

2024 CAPITAL IMPROVEMENT PLAN SUMMARY

		Programmed
ore Business CIP Category / Project Title	Phase	Amount ¹
ater Delivery		
Corporate		
Eastside Operations Center Fuel Facility	Construction	5,250,00
General Legal Services - WD	Acquisition	151,40
Water Delivery OCCC	Construction	16,531,3
Water Delivery Overhead	Overhead	11,750,00
Corporate Total		33,682,7
Mains - Replacement		
Dead-End Water Main Elimination	Construction	6,615,0
Governmental Water Mains	Construction	42,000,0
Highland-Goliad Water Main Replacement	Construction	13,000,4
Valves, Services and Meter Replacements	Construction	17,850,0
Water Main Replacement Engineering Contract	Design	4,462,5
Water Main Replacement Geotechnical Services Contract	Design	210,0
Mains - Replacement Total		84,137,9
Mains - New		
Mathis Rd Hardy Rd. to Waterwood Pass Approach Main	Construction	4,250,4
Water Main Oversizing	Construction	38,474,0
West Grosenbacher Road New Water Main	Design	709,4
Mains - New Total		43,433,8
Production		
Evans PZ 1258 Booster Station Improvements Project	Design	787,5
Indian Hills and Verano Elevated Storage Tanks	Construction	33,591,5
King Street Pump Station Rehabilitation and New Well #6	Construction	5,565,0
Knights Cross Standpipe No. 2	Construction	8,925,0
Marbach Pump Station Rehabilitation (Phase 9)	Construction	11,709,2
Old Pearsall Pump Station Test Well	Construction	525,0
Patton 2.0 MG Elevated Storage Tank	Design	2,940,0
Production Facilities Engineering Contract	Design	1,575,0
Pump Station Generators and Resiliency Measures	Design/Construction	64,251,9
Silver Mountain Pump Station Upgrades	Construction	8,400,0
Production Total	Construction	138,270,3
Jahar Daliman, Tahal		\$ 299,524.8
ater Delivery Total		\$ 299,524,8
/astewater		
Corporate Footside Operations Contar Fuel Facility	Construction	F 2F0 0
Eastside Operations Center Fuel Facility		5,250,0
General Legal Services - WW	Acquisition	417,0
Wastewater OCCC	Construction	7,087,5
Wastewater Overhead	Overhead	11,250,0
Corporate Total		24,004,5
Mains - Replacement	_	
Governmental Wastewater Mains	Construction	21,000,0
Main Replacements - Wastewater	Construction	3,675,0
Wastewater Laterals	Construction	5,565,0
Wastewater Main Replacement Construction (CMOM)	Construction	32,360,0
Wastewater Main Replacement Engineering Contract	Design	4,474,8
Wastewater Main Replacement Geotechnical Services Contract	Design	210,0
W-52 Culebra Creek Sewer Capacity Relief Project	Construction	37,947,3
W-9 Upper Leon Creek Sewer Capacity Storage and Relief Project	Construction	77,988,0 183,220,4
Mains - Replacement Total		100,220,4
Mains - Replacement Total		
Mains - New	Construction	י כדר חר
·	Construction	20,373,3 20,373,3

¹ Includes 5.0% projected inflation

2024 CAPITAL IMPROVEMENT PLAN SUMMARY

Core Business CIP Category / Project Title Wastewater, continued	Phase	. 1
Wastewater, continued		Amount ¹
Treatment		
Medio Creek WRC Control System Upgrades	Design	1,775,5
Medio Creek WRC Influent Lift Station Improvements	Design	1,620,1
Salado Creek WRC Flow Management Upgrades	Design	3,855,6
Steven M. Clouse WRC Flow Management Upgrades	Design	1,036,3
Treatment Facilities Engineering Contract	Design	1,575,0
Treatment Total		9,862,6
Wastewater Total		\$ 237,461,0
Water Supply		
Recycled Water		
Recycled Water OCCC	Construction	262,5
Recycled Water Governmental Adjustments	Construction	420,0
Recycled Water Overhead	Overhead	325,0
Recycled Water Total		1,007,5
Water Resources		
General Legal Services - WR	Acquisition	26,2
H2Oaks ASR Lime System Improvements Project	Construction	5,418,0
Water Resources OCCC	Construction	1,050,0
Water Resources Overhead	Overhead	10,000,0
Water Resources Total		16,494,2
Water Supply Total		\$ 17,501,7
Chilled Water		
Chilled Water		
Central Plant Electrical, Cooling Tower, and Metering Upgrades	Construction	7,120,8
Chilled Water OCCC	Construction	134,4
Chilled Water Overhead	Overhead	325,0
General Legal Services - CW	Acquisition	52,5
Port SA Building 1625 Plant Chiller #1 Replacement	Construction	903,3
Port SA Building 1625 Plant Controls	Construction	1,155,1
Port SA Building 356 Plant Electrical Upgrades and Controls	Construction	3,465,3
Chilled Water Total		\$ 13,156,5
Grand Total		\$ 567,644,2

¹ Includes 5.0% projected inflation



Project: Eastside Operations Center Fuel Facility

Project ID: Pro-11533

Programmed Amount: \$5,250,000

Core Business: Water Delivery

Category: Corporate WD

Phase: Construction

Council District: District 02



Description and Scope:

This project will construct a new fueling facility at the Eastside Operations Center (ESOC) using above-ground fuel storage tanks (AGTs), a new ice and water station for SAWS crews, a new waste oil collection system with above-ground waste oil tanks for fleet services, a new emergency generator to provide emergency power for the service center, relocation of an existing emergency generator to power the supply building and new fuel station. This project also includes removal of the existing fuel station, site grading improvements, fencing, lighting, and paving work.

Justification:

ESOC is one of SAWS main hubs for emergency response for Distribution and Collection. The fuel station at ESOC is currently in poor condition and unreliable. The UGTs are more than 30 years old and have reached the end of their service life. If the fuel station goes down, crews must drive to Mission Road Service Center, Steven M, Clouse Water Recycling Center, or Northeast Operations Center to refuel. The emergency generator serving ESOC is also not large enough to adequately serve the new Operations Center so electrical service to some critical components are not available in the event we lose power at the facility.

Project: General Legal Services - WD - 2024

\$151,404

Project ID: Pro-12319

Core Business: Water Delivery

Category: Corporate WD

Phase: Acquisition

Council District: System Wide



Description and Scope:

Programmed Amount:

Specialized legal support is required for critical projects.

Justification

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

Project: Water Delivery OCCC - 2024

Project ID: Pro-12324

Programmed Amount: \$16,531,316

Core Business: Water Delivery

Category: Corporate WD

Phase: Construction

Council District: System Wide



Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over \$100,000.

