

Environmental Report

City of Springfield Additional Water Plant Work

June 2024

Prepared By:

Planning & Development District III

PO Box 687

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Project Description and Location: The City of Springfield, located in Bon Homme County in southeast South Dakota, is proposing to include additional work elements to its ongoing water plant construction project. This additional work, which was not identified when the original environmental assessment for the project was completed, is shown in **Exhibit 1**. Following is a summary of the proposed work activities:

- Demolishing the current water plant building, a single-story brick structure that was built in 1966. Prior to demolition, asbestos that is known to be present in the floor tiles will be removed and disposed of at a licensed waste disposal facility.
- Constructing a channel that will improve drainage on the water plant property. It will start near the northwest corner of the property and run down to a natural drainageway that empties into the Missouri River. The channel will be approximately 700 feet in length, clad with riprap and concrete. Its width will vary, with some areas up to 25 feet wide, and it will be approximately two feet deep. See **Exhibit 3** for a detailed layout of the proposed channel.
- Reconstructing one block each of Eighth Street and Oak Street adjacent to the water plant site. The street segments will be given a new base course, six-inch asphalt surface, and curb and gutter. An 18-inch culvert will be installed under Eighth Street to replace an existing culvert that no longer functions well. The total length of construction will be approximately 800 feet.
- Replacing approximately 200 feet of asbestos cement 10-inch waterline under Ash Street from Eighth Street south to the new plant with 10-inch PVC pipe.

All construction activity will take place in Township 93N, Range 60W, Section 24 within the City of Springfield, South Dakota. Attached are a map showing the general location of the project elements (**Exhibit 1**) and photographs of the areas of work activity (**Exhibit 2**).

Land Ownership and Land Use: Almost all work activity will occur on land owned by the City of Springfield, but some minor modifications are proposed for the raw water intake, which is located in the Missouri River. This area is under the jurisdiction of the US Army Corps of Engineers (see **Exhibit 4**), which has been consulted regarding the project.

Important Farmland: The project will take place within the incorporated city limits of Springfield and will not involve the conversion of any land from its current state. Although Web Soil Survey documentation for farmland classification from the Natural Resources Conservation Service (NRCS) shows the project area as prime farmland (see **Exhibit 5**), there will be no impact on farmland since the land has already been developed. The NRCS state office had no concerns with the project; their comments are included as part of **Exhibit 14**.

Floodplains: FEMA has not completed a study to determine flood hazard in Bon Homme County, and therefore there is no flood map available for Springfield. Since the project site is unmapped, the NRCS web soil survey was used to determine the potential for flooding on the site. According to the flooding frequency class documentation pulled from the NRCS web soil survey website, the chance of flooding is nearly 0 percent in any year (see **Exhibit 6**). Given this information,

Planning and Development District III is suggesting the project will neither directly nor indirectly affect floodplains. Local floodplain managers will be contacted prior to construction.

Wetlands: Data from the National Wetlands Inventory was checked to see if wetlands are present in the area. No wetlands were found within the project footprint, but the Missouri River is located in the immediate vicinity of the project (see **Exhibit 7**). **Exhibit 8** is Hydric Rating information from the Natural Resources Conservation Service (NRCS), which identifies the project area soil associations as EaA, EaB, and EbE. The EbE soil type is noted as not hydric, while the other two soil types are noted as “Hydric (1 to 32%)”, which is the lowest percentage of the hydric soil types. This low percentage indicates little potential for long-term water flooding or ponding.

Planning and Development District III staff contacted the US Army Corps of Engineers about the project on May 15, 2024. After further discussion with their staff, additional details about the project were provided to the Corps on May 23rd. The Corps responded by stating that it appears the only wetland/water impacted is the ‘Backwash Pond’ which looks to be a constructed waste treatment pond. Although this type of feature is generally not jurisdictional under Section 404 of the Clean Water Act, an Approved Jurisdictional Determination with supporting information would need to be requested prior to construction in order to receive official confirmation of this. Alternatively, the project could proceed directly to permitting under the assumption that any wetlands or other waters impacted are jurisdictional. It appears that this project would qualify for a Nationwide Permit. If the total loss of waters (wetlands and other waters) is less than 1/10 acre, the permit would not have to be submitted, as long as the project complies with all other terms and conditions of the permit. See **Exhibit 14** for documentation on the outreach to the Corps.

Given this information and the feedback received from the US Army Corps of Engineers, Planning and Development District III is suggesting the project will not impact wetlands.

