Appendix G. Contaminated Materials Review

CONTAMINATED MATERIALS REVIEW

Northshore Drive Realignment Project
Northwest of North Sioux City,
Union County, South Dakota

Project No.: EM 8064(32)
PCN: 097K

Prepared for:

South Dakota Department of Transportation
Office of Project Development
Environmental Office
700 E Broadway Avenue
Pierre, SD 57501-2586

Prepared by:
Carin Richardson

QA/Qc'd by:
Allison Sambol

Submitted:
February 2024

Left Intentionally Blank

Table of Contents

Appendices

List of Tables

1. Introduction

Carin Richardson from Felsburg Holt & Ullevig (FHU), acting on behalf of the South Dakota Department of Transportation (SDDOT) completed this Contaminated Materials Review (CMR) for the Northshore Drive Realignment Project (Project Number EM 8064(32); PCN 097K). The project is northwest of North Sioux City, Union County, South Dakota (**Figure 1**; **Appendix A**).

This CMR was performed as part of the environmental documentation for the Northshore Drive Realignment NEPA process. The information provided within this review is intended to assist SDDOT in identifying potential contaminated materials concerns and in considering the possible need to address contaminated materials concerns in project decisions regarding materials management and worker health and safety. A project summary description is included in the **Section 1.1**. The CMR included a review of South Dakota Department of Agriculture and Natural Resources (SDDANR) tank, well, and spill databases was completed on May 30, 2023, and a visual reconnaissance conducted on June 5, 2023, by Kody Unstad, under the supervision of Carin Richardson, an ASTM E 1527-21 and AAI (40 CFR 312.10; USEPA 2014) defined Environmental Professional (EP).

FHU's assessment and findings presented herein are based on observation of current conditions within the environmental study area and a review of reasonably ascertainable standard record resources. Due to the sensitive nature of the right-of-way (ROW) acquisition process and the lack of finalized ROW plans identifying the specific amount of property to be acquired for ROW for the project, right-of-entry to properties located within the environmental study area were not obtained. Additionally, interviews with current and/or past owners, occupants, operators or employees of the properties located within the environmental study area were not conducted.

FHU's assessment was limited to areas visible from public ROW and did not include access to fenced-in areas, interiors of buildings, rear lots (alley side portion of each site), or areas not visible from public ROW. This assessment did not attempt to detect the presence of environmental contamination that may exist in areas that could not be visually inspected.

This CMR was non-intrusive. Sampling of soils, groundwater, and/or surface waters was beyond the scope of this CMR. Other environmental liabilities to a property owner, such as the presence of asbestos-containing materials (ACM), radon, or lead-based paint (LBP) were also beyond the scope of investigation for this CMR. The presence or absence of such conditions cannot be confirmed without additional investigation. Findings are discussed in **Section 4** of this document.

1.1 Project Description

This project is to construct approximately 1 mile of new road on new alignment, a realigned segment of Northshore Drive to create a connection between Interstate 29 (I-29)/Streeter Drive on the east and Westshore Drive on the west, reconnecting to Northshore Drive. The work is being completed in coordination with SDDOT and is federally funded.

The proposed improvements for this project consist of grading for an ultimate 4-lane urban divided median section; however, paving for the current project would consist of a 3-lane urban section with curb and gutter. Depending on the design selected, the 3-lane section may include a median or center left-turn lane. A storm drainage system structure would also be constructed along the new roadway. Detached boulevard sidewalks will be included on both sides of the corridor. The pedestrian/bicycle trail, sidewalks, crosswalks, and ramps would be constructed according to the Americans with Disabilities Act (ADA) requirements. The sidewalks will be a minimum of 5 feet wide. The south side is proposed to be 10 feet wide and connect to the existing North Sioux City/McCook Lake Trail on the south-east end of the project. All intersections will comply with

ADA requirements for pedestrians. Trails and sidewalks will be located in the boulevard to allow street expansion for additional lanes in the future.

New storm sewer shall be included for the length of the corridor to accommodate urban design standards. Water main and sanitary sewer will be installed throughout the project. Street lighting along the corridor is anticipated and all traffic control signing shall be posted according to the current MUTCD.

Property rights for the corridor (such as temporary/permanent easements and right of way acquisition) may be necessary to construct the project and are expected. Acquisition of property rights would be completed in compliance with the Uniform Act.

Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements. Construction phasing to complete intersection work where the new alignment would tie into the existing roadway system network could include short road closures (less than three days).

The full project description is attached in **Appendix B**. **Table 1** summarizes the project features.

Table 1. Project Features

Project Feature	Present (Yes/No)	Discussion
Structure Acquisition	☐ Yes ☒ No	
Structure Modifications	☒ Yes ☐ No	No
Structure Demolition	☒ Yes ☐ No	No
Full Property Acquisition for Right-of Way	☐ Yes ☒ No	
Permanent or Temporary Easement	☒ Yes ☐ No	Temporary and permanent easements are expected, including right-of-way acquisition. No relocations of homes or businesses are anticipated, although in some instances access could be relocated.
Utility Relocation	☒ Yes ☐ No	Storm, water main, and sanitary sewer improvements will be included for the length of the corridor. Street lighting along the corridor is anticipated.
Excavation or Drilling	☒ Yes ☐ No	Dependent on the final design.
Disturbance Depth	Excavation depth is dependent on final design.	
Encountering Groundwater Anticipated	☐ Yes ☒ No	
Dewatering	☐ Yes ☒ No	
Depth to Groundwater (feet) (**Section 2**)	Between 140-320 feet below ground surface (SDDENR, 2023).	
Groundwater Flow Direction (**Section 2**)	Southeast and south toward the Missouri River and Big Sioux River.	

1.2 Methodology

The methodology used to identify the presence of contaminated sites within the project footprint which have the potential to impact the project follow the process that included the following steps:

- Reviewed readily available local, state, and federal environmental agency databases to identify and assess sites with potential to impact the project up to a maximum distance of one mile from the project footprint.
- Performed a visual reconnaissance of the project area from public right-of-way to identify site activities and potential contamination sources within and adjoining to the project area.
- Reviewed readily available standard historical sources, including aerial photographs within the project area.
- Reviewed previous studies, SDDANR and SDDENR records, State Fire Marshall (SFM) records, or other available regulatory records from local, state, and federal agency records for properties within the project area.

The CMR study area encompasses the project footprint, which is the area on a project site where excavation or work occurs to construct the project improvements, including work on such features as the roadway and structures (i.e., bridge). The project footprint includes vertical and horizontal attributes of the project's construction activity, including depth of excavation. The study area is depicted on **Figure 2** (**Appendix A**).

1.3 Terminology

This section briefly explains some of the common terminology used in the CMR.

- **Contaminated Materials** – The term contaminated materials used in the SDDOT Environmental Procedures Manual (2019) is a general phrase not defined in federal or state statutes or regulations, but it includes hazardous wastes under the Resource Conservation and Recovery Act (RCRA); hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and other regulated materials such as petroleum fuels (petroleum-contaminated soil), non-hazardous substances, toxic substances, and pollutants.
- **Project Area** – The project area includes the footprint of the existing roadway alignment and the proposed alternatives from project beginning to project end.
- **Environmental Study Area (ESA)** – The Environmental Study Area for the project consists of a 0.25-mile buffer of the anticipated location of the realigned Northshore Drive from east terminus (I-29/Street Drive intersection) to west terminus (Westshore Drive).
- **Recognized Environmental Conditions (RECs)** – RECs as defined by the ASTM: "The term *recognized environmental condition* means *(1)* the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* to the *environment; (2)* the likely presence of *hazardous substances* or *petroleum products* in, on , or at the *subject property* due to a *release* or likely *release* to the *environment;* or *(3)* the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* under conditions that pose a *material threat* of a future *release* to the *environment.* A *de minimis* condition is not a *recognized environmental condition*."
- ***De minimis* condition** – a condition related to a *release* that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a *recognized environmental condition* nor a *controlled recognized environmental condition.*

1.4 Impact Criteria

The magnitude of the project impact from an identified site depends on several factors, including the distance between a potential source of a contaminated material and the project; regulatory status of the identified sites (e.g., active or inactive); known or suspected releases into soil, soil vapor, surface water, or groundwater; the hydrogeologic relationship of the source of contamination to the project; and the depth and/or duration of construction. This CMR considers these factors as part of the evaluation of whether an identified site has the potential to impact the project. Identified sites were categorized as having either low, medium, or a high potential to impact the project area. The following describes the categories:

- **Low Potential –** It is determined through investigation it is unlikely contamination would be encountered during construction.
- **Medium Potential –** During the investigation, it is determined it is unknown whether contamination is located in the project footprint. A subsurface investigation or further coordination with regulatory agencies determines if unlikely contamination would be located in the project footprint. On a case-by-case basis, a commitment to the contractor and SDDOT project manager to look for signs of contamination in specific areas can be included in the CMR rather than proceeding with a subsurface investigation.
- **High Potential –** Through file review or subsurface investigation, it has been determined it is likely contamination would be encountered during construction.

These criteria are used throughout this report in evaluating impact potential from contaminated materials to the project.

2. Environmental Setting

The United States Geological Survey (USGS) topographic maps identify groundwater flow, SDDENR identify groundwater levels (SDDENR, 2023), and MRDATA identify local and regional geology (MRDATA, 2023).

Registered wells near the project area indicate regional groundwater flow would generally be to the south / southeast toward the Missouri River and Big Sioux River (**Figure 2**; **Appendix A**). Within the project footprint, groundwater monitoring wells were identified with static water levels between 37 feet below ground surface (bgs) and 300 feet bgs (SDDENR, 2023). The topography is flat. The geology of the area is the Upper to Lower Cretaceous of the Dakota Formation with sandstone being the major lithologic constituent and mudstone and shale being the minor lithologic constituents (MRDATA, 2023) covered with Forney silty clay, Modale silt loam, and Onawa silty clay. Confirmation of the geology and groundwater flow beneath the project area was beyond the scope of this CMR.

3. Results

The following sections summarize the review of regulatory databases, the visual reconnaissance, and additional analysis. As discussed in Section 1.3, the evaluation of magnitude of the project impacts from a contaminated material is based on several factors. The CMR resource reviews were used to identify and evaluate sites with potential concerns related to contaminated materials e located adjoining to or within the vicinity of the proposed project.

3.1 Regulatory Database Search

The SDDANR (2023) tanks and release database was reviewed on May 30, 2023, to determine if contaminated materials were within the ESA and if the circumstances and level of impact of the contaminated material would have on the project and worker health and safety.

Two (2) regulated facilities are present in the ESA. One site is a Tier 2 Chemical Reporting/Superfund Amendments and Reauthorization Act (SARA) Title III site due to chlorine storage and the other site is an underground storage tank (UST); listed in Table 2. No National Priority List or Superfund (SF) sites are located adjoining to and/or within 1 mile of the project footprint. Four (4) spills were reported within the ESA (listed below in chronological order).

1. SDDANR# 84.049. June 12, 1984, a barge sank in McCook Lake with 100 gallons of diesel fuel. The barge was raised June 30, 1984, without spilling the diesel fuel. The file was closed indicating no fuel product was lost.
2. SDDANR# 92.369. October 27, 1992, a 150-gallon oil dump reportedly occurred in McCook Lake. An inspection occurred and no unusual or excessive discrepancies in the quantities of petroleum products could be found. No samples were taken because no indication of hydrocarbons was observed, and the file was closed.
3. SDDANR# 97.309 September 16, 1997, a surface spill of hydraulic fluid at the Dakota Valley High School occurred and the site was cleaned up. The file was closed.
4. SDDANR# 98.105 May 13, 1998, a surface spill of hydraulic fluid on McCook Lake near Northshore Drive occurred when a hydraulic hose broke on a dredge. Absorbent booms were used to recover the oil out of the lake water. The file was closed.

The SARA Title III Tier 2 site (North Sioux City chlorine storage) was determined to not warrant additional analysis due to its location relative to the project area (0.15 mile topographically downgradient) and regulatory status (no recorded spills). The underground storage tank site is discussed in further detail in **Section 3.4, Summary of Regulatory File Review**. Refer to **Figure 2** in **Appendix A**. No other regulated facilities were identified within the ESA.

Table 2. Identified Sites within the Search Radii

Facility	Address	Regulatory Database & Facility Status	Distance Relative to Project
1. City of North Sioux City SDDANR #UN 0068	300 Streeter Drive North Sioux City, SD	Tier 2 – active	0.15 mile southeast; down gradient
2. Dakota Valley School District SDDANR #2005.009	1150 Northshore Drive North Sioux City, SD	UST – closed	Adjoining east; down gradient

SDDANR – South Dakota Department of Agriculture and Natural Resources

Tier 2 – Tier 2 Chemical Reporting/Superfund Amendments and Reauthorization Act (SARA) Title III

Facility	Address	Regulatory Database & Facility Status	Distance Relative to Project

UST – underground storage tank

3.2 Visual Reconnaissance

A visual reconnaissance was conducted on June 5, 2023, by Kody Unstad of FHU, under the supervision of Carin Richardson, an EP as defined by ASTM e1527-21. The purpose of the visual reconnaissance was to assess the project area for potential contaminated materials concerns associated with current land use and observable site activities. The visual reconnaissance assessed the project area for obvious evidence of potential contamination sources, such as current contaminated materials storage or use; unusually stained soils, concrete slabs, or pavements; sumps, dumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded containers.

The Burlington Northern / Santa Fe Railroad line runs along the east side of the I-29 corridor. It is 0.27 miles east of the project terminus and is topographically downgradient. The Santa Fe Railroad was built from Independence, Missouri, to Santa Fe, New Mexico, with the mainline to the Colorado state line being completed in 1872. Based on historical and current uses of railroad tracks, soil and groundwater contamination may exist along the railroad corridor due to undocumented events and an accumulation over time of drips, leaks, spills, and hydrocarbon exhaust residues from rail traffic.

Several natural gas lines (markers) were observed during the visual reconnaissance. No evidence of poor housekeeping or other indications of a release were observed from public right-of-way.

3.3 Historical Use Information

The objective of the historical review is to "develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions (RECs)" (ASTM, 2021).

To evaluate the past uses of the project corridor and identify any sites with potential to impact the project, historical aerial photographs and USGS topographic maps were reviewed for direct observation of site conditions through a period of time (**Table 3**). There was no coverage of the project area for Sanborn Fire insurance maps. Observations noted from the historical review may include details regarding environmental changes, the locations of tanks, drums, pits, ponds, lagoons, stained/stressed vegetation, or other site development features which may indicate potential contaminant sources.

Table 3 summarizes the historical records reviewed. In general, the project is located in an area that contains agricultural fields, residential areas, and the three Dakota Valley Schools (elementary, middle, and high school; including football and baseball fields). Refer to Appendix D for pertinent historical information.

