

Why You Should Read This: 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.



IOWA STATE REVOLVING FUND
FINDING OF NO SIGNIFICANT IMPACT

December 20, 2023

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 Meservey

SRF Number: FS-17-24-DWSRF-017

County: Cerro Gordo

Iowa DNR Project Number: W2023-0283

State: Iowa

Other Federal Funding: CDBG

The City of Meservey, Iowa is planning an upgrade to their water supply system. 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 Meservey is located in Cerro Gordo County, Iowa approximately 20 miles southwest of Mason City, Iowa and 45 miles northeast of Fort Dodge, Iowa. The population of Meservey according to the 2020 US Census was 222 people. The design population equivalent for the year 2043 is 257 people.

Water is supplied to the City of Meservey by one public water supply well, Well #1, that is pumped directly to the distribution system. The well was originally drilled in 1957 to a depth of 573 feet deep in to the Devonian Aquifer. The well has been maintained over the years and currently produces 100 gallons per minute. Well #1 is located at the north end of 4th Street in Meservey. The City needs additional supply capacity to meet the requirements of firm capacity (largest well out of service) on the design maximum day.

The water from the well is tested annually and the results are published in the Consumer Confidence Report (CCR). Test results in the annual reporting show that the water from the public water supply well is within the limits for lead, copper, radium, and fluoride, etc.

The existing distribution system consists mainly of $\frac{3}{4}$ -inch, 1 inch, 1-1/4-inch, 2-inch, and 4-inch water mains. The pipe material in the water distribution system is plastic and copper. The exact type of existing plastic piping is unknown, but it is estimated to be either PVC or HDPE. There are also approximately a dozen areas of distribution piping that dead end in the City. Small diameter pipe has limited capacity to deliver the required flow rates at adequate pressures and existing 3-inch or smaller piping should be replaced to meet the Great Lakes Upper Mississippi River Board requirements. The City utilizes water meters to keep track of water use. Water meters throughout the city are generally in poor condition and are past their design life. Water meters are expected to begin failing intermittently in the next few years and a replacement program is in progress. The City also has one elevated multi-leg water storage tower with a capacity of 50,000 gallons. The current storage capacity of the existing water tower is suitable to meet present and projected demands, however, the riser pipe on the existing tower is too small and restricts the flow and residual pressures to the city during hydrant flushing, or other events in which use of a hydrant is required. It is recommended this pipe is replaced with a larger pipe to provide increased residual pressures to the City.

The purpose of this project is to make improvements to the City's drinking water infrastructure to enhance their reliability, increase capacity, and safely and reliably operate the City of Meservey's water supply system for the next 20 years.

The project includes construction of a new well (Well #2), a 14' x 16' well house, 6" water main, reconnection of existing water services to the new main, and installation of new water meters. This work will be completed in one phase. The water main will be installed via open cut excavation from the new well to the new well house and then along Minnesota Street for an approximate length of 500 feet. The well and well house will be constructed in the existing City Park, and staging areas will be set up and restored by the Contractor as needed. A gravel access driveway to the well house will also be installed from the west end of Minnesota Street. The pavement on Minnesota Street will be replaced in kind where it has been excavated for the new water main. The water main will be open cut as far as possible. Water main installation under 1st street will be either open cut or directionally drilled, pending approval to open cut from the County. For the water meter installation work, the City will replace approximately 200 water meters inside residential and commercial buildings.

The project will not significantly affect the pattern and type of land use (industrial, commercial, agricultural, recreational, 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. The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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. 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. Please direct your comments to me at Rebecca.FlynnKettman@dnr.iowa.gov or 515-204-5672.

