



**2021-2025**

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

**CAPITAL IMPROVEMENT PROGRAM (CIP)**

**BUDGET REQUEST**

November 18, 2021

## Overview of MSD’s 2021 five-year CIP Budget Proposal

This overview is meant to serve as a guide to the 2021 CIP budget proposal, explaining why specific projects have been included or excluded, and, in some cases, why project budgets and schedules may have changed from previous reports. Under the terms of the 1968 Agreement, MSD must submit a 5-year capital improvement plan (CIP) on an annual basis. Although a 5-year plan is submitted, the capital budget is approved on an annual basis. The Board of County Commissioners’ (BoCC) approval of the capital budget usually occurs in December with an appropriation funds that under Ohio Revised Code Chapter 6117 allows MSD to proceed with engineering planning and design of various projects, and with construction in the case of some allowances. Funding for construction projects, while listed in the annual CIP budget, is not appropriated until detailed plans and specifications are presented by MSD and approved by the BoCC on a per project basis. These approvals must occur throughout the coming calendar year.

### Request Summary

The current capital budget request contains three broad categories of projects; WWIP (Wet Weather Improvement Plan, or Consent Decree) projects, Asset Management (AM) projects (projects to renew, replace, or enhance existing infrastructure), and OTHER projects (projects for which funding gets allocated to either WWIP or AM as a part of year-end accounting). Projects classified as OTHER include program contingency (funding used for items such as construction change orders) and labor (for MSD staff working on the capital program). Within the WWIP and AM categories, there are various subtypes of projects such as sewer replacements, facility projects, pump station upgrades/eliminations, etc. Consistent with previous years, the capital budget also includes some projects known as “allowances” that are used by MSD to expeditiously address urgent and critical needs of the sewer system and treatment plants, and work such as sewer relining that does not require long term planning and design.

The 2021 budget request is presented in the table below with a comparison to the capital budget approved last year. For 2021, the total request has increased over the 2020 approved budget due to slight increases in all project categories. Note that the 2019 CIP budget, approved by the BoCC in 2018, was \$135 million, and that the current budget request is *lower* than that amount.

	<b>2020 CIP (Approved)</b>	<b>2021 CIP (Request)</b>
WWIP	\$51.9 M	\$52.3 M
AM	\$60.2 M	\$61.7 M
OTHER	\$16.5 M	\$17.3 M
<b>TOTAL</b>	<b>\$128.6 M</b>	<b>\$131.2 M</b>

## Changes made since August 2020 draft CIP submittal

The current request is a modified version of the draft CIP budget that was submitted to the County for review on August 17, 2020. Changes have been made to reflect comments from the County and received by MSD on October 19<sup>th</sup> as well as changes that have resulted from ongoing project management activities, which include schedule updates and estimate refinement. In the final version, total 2021 WWIP spending is reduced compared to the August draft, largely because of an update to the schedule of the Little Miami Standby Power reflecting a forecasted delay of the construction start date based on the current design schedule. This reduction was somewhat offset by the inclusion of the Mill Creek Pump Station (for EHRT) project in an amount that is consistent with the County's 2018 Phase 2A plan. Three other WWIP projects have been added to the current version of the budget recommendation, including the SBU Urgent Capacity Response Program allowance (erroneously omitted from the August draft), construction of the SSO 603 and 704 Improvements project (work that had been postponed pending the outcome of the now completed SSO700 IWAP), and design of the CSO 488 Strategic Sewer Separation Phase A project. The schedule of WWIP projects in this budget continues to follow the 2018 County Phase 2A plan as closely as possible.

The total budget for proposed 2021 Asset Management (AM) projects has increased since the draft version of the CIP was submitted in August. Although some changes are related to updated estimates, the most significant changes are the result of several AM projects being added to the final CIP budget. This is based on outputs of MSD's asset management system, which is employed to continuously evaluate asset risk and investment needs using the most current information field information, permit requirements, and data analytics. The projects that were added in the latest budget have been presented and approved at Stage Gate meetings as a part of MSD's new Project Delivery System (PDS), and MSD anticipates fewer off-cycle, or late CIP additions, in future years as the PDS is more fully established.

Projects that have been added to this version of the CIP include planning for an upgrade at the Stratford Lakes Pump Station, planning/design projects for clarifier upgrades and flow meter replacement at two treatment plants, and the design of sewer replacement projects on Victory Parkway, on Gilbert Avenue, on Reading Road, on Taft Road, and at two other locations. One project was removed in the latest version; the Spring Grove Avenue Sewer Replacement is now expected to be presented to the BoCC for vote on approval of construction funding in November of 2020. Refined estimates have impacted the budget costs of multiple projects since the last submittal. For example, the cost of two construction projects related to renewal of electrical infrastructure at Mill Creek WWTP have increased, while the design costs for a sewer replacement project have decreased.

Finally, changes to the budget of two projects classified as "OTHER" have been made. The MSD Labor allowance was new in 2020 and was based on an estimated anticipated cost. The current 2021 request is based on data from actual year-to-date costs in 2020. Likewise, the increase in the Program Management allowance cost is based on actual expenditures and known needs moving forward.

It should be noted that the CIP out-years, or years 2022-2025, contain projects and funding activities, i.e. additional planning, ROW acquisition, design, and construction, that generally follow the schedules of projects approved in previous budgets (and proposed in the 2021 budget), as well as the County's 2018 Phase 2A submittal and known utility asset management needs. MSD did not receive feedback or comments on the out-years from the County after the submittal of the draft 2021 CIP in August, and at

this time there remains a high degree of uncertainty with regard to future projects as a result of ongoing Consent Decree negotiations with Regulators. As a result of these factors, MSD is largely unable to smooth encumbrance cash flow for future years, forecast rate impacts, or provide a CIP with out-years that accurately reflect long-term utility needs.

## Consent Decree Projects

In addition to meeting prior obligations (WWIP Phase 1 and Bridge schedules), this capital budget seeks to comply with the County's 2018 Phase 2A plan. As of January 2020, all Phase 1 projects were substantially complete and are providing beneficial use. That said, the Consent Decree obligates MSD to perform Phase 1 "post-construction monitoring" to evaluate the effectiveness of the constructed projects and to update the system wide model. Multiple WWIP projects are being constructed in 2021 in accordance with a 2018 Consent Decree modification known as the "Bridge schedule" and these projects are referred to as "Bridge projects". In May of 2020, the federal court overseeing the Consent Decree ordered that Hamilton County's June 29, 2018 Phase 2A Schedule shall serve as the Co-Defendants' submittal for the purpose of Phase 2A negotiations. As such, the MSD is seeking to implement the County's 2018 Phase 2A proposal to the extent that this is possible, and has been providing financial and engineering data to support the County plan in ongoing negotiations with the USEPA, Ohio EPA and ORSANCO (the Regulators).

Although MSD has followed the 2018 County Phase 2A plan as closely as possible, this budget recommendation contains five projects that deviate from the County plan. Three of these projects were actually included in the 2018 County plan but were proposed to begin at a later date. MSD recommends that these three projects advance sooner rather than later to address significant asset management needs and to mitigate permit compliance risks. The first such project is a design funding request for the Upper Muddy Creek Interceptor Replacement Phase A project. This is the portion of the sewer that is upstream of the Upper Muddy Creek Interceptor Replacement Phase B project that the BoCC approved for construction in June of 2020. The Phase A project was created when the original project was split in 2018 to create the Bridge project that will soon be constructed. The remaining, upstream portion of the sewer is also in very poor condition and is at high risk of failure. The other two projects with modified County Phase 2A plan schedules consist of requests for planning funds to begin work on the Muddy Creek (Remote) Pump Station Upgrade and the Addyston Pump Station Elimination projects. Again, all three of these projects have been included in the CIP budget request in order to address critical asset management needs at those facilities sooner than the schedule of the 2018 County Phase 2A plan.

Two additional projects WWIP are being added at the recommendation of MSD and after discussions with representatives of the County administration. The first is the inclusion of the CSO 488/490 I-75 Reconstruction Coordination project that is described in a later section. The second is a planning project for sewer separation on Vine St. and Erkenbrecher Ave., a proposed collaborative project with the Cincinnati Zoo that is also described in a later section

In addition to the projects listed above, MSD is also requesting a Phase 2 planning allowance in the 2021 budget. This allowance is something that is not currently funded and it is intended to ensure that remaining WWIP-required projects are being planned appropriately and in a manner that allows for expeditious and cost-effective implementation of Consent Decree requirements. Some projects in the County 2018 Phase 2A plan have yet to be planned and based on Regulator feedback, it is reasonable to

expect that additional projects may be required. Successful execution of Phase 2A projects will require engineering planning and comprehensive validation of the proposed project scopes to confirm workable the baseline budgets and schedules for delivery. Failure to perform this work in advance of a formal commitment to Regulators significantly increases the risk of schedule delays and project costs that exceed expectations. The implementation of the Bridge schedule, a 2018 Consent Decree modification consisting of a small group of projects that the co-defendants (County and City) agreed to undertake without complete project planning and validation, has provided real examples of risks and negative consequences that can be avoided with proper planning. In addition to mitigation of risk, the furtherance of WWIP planning will facilitate ongoing Phase 2 negotiations and permit the utility to take advantage of the terms of the Consent Decree that allow for adaptive management, or the substitution of prescribed, agreed upon projects, if an equivalent overflow reduction benefit can be shown through engineering planning.

Some specific County Phase 2A projects are addressed in more detail in subsequent paragraphs within this document.

### Asset Management Projects

Asset Management projects are all capital projects that the utility undertakes outside of the Consent Decree. Asset management projects are largely the result of a need for continuous reinvestment in the public sewer system, and can include some system expansions, treatment plant upgrades, and sewer replacements. MSD manages nearly three thousand miles of sewers and operates nine permitted treatment plants, in addition to more than 100 remote facilities. Parts of the MSD sewer system are over 200 years old and the district's largest treatment plants were constructed in the 1950's. With this aging system, asset management needs consistently exceed the funding available. For example, given that sewer district manages assets with a value of on the order of \$15 billion, an annual reinvestment rate of only 1% (a recommended minimum under industry standards) would amount to a \$150 million annual capital budget. In response to this situation, MSD has developed a comprehensive and sophisticated asset management system to proactively identify risks and needs in advance, seeking to prevent failures that would result in public health and safety threats or environmental hazards, and to avoid reactive repairs that are more costly than planned work and MSD has identified the most urgent priorities.

In order to ensure appropriate level of asset reinvestment, both the MSD and County Phase 2A proposals from 2018 agreed that an average annual *minimum* of \$50 million (2006\$) in capital asset management funding should be provided. Accounting for inflation, this amounts to approximately \$65 million in current dollars. As mentioned in the preceding paragraph, the minimum asset reinvestment rate should be at least 1% of total asset value, but it is recognized by all parties that many of the required WWIP projects provide a significant asset management benefit. Although current budget request falls below target annual AM spending, some CIP out-years have budgets that exceed \$50 million (2006\$). For example, the much-needed solids disposal facility that has been proposed for the Little Miami WWTP, will cost \$80 million to construct in 2022 and MSD cannot forgo all other asset management spending in that year. Although the total asset management spending will exceed \$50 million (2006\$) in 2022, this is completely consistent with the County Phase 2A plan. From page 43 of the County document:

*“The Board believes that \$50 million (2006\$) per year is reasonable and appropriate at this time for CIP asset management spending, so the 5-year total asset management spending proposed for Phase 2A is \$250 million (2006\$). MSDGC is currently developing comprehensive asset management programs for its WWTPs, pump stations and collection system. Once these*

programs are more fully developed, and a more comprehensive understanding of the existing asset conditions are determined, this level of required asset management may increase.”

## Sewer Backups (SBU’s) and Capital Program Strategy

The Cincinnati metropolitan area continues to experience what has become a trend of more intense rainfall events with increasing frequency. Rainfall is the direct cause of sewer backups, and it is obviously a variable that MSD cannot control. While the SBU response program (assessment, cleaning, claims, etc.) is funded from the operating budget and led by the Wastewater Collection Division, the apparent changes in regional weather has led the utility to recognize the need for, and recommend funding of, a more proactive and comprehensive project-based approach to provide long term solutions. This strategy is reflected in the current budget proposal and in current capital program activity. For example, MSD is currently designing a source control solution for a neighborhood in Mt. Washington, and planning is underway for other many problem areas across the district.

For 2021, MSD recommends additional capital resources to address sewer backups. These projects go hand in hand with the SBU response program funded with the operating budget, and information collected from that program continuously informs the needs of the capital improvement program.

In the current budget proposal, the Urgent Capacity Response allowance that was funded in 2019 and 2020 has been included with an update to allow for construction. This will allow MSD to take immediate action to make small system improvements to provide quick relief where possible.

Also proposed in this budget is the Greater Cincinnati East Side SBU Mitigation Study which will initiate planning of solutions to recurring and widespread sewer backup problems in multiple areas, including Norwood, Hyde Park, and Oakley. This project will complement other capital projects that are underway to evaluate, design, and construct solutions in various neighborhoods such as Ludlow Run, Mt. Washington, and various West Side neighborhoods.

## Bridge Projects and WWIP Projects listed as Conditional in 2020 CIP

Three Bridge projects are included in the 2021 CIP budget for construction funding. These include the CSO 513 Sewer Separation project, the CSO 214 Partial Separation project, and the CSO 83 & 472 Dynamic Underflow Control project, and the CSO 402-406 Wet Weather Improvements Project.

The CSO 402-406 Wet Weather Improvement project is a Consent Decree Bridge *continuation* project (designed in the Bridge) that was included in the County’s 2018 Phase 2A plan that is now before the Regulators. Although included in the Board-modified and approved 2020 CIP budget, this project is advancing in accordance with the schedule that was reported by MSD last year. The project could not be expedited to begin construction in 2020 due to ongoing design and right-of-way acquisition, and it remains on-schedule and in the budget request for 2021 construction.

Of the eighteen projects listed in the 2020 Board modified and approved CIP (Exhibit C), twelve have been approved as of the date of this submittal. One of these is the Upper Muddy Creek Interceptor Replacement Phase B project, a Bridge project that was approved by the BoCC in June and is currently in construction phase. Another, the CSO 198 Partial Separation project, a County Phase 2A project, was approved earlier this year so that planning could commence in 2020 per the County-proposed schedule.

The 2020 Conditional projects that remain unapproved include the Muddy Creek Pump Station & EHRT project, the SSO700 IWAP planning project, and the Muddy Creek IWAP planning project. These projects are discussed in more detail later in this document.

Of the remaining six unapproved 2020 “conditional” projects, only the CSO 402-406 project is recommended in the 2021 CIP budget.

### **County Phase 2A: Muddy Creek Pump Station and EHRT**

The Muddy Creek EHRT & Pump Station project is notable for its lack of appearance in the 2021 budget. This project is largest project in the County’s 2018 WWIP Phase 2A proposal, and according to a July 12<sup>th</sup> communication from the County monitor, the County now seeks its completion by 2025. MSD advises that this schedule is likely not possible for this large and complex project that has not yet been planned, but the utility will nevertheless endeavor to meet this goal. Initially, MSD brought forth legislation seeking approval of design funding for this project in early 2019, but the BoCC determined that this request was ahead of schedule. The 2020 CIP budget approved by the BoCC contained a budget for planning of this project, but that conditional funding was never released for use by MSD. The continued lack of funding for project planning has prevented MSD from developing an accurate budget, schedule, and scope, thereby putting the County’s Phase 2A plan at risk. Rather than include the design request in the 2021 budget, MSD has submitted legislation for planning and design funding as an amendment to the 2020 CIP so that the project can be implemented as expeditiously as possible.

### **County Phase 2A: Integrated Watershed Action Plans (IWAP) and the Water Infrastructure Improvement Act (WIIA)**

At the County’s request, MSD spent several years and over \$4 million studying alternatives to specific required Consent Decree projects on a project known as the SSO700 IWAP. This study was completed in 2019 and was not fruitful because there were no viable alternatives, or “early action projects”, identified. Perhaps anticipating a different result, the County sought to include “SSO700 IWAP early action projects” as adaptive management projects in its 2018 Phase 2A plan. Unfortunately, there are no projects to recommend and MSD must report that this aspect of the County Phase 2A plan is not feasible. Additionally, MSD does not recommend expending additional funds on the SSO700 IWAP study as proposed in the BoCC modified and approved 2020 CIP, and those conditionally budgeted funds remain unapproved.

Furthermore, MSD is obliged to inform the BoCC that a primary component of the County IWAP philosophy is to identify and remove stormwater from the system to meet County stormwater obligations, but that this is problematic to the extent that County stormwater obligations are not necessarily MSD obligations. The use of sewer district ratepayer funds to create storm water infrastructure is limited by ORC 6117 and it is also restricted by the fourth amendment to the 1968 Agreement. In addition, MSD must voice concern that the County IWAP philosophy overemphasizes source control and is preventing MSD from solving sewer backups (SBU’s), overflowing manholes, and Consent Decree obligations by diverting resources from much needed wastewater conveyance capacity projects. Theoretical aspirations for source control have not been shown to be cost effective.

MSD's factual analysis of the flaws in the County IWAP approach does not diminish the utility's strong support for integrated planning. For the past decade, MSD's wet weather program has transitioned from planning for only traditional conveyance and storage-based solutions to a more holistic method of planning with the goal of cost effectively maximizing environmental and community benefits. Adaptive Plan reviews and substitution of green infrastructure have always been available under the WWIP. MSD's successful effort to modify the Consent Decree to allow for the Lick Run Greenway instead of the more expensive deep tunnel is a prime example of this. Although it is not recommending continuation of IWAP activities, MSD continues its significant efforts in integrated watershed planning. The ongoing work in the Muddy Creek basin is a good example of this.

In 2019, the Water Infrastructure Improvement Act (WIIA) modified the Federal Water Pollution Control Act (also known as the CWA) to codify the Integrated Planning Framework under the NPDES. WIIA also modified CWA to allow utilities to request a modification of a settlement agreement based on a compliant integrated plan. The modification of the Act does not specifically require the Regulators to incorporate green infrastructure into consent decrees, but it does require them to promote and integrate the use of green infrastructure and does not prohibit them from modifying existing agreements. WIIA enshrines in statute what the Defendants negotiated in the WWIP and MSD has been implementing for over a decade. MSD's program philosophy aligns with the WIIA to incorporate innovative elements such as smart sewers, outfall disinfection, and strategic separation of stormwater from combined sewer systems.

### **County Phase 2A: Mt. Washington Source Control project**

The Mt. Washington Source Control project is also a Consent Decree project that was in the 2018 County Phase 2A plan with a proposed cost of \$8.2 million (2006\$), or nearly \$11 million in today's dollars. The primary purpose of the project is to provide a solution to sewer backups in a neighborhood with severe and recurring problems, with a secondary goal of providing a CSO volume reduction at CSO 182, an eventual Consent Decree requirement (Index 317). MSD's request for design funding was approved by the BoCC in May of 2019 and design efforts are currently underway. At the time of design funding approval, it was believed that the project could be designed and constructed at a cost that was significantly lower than the cost assumed in the 2018 County Phase 2A proposal (a total project cost of less than \$3 million). As design has progressed, it has become apparent that this was overly optimistic. In June of 2020, the designer reported the existence of unforeseen utility conflicts and the need for additional right-of-way acquisition were driving up costs and negatively impacting the viability of the project as proposed. As MSD reported to the BoCC on July 27<sup>th</sup> of this year and in follow up meetings with the County administration, MSD is currently evaluating the feasibility of extending sewer separation further downstream to resolve these conflicts. This proposed change in budget and scope is consistent with the County Phase 2A plan and a result of the current evaluation is expected to be available in the first quarter of 2021.

### **County Phase 2A: Mill Creek WWTP EHRT**

Work on the Mill Creek WWTP EHRT facility, known as Mill Creek CEPT in the WWIP, began with the 2018 approval of the Bridge schedule which called for initiation of construction of a new diversion chamber. A diversion chamber is the term used for the underground structure that connects the interceptor sewers to the pump station. The County's 2018 Phase 2A schedule proposed a project called "Mill Creek EHRT,



Complete Diversion Chamber”. This was proposed in recognition that the funding proposed in the Bridge schedule would not suffice to complete the required structure(s). In 2019, the County chose to accelerate their Phase 2A project by funding the entire Diversion Chamber. As such, this project is currently under construction and no additional activity or funding will be required for Phase 2A for this phase of the Mill Creek EHRT project.

With that said, it should be noted that the Bridge project was originally initiated because of:

- 1) Asset Management need: The existing Mill Creek pump station, the district’s largest, is deteriorating and is seen as *MSD’s highest risk asset*. Multiple failures of large gates and concrete structures have been observed over the past several years. These cannot be repaired without taking the pump station offline because of how the facility was designed, before a treatment plant existed, and when it was acceptable to discharge 100 million gallons per day of raw sewage into the Mill Creek for an extended period of time. Construction of the new Diversion Chamber will allow for a new, modern, maintainable pump station to be constructed while the existing pump station remains in 24/7 operation. In addition, the new Diversion Chamber will provide a location to place temporary pumps that could mitigate an environmental disaster by allowing for limited pumping capacity in the event that the existing diversion chamber (a weak link) fails before the new pump station has been constructed.
- 2) WWIP need: Under the terms of the federal Consent Decree, MSD is required to construct a wet weather facility at the Mill Creek WWTP. This facility will require additional pumping capacity that the existing pumping facility cannot provide. Because of the large cost of the complete project, the Regulators agreed to a phased construction approach.

It is important to note that the Diversion Chamber currently being constructed does not provide wet weather benefit, or significant asset management benefit (risk mitigation), until the additional phases are designed and constructed. Consistent with the 2018 County Phase 2A plan, MSD is requesting planning and design funding to continue work on this important project, and strongly recommends that this project and the funding requisite to complete design and construction be prioritized due to the urgent asset management need.

## County Phase 2A: Little Miami Standby Power, Duke Rider, and Pump Station Upgrades

The County Phase 2A plan contains multiple projects at the Little Miami WWTP. The Little Miami Standby Power project construction was scheduled to proceed in late 2021, but the schedule has slipped and a line item for construction funding now appears in the 2022 budget request. As previously reported by MSD, the County’s proposed “Duke Rider Cost” is an ongoing operating expense and the County has not explained how this can be capitalized or considered to be a WWIP project.

In accordance with the 2018 County Phase 2A proposal, MSD can proceed with design of the Little Miami Pump Station Upgrades if funding is made available. However, MSD has not been provided information from the County about the proposed scope of these projects. Although planning was completed in 2014, the proposed upgrades were not separated into two projects as is the case in the County Phase 2A plan and MSD has not been provided with additional information. A request for design funding is not currently

in the 2021 CIP budget. However, with feedback from the County on the intended scope of these projects, MSD can develop a design funding request to be presented as an amendment to the 2021 CIP, or in a later budget year.

In response to County feedback on the 2021 draft CIP budget, MSD has reported that the Little Miami Solids Disposal Facility project, recommended in the 2019 MSD Solids Handling Master Plan is unrelated to the sizing of a future EHRT at the Little Miami facility, and can proceed without delay.

### **Collaborative Projects: ODOT and Cincinnati Zoo**

In the 2021 draft budget request, MSD has included a project called CSO 488/490 I-75 Reconstruction Coordination. This WWIP project was a “Bucket D”, or low priority project in MSD’s January 2020 Validation Report. Since that time, the Ohio Department of Transportation (ODOT) has contacted MSD to seek collaboration and coordination on this project with their ongoing construction project in the Interstate 75 corridor, and if MSD were to revise the Validation this would now be a “Bucket A”, or highest priority, project.

Because we cannot alter the ODOT construction schedule, there is a small window of opportunity for a collaborative effort, ODOT will proceed with construction that, despite meeting permitting requirements, would increase the overflow volume at CSO 488. ODOT is not subject to the MSD Rule 2407 and if a collaborative project does not occur, increases in overflow volume would need to be addressed by MSD in the future, at the sole expense of the ratepayers, in order to meet the requirements of Index 442 in Attachment 2 of the Final WWIP. For this collaborative project, MSD is requesting \$1 million in the 2021 capital budget.

The Vine Street & Erkenbrecher Avenue Sewer Separation project is a proposed collaborative effort with the Cincinnati Zoo that will address replace some old, failing sewers while separating and diverting stormwater to a detention facility that will be constructed by MSD and the Zoo as a part of its new parking facility. The Zoo will treat the diverted stormwater and use it for animal care needs within the park. The 2021 request is to initiate planning, at a cost of \$750,000. This planning collaboration cannot be delayed as it must align with the schedule of the Zoo’s capital improvement plan.

**Metropolitan Sewer District of Greater Cincinnati  
Capital Budget and Capital Improvement Program  
Years 2021-2025**

**Table of Contents**

	<b><u>Page</u></b>
<b>Executive Summary</b>	<b>i</b>
<b>Glossary of Terms</b>	<b>3</b>
<b>Annual CIP Legislation Assumptions</b>	<b>4</b>
<b>2021 CIP Planning/Design/Easement Funding Request</b>	<b>5</b>
<b>2021 CIP Projects</b>	<b>9</b>
<b>2021 WWIP Projects</b>	<b>13</b>
<b>2021 ASSET Projects</b>	<b>32</b>
<b>2021 OTHER Projects</b>	<b>76</b>
<b>2022 CIP</b>	<b>80</b>
<b>2023 CIP</b>	<b>85</b>
<b>2024 CIP</b>	<b>89</b>
<b>2025 CIP</b>	<b>93</b>

# Glossary of Terms

## Abbreviation

## Description

ALW	Allowance
BOCC	Board of County Commissioners, Hamilton County, OH
CDOTE	Cincinnati Department of Transportation & Engineering
CEHRT	Chemically Enhanced High Rate Treatment
CIP	Capital Improvement
CSO	Combined Sewer Overflow; discharge from a combined sewer collection system.
EPA	Environmental Protection Agency
ESP	Early Success Project
FAC	Treatment Facility
HA	Highly Active SSOs (HASSOs)
HNS	Home Numbers
HSTS	Home Sewage Treatment Systems
HW/DW	High Water, Dry Weather, refers to a specific type of CSO, the condition that occurs when the interceptor sewer floods from area rivers or creeks back-flowing into a CSO structure, resulting in extraneous waters that cause a combined discharge further down the collection system
ITS	IT Systems
LAT	Lateral Sewer
LMCPR	Lower Mill Creek Partial Remedy
LOC	Local Sewer
MGD	Million Gallons per Day
MSD	Metropolitan Sewer District
NPDES	National Pollution Discharge Elimination System; permitting authority overseen by USEPA
O&M	Operations and Maintenance
OEPA	Ohio Environmental Protection Agency
ORC	Ohio Revised Code
PRG	Program Contingency
PSE	Pump Station Improvement Elimination
PSO	Pump Station Overflow
RDI/I	Rainfall Derived Infiltration Inflow (IL), extraneous sources of storm ground water into a sanitary sewer system
REG	Regulator Improvement
REM	Sewer Backup Remediation
REP	Sewer Replacement
SBU	Sewer Back Up (aka WIB Water-In-Basement)
SCADA	Supervisory Control and Data Acquisition
SEP	Sewer Separation
SEW	New Sewer
SRC	Source Control
SSO	Sanitary Sewer Overflow; discharge from a separate sanitary sewer
STY	Study
SUP	Supplemental Environmental Project
TUN	Tunnel
USEPA	United States Environmental Protection Agency
WWC	Wastewater Collection Division of MSD
WWIP	Wet Weather Improvement Program
WWT	Wastewater Treatment Division of MSD
WWTP	Wastewater Treatment Plant

# ANNUAL CIP LEGISLATION ASSUMPTIONS

**The development of this CIP was based on several key assumptions that are defined below:**

## **Escalation, Inflation, and Labor Inflation**

Per MSD's Financial Analysis Manual:

a. Escalation = 3.5%   b. Inflation = 2.1%   c. Labor Inflation = 3.0%

## **Planning / Study**

The cost for planning or study, during any stage of the planning phase. May be performed by MSD personnel and or by consultant contract.

## **Design**

The cost for detailed design during the design phase. May be performed by MSD personnel and or by consultant contract.

## **Pre Construction Services**

Prior to 2020, this included the cost of MSD personnel performing support functions during the planning and design phases. These costs are now captured in an Allowance for MSD Labor.

## **Miscellaneous Expense**

The cost of all permit fees paid directly by MSD during the design phase. These costs include, but are not limited to, PTI, street opening permit, building permits, 401 permits. In addition, costs may include utility relocations and demolition if not handled during construction.

## **Right of Way**

The cost of easement acquisition by MSD personnel, professional services for appraisal and title opinions, appropriation costs, court costs, and compensation paid to property owners for easements during the design phase.

## **Construction**

The bid cost to construct the project as estimated by the engineer, including startup and commissioning costs if required for project.

## **Construction Services**

The cost for construction phase professional services, as needed, including construction management, construction inspection, field engineering and other related costs.

## **Interest/Financing**

The cost of interest charged prior to the asset being placed in service. This is only applied to projects that have a prospective borrowing, such as projects financed through OPEA low interest loan program. Most 2021 CIP Projects will proceed with bond financing, so the value is shown as \$0.

## **MSD Labor**

The cost for MSD project planning, design and delivery related activities, including project management, construction management, construction inspection, field engineering, and other project-related personnel costs.

## **2021 - 2025 CIP**

The schedule for the Phase 2 WWIP remains under development by the City and County in preparation for anticipated Regulatory discussions. Individual projects to be advanced are subject to change pending on-going engineering or affordability considerations. Due to the evolving nature of these evaluations and their direct impact on future regulatory compliance, the Projects associated with the future Phase 2 WWIP have not been included in this CIP.

## **Legislated Costs**

Legislated costs include costs that have been previously legislated and legislation anticipated to be approved during 2020. Due to this assumption, it may be the case that some legislated costs may not have been approved at the time of drafting this document.

## **Cost Estimates**

Project costs have been estimated and based on industry best practice and AACE International guidelines. In general, most P D E projects are considered as a Class 5 estimates based on the maturity of the scope development and have an expected accuracy range of -50% to +100%. Construction projects are based on an Engineer's Opinion of Probable Costs (OPCC) and will be reflective of the estimate class at the time of the budget update.

## **Project Schedules**

Project schedules are established based on the use of a standard template developed for the type and size of the project. The schedules are then refined to address project specific issues or complexities, such as alternative delivery method, hydraulic physical modeling, or extensive ROW acquisition requirements. In general, the schedule templates for conveyance projects account for a typical ROW activity and duration. This is not included in most facility projects. All schedules are created and maintained in Primavera P6 and updated on a regular basis to reflect the current forecasted completion of the remaining milestones.



