

**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**

February 17, 2012

#### **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 Humboldt

**SRF Number:** FS-46-12-DWSRF-006

**IDNR Project Number:** W2010-0367

**County:** Humboldt

**State:** Iowa

The City of Humboldt, Iowa is planning an upgrade to their drinking water treatment facility. 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 Humboldt is located in Humboldt County approximately 17 miles north of Fort Dodge, Iowa and 60 miles east of Storm Lake, Iowa. The population of Humboldt according to the 2010 US Census was 4,690. Projected design population for the year 2030 is roughly the same given historical population data and estimates of population change.

The existing water treatment plant (WTP) is a lime softening facility including equipment for aeration, chemical feed, and gas chlorination. In addition, there are three underground storage vessels located at the plant site: a 40,000-gallon clearwell, a 100,000-gallon reservoir and 500,000-

gallon reservoir. The WTP and existing ground storage are located within the 100-year flood plain and are susceptible to flooding and failure from high water levels.

The proposed project includes construction of a new addition to the existing WTP building, replacement/repair of process equipment, new electrical systems and controls, and flood-proofing of existing plant facilities. The existing WTP building will be rehabilitated including the addition of new insulated wall panels, doors, and windows throughout the building. The existing 100,000-gallon and 500,000-gallon underground storage reservoirs will be demolished. The existing 40,000-gal clearwell will be abandoned and filled. A new building will be constructed at the WTP site to house a new 14,000-gallon clearwell, new 133,000-gallon chlorine contact tank, and new high service pump. A second new building will be constructed at the WTP site for new sludge dewatering process equipment. In addition, a new underground electrical line (along Sumner Ave) will be installed from the WTP to the existing well house located at the city park.

The purpose of this project is to make improvements to the water treatment facilities to protect equipment and drinking water supply from 100-year flood events and provide an easily expandable system to safely and reliably operate the City of Humboldt's water supply system for at least the next 20 years. Positive environmental effects will be maintained water quality for the citizens of Humboldt. Floodwaters could potentially contaminate water supply facilities with bacteria, viruses, or chemicals which could pose human health or safety hazards. By protecting the facilities from the 100-year flood events, the City significantly reduces the risks of contamination by floodwater and subsequent risks to human health and safety.

The project will not significantly affect the pattern and type of land use or growth and distribution of population. 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 conflict with local, regional or State land use plans or policies. 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. The project will not impact wetlands or affect threatened and endangered species or their habitats. The project will not have a significant impact to the 100-year flood plain given the conditions of the state and local-issued flood plain development permits are abided by.

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.

The attached review does not indicate that a significant environmental impact will result from the proposed action. This action is taken on the basis of 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 [tiffany.wilson@dnr.iowa.gov](mailto:tiffany.wilson@dnr.iowa.gov) or 515-725-0261.

Sincerely,



Tiffany Wilson  
Environmental Specialist  
401 SW 7<sup>th</sup>, Suite M  
Des Moines, IA 50309

Enclosures: Environmental Assessment  
Project Map

Cc: Lance Aldrich, FOX Engineering Associates, Inc., 1601 Golden Aspen Dr., Suite  
103 Ames, IA 50010

Distribution List (email): Horst Greczmiel, Council on Environmental Quality  
Dean Lemke, Iowa Department of Agriculture and Land Stewardship  
Ken Sharp, Iowa Department of Public Health  
Benton Quade, Iowa Economic Development Authority  
Annie Beaman, Iowa Environmental Council  
Susan Heathcote, Iowa Environmental Council  
Tracy Scebold, Iowa Finance Authority  
Mickey Shields, Iowa League of Cities  
Jane Clark, Sierra Club  
Donna Jones, USACE Rock Island District  
Jim Carroll, USDA Rural Development  
Nick Chevance, USDO, National Park Service, Midwest Region  
USDO, Fish and Wildlife Service, Rock Island Field Office  
Christopher Simmons, USEPA Region VII  
Joe Cothorn, USEPA Region VII  
Kelly Beard-Tittone, USEPA Region VII  
The Humboldt Independent

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## **IOWA STATE REVOLVING FUND**

### **ENVIRONMENTAL ASSESSMENT DOCUMENT**

#### ***PROJECT IDENTIFICATION***

**Applicant:** City of Humboldt

**SRF No.:** FS-46-12-DWSRF-006

**County:** Humboldt

**Project No.:** W2010-0367

**State:** Iowa

#### ***COMMUNITY DESCRIPTION***

**Location:** The City of Humboldt is located in Humboldt County approximately 17 miles north of Fort Dodge, Iowa and 60 miles east of Storm Lake, Iowa.

