

Sewer Utility

Capital Improvement Plan

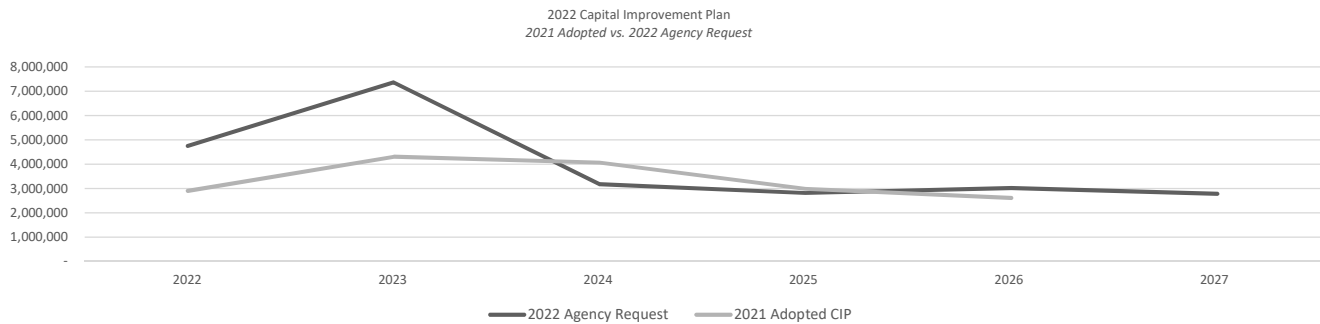
	2021 Adopted	2022 Request	Change
2022 Capital Budget	2,901,000	4,756,000	1,855,000
2022 Capital Improvement Plan*	16,868,000	21,118,000	4,250,000

*Years 2022 to 2026 used for comparison.

	2021 Adopted	2022 Request
Number of Projects	6	9

Project Summary: Agency Request

	2022	2023	2024	2025	2026	2027
Citywide Pumping Stations-Emergency Power Stationary Generators	58,000	58,000	58,000	58,000	60,000	63,000
Engineering Sycamore Cold Storage Structure	200,000	-	-	-	-	-
Lift Station Rehabilitation and Replacement	253,000	275,000	613,000	555,000	524,000	172,000
Sewer Access Improvements	130,000	130,000	130,000	135,000	142,000	149,000
Sewer Backwater Valve Reimbursement	40,000	40,000	40,000	40,000	40,000	40,000
Sewer Impact Fee Districts	1,200,000	1,500,000	-	-	-	-
Sewer Reconstruction	1,065,000	597,000	275,000	301,000	437,000	459,000
Trenchless Sewer Rehabilitation	1,760,000	1,760,000	1,760,000	1,724,000	1,810,000	1,900,000
Utility Materials Handling Site	50,000	3,000,000	300,000	-	-	-
Total	4,756,000	7,360,000	3,176,000	2,813,000	3,013,000	2,783,000



Major Changes/Decision Points

- Engineering Sycamore Cold Storage Structure
 - \$200k project added to CIP in 2022
- Lift Station Rehabilitation and Replacement
 - Program budget for 2022 increased by \$22k to reflect adjustments to schedule for lift station projects associated with Final Attachment of Town of Madison (no change to overall program budget from 2022-2026)
- Sewer Impact Fee Districts
 - Pumpkin Hollow project advanced from 2024 to 2022
 - Program budget increased by \$500k from 2022-2026
- Sewer Reconstruction
 - 2022 budget increased by \$343k to reflect changes to sewer reconstruction schedule (no change to overall program budget from 2022-2026)
- Utility Materials Handling Site
 - \$3.35m project added to CIP in 2022-2024



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To: Dave Schmiedicke, Finance Director
From: Robert F. Phillips, P.E., City Engineer
Date: May 25, 2021
Subject: Sewer Utility 2022 Capital Budget Request

Goals of Sewer Utility Capital Budget

The primary objective of the Sewer Utility Budget is to undertake projects which provide for the safe, reliable, efficient, and cost effective collection and conveyance of wastewater to the Nine Springs Wastewater Treatment Plant. An emphasis is placed on projects that reduce the potential for sewer backups and sanitary sewer overflows.

Funds for sewer replacement associated with specific street reconstruction projects are not shown in the Sewer Utility budget but rather in the Engineering – Major Streets budget. This was done to provide a full view of funding for City street projects.

The community need that is addressed is providing uninterrupted safe reliable sewer service to all of our customers. Our projects target deficiencies in the City’s sanitary sewer collection system whether that is repair or replacement work, ensuring pumping stations have continuous power or providing access for City crews to City sewers. One program that prioritizes Racial Equity and Social Justice is the proposed Backwater Valve Reimbursement program where our outreach targets locations where we have had a history of sewer backups and are located in areas of environmental justice. We are prioritizing these locations as well as properties who have had recent backups with our notifications by mail. The reimbursement program is available to all customers as long as funding is available in the program.

Prioritized List of Capital Requests

1. Trenchless Sewer Rehabilitation
2. Citywide Pumping Stations – Emergency Power Stationary Generators
3. Lift Station Rehabilitations and Replacements
4. Sewer Reconstructions
5. Sewer Impact Fees
6. Sewer Access Improvements
7. Backwater Valve Reimbursement Program
8. Engineering Sycamore Cold Storage Structure
9. Utility Materials Handling Site

The top priority is Trenchless Sewer Rehabilitation because it is the most cost effective least time consuming method we have for the repair of sanitary sewer. Sewer mains can be rehabilitated in a day compared to weeks with traditional open cut sewer replacement methods. It should be noted however that trenchless technology is not able to address all deficiencies in Sanitary Sewers and in some instances sewer replacement is necessary. As stated in the introduction above, funds for sewer reconstruction can be found in the individual street projects that exist within the Major Streets Budget and these projects are a high priority for the sewer utility.

The next two priorities are Citywide Pumping Stations Emergency Power Generators and Lift Station Rehabilitation and replacement. Failures in a lift station often lead to basement backups and possible sanitary sewer overflows. The project, Emergency Power Stationary Generator program, installs generators at lift stations to provide temporary power during a power outage and the Lift Station Rehabilitation and Replacement Program makes needed upgrades to lift stations. Several of the City's lift stations cannot be accessed with a portable generator in a timely manner in the event of power loss. Both projects reduce the likelihood of sewer backups into basements or Sanitary Sewer Overflows (SSOs) into the City's Lakes.

Sewer Reconstruction is the fourth priority. These projects are sewer repair and replacements identified by Engineering Operations personnel as requiring to be addressed promptly.