## 2021 CIP Projects

### Metropolitan Sewer District of Greater Cincinnati

#### Planning/Design/Easement Funding Request (Exhibit A)

Project No	CIP Type	Project Type	Project Name	P/D/E Funds Requested
10130161	WWIP	PSE	Muddy Creek PSU & Force Main (Planning)	\$550,000
10130280	WWIP	PSE	Addyston Pump Station Elimination (Planning)	\$159,382
10140417	WWIP	ALW	WWIP Phase 1 Construction Compliance Assurance (Design)	\$4,222,000
10142420	WWIP	SEP	Vine Street at Erkenbrecher Avenue Sewer Separation (Planning)	\$750,000
10144888	WWIP	FAC	MCWWTP High Rate Treatment Pump Station (Planning,Design)	\$6,256,000
10190221	WWIP	ALW	Phase 2 WWIP Planning 2021 (Planning)	\$5,000,000
10192021	WWIP	ALW	SBU Urgent Capacity Response Program 2021 (Design)	\$417,700
11142741	WWIP	SEP	CSO 488 490 I-75 Reconstruction Coordination (Design)	\$60,000
11142745	WWIP	SEP	CSO 488 Strategic Sewer Separation Phase A (Design)	\$628,300
11530000	WWIP	REP	Upper Muddy Creek Interceptor Replacement (Design)	\$558,100
10199021	OTHER	ALW	Program Management and Support Services 2021 (Design)	\$6,800,000
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000
10222015	ASSET	PSE	Stratford Lake Force Main Renewal (Planning)	\$76,733
10230150	ASSET	REP	Addyston Creek and Sewer Rehab (Design)	\$50,000
10230655	ASSET	REP	Muddy Creek Road and Rosebud Drive Sewer Replacement (Planning)	\$68,000
10232025	ASSET	REP	3731 Glenmore Avenue Sewer Evaluation (Planning)	\$32,000
10240200	ASSET	REP	Harvey Ave-Hickman Ave Sewer Replacement (Design,Easement)	\$745,500
10240755	ASSET	REP	Victory Parkway at LedgeWood Drive Sewer Replacement (Design,Easement)	\$525,000
10240760	ASSET	REP	Highland and Burnet Sewer Replacement (Design,Easement)	\$78,500
10240775	ASSET	REP	Gilbert Avenue at Casino Sewer Replacement (Design,Easement)	\$502,700
10240820	ASSET	REP	Reading Road at Stewart Place Sewer Replacement (Design,Easement)	\$366,000
10240845	ASSET	REP	Taft Road & McMillan Street Sewer Replacement (Planning)	\$420,000
10240855	ASSET	REP	Connecticut Avenue Sewer Replacement (Design,Easement)	\$666,000
10241905	ASSET	SUP	Congress Run Stream Restoration and Bank Stabilization (Planning)	\$166,000
10242025	ASSET	REP	Davey Avenue to Hamilton Avenue Sewer Replacement (Design,Easement)	\$330,500
10242035	ASSET	REP	Reading Road - 12th Street to E Liberty Street Sewer Replacement (Design,Easement)	\$438,400
10242085	ASSET	PSE	Village Woods Pump Station and System Improvements (Design,Easement)	\$166,000
10242120	ASSET	REP	Elberon Avenue Sewer (Planning)	\$120,000
10242125	ASSET	REP	Sycamore Street Sewer (Planning)	\$180,000
10262015	ASSET	FAC	SCWWTP Clarifiers (Planning)	\$227,216
10270220	ASSET	REP	Tusculum Avenue at Woodbridge Sewer Replacement (Design)	\$38,900
10272050	ASSET	PSE	Wayside Hills Pump Station (Planning)	\$150,000
10272065	ASSET	FAC	LMWWTP Flow Meter Renewal (Design)	\$630,000
10272070	ASSET	REP	Summerview Low Pressure Forcemain (Planning)	\$50,335
10280241	ASSET	ALW	Hydraulic Modeling 2021 (Planning)	\$1,200,000
10281100	ASSET	FAC	LMWWTP Solids Disposal With Odor Control (Design)	\$5,567,625
10282021	ASSET	ALW	CIP Planning Projects 2021 (Planning)	\$2,100,000
11582000	ASSET	STY	Greater Cincinnati East Side SBU Mitigation Study (Planning)	\$1,000,000



## 2021 CIP Projects

### Metropolitan Sewer District of Greater Cincinnati

#### Planning/Design/Easement Funding Request (Exhibit A)

<b>Project No</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>P/D/E Funds Requested</b>
<b>38 Planning/Design/Easement Projects in 2021</b>				<b>\$ 46,796,891</b>

**FY 2021 MSD CIP Funding Request**  
**Metropolitan Sewer District of Greater Cincinnati**  
**Estimate of Construction**  
**Detailed Project Estimated Cost (Exhibit B)**

ID#	CIP#	Project Name	Location	Explanation/Description	Legislation Type	Resolution 1	Resolution 2	Resolution 3	Current Request	WWIP	AM	Proj Start	Proj End
10180121	NA	Main Sewer Renewal Program 2021	Throughout the MSD service area	This program conducts lining of existing main sewers throughout the District as a cost-effective method of rehabilitating structurally deteriorated sewers. This scope of work for this program will include, but not limit itself to, slip-lining, point lining, spiral wound lining, pipe bursting, carbon filament wrapping, directional drilling, jack-and-boring, Cured-in-place-pipe, and other methods. The sewer segments to be addressed under this program have identified through investigations of the sewer lines and are prioritized based on their risk ranking relative to structural condition and the likelihood and consequence of a sewer failure. The scope of work for the program does not include addressing building sewers.	Const	Approve - plans/ specs/ cost est.	Necessity/ Proceed	Authorize - advertise and bid	\$ 6,000,000.00	X		Jan 2021	Dec 2021
10180221	NA	Manhole Renewal Program 2021	Throughout the MSD service area	This program provides a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehab projects are prioritized based on their risk ranking relative to structural condition and the likelihood and consequence of failure. The scope of work for the program will include manhole repairs, replacement manholes and adjustments and chimney repairs necessary in conjunction with paving projects.	Const	Approve - plans/ specs/ cost est.	Necessity/ Proceed	Authorize - advertise and bid	\$ 973,000.00	X		Jan 2021	Dec 2021
10281321	NA	Prioritized Wastewater Collection System Improvements 2021	Throughout the MSD service area	This program will allow the District to respond to sudden, unexpected system failures, to complete planned repairs and improvements to high risk utility-owned assets, and to make prioritized system improvements through construction coordination projects in order to maintain acceptable levels of service at the lowest life-cycle cost. This allowance represents a consolidation of the former Emergency Sewer, High Risk Asset Renewal, and Building Sewer Renewal allowances.	Const	Approve - plans/ specs/ cost est.	Necessity/ Proceed	Authorize - advertise and bid	\$ 12,000,000.00	X		Jan 2021	Dec 2021
10280721	NA	Critical Asset Management Projects 2021	Throughout the MSD service area	This allowance serves as an annual "budget" from which smaller expenditures will be made as the need arises. To manage this allowance, MSD will maintain a risk-based prioritized list of proposed expenditures that will be updated as needs arise and seek legislative approval according to established thresholds.	Const	Approve - plans/ specs/ cost est.	Necessity/ Proceed	Authorize - advertise and bid	\$ 6,000,000.00	X		Jan 2021	Dec 2021
<b>Total</b>									<b>\$ 24,973,000.00</b>				



**FY 2021 MSD CIP Funding Request  
Metropolitan Sewer District of Greater Cincinnati  
Estimate of Construction  
Detailed Project Estimated Cost (Exhibit B)**

ID#	CIP#	Project Name	Planning	Design	Pre-Construction Services	Miscellaneous Expense	Right Of Way	Construction	Contingency	Construction Services	Interest / Financing	Total
10180121	NA	Main Sewer Renewal Program 2021	\$ -	\$ -	\$ -	\$ -	\$ -	6,000,000.00	\$ -	\$ -	\$ -	6,000,000.00
10180221	NA	Manhole Renewal Program 2021	\$ -	\$ -	\$ -	\$ -	\$ -	873,000.00	\$ -	100,000.00	\$ -	973,000.00
10281321	NA	Prioritized Wastewater Collection System Improvements 2021	\$ -	\$ -	\$ -	\$ -	\$ -	10,000,000.00	\$ -	2,000,000.00	\$ -	12,000,000.00
10280721	NA	Critical Asset Management Projects 2021	\$ -	\$ -	\$ -	\$ -	\$ -	6,000,000.00	\$ -	\$ -	\$ -	6,000,000.00
<b>Total</b>											<b>\$ 24,973,000.00</b>	

Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2020  
Board of County Commissioners  
Hamilton County, Ohio



\_\_\_\_\_  
Ryan Welsh, P.E.  
Deputy Director, MSD  
Hamilton County Sanitary Engineer  
(for the purposes of the Metropolitan Sewer District of Greater Cincinnati  
as authorized in the Resolution of February 28, 2007, Comm. Minutes, Vol. 305, Images 4190-4191)  
City of Cincinnati Department of Sewers



## 2021 CIP Projects

### Metropolitan Sewer District of Greater Cincinnati

<b>Project ID</b>	<b>Project Category</b>	<b>Project Type</b>	<b>Project Name</b>	<b>2021 Total Requested</b>	<b>Total Project Cost</b>
10130161	WWIP	PSE	Muddy Creek PSU & Force Main (Planning)	\$550,000	\$9,258,586
10130280	WWIP	PSE	Addyston Pump Station Elimination (Planning)	\$159,382	\$3,335,893
10131021	WWIP	CSO	CSO 402-406 Wet Weather Improvements (Construction)	\$14,018,000	\$16,485,000
10140417	WWIP	ALW	WWIP Phase 1 Construction Compliance Assurance (Design)	\$4,222,000	\$6,968,000
10142200	WWIP	SEP	CSO 513 Sewer Separation (Construction)	\$3,802,700	\$4,638,011
10142420	WWIP	SEP	Vine Street at Erkenbrecher Avenue Sewer Separation (Planning)	\$750,000	\$26,700,000
10144888	WWIP	FAC	MCWWTP High Rate Treatment Pump Station (Planning,Design)	\$6,256,000	\$140,000,000
10171641	WWIP	SEP	CSO 214 Partial Separation (Construction)	\$1,273,700	\$2,253,900
10180121	WWIP	ALW	Main Sewer Renewal Program 2021 (Construction)	\$6,000,000	\$6,000,000
10180221	WWIP	ALW	Manhole Renewal Program 2021 (Construction)	\$973,000	\$973,000
10190221	WWIP	ALW	Phase 2 WWIP Planning 2021 (Planning)	\$5,000,000	\$5,000,000
10192021	WWIP	ALW	SBU Urgent Capacity Response Program 2021 (Design)	\$417,700	\$417,700
10240275	WWIP	SSO	SSO 603 and 704 Improvements (Construction)	\$3,660,000	\$11,182,581
10270170	WWIP	CSO	CSO 83 and 472 Dynamic Underflow Control (Construction)	\$2,989,000	\$3,860,025
11142741	WWIP	SEP	CSO 488 490 I-75 Reconstruction Coordination (Design,Construction)	\$1,000,000	\$1,074,000
11142745	WWIP	SEP	CSO 488 Strategic Sewer Separation Phase A (Design)	\$628,300	\$8,642,950
11530000	WWIP	REP	Upper Muddy Creek Interceptor Replacement (Design)	\$558,100	\$11,000,188
10199021	OTHER	ALW	Program Management and Support Services 2021 (Design)	\$6,800,000	\$6,800,000
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$37,421,915
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$32,500,000
10222015	ASSET	PSE	Stratford Lake Force Main Renewal (Planning)	\$76,733	\$880,398
10230130	ASSET	REP	Dry Weather Channel for SS 937 (Construction)	\$3,177,000	\$4,394,405
10230150	ASSET	REP	Addyston Creek and Sewer Rehab (Design)	\$50,000	\$819,283



## 2021 CIP Projects

### Metropolitan Sewer District of Greater Cincinnati

<b>Project ID</b>	<b>Project Category</b>	<b>Project Type</b>	<b>Project Name</b>	<b>2021 Total Requested</b>	<b>Total Project Cost</b>
10230655	ASSET	REP	Muddy Creek Road and Rosebud Drive Sewer Replacement (Planning)	\$68,000	\$735,000
10232015	ASSET	FAC	MUWWTP Thickening Replacement and Pumping Improvements (Construction)	\$3,350,000	\$3,860,000
10232025	ASSET	REP	3731 Glenmore Avenue Sewer Evaluation (Planning)	\$32,000	\$566,000
10240055	ASSET	FAC	MCWWTP Liquid Sludge Storage Tank Covers and Odor Control (Construction)	\$7,898,393	\$8,483,195
10240180	ASSET	REP	3934 Winding Way Sewer Replacement (Construction)	\$388,300	\$539,677
10240200	ASSET	REP	Harvey Ave-Hickman Ave Sewer Replacement (Design,Easement)	\$745,500	\$2,190,377
10240360	ASSET	PSE	Timbers Pump Station Elimination (Construction)	\$1,773,000	\$2,065,579
10240380	ASSET	CSO	CSO 005 Water Connection (Construction)	\$134,300	\$274,789
10240495	ASSET	REP	Wahl Terrace Sewer Replacement (Construction)	\$658,400	\$921,054
10240545	ASSET	REP	Central Parkway Sewer Replacement (HN 2402) (Construction)	\$444,000	\$644,611
10240625	ASSET	FAC	MCWWTP Standby Power Distribution System Improvements (Construction)	\$4,639,261	\$5,194,178
10240697	ASSET	FAC	Mill Creek 4.16 kV & 13.2 kV Loop Improvements (Construction)	\$2,283,627	\$2,647,895
10240755	ASSET	REP	Victory Parkway at Ledgewood Drive Sewer Replacement (Design,Easement)	\$525,000	\$1,485,000
10240760	ASSET	REP	Highland and Burnet Sewer Replacement (Design,Easement)	\$78,500	\$278,900
10240775	ASSET	REP	Gilbert Avenue at Casino Sewer Replacement (Design,Easement)	\$502,700	\$5,427,400
10240820	ASSET	REP	Reading Road at Stewart Place Sewer Replacement (Design,Easement)	\$366,000	\$666,000
10240845	ASSET	REP	Taft Road & McMillan Street Sewer Replacement (Planning)	\$420,000	\$11,602,500
10240855	ASSET	REP	Connecticut Avenue Sewer Replacement (Design,Easement)	\$666,000	\$4,048,600
10241905	ASSET	SUP	Congress Run Stream Restoration and Bank Stabilization (Planning)	\$166,000	\$2,679,000



## 2021 CIP Projects

### Metropolitan Sewer District of Greater Cincinnati

<b>Project ID</b>	<b>Project Category</b>	<b>Project Type</b>	<b>Project Name</b>	<b>2021 Total Requested</b>	<b>Total Project Cost</b>
10242025	ASSET	REP	Davey Avenue to Hamilton Avenue Sewer Replacement (Design,Easement)	\$330,500	\$1,042,600
10242035	ASSET	REP	Reading Road - 12th Street to E Liberty Street Sewer Replacement (Design,Easement)	\$438,400	\$3,258,600
10242085	ASSET	PSE	Village Woods Pump Station and System Improvements (Design,Easement)	\$166,000	\$690,000
10242120	ASSET	REP	Elberon Avenue Sewer (Planning)	\$120,000	\$1,770,000
10242125	ASSET	REP	Sycamore Street Sewer (Planning)	\$180,000	\$2,935,000
10262005	ASSET	FAC	SCWWTP Thickening and Settlement Improvements (Construction)	\$950,000	\$1,270,000
10262015	ASSET	FAC	SCWWTP Clarifiers (Planning)	\$227,216	\$4,626,647
10270175	ASSET	REP	East Hill Ave Sewer Replacement (Construction)	\$1,765,728	\$2,289,628
10270220	ASSET	REP	Tusculum Avenue at Woodbridge Sewer Replacement (Design)	\$38,900	\$346,400
10272050	ASSET	PSE	Wayside Hills Pump Station (Planning)	\$150,000	\$2,262,500
10272065	ASSET	FAC	LMWWTP Flow Meter Renewal (Design)	\$630,000	\$7,493,000
10272070	ASSET	REP	Summerview Low Pressure Forcemain (Planning)	\$50,335	\$467,246
10280241	ASSET	ALW	Hydraulic Modeling 2021 (Planning)	\$1,200,000	\$1,200,000
10280721	ASSET	ALW	Critical Asset Management Projects 2021 (Construction)	\$6,000,000	\$6,000,000
10281100	ASSET	FAC	LMWWTP Solids Disposal With Odor Control (Design)	\$5,567,625	\$90,953,125
10281321	ASSET	ALW	Prioritized Wastewater Collection System Improvements 2021 (Construction)	\$12,000,000	\$12,000,000
10282021	ASSET	ALW	CIP Planning Projects 2021 (Planning)	\$2,100,000	\$2,100,000
10630000	ASSET	SUP	Muddy Creek FEMA Property Acquisition & Floodplain Reconfiguration (Construction)	\$328,000	\$700,000
11582000	ASSET	STY	Greater Cincinnati East Side SBU Mitigation Study (Planning)	\$1,000,000	\$1,000,000
<b>61 CIP Projects for 2021</b>				<b>\$131,243,300</b>	<b>\$537,320,336</b>

# **2021 WWIP Projects**



## 2021 Projects

### Metropolitan Sewer District of Greater Cincinnati

### WWIP Projects

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10130161	WWIP	PSE	Muddy Creek PSU & Force Main (Planning)	\$550,000	\$0	\$550,000	14
10130280	WWIP	PSE	Addyston Pump Station Elimination (Planning)	\$159,382	\$0	\$159,382	15
10131021	WWIP	CSO	CSO 402-406 Wet Weather Improvements (Construction)	\$14,018,000	\$0	\$14,018,000	16
10140417	WWIP	ALW	WWIP Phase 1 Construction Compliance Assurance (Design)	\$4,222,000	\$0	\$4,222,000	17
10142200	WWIP	SEP	CSO 513 Sewer Separation (Construction)	\$3,802,700	\$0	\$3,802,700	18
10142420	WWIP	SEP	Vine Street at Erkenbrecher Avenue Sewer Separation (Planning)	\$750,000	\$0	\$750,000	19
10144888	WWIP	FAC	MCWWTP High Rate Treatment Pump Station (Planning,Design)	\$6,256,000	\$0	\$6,256,000	20
10171641	WWIP	SEP	CSO 214 Partial Separation (Construction)	\$1,273,700	\$0	\$1,273,700	21
10180121	WWIP	ALW	Main Sewer Renewal Program 2021 (Construction)	\$6,000,000	\$0	\$6,000,000	22
10180221	WWIP	ALW	Manhole Renewal Program 2021 (Construction)	\$973,000	\$0	\$973,000	23
10190221	WWIP	ALW	Phase 2 WWIP Planning 2021 (Planning)	\$5,000,000	\$0	\$5,000,000	24
10192021	WWIP	ALW	SBU Urgent Capacity Response Program 2021 (Design)	\$417,700	\$0	\$417,700	25
10240275	WWIP	SSO	SSO 603 and 704 Improvements (Construction)	\$3,660,000	\$0	\$3,660,000	26
10270170	WWIP	CSO	CSO 83 and 472 Dynamic Underflow Control (Construction)	\$2,989,000	\$0	\$2,989,000	27
11142741	WWIP	SEP	CSO 488 490 I-75 Reconstruction Coordination (Design,Construction)	\$1,000,000	\$0	\$1,000,000	28
11142745	WWIP	SEP	CSO 488 Strategic Sewer Separation Phase A (Design)	\$628,300	\$0	\$628,300	29
11530000	WWIP	REP	Upper Muddy Creek Interceptor Replacement (Design)	\$558,100	\$0	\$558,100	30
<b>Total Cost for 17 WWIP CIP Projects</b>				<b>\$52,257,882</b>	<b>\$0</b>	<b>\$52,257,882</b>	

# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Muddy Creek PSU & Force Main		
Project ID	10130161	CIP Number	10130161 CD Index # 216
Project Type	Pump Station Improvement/Elim	Sewer Number	7060

## Purpose and Justification

This project is required by the Global Consent Decree as part of the West Branch Muddy Creek Bundle. This project will upgrade the Muddy Creek Pump Station to provide increased capacity. The flow will continue to be conveyed to the West Branch Muddy Creek Interceptor. This is associated with Index 216 in Attachment 2 of the Final WWIP.

## Impact to Operating Budget

None

## Description and Location

This project consists of the upgrade of the Muddy Creek Pump Station at 7513 Gracely Drive. The capacity of the pump station will be increased to a firm capacity of 10.5 MGD and the flows will continue to be conveyed to the West Branch Muddy Creek Interceptor. This project is located in the neighborhood of Saylor Park in the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$250,594	\$0	\$550,000	\$0	\$550,000
Design	\$390,046	\$0	\$0	\$1,600,000	\$1,600,000
Pre-Construction Services	\$380,902	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$96,586	\$0	\$0	\$96,586	\$96,586
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$4,655,468	\$0	\$0	\$5,762,000	\$5,762,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$651,766	\$0	\$0	\$1,250,000	\$1,250,000
Interest / Financing	\$105,806	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$6,531,168</b>	<b>\$0</b>	<b>\$550,000</b>	<b>\$8,708,586</b>	<b>\$9,258,586</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$550,000	\$1,696,586	\$7,012,000	\$0	\$0	\$9,258,586

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Addyston Pump Station Elimination		
Project ID	10130280	CIP Number	10130280 CD Index # 235
Project Type	Pump Station Improvement/Elim	Sewer Number	7061

## Purpose and Justification

This project will eliminate the aging Addyston Pump Station and provide inline storage using a flow control device that will limit the total flow into the Muddy Creek Pump Station to 10.5 MGD from the Muddy Creek Interceptor and Addyston Area. This is associated with Index 235 in Attachment 2 of the Final WWIP

## Impact to Operating Budget

None.

## Description and Location

This project will eliminate the Addyston Pump Station by installation of approximately 2700 feet of 36-inch gravity sewer along US 50. This sewer will also serve as a storage pipe. This project is located in the Village of Addyston.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$159,382	\$0	\$159,382	\$0	\$159,382
Design	\$230,192	\$0	\$0	\$500,000	\$500,000
Pre-Construction Services	\$185,509	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$73,906	\$0	\$0	\$73,906	\$73,906
Right-of-Way	\$17,851	\$0	\$0	\$17,851	\$17,851
Construction	\$2,267,328	\$0	\$0	\$2,267,328	\$2,267,328
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$317,426	\$0	\$0	\$317,426	\$317,426
Interest / Financing	\$51,530	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,303,124</b>	<b>\$0</b>	<b>\$159,382</b>	<b>\$3,176,511</b>	<b>\$3,335,893</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$159,382	\$591,757	\$0	\$0	\$2,584,754	\$3,335,893

## Prior Legislation Action





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 402-406 Wet Weather Improvements		
Project ID	10131021	CIP Number	10131021 CD Index # 218-222
Project Type	CSO Improvement/Elim	Sewer Number	6746

## Purpose and Justification

This project is required by the Wet Weather Consent Decree. It is listed in Index 218-222 of Attachment 2 to the Final WWIP as part of the West Branch Muddy Creek Bundle. The project will improve compliance with the Ohio EPA's Nine Minimum Controls Program whereby MSD is required to prevent river water from entering the collection system to the greatest extent possible.

## Impact to Operating Budget

None.

## Description and Location

This project will provide the design and construction of improvements to existing CSO 402-406. The five CSO projects(10131020,10131040,10131060,10131080,and 10131100) have been combined into one project. Improvements include backflow prevention and regulator control modifications. This project is located in the Saylor Park Neighborhood of the City of Cincinnati, Hamilton County, Ohio.

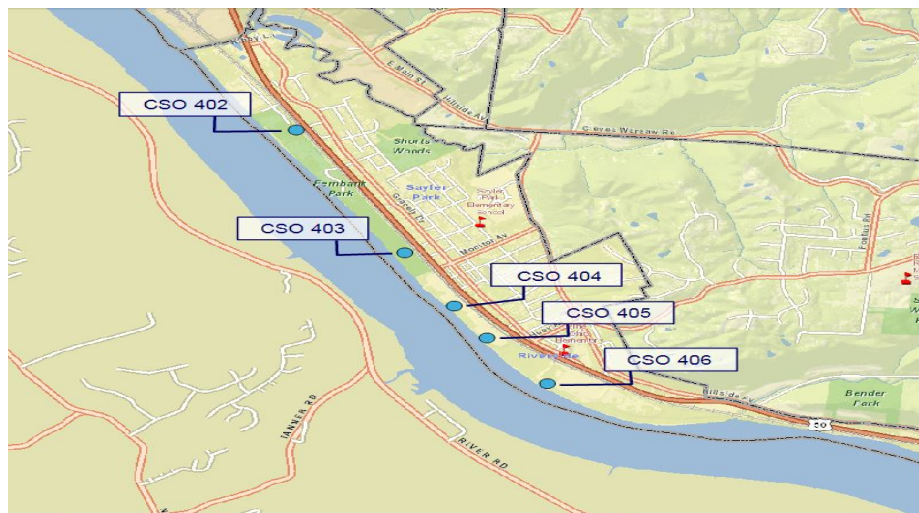
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$737,200	\$1,327,800	\$0	\$0	\$1,327,800
Pre-Construction Services	\$393,400	\$640,100	\$0	\$0	\$640,100
Miscellaneous Expense	\$138,100	\$282,000	\$0	\$0	\$282,000
Right-of-Way	\$122,000	\$217,100	\$0	\$0	\$217,100
Construction	\$10,452,700	\$0	\$13,668,000	\$0	\$13,668,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$1,041,300	\$0	\$350,000	\$0	\$350,000
Interest / Financing	\$563,200	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$13,447,900</b>	<b>\$2,467,000</b>	<b>\$14,018,000</b>	<b>\$0</b>	<b>\$16,485,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$2,467,000	\$14,018,000	\$0	\$0	\$0	\$0	\$16,485,000

## Prior Legislation Action

Dec 2017, Sep 2019



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	WWIP Phase 1 Construction Compliance Assurance		
Project ID	10140417	CIP Number	10140417 CD Index # 112
Project Type	Allowance	Sewer Number	6740

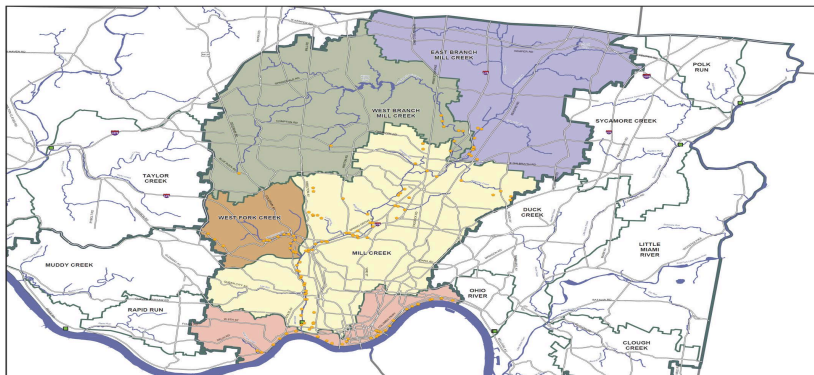
<b>Purpose and Justification</b> This is a consent decree requirement as agreed to in the submitted PCMP required by the WWIP.	<b>Impact to Operating Budget</b> None.
	<b>Description and Location</b> MSDGC must demonstrate compliance with the LMCP and other Wet Weather Improvement Program's (WWIP's) Performance Criteria applicable to combined sewer overflows (CSOs) by post-construction monitoring and modeling as part of the Post Construction Monitoring Plan (PCMP). This CIP is for the planning, flow monitoring, hydraulic modeling, and assistance with regulatory negotiations for that project.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$2,746,000	\$4,222,000	\$0	\$6,968,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$2,746,000	\$4,222,000	\$0	\$6,968,000

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$2,746,000	\$4,222,000	\$0	\$0	\$0	\$6,968,000

**Prior Legislation Action**  
 Dec 2017, Feb 2020

## Mill Creek Basin



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 513 Sewer Separation		
Project ID	10142200	CIP Number	10142200 CD Index # 231
Project Type	Sewer Separation	Sewer Number	6886

## Purpose and Justification

This project is required by the Wet Weather Consent Decree. It is listed in Index 231 of Attachment 2 to the Final WWIP. The project is necessary to reduce overflows tributary to CSO 513.

## Impact to Operating Budget

None.

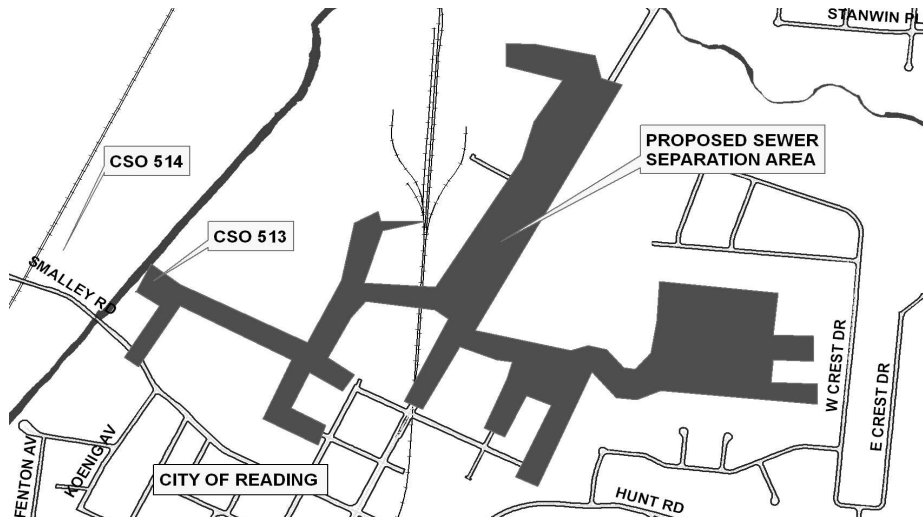
## Description and Location

This project will reduce overflows from CSO 513 by removing storm water from the upstream combined sewers that are tributary to CSO 513. This project is located in the Mill Creek Basin in the City of Reading, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$198,900	\$0	\$0	\$0	\$0
Design	\$210,400	\$375,311	\$0	\$0	\$375,311
Pre-Construction Services	\$146,300	\$160,000	\$0	\$0	\$160,000
Miscellaneous Expense	\$97,500	\$40,000	\$0	\$0	\$40,000
Right-of-Way	\$0	\$210,000	\$0	\$0	\$210,000
Construction	\$2,568,700	\$50,000	\$3,738,000	\$0	\$3,788,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$254,300	\$0	\$64,700	\$0	\$64,700
Interest / Financing	\$127,200	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,603,300</b>	<b>\$835,311</b>	<b>\$3,802,700</b>	<b>\$0</b>	<b>\$4,638,011</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$835,311	\$3,802,700	\$0	\$0	\$0	\$4,638,011

**Prior Legislation Action**  
 Dec 2017, Sep 2018, Mar 2019, Aug 2019, Jan 2020, Jun 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Vine Street at Erkenbrecher Avenue Sewer Separation		
Project ID	10142420	CIP Number	10142420 CD Index #74, 112
Project Type	Sewer Separation	Sewer Number	7057

## Purpose and Justification

The nominated project is an opportunity to address multiple extreme risk sewer assets in the area. It will address capacity issues in the sewer system via strategic sewer separation. Additionally, through coordination with the zoo it will achieve net-zero on-site water usage. This will have a positive impact on the flow in the sewer system and reduce overflows. Based on existing information, the pipes are candidates for rehabilitation. The project will further evaluate and investigate the sewers in this area for structural condition as well as capacity. Alternatives analysis will be conducted and evaluated to provide the best course of action in the project area.

