STORMWATER SECTION DRAINAGE & FLOODING PROGRAM UPDATE

ENVIRONMENTAL QUALITY & PUBLIC WORKS COMMITTEE:

August 2024





Agenda

- Stormwater (SW) Priority Project List Overview
- Active Capital Projects Construction
- Active Capital Projects Design
- Capital Maintenance Work
- Questions



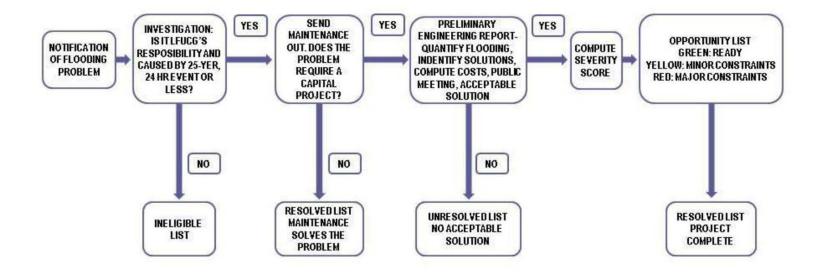




Stormwater (SW) Priority List



Severity Score Process





Stormwater (SW) Priority List

HOW DOES A PROPERTY GET CONSIDERED FOR INCLUSION ON THE STORMWATER PRIORITY LIST?

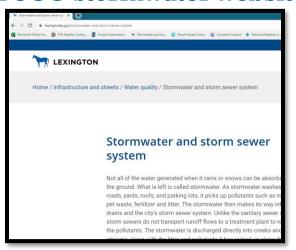
For storm events less than the 25-year, 24-hour event (5.23 inches) – at least one of the following conditions must be met:

- Structure flooding (surface water entering a structure through an opening such as a door, window, or vent); or
- Street/road flooding with either greater than 1 foot of water in the driving lane or the crown of the road is not visible.

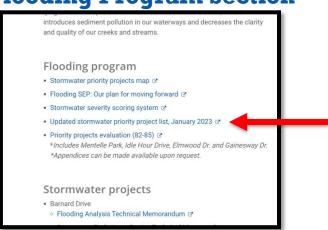


Stormwater (SW) Priority List

LFUCG Stormwater Website



Flooding Program Section



Stormwater Priority Projects Master List- January 2023

Home Flooding or Serious Street Flooding Known or Suspected

(Projects are Prioritized by Efficiency Value)
(Projects Active on the Date of Publication Appear as **Bold Text**)

(Shading Denotes Projects That are Complete, Bid, or Recommended for Removal)

	Project		Council	Severity	CPI Adjusted	Efficiency	
	Priority and Name		District	Score	Estimate	Value	Comments
							PROJECT COMPLETED to prevent home flooding. Six homes demolished.
N/A	WPGL	WR	3	1,506			Total Cost: \$ 450,000
							PROJECT COMPLETED by demolishing 3 homes. FEMA grant used.
N/A	FEMA Grant #1 (Kilrush)	WR	9	N/A			Total Cost: \$ 293,000
							PROJECT COMPLETED to stop street flooding and dangerous ice formation.
1	Yellowstone	EH	7	195			Total Cost: \$ 9,000
							PROJECT COMPLETED to prevent home flooding. 405 Plainview acquired and
2	Plainview Drive	WH	7	193			demolished in 2011.Total Cost: \$ 227,185
							Project recommended for removal from stormwater priority list. Disruption to
3	CR-3, Sandpiper/Kingston/Swigert	CR	6	706			neighborhood and cost/benefit ratio unreasonable.
							PROJECT COMPLETED to prevent street & home flooding.
4	Smoky Mountain	EH	7	194			Total Cost: \$ 9,000
							Project recommended for removal from stormwater priority list. Property owner resolved
4.3	Greyhound Dr.	CR	12	480			flooding by using LFUCG Cooperative Floodproofing Program.
							PROJECT COMPLETED to prevent home flooding and serious street flooding.
4.5	Perry Street / 200 Block	TB	2	1,234			Total Cost: \$ 40,000
							PROJECT COMPLETED to prevent home flooding.
4.7	Sherwood Drive / Robin Road	WH	4	880			Total Cost: \$77,000
							PROJECT COMPLETED to prevent home flooding. Two houses razed.
5	CR-6, Old Paris @ I-75	CR	6	486			Total Cost: \$ 129,000
							PROJECT COMPLETED- acquisition and demolition of one structure complete Dec
6	NE-2, Silver Leaf Court	NE	6	1,220			2020
							PROJECT COMPLETED to protect homes from dangerous erosion.
7	WH-43, Coldstream Ct	WH	8	928			Total Cost: \$ 20,000

