



700 West Liberty Street | Louisville, KY 40203-1911  
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February 27, 2024

Director, Division of Enforcement  
Department for Environmental Protection  
300 Sower Blvd.  
Frankfort, KY 40601

Chief, Water Enforcement Branch  
Enforcement and Compliance Assurance Division  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street SW  
Atlanta, GA 30303

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

Subject: Kavanaugh Road PS Elimination  
Project Modification  
IOAP Project No. S\_HC\_HC\_MSD1085\_S\_03\_A  
DOJ Case No. 3:05-cv-00236-CRS

Attention Chiefs and Director:

MSD is requesting approval of a proposed minor project modification to the Kavanaugh Road PS Improvements project (IOAP Project No. S\_HC\_HC\_MSD1085\_S\_03\_A). This request is part of the ongoing adaptive management review of the approved Integrated Overflow Abatement Plan (IOAP) dated April 2021.

#### 2009 IOAP Project Description

The original Kavanaugh Lane PS Improvements Project consisted of upgrading the existing pump station to 0.84 MGD and upsizing approximately 2,500 LF of force main to 8". The project completion date was December 31, 2024.

#### 2012 IOAP Modification Project Description

No changes were proposed in the 2012 IOAP Modification (approved in 2014). The project details remained the same as the 2009 project.

#### 2021 IOAP Modification Project Description

No technical changes were proposed in the 2021 IOAP Modification. The project details remained the same as the 2009 and 2012 projects. The project completion date was changed to December 31, 2025.

#### 2022 Project Modification

In November 2022 a minor modification letter was sent requesting to change the project from pump station improvements to a pump station elimination project. The project name was changed to *Kavanaugh Road Pump Station Elimination*. The modification request was approved in June 2023.

#### 2023 Project Modification Request

The project modification request changes the completion data from December 31, 2025, to December 31, 2027. The project details remain the same as the 2022 project modification request.

#### Technical Justification

After submittal of the minor modification request, MSD began the detailed design of the interceptor to eliminate the Kavanaugh Road Pump Station. The alignment presented several technical challenges to minimize creek crossings and limit disturbance to sensitive areas (steep slopes, wooded areas, pond). Additionally, the alignment resulted in the need to acquire 23 easements from private property owners. Initial conversations with property

Kavanaugh Road PS Improvements Minor Modification Request

February 27, 2024

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owners indicate that some of the easements will be difficult to acquire. Discussion and negotiations will continue, but it is likely that some of the easements will need to be acquired through legal proceedings. The project was initially scheduled to begin construction in the spring of 2024, with an estimated construction duration of approximately 1 year. This schedule would have allowed for a 6 month 'float' prior to December 31, 2025. However, it appears easement negotiations and acquisition will delay the construction start date by 6 months to 1 year. Although MSD will continue efforts to expedite the project as much as possible, the delay will likely push the completion schedule beyond December 31, 2025.

Previous work has been performed to minimize overflows at the site. MSD installed a backup power generator at the station in December 2018. Since that date, no overflows have occurred at the pump station site. Furthermore, MSD will attempt to haul from the station if a high wet well is detected. While modeling still indicates the project is necessary to meet the required Level of Control, the installation of the backup power generator and regular maintenance activities have minimized the overflows at the station.

For your reference, a copy of the original project fact sheet from the 2021 IOAP Modification can be found in Attachment "A". The approved 2022 fact sheet is included as 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) 540-6136.

