

WATER PERMIT NO. 8916-3

Name of Applicant: City of Sioux Falls

Address: 231 North Dakota Avenue, Sioux Falls SD 57104

Phone: 605-367-8036

Amount of Water Claimed: 0.033 cfs

Total Acres: N/A

Source of Water Supply: Groundwater

Water to be used for: Municipal

County: Minnehaha

Type of Waste Disposal System:

Location: Approx. 3 miles west of Sioux Falls

PRIORITY Date Received: 12-04-24

Application/License Fee: \$300.00

Corrected Application Received: 01-06-25

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: NW 1/4 NW 1/4 Sec 16-T101N-R50W

Land to be Irrigated: N/A

Depth of Well: 35

Well Driller: Shannon & Wilson

Remarks:

Type of Map: aerial

Reviewed and the Number Assigned on: 01-07-25

By: Rachel Rodriguez

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8916-3

Date of first receipt of application December 4, 2024.

Date of return to applicant for corrections, amendments or changes December 6, 2024.

Date of receipt of corrected application December 18, 2024.

The Acting Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8916-3 to City of Sioux Falls, 231 North Dakota Avenue, Sioux Falls SD 57104, authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8916-3 appropriates up to 0.024 acre-feet of water annually at a maximum pump rate of 0.033 cubic feet of water per second from one well to be completed into the Big Sioux: Southern Skunk Creek Aquifer (approximately 35 feet deep) located in the NW 1/4 NW 1/4 Section 16 for municipal use at the Basin 15 Lift Station located in the NW 1/4 NW 1/4 Section 16; all in T101N-R50W. This site is located on the northwest outskirts of Sioux Falls SD city limits.
2. The water appropriated shall be used for the purpose of municipal use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 8916-3 is March 10, 2025.
5. The date from which applicant may claim right is December 4, 2024.
6. One-fifth of the construction is to be completed on or before September 10, 2027.
7. All construction is to be completed on or before March 10, 2030.
8. Water is to be put to beneficial use on or before March 10, 2034.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The city of Sioux Falls has priority right to this water under future use withdrawal permit. Permit No. 8916-3 is issued as a temporary use permit pursuant to SDCL 46-5-39 and is subject to this prior right if or when the city of Sioux Falls develops their reserve water supply. Temporary Water Use Permit No. 8916-3 may be subject to cancellation when the water reserved under the future use permit is put to beneficial use. The Chief Engineer must provide the permit holder six months' notice prior to cancellation of this temporary use permit.
2. The well approved under Temporary Use Water Permit No. 8916-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

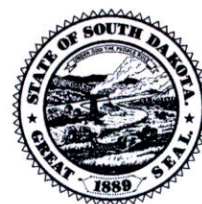
(continued)

3. The proposed well authorized by Temporary Use Permit No. 8916-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Big Sioux: Southern Skunk Creek aquifer.
5. Temporary Use Water Permit No. 8916-3 authorizes a total annual diversion of up to 0.024 acre feet of water from the Big Sioux: Southern Skunk Creek aquifer.

WATER MANAGEMENT BOARD

By: Mark Mayer
Mark Mayer, PE
Director of Office of Water
Department of Agriculture and Natural Resources

4/3/25
date



DEC 04 2024

Mail to:

SD DANR, Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182

ph. (605) 773-3352

No. 8916-3 Hydrologic Unit 10170203

OFFICE OF
WATER

Basin Big Sioux

Newspaper Sioux Falls Argus Leader

(office use only)

PAID

DEC 04 2024

Ck# 1008965

Rec't# _____

Application for Permit to Appropriate Water in South Dakota

Check use(s) of water:

☒ Municipal	☐ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal
☒ Domestic (over 18 gpm)	☐ Industrial	☐ Other _____	

Type of Application: (check one)

☒ New	☐ Vested Right (Use predates Mar 2, 1955)	☒ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____		
☐ Amendment/Correction to Permit No. _____		

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Water

City of Sioux Falls

Permit Mailing Address

231 North Dakota Avenue

Sioux Falls

SD

57104

Phone

605-367-8036

Mobile

N/A

Email

Dan.Drake@siouxfalls.gov

2. Amount of water claimed

N/A

*CFS or

15

**GPM and

N/A

***AF or

7,800

Gallons

Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use

3. Source of water supply

Groundwater Aquifer

4. Location of point of diversion

One domestic water well in NW1/4 NW1/4 Section 16-T101N-R50W

County

Minnehaha

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No

If "Yes," where will water be used? N/A

(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used

Minnehaha

6. Annual period during which water is to be used

All year

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

The Basin 15 Lift Station (LS No. 247) will be constructed with a domestic water well which is planned to be located adjacent to the lift station. The well is designed to be 35 feet deep, featuring a 14-inch pitless casing, a 12-inch steel casing, and a 2-inch raw water supply line that will connect the well to the lift station. This design is preliminary and the contractor will submit a finalized design for approval by the engineer.

I, Dan Drake

Name of Person

Project Manager

Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

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1. Well Information (check one or both as applicable)



Drilling new well(s)



Using existing well(s)

a) If new wells, how many Have test holes been drilled? ☒ Yes ☐ No Drilled by
(if yes, please provide copies of logs)

b) If existing wells, how many Provide copy of log(s), if available. Drilled by

For either existing or proposed wells:

c) Well Depth (required) Depth to Top of Water Bearing Material Depth to Water from Surface

d) Distance to nearest domestic well on applicant's property Property owned by others

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field)

b) System Capacity (gallons) Year Constructed

c) Connected to the City of Sanitary System

3. Dugout Information

a) Surface Dimensions Depth

b) Depth to water (ground surface to water level)

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity

If pipe, diameter

f) Secondary Spillway Capacity

Spillway Width

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

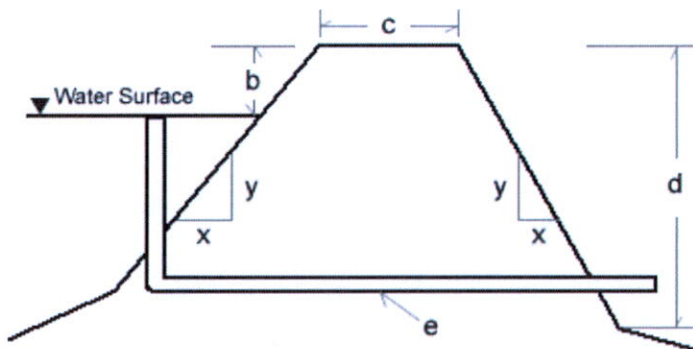
Upstream

Downstream

h) Area of Impoundment

i) Storage Acre Feet

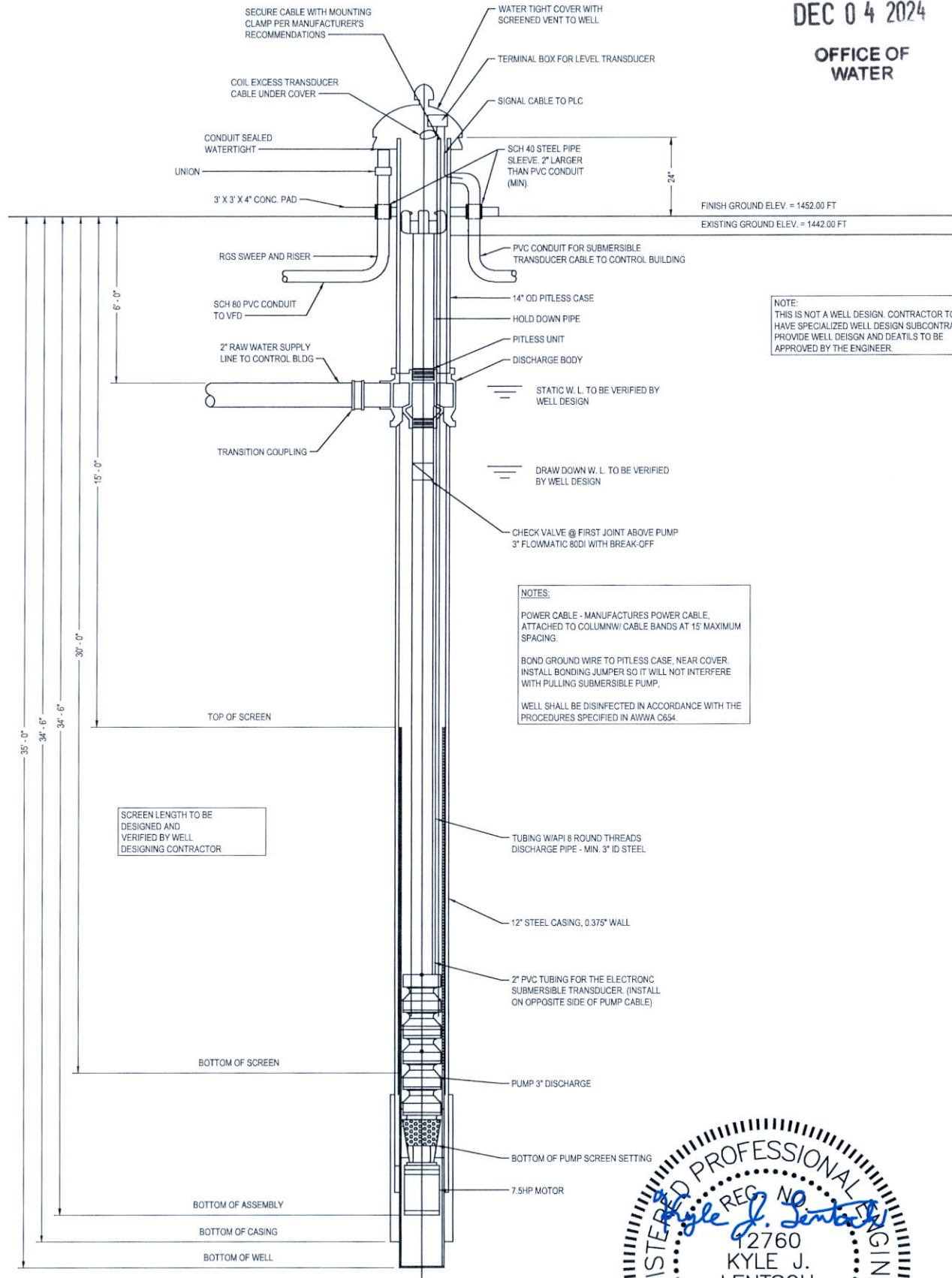
j) Drainage Area Above Dam Acres



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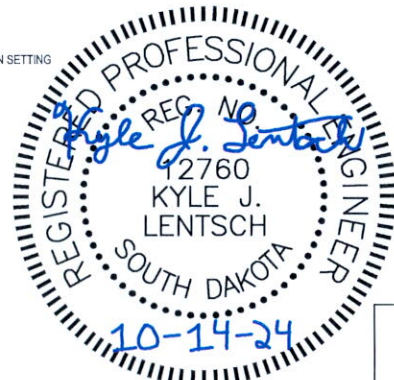


NOTE:
THIS IS NOT A WELL DESIGN. CONTRACTOR TO
HAVE SPECIALIZED WELL DESIGN SUBCONTRACTOR
PROVIDE WELL DESIGN AND DETAILS TO BE
APPROVED BY THE ENGINEER.

NOTES:
POWER CABLE - MANUFACTURER'S POWER CABLE,
ATTACHED TO COLUMN W/ CABLE BANDS AT 15' MAXIMUM
SPACING.
BOND GROUND WIRE TO PITLESS CASE, NEAR COVER.
INSTALL BONDING JUMPER SO IT WILL NOT INTERFERE
WITH PULLING SUBMERSIBLE PUMP.
WELL SHALL BE DISINFECTED IN ACCORDANCE WITH THE
PROCEDURES SPECIFIED IN AWWA C654.

SCREEN LENGTH TO BE
DESIGNED AND
VERIFIED BY WELL
DESIGNING CONTRACTOR

VERTICAL WELL DETAIL
NOT TO SCALE



BASIN 15 EQ BASIN AND LIFT STATION,
PHASE 2C EXTENSION
SIOUX FALLS, SOUTH DAKOTA

SPECIAL DETAILS AND PLATES

DESIGNED BY: C. MUSICK	DATE: 10/14/2024
DRAWN BY: J. PETERSEN/ACAD FILE	DATE: 10/14/2024
CHECKED BY: K. LENTSCH	DATE:
REVISIONS	BY: DATE:

CITY OF SIOUX FALLS
PUBLIC WORKS
Providing a Better Quality of Life for You!



SHEET NO.



N004

Appendix A

Subsurface Explorations by S&W

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A.1 INTRODUCTION

Shannon & Wilson's field exploration program for the aquifer pumping test was conducted from March 28 to April 3, 2023 and consisted of drilling four borings approximately 0.36 miles south of the currently proposed Phase 1 alignment. At the time of our explorations, the proposed Phase 1 alignment was adjacent to our aquifer pumping test location; however, the Phase 1 alignment has since been split into Phase 1 and Phase 2A. The locations of the borings completed for the aquifer pumping test are shown in our Basin 15 Phase 2A-2B report and Exhibit A-1, below.



Exhibit A-1: Pumping Test Location

The purpose of the explorations was to install pumping and observation wells to conduct an aquifer pumping test (PW-1, OW-1, OW-2, and OW-3). Boring OW-3 was completed as an offset boring adjacent to boring OW-2 to evaluate subsurface conditions below the surficial aquifer layer. The methods used to conduct the field exploration program are described below.

A.2 EXPLORATIONS

The borings were coordinated (including subcontractor coordination, utility locates, and permitting) and observed by Shannon & Wilson. Individual boring logs are presented in

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Figures A-2 to A-5. The exploration logs represent our interpretation of the contents of the field log and results of select laboratory testing.

The borings were drilled by Terracon Consultants, Inc. (Terracon) of Fort Collins, Colorado (under subcontract to Shannon & Wilson) using a CME 75 truck-mounted drill rig. The borings were advanced to depths of approximately 36.5 to 56.5 feet below ground surface (bgs) using either 8-inch-inside-diameter (I.D.) or 14-inch-I.D. hollow-stem auger. Groundwater was encountered in all borings during drilling and our field representative measured the approximate depth to groundwater using an electronic water level indicator.

