<u>Why You Should Read This</u>: The document below reviews the environmental impact likely from a project. This project is planned to be federally funded through your tax dollars; therefore, you are entitled to take part in its review. If you have concerns about the environmental impact of this project, raise them now. We encourage public input in this decision making process.



September 12, 2024

To: All Interested Citizens, Government Agencies, and Public Groups

An environmental review has been performed based on the procedures for implementing the National Environmental Policy Act (NEPA), for the proposed agency action below:

Applicant: City of Dubuque SRF Number: CS1921034 01

County: Dubuque lowa DNR Project Number: S2021-0394A

State: Iowa

Dubuque Wastewater Infrastructure Improvements - Old Mill

The City of Dubuque, Iowa is planning an upgrade to their wastewater infrastructure. The city has applied for financial assistance through the State Revolving Fund (SRF) loan program to build the project. The State Revolving Loan Program is a program authorized by the Environmental Protection Agency (EPA) and administered by the Iowa Department of Natural Resources (DNR) in partnership with the Iowa Finance Authority.

The City of Dubuque is located in Dubuque County, Iowa approximately 80 miles northeast of Cedar Rapids, Iowa and 60 miles northwest of Clinton, Iowa. The population of Dubuque according to the 2014 Census was 58,436. The design population equivalent for the year 2040 is 75,000.

This area of Dubuque's wastewater system, Sewer Shed 4, is currently served by the Granger Creek Interceptor Sewer (Sewer) and the Granger Creek Pump Station (Pump Station). Sewer Shed 4 is approximately 6,300 acres. The Sewer was originally constructed in 1998 and provides sanitary sewer service to the Dubuque Technology Park and the Key West area, along US Hwy 151/61. The Sewer was extended along Granger Creek to the Dubuque Regional Airport in 2015. The sewer consists of 18in and 20in Ductile Iron pipe. The Pump Station consists of two submersible pumps with room for a third. It receives flow solely from the Sewer and pumps the wastewater approximately 60ft to a manhole immediately upstream of the Catfish Creek Pump Station. The Catfish Creek Pump Station conveys the combined flows to the City's Water and Resource Reclamation Center for treatment. The current wastewater system does not consist of the infrastructure for long-term support of Sewer Shed 4.

The purpose of this project is to make improvements to the wastewater treatment infrastructure to enhance their reliability, increase capacity and to replace obsolete system to safely and reliably operate the City of Dubuque's wastewater system for at least the next 20 years.

The project area is currently a mix of easements, private property, existing roadway and railroad, and existing interceptor sewer. The proposed project includes Construction of a new 20 MGD wastewater pumping station (Approximately 65' x 65' with a depth of 45'). New dual force mains will be constructed from the new lift station directly to the head works at WRRC (36-inch and 42-inchs diameter pipe with a minimum cover of 6.5-feet. The cover at stream crossings will be 5-feet below the stream bed). Additionally, a proposed 54-inch gravity main will also be constructed. The project will also include necessary electrical and utility installations and all necessary connections and appurtenances. A majority of the force main alignment will follow the existing City street right-of-way. The proposed project also includes a force main tie-in point at the WRRC Headworks.

The treated wastewater from the existing facility is discharged to the Mississippi River, which is classified as A1, B(WW1), and HH. Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing. Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrate species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams. Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

The project will not significantly affect the pattern and type of land use (industrial, commercial, agricultural, recreational, and residential) or growth and distribution of population. The project will not conflict with local, regional or State land use plans or policies. The project will not impact wetlands. provided the terms of Nationwide Permit #58 are abided by. The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between August 1 and October 11 to avoid impacting endangered bees. If any State or Federally listed threatened or endangered species or communities are found during the planning or construction phases, additional studies and/or mitigation may be required. The project will not displace population, alter the character of existing residential areas, or convert significant farmlands to non agricultural purposes. The project will not affect the 100 year flood plain provided all necessary floodplain development permits, state and local, are abided by. The project will not have effect on parklands, preserves, other public lands, or areas of recognized scenic or recreational value.