Website – LINK

https://www.lexingtonky.gov/stormwater-and-storm-sewer-system



Active Capital Projects Construction

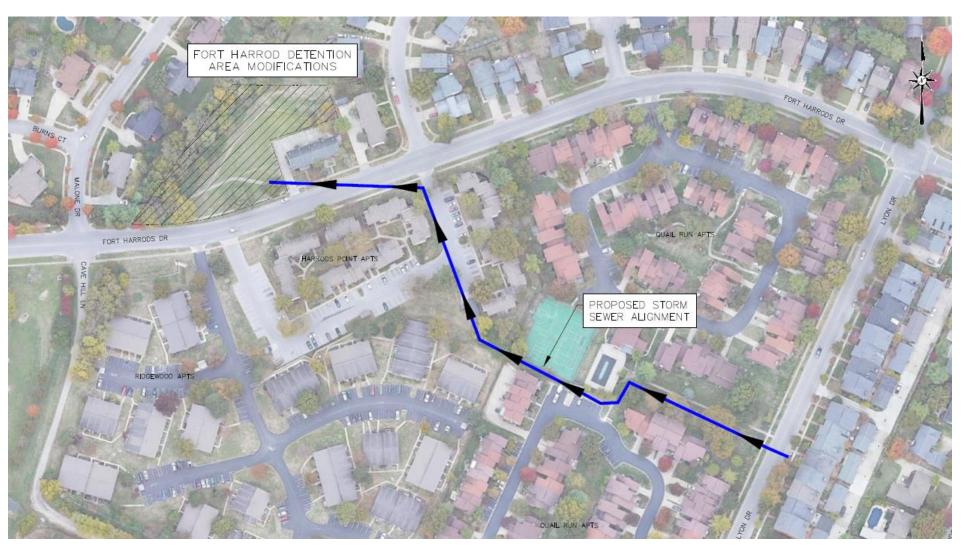


2023-2024 Capital Projects

- LYON DRIVE SW PROJECT (Council District 10)
 - Project is to mitigate street flooding on Lyon Dr. between Ft. Harrod Dr. and Snaffle Rd.
 - Project is to construct upsized stormsewer and expand an existing detention basin on Ft. Harrods Dr.
 - Low Bid \$1,393,232
 - Construction completion Fall 2024

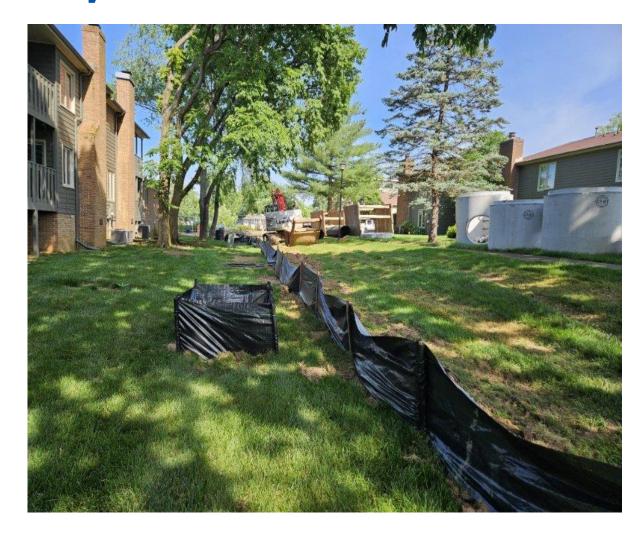


Lyon Drive SW Project





Lyon Drive Construction Photos







EAST THIRD & OHIO (Council District 1)

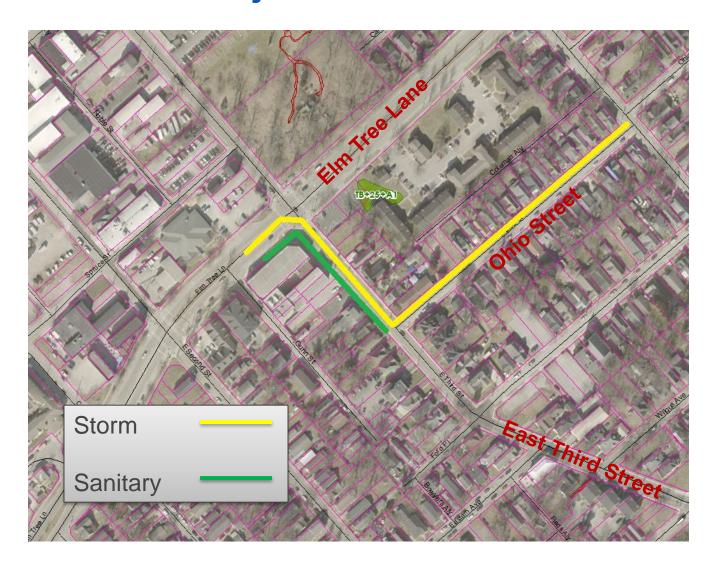
- Project is to mitigate street flooding at intersection of East Third and Ohio Street.
- Undersized infrastructure.
- Project is to construct upsized stormsewer
 as well as replace some aging sanitary
 sewer along Ohio Street.



