



Louisville and Jefferson County Metropolitan Sewer District
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502-540-6000
www.msdlouky.org

April 30, 2014

Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
Post Office Box 7611
Washington DC 20044-7611

Jeff Cummins, Acting Director
Division of Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

Chief, Water Programs Enforcement Branch
Water Management Program
US EPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, GA 30303

Subject: Clifton Heights Storage Basin
Minor Project Modification
IOAP Project No. L_MU_MF_154_M_09B_B_A_8
DOJ Case No. 90-5-1-1-08254

Attention Chiefs and Director:

MSD is requesting approval of a proposed minor project modification to the Clifton Heights Storage Basin project (IOAP Project No. L_MU_MF_154_M_09B_B_A_8). This request is a revision to the advanced notification provided in our letter dated September 20, 2012. This modification is part of an overall adaptive management review of the approved 2009 IOAP that will be documented in the proposed 2012 IOAP Modification to be formally submitted in 2014.

2009 IOAP Project Description

The Clifton Heights Storage Basin project originally involved the construction of a 6.55 million gallon (MG) storage basin to be completed by December 31, 2018, with an 8 overflow per typical year level of control.

2012 Project Modification Request

The project modification proposed in 2012 changed the Clifton Heights Storage Basin solution from a 6.55 MG basin to a 4.28 MG basin, and revised the level of control from 8 overflows per typical year to 4 overflows per typical year.



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2014 Project Modification Request

The project modification request is to change the basin size from 4.28 MG to 7.0 MG. No change is proposed in the level of control (4 overflows in a typical year) or schedule completion (December 31, 2018).

This change is part of the ongoing adaptive management review of the approved IOAP. This and all future proposed changes will be justified in detail through minor modification letters addressing benefits, costs and program implementation refinements required.

Technical Justification

Since the last IOAP submittal, additional flow monitors have been installed in the system and on the overflow structures. Detailed topographic surveys were conducted at many of the CSO structures. The combined sewer system model was updated with the new survey data and re-calibrated based on the data from the additional flow monitors. For the Clifton Heights Basin a review of more detailed survey data and field reconnaissance revealed that the basin boundary needed to be adjusted.

Based on the results of the re-calibration and basin redefinition, the hydrologic and hydraulic nodes showed that a basin size of 7.0 MG was required to meet the level of control of 4 overflows per year. Therefore, MSD proposes to change the Clifton Heights Storage Basin solution from a 4.28 MG basin to a 7.0 MG basin. These improvements will maintain the same completion date of December 31, 2018, as the original solution.

For your reference, a copy of the project fact sheet and map from the 2012 modification advance notification are in Attachment A. A new project fact sheet and map have been provided in Attachment B.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 540-6000.

Sincerely,



Angela L. Akridge, PE
Regulatory Services Director

cc: Greg Heitzman Paula Purifoy

Attachments

Attachment A



CSO Project Fact Sheet

2012 IOAP Project Modification



Project Name: Clifton Heights Storage Basin

Project Type: Off-Line Storage

Rec Stream: Muddy Fork Beargrass Creek

Project Description: This project includes a 4.28 MG storage basin and conveyance from each CSO to achieve 4 overflows in a typical year.

Design Assumption: Basin is designed to the 5th Overflow volume. Portions of the existing overflow pipe from CSO 132 may be used for CSO conveyance depending on potential direct stormwater contributions.

Capital Cost: \$14,166,000

Capital Benefit/Cost: 68.88

Present Worth Benefit Cost: 76.85

CSO	CSO Name	Existing May 2012 ¹		Baseline May 2012 ²	
		Avg. Annual Overflow Volume	Avg. Annual Frequency	Avg. Annual Overflow Volume	Avg. Annual Frequency
CSO088	MELLWOOD AVE INT	21.25	38	19.36	36
CSO131	REG NO 33 - MELWD & FRANKFORT	2.42	20	2.42	20
CSO132	REG NO 35 - BROWNSBORO	30.97	36	25.41	34
CSO154	MELLWOOD @ SCHOEFFEL	26.33	40	27.32	38
CSO167	BROWNSBORO LAT NO 2	0.00	1	0.00	0