Borings PW-1, OW-1, and OW-2 were completed as temporary groundwater monitoring wells with a filter pack placed around the well screen. Boring OW-3 was backfilled with cuttings to a depth of approximately 20 feet bgs, and a section of well casing was placed into the borehole to serve as a temporary standpipe. Well installation procedures and permitting are described below. Laboratory testing procedures and results are presented in Appendix B.

A.2.1 Soil Classification System

During exploration, our representative collected samples and prepared field logs of the explorations. Soil classification for this project was based on ASTM International (ASTM) Designation: D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System), and ASTM Designation: D2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). The Unified Soil Classification System (USCS) is summarized in Figure A-1.

A.2.2 Standard Penetration Test (SPT)

Disturbed samples were obtained in general accordance with the Standard Penetration Test (SPT) (ASTM Designation: D1586). The SPT consists of driving a 2-inch outside diameter (O.D.), 1.375-inch inside diameter split-spoon sampler a distance of 18 inches with a 140-pound hammer free-falling a distance of 30 inches. An automatic hammer system was used to advance the samplers. During sampling, the Shannon & Wilson field representative recorded the number of blows for each 6-inch increment of penetration and summed the blow counts for the last two 6-inch increments. This sum is recorded as the penetration resistance number, or N-value. If high penetration resistance prevented driving the total length of the sampler, the Shannon & Wilson field representative recorded the partial penetration depth and blow count. The N-values provide a means for evaluating the relative density or compactness of cohesionless (granular) soils and consistency or stiffness of cohesive (fine-grained) soils (see Figure A-1). The N-values are shown in the individual

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boring logs. Representative portions of the split-spoon sample obtained in conjunction with the SPT were placed in a screw-top plastic jar and transported to our laboratory.

A.3 GROUNDWATER MONITORING WELLS

Shannon & Wilson installed groundwater monitoring wells for the pumping test in all of the borings at the time of drilling. The completed well depths range from approximately 19 to 34.5 feet bgs. A description of well installation procedures and well permitting is provided below.

A.3.1 Well Installation

The installed wells consisted of one pumping well (PW-1) and three observation wells (OW-1, OW-2 and OW-3). The observation wells were located approximately 20, 50 and 75 feet south of the pumping well. Well construction diagrams are incorporated into each boring log presented in Appendix A and well configuration symbols are presented in Figure A-1. The groundwater level at time of drilling is also shown on the boring logs.

A.3.2 Pumping Test Well

The pumping test well consisted of threaded, flush-jointed, 8-inch inside diameter, Schedule 40, polyvinyl chloride (PVC) well casing with a slotted portion (screen) to allow for inflow of groundwater. The machine-slotted vee-wire screen had 0.030-inch-wide openings (No. 30-slot). An end cap was attached to the bottom of the slotted section. The 25-foot screened interval was selected based on soil units encountered in the boring and the anticipated groundwater level.

A filter pack consisting of No. 4/10 silica sand (see Exhibit A-1) was poured into the annular space between the boring wall and the well screen from the bottom of the boring to approximately 5 feet bgs. The well was completed with approximately 1 foot of stickup to allow for removal at the termination of the pumping test.

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Exhibit A-2: Filter Pack Sand

A.3.3 Observation Wells

Observation wells OW-1 and OW-2 consisted of threaded, flush-jointed, 2-inch inside diameter, Schedule 40, PVC well casing with a screen to allow for inflow of groundwater. Observation well OW-3 consisted of threaded, flush-jointed, 1-inch inside diameter, Schedule 40, PVC well casing with a screen to allow for inflow of groundwater. The machine-slotted screen had 0.020-inch-wide openings (No. 20 slot). An end cap was attached to the bottom of the slotted screen. The length of the screened interval for OW-1 and OW-2 was 25 feet and the screened length for OW-3 was 5 feet. The screen length was selected based on soil units encountered in the borings and the anticipated groundwater level.

A filter pack was used on OW-1 and OW-2, consisting of No. 4/10 silica sand that was poured into the annular space between the boring wall and the well screen from the bottom of the boring to approximately 5 feet above the top of the screen. The well was completed with approximately 1 foot of stickup to allow for removal at the termination of the pumping test.

A filter pack was not used on OW-3, instead the well casing was set on the bottom of the borehole and the well was completed with approximately 1 foot of stickup.

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A.4 WELL PERMITTING

Before performing the subsurface investigation, Shannon & Wilson submitted a Notice of Intent to Obtain Coverage Under the SWD General Permit for Temporary Discharge Activities and a Temporary Water Rights Use Permit for the Pumping Test with the State Department of Agriculture and Natural Resources (DANR). The registration forms received from the DANR are included as Figure A-6. The permit included periodic monitoring requirements for several constituents, as summarized in Exhibit A-3.

Exhibit A-3: Summary of Permitted Monitoring Requirements

Parameter	Monitoring Frequency	Permit Limit		Units	Notes
		Minimum	Max		
Flow Rate	Daily	N/A	N/A	GPD	
Total Flow	Monthly	N/A	N/A	Gallons	
pH	Weekly	6.5	9.0	Units	
Floating Solids/Visible Foam	Daily	N/A	N/A	-	Sample if visual solids or foam observed
Oil and Grease	Daily	N/A	10	mg/L	Sample if visual sheen observed
Total Suspended Solids	Weekly	N/A	90	mg/L	

During the step-drawdown test and constant rate tests, Shannon & Wilson used a YSI to record water quality parameters outlined in the Discharge Monitoring Report from the discharge water at regular intervals. This monitoring was performed at the beginning of each day and is summarized in Exhibit A-3 and presented in Figure A-7.

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Exhibit A-4: Summary of Pumping Test Monitoring

Parameter	3/31/2023 11:00AM	4/2/2022 9:00PM
pH ¹	7.32	7.56
Flow (gpm) ¹	100	230
Floating Solids/Visible Foam ²	N/A	N/A
Oil and Grease ³	N/A	N/A
TSS (mg/L)	1.63	0.27

NOTES:

- 1 The reading from the closest hour is presented.
 - 2 N/A for Floating Solids/Visible Foam indicates no floating solids or foam was observed; therefore, no sampling was performed.
 - 3 N/A for Oil and Grease indicates that no sheen was observed; therefore, no sampling was performed.
- gpm = gallon per minute, TSS = Total Suspended Solids, mg/L = milligrams per liter

Upon completion of the pumping test, Shannon & Wilson removed the PVC casing from the four groundwater monitoring wells (PW-1, OW-1, OW-2, and OW-3) and backfilled the boreholes with sand up to the groundwater level and cuttings above the groundwater level in each hole. Shannon & Wilson filed a Notice of Termination with the DANR. This form is included as Figure A-8.

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Shannon & Wilson, Inc. (S&W), uses a soil identification system modified from the Unified Soil Classification System (USCS). Elements of the USCS and other definitions are provided on this and the following pages. Soil descriptions are based on visual-manual procedures (ASTM D2488) and laboratory testing procedures (ASTM D2487), if performed.

S&W INORGANIC SOIL CONSTITUENT DEFINITIONS

CONSTITUENT ²	FINE-GRAINED SOILS (50% or more fines) ¹	COARSE-GRAINED SOILS (less than 50% fines) ¹
Major	Silt, Lean Clay, Elastic Silt, or Fat Clay³	Sand or Gravel⁴
Modifying (Secondary) Precedes major constituent	30% or more coarse-grained: Sandy or Gravelly⁴	More than 12% fine-grained: Silty or Clayey³
Minor Follows major constituent	15% to 30% coarse-grained: with Sand or with Gravel⁴ 30% or more total coarse-grained and lesser coarse-grained constituent is 15% or more: with Sand or with Gravel⁵	5% to 12% fine-grained: with Silt or with Clay³ 15% or more of a second coarse-grained constituent: with Sand or with Gravel⁵

¹All percentages are by weight of total specimen passing a 3-inch sieve.

²The order of terms is: *Modifying Major with Minor*.

³Determined based on behavior.

⁴Determined based on which constituent comprises a larger percentage.

⁵Whichever is the lesser constituent.

MOISTURE CONTENT TERMS

Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, from below water table

STANDARD PENETRATION TEST (SPT) SPECIFICATIONS

Hammer:	140 pounds with a 30-inch free fall. Rope on 6- to 10-inch-diam. cathead 2-1/4 rope turns, > 100 rpm
	NOTE: If automatic hammers are used, blow counts shown on boring logs should be adjusted to account for efficiency of hammer.
Sampler:	10 to 30 inches long Shoe I.D. = 1.375 inches Barrel I.D. = 1.5 inches Barrel O.D. = 2 inches
N-Value:	Sum blow counts for second and third 6-inch increments. Refusal: 50 blows for 6 inches or less; 10 blows for 0 inches.
	NOTE: Penetration resistances (N-values) shown on boring logs are as recorded in the field and have not been corrected for hammer efficiency, overburden, or other factors.

PARTICLE SIZE DEFINITIONS

DESCRIPTION	SIEVE NUMBER AND/OR APPROXIMATE SIZE
FINES	< #200 (0.075 mm = 0.003 in.)
SAND Fine Medium Coarse	#200 to #40 (0.075 to 0.4 mm; 0.003 to 0.02 in.) #40 to #10 (0.4 to 2 mm; 0.02 to 0.08 in.) #10 to #4 (2 to 4.75 mm; 0.08 to 0.187 in.)
GRAVEL Fine Coarse	#4 to 3/4 in. (4.75 to 19 mm; 0.187 to 0.75 in.) 3/4 to 3 in. (19 to 76 mm)
COBBLES	3 to 12 in. (76 to 305 mm)
BOULDERS	> 12 in. (305 mm)

RELATIVE DENSITY / CONSISTENCY

COHESIONLESS SOILS		COHESIVE SOILS	
N, SPT, BLOWS/FT.	RELATIVE DENSITY	N, SPT, BLOWS/FT.	RELATIVE CONSISTENCY
< 4	Very loose	< 2	Very soft
4 - 10	Loose	2 - 4	Soft
10 - 30	Medium dense	4 - 8	Medium stiff
30 - 50	Dense	8 - 15	Stiff
> 50	Very dense	15 - 30	Very stiff
		> 30	Hard

WELL AND BACKFILL SYMBOLS

	Bentonite Cement Grout		Surface Cement Seal
	Bentonite Grout		Asphalt or Cap
	Bentonite Chips		Slough
	Silica Sand		Inclinometer or Non-perforated Casing
	Perforated or Screened Casing		Vibrating Wire Piezometer

PERCENTAGES TERMS^{1,2}

Trace	< 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

¹Gravel, sand, and fines estimated by mass. Other constituents, such as organics, cobbles, and boulders, estimated by volume.

²Reprinted, with permission, from ASTM D2488 - 09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standard may be obtained from ASTM International, www.astm.org.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

SOIL CLASSIFICATION AND LOG KEY

June 2024

110328-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-1
Sheet 1 of 3

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UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)
(Modified From USACE Tech Memo 3-357, ASTM D2487, and ASTM D2488)

MAJOR DIVISIONS			GROUP/GRAPHIC SYMBOL	TYPICAL IDENTIFICATIONS
COARSE-GRAINED SOILS (more than 50% retained on No. 200 sieve)	Gravels (more than 50% of coarse fraction retained on No. 4 sieve)	Gravel (less than 5% fines)	GW	 Well-Graded Gravel; Well-Graded Gravel with Sand
			GP	 Poorly Graded Gravel; Poorly Graded Gravel with Sand
		Silty or Clayey Gravel (more than 12% fines)	GM	 Silty Gravel; Silty Gravel with Sand
			GC	 Clayey Gravel; Clayey Gravel with Sand
	Sands (50% or more of coarse fraction passes the No. 4 sieve)	Sand (less than 5% fines)	SW	 Well-Graded Sand; Well-Graded Sand with Gravel
			SP	 Poorly Graded Sand; Poorly Graded Sand with Gravel
		Silty or Clayey Sand (more than 12% fines)	SM	 Silty Sand; Silty Sand with Gravel
			SC	 Clayey Sand; Clayey Sand with Gravel
FINE-GRAINED SOILS (50% or more passes the No. 200 sieve)	Silts and Clays (liquid limit less than 50)	Inorganic	ML	 Silt; Silt with Sand or Gravel; Sandy or Gravelly Silt
			CL	 Lean Clay; Lean Clay with Sand or Gravel; Sandy or Gravelly Lean Clay
		Organic	OL	 Organic Silt or Clay; Organic Silt or Clay with Sand or Gravel; Sandy or Gravelly Organic Silt or Clay
	Silts and Clays (liquid limit 50 or more)	Inorganic	MH	 Elastic Silt; Elastic Silt with Sand or Gravel; Sandy or Gravelly Elastic Silt
			CH	 Fat Clay; Fat Clay with Sand or Gravel; Sandy or Gravelly Fat Clay
		Organic	OH	 Organic Silt or Clay; Organic Silt or Clay with Sand or Gravel; Sandy or Gravelly Organic Silt or Clay
HIGHLY-ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor		PT	 Peat or other highly organic soils (see ASTM D4427)

NOTE: No. 4 size = 4.75 mm = 0.187 in.; No. 200 size = 0.075 mm = 0.003 in.

NOTES

- Dual symbols (symbols separated by a hyphen, i.e., SP-SM, Sand with Silt) are used for soils with between 5% and 12% fines or when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart. Graphics shown on the logs for these soil types are a combination of the two graphic symbols (e.g., SP and SM).
- Borderline symbols (symbols separated by a slash, i.e., CL/ML, Lean Clay to Silt; SP-SM/SM, Sand with Silt to Silty Sand) indicate that the soil properties are close to the defining boundary between two groups.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

**SOIL CLASSIFICATION
AND LOG KEY**

June 2024

110328-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-1
Sheet 2 of 3

GRADATION TERMS

Poorly Graded	Narrow range of grain sizes present or, within the range of grain sizes present, one or more sizes are missing (Gap Graded). Meets criteria in ASTM D2487, if tested.
Well-Graded	Full range and even distribution of grain sizes present. Meets criteria in ASTM D2487, if tested.