Table 3. Summary of Historical Records Reviewed

Historical Record	Years Reviewed
USGS 7.5-Minute Topographical Maps[(1)]	1955, 1959, 1963, 1986, 1994, 2011, 2017, and 2021
Aerial Photographs [2)]	1985, 1993, 2000, 2003, 2014, 2017, and 2022
Sanborn Fire Insurance Maps[(2)]	No coverage

NOTES:

(1) Historical topographic maps were retrieved from the United States Geological Survey (USGS) The National Map at https://viewer.nationalmap.gov/advanced-viewer/

(2) Historical aerial photographs were obtained from Google Earth.

3.3.1 USGS Topographic Maps

USGS Topographic Maps are illustrated maps providing large-scale detail and representation of relief using contour lines, but also include natural and man-made features. Topographic maps have the ability to highlight changes in the environment, such as urban sprawl or development along an industrial corridor. The USGS Topographic maps (1:24,000 scale) show McCook Lake (the oxbow) and SD Highway 26 on the 1955 historical map with some development seen along the lake edge in the 1963 topographic map. The maps were obtained from the USGS National Map Viewer (USGS a-h). Map dates include coverage for 1955, 1959, 1963, 1986, 1994, 2011, 2017, and 2021. The topographic map shows the development of the interstate between 1958 and the 1986 maps. The 1986 to 2021 topographic maps change little: with land use depicted as undeveloped land.

3.3.2 Historical Aerial Photographs

Historical aerials are similar to topographic maps by providing the ability to interpret changes over time; however, aerials, unlike topographic maps, show existing conditions (at the time of photo) and not a representation of the current condition. The ability to show the current conditions increases the detail in which to interpret the environmental condition of an area.

There were seven (7) historical aerial photographs, which span approximately 37 years (1985–2022) (**Appendix D**). When combined with information from the topographic maps, the aerials provide further detail about the residential and geographic growth of development within the ESA. Overall, the development in the study area has been primarily educational facilities and residential. The aerial photographs from 1985 do not clearly show Dakota Middle School, but the 1993 aerial does, and includes the football field north of it. Residential areas south of Northshore Drive and along Penrose Drive appear established. The 2000 aerial shows the football field moved to northeast of the middle school and the construction beginning for the elementary school with the 2003 aerial showing the elementary school and baseball fields complete. The 2014 aerial shows the construction beginning for the high school and the 2017 aerial shows construction complete. One residence was built between 2003 and 2014 west of Westshore Drive. No new development appears to have occurred since 2017.

3.4 Summary of Regulatory File Review

A detailed records review was conducted for the identified site (as stated in **Section 3.1**) located adjoining to, up-gradient, and or near the project footprint to further evaluate if there is potential for conditions at the site to impact the project (**Table 4**).

The objective of the detailed records review was to examine available information regarding the extent of the known impacts to soil, soil vapor, groundwater, and surface water due to an existing or past release of a contaminated substance or petroleum product and to evaluate the potential for residual soil and groundwater contamination to remain on the site. The findings of the regulatory file review are included in **Table 4**. Refer to **Appendix C** for pertinent regulatory records.

Table 4. Regulatory Records Review for Identified Site

Facility	Status	Address	Material & Source Type	Direction & Relative Gradient to Project
1. Dakota Valley School District SDDANR #2005.009[1]	Closed	1150 Northshore Drive North Sioux City, SD	UST[2]	Adjoining east; down gradient

FINDINGS: One UST was registered to the Dakota Valley School District with a capacity of 20,000 gallons at this location. The UST was reportedly last used in 1998. The tank was removed in January 2005. The SDDANR record from the tank closure's field observations did not indicate petroleum hydrocarbon concentrations were present in the soil under and adjacent to the tank system. Laboratory analysis results indicated petroleum hydrocarbon concentrations were detected in one base soil sample just above remediation standards. SDDANR issued a no further action letter on January 19, 2005. See **Appendix C**.

Based on the above information and location topographically downgradient from the project area, the Dakota Valley School District site is considered to have low potential to impact the proposed project construction due to its regulatory status.

NOTES:

[1] SDDANR – South Dakota Department of Agriculture and Natural Resources

[2] UST – Underground Storage Tank

4. Findings and Mitigation Measures

The findings and recommendations of this contaminated materials assessment must be viewed in recognition of certain limiting conditions. Results of this CMR are based on a visual reconnaissance of current conditions within the project area, a review of readily available standard historical sources and regulatory records review.

4.1 Findings

The following summarizes findings from the contaminated materials due diligence activities performed for this project:

Based upon the SDDANR GIS databases, the visual reconnaissance, the regulatory file review, and the proposed scope of work; there is one REC within the project study area and the project is considered to have a low potential for contamination of soil and/or groundwater to be encountered during construction. The Dakota Valley School located at 1150 Northshore Drive was identified as a location of past contamination that was closed to no further action by SDDANR; however, it is possible for there to be residual contamination. This site adjoins N Westshore Drive.

4.2 Mitigation Measures

The following mitigation measures shall be carried forward through the NEPA documentation and SDDOT environmental commitments for this project:

Contaminated Material

- During construction, the Project Engineer will monitor the construction site to ensure that the avoidance measures or remediation have been accomplished in accordance with the plans. If contamination is encountered during construction, the Project Engineer will contact the Environmental Office (EO), which will contact SDDANR and a qualified consultant to inspect and monitor removal of any contaminated soil. Removal of soil will be completed under a separate bid. The Environmental Project Coordinator (EPC) will document DOT-272 and construction findings in the project file.
- This note is included when there is known contaminated soil on the project or gas stations were located along the project limits. Gas stations, underground storage tanks, or any other contaminated material will have been identified by SDDANR in coordination with the EO and will be identified in the Section A Plan Notes for the project.

  > *"When the Contractor is 30 days from start of construction activities, a written notification will be sent to the Area Engineer and SDDANR. Another written notice will be sent to the Project Engineer 7 days in advance of the start of work. This commitment will include the estimated cubic yards of contaminated materials that will be removed and list the landfill that accepts such materials."*

- It is possible that locations of contaminated material exist within the project limits which have not been documented. If the Contractor encounters contaminated soil, the Project Engineer must contact the EO, and contact will then be made with SDDANR, so the site can be inspected and monitored while material is removed.
- Tanks and spills - If contamination is encountered or if a spill occurs during onsite construction activity, that contamination or spill must be reported to DANR at 605-773-3296 (605-773-3231 after hours). Contaminated soil that has been excavated should be segregated from clean soil and sampled to determine disposal requirements. Further, any piping, equipment, or other material to be placed in a location where it will be in contact with contaminated soil or groundwater, should be evaluated to determine if it is compatible with the contaminant. If you have questions, please contact Baylee Hoff at baylee.hoff@state.sd.us or (605) 773-3296.

- Solid and Hazardous Waste - Some solid waste may be generated during this project. Any solid waste generated that will not be reused in some beneficial manner must be disposed or managed at a permitted solid waste facility. Regional landfills able to accept all solid waste generated are listed on our website: https://apps.sd.gov/NR60SolidWaste/main.html#. Only Regional landfills are permitted to accept all wastes generated. If you have any questions, please contact Waste Management at 605-773-3153.

  It is not expected that any hazardous wastes sites will be encountered within the vicinity of your project area. However, if road construction is planned for areas within a city or town, the contractor should contact this Department prior to construction. Should any hazardous waste be generated during the implementation of this project, the generator must abide by all applicable hazardous waste regulations. To determine whether your project may generate hazardous waste, visit: https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses . If you have any questions please contact Anthony Wagner at 605-773-3153, or anthony.wagner@state.sd.us.

5. References

American Society for Testing and Materials. 2021. ASTM Designation E 1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

MRData. 2023. Mineral Resources On-Line Spatial Data (MRData). Retrieved from http://mrdata.usgs.gov/geology/state/map.html on June 2, 2023.

South Dakota Department of Agriculture and Natural Resources (SDDANR). 2023. Tanks, Spills, and Environmental Events. Retrieved from https://apps.sd.gov/NR42InteractiveMap on May 30, 2023.

South Dakota Department of Environment and Natural Resources (SDDENR). 2023. Water Well Completion Reports. Retrieved from https://apps.sd.gov/nr68welllogs/ on May 30, 2023.

South Dakota Department of Transportation (SDDOT). 2015. Standard Specifications for Roads and Bridges.

SDDOT. 2019. Environmental Procedures Manual.

United States Environmental Protection Agency (EPA). 2014. "Amendment to Standards and Practices for All Appropriate Inquiries." Federal Register 79 (October 6): 66087 – 60090.

United States Geographical Survey (USGSa). 1955. 7.5-minutes series topographic map; Sioux City, NE. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSb. 1959. 7.5-minutes series topographic map; Sioux City, IA. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSc. 1963. 7.5-minutes series topographic map; Jefferson, SD. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSd. 1986. 7.5-minutes series topographic map; Sioux City North, IA. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

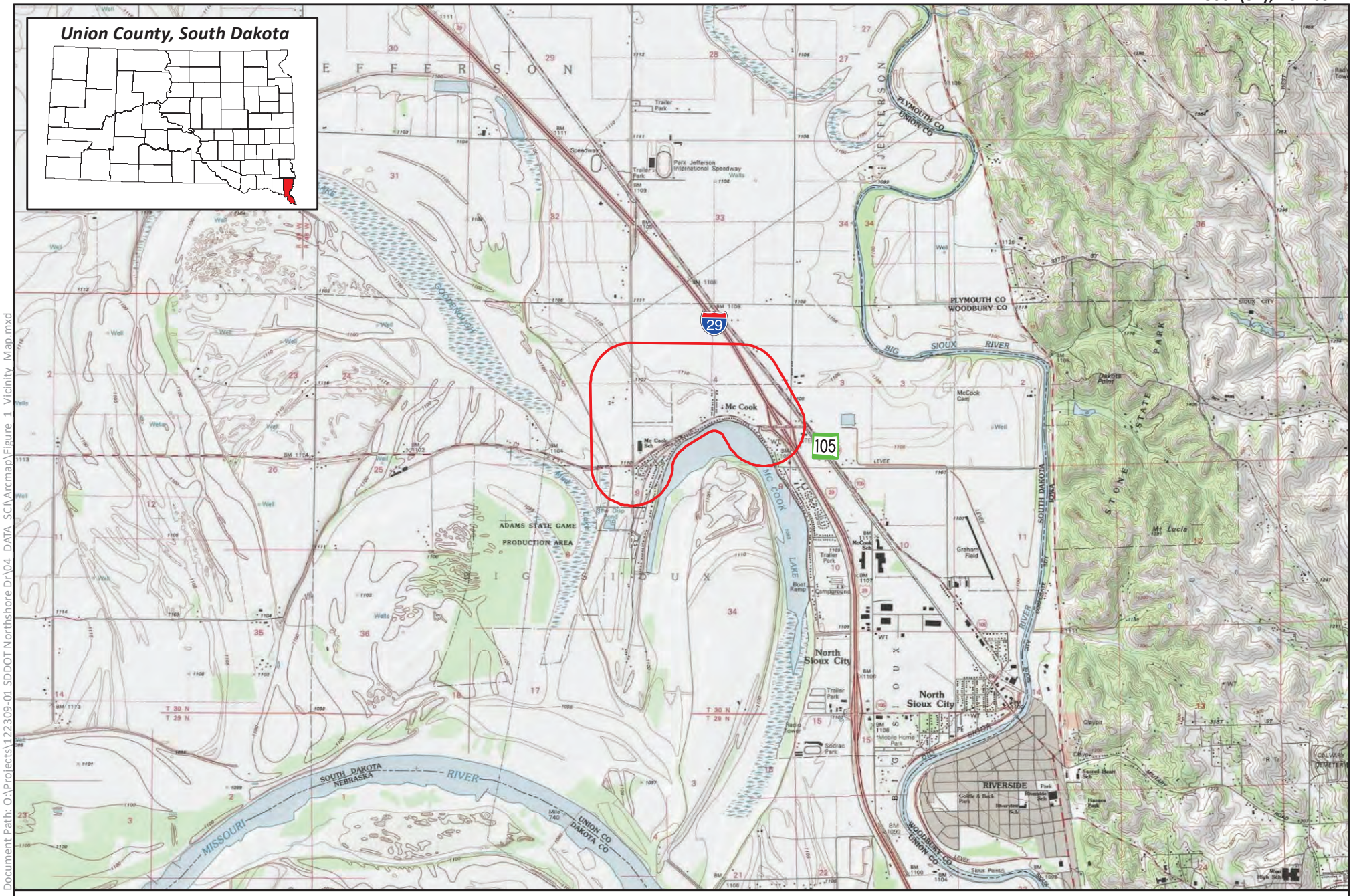
USGSe. 1994. 7.5-minutes series topographic map; Jefferson, SD. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSf. 2011. 7.5-minutes series topographic map; Jefferson, SD. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSg. 2017. 7.5-minutes series topographic map; Jefferson, SD. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

USGSh. 2021. 7.5-minutes series topographic map; Jefferson, SD. Retrieved from https://viewer.nationalmap.gov/advanced-viewer/ on June 13, 2023.