Historic Preservation: A database search of NEPA Assist, the National Register of Historic Places, and the South Dakota (SD) State Register of Historic Places was completed. Three properties - the Peter Monfore House, the Main Hall (USD Campus), and the Thompson House - were identified as being within or near the City of Springfield, but none of the properties is located within the project’s Area of Potential Effect.

Recognizing the programmatic agreement between USDA Rural Development and the South Dakota State Historic Preservation Office to meet the requirements of the National Historic Preservation Act and Section 106, a summary of information regarding the project’s possible impact on historic and cultural resources was prepared for the South Dakota Historic Preservation Office (SHPO), which is included as **Exhibit 9**. Planning and Development District III is suggesting a preliminary finding of “No Historic Properties Affected”.

Biological Resources: Planning and Development District III staff consulted with the US Fish and Wildlife Service and the South Dakota Dept of Game, Fish, and Parks to determine the project’s potential to impact biological resources, including threatened and endangered species. Project information entered into the US Fish and Wildlife Service’s Information for Planning and

Consultation (IPaC) website by Planning and Development District III staff revealed that the following threatened and endangered species might be present in the project location:

- Mammals: northern long-eared bat and tricolored bat
- Birds: piping plover ¹, red knot, and whooping crane
- Fish: pallid sturgeon
- Insects: monarch butterfly
- Plants: western prairie fringed orchid

The IPaC consultation process included a determination key that was run for the northern long-eared bat, an endangered species that faces extinction due to the range-wide impacts of white-nose syndrome. Information about the project submitted into the key stated that all tree cutting would be restricted to the inactive season for the bat, which in South Dakota is from October 1 through May 15.

After the IPaC process was completed, a letter was generated from the US Fish and Wildlife Service on May 13, 2024, which is included as part of **Exhibit 14**. The letter included the following comments: Based upon your IPaC submission and a standing analysis completed by the Service, your project has reached the determination of “May Affect, Not Likely to Adversely Affect” the northern long-eared bat. Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that consultation on the Action is complete and no further action is necessary unless either of the following occurs:

- New information reveals effects of the action that may affect the northern long-eared bat in a manner or to an extent not previously considered; or
- The identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat that was not considered when completing the determination key.

Later on May 13th, the US Fish and Wildlife Service sent a letter to Planning and Development District III which stated “The IPaC determination of a “not likely to adversely affect” generated by the determination key ends the consultation for that species (the northern long-eared bat), and the USFWS has no comments or concerns for the remaining species due to the urban nature and previously disturbed grounds associated with this project.”

Correspondence from the US Fish and Wildlife Service and the South Dakota Dept of Game, Fish, and Parks is included as part of **Exhibit 14**. Based on the response from these organizations, Planning and Development District III is suggesting a finding of “No Impact” regarding threatened and endangered species, as long as tree cutting occurs between October 1 and May 15.

¹ The IPaC consultation indicated that critical habitat exists within the project area for the piping plover, which is a threatened species. These birds nest on sandbars in the Missouri River, which will not be affected by the project.

Miscellaneous Resources: Planning and Development District III staff examined whether the project might have other impacts. Following is a summary of the expected impacts, which includes comments received from the South Dakota Department of Agriculture and Natural Resources (DANR).

Air Quality: No air quality metering station is located within the general region of the project. However, considering the nature of the project, there will be no impact to air quality from the project once it is completed and minimal emissions from equipment during construction. These opinions were confirmed by DANR, which stated that the project is unlikely to have adverse impacts to air quality in the area (see **Exhibit 14**).

Water Quality: The project site is not located within a wetland. However, if for some reason work must occur within a wetland, it will be completed in accordance with the guidelines delineated by the appropriate State and Federal Agencies. The project is located within a drinking water source, namely the Missouri River, which supplies water to Springfield and many other communities within southeast South Dakota.

The response from DANR stated the project will not have adverse environmental effects to drinking water in the area and is unlikely to have adverse effects on ground water quality. DANR's Water Quality Program provided the following comments regarding the project:

- All tributaries, creeks, wetlands, and lakes within the vicinity of the project are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that water quality standards are not violated.
- The project is next to the Missouri River. This waterbody is classified by the South Dakota Surface Water Quality Standards and Uses Assigned to Streams for the following beneficial uses: (4) Warmwater permanent fish life propagation waters; (7) Immersion recreation waters; (8) Limited contact recreation waters; (9) Fish and wildlife propagation, recreation, and stock watering waters; and (10) Irrigation waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that the 30-day average total suspended solids criterion of 90 mg/L and the daily maximum total suspended solids criterion of 158 mg/L are not violated.
- At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities. A Surface Water Discharge permit may be required if any construction dewatering should occur as a result of this project.
- The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment except where authorized under Section 404 of the Federal Water Pollution Control Act.

