



Louisville and Jefferson County Metropolitan Sewer District
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February 16, 2015

Dennis J. Sayre
NPDES Permitting and Enforcement Branch
U.S. EPA Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

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

Subject: Goose Creek PS Phase 1 – Devondale Wet Weather Storage
Minor Project Modification
IOAP Project No. S_MI_MF_NB04_M_03_B
DOJ Case No. 90-5-1-1-08254

Attention Dennis and Jeff:

MSD is requesting approval of a proposed minor project modification to the Goose Creek PS Phase 1 – Devondale Wet Weather Storage project (IOAP Project No. S_MI_MF_NB04_M_03_B). This modification is part of an overall adaptive management review of the approved 2012 IOAP Modification, considering alternative opportunities not known when the IOAP was developed.

2009 IOAP Project Description

The Goose Creek PS Phase 1 – Devondale Wet Weather Storage project originally involved construction of a 0.5 million gallon (MG) covered wet weather storage basin at the Devondale Pump Station. This wet weather storage was intended to attenuate flow peaks that exceeded the capacity of the Devondale Pump Station, thereby eliminating the SSO at the pump station. This project has an IOAP completion date of December 31, 2024.

Project Modification Request

The project modification proposed eliminates the Devondale Pump Station by constructing 1,334 LF of new 12-inch diameter gravity sewer from the current pump station to the site of the existing Bancroft Water Quality Treatment Center (WQTC). MSD plans to eliminate the Bancroft WQTC as part of MSD's overall program to eliminate all small WQTCs. This will be accomplished by constructing a new 0.33 MGD pump station to eliminate the WQTC. A 0.25 MG wet weather storage basin at the Bancroft WQTC site will be constructed to attenuate wet weather peak flows. Flows from the Bancroft service area and the Devondale Pump Station service area will be consolidated and pumped through a 6-inch diameter force main back to the current discharge location of the Devondale Pump Station. Flows will be treated at the Morris Forman WQTC. No change in the project schedule is proposed.



Beneficial Use of Louisville's Biosolids
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Technical Justification

The original IOAP considered a variety of storage and pump station upgrades to eliminate the SSO at the Devondale Pump Station SITE. The selected solution in the IOAP was to provide off-line storage, based on the benefit-cost evaluation approach used in the IOAP. MSD's decision to eliminate all small WQTC(s) created the opportunity to consolidate the Devondale Pump Station elimination with the Bancroft WQTC elimination. Both facilities can be eliminated at a lesser expense with this consolidation. Based on MSD's current plans, the Devondale pump station will be eliminated by December 31, 2015, thereby eliminating the SSO at this location nine years earlier than originally proposed. This solution provides the same 1.82-inch 3-hour cloudburst level of protection as the original project with the added benefit of eliminating two aging facilities. All flows will be treated at the Morris Forman WQTC.

For your reference, a copy of the current project fact sheet and map from the 2012 IOAP Modification are in Attachment A. A new project fact sheet and map reflecting the pump station elimination 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

Infrastructure Planning and Environmental Compliance Director

cc: Greg Heitzman Paula Purifoy

x:\.Final Devondale PS elimination February 2015 Modification.docx

Attachments

Attachment A



SSO Project Fact Sheet
2012 IOAP Project Modification



Project Name	Goose Creek PS Improvements & Wet Weather Storage 1 - Devondale Wet Weather Storage
Project Number	S_MI_MF_NB04_M_03_B
Modeled Area	Middle Fork Beargrass Creek
Branch or SSO ID	MF04
Project Type	Storage & Force Main Upgrades
Receiving Stream	Goose Creek
Project Description	Construct 0.5 MG covered storage basin near Devondale Pump Station.
Reason for Overflow	Pump station capacity
Design Parameters	This solution is based on a 2.25 inch cloudburst rain event.
Project Constraints	N/A
Estimated Capital Cost	\$1,781,000
Weighted Benefit/Cost Ratio	11.00





