

CIP 213002: Rehabilitation of Central Offload Facility



WRRF Rehabilitation of Central Offload Facility

- PROJECT SUMMARY
- Innovation
 - MP Right Sizing
 - System Reliability

Project Status

Active

Project Status Guide:

Active: One or more phases have started, including procurement
 New: First appearance in CIP
 Future Planned: No Phases have Started
 Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled
 Pending Closeout: Project at Substantial Completion but not closed out
 Archived: Project closed or completed for more than one year
 Reclassified: Projects that have been merged with other projects

Project Title **WRRF Rehabilitation of Central Offload Facility**

Project Significance Refurbishment or replacement of COF equipment including sludge storage bins, conveyors, and lime offload system, scrubber system, HVAC etc., will improve reliability and performance. This improvement will enable WRRF to be in compliance with NPDES permit

Year Added: 2010

Date Original BCE Prepared: 8/8/2016

Date BCE Last Updated: 9/18/2017

Project Engineer/Manager: Alfredo Lava

Title: Engineer

Phone: (313) 297-5940

Email: Alfredo.Lava@glwater.org

Manager: Ali Khraizat

Managing Dept WW Eng

CIP Type: Project

Budget: Wastewater

Project Classification Level 1: Wastewater

Project Classification Level 2: WRRF

Project Classification Level 3: Residuals Management

Project Location: City of Detroit

Fund: 5421

Cost Center: 892211

PROJECT INFORMATION

Scope of Work: The study, design and construction for the rehabilitation of the central offload facility includes bin activators, rotary feeder valves, knife gate valves, bottom hoppers, conveyors, and other associated items. The work also includes rehabilitation of HVAC system of the entire facility, lime offloading system, drainage system, elevator, and doors.

Project History: The Central Offload Facility was built under PC-744 (DWP-1074) as a design build project in 2005. The project completion was delayed due to the lime sludge slide gates on the lime mixers which were continuously leaking whenever sludge head in storage bins was high. This problem was finally resolved after replacing the gates. Due to the nature of lime and sludge and continuous operation of this facility, the equipment started failing causing various operational and maintenance problems. Eventually, the facility needs a major rehabilitation.

Driver: 1 - Condition

Challenges: Maintaining the MDEQ-NPDES required capacity during the construction phase of the project.

Other Important Info:



GLWA FY 2019-2023 CIP

New CIP# **213002**

Old CIP# **1221**

WRRF Rehabilitation of Central Offload Facility

Related Project: PC - 757: Rehabilitation of Primary Clarifiers and Pipe Gallery Improvements.

Phase Overview

Phase Title CS-1701 Rehabilitation of Central Offload Facility

Phase Category: S/D/CA

Budget: Wastewater

Contract Number: CS-1701

Phase Status: Active

Start Date: 10/17/2016

End Date: 1/19/2021

Phase Cost Allocation: CTA

Phase Financial Source: SRF

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By: Engineer

Useful Life > 20Yrs Yes

Comments:

Study and Design and Construction Assistance

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

Phase Overview

Phase Title Rehabilitation of Central Offload Facility

Phase Category: C

Budget: Wastewater

Contract Number:

Phase Status: Future Planned Start

Start Date: 7/20/2018

End Date: 1/19/2021

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By: Ali Khraizat

Useful Life > 20Yrs Yes

Comments:

Construction

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

Comments: Construction will start after the design is complete.



WRRF Rehabilitation of Central Offload Facility

New CIP# **213002**

Old CIP# **1221**

Phase Expenses

CURRENT PHASE	Study and Design and Construction Assistance					BUDGET					Contract No	Phase Status		
Phase Title	CS-1701 Rehabilitation of Central Offload Facility					PPAT CIP Number					CS-1701	Active		
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction														
Engineering Services	581	200	150	50										
GLWA Salaries	58	20	15	5										
Materials														
Other														
Current Phase Fringe Benefit Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	23	8	6	2	0	0	0
Current Phase Non-Personnel Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	3	1	1	0	0	0	0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	665	229	172	57	0	0	0



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CURRENT PHASE	Construction					BUDGET					Wastewater	Contract No		
	Rehabilitation of Central Offload Facility					PPAT CIP Number							Phase Status	Future Planned Start
Phase Title	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	FY18	FY19	FY20	FY21	FY22		
Expense Type														
Construction		5,500	6,500	4,000										
Engineering Services														
GLWA Salaries		495	585	360										
Materials														
Other														

Current Phase Fringe Benefit Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	198	234	144	0	0	0
Current Phase Non-Personnel Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	25	29	18	0	0	0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	6,218	7,348	4,522	0	0	0

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	665	6,447	7,520	4,579	0	0	0

Phase Tasks and Dates

Phase Category	C
Budget	Wastewater
Phase Status	Future Planned Start
Contract No	
Cost Est Class	

Construction

Task Name	Start Date	Duration	End Date
Scope Development	10/17/2016	550	4/20/2018
Procurement	4/20/2018	180	10/17/2018
Project Execution	10/18/2018	914	4/19/2021
Project Closeout	4/20/2021	60	6/19/2021



WRRF Rehabilitation of Central Offload Facility

Phase Category	S/D/CA
Budget	Wastewater
Phase Status	Active
Contract No	CS-1701
Cost Est Class	

Study and Design and Construction Assistance

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution	10/17/2016	1645	4/19/2021
Project Closeout	1/19/2021	60	3/20/2021

PROJECT PRIORITIZATION SCORING

Project Manager Score

Criteria	Score	Score Comment
Condition	5	Replacement or major rehabilitation
Performance (Service Level/Reliability)	5	Will cause capacity problems
Regulatory (Environmental/Legal)	4	Regulatory Compliance failure w
O&M	4	High levels of O&M
Public Health & Safety	3	Moderate impact on public Health
Public Benefit	3	Moderate savings for GLWA
Financial	3	Will generate savings
Efficiency and Innovation	4	Project will remove significant o

Project Manager Weighted Score

78.4

Review Committee Score

Criteria	Score	Score Comment
Condition	4	
Performance (Service Level/Reliability)	4	
Regulatory (Environmental/Legal)	4	
O&M	4	
Public Health & Safety	4	
Public Benefit	4	
Financial	3	
Efficiency and Innovation	3	

Review Committee Weighted Score

76.2

Describe Here the Changes from the 2018 CIP to 2019 CIP

Estimated cost changed because previous estimate was too low without including Engineering services.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		800	5,850	6,750	4,350					17,750
2019		202	665	6,447	7,520	4,579	0	0	0	19,413