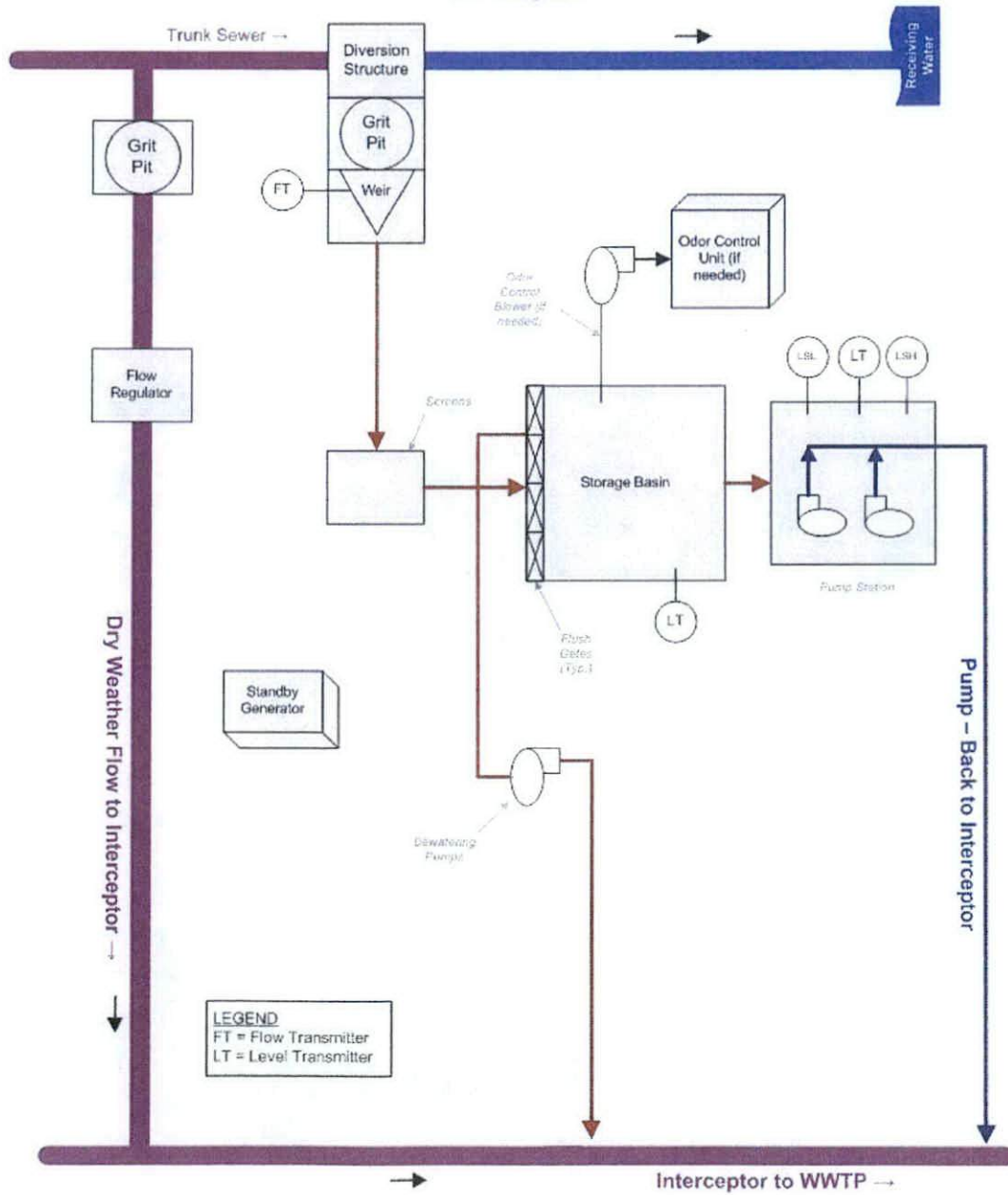
1. Existing May 2012 conditions reflect existing system operating conditions as of that date.

2. Baseline May 2012 assumes all SSDP projects are complete and critical combined sewer facilities (e.g. Morris Forman WQTC Southwestern Pump Station, Starkey Pump Station) are operating at optimal, sustainable levels.

CSO LTCP Project Fact Sheet



Off-Line Storage
Pumped Effluent
Flow Diagram

















**Integrated Overflow Abatement Plan
Vol. 2 - Final CSO Long Term Control Plan**

Muddy Fork Beargrass Creek

Clifton Heights Storage Basin

Preliminary - For Budget Development Only

-  Active CSO
-  Eliminated CSO
-  Proposed Pump Station Solution
-  Pump Stations
-  Proposed Pipe Solution
-  Combined Sewer Pipe
-  Force Main
-  Collector < 12"
-  Interceptor >= 12"
-  Drainage Mains
-  Proposed Storage Solution
-  Streams
-  Floodway
-  Jefferson County Boundary

General representation of overflow abatement solutions are for preliminary planning purposes. Alignments and locations may be altered during design.

1 inch = 102 feet



Aerial Date:
2009

Map Revision:
April 9, 2012



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Attachment B



CSO Project Fact Sheet
2012 IOAP Project Modification



Project Name: Clifton Heights Storage Basin

Project Number: L_MU_MF_154_M_09B_B_A_8

Project Type: Off-Line Storage

Rec Stream: Muddy Fork Beargrass Creek

Project Description: This project includes a 7.0 MG storage basin and conveyance from each CSO to achieve 4 overflows in a typical year.

