<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.



January 27, 2025

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 CrestonSRF Number: FS-88-24-DWSRF-041

And FS-88-24-DWSRF-041L

County: Union lowa DNR Project Number: W2023-0662

State: lowa

The City of Creston, Iowa is planning an upgrade to their water supply distribution system. The city has applied for financial assistance through the State Revolving Fund (SRF) Ioan 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 Creston is located in Union County, Iowa approximately 75 miles southwest of Des Moines, Iowa and 100 miles east of Omaha, Nebraska. The population of Creston according to the 2020 US Census was 7,536 persons. The Creston water distribution system was originally constructed in the 1890s. The system has been expanded and portions of the original system have been replaced. Currently, the City's water distribution piping material consists of 156,025 linear feet of cast iron pipe, 39,560 linear feet of ductile iron pipe, 165,485 linear feet of polyvinylchloride pipe (PVC), and 390 feet of type K copper pipe. Much of the cast iron pipe is original to the system, making it approximately 130 years old. Reportedly, 114 water main breaks occurred between 2013 and 2017, mostly in areas of cast iron pipe though there are areas of break-prone ductile iron as well. Each time a water main breaks, the opening presents the opportunity for harmful organism to infiltrate into the water supply.

The Iowa Department of Natural Resources program to replace lead service lines started in 2021. Its objective is to inventory and start process of replacing all lead service lines in the state. According to the City of Creston records, approximately 339 lead water services are connected to the distribution system, along with 344 galvanized steel water services. Of those, 32 were identified in areas were water mains have frequently broken in recent years and would be adjacent the currently proposed water main work.

Lead piping is a concern due to corrosion. While typical systems manage their water chemistry to prevent corrosion, the lead material is still present and poses a potential hazard to the community. When lead pipe corrosion occurs, there may be spikes in premature birth, increased blood pressure, and anemia. This has resulted in a nationwide effort to inventory and replace lead service lines due to the health concerns. Replacing these lead pipes in such varied piping situations requires clear communication, and often coordination, with private landowners.

The purpose of this project is to make improvements to the water supply system to better prevent contamination due to water main breaks and due to lead pipes in order to better safely and reliably operate the City of Creston's water system for at least the next 20 years. The proposed improvements include replacement of cast iron water main and break-prone ductile iron pipe, new hydrants, valves, curb stops and boxes, and replacement of lead or galvanized service lines where encountered. The proposed work is planned for much of uptown Creston and specific areas within the system with the most issues and highest frequency of main breaks. Construction methods for water main replacement include directional boring and open trench excavation. Lead service lines are expected to be replaced using a pull-through technique. To better regulate system pressure, two blocks of new water main is also proposed.

Positive environmental effects will be maintained or, potentially improved, water quality for the citizens of City by removal of a potential source of contamination in the form of lead pipes. The replacement of breakprone water mains will better assist in the prevention of water supply contamination associated with inadequate pressures within the distribution system. A catastrophic loss of water supply could result in Citywide health impacts due to a lack of sanitation and the use of other water sources that may not meet Federal drinking water standards.

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 provided that the two blocks of new water main are installed using a boring technique that will not disturbed the unnamed creek. The project will not affect threatened and endangered species or their habitats. 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 obtained and the terms of which 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 from this project. All lead pipe shall be abandoned in place and physically disconnected from the active distribution system or physically removed in entirety according to state and federal regulations.

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 Jean.Mayne@dnr.iowa.gov or (515) 491-7565.

Sincerely,

Jean Mayne Environmental Specialist 6200 Park Ave, Suite 200 Des Moines, IA 50321

Enclosures: Environmental Assessment

Project Map

Distribution

List (email): Garden & Associates engineering

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 Creston News Advertiser newspaper <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.



PROJECT IDENTIFICATION

Applicant: City of CrestonSRF Number: FS-88-24-DWSRF-041

And FS-88-24-DWSRF-041L lowa DNR Project Number: W2023-0662

County: Union State: lowa

COMMUNITY DESCRIPTION

Location: The City of Creston is located in Union County, Iowa approximately 75 miles southwest of Des Moines, Iowa and 100 miles east of Omaha, Nebraska.

