

- L. **Sheehan, Chair**
- H. **LeGris, Vice-Chair**
- D. Wu
- T. Fogle
- S. Lynch
- B. Monarrez
- D. Gray
- P. Worley
- F. Brown
- D. Sevigny



AGENDA
Environmental Quality & Public Works Committee
December 3, 2024
1:00 P.M.

- | | | |
|------|---|---------|
| I. | Approval of the October 22, 2024 Committee Summary | (1-2) |
| II. | Consent Decree/Remedial Measures Plan [Sheehan/Martin] | (3-23) |
| III. | Waste Digester Task Force Report-Out [Sevigny/Albright] | (24-36) |
| IV. | Recycling Update [Worley/Albright] | (37-46) |
| V. | Items Referred to Committee | (47) |

"Environmental Quality and Public Works committee to which shall be referred matters relating to the department of Environmental Quality and Public Works and its divisions, including capital improvement projects and any related partner agencies."- Council Rules & Procedures, Section 2.102 (3). Effective January 1, 2023. Adopted by Urban County Council September 22, 2022.

2024 Meeting Schedule

February 6	August 20
March 12	October 22
April 30	December 3
June 18	



Environmental Quality & Public Works Committee

October 22, 2024

Summary and Motions

Chair Sheehan called the meeting to order at 1:03 p.m. Committee Members, Vice-Mayor Wu and Council Members Fogle, Lynch, LeGris, Monarrez, Gray, Worley, F. Brown, and Sevigny were present. Council Member Reynolds was present as a non-voting member.

I. Approval of August 20, 2024 Committee Summary

Motion by Sevigny to approve the August 20, 2024 Environmental Quality & Public Works Committee Summary. Seconded by LeGris. Motion passed without dissent.

II. Annual Snow Removal Plan

Rob Allen, Director of Streets and Roads, presented the 2024-25 Snow Plan Update and reviewed the salt expense comparison between fiscal years. He said 8,800 tons of salt are on hand for the 2024-25 winter season. Allen displayed a map to show the route rankings throughout the city and said service levels are 1-3 depending on accumulation. The Snow Route Optimization Study was completed this year and LFUCG went from having 16 previous zones to 11 current zones. He spoke about the baseline scenario presented by University of Kentucky and out of the 3 options presented, “medium change” was selected as the most desirable scenario. He reviewed changes for the 2024-25 school year noting that some routes have been added after consulting with Fayette County Public Schools (FCPS).

Sidewalk snow removal is performed primarily by the Division of Environmental Services, Parks, Fire, and Facilities and over 84 miles of sidewalks are serviced with full completion of the plan. He provided an example to show how routes are prioritized and said the snow plan is designed to be completed within 48 hours. Looking ahead, the condemned salt barn is being replaced with a new salt dome on the old landfill. The new dome will have a storage capacity of up to 4,500 tons and this will bring the storage capacity to 11,500 tons of salt under one roof.

When asked if all those invited to the stakeholder meetings were in attendance, Allen said he is not sure if all attended, but they have all provided input and participated. Speaking about communication with FCPS, Allen said they coordinate on a regular basis and FCPS communicates when bus routes have been amended. Allen confirmed if parents have questions, they would direct calls to LFUCG. No action was taken on this item.

III. MS4 Stormwater Quality Update

Greg Lubeck, Deputy Director of Water Quality, reviewed the Municipal Separate Storm Sewer System (MS4) Program elements. These elements include public engagement, pollution prevention, and monitoring and reporting. The purpose of Illicit Discharge Detection and Elimination (IDDE) is to detect and eliminate illicit connections and improper disposal of waste into the MS4 by determining the types and sources of illicit discharges entering the system. The construction site stormwater runoff control program stipulates requirements for construction site operators to implement appropriate erosion and sediment control using best management practices. He reviewed several case studies including curb inlets, vegetative buffer, silt fence, and construction access. Construction site management and

enforcement includes detention basins, retention ponds, private water quality control devices, LFUCG water quality devices, underground detention basins, and critical culvert inspections. He reviewed municipal operations, industrial facilities, and industrial inspections and noted there were 12,151 inspections in 2023.

When asked if there is a way for residents to report issues, Lubeck said the best thing to do is call 311 and the Compliance and Monitoring section will investigate. Lubeck spoke about the water sampling process and the volunteering aspect of water quality measurements, and he mentioned the watershed focus monitoring program where they sample 7 different watersheds. They rely on volunteers because staff alone can't accomplish this. He also cited the last watershed focus monitoring program was a permitting issue and they are working with the state to get a new permit. No action was taken on this item.

IV. Community Outreach Update

Angela Poe, Public Information and Engagement (PIE) Section Manager, began the presentation with an overview of the PIE program's purpose and structure. The mission is to inform the public about services provided by Environmental Quality & Public Works and engage the public in behaviors that benefit the community. She provided an overview of the FY24 programs which include Geocaching, Art by Nature, Go See Trees, Creek Sweep (litter cleanup), and Compost Workshops. Moving forward, the Community Environmental Academy is returning and will be more accessible. There will be storm drain adoptions and a Pickup and Play pilot funded by Corridors in partnership with Parks and Recreation. The compost program provides alternative organic material disposal options, engaging only those interested in home composting. Poe provided an overview of the FY24 PIE-led events as well collaborative and tabling events. Finally, she spoke about direct community outreach which is aimed at building relationships with traditionally underserved communities. This is a long-term investment for us to show up, listen, and help in ways that are within our scope.

When asked if metal stakes are recycled with the yard signs, Poe said this is done separately so they can be reused or recycled with metal. Poe confirmed councilmembers are allowed to participate in the Community Environmental Academy. Poe spoke about the diversity of staff which consists of college age up to those who could potentially retire. When asked if there are events on the Northside, Poe said Lex Litter Fest took place in Castlewood Park. Currently, there are programs in 5 parks but are deliberately spread out across the city.

Regarding the capacity of the compost workshop, Poe confirmed they try not to make the classes too large because each person in the registered household is encouraged to attend. She will investigate the feasibility of making these workshops available virtually. This program's success is due to participants investing in the education piece before they get the voucher. When asked about outreach, Poe said mailers and social media are a useful way to get the word out. Poe requested the Council to communicate with her if they have connections to active neighborhood associations or faith-based groups. No action was taken on this item.

V. Items Referred to Committee

Motion by Sheehan to remove from the list of committee referrals: Item #2 – Explore Lexington's Sustainability Options. Seconded by Gray. Motion passed without dissent.

The meeting adjourned at 2:20 p.m.



CONSENT DECREE AND REMEDIAL MEASURES PLAN UPDATE

Environmental Quality & Public Works Committee

December 3, 2024

Charles H. Martin, P.E.