Sincerely,

Rebecca Flynn Kettman
Environmental Specialist
502 E 9th St
Des Moines, IA 50319-0034

Enclosures: Environmental Assessment
Project Map

Distribution

List (email): Christina Skalko, Short Elliott Hendrickson, Inc.
Chris Diggins, North Iowa Area Council of Governments
Edward Boling, Council on Environmental Quality
Jake Hansen, Iowa Department of Agriculture and Land Stewardship
Ken Sharp, Iowa Department of Public Health
Sarah Petersen, Iowa Department of Public Health
Nichole Hansen, 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
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 McPeak, Fish and Wildlife Service, Rock Island Field Office
Christopher Simmons, USEPA Region VII
Kelly Beard-Tittone, USEPA Region VII
Belmond Independent

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IOWA STATE REVOLVING FUND
ENVIRONMENTAL ASSESSMENT DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Meservey

County: Cerro Gordo

State: Iowa

SRF Number: FS-17-24-DWSRF-017

Iowa DNR Project Number: W2023-0283

Other Federal Funding: CDBG

COMMUNITY DESCRIPTION

Location: The City of Meservey is located in Cerro Gordo County, Iowa approximately 20 miles southwest of Mason City, Iowa and 45 miles northeast of Fort Dodge, Iowa.

Population: The population of Meservey according to the 2020 US Census was 222 people. The design population equivalent for the year 2043 is 257 people.

Current Source of Water: Water is supplied to the City of Meservey by one public water supply well, Well #1, that is pumped directly to the distribution system. The well was originally drilled in 1957 to a depth of 573 feet deep in to the Devonian Aquifer. The well has been maintained over the years and currently produces 100 gallons per minute. Well #1 is located at the north end of 4th Street in Meservey. The City needs additional supply capacity to meet the requirements of firm capacity (largest well out of service) on the design maximum day.

Current Water Treatment and Quality: The City currently uses liquid chlorine to treat Well #1. The water from the well is tested annually and the results are published in the Consumer Confidence Report (CCR). Test results in the annual reporting show that the water from the public water supply well is within the limits for lead, copper, radium, and fluoride, etc.

Current Distribution System: The existing distribution system consists mainly of ¾-inch, 1 inch, 1-1/4-inch, 2-inch, and 4-inch water mains. The pipe material in the water distribution system is plastic and copper. The exact type of existing plastic piping is unknown, but it is estimated to be either PVC or HDPE. There are also approximately a dozen areas of distribution piping that dead end in the City. Small diameter pipe has limited

capacity to deliver the required flow rates at adequate pressures and existing 3-inch or smaller piping should be replaced to meet the Great Lakes Upper Mississippi River Board requirements. The City utilizes water meters to keep track of water use. Water meters throughout the city are generally in poor condition and are past their design life. Water meters are expected to begin failing intermittently in the next few years and a replacement program is in progress. The City also has one elevated multi-leg water storage tower with a capacity of 50,000 gallons. The current storage capacity of the existing water tower is suitable to meet present and projected demands, however, the riser pipe on the existing tower is too small and restricts the flow and residual pressures to the city during hydrant flushing, or other events in which use of a hydrant is required. It is recommended this pipe is replaced with a larger pipe to provide increased residual pressures to the City.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the City's drinking water infrastructure to enhance their reliability, increase capacity, and safely and reliably operate the City of Meservey's water supply system for the next 20 years.

Proposed Improvements: The project includes construction of a new well (Well #2), a 14' x 16' well house, 6" water main, reconnection of existing water services to the new main, and installation of new water meters. This work will be completed in one phase. The water main will be installed via open cut excavation from the new well to the new well house and then along Minnesota Street for an approximate length of 500 feet. The well and well house will be constructed in the existing City Park, and staging areas will be set up and restored by the Contractor as needed. A gravel access driveway to the well house will also be installed from the west end of Minnesota Street. The pavement on Minnesota Street will be replaced in kind where it has been excavated for the new water main. The water main will be open cut as far as possible. Water main installation under 1st street will be either open cut or directionally drilled, pending approval to open cut from the County. For the water meter installation work, the City will replace approximately 200 water meters inside residential and commercial buildings.