## Impact to Operating Budget

None

## Description and Location

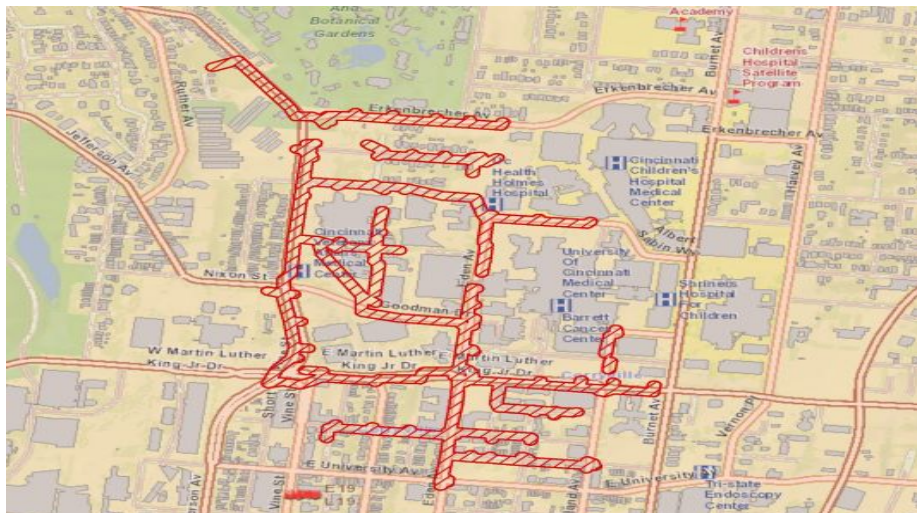
The nominated project is located in the vicinity of Vine Street and Erkenbrecher Avenue, within Clifton and Corryville neighborhoods, in the City of Cincinnati. It will be conducted in coordination with Cincinnati Zoo. The project area includes many extreme risk combined sewer lines. The planning effort will include several activities such as, CCTV inspection, condition assessment, flow monitoring, model updates, alternatives analysis. Based on the data, information, and the analysis a BCE will be developed.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$750,000	\$0	\$750,000	\$0	\$750,000
Design	\$1,500,000	\$0	\$0	\$1,500,000	\$1,500,000
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$1,200,000	\$0	\$0	\$1,200,000	\$1,200,000
Right-of-Way	\$750,000	\$0	\$0	\$750,000	\$750,000
Construction	\$20,000,000	\$0	\$0	\$20,000,000	\$20,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$2,500,000	\$0	\$0	\$2,500,000	\$2,500,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$26,700,000</b>	<b>\$0</b>	<b>\$750,000</b>	<b>\$25,950,000</b>	<b>\$26,700,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$750,000	\$3,450,000	\$0	\$0	\$22,500,000	\$26,700,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	MCWWTP High Rate Treatment Pump Station		
Project ID	10144888	CIP Number	10144888 CD Index # 248
Project Type	Treatment Facility	Sewer Number	6793

## Purpose and Justification

The current WWTP pump station lacks the ability to isolate the influent diversion chamber and the north PS wet well, and is a known risk. Recent physical scale model and computation fluid dynamics (CFD) studies have shown that there is no other feasible way to increase plant pumping capacity with the existing wet wells. Building additional pumping capacity and a new larger diversion chamber at the Mill Creek WWTP site would be required. Thus, any additional wet weather treatment capacity at the plant will require a new pump station. This is associated with Index 248 in Attachment 2 of the Final WWIP.

## Impact to Operating Budget

None

## Description and Location

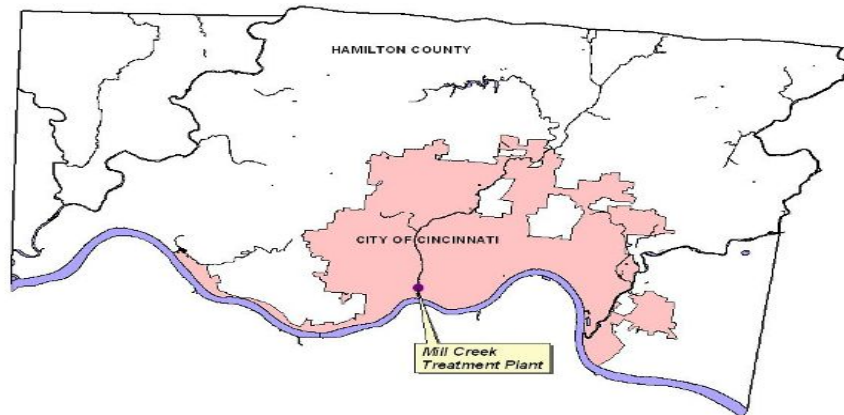
The Mill Creek Raw Sewage Pump Station consists of two physically separate pumping stations: The North PS and the South PS. The North PS was constructed in the mid-1950's and consists of nine vertical centrifugal pumps rated at 40 MGD each (320 MGD firm capacity). The South PS was constructed in the late 1980's and consists of three vertical centrifugal pumps with two rated at 65 MGD each and one rated at 30 MGD (95 MGD firm capacity). This project will construct a new pump station to be connected to both a new diversion structure being constructed under the bridge schedule and to a future wet weather facility. This is the second step of construction necessary to construct the future wet weather facility. This project is located in the Lower Price Hill neighborhood in the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$1,000,000	\$0	\$1,000,000
Design	\$3,344,948	\$0	\$4,756,000	\$7,244,000	\$12,000,000
Pre-Construction Services	\$2,229,965	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$278,746	\$0	\$500,000	\$1,500,000	\$2,000,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$61,324,042	\$0	\$0	\$112,000,000	\$112,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$11,428,571	\$0	\$0	\$13,000,000	\$13,000,000
Interest / Financing	\$1,393,728	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$80,000,000</b>	<b>\$0</b>	<b>\$6,256,000</b>	<b>\$133,744,000</b>	<b>\$140,000,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$6,256,000	\$8,744,000	\$0	\$125,000,000	\$0	\$140,000,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 214 Partial Separation		
Project ID	10171641	CIP Number	10171641 CD Index #188R
Project Type	Sewer Separation	Sewer Number	6744

## Purpose and Justification

The project is required by the Wet Weather Consent Decree. Per the Consent Decree, CSO 214 remaining overflow volume during the typical year shall be 57.4 MG or less. This project will strategically separate the drainage to CSO 214 to reduce the flows to CSO 214 regulator.

## Impact to Operating Budget

None.

## Description and Location

This project involves strategic separation of approximately 55 acres of CSO 214 sewer shed. Existing inlets in a ravine to the CSO sewer will be plugged or elevated to allow large flows to enter the combined sewers for events greater than the Typical Year. The existing storm outlet will be improved to convey storm flow from CSO 214 directly to Yononte Creek, which is a tributary to Duck Creek. Additional modeling to be performed by MSD, Bridge project to be completed by end of 2020. This project is located in Columbia Township, Hamilton County, Ohio.

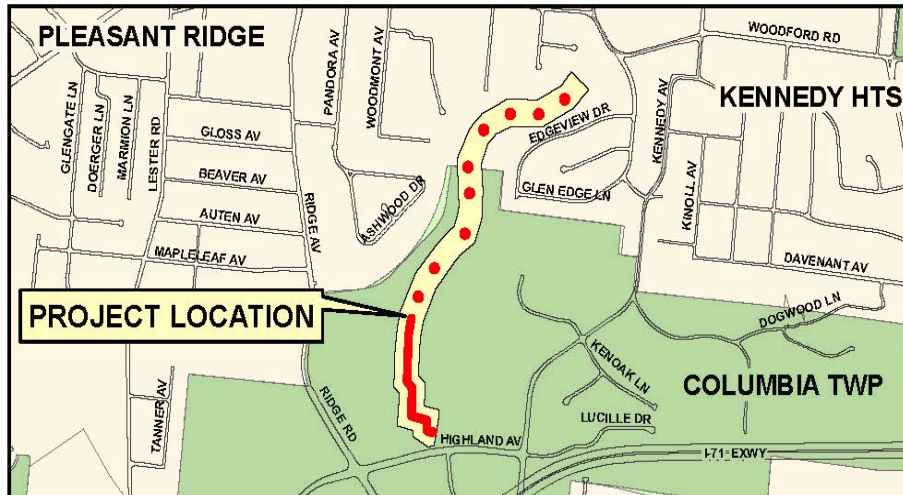
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$278,000	\$0	\$0	\$278,000
Pre-Construction Services	\$0	\$110,000	\$0	\$0	\$110,000
Miscellaneous Expense	\$0	\$112,200	\$0	\$0	\$112,200
Right-of-Way	\$0	\$480,000	\$0	\$0	\$480,000
Construction	\$2,403,000	\$0	\$1,233,700	\$0	\$1,233,700
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$315,000	\$0	\$40,000	\$0	\$40,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,718,000</b>	<b>\$980,200</b>	<b>\$1,273,700</b>	<b>\$0</b>	<b>\$2,253,900</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$980,200	\$1,273,700	\$0	\$0	\$0	\$0	\$2,253,900

## Prior Legislation Action

Dec 2017



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Main Sewer Renewal Program 2021		
Project ID	10180121	CIP Number	10180121 CD Index # 000
Project Type	Allowance	Sewer Number	7062

## Purpose and Justification

Formerly known as the “Trenchless Technology Sewer Rehabilitation Allowance”, this program provides a cost-effective method of rehabilitating deteriorated existing main sewers while improving the hydraulic performance of the sewer. This work may also increase development credits upstream of an SSO.

## Impact to Operating Budget

None.

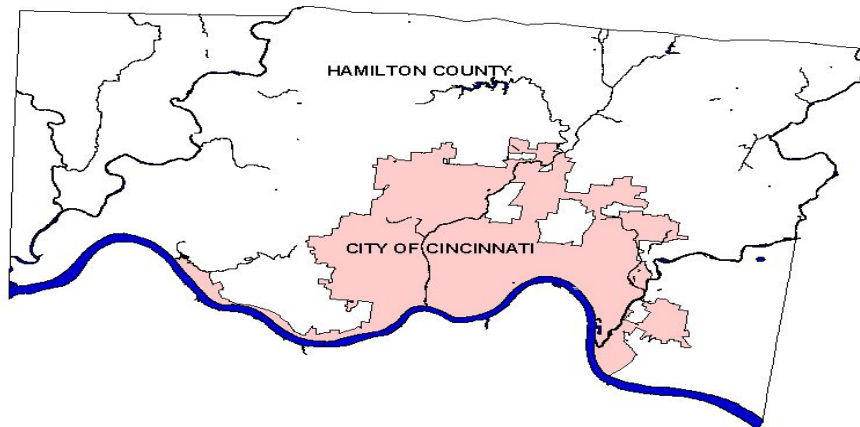
## Description and Location

This program conducts lining of existing main sewers throughout the District as a cost-effective method of rehabilitating structurally deteriorated sewers. This scope of work for this program will include, but not limit itself to, slip-lining, point lining, spiral wound lining, pipe bursting, carbon filament wrapping, directional drilling, jack-and-boring, Cured-in-place-pipe, and other methods. The sewer segments to be addressed under this program have identified through investigations of the sewer lines and are prioritized based on their risk ranking relative to structural condition and the likelihood and consequence of a sewer failure. The scope of work for the program does not include addressing building sewers.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$10,000,000	\$0	\$6,000,000	\$0	\$6,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$3,000,000	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$13,000,000</b>	<b>\$0</b>	<b>\$6,000,000</b>	<b>\$0</b>	<b>\$6,000,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$6,000,000	\$0	\$0	\$0	\$0	\$6,000,000

**Prior Legislation Action**



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Manhole Renewal Program 2021		
Project ID	10180221	CIP Number	10180221 CD Index # 000
Project Type	Allowance	Sewer Number	7063

## Purpose and Justification

Formerly known as the “Trenchless Technology Manhole Rehabilitation Allowance”, this program provides a cost-effective method of rehabilitating existing manholes each year to reduce infiltration and inflow upstream of SSOs to reduce overflows. This work may also increase development credits upstream of an SSO.

## Impact to Operating Budget

None.

## Description and Location

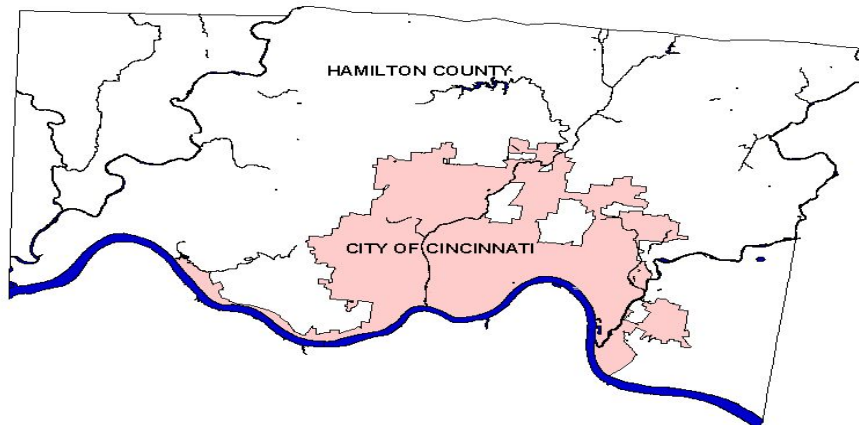
This program provides a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehab projects are prioritized based on their risk ranking relative to structural condition and the likelihood and consequence of failure. The scope of work for the program will include manhole repairs, replacement manholes and adjustments and chimney repairs necessary in conjunction with paving projects.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,200,000	\$0	\$873,000	\$0	\$873,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$100,000	\$0	\$100,000	\$0	\$100,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,300,000</b>	<b>\$0</b>	<b>\$973,000</b>	<b>\$0</b>	<b>\$973,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$973,000	\$0	\$0	\$0	\$0	\$973,000

## Prior Legislation Action





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

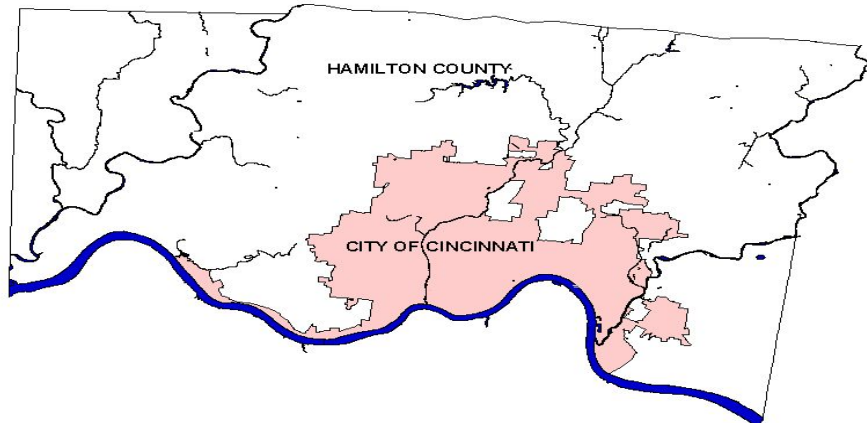
Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Phase 2 WWIP Planning 2021		
Project ID	10190221	CIP Number	10190221 CD Index # 000
Project Type	Allowance	Sewer Number	7048

<b>Purpose and Justification</b> MSD will track work comprised of planning and preparation activities associated with Phase 2 of the District's Wet Weather Improvement Plan.	<b>Impact to Operating Budget</b> None
	<b>Description and Location</b> This funding will provide ongoing support for the technical evaluations and support for the capital program, regulatory and affordability needs for the Phase 2A program.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$5,000,000	\$0	\$5,000,000
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$0	\$5,000,000	\$0	\$5,000,000

5 Year Projected Legislation						
Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000

**Prior Legislation Action**



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	SBU Urgent Capacity Response Program 2021		
Project ID	10192021	CIP Number	10192021 CD Index #
Project Type	Allowance	Sewer Number	6898

## Purpose and Justification

This project will be used to address sewer back up problems as indicated in the project description and in accordance with the Consent Decree and MSDGC policy, and Board of County Commissioner approval.

## Impact to Operating Budget

None

## Description and Location

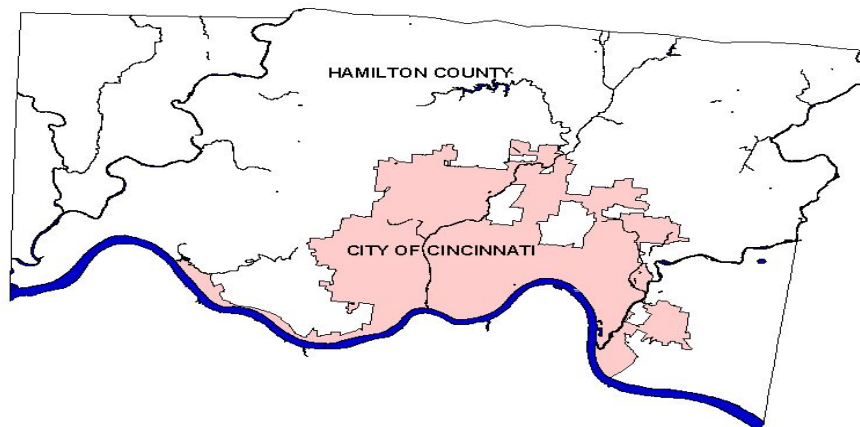
This allowance funds planning of measures that restore sewer capacity in existing CSO communities by identifying urgent WWIP construction work that is needed to address urgent CSO community capacity needs, WIB (SBU) issues, or unpermitted flows. These measures are either not identified as WWIP projects or would be moved up from existing WWIP schedules. All resulting construction projects will undergo public review and evaluation as part of proposed legislation and approval by the BoCC.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$417,700	\$0	\$417,700
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,750,000	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$250,000	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,000,000</b>	<b>\$0</b>	<b>\$417,700</b>	<b>\$0</b>	<b>\$417,700</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$417,700	\$0	\$0	\$0	\$0	\$417,700

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	SSO 603 and 704 Improvements		
Project ID	10240275	CIP Number	2008-28 CD Index # 227R
Project Type	SSO Improvement/Elim	Sewer Number	5968

## Purpose and Justification

The purpose of this project is to improve two SSO's. SSO 603 is active about 9 times per year, and SSO 704 is active about 8 times per year. The project will eliminate modeled overflows at SSO 603 and SSO 704 for the 10-year, SCS Type II design storm. This is associated with Index 227 in Attachment 2 of the Final WWIP.

## Impact to Operating Budget

None.

## Description and Location

This project will replace 6000 feet of 15" and 18" sewer with 24" through 36" sewer in order to increase capacity and eliminate SSO's 603 and 704. This project is located near a stream south of Trebor Drive in Sycamore Township.

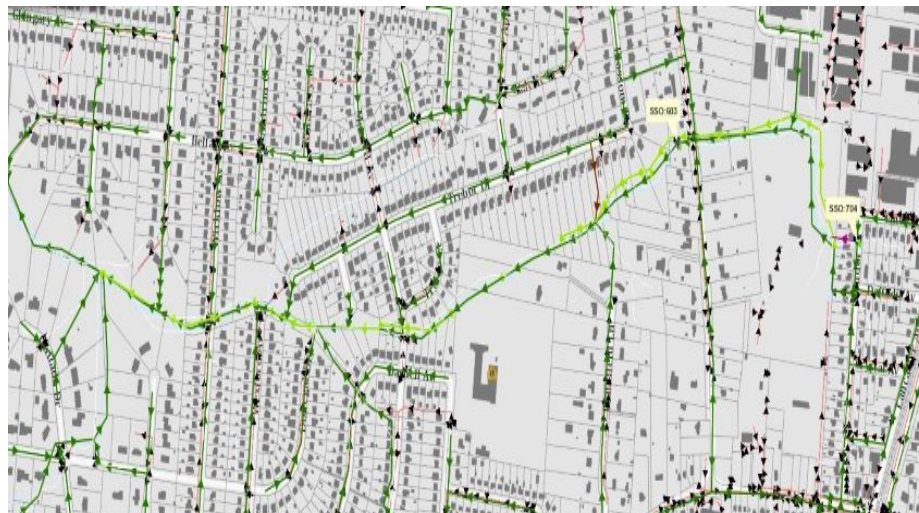
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$126,100	\$446,100	\$0	\$0	\$446,100
Pre-Construction Services	\$33,600	\$336,804	\$0	\$0	\$336,804
Miscellaneous Expense	\$10,300	\$27,800	\$0	\$0	\$27,800
Right-of-Way	\$5,000	\$971,596	\$0	\$0	\$971,596
Construction	\$892,200	\$5,300,000	\$3,660,000	\$0	\$8,960,000
Program Management	\$0	\$35,681	\$0	\$0	\$35,681
Construction Services	\$139,400	\$182,000	\$0	\$0	\$182,000
Interest / Financing	\$37,700	\$222,600	\$0	\$0	\$222,600
<b>Total</b>	<b>\$1,244,300</b>	<b>\$7,522,581</b>	<b>\$3,660,000</b>	<b>\$0</b>	<b>\$11,182,581</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$7,522,581	\$3,660,000	\$0	\$0	\$0	\$0	\$11,182,581

## Prior Legislation Action

Dec 2007, Aug 2008, Dec 2011, Aug 2012, May 2014, Aug 2019, Nov 2019



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 83 and 472 Dynamic Underflow Control		
Project ID	10270170	CIP Number	10270170 CD Index # 255 285
Project Type	CSO Improvement/Elim	Sewer Number	6594

## Purpose and Justification

This project will provide a cost effective strategy to reduce combined sewer overflows through operational controls. Additionally, this project will provide information to be used to support MSD's needs to collect data to provide cost effective and innovative solutions for the Federal Consent Decree. It offers the opportunity to demonstrate water quality management at the lowest cost to rate payers, and a goal to be on the forefront of water management practices.

## Impact to Operating Budget

None

## Description and Location

The project consists of modifications to CSO 83 and CSO 472 that will provide for an automated control of flow into the interceptor sewer. The proposed improvements consist of replacement of the underflow pipe, replacement of the regulator, addition of level sensors, and telemetry equipment. The project is located in the Little Miami basin in Linwood and Madisonville neighborhoods of the City of Cincinnati, Hamilton County, Ohio.

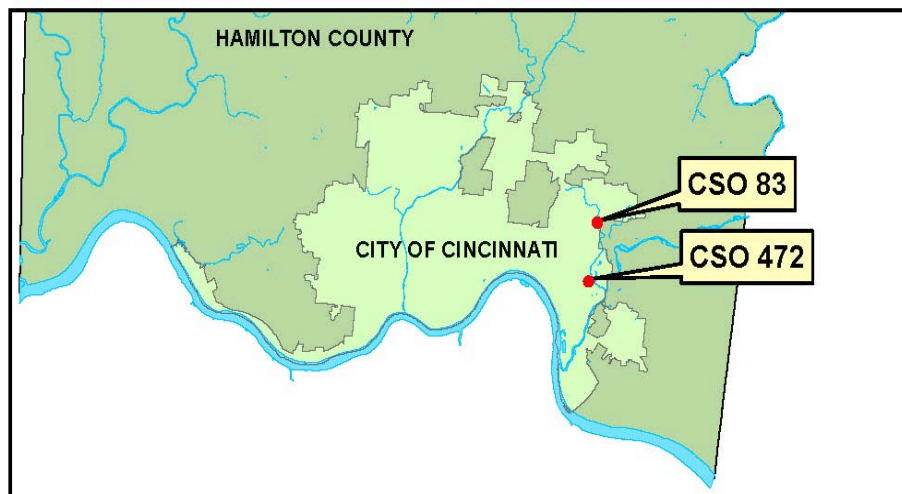
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$267,000	\$569,025	\$0	\$0	\$569,025
Pre-Construction Services	\$72,000	\$72,000	\$0	\$0	\$72,000
Miscellaneous Expense	\$65,000	\$65,000	\$0	\$0	\$65,000
Right-of-Way	\$0	\$165,000	\$0	\$0	\$165,000
Construction	\$2,377,310	\$0	\$2,739,000	\$0	\$2,739,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$58,500	\$0	\$250,000	\$0	\$250,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,839,810</b>	<b>\$871,025</b>	<b>\$2,989,000</b>	<b>\$0</b>	<b>\$3,860,025</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$871,025	\$2,989,000	\$0	\$0	\$0	\$0	\$3,860,025

## Prior Legislation Action

Dec 2014, Mar 2015, Oct 2015, Dec 2016, Aug 2017, Jan 2019



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 488/490 I-75 Reconstruction Coordination		
Project ID	11142741	CIP Number	11142741 CD Index # 453R
Project Type	Sewer Separation	Sewer Number	6408

## Purpose and Justification

The MSD ODOT collaboration represent a rare opportunity to reduce CSOs, perform asset management, improve water quality, and position the service area for future growth in I-75 corridor. These improvements are being coordinated not only with ODOT, but DOTE, Public Services, City Planning, and other City departments and neighborhood stakeholders. Numerous agreements are complete or in development, with some projects are in construction, in the context of goals stated in the Revive Cincinnati report.

## Impact to Operating Budget

None.

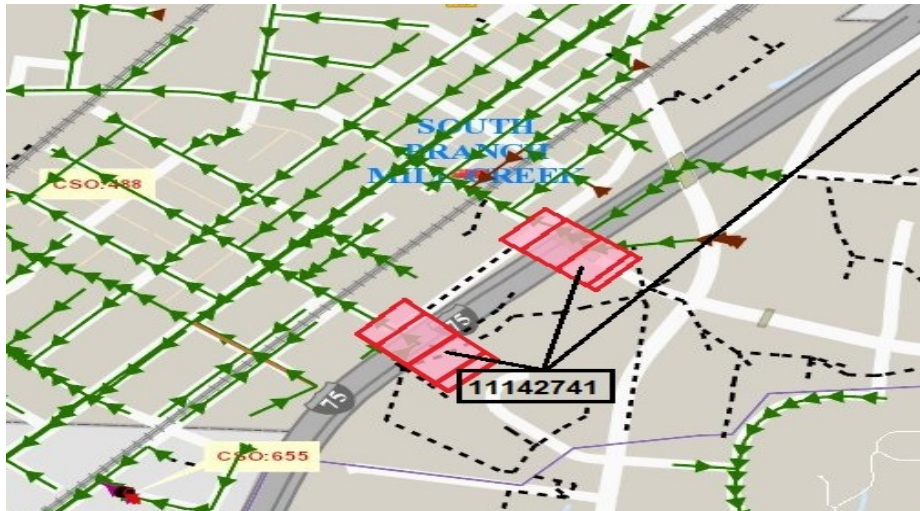
## Description and Location

CSO 488 I-75 Reconstruction Coordination will coordinate highway separations, stormwater crossings of I-75, water quality improvements, and asset management improvements critical to CSO 488 sewershed with ODOT's I-75 reconstruction. The project is located in the Carthage neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$28,000	\$0	\$0	\$28,000
Pre-Construction Services	\$0	\$39,000	\$0	\$0	\$39,000
Miscellaneous Expense	\$0	\$6,000	\$60,000	\$0	\$66,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,558,000	\$0	\$900,000	\$0	\$900,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$55,000	\$0	\$40,000	\$0	\$40,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,613,000</b>	<b>\$73,000</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$1,073,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$73,000	\$1,000,000	\$0	\$0	\$0	\$1,073,000

**Prior Legislation Action**  
Jul 2014



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 488 Strategic Sewer Separation Phase A		
Project ID	11142745	CIP Number	11142745 CD Index # 000
Project Type	Sewer Separation	Sewer Number	6604

## Purpose and Justification

ODOT is preparing for a widening project on I-75. The interstate in the area is too far for a direct discharge of storm flows in to the Mill Creek or tributary. Storm water from the interstate will discharge, after detention, into a tributary of CSO 488. The I-75 expansion is anticipated to increase overflows at CSO 488 by 4.2 million gallons year as well as increasing the risk for SBU's in the area. ODOT has offered to contribute the construction cost of the detention toward a regional storm water project to separate I-75 storm flows and other area storm connections from the combined sewer.

## Impact to Operating Budget

None.

## Description and Location

The project consists of approximately 5,300 linear feet of storm sewer between 36 and 66-inches in diameter. The storm sewers will collect storm water from I-75, as well as, street load separation in the area and route the flows through a 1.6 million gallon bioretention pond before discharge into the Mill Creek. The project is estimated to reduce annual overflow volumes at CSO 488 by 25.3 million gallons. The project is located in the Carthage neighborhood of the City of Cincinnati, Hamilton County, Ohio.

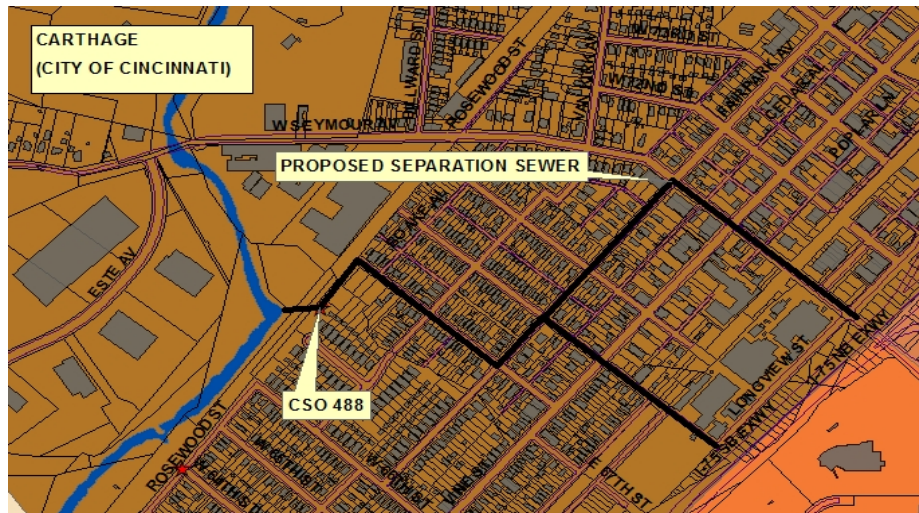
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$299,300	\$299,300	\$0	\$0	\$299,300
Design	\$479,700	\$479,700	\$628,300	\$0	\$1,108,000
Pre-Construction Services	\$112,300	\$112,300	\$0	\$0	\$112,300
Miscellaneous Expense	\$224,500	\$224,500	\$0	\$0	\$224,500
Right-of-Way	\$500,000	\$500,000	\$0	\$0	\$500,000
Construction	\$5,613,000	\$0	\$0	\$5,613,000	\$5,613,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$505,200	\$0	\$0	\$505,200	\$505,200
Interest / Financing	\$280,650	\$0	\$0	\$280,650	\$280,650
<b>Total</b>	<b>\$8,014,650</b>	<b>\$1,615,800</b>	<b>\$628,300</b>	<b>\$6,398,850</b>	<b>\$8,642,950</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$1,615,800	\$628,300	\$0	\$0	\$6,398,850	\$0	\$8,642,950

## Prior Legislation Action

Dec 2016



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Upper Muddy Creek Interceptor Replacement		
Project ID	11530000	CIP Number	11530000 CD Index # 233, 234
Project Type	Sewer Replacement	Sewer Number	6281

## Purpose and Justification

The project will replace the upper portion of the Muddy Creek Interceptor that was originally installed around 1929 and 1935. The existing sewer is aging and deteriorating and needs to be relocated. The project will also increase available underflow capacity from CSO 522, the Werk & Westbourne EHRT, CSO 198, and CSO 518 to mitigate overflows presently caused by surcharging from entering Muddy Creek.