Population: The population of Creston according to the 2020 US Census was 7,536 persons.

Background: The Creston water distribution system was originally constructed in the 1890s. The system has been expanded and portions of the original system have been replaced. Currently, the City's water distribution piping material consists of 156,025 linear feet of cast iron pipe, 39,560 linear feet of ductile iron pipe, 165,485 linear feet of polyvinylchloride pipe (PVC), and 390 feet of type K copper pipe. Much of the cast iron pipe is original to the system, making it approximately 130 years old. Reportedly, 114 water main breaks occurred between 2013 and 2017, mostly in areas of cast iron pipe though there are areas of break-prone ductile iron as well. Each time a water main breaks, the opening presents the opportunity for harmful organism to infiltrate into the water supply.

The Iowa Department of Natural Resources program to replace lead service lines started in 2021. Its objective is to inventory and start process of replacing all lead service lines in the state. According to the City of Creston records, approximately 339 lead water services are connected to the distribution system, along with 344 galvanized steel water services. Of those, 32 were identified in areas were water mains have frequently broken in recent years and would be adjacent the currently proposed water main work.

Lead piping is a concern due to corrosion. While typical systems manage their water chemistry to prevent corrosion, the lead material is still present and poses a potential hazard to the community. When lead pipe corrosion occurs, there may be spikes in premature birth, increased blood pressure, and anemia. This has

resulted in a nationwide effort to inventory and replace lead service lines due to the health concerns. Replacing these lead pipes in such varied piping situations requires clear communication, and often coordination, with private landowners.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the water supply system to better prevent contamination due to water main breaks and due to lead pipes in order to better safely and reliably operate the City of Creston's water system for at least the next 20 years.

Proposed Improvements: The proposed improvements include replacement of cast iron water main and break-prone ductile iron pipe, new hydrants, valves, curb stops and boxes, and replacement of lead or galvanized service lines where encountered. The proposed work is planned for much of uptown Creston and specific areas within the system with the most issues and highest frequency of main breaks. Construction methods for water main replacement include directional boring and open trench excavation. Lead service lines are expected to be replaced using a pull-through technique. To better regulate system pressure, two blocks of new water main is also proposed.

ALTERNATIVES CONSIDERED

Alternatives Considered: After review of the existing distribution system, the City of Creston identified the lead service locations. A no action alternative is not viable due to the health concerns of lead service lines. No improvement of the break-prone pipe mains would result in a continued deterioration of the pipes leading to more frequent and severe water main breaks and potentially water supply contamination due to loss of pressure. Other improvements considered include changes to the pipeline material and diameter. Two blocks of new water main were considered to better manage pressures and flows.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable due to the continued threat of water contamination due to lead piping. Creston intends to replace the service lines using a pull-through technique. Water main pipes selected for replacement were selected based on age and frequency of breakage. Replacement water main materials and diameters were selected based on the local environment, engineering criteria, and expected system pressures as well as minimization of the impacts to the environment. The location of new water main was selected to better manage system pressures and flows.

MEASURES TAKEN TO ASSESS IMPACT

Public Involvement: A public hearing was held on January 14, 2025 at 5:30PM at the City of Creston Water Works Board of Trustee regular meeting. The public notice of this hearing was made available by publication in the Creston News Advertiser on December 11, 2024 and placed on the applicant's website on December 11, 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

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

Creston 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. 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").

If construction activities find an unknown area of contamination, it is the responsibility of the applicant to follow the procedure for notification of hazardous conditions (567 IAC 131.2). Excavated soil that contains a hazardous substance must be assessed and properly disposed of (567 IAC 100.4).