• Current Project Cost - \$2,179,875.00



East Third & Ohio SW Project





3rd Street at the Lyric Theater







Active Capital Projects Design



Active Capital Projects

JOYLAND AREA STORMWATER PROJECT (Council District 1 & 6)

• Problem: Undersized infrastructure and no detention in the project area.

Remedy:

- Create detention within the project area at Lisa Drive, Cabot Drive, and Shandon Drive.
- Construct additional stormsewer on Freeman Dr.
- Two Phase Approach
 - Phase 1 Basins (2023) **\$1,289,489.00**
 - Phase 2 Pipeline Work
 - Advertised Fall/Winter 2024
 - Construction 2025



Joyland Area SW Project - Phase 2 (Council District 1 & 6)

- LFUCG-DWQ applied for a FEMA Hazard Mitigation Grant Program (HMGP)
- Awarded \$999,598.00
 - o Federal (90%)- \$899,638.20
 - State (4.8%) \$47,980.70
 - o Local (5.2%) **\$51,979.10**
- Additional Award
 - SRMC Grant (100% Federal) \$21,083.00
- Period of Performance Deadline
 May 2nd 2026





The stormwater management challenge in Joyland.

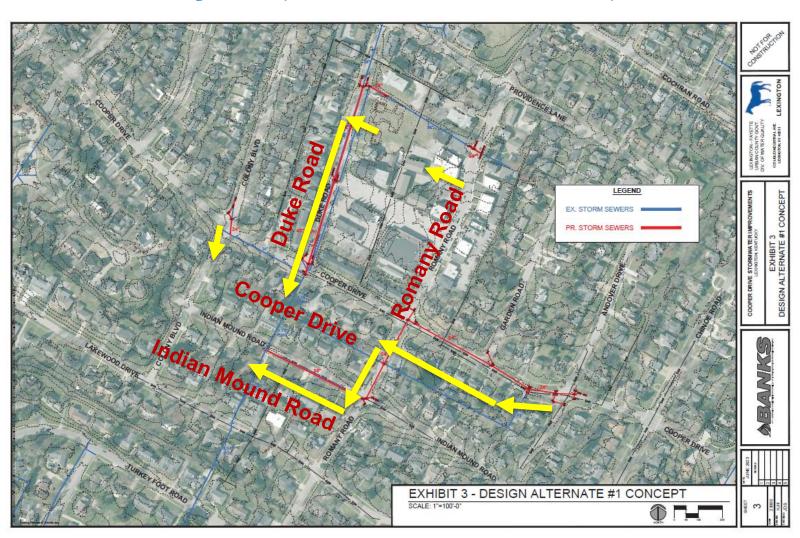
The Cave!





Cooper Drive SW Project (Council District 5)

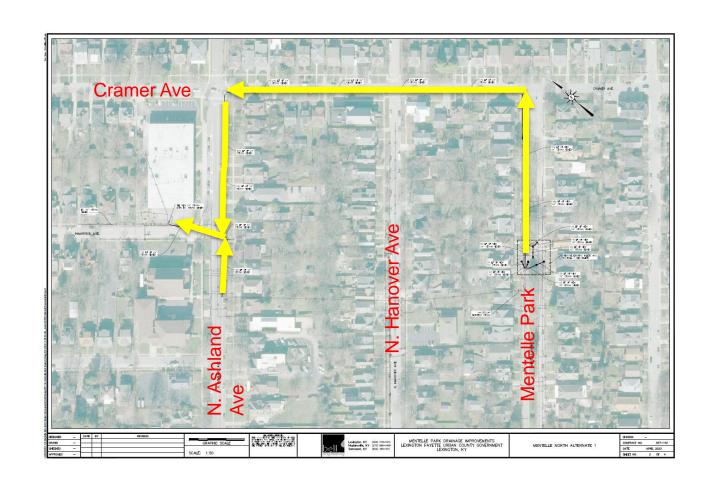
- Project Plans 75%
- Construction 2025
- Cost Estimate -\$2,500,000