## Impact to Operating Budget

None.

## Description and Location

The project consist of installing approximately 3,300 LF of 30-inch sewer from south of the Werk & Westbourne EHRT (near Werk Road and Westbourne Drive) to the intersection of Muddy Creek Road and Westbourne Drive and approximately 2,300 LF of 36-inch sewer from the intersection of Westbourne Drive and Muddy Creek Road west to near CSO 518. The project may include regulator improvements at CSO 198 and CSO 518. This project is located in Green Township.

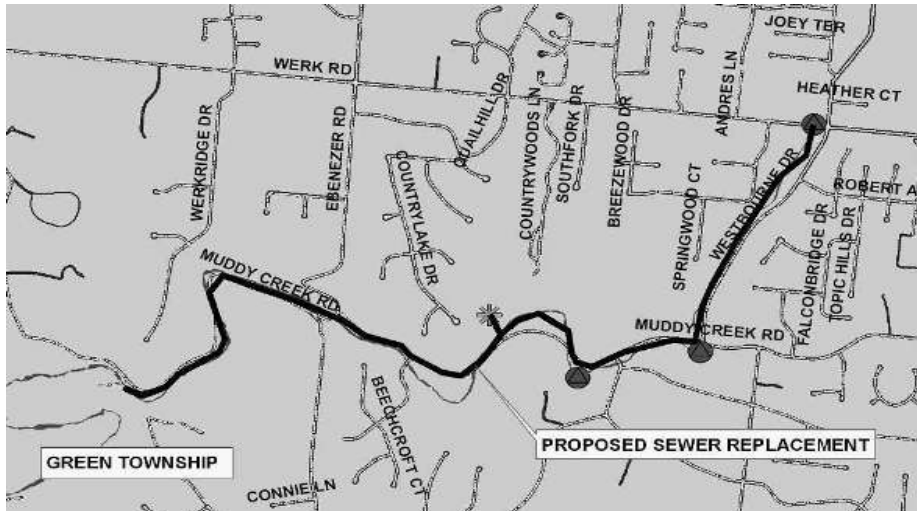
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$98,960	\$0	\$0	\$98,960
Design	\$1,186,900	\$1,206,534	\$558,100	\$0	\$1,764,634
Pre-Construction Services	\$1,437,400	\$1,437,400	\$0	\$0	\$1,437,400
Miscellaneous Expense	\$346,700	\$247,740	\$0	\$0	\$247,740
Right-of-Way	\$524,400	\$524,400	\$0	\$0	\$524,400
Construction	\$23,956,500	\$0	\$0	\$6,662,000	\$6,662,000
Program Management	\$0	\$145,054	\$0	\$0	\$145,054
Construction Services	\$320,400	\$0	\$0	\$120,000	\$120,000
Interest / Financing	\$2,994,600	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$30,766,900</b>	<b>\$3,660,088</b>	<b>\$558,100</b>	<b>\$6,782,000</b>	<b>\$11,000,188</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total	
	\$3,660,088	\$558,100	\$0	\$0	\$6,782,000	\$0	\$11,000,188

## Prior Legislation Action

Dec 2011, Jan 2014, May 2014, Mar 2015



# **2021 ASSET Projects**





## 2021 Projects

### Metropolitan Sewer District of Greater Cincinnati

### ASSET Projects

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10222015	ASSET	PSE	Stratford Lake Force Main Renewal (Planning)	\$76,733	\$0	\$76,733	34
10230130	ASSET	REP	Dry Weather Channel for SS 937 (Construction)	\$3,177,000	\$0	\$3,177,000	35
10230150	ASSET	REP	Addyston Creek and Sewer Rehab (Design)	\$50,000	\$0	\$50,000	36
10230655	ASSET	REP	Muddy Creek Road and Rosebud Drive Sewer Replacement (Planning)	\$68,000	\$0	\$68,000	37
10232015	ASSET	FAC	MUWWTP Thickening Replacement and Pumping Improvements (Construction)	\$3,350,000	\$0	\$3,350,000	38
10232025	ASSET	REP	3731 Glenmore Avenue Sewer Evaluation (Planning)	\$32,000	\$0	\$32,000	39
10240055	ASSET	FAC	MCWWTP Liquid Sludge Storage Tank Covers and Odor Control (Construction)	\$7,898,393	\$0	\$7,898,393	40
10240180	ASSET	REP	3934 Winding Way Sewer Replacement (Construction)	\$388,300	\$0	\$388,300	41
10240200	ASSET	REP	Harvey Ave-Hickman Ave Sewer Replacement (Design,Easement)	\$745,500	\$0	\$745,500	42
10240360	ASSET	PSE	Timbers Pump Station Elimination (Construction)	\$1,773,000	\$0	\$1,773,000	43
10240380	ASSET	CSO	CSO 005 Water Connection (Construction)	\$134,300	\$0	\$134,300	44
10240495	ASSET	REP	Wahl Terrace Sewer Replacement (Construction)	\$658,400	\$0	\$658,400	45
10240545	ASSET	REP	Central Parkway Sewer Replacement (HN 2402) (Construction)	\$444,000	\$0	\$444,000	46
10240625	ASSET	FAC	MCWWTP Standby Power Distribution System Improvements (Construction)	\$4,639,261	\$0	\$4,639,261	47
10240697	ASSET	FAC	Mill Creek 4.16 kV & 13.2 kV Loop Improvements (Construction)	\$2,283,627	\$0	\$2,283,627	48
10240755	ASSET	REP	Victory Parkway at Ledgewood Drive Sewer Replacement (Design,Easement)	\$525,000	\$0	\$525,000	49
10240760	ASSET	REP	Highland and Burnet Sewer Replacement (Design,Easement)	\$78,500	\$0	\$78,500	50
10240775	ASSET	REP	Gilbert Avenue at Casino Sewer Replacement (Design,Easement)	\$502,700	\$0	\$502,700	51
10240820	ASSET	REP	Reading Road at Stewart Place Sewer Replacement (Design,Easement)	\$366,000	\$0	\$366,000	52
10240845	ASSET	REP	Taft Road & McMillan Street Sewer Replacement (Planning)	\$420,000	\$0	\$420,000	53
10240855	ASSET	REP	Connecticut Avenue Sewer Replacement (Design,Easement)	\$666,000	\$0	\$666,000	54
10241905	ASSET	SUP	Congress Run Stream Restoration and Bank Stabilization (Planning)	\$166,000	\$0	\$166,000	55
10242025	ASSET	REP	Davey Avenue to Hamilton Avenue Sewer Replacement (Design,Easement)	\$330,500	\$0	\$330,500	56
10242035	ASSET	REP	Reading Road - 12th Street to E Liberty Street Sewer Replacement (Design,Easement)	\$438,400	\$0	\$438,400	57



## 2021 Projects

### Metropolitan Sewer District of Greater Cincinnati

### ASSET Projects

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10242085	ASSET	PSE	Village Woods Pump Station and System Improvements (Design,Easement)	\$166,000	\$0	\$166,000	58
10242120	ASSET	REP	Elberon Avenue Sewer (Planning)	\$120,000	\$0	\$120,000	59
10242125	ASSET	REP	Sycamore Street Sewer (Planning)	\$180,000	\$0	\$180,000	60
10262005	ASSET	FAC	SCWWTP Thickening and Settlement Improvements (Construction)	\$950,000	\$0	\$950,000	61
10262015	ASSET	FAC	SCWWTP Clarifiers (Planning)	\$227,216	\$0	\$227,216	62
10270175	ASSET	REP	East Hill Ave Sewer Replacement (Construction)	\$1,765,728	\$0	\$1,765,728	63
10270220	ASSET	REP	Tusculum Avenue at Woodbridge Sewer Replacement (Design)	\$38,900	\$0	\$38,900	64
10272050	ASSET	PSE	Wayside Hills Pump Station (Planning)	\$150,000	\$0	\$150,000	65
10272065	ASSET	FAC	LMWWTP Flow Meter Renewal (Design)	\$630,000	\$0	\$630,000	66
10272070	ASSET	REP	Summerview Low Pressure Forcemain (Planning)	\$50,335	\$0	\$50,335	67
10280241	ASSET	ALW	Hydraulic Modeling 2021 (Planning)	\$1,200,000	\$0	\$1,200,000	68
10280721	ASSET	ALW	Critical Asset Management Projects 2021 (Construction)	\$6,000,000	\$0	\$6,000,000	69
10281100	ASSET	FAC	LMWWTP Solids Disposal With Odor Control (Design)	\$5,567,625	\$0	\$5,567,625	70
10281321	ASSET	ALW	Prioritized Wastewater Collection System Improvements 2021 (Construction)	\$12,000,000	\$0	\$12,000,000	71
10282021	ASSET	ALW	CIP Planning Projects 2021 (Planning)	\$2,100,000	\$0	\$2,100,000	72
10630000	ASSET	SUP	Muddy Creek FEMA Property Acquisition & Floodplain Reconfiguration (Construction)	\$328,000	\$0	\$328,000	73
11582000	ASSET	STY	Greater Cincinnati East Side SBU Mitigation Study (Planning)	\$1,000,000	\$0	\$1,000,000	74
<b>Total Cost for 41 ASSET Projects</b>				<b>\$61,685,418</b>	<b>\$0</b>	<b>\$61,685,418</b>	

# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Stratford Lake Force Main Renewal		
Project ID	10222015	CIP Number	10222015 CD Index #NA
Project Type	Pump Station Improvement/Elim	Sewer Number	

## Purpose and Justification

This pump station serves 23 properties on Castlebrook. The 3" pump station FM that runs up Castlebrook connects to a 3" LPFM that run from Mallard Crossing to Boomer and ultimately connects to a gravity line on Arrow. Approx 29 properties are connected to this LPFM. In 2019, MSD approved a sewer availability request to connect 38 homes along Boomer to the LPFM due to failing septic systems, that was rescinded due to capacity issues. Also, development services has fielded sewer availability requests from developers as there are undeveloped lots nearby. These issues have put a hold on development in the area as all request to tie into the sewer have been put on hold pending a solution.

## Impact to Operating Budget

None

## Description and Location

Stratford Lake Pump Station has been struggling to perform during wet weather leading to high wet well level alarms. Several reports of sewer back-ups and sewage surfacing have occurred since 2016 along the LPFM located on Mallard Crossing Ln. and Boomer Rd. All requests for sewer availability have been put on hold until these issues are addressed, including a request by the Hamilton County Health Department to connect 38 homes. Project will evaluate solutions to alleviate capacity issues. Construction of a dedicated pump station force main running along Boomer Rd. and connecting to gravity sewer on Arrow Ave. (MH 23509003) will be evaluated along with PS elimination and gravity options. Need for upgrades at PS to accommodate area development should be evaluated. Project located in Taylor Creek in Green Township.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$76,733	\$0	\$76,733	\$0	\$76,733
Design	\$104,261	\$0	\$0	\$104,261	\$104,261
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$46,300	\$0	\$0	\$46,300	\$46,300
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$591,580	\$0	\$0	\$591,580	\$591,580
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$61,524	\$0	\$0	\$61,524	\$61,524
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$880,398</b>	<b>\$0</b>	<b>\$76,733</b>	<b>\$803,665</b>	<b>\$880,398</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$76,733	\$150,561	\$0	\$653,104	\$0	\$880,398

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Dry Weather Channel for SS 937		
Project ID	10230130	CIP Number	10230130 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6253

## Purpose and Justification

The dry weather channel will remediate significant sewer odors that have been experienced in areas north of the proposed Werk and Westbourne EHRT, along Glenway Avenue and Westbourne Drive where, during dry weather, there is insufficient flow to convey solids through the combined sewer which runs beneath these streets. Furthermore, the dry weather channel will significantly reduce the quantity of solids and associated odors that are conveyed to Schaible Creek during summertime wet weather events characterized by heavy early-onset precipitation. This project will also improve water quality in the creek.

## Impact to Operating Budget

None.

## Description and Location

This project proposes to remodel the bottom of 5500 feet of existing Sanitary Sewer 937A and 937B to create a dry weather channel. This dry weather channel will be constructed to increase flow velocity of dry weather flow in this sewer to allow solids to be conveyed and handled at the Muddy Creek WWTP during dry weather. This project is located in Green Township, Hamilton County, Ohio.

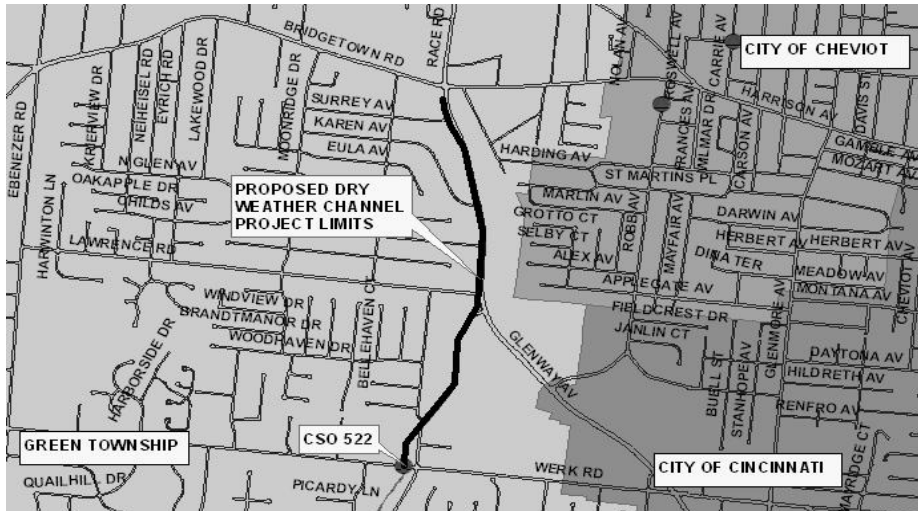
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$120,011	\$0	\$0	\$120,011
Design	\$244,900	\$290,700	\$0	\$0	\$290,700
Pre-Construction Services	\$67,300	\$67,300	\$0	\$0	\$67,300
Miscellaneous Expense	\$42,500	\$42,500	\$0	\$616,500	\$659,000
Right-of-Way	\$65,700	\$65,700	\$0	\$0	\$65,700
Construction	\$1,701,000	\$0	\$3,127,000	\$0	\$3,127,000
Program Management	\$0	\$14,694	\$0	\$0	\$14,694
Construction Services	\$70,000	\$0	\$50,000	\$0	\$50,000
Interest / Financing	\$28,000	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,219,400</b>	<b>\$600,905</b>	<b>\$3,177,000</b>	<b>\$616,500</b>	<b>\$4,394,405</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$600,905	\$3,177,000	\$616,500	\$0	\$0	\$0	\$4,394,405

## Prior Legislation Action

May 2013, May 2014, Mar 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Addyston Creek and Sewer Rehab		
Project ID	10230150	CIP Number	10230150 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6453

## Purpose and Justification

The West Fork Muddy Creek is unstable and has shifted causing damage to the 12-inch diameter sewer from manhole 11801005 to manhole 11801001 and manhole 11810112. Pipe segment 11801003-11801002 fell away from the hillside due to erosion in August 2011. Manhole 11801002 collapsed in July 2010 and was repaired. The sewer segments further south of this segment are protected by a vertical retaining wall that has fallen away and needs to be repaired.

## Impact to Operating Budget

None.

## Description and Location

The Addyston Creek and Sewer Rehab project, is located along the West Fork Muddy Creek between Church Street and 1st Street, in the Village of Addyston, in the Muddy Creek Basin. The project will construct a new 21-inch diameter sewer on the East side of the West Fork Muddy Creek, fill seal, and abandon the existing 8-inch and 18-inch diameter sewer and replace the fallen retaining wall on the West side of the West Fork Muddy Creek.

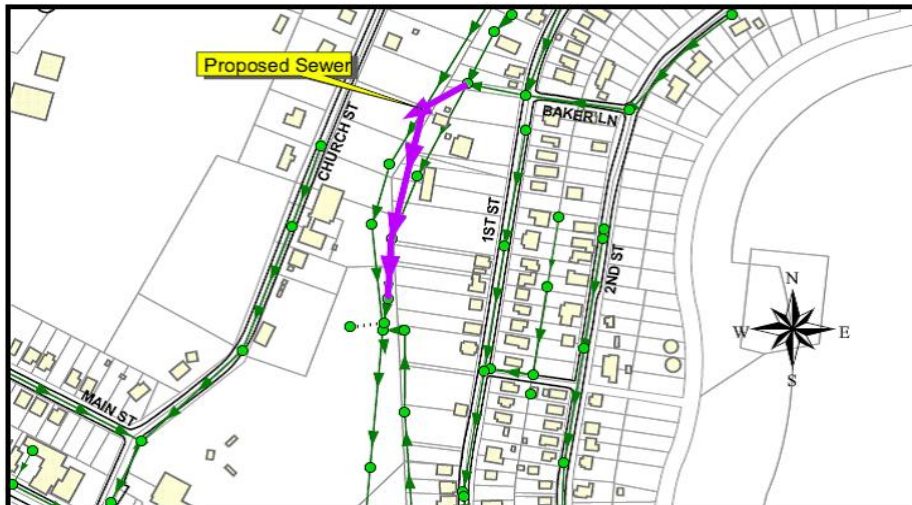
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$31,942	\$0	\$0	\$31,942
Design	\$73,000	\$98,923	\$50,000	\$0	\$148,923
Pre-Construction Services	\$27,900	\$56,800	\$0	\$0	\$56,800
Miscellaneous Expense	\$74,500	\$57,500	\$0	\$0	\$57,500
Right-of-Way	\$14,944	\$43,544	\$0	\$0	\$43,544
Construction	\$464,400	\$0	\$0	\$452,000	\$452,000
Program Management	\$0	\$3,574	\$0	\$0	\$3,574
Construction Services	\$46,900	\$0	\$0	\$25,000	\$25,000
Interest / Financing	\$5,800	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$707,444</b>	<b>\$292,283</b>	<b>\$50,000</b>	<b>\$477,000</b>	<b>\$819,283</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$292,283	\$50,000	\$477,000	\$0	\$0	\$0	\$819,283

## Prior Legislation Action

Dec 2013, May 2014, Nov 2014, Nov 2015, Dec 2017



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	<b>Muddy Creek Road and Rosebud Drive Sewer Replacement</b>			
Project ID	<b>10230655</b>	CIP Number	<b>10230655</b>	CD Index #NA
Project Type	<b>Sewer Replacement</b>	Sewer Number	<b>6771</b>	

## Purpose and Justification

The project includes one segment that has been requested for a BCE by the WWC Gravity Sewer Asset Management system with a structural risk of 23. Additional high risk sewers exist within the project scope. Modeling indicates capacity issues for local sewer segments at the intersection of Rosebud Dr & Muddy Creek Rd, but a parallel interceptor just to the south appears to have capacity to accept additional flow. Multiple sewer complaints in the area reinforce the suspected capacity issues.

## Impact to Operating Budget

None

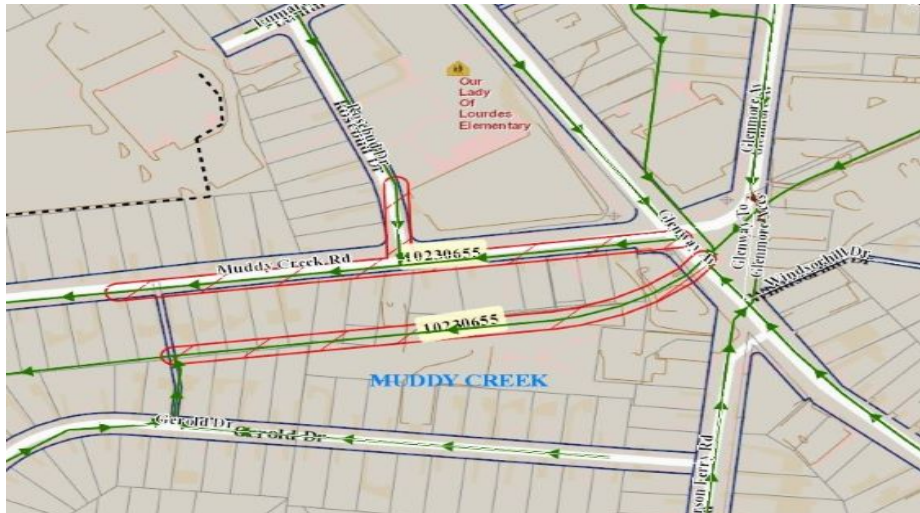
## Description and Location

The project will replace or rehab structurally deficient, 24" VCP sewers, as well as investigate the feasibility and possible construction of a relief sewer to a nearby interceptor. This project is located in the Westwood neighborhood of the City of Cincinnati, Hamilton County, Ohio

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$68,000	\$0	\$68,000
Design	\$86,000	\$0	\$0	\$86,000	\$86,000
Pre-Construction Services	\$15,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$120,000	\$0	\$0	\$120,000	\$120,000
Right-of-Way	\$7,500	\$0	\$0	\$9,000	\$9,000
Construction	\$400,000	\$0	\$0	\$400,000	\$400,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$52,000	\$0	\$0	\$52,000	\$52,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$680,500</b>	<b>\$0</b>	<b>\$68,000</b>	<b>\$667,000</b>	<b>\$735,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$215,000	\$0	\$0	\$452,000	\$735,000
	\$68,000					

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	MUWWTP Thickening Replacement and Pumping Improvements			
Project ID	10232015	CIP Number	10232015	CD Index #NA
Project Type	Treatment Facility	Sewer Number	6982	

## Purpose and Justification

This project was identified as a priority project in MSD's Solids Handling Master Plan and is intended to address failing assets at the plant. The existing gravity belt thickeners have reached the end of their useful life and will be replaced as part of this project. Thickening building modifications are required to accommodate the replacement equipment. Additionally, waste activated sludge (WAS) at the facility is double pumped and improvements will be made to eliminate this double pumping when replacing pumps.

## Impact to Operating Budget

None

## Description and Location

This project will include the replacement of existing gravity belt thickeners, thickening building modifications to accommodate replacement equipment, new polymer skid and bulk storage, odor control, and feed pumps. It will also eliminate waste activated sludge (WAS) double pumping when replacing pumps and replace aging primary sludge pumps and controls. This project is located within the MUWWTP in the Sayler Park neighborhood of the City of Cincinnati.

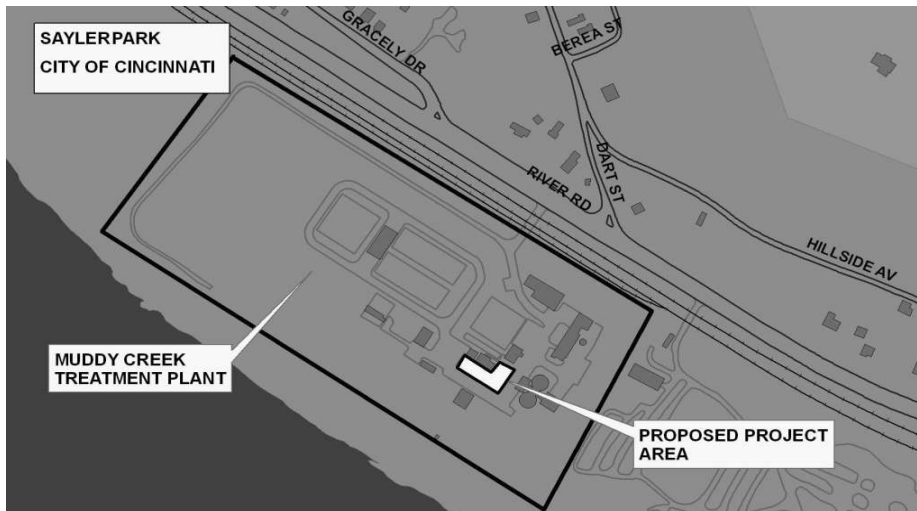
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$67,634	\$0	\$0	\$67,634
Design	\$325,000	\$402,366	\$0	\$0	\$402,366
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$40,000	\$40,000	\$0	\$0	\$40,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,929,000	\$0	\$3,000,000	\$0	\$3,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$239,000	\$0	\$350,000	\$0	\$350,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,533,000</b>	<b>\$510,000</b>	<b>\$3,350,000</b>	<b>\$0</b>	<b>\$3,860,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$510,000	\$3,350,000	\$0	\$0	\$0	\$0	\$3,860,000

## Prior Legislation Action

Feb 2020, Apr 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	3731 Glenmore Avenue Sewer Evaluation		
Project ID	10232025	CIP Number	10232025 CD Index #N/A
Project Type	Sewer Replacement	Sewer Number	7045

## Purpose and Justification

In 2011 WWC nominated 9 pipe segments for structural condition, capacity, and location beneath a structure. Previous planning efforts recommended CIPP Lining, but WWC has requested re-evaluation of that recommendation. The planning project is to evaluate alternatives to address the condition and location of the sewer.

## Impact to Operating Budget

## Description and Location

The project is located in Green Township, Hamilton County, near the intersection of Glenmore Avenue and Harrison Avenue. Planning efforts include CCTV inspection, local flow monitoring, model updates, alternatives analysis, and development of a BCE with recommendation. The project includes approximately 975 feet of 24 to 36 inch sewer.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$66,000	\$0	\$32,000	\$0	\$32,000
Design	\$83,000	\$0	\$0	\$83,000	\$83,000
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$71,000	\$0	\$0	\$71,000	\$71,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$380,000	\$0	\$0	\$380,000	\$380,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$600,000</b>	<b>\$0</b>	<b>\$32,000</b>	<b>\$534,000</b>	<b>\$566,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$32,000	\$154,000	\$0	\$0	\$380,000
						\$566,000

## Prior Legislation Action





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	MCWWTP Liquid Sludge Storage Tank Covers and Odor Control		
Project ID	10240055	CIP Number	10240055 CD Index #NA
Project Type	Treatment Facility	Sewer Number	6667

## Purpose and Justification

To replace the existing covers that have exceeded their useful life and are a clear and present danger to employees. The replacement will also allow for new odor control to be provided to capture and treat the emissions that are currently untreated.

## Impact to Operating Budget

None.

## Description and Location

This project will provide an engineering design for new covers for existing sludge holding tanks A1 and A2. The scope will include demolition of the existing covers, design of the new covers, and a new odor control system to capture and treat odorous air from the two tanks. All necessary Structural, Electrical, I&C, and Mechanical drawings and specifications are to be included. Services for construction administration will also include submittal review, meetings, bidding assistance, permits, SCADA, and training. This project is located at the Mill Creek WWTP in the Lower Price Hill neighborhood of the City of Cincinnati

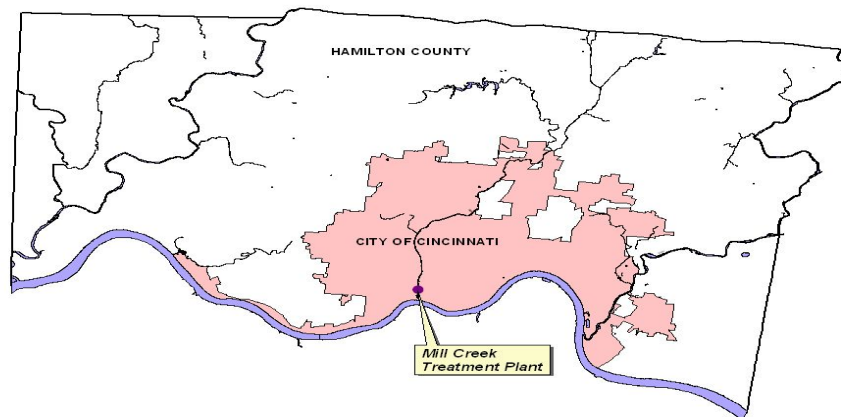
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$340,000	\$474,802	\$0	\$0	\$474,802
Pre-Construction Services	\$70,000	\$70,000	\$0	\$0	\$70,000
Miscellaneous Expense	\$40,000	\$40,000	\$0	\$0	\$40,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$3,500,000	\$0	\$7,473,393	\$0	\$7,473,393
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$718,000	\$0	\$425,000	\$0	\$425,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$4,668,000</b>	<b>\$584,802</b>	<b>\$7,898,393</b>	<b>\$0</b>	<b>\$8,483,195</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$584,802	\$7,898,393	\$0	\$0	\$0	\$0	\$8,483,195

## Prior Legislation Action

Dec 2017, Aug 2019, Jul 2020, Sep 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	3934 Winding Way Sewer Replacement		
Project ID	10240180	CIP Number	2008-42 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6250

## Purpose and Justification

This project will abandon a severely deteriorated sewer and redirect one house connection. The abandoned sewer will be filled and sealed.

## Impact to Operating Budget

None.

## Description and Location

The proposed 3934 Winding Way Sewer Replacement project will fill, seal, and abandon 20 linear feet of combined sewer; construct approximately 575 linear feet of 12-18-inch diameter combined sewer between Winding Way and Victory Parkway; and reconnect two sewer laterals. This project is located between Winding Way and Victory Parkway in the City of Cincinnati.

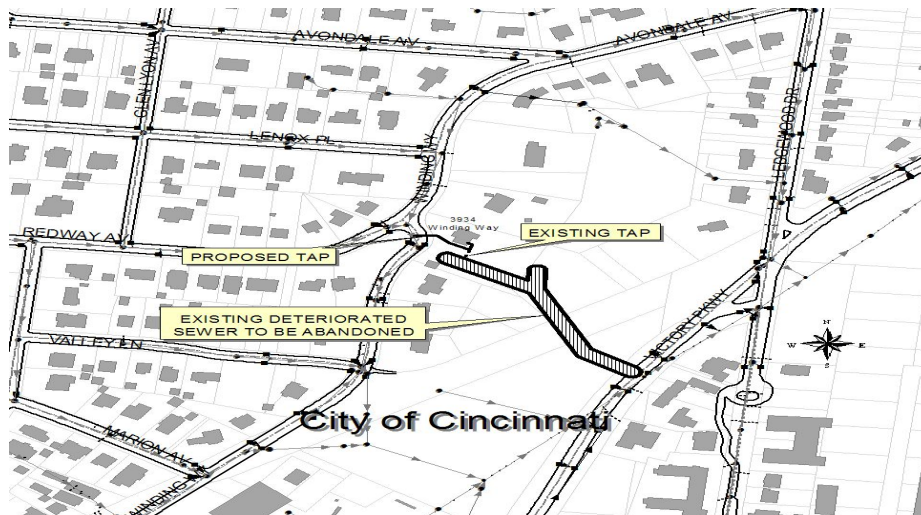
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$2,189	\$0	\$0	\$2,189
Design	\$10,400	\$0	\$0	\$0	\$0
Pre-Construction Services	\$2,800	\$78,500	\$0	\$0	\$78,500
Miscellaneous Expense	\$5,200	\$28,700	\$0	\$0	\$28,700
Right-of-Way	\$34,300	\$39,400	\$0	\$0	\$39,400
Construction	\$73,300	\$0	\$337,800	\$0	\$337,800
Program Management	\$0	\$2,588	\$0	\$0	\$2,588
Construction Services	\$38,000	\$0	\$50,500	\$0	\$50,500
Interest / Financing	\$800	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$164,800</b>	<b>\$151,377</b>	<b>\$388,300</b>	<b>\$0</b>	<b>\$539,677</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$151,377	\$388,300	\$0	\$0	\$0	\$0	\$539,677

## Prior Legislation Action

Dec 2007, Dec 2009, May 2014, Nov 2014, Jan 2019, Feb 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Harvey Ave-Hickman Ave Sewer Replacement		
Project ID	10240200	CIP Number	2008-45 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6647

## Purpose and Justification

The purpose of this project is to replace a deteriorated 24" sewer and reduce maintenance costs. This project will also increase capacity and facilitate redevelopment in the area near Jewish Hospital.