Sewer Impact Fee Districts is the fifth priority. These projects include the installation of new sanitary sewer facilities in order to facilitate new development.

Sewer Access improvements is the sixth priority because the City is not able to access certain sewers for routine maintenance or emergency repairs.

The Backwater Valve Reimbursement Program is the seventh priority. This is a new program where the City offers to reimburse property owners who would like a sewer backwater valve for additional protection from sewer backups.

The Engineering Sycamore Cold Storage Structure is the eighth priority. This is a new project to construct a fabric shelter at the Engineering clean fill site on Sycamore Rd. The structure will be used to store equipment and materials needed on the east side of Madison.

The Utility Materials Handling Site is the ninth priority. This site will allow the utilities to construct a new excess material disposal site and drying bed location. When repair work is done in city right of ways, often the material taken out of the trenches cannot be used for backfilling the trench and must be disposed of off-site. Our current disposal site has approximately 7 years of life left and we currently use the drying beds at the Madison Metropolitan Sewerage District (MMSD). While the use of MMSD's location has worked, coordination issues have arisen during large dredge projects. As the Storm Water Utility expands pond maintenance/dredging (as required by our WPDES stormwater discharge permit), we will need a dedicated City location for drying of pond sediments. Sewer Utility will own the site and Stormwater Utility and Water Utility will annually pay for their usage of it.

Summary of Changes from 2021 Capital Improvement Plan

For the 2022 Capital Budget, the overall budget funding levels are consistent with increases observed with new projects not included in the 2021 budget.

New projects in the 2022 budget include funding for:

1. Funding the new project Engineering Sycamore Cold Storage Structure project to provide temporary shelter for stored materials and equipment. The structure will be fabric.
2. Funding the new project for the Utility Materials Handling Site. This funding will provide a site to allow the City utilities to dispose of clean excavated material from repair projects throughout the city and a site to construct a drying bed for dredged material.
3. Creation of Backwater Valve Reimbursement program which will enable the City to reimburse property owners for the installation of a sewer backwater valve on their property. The program offers to pay for 75% of the installation cost of the valve (up to \$1500) which provides protection for wastewater backing up into homes. The priority customers for this program are customers who have had sanitary sewer backups.
4. Replacement of the City sewer with the Cannonball Bike Path project east of Fish Hatchery along the railroad. This sewer is undersized and in need of replacement.
5. Sewer Reconstruction has 2 projects planned for 2022:
 - Worthington Ave., Powers Ave., Thurber Ave. is a sewer replacement project located in the Town of Blooming Grove. The Waunona Sanitary District was taken over by the City in September 2017 and are in need of replacement.
 - Femrite Drive has a proposed sanitary sewer between Meier Road and Ohmeda Drive for 2022(100% assessed) to provide sanitary sewer service to a pending office development on the south half of the GE Medical site. This is an assessable project.

The expenditure level for the out years in the Sewer Utility Capital budget are consistent with the 2021 City of Madison Adopted Capital Budget when considered in totality with exception of the newly added projects (Engineering Sycamore Cold Storage Structure, Utility Materials Handling Site and Backwater Valve Reimbursement program) which resulted in an increase in the overall budget over the 5 year period.

As stated earlier, funds for sewer work on street projects are shown in the Major Streets Budget. Funding show in the proposed 2022 Capital budget is consistent with that shown in the 2021 Adopted Capital Budget however funds were reallocated. We are proposing to use budgeted funds from the sewer portion of Pavement Management and Reconstruction Streets which didn't need the funding on individual Major Streets projects to account for the estimated cost increases to complete the work and to fund sewer replacement work in conjunction with the Cannonball bike path that was not previously budgeted.

Potential for Scaling Capital Requests

In the Engineering-Sewer Utility budget, individual projects for the most part are difficult to downscale other than Trenchless Sewer Rehabilitation or Citywide Pumping Stations-Emergency Power Generators where we have the most flexibility.

We can scale back on the number of sewer mains lined in Trenchless Sewer Rehabilitation. We can also scale back on the number of generators installed. A significant portion of the Engineering Sewer Utility budget funding involves sewer replacements with street projects included in the Engineering- Major Streets Budget. Reducing expenditures here will require the street project to be delayed. It is not recommended to reconstruct streets without the needed sanitary sewer reconstruction.

Impact of COVID-19 on Capital Funding

The Engineering-Sewer Utility budget has been slightly impacted by COVID-19. While the sanitary sewer 2020 revenue was initially affected by reduced volumes during the pandemic, adjustments were made to our budget during the 2020 year to allow the Sewer Utility to finish the year within budget limitations. We delayed a generator installation from 2020 to 2021 and we delayed bidding trenchless work. Most projects proposed for 2021 are on track to be completed as planned in the budget or will be bid out later this year.

c.c. Katie Crawley, Deputy City Mayor

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Citywide Pumping Station"/>
Project Number	<input type="text" value="11510"/>	Project Type	<input type="text" value="Program"/>
Project Category	<input type="text" value="Utility"/>	Priority:	<input type="text" value="2"/>
2022 Project Number	<input type="text" value="13609"/>		

Description

This program funds the installation of emergency power stationary generators at the City's pumping stations. The goal of the program is to ensure continuous sanitary service in the event of power loss. Funding in 2021 is for a back-up generator at the Veith Lift Station.

Budget Information

Prior Appropriation* **Prior Year Actual**

*Based on Fiscal Years 2015-2020

Budget by Funding Source

<i>Funding Source</i>	2022	2023	2024	2025	2026	2027
Reserves Applied - Sewer	58,000	58,000	58,000	58,000	60,000	63,000
Total	\$58,000	\$58,000	\$58,000	\$58,000	\$60,000	\$63,000

Budget by Expenditure Type

<i>Expense Type</i>	2022	2023	2024	2025	2026	2027
Sanitary Sewer	58,000	58,000	58,000	58,000	60,000	63,000
Total	\$58,000	\$58,000	\$58,000	\$58,000	\$60,000	\$63,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

No changes.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

To have a reliable sanitary sewer lift station in the event of a loss of power. Potential consequences of a lift station without power are sewer backups into homes and sanitary sewer overflows (SSOs).

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

The City has 29 lift stations located throughout the City. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from lift station overflows.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

We are not currently working with other City agencies on this program. Continuous sanitary sewer service is offered to all customers connected to the City's wastewater collection system.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

No

How will we continue to communicate with them in this process?

No

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Veith Ave. Lift Station	\$58,000	4101 Veth Ave.