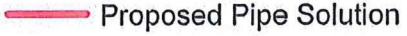

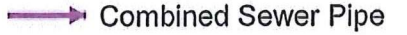

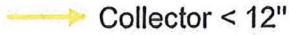


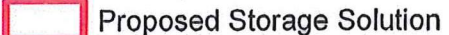


Asset ID	SSO Start Date	Volume (Gal)
21628-W	1/1/2003	4500
21628-W	1/1/2003	4500
21628-W	1/1/2005	2000
MSD1024-PS	1/11/2014	5
43472	1/13/2013	16725
21628-W	1/24/2002	2000
MSD1024-PS	1/26/2012	52500
21628-W	1/3/2005	36000
21628-W	1/6/2005	30000
105936	10/6/2013	64000
43472	10/6/2013	37750
105936	11/17/2013	32500
43472	11/17/2013	6700
43472	11/22/2011	2520
21628-W	11/28/2011	28000
43472	11/28/2011	58500
21628-W	11/29/2001	400
43472	12/10/2012	1660
21628-W	12/15/2007	10800
21628-W	12/16/2000	0
21628-W	12/19/2002	8000
43472	12/21/2013	250
43472	12/22/2013	105500
43472	12/5/2011	9000
21628-W	12/5/2011	85500
105936	2/12/2013	100
43472	2/24/2011	15925
21628-W	2/25/2011	16475
21628-W	2/28/2011	1750
21628-W	2/6/2008	682500

Integrated Overflow Abatement Plan

Vol. 3 - Sanitary Sewer Discharge Plan

Middle Fork Sewershed
 Goose Creek PS Improvements &
 Wet Weather Storage 1
 Devondale Wet Weather Storage

Preliminary - For Budget Development Only

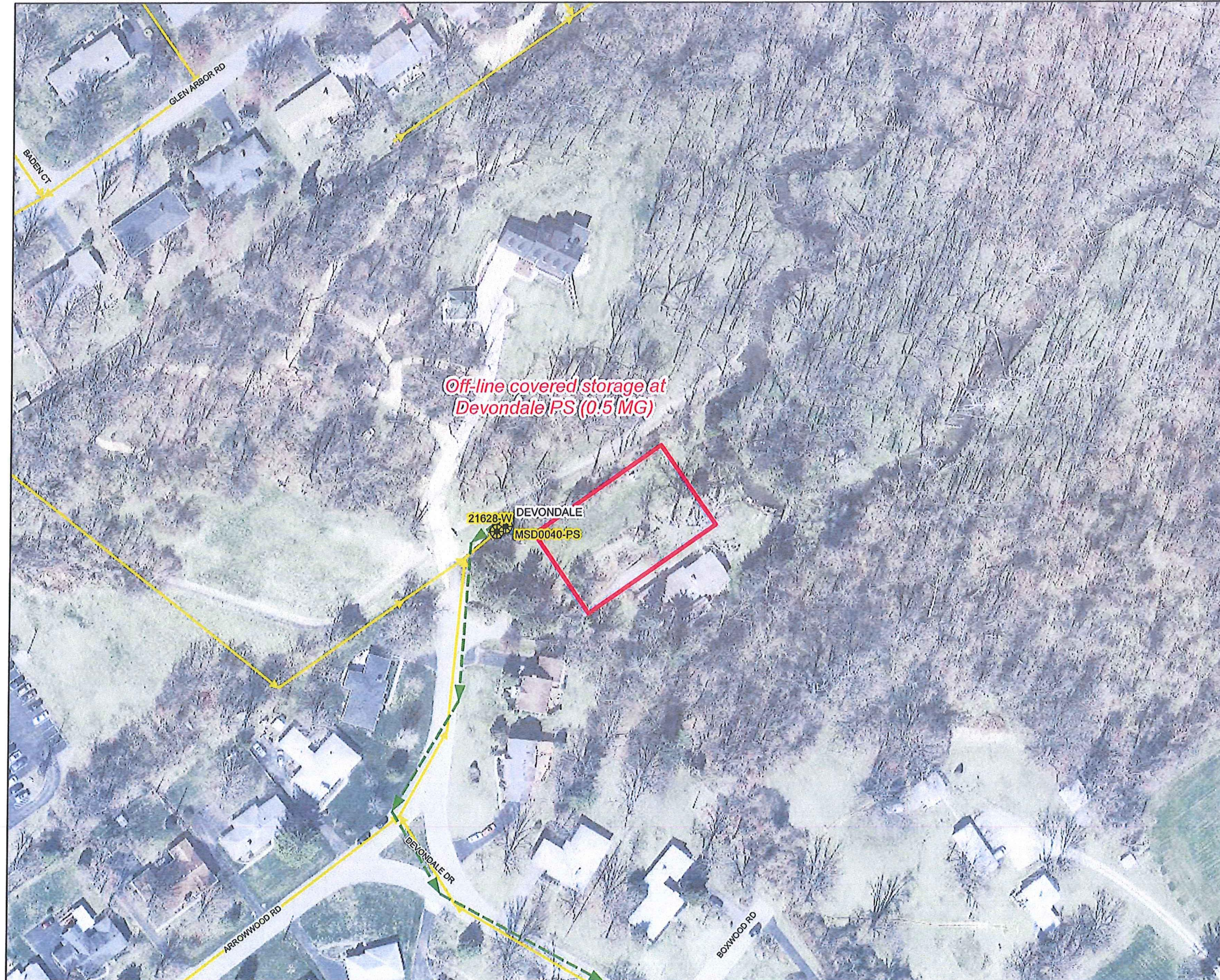
-  Documented SSO
-  Suspected SSO
-  Haulop Locations
-  Pump Stations
-  Proposed Pipe Solution
-  WQTC
-  Combined Sewer Pipe
-  Force Main
-  Collector < 12"
-  Interceptor >= 12"
-  Streams
-  Proposed Storage Solution
-  Floodway
-  Jefferson County Boundary