All lead pipe shall be abandoned in place and physically disconnected from the active distribution system or physically removed in entirety. The lowa Department of Natural Resources recommends that any lead pipe materials removed from water services be managed through reclamation rather than disposal. A provision in federal rules (40 CFR 261) allows for management of what would otherwise be waste scrap metal to be managed as a solid waste provided the scrap metal is reclaimed. Municipalities are encouraged to carefully evaluate scrap dealers who might take this waste to ensure the lead pipe materials will be properly recycled. Recycled lead can be put back into use through lead-acid batteries, lead shielding and other valuable uses. If a municipality chooses to dispose of the lead materials, it will be necessary to characterize the waste to determine whether it exhibits a hazardous characteristic for lead. Lead pipe materials would likely fail TCLP for lead and would then need to be managed as a hazardous waste. No landfills in lowa can accept hazardous wastes. Lead pipe materials determined to be non hazardous could be disposed of in a solid waste landfill.

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#240888969), 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 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 provided that the two blocks of new water main are installed using a boring technique that will not disturbed the unnamed creek. 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. 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 provided all necessary floodplain development permits, state and local, are obtained and the terms of which 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.

Land Use and Trends: The project will not displace population nor will it alter the character of existing residential areas. 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 EJScreen 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 EJScreen 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, potentially improved, water quality for the citizens of City by removal of a potential source of contamination in the form of lead pipes. The replacement of breakprone water mains will better assist in the prevention of water supply contamination associated with inadequate pressures within the distribution system. A catastrophic loss of water supply could result in Citywide health impacts due to a lack of sanitation and the use of other water sources that may not meet Federal drinking water standards.

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 provided that the two blocks of new water main are installed using a boring technique that will not disturbed the unnamed creek.
- The project will not affect threatened and endangered species or their habitats. 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 obtained and the terms of which 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 from this project.
- All lead pipe shall be abandoned in place and physically disconnected from the active distribution system or physically removed in entirety according to state and federal regulations.

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.

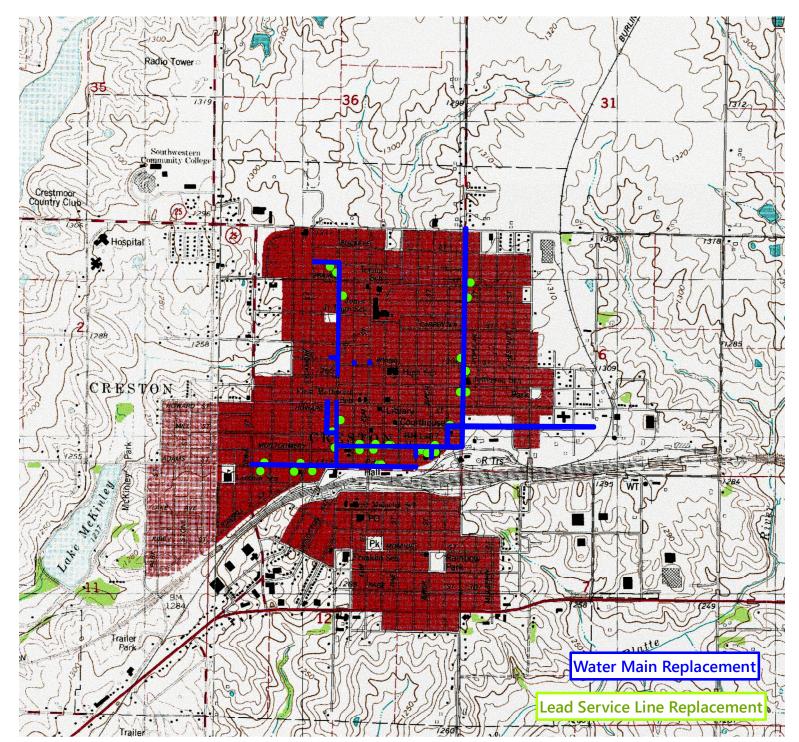
Jean Mayne

Environmental Review Specialist State Revolving Fund Iowa Department of Natural Resources



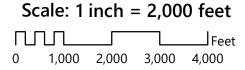
USGS 7.5' Quad: Creston East S01 & 12, T72N, R 31W S06, T 72N, R 30W Date: 1980