Appendix A. Project Figures and Photolog

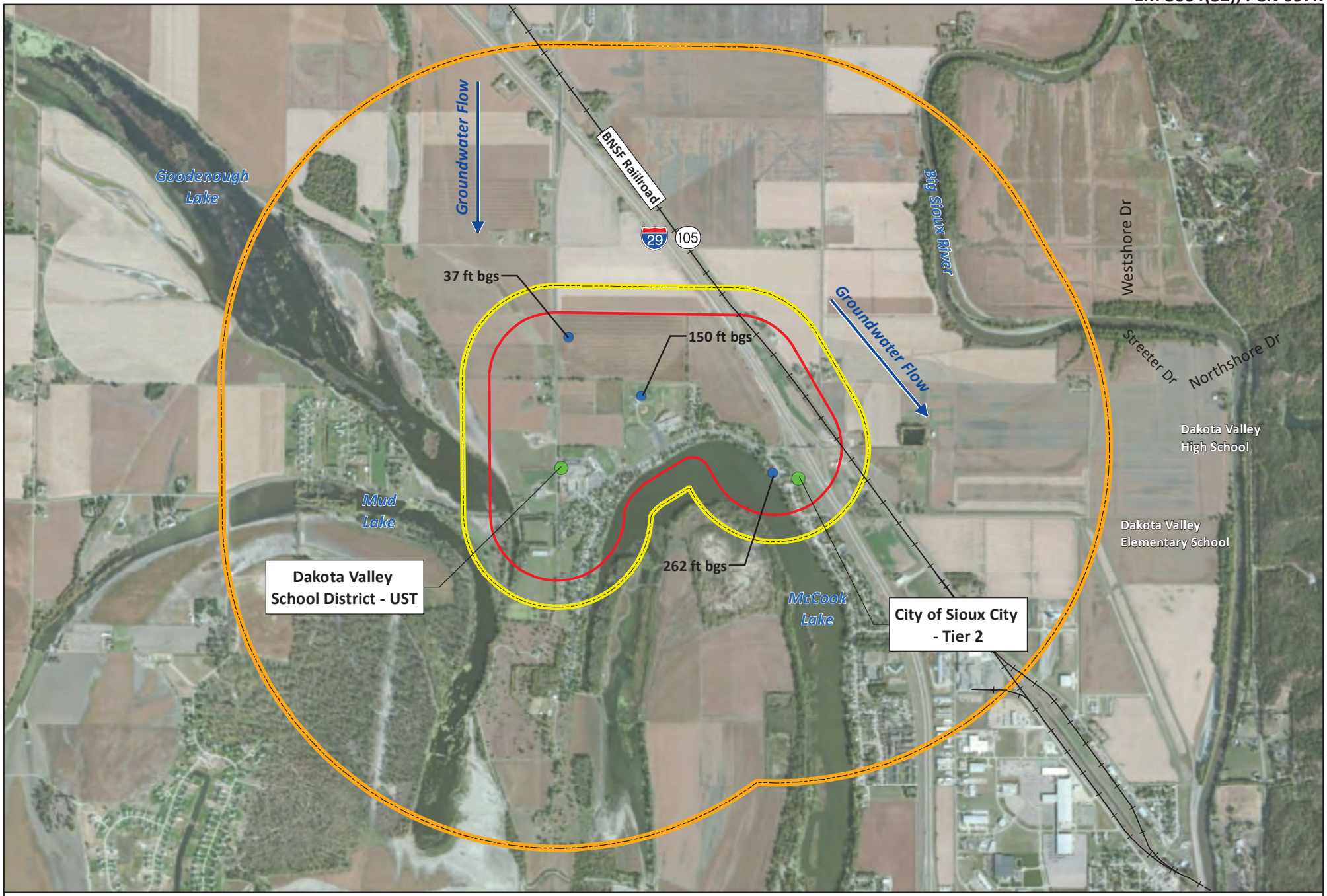


Environmental Study Area

0 NORTH 2 Miles

Figure 1
Vicinity Map
Northshore Drive Realignment
Union County, South Dakota

Document Path: O:\Projects\122309-01 SDDOT Northshore Dr\04 DATA SC\Arcmap\Figure 1 Vicinity Map.mxd



Well
Regulated Facility
Railroad
Contaminated Materials Study Area (1 mile)
Contaminated Materials Study Area (0.1 mile)
Environmental Study Area

0 NORTH 1 Miles

Figure 2
Contaminated Materials Map
Northshore Drive Realignment
Union County, South Dakota

Project: **Northshore Drive Realignment**
RE: CMR Visual Reconnaissance
Date: June 5, 2023

Photo #1 – View northeast toward the east terminus of the project alignment (intersection of Northshore Drive and Streeter Drive.

Photo #2 – View west toward utility marker near the west terminus of the project (northwest of intersection of Northshore Drive and Westshore Drive).

Photo #3 – View west toward empty agricultural field where new roadway will be built.

Photo #4 – View northwest toward above ground storage tanks at Dakota Valley High School.

Photo #5 – Looking north toward a utility marker near the west terminus of the project (southwest of intersection of Northshore Drive and Westshore Drive).

Photo #6 – Looking west toward same utility marker as Photo #5, located near the west terminus of the project (southwest of intersection of Northshore Drive and Westshore Drive).

Photo #7 – Looking northwest toward same utility marker depicted in Photo #2 near the west terminus of the project (northwest of intersection of Northshore Drive and Westshore Drive).

Photo #8 – Looking west toward City of North Sioux City Water Department (chlorine storage) on the west side of Streeter Drive.

Photo #9 – Looking north toward utility boxes near the railroad east of I-29 and north of Northshore Drive. No stockpiles of railroad ties or surface staining were observed.

Photo #10 – Looking southeast toward the railroad from the intersection of Northshore Drive with Military Road. The storage unit business was fenced.

Photo #11 – Looking toward pole-mounted transformers which occur along the existing Northshore Drive.

Photo #12 – Looking north toward the west terminus of the project alignment at the intersection of Northshore Drive and Westshore Drive.

Appendix B. Full Project Description

NORTHSHORE DRIVE REALIGNMENT PROJECT
EM 8064(32), PCN 097K

UNION COUNTY, CITY OF NORTH SIOUX CITY

PROJECT BACKGROUND

The Northshore Drive Realignment Project (project) is located within the City of North Sioux City (City), in Union County, South Dakota (**Section 1.6, Figure 1**). More specifically, it is located north of McCook Lake between Westshore Drive on the west and Interstate 29 (I-29) on the east (**Section 1.6, Figure 2**). The project is being completed in coordination with the South Dakota Department of Transportation (SDDOT) and Federal Highway Administration (FHWA), the lead agency for the project. Other participating agencies may include the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), South Dakota Game Fish and Parks (SDGFP), South Dakota Department of Agriculture and Natural Resources (SDDANR), South Dakota State Historic Preservation Office (SDSHPO), and any tribes with a cultural interest in the project area. Federal funding was provided through an earmark in the 2022 Omnibus Bill and was designated to create a bypass to route farm, school, and residential traffic off the existing Northshore Drive between Westshore Drive and I-29/Streeter Drive. This purpose and need document is intended for the project development and National Environmental Policy Act (NEPA) stages of the project. An Environmental Assessment will be prepared for compliance with the NEPA.

The existing Northshore Drive is an important travel route for the local community, area businesses, schools, and residents in a growing part of the Siouxland metropolitan area. Many lakefront residences are present along McCook Lake resulting in 29 access points along the south side of Northshore Drive between Westshore Drive and I-29/Street Drive. Residences and Dakota Valley School entrances result in an additional fifteen access points on the north side of Northshore Drive. The high number of access points, combined with traffic congestion on Northshore Drive, has contributed to seventeen rear-end crashes between 2018 and 2022. With average daily traffic (ADT) projected to increase from 5,975 in 2022 to 6,500 in 2045, the problem is expected to worsen if no solution is implemented. Additionally, the North Sioux City Master Plan for North of Northshore Drive identifies 153.4 acres of single-family residential; 12.8 acres of one and two family residential; 32.6 acres of multiple-family residential; and 28.1 acres of business development in what is currently agricultural land north the Dakota Valley Schools (**Section 1.6, Figure 3**).

PROJECT DESCRIPTION

This project proposes to improve existing traffic operations and accommodate planned future growth in the vicinity of Northshore Drive, including the potential for new transportation infrastructure. The project may also involve modification to existing roads, intersections, and driveways to improve overall traffic operations in the vicinity of the project and is anticipated to involve modification or construction of a new storm drainage system. The project would also look for opportunities to improve pedestrian and bicyclist continuity with the use of the Americans with Disabilities Act (ADA) compliant sidewalks, crosswalks, ramps, trails, and/or shared use paths that connect to existing trail infrastructure.

Property rights for improvements (such as temporary/permanent easements and right of way acquisition) may be necessary to construct the project and are expected. Acquisition of property rights will be completed in compliance with the Uniform Act.

NORTHSHORE DRIVE REALIGNMENT PROJECT
EM 8064(32), PCN 097K

UNION COUNTY, CITY OF NORTH SIOUX CITY

1.1 Purpose for the Project

The purpose of the project is to improve the efficiency of local traffic by decreasing the traffic volume along Northshore Drive between Westshore Drive and I-29/Streeter Drive. An additional purpose is to fulfill the funding requirements for the project. Funding was granted through congressionally directed spending under the Transportation, Housing and Urban Development, and Related Agencies appropriations bill and passed as part of the 2022 Omnibus Bill.

1.2 Need for Project

1. The transportation project is needed to maintain an acceptable level of service (LOS) along Northshore Drive, defined as LOS B or better. LOS are described with a letter designation of A, B, C, D, E, or F, with LOS A representing uninterrupted flow, and LOS F representing a breakdown of traffic flow with noticeable congestion and delay. SDDOT identifies LOS B as the acceptable LOS threshold for Minor Arterials and Collectors. Currently, Northshore Drive (between Westshore Drive and Streeter Drive) functions at LOS C. The Siouxland Interstate Metropolitan Planning Council (SIMPCO) travel demand model projects an annual growth rate of 0.5% along Northshore Drive from 2017 to 2045. Based on this projection, Northshore Drive (between Westshore Drive and Streeter Drive) is anticipated to operate at LOS C in 2025 and LOS D in 2045, both of which are considered deficient LOS based on SDDOT guidelines, which are being used for the purposes of this project.

Location	2022 ADT	2022 LOS	2025 ADT	2025 LOS	2045 ADT	2045 LOS
Northshore Drive (Westshore Drive to Streeter Drive)	5,975	C	6,100	C	6,500	D

2. This transportation project is also needed to fulfill the funding requirements for the project. As part of the 2022 Federal Omnibus Bill, the City of North Sioux City was granted funds through congressionally directed spending under the Transportation, Housing and Urban Development, and Related Agencies appropriations bill. The funds were provided for creating a bypass to route farm, school, and residential traffic off the existing Northshore Drive between Westshore Drive and I-29/Streeter Drive.

Example Alternative Evaluation Matrix

Project Need	**Alternative X**
Does the alternative result in an acceptable LOS per SDDOT standards for minor arterials and collectors on Northshore Drive (i.e., LOS B or better)?	Yes/No
Does the alternative fulfill the congressionally directed spending which was granted to create a bypass to route traffic off the existing Northshore Drive?	Yes/No

1.3 Project Goals

Project goals address general concerns relevant to stakeholders and the public that do not rise to the level of a project need. These goals would not be used to eliminate an alternative in the screening phase but may result in the selection of a preferred alternative when other needs are equal, and one alternative addresses the goals better than other alternatives.

1. One goal of the project is to improve safety along Northshore Drive for vehicular traffic. Based on a traffic study for the project, rear-end crashes were the most prevalent crash type between 2018 and 2022. Of 21 reported crashes in the project area, seventeen were rear-end type crashes, including nine at intersections and eight along roadway segments. Future traffic volumes (anticipated to be 6,500 vehicles per day on Northshore Drive in 2045 based on SIMPCO growth projection) would be expected to increase vehicle follower density and thus increase the likelihood for rear-end type crashes.

2. Another goal of the project is to improve safety along Northshore Drive for pedestrians. Vehicle and pedestrian conflict points are high with 54 access points located along Northshore Drive between Westshore Drive and Streeter Drive (15 on north, 39 on south). The North Sioux City/McCook Lake Trail parallels Northshore Drive on the north side of the roadway and connects to all Dakota Valley Schools. Implementation of the project is anticipated to result in reduced traffic volumes along Northshore Drive, decreasing the potential for vehicle and pedestrian conflicts at the existing access points. The project may also look at reducing or consolidating certain access points where it may be beneficial. Additionally, the project may provide an alternative, access-controlled route for bicyclists and pedestrians traveling between Westshore Drive and I-29/Streeter Drive with minimal conflict points.

1.4 Environmental Study Area / Logical Termini / Independent Utility

Environmental Study Area:

The Environmental Study Area (ESA) for the project is shown in **Section 1.6, Figure 2**. The boundaries of the ESA are McCook Lake on the south, Adam's Homestead Nature Preserve/wetlands on the west, and the I-29 corridor on the east. The ESA extends into undeveloped farmland approximately 0.25 miles north of the Dakota Valley Schools property, a sufficient distance to accommodate a potential northern alternative for the project.

The project termini are located at the east and west ends of the stretch of Northshore Drive that have been determined to have LOS below the acceptable level for both existing and future conditions (FHU 2023). This stretch of roadway runs east-west and is located between I-29/Streeter Drive on the east and Westshore Drive on the west and ends at the intersections with these roadways. Therefore, it does not have a northern or southern terminus.

Western Terminus:

Westshore Drive. This terminus is recommended because Westshore Drive connects to the existing Northshore Drive at the west end of the stretch of Northshore Drive for which the project seeks to improve traffic operations (i.e., between Westshore Drive and I-29/Streeter Drive). Westshore Drive would be the logical connection point for any improvements to this stretch of Northshore Drive or any new roadways that would bypass Northshore Drive. Further west is limited by the presence of wetlands and the Adam's Homestead Nature Preserve.

Eastern Terminus:

Interstate 29 (I-29)/Streeter Drive. This terminus is recommended because the intersection is a travel shed transition point at which drivers can turn to navigate onto I-29 or continue eastward toward Military Road and/or south along Street Drive which leads to River Drive, a main thoroughfare in North Sioux City.

Independent Utility:

The proposed project would improve traffic operations along Northshore Drive between Westshore Drive and I-29/Street Drive, a section of roadway with known congestion issues, many access points, and a history of rear-end collisions. Improvements to this stretch of Northshore Drive would provide a transportation benefit even if no additional transportation improvements are made in the area.

The project would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. The master plan for north of Northshore Drive calls for the farmland to be developed into residential and commercial infrastructure, but there are not yet any specific projects planned. This project would not restrict any future transportation development in this area. The adjacent I-29 corridor and adjacent interchange is being studied by SDDOT but there are no programmed projects.

1.5 References

Felsburg Holt & Ullevig (FHU). July 2023. Northshore Drive Realignment Alternatives Analysis. Prepared for City of North Sioux City.

North Sioux City (City of). 2020. Master Planning North of Northshore Drive.

Appendix C. Pertinent Regulatory Record Files

Patch II

10-0133

2005.009

ATP

South Dakota Spill Report Form

Dept. of Ag. Case No. _____ State Case No.: 2005.009

Reported: (mm/dd/yy) 1/14/2005	Time:	Recorded By: Rick Lancaster

A. REPORTER

Reported By: Governor's Abandoned Tank Project (ATP)

Organization Name:

Organization: ☐ discharger ☐ public ☒ state ☐ local ☐ federal

Address:

City:	County:	State:
Zip:	Phone:	

B. DISCHARGER (Responsible Party)

Name: Dakota Valley School District

Address: 1150 Northshore Drive

City: North Sioux City	County: Union	State: SD
Zip: 57049	Phone: 605-232-3190	

C. INCIDENT LOCATION

As Above in B Street or Approx. Location: West side of school, adjacent to sidewalk

Survey Description: _____ _____ Sec _____ T _____ R _____

City: North Sioux City	County: Union	State: SD

D. DATE

Spill Date: (mm/dd/yy) UST removal Spill Time:

E. MATERIAL

Material Type (Code/Name): ☐ hazardous substance ☐ material unknown ☐ oil ☐ other	Quantity Spilled	Spilled in Water	Units (Check 1)	
			☐ lb. ☐ bbl.	☐ gal. ☐ oth.
			☐ lb. ☐ bbl.	☐ gal. ☐ oth.
			☐ lb. ☐ bbl.	☐ gal. ☐ oth.