Project: Water Delivery Overhead - 2024

Project ID: Pro-12325

Programmed Amount: \$11,750,000

Core Business: Water Delivery

Category: Corporate WD

Phase: Overhead

Council District: System Wide



Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2023 and prior year CIP projects and the future 2024 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Project: Dead-End Water Main Elimination - 2024

Project ID: Pro-12335

Programmed Amount: \$6,615,000

Core Business: Water Delivery

Category: Main Replacement - Water

Phase: Construction

Council District: System Wide



Description and Scope:

The Dead-End Main (DEM) Flushing Program is a required program to meet Texas Commission on Environmental Quality (TCEQ) regulations. There are approximately 10,397 DEMs in the SAWS distribution system. DEM locations are reviewed for abandonment or elimination due to potential quality issues resulting from the mains not holding chlorine residual, which cannot be solved with auto-flushers. The design consultant for this project prepared design plans to eliminate 34 dead-end water mains that are the most practical to eliminate. This funding is for construction work associated with eliminating these DEMs that were designed in 2022. This is part of an on-going program to satisfy TCEQ requirements.

Justification:

TCEQ highly encourages DEM's to be eliminated where practical. Implementation of the DEM Elimination Project will reduce the overall number of DEMs required to be flushed. Eliminating the DEMs where feasible will reduce staff time and resources in flushing these sites.

Project: Governmental Water Mains - 2024

Project ID: Pro-12339

Programmed Amount: \$42,000,000

Core Business: Water Delivery

Category: Governmental Water

Phase: Construction

Council District: System Wide



Description and Scope:

The governmental water mains program consists of projects implemented in conjunction with other government agencies infrastructure work. The program includes replacement of water mains in poor condition, adjustment of water mains whose existing alignment conflicts with proposed new street alignment, and installation of new water mains needed to provide additional capacity.

SAWS participates in the Utility Coordination Council and jointly plans and reviews infrastructure improvements with COSA, Bexar County, CPS, TXDOT, AT&T, and other agencies, to maximize effectiveness of public infrastructure.

Justification

Replacing and/or adjusting aging infrastructure in conjunction with other agencies planned street work is the most cost-effective approach to infrastructure management. It minimizes the cost of construction andthe potential of utility failure under a new street.

Project: Highland-Goliad Water Main Replacement

Water Delivery

Project ID: Pro-11628
Programmed Amount: \$13,000,428

Category: Main Replacement - Water

Phase: Construction

Council District: District 03



Description and Scope:

Core Business:

The Highland-Goliad Water Main Replacement Project will install approximately 3.3 miles of new 8-inch and 12-inch water mains in the neighborhood northwest of the Goliad Road and East Southcross Boulevard intersection. The existing pipes will be abandoned in the alleys and the new main will be installed in the streets. Yard piping will be installed to connect existing services to the new water mains.

Justification:

The purpose of this project is to replace deteriorating water mains that have a high probability of failure and are near the end of their useful life. The mains are made of Asbestos Cement pipe, Cast Iron, Ductile Iron and Concrete Pressure pipe with a maximum age of 72 years. Additionally, these mains have a history of water main failure and service line failure work orders over the past 10 years. Most of the mains are in alleys and will require alley services to be rerouted to new mains replaced in the streets.

Project: Valves, Services and Meter Replacements - 2024

Project ID: Pro-12337

Programmed Amount: \$17,850,000

Core Business: Water Delivery

Category: Main Replacement - Water

Phase: Construction

Council District: System Wide



Description and Scope:

This project funds the replacement of water mains, valves, hydrants, and meters within the SAWS distribution system. When infrastructure fails, it is evaluated to determine the best repair method. When replacement is necessary, it is evaluated to determine whether replacement by SAWS crews or a contractor would be more effective and efficient.

Justification:

Replacement work is necessary to restore service and is more efficient than repair.

Project: Water Main Replacement Engineering Contract - 2024

Project ID: Pro-12338

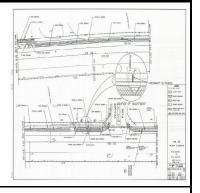
Core Business: Water Delivery

Category: Main Replacement - Water

\$4,462,500

Phase: Design

Council District: System Wide



Description and Scope:

Programmed Amount:

This project funds design services to replace water mains that have experienced a high rate of main failure. These projects vary in size and location and may require the solicitation of contractor construction services on an urgent basis. The projects will replace sub-standard or deteriorated water mains requiring immediate replacements.

Justification:

Design of mains to be replaced is necessary to restore and maintain water service. This line item includes funding for design of projects identified as part of the Water Risk and Condition Assessment.

Project: Water Main Replacement Geotechnical Services Contract - 2024

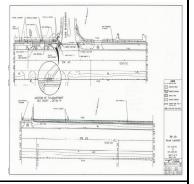
Project ID: Pro-12344
Programmed Amount: \$210,000

Core Business: Water Delivery

Category: Main Replacement - Water

Phase: Design

Council District: System Wide



Description and Scope:

SAWS is pursuing professional engineering services related to geotechnical and construction materials testing and reporting.

Justification:

The geotechnical and construction materials testing will improve quality control and assurance of SAWS construction projects.

Project: Mathis Rd. - Hardy Rd. to Waterwood Pass Approach Main

Project ID: Pro-00174
Programmed Amount: \$4,250,400

Core Business: Water Delivery

Category: Mains New - Water

Phase: Construction

Council District: OCL



Description and Scope:

This project will upgrade the existing 4-inch and 6-inch water lines along Mathis Rd from Hardy Rd. to the existing 16-inch water main near Waterwood Pass Dr. In total, the project will install 11,400 feet of new 12-inch water main, upgrading the existing lines to current SAWS standards.

Justification:

This 12- inch water main will replace the undersized existing 4-inch water mains and supply redundancy for approximately 1,500 customers within the far east pressure zone 830 area. This project will also serve projected growth in southern pressure zone 830. Service laterals will be relayed and connected to existing meters and new unmetered services will be provided to vacant lots.

Project: Water Main Oversizing - 2024

Project ID: Pro-12350

Programmed Amount: \$38,474,008

Core Business: Water Delivery

Category: Mains New - Water

Phase: Construction

Council District: System Wide



Description and Scope:

This project funds SAWS proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer or single customer. Developers are required to build necessary offsite infrastructure to meet the needs of their development. When growth is projected in adjacent tracts, SAWS contributes money to increase the size of the mains to serve the additional growth. Sharing in the cost is beneficial to both SAWS and the developer and prevents the construction of parallel smaller sized mains.