CEMENTATION TERMS¹

Weak	Crumbles or breaks with handling or slight finger pressure
Moderate	Crumbles or breaks with considerable finger pressure
Strong	Will not crumble or break with finger pressure

PLASTICITY²

DESCRIPTION	VISUAL-MANUAL CRITERIA	APPROX. PLASTICITY INDEX RANGE
Nonplastic	A 1/8-in. thread cannot be rolled at any water content.	< 4
Low	A thread can barely be rolled and a lump cannot be formed when drier than the plastic limit.	4 to 10
Medium	A thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. A lump crumbles when drier than the plastic limit.	10 to 20
High	It takes considerable time rolling and kneading to reach the plastic limit. A thread can be rerolled several times after reaching the plastic limit. A lump can be formed without crumbling when drier than the plastic limit.	> 20

ADDITIONAL TERMS

Mottled	Irregular patches of different colors.
Bioturbated	Soil disturbance or mixing by plants or animals.
Diamict	Nonsorted sediment; sand and gravel in silt and/or clay matrix.
Cuttings	Material brought to surface by drilling.
Slough	Material that caved from sides of borehole.
Sheared	Disturbed texture, mix of strengths.

PARTICLE ANGULARITY AND SHAPE TERMS³

Angular	Sharp edges and unpolished planar surfaces.
Subangular	Similar to angular, but with rounded edges.
Subrounded	Nearly planar sides with well-rounded edges.
Rounded	Smoothly curved sides with no edges.
Flat	Width/thickness ratio > 3.
Elongated	Length/width ratio > 3.

ACRONYMS AND ABBREVIATIONS

ATD	At Time of Drilling
Diam.	Diameter
Elev.	Elevation
ft.	Feet
FeO	Iron Oxide
gal.	Gallons
Horiz.	Horizontal
HSA	Hollow Stem Auger
I.D.	Inside Diameter
in.	Inches
lbs.	Pounds
MgO	Magnesium Oxide
mm	Millimeter
MnO	Manganese Oxide
NA	Not Applicable or Not Available
NP	Nonplastic
O.D.	Outside Diameter
OW	Observation Well
pcf	Pounds per Cubic Foot
PID	Photo-Ionization Detector
PMT	Pressuremeter Test
ppm	Parts per Million
psi	Pounds per Square Inch
PVC	Polyvinyl Chloride
rpm	Rotations per Minute
SPT	Standard Penetration Test
USCS	Unified Soil Classification System
q _u	Unconfined Compressive Strength
VWP	Vibrating Wire Piezometer
Vert.	Vertical
WOH	Weight of Hammer
WOR	Weight of Rods
Wt.	Weight

STRUCTURE TERMS¹

Interbedded	Alternating layers of varying material or color with layers at least 1/4-inch thick; singular: bed.
Laminated	Alternating layers of varying material or color with layers less than 1/4-inch thick; singular: lamination.
Fissured	Breaks along definite planes or fractures with little resistance.
Slickensided	Fracture planes appear polished or glossy; sometimes striated.
Blocky	Cohesive soil that can be broken down into small angular lumps that resist further breakdown.
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay.
Homogeneous	Same color and appearance throughout.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

**SOIL CLASSIFICATION
AND LOG KEY**

June 2024

110328-001

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Geotechnical and Environmental Consultants

FIG. A-1
Sheet 3 of 3

¹Reprinted, with permission, from ASTM D2488 - 09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standard may be obtained from ASTM International, www.astm.org.

²Adapted, with permission, from ASTM D2488 - 09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standard may be obtained from ASTM International, www.astm.org.

Total Depth: 36.5 ft. Northing: ~ 15,827,503 ft. Drilling Method: Hollow-Stem Auger Hole Diam.: 14 in.
Top Elevation: ~ 1446.9 ft. Easting: ~ 2,210,036 ft. Drilling Company: Terracon Rod Type.: HEX
Vert. Datum: Station: ~ 124+37 Drill Rig Equipment: CME 75 Truck Hammer Type: Automatic
Horiz. Datum: Offset: ~ Other Comments:

SOIL DESCRIPTION
Refer to the report text for a proper understanding of the subsurface materials and drilling methods. The stratification lines indicated below represent the approximate boundaries between material types, and the transition may be gradual.

Medium stiff, brown, *Lean Clay with Sand (CL)*; moist; iron oxide staining.
Alluvium

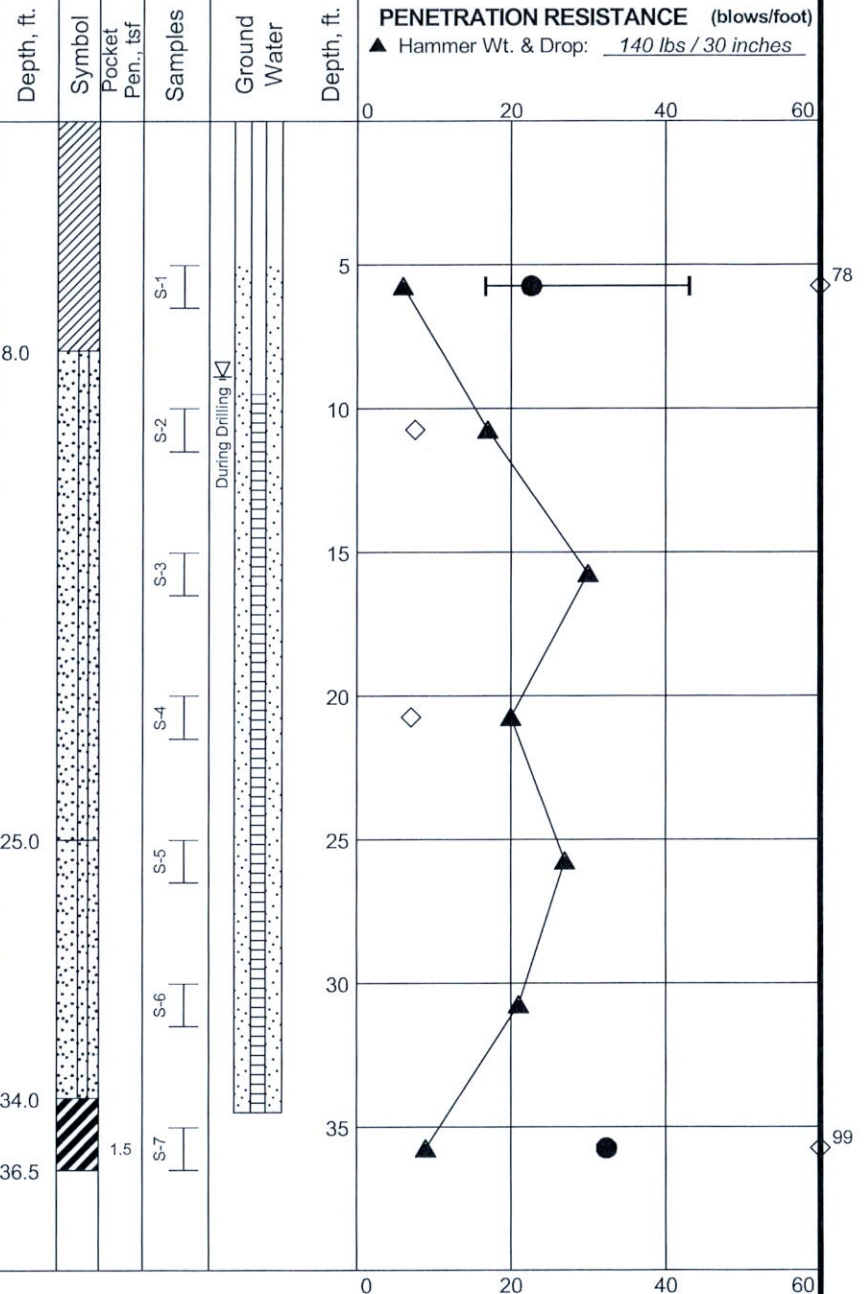
Medium dense, red-brown, *Poorly Graded Sand with Silt (SP-SM) to Well-Graded Sand with Silt and Gravel (SW-SM)*; moist to wet; fine grained sand.
Alluvium

- Trace cobbles inferred from drill action at 18 feet.

Medium dense, light gray, *Poorly Graded Sand with Silt and Gravel (SP-SM) to Poorly Graded Sand with Silt (SP-SM)*; wet.
Alluvium

Stiff, gray, *Fat Clay (CH)*; moist; trace sand.
Glacial Till

**BOTTOM OF BORING
COMPLETED ON 3/29/2023**



LEGEND

- * Sample Not Recovered
- Standard Penetration Test
- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Surface Concrete Seal
- Ground Water Level ATD

NOTES

- Refer to Figure A-1 for explanation of symbols, codes, abbreviations and definitions.
- The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
- The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
- Groundwater level, if indicated above, is for the date specified and may vary.
- USCS designation is based on visual-manual classification and selected lab testing.
- The hole location was measured from existing site features and should be considered approximate.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

LOG OF BORING PW-1

June 2024

110328-001

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. A-2

FINAL

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MASTER LOG E-POCKET PEN 110328 BASIN 15.GPJ DENVER 2021.GDT 6/20/23

OFFICE OF

Total Depth: 36.5 ft. Northing: ~ 15,827,483 ft. Drilling Method: Hollow-Stem Auger Hole Diam.: 8 in.
Top Elevation: ~ 1446.6 ft. Easting: ~ 2,210,036 ft. Drilling Company: Terracon Rod Type.: HEX
Vert. Datum: Station: ~ 124+53 Drill Rig Equipment: CME 75 Truck Hammer Type: Automatic
Horiz. Datum: Offset: ~ Other Comments:

SOIL DESCRIPTION
Refer to the report text for a proper understanding of the subsurface materials and drilling methods. The stratification lines indicated below represent the approximate boundaries between material types, and the transition may be gradual.

Stiff, gray-brown, *Lean Clay (CL)*; moist; trace sand and gravel; iron oxide staining. Alluvium

Medium dense to dense, red-brown, *Poorly Graded Sand with Silt (SP-SM)* to *Poorly Graded Sand with Silt and Gravel (SP-SM)*; moist to wet; fine to medium grained sand. Alluvium

- Trace cobbles inferred from drill action at 19 feet.

Medium dense to dense, light gray, *Silty Sand with Gravel (SM)*; wet. Alluvium

Very stiff, gray, *Fat Clay (CH)*; moist; trace sand. Glacial Till

BOTTOM OF BORING
COMPLETED ON 3/29/2023

Depth, ft.

Symbol

Pocket Pen., tsf

Samples

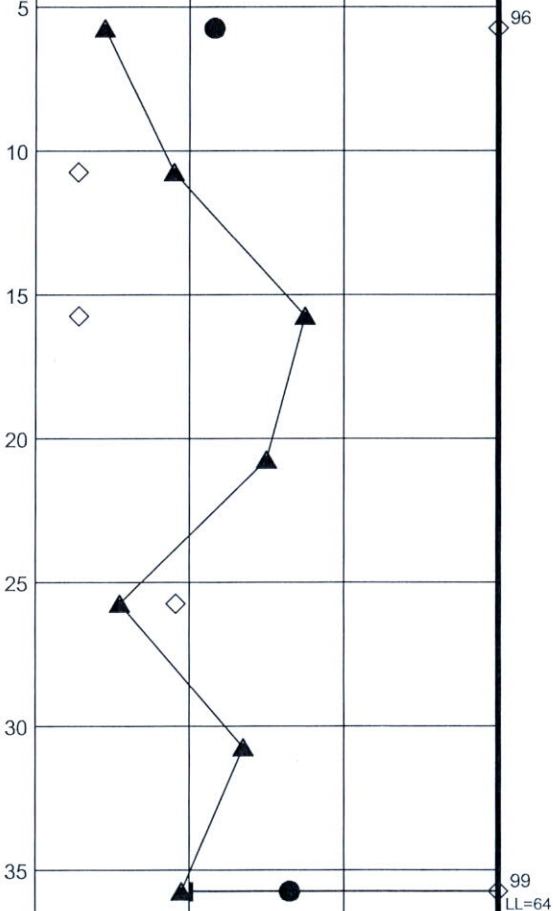
Ground Water

Depth, ft.

PENETRATION RESISTANCE (blows/foot)

▲ Hammer Wt. & Drop: 140 lbs / 30 inches

0 20 40 60



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

- Piezometer Screen and Sand Filter
- Bentonite-Cement Grout
- Bentonite Chips/Pellets
- Surface Concrete Seal
- Ground Water Level ATD

NOTES

- Refer to Figure A-1 for explanation of symbols, codes, abbreviations and definitions.
- The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
- The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
- Groundwater level, if indicated above, is for the date specified and may vary.
- USCS designation is based on visual-manual classification and selected lab testing.
- The hole location was measured from existing site features and should be considered approximate.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