## Impact to Operating Budget

None

## Description and Location

This project is located in Reading Road, Ridgeway Avenue, and Harvey Avenue in the Cincinnati neighborhood of Avondale. This project will construct about 4000 feet of sewer and abandon an existing deteriorated 24" sewer.

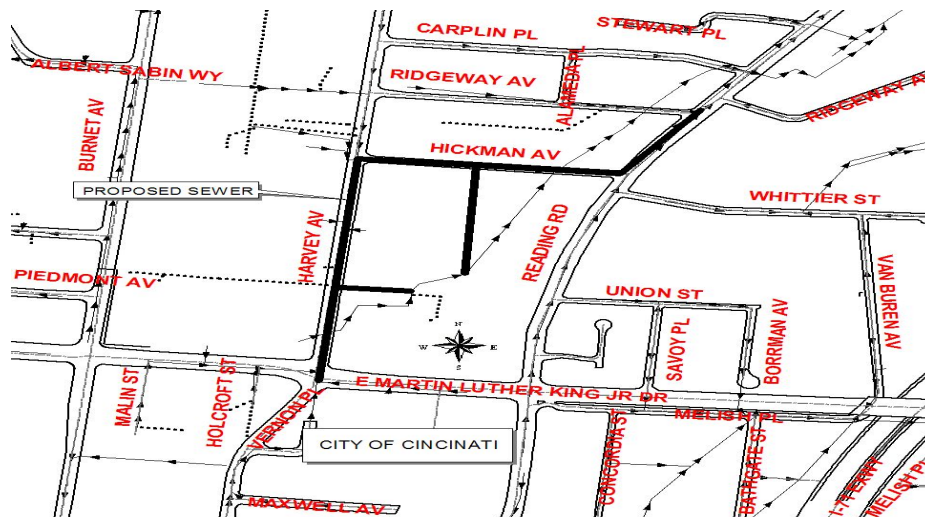
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$190,000	\$0	\$250,000	\$0	\$250,000
Pre-Construction Services	\$109,600	\$4,308	\$500	\$0	\$4,808
Miscellaneous Expense	\$390,000	\$0	\$390,000	\$0	\$390,000
Right-of-Way	\$105,000	\$176	\$105,000	\$0	\$105,176
Construction	\$1,660,200	\$0	\$0	\$1,400,000	\$1,400,000
Program Management	\$0	\$394	\$0	\$0	\$394
Construction Services	\$262,700	\$0	\$0	\$40,000	\$40,000
Interest / Financing	\$86,700	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,804,200</b>	<b>\$4,878</b>	<b>\$745,500</b>	<b>\$1,440,000</b>	<b>\$2,190,378</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$4,878	\$745,500	\$0	\$0	\$1,440,000	\$0	\$2,190,378

## Prior Legislation Action

Dec 2007, May 2014, Aug 2017, Apr 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	<b>Timbers Pump Station Elimination</b>		
Project ID	<b>10240360</b>	CIP Number	<b>10240360</b> CD Index #NA
Project Type	<b>Pump Station Improvement/Elim</b>	Sewer Number	<b>6313</b>

## Purpose and Justification

The purpose of this project is to eliminate the Timbers Pump Station that was installed in 1980 to serve 37 homes. The functionality of the pump station is insufficient in terms of handling wet weather flow. Structurally, this station is not sound because of the metal wet well that has been in the ground for more than 30 years. The size of the well is small. This metal wet well has the risk of having continuous flow into it, which will cause continuous pumping, weakening the soil around it that will likely cause structural failure. After the gravity sewer is constructed, the pump station will be decommissioned and parts salvaged.

## Impact to Operating Budget

None.

## Description and Location

This project includes construction of approximately 1,600 feet of 8-inch diameter gravity sewer via a jack-and-bore alignment through the Winton Woods Park. The pump station is located in City of Forest Park, Hamilton County, Ohio.

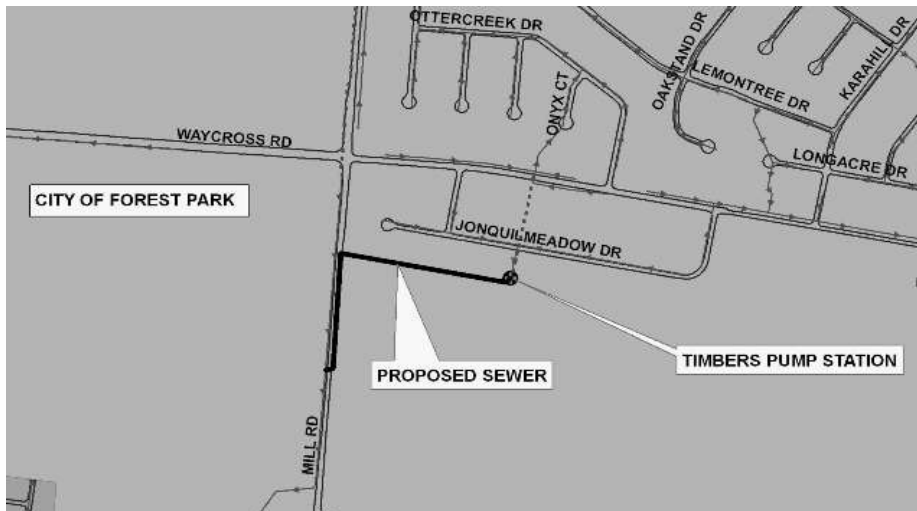
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$5,262	\$0	\$0	\$5,262
Design	\$166,500	\$0	\$0	\$0	\$0
Pre-Construction Services	\$41,200	\$207,700	\$0	\$0	\$207,700
Miscellaneous Expense	\$51,000	\$51,000	\$0	\$0	\$51,000
Right-of-Way	\$21,900	\$21,900	\$0	\$0	\$21,900
Construction	\$1,371,100	\$0	\$1,773,000	\$0	\$1,773,000
Program Management	\$0	\$6,718	\$0	\$0	\$6,718
Construction Services	\$64,500	\$0	\$0	\$0	\$0
Interest / Financing	\$22,400	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,738,600</b>	<b>\$292,580</b>	<b>\$1,773,000</b>	<b>\$0</b>	<b>\$2,065,580</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$292,580	\$1,773,000	\$0	\$0	\$0	\$0	\$2,065,580

## Prior Legislation Action

Dec 2012, May 2014, Nov 2014



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CSO 005 Water Connection		
Project ID	10240380	CIP Number	10240380 CD Index #NA
Project Type	CSO Improvement/Elim	Sewer Number	6334

## Purpose and Justification

This CSO facility allows combined sewage to overflow into the Mill Creek at times when the capacity of the 24-inch underflow pipe has been exceeded. The facility was recently upgraded with Real Time Control in order to take advantage of storage capacity in the existing Lick Run Trunk Sewer. MSD has discovered that using the CSO chamber for storage results in a substantial buildup of sediment. This project will provide a safe and effective means for cleaning and removal of sediment at the CSO facility, which is necessary in order to stay in compliance with the CSO NPDES permit.

## Impact to Operating Budget

None.

## Description and Location

MSD proposes to construct a permanent water service connection from the 8" water main on Queen City Ave. 270 linear feet of 6-inch ductile iron pipe water service, one Railroad crossing, a water cannon, a yard hydrant with 2.5-inch diameter house connection hose and other appurtenance. During design it was determined any connection to the 36" water main on site would be temporary because water main is to be relocated as part of the Lick Run Valley Conveyance System, therefore the service lateral was extended to the nearest active main. This project is located in the South Fairmount neighborhood of the City of Cincinnati, Hamilton County, Ohio.

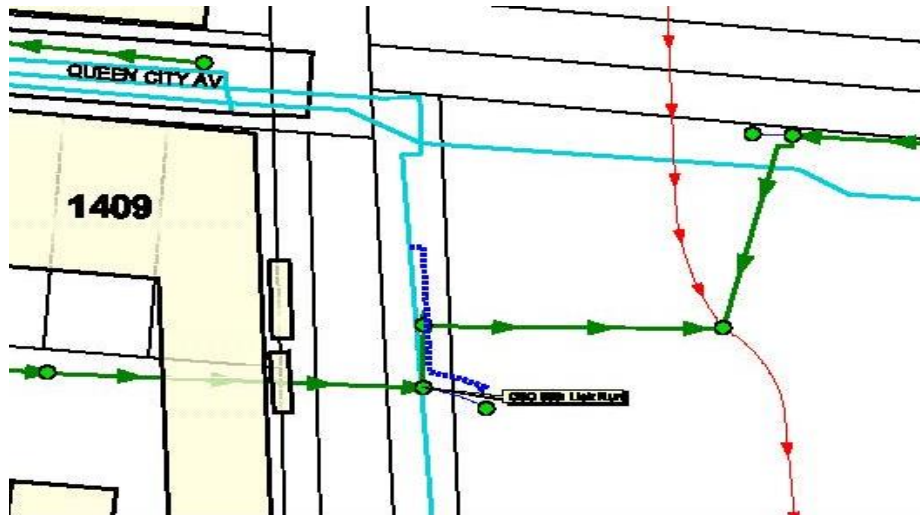
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$17,261	\$0	\$0	\$17,261
Design	\$17,300	\$0	\$0	\$0	\$0
Pre-Construction Services	\$1,800	\$64,000	\$0	\$0	\$64,000
Miscellaneous Expense	\$7,300	\$7,300	\$0	\$0	\$7,300
Right-of-Way	\$0	\$50,000	\$0	\$0	\$50,000
Construction	\$60,400	\$0	\$124,300	\$0	\$124,300
Program Management	\$0	\$1,928	\$0	\$0	\$1,928
Construction Services	\$10,600	\$0	\$10,000	\$0	\$10,000
Interest / Financing	\$300	\$0	\$0	\$0	\$0
<b>Total</b>	\$97,700	\$140,489	\$134,300	\$0	\$274,789

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$140,489	\$134,300	\$0	\$0	\$0	\$0	\$274,789

## Prior Legislation Action

May 2013, May 2014, Aug 2016, Oct 2016, Feb 2017, Feb 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Wahl Terrace Sewer Replacement		
Project ID	10240495	CIP Number	10240495 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6781

## Purpose and Justification

The project is to replace and line deteriorated sewer segments constructed in 1916 and 1917. The existing sewers are buckling and collapsing and are difficult to maintain. Due to the current structural condition of the sewers, there is a risk of ultimate collapse and the inability to appropriately maintain the sewers that can lead to sewer discharges to the environment and sewer backups (SBU).

## Impact to Operating Budget

None.

## Description and Location

This project entails the replacement of approximately 1,170 feet of 8 to 18-inch combined sewers and lining of approximately 330 feet of 12-inch combined sewer due to the existing structural condition and inability to effectively maintain the sewers. The subdivision is located south of Harrison Avenue and just north of the Lick Run Valley Conveyance project. The project is located in the Westwood and South Fairmount neighborhoods of the City of Cincinnati.

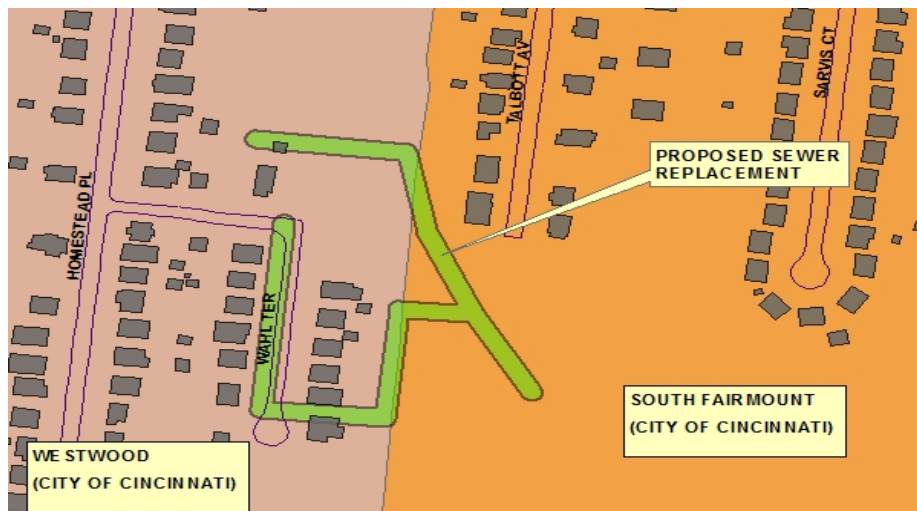
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$10,303	\$0	\$0	\$10,303
Design	\$99,400	\$79,700	\$0	\$0	\$79,700
Pre-Construction Services	\$43,000	\$53,900	\$0	\$0	\$53,900
Miscellaneous Expense	\$112,400	\$29,800	\$0	\$0	\$29,800
Right-of-Way	\$323,000	\$87,800	\$0	\$0	\$87,800
Construction	\$729,800	\$0	\$648,400	\$0	\$648,400
Program Management	\$0	\$1,151	\$0	\$0	\$1,151
Construction Services	\$53,700	\$0	\$10,000	\$0	\$10,000
Interest / Financing	\$9,000	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,370,300</b>	<b>\$262,654</b>	<b>\$658,400</b>	<b>\$0</b>	<b>\$921,054</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$262,654	\$658,400	\$0	\$0	\$0	\$0	\$921,054

## Prior Legislation Action

May 2014, Mar 2016, Nov 2019



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Central Parkway Sewer Replacement (HN 2402)		
Project ID	10240545	CIP Number	10240545 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	7064

## Purpose and Justification

The existing pipe segments were installed in 1903 and 1907 and are near the end of their useful life. The existing pipe segments are combined sewers, and show fracturing at multiple locations, and have areas of substantial shape loss with some sections of the pipe having fallen in to the sewer.

## Impact to Operating Budget

None.

## Description and Location

The proposed Central Parkway Sewer Replacement project will fill, seal, and abandon 1100 linear feet of combined sewer; construct approximately 600 linear feet of 12 to 24-inch diameter combined sewer along the east side of Central Parkway, including 8 new manholes and reconnecting 15 sewer laterals. This project is located in the vicinity of 2402 Central Parkway, just north of the Western Hills Viaduct, in Hamilton County.

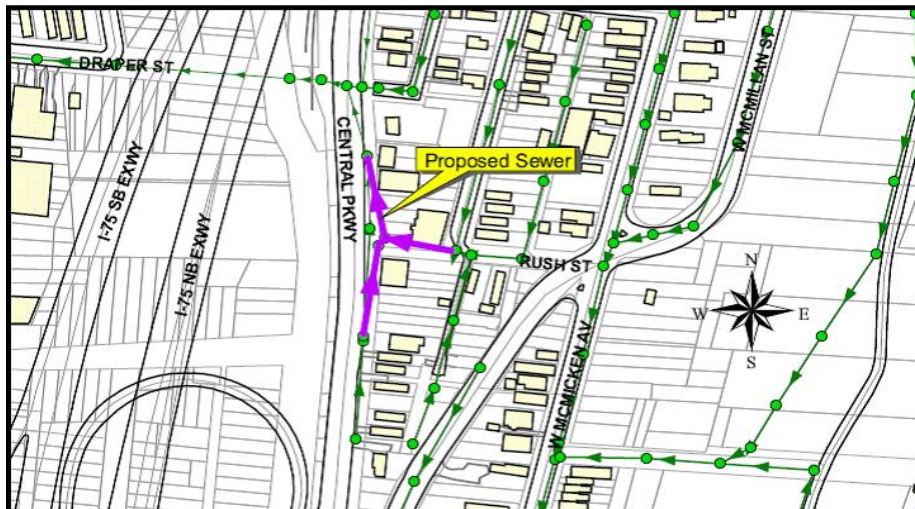
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$28,210	\$0	\$0	\$28,210
Design	\$54,900	\$54,900	\$0	\$0	\$54,900
Pre-Construction Services	\$18,100	\$58,100	\$0	\$0	\$58,100
Miscellaneous Expense	\$43,300	\$43,300	\$0	\$0	\$43,300
Right-of-Way	\$12,900	\$12,900	\$0	\$0	\$12,900
Construction	\$302,200	\$0	\$434,000	\$0	\$434,000
Program Management	\$0	\$3,201	\$0	\$0	\$3,201
Construction Services	\$40,100	\$0	\$10,000	\$0	\$10,000
Interest / Financing	\$3,800	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$475,300</b>	<b>\$200,611</b>	<b>\$444,000</b>	<b>\$0</b>	<b>\$644,611</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$200,611	\$444,000	\$0	\$0	\$0	\$0	\$644,611

## Prior Legislation Action

May 2014, Dec 2014, Apr 2017



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	MCWWTP Standby Power Distribution System Improvements			
Project ID	10240625	CIP Number	10240625	CD Index #NA
Project Type	Treatment Facility	Sewer Number	6866	

## Purpose and Justification

The MCWWTP Standby Power project will upgrade critical distribution assets at MCWWTP to improve reliability and maintainability of the standby power system. The standby power system project includes replacement of standby engine-generator, copper bus distribution system, and local process area transfer switches and power panels. This will limit risk to MSDGC operations during power outage at MCWWTP.

## Impact to Operating Budget

None

## Description and Location

The Project will increase the reliability of MCWWTP's current standby power distribution system at 1600 Gest Street, Cincinnati, OH 45204. This project is in the Lower Price Hill neighborhood of the City of Cincinnati.

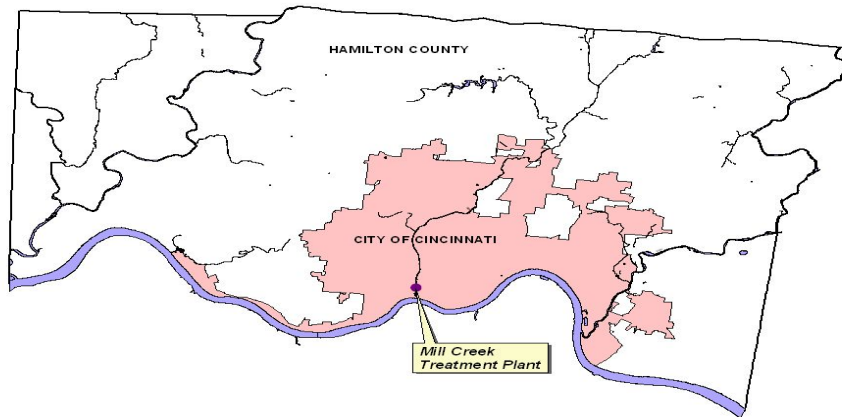
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$344,000	\$434,917	\$0	\$0	\$434,917
Pre-Construction Services	\$75,000	\$75,000	\$0	\$0	\$75,000
Miscellaneous Expense	\$45,000	\$45,000	\$0	\$0	\$45,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$3,424,000	\$0	\$3,849,261	\$0	\$3,849,261
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$309,000	\$0	\$790,000	\$0	\$790,000
Interest / Financing	\$129,000	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$4,326,000</b>	<b>\$554,917</b>	<b>\$4,639,261</b>	<b>\$0</b>	<b>\$5,194,178</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$554,917	\$4,639,261	\$0	\$0	\$0	\$0	\$5,194,178

## Prior Legislation Action

Jan 2019, Jul 2020





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Mill Creek 4.16 kV & 13.2 kV Loop Improvements		
Project ID	10240697	CIP Number	10240697 CD Index #NA
Project Type	Treatment Facility	Sewer Number	6867

## Purpose and Justification

The project will improve the critical MSD owned high and medium voltage assets within the existing 4.16kV and 13.2kV distribution loop systems at MCWWTP to increase the reliability and reduce the high risk of failure. Assets to be replaced include equipment operating past the end of useful life, equipment no longer supported by manufacturer and equipment operating at risk of failure.

## Impact to Operating Budget

None.

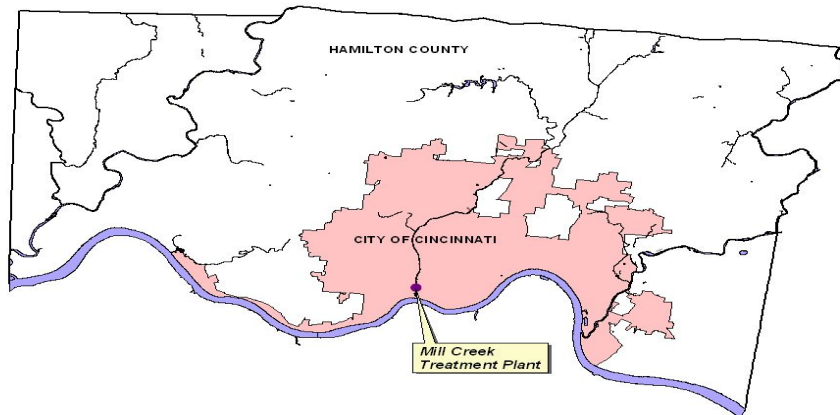
## Description and Location

The Project will upgrade the existing at-risk 4.16kV and 13.2kV distribution loop equipment not currently being planned for replacement with other projects in MCWWTP. This project is in the Lower Price Hill neighborhood of the City of Cincinnati.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$117,000	\$249,268	\$0	\$0	\$249,268
Pre-Construction Services	\$75,000	\$75,000	\$0	\$0	\$75,000
Miscellaneous Expense	\$40,000	\$40,000	\$0	\$0	\$40,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$1,044,000	\$0	\$1,773,627	\$0	\$1,773,627
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$100,000	\$0	\$510,000	\$0	\$510,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,376,000</b>	<b>\$364,268</b>	<b>\$2,283,627</b>	<b>\$0</b>	<b>\$2,647,895</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$364,268	\$2,283,627	\$0	\$0	\$0	\$2,647,895

**Prior Legislation Action**  
Jan 2019, Sep 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

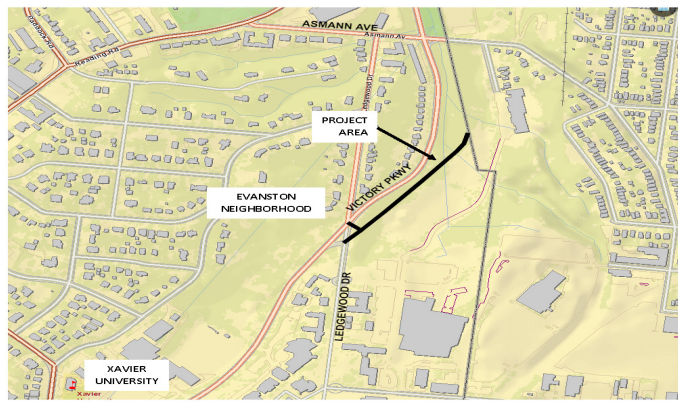
Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Victory Parkway at Ledgewood Drive Sewer Replacement		
Project ID	10240755	CIP Number	10240755 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6688

<b>Purpose and Justification</b> MSD Collection has assigned a structural risk bin score of 19 (high) to one of the segments included in the evaluation, and has recommended a BCE.	<b>Impact to Operating Budget</b> None.
	<b>Description and Location</b> Planning effort to address structural defects in a 120" Brick sewer. Sewer segments 37709015-37716021 and 37716021-37716006 are included in the planned evaluation. This project is located in the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$150,000	\$0	\$250,000	\$0	\$250,000
Pre-Construction Services	\$32,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$270,000	\$0	\$270,000	\$0	\$270,000
Right-of-Way	\$0	\$0	\$5,000	\$0	\$5,000
Construction	\$920,000	\$0	\$0	\$920,000	\$920,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$110,000	\$0	\$0	\$40,000	\$40,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,482,000</b>	<b>\$0</b>	<b>\$525,000</b>	<b>\$960,000</b>	<b>\$1,485,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$525,000	\$0	\$0	\$960,000	\$0	\$1,485,000

**Prior Legislation Action**



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Highland and Burnet Sewer Replacement		
Project ID	10240760	CIP Number	10240760 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6689

## Purpose and Justification

MSD Collection has assigned a structural risk bin score of 25 (severe) to one of the segments included in the evaluation, and has recommended a BCE.

## Impact to Operating Budget

None.

## Description and Location

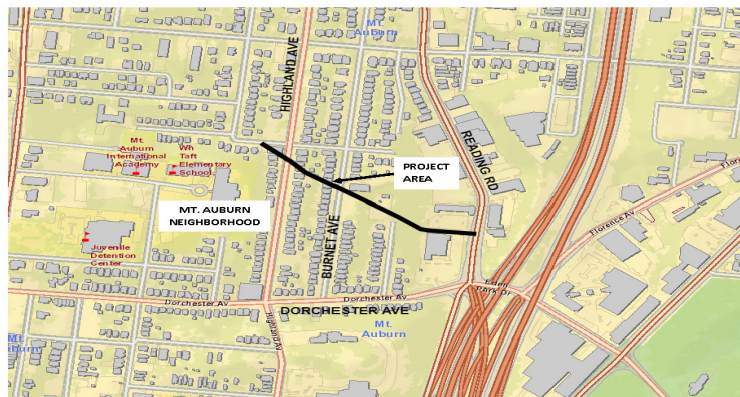
Planning effort to address structural defects in a 21" VCP sewer running beneath multiple residences. Sewer segments 33615060-33615059, 33615059-33615047, 33615047-33615046, 33615046-33614003, 33614003-33614002, 33614002-33611024, 33611024-33611025, 33611025-33611075, and 33611075-33611027 are included in the planned evaluation. This project is located in the Mt Auburn neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$270,000	\$0	\$34,600	\$0	\$34,600
Pre-Construction Services	\$73,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$610,000	\$0	\$35,900	\$0	\$35,900
Right-of-Way	\$105,000	\$0	\$8,000	\$0	\$8,000
Construction	\$2,100,000	\$0	\$0	\$192,400	\$192,400
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$250,000	\$0	\$0	\$8,000	\$8,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,408,000</b>	<b>\$0</b>	<b>\$78,500</b>	<b>\$200,400</b>	<b>\$278,900</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$78,500	\$0	\$0	\$200,400	\$0	\$278,900

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Gilbert Avenue at Casino Sewer Replacement		
Project ID	10240775	CIP Number	10240775 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6694

## Purpose and Justification

The project includes three segments that have been requested for a BCE by the WWC Gravity Sewer Asset Management system with structural risks of 20, 24, and 24. These three segments and all others included in the project will be investigated to determine how to address structural and capacity concerns.

## Impact to Operating Budget

None.

## Description and Location

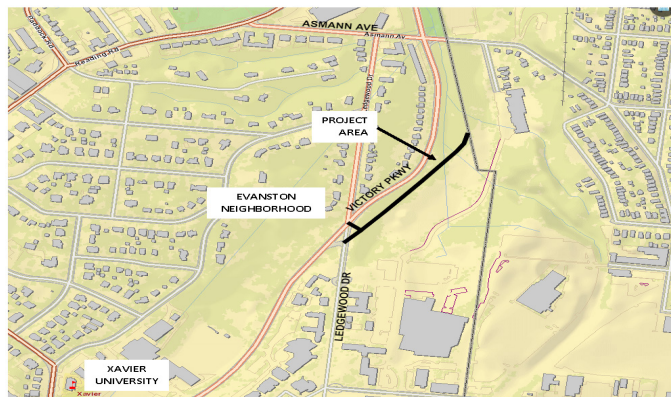
Project to address 8"-114" combined sewer pipe installed in 1881 in deteriorating condition and possible capacity concerns. Many of the segments are under or in close proximity to the casino. Segments include 33515063-33515035, 33603063-33514051, 33515035-33510057, 33510057-33510106, 33515045-33515044, 33515040-33515063, 33514051-33515045, 33515042-33515040, 33515041-33515042, 33515039-33515040, 33515062-33515045, 33515061-33515062, and 33515044-33515042. This project is located in the Downtown area of the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$520,000	\$0	\$322,600	\$0	\$322,600
Pre-Construction Services	\$180,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$1,500,000	\$0	\$105,100	\$0	\$105,100
Right-of-Way	\$75,000	\$0	\$75,000	\$0	\$75,000
Construction	\$4,900,000	\$0	\$0	\$4,900,000	\$4,900,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$610,000	\$0	\$0	\$24,700	\$24,700
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$7,785,000</b>	<b>\$0</b>	<b>\$502,700</b>	<b>\$4,924,700</b>	<b>\$5,427,400</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$502,700	\$0	\$0	\$4,924,700	\$0	\$5,427,400

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Reading Road at Stewart Place Sewer Replacement		
Project ID	10240820	CIP Number	10240820 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6707

## Purpose and Justification

The BCER pipe segment was last inspected by CCTV in 2010. The inspection identified infiltration, fractures, and a broken pipe. The WWC GSAM asset management system identified the segment, with structural risk bin score of 23, for lining rehabilitation, however the pipe is located beneath a commercial structure located at 3328 Reading Road. The planning project is to evaluate alternatives to address the condition and location of the sewer. The other pipe segments included in the evaluation have structural risk bin scores ranging from 6-20, but would also potentially need to be relocated in the sewer alignment changes.

## Impact to Operating Budget

None.