Justification:

Participating in oversizing is a cost-effective way to meet the needs of growth. It is funded by impact fees collected from new development.

Project: West Grosenbacher Road New Water Main

Project ID: Pro-11930
Programmed Amount: \$709,458

Core Business: Water Delivery

Category: Mains New - Water

Phase: Design

Council District: OCL



Description and Scope:

This project will design a new 16-inch water main from the existing 16-inch main on W Grosenbacher Rd to the existing 12-inch main on W Grosenbacher Rd. A portion of this new main serves as a border main for the Dickerson Tract Subdivision (USA-15652). This main will create a loop for Pressure Zone 1080 from the existing 16-inch main heading south on Grosenbacher Rd. A future project will extend the main to the west and connect it to the 24-inch main on Stevens Parkway.

Justification:

The project will provide redundancy to approximately 1,800 existing customers and approximately 1,000 new customers. In addition, the project will help stabilize pressures for a future Pressure Reducing Valve to eliminate the Mountain Laurel facility.

Project: Evans PZ 1258 Booster Station Improvements Project

Project ID: Pro-11473
Programmed Amount: \$787,500

Core Business: Water Delivery

Category: Production

Phase: Design

Council District: District 09



Description and Scope:

This project will provide additional pumping capacity at the Evans Booster Station by replacing the existing pressure zone (PZ) 1258 high service pumps (HSP) #1 and #3 with new 2,800 gallons per minute (GPM) pumps. Additionally, the project includes new motors, flow meters, combination air valve, concrete foundations, drain lines, modifications to electrical cabinets, and SCADA programming services for a complete in place facility. For PZ 1258 HSP, two Mercoid pressure switches need to be replaced. The pump, motor, and base for PZ 1258 HSP 2 needs to be blasted and recoated. All above ground piping and electrical cabinets for PZ 1258 High Service pumps 1, 2, 3, and surge relief need to be blasted and recoated. All above ground piping, valves, and electrical at tank inlet valve station needs to be blasted and recoated.

Justification

Pressure zone 1258 is currently deficient in terms of high service pumping capacity given the number of customer connections. An additional 4 million gallons per day (MGD) is required at the Evans Booster Station. This project to provide additional pumping capacity is mandatory given the PZ does not currently meet TCEQ requirements for high service pumping capacity.

Project: Indian Hills and Verano Elevated Storage Tanks

Project ID: Pro-11471

Programmed Amount: \$33,591,577

Core Business: Water Delivery

Category: Production

Phase: Construction

Council District: OCL



Description and Scope:

This project will construct two elevated storage tanks (EST), a 2.5-million-gallon (MG) EST on Indian Hills Lane on the north side of San Antonio and a 3.0-MG EST on S. Zarzamora Street on the south side of San Antonio. In addition to construction of two elevated composite water storage tanks, this project will install piping, fencing, pavement, SCADA controls, electrical and security features.

Justification:

The 2017 Water Master Plan indicated pressure zone (PZ) 1400W and 790 did not meet TCEQ elevated storage requirements. To overcome this deficit, and to deal with aging infrastructure, the new Indian Hills 2.5-MG EST and Verano 3.0-MG EST is recommended. In addition, the project will alleviate areas of low pressure in the northern part of PZ 1400W observed in existing system modeling and it will supply storage for the existing Indian Hills Booster Pump Station.

Project: King Street Pump Station Rehabilitation and New Well #6

Project ID: Pro-00413

Programmed Amount: \$5,565,087

Core Business: Water Delivery

Category: Production

Phase: Construction

Council District: District 04



Description and Scope:

This project was previously budgeted in 2022 for \$18,941,467. Additional funds are needed for the project in 2024 to cover increased project costs due to inflation and material cost increases. The new total for this project is \$24,506,555. King Street Pump Station is a former Bexar-Met primary pump station. This pump station includes three wells, three high service pumps, and a 500,000-gallon ground storage tank. This project will be performed as a part of SAWS' continued work to improve and upgrade former Bexar-Met Water Production Facilities. The scope of this project includes the evaluation and replacement of the well pumps, high service pumps, electrical and communication equipment, and necessary site improvements such as grading, fencing, lighting, pavement, security, and yard piping. This project will also drill an additional production well #6 at the King Street Pump Station. This will include drilling, construction, developing, and testing of the well and the installation of a well pump, motor, well appurtenances, electrical, SCADA, collection piping and drainage piping.

Justification:

King Street Pump Station's mechanical and electrical components are aging and difficult to operate. These components need to be upgraded to improve the reliability and efficiency of the operation of this pump station. All the existing water wells located at the King Street Pump Station are over 60 years old and prone to failures. The additional well will provide redundancy should any of the existing wells fail and a new well is required to maintain current pump capacity. Additional production wells are required at this pump station to adequately deliver water to the customers in the future. Installation of the new production well will help meet peak water demand.

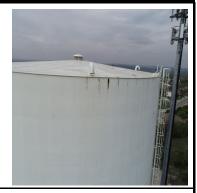
Project: Knights Cross Standpipe No. 2

Project ID: Pro-11499 Programmed Amount: \$8,925,000

Water Delivery Core Business:

Production Category: Phase: Construction

Council District: District 09



Description and Scope:

This project will construct a second standpipe within the existing site. The project includes all associated piping and valves, tank level controls and associated SCADA, tank overflow piping, and fencing. The project will help to mitigate current erosion issues associated with tank overflow events.

Justification:

Knights Cross is the primary source of water for pressure zone (PZ) 1295 and 1400. The existing tank is not accessible to SAWS personnel due to safety concerns and does not meet TCEQ requirements. Should there be a tank leak, the entire facility must be taken out of service. The additional standpipe will provide redundancy and additional storage for PZ 1295 and 1400. This redundancy also allows SAWS to rehabilitate the existing standpipe (Standpipe No. 1) that is currently in poor shape.

Project: Marbach Pump Station Improvements Project - Phase 9

Project ID: Pro-00225

Programmed Amount: \$11,709,294

Water Delivery Core Business: Category: Production Phase: Construction

Council District: District 04

Description and Scope:

This project was previously budgeted in 2023 for \$20,208,816. Additional funds are needed for the project in 2024 to cover increased project costs due to inflation and substantial material cost increases. The new total for this project is \$31,918,110. This facility is a primary pump station for SAWS and supplies water to the west side service areas along Loop 410. The pump station has a total well pumping capacity of 36.75 million gallons per day and a firm high service pumping capacity of 42 million gallons per day. This project is Phase 9 of the multi-year pump station improvements program, and it will replace high service pumps, well pumps, and electrical and SCADA equipment at the Marbach pump station. The project will also include necessary site improvements such as grading, fencing, lighting, pavement, security, and yard piping.