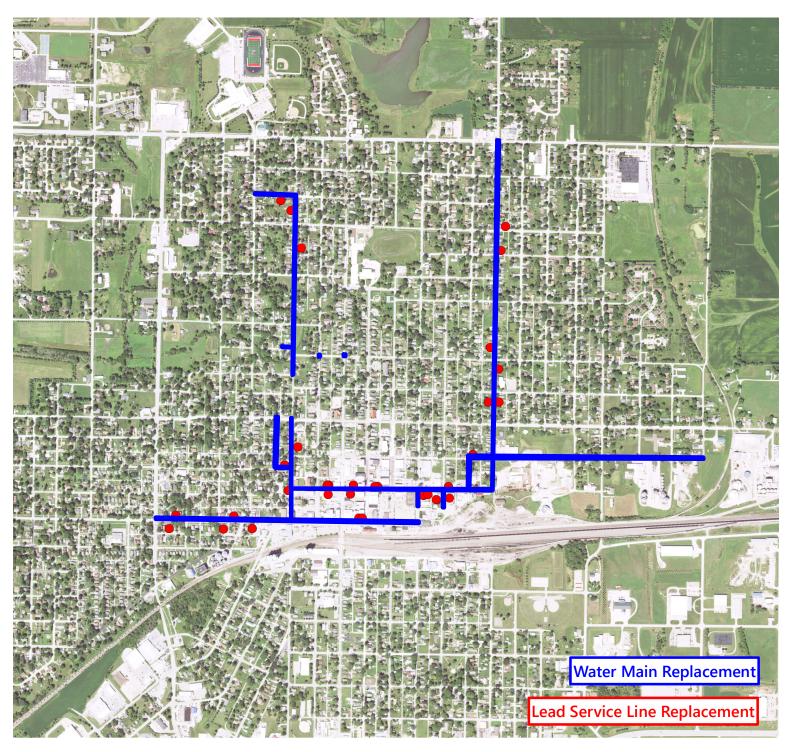
Topographic Map

Creston Lead Service Line and Water Main Replacement Creston, Iowa (Union County)



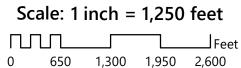






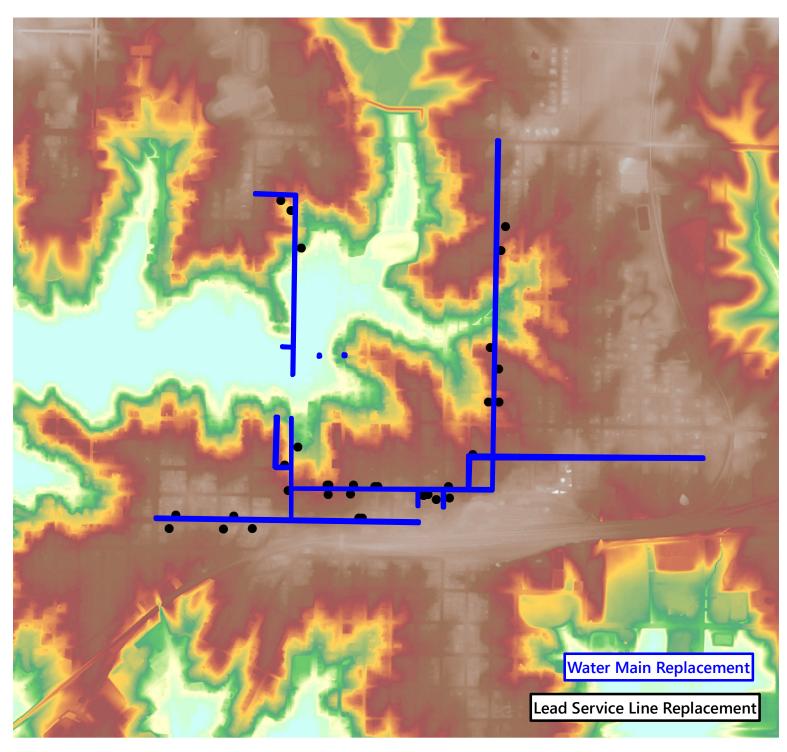
Aerial Photograph

Creston Lead Service Line & Water Main Replacement Creston, Iowa (Union County)









LiDAR

Scale: 1 inch = 1,250 feet

Feet

1,300 1,950 2,600

Creston Lead Service Line and Water Main Replacement Creston, Iowa (Union County)