## Description and Location

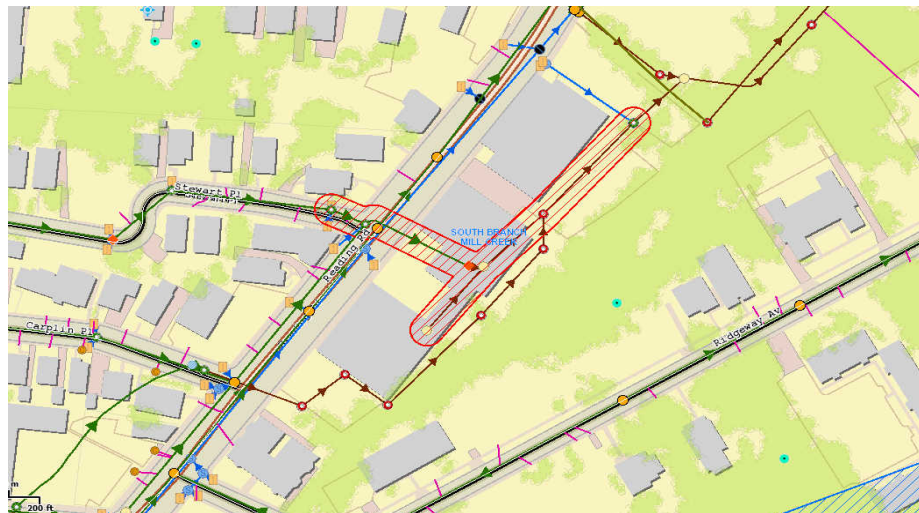
Planning efforts include CCTV inspection, alternatives analysis, and development of a BCE with recommendation. Pipe segment 33812041-36909017 is approximately 108 feet of 39-inch combined sewer installed in 1913. Additional segments included in the planning analysis are: 33812017-33812018-3812022-33812041-36909017-36909016, and 33812040-33812047-33812041. This project is located in the Avondale neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$51,000	\$0	\$0	\$0	\$0
Design	\$61,000	\$0	\$240,000	\$0	\$240,000
Pre-Construction Services	\$9,800	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$81,000	\$0	\$81,000	\$0	\$81,000
Right-of-Way	\$45,000	\$0	\$45,000	\$0	\$45,000
Construction	\$290,000	\$0	\$0	\$290,000	\$290,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$34,000	\$0	\$0	\$10,000	\$10,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$571,800</b>	<b>\$0</b>	<b>\$366,000</b>	<b>\$300,000</b>	<b>\$666,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$366,000	\$0	\$0	\$300,000	\$0	\$666,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Taft Road & McMillan Street Sewer Replacement		
Project ID	10240845	CIP Number	10240845 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6775

## Purpose and Justification

The project includes one segment that has been requested for a BCE by the WWC Gravity Sewer Asset Management system with a structural risk of 25 and a segment under structures. These segments and all others included in the project will be investigated to determine how to address the structural concerns and to investigate whether improved capacity will reduce sewer backups in the area.

## Impact to Operating Budget

None

## Description and Location

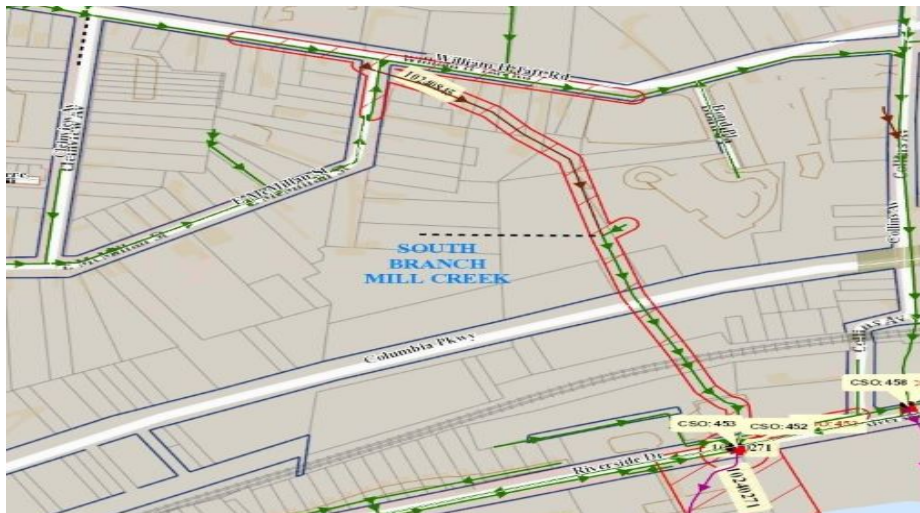
The project will replace or rehab structurally deficient, 52" stone sewer located under or near residential structures, and investigate the feasibility and possible construction of a new alignment to provide relief to the local sewer main. This project is located in the East Walnut Hill neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$420,000	\$0	\$420,000
Design	\$710,000	\$0	\$0	\$710,000	\$710,000
Pre-Construction Services	\$270,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$2,200,000	\$0	\$0	\$2,200,000	\$2,200,000
Right-of-Way	\$142,500	\$0	\$0	\$142,500	\$142,500
Construction	\$7,200,000	\$0	\$0	\$7,200,000	\$7,200,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$930,000	\$0	\$0	\$930,000	\$930,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$11,452,500</b>	<b>\$0</b>	<b>\$420,000</b>	<b>\$11,182,500</b>	<b>\$11,602,500</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$420,000	\$3,052,500	\$0	\$8,130,000	\$0	\$11,602,500

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Connecticut Avenue Sewer Replacement		
Project ID	10240855	CIP Number	10240855 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6778

## Purpose and Justification

The project includes one segment that has been requested for a BCE by the WWC Gravity Sewer Asset Management system with a structural risk of 23. These segments and all others included in the project will be investigated to determine how to address the structural concerns and to investigate whether improved capacity will reduce sewer backups in the area.

## Impact to Operating Budget

None

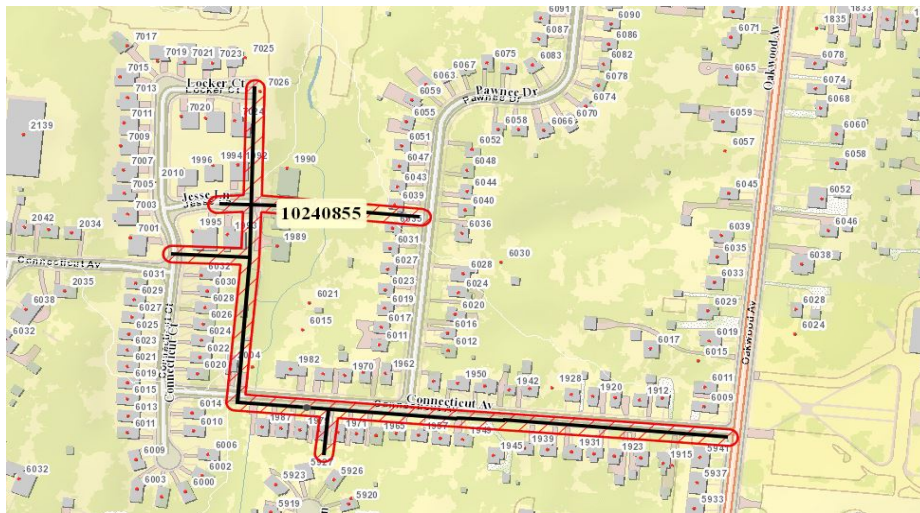
## Description and Location

The project is to evaluate sewer replacement and existing capacity serving the homes on the east side of the 6000 block of Connecticut Ct. Analysis will be performed to evaluate potential benefits to homes upstream of said street, along Connecticut Avenue, as well as Pawnee Drive which connects at the downstream end of said 6000 block. This project is located in the College Hill neighborhood of the City of Cincinnati, Hamilton County, Ohio

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$220,000	\$0	\$0	\$220,000
Design	\$290,000	\$0	\$368,700	\$0	\$368,700
Pre-Construction Services	\$78,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$650,000	\$0	\$118,300	\$0	\$118,300
Right-of-Way	\$120,000	\$0	\$179,000	\$0	\$179,000
Construction	\$2,100,000	\$0	\$0	\$3,064,000	\$3,064,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$270,000	\$0	\$0	\$98,600	\$98,600
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,508,000</b>	<b>\$220,000</b>	<b>\$666,000</b>	<b>\$3,162,600</b>	<b>\$4,048,600</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$220,000	\$666,000	\$0	\$3,162,600	\$0	\$0
						\$4,048,600

**Prior Legislation Action**  
Jan 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Congress Run Stream Restoration and Bank Stabilization		
Project ID	10241905	CIP Number	10241905 CD Index #NA
Project Type	Supplemental Environmental Prj	Sewer Number	6843

## Purpose and Justification

Congress Run is a tributary stream to Mill Creek located in the Hartwell neighborhood of the City of Cincinnati that runs along the MSD- Wastewater Collection Division (WWC) facility. The stream was modified during the construction of WWC in the 1970s which altered the hydraulics of the stream. This project will alleviate the issues created by the original modifications so that stream bank erosion no longer poses a threat to the existing MSD infrastructure. Modifications will include: bank stabilization, creek restoration, and replacement of sewers located underneath the creek.

## Impact to Operating Budget

None

## Description and Location

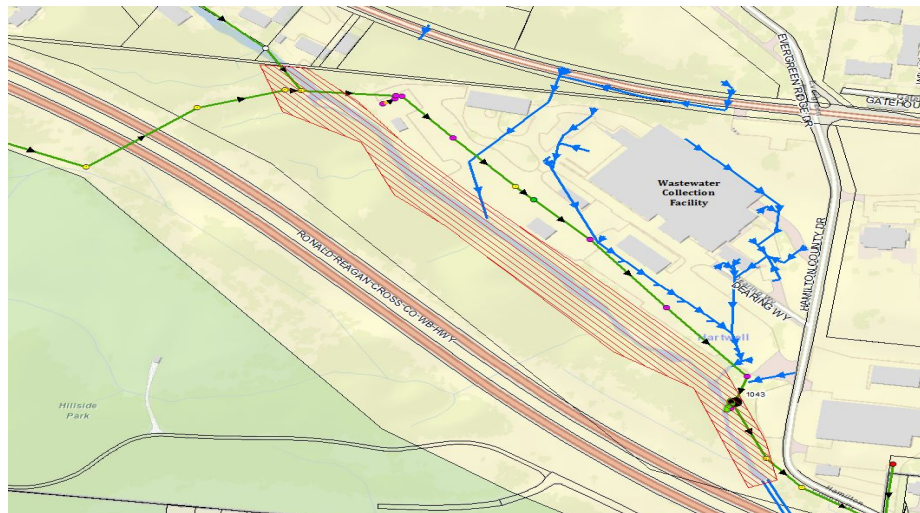
This project will provide a solution to mitigate the erosion issues, stabilize the stream, protect existing infrastructure. Severe erosion poses a threat to the existing WWC facility and multiple sewers and building lateral crossings in the area of the project. Previous efforts to reinforce existing infrastructure from further erosion were unsuccessful. This project is located in the Hartwell neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$166,000	\$0	\$166,000
Design	\$0	\$0	\$0	\$276,000	\$276,000
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$20,000	\$20,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$2,008,000	\$2,008,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$209,000	\$209,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$0	\$166,000	\$2,513,000	\$2,679,000

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$166,000	\$296,000	\$2,217,000	\$0	\$0	\$2,679,000

## Prior Legislation Action





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	Davey Avenue to Hamilton Avenue Sewer Replacement			
Project ID	10242025	CIP Number	10242025	CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6849	

## Purpose and Justification

This pipes in this project have structural issues that will be addressed. Sewer segments have been scored from high to extreme risk and require replacement or remediation in accordance with the Gravity Sewer Asset Management protocol. A 2018 video of sewers identified significant cracks, voids, and deformation of pipe sections. A cave-in near portions of the sewer was reported in 2017. The sewers in this project are showing structural issues and need to be addressed as part of a replacement and rehabilitation project.

## Impact to Operating Budget

None

## Description and Location

The project will address deteriorating sewers located between Davey Avenue, Hamilton Avenue, and north of Larch Avenue within the City of Cincinnati and the neighborhood of College Hill. The sewer segments are within the Mill Creek basin and Kings Run watershed. The high to extreme risk sewers will be addressed through abandonment, rehabilitation or replacement. The project descriptions and costs are pre-planning level.

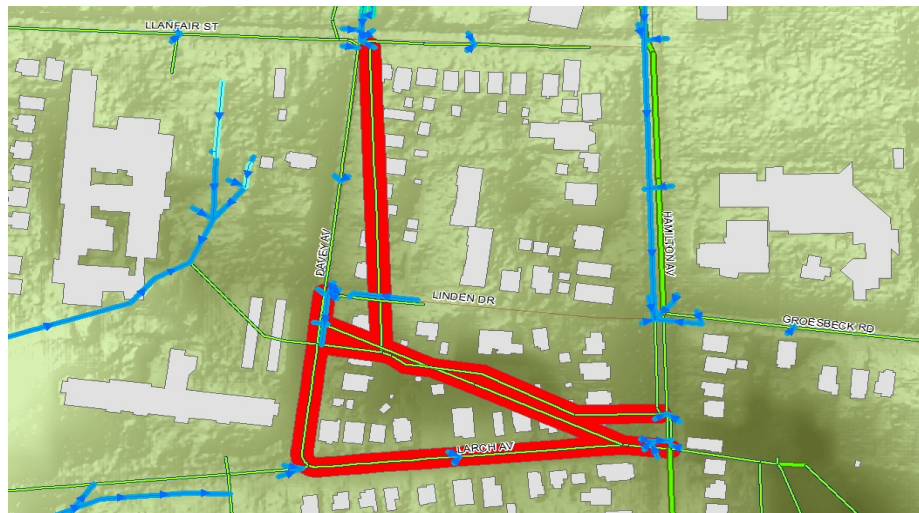
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$76,000	\$199,000	\$0	\$0	\$199,000
Design	\$98,000	\$0	\$148,500	\$0	\$148,500
Pre-Construction Services	\$18,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$150,000	\$0	\$96,000	\$0	\$96,000
Right-of-Way	\$86,000	\$0	\$86,000	\$0	\$86,000
Construction	\$500,000	\$0	\$0	\$500,000	\$500,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$62,000	\$0	\$0	\$13,100	\$13,100
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$990,000</b>	<b>\$199,000</b>	<b>\$330,500</b>	<b>\$513,100</b>	<b>\$1,042,600</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$199,000	\$330,500	\$0	\$0	\$513,100	\$0	\$1,042,600

## Prior Legislation Action

Jan 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Reading Road - 12th Street to E Liberty Street Sewer Replacement		
Project ID	10242035	CIP Number	10242035 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6851

## Purpose and Justification

The pipe segments in this project have structural and capacity issues. According to the hydraulic model some segments are surcharged as frequently as the 6-month design storm. The pipe segments to be evaluated also have structural deficiencies; some exhibit shape loss and are in risk of collapse. Failure of these segments would disrupt service and likely cause sewer backups upstream of the collapse.

## Impact to Operating Budget

## Description and Location

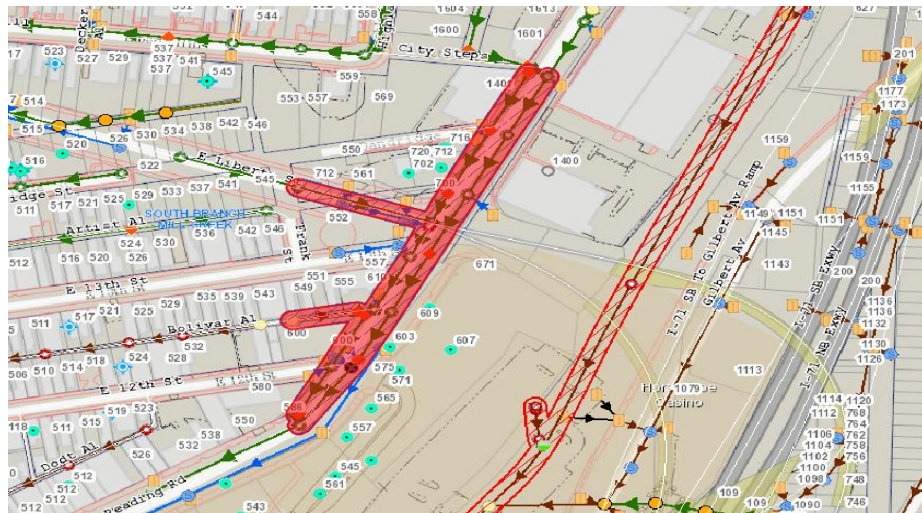
This project addresses approximately 2,000 linear feet of 18-inch vitrified clay pipe installed prior to 1900. These segments, in the Pendleton neighborhood of the City of Cincinnati, will be evaluated for rehabilitation or replacement. All project costs and descriptions are pre-planning level.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$160,000	\$0	\$0	\$0	\$0
Design	\$240,000	\$0	\$240,000	\$0	\$240,000
Pre-Construction Services	\$63,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$520,000	\$0	\$98,400	\$0	\$98,400
Right-of-Way	\$30,000	\$0	\$100,000	\$0	\$100,000
Construction	\$1,800,000	\$0	\$0	\$2,780,200	\$2,780,200
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$220,000	\$0	\$0	\$40,000	\$40,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,033,000</b>	<b>\$0</b>	<b>\$438,400</b>	<b>\$2,820,200</b>	<b>\$3,258,600</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$438,400	\$0	\$0	\$2,820,200	\$0	\$3,258,600

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	Village Woods Pump Station and System Improvements			
Project ID	10242085	CIP Number	10242085	CD Index #NA
Project Type	Pump Station Improvement/Elim	Sewer Number	6967	

## Purpose and Justification

The project will increase velocities within a force main serving the neighborhood in order to maintain sewer service capacity and pump efficiency. Currently, sediment collects in the force main, and the velocities are too low to appropriately self-clean. The current system creates undue risk and maintenance.

## Impact to Operating Budget

None

## Description and Location

The project is located within the Village Woods subdivision, in the East Branch Mill Creek watershed and the City of Sharonville. The project will reduce sediment accumulation within an existing force main serving the neighborhood. The project is related to the original pump station and force main installation, sewer number 3077.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$58,000	\$0	\$86,000	\$0	\$86,000
Pre-Construction Services	\$9,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$31,000	\$0	\$50,000	\$0	\$50,000
Right-of-Way	\$15,000	\$0	\$30,000	\$0	\$30,000
Construction	\$310,000	\$0	\$0	\$454,000	\$454,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$30,000	\$0	\$0	\$70,000	\$70,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$453,000</b>	<b>\$0</b>	<b>\$166,000</b>	<b>\$524,000</b>	<b>\$690,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$166,000	\$0	\$0	\$524,000	\$0	\$690,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Elberon Avenue Sewer		
Project ID	10242120	CIP Number	10242120 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6974

## Purpose and Justification

The project area includes 4 BCER segments on Elberon Avenue with structural risk bin scores of 19, 25, 25, and 25. Condition assessments identified numerous structural defects in these pipes including multiple fractures and cracks. The pipes are candidates for lining, however the hydraulic model indicates surcharging in events as small as the 6-month storm. The project will evaluate the sewers in this area for structural condition as well as capacity.

## Impact to Operating Budget

None

## Description and Location

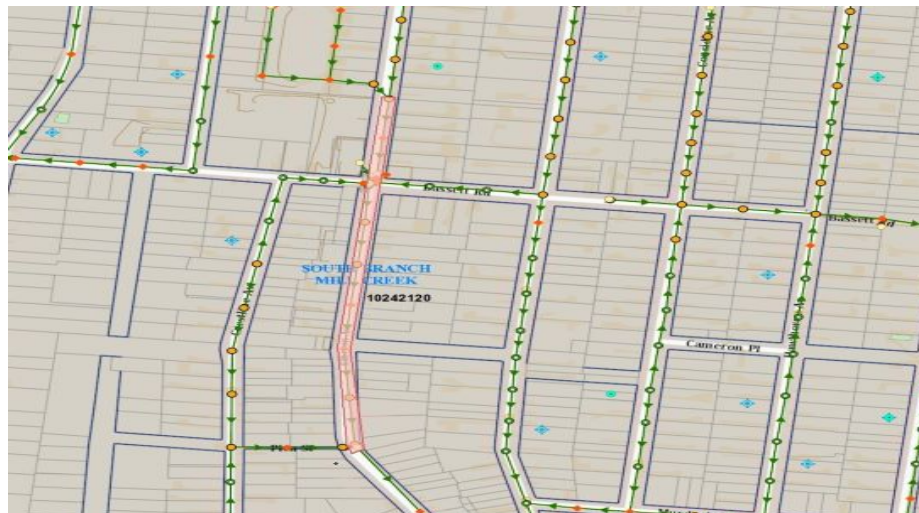
The project is located in the City of Cincinnati, East Price Hill, on Elberon Avenue generally between house numbers 411 and 528 Elberon Avenue. Planning efforts include CCTV inspection, flow monitoring, model updates, alternatives analysis, cost estimating, and development of a BCE with recommendation. The project area includes approximately 1,286 feet of 18-30 inch diameter sewer.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$120,000	\$0	\$120,000
Design	\$160,000	\$0	\$0	\$500,000	\$500,000
Pre-Construction Services	\$34,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$290,000	\$0	\$0	\$125,000	\$125,000
Right-of-Way	\$15,000	\$0	\$0	\$15,000	\$15,000
Construction	\$890,000	\$0	\$0	\$890,000	\$890,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$120,000	\$0	\$0	\$120,000	\$120,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,509,000</b>	<b>\$0</b>	<b>\$120,000</b>	<b>\$1,650,000</b>	<b>\$1,770,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$120,000	\$640,000	\$0	\$0	\$1,010,000	\$1,770,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Sycamore Street Sewer		
Project ID	10242125	CIP Number	10242125 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6975

## Purpose and Justification

The project area includes 2 BCER segments on Sycamore Street with structural risk bin scores of 21 and 25. Condition assessments identified numerous structural defects in these pipes including longitudinal and spiral cracking. The pipes are candidates for lining, however the hydraulic model indicates surcharging in events as small as the 6-month storm. The project will evaluate the sewers in this area for structural condition as well as capacity.

## Impact to Operating Budget

None

## Description and Location

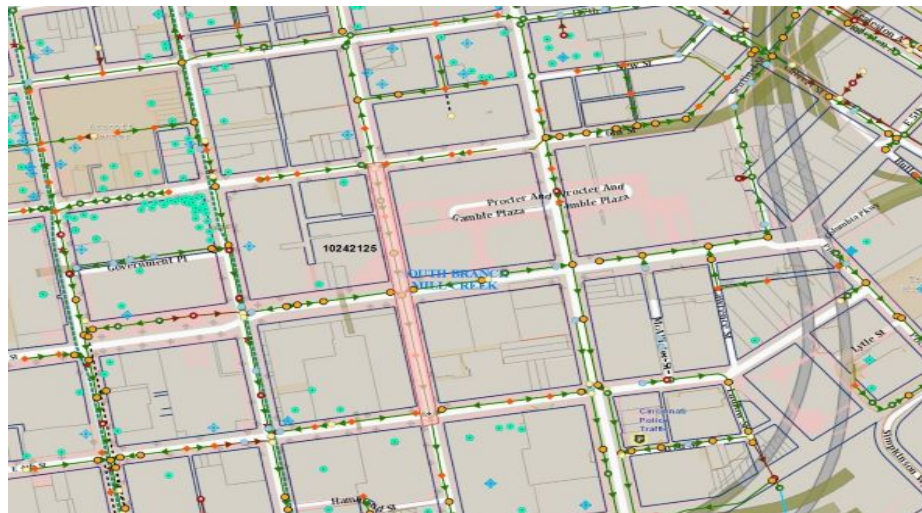
The project is located in the City of Cincinnati, Downtown, on Sycamore Street between 4th Street and 6th Street. Planning efforts include CCTV inspection, flow monitoring, model updates, alternatives analysis, cost estimating, and development of a BCE with recommendation. The project area includes approximately 932 feet of 18-36 inch diameter sewer.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$180,000	\$0	\$180,000	\$0	\$180,000
Design	\$260,000	\$0	\$0	\$260,000	\$260,000
Pre-Construction Services	\$66,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$550,000	\$0	\$0	\$550,000	\$550,000
Right-of-Way	\$15,000	\$0	\$0	\$15,000	\$15,000
Construction	\$1,700,000	\$0	\$0	\$1,700,000	\$1,700,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$230,000	\$0	\$0	\$230,000	\$230,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,001,000</b>	<b>\$0</b>	<b>\$180,000</b>	<b>\$2,755,000</b>	<b>\$2,935,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$180,000	\$825,000	\$0	\$0	\$1,930,000	\$2,935,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	SCWWTP Thickening and Settlement Improvements		
Project ID	10262005	CIP Number	10262005 CD Index #NA
Project Type	Treatment Facility	Sewer Number	6983

## Purpose and Justification

This project was identified as a priority project in MSD's Solids Handling Master Plan and addresses failing assets and operational issues with the solids handling facilities and associated odor control at the SCWWTP. To expand thickening capacity and provide more flexible operations, the existing gravity thickener #2 needs to be put back in service as a gravity thickener and covered. The sludge withdrawal pumps have reached the end of their useful lives and need replaced. Modifications on the aeration tanks are needed to address foam trapping in the liquid stream to improve operation and sludge settleability.

## Impact to Operating Budget

None

## Description and Location

This project will place the gravity thickener #2 back into service as a gravity thickener, cover the tank and connect it to the existing odor control system. The sludge withdrawal pumps will be replaced and modifications on the aeration tanks will be made to address foam trapping in the liquid stream. This project is located within the SCWWTP in Sycamore Township of Hamilton County.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$34,413	\$0	\$0	\$34,413
Design	\$190,000	\$265,587	\$0	\$0	\$265,587
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$20,000	\$20,000	\$0	\$0	\$20,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$308,000	\$0	\$800,000	\$0	\$800,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$38,500	\$0	\$150,000	\$0	\$150,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$556,500</b>	<b>\$320,000</b>	<b>\$950,000</b>	<b>\$0</b>	<b>\$1,270,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$320,000	\$950,000	\$0	\$0	\$0	\$0	\$1,270,000

## Prior Legislation Action

Feb 2020, Apr 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	SCWWTP Clarifiers		
Project ID	10262015	CIP Number	10262015 CD Index #NA
Project Type	Treatment Facility	Sewer Number	7058

## Purpose and Justification

Due to the age of settling tanks #2 (1995) and #3 (1985), the concrete floor is starting to fail on both units. Settling tank #3 has a large crack and part of the floor is hooved up, which is scraping on the bottom collector arm. The floor in Secondary Settling tank #2 is raised in multiple places and the collector arm had to be lifted to allow for proper rotation. The collector arms are original to the tanks and should be replaced due to age. Failure to repair these critical assets can lead to a lowering of effluent quality which can ultimately lead to violating the facility's NPDES permit.

## Impact to Operating Budget

## Description and Location

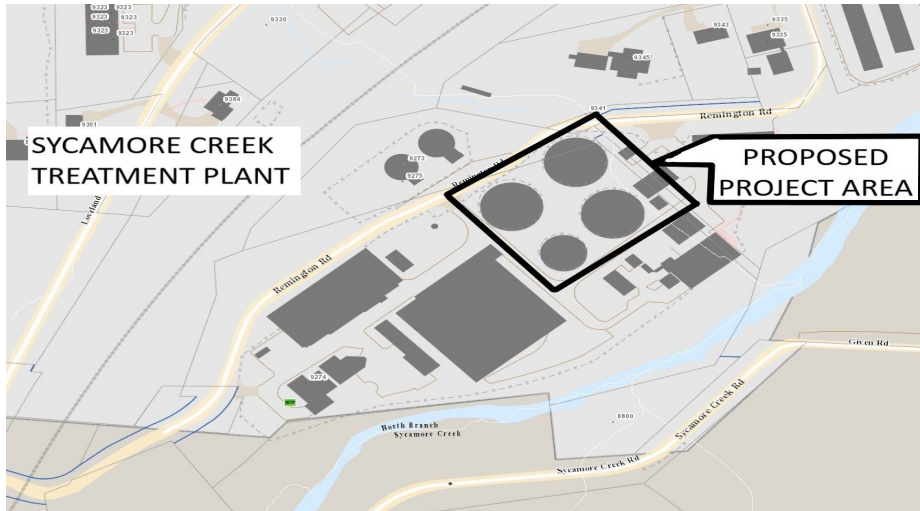
This project will repair or replace the clarifier tanks at the Sycamore Creek Wastewater Treatment Plant. The clarifier tanks which are nearing the end of their estimated useful life have damage to the concrete floors that are impeding their operation. The collector arms, which are original to the tanks, will also be evaluated for replacement due to their age. This project is located at the Sycamore WWTP in Sycamore Township.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$227,216	\$0	\$227,216	\$0	\$227,216
Design	\$369,460	\$0	\$0	\$369,460	\$369,460
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$25,000	\$0	\$0	\$25,000	\$25,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$3,323,627	\$0	\$0	\$3,323,627	\$3,323,627
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$681,344	\$0	\$0	\$681,344	\$681,344
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$4,626,647</b>	<b>\$0</b>	<b>\$227,216</b>	<b>\$4,399,431</b>	<b>\$4,626,647</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$227,216	\$394,460	\$4,004,971	\$0	\$0	\$4,626,647

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	East Hill Ave Sewer Replacement		
Project ID	10270175	CIP Number	10270175 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6657

## Purpose and Justification

The purpose of this project is to address a severely deteriorated combined sewer segment that is at risk of failure. WWC nominated this project in 2011 based on a TV inspection that showed multiple quad fractures and substantial shape loss throughout the sewer. The nominated sewer segments were given structural risk ratings of 20 and 10, which rank as high risk of failure. A secondary benefit to this project, but not the driving force of the project, is that it removes a sewer from under three residences and replaces this sewer in the public right of way, allowing for much easier maintenance in the future and reducing MSD's risk from potential property damages.

## Impact to Operating Budget

None.

## Description and Location

This asset management project located in the Hyde Park neighborhood of the City of Cincinnati. This project will install approximately 165 of new 18 inch sewer, 399 feet of new 30 inch sewer, and 77 feet of new 36 inch sewer to replace and relocate a severely deteriorated 24 inch sewer near East Hill Ave and Madison Road. The new sewer will placed complete outside of the Madison Road ROW and abandon and the existing sewer running underneath the three residences will be abandoned.

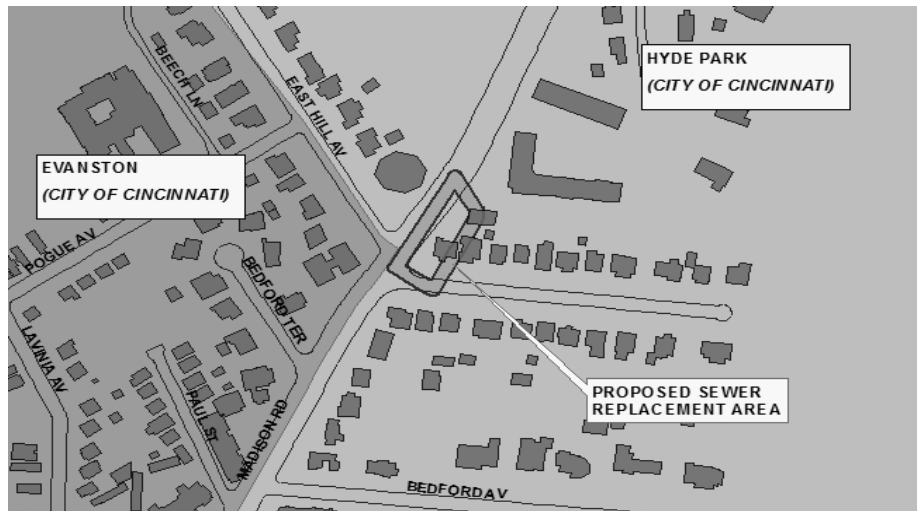
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$177,100	\$177,100	\$0	\$0	\$177,100
Pre-Construction Services	\$42,500	\$79,700	\$0	\$0	\$79,700
Miscellaneous Expense	\$43,500	\$43,500	\$0	\$0	\$43,500
Right-of-Way	\$16,600	\$223,600	\$0	\$0	\$223,600
Construction	\$1,416,800	\$0	\$1,725,728	\$0	\$1,725,728
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$48,700	\$0	\$40,000	\$0	\$40,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,745,200</b>	<b>\$523,900</b>	<b>\$1,765,728</b>	<b>\$0</b>	<b>\$2,289,628</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$523,900	\$1,765,728	\$0	\$0	\$0	\$0	\$2,289,628

## Prior Legislation Action

Dec 2014, Jun 2017, Mar 2019, Sep 2020





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Tusculum Avenue at Woodbridge Sewer Replacement		
Project ID	10270220	CIP Number	10270220 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	6692

## Purpose and Justification

The project includes one segment that has been requested for a BCE by the WWC Gravity Sewer Asset Management system with structural risk of 22. This segment and all others included in the project will be investigated to determine how to address the structural concerns.