Justification:

This primary pump station was built in 1973. In 1991, an additional well and high service pumps were installed. Most of the existing electrical and mechanical equipment of the pump station exceeds the 20-25 year life expectancy. To meet the current codes, and to improve the efficiency of the pump station, mechanical and electrical components of the pump station need to be replaced.

Project: Old Pearsall Pump Station Test Well

Project ID: Pro-12408
Programmed Amount: \$525,000

Core Business: Water Delivery

Category: Production

Phase: Construction

Council District: Unknown

Description and Scope:

Additional production is needed to supplement and/or replace the water produced from the Anderson Pump Station (PS). The current rated well capacity at Anderson PS is 40 million gallons per day (MGD) total, 30 MGD firm, with a realized total capacity of about 33 MGD.

Justification:

A test well is needed at Old Pearsall PS to determine if this site is a viable candidate for additional well capacity.

Project: Patton 2.0 MG Elevated Storage Tank

Project ID: Pro-12207

Programmed Amount: \$2,940,000

Core Business: Water Delivery

Category: Production

Phase: Design

Council District: District 03



Description and Scope:

This project will design a 2 million gallon (MG) Elevated Storage Tank (EST) in Pressure Zone (PZ) 823 (soon to be integrated into PZ 828) to replace the existing McMullen EST. The project will include installing piping, fencing, pavement, SCADA controls, electrical and security features and will connect directly to the existing on-site 12-inch water main. The tank will be constructed near Hwy 90 and S. Gen McMullen.

Justification:

PZ 828 is in risk of violating TCEQ elevated storage requirements due to extensive growth in the east as well as the future integration of PZ 823. To meet TCEQ criteria for elevated storage SAWS needs an immediate increase in elevated storage capacity. In addition, PZ 828 also supplies water to PZ 750 through two Pressure Reducing Valves (PRV). The heavy reliance on these PRVs is causing pressure concerns in the western portion of 828 as more water is being transmitted to the east to feed PZ 750. The current General McMullen EST is significantly undersized and needs additional capacity to keep pace with the growth in PZ 750 and maintain reliable service. This project will stabilize pressures in the western portion of PZ 828 and provide additional storage once SAWS integrates PZ 828 with PZ 846 and ensure that SAWS meets TCEQ criteria. A future PZ 750 tank will support projected growth in PZ 750 and reduce its reliance on the PRVs.

Project: Production Facilities Engineering Contract 2024

Project ID: Pro-12336

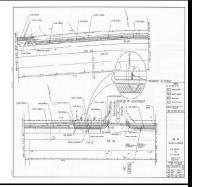
Programmed Amount: \$1,575,000

Core Business: Water Delivery

Category: Production

Phase: Design

Council District: System Wide



Description and Scope:

SAWS periodically has a need for general types of projects that entail evaluation, rehabilitation, improvement upgrades, addition/demolition, replacement/expansion of equipment and facilities. These project covers engineering services related to water production primary and secondary pump station facilities, elevated storage tank and ground storage tank sites, transmission mains (20-inch diameter and larger), valve and control valve replacement, yard piping, electrical upgrades, SCADA, programming, and other related projects of similar nature.

Justification:

A work order contract is created on an "as-needed" basis, and the scope of the services depends on the nature of each individual project. A work order will be issued upon identification of a project and determination of its scope and schedule.

Project: Pump Station Generators and Resiliency Measures

Construction

Project ID: Pro-11743

Programmed Amount: \$64,251,906

Core Business: Water Delivery

Category: Production

Council District: System Wide



Description and Scope:

This project will provide funding to design, purchase, and install generators and implement other resiliency measures at multiple selected pump stations.

Justification:

Phase:

Senate Bill 3 required water utilities, such as SAWS, to submit an emergency preparedness plan to the Texas Commission on Environmental Quality (TCEQ) by March 1, 2022. The Emergency Preparedness Plan must demonstrate a utility's ability to provide emergency operation of its water system during an extended power outage at a minimum water pressure of 20 pounds per square inch or at a water pressure level, as approved by TCEQ, as soon as safe and practicable following the occurrence of a natural disaster.

Project: Silver Mountain Pump Station Upgrades

Project ID: Pro-11945

Programmed Amount: \$8,400,000

Core Business: Water Delivery

Category: Production

Phase: Construction

Council District: OCL

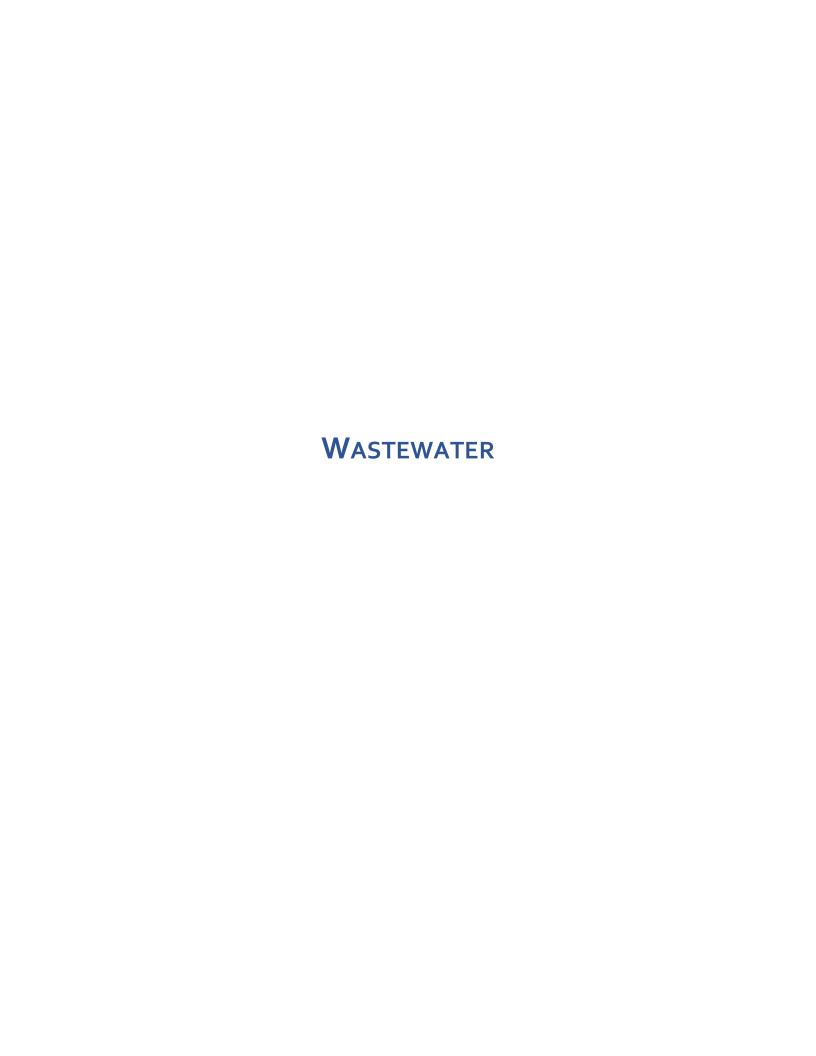


Description and Scope:

Silver Mountain Pump Station is a secondary pump station located on the City of San Antonio's southeast side. This project includes the demolition of existing concrete slabs, skid-mounted pump station, underground piping, electrical service lines, poles, equipment, duct banks, cabinets, and conduits. It will also install a new 1.0-million-gallon ground storage tank, a 3 million gallon per day (MGD) booster station and building, a 30,000-gallon hydro-pneumatic tank, a new electrical and instrumentation and controls system which will include a power generator, SCADA system and site security. The new tank will serve as ground storage for pressure zone (PZ) 920. The project will also include miscellaneous site improvements such as access driveways, fencing, grading, drainage, and the installation of a 4,100-ft long 12-inch water main along Silver Mountain Dr.

Justification:

The pumps, motors, electrical gear, and instrumentation and controls equipment have exceeded their life expectancy at the existing pump station. In addition, this area is anticipated to experience growth in the near future and a new tank and pump station is necessary to overcome the deficit that will be created by the growth. Lastly, the project is needed to alleviate areas of low pressure in the northern part of the PZ 920 observed in existing system modeling.



Project: Eastside Operations Center Fuel Facility

\$5,250,000

Project ID: Pro-11533

Core Business: Wastewater

Category: Corporate WW

Phase: Construction

Council District: District 02



Description and Scope:

Programmed Amount:

This project will construct a new fueling facility at the Eastside Operations Center (ESOC) using above-ground fuel storage tanks (AGTs), a new ice and water station for SAWS crews, a new waste oil collection system with above-ground waste oil tanks for fleet services, a new emergency generator to provide emergency power for the service center, relocation of an existing emergency generator to power the supply building and new fuel station. This project also includes removal of the existing fuel station, site grading improvements, fencing, lighting, and paving work.

Justification:

ESOC is one of SAWS main hubs for emergency response for Distribution and Collection. The fuel station at ESOC is currently in poor condition and unreliable. The UGTs are more than 30 years old and have reached the end of their service life. If the fuel station goes down, crews must drive to Mission Road Service Center, Steven M, Clouse Water Recycling Center, or Northeast Operations Center to refuel. The emergency generator serving ESOC is also not large enough to adequately serve the new Operations Center so electrical service to some critical components are not available in the event we lose power at the facility.

Project: General Legal Services - WW 2024

Project ID: Pro-12321

Programmed Amount: \$417,054

Core Business: Wastewater

Category: Corporate WW

Phase: Acquisition

Council District: System Wide



Description and Scope:

Specialized legal support is required for critical projects.

Justification

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

Project: Wastewater OCCC - 2024

System Wide

Project ID: Pro-12322

Programmed Amount: \$7,087,500

Core Business: Wastewater

Category: Corporate WW

Phase: Construction



Description and Scope:

Council District:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Core Business:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over \$100,000.

Project: Wastewater Overhead - 2024

Wastewater

Project ID: Pro-12323
Programmed Amount: \$11,250,000

Category: Corporate WW

Phase: Overhead

Council District: System Wide



Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2023 and prior year CIP projects and the future 2024 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Project: Governmental Wastewater Mains - 2024

 Project ID:
 Pro-10933

 Programmed Amount:
 \$21,000,000

 Core Business:
 Wastewater

Category: Governmental Sewer

Phase: Construction

Council District: System Wide



Description and Scope:

The governmental sewer mains program consists of projects implemented in conjunction with other government agencies infrastructure work. The program includes replacement of sewer mains in poor condition, adjustment of sewer mains whose existing alignment conflicts with proposed new street alignment, and installation of new sewer mains needed to provide additional capacity.

SAWS participates in the Utility Coordination Council, and jointly plans and reviews infrastructure improvements with COSA, Bexar County, CPS, TXDOT, AT&T, and other agencies, to maximize effectiveness of public infrastructure.

Justification

Replacing and/or adjusting aging infrastructure in conjunction with other agencies planned street work is the most cost-effective approach to infrastructure management. It minimizes the cost of construction and the potential of utility failure under a new street.

Project: Main Replacements - Wastewater

Project ID: Pro-12341

Programmed Amount: \$3,675,000

Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: System Wide



Description and Scope:

This project captures costs of the replacement of sewer mains when failures in the sewer system are encountered. SAWS crews determine the best method to restore service. If portions of the system must be replaced the project is evaluated to determine if SAWS crews, or contractors, will be the most effective or efficient means to complete the replacement.

Justification:

The replacement work is necessary to restore service and is required to comply with the EPA Consent Decree.

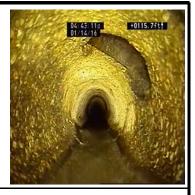
Project: Wastewater Laterals - 2024

Project ID: Pro-12342
Programmed Amount: \$5,565,000
Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: System Wide



Description and Scope:

This project replaces deteriorated customer sewer upper laterals from the sewer main to the customer's property line. Each year SAWS crews replace customer laterals when either televising or a reported problem indicates the lateral has become unserviceable.

Justification:

Replacement of sewer laterals is necessary to restore service and reduces inflow and infiltration, which reduces sewer overflows.

Project: Wastewater Main Replacement Construction (CMOM)

Project ID: Pro-12340
Programmed Amount: \$32,360,079
Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: System Wide



Description and Scope:

This project replaces urgent/emergency sewer mains identified in the Capacity, Management, Operation and Maintenance (CMOM) Program. The sewer mains identified for replacement are in poor and very poor condition.

Justification:

Sewer mains in poor and very poor condition are currently part of the CMOM program under monitoring. The condition of these assets will continue to degrade over time and may reach urgent or emergency status requiring expedited design and construction to ensure the protection of public health and safety.