F. SOURCE

Source of Spill: ☐ AST ☒ UST ☐ railway ☐ vessel ☐ fixed facility ☐ pipeline ☐ highway ☐ air transport

Description: Tank #1 - 20,000 gallon capacity, 200 gallons in tank, good condition

G. MED.

Medium Affected: ☐ air ☒ land ☐ water ☐ groundwater ☐ within facility only

Waterway Affected:

H. CAUSE

Reported Cause: ☐ transportation accident ☒ equipment failure ☐ operational error ☐ natural phenomenon ☐ dumping ☐ unknown ☐ Other UST

Description:

I. DAM.

Damages: No. of injuries _____ No. of deaths _____ Property damage > $50,000 _____

J. ACTIONS

☐ Evacuation Response Action Taken: Tank removed: Laboratory analysis indicated petroleum-hydrocarbon concentrations detected in one base sample. The reported TPH as fuel oil concentrations of 11.0 ppm barely exceeded the laboratory detection limit. No receptors or exposure pathways are likely to be affected near this tank location.

K. NOTI-FIED

Responding Agency: ☒ DENR ☐ DOA ☐ discharger ☐ federal ☐ EPA ☐ local

Agencies Notified:

L. COMMENTS

Comments: Environmental Contractor: DENR

DENR FID #2815

PRCF #6820

Contact: Al Leber

Department of Environment and Natural Resources
Ground Water Quality Program
523 East Capitol Avenue
Pierre, South Dakota 57501-3182

Business Hours M thru F 8:00 – 5:00pm
Normal business hours – (605) 773-3296
After business hours – (605) 773-3231

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 19, 2005

Al Leber
Dakota Valley School District # 61-8
1150 Northshore Drive
North Sioux City, SD 57049

RE: DENR Spill # 2005.009

Dear Mr. Leber:

Thank you for participating in South Dakota's Abandoned Tank Project by agreeing to have the school's old abandoned underground storage tank removed. During the removal of the tank, petroleum products were found in the soils around the tank. However, at this time, there is nothing to indicate those petroleum products in the remaining soils will cause any further problems.

The legislation that established the state abandoned underground storage tank removal project authorized the state to remove the tank and also to perform any corrective actions that are needed. Therefore, if any future problems arise from the petroleum products that were left in the soils, please call Kristi Honeywell with DENR at (605) 773-3296 or e-mail at kristi.honeywell@state.sd.us so we can determine if the state needs to perform any further cleanup.

Thanks again for agreeing to let us remove your underground tank. It is people like you who are making a difference by protecting the ground water resources of South Dakota.

Sincerely,

Steven M. Pirner
Secretary

cc: Dennis Rounds, PRCF # 6820, Pierre

Tank System Removal Form

DENR FID# 2815
PRCF ID# 6820

Site Name: Dakota Valley School District

Street Address: 1150 Northshore Drive City: North Sioux City

Owner: Al Leber Phone #: 605-232-3190

Tank No.	Capacity (gallons)	Contents at the Time of Removal	Condition
1	20,000	200 gallons fuel oil	good

Piping
Was the piping removed at this site? Yes x No ____ Length of piping removed: 10'
If the piping was not removed, please explain why.

Pump Islands
Number of pump islands at the site: 0 Number of islands removed: 0
If the pump islands were not removed, please explain why.

Was groundwater encountered in the excavation? Yes ____ No x If yes, at what depth? ____

Was free product encountered in the excavation? Yes ____ No x If yes, describe the extent of the problem:

Loose cubic yards of soil hauled to the landfarm/landfill: 0 Loose cubic yards of fill used: 160

Briefly describe the lithology of the tank basin and any special circumstances relating to the site:

Although signed up as an 8,000-gallon tank, the tank volume was actually 20,000 gallons. The tank basin is primarily within weathered clay till. Soil was moist from 10 feet to the max depth of 15 feet below ground surface. PID readings did not exceed instrument detection limits. Field observations did not indicate that petroleum-hydrocarbon concentrations were present in the soil under and adjacent to the tank system.

Laboratory-analysis results for selected samples indicated that petroleum-hydrocarbon concentrations were detected in one base soil sample. The reported TPH as fuel oil concentrations of 11. ppm barely exceeded the laboratory detection limit and is well below the Tier 1 trigger level of 500 ppm. No receptors or exposure pathways are likely to be affected near this tank location. Site Closure is recommended.

Soil samples were collected by: Environmental Contractor: DENR-GWQ

Name: Terry Florentz Signature: Terry Florentz Date: 1/12/05

DENR FID# 2815
PRCF ID# 6820

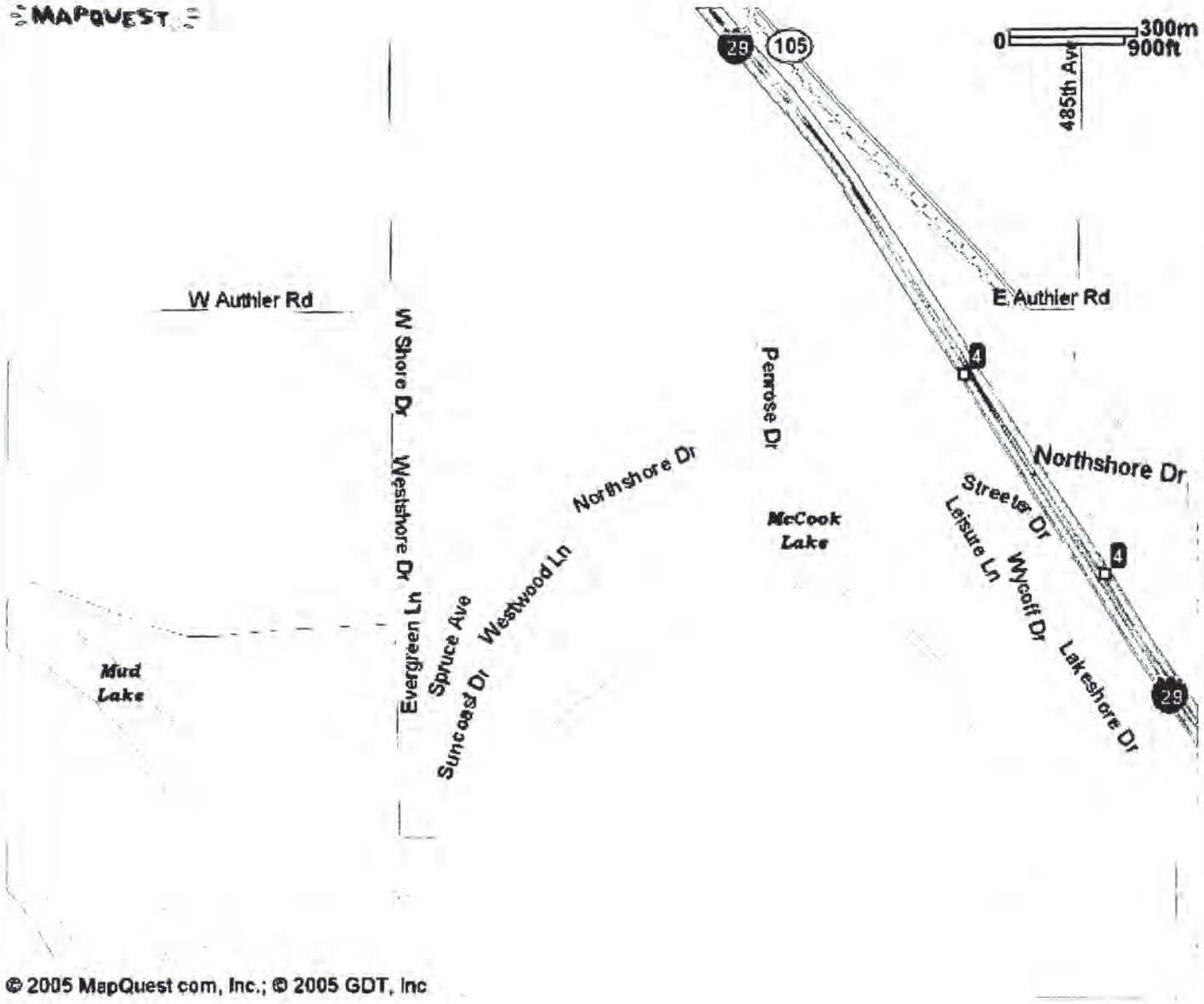
Table 1
PID Readings for Selected Soil Samples
Dakota Valley School
North Sioux City, South Dakota

Sample ID	Location	Depth (ft)	PID
#1	Northwest Sidewall	14	0.0
#2	Northeast Sidewall	13	0.0
#3	Southwest Sidewall	14	0.0
#4	Southeast Sidewall	12	0.0
#5	West Base	15	0.0
#6	East Base	15	0.0

Table 2
Analytical Results for Soil Samples
Dakota Valley School
North Sioux City, South Dakota

Sample ID	Benzene	Toluene	Ethyl-benzene	Xylene	TPH as Gasoline	MTBE	TPH as Fuel Oil	Naphthalene
#5) DV School-West-15'	-	-	-	-	-	-	11.0	< 0.66
#6) DV School-E Base-15'	-	-	-	-	-	-	< 10.0	< 0.66
Tier 1 Action Levels	**0.2**	**15.0**	**10.0**	**300.0**	**500.0**	**--**	**500.0**	**25.0**

Bold – Indicates levels that exceed Tier 1 Action Levels or "trigger level" of 500 ppm TPH.
TPH – Total Petroleum Hydrocarbons Results in mg/kg, which approximate parts per million (ppm)



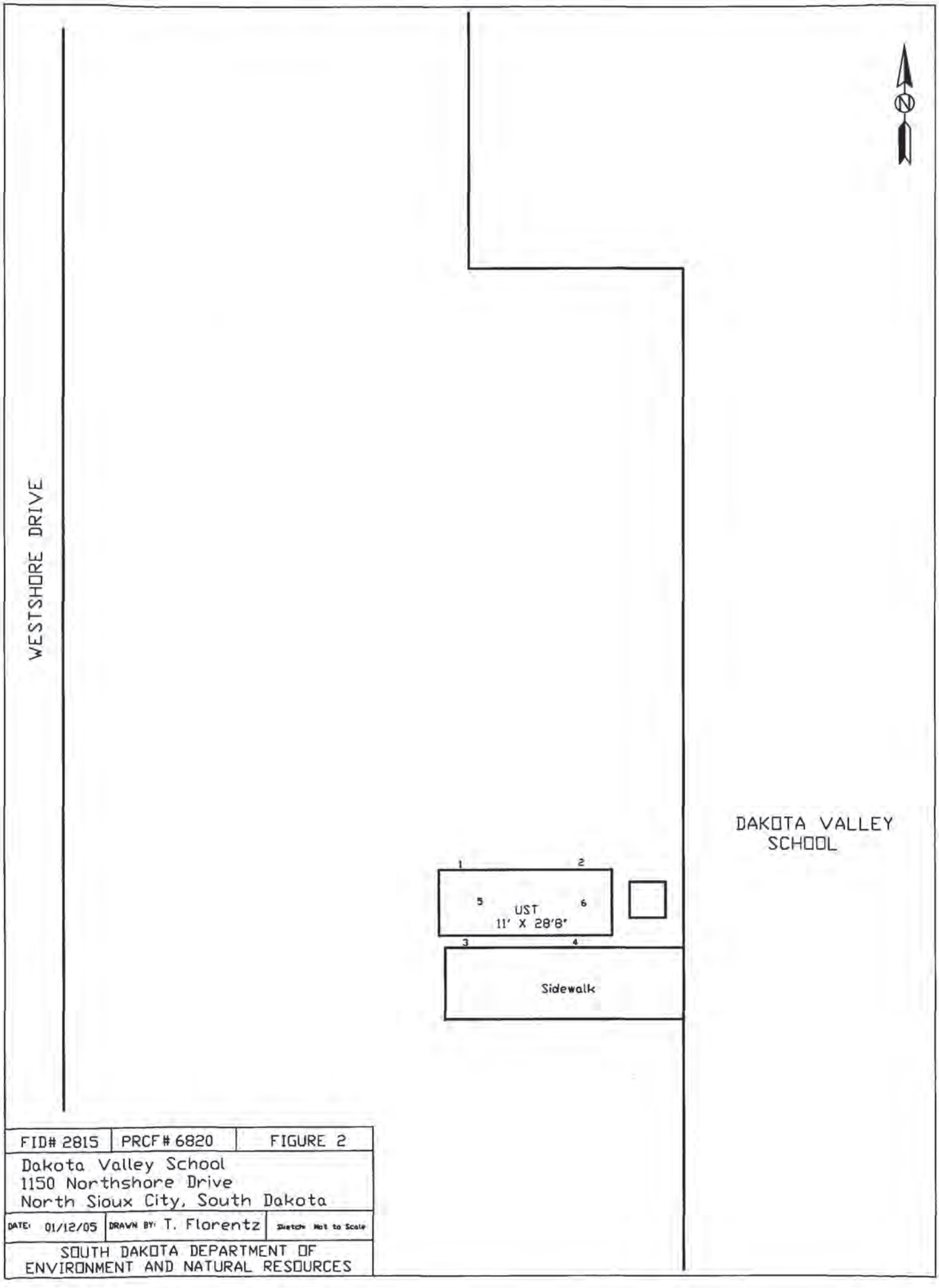
NORTH

(Modified from MapQuest Maps)

Dakota Valley School District
North Sioux City, SD

Site Location Map

FIGURE 1



FID# 2815	PRCF# 6820	FIGURE 2
Dakota Valley School 1150 Northshore Drive North Sioux City, South Dakota		
DATE: 01/12/05	DRAWN BY: T. Florentz	Sketch Not to Scale
SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES		

Looking North at UST Location

Looking East at UST Location

Dakota Valley School
North Sioux City, SD

Figure 3, Site Photographs

ENERGY LABORATORIES, INC. • 2821 Plant Street • Rapid City, SD 57702
888.672.1225 • 605.342.1225 • 605.342.1397 fax • rapid_city@energylab.com

LABORATORY ANALYTICAL REPORT

Client: SD DENR
Project: SE
Lab ID: R04080347-001
Client Sample ID: DV School-West-15'