ALTERNATIVES CONSIDERED

Alternatives Considered: The City considered two alternatives for additional water supply: a new water supply well (Well #2) or a connection to a nearby water system. The cities of Belmond, Goodell, and Thornton are 7, 7, and 5 miles away, respectively. Additionally, several construction phases were considered for water distribution improvements, including replacing water meters, replacing the water tower riser pipe, and replacing various sections of small diameter water piping.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable due to the City's need to meet firm capacity and enhance reliability to meet water supply needs. The option to connect to a nearby municipal water system is not a reasonable alternative for water supply as the cost to install water main for the distance required would be significantly more expensive than installing a new well. The City also prioritized the phases for distribution improvements in order to prevent system failure. The priority phase includes replacing all water meters at once to allow more accurate and reliable water usage data collection, and reduce current operation and maintenance costs and difficulties associated with failing water meters and locating leaks.

The project site was selected for the availability of land (it is already City-owned) as well as minimization of the impacts to the environment.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on December 11, 2023 at 6:30PM at the City's regular council meeting. The public notice of this hearing was published in the Belmond Independent on November 9, 2023. 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 Flood Plain Management 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

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 one or more acres of soil; 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) 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#231017391), that this undertaking will result in "no historic properties affected" based on the scope of the project and the prior use of the project area. 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. 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 protected species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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 Flood Plain Management Section, this project will not impact the 100-year floodplain. By obtaining and abiding by the appropriate Water Use Permit, the project will not have any adverse effect on groundwater quantity or water supply.

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 Meservey 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

Environmental Justice: Based on the current EPA EJSscreen tool, this project area has been evaluated for Environmental Justice (EJ) and is not considered a community of concern at the time of this review and for the purposes of this proposed project. The EJSscreen report is available upon request.

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 maintained or improved water quality for the citizens of Meservey. The new production well will allow the City to meet requirements for overall firm capacity and continue to supply safe and reliable drinking water to its customers.

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, 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.
- The project will not affect threatened and endangered species or their habitats provided that any tree cutting is conducted between October 1 and March 31 to avoid impacting endangered bats. 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.
- 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 44.10(3) relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