Explain the justification for selecting projects planned for 2022:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

2023 Projects

Project Name	Est Cost	Location
American Family Lift Station	\$29,000	4747 Eastpark Blvd.
Cherokee No. 2 Lift Station	\$29,000	1550 Commanche Glen

Explain the justification for selecting projects planned for 2023:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

2024 Projects

Project name	Est Cost	Location
Hermina Lift Station	\$29,000	201 Clyde Gallagher Ave.
Waunona No.2(Fayette)	\$29,000	5201 Fayette Ave.

Explain the justification for selecting projects planned for 2024:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

2025 Projects

Project name	Est Cost	Location
Atlas Lift Station	\$29,000	702 Atlas Ave.
Commodore Lift Station	\$29,000	3100 Lake Mendota Drive

Explain the justification for selecting projects planned for 2025:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

2026 Projects

Project name	Est Cost	Location
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<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Waunona No. 1 (Hoboken) Lift Station	\$30,000	1814 Waunona Way
Waunona No. 4 (Waunona) Lift Station	\$30,000	3061 Waunona Way

Explain the justification for selecting projects planned for 2026:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

2027 Projects

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Gettle Lift Station	63,000	5414 Gettle Ave.

Explain the justification for selecting projects planned for 2027:

Program purchases and installs generators to provide continuous power to sanitary sewer lift station in the event of a loss of power. Priority of locations selected based upon likelihood of a loss of power, travel time to lift station with a portable generator, the number of customers affected with a sewer backup if the lift station has no power, and consequences to the environment from potential lift station overflows.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program? \$0

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
	0	This program ensures continuous power supply to the lift station. Without the generators, MMSD will need to bring a portabel generator to the lift station site and the City will need to dispatch a sewer vacator truck(s) and personnel to ensure uninterrupted sanitary sewer service to our customers and no Sanitary Sewer Overflows (SSOs) occur.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
	0	Minimal impacts to future equipment operation costs.

Notes

Notes:

2022 Capital Improvement Plan Project Budget Proposal

Identifying Information

Agency	Sewer Utility	Proposal Name	Engineering Sycamore Cc
Project Number	13688	Project Type	Project
Project Category	Utility	Priority:	8 <input style="width: 50px;" type="text"/>

Description

This project will construct a fabric shelter at the Engineering clean fill site on Sycamore Rd. The structure will be used to store equipment and materials needed on the east side of Madison.

Budget Information

Total Project Budget **Prior Appropriation**

*Based on Fiscal Years 2015-2021

Budget by Funding Source

Funding Source	2022	2023	2024	2025	2026	2027
Reserves Applied - Sewer	200,000	0	0	0	0	0
Total	\$200,000	\$0	\$0	\$0	\$0	\$0

Budget by Expenditure Type

Expense Type	2022	2023	2024	2025	2026	2027
Building	200,000	0	0	0	0	0
Total	\$200,000	\$0	\$0	\$0	\$0	\$0

Explain any changes from the 2021 CIP in the proposed funding for this project.

This is a new project which was not included in the 2021 CIP.

Explain any changes from the 2021 CIP in the proposed funding for this program.

This is a new project which was not included in the 2021 CIP.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Storage of materials at this site will reduce drive time for work on the east-side which translates to reduced fuel costs and emissions. A battery based PV system will provide power to operate the structures' overhead door and lighting.

What is the justification for this project?

Engineering needs additional covered storage for equipment and materials. The Division owns this site and its location allows us to operate more efficiently and reduce fuel usage and emission for work on the east-side.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, 2022 Capital Budget Agency Requests

home language, etc.) would be affected by the proposed budget or budget change(s)?

This project will provide covered storage for equipment and materials used in the maintenance and operation of the City's Storm Water and Sanitary Sewer Utilities. All residents of the City of Madison depend upon reliable sewer systems as part of their daily life. The fact that most people have to give this absolutely no consideration normally is a testament to the effectiveness of the system. Only when these systems fail do residents notice them.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

This project provides equipment to allow for the safe maintenance and operation of the City's Storm Water and Sanitary Sewer Utilities. All residents of the City of Madison depend upon reliable sewer systems as part of their daily life. The fact that most people have to give this absolutely no consideration normally is a testament to the effectiveness of these systems. Only when these systems fail do residents notice them.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

No

How will we continue to communicate with them in this process?

N/A

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

Can this project be mapped? Yes No

What is the location of the project?

Is this project on the Project's Portal? Yes No

2022 Status

Status/Phase	Est Cost	Description
	200000	Purchase and erection of fabric storage structure

2023 Status

Status/Phase	Est Cost	Description

2024 Status

Status/Phase	Est Cost	Description

2025 Status

Status/Phase	Est Cost	Description

2026 Status

Status/Phase	Est Cost	Description

2027 Status

Status/Phase	Est Cost	Description

Operating Costs

What are the estimated annual operating costs associated with the project?

Personnel

# of FTEs	Annual Cost	Description
<input type="text" value="0"/>	<input type="text" value="0"/>	

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
	0	

Notes

Notes:

v1 03/15/2021

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Lift Station Rehabilitation"/>
Project Number	<input type="text" value="10268"/>	Project Type	<input type="text" value="Program"/>
Project Category	<input type="text" value="Utility"/>	Priority:	<input type="text" value="3"/>
2022 Project Number	<input type="text" value="13606"/>		

Description

This program funds rehabilitation and replacement of the Sewer Utility's 29 wastewater lift stations and force mains. The goal of this program is to maintain system reliability and to reduce the number of back-ups or emergency incidents. The City will own and maintain 32 lift stations by October 2022 when the Town of Madison becomes part of the City of Madison. Projects to be constructed in 2021 include the replacement of the Truax Lift Station and smaller repairs to several other lift stations.

Budget Information

Prior Appropriation* **Prior Year Actual**

*Based on Fiscal Years 2015-2020

Budget by Funding Source

<i>Funding Source</i>	2022	2023	2024	2025	2026	2027
Revenue Bonds - Sewer	0	100,000	360,000	360,000	360,000	0
Reserves Applied - Sewer	253,000	175,000	253,000	195,000	164,000	172,000
Total	\$253,000	\$275,000	\$613,000	\$555,000	\$524,000	\$172,000

Budget by Expenditure Type

<i>Expense Type</i>	2022	2023	2024	2025	2026	2027
Sanitary Sewer	253,000	275,000	613,000	555,000	524,000	172,000
Total	\$253,000	\$275,000	\$613,000	\$555,000	\$524,000	\$172,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

The lift station projects have been delayed by a year due to the late date for when the Town of Madison Lift Stations become part of City wastewater collection system. The Badger Lift Station Design was moved to 2023(\$40,000), Badger Lift Station Construction 2024(\$400,000), Lake Forest Lift Station Design 2024 (\$40,000), Lake Forest Lift Station Construction 2025 (\$360,000), Mayflower Lift Station Design(\$40,000) 2026 Construction (\$369,000).

