<u>Why You Should Read This</u>: The document below reviews the environmental impact likely from a State Revolving Fund project. As part of the environmental review, you are entitled to provide comments. If you have concerns about the environmental impact of this project, raise them now. We encourage public input in this decision making process.



March 31, 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 Muscatine SRF Number: S2022-036A

County: Muscatine lowa DNR Project Number: CS1921135 01

State: Iowa

The City of Muscatine, Iowa is planning an upgrade to their wastewater 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 Muscatine is located in Muscatine County, Iowa approximately 50 miles southeast of Iowa City, Iowa and 30 miles west of Davenport, Iowa. 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.

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.

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.

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. Temporary construction easements and permanent sewer easements will be needed where sewers cross private property.

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 Street. At Logan Street 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 City is replacing approximately 1300' of the existing concrete box 3.2'x3.2' UWBS. The City may need to replace portions of the UWBS between Roscoe and Logan Street. The year of construction of UWBS 1929 based on an entry made in the City's database from an unknown source. The City has made a financial offer to buy 539 Hagerman Drive and it is currently under review by the property owner's attorney.

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.

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.

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. An application has been submitted to the U.S. Army Corps of Engineers for their determination if the project will impact wetlands or jurisdictional waters of the United States and require a permit. 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 are of potential effect, 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 <a href="mailto:SRF-PC@dnr.iowa.gov">SRF-PC@dnr.iowa.gov</a> or directly to me at <a href="mailto:karrie.darnell@dnr.iowa.gov">karrie.darnell@dnr.iowa.gov</a> or 515-901-6817.

Sincerely,

Karrie Darnell Environmental Specialist Senior 502 E 9<sup>th</sup> St Des Moines, IA 50319-0034

Enclosures: Environmental Assessment

**Project Map** 

Distribution

List (email): Karmen Heim, Stanley Consultants

Edward Boling, Council on Environmental Quality

Jake Hansen, Iowa Department of Agriculture and Land Stewardship

Ken Sharp, Iowa Department of Public Health Sarah Petersen, Iowa Department of Public Health 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
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
Muscatine Journal

<u>Why You Should Read This</u>: The document below reviews the environmental impact likely from a State Revolving Fund project. As part of the environmental review, you are entitled to provide comments. 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 Muscatine SRF Number: S2022-036A

County: Muscatine lowa DNR Project Number: CS1921135 01

State: Iowa

#### **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. Temporary construction easements and permanent sewer easements will be needed where sewers cross private property.

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 Street. At Logan Street 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 City is replacing approximately 1300' of the existing concrete box 3.2'x3.2' UWBS. The City may need to replace portions of the UWBS between Roscoe and Logan Street. The year of construction of UWBS 1929 based on an entry made in the City's database from an unknown source. The City has made a financial offer to buy 539 Hagerman Drive and it is currently under review by the property owner's attorney.

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.

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**

**Public Involvement:** A public hearing was held on November 7, 2024 at 6:00PM at the City's regular council meeting. The public notice of this hearing was made available by publication in the Muscatine Journal on

September 26, 2024 and placed on the City website on September 27, 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

Muscatine Historic Preservation Commission

Muscatine County 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"). This project does not include construction of equipment that has a potential to emit criteria pollutants or hazardous air pollutants above minor source reporting thresholds. 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: 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. A Phase I Archaeological Investigation and Phase IA Architectural Historic Reconnaissance Report of the proposed project were completed. Results from these investigations were submitted to the State Historical Preservation Office (SHPO) for comment. The DNR has determined 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 investigations conducted. 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 area of potential effect, 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. An application has been submitted to the U.S. Army Corps of Engineers for their determination if the project will impact wetlands or jurisdictional waters of the United States and require a permit. 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.

**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.
- An application has been submitted to the U.S. Army Corps of Engineers for their determination if the project will impact wetlands or jurisdictional waters of the United States and require a permit.
- 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 are of potential effect, 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 92.8(1)"b" for wastewater relating to compliance with the National Environmental Policy Act of 1969. No adverse effect or significant environmental impact is foreseen at this time.