No historic properties will be adversely affected by the proposed project. However, if project activities uncover any item(s) that might be of archaeological, historical, or architectural interest, or if important new archaeological, historical, or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual meeting the Secretary of the Interior's professional qualifications standards (36 CFR Part 61).

The project will not have a significant adverse effect upon local ambient air quality provided the applicant takes reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property during the proposed project (567 IAC 23.3(2)"c"). The project will not have a significant adverse effect upon local ambient noise levels, surface water quantity, groundwater quality or quantity, or

water supply. No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected provided that an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) is obtained and the terms of which are abided by.

Minimum separation distances will be maintained. Noise during construction will be maintained at tolerable levels through controls on construction activities. Any construction debris will be removed from the site for proper disposal. Adverse environmental effects from construction activities will be minimized with proper construction practices, inspection, prompt clean up and other appropriate measures. Areas temporarily disturbed by the construction will be restored.

It has been determined that the proposed action will result in no significant impacts to the surrounding environment. This determination is based on a careful review of the engineering report, the environmental assessment and other supporting data which are on file at the Department of Natural Resources' office in Des Moines, Iowa. These are available for public review upon request. A copy of the environmental assessment is attached. This Department will not take any administrative action on the project for at least thirty (30) calendar days from the above date. Persons disagreeing with the above environmental decision may submit comments to the department during this period. Your comments can be sent to SRF-PC@dnr.iowa.gov or directly to me at hailey.andersen@dnr.iowa.gov or (515) 321-7385.

Sincerely,

Hailey Andersen Environmental Specialist 6200 Park Ave, Suite 200 Des Moines, IA 50321

Enclosures: Environmental Assessment

Project Map

Distribution

List (email): Strand Associates, Inc.

Raphael Wahwassuck, Prairie Band Potwawatomi Nation

Alan Kelly, Iowa Tribe of Kansas & Nebraska Diane Hunter, Miami Tribe of Oklahoma Sunshine Bear, Winnebago Tribe of Nebraska Edward Boling, Council on Environmental Quality

Jake Hansen, Iowa Department of Agriculture and Land Stewardship

Ken Sharp, Iowa Department of Health & Human Services Mindy Wells, Iowa Department of Health & Human Services

Chad Sands, Iowa Economic Development Authority

Alicia Vasto, Iowa Environmental Council Michael Schmidt, Iowa Environmental Council

Tracy Scebold, Iowa Finance Authority Tony Toigo, Iowa Finance Authority Lee Wagner, Iowa Finance Authority Rick Andriano, Iowa Finance Authority
Mickey Shields, Iowa League of Cities
Jane Clark, Sierra Club
Josh Mandelbaum, Environmental Law and Policy Center
Kate Sand, USDA Rural Development
Tokey Boswell, USDOI, National Park Service, Midwest Region
Kraig McPeek, Fish and Wildlife Service, Rock Island Field Office
Ann D'Alfonso, USEPA Region VII
Kelly Beard-Tittone, USEPA Region VII
The Telegraph Herald

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PROJECT IDENTIFICATION

Applicant: City of Dubuque SRF Number: CS1921034 01

County: Dubuque lowa DNR Project Number: S2021-0394A

State: lowa

Dubuque Wastewater Infrastructure Improvements - Old Mill

COMMUNITY DESCRIPTION

Location: The City of Dubuque is located in Dubuque County, Iowa approximately 80 miles northeast of Cedar Rapids, Iowa and 60 miles northwest of Clinton, Iowa.

Population: The population of Dubuque according to the 2014 Census was 58,436. The design population equivalent for the year 2040 is 75,000.

