

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 INFORMATION DOCUMENT

PROJECT IDENTIFICATION

Applicant: City of Muscatine
County: Muscatine
State: Iowa

SRF Number: S2022-036A
Iowa DNR Project Number: CS1921135 01

COMMUNITY DESCRIPTION

Location: The City of Muscatine is located in Muscatine County, Iowa approximately 50 miles southeast of Iowa City, Iowa and 30 miles west of Davenport, Iowa.

Population: The population of Muscatine according to the 2020 US Census was 23,797. Muscatine is currently growing at a rate of 0.38% annually and its population has increased by 0.76% since the most recent census, which recorded a population of 23,797 in 2010.

Current Waste Collection System: The City of Muscatine has a combined sewer system (CSS) in the original portions of the community. The CSS conveys sanitary wastewater and stormwater to the wastewater treatment plant located on Musser Street. In 2007, the City entered into a Consent Order with the EPA (CWA-07-2007-0088) formalizing the City's commitment to separate its combined sewer system.

PROJECT DESCRIPTION

Purpose: The purpose of this project is to make improvements to the wastewater collection system to enhance their reliability, increase capacity and to replace obsolete system to safely and reliably operate the City of Muscatine's wastewater system for the next 20 years. Additionally, the City of Muscatine is under an EPA Consent Order (CWA-07-2007-0088) to eliminate their Combined Sewer Overflows (CSO) including those in the West Hill Area by December 31, 2028. A consent order extension from December 31, 2024 to December 31, 2028 was granted by the EPA in October 2012.

Proposed Improvements: The West Hill Sanitary Sewer Separation Phase 6D project will include approximately 4,500 feet of new sanitary sewer with surface restoration and full width pavement replacement. The proposed sanitary sewer construction will include 8-15" sanitary sewer. New storm sewer could include up to 4,200 feet of new 12-60" storm sewer. Sewers depth will range up to 20 feet deep. The sewers will be installed by open cut excavation, however trenchless construction may be used to install new pipes under existing sewers if needed. Approximately 1,000 feet of the project corridor will cross wooded undeveloped ground on private property between Hagerman Drive and Eisenhower Street. The project area

north of Hagerman Drive toward Terrace Heights may include connecting existing sewers on Private property to the new Hagerman Drive sewers and could include up to 2000' of sanitary and/or storm sewer work plus storm water management. The existing Upper West Branch Sewer (UWBS) is a combined sewer within the project limits and is comprised of 39"x39" concrete box from Hagerman Dr to Logan St. At Logan St a short segment is a 4'x4' concrete arch under the road that acts as a culvert taking surface flow from the west and the beginning of the UWBS box sewer structure. The year of construction of UWBS 1929 based on an entry made in the City's database from an unknown source. Cutting of trees along the wooded corridor would occur between Oct 1, 2024 and March 31, 2025 ahead of the Phase 6D sewer construction. Temporary construction easements and permanent sewer easements will be needed where sewers cross private property. Muscatine Power and Water (MPW) is the owner of the water, electric, and communications utility in Muscatine. MPW is a separate utility from the City of Muscatine public works, government and structure. MPW may elect to replace water and electric improvements in the project corridor. The improvements may be included in the City's contract with the sewer separation work or occur outside of the contract. On occasion water line relocation is deemed necessary because of the sewer improvements and the cost of the relocation falls on the City of Muscatine to fund. The City may purchase property on Hagerman Drive.

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

ALTERNATIVES CONSIDERED

Alternatives Considered: The West Hill Area Separation Program has been ongoing for several years. In 2010 an engineering study titled "West Hill Area Sewer Separation Conceptual Design Report" was prepared. The City is under an EPA Consent Order to eliminate their Combined Sewer Overflows. The 2010 Report provided an overview of the West Hill Area separation program and divided the separation projects into four phases. As the program has progressed, the City reallocated the four separation phases into six.

Reasons for Selection of Proposed Alternative: The No-Action alternative is not viable due to the EPA Consent Administrative Order. The project site was selected for the availability of land, engineering criteria, proximity to existing facilities, hydraulic considerations, as well as minimization of the impacts to the environment.

MEASURES TAKEN TO ASSESS IMPACT

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
Muscatine Historic Preservation Commission
Muscatine County Historic Preservation Commission

No adverse comments were received from any agencies or general public to date. 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").

This project may require the disposal of sewage sludge. It is the responsibility of the applicant to ensure that the disposal of any sewage sludge complies with applicable requirements found in 40 CFR Part 503 and 567 Iowa Administrative Code IAC 67.