Solid Waste Management: Solid waste will be generated by the project. Construction debris generated from the street and utility work will be disposed of by the contractor per the project's bid specifications. Debris generated from the demolition of the old water plant will be disposed of at a regional landfill permitted to accept all waste generated. Prior to demolition, asbestos present in the building's floor tiles will be removed and disposed of at a permitted facility (see Hazardous Substances below for further information). DANR commented that some solid waste may be generated during the project and that any such waste generated that will not be reused in some beneficial manner must be disposed of or managed at a permitted solid waste facility.

Coastal Areas: No impact, as there are no coastal zone management areas or Coastal Barrier Resource Areas present in South Dakota.

Nonattainment Areas: EPA databases were utilized to determine if the project lies within a designated nonattainment area. **Exhibit 10** shows that there are no nonattainment areas located near Springfield.

Wild and Scenic Rivers: There are no wild and scenic rivers near the project site.

Noise: The project will cause short term noise disruptions during construction activity, but no long-term impacts. The noise generated is not expected to be significant, and the potential for negative impacts will be further reduced through regulation of operational hours of the construction activities.

Transportation: The project will not have an adverse impact on Springfield's transportation system, other than temporary traffic disruptions during reconstruction of the Eighth and Oak Street segments and replacement of the water main under Ash Street. The project will not result in an increase in traffic volume.

Energy: Springfield relies on electrical power provided by NorthWestern Energy, a portion of which is generated via hydroelectric turbines at Gavins Point Dam west of Yankton, South Dakota. No component of the proposed work will have a significant effect on NorthWestern's electrical distribution capacities. In addition to electrical power, residents and businesses in Springfield utilize propane gas as a primary source of energy. Again, the project will have no impact on this fuel source.

Sole Source Aquifers: There are currently no sole source aquifers in South Dakota.

Hazardous Substances: Although the response from DANR stated that it is not expected that any hazardous wastes sites will be encountered within the vicinity of the project area, asbestos and lead-based paint are known to be present in the old water plant. Geotek Engineering & Testing Services conducted an environmental site assessment of the plant in the fall of 2022 during which non-friable asbestos was detected in three of the eight samples at greater than 1% asbestos (see **Exhibit 11**). This material was found in the floor tiles of the lime room, parts room, bathroom, office, and the storage and chlorine room. The site

assessment also found lead-based paint in some piping in the plant's basement. However, no evidence of recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), or historical recognized environmental conditions (HRECs) was found.

The comments from DANR stated that demolition of a building structure is subject to South Dakota asbestos requirements, including inspection, abatement of regulated asbestos-containing materials, and notification ten days prior to the start of the project. Geotek recommends that asbestos materials in poor condition be removed by a licensed abatement firm prior to building demolition. Abatement will be coordinated through the SD Department of Agriculture and Natural Resources Brownfields Program and asbestos removed from the building will be disposed of at a permitted facility that accepts asbestos waste in accordance with applicable federal and state regulations. Regarding lead-based paint abatement, Geotek recommends that contractors comply with OSHA lead exposure rules during work involving potential lead-based paint.

Tanks and Spills: The response from DANR stated that their records show one environmental event, but that no registered storage tank facilities were identified near the project area. Information about the event was included in their response letter, which is included as part of **Exhibit 14**. DANR further stated that if contamination is encountered or if a spill occurs during onsite construction activity, that contamination or spill must be reported to DANR. Contaminated soil that has been excavated should be segregated from clean soil and sampled to determine disposal requirements. Further, any piping, equipment, or other material to be placed in a location where it will be in contact with contaminated soil or groundwater, should be evaluated to determine if it is compatible with the contaminant.

Planning and Development District III staff also researched the presence of tanks and records of hazardous materials spills in the vicinity of the project area by reviewing DANR's Tanks, Spills, and Environmental Events Map (apps.sd.gov/NR42InteractiveMap). Three underground tanks and ten records of spill events were found within a half mile radius of the project site. Documentation is attached as **Exhibit 12**.

Other Resources: The proposed project is not expected to have a negative impact upon any other resources not already discussed. There will be no adverse visual impacts, nor will the project have any impact regarding climate change as only minimal emissions will be given off by construction equipment during the construction phase. No other environmental resources other than those already discussed are known to be present on or near the project site.

Socio-Economic Impact: Planning and Development District III staff examined the project's potential to disproportionately impact human health and the environment near minority and low-income population areas. Consultation using EPA's Environmental Justice resources revealed that the project will not have an impact upon either of these populations. Documentation is attached as **Exhibit 13**.