Current Waste Collection System: This area of Dubuque's wastewater system, Sewer Shed 4, is currently served by the Granger Creek Interceptor Sewer (Sewer) and the Granger Creek Pump Station (Pump Station). Sewer Shed 4 is approximately 6,300 acres. The Sewer was originally constructed in 1998 and provides sanitary sewer service to the Dubuque Technology Park and the Key West area, along US Hwy 151/61. The Sewer was extended along Granger Creek to the Dubuque Regional Airport in 2015. The sewer consists of 18in and 20in Ductile Iron pipe. The Pump Station consists of two submersible pumps with room for a third. It receives flow solely from the Sewer and pumps the wastewater approximately 60ft to a manhole immediately upstream of the Catfish Creek Pump Station. The Catfish Creek Pump Station conveys the combined flows to the City's Water and Resource Reclamation Center for treatment. The current wastewater system does not consist of the infrastructure for long-term support of Sewer Shed 4.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the wastewater treatment infrastructure to enhance their reliability, increase capacity and to replace obsolete system to safely and reliably operate the City of Dubuque's wastewater system for at least the next 20 years.

Proposed Improvements: The project area is currently a mix of easements, private property, existing roadway and railroad, and existing interceptor sewer. The proposed project includes Construction of a new 20 MGD wastewater pumping station (Approximately 65' x 65' with a depth of 45'). New dual force mains will be constructed from the new lift station directly to the head works at WRRC (36-inch and 42-inchs diameter pipe with a minimum cover of 6.5-feet. The cover at stream crossings will be 5-feet below the stream bed). Additionally, a proposed 54-inch gravity main will also be constructed. The project will also include necessary electrical and utility installations and all necessary connections and appurtenances. A majority of the force main alignment will follow the existing City street right-of-way. The proposed project also includes a force main tie-in point at the WRRC Headworks.

Receiving Stream: The treated wastewater from the existing facility is discharged to the Mississippi River, which is classified as A1, B(WW1), and HH. Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing. Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrate species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams. Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

ALTERNATIVES CONSIDERED

Alternatives Considered: Three alternatives were considered including:

- 1. Modifications to CCPS and force main, gravity main upgrades, construction of a parallel pumping station.
 - a. Phase I- CCPS Alteration & Force Main: Modifications to increase the firm pumping capacity of the station to 13.5 MGD from 7.74 MGD. This amount of added capacity would eliminate the need for the City to set up and operate a 2,000 gpm (2.88 MGD) temporary bypass pumping system during wet weather conditions to prevent SSO's at CCPS. This alternative would also provide an estimated 2.88 MGD of additional capacity beyond what is needed to convey the existing wet weather peak flow. Along with the alterations to the existing pumping station, a new 30-inch force main would need to be constructed to the headworks of WRRC to convey the flow from the upgraded pump station and an additional pump station under phase III.
 - b. Phase II- Gravity Main Upgrades: Once the CCPS alterations were made, the 5,125 LF of 24-inch and 30-inch gravity sewer leading to the CCPS, lacks capacity to convey enough flow to fully utilize upgraded CCPS. Phase II consists of upgrading the 5,125 LF 30-inch of gravity sewer, upstream of the CCPS, to 72-inch diameter.
 - Phase III- Parallel Pumping Station: once the gravity sewer upgrades are completed, the resulting flows will exceed the capacity of the Phase I upgrades to CCPS, resulting in the need to move

forward with Phase III. Phase III consists of the addition of a 15 MGD pumping station, to be constructed adjacent to CCPS.

- 2. System Storage: Usage of storage for peak flow management, in a collection system, requires not only the storage tank, but also a pumping station and force main to convey flows from the system to the storage facility or from the storage facility back into the system. Screening to keep large items out of the storage facility would also be required under this scenario. This alternative also requires improvements to the intercepting sewers, to eliminate local bottlenecks, so flow can be conveyed to the storage location. It also requires the Phase I upgrades to CCPS have been completed as described under Alternative 1.
- 3. New Pump Station and Force Main: Alternative 3 will provide a new 15 MGD pump station which will be constructed to be expandable to 30 MGD. The pump station will be constructed to easily make incremental adjustments to the pumping capacity. The expandability will be accomplished by modifying the pumps, as flows increase, and ultimately adding a fourth pump to reach the 30 MGD capacity. This single pump station will provide more initial capacity, at 15 MGD, and more final capacity, at 30 MGD, than the two pump stations under alternative 1 combined. This alternative would also allow the existing 7.74 MGD CCPS to be utilized primarily for the mostly developed Sewer Shed 15 and Sewer Shed 4, served by the Granger Creek Interceptor sewer. Shed four is the largest of the sewer sheds and has a high potential for growth. Utilizing the existing 7.74 MGD CCPS and the new 15 to 30 MGD pump station, this alternative will provide the City with an initial combined firm pumping capacity of 22.74 MGD and an ultimate combined firm pumping capacity of 37.74 MGD.