LOG OF BORING OW-1

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FIG. A-3

FINAL

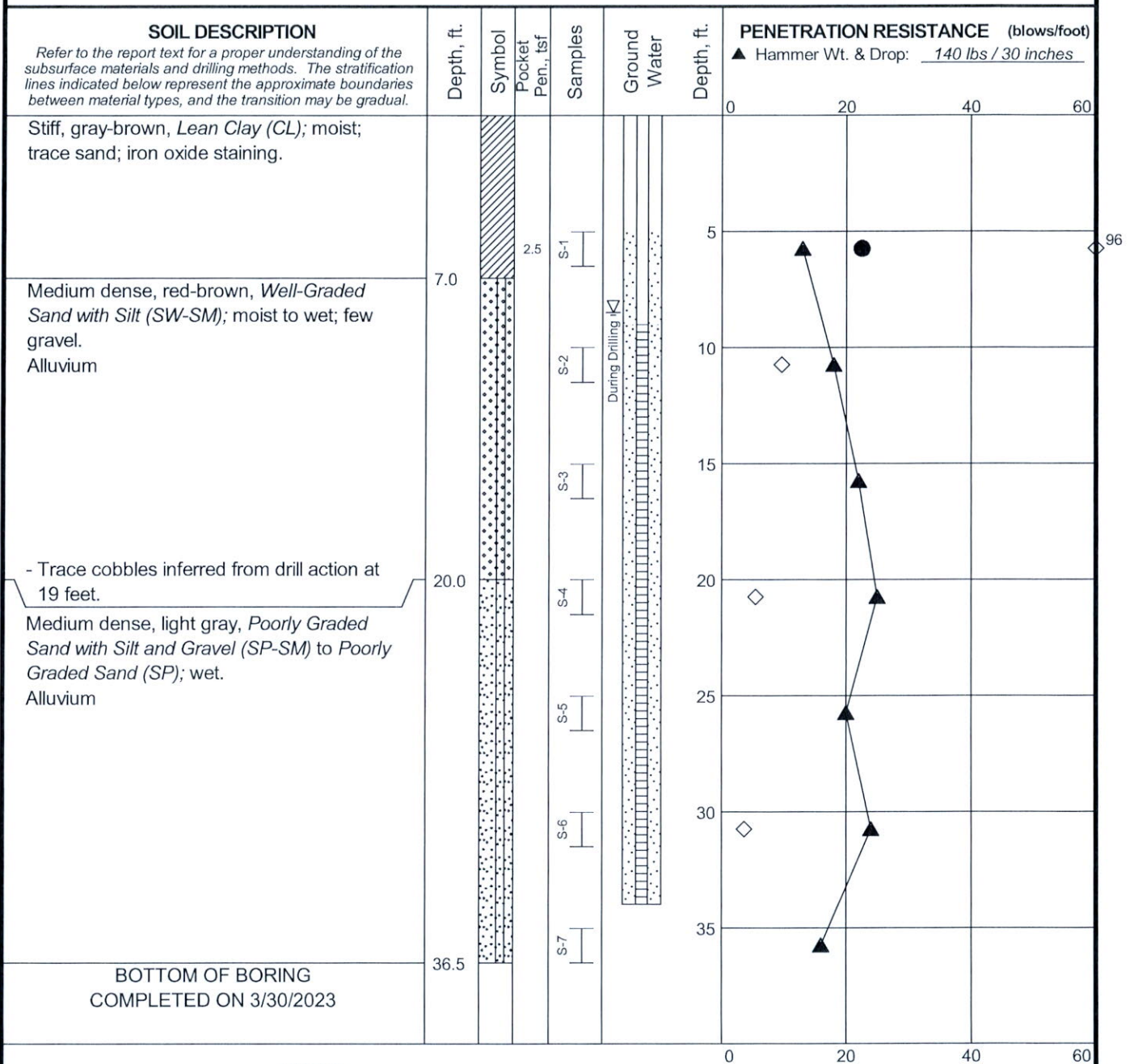
DEC 04 2024

RECEIVED

MASTER LOG E POCKETPEN 110328 BASIN 15.GPJ DENVER 2021.GDT 6/20/23

OFFICE OF

Total Depth: 36.5 ft. Northing: ~ 15,827,452 ft. Drilling Method: Hollow-Stem Auger Hole Diam.: 8 in.
 Top Elevation: ~ 1446.2 ft. Easting: ~ 2,210,038 ft. Drilling Company: Terracon Rod Type.: HEX
 Vert. Datum: Station: ~ 124+78 Drill Rig Equipment: CME 75 Truck Hammer Type: Automatic
 Horiz. Datum: Offset: ~ Other Comments:



- LEGEND**
- * Sample Not Recovered
 - Standard Penetration Test
 - Piezometer Screen and Sand Filter
 - Bentonite-Cement Grout
 - Bentonite Chips/Pellets
 - Surface Concrete Seal
 - Ground Water Level ATD
 - ◇ % Fines (<0.075mm)
 - % Water Content

- NOTES**
- Refer to Figure A-1 for explanation of symbols, codes, abbreviations and definitions.
 - The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
 - The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
 - Groundwater level, if indicated above, is for the date specified and may vary.
 - USCS designation is based on visual-manual classification and selected lab testing.
 - The hole location was measured from existing site features and should be considered approximate.

Sanitary Sewer Extension
 Basin 15 Phase 1
 Sioux Falls, South Dakota

LOG OF BORING OW-2

June 2024

110328-001

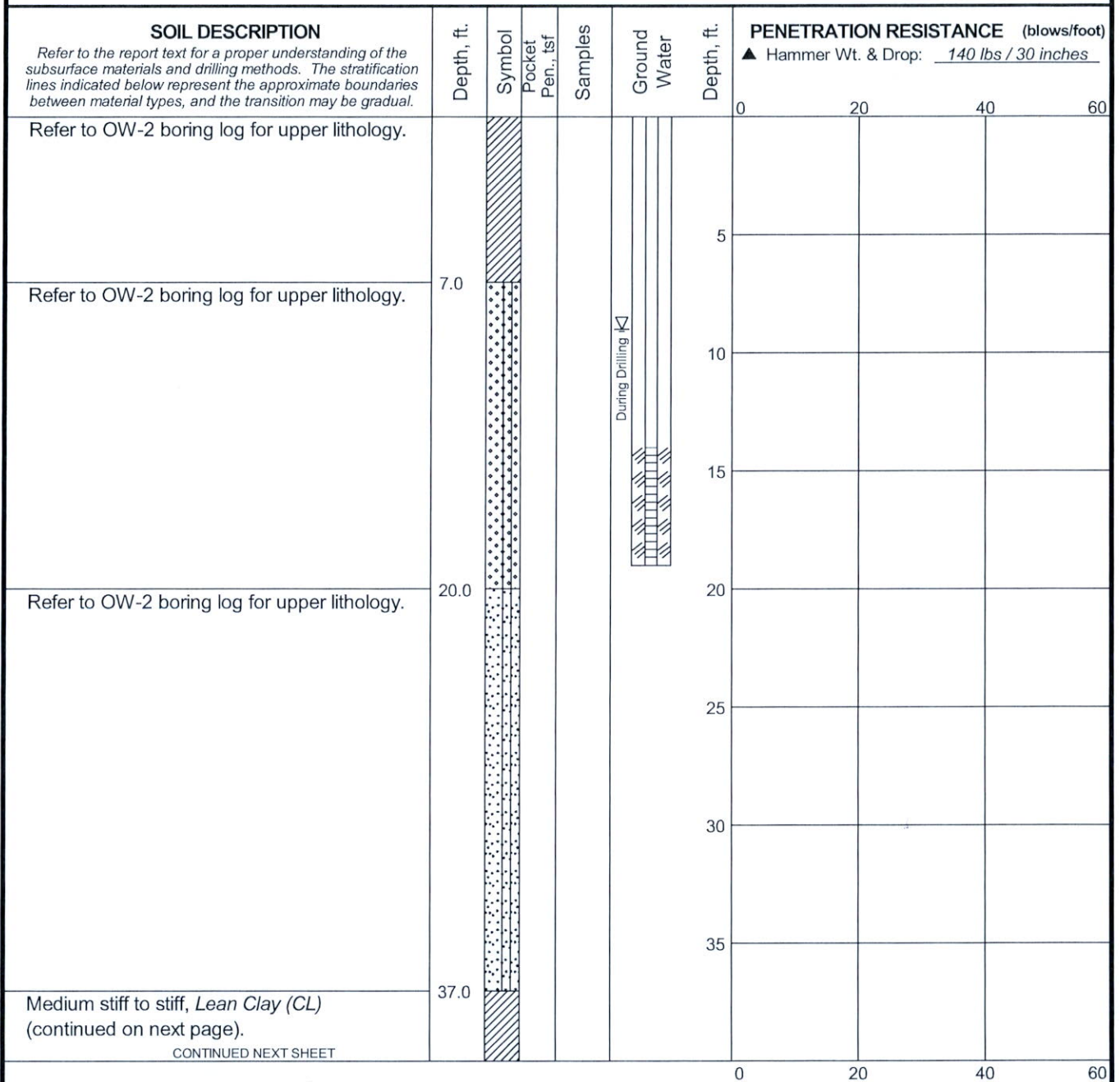
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FIG. A-4

FINAL

MASTER LOG E. POCKET PEN. 110328 BASIN 15.GPJ DENVER 2021.GDT 6/20/23
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 WATER

Total Depth: 56.5 ft. Northing: ~ 15,827,428 ft. Drilling Method: Hollow-Stem Auger Hole Diam.: 8 in.
Top Elevation: ~ 1446.2 ft. Easting: ~ 2,210,037 ft. Drilling Company: Terracon Rod Type.: HEX
Vert. Datum: Station: ~ 124+84 Drill Rig Equipment: CME 75 Truck Hammer Type: Automatic
Horiz. Datum: Offset: ~ Other Comments:



LEGEND

* Sample Not Recovered
└ Standard Penetration Test

▢ Piezometer Screen and Sand Filter
▨ Bentonite-Cement Grout
▣ Bentonite Chips/Pellets
▤ Surface Concrete Seal
▽ Ground Water Level ATD

◇ % Fines (<0.075mm)
● % Water Content
Plastic Limit —●— Liquid Limit
Natural Water Content

- NOTES**
- Refer to Figure A-1 for explanation of symbols, codes, abbreviations and definitions.
 - The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
 - The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
 - Groundwater level, if indicated above, is for the date specified and may vary.
 - USCS designation is based on visual-manual classification and selected lab testing.
 - The hole location was measured from existing site features and should be considered approximate.

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

LOG OF BORING OW-3

June 2024

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FIG. A-5
Sheet 1 of 2

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MASTER 110328 BASIN 15.GPJ DENVER 2021.GDT 6/20/23

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WATER

Total Depth:	<u>56.5 ft.</u>	Northing:	<u>~ 15,827,428 ft.</u>	Drilling Method:	<u>Hollow-Stem Auger</u>	Hole Diam.:	<u>8 in.</u>
Top Elevation:	<u>~ 1446.2 ft.</u>	Easting:	<u>~ 2,210,037 ft.</u>	Drilling Company:	<u>Terracon</u>	Rod Type.:	<u>HEX</u>
Vert. Datum:	<u></u>	Station:	<u>~ 124+84</u>	Drill Rig Equipment:	<u>CME 75 Truck</u>	Hammer Type:	<u>Automatic</u>
Horiz. Datum:	<u></u>	Offset:	<u>~</u>	Other Comments:	<u></u>		

SOIL DESCRIPTION			Depth, ft.	Symbol	Pocket Pen., tsf	Samples	Ground Water	Depth, ft.	PENETRATION RESISTANCE (blows/foot)	
Refer to the report text for a proper understanding of the subsurface materials and drilling methods. The stratification lines indicated below represent the approximate boundaries between material types, and the transition may be gradual.									▲ Hammer Wt. & Drop: 140 lbs / 30 inches	
Medium stiff to stiff, gray, <i>Lean Clay (CL)</i> ; moist; trace sand. Glacial Till			56.5		1.5	S-1		45	25	98
BOTTOM OF BORING COMPLETED ON 3/30/2023										
								55	25	
								60		
								65		
								70		
								75		

* Sample Not Recovered
I Standard Penetration Test

LEGEND

	Piezometer Screen and Sand Filter
	Bentonite-Cement Grout
	Bentonite Chips/Pellets
	Surface Concrete Seal
	Ground Water Level ATD

NOTES

1. Refer to Figure A-1 for explanation of symbols, codes, abbreviations and definitions.
2. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
3. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
4. Groundwater level, if indicated above, is for the date specified and may vary.
5. USCS designation is based on visual-manual classification and selected lab testing.
6. The hole location was measured from existing site features and should be considered approximate.

◇ % Fines (<0.075mm)
 ● % Water Content
 Plastic Limit ——— Liquid Limit
 Natural Water Content

Sanitary Sewer Extension
Basin 15 Phase 1
Sioux Falls, South Dakota

LOG OF BORING OW-3

June 2024

110328-001

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FIG. A-5
Sheet 2 of 2

FINAL

MASTER LOG E POCKET DEN, 110328 BASIN 15.GPJ DENVER 2021.GDT 6/20/23

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SKUNK CREEK

SKUNK CREEK

STAGING AREA

Proposed Domestic Well

CHAINLINK FENCE
(BOUNDARY OF BASE, ALT A WORK ZONE)

BOUNDARY OF ALT C WORK ZONE

PHASE 2C ACCESS ROAD ALIGNMENT

LEGEND

- BASE, ALT A
- ALT C

GENERAL NOTES

GENERAL NOTES:

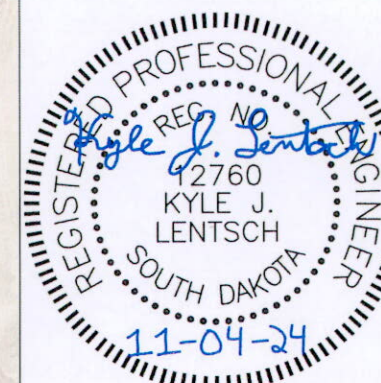
1. CONTRACTOR SHALL BE RESPONSIBLE FOR HAULING AND PLACING ALL BORROW MATERIAL NECESSARY TO CONSTRUCT THE SITE TO THE PLAN SHOWN GRADES.
2. PRIOR TO PERFORMING EXCAVATION AND EMBANKMENT OPERATIONS, THE CONTRACTOR SHALL STRIP & STOCKPILE ALL TOPSOIL.
3. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISHED GRADE.
4. ALL DISTURBED AND EXPOSED AREAS NOT SURFACED SHALL BE TOPSOILED AND SEEDED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. EXISTING SURFACING SHALL BE SCARIFIED, BLADED, AND WATERED TO REMOVE ANY FOREIGN MATERIAL BEFORE THE ADDITION OF NEW SURFACING.

EARTHWORK FOR EQ BASIN NOTES:

1. A SOILS EXPLORATION STUDY WAS CONDUCTED AT THE EQ BASIN SITE. A COMPLETE COPY OF THE SOILS REPORT IS AVAILABLE FOR REVIEW IN THE APPENDIX OF THE SPECIFICATIONS.
2. CONTRACTOR SHALL PERFORM SITE CLEARING IN ACCORDANCE WITH SPECIFICATIONS AND DETAILS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING WASTE MATERIAL OFFSITE. SUITABLE EXCESS EXCAVATION MATERIAL MAY BE PLACED IN ADJACENT AREA IF ACCEPTED BY OWNER AND ENGINEER. CONTRACTOR SHALL STRIP TOPSOIL PRIOR TO STOCKPILING BORROW AND SHALL PLACE TOPSOIL AND REESTABLISH VEGETATIVE COVER.
4. CONTRACTOR SHALL COMPLETE EARTHWORK OPERATIONS IN SEQUENCE TO ALLOW FLEXIBILITY TO INCORPORATE MINOR VOLUMES OF FILL OR OBTAIN ADDITIONAL EMBANKMENT AS APPROVED BY THE ENGINEER. CONSIDERATIONS FOR PLACING FILL MAY INCLUDE FLATTENING THE EXTERIOR EAST AND WEST SLOPES OF THE EQ BASIN AS APPROVED BY THE ENGINEER.
5. TOPSOIL PLACEMENT VOLUME IS INCLUDED IN THE EMBANKMENT YARDAGE.
6. STAGING AREA SHOWN WEST OF SKUNK CREEK IS THE SAME FOR PHASE 1, PHASE 2A, AND PHASE 2C PROJECTS. ALL ITEMS STAGED FOR PHASE 2C PROJECT SHALL NOT INTERFERE WITH THE WORK FOR THE PHASE 1 OR PHASE 2A PROJECTS.
7. CONTRACTOR SHALL COORDINATE SCHEDULE WITH PHASE 2A CONTRACTOR REGARDING ACCESS TO THE WEST SIDE OF SKUNK CREEK AS PHASE 2A PROJECT WILL BE INSTALLING SANITARY SEWER WITHIN THE SANITARY SEWER EASEMENT. PHASE 2A CONTRACTOR IS NOT ALLOWED TO BLOCK OFF ACCESS TO THE PHASE 2C PROJECT SITE WITHOUT APPROVAL OF THE OWNER AND ENGINEER.