Project: Wastewater Main Replacement Engineering Contract - 2024

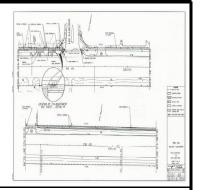
Project ID: Pro-12345
Programmed Amount: \$4,474,889

Category: Main Replacement - Sewer

Wastewater

Phase: Design

Council District: System Wide



Description and Scope:

Core Business:

This project funds design services to repair/replace sewer mains that have experienced or will experience cave-ins and overflows. These projects vary in size and location and may require the solicitation of contractor construction services on an urgent basis. These projects will be constructed to correct unsanitary and potentially hazardous conditions that pose a threat to public health and safety and are primarily projects required by the EPA Consent Decree as part of the Capacity, Management, Operation and Maintenance (CMOM) Program.

Justification:

Design of replacement/repair mains is necessary to restore and maintain wastewater service.

Project: Wastewater Main Replacement Geotechnical Services Contract - 2024

Project ID: Pro-12343

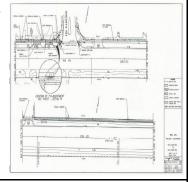
Programmed Amount: \$210,000

Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Design

Council District: System Wide



Description and Scope:

SAWS is pursuing professional engineering services related to geotechnical and construction materials testing and reporting.

Justification

The geotechnical and construction materials testing will improve quality control and assurance of SAWS construction projects.

Project: W-52 Culebra Creek Sewer Capacity Relief Project

 Project ID:
 Pro-00395

 Programmed Amount:
 \$37,947,397

Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: District 06



Description and Scope:

The W-52 Culebra Creek Sewer Capacity Relief Project will be constructed in northwest San Antonio. The project will replace approximately one mile of undersized 30-inch and 33-inch sewer main with 36-inch, 42-inch, and 60-inch diameter sanitary sewer pipe and related structures. Located south of Old Grissom Road within Culebra Creek, the project generally follows the creek to the intersection of Culebra and Leon Creek (adjacent to the W-9 Project).

Justification:

The W-52 Culebra Creek Sewer project will resolve the undersizing issue and reduce the likelihood of sanitary sewer overflows (SSOs) within the W-52 Culebra Creek Sewer Capacity Constraint Area. This project is required by the consent decree with the EPA.

Project: W-9 Upper Leon Creek Sewer Capacity Storage and Relief Project

Project ID: Pro-00280
Programmed Amount: \$77,988,095
Core Business: Wastewater

Category: Main Replacement - Sewer

Phase: Construction

Council District: District 06, District 07



Description and Scope:

The W-9 Upper Leon Creek Capacity Storage and Relief Project will be constructed in northwest San Antonio and consist of approximately 4.1 miles of 42-inch and 48-inch-diameter sewer pipe, and approximately one-quarter mile of 8-inch, 12-inch and 27-inch diameter sanitary sewer pipe and related structures. The limits of the W-9 project begins at the W-52 capacity constraint project near the confluence of Leon Creek and Culebra Creek. Construction will proceed upstream across Grissom and Bandera roads to the connection with the existing sewer system approximately three-quarters of a mile northeast of Bandera Road. The proposed improvements are aligned along Leon Creek stream banks and the City of San Antonio Leon Creek Greenway Park hike and bike trails.

Justification:

The W-9 Upper Leon Creek Capacity Constraint Area was identified as a capacity constraint project that will improve sanitary sewer system capacity, abandon poor condition pipeline segments, and relocate the alignment to reduce sanitary sewer overflows. This project is required by the consent decree with the EPA.

Project: Sewer Main Oversizing - 2024

\$20,373,360

Project ID: Pro-12351

Core Business: Wastewater

Category: Mains New - Sewer

Phase: Construction

Council District: System Wide



Description and Scope:

Programmed Amount:

This project funds SAWS' proportionate share of the cost of mains which are necessary to serve anticipated growth but are larger than the size main required by a developer or single customer. Developers are required to build necessary offsite infrastructure to meet the needs of their development. When growth is projected in adjacent tracts, SAWS contributes money to increase the size of the mains to serve the additional growth. Sharing in the cost is beneficial to both SAWS and the developer and prevents the construction of parallel smaller sized mains.

Justification:

Participating in oversizing is a cost-effective way to meet the needs of growth. It is funded by impact fees collected from new development.

Project: Medio Creek WRC Control System Upgrades

Design

Project ID: Pro-12300

Programmed Amount: \$1,775,550

Core Business: Wastewater

Category: Treatment

Council District: District 04

Description and Scope:

This project includes upgrading the existing Emerson Distributed Control System (DCS) to SAWS new standard programmable logic controller (PLC) based Allen Bradley System as well as upgrading the human-machine interface, PLCs, switches etc. at the Medio Creek Water Recycling Center (WRC).

Justification:

Phase:

To meet SAWS updated standards and replace Emerson DCS with a PLCs based system.

Project: Medio Creek WRC Influent Lift Station Improvements

Project ID: Pro-12306

Programmed Amount: \$1,620,150

Core Business: Wastewater

Category: Treatment

Phase: Design

Council District: District 04



Description and Scope:

This project will construct dedicated lift stations that service the Medio Creek Water Recycling Center (WRC). The current Medio Creek WRC lift station services both Plant 1 and Plant 2, splitting the flow via a manual valve. The current lift station pumps are mismatched in size, which complicates the operation. Additionally, the existing wet well is too shallow and has issues with overflowing during heavy/longer duration storm events.

Justification:

The lift stations will be built to ease the complexity that operators experience when trying to split flow accurately between the two plants. By constructing two lift stations this project will also add a layer of redundancy, as opposed to relying solely on a single lift station.

Project: Salado Creek WRC Flow Management Upgrades

Project ID: Pro-11981

Programmed Amount: \$3,855,600

Core Business: Wastewater

Category: Treatment

Design

Council District: District 03



Description and Scope:

The operation of the Salado Creek Water Recycling Center (SC WRC) Flow Equalization Basins (FEBs) is pivotal in managing the projected peak 2hour flow in the East Sewershed in the year 2050. The proposed Salado Creek WRC FEB diversion structure will allow SAWS a level of flexibility when transferring and holding flows before they reach the Steven M. Clouse Water Recycling Center (SMC WRC).

Justification:

Phase:

Wastewater flows from the East Sewershed flow to the SC WRC before continuing to the SMC WRC. The SC WRC has limited primary treatment capabilities and has no outfall discharge. The SC WRC has onsite FEBs that have a total storage volume of 22 MG, which are utilized during wet weather flow events. Flows that are treated at SC WRC or diverted for storage at SC WRC FEBs are returned to the East Sewershed and continue to the SMC WRC for processing. The 22 MG Salado Creek FEBs can reduce the East Sewershed peak flows papproximately 50 MGD. The Salado Creek FEBs would be triggered when East Sewershed flows increase above 79 MGD. Flows above 79 MGD would be diverted to the Salado Creek FEBs, allowing the East Sewershed peak flow to be capped at 79 MGD sent to the SMCWRC. The operation of the diversion structure and the FEBs is pivotal in developing an effective wet weather flow management strategy.