Design Assumption: Basin is designed to the 5th Overflow volume. Portions of the existing overflow pipe from CSO 132 may be used for CSO conveyance depending on potential direct stormwater contributions.

Capital Cost: \$19,757,000

Capital Benefit/Cost: 68.88

Present Worth Benefit Cost: 76.85

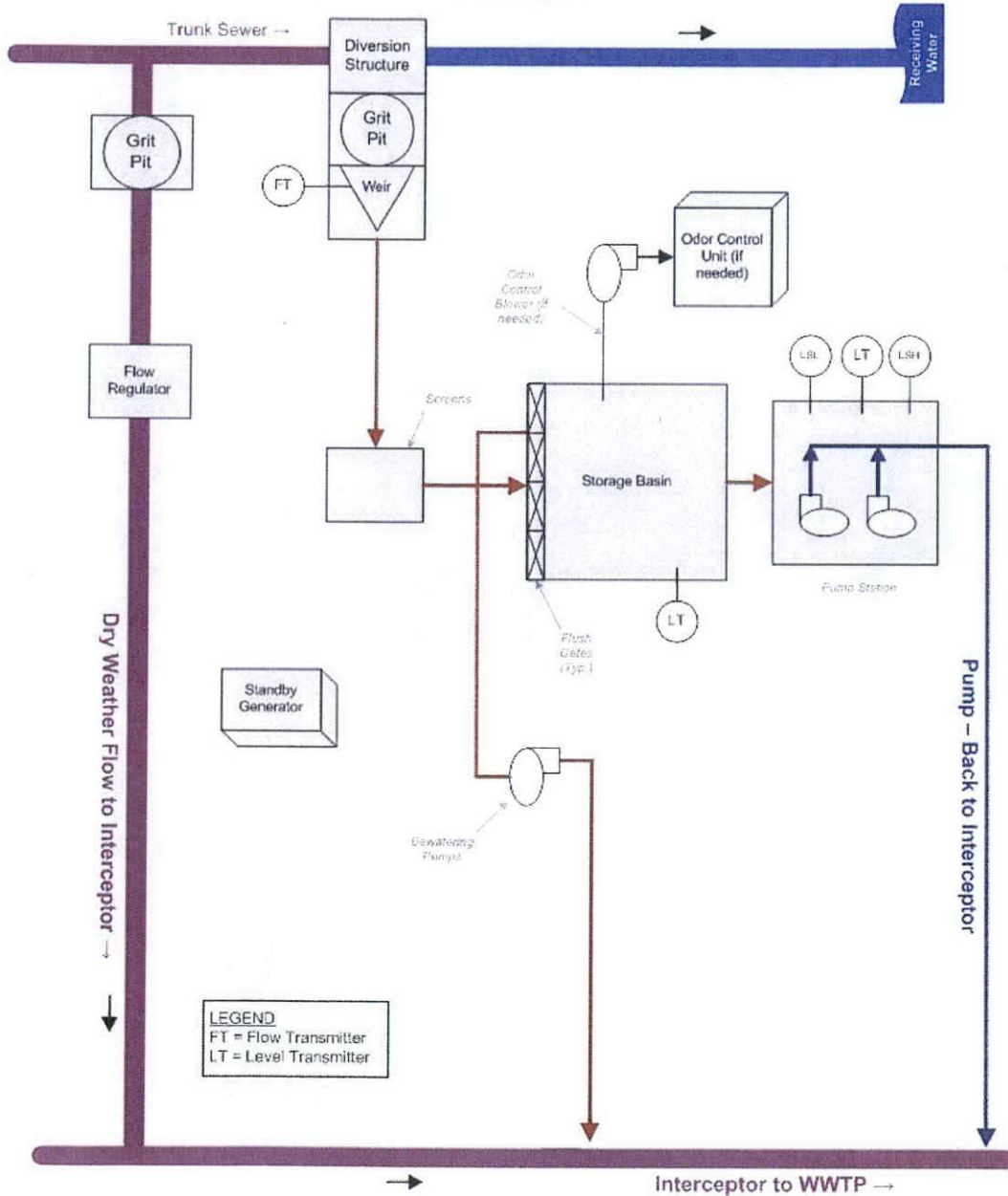
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CSO LTCP Project Fact Sheet

Off-Line Storage
Pumped Effluent
Flow Diagram








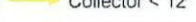
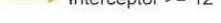






**Integrated Overflow Abatement Plan
Vol. 2 - Final CSO Long Term Control Plan**

Muddy Fork Beargrass Creek

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-  Proposed Storage Solution
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Aerial Date:
2009

Map Revision:
April 14, 2014



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