Historical/Archaeological: Various Native American tribes with an interest in the area and the Certified Local Government were provided information regarding the project. A Phase I Archeological investigation of the proposed project was completed and an architectural study is underway. Results from these investigations will be submitted to the State Historical Preservation Office (SHPO) for review. The project will only proceed as planned if a determination of either "no historic properties affected" or "no adverse effect on historic properties" can be appropriately reached with or without mitigation. 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: The U.S. Army Corps of Engineers will determine if the proposed project will impact wetlands or jurisdictional waters of the United States. 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 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. 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. The proposed project is within the present corporate limits of Muscatine 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 EJScreen tool, this project area has been evaluated as a community with Environmental Justice (EJ) concern at the time of this review and for the purposes of this proposed project. The EJScreen report is available upon request. While short-term environmental impacts are expected as outlined in the construction section above this project will improve the handling and treatment of wastewater. This project has been designed to maintain and protect high quality waters and existing water quality in other waters from unnecessary pollution.

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 collection of the wastewater from the City of Muscatine and compliance with the EPA Consent Order. This project should reduce the frequency of raw sewage discharge events to the environment which can pose not only a health and safety hazard to people, but also could be harmful to amphibians, fish, birds, and other wildlife.

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 U.S. Army Corps of Engineers will determine if the proposed project will impact wetlands or jurisdictional waters of the United States.
- 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.
- An archeological and architectural investigation of the proposed project area will be completed. Results from this investigation will be submitted to the State Historical Preservation Office for review. The project will only proceed as planned if a determination of either "no historic properties affected" or "no adverse effect on historic properties" can be appropriately reached with or without mitigation.
- 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.

The project description, scope, and anticipated environmental impacts detailed above are accurate and complete to the best to my knowledge.

Signature of the Mayor, City of Muscatine

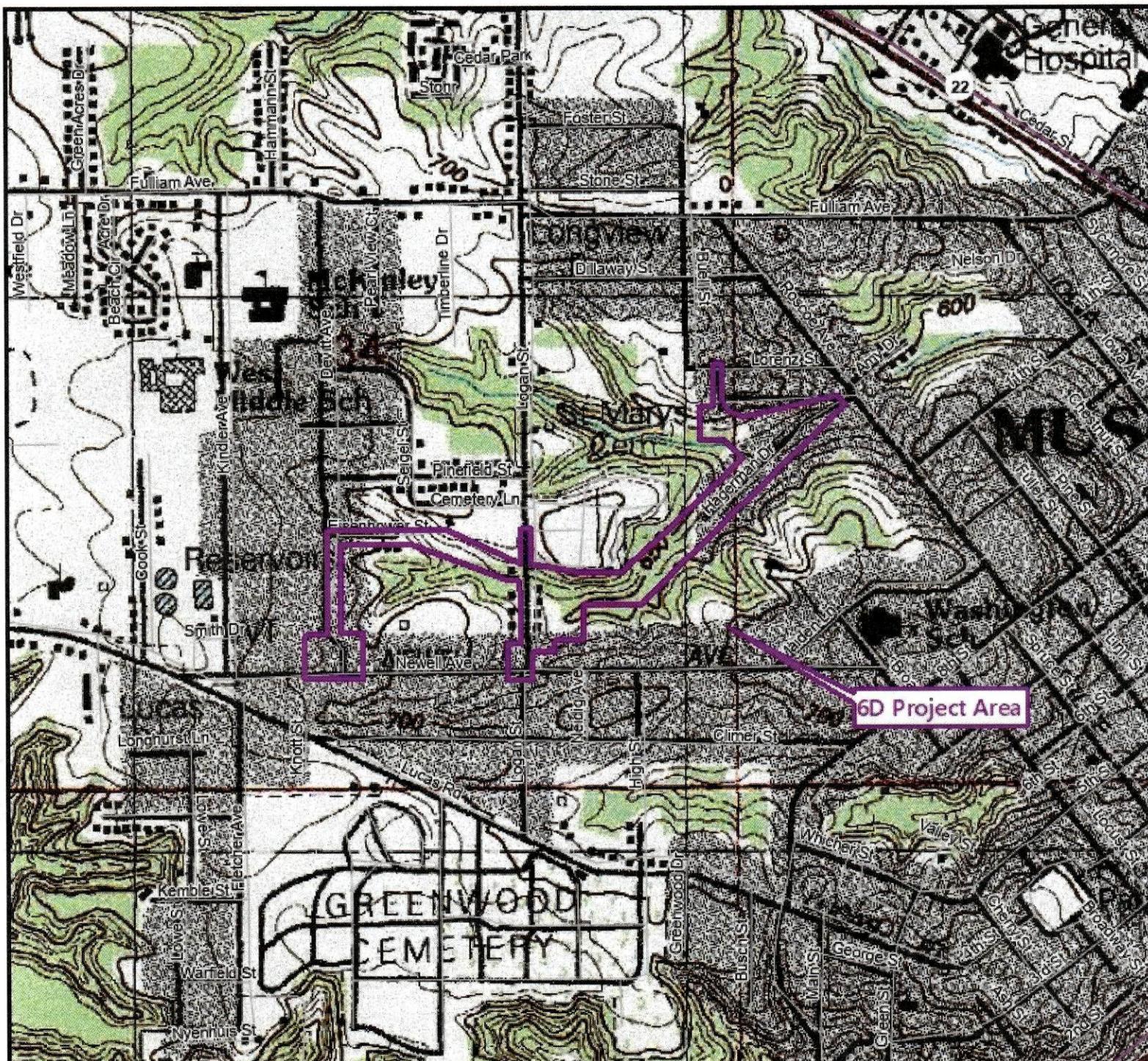
Date

Printed Name of the Mayor, City of Muscatine



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

USGS 7.5 Minute Quadrangle: Muscatine
Sections: 34 & 35, Township: 77 N, Range: 02 W
Date: 1991