Project: Steven M. Clouse WRC Flow Management Upgrades

Treatment

Project ID: Pro-11975

Programmed Amount: \$1,036,350

Core Business: Wastewater

Phase: Design

Council District: District 03



Description and Scope:

Currently, the flow diversion line from the Leon Creek Water Recycling Center (LC WRC) does not have the ability to transfer directly to the Steven M. Clouse Water Recycling Center (SMC WRC) Flow Equalization Basin (FEB). A diversion box is proposed that will allow the flow to move to the SMC WRC FEBs or the headworks. This structure will improve the operational flexibility when managing flows at the LC WRC and SMC WRC. This project also incorporates electrical and instrumentation and controls related components, such as providing automated controls for gates and valves to fill or empty basins and transfer flows.

Justification:

Category:

The existing FEB diversion structure is limited in ways that it can receive and distribute flows. Currently, flows from the South Sewershed flow directly to the SMC WRC headworks facility for processing. There are no FEBs associated with this sewershed flow. To support the transfer of peak flows from LC WRC to the SMC WRC FEBs, a new diversion structure would have to be constructed on the existing SBSP to divert and discharge flows to SMC WRC FEBs. Improvements to flow management capabilities of the SMC WRC FEBs will help the entire system manage and process wastewater flows.

Project: Treatment Facilities Engineering Contract - 2024

Project ID: Pro-12346

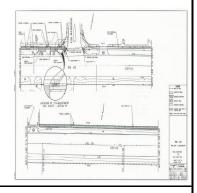
Programmed Amount: \$1,575,000

Core Business: Wastewater

Category: Treatment

Phase: Design

Council District: System Wide



Description and Scope:

This project will use work order contracts for engineering services of small but urgent projects. These contracts allow flexibility to execute projects without pulling funds from budgeted projects and avoid delays associated with conventional bid processes.

Justification

This work order contract will be on an "as-needed" basis, and the scope of the construction will depend on the nature of each individual project. A work order will be issued upon identification of a need for a construction activity and determination of its scope and schedule.



Project: Recycled Water Governmental Adjustments - 2024

\$420,000

Project ID: Pro-12329

Core Business: Water Supply

Category: Recycled Water

Phase: Construction

Council District: System Wide



Description and Scope:

Programmed Amount:

The governmental recycled water program consists of projects implemented in conjunction with other government agencies when they implement maintenance and/or capital improvement projects. Through this program, SAWS participates in the relocation and replacement of recycled water facilities, when appropriate or required. SAWS participates in the Utility Coordination Council and jointly plans and reviews infrastructure improvements with COSA, Bexar County, CPS, TXDOT, AT&T, and other agencies, to maximize effectiveness of public infrastructure.

Justification:

Replacing aging infrastructure in conjunction with other agencies planned street work is the most cost-effective approach to infrastructure management. It minimizes the cost of construction and minimizes the potential of utility failure under a new street.

Project: Recycled Water OCCC - 2024

Project ID: Pro-12347

Programmed Amount: \$262,500

Core Business: Water Supply

Category: Recycled Water

Phase: Construction

Council District: System Wide



Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over \$100,000.

Project: Recycled Water Overhead 2024

System Wide

Project ID: Pro-12331
Programmed Amount: \$325,000

Core Business: Water Supply

Category: Recycled Water

Phase: Overhead

Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2023 and prior year CIP projects and the future 2024 CIP projects.

Justification:

Council District:

Overhead costs are applied to SAWS personnel costs to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Project: General Legal Services - WR 2024

Project ID: Pro-12320

Programmed Amount: \$26,250

Core Business: Water Supply

Category: Water Resources

Phase: Acquisition

Council District: System Wide



Description and Scope:

Specialized legal support is required for critical projects.

Justification

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

Project: H2Oaks ASR Lime System Improvements Project

Project ID: Pro-00413

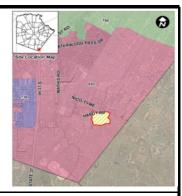
Programmed Amount: \$5,418,000

Core Business: Water Supply

Category: Water Resources

Phase: Construction

Council District: OCL



Description and Scope:

This project will consist of improvements to the Aquifer Storage and Recovery (ASR) lime storage system located at the H2Oaks Facility in south Bexar County near the Atascosa and Wilson County lines. The proposed upgrades at this site include the existing hydrated limes storage and feed system, restoration of the plant SCADA system, replacement/repair drainage lines to solve clogging issues, replacement of the raw water booster pumps to achieve the desired pressure for system flushing, slurry tank and associated piping and equipment, a new spiral access staircase for the existing silos, and improvements and automation of the existing CO2 system. This project was previously included in the 2022 CIP budget, however the funds were used to cover overages in the Arteria Pump Station Pumps & Motors project.

Justification

The existing lime system at the H2Oaks ASR Plant is approaching 20 years old and is at the end of its useful service life. Additionally, the existing lime slurry hoses have been prone to clogging and a new lime slurry loop system will be installed to prevent unnecessary maintenance.

Project: Water Resources OCCC - 2024

Project ID: Pro-12326

Programmed Amount: \$1,050,000

Core Business: Water Supply

Category: Water Resources

Phase: Construction

Council District: System Wide



Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over \$100,000.

