

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

June 26, 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 Grinnell

SRF Number: FS-79-24-DWSRF-006

County: Poweshiek

Iowa DNR Project Number: W2023-0266

State: Iowa

The City of Grinnell, Iowa is planning an upgrade to their drinking water 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 Grinnell is located in Poweshiek County, Iowa approximately 66 miles southwest of Cedar Rapids, Iowa and 54 miles northeast of Des Moines, Iowa. The population of Grinnell according to the 2020 US Census was 9,564. The design population equivalent for the year 2045 is 10,939.

The City of Grinnell has one finished-water elevated storage tower with a capacity of 300,000 gallons. The elevated tower was constructed in 1929 and is located near the intersection of 2nd Avenue and Main Street, adjacent to the current treatment facility. It was last inspected in 2020 and is in fair to good condition.

There are water level sensors in the elevated storage tower. The water level in the tower is maintained by four in-plant/process pumps. All pumps are connected to the water plant SCADA system. However, because pumps No. 2 and No. 4 cause significant pressure surges in the distribution system, these pumps are operated manually. Operation of pump No. 1 and No. 3 is controlled by the water plant SCADA system and is directly linked to water levels in the storage tower. The existing tower does not currently experience stagnation issues and, therefore, does not have a mixer. The tower is flushed two times per year. The tower has one access hatch on the roof of the tank. The Ten State Standards requires two access hatches for safety purposes.

Iowa DNR (IDNR) has established criteria for determining the minimum storage capacity a public water system

must provide. For water systems designed to provide fire protection, a facility should be capable of providing storage to meet the required fire flow for a given duration and the average day demand. The City's current and design year average day demands are as follows: 1,160,000 gallons (current), 1,330,000 gallons (design year 2045) and 1,460,000 (design year 2065). Based on this analysis, the City does not meet IDNR storage capacity requirements for their current or future water system demands.

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

The proposed project includes the construction of a new water tower, new access road, and the installation of a 12-inch water main from the water tower to the distribution system. The estimated trench depth is 12-ft wide and 7-ft deep. The crossing under the road, East Street, is planned to be installed via trenchless construction. The project will include all necessary connections and appurtenances. The existing 0.3 Million Gallon (MG) water tower is planned to be maintained and continued in-use alongside the proposed new water tower.

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. Your comments can be sent to SRF-PC@dnr.iowa.gov or directly to me at nicole.osborn@dnr.iowa.gov or (515) 321-7601.

Sincerely,

Nicole Osborn
Environmental Specialist
6200 Park Ave, Suite 200
Des Moines, IA 50321

Enclosures: Environmental Assessment
Project Map

Distribution

List (email): Jen Collens, McClure Engineering
Andy Willcuts, Veenstra & Kimm Inc.
Grinnell Historic Preservation Commission
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 Public Health
Dan Narber, 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, USDO, National Park Service, Midwest Region
Kraig McPeck, Fish and Wildlife Service, Rock Island Field Office
Ann D'Alfonso, USEPA Region VII
Kelly Beard-Tittone, USEPA Region VII
Grinnell Herald-Register

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
ENVIRONMENTAL ASSESSMENT DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Grinnell
County: Poweshiek
State: Iowa

SRF Number: FS-79-24-DWSRF-006
Iowa DNR Project Number: W2023-0266

COMMUNITY DESCRIPTION

Location: The City of Grinnell is located in Poweshiek County, Iowa approximately 66 miles southwest of Cedar Rapids, Iowa and 54 miles northeast of Des Moines, Iowa.

Population: The population of Grinnell according to the 2020 US Census was 9,564. The design population equivalent for the year 2045 is 10,939.

Current Finished Water Storage Facilities: The City of Grinnell has one finished-water elevated storage tower with a capacity of 300,000 gallons. The elevated tower was constructed in 1929 and is located near the intersection of 2nd Avenue and Main Street, adjacent to the current treatment facility. It was last inspected in 2020 and is in fair to good condition.

There are water level sensors in the elevated storage tower. The water level in the tower is maintained by four in-plant/process pumps. All pumps are connected to the water plant SCADA system. However, because pumps No. 2 and No. 4 cause significant pressure surges in the distribution system, these pumps are operated manually. Operation of pump No. 1 and No. 3 is controlled by the water plant SCADA system and is directly linked to water levels in the storage tower. The existing tower does not currently experience stagnation issues and, therefore, does not have a mixer. The tower is flushed two times per year. The tower has one access hatch on the roof of the tank. The Ten State Standards requires two access hatches for safety purposes.