Mitigation Measures: Responses received from the various agencies contacted about this project indicate that mitigation measures will be required. Following is a summary of the requirements:

- The US Fish and Wildlife Service recommends that tree cutting be restricted to the period of October 1 through May 15 so as not to disturb any northern long-eared bats that may be present.
- The DANR Resource Conservation & Forestry Program commented that special construction measures may have to be taken to preserve and protect tree health by avoiding damage to tree roots, stems, or branches. At a minimum the storage of equipment, machinery, or trucks under or against a tree should be avoided. Barriers or sturdy fencing should be placed around trees that will remain on site following construction. These measures pertain to construction of the proposed drainage channel.
- The DANR Solid and Hazardous Waste Program commented that demolition of a building structure is subject to the South Dakota asbestos requirements, including inspection, abatement of regulated asbestos-containing materials, and notification ten days prior to the start of the project. As mentioned earlier, abatement of asbestos from the old water plant will be coordinated through DANR's Brownfields Program and asbestos removed from the building will be disposed of at a permitted facility that accepts asbestos waste in accordance with applicable federal and state regulations. The removal of lead-based paint in the plant will require that contractors comply with OSHA lead exposure rules.
- The DANR Water Quality Program commented that appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site. Any construction activity that disturbs an area of one or more acres of land must have authorization under the General Permit for Storm Water Discharges Associated with Construction Activities.

Correspondence: To prepare this report, requests for comment were submitted to the following State and Federal agencies:

- U.S. Fish and Wildlife Service
- South Dakota Dept of Game, Fish, and Parks
- SD Dept of Agriculture and Natural Resources (DANR)
- Natural Resource Conservation Service
- United States Army Corps of Engineers

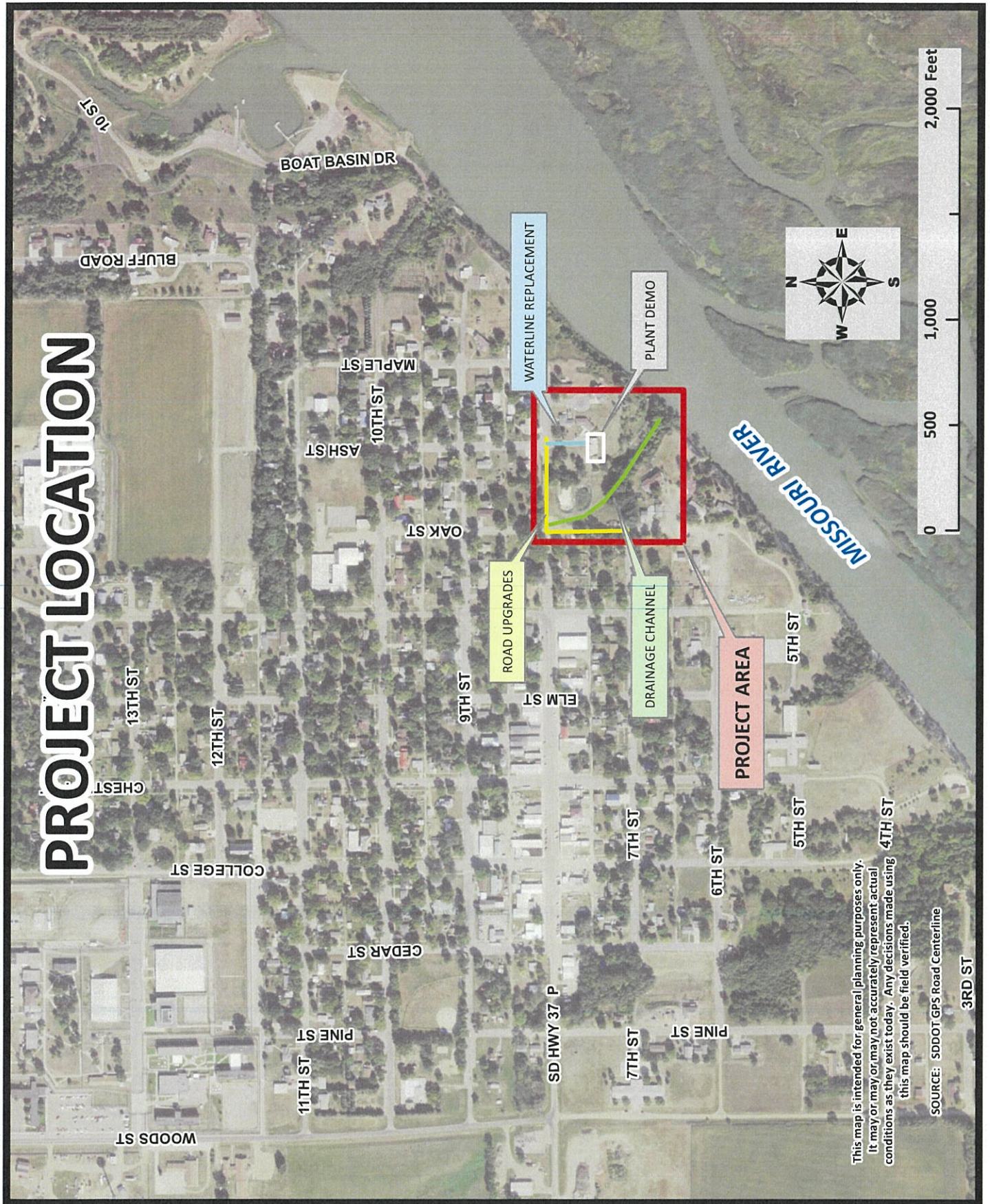
Copies of the responses received from each agency are included in **Exhibit 14**. In addition, USDA Rural Development staff solicited comments from the South Dakota Historic Preservation Office for Section 106 consultation as well as several tribal historic preservation offices.