Project: Water Resources Overhead - 2024

 Project ID:
 Pro-12327

 Programmed Amount:
 \$10,000,000

Core Business: Water Resources

Category: Corporate WR

Phase: Construction

Council District: System Wide

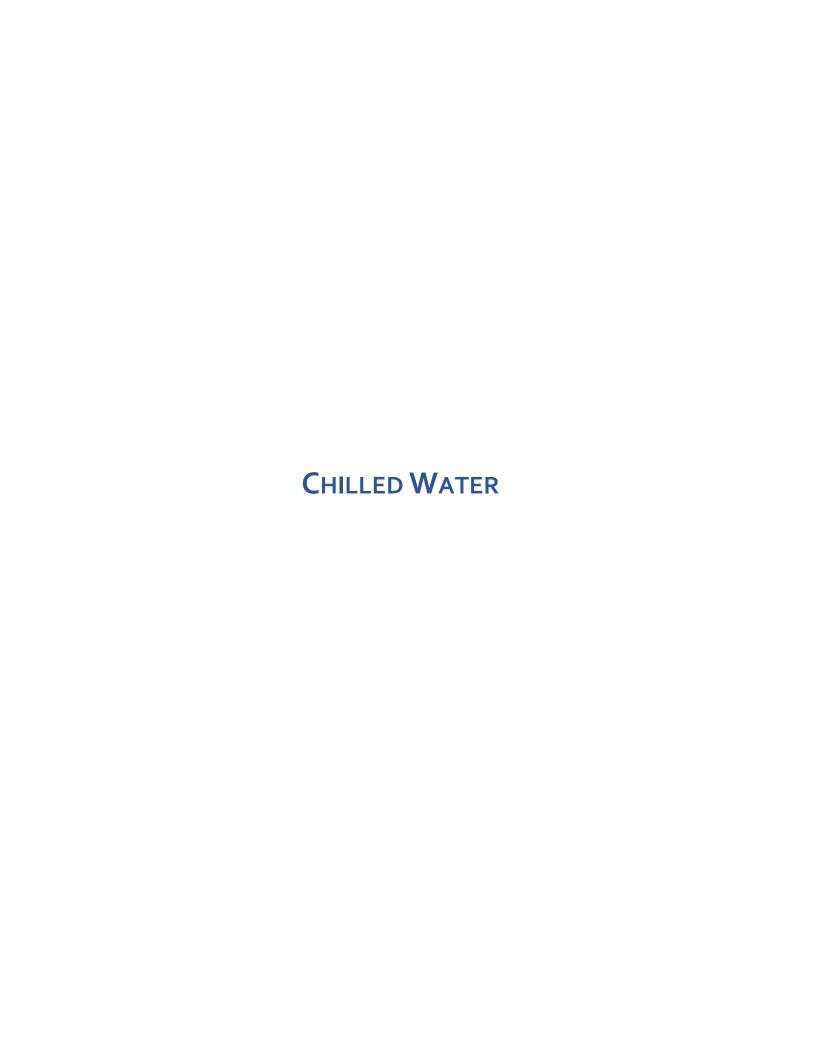


Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2023 and prior year CIP projects and the future 2024 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.



Project: Central Plant Electrical, Cooling Tower, and Metering Upgrades

Project ID: Pro-12365

Programmed Amount: \$7,120,850

Core Business: Chilled Water

Category: Chilled Water

Phase: Construction

Council District: District 01



Description and Scope:

This project will replace existing electrical distribution equipment, gear boxes, motors, and fans for cooling towers 3, 4, and 5, and replace existing cooling tower fill at the downtown Central Cooling Plant. It will also replace metering instrumentation in both the Central Plant and customer mechanical rooms.

Justification:

The electrical distribution equipment at the Central chilled water plant is past its useful life. As a result, reliability is a concern and replacement parts are difficult to acquire. The electrical equipment is also limiting the future cooling capacity of the plant at full buildout. Replacing the electrical equipment will help with reliability and ensure the plant can accommodate future cooling loads. These projects will improve the performance and reliability of the Central Plant which serves critical loads including the Convention Center, Alamodome, Grand Hyatt, Palacio Del Rio and more.

Project: Chilled Water OCCC - 2024

Project ID: Pro-12332

Programmed Amount: \$134,400

Core Business: Chilled Water

Category: Chilled Water

Phase: Construction

Council District: System Wide



Description and Scope:

The Owner Controlled Construction Changes (OCCC) fund was established to improve monitoring and efficiency of construction requested by SAWS. Funding amounts are determined by reviewing historical data and project schedules to determine the estimated amount needed for present and future years.

Justification:

Changes that occur on construction projects must be approved by SAWS Board of Trustees if over \$100,000.

Project: Chilled Water Overhead - 2024

Project ID: Pro-12333

Programmed Amount: \$325,000

Core Business: Chilled Water

Category: Chilled Water

Phase: Overhead

Council District: System Wide



Description and Scope:

SAWS overhead costs cover the direct costs associated with SAWS personnel that manage and support CIP projects during the capitalizable phases of the project. The overhead costs were calculated primarily using the capitalized costs from staff time charged using the CIP Time Tracker on an annualized basis and analyzing the remaining 2023 and prior year CIP projects and the future 2024 CIP projects.

Justification:

Overhead costs are applied to SAWS personnel costs to capture direct incremental costs associated with SAWS personnel that support the development and construction of CIP projects.

Project: General Legal Services - CW 2024

Project ID: Pro-12334
Programmed Amount: \$52,500

Core Business: Chilled Water
Category: Chilled Water
Phase: Acquisition

Council District: System Wide



Description and Scope:

Specialized legal support is required for critical projects.

Justification:

External legal support is sought only when there is insufficient internal legal staff to support the effort, or specialized legal expertise is required.

Project: Port SA Building 1625 Plant Chiller #1 Replacement

Project ID: Pro-12368

Programmed Amount: \$903,310

Core Business: Chilled Water

Category: Chilled Water

Phase: Construction

Council District: District 04



Description and Scope:

Replace chiller #1 at the Port San Antonio (SA) Building 1625 chilled water plant.

Justification:

Chiller #1 at the Port SA Building 1625 chilled water plant is past its useful life and more than 10% of the chiller's tubes have been plugged due to failure. Replacing this chiller will ensure the plant can reliably meet the cooling load requirements of Port San Antonio and US Air Force facilities.

Project: Port SA Building 1625 Plant Controls

Project ID: Pro-12367

Programmed Amount: \$1,155,127

Core Business: Chilled Water

Category: Chilled Water

Phase: Construction

Council District: District 04



Description and Scope:

This project will install an automation system to control operation of the plant. There are no automated controls in place at the Port San Antonio (SA) Building 1625 chilled water plant. All equipment must be operated manually and onsite which is inefficient from both a management and energy standpoint.

Justification:

Installing an automated controls system will allow staff to operate the plant remotely and incorporate optimization, which will improve energy efficiency. This project will allow SAWS to pass energy savings on to Port SA and US Airforce customers.

Project: Port SA Building 356 Plant Electrical Upgrades and Controls

Project ID: Pro-12366

Programmed Amount: \$3,465,382

Core Business: Chilled Water

Category: Chilled Water

Phase: Construction

Council District: District 04



Description and Scope:

This project will replace all existing electrical distribution equipment and install an automation system to control operation of the plant. The Port San Antonio (SA) Building 356 chilled water plant serves critical customers including Standard Aero, Boeing, and Chromalloy.

Justification

The electrical distribution equipment at the Port SA Building 356 chilled water plant is past its useful life. As a result, reliability is a concern and replacement parts are difficult to acquire. Replacing the electrical equipment will ensure reliability moving forward. There are no automated controls in place at the Port SA Building 356 chilled water plant. All equipment must be operated manually and onsite which is inefficient from both a management and energy standpoint. Installing an automated controls system will allow staff to operate the plant remotely and incorporate optimization which will improve energy efficiency.