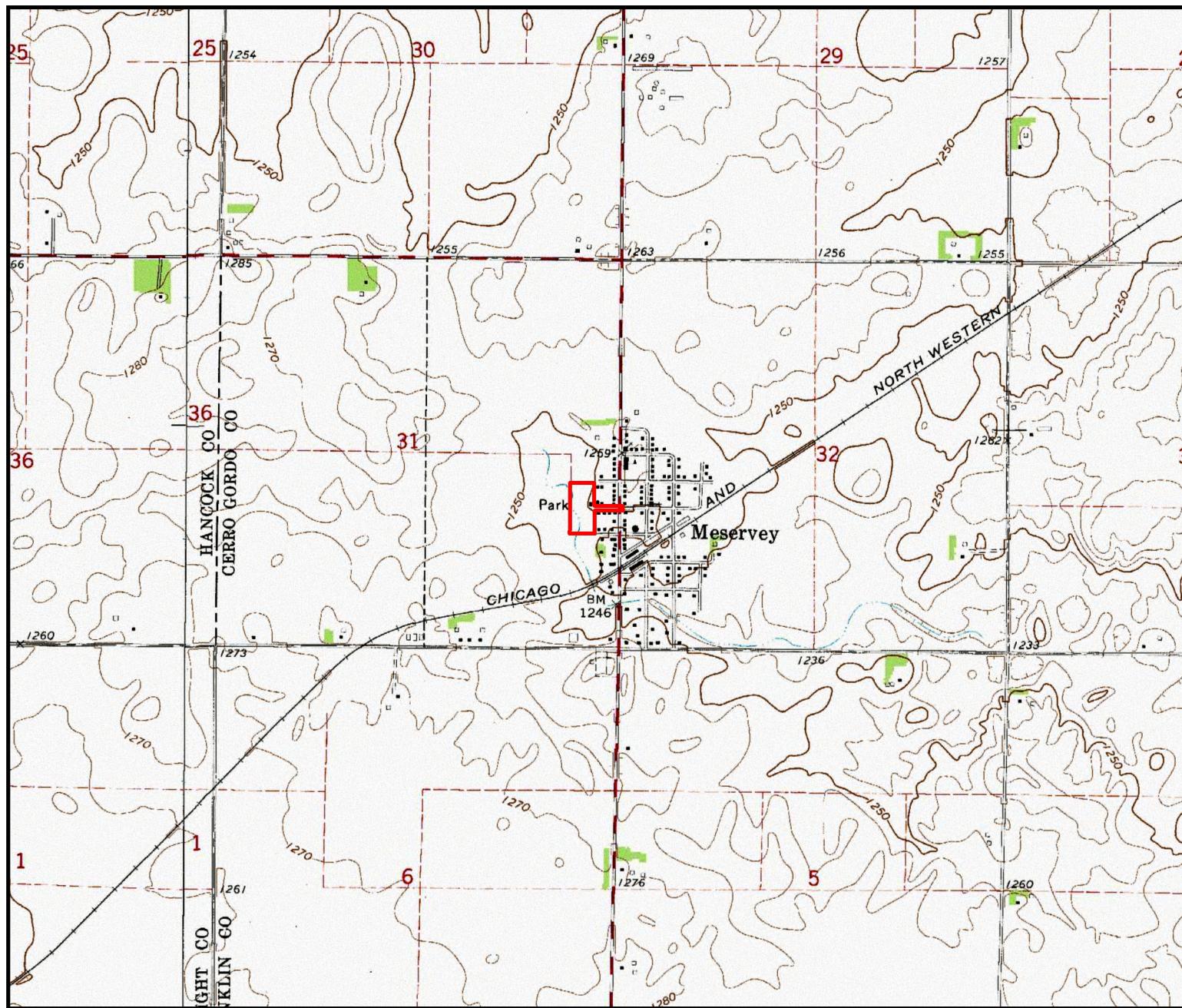
Rebecca Flynn Kettman

Environmental Review Specialist
State Revolving Fund
Iowa Department of Natural Resources



State Revolving Fund
502 East 9th Street
Des Moines, IA 50319-0034

USGS 7.5 Minute Quadrangle: Thornton
Sections: 31, 32 Township: 94 N, Range: 22 W
Date: 1972

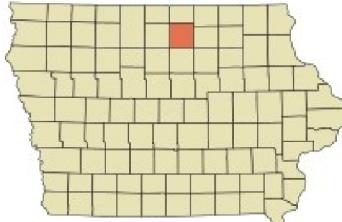
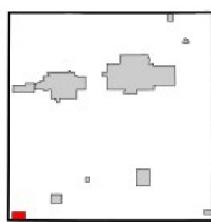


USGS Topographic Map

Meservey Phase 1 Water Supply System Improvements Project

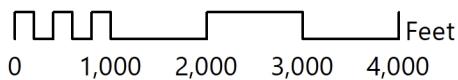
Meservey, IA (Cerro Gordo County, Iowa)

Legend



Cerro Gordo County. Image source: Wikipedia, 2023.