Iowa DNR (IDNR) has established criteria for determining the minimum storage capacity a public water system must provide. For water systems designed to provide fire protection, a facility should be capable of providing storage to meet the required fire flow for a given duration and the average day demand. The City's current and design year average day demands are as follows: 1,160,000 gallons (current),

1,330,000 gallons (design year 2045) and 1,460,000 (design year 2065). Based on this analysis, the City does not meet IDNR storage capacity requirements for their current or future water system demands.

PROJECT DESCRIPTION

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

Proposed Improvements: The proposed project includes the construction of a new water tower, new access road, and the installation of a 12-inch water main from the water tower to the distribution system. The estimated trench depth is 12-ft wide and 7-ft deep. The crossing under the road, East Street, is planned to be installed via trenchless construction. The project will include all necessary connections and appurtenances. The existing 0.3 Million Gallon (MG) water tower is planned to be maintained and continued in-use alongside the proposed new water tower.

ALTERNATIVES CONSIDERED

Alternatives Considered: Several alternatives were identified for potential improvements to address finished water storage concerns. The alternatives evaluated as part of the Preliminary Engineering Report are as follows:

Alternative 1 – Convert 1.0 MG detention tank to finished storage & construct 0.5MG tower (South): This alternative would involve converting the existing 1.0 MG raw water detention tank from raw water storage to finished water storage and constructing a new 0.5 MG elevated storage tank on the southside of the city. Additional internal inspections of the entire raw water detention tank structure would be needed in order to determine the final scope of work for rehabilitation and to provide an estimated useful life of the structure after rehabilitation is complete. The estimated construction cost for rehabilitating the raw water detention tank is \$1,887,000.

Alternative 2 – Construct new 1.0MG Tower (South) & 0.3MG Clearwell: This alternative would involve constructing a new 1.0 MG elevated storage tank on the southside of the city as well as a new 0.3 MG clearwell at the new water treatment plant. A clearwell at the new water treatment plant would serve several functions. It would act as a wet well for the high service pumps and provide adequate contact time for chlorine disinfection. Because the water in the clearwell will be treated, disinfected, finished water, and because the high service pumps at the new water treatment plant will be equipped with standby power, water in the clearwell can be counted toward the City's effective storage capacity. The total estimated construction cost for Alternative 2 is \$7,241,000.

Alternative 3 – Construct new 0.5MG Tower (North): Alternative 3 would provide the City with adequate finished water storage capacity for their future 2065 water demands by adding an additional 0.5 MG elevated storage tower on the north side of town. The estimated construction cost for a new 0.5 MG water tower on the north side of town is \$4,099,000.

Reasons for Selection of Proposed Alternative: Alternative 1 was not selected because the age, condition, cost to rehabilitate, and remaining useful life of the raw water detention tank after rehabilitation was deemed a risk

not worthy of the financial investment. Alternative 2 has been selected because it provides the City with brand new facilities at a cost-effective increment.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on June 17, 2024 at 7:00PM at the City's regular council meeting. The public notice of this hearing was made available by publication in the Grinnell Herald-Register on May 9, 2024 and placed on the City website on May 9, 2024. 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
- Natural Resources Conservation 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
Grinnell Historic Preservation 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 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), 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# 240579917), that this undertaking will result in “no historic properties affected” based on the scope of the project, the prior use of the project area, and the findings of the Phase I Archeological Survey 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. 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.

No adverse impacts are expected to result from this project, such as those to surface water quantity, or groundwater quality or quantity.

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 Grinnell in areas zoned residential, commercial, or industrial. No significant farmlands will be impacted. An analysis of the farmland conversion impact was completed. Removing this area from production should not have a significant impact on corn or soybean production in the area, nor should it have a significant impact on the agricultural industry in the area. 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 improved water quality in. The new elevated storage tank will bring the City of Grinnell into compliance with department requirements and will better assist in the prevention of water supply contamination associated with inadequate pressures within the distribution system.