Reasons for Selection of Proposed Alternative: Alternative 1 solves the immediate need of adding capacity to CCPS but does not provide enough capacity for long term needs. Alternative 2 was deemed too expensive due to location, size and both initial and ongoing operating costs. Alternative 3 was deemed the most cost effective and would allow CCPS to operate for approximately 30 years before capacity upgrades to CCPS may need to be completed.

The project site was selected for the availability of land, proximity to existing infrastructure, engineering criteria, capital cost, operational costs and considerations, as well as minimization of the impacts to the environment.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on June 20, 2022 at 6:30PM. The public notice of this hearing was published in the Telegraph Herald on May 20, 2022. The purpose of this hearing was to present the environmental and financial impacts of the proposed improvement project. No written or oral comments were received.

Coordination and Documentation with Other Agencies and Special Interest Groups: The following Federal, state and local agencies were asked to comment on the proposed project to better assess the potential impact to the environment:

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
State Historical Society of Iowa (State Historical Preservation Office)

Iowa DNR Conservation and Recreation Division

Iowa DNR Water Resources Section

Citizen Band Potawatomi Indian Tribe

Flandreau Santee Sioux

Ho-Chunk Nation

Iowa Tribe of Kansas and Nebraska

Iowa Tribe of Oklahoma

Kickapoo Tribe in Kansas

Kickapoo Tribe of Oklahoma

Lower Sioux Indian Community Council

Miami Tribe of Oklahoma

Omaha Tribal Council

Osage Tribal Council

Otoe-Missouria Tribe

Pawnee Nation of Oklahoma

Peoria Tribe of Indians of Oklahoma

Ponca Tribe of Indians of Oklahoma

Ponca Tribe of Nebraska

Prairie Band Potawatomi Nation

Prairie Island Indian Community

Sac & Fox Nation of Mississippi in Iowa

Sac & Fox Nation of Missouri

Sac & Fox Nation of Oklahoma

Santee Sioux Nation

Shakopee Mdewakanton Sioux Community

Sisseton-Wahpeton Oyate

Spirit Lake Tribal Council

Three Affiliated Tribes Mandan, Hidatsa & Arikara Nations

Upper Sioux Tribe

Winnebago Tribal Council

Yankton Sioux Tribal Business and Claims Committee

Dubuque County Historical Society

Dubuque Historic Commission

No adverse comments were received from any agencies or general public. Conditions placed on the applicant by the above agencies in order to assure no significant impact are included in the Summary of Reasons for Concluding No Significant Impact section.

ENVIRONMENTAL IMPACT SUMMARY

Construction: Traffic patterns within the community may be disrupted and above normal noise levels in the vicinity of the construction equipment can be anticipated during construction and should be a temporary problem. Adverse environmental impacts on noise quality will be handled by limited hours of contractor work time during the day. Other adverse environmental effects from construction activities will be minimized by proper construction practices, inspection, prompt cleanup, and other appropriate measures. Areas

temporarily disturbed by the construction will be restored. Solid wastes resulting from the construction project will be regularly cleared away with substantial efforts made to minimize inconvenience to area residents.

Care will be taken to maintain dirt to avoid erosion and runoff. The proposed project will disturb soils over an area greater than one acre; therefore, the applicant is required to obtain an NPDES General Permit Number 2 (for storm water discharge associated with construction activities) and abide by its terms. Provided that this permit is obtained and the terms of which are abided by, no significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected. Temporary air quality degradation may occur due to dust and fumes from construction equipment. The applicant shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property during the proposed project (567 Iowa Administrative Code IAC 23.3(2)"c").