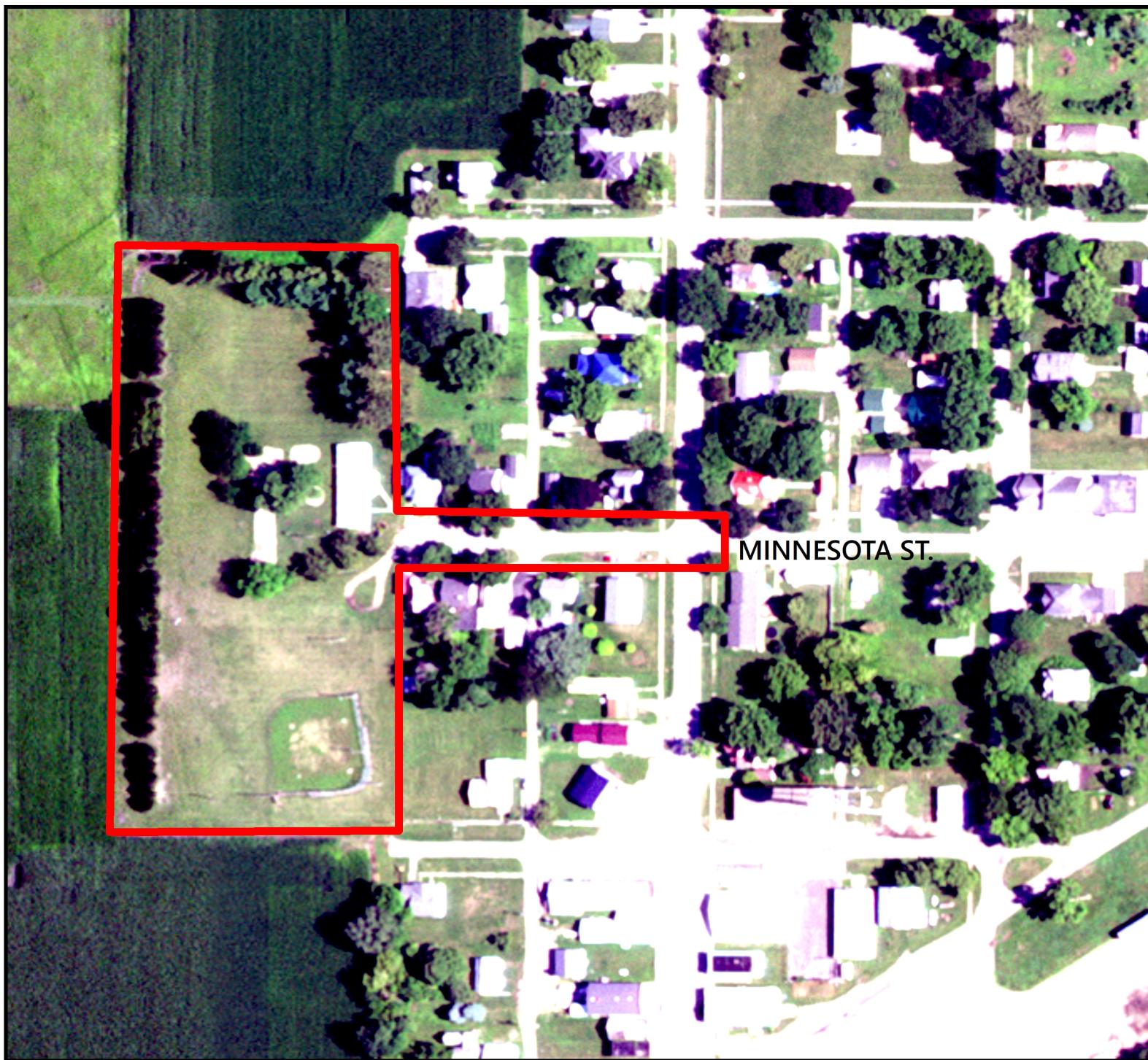
Scale: 1 inch = 2,000 feet





State Revolving Fund
502 East 9th Street
Des Moines, IA 50319-0034

2021 Aerial



Meservey Phase 1 Water Supply System Improvements Project
Meservey, IA (Cerro Gordo County, Iowa)

Legend

Project Area

1 in = 165 ft





State Revolving Fund
502 East 9th Street
Des Moines, IA 50319-0034

2021

Municipal Boundary for New Water Meter Installation



Meservey Phase 1 Water Supply System Improvements Project
Meservey, IA (Cerro Gordo County, Iowa)

1 in = 1,000 ft