Exhibits

Exhibit 1	Project Location Map
Exhibit 2	Site Photographs
Exhibit 3	Drainage Channel Layout
Exhibit 4	Formally Classified Land Map
Exhibit 5	NRCS Web Soil Survey – Farmland Classification Documentation
Exhibit 6	NRCS Web Soil Survey - Flood Frequency Documentation
Exhibit 7	National Wetlands Inventory Map
Exhibit 8	NRCS Web Soil Survey - Hydric Soils Documentation
Exhibit 9	Historic Preservation Documentation
Exhibit 10	EPA Nonattainment Areas Map
Exhibit 11	Geotek Water Treatment Plant Environmental Site Assessment Report
Exhibit 12	Tanks and Spills Documentation
Exhibit 13	EPA Environmental Justice Maps & Report
Exhibit 14	Agency Solicitation Correspondence

EXHIBIT 1

PROJECT LOCATION



This map is intended for general planning purposes only. It may or may not accurately represent actual conditions as they exist today. Any decisions made using this map should be field verified.

SOURCE: SDDOT GPS Road Centerline

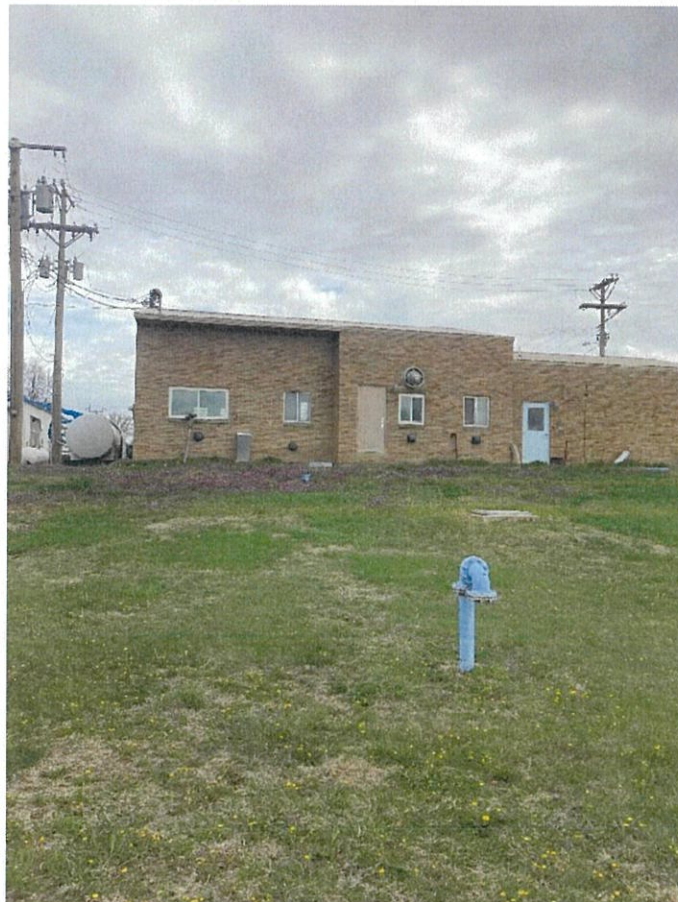
EXHIBIT 2

PHOTO LAYOUT

FRONT OF WATER PLANT (LOOKING SOUTH FROM ASH STREET)



BACK OF WATER PLANT (LOOKING NORTH)



EAST SIDE OF WATER PLANT (LOOKING WEST)