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

To have reliable energy efficient sanitary sewer lift stations operating without failures which could result in sanitary sewer backups into homes or sanitary sewer overflows (SSOs).

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

The lift station repair and replacement work that is completed under this program is based upon the age and condition of the lift station and equipment. Projects are prioritized based upon the level of confidence that the lift station will continue to operate without failure or outages. Lift station failure could result in sewer backups into homes and/or sanitary sewer overflows into lakes, rivers, creeks, and streams.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

We are not currently working with other City agencies on this program. Continuous sanitary sewer service is offered to all customers connected to the City's wastewater collection system.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

No

How will we continue to communicate with them in this process?

No

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
 No
 Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Regent Lift Station Repalcement, Control & Telemetry	\$81,000	3929 Regent Street
Waunona No. 1 L.S. (Hoboken) Controls	\$17,000	1814 Waunona Way
Lift Station Pump Rebuilds(4-6 per year)	\$75,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	\$80,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2022:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

2023 Projects

Project Name	Est Cost	Location
American Family Controller upgrade	\$6,000	4747 Eastpark Blvd.
Cherokee No.2 L.S. Controller upgrade	\$13,000	1550 Commanche Glen
Badger Lift Station Replacement/Rehabilitation(by consultant engineer)	\$40,000	101 Nob Hill Road
Hermina L.S. Control Upgrade	\$11,000	201 Clyde Gallagher Ave.
Westport L.S Station Power	\$30,000	42 Knutson Drive
Waunona No. (Waunona) L.S. Control upgrade	\$20,000	5201 Fayette Ave.
Lift Station Pump Rebuilds (4-6 per year)	\$75,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	\$80,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2023:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

Badger Lift Station has been determined by MMSD to require excessive repair work and is need of replacement. This is currently a Town of Madison owned facility. MMSD recommended that this lift station be the City's top priority when the lift station is taken over from the Town in 2022. Design will be completed in 2023 and

construction in 2024.

2024 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Badger Lift Station Replacement/Rehabilitation	\$400,000	101 Nob Hill Road
Lake Forest Lift Station Replacement/ Rehabilitation Design(by consultant engineer)	\$40,000	2021 Dickson Place
Atlas Lift Station Controller upgrade	\$6,000	702 Atlas Ave
Nelson Road L.S. Controller upgrade	\$6,000	5950 Nelson Road
South Point L.S. Controller Upgrade	\$6,000	452 South Point Road
Lift Station Pump Rebuilds (4-6 per year)	\$75,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	\$80,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2024:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

Badger Lift Station will be planned for replacement in 2024(current a Town of Madison facility) and is the MMSD's recommended top priority Town of Madison lift station for replacement.

The Lake Forest Lift Station has been determined by MMSD to require excessive repair work and may need to be fully replaced. This is currently a Town of Madison owned facility until October 2022). Analysis of the lift station will be needed in order to determine whether significant repair work or a full lift station replacement is warranted. For the purpose of the budget, full replacement of the lift station will be planned (design in 2024, construction in 2025).

2025 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Lake Forest Lift Station Replacement/ Rehabilitation	\$360,000	2021 Dickson Place
Mayflower Lift Station Replacement/ Rehabilitation Design(by consultant engineer)	\$40,000	902 W. Badger Road
Lift Station Pump Rebuilds (4-6 per year)	\$75,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	\$80,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2025:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

Lake Forest Lift Station replacement or rehabilitation work to update the lift station facility to current standards will be planned for in 2025.

The Mayflower Lift Station has been determined by MMSD to require excessive repair work and may need to be fully replaced. This is currently a Town of Madison owned facility until October 2022). Analysis of the lift station will be needed in order to determine whether significant repair work or full lift station replacement is warranted. For the purpose of the budget, a full replacement of the lift station will be planned (design in 2025, construction in 2026).

2026 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Mayflower Lift Station Replacement/ Rehabilitation Design	\$369,000	902 W. Badger Road
Lift Station Pump Rebuilds (4-6 per year)	\$75,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	\$80,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2026:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

Mayflower Lift Station replacement or rehabilitation work to update lift station facility to current standards will be designed in 2025 and improvements will be made in 2026.

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Lift Station Pump Rebuilds (4-6 per year)	88,000	Various location as identified by MMSD
Miscellaneous Repairs as recommended by MMSD	84,000	Various location as identified by MMSD

Explain the justification for selecting projects planned for 2027:

Lift Station pumps and electronics have a life cycle of 25 years prior to requiring replacement. MMSD maintains the City's lift stations and provides recommendations when repair or replacement is required.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
<input type="text" value=""/>	<input type="text" value="0"/>	This program makes improvements to the City's existing lift stations and does not generally result in an increase in personnel operation cost. Some reduction in operation costs can be achieved with new equipment that requires less maintenance.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
<input type="text" value=""/>	<input type="text" value="0"/>	Minimal impacts to future equipment operating costs.

Notes

Notes:

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Sewer Access Improvement"/>
Project Number	<input type="text" value="10437"/>	Project Type	<input type="text" value="Program"/>
Project Category	<input type="text" value="Utility"/>	Priority:	<input type="text" value="6"/>
2022 Project Number	<input type="text" value="13607"/>		

Description

This program is for sewer maintenance access roads, trails, paths and easement acquisitions where access to sanitary sewer access structures is not already well established. The goal of this program is to provide City Operations crews with safe access to maintain the City's sanitary sewer system. The main project planned for 2021 is improving access to a sewer off of Packers Avenue south of Dovetail Drive.

Budget Information

Prior Appropriation* **Prior Year Actual**

*Based on Fiscal Years 2015-2020

Budget by Funding Source

<i>Funding Source</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>
Reserves Applied - Sewer	130,000	130,000	130,000	135,000	142,000	149,000
Total	\$130,000	\$130,000	\$130,000	\$135,000	\$142,000	\$149,000

Budget by Expenditure Type

<i>Expense Type</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>
Land Improvements	130,000	130,000	130,000	135,000	142,000	149,000
Total	\$130,000	\$130,000	\$130,000	\$135,000	\$142,000	\$149,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

No changes.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Sewer Access Improvements ensure quick access for sewer cleaning. Proactive maintenance minimizes disruption of sewer service ensuring protection of property and the environment.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

Sewer Access Improvements ensure quick access for sewer cleaning which ensures access to sewer facilities that are otherwise difficult to access for cleaning and maintenance. Our goal is to provide continuous sanitary sewer service to all customers connected to the City's wastewater collection system. We measure success

by the frequency of sanitary sewer backups throughout the City. Our target locations for this program are based upon where maintenance crews need to improve access. Access improvements can include construction improvements or easement acquisitions.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

City Real Estate is engaged with this program when permanent access easements are required for this program.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

Yes, we receive direct input from City Real Estate during the easement acquisition process.