## Impact to Operating Budget

None.

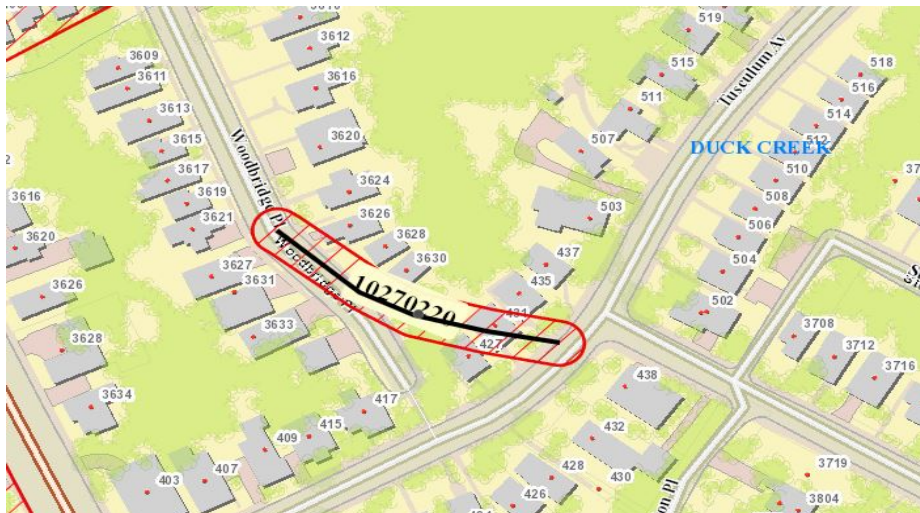
## Description and Location

Project to address 18"-48" combined sewer pipe under buildings in deteriorating condition. The project includes segments 42201037-42201036, 42201036-42201014, and 42201038-42201037. The project is located in the Columbia Tusculum neighborhood of the City of Cincinnati, Hamilton County, Ohio

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$162,000	\$0	\$0	\$162,000
Design	\$74,000	\$0	\$0	\$0	\$0
Pre-Construction Services	\$12,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$100,000	\$0	\$38,900	\$0	\$38,900
Right-of-Way	\$45,000	\$0	\$0	\$0	\$0
Construction	\$340,000	\$0	\$0	\$145,500	\$145,500
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$42,000	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$613,000</b>	<b>\$162,000</b>	<b>\$38,900</b>	<b>\$145,500</b>	<b>\$346,400</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total	
Prior Legislation	\$162,000	\$38,900	\$0	\$0	\$145,500	\$0	\$346,400

**Prior Legislation Action**  
Jan 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Wayside Hills Pump Station		
Project ID	10272050	CIP Number	10272050 CD Index #NA
Project Type	Pump Station Improvement/Elim	Sewer Number	6948

## Purpose and Justification

Based on available condition assessment information the Wayside Hills Pump station's wet well is in poor condition and has reached the end of its remaining useful life. The station's valve vault and power equipment are nearing or have reached the end of their estimated useful life. Additionally, operation staff have observed wetwell overflows and noted some capacity issues in the area. This project will evaluate the station for rehab, replacement or elimination.

## Impact to Operating Budget

None

## Description and Location

The Wayside Hills Pump Station consists of a 0.35 MGD pump station, 1,840 feet of 4-inch force main, and 7 air release valves. The pump station has several critical assets that are in poor condition and or reaching the end of their useful life. This project will evaluate the pump station, force main and other appurtenances for rehab, replacement, or elimination. The project is located in Anderson Township at 5783 Shady Hollow Ln in the California watershed of the Little Miami Basin.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$150,000	\$0	\$150,000
Design	\$210,000	\$0	\$0	\$210,000	\$210,000
Pre-Construction Services	\$49,000	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$410,000	\$0	\$0	\$410,000	\$410,000
Right-of-Way	\$22,500	\$0	\$0	\$22,500	\$22,500
Construction	\$1,300,000	\$0	\$0	\$1,300,000	\$1,300,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$170,000	\$0	\$0	\$170,000	\$170,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$2,161,500</b>	<b>\$0</b>	<b>\$150,000</b>	<b>\$2,112,500</b>	<b>\$2,262,500</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$150,000	\$0	\$642,500	\$0	\$0	\$792,500

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	LMWWTP Flow Meter Renewal		
Project ID	10272065	CIP Number	10272065 CD Index #NA
Project Type	Treatment Facility	Sewer Number	7059

## Purpose and Justification

In 2014, a bundle planning effort was completed on the Little Miami Wastewater Treatment Plant (LMWWTP) that identified projects that would allow MSD to meet the objectives of the Wet Weather Improvement Plan (WWIP). Since this time, a number of updates have occurred at the plant. A new effort is currently underway to update the 2014 bundle in light of recent changes including plans for a future High Rate Treatment (HRT) facility and the District-wide Solids Handling Master Plan.

## Impact to Operating Budget

None

## Description and Location

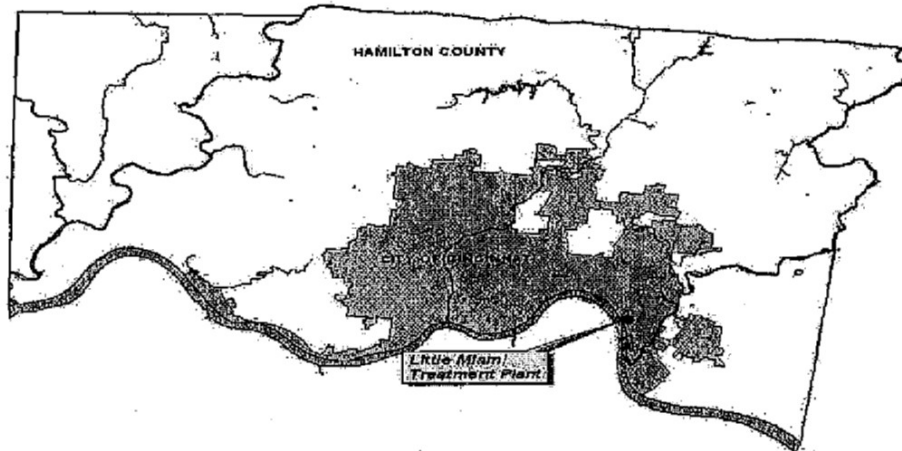
This project will upgrade flow meters in three process areas at the Little Miami Wastewater Treatment Plant. These meters, which have reached the end of their useful life, are in many cases used to measure permitted flows and have a history of giving inaccurate readings. These flow meters are necessary for effective and proper treatment of waste. Also, with the planned upgrades at the Little Miami Wastewater Treatment Plant (LMWWTP), as laid out in the Little Miami Bundle prepared by Arcadis, these flow meters will be required to monitor process flow rates. Accurate flow measurements are imperative to allow for strategic shutdowns which are required for efficient, safe, and cost-effective construction of other plant improvements. As a result, these flow meters need to be replaced prior to other projects identified in the bundle. This project is located at the LMWWTP in the East End neighborhood.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$510,000	\$0	\$510,000	\$0	\$510,000
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$120,000	\$0	\$120,000	\$0	\$120,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$6,100,000	\$0	\$0	\$6,100,000	\$6,100,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$763,000	\$0	\$0	\$763,000	\$763,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$7,493,000</b>	<b>\$0</b>	<b>\$630,000</b>	<b>\$6,863,000</b>	<b>\$7,493,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$630,000	\$6,863,000	\$0	\$0	\$0	\$7,493,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Summerview Low Pressure Forcemain		
Project ID	10272070	CIP Number	10272070 CD Index #NA
Project Type	Sewer Replacement	Sewer Number	7072

## Purpose and Justification

A LPFM was installed in 1995 to serve the Summer View Subdivision. It creates nuisance odors and high hydrogen sulfide (H2S) levels that can lead to corrosion of sewer assets. In order to minimize odors, WWC has installed a biological air scrubber and chemical feed system. While the odors have been abated with this system in place, the annual cost to sustain treatment of the sewage is not sustainable and a more permanent sewered solution is needed. WWC proposes extending the LPFM approximately 330-ft from MH 51701010 and connecting it to MH 51701005 in Ayers Road via a drop connection. The proposed LPFM connection will discharge into the gravity flow to minimize odors.

## Impact to Operating Budget

None

## Description and Location

This project will extend the existing low pressure force main (LPFM) approximately 330-ft from MH 51701010 to MH 51701005 in Ayers Road. The proposed LPFM drop connection to MH 51701005 will be a drop connection into the gravity flow and minimize odors. The home at 7501 Ayers Road is connected to the gravity line directly downstream of the LPFM. Untreated flow from the LPFM settles in the gravity system and can cause outdoor odors for the homeowners. Extending the LPFM further downstream with a drop connection will effectively minimize odors.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$50,335	\$0	\$50,335	\$0	\$50,335
Design	\$63,791	\$0	\$0	\$63,791	\$63,791
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$19,000	\$0	\$0	\$19,000	\$19,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$302,645	\$0	\$0	\$302,645	\$302,645
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$31,475	\$0	\$0	\$31,475	\$31,475
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$467,246</b>	<b>\$0</b>	<b>\$50,335</b>	<b>\$416,911</b>	<b>\$467,246</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$50,335	\$82,791	\$334,120	\$0	\$0	\$467,246

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	Hydraulic Modeling 2021			
Project ID	10280241	CIP Number	10280241	CD Index #NA
Project Type	Allowance	Sewer Number	7065	

## Purpose and Justification

The purpose of the Hydraulic Modeling Allowance is to enable MSD to maintain the models of its collection system and treatment works at the highest state of accuracy and calibration and to apply those models in support of planning, operations, and regulatory consent decree compliance. Since MSD's system is continually changing (due to natural degradation, maintenance and repairs, capital improvements, and changes in operations) an annual investment in maintaining and calibrating the models is necessary to keep them up-to-date. The models are used in the planning and design of all capital projects and their use is required as part of the Global Consent Decree and MSD's CSO NPDES permit.

## Impact to Operating Budget

None.

## Description and Location

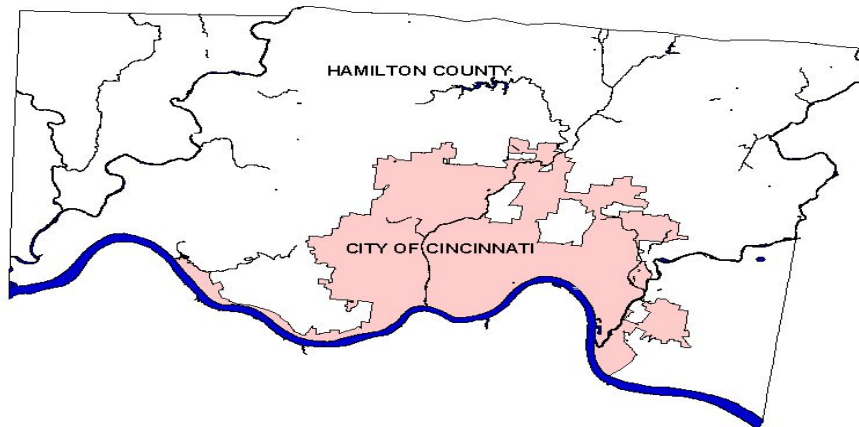
MSD maintains and uses 9 basin models that collectively cover the entire MSD service area. This allowance is used to fund general maintenance and improvement work, including calibrations, to all of them, as well as investigations into hydraulic problems or concerns in any portion of the District's service area, as the need arises. Modeling in support of an identified capital improvement project is subsequently moved to that project's ID

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$1,000,000	\$0	\$1,200,000	\$0	\$1,200,000
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$1,200,000</b>	<b>\$0</b>	<b>\$1,200,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$1,200,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Critical Asset Management Projects 2021		
Project ID	10280721	CIP Number	10280721 CD Index #NA
Project Type	Allowance	Sewer Number	7066

## Purpose and Justification

This allowance is to provide MSD with an expeditious means of addressing infrastructure and other asset failures in advance of catastrophic failure when possible. MSD has over \$11M of needs associated with WWT and Wet Weather facilities in the coming year and uses this allowance to prioritize the most critical needs. This allowance utilizes district wide condition reports, field data, studies and other analyses to provide MSD with a rapid means to address failing roofs, roadways, other unforeseen capital needs that require little or no design, that are needed sooner than the normal CIP project process allows, and or are of significantly less cost than a typical CIP project.

## Impact to Operating Budget

None.

## Description and Location

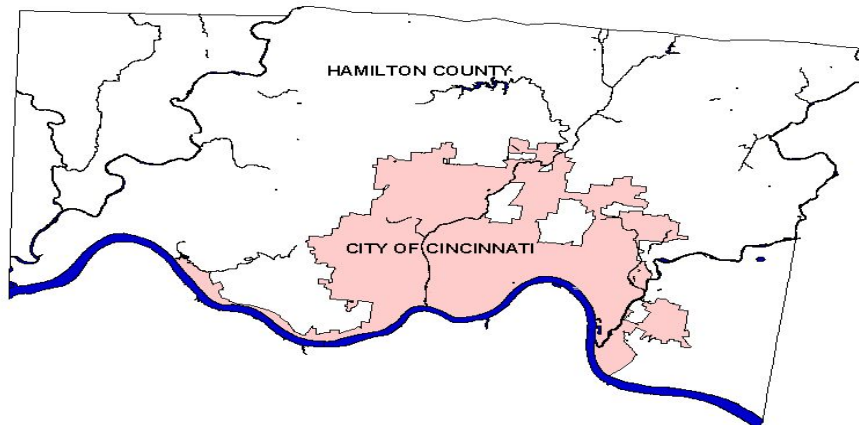
This allowance serves as an annual "budget" from which smaller expenditures will be made as the need arises. To manage this allowance, MSD will maintain a risk-based prioritized list of proposed expenditures that will be updated as needs arise and seek legislative approval according to established thresholds.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$6,000,000	\$0	\$6,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$0	\$6,000,000	\$0	\$6,000,000

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$6,000,000	\$0	\$0	\$0	\$0	\$6,000,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	LMWWTP Solids Disposal With Odor Control		
Project ID	10281100	CIP Number	10281100 CD Index #NA
Project Type	Treatment Facility	Sewer Number	6914

## Purpose and Justification

This project was identified as a priority project in MSD's Solids Handling Master Plan. The project will diversify MSD's solids handling management, decrease the reliance on landfills for sludge disposal and also allow for revenue opportunities associated with the processing of high strength waste (HSW) and sale of biogas.

## Impact to Operating Budget

None

## Description and Location

This project will address critical solids handling, disposal and odor control needs at Little Miami WWTP. The project includes digestion facilities and supporting structures, biogas conditioning, waste gas burner, high strength waste (HSW) and liquid sludge receiving facilities, sludge dewatering facilities, and odor control for associated processes. This project is located within the Little Miami WWTP in the East End neighborhood of the City of Cincinnati.

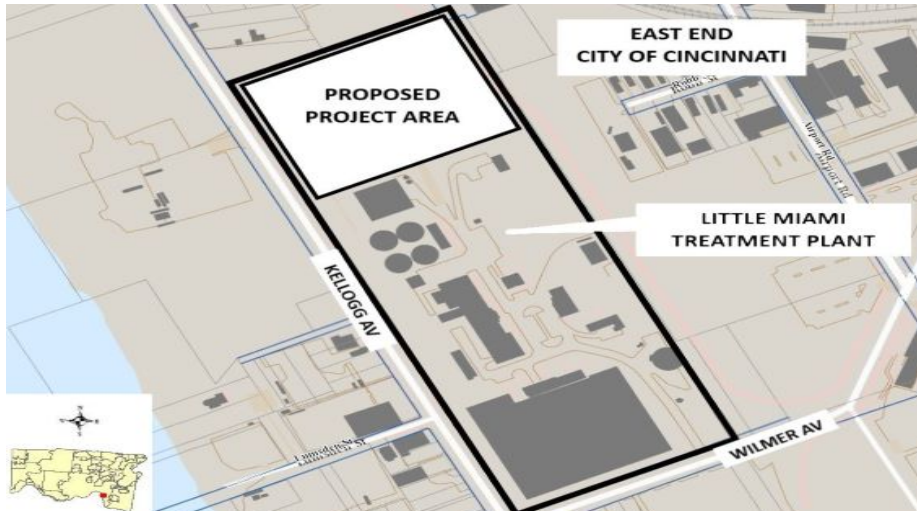
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$856,325	\$0	\$0	\$856,325
Design	\$2,402,500	\$3,666,175	\$5,433,825	\$0	\$9,100,000
Pre-Construction Services	\$586,800	\$586,800	\$0	\$0	\$586,800
Miscellaneous Expense	\$216,200	\$216,200	\$133,800	\$0	\$350,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$78,560,000	\$78,560,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$1,500,000	\$1,500,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,205,500</b>	<b>\$5,325,500</b>	<b>\$5,567,625</b>	<b>\$80,060,000</b>	<b>\$90,953,125</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$5,325,500	\$5,567,625	\$0	\$80,060,000	\$0	\$0	\$90,953,125

## Prior Legislation Action

Jan 2019, Feb 2020, Apr 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department Metropolitan Sewer District of Greater Cincinnati  
 Project Title **Prioritized Wastewater Collection System Improvements 2021**

Project ID **10281321** CIP Number **10281321** CD Index #NA  
 Project Type **Allowance** Sewer Number **7067**

## Purpose and Justification

MSD proposes to use this allowance to fund all planned and reactive improvements to publicly owned assets that comprise the wastewater collection system and to remedy structurally failed privately-owned building sewers located within the public right-of-way, excluding work specifically covered in other Consent Decree specified allowances (Main Sewer Renewal and Manhole Renewal).

## Impact to Operating Budget

None.

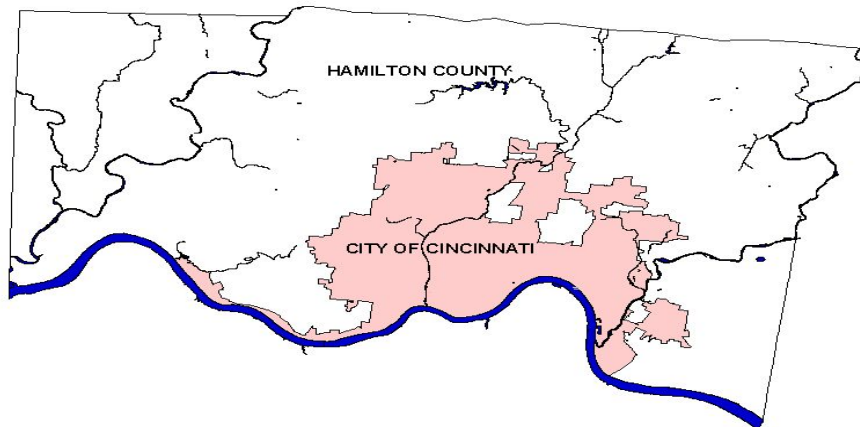
## Description and Location

This program will allow the District to respond to sudden, unexpected system failures, to complete planned repairs and improvements to high risk utility-owned assets, and to make prioritized system improvements through construction coordination projects in order to maintain acceptable levels of service at the lowest life-cycle cost. This allowance represents a consolidation of the former Emergency Sewer, High Risk Asset Renewal, and Building Sewer Renewal allowances.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$10,000,000	\$0	\$10,000,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$2,000,000	\$0	\$2,000,000
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$0	\$12,000,000	\$0	\$12,000,000

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$12,000,000	\$0	\$0	\$0	\$0	\$12,000,000

## Prior Legislation Action





# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	CIP Planning Projects 2021		
Project ID	10282021	CIP Number	10282021 CD Index #NA
Project Type	Allowance	Sewer Number	7068

## Purpose and Justification

This allowance is needed to provide BCE planning for projects which have inadequate project definition from the pre-planning or project nomination phase to determine as specific project. This funding will allow for development of the BCE and confirmation of a project through a SG2 meeting for establishment of a project in the CIP and Oracle iWave system.

## Impact to Operating Budget

None.

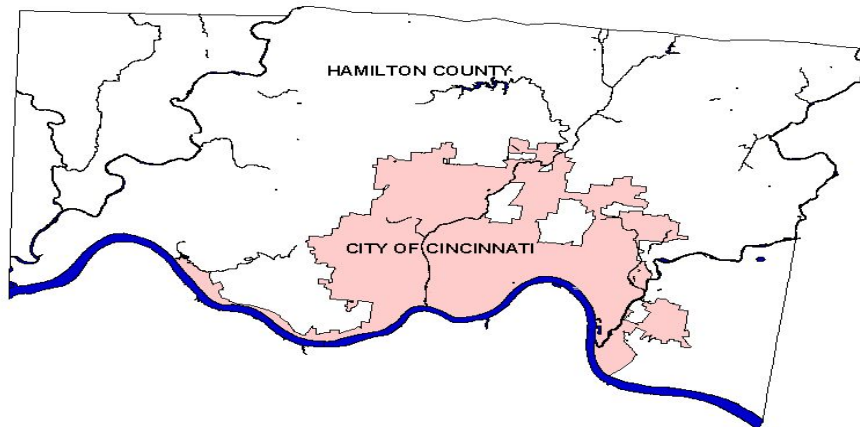
## Description and Location

Provide appropriated funds for BCE level planning of capital projects that have gone through a project nomination phase and SG1 approval for advancement to the design phase and or legacy projects which are pending planning. This is consistent with MSD project delivery approach and stage gates to confirm project intent and approval to progress to next phase. Efforts involve a significant amount of alternative analysis directed towards determining the best option(s), to be evaluated and confirmed during planning phase. Consistent with past practice, MSD use of planning allowances ensures charges to allowances are allocated to individual capital projects once they are approved and established in iWave. Once BCE is completed a project will be confirmed via SG2 and if approved, setup in the system as a standalone project with budget and schedule.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$2,100,000	\$0	\$2,100,000
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$0	\$2,100,000	\$0	\$2,100,000

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$2,100,000	\$0	\$0	\$0	\$0	\$2,100,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	<b>Muddy Creek FEMA Property Acquisition &amp; Floodplain Reconfiguration</b>		
Project ID	<b>10630000</b>	CIP Number	<b>10630000</b> CD Index #
Project Type	<b>Supplemental Environmental Prj</b>	Sewer Number	<b>7005</b>

## Purpose and Justification

The Muddy Creek Floodprone Property Acquisition Project will reduce flood risk and damage to community residents and repeatable SBU liability. The full application has been submitted to FEMA to acquire and demolish up to 31 residential structures along Muddy Creek Road in Cincinnati and Green Township within the floodway and floodplain and obtain 4 property that is currently vacant. The total budget is \$4,744,410, of which 25% is split between the state and local dollars and FEMA provides 75%. The project will provide space for passive, green solutions such as wetland and floodplain restoration and vegetated open spaces for more effective stormwater management in a combined sewer area.

## Impact to Operating Budget

Acquiring the targeted properties will reduce risk and liability of future cleanings and claims associated with SBU. The properties are at risk for SBUs and have had repeated impacts, with MSD having already paid over \$500K in damage claims since 2009

## Description and Location

The area of focus is Muddy Creek Road between Glenway Avenue and Muddy Creek. The Project is directly related to and will effectively carry out the goals of the State of Ohio Hazard Mitigation Plan by purchasing floodprone property within the floodway and floodplain, mitigating the risk of loss of life and property as well as future damage claims to FEMA and Ohio EMA.

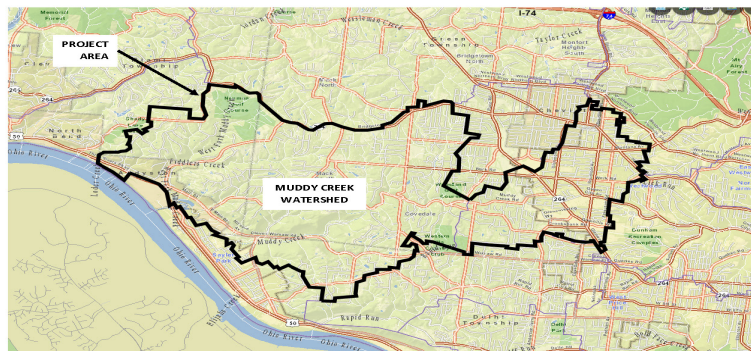
Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$200,000	\$200,000	\$0	\$0	\$200,000
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$500,000	\$0	\$328,000	\$172,000	\$500,000
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$700,000</b>	<b>\$200,000</b>	<b>\$328,000</b>	<b>\$172,000</b>	<b>\$700,000</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$200,000	\$328,000	\$0	\$172,000	\$0	\$0	\$700,000

## Prior Legislation Action

Jan 2020



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati			
Project Title	Greater Cincinnati East Side SBU Mitigation Study			
Project ID	11582000	CIP Number	11582000	CD Index #N/A
Project Type	Study	Sewer Number	7044	

## Purpose and Justification

The current SBU program installs prevention systems for homes with repeated SBUs. However, the program is not cost-effective given the volume of complaints and issues on the east side of Greater Cincinnati. In addition, the current program does not address related problems such as sewer capacity or combined sewer overflow (CSO) volumes. A planning study will help in identifying the hot spots and root causes for SBUs in the study area and assist MSD in achieving regulatory compliance.

## Impact to Operating Budget

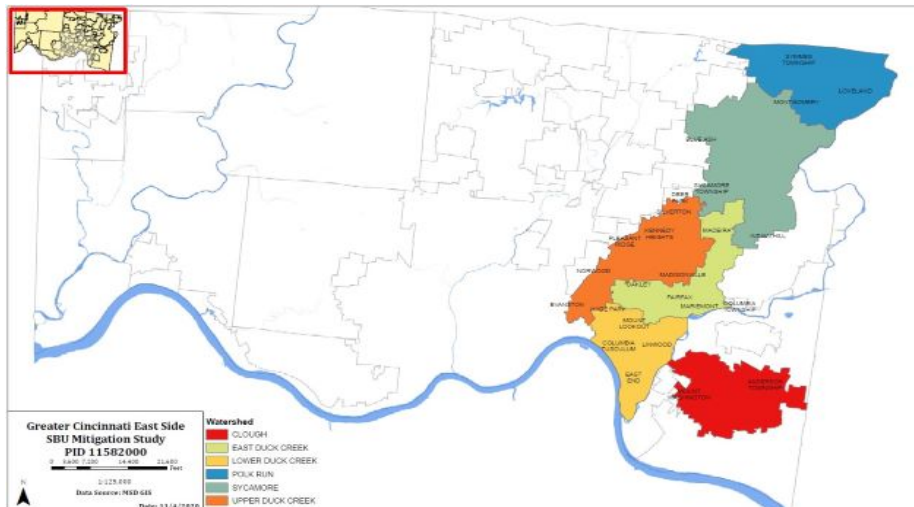
## Description and Location

The project will conduct a planning study and evaluate alternatives to identify cost-effective, watershed-based solutions for chronic sewer backups (SBUs) in neighborhoods and municipalities located on the east side of Greater Cincinnati. The study area includes, but is no limited to, the Clough, Duck Creek, Polk Run, and Sycamore basins. This study will obtain and analyze available data to identify potential alternatives to improve sewer capacity, decrease CSO volumes, and achieve regulatory compliance. Potential alternatives at the local and watershed scale within the study area will be identified and evaluated at a conceptual level.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$1,000,000	\$0	\$1,000,000	\$0	\$1,000,000
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$1,000,000</b>

5 Year Projected Legislation	2021	2022	2023	2024	2025	Project Total
Prior Legislation	\$0	\$0	\$0	\$0	\$0	\$0
	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000

## Prior Legislation Action



# **2021 OTHER Projects**



## 2021 Projects

### Metropolitan Sewer District of Greater Cincinnati

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total	Page
10199021	OTHER	ALW	Program Management and Support Services 2021 (Design)	\$6,800,000	\$0	\$6,800,000	77
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$0	\$5,000,000	78
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$0	\$5,500,000	79
<b>Total Cost for 3 OTHER Projects</b>				<b>\$17,300,000</b>	<b>\$0</b>	<b>\$17,300,000</b>	

# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Program Management and Support Services 2021		
Project ID	10199021	CIP Number	10199021 CD Index #NA
Project Type	Allowance	Sewer Number	7048

## Purpose and Justification

This project supports the internal efforts, supplemental staff and professional services necessary to carry out the Capital Program. The activities will include program and project management, systems implementation, training, project delivery, project controls, design management, CIP planning, and construction administration.

## Impact to Operating Budget

None.

## Description and Location

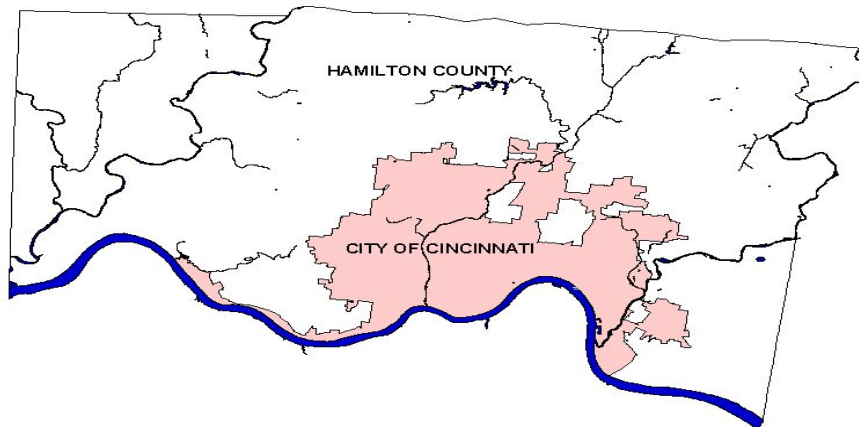
The Program Management Team (PMT) consists of outside professional consultant staff working in an integrated manner with internal MSD personnel. The PMT is providing support for the development and delivery of the entire CIP, inclusive of all WWIP and Asset Management projects. The core services needed to support the management, delivery, and reporting has been defined in an Annual Program Work Plan. The budget, as a % of the CIP, is consistent with average National Program Management Fees, per CMAA. This allowance also provides budget for capital project legal services

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$5,400,000	\$0	\$6,800,000	\$0	\$6,800,000
Miscellaneous Expense	\$0	\$0	\$0	\$0	\$0
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$5,400,000	\$0	\$6,800,000	\$0	\$6,800,000

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$0	\$6,800,000	\$0	\$0	\$0	\$0	\$6,800,000

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	Programmatic Contingency		
Project ID	13090000	CIP Number	CD Index #000
Project Type	Program Contingency	Sewer Number	

## Purpose and Justification

Project budgets in the CIP do not include a contingency line item. MSD uses programmatic contingency to fund construction and design change orders for all projects in the capital program.