Legend

Muscatine West Hill 6D Project Area

Scale: 1 inch = 833 feet

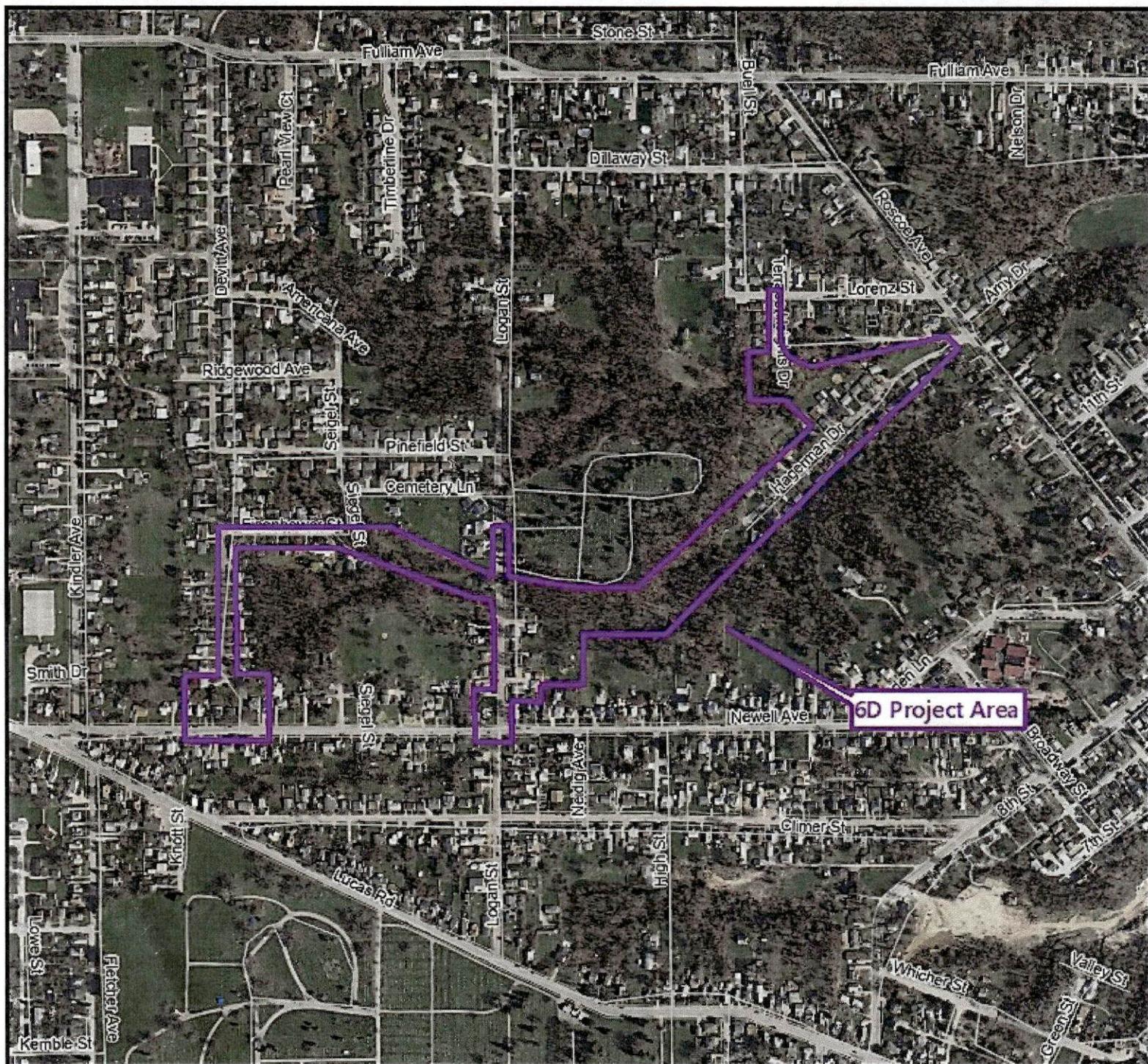
Muscatine West Hill Sewer Separation 6D
Muscatine, IA Muscatine County, Iowa)

0 410 820 1,230 1,640 2,050 Feet



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

Aerial



Legend

Muscatine West Hill 6D Project Area

Scale: 1 inch = 583 feet

Muscatine West Hill Sewer Separation 6D
Muscatine, IA Muscatine County, Iowa)