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:

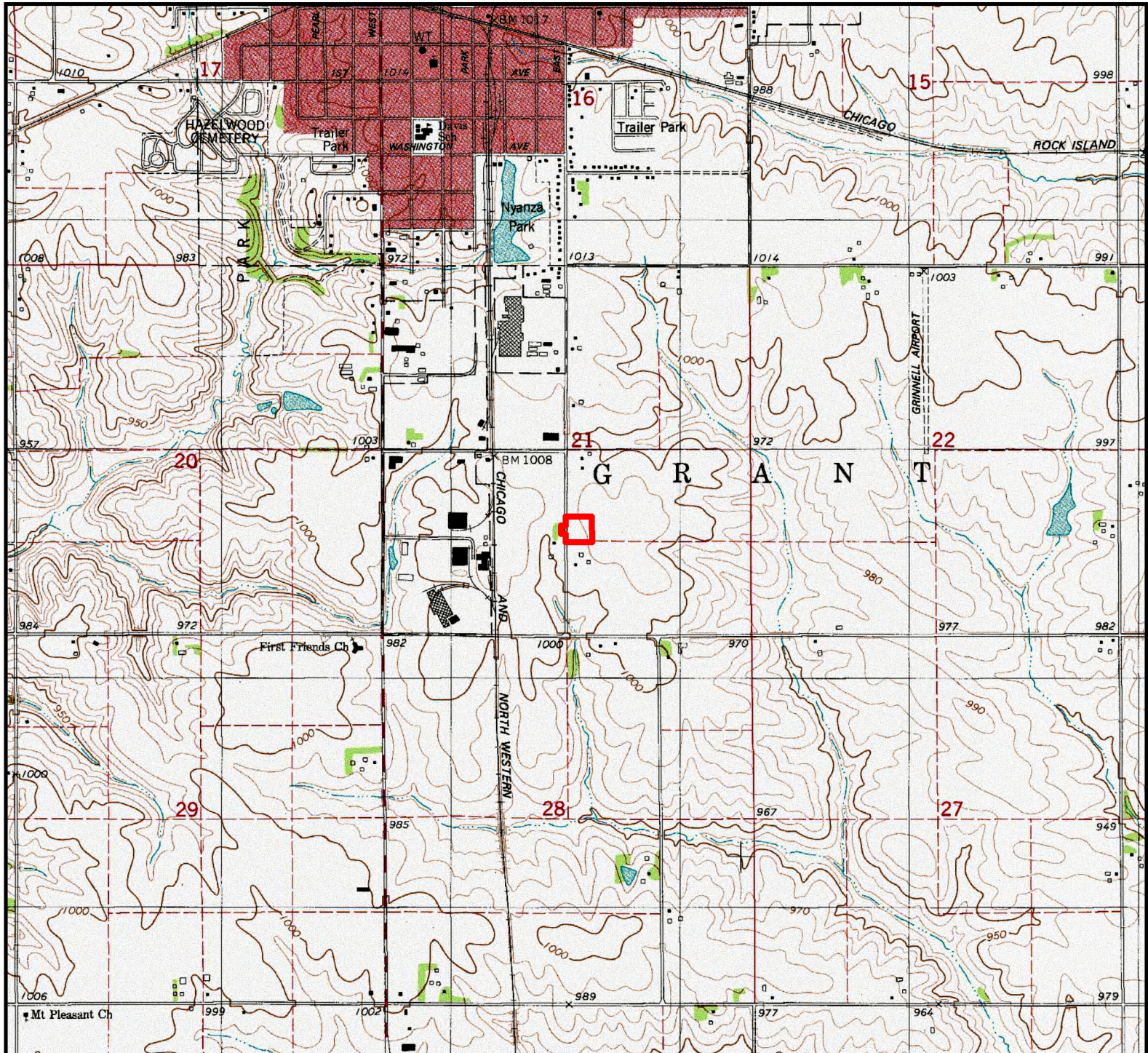
The above project conforms to the criteria in 567 Iowa Administrative Code 44.10(3) for drinking water relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

Nicole Osborn

Environmental Review Specialist
State Revolving Fund
Iowa Department of Natural Resources

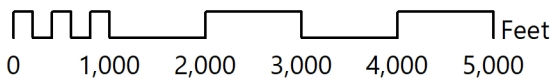


USGS 7.5 Minute Quadrangle: Grinnell S
Section: 21, Township: 80 N, Range: 16 W
Date: 1979

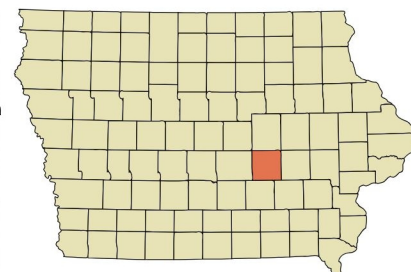
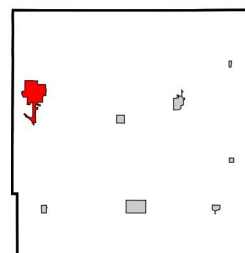