FEATURE IDENTIFIERS

1. LIFT STATION 247 (BASE)
2. EQ RETURN METER STRUCTURE (ALT A)
3. EQ INLET (ALT A)
4. EQ OUTLET (ALT A)
5. OVERFLOW STRUCTURE (ALT A)
6. PLANT ENTRANCE
7. EQUALIZATION BASIN - 5MG (ALT A)
8. COMPENSATORY STORAGE - 26,136 CuYd (BASE)
9. COMPENSATORY STORAGE - 87,110 CuYd (ALT C)
10. CONTRACTOR STAGING AREA



BASIN 15 EQ BASIN AND LIFT STATION,
PHASE 2C EXTENSION
SIOUX FALLS, SOUTH DAKOTA

SITE LAYOUT AND STAGING PLAN

DESIGNED BY: C. N. WICK
DRAWN BY: J. PETERSEN
CHECKED BY: K. LENTSCH
DATE: 11/14/2024
BY: HDR
DATE: 11/04/2024

CITY OF SIOUX FALLS
PUBLIC WORKS
Providing a Better Quality of Life for You!



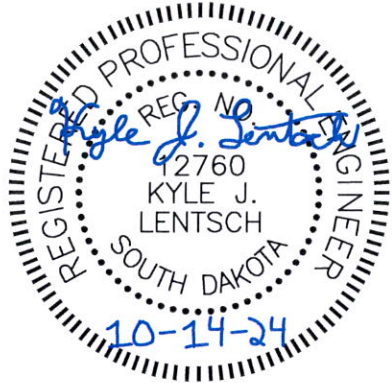
SHEET NO.

C101

City of Sioux Falls
Minnehaha County

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WATER

BASIN 15 EQ BASIN AND LIFT STATION
PHASE 2C EXTENSION
SIOUX FALLS, SOUTH DAKOTA
CIP No. 23034
Bid Request No. 24-1077



I, Kyle J. Lentsch, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered engineer under the laws of the State of South Dakota.

Name S.D. No. 12760 Date



I, Brian H. Johnson, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered engineer under the laws of the State of South Dakota.

Name S.D. No. 17143 Date



Location Map

Drawing indicates general utility locations only. Neither the correctness or completeness of locations are guaranteed.

Prior to excavation contact:
SOUTH DAKOTA ONE CALL (1-800-781-7474)



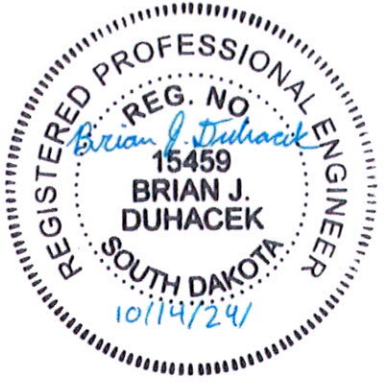
City of Sioux Falls
PUBLIC WORKS - DIVISION OF ENGINEERING CITY CENTER
231 NORTH DAKOTA AVENUE
SIOUX FALLS, SD 57104 (605) 367-8601

Approved *Andrew B...* 10/17/24
City Engineer Date

Plans By:

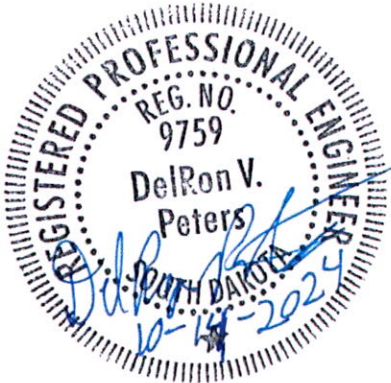


101 S. PHILLIPS AVENUE
SUITE 401
SIOUX FALLS, SOUTH DAKOTA 57104
(605) 977-7740
FAX: (605) 977-7747



I, Brian J. Duhacek, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered engineer under the laws of the State of South Dakota.

Name S.D. No. 15459 Date



I, DelRon V. Peters, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered engineer under the laws of the State of South Dakota.

Name S.D. No. 9759 Date



I, Brian Charles Hoagland, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered engineer under the laws of the State of South Dakota.

Name S.D. No. 12523 Date

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date December 05th, 2024

RECEIVED OF City of Sioux Falls C/O Dan Drak 231 North Dakota Avenue Sioux Falls SD

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>8916-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>50.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>50.00</u>

By Eric Gronlund
Chief Engineer

Sm

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date December 18th, 2024

RECEIVED OF City of Sioux Falls C/O Dan Drak 231 North Dakota Avenue Sioux Falls SD

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>8916-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>50.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8916-3</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>250.00</u>

By Eric Gronlund
Chief Engineer

SN



12/13/2024

Rachel Rodriguez, Program Assistant
SD DANR Water Rights Program
523 East Capitol Ave
Pierre, SD 57501

PAID

DEC 18 2024

Ck# 1009125

Rec't# _____

Dear Rachel:

Subject: City of Sioux Falls – Application for Permit to Appropriate Water

I am enclosing a check for the remaining \$250.00 (\$100 application fee plus \$200 inspection fee minus the \$50 already sent) needed for the city's previous application.

If you have any further questions regarding the application, please let me know.

Sincerely,

Dan Drake
Engineering Project Manager
City Center
231 North Dakota Avenue
605-367-8036

RECEIVED

DEC 18 2024

OFFICE OF
WATER

Duvall, Ron

From: Lentsch, Kyle <Kyle.Lentsch@hdrinc.com>
Sent: Monday, January 6, 2025 4:56 PM
To: Drake, Dan; Duvall, Ron
Cc: Myers, Chris; Lewis, Ted; Rodriguez, Rachel
Subject: RE: [EXT] Water Permit Application for Lift Station Well

Follow Up Flag: Follow up
Flag Status: Flagged

Ron,

Please proceed with application as a temporary use permit rather than a regular appropriation. We do not want this under the Future Use Permit.

Annual amount of water is an approximation. 15 gal./min. x 5 min./time x 2 times/week x 52 weeks/year = 7,800 gal./year.

Any further questions, please let me know.

Thanks,

Kyle Lentsch, PE, CDT
D 605.977.7752 M 605.690.8677

hdrinc.com/follow-us

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Monday, December 30, 2024 3:23 PM
To: Drake, Dan <Dan.Drake@SiouxFalls.Gov>
Cc: Myers, Chris <Chris.Myers@SiouxFalls.Gov>; Lewis, Ted <Ted.Lewis@SiouxFalls.Gov>; Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: Water Permit Application for Lift Station Well

This Message Is From an External Sender

This message came from outside your organization.

Dan,

I am looking over the application and have a couple of questions to follow-up on Rachel's contact with you regarding the application. Rachel noted that the application had a box checked to make a future use reservation and suggested that the application was to place water to beneficial use, not to reserve water. You agreed with that and removing "domestic" as a use and just go with "municipal" use. After giving this a look as to the water source, it appears to me to be the Big Sioux Southern Skunk Creek aquifer. If so, then water from this aquifer has been appropriated to the extent that temporary use permits are being issued rather than regular appropriations. The reason for issuing temporary use permits is the amount of water appropriated has reached the estimated average annual recharge to the aquifer. Temporary use permits are issued to allow water to be used until the City of Sioux Falls places water to beneficial use that has been reserved by [Future Use Water Permit No. 449-3](#). The proposed well site is within the future use area described on No. 449-3. Since the applicant is the city and the city holds Future Use Permit No. 449-3, I now

wonder if the intent on your application was to check the box "Place to Beneficial Use Water Reserved by Future Use Permit No. 449-3? By doing that, your application will not be processed, and likely issued, as a temporary use permit. Rather your application will take water from future use and have the priority date associated with No. 449-3.

In addition, we need both a diversion (pump) rate and volume of water identified on the application. Currently, the application indicates 15 gallons per minute. We will need an annual volume of water identified and the volume, like the pump rate, should be a maximum number, not an average value.

Please let me know how you want to proceed.

- Use water reserved by No. 449-3 or not, and
- The annual volume to place on the application in either gallons or acre-feet.

Thank you,

Ron Duvall
Dept. of Agriculture & Natural Resources
Office of Water, Water Rights Program
605.773.3352
danr.sd.gov



DANR
SOUTH DAKOTA

PS - Copying Chris Myers and Ted Lewis since referencing the city's future use permit.

Rodriguez, Rachel

From: Drake, Dan <Dan.Drake@SiouxFalls.Gov>
Sent: Wednesday, December 11, 2024 7:46 AM
To: Rodriguez, Rachel; Lentsch, Kyle
Subject: RE: [EXT] Water Permit Application

Rachel,

I will get another check sent out. Should I send it to your attention at the same address?

Thanks,

Dan Drake

Engineering Project Manager
Engineering-Project & Construction



📞 605-367-8036 📠 605-413-6880 ✉️ Dan.Drake@siouxfalls.gov

www.siouxfalls.gov

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Tuesday, December 10, 2024 4:13 PM
To: Lentsch, Kyle <Kyle.Lentsch@hdrinc.com>
Cc: Drake, Dan <Dan.Drake@SiouxFalls.Gov>
Subject: RE: Water Permit Application

External email - use caution when clicking on links or attachments.

Good afternoon,

We still need the fee which would be \$100 for the application and \$200 for the inspection fee, for a total of \$300. Therefore, minus the \$50 already received, comes to an additional \$250.00.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



From: Lentsch, Kyle <Kyle.Lentsch@hdrinc.com>
Sent: Monday, December 9, 2024 9:44 AM
To: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>

Cc: Drake, Dan <Dan.Drake@SiouxFalls.Gov>

Subject: RE: [EXT] Water Permit Application

- The City plans on using the water (likely starting in 2026)
- Okay – Process as a new permit
- The water will be used for a restroom, a utility sink, and a couple wall spigots. It will not be consumed so it can be listed as municipal.
- Annual amount of water is an approximation. 15 gal./min. x 5 min./time x 2 times/week x 52 weeks/year = 7,800 gal./year.

Let me know if you need anything else.

Thanks,

Kyle Lentsch, PE, CDT
D 605.977.7752 M 605.690.8677

hdrinc.com/follow-us

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>

Sent: Friday, December 6, 2024 1:48 PM

To: Drake, Dan <Dan.Drake@SiouxFalls.Gov>

Subject: Water Permit Application

External email - use caution when clicking on links or attachments.

Good afternoon,

I am in receipt of your application and have a few items that need clarification.

- If you plan to use the water, then this application is not a future use, it is a new application. Please clarify if you plan to use the water or are reserving it for future use.
- The fee for a new permit would be \$100 for the application and \$200 for the inspection fee, for a total of \$300. Therefore, we need an additional \$250.00.
- You have domestic, as well as municipal use checked. However, this would not be domestic since it will be used for municipal use.
- We need the annual amount of water in either gallons or acre feet, see attached.

Once I receive the items above, I can begin processing your application.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8916-3, City of Sioux Falls**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8916-3, City of Sioux Falls, c/o Dan Drake, 231 North Dakota Avenue, Sioux Falls, SD 57104.

The Chief Engineer is recommending APPROVAL of Application No. 8916-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until the city of Sioux Falls, holder of a future use permit from the Southern Skunk Creek management unit of the Big Sioux Aquifer fully develops water reserved from their future use permit, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The city of Sioux Falls has priority right to this water under future use withdrawal permit. Permit No. 8916-3 is issued as a temporary use permit pursuant to SDCL 46-5-39 and is subject to this prior right if or when the city of Sioux Falls develops their reserve water supply. Temporary Water Use Permit No. 8916-3 may be subject to cancellation when the water reserved under the future use permit is put to beneficial use. The Chief Engineer must provide the permit holder six months' notice prior to cancellation of this temporary use permit.
2. The well approved under Temporary Use Water Permit No. 8916-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The proposed well authorized by Temporary Use Permit No. 8916-3 must be constructed by a licensed well driller and construction of the well and installation of the pump must comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
4. The Permit holder must report to the Chief Engineer annually the amount of water withdrawn from the Big Sioux:Southern Skunk Creek aquifer.
5. Temporary Use Water Permit No. 8916-3 authorizes a total annual diversion of up to 0.024 acre feet of water from the Big Sioux:Southern Skunk Creek aquifer.

See report on application for additional information.

Eric Gronlund, Chief Engineer
February 10, 2025

Report to the Chief Engineer
On Water Permit Application No. 8916-3

City of Sioux Falls

February 6th, 2025

Water Permit Application No. 8916-3 proposes to appropriate up to 0.024 acre-feet of water annually (ac-ft/yr) at a pump rate of 0.033 cubic feet of water per second (cfs) (15 gallons per minute) from one well to be completed into the Southern Skunk Creek Management unit of the Big Sioux aquifer (approximately 35 feet deep) located in the NW ¼ NW ¼ Section 16-T101N-R50W, for municipal use at the Basin 15 Lift Station located in the NW ¼ NW ¼ Section 16-T101N-R50W. This site is located on the northwest outskirts of Sioux Falls, SD in Minnehaha County.

AQUIFER: Big Sioux: Southern Skunk Creek (BS:SSC)

HYDROGEOLOGY:

Lindgren and Niehus (1992) called the aquifer that this application proposes to appropriate water the Skunk Creek aquifer. However, Big Sioux: Southern Skunk Creek aquifer naming convention and management units from Hedges and others (1982) as adopted by the Water Rights Program and accepted by the Water Management Board will be used for this report.