How will we continue to communicate with them in this process?

We will continue to engage with City Real Estate until easement acquisition process is completed.

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Miscellaneous projects as needed	\$130,000	Locations identified by operations crews as not being accessible to perform preventative maint...

Explain the justification for selecting projects planned for 2022:

Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

2023 Projects

Project Name	Est Cost	Location
Miscellaneous projects as needed	\$130,000	Locations identified by operations crews as not being accessible to perform preventative maint...

Explain the justification for selecting projects planned for 2023:

Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

2024 Projects

Project name	Est Cost	Location
Miscellaneous projects as needed	\$130,000	Locations identified by operations crews as not being accessible to perform preventative maint...

Explain the justification for selecting projects planned for 2024:

Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

2025 Projects

Project name	Est Cost	Location
Miscellaneous projects as needed	\$135,000	Locations identified by operations crews as not being accessible to perform preventative maintenance work.

Explain the justification for selecting projects planned for 2025:

Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

2026 Projects

Project name	Est Cost	Location
Miscellaneous projects as needed	\$142,000	Locations identified by operations crews as not being accessible to perform preventative maintenance work.

Explain the justification for selecting projects planned for 2026:

Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

2027 Projects

Project Name	Est Cost	Location
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<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Miscellaneous projects as needed	149,000	Locations identified by operations crews as not being accessible to perform preventative maintenance work.

Explain the justification for selecting projects planned for 2027:
 Locations are typically in wet areas or backyards that cannot be readily accessed with maintenance equipment.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program? \$0

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
	0	There will be a reduction in operating cost if Engineering Operations crews are able to more quickly access sanitary sewer facilities.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
	0	A slight decrease in equipment operating costs will result after these projects are completed.

Notes

Notes:

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Sewer Backwater Valve R"/>
Project Number	<input type="text" value="13568"/>	Project Type	<input type="text" value="Program"/>
Project Category	<input type="text" value="Utility"/>	Priority:	<input type="text" value="7"/>
2022 Project Number	<input type="text" value="13611"/>		

Description

This program funds the reimbursement of property owners for a sewer backwater valve installation. Sewer backwater valves are installed on the sewer lateral either inside the home or on the property between the home and the City sewer main. With this program, the City reimburses property owners 75% of the installation costs up to \$1,500, provided that property owners go through the application process, pass the City plumber on-site pre-inspection, and receive 3 bids from contractors. The goal of the program is to provide additional protection to private property for unplanned sanitary sewer backups.

Budget Information

Prior Appropriation*

*Based on Fiscal Years 2015-2020

Prior Year Actual

Budget by Funding Source

<i>Funding Source</i>	2022	2023	2024	2025	2026	2027
Reserves Applied - Sewer	40,000	40,000	40,000	40,000	40,000	40,000
Total	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000

Budget by Expenditure Type

<i>Expense Type</i>	2022	2023	2024	2025	2026	2027
Sanitary Sewer	40,000	40,000	40,000	40,000	40,000	40,000
Total	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

This is a new program and is being initiated to offer sewer customers additional protection for homes from sanitary sewer backups.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

The mapping that we are utilizing includes environmental justice mapped areas. This information was provided by City Planning.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

No. Our public reachout for this program is based upon the mapped data from City Planning combined with our reported sewer backups.

How will we continue to communicate with them in this process?

Our communication will be a letter/postcard notification to the target focus groups of the availability of the program.

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Reimburse property owners for installation of sewer backwater valves on private property	\$40,000	Various Locations

Explain the justification for selecting projects planned for 2022:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

2023 Projects

Project Name	Est Cost	Location
Reimburse property owners for installation of sewer backwater valves on private property	\$40,000	Various Locations

Explain the justification for selecting projects planned for 2023:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

2024 Projects

Project name	Est Cost	Location
Reimburse property owners for installation of sewer backwater valves on private property	\$40,000	Various Locations

Explain the justification for selecting projects planned for 2024:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

2025 Projects

Project name	Est Cost	Location
Reimburse property owners for installation of sewer backwater valves on private property	\$40,000	Various Locations

Explain the justification for selecting projects planned for 2025:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

2026 Projects

Project name	Est Cost	Location
Reimburse property owners for installation of sewer backwater valves on private property	\$40,000	Various Locations

Explain the justification for selecting projects planned for 2026:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

2027 Projects

Project Name	Est Cost	Location
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<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Reimburse property owners for installation of sewer backwater valves on private property	40,000	Various Locations

Explain the justification for selecting projects planned for 2027:

Provide property owners additional protection from sanitary sewer backups as a result of blockages in the sewer lateral or the City sewer main.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
<input type="text"/>	<input type="text" value="0"/>	There will be a potential reduction in operating costs if Engineering Operations crews do not need to respond to an unplanned sewer backup which is the focus of this program. If there is blockages in the sewer main, Engineering Operations crews will still need to respond with cleaning the sewer main but potentially will not need to respond to homes who have experienced a sanitary sewer backup.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
<input type="text"/>	<input type="text" value="0"/>	There will be a potential reduction in equipment costs if Engineering Operations crews do not need to respond to an unplanned sewer backup which is the focus of this program.

Notes

Notes:

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	Sewer Utility	Proposal Name	Sewer Impact Fee District
Project Number	11678	Project Type	Program
Project Category	Utility	Priority:	5
2022 Project Number	13610		

Description

This program is for the extension of sanitary sewer service to developing areas of the City requiring sewer infrastructure installation. The program is funded entirely by Impact Fees, and review for planned projects is conducted annually as dictated by demand for development.

Budget Information

Prior Appropriation* \$5,312,000 **Prior Year Actual** \$648,786

*Based on Fiscal Years 2015-2020

Budget by Funding Source

Funding Source	2022	2023	2024	2025	2026	2027
Impact Fees	1,200,000	1,500,000	0			
Total	\$1,200,000	\$1,500,000	\$0	\$0	\$0	\$0

Budget by Expenditure Type

Expense Type	2022	2023	2024	2025	2026	2027
Sanitary Sewer	1,200,000	1,500,000	0			
Total	\$1,200,000	\$1,500,000	\$0	\$0	\$0	\$0

Explain any changes from the 2021 CIP in the proposed funding for this program.