**Population:** The population of Humboldt according to the 2010 US Census was 4,690. Projected design population for the year 2030 is roughly the same given historical population data and estimates of population change.

**Current Source of Water:** Currently, the city obtains its drinking water from two flowing wells (also referred to as the north and south spring) located in the existing water treatment plant and from a drilled well located in the city park approximately 300 yards southeast of the water plant.

**Current Water Treatment:** The existing water treatment plant (WTP) is a lime softening facility including equipment for aeration, chemical feed, and gas chlorination. In addition, there are three underground storage vessels located at the plant site: a 40,000-gallon clearwell, a 100,000-gallon reservoir and 500,000-gallon reservoir. The WTP and existing ground storage are located within the 100-year flood plain and are susceptible to flooding and failure from high water levels.

## ***PROJECT DESCRIPTION***

**Purpose:** The purpose of this project is to make improvements to the water treatment facilities to protect equipment and drinking water supply from 100-year flood events and provide an easily expandable system to safely and reliably operate the City of Humboldt's water supply system for at least the next 20 years.

**Proposed Improvements:** The proposed project includes construction of a new addition to the existing WTP building, replacement/repair of process equipment, new electrical systems and controls, and flood-proofing of existing plant facilities. The existing WTP building will be rehabilitated including the addition of new insulated wall panels, doors, and windows throughout the building. The existing 100,000-gallon and 500,000-gallon underground storage reservoirs will be demolished. The existing 40,000-gal clearwell will be abandoned and filled. A new building will be constructed at the WTP site to house a new 14,000-gallon clearwell, new 133,000-gallon chlorine contact tank, and new high service pump. A second new building will be constructed at the WTP site for new sludge dewatering process equipment. In addition, a new underground electrical line (along Sumner Ave) will be installed from the WTP to the existing well house located at the city park.

## ***ALTERNATIVES CONSIDERED***

**Alternatives Considered:** Construction of a new electro-dialysis reversal (EDR) membrane water treatment plant in the existing city park or a new lime softening plant near the high school were considered as alternatives to meet current DNR design standards and protect the city's water supply from contamination during 100-year flood events.

**Reasons for Selection of Proposed Alternative:** The No-Action alternative is not viable given the condition and need to bring the existing water treatment facilities to current design standards as well as the potential hazards to the drinking water supply given the location of the existing water treatment plant in the 100-year flood plain. The renovation and expansion of the existing water treatment plant was considered the most cost effective option.

## ***MEASURES TAKEN TO ASSESS IMPACT***

**Public Involvement:** A public hearing was held on December 19, 2011 at 5:30PM at the City's regular council meeting. The public notice of this hearing was published in The Humboldt Independent on November 10, 2011. 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  
Delaware Tribe of Indians  
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 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. Therefore, 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 (IAW Iowa Administrative Code 567-23.3(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 agreed (R&C #111046013), 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 has determined that the project will not impact threatened or endangered species or their habitats so long as tree clearing takes place during the fall/winter months to avoid nesting and brooding seasons of migratory species. 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. The Iowa DNR Water Resources Section and City of Humboldt have issued flood plain development permits for the project. No significant impacts the 100-year flood plain are expected given all terms and conditions of the flood

plain development permits are met. 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 Humboldt 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 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.

### ***POSITIVE ENVIRONMENTAL EFFECTS TO BE REALIZED FROM THE PROPOSED PROJECT***

Positive environmental effects will be maintained water quality for the citizens of Humboldt. Floodwaters could potentially contaminate water supply facilities with bacteria, viruses, or chemicals which could pose human health or safety hazards. By protecting the facilities from the 100-year flood events, the City significantly reduces the risks of contamination by floodwater and subsequent risks to human health and safety.

### ***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. 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 have a significant impact to the 100-year flood plain given the conditions of the state and local-issued flood plain development permits 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.
- 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 (IAW Iowa Administrative Code 567-23.3(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 projects relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.