The Big Sioux: Southern Skunk Creek aquifer is a Quaternary aged, surficial, glacial aquifer that underlies the Southern portion of the Skunk Creek floodplain (Hedges and others, 1982; Lindgren and Niehus, 1992). The aquifer underlies a total of 9,700 acres of Minnehaha County as seen in Figure 1 (Hedges and others, 1982). Iles and Frykman (1986) estimated the saturated thickness ranges between 4 to 74 feet. The aquifer is made up of fine to coarse sand and fine to medium gravel which can locally contain thin silty clay layers (Lindgren and Niehus, 1992). This aquifer is primarily under unconfined conditions (Lindgren and Niehus, 1992). The direction of ground water movement is generally towards and along Skunk Creek (Lindgren and Niehus, 1992).

Geologic information for four test wells was submitted with the application. The test wells were completed on March 29th-30th, 2023 and located approximately 0.4 miles south from the proposed diversion point (Water Rights, 2025d). The geology reports indicate the wells were completed into the Big Sioux: Southern Skunk Creek aquifer with the top of aquifer bearing material (poor-graded silty sand to well-graded silty sand and gravel) at 7 to 8 feet below the ground surface, with a static water level of around 9 to 10 feet below ground surface, and a saturated aquifer thickness of approximately 24 to 27 feet (Water Rights, 2025d, SDGS, 2025). Since other nearby water well completion reports also indicate unconfined conditions, the aquifer at the proposed diversion point for this application is expected to be unconfined.

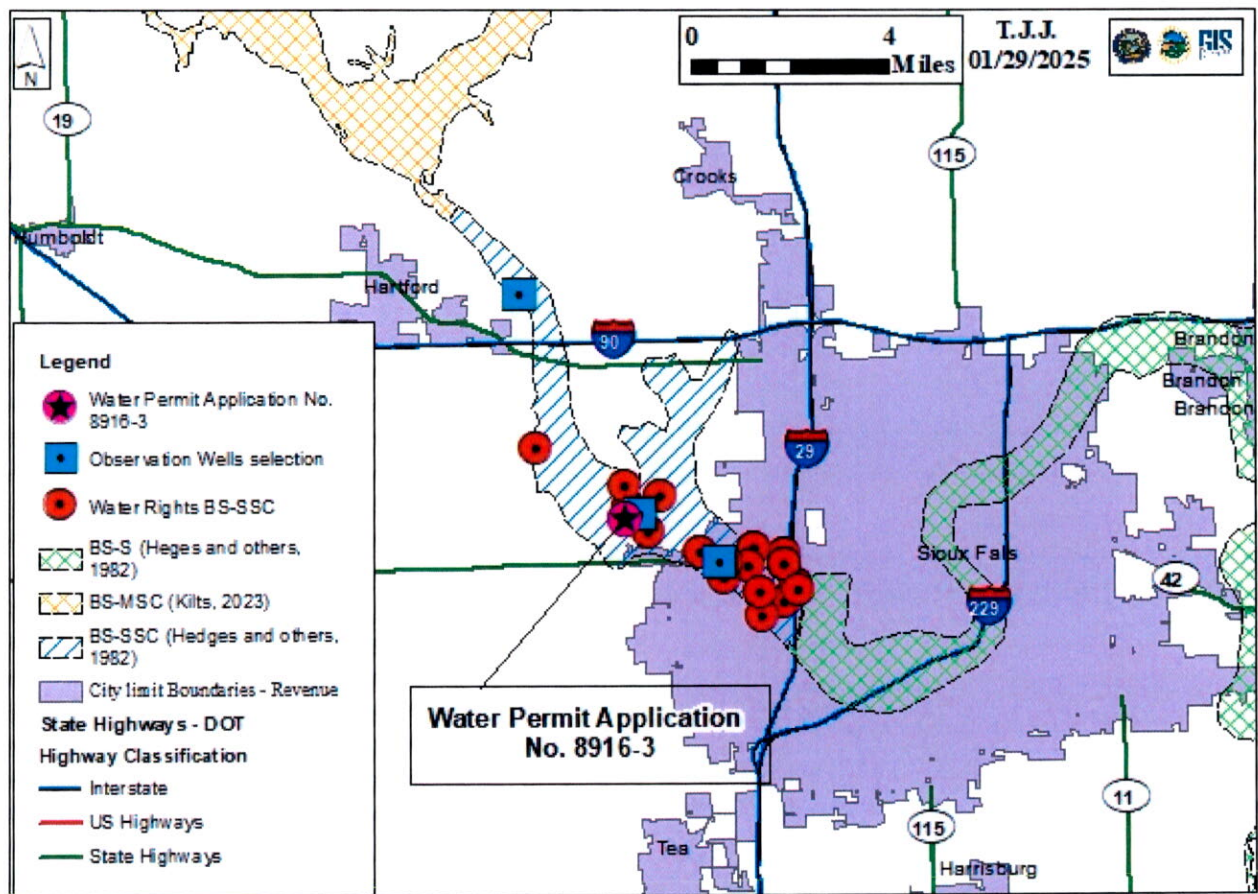


Figure 1. Map showing the approximate boundaries of the Big Sioux: Southern Skunk Creek (BS:SSC), Big Sioux: Middle Skunk Creek (BS:MSC), and Big Sioux: South (BS:S) aquifers (Hedges and others, 1982; Kilts, 2023), Big Sioux: Southern Skunk Creek observation wells/water rights (Water Rights, 2025b and 2025c), and the location of proposed diversion point for Water Permit Application No. 8916-3.

Applicable South Dakota Codified Laws (SDCL)

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that unappropriated water is available for the applicant’s proposed use, the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, the proposed use is a beneficial use, and the permit is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic uses and water rights within the Big Sioux: Southern Skunk Creek aquifer.

Pursuant to SDCL 46-5-39, temporary appropriations may be authorized from undeveloped future use permits using the permitting procedure of SDCL Chapter 46-2A. A future use permit is a permit reserving water for contemplated future needs upon a showing of availability of unappropriated water and future need, which can be issued to entities identified in SDCL 46-5-38,

such as municipalities or nonprofit rural water supply companies. Permits issued from undeveloped future use reservations are referred to as temporary use permits.

Pursuant to SDCL 46-5-40 the Chief Engineer must give at least six months notice prior to the cancellation of a temporary use permit. The temporary use permit may not be cancelled prior to the time at which facilities are constructed, and water may be put to beneficial use by the entity holding the future use permit.

WATER AVAILABILITY:

Water Permit Application No. 8916-3 proposes to appropriate water from the Big Sioux: Southern Skunk Creek aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems." The Big Sioux: Southern Skunk Creek aquifer is not older than or stratigraphically lower than the Greenhorn Formation, and the applicant's proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Big Sioux: Southern Skunk Creek aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Big Sioux: Southern Skunk Creek aquifer is received primarily through infiltration of precipitation, seepage from surface water, and inflow from the Wall Lake & Big Sioux: Middle Skunk Creek aquifers (Iles and Frykman, 1991; Lindgren and Niehus, 1992). Using observation well analysis, Hedges and others (1985) estimated a recharge rate of 2.7 inches per year for the Big Sioux: Southern Skunk Creek aquifer. The Big Sioux: Southern Skunk Creek aquifer has an estimated areal extent of approximately 9,700 acres (Hedges and others, 1982). Therefore, the average annual recharge rate for the Big Sioux: Southern Skunk Creek aquifer (based on Hedges and others, 1985 & 1982) is estimated to be approximately 2,183 acre-feet/year.

Ohland (1990), while working for the United States Geological Survey (USGS), modeled the approximate areas of the Big Sioux: Southern Skunk Creek and Big Sioux: Middle Skunk Creek aquifers. As part of modeling efforts, Ohland (1990) estimated the recharge (from 1978 to 1985) of the combined area to be 5.9 inches per year through observation well analysis and 11 inches per year through stream flow analysis. Ohland (1990) water levels and precipitation data were generally higher in the early to mid-1980s compared to data from the late 1970s.

Barari and others (1989) consulted with the USGS on what the estimated sustainable yield for the aquifer was under normal conditions. Based on modeling work by the USGS, the sustainable yield was estimated at 3.6 million gallons per day (4,032 acre-feet per year) (Barari and others, 1989). Sustainable yield is a general estimate of the amount for groundwater that can be withdrawn from an aquifer without causing negative impacts. While sustainable yield is not a direct estimate of average annual recharge, when taking into consideration the recharge analysis work by Ohland (1990), the average annual recharge to the aquifer could be closer to 4,032 acre-feet per year.

Discharge

Discharge from the Big Sioux: Southern Skunk Creek aquifer occurs primarily through seepage to Skunk Creek, well withdrawals, outflow to the Big Sioux: South aquifer and evapotranspiration in areas where the aquifer is at or near land surface (Lindgren and Niehus, 1992; Water Rights, 2025d). Currently, there are 19 water rights/permits authorized to appropriate water from the Big Sioux: Southern Skunk Creek aquifer (Water Rights, 2025c). There is one future use permit (Future Use Permit No. 449-3 held by the City of Sioux Falls) reserving 5,430 acre-feet/year of water from the Big Sioux: Southern Skunk Creek aquifer (Water Rights, 2025c). Future Use permits are assumed to be fully developable for the purpose of estimating withdrawals. While some parts of the future use area for Future Use Permit No. 449-3 fall outside of the currently mapped boundaries of the aquifer (Kilts, 2024), it is assumed that the future use permit will be developed entirely from the Big Sioux: Southern Skunk Creek aquifer.

Table 1 summarizes the 14 standard non-irrigation water rights/permits authorized to appropriate water from the Big Sioux: Southern Skunk Creek aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. The amount of water annually withdrawn was estimated with the assumption that non-irrigation water rights/permits limited by an annual volume will withdraw their entire permitted volume each year. It is assumed that non-irrigation water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time. The 60 percent estimation was established by Water Rights Staff to be a reasonable and safe assumption of average annual withdrawals by non-irrigation appropriations. Historically, the 60 percent estimate has been accepted by the Water Management Board. The 60 percent estimated average annual withdrawal for the Big Sioux: Southern Skunk Creek aquifer non-irrigation water rights/permits is 1,911 acre-feet (Table 1) (Water Rights, 2025c). However, based on the following discussion, not all of the appropriated water is being used resulting in an estimated use of 558 acre-feet (Table 1) (Water Rights, 2025c).

The water source for Water Permit No. 7201-3 is a dugout/pond with a location and depth capable of receiving water from the aquifer (Water Rights, 2025c). This permit is for commercial use in a rock and sand washing operation, which implements recycle and reuse (Water Rights, 2025c). Due to the recycle and reuse of water, the actual consumptive use of water is likely less than the estimate.

Water Right Nos. 5142-3 and 5346-3, held by Magellan Pipeline Company, are likely subject to partial or full cancellation due to nonuse. In 2008, it was determined that no additional remediation would be required for the spill these two water rights are associated with, so further pumping for groundwater remediation would not be required at the site by the regulatory agency overseeing spill cleanup (ICR, 2025). Additionally, the Water Rights Program has on file what appears to be plugging reports for several of the recovery wells for Water Right No. 5142-3 (Water Rights, 2025c). Therefore, average annual withdrawal for Water Right Nos. 5142-3 and 5346-3 is estimated to be zero acre-feet.

Water Right No. 6276-3 held by Dakota Aggregate Resource, is likely subject to partial or full cancellation due to nonuse. The last annual report for the operation filed with the DANR Minerals, Mining, and Superfund Program (MMS) indicates, the operator went bankrupt in 2016, was served a notice of violation in 2016, and the bond for the operation was released in 2022 (MMS, 2025; Kilts, 2024). MMS (2025) lists the sand and gravel operation as “inactive” and last use of the site was likely in 2016. Therefore, average annual withdrawal for Water Right No. 6276-3 is estimated to be zero acre-feet.

Water Right Nos. 2304-3, 4159-3, 4463-3, 5210-3, and 5713-3 were all associated with supplying water to mobile home parks under the same ownership at the time of licensing (Water Rights, 2025c). These mobile home parks were all inactivated as public water systems in the 1990s, when they connected to city water (Kilts, 2024; Water Rights, 2025c). If these wells are being maintained as backup water, use from the wells is likely limited. Therefore, average annual withdrawal for Water Right Nos. 2304-3, 4159-3, 4463-3, 5210-3, and 5713-3 is estimated to be zero acre-feet.

Water Right No. 4913-3 is held by Tower Tourist Camp. The campground was inactivated as a public water system in the 1990s, when they connected to city water (Kilts, 2024; Water Rights, 2025c). The file for Water Right No. 4913-3 notes that in 2000 some lawn watering was occurring at the time (Water Rights, 2025c). Although it is likely an overestimate, average annual withdrawal for Water Right No. 4913-3 is estimated to be pumping 60% of the time at the permitted diversion rate.

Water Right No. 5729-3 is held by Holiday Mobile Home Park. This mobile home park was inactivated as a public water system in the 1990s, when they connected to city water (Kilts, 2024; Water Rights, 2025c). If these wells are being maintained as backup water, use from the wells is likely limited. Therefore, average annual withdrawal for Water Right Nos. 5729-3 is estimated to be zero acre-feet.

Table 1. Estimated annual use for non-irrigation water rights/permits authorized to divert water from the Big Sioux: Southern Skunk Creek aquifer (Water Rights, 2025c; Kilts, 2024)

Permit No.	Name	Status	Uses	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	60% Pumpage (acre-feet/year)	Estimated Use (acre-feet/year)
2304-3	WEEG TRAILER PARK	LC	COM	0.020	N/A	9	0
4159-3	DON WEEG	LC	COM	0.670	N/A	291	0
4463-3	PINE KNOLL INC	LC	COM	0.020	N/A	9	0
4913-3	TOWER TOURIST CAMP	LC	COM, DOM	0.070	N/A	30	30
5142-3	MAGELLAN PIPE LINE CO LLC	LC	IND	0.130	N/A	56	0
5210-3	PINECREST INC	LC	SHD	0.220	N/A	96	0
5346-3	MAGELLAN PIPE LINE CO LLC	LC	IND	0.223	N/A	97	0
5713-3	PINECREST INC	LC	SHD	0.830	N/A	361	0
5729-3	HOLIDAY MOBILE PARK	LC	COM	0.330	N/A	143	0
746A-3	CHS INC	LC	IND, DOM, LCO	0.330	N/A	143	143
5916-3	NATURAL BEAUTY GROWERS LLC	LC	COM	0.460	N/A	200	200
6116-3	FALLS HOMES	LC	COM	0.011	N/A	5	5
6276-3	DAKOTA AGGREGATE RESOURCE	LC	COM	0.600	N/A	261	0
7201-3*	LG EVERIST INC	PE	COM	2.230	180.00	N/A	180
PE Permit, LC License, COM Commercial, IND Industrial, DOM Domestic, SHD Suburban Housing Development, LCO Livestock Confinement Operation *Permit indicates recycling and reuse of water, so the actual use is likely less than estimated.					Total	1,701	558

Currently, there are three irrigation water rights/permits appropriating water from the Big Sioux: Southern Skunk Creek aquifer (Water Rights, 2025c). These irrigation water rights/permits have been authorized to irrigate a total of 220 acres. All three irrigation water rights have been active since 2004. The average annual reported withdrawal rate for the Big Sioux: Southern Skunk Creek aquifer active irrigation water rights/permits from 2004 to 2023 is approximately 190 acre-feet per year (Table 2) (Water Rights, 2025a).