Pumpkin Hollow was moved from 2024 to 2022 due to pending developments requiring sewer in order to develop.

Priority & Justification

Citywide Element Effective Government

Strategy Ensure that new development occurs in locations that can be efficiently served to minimize costs on the community as a whole.

Describe how this project advances the Citywide Element:

Extension of sanitary sewer to provide sanitary sewer service to developing lands.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

Impact Fees are focused on areas of new development. These developing areas are required to be developed in conformance with City Planning development plans which focus on equitable neighborhoods.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

City Planning prepares the neighborhood plan.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

Yes, we actively communicate with City Planning when neighborhood plans are prepared.

How will we continue to communicate with them in this process?

We actively provide feedback with each development plan within a neighborhood plan.

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTS, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Pumpkin Hollow Sanitary Sewer Impact Fee District	\$1,200,000	Sewer project begins 1100' south of Hoepker Road at Interstate Highway 90 & 94 and extends n...

Explain the justification for selecting projects planned for 2022:

Sanitary sewer service required for pending devopment.

2023 Projects

Project Name	Est Cost	Location
Felland Road Neighborhood Sanitary Sewer Improvement Impact Fee District	\$1,500,000	Sewer project begins at Felland Road/ Burke Road and extends north along Felland Road to Nels...

Explain the justification for selecting projects planned for 2023:

Sanitary sewer service required for pending devopment.

2024 Projects

Project name	Est Cost	Location

Explain the justification for selecting projects planned for 2024:

No planned impact fee projects at this time: \$0.

2025 Projects

Project name	Est Cost	Location

Explain the justification for selecting projects planned for 2025:

No planned impact fee projects at this time: \$0.

2026 Projects

Project name	Est Cost	Location

Explain the justification for selecting projects planned for 2026:

No planned impact fee projects at this time: \$0.

2027 Projects

Project Name	Est Cost	Location

Explain the justification for selecting projects planned for 2027:

No planned impact fee projects at this time: \$0.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?
2022 Capital Budget Agency Requests

\$2,889.17

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
	0	There will be minimal additional personnel operating costs due to the sanitary sewer facilities being added to the sewer collection system. Sewer interceptors are cleaned once every 3 years and televised once every 10 years. On average, every new foot of sewer main added to the sewer system costs \$0.3623/L.F. to maintain per year equipment and labor.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
	0	There will be minimal additional equipment operating costs due to the sanitary sewer facilities being added to the sewer collection system. Sewer interceptors are cleaned once every 3 years and televised once every 10 years. On average, every new foot of sewer main added to the sewer system costs \$0.3623/L.F. to maintain per year equipment and labor.

Notes

Notes:

v1 03/15/2021

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	Sewer Utility	Proposal Name	Sewer Reconstruction
Project Number	10267	Project Type	Program
Project Category	Utility	Priority:	4
2022 Project Number	13605		

Description

This program is for replacing old, problematic sewers throughout the City. The goal of this program is to alleviate emergency sewer repairs and back-ups by replacing the sewer infrastructure that is past its useful life. Coordination for the replacement of these sewers often gets completed with the Reconstruct Streets and Pavement Management programs within the Engineering-Major Streets budget. This program uses a case-by-case basis to evaluate the replacement of the sewers. Projects planned for 2021 include the Dearholt Sewer replacement in the Westgate Mall (Whitney Way) area, replacement of a sewer on Grimm Street, and other smaller repairs citywide.

Budget Information

Prior Appropriation*

*Based on Fiscal Years 2015-2020

\$2,623,804	Prior Year Actual	\$2,267,601
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Budget by Funding Source

Funding Source	2022	2023	2024	2025	2026	2027
Revenue Bonds - Sewer	473,000	451,000	192,000	210,000	321,000	337,000
Reserves Applied - Sewer	191,000	141,000	78,000	86,000	111,000	117,000
Special Assessment - Sewer	401,000	5,000	5,000	5,000	5,000	5,000
Total	\$1,065,000	\$597,000	\$275,000	\$301,000	\$437,000	\$459,000

Budget by Expenditure Type

Expense Type	2022	2023	2024	2025	2026	2027
Sanitary Sewer	1,065,000	597,000	275,000	301,000	437,000	459,000
Total	\$1,065,000	\$597,000	\$275,000	\$301,000	\$437,000	\$459,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

The Oscar Mayer site work (west of the railroad) was moved from 2022 to 2023. Sewer Replacement work on Worthington Ave, Powers Ave and Thurber Ave in the Town of Blooming Grove is planned for 2022. These are City of Madison sewer mains that are in need of replacement in 2022. The Town intends to resurface Worthington Ave and chip seal Powers Ave and Thurber Ave in 2023. These sewers were identified to be in need of replacement by Engineering Operations crews. Femrite Drive has a proposed sanitary sewer between Meier Road and Ohmeda Drive for 2022(100% assessed) to provide sanitary sewer service to a pending redevelopment of the GE Medical site.

Priority & Justification

Citywide Element Green and Resilient

Strategy Protect Madison's water supply and infrastructure to provide safe clean drinking water.

Describe how this project advances the Citywide Element:

Sanitary Sewer system that efficiently carries wastewater with minimal costly sewer back-ups or disruption of sewer service is essential to protecting our environment and public health. Replacing sewer mains reduces the amount of groundwater that infiltrates into the City's sanitary sewer collection system which results in higher treatment costs. Replacing defective sewer mains also reduces the amount of wastewater that infiltrates into the groundwater system.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget changes.

Sewer Reconstruction project locations are selected based upon sewer maintenance staff discovery or upon the need to address capacity constraints for a pending development. Sewers in disrepair are found by Engineering Operations staff throughout the City.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

City Planning is involved if sewer upgrades are the required as a result of a development. If work is performed on behalf of a developer, the sewer improvement costs are assessed to the developer.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

City Planning is provided feedback for utility needs when developments are proposed.

How will we continue to communicate with them in this process?

We have limited communication with City Planning after we have decided to move forward with a project.