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

1 inch = 100 feet N Aerial Date: 2009 Map Revision: April 9, 2012



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Attachment B

Project Name Goose Creek PS Improvements & Wet Weather Storage 1 - Devondale Wet Weather Storage

Modeled Area Middle Fork Beargrass Creek

Branch or SSO ID MF04

Project Type WQTC Elimination, Storage & Force Main Upgrades

Receiving Stream Goose Creek

Project Description This project eliminates the Devondale Pump Station by constructing 1,334 LF of new 12-inch diameter gravity sewer from the current pump station to the site of the existing Bancroft Water Quality Treatment Center (WQTC). The Bancroft WQTC will be eliminated by constructing a new 0.33 MGD pump station. A 0.25 MG wet weather storage basin at the Bancroft WQTC site will be constructed to attenuate wet weather peak flows. Flows from the Bancroft service area and the Devondale Pump Station service area will be consolidated and pumped through a 6-inch diameter force main back to the current discharge location of the Devondale Pump Station.

Reason for Overflow Pump station capacity

Design Parameters This solution is based on a 2.25 inch cloudburst rain event.

Project Constraints N/A

Estimated Capital Cost \$1,781,000

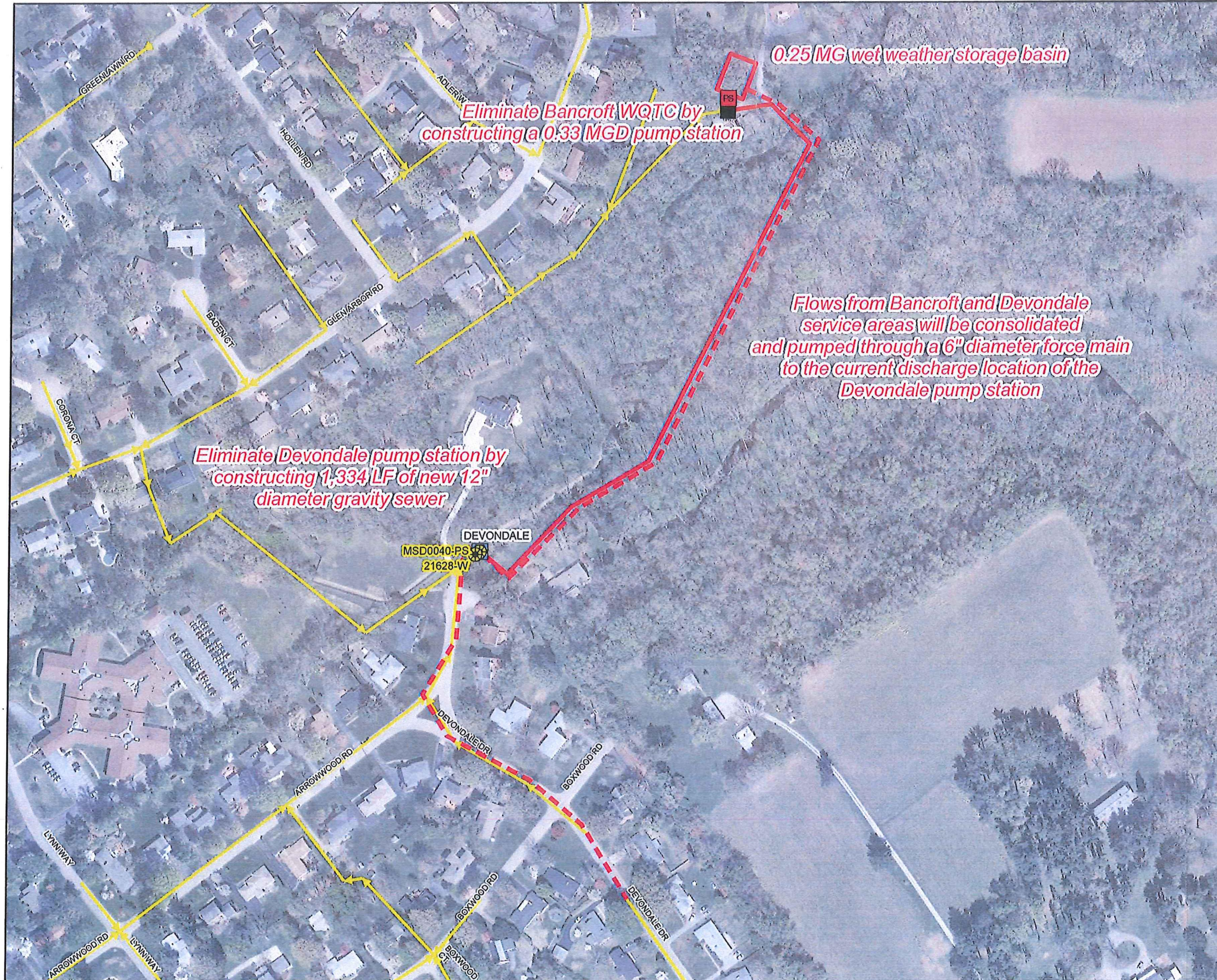
Weighted Benefit/Cost Ratio 11.00

Asset-ID	SSO Start Date	Volume (Gal)
105936	6/26/2013	122000
105936	10/6/2013	64000
105936	8/4/2009	1800
105936	4/4/2008	43200
105936	3/9/2011	326700
105936	4/12/2011	76500
105936	4/27/2011	417500
105936	6/27/2013	26000
105936	2/12/2013	100
105936	5/3/2011	268800
105936	4/24/2011	651000
105936	11/17/2013	32500
21628-W	8/4/2009	25000
21628-W	5/13/2002	18000
21628-W	9/2/2003	3500
21628-W	3/26/2002	6000
21628-W	3/19/2002	1000
21628-W	1/24/2002	2000
21628-W	12/16/2000	0
21628-W	1/3/2005	36000
21628-W	7/17/2004	10000
21628-W	11/29/2001	400
21628-W	12/19/2002	8000
21628-W	1/1/2003	4500
21628-W	1/1/2003	4500

**Integrated Overflow Abatement Plan
Vol. 3 - Sanitary Sewer Discharge Plan**

Middle Fork Sewershed
Goose Creek PS Improvements &
Wet Weather Storage 1
Devondale Wet Weather Storage

Preliminary - For Budget Development Only



- Documented SSO
- Suspected SSO
- WQTC
- Haulop Locations
- Pump Stations
- Proposed Pump Station Solution
- Proposed Gravity Sewer
- Proposed Force Main
- Collector < 12"
- Interceptor >= 12"
- Streams
- Proposed Storage Solution
- Floodway

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

1 inch = 200 feet		Aerial Date: 2009	Map Revision: 11/21/2014
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