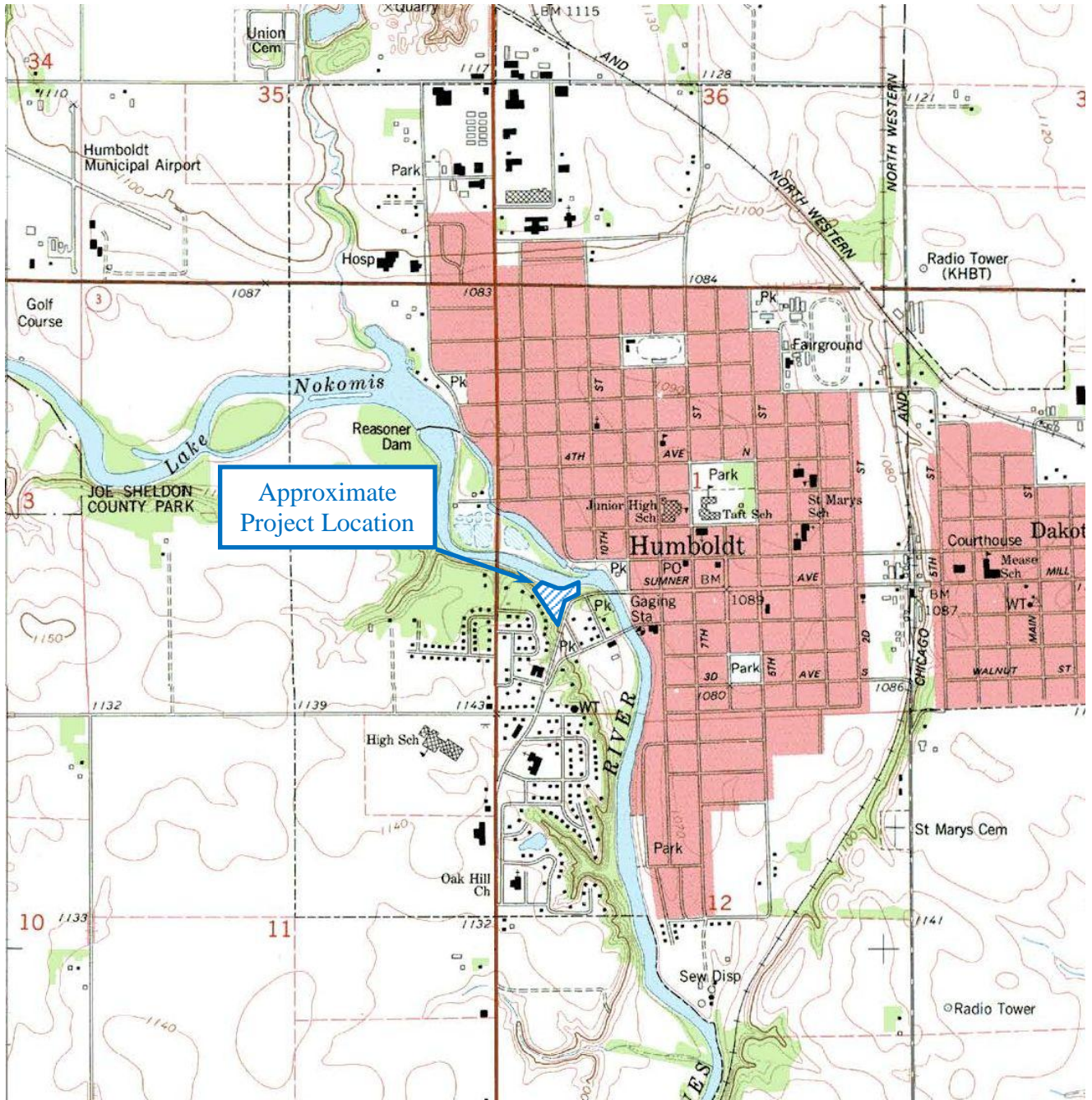
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**Tiffany Wilson**  
Environmental Review Specialist  
State Revolving Fund  
Iowa Department of Natural Resources

**USGS 7.5 Minute Quadrangle: Humboldt**  
**Section: 01, Township: 91 N, Range: 29 W**  
**Date: 1979**  
**Scale: 1 Inch = 2,000 Feet**