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Worthington Ave./Powers Ave./Thurber Ave.	\$661,000	Sewer identified , the sewer had breaks, is undersized and has groundwater entering sewer syst...
Femrite Drive(GE Medical Site Redevelopment)	\$374,000	Sewer to be installed from Meier Road to Ohmeda Drive (1300 ft) to provide sanitary sewer ser...
Funds allocated for urgent sewer replacement projects	\$30,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2022:

Sanitary sewers identified to be in need of immediate repair or replacement due to being undersized. The Worthington sewer is located in Town of Blooming Grove but sewer became owned and maintained by the City of Madison when the Waunona Sanitary District was acquired by the City (September 2017). The Femrite Drive sewer which will be 100% assessed is necessary to provide sewer service to a pending office development.

2023 Projects

Project Name	Est Cost	Location
Oscar Mayer Sewer Upgrade(West of Railroad)	\$547,000	Sewer identified, the sewer had breaks, is undersized and has groundwater entering sewer
Funds allocated for urgent sewer replacement projects	\$50,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2023:

Sanitary sewers identified to be in need of immediate repair or replacement.

2024 Projects

Project name	Est Cost	Location
Funds allocated for urgent sewer replacement projects	\$275,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2024:

Sanitary sewers identified to be in need of immediate repair or replacement.

2025 Projects

Project name	Est Cost	Location
Funds allocated for urgent sewer replacement projects	\$301,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2025:

Sanitary sewers identified to be in need of immediate repair or replacement.

2026 Projects

<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Funds allocated for urgent sewer replacement projects	\$437,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2026:

Sanitary sewers identified to be in need of immediate repair or replacement.

2027 Projects

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Funds allocated for urgent sewer replacement projects	459,000	Various locations identified by City Engineering Operations staff.

Explain the justification for selecting projects planned for 2027:

Sanitary sewers identified to be in need of immediate repair or replacement.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program?

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
<input type="text" value=""/>	<input type="text" value="0"/>	A slight decrease in personnel operating costs will result after these projects are completed. New sewer mains require maintenance every 3 years versus up to 4 times per year for sewer mains in need of being repaired or replaced. The decrease in the required maintenance of lined or reconstructed sewer allows for the new maintenance required for added sewer facilities as part of a new development.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
<input type="text" value=""/>	<input type="text" value="0"/>	A slight decrease in equipment operating costs will result after these projects are completed. New sewer mains require maintenance every 3 years versus up to 4 times per year for sewer mains in need of being repaired or replaced. The decrease in the required maintenance of lined or reconstructed sewer allows for the new maintenance required for added sewer facilities as part of a new development.

Notes

Notes:

2022 Capital Improvement Plan Program Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Trenchless Sewer Rehabil"/>
Project Number	<input type="text" value="10450"/>	Project Type	<input type="text" value="Program"/>
Project Category	<input type="text" value="Utility"/>	Priority:	<input type="text" value="1"/>
2022 Project Number	<input type="text" value="13608"/>		

Description

This program funds the rehabilitation of failing sewers by lining the existing sewer mains using cameras and remote controlled tools. Some sewer mains are rehabilitated (or lined) to address inflow and infiltration problems. The goal of this program is to repair nine miles of sewer mains at selected locations based upon need; backyard sewer mains are prioritized.

Budget Information

Prior Appropriation* **Prior Year Actual**

*Based on Fiscal Years 2015-2020

Budget by Funding Source

<i>Funding Source</i>	2022	2023	2024	2025	2026	2027
Revenue Bonds - Sewer	1,260,000	1,260,000	1,260,000	1,233,000	1,293,000	1,400,000
Reserves Applied - Sewer	500,000	500,000	500,000	491,000	517,000	500,000
Total	\$1,760,000	\$1,760,000	\$1,760,000	\$1,724,000	\$1,810,000	\$1,900,000

Budget by Expenditure Type

<i>Expense Type</i>	2022	2023	2024	2025	2026	2027
Sanitary Sewer	1,760,000	1,760,000	1,760,000	1,724,000	1,810,000	1,900,000
Total	\$1,760,000	\$1,760,000	\$1,760,000	\$1,724,000	\$1,810,000	\$1,900,000

Explain any changes from the 2021 CIP in the proposed funding for this program.

No changes in funding proposed.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

Sanitary sewer system that efficiently carries wastewater with minimal costly sewer back-ups or disruption of sewer service is essential to protecting our environment and public health. There is significant cost savings to our rate payers to rehabilitate sewer mains with lining vs open cut replacement. Lining sewer mains significantly reduces the groundwater that infiltrates into the City's sanitary sewer collection system which in turn reduces treatment costs. Lining City sewer mains also prevents wastewater from exfiltrating out of the sewer system into the groundwater.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

Continuous sanitary sewer service is offered to all customers connected to the City's wastewater collection system. Trenchless rehabilitation of sewer mains is the City's most cost effective way to upgrade a sewer main. We prioritize trenchless sewer work based upon groundwater level, backyard sewer location, location in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or located in streets that are not planned to be rehabbed for an extensive length of time.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

We are not currently working with other City agencies on this program.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

No

How will we continue to communicate with them in this process?

No

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
- No
- Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
- No

If so, please identify the respective group and recommendation.

Project Schedule & Location

2022 Projects

Project Name	Est Cost	Location
Sewer Lining - Approximately 9 miles	\$1,760,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2022:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

2023 Projects

Project Name	Est Cost	Location
Sewer Lining - Approximately 9 miles	\$1,760,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2023:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

2024 Projects

Project name	Est Cost	Location
Sewer Lining - Approximately 9 miles	\$1,760,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2024:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

2025 Projects

Project name	Est Cost	Location
Sewer Lining - Approximately 9 miles	\$1,724,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2025:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

2026 Projects

Project name	Est Cost	Location
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<i>Project name</i>	<i>Est Cost</i>	<i>Location</i>
Sewer Lining - Approximately 9 miles	\$1,810,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2026:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

2027 Projects

<i>Project Name</i>	<i>Est Cost</i>	<i>Location</i>
Sewer Lining - Approximately 9 miles	1,900,000	Various locations identified by City Operations Staff.

Explain the justification for selecting projects planned for 2027:

Sewer mains are selected to be lined based upon one or more of the following criteria 1) sewer shows defects and is located in areas of high groundwater, 2) sewer shows defects and is located in the backyard where it will be too costly to open cut replace, 3) sewer shows defects and is located in streets planned to be resurfaced or reconstructed where the rest of the sewer does not warrant full replacement, or 4) sewer shows defects and is located in streets that are not planned to be rehabbed for an extensive length of time.