Report Date: 09/17/04
Collection Date: 08/16/04 12:30
Date Received: 08/24/04
Matrix: SOIL

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL PETROLEUM HYDROCARBONS AS FUEL OIL								
TPH as Fuel Oil	11	mg/kg		10		1	CA-LUFT	09/02/04 17:29/SN
Naphthalene	ND	mg/kg		0.66		1	CA-LUFT	09/02/04 17:29/SN
Surr: o-Terphenyl	107	%REC			70-130		CA-LUFT	09/02/04 17:29/SN

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

ENERGY LABORATORIES

LABORATORY ANALYTICAL REPORT

Client: SD DENR
Project: SE
Lab ID: R04080347-002
Client Sample ID: DV School-E Base-15'

Report Date: 09/17/04
Collection Date: 08/17/04 08:10
Date Received: 08/24/04
Matrix: SOIL

Analyses	Result	Units	Qual	RL	MCL/ QCL	DF	Method	Analysis Date / By
TOTAL PETROLEUM HYDROCARBONS AS FUEL OIL								
TPH as Fuel Oil	ND	mg/kg		10		1	CA-LUFT	09/02/04 18:09/SN
Naphthalene	ND	mg/kg		0.66		1	CA-LUFT	09/02/04 18:09/SN
Surr: o-Terphenyl	108	%REC			70-130		CA-LUFT	09/02/04 18:09/SN

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ___ of ___

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: DENR

Project Name, PWS #, Permit #, Etc.: SE

Report Mail Address: 523 East Capitol Pierre SD 57501

Contact Name, Phone, Fax, E-mail: Terry Florentz 7733296

Sampler Name if other than Contact:

SEP 2004 RECEIVED DENR

Invoice Address:

Invoice Contact & Phone #:

Purchase Order #:

ELI Quote #:

Report Required For: POTW/WWTP ☐ DW ☐ Other ______

Special Report Formats - ELI must be notified prior to sample submittal for the following:

NELAC ☐ A2LA ☐ Level IV ☐

Other ______

EDD/EDT ☐ Format ______

Notify ELI prior to RUSH sample submittal for additional charges and scheduling

Comments:

Receipt Temp 4.6 °C

Cooler ID(s)

Custody Seal Y N

Intact Y N

Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers / Sample Type: A W S V B O (Air Water Soils/Solids Vegetation Bioassay Other) MATRIX	TPH as fuel oil	BTEX	TPH as gasoline	SEE ATTACHED	Normal Turnaround (TAT)	RUSH Turnaround (TAT)	Lab ID (LABORATORY USE ONLY)
1 DV School-West-15'	8/16/04	12:30p	1 S	X						B04080347-001
2 DV School-EBase-15'	8/17/04	8:10a	1 S	X						002A
3 Midwest Rad-Reartank-7'	8/17/04	3:00p	1 S		X	X				003A
4 HappyJacks-Base-8'	8/17/04	4:00p	1 S	X						004A
5 Convenience-Base-7'	8/18/04	10:15a	1 S	X						005A
6 Trent-Base-9'	8/18/04	7:30p	1 S	X						006A
7 Baltic-Base-8'	8/18/04	2:30p	1 S	X						007A
8 Donelan-Base-7'	8/18/04	5:15p	1 S	X						008A
9 Colton-Base-8'	8/19/04	9:00a	1 S	X						009A
10 Peterson-Base-5'	8/19/04	12:15p	1 S	X						010A

Custody Record MUST be Signed

Relinquished by: [signature] Date/Time: Shipped by: Received by: [signature] Date/Time: 8-24-04 16:00

Relinquished by: Date/Time: Shipped by: Received by: Date/Time:

Sample Disposal: Return to client: ______ Lab Disposal: ______

LABORATORY USE ONLY

Sample Type: ______ # of fractions ______

2815

PETROLEUM RELEASE COMPENSATION FUND

Anderson Building
445 East Capitol Avenue, Suite 200
Pierre, South Dakota 57501
(605)773-3769 • Fax (605)773-6048

February 25, 2004

Al Leber
Dakota Valley School District
1150 Northshore Drive
North Sioux City SD 57049

RE: Dakota Valley School District 61-B; PRCF File #6820

Dear Al Leber:

This letter is to acknowledge that I am in receipt of your request to have the abandoned tanks at Dakota Valley School District 61-B in North Sioux City removed through the abandoned tank removal program. Based on the information contained with your request, your site qualifies for participation in this program. A representative of the Department of Environment and Natural Resources will be contacting you within the next 90 days to schedule a time for the tank removal.

Thank you for your interest in this program. If you have any questions, please feel free to contact me.

Sincerely,

Dennis D. Rounds
Executive Director

cc: Kristi Honeywell, SD Department of Environment and Natural Resources

TANK REMOVAL FORM – Page 1 of 2
(Please fill out both sides of this form for each tank site and send to the address below)

Return to: Director, Petroleum Release Compensation Fund
Anderson Building
445 East Capitol Ave.
Pierre, SD 57501 Phone: 605-773-3769

Name of Tank Owner: DAKOTA VALLEY SCHOOL DISTRICT # 61 - 8

Mailing Address: 1150 Northshore Drive

City: North Sioux City State: SD Zip: 57049

Daytime Phone: (605) 232-3190 Evening Phone: _____

Tank Information:
Name or former name of business where tanks are located: Dakota Valley School District # 61-8

Street Address: 1150 Northshore Drive

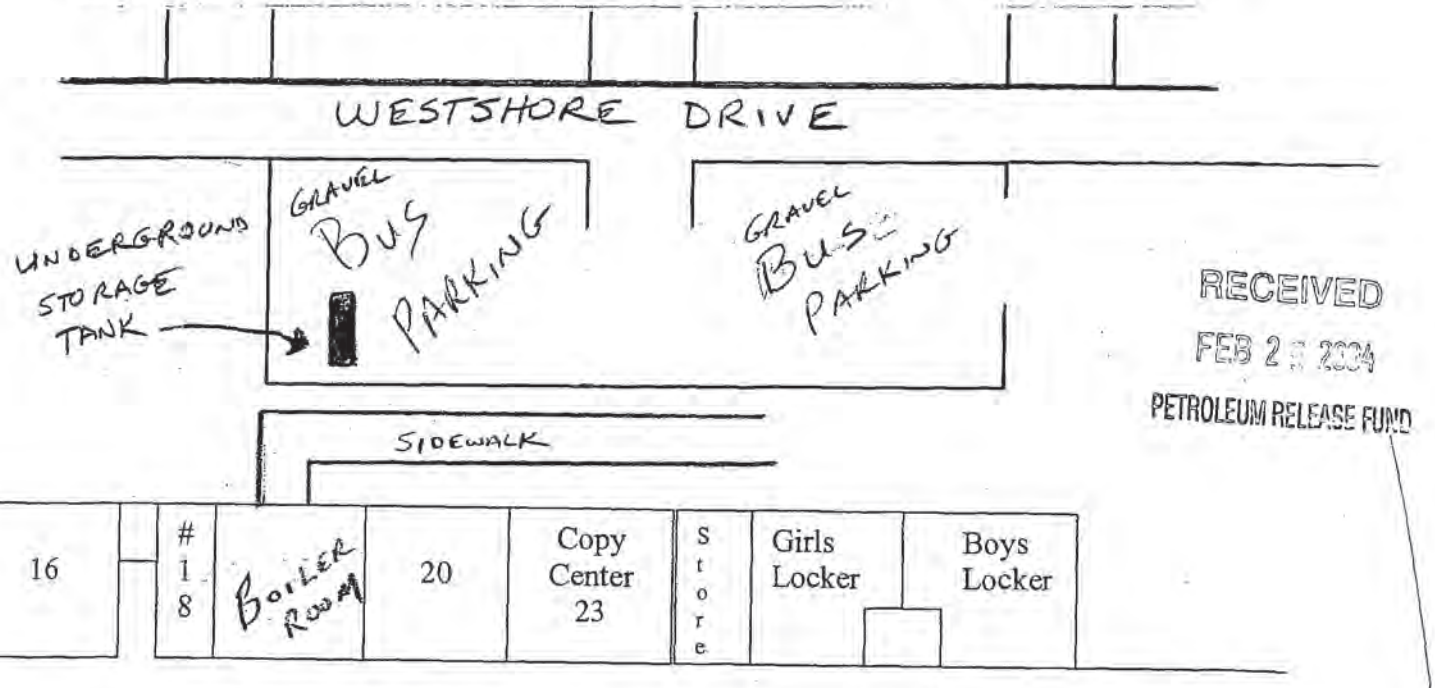
City: North Sioux City County: Union

What type(s) of surfacing overlies the tank(s)?
Circle all that apply. (Concrete) (Gravel) Grass/dirt Asphalt Other _____

Number of pump islands: none

Was the site a commercially-operated motor fuel station that was in service on or after April 1, 1988? (circle one) Yes (No)

Please mark an "X" on the site sketch below to show the location of tanks and identify the names of the nearby streets or roads.



TANK REMOVAL FORM – Page 2 of 2

(Please fill out both sides of this form for each tank site and send to the address on front)

Please fill out the following table to the best of your knowledge for tanks at this location:

Tank No.	Capacity (gallons)	Used for Storing What Substances?	Current Contents and Amount	Date Last Used
1	8,000 gal.	# 2 - fuel oil	300 - 400 gal.	Winter 1998
2				
3				
4				
5				

I hereby give the state permission to remove my abandoned underground storage tank(s) and I certify and agree to the following terms:

1. I certify I own the property and tanks and the taxes are current at the location described above;
2. I waive all claims against the state, its officers, agents, and employees for damages resulting directly or indirectly from the tank pulling or corrective action;
3. I agree to transfer ownership of the tanks and their contents to the state upon removal;
4. I understand the state will fill the excavations back to grade after removal, but will not replace or provide any resurfacing; and
5. I, the owner of the property described on this form, consent to officers, agents, employees, and authorized representatives of the state of South Dakota entering and having continued access to the property for the following purposes:
   - Removal of abandoned underground storage tanks and petroleum contaminated soil;
   - Taking of such soil, water, and air samples as necessary; and
   - Other actions related to the investigation, assessment, and corrective action of surface or subsurface contamination.

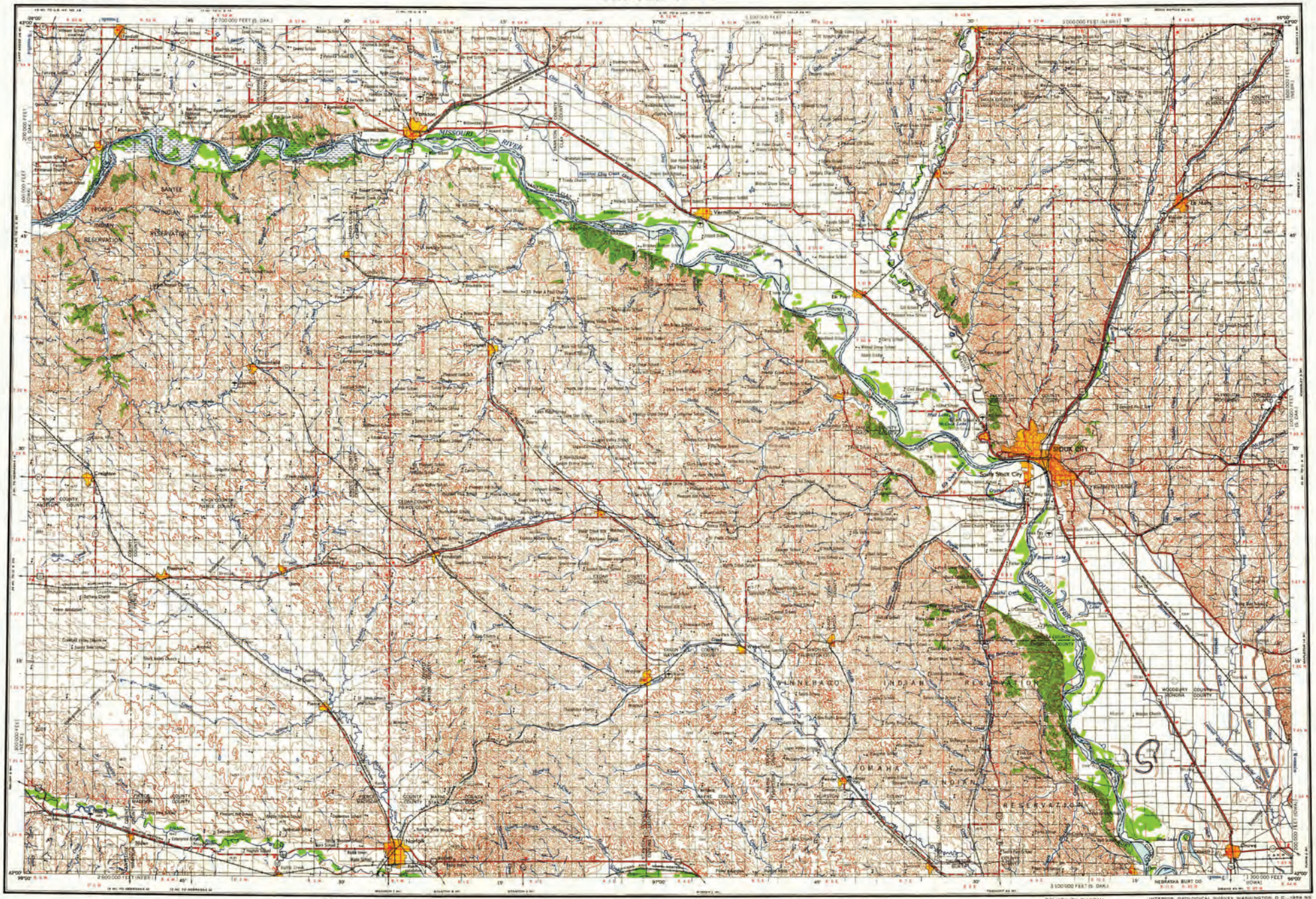
Al Leber, Superintendent — February 20, 2004

Signature of Tank Owner — Date

(Complete both sides of this form before mailing)