#### KARRIE DARNELL

Environmental Review Specialist State Revolving Fund Iowa Department of Natural Resources



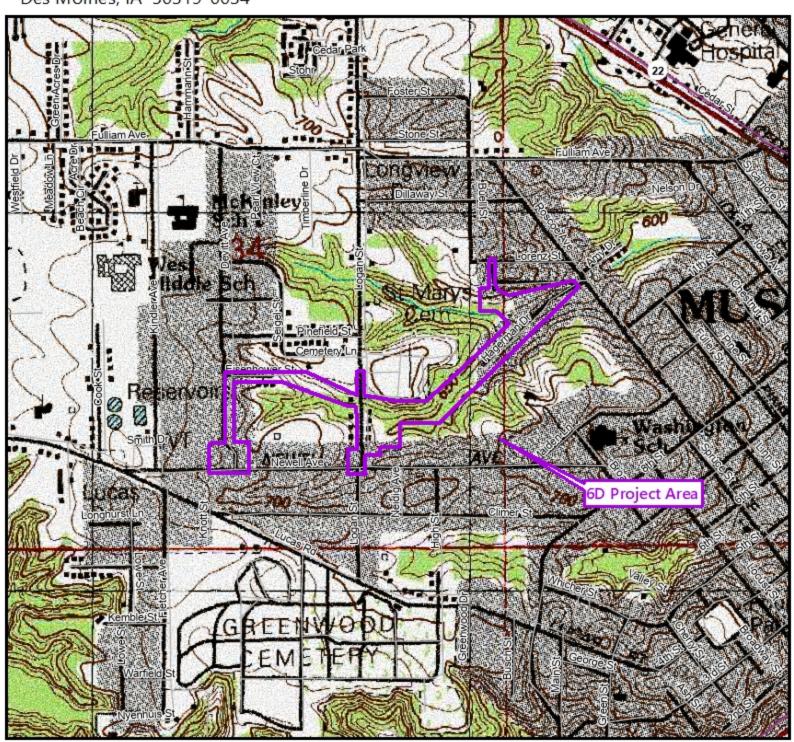
502 East 9th Street

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

Date: 1991



Des Moines, IA 50319-0034



### Legend

Muscatine West Hill 6D Project Area

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

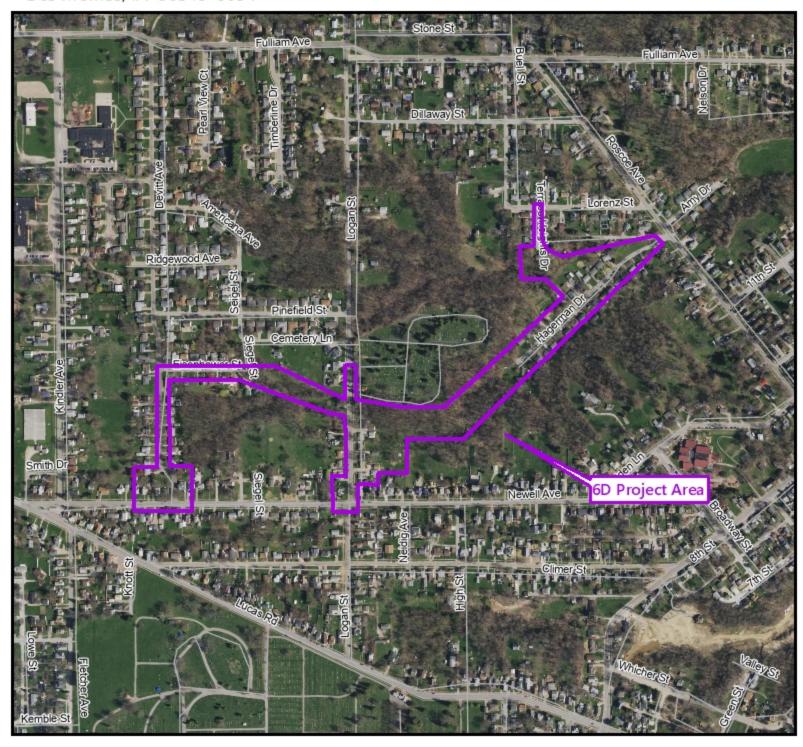
1,230 1,640 2,050

Scale: 1 inch = 833 feet



# **Aerial**





## <u>Legend</u>

Muscatine West Hill 6D Project Area

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

Feet 0 290 580 870 1,160 1,450

Scale: 1 inch = 583 feet