There are domestic wells completed into the Big Sioux: Southern Skunk Creek aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2025d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems and municipal water service in areas where the Big Sioux:

Southern Skunk Creek aquifer is the uppermost aquifer available; it is likely some domestic users may have transitioned to public water distribution systems. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Big Sioux: Southern Skunk Creek aquifer.

Temporary Use Permits

SDCL 46-5-39 allows for the issuance of temporary use permits for the temporary use of water reserved by future use permits. Currently, there are two active temporary use permits (Nos. 8427-3 & 8853-3). Temporary Use Permit No. 8427-3 appropriates up to 589 acre-feet of water annually from a pond/dugout for commercial use in a sand and gravel operation (Water Right, 2025c). The water is to be recycled by discharge to a settling pond and then diverted back to the pond for reuse (Water Right, 2025c). Due to the recycling, the consumptive use of water will likely be much lower than the permitted maximum volume. Although the permit has reported zero acre-feet use in 2021 to 2023, the permit is still within the five-year construction period. The maximum annual volume of 589 acre-feet will be used as an estimate, until sufficient reporting data is available to more accurately estimate the average annual use. Temporary Use Permit No. 8853-3 appropriates up to 6 acre-feet of water annually for dewatering a gravel pit for industrial use (Water Right, 2025c). Permit No. 8853-3 was approved in 2024, so the maximum annual volume of 6 acre-feet will be assumed, until sufficient reporting data is available to more accurately estimate the average annual use.

This application, if approved, proposes to appropriate up to 0.024 acre-feet of water annually for municipal use. Together, this application and Temporary Use Permit Nos. 8427-3 & 8853-3 appropriate 595.024 acre-feet annually for temporary use. That volume estimate is much less than the amount of water reserved by Future Use Permit No. 449-3. Currently, there is not a method in South Dakota codified law or administrative rule for turning a temporary use permit issued from water reserved by future use under SDCL 46-5-39 into a regular water right.

Table 2. Reported irrigation for active irrigation permits from the Big Sioux: Southern Skunk Creek aquifer (Water Rights, 2025a; Kilts, 2024)

Year	Reported Pumping No. 4231-3 (acre-feet)	Reported Pumping No. 5416-3 (acre- feet)	Reported Pumping No. 6493-3 (acre-feet)	Total (acre-feet)
2023	141.9	2.7	168.4	313.05
2022	57.28	24.08	103.46	184.82
2021	65.4	32.48	125.88	223.76
2020	72.31	40.21	145.97	258.49
2019	17.95	1.99	43.54	63.48
2018	32.59	0	59.81	92.40
2017	30.82	14.47	126.87	172.16
2016	54.02	11.93	115.06	181.01
2015	48.67	10.08	115.83	174.58
2014	48.39	16.7	83.46	148.55
2013	59.33	23.2	128.7	211.23
2012	38.01	18.56	172.38	228.95
2011	32.15	17.23	91.34	140.72
2010	10.61	0	85.62	96.23
2009	23.42	29.83	86.26	139.51
2008	63.86	24.56	112.91	201.33
2007	45.74	27.18	131.32	204.24
2006	74.41	40.92	150.93	266.26
2005	75.15	18.3	149.83	243.28
2004	59.22	26.29	175.66	261.17
2003	38.24	11.89	not yet issued	50.13
2002	36.46	16.26	not yet issued	52.72
2001	36.07	21.65	not yet issued	57.72
2000	43.25	15.32	not yet issued	58.57
1999	28.72	7.94	not yet issued	36.66
1998	92.99	4.25	not yet issued	97.24
1997	60	8	not yet issued	68.00
1996	185.04	13.82	not yet issued	198.86
1995	58.46	11.86	not yet issued	70.32
1994	12.45	12.63	not yet issued	25.08
1993	9.7	1.1	not yet issued	10.80
1992	10.83	5.6	not yet issued	16.43
1991	14.8	10	not yet issued	24.80
1990	0	0	not yet issued	0.00
1989	0	not yet issued	not yet issued	0.00
1988	72.6	not yet issued	not yet issued	72.60
1987	173	not yet issued	not yet issued	173.00
1986	55	not yet issued	not yet issued	55.00
1985	32.3	not yet issued	not yet issued	32.30
1984	27	not yet issued	not yet issued	27.00
1983	23.85	not yet issued	not yet issued	23.85
1982	47.32	not yet issued	not yet issued	47.32
Overall Average	50.2	15.3	118.7	119.1
Average (2004-2023)	52.6	19.0	118.7	190.3

Hydrologic Budget Summary

The average annual recharge rate to the Big Sioux: Southern Skunk Creek aquifer is an estimated range from about 2,183 to 4,032 acre-feet/year (Hedges and others, 1985 & 1982; Ohland, 1990). Average annual appropriative withdrawals (excluding temporary use permits) are estimated at approximately 6,178 acre-feet/year (non-irrigation: 558 acre-feet per year, irrigation: 190 acre-feet per year, and future use: 5,430 acre-feet per year) Therefore, water is not available to issue a new regular water permit from the aquifer.

Pursuant to SDCL 46-5-39, temporary use permit may be authorized from undeveloped future use permits. Based on the currently available information on the water rights/permits, estimated average annual appropriative pumpage from the aquifer is 1,343.024 acre-feet (non-irrigation: 558 acre-feet per year, temporary use water permits: 595.024 acre-feet per year, and irrigation: 190 acre-feet per year). In addition, 5,430 acre-feet of water per year is reserved in existing future use permits. Given the best information currently available, there is a reasonable probability that water is available to issue this application only as a temporary use water permit out of undeveloped future use (Future Use Permit No. 449-3) pursuant to SDCL 46-5-39. Temporary use permits are subject to cancellation upon six months notice to the permit holder when water permits are approved which authorize construction and placing reserved water to beneficial use from existing future use permits that results in withdrawals exceeding recharge to the Big Sioux: Southern Skunk Creek aquifer.

The priority date for Future Use Permit No. 449-3 is April 8, 1957. The reserved volume for future use exceeds all estimates of average annual recharge for the Big Sioux: Southern Skunk Creek aquifer. Only Water Right No. 4463-3 has a priority date senior to Future Use Permit No. 449-3. If Future Use Permit No. 449-3 is developed, annual reporting of water use for all water rights/permits in the aquifer will be necessary to maintain a balance of recharge and discharge, while putting the water in the aquifer to maximum beneficial use.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DANR-Water Rights Program maintains three observation wells completed into the Big Sioux: Southern Skunk Creek aquifer. The observation wells completed into the aquifer are shown on Figure 1 (Water Rights, 2025b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The three closest observation wells to the proposed diversion point are MA-80X (approximately 0.3 miles northeast), MA-80Y (approximately 1.2 miles southeast), and MA-78F (approximately 5.1 miles northwest) (Water Rights, 2025b). The water level elevations for these observation wells are displayed in Figure 2

(Water Rights, 2025b). It should be noted that observation well MA-80Y has no recorded measurements after 2018. The well has not been located since 2019 and was likely destroyed between September 2018 and June 2019. Although MA-80Y has no recent data, the historic data can still be analyzed. In this case, review of MA-80Y is used because of the limited number of observation wells completed into the aquifer and the water levels in MA-80Y were representative of the water levels in the aquifer in general.

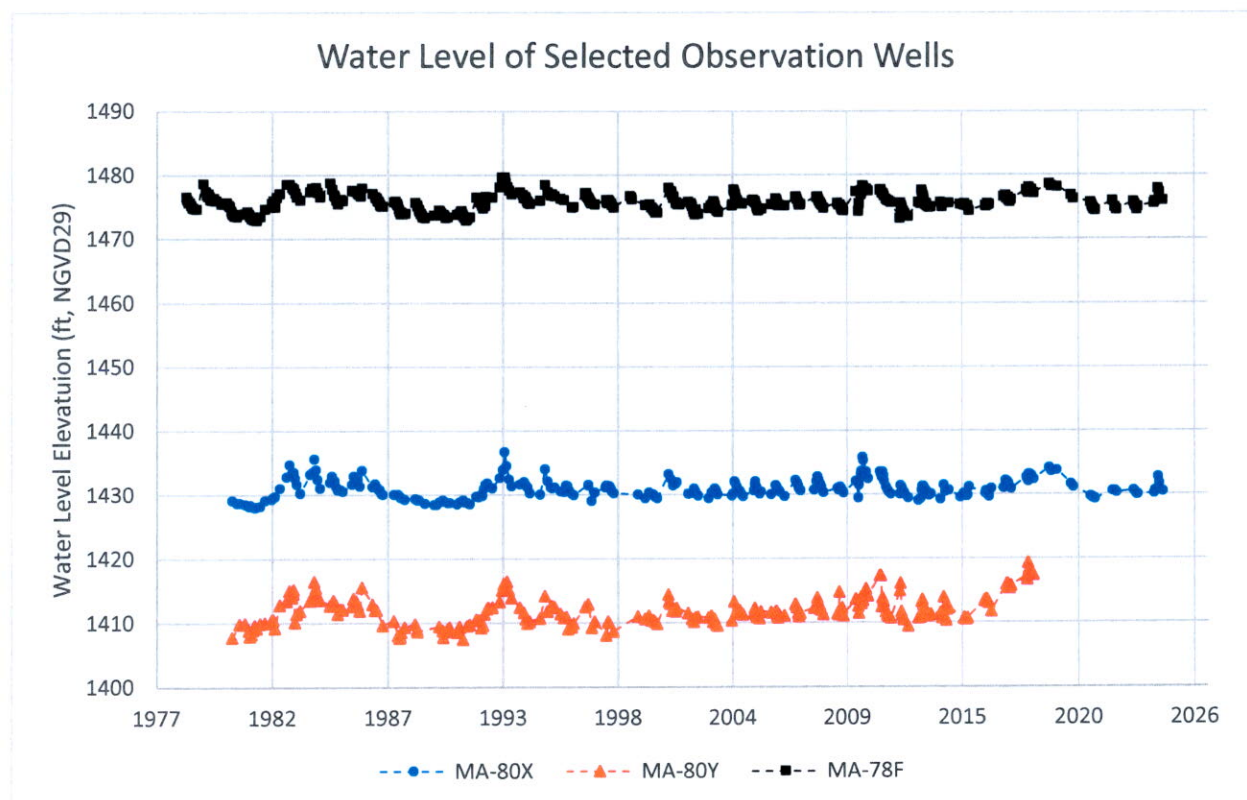


Figure 2. A graph showing the elevation of water levels in observation wells MA-80X, MA-80Y, and MA-78F (Water Rights, 2025b)

Figure 2 shows that the observation wells display generally stable water levels. The hydrographs for the Big Sioux: Southern Skunk Creek aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of water levels in the aquifer rather than the impacts of pumping from the Big Sioux: Southern Skunk Creek aquifer. It should be noted, water levels in observation wells are representative of recharge to, natural discharge from, and active withdrawals from the aquifer. They do not represent future withdrawals of water reserved by future use permits. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate water is available for appropriation as a temporary use permit.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Water rights/permits in the general vicinity of the proposed well site for this application are shown in Figure 3 and summarized in Table 3 (Water Rights, 2025c). The closest water right/permit (not held by the applicant) to the proposed diversion point is Water Right No. 5916-3 which is held by Natural Beauty Growers LLC. The diversion point for Water Right No. 5916-3 is located approximately 0.2 miles northeast of the proposed diversion point for this application (Water Rights, 2025c). There are domestic wells on file with the DANR-Water Rights Program that are completed into the Big Sioux: Southern Skunk Creek aquifer, with the closest domestic well on file (not held by the applicant) located within 0.2 miles northeast of the proposed diversion point (Water Rights, 2025d). The proposed well site for this application is located in the future use area of Future Use Permit No. 449-3 held by the City of Sioux Falls (the applicant). The location of domestic wells is based on the information provided by the well driller on the submitted well completion report. There could potentially be other domestic wells completed into the Big Sioux: Southern Skunk Creek aquifer near the proposed well site that are not on file with the DANR-Water Rights Program.