GARAGE LOCATED ON WEST SIDE OF WATER PLANT



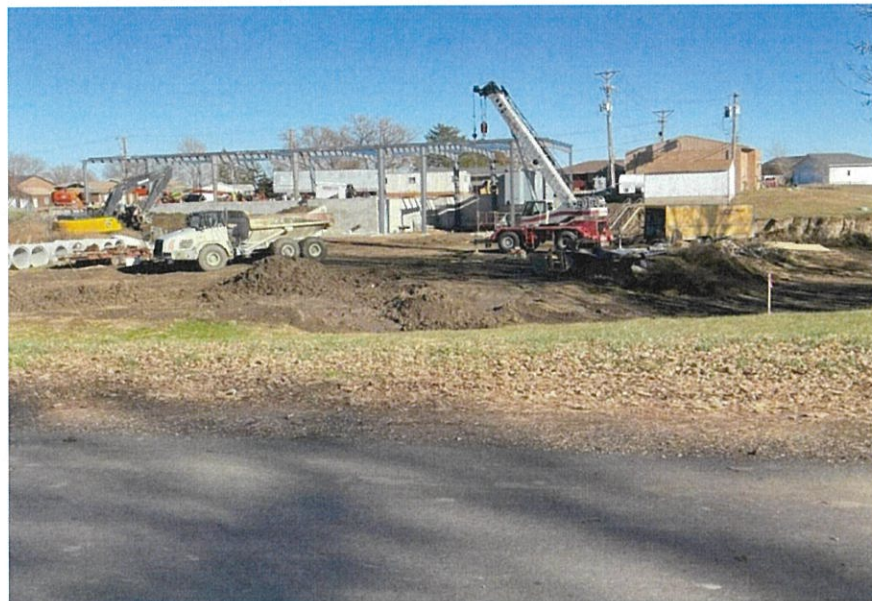
BACK OF GARAGE



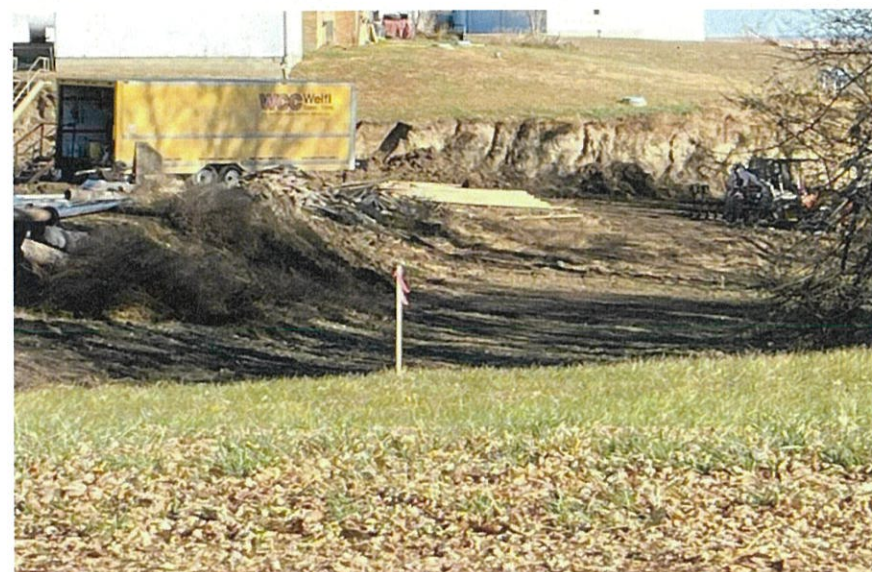
APPROXIMATE START POINT OF PROPOSED CHANNEL (LOOKING SE FROM CORNER OF 8th AND OAK)



FARTHER SOUTH ALONG CHANNEL (PHOTO TAKEN FALL 2024 LOOKING EAST FROM OAK STREET)



FARTHER SOUTH ALONG CHANNEL (PHOTO TAKEN FALL 2024)



BLOCK OF EIGHTH STREET TO BE RECONSTRUCTED



BLOCK OF OAK STREET TO BE RECONSTRUCTED



PARTIAL BLOCK OF ASH STREET WHERE WATER MAIN WILL BE REPLACED



EXHIBIT 3



SPN
& Associates

Engineers • Planners • Surveyors
2100 North Saddle Creek Blvd., P.O. Box 308
Midvale, South Dakota 57051-0308
Phone: (605) 996-7811 • Fax: (605) 996-0115

Certificate

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of South Dakota.