Historical/Archaeological: The State Historical Preservation Office (SHPO), the Certified Local Government and various Native American tribes with an interest in the area were provided information regarding the project. The DNR has determined, and the SHPO has concurred (R&C#211031570), that this undertaking will result in "no adverse effect" to historic properties based on the scope of the project, the prior use of the project area, and the findings of the archeological surveys conducted on the project property. However, if project activities uncover any item(s) that might be of archaeological, historical, or architectural interest, or if important new archaeological, historical, or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual meeting the Secretary of the Interior's professional qualifications standards (36 CFR Part 61).

Environmental: According to the Iowa DNR Conservation and Recreation Division, the proposed project will not interfere with any State-owned parks, recreational areas or open spaces. The U.S. Army Corps of Engineers concurs that the project will not impact wetlands provided the terms of Nationwide Permit #58 are abided by. The project will not impact any wild and scenic rivers as none exist within the State of Iowa. The U.S. Fish & Wildlife Service Section 7 Technical Assistance website consultation determined, and Iowa DNR Conservation and Recreation Division agree, that the project will not impact threatened or endangered species or their habitats provided that any tree cutting is conducted between August 1 and October 11 to avoid impacting endangered bees. However, if any State- or Federally-listed threatened or endangered species or communities are found during the planning or construction phases, additional studies and/or mitigation may be required. According to the Iowa DNR Water Resources Section, this project will not impact the 100-year floodplain provided all necessary floodplain development permits, state and local, are abided by. No adverse impacts are expected to result from this project, such as those to surface water quantity, or groundwater quality or quantity. No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is expected to result from this project.

Land Use and Trends: The project will not displace population nor will it alter the character of existing residential areas. The proposed project is within the present corporate limits of Dubuque in areas zoned residential, commercial, or industrial. No significant farmlands will be impacted. This project should not impact population trends as the presence or absence of existing water/sewer infrastructure is unlikely to induce significant alterations in the population growth or distribution given the myriad of factors that influence

development in this region. Similarly, this project is unlikely to induce significant alterations in the pattern and type of land use

Irreversible and Irretrievable Commitment of Resources: Fuels, materials, and various forms of energy will be utilized during construction.

Nondiscrimination: All programs, projects, and activities undertaken by DNR in the SRF programs are subject to federal anti-discrimination laws, including the Civil Rights Act of 1964, section 504 of the Rehabilitation Act of 1973, and section 13 of the Federal Water Pollution Control Amendments of 1972. These laws prohibit discrimination on the basis of race, color, national origin, sex, disability, or age.

POSITIVE ENVIRONMENTAL EFFECTS TO BE REALIZED FROM THE PROPOSED PROJECT

Positive environmental effects will be continued safe conveyance of wastewater for the City of Dubuque.

SUMMARY OF REASONS FOR CONCLUDING NO SIGNIFICANT IMPACT

- The project will not significantly affect the pattern and type of land use (industrial, commercial, agricultural, recreational, and residential) or growth and distribution of population.
- The project will not conflict with local, regional or State land use plans or policies.
- The project will not impact wetlands. provided the terms of Nationwide Permit #58 are abided by.
- The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between August 1 and October 11 to avoid impacting endangered bees. If any State- or Federally-listed threatened or endangered species or communities are found during the planning or construction phases, additional studies and/or mitigation may be required.
- The project will not displace population, alter the character of existing residential areas, or convert significant farmlands to non-agricultural purposes.
- The project will not affect the 100-year flood plain provided all necessary floodplain development permits, state and local, are abided by.
- The project will not have effect on parklands, preserves, other public lands, or areas of recognized scenic or recreational value.
- No historic properties will be adversely affected by the proposed project. However, if project activities uncover any item(s) that might be of archaeological, historical, or architectural interest, or if important new archaeological, historical, or architectural data should be encountered in the project APE, the applicant should make reasonable efforts to avoid further impacts to the property until an assessment can be made by an individual meeting the Secretary of the Interior's professional qualifications standards (36 CFR Part 61).
- The project will not have a significant adverse effect upon local ambient air quality provided the applicant takes reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property during the proposed project (567 IAC 23.3(2)"c").
- The project will not have a significant adverse effect upon local ambient noise levels, surface water quantity, groundwater quality or quantity, or water supply.