Appendix D. Pertinent Historical Information

SIOUX CITY



LEGEND

ROAD DATA 1955

POPULATED PLACES

LOS ANGELES
OMAHA
GALVESTON
Laramie
Grand Coulee
Sun Valley

RAILROADS

BOUNDARIES

Scale 1 250,000

CONTOUR INTERVAL 50 FEET WITH SUPPLEMENTARY CONTOURS AT 25 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

LOCATION DIAGRAM FOR NK 14-6

RELIABILITY DIAGRAM

INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D.C. 1959 NS MB 917Z

SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

TOWNSHIP OR RANGE LINE
AND GRANT BOUNDARY

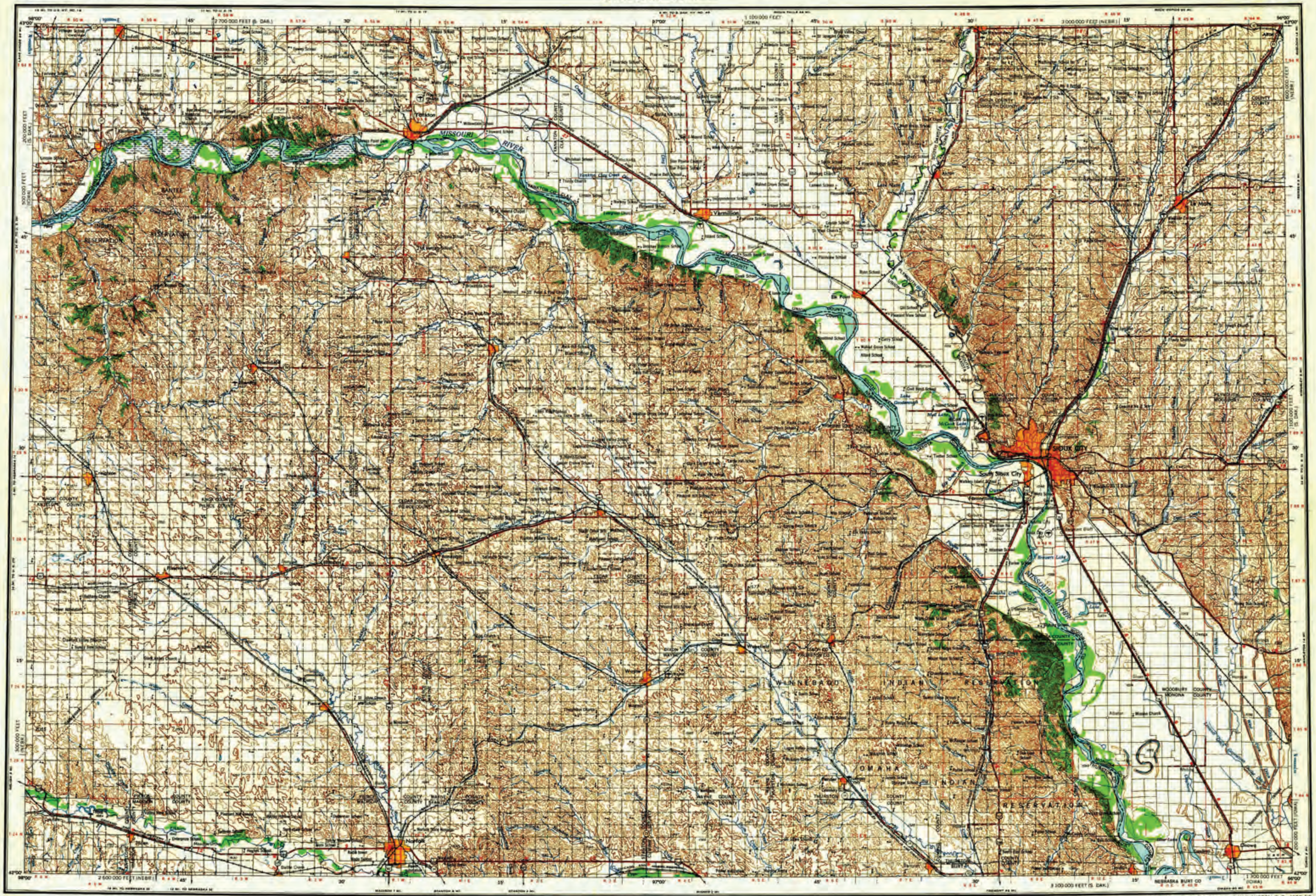
KEYUS 701
USGS NMD HISTORICAL MAP ARCHIVES

7-89-85
2815

SIOUX CITY, IOWA, NEBRASKA, SOUTH DAKOTA

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

SIOUX CITY



Prepared by the Army Map Service (ASPM), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1956 by photogrammetric methods and from: Nebraska, 1:24,000, CE, 1946-47; South Dakota, 1:25,000, USGS, Elk Point, 1889. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1955.

100,000-foot grids based on Nebraska coordinate system, north zone; South Dakota coordinate system, south zone, and Iowa coordinate system, south zone.

10,000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue.

LEGEND

ROAD DATA 1955

Figures in red denote approximate distances in miles between stars.

POPULATED PLACES: Over 500,000 LOS ANGELES; 100,000 to 500,000 OMAHA; 25,000 to 100,000 GALVESTON; 5,000 to 25,000 Laramie; 1,000 to 5,000 Grand Coulee; Less than 1,000 Sun Valley

ROADS: Hard surface, heavy duty — More than two lanes wide; Two lanes wide; Federal route marker. Hard surface, medium duty — More than two lanes wide; Two lanes wide; State route marker. Improved light duty; Unimproved dirt; Trail

RAILROADS: Single track / Double or Multiple — Standard gauge; Narrow gauge

BOUNDARIES: International; State; County; Park or reservation

Landplane airport; Landing area; Seaplane airport; Seaplane anchorage; Woods-brushwood

Landmarks: School; Church; Other; Horizontal control point; Spot elevation in feet; Marsh or swamp; Intermittent or dry stream; Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

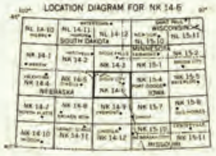
5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 50 FEET WITH SUPPLEMENTARY CONTOURS AT 25 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

LOCATION DIAGRAM FOR NK 14-6



RELIABILITY DIAGRAM

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1959-N8

MB 7172

SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

TOWNSHIP OR RANGE LINE

LAND GRANT BOUNDARY

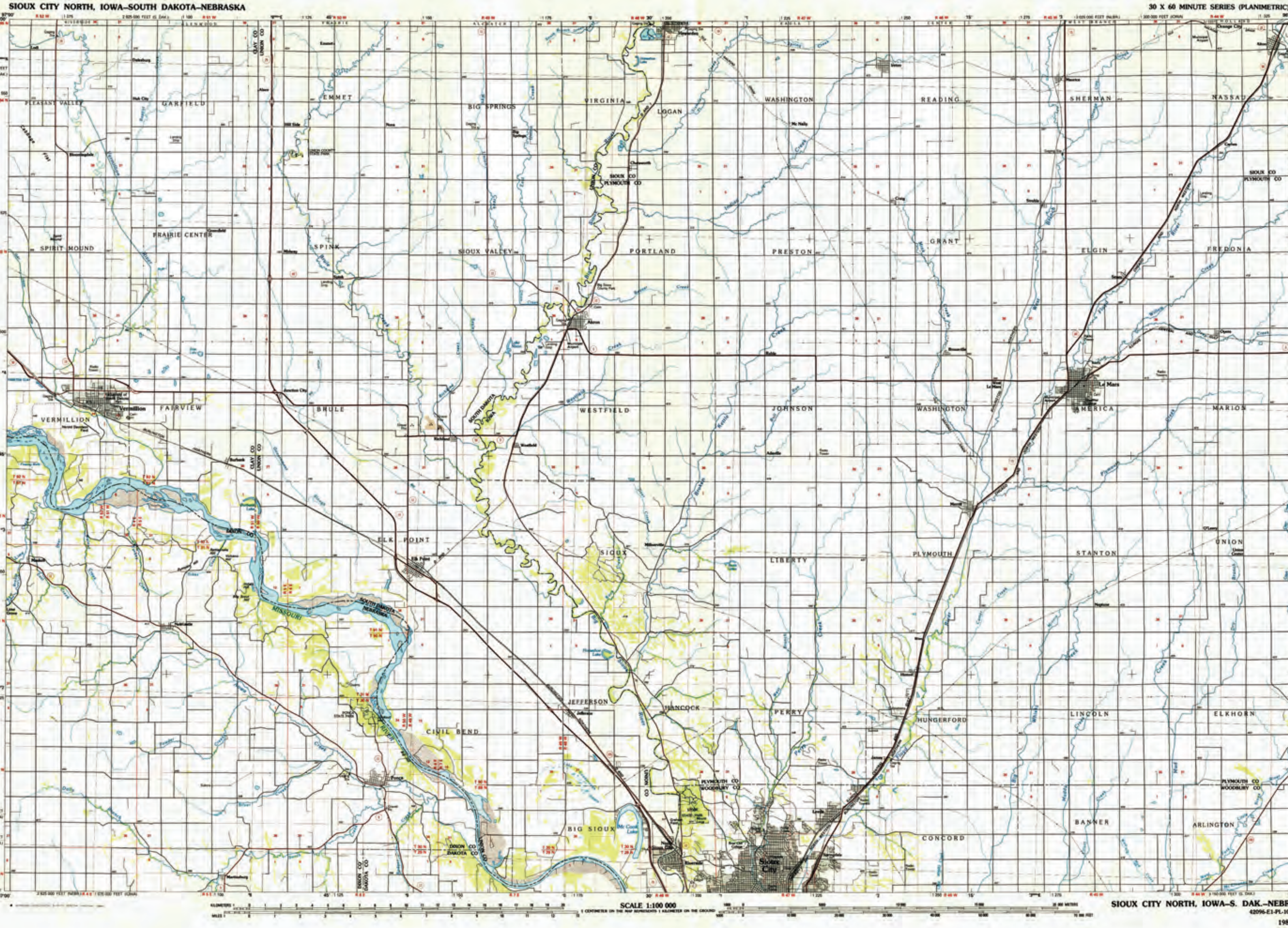
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

SIOUX CITY, IOWA; NEBRASKA; SOUTH DAKOTA


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
JEFFERSON QUADRANGLE
SOUTH DAKOTA–NEBRASKA–IOWA
7.5 MINUTE SERIES (TOPOGRAPHIC)
HANCOCK
JEFFERSON
CIVIL BEND
ST JOHNS
COVINGTON
SUMMIT
Jefferson
LAKE GOODENOUGH
McCOOK LAKE
Med Lake
North Sioux City
MISSOURI RIVER
SOUTH DAKOTA
NEBRASKA
IOWA
SOUTH DAKOTA
PLYMOUTH CO
UNION CO
DAKOTA CO
BIG SIOUX RIVER
MILWAUKEE
ST PAUL
AND PACIFIC
CHICAGO
Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial photographs taken 1961 and planetable surveys 1963
Polyconic projection. 1927 North American datum
10,000-foot grids based on South Dakota coordinate system, south zone, Nebraska coordinate system, north zone, and Iowa coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked
Certain land lines are omitted because of insufficient data
Revisions shown in purple compiled from aerial photographs taken 1971 and 1976. This information not field checked
SCALE 1:24 000
CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
UTM GRID AND 1976 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
ROAD CLASSIFICATION
Heavy-duty
Medium-duty
Light-duty
Unimproved dirt
Interstate Route
U.S. Route
State Route
SOUTH DAKOTA
QUADRANGLE LOCATION
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND BY THE IOWA GEOLOGICAL SURVEY, IOWA CITY, IOWA 52240
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST
AUG 22 1978
USGS
Historical File
Topographic Division
JEFFERSON, S. DAK.–NEBR.–IOWA
N4230—W9630/7.5
1963
PHOTOREVISED 1971 AND 1976
AMS 6669 II SE–SERIES V875
2940

SIOUX CITY NORTH, IOWA–SOUTH DAKOTA–NEBRASKA

30 X 60 MINUTE SERIES (PLANIMETRIC)

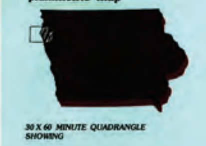


42096-E1-PL-100

Sioux City North

IOWA–SOUTH DAKOTA–NEBRASKA

1:100 000-scale
planimetric map



30 X 60 MINUTE QUADRANGLE SHOWING

- Elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

GEOLOGICAL SURVEY

1986

Produced by the United States Geological Survey

Compiled from USGS 1:24 000-scale topographic maps dated 1962–1980. Planimetry revised from aerial photographs taken 1983 and other source data
Revised information not field checked
Map edited 1986

Projection and 10 000-meter grid, zone 14
Universal Transverse Mercator
25 000-foot grid ticks based on Iowa coordinate system, north zone, South Dakota coordinate system south zone, and Nebraska coordinate system, north zone
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 6 meters north and 26 meters east

There may be private inholdings within the boundaries of the National or State reservations shown on this map

NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

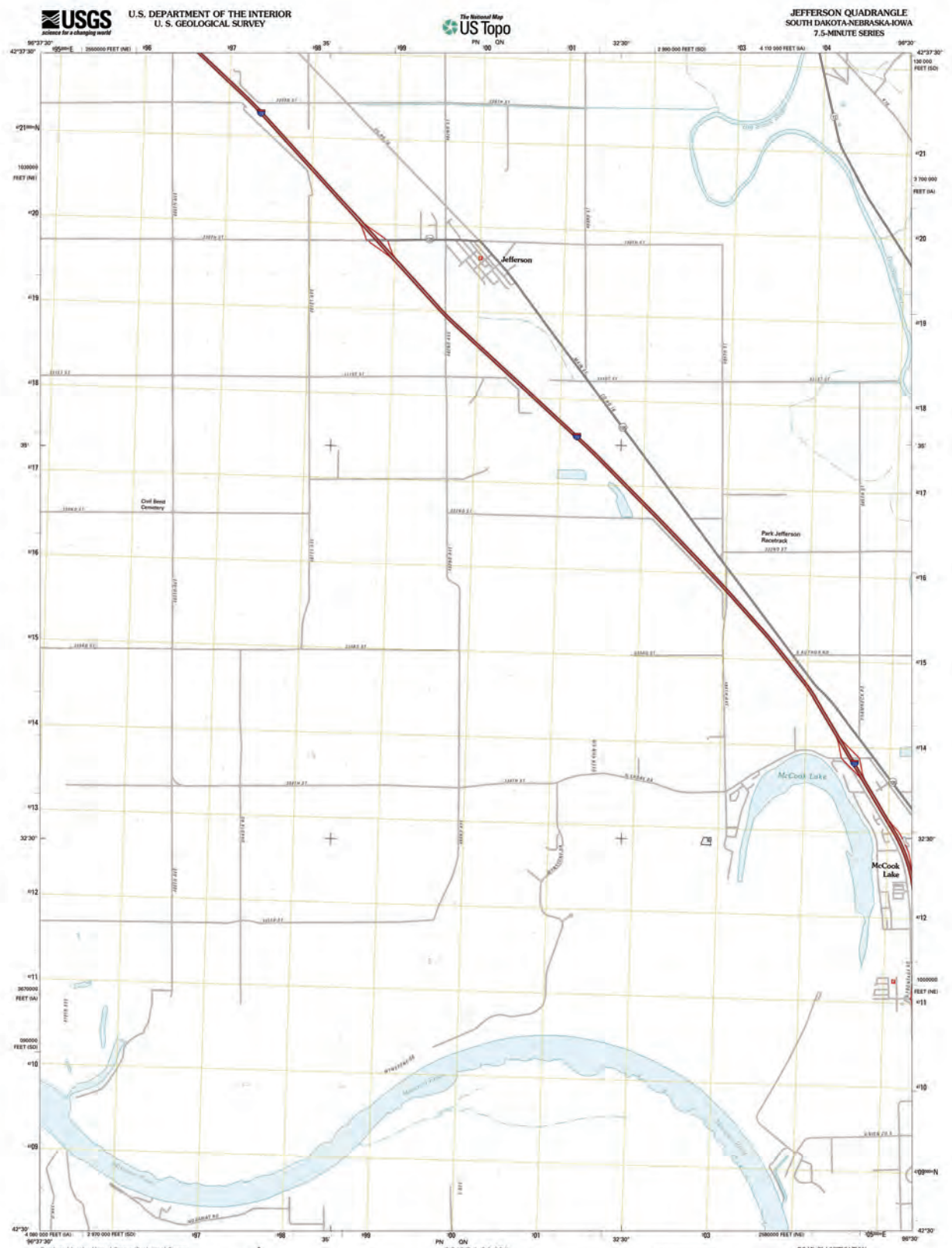
CONVERSION TABLE

DECLINATION DIAGRAM

ADJOINING MAPS

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092

Topographic Map Symbols



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

USGS science for a changing world

The National Map US Topo

JEFFERSON QUADRANGLE
SOUTH DAKOTA-NEBRASKA-IOWA
7.5-MINUTE SERIES

SCALE 1:24 000

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 14T
10 000-foot ticks: South Dakota Coordinate System of 1983
(south zone), Nebraska Coordinate System of 1983, Iowa
Coordinate System of 1983 (north zone)