Sincerely,

DocuSigned by:  


88F5D1C69A890110  
Angela L. Arndge, PE  
Chief Strategy Officer  
for Business Transformation and Regulatory Compliance

cc: T. Parrot D. Johnson, PE J. Quarles

cwm: X:\Data\IOAP\2021\_IOAP\Mod Letters\Minor Mod Letter - Kavanaugh - Feb2024.docx

Attachment A: 2021 IOAP Modification Fact Sheet  
Attachment B: 2022 Project Modification Fact Sheet

**Attachment A**





## SSO Project Fact Sheet

### 2012 IOAP Project Modification



**Project Name** Kavanaugh Rd. PS Improvements

**Project Number** S\_HC\_HC\_MSD1085\_S\_03\_A

**Modeled Area** Hite Creek

**Branch or SSO ID** MSD1085

**Project Type** PS Upgrades

**Receiving Stream** Hite Creek

**Project Description** This alternative includes upgrading the Kavanaugh Road pump station to handle peak flows of 0.84 MGD and upsize 2,458 LF of force main to 8".

**Reason for Overflow** Pump station capacity

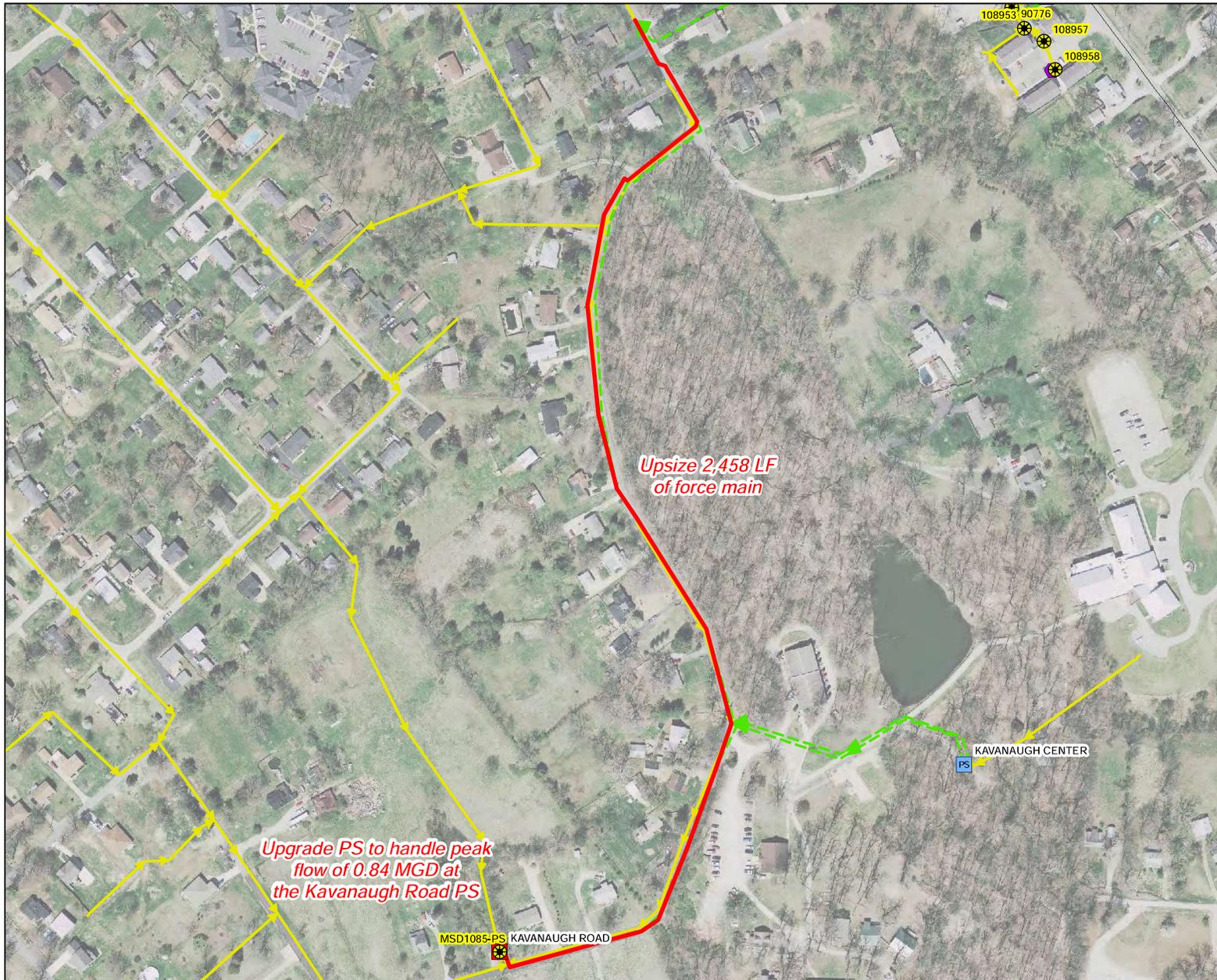
**Design Parameters** This solution is based on a 2.60 inch cloudburst rain event.