Legend

Project Area

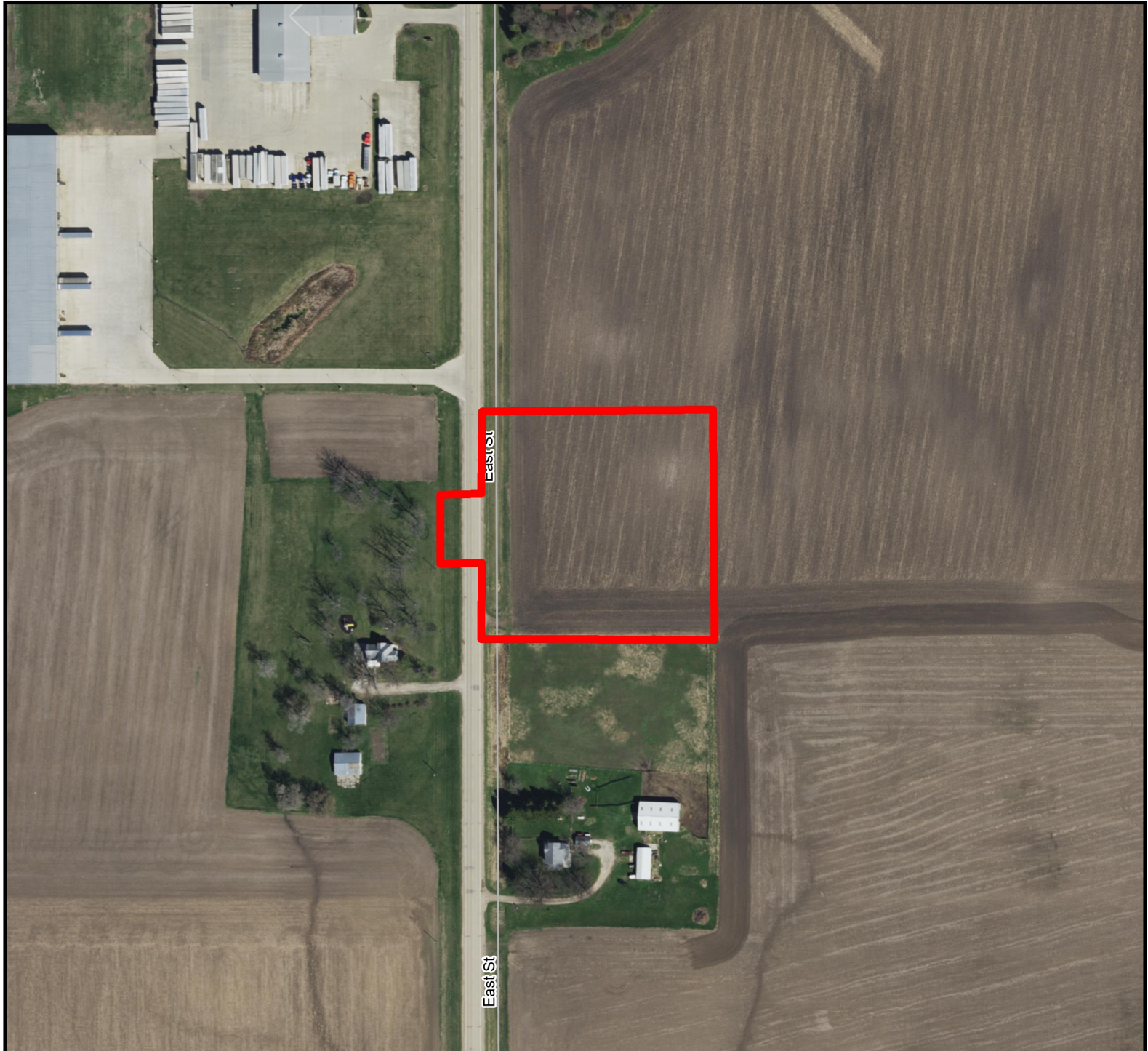


Scale: 1 inch = 2,000 feet

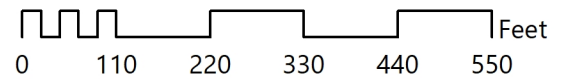


Grinnell Water System Improvements Phase 2
Grinnell, IA (Poweshiek County, Iowa)

Poweshiek County. Image source: Wikipedia, 2023.



Legend
Project Area

Scale: 1 inch = 225 feet

Grinnell Water System Improvements Phase 2
Grinnell, IA (Poweshiek County, Iowa)