Mentelle Park North SW Project

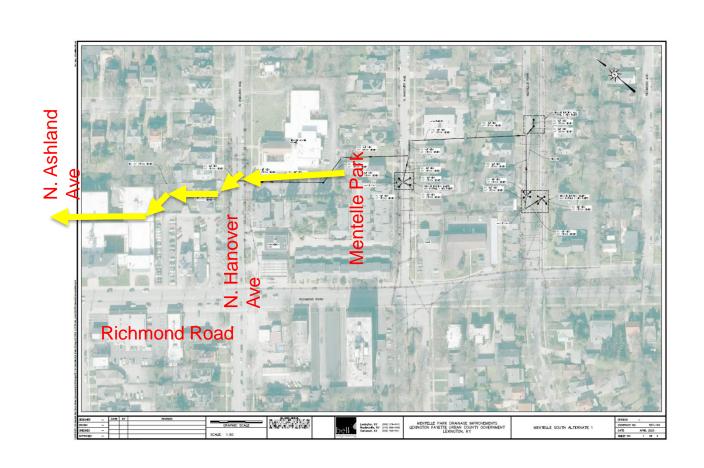
- Stage: Preliminary
 Engineering Report –
 complete.
- Work appears to be in the street.
- Cost Estimate -\$1,700,000
- Construction target –
 2025





Mentelle Park South SW Project

- Stage: Preliminary Engineering Report
- Work likely outside the street much heavier lift.
- Construction 2026-2027 (post phase 1)





Capital Maintenance

• Smaller projects to mitigate nuisance flooding or;

 Repair and cleaning projects intended to restore neglected infrastructure or;

• Larger "Repair" projects, which require engineering design and are openly bid for construction. These would not likely meet the criteria for Priority Capital projects.



Advertise/Award/Construction Meadowthorpe Phase 2 (CD 11)

Dogwood (CD 9)
Barnard (CD6)

Final Design

Savannah-Guilford (CD 10)

Masterson Station/Great Acres (CD 2)

Lakewood Court (CD 5)

Furlong Drive (CD 11)

Haggard Court (CD 1)

Preliminary Engineering Report

Kenesaw Drive (CD 8)

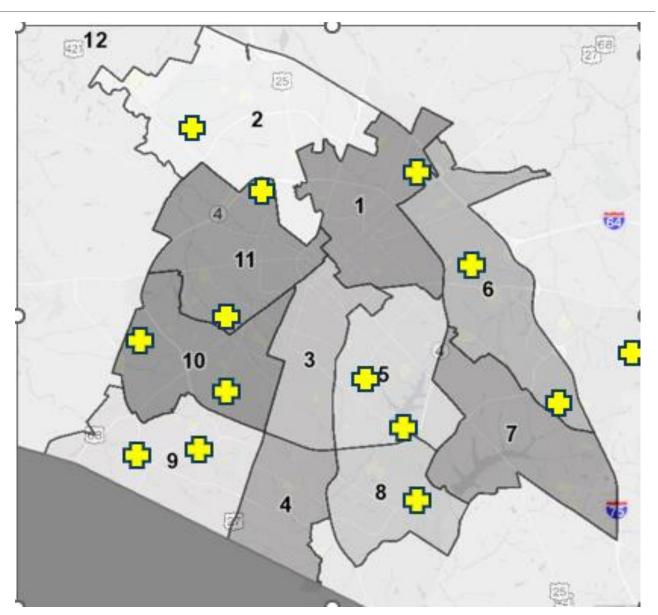
Gayle Drive (CD 6)

Taborlake Drive (CD 5)

Longwood Drive (CD 9)

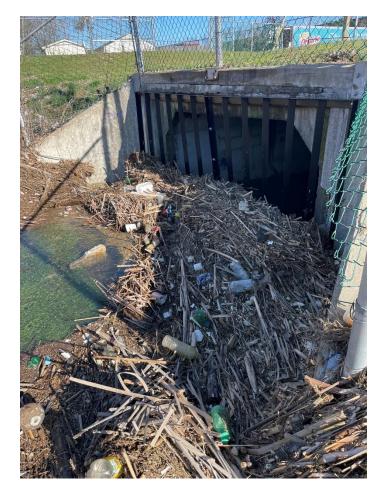
Southland Drive (CD10)

Walnut Grove (CD 12)





STORMWATER CAPITAL MAINTENANCE



Edgelawn Detention Basin (After Big Storms – Help (as-needed))





Wyndham Hills & Clays Mills (Buried Inlet – Impacted Storm Pipe)





Race Street
(Broken Storm Pipe and KAW Conflict)



STORMWATER CAPITAL MAINTENANCE



Curb Inlets full of Trash



Completely Broken Inlets



Cleaning Concrete Flumes



Coolers blocking Storm Pipes



Working at Night



3 FTEs manage a contractor to clean and repair Stormwater infrastructure with an annual budget of \$1,000,000.

Completed Work Orders

Year	ссти	Point Repair	Clean/Repair Basin	Totals
2018	16	25	46	87
2019	17	56	69	142
2020	15	21	25	61
2021	30	108	50	218
2022	49	122	61	232
2023	22	156	46	224

Questions?