Operating Costs

What are the estimated annual operating costs associated with the projects planned within this program? \$0

Personnel

<i># of FTEs</i>	<i>Annual Cost</i>	<i>Description</i>
	0	A slight decrease in personnel operating costs will result after these projects are completed. Lined sewer mains require maintenance every 3 years vs. 4 times per year for sewers needing to be lined. The decrease in the required maintenance of lined or reconstructed sewer facilities offsets the the new maintenance required for added sewer facilities as part of new development.

Non-Personnel

<i>Major</i>	<i>Amount</i>	<i>Description</i>
	0	A slight decrease in equipment operating costs will result after these projects are completed. Lined sewer mains require maintenance every 3 years vs. 4 times per year for sewers needing to be lined. The decrease in the required maintenance of lined or reconstructed sewer facilities offsets the the new maintenance required for added sewer facilities as part of new development.

Notes

Notes:

2022 Capital Improvement Plan Project Budget Proposal

Identifying Information

Agency	<input type="text" value="Sewer Utility"/>	Proposal Name	<input type="text" value="Utility Materials Handling"/>
Project Number	13599	Project Type	Project
Project Category	Green and Resilient	Priority:	<input type="text" value="9"/>

Description

This program is for creation of a new site for the Sanitary, Storm & Water Utilities, allowing the disposal of excess cut from repair operations and to allow for the dewatering of dredge sediments from pond maintenance operations. Once dewatered, the majority of material is expected to be moved to the Dane County Landfill to be used for daily cover and haul roads. The Utilities current disposal site is running out fill area, and with the planned increase in dredging of stormwater retention facilities/ponds as required for compliance with our EPA WPDES discharge permit, the current drying bed, the Madison Metropolitan Sewerage District Drying Bed, is becoming too small. Sewer Utility will own the site and Stormwater Utility and Water Utility will annually pay for their usage of it.

Budget Information

Total Project Budget **Prior Appropriation**

*Based on Fiscal Years 2015-2021

Budget by Funding Source

<i>Funding Source</i>	2022	2023	2024	2025	2026	2027
Reserves Applied - Sewer	50,000					
Revenue Bonds - Sewer		3,000,000	300,000			
Total	\$50,000	\$3,000,000	\$300,000	\$0	\$0	\$0

Budget by Expenditure Type

<i>Expense Type</i>	2022	2023	2024	2025	2026	2027
Land	50,000	3,000,000	300,000			
Total	\$50,000	\$3,000,000	\$300,000	\$0	\$0	\$0

Explain any changes from the 2021 CIP in the proposed funding for this project.

This is a new project in the 2022 CIP as we are planning for the eventual decommissioning of the Sycamore disposal site in the next 7+ years.

Explain any changes from the 2021 CIP in the proposed funding for this program.

This is a new project in the 2022 CIP as we are planning for the eventual decommissioning of the Sycamore disposal site in the next 7+ years.

Priority & Justification

Citywide Element

Strategy

Describe how this project advances the Citywide Element:

To allow compliance with the City's stormwater WPDES discharge permit issued by the WDNR and EPA the Stormwater Utility is required to maintain the public pond system within certain depth thresholds. We have a depth monitoring system in place and many of our ponds are approaching a point in their lifecycle where dredging will be required to maintain compliance with WDNR standards. Having a drying bed location available as we ramp up this maintenance program in the coming years is critical to maintaining compliance with our permit and coordinating this site with the needs of the sanitary and water utilities for disposal of routine material generated by repairs makes economic sense.

What is the justification for this project?

A drying bed and disposal site are needed for operational work of the storm, sanitary and water utilities. Currently, we have a disposal site that will be suitable for the next 7+ years and we utilize Madison Metropolitan Sewerage Districts drying beds as for drying back dredge sediments. As the pond dredging program ramps up, using the MMSD drying bed will not continue to be feasible due to conflicts with MMSD's use of the space. As finding land, permitting, and constructing it will take several years, programming this prior to reaching a crisis point on both these issues is a responsible approach.

Racial Equity and Social Justice

We are continuing our efforts to articulate and prioritize racial equity and social justice in the City's budget and operations. Please respond to the following questions and incorporate these responses into your budget narrative to ensure racial equity is included in decision-making.

Describe how Black, Indigenous, and People of Color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) would be affected by the proposed budget or budget change(s)?

This proposal affects all residents of Madison in similar ways. Maintenance of our storm, sanitary and water systems are critical to all. However a failure of the sanitary sewer (due to backup) may adversely impact lower income residents disproportionately as they have fewer reserves with which to recover from the event.

What City agencies or community partners are affected by, care about, or already working on issues related to this project/program?

The Water Utility and Sewer Utility are aware of this project - all relevant City agencies are aware of and support this request.

Have we asked for their perspectives directly and, if so, how have we incorporated their feedback?

We have met with all City agencies and will continue to do so as we move forward with this request.

How will we continue to communicate with them in this process?

We will continue to meet with agencies as this project goes forward.

Have we used any data related to the project/program that details race, non-binary and transgender people, people with disabilities, those experiencing homelessness, or undocumented status?

- Yes
 No
 Some, not all

Is the proposed budget or budget change related to a recommendation from any of the City's teams or initiatives that connect community need with opportunities to advance racial equity, inclusion, and social justice (e.g., NRTs, RESJI, LCET, MAC, WIC, Equitable Workforce Plans)?

- Yes
 No

If so, please identify the respective group and recommendation.

Project Schedule & Location

Can this project be mapped?

- Yes
 No

What is the location of the project?

2022 work will include attempting to identify a location for this site.

Is this project on the Project's Portal?

- Yes
 No

2022 Status

Status/Phase	Est Cost	Description
	50000	Work with Real Estate to find a suitable site location and begin purchase discussions

2023 Status

Status/Phase	Est Cost	Description
	3000000	Work in this year would include purchase of the lands needed.

2024 Status

Status/Phase	Est Cost	Description
	300000	Construction of the disposal site and drying area - it is possible this could be delayed due to acquisition

2025 Status

Status/Phase	Est Cost	Description

2026 Status

Status/Phase	Est Cost	Description

2027 Status

Status/Phase	Est Cost	Description

Operating Costs

What are the estimated annual operating costs associated with the project?

Personnel

# of	Annual Cost	Description
2022	Capital Budget	

FTEs

There are two purposes for this site - disposal of excess cut materials from storm, sanitary and water utility repair efforts. That work is already going on and the disposal would simply occur at a different location. No new costs are expected.

The second purpose for this site is drying back of dredge sediments. That work now (and expected in the future) is completed by a Contractor and is part of a Capital project. No new costs are expected.

Non-Personnel

Major

Amount

Description

No new costs are anticipated for equipment.

Notes

Notes:

v1 03/15/2021