**Project Constraints** Project will occur in MSD easements or land

**Estimated Capital Cost** \$1,110,000

**Weighted Benefit/Cost Ratio** 21.09

Asset ID	SSO Start Date	Volume (Gal)
MSD1085-PS	4/4/2008	176000
MSD1085-PS	5/11/2003	800



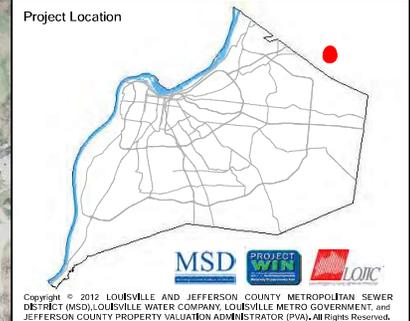
**Integrated Overflow Abatement Plan**  
 Vol. 3 - Sanitary Sewer Discharge Plan  
 Hite Creek Sewershed  
 Kavanaugh Rd PS Improvement

Preliminary - For Budget Development Only

- Documented SSO
- Suspected SSO
- Haulop Locations
- Proposed Pump Station Solution
- Pump Stations
- WQTC
- Proposed Pipe Solution
- Combined Sewer Pipe
- Force Main
- Collector < 12"
- Interceptor >= 12"
- 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 = 200 feet		Aerial Date: 2009	Map Revision: April 9, 2012
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**Attachment B**



## SSO Project Fact Sheet

### 2022 IOAP Project Modification



**Project Name** Kavanaugh Rd. PS Elimination

**Project Number** S\_HC\_HC\_MSD1085\_S\_03\_A

**Modeled Area** Floyds Fork

**Branch or SSO ID** MSD1085

**Project Type** Pump Station Elimination

**Receiving Stream** Floyds Fork

**Project Description** This project will eliminate the existing pump station by constructing approximately 1,700 LF of 8" sewer and 7,100 LF of 18"-21" sewer from the pump station site to a future interceptor at the former Ash Avenue Wastewater Treatment Plant Site. The interceptor would be sized for the potential future elimination of the Cherry Lane and Kavanaugh Center pump stations. The elimination of these stations is not included in the project cost.

**Reason for Overflow** Pump station capacity

**Design Parameters** This solution is based on a 2.60 inch cloudburst rain event.

**Project Constraints** Project will occur in MSD easements or land

**Estimated Capital Cost** \$3,655,900

**Weighted Benefit/Cost Ratio** 21.09

Asset ID	SSO Start Date	Volume (Gal)
MSD1085-PS	4/4/2008	176000
MSD1085-PS	5/11/2003	800

# Integrated Overflow Abatement Plan Vol 3 Sanitary Sewer Discharge Plan

Floyds Fork Sewershed  
Kavanaugh Road PS Elimination

Preliminary - For Budget Development Only

- Proposed MH Solution
- Documented SSO
- Suspected SSO
- PS Pump Stations
- Haulop Locations
- Proposed Pipe Solution
- Combined Sewer Pipe
- Force Main
- Collector < 12"
- Interceptor >= 12"
- Drainage Mains
- - - Streams
- Floodway
- Jefferson County Boundary
- Small WWTP Service Area
- Large WWTP Service Area

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

1 inch = 900 feet	N 	Aerial Date: 2021	Map Revision: Sep 30, 2022
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