**North**



## USGS Topographic Map

Humboldt Water Treatment Plant Upgrades  
Humboldt, Iowa



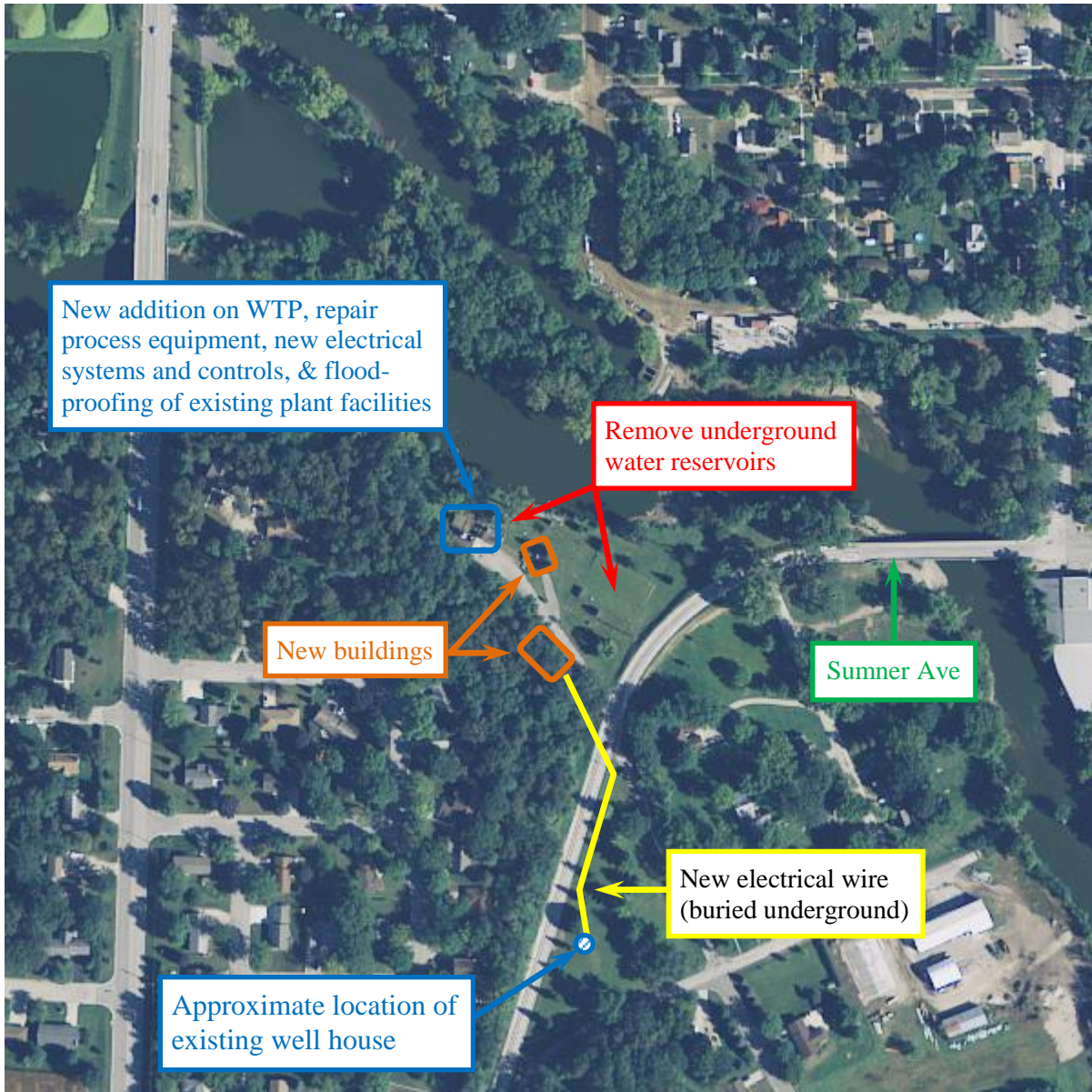
State Revolving Fund  
401 SW 7<sup>th</sup> Street, Suite M  
Des Moines, IA 50309

2010

Location provided by FOX Engineering Associates, Inc.



North



## Aerial Photograph

Humboldt Water Treatment Plant Upgrades  
Humboldt, Iowa



State Revolving Fund  
401 SW 7<sup>th</sup> Street, Suite M  
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