Plan Horiz. Scale:	1" = 60'
Drawn By:	CAH
Checked By:	CAH
Date:	5/15/2024
Project No.:	15627
File Name:	#15627 Springfield WTP Erosion Control

Project Name:

Water Treatment Plant

Located in:

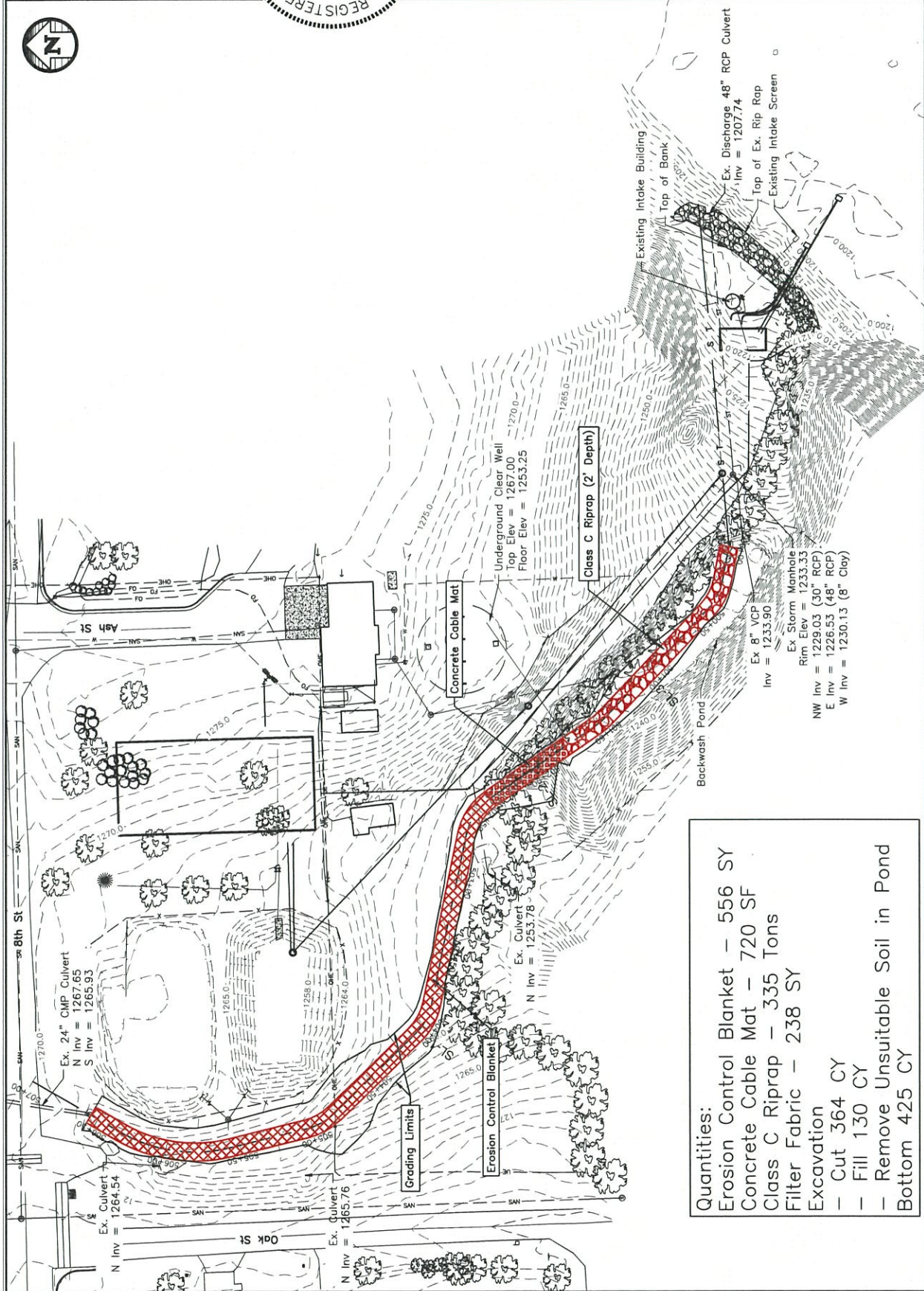
**Springfield,
South Dakota**

Sheet Name:

Erosion Control

Sheet Number:

1 5

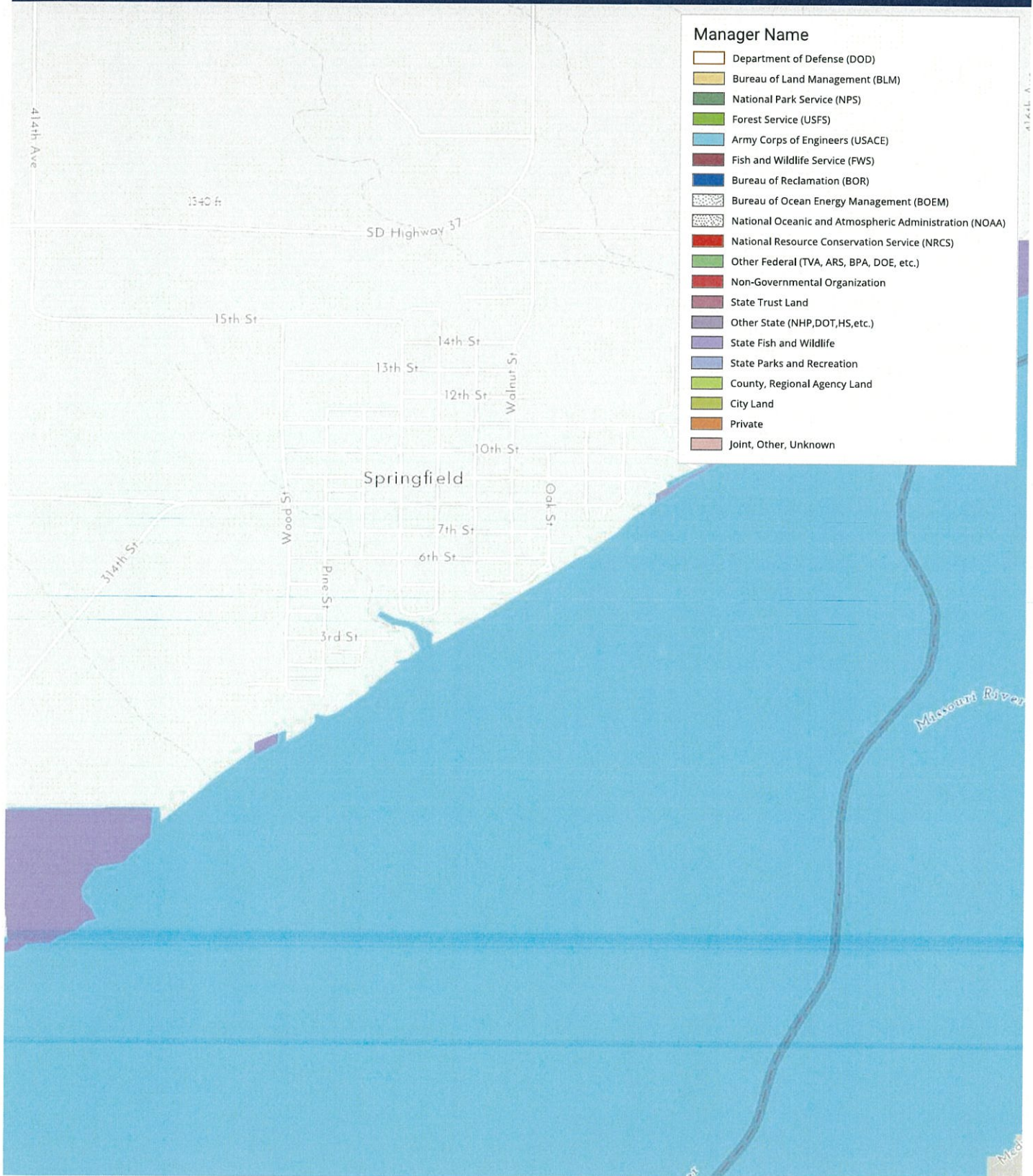


Quantities:

Erosion Control Blanket – 556 SY
Concrete Cable Mat – 720 SF
Class C Riprap – 335 Tons
Filter Fabric – 238 SY
Excavation
– Cut 364 CY
– Fill 130 CY
– Remove Unsuitable Soil in Pond
Bottom 425 CY

EXHIBIT 4

Protected Areas Database of the U.S. (PAD-US) by Land Manager



This map is based on the PAD-US 3.0 Combined Proclamation (Tribal, DOD only), Marine Fee, Designation, Easement feature class, published by the USGS Science Analytics and Synthesis (SAS), GAP Analysis Project (GAP). This map provides a general overview of management, not ownership. Federal and other designated areas may overlap state, private, and other inholdings.

U.S. Geological Survey (USGS) Gap Analysis Project (GAP), 2022, Protected Areas Database of the United States (PAD-US) 3.0: U.S. Geological Survey data release, <https://doi.org/10.5066/P9Q9LQ4B>.

Basemap created by ESRI. More information at: <https://usgs.gov/gapanalysis/PAD-US> or pad-us@usgs.gov. Map created by Greeninfo Network in cooperation with USGS, 2024.