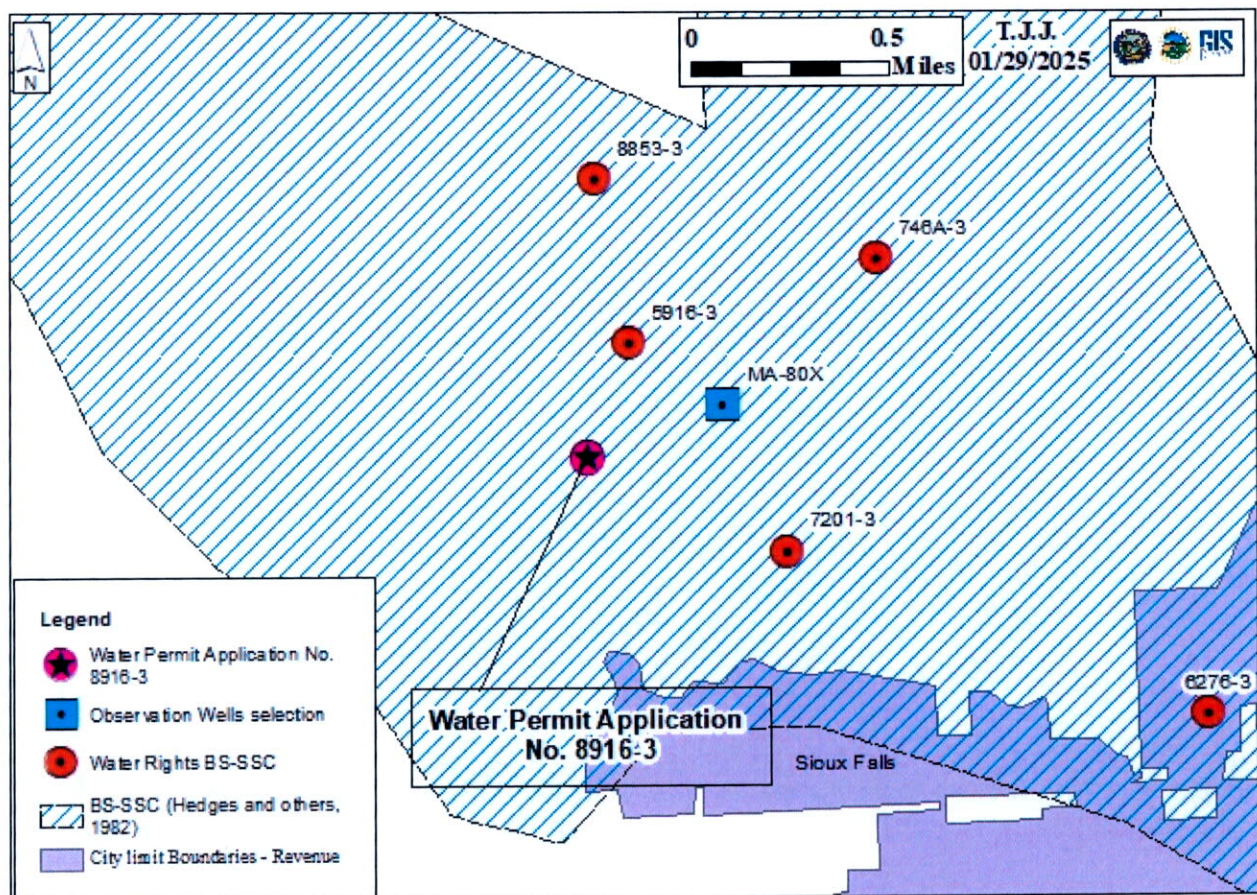


Figure 3. Map of the Big Sioux: Southern Skunk Creek aquifer water rights/permits within 2 miles of the location of the well for Water Permit Application No. 8916-3 (Water Rights, 2025b and 2025c).

Table 3. List of water rights/permits shown in Figure 3.

Permit	Name/Business	Priority	Status	Use Type	CFS
5916-3	Natural Beauty Growers LLC	03/18/1996	License	Commercial	0.46
6276-3	Dakota Aggregate Resource	07/30/2001	License	Commercial	0.6
7201-3	L G Everist Inc.	05/26/2010	Permit	Commercial	2.23
746A-3	CHS Inc	10/22/1960	License	Industrial, Domestic	0.33
8853-3*	Darby Parson – Prairie States Pit	04/05/2024	Permit	Industrial	0.67
*These permits are temporary use permits (including this application).					

The Big Sioux: Southern Skunk Creek aquifer is primarily under unconfined conditions and drawdown as the result of pumping in an unconfined aquifer typically does not extend far from the pumping well. The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.”

Due to the thinner saturated thickness of the aquifer in some locations, conditions can occur where withdrawals in the aquifer exceed recharge for a period of time, such as late summer and early fall or extended drought conditions. Situations may occur where pumping from a thicker part of an unconfined aquifer could cause drawdown impacting adequate wells in a thinner part of the aquifer. Under such conditions an unlawful impairment of senior water rights/permits or adequate domestic wells may occur. Therefore, the applicant should control their withdrawals so that nearby adequate domestic wells and senior water rights/permits are able to access needed water. There are two complaints of well interference on file with the Water Rights Program for this aquifer both from the late 1980s within the city limits of Sioux Falls, but neither complaint was substantiated as unlawful impairment (Water Rights, 2025d). This area of the aquifer also has a history of sand and gravel mining in the aquifer materials of this aquifer without a history of complaints of well interference (Water Rights, 2025c & 2025d; MMS, 2024). Ultimately, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20 (6) and (7)), the saturated aquifer thickness at the proposed diversion point, the lack of recent well interference complaints for adequate wells completed into the Big Sioux: Southern Skunk Creek aquifer in Minnehaha County (Water Rights, 2025e), there is a reasonable probability that any drawdown created from the proposed diversion is not expected to cause an unlawful impairment on proposed water right/permit holders or domestic users with adequate wells.

CONCLUSIONS:

1. Water Permit Application No. 8916-3 proposes to appropriate up to 0.024 acre-feet/year at a pump rate of 0.033 cfs from one well to be completed into the Southern Skunk Creek Management unit of the Big Sioux aquifer (approximately 35 feet deep) located in the NW ¼ NW ¼ Section 16-T101N-R50W, for municipal use at the Basin 15 Lift Station located in the NW ¼ NW ¼ Section 16-T101N-R50W. This site is located on the northwest outskirts of Sioux Falls, SD in Minnehaha County.
2. Future Use Permit No. 449-3 is held by the City of Sioux Falls and reserves 5,430 acre-feet per year.
3. Based on the hydrologic budget and observation well data, there is a reasonable probability that sufficient water is available at the current level of average annual appropriative pumping for this application to be approved as a temporary use water permit out of the undeveloped future use reservation pursuant to SDCL 46-5-39.
4. There is a reasonable probability that the diversion by Water Permit Application No. 8916-3 will not unlawfully impair adequate wells for existing water rights/permits and domestic uses.



Tyler Jensen
Natural Resources Engineer I
SD DANR - Water Rights Program

Reviewed by:



Adam Mathiowetz, PE
Natural Resources Engineer IV
SD DANR - Water Rights Program

References

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- Dakota and Iowa, Task 1: Bed rock Topography and Distribution, Task 2: Extent of Aquifers, Task 3 Ground-Water Storage, Task 4: Computerized Data Base. United States Army Corps of Engineers Contract DACW 45-80-C-0185.
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- Water Rights, 2025c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2025d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2025e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.**

February 13, 2025

City of Sioux Falls
c/o Dan Drake
231 North Dakota Avenue
Sioux Falls SD 57104

Dear Mr. Drake:

Water Permit Application No. 8916-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Argus Leader printed in Sioux Falls SD (online portal system, email will be provided). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

NOTICE OF APPLICATION NO. 8916-3 to Appropriate Water

Notice is given that the City of Sioux Falls, 231 North Dakota Avenue, Sioux Falls SD 57104, has filed an application for a water permit to appropriate up to 0.024 acre-feet of water annually at a maximum pump rate of 0.033 cubic feet of water per second from one well to be completed into the Big Sioux: Southern Skunk Creek Aquifer (approximately 35 feet deep) located in the NW 1/4 NW 1/4 Section 16-T101N-R50W for municipal use at the Basin 15 Lift Station located in the NW 1/4 NW 1/4 Section 16-T101N-R50W. This site is located on the northwest outskirts of Sioux Falls SD city limits.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8916-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until the city of Sioux Falls, holder of a future use permit from the Southern Skunk Creek management unit of the Big Sioux Aquifer fully develops water reserved from their future use permit, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by March 10, 2025.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by March 10, 2025.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, February 13, 2025 11:28 AM
To: legals@argusleader.com
Subject: 8916-3 City of Sioux Falls - Public Notice
Attachments: 8916-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on February 28, 2025.

City of Sioux Falls, 231 North Dakota Avenue, Sioux Falls SD 57104, 605-367-8036, Dan.Drake@siouxfalls.gov will be notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



AFFIDAVIT OF PUBLICATION

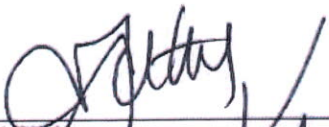
Jermery J. Washington
the Carnegie Town Hall
Sf, City Of
235 W 10Th St
Sioux Falls SD 57104-6302

STATE OF WISCONSIN, COUNTY OF BROWN

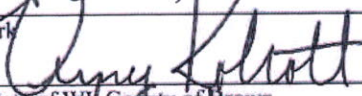
The Argus Leader, a daily newspaper published in the city of Sioux Falls, Minnehaha County, State of South Dakota, and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issue:

02/28/2025

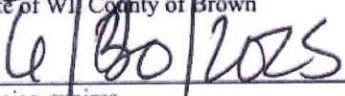
and that the fees charged are legal.
Sworn to and subscribed before on 02/28/2025



Legal Clerk



Notary, State of WI, County of Brown



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Please do not use this form for payment remittance.

AMY KOKOTT
Notary Public
State of Wisconsin

NOTICE OF
APPLICATION NO. 8916-3
to Appropriate Water

Notice is given that the City of Sioux Falls, 231 North Dakota Avenue, Sioux Falls SD 57104, has filed an application for a water permit to appropriate up to 0.024 acre-feet of water annually at a maximum pump rate of 0.033 cubic feet of water per second from one well to be completed into the Big Sioux: Southern Skunk Creek Aquifer (approximately 35 feet deep) located in the NW 1/4 NW 1/4 Section 16-T101N-R50W for municipal use at the Basin 15 Lift Station located in the NW 1/4 NW 1/4 Section 16-T101N-R50W. This site is located on the northwest outskirts of Sioux Falls SD city limits.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8916-3 as a TEMPORARY USE PERMIT pursuant to SDCL 46-5-39 because 1) water is available to be appropriated as a temporary use permit until the city of Sioux Falls, holder of a future use permit from the Southern Skunk Creek management unit of the Big Sioux Aquifer fully develops water reserved from their future use permit, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at

<https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

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<https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by March 10, 2025.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published Feb 28, 2025, at the total approximate cost of \$60.17 and may be viewed free of charge at www.sdpublicnotice.com

Rodriguez, Rachel

From: Gannett Legals Public Notices 4 <ganlegpubnotices4@gannett.com>
Sent: Thursday, February 13, 2025 11:46 AM
To: Rodriguez, Rachel
Subject: RE: [EXT] 11041842 8916-3 City of Sioux Falls - Public Notice
Attachments: 11041842.pdf

Good Morning,

Please find your order confirmation and proof of ad attached.

Your ad is set to run in the Argus Leader on February 28. The order cost is \$60.17 which includes an affidavit, that will be mailed to you 7-10 business days after the last day of the ad printing.

All orders are subject to a 3.99% service fee. As an incentive for customers, we provide a discount off the order cost equal to the 3.99% service fee if you pay with ACH. Pay by ACH and Save!
Final order cost provided at time of payment and via a receipt.

Your notice is scheduled to run per your request and will publish unless you reply to this email requesting changes or to cancel.

If you would like to utilize our online self-serve ad portal to place your legal notices in the future, please visit your local publication's online classifieds legal section. There, you can conveniently submit and immediately preview your notices anytime, 24/7.

Thank you!

Brittany Grady
Public Notice Representative



Office: 844-254-5287

From: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Sent: Thursday, February 13, 2025 11:28 AM
To: SFA-Legals mbx <allegals@gannett.com>
Subject: 11041842 8916-3 City of Sioux Falls - Public Notice

Attached is a notice to be published on February 28, 2025.

City of Sioux Falls, 231 North Dakota Avenue, Sioux Falls SD 57104, 605-367-8036, Dan.Drake@siouxfalls.gov will be notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Order Confirmation
Not an Invoice

Account Number:	1248656
Customer Name:	Sf, City Of
Customer Address:	Sf, City Of 235 W 10Th St City Clerks Office The Carnegie Town Hall Sioux Falls SD 57104-6302
Contact Name:	Denise Tucker
Contact Phone:	
Contact Email:	Denise.Tucker@SiouxFalls.Gov
PO Number:	

Date:	02/13/2025
Order Number:	11041842
Prepayment Amount:	\$ 0.00

Column Count:	1.0000
Line Count:	173.0000
Height in Inches:	0.0000

Print

Product	#Insertions	Start - End	Category
SFA SiouxFalls Argus Leader	1	02/28/2025 - 02/28/2025	Govt Public Notices
SFA argusleader.com	1	02/28/2025 - 02/28/2025	Govt Public Notices

As an incentive for customers, we provide a discount off the total order cost equal to the 3.99% service fee if you pay with Cash/Check/ACH. Pay by Cash/Check/ACH and save!

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Tax Amount	\$0.00
Service Fee 3.99%	\$2.40
Cash/Check/ACH Discount	-\$2.40
Payment Amount by Cash/Check/ACH	\$60.17
Payment Amount by Credit Card	\$62.57

Order Confirmation Amount
\$60.17

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, February 13, 2025 12:00 PM
To: Drake, Dan
Subject: 8916-3 City of Sioux Falls - Public Notice
Attachments: 8916-3 Rec.pdf; 8916-3 Ltr.pdf; 8916-3 PubNotice.pdf; Argus Leader.pdf

Good morning,

Attached is a copy of the report, chief engineer's recommendation, and information regarding the public notice for your water permit application. You may receive an email from the online portal, if they send it to me, I will forward to you. As stated in the letter, please contact the paper(s) as soon as possible to authorize publication and arrange for payment. This information is also being mailed to you today.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

APR 03 2025

City of Sioux Falls
c/o Dan Drake
231 North Dakota Avenue
Sioux Falls SD 57104

Dear Mr. Drake:

Enclosed is Water Permit No. 8916-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Mark Mayer, PE
Director of Office of Water

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

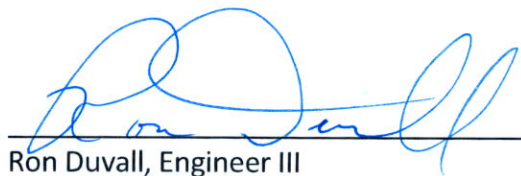
Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8916-3

Name of Applicant: City of Sioux Falls, Dan Drake

Date of Posting: 2/24/2025

Date of Removal: 4/3/2025

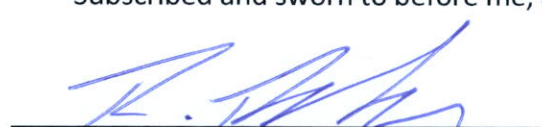


Ron Duvall, Engineer III

4/4/2025

Date

Subscribed and sworn to before me, a notary public, this 4th day of April, 20 25.



Notary Public - South Dakota

My commission expires:

**Rachel Rodriguez
My Commission Expires
May 16, 2029**

(SEAL)

