lignite Research Development and Marketing Program Technical Advisor contract is between the State of North Dakota acting by and through its Industrial Commission and the North Dakota Lignite Energy Foundation.

Pursuant to approval by the Industrial Commission at the September 30th, 2025, Industrial Commission meeting, the term of the Consulting Services Agreement has been extended through December 31st, 2025. All other terms and conditions of the contract remain unchanged.

| North Dakota Industrial Commission | North Dakota Lignite Energy Foundation |
| --- | --- |
| _____ | _____ |
| Jordan Kannianen | Jonathan Fortner |
| Deputy Executive Director | (Title for Foundation Position) |