Imagery.....NAIP, August 2010
Roads.....©2006-2011 TomTom
Names.....GNIS, 2011
Hydrography.....National Hydrography Dataset, 2008
Contours.....National Elevation Dataset, 1999
Boundaries.....Census, BMAC, IBC, USGS, 1972 - 2010

UTM GRID AND 2011 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.1

QUADRANGLE LOCATION

ADJOINING 7.5' QUADRANGLES

Elk Point	Elk Point NE	Hillsdale
Powell	Jefferson	Sioux City South
Waterbury	Jackson	Sioux City North

ROAD CLASSIFICATION

Interstate Route
US Route
Ramp
State Route
Local Road
4WD

JEFFERSON, SD-NE-IA
2011

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

JEFFERSON QUADRANGLE
SOUTH DAKOTA-NEBRASKA-IOWA
7.5 MINUTE SERIES (TOPOGRAPHIC)

Produced by the United States Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1961 and planetable surveys 1963. Revised from aerial photographs taken 1990-91. Field checked 1992. Map edited 1994

North American Datum of 1927 (NAD 27). Projection and 1000-meter ticks: Universal Transverse Mercator, zone 15
10 000-foot ticks: South Dakota coordinate system, south zone, Nebraska coordinate system, north zone, and Iowa coordinate system, north zone

North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software

There may be private inholdings within the boundaries of the National or State reservations shown on this map

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

SCALE 1:24000

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UTM GRID AND 1994 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ADJOINING 7.5' QUADRANGLE NAMES
1 Elk Point
2 Elk Point NE
3 Nilsonville
4 Ponca
5 Sioux City North
6 Waterbury
7 Jackson
8 Sioux City South

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U.S. Route
State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND IOWA GEOLOGICAL SURVEY, IOWA CITY, IOWA 52240
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

JEFFERSON, S. DAK.-NEBR.-IOWA
42096-E5-TF-024
1994
DMA 6669 II SE - SERIES V873

USGS
science for a changing world

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

JEFFERSON QUADRANGLE
SOUTH DAKOTA - NEBRASKA - IOWA
7.5-MINUTE SERIES

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: Universal Transverse Mercator, Zone 14T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, July 2015 - October 2016
Roads.....U.S. Census Bureau, 2015 - 2017
Names.....GNIS, 1980 - 2017
Hydrography.....National Hydrography Dataset, 2004 - 2017
Contours.....National Elevation Dataset, 1999 - 2014
Boundaries.....multiple sources; see metadata file 2014 - 2016
Public Land Survey System.....BLM, 2014 - 2017
Wetlands.....FWS National Wetlands Inventory 1983 - 2002

UTM GRID AND 2017 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011
A metadata file associated with this product is draft version 0.6.18

ROAD CLASSIFICATION

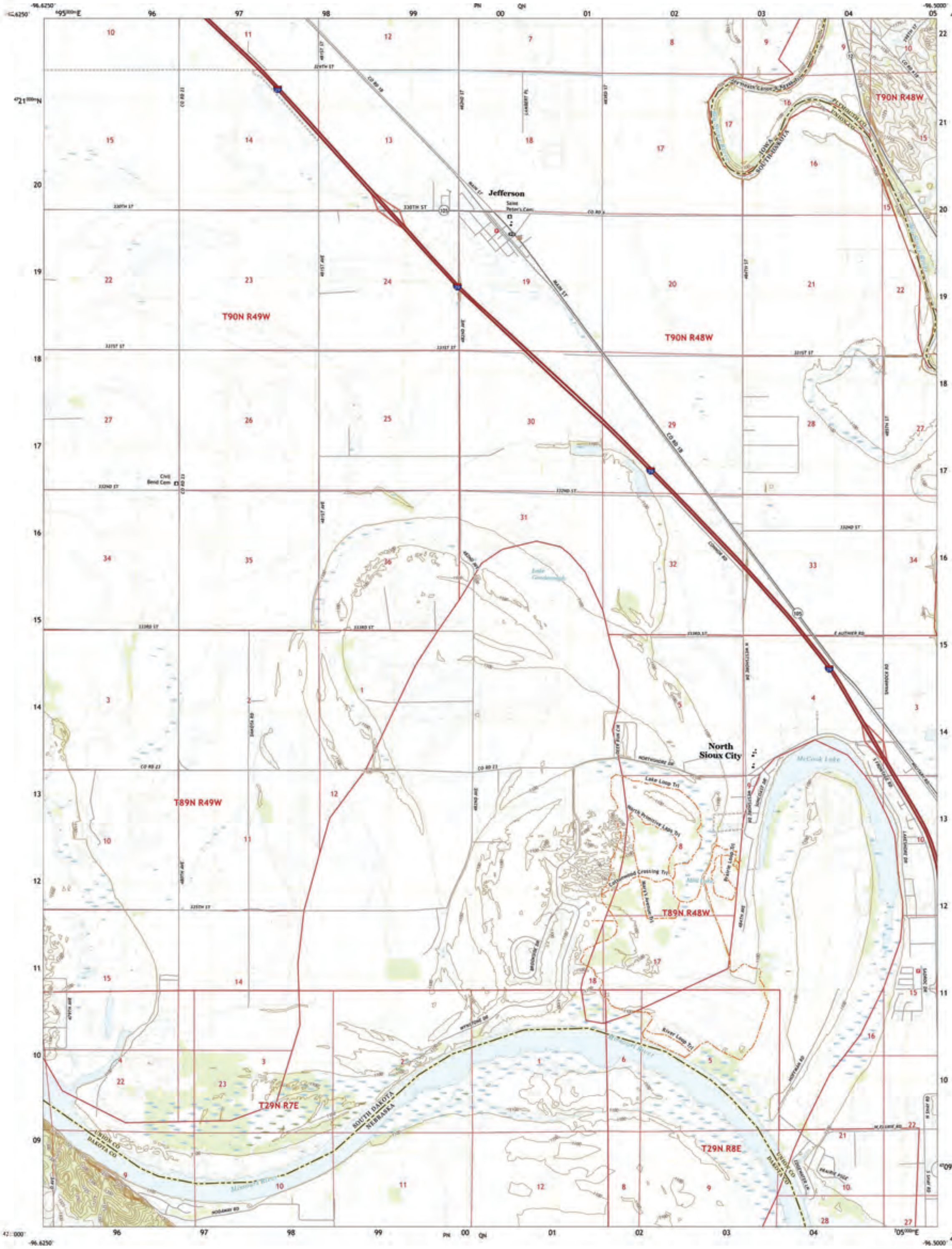
1 Elk Point
2 Elk Point NE
3 Rideewilla
4 Ponca
5 South City North
6 Waterbury
7 Jackson
8 Dixie City South

JEFFERSON, SD, NE, IA
2017

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map
US Topo

JEFFERSON QUADRANGLE
SOUTH DAKOTA - NEBRASKA - IOWA
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 14T
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery....NAIP, August 2017 - September 2020
Roads....U.S. Census Bureau, 2015 - 2018
Names....GNIS, 1980 - 2020
Hydrography....National Hydrography Dataset, 2004 - 2018
Contours....National Elevation Dataset, 2014
Boundaries....Multiple sources; see metadata file 2019 - 2021
Public Land Survey System....BLM, 2017 - 2020
Wetlands....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

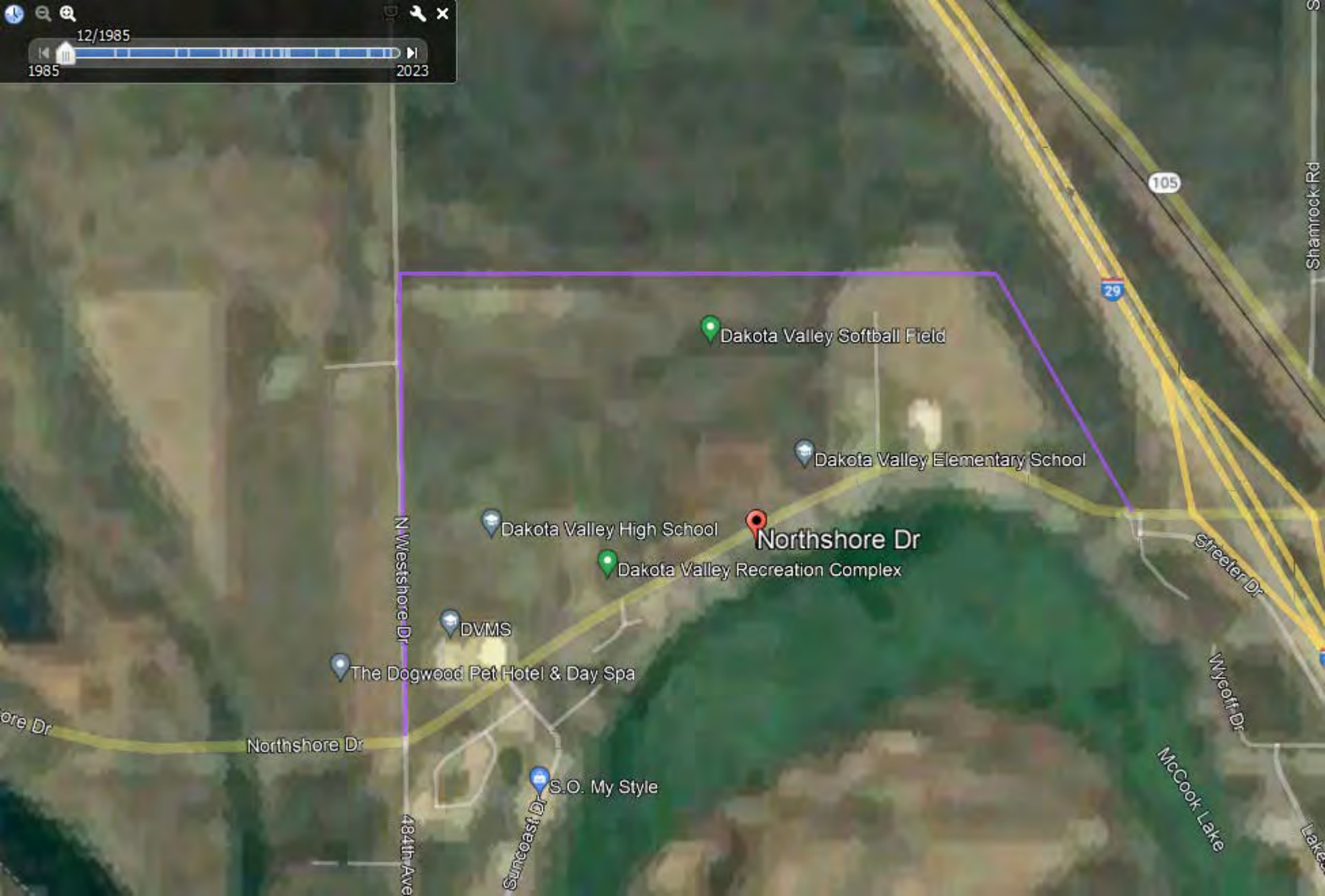
CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard

ROAD CLASSIFICATION

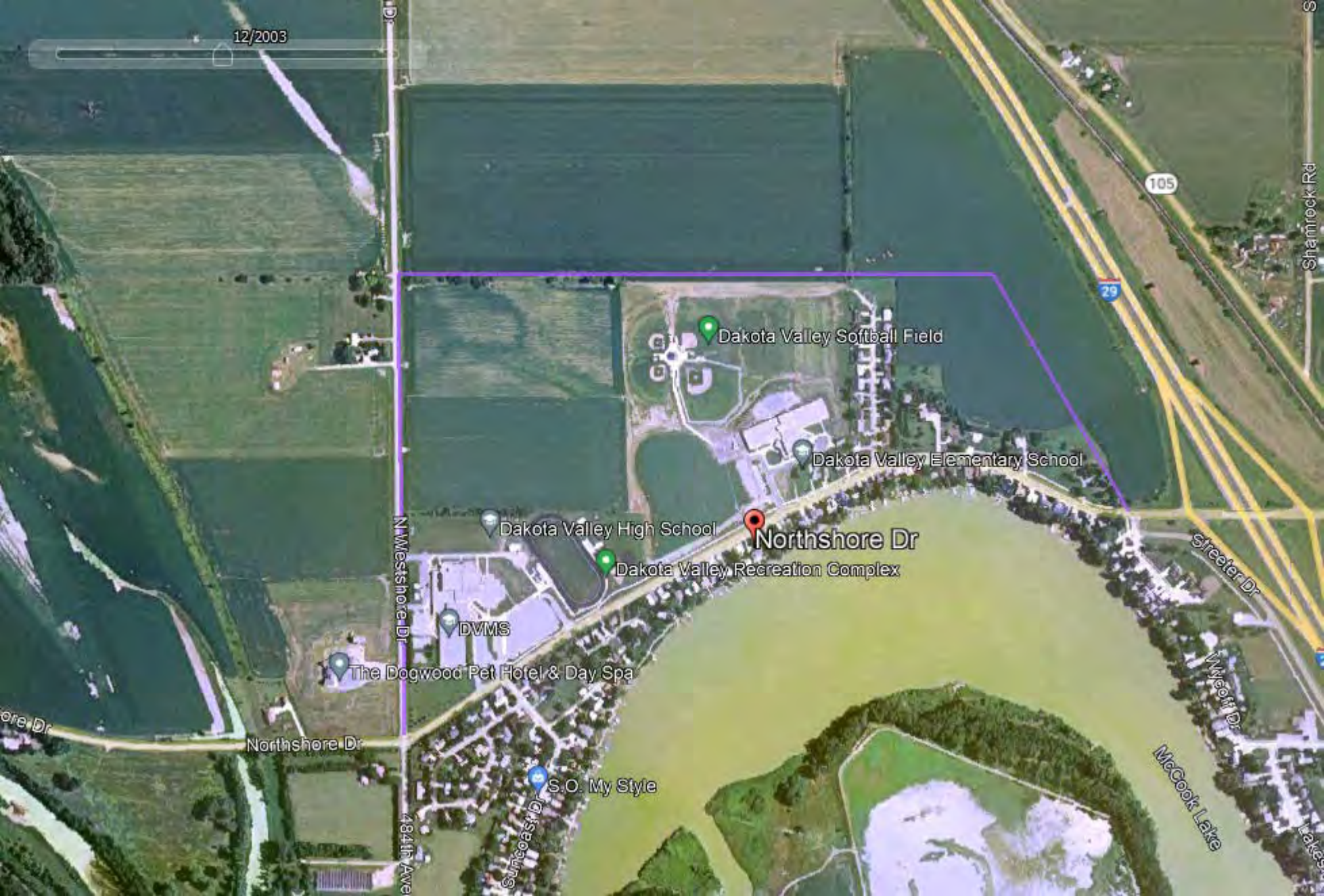
ADJOINING QUADRANGLES

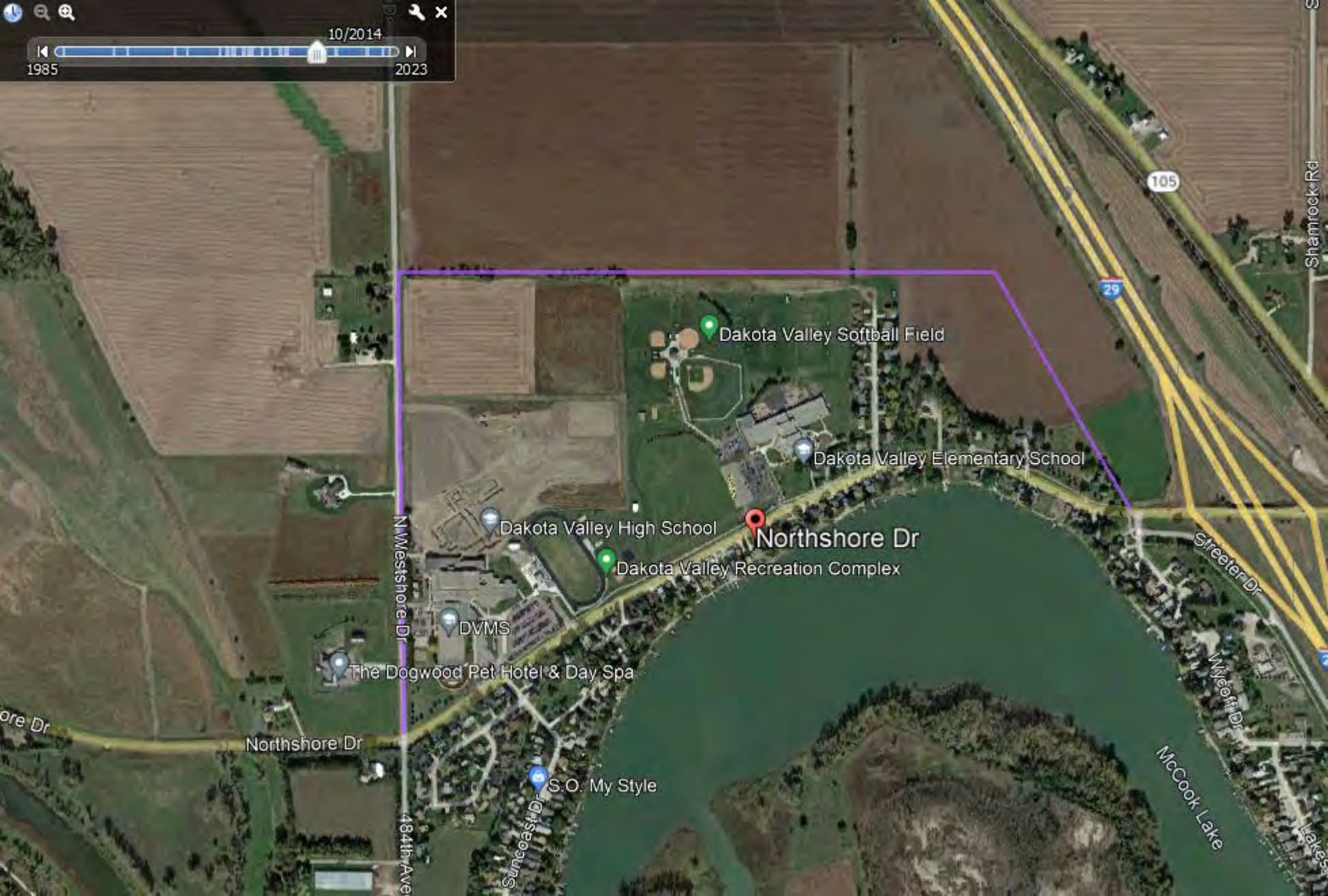
JEFFERSON, SD, NE, IA
2021

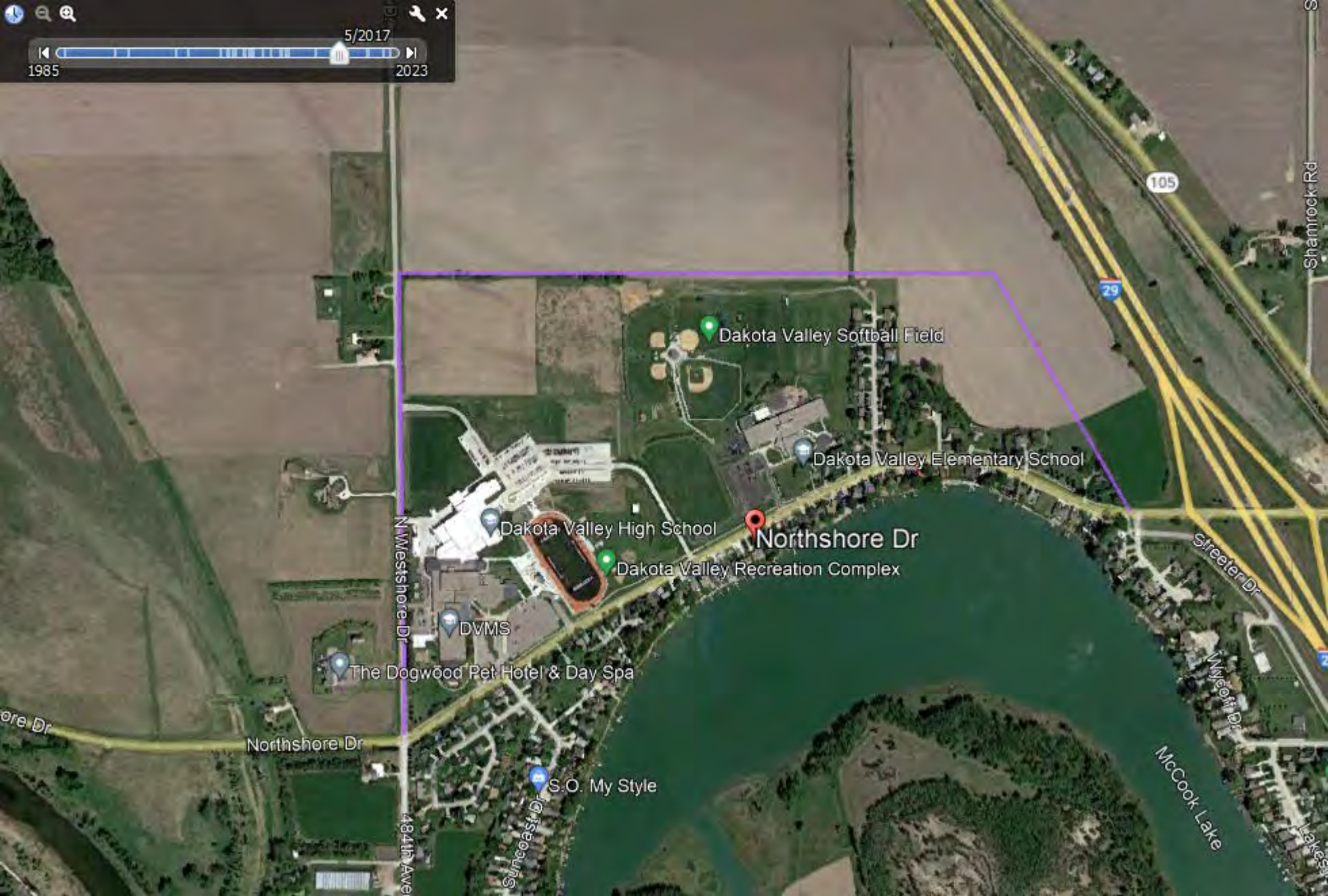

12/1985
1985
2023
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
N Westshore Dr
484th Ave
Suncoast Dr
Streeter Dr
Wycoff Dr
McCook Lake
Shamrock Rd
105
29

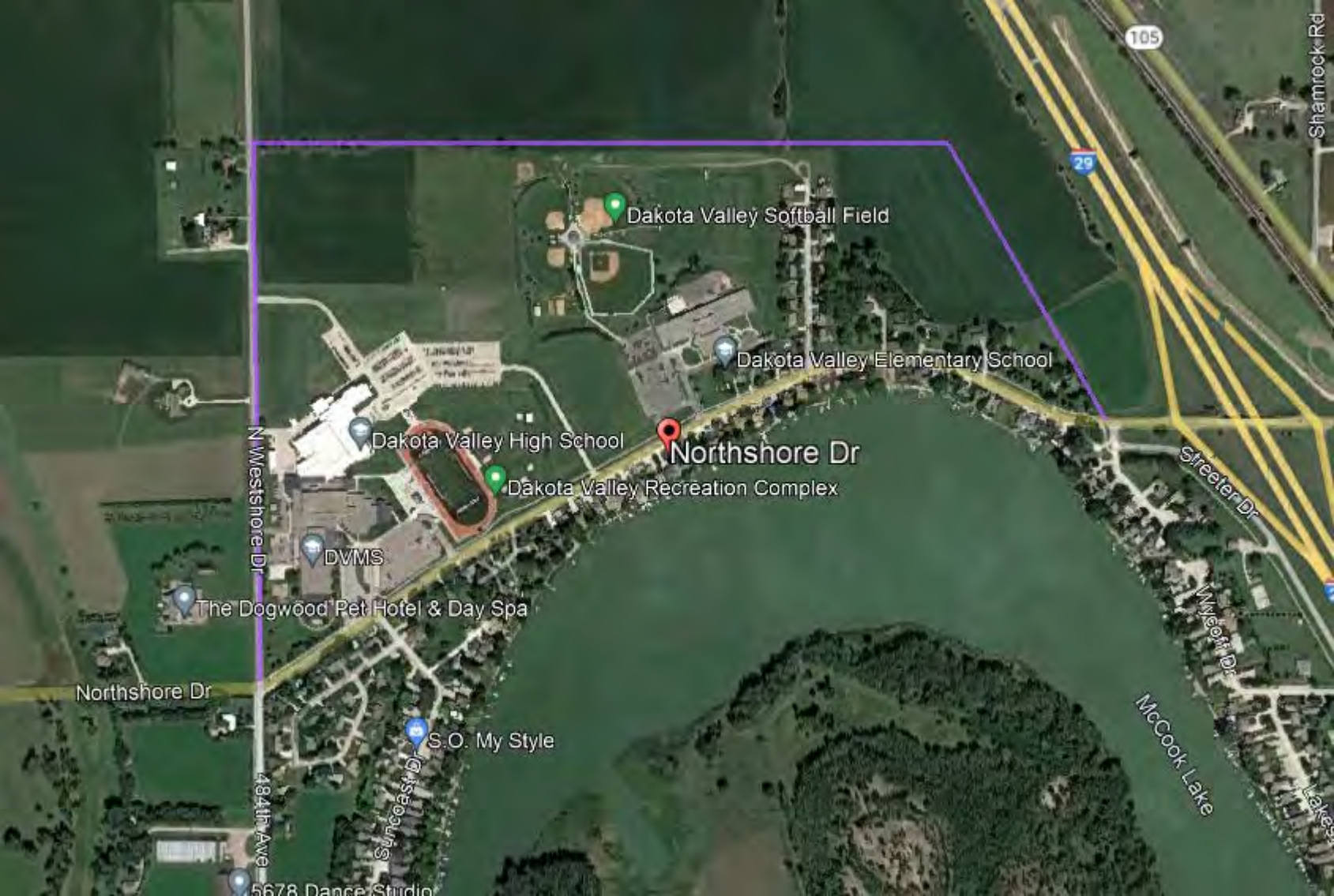

4/1993
105
29
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
N Westshore Dr
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
484th Ave
Sunset Dr
Streeter Dr
McCook Lake
Shamrock Rd


3/2000
105
29
Shamrock Rd
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
Streeter Dr
N Westshore Dr
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
McCook Lake
484th Ave


12/2003
105
29
Shamrock Rd
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
Streeter Dr
N Westshore Dr
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
McCook Lake


10/2014
1985
2023
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
NWestshore Dr
484th Ave
Sunset Dr
Streeter Dr
McCook Lake
105
29
Shamrock Rd


5/2017
1985
2023
Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
N Westshore Dr
484th Ave
Sunset Dr
Streeter Dr
Wyeth Dr
McCook Lake
Shamrock Rd
105
29


Dakota Valley Softball Field
Dakota Valley Elementary School
Dakota Valley High School
Northshore Dr
Dakota Valley Recreation Complex
DVMS
The Dogwood Pet Hotel & Day Spa
Northshore Dr
S.O. My Style
N Westshore Dr
484th Ave
Sunset Dr
Streeter Dr
McCook Lake
Shamrock Rd
105
29