## Impact to Operating Budget

None.

## Description and Location

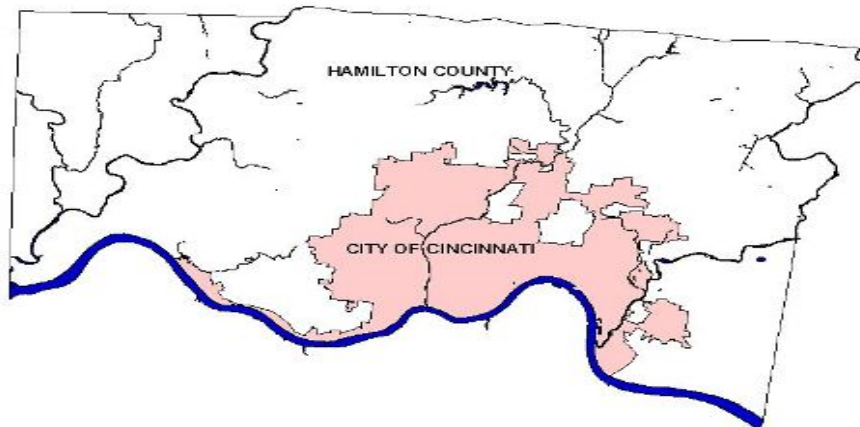
For 2021, the Allowance for Programmatic Contingency has been estimated at \$5 million which is consistent with expenditures from this fund in recent years, and consistent with industry standard benchmarking. Costs are allocated to specific capital projects as they are expended.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$50,000,000	\$12,421,915	\$5,000,000	\$20,000,000	\$37,421,915
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$50,000,000</b>	<b>\$12,421,915</b>	<b>\$5,000,000</b>	<b>\$20,000,000</b>	<b>\$37,421,915</b>

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$12,421,915	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$37,421,915

## Prior Legislation Action



# 2021 Capital Budget and Capital Improvement Program

Tuesday, November 17, 2020

Department	Metropolitan Sewer District of Greater Cincinnati		
Project Title	MSD LABOR		
Project ID	13099999	CIP Number	CD Index #
Project Type	Allowance	Sewer Number	

## Purpose and Justification

Effective January 1, 2020 MSD accounting practices revised how MSD staff labor will be capitalized. This change was discussed internally with the County Monitor Team, and it was mutually determined that there is no added value in tracking internal labor to specific projects. This allowance will fund all of MSD's estimated labor costs which are currently forecasted to approximately \$5,000,000. These costs will be allocated back to projects by formula.

## Impact to Operating Budget

None

## Description and Location

This allowance was initiated in 2020 to allow all WWE staff to discontinue direct charges to projects and instead charge to an allowance that would then be allocated back to projects based on a formula. The cost of MSD labor has been removed from project specific budgets to avoid double counting.

Cost Description	Original Project Estimate	Prior Legislation	Current Legislation	Future Legislation	Current Project Estimate
Planning	\$0	\$0	\$0	\$0	\$0
Design	\$0	\$0	\$0	\$0	\$0
Pre-Construction Services	\$0	\$0	\$0	\$0	\$0
Miscellaneous Expense	\$0	\$5,000,000	\$5,500,000	\$22,000,000	\$32,500,000
Right-of-Way	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0
Program Management	\$0	\$0	\$0	\$0	\$0
Construction Services	\$0	\$0	\$0	\$0	\$0
Interest / Financing	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	\$0	\$5,000,000	\$5,500,000	\$22,000,000	\$32,500,000

## 5 Year Projected Legislation

Prior Legislation	2021	2022	2023	2024	2025	Project Total
\$5,000,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$32,500,000

## Prior Legislation Action

Jan 2020







**2022 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**WWIP Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10130161	WWIP	PSE	Muddy Creek PSU & Force Main (Design)	\$1,696,586	\$0	\$1,696,586
10130280	WWIP	PSE	Addyston Pump Station Elimination (Design,Easement)	\$591,757	\$0	\$591,757
10142420	WWIP	SEP	Vine Street at Erkenbrecher Avenue Sewer Separation (Design,Easement)	\$3,450,000	\$0	\$3,450,000
10144888	WWIP	FAC	MCWWTP High Rate Treatment Pump Station (Design)	\$8,744,000	\$0	\$8,744,000
10172900	WWIP	FAC	LMWWTP Standby Power (Construction)	\$17,325,000	\$0	\$17,325,000
10180122	WWIP	ALW	Main Sewer Renewal Program 2022 (Construction)	\$6,000,000	\$0	\$6,000,000
10180222	WWIP	ALW	Manhole Renewal Program 2022 (Construction)	\$973,300	\$0	\$973,300
10190222	WWIP	ALW	Phase 2 WWIP Planning 2022 (Planning)	\$5,000,000	\$0	\$5,000,000
11242844	WWIP	SEP	CSO 12 Sewer Separation Outfall to Mill Creek (Design,Easement)	\$2,688,775	\$0	\$2,688,775
<b>Total Cost for 9 WWIP Projects in 2022</b>				<b>\$46,469,418</b>	<b>\$0</b>	<b>\$46,469,418</b>



## 2022 CIP

### Metropolitan Sewer District of Greater Cincinnati

#### OTHER Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10199022	OTHER	ALW	Program Management and Support Services 2022 (Design)	\$5,800,000	\$0	\$5,800,000
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$0	\$5,000,000
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$0	\$5,500,000
<b>Total Cost for 3 OTHER Projects in 2022</b>				<b>\$16,300,000</b>	<b>\$0</b>	<b>\$16,300,000</b>



## 2022 CIP

# Metropolitan Sewer District of Greater Cincinnati

## ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10222005	AM	PSE	Colerain-Bevis Pump Station Replacement (Planning)	\$310,000	\$0	\$310,000
10222015	AM	PSE	Stratford Lake Force Main Renewal (Design)	\$150,561	\$0	\$150,561
10230054	AM	FAC	Muddy Creek WWTP Disinfection Upgrades (Planning,Design)	\$740,000	\$0	\$740,000
10230130	AM	REP	Dry Weather Channel for SS 937 (Design)	\$616,500	\$0	\$616,500
10230150	AM	REP	Addyston Creek and Sewer Rehab (Construction)	\$477,000	\$0	\$477,000
10230170	AM	REP	Harrison Avenue North and South Hydraulic Improvements (Planning)	\$290,000	\$0	\$290,000
10230655	AM	REP	Muddy Creek Road and Rosebud Drive Sewer Replacement (Design,Easement)	\$215,000	\$0	\$215,000
10232005	AM	REP	Benz Avenue (HN 1111) Sewer Replacement (Planning)	\$29,000	\$0	\$29,000
10232025	AM	REP	3731 Glenmore Avenue Sewer Evaluation (Design)	\$154,000	\$0	\$154,000
10240320	AM	REP	Wilder Avenue Sewer Replacement (Construction)	\$679,700	\$0	\$679,700
10240500	AM	REP	Yoast Avenue Sewer Improvements (Construction)	\$102,900	\$0	\$102,900
10240720	AM	REP	Valleyview Court Sewer Replacement (Design,Easement)	\$300,000	\$0	\$300,000
10240725	AM	REP	Shaffer Avenue Sewer Replacement (Design,Easement)	\$311,200	\$0	\$311,200
10240735	AM	REP	De Votie Avenue Sewer Replacement (Design,Easement)	\$326,500	\$0	\$326,500
10240740	AM	REP	Tennessee Avenue (HN 1754) Sewer Replacement (Design,Easement)	\$350,000	\$0	\$350,000
10240750	AM	REP	Seton Avenue (HN 916) Sewer Replacement (Design,Easement)	\$210,000	\$0	\$210,000
10240780	AM	REP	Galbraith Rd to Sheldon Avenue Sewer Replacement (Design,Easement)	\$258,100	\$0	\$258,100
10240795	AM	REP	Central to McMicken at Stark St Sewer Replacement (Design,Easement)	\$442,200	\$0	\$442,200
10240810	AM	REP	Overlook Avenue near Glenway Ave Sewer Replacement (Design,Easement)	\$275,000	\$0	\$275,000
10240845	AM	REP	Taft Road & McMillan Street Sewer Replacement (Design,Easement)	\$3,052,500	\$0	\$3,052,500
10240850	AM	FAC	Mill Creek WWTP Outfall Improvements (Design)	\$447,000	\$0	\$447,000
10241905	AM	SUP	Congress Run Stream Restoration and Bank Stabilization (Design)	\$296,000	\$0	\$296,000



## 2022 CIP

# Metropolitan Sewer District of Greater Cincinnati

## ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10242020	AM	FAC	Mill Creek WWTP Disinfection Improvement (Planning,Design)	\$1,907,200	\$0	\$1,907,200
10242030	AM	REP	Dorchester Avenue at Highland Avenue Sewer Replacement (Design,Easement)	\$240,350	\$0	\$240,350
10242050	AM	REP	Glenmary Ave and Vine Street Sewer Improvements (Planning)	\$300,000	\$0	\$300,000
10242080	AM	REP	Fenton Avenue (HN 1336) Sewer Relocation (Planning)	\$110,000	\$0	\$110,000
10242090	AM	REP	Donna Lane & Ester Marie Drive Sewer Relocation and Rehab (Planning)	\$86,000	\$0	\$86,000
10242105	AM	REP	Loth Street (HN 2272) Sewer Relocation and Rehab (Planning)	\$160,000	\$0	\$160,000
10242110	AM	REP	Central Avenue and W 9th Street Sewer (Planning)	\$130,000	\$0	\$130,000
10242115	AM	REP	Central Avenue (HN 1964) Sewer (Planning)	\$45,000	\$0	\$45,000
10242120	AM	REP	Elberon Avenue Sewer (Design,Easement)	\$640,000	\$0	\$640,000
10242125	AM	REP	Sycamore Street Sewer (Design,Easement)	\$825,000	\$0	\$825,000
10242140	AM	FAC	MCWWTP Dewatering Building Odor Control (Construction)	\$7,965,000	\$0	\$7,965,000
10242150	AM	FAC	Daly Road Treatment Facility Modifications (Construction)	\$443,100	\$0	\$443,100
10242155	AM	REP	Morrison Avenue Sewer Replacement (Planning)	\$140,000	\$0	\$140,000
10252020	AM	FAC	PRWWTP Sludge Storage Tank with Odor Control (Construction)	\$2,410,000	\$0	\$2,410,000
10262015	AM	FAC	SCWWTP Clarifiers (Design)	\$394,460	\$0	\$394,460
10270110	AM	REP	Linwood Avenue Sewer Replacement (Construction)	\$799,500	\$0	\$799,500
10270155	AM	REP	Paxton Avenue Sewer Rehabilitation (Design,Easement)	\$239,400	\$0	\$239,400
10270165	AM	REP	Delta and Greist Sewer Replacement (Construction)	\$683,437	\$0	\$683,437
10270185	AM	REP	Paxton Ave at Linwood Ave Sewer Replacement (Construction)	\$394,155	\$0	\$394,155
10270225	AM	REP	Elsmere Avenue from Slane to Lafayette Sewer Replacement (Design,Easement)	\$496,300	\$0	\$496,300
10272045	AM	REP	Celeron Avenue Sewer Rehabilitation (Planning)	\$150,000	\$0	\$150,000
10272065	AM	FAC	LMWWTP Flow Meter Renewal (Construction)	\$6,863,000	\$0	\$6,863,000
10272070	AM	REP	Summerview Low Pressure Forcemain (Design)	\$82,791	\$0	\$82,791
10280242	AM	ALW	Hydraulic Modeling 2022 (Planning)	\$1,200,000	\$0	\$1,200,000



**2022 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**ASSET Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10280722	AM	ALW	Critical Asset Management Projects 2022 (Construction)	\$6,000,000	\$0	\$6,000,000
10281322	AM	ALW	Prioritized Wastewater Collection System Improvements 2022 (Construction)	\$12,000,000	\$0	\$12,000,000
10282022	AM	ALW	CIP Planning Projects 2022 (Planning)	\$2,100,000	\$0	\$2,100,000
<b>Total Cost for 49 ASSET Projects in 2022</b>				<b>\$56,837,854</b>	<b>\$0</b>	<b>\$56,837,854</b>
<b>Grand Totals for 61 Projects in 2022</b>				<b>\$119,607,272</b>	<b>\$0</b>	<b>\$119,607,272</b>



**2023 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**WWIP Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10130161	WWIP	PSE	Muddy Creek PSU & Force Main (Construction)	\$7,012,000	\$0	\$7,012,000
10130566	WWIP	FAC	Muddy Creek WWTP EHRT and Pump Station (Construction)	\$106,000,000	\$0	\$106,000,000
10142910	WWIP	SRC	Ludlow Run Sustainable Source Control (Design,Easement)	\$1,952,233	\$0	\$1,952,233
10172940	WWIP	SRC	Mt Washington Source Control Implementation (Construction)	\$9,708,000	\$0	\$9,708,000
10180123	WWIP	ALW	Main Sewer Renewal Program 2023 (Construction)	\$6,000,000	\$0	\$6,000,000
10180223	WWIP	ALW	Manhole Renewal Program 2023 (Construction)	\$973,300	\$0	\$973,300
10190223	WWIP	ALW	Phase 2 WWIP Planning 2023 (Planning)	\$5,000,000	\$0	\$5,000,000
<b>Total Cost for 7 WWIP Projects in 2023</b>				<b>\$136,645,533</b>	<b>\$0</b>	<b>\$136,645,533</b>



## 2023 CIP

### Metropolitan Sewer District of Greater Cincinnati

#### OTHER Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10199023	OTHER	ALW	Program Management and Support Services 2023 (Design)	\$4,800,000	\$0	\$4,800,000
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$0	\$5,000,000
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$0	\$5,500,000
<b>Total Cost for 3 OTHER Projects in 2023</b>				<b>\$15,300,000</b>	<b>\$0</b>	<b>\$15,300,000</b>



## 2023 CIP

# Metropolitan Sewer District of Greater Cincinnati

## ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10222005	AM	PSE	Colerain-Bevis Pump Station Replacement (Design,Easement)	\$1,935,000	\$0	\$1,935,000
10230045	AM	REP	Stonebridge Relief Sewer (Construction)	\$4,962,255	\$0	\$4,962,255
10230090	AM	PSE	Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kirkridge Acres P.S. Eliminations (Construction)	\$7,652,400	\$0	\$7,652,400
10230160	AM	REP	Glenway Avenue at Parkcrest Lane Sewer (Planning)	\$83,000	\$0	\$83,000
10240271	AM	CSO	Lower Mill Creek HW DW Protection (Construction)	\$1,392,000	\$0	\$1,392,000
10240330	AM	REP	Otte Avenue Sewer Replacement (Construction)	\$797,600	\$0	\$797,600
10240445	AM	REP	Colton Lane Sewer Replacement (Design)	\$144,000	\$0	\$144,000
10240560	AM	REP	Schulte Drive Sewer Replacement (Construction)	\$485,600	\$0	\$485,600
10240765	AM	REP	Fyffe Avenue Sewer (Planning)	\$76,000	\$0	\$76,000
10240790	AM	REP	Clifton Avenue at Parker Street Sewer Replacement (Planning)	\$370,000	\$0	\$370,000
10240800	AM	REP	4511 Reading Road Sewer (Planning)	\$210,000	\$0	\$210,000
10240815	AM	REP	150 Caldwell Drive Sewer (Planning)	\$39,000	\$0	\$39,000
10240835	AM	CSO	CSO 488 Access Lane (Construction)	\$68,000	\$0	\$68,000
10240855	AM	REP	Connecticut Avenue Sewer Replacement (Construction)	\$3,162,600	\$0	\$3,162,600
10240875	AM	REP	Ledgewood Ave Sewer Replacement (Design,Easement)	\$1,100,000	\$0	\$1,100,000
10241905	AM	SUP	Congress Run Stream Restoration and Bank Stabilization (Construction)	\$2,217,000	\$0	\$2,217,000
10242050	AM	REP	Glenmary Ave and Vine Street Sewer Improvements (Design,Easement)	\$1,872,500	\$0	\$1,872,500
10242055	AM	REP	Queen City Avenue (HN 2047) Sewer Rehabilitation (Design,Easement)	\$308,000	\$0	\$308,000
10242110	AM	REP	Central Avenue and W 9th Street Sewer (Design,Easement)	\$555,000	\$0	\$555,000
10242115	AM	REP	Central Avenue (HN 1964) Sewer (Design,Easement)	\$135,500	\$0	\$135,500
10242130	AM	FAC	MCWWTP Primary Settling Electrical Equipment Replacement (Planning)	\$120,000	\$0	\$120,000
10250040	AM	FAC	Polk Run WWTP Effluent Pumping Improvements (Planning)	\$219,216	\$0	\$219,216
10262015	AM	FAC	SCWWTP Clarifiers (Construction)	\$4,004,971	\$0	\$4,004,971
10270007	AM	SEW	Dry Run Area Sewers Phase 2 Contract RB (Design,Construction)	\$6,684,500	\$0	\$6,684,500
10270026	AM	PSE	Camargo Canyon Pump Station Elimination (Construction)	\$1,178,400	\$0	\$1,178,400





**2023 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**ASSET Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10272025	AM	REP	Wasson Ravine Sewer Replacement (Construction)	\$2,115,000	\$0	\$2,115,000
10272050	AM	PSE	Wayside Hills Pump Station (Design,Easement)	\$642,500	\$0	\$642,500
10272070	AM	REP	Summerview Low Pressure Forcemain (Construction)	\$334,120	\$0	\$334,120
10280243	AM	ALW	Hydraulic Modeling 2023 (Planning)	\$1,200,000	\$0	\$1,200,000
10280723	AM	ALW	Critical Asset Management Projects 2023 (Construction)	\$6,000,000	\$0	\$6,000,000
10281100	AM	FAC	LMWWTP Solids Disposal With Odor Control (Construction)	\$80,060,000	\$0	\$80,060,000
10281323	AM	ALW	Prioritized Wastewater Collection System Improvements 2023 (Construction)	\$12,000,000	\$0	\$12,000,000
10282023	AM	ALW	CIP Planning Projects 2023 (Planning)	\$2,100,000	\$0	\$2,100,000
10630000	AM	SUP	Muddy Creek FEMA Property Acquisition & Floodplain Reconfiguration (Construction)	\$172,000	\$0	\$172,000
<b>Total Cost for 34 ASSET Projects in 2023</b>				<b>\$144,396,162</b>	<b>\$0</b>	<b>\$144,396,162</b>
<b>Grand Totals for 44 Projects in 2023</b>				<b>\$296,341,695</b>	<b>\$0</b>	<b>\$296,341,695</b>



**2024 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**WWIP Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10142910	WWIP	SRC	Ludlow Run Sustainable Source Control (Construction)	\$11,266,414	\$0	\$11,266,414
10144888	WWIP	FAC	MCWWTP High Rate Treatment Pump Station (Construction)	\$125,000,000	\$0	\$125,000,000
10180124	WWIP	ALW	Main Sewer Renewal Program 2024 (Construction)	\$6,000,000	\$0	\$6,000,000
10180224	WWIP	ALW	Manhole Renewal Program 2024 (Construction)	\$973,300	\$0	\$973,300
10190224	WWIP	ALW	Phase 2 WWIP Planning 2024 (Planning)	\$5,000,000	\$0	\$5,000,000
11142745	WWIP	SEP	CSO 488 Strategic Sewer Separation Phase A (Construction)	\$6,398,850	\$0	\$6,398,850
11242844	WWIP	SEP	CSO 12 Sewer Separation Outfall to Mill Creek (Construction)	\$26,050,956	\$0	\$26,050,956
11530000	WWIP	REP	Upper Muddy Creek Interceptor Replacement (Construction)	\$6,782,000	\$0	\$6,782,000
<b>Total Cost for 8 WWIP Projects in 2024</b>				<b>\$187,471,520</b>	<b>\$0</b>	<b>\$187,471,520</b>



## 2024 CIP

### Metropolitan Sewer District of Greater Cincinnati

#### OTHER Projects

Project ID	CIP Type	Project Type	Project Name	MSD	Other	Total
10199024	OTHER	ALW	Program Management and Support Services 2024 (Design)	\$3,800,000	\$0	\$3,800,000
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$0	\$5,000,000
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$0	\$5,500,000
<b>Total Cost for 3 OTHER Projects in 2024</b>				<b>\$14,300,000</b>	<b>\$0</b>	<b>\$14,300,000</b>



## 2024 CIP

# Metropolitan Sewer District of Greater Cincinnati

## ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10222015	AM	PSE	Stratford Lake Force Main Renewal (Construction)	\$653,104	\$0	\$653,104
10230054	AM	FAC	Muddy Creek WWTP Disinfection Upgrades (Construction)	\$2,628,400	\$0	\$2,628,400
10230160	AM	REP	Glenway Avenue at Parkcrest Lane Sewer (Design,Easement)	\$320,000	\$0	\$320,000
10230170	AM	REP	Harrison Avenue North and South Hydraulic Improvements (Design,Easement)	\$955,000	\$0	\$955,000
10232005	AM	REP	Benz Avenue (HN 1111) Sewer Replacement (Design,Easement)	\$92,000	\$0	\$92,000
10240200	AM	REP	Harvey Ave-Hickman Ave Sewer Replacement (Construction)	\$1,440,000	\$0	\$1,440,000
10240426	AM	PSE	Pleasant Run Pump Station Upgrades (Construction)	\$29,509,000	\$0	\$29,509,000
10240465	AM	REP	Hosea Street Sewer Replacement (Design,Easement)	\$359,700	\$0	\$359,700
10240525	AM	REP	Victory Parkway Sewer Rehabilitation (Construction)	\$1,949,000	\$0	\$1,949,000
10240600	AM	FAC	Mill Creek WWTP Electrical Arc Flash Protection (Planning)	\$500,000	\$0	\$500,000
10240740	AM	REP	Tennessee Avenue (HN 1754) Sewer Replacement (Construction)	\$320,000	\$0	\$320,000
10240755	AM	REP	Victory Parkway at Ledgewood Drive Sewer Replacement (Construction)	\$960,000	\$0	\$960,000
10240760	AM	REP	Highland and Burnet Sewer Replacement (Construction)	\$200,400	\$0	\$200,400
10240775	AM	REP	Gilbert Avenue at Casino Sewer Replacement (Construction)	\$4,924,700	\$0	\$4,924,700
10240790	AM	REP	Clifton Avenue at Parker Street Sewer Replacement (Design,Easement)	\$2,340,000	\$0	\$2,340,000
10240800	AM	REP	4511 Reading Road Sewer (Design,Easement)	\$1,000,000	\$0	\$1,000,000
10240815	AM	REP	150 Caldwell Drive Sewer (Design,Easement)	\$93,000	\$0	\$93,000
10240820	AM	REP	Reading Road at Stewart Place Sewer Replacement (Construction)	\$300,000	\$0	\$300,000
10240845	AM	REP	Taft Road & McMillan Street Sewer Replacement (Construction)	\$8,130,000	\$0	\$8,130,000
10240870	AM	REP	911 McPherson Avenue Sewer Replacement (Construction)	\$1,024,000	\$0	\$1,024,000
10242025	AM	REP	Davey Avenue to Hamilton Avenue Sewer Replacement (Construction)	\$513,100	\$0	\$513,100
10242030	AM	REP	Dorchester Avenue at Highland Avenue Sewer Replacement (Construction)	\$1,516,100	\$0	\$1,516,100



## 2024 CIP

# Metropolitan Sewer District of Greater Cincinnati

## ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10242035	AM	REP	Reading Road - 12th Street to E Liberty Street Sewer Replacement (Construction)	\$2,820,200	\$0	\$2,820,200
10242080	AM	REP	Fenton Avenue (HN 1336) Sewer Relocation (Design,Easement)	\$435,000	\$0	\$435,000
10242085	AM	PSE	Village Woods Pump Station and System Improvements (Construction)	\$524,000	\$0	\$524,000
10242090	AM	REP	Donna Lane & Ester Marie Drive Sewer Relocation and Rehab (Design,Easement)	\$295,000	\$0	\$295,000
10242105	AM	REP	Loth Street (HN 2272) Sewer Relocation and Rehab (Design,Easement)	\$732,000	\$0	\$732,000
10242130	AM	FAC	MCWWTP Primary Settling Electrical Equipment Replacement (Design)	\$280,000	\$0	\$280,000
10242135	AM	REP	Mill Creek Interceptors Rehabilitation (Construction)	\$4,300,000	\$0	\$4,300,000
10242155	AM	REP	Morrison Avenue Sewer Replacement (Design,Easement)	\$590,000	\$0	\$590,000
10250040	AM	FAC	Polk Run WWTP Effluent Pumping Improvements (Design)	\$466,566	\$0	\$466,566
10270155	AM	REP	Paxton Avenue Sewer Rehabilitation (Construction)	\$1,734,200	\$0	\$1,734,200
10270220	AM	REP	Tusculum Avenue at Woodbridge Sewer Replacement (Construction)	\$145,500	\$0	\$145,500
10270225	AM	REP	Elsmere Avenue from Slane to Lafayette Sewer Replacement (Construction)	\$806,000	\$0	\$806,000
10272045	AM	REP	Celeron Avenue Sewer Rehabilitation (Design,Easement)	\$735,000	\$0	\$735,000
10280244	AM	ALW	Hydraulic Modeling 2024 (Planning)	\$1,200,000	\$0	\$1,200,000
10280724	AM	ALW	Critical Asset Management Projects 2024 (Construction)	\$6,000,000	\$0	\$6,000,000
10281324	AM	ALW	Prioritized Wastewater Collection System Improvements 2024 (Construction)	\$12,000,000	\$0	\$12,000,000
10282024	AM	ALW	CIP Planning Projects 2024 (Planning)	\$2,100,000	\$0	\$2,100,000
<b>Total Cost for 39 ASSET Projects in 2024</b>				<b>\$94,890,970</b>	<b>\$0</b>	<b>\$94,890,970</b>
<b>Grand Totals for 50 Projects in 2024</b>				<b>\$296,662,490</b>	<b>\$0</b>	<b>\$296,662,490</b>



**2025 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**WWIP Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10130280	WWIP	PSE	Addyston Pump Station Elimination (Construction)	\$2,584,754	\$0	\$2,584,754
10142420	WWIP	SEP	Vine Street at Erkenbrecher Avenue Sewer Separation (Construction)	\$22,500,000	\$0	\$22,500,000
10180125	WWIP	ALW	Main Sewer Renewal Program 2025 (Construction)	\$6,000,000	\$0	\$6,000,000
10180225	WWIP	ALW	Manhole Renewal Program 2025 (Construction)	\$973,300	\$0	\$973,300
10190225	WWIP	ALW	Phase 2 WWIP Planning 2025 (Planning)	\$5,000,000	\$0	\$5,000,000
<b>Total Cost for 5 WWIP Projects in 2025</b>				<b>\$37,058,054</b>	<b>\$0</b>	<b>\$37,058,054</b>



**2025 CIP**  
**Metropolitan Sewer District of Greater Cincinnati**  
**OTHER Projects**

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10199025	OTHER	ALW	Program Management and Support Services 2025 (Design)	\$3,500,000	\$0	\$3,500,000
13090000	OTHER	PRG	Programmatic Contingency (Design)	\$5,000,000	\$0	\$5,000,000
13099999	OTHER	ALW	MSD LABOR (Design)	\$5,500,000	\$0	\$5,500,000
<b>Total Cost for 3 OTHER Projects in 2025</b>				<b>\$14,000,000</b>	<b>\$0</b>	<b>\$14,000,000</b>



## 2025 CIP

### Metropolitan Sewer District of Greater Cincinnati

### ASSET Projects

<b>Project ID</b>	<b>CIP Type</b>	<b>Project Type</b>	<b>Project Name</b>	<b>MSD</b>	<b>Other</b>	<b>Total</b>
10230655	AM	REP	Muddy Creek Road and Rosebud Drive Sewer Replacement (Construction)	\$452,000	\$0	\$452,000
10232010	AM	FAC	MUWWTP Outfall Manhole Repair (Design)	\$225,000	\$0	\$225,000
10232025	AM	REP	3731 Glenmore Avenue Sewer Evaluation (Construction)	\$380,000	\$0	\$380,000
10240445	AM	REP	Colton Lane Sewer Replacement (Construction)	\$218,200	\$0	\$218,200
10240465	AM	REP	Hosea Street Sewer Replacement (Construction)	\$2,453,400	\$0	\$2,453,400
10240640	AM	FAC	MCWWTP Dewatering Building Improvements (Design)	\$1,288,000	\$0	\$1,288,000
10240720	AM	REP	Valleyview Court Sewer Replacement (Construction)	\$734,000	\$0	\$734,000
10240725	AM	REP	Shaffer Avenue Sewer Replacement (Construction)	\$907,400	\$0	\$907,400
10240735	AM	REP	De Votie Avenue Sewer Replacement (Construction)	\$588,000	\$0	\$588,000
10240750	AM	REP	Seton Avenue (HN 916) Sewer Replacement (Construction)	\$328,000	\$0	\$328,000
10240765	AM	REP	Fyffe Avenue Sewer (Design,Easement)	\$264,000	\$0	\$264,000
10240780	AM	REP	Galbraith Rd to Sheldon Avenue Sewer Replacement (Construction)	\$413,800	\$0	\$413,800
10240795	AM	REP	Central to McMicken at Stark St Sewer Replacement (Construction)	\$1,712,900	\$0	\$1,712,900
10240810	AM	REP	Overlook Avenue near Glenway Ave Sewer Replacement (Construction)	\$238,000	\$0	\$238,000
10240875	AM	REP	Ledgewood Ave Sewer Replacement (Construction)	\$2,460,000	\$0	\$2,460,000
10242020	AM	FAC	Mill Creek WWTP Disinfection Improvement (Construction)	\$8,372,500	\$0	\$8,372,500
10242120	AM	REP	Elberon Avenue Sewer (Construction)	\$1,010,000	\$0	\$1,010,000
10242125	AM	REP	Sycamore Street Sewer (Construction)	\$1,930,000	\$0	\$1,930,000
10242130	AM	FAC	MCWWTP Primary Settling Electrical Equipment Replacement (Construction)	\$1,030,000	\$0	\$1,030,000
10280245	AM	ALW	Hydraulic Modeling 2025 (Planning)	\$1,200,000	\$0	\$1,200,000
10280725	AM	ALW	Critical Asset Management Projects 2025 (Construction)	\$6,000,000	\$0	\$6,000,000
10281325	AM	ALW	Prioritized Wastewater Collection System Improvements 2025 (Construction)	\$12,000,000	\$0	\$12,000,000
10282025	AM	ALW	CIP Planning Projects 2025 (Planning)	\$2,100,000	\$0	\$2,100,000
<b>Total Cost for 23 ASSET Projects in 2025</b>				<b>\$46,305,200</b>	<b>\$0</b>	<b>\$46,305,200</b>
<b>Grand Totals for 31 Projects in 2025</b>				<b>\$97,363,254</b>	<b>\$0</b>	<b>\$97,363,254</b>