No significant impact to surface water quality, fish, shellfish, wildlife, or their natural habitats is
expected provided that an NPDES General Permit Number 2 (for storm water discharge associated with
construction activities) is obtained and the terms of which are abided by.

THEREFORE:

The above project conforms to the criteria in 567 Iowa Administrative Code 92.8(1)"b relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

Hailey Andersen

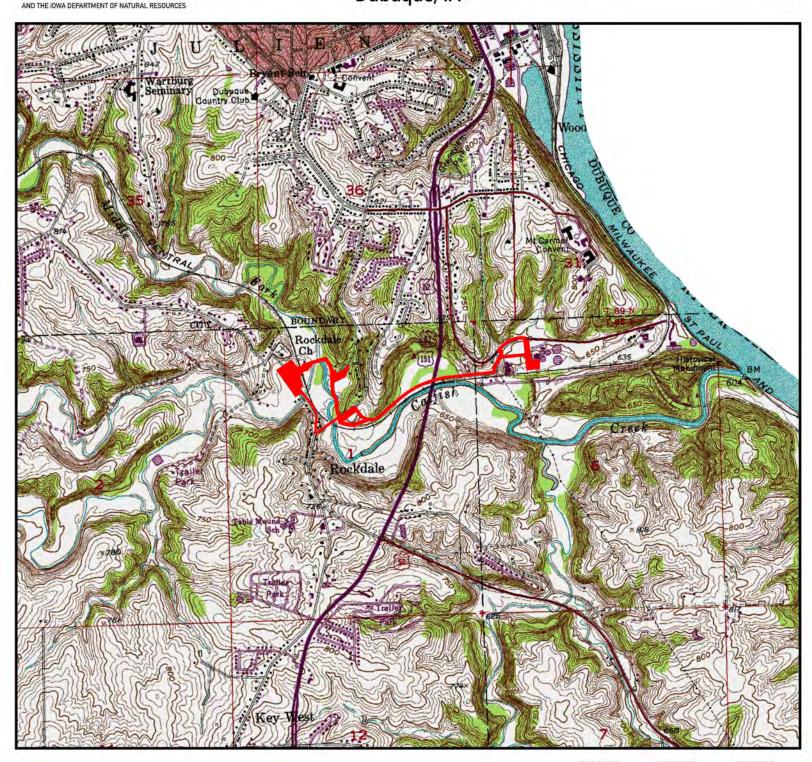
Environmental Review Specialist State Revolving Fund Iowa Department of Natural Resources



USGS Topographic Map Wastewater Infrastructure Improvements

Dubuque, IA







Dubuque County. Image source: Wikipedia, 2023.

800 1,600 2,400 3,200 4,000 Scale: 1 inch = 2,000 feet

USGS 7.5 Minute Quadrangle: Dubuque South Section: 01, Township: 88 N, Range: 02 E Section: 06, Township: 88 N, Range: 03 E

Date: 1972



Aerial Photograph Wastewater Infrastructure Improvements

Wastewater Infrastructure Improvements
Dubuque, IA







Access - based on Dubuque DW Rockdale Project Location SHPO Concur 1.4.24

Additional Project Area - Fiber Install

Fiber Install in Existing Conduit (no ground disturbance)

Project Area - Previously cleared SHPO Concur 1.4.24

Temporary access to wastewater treatment plant

Staging Area

Scale: 1 inch = 750 feet

USGS 7.5 Minute Quadrangle: Dubuque South Section: 01, Township: 88 N, Range: 02 E Section: 06, Township: 88 N, Range: 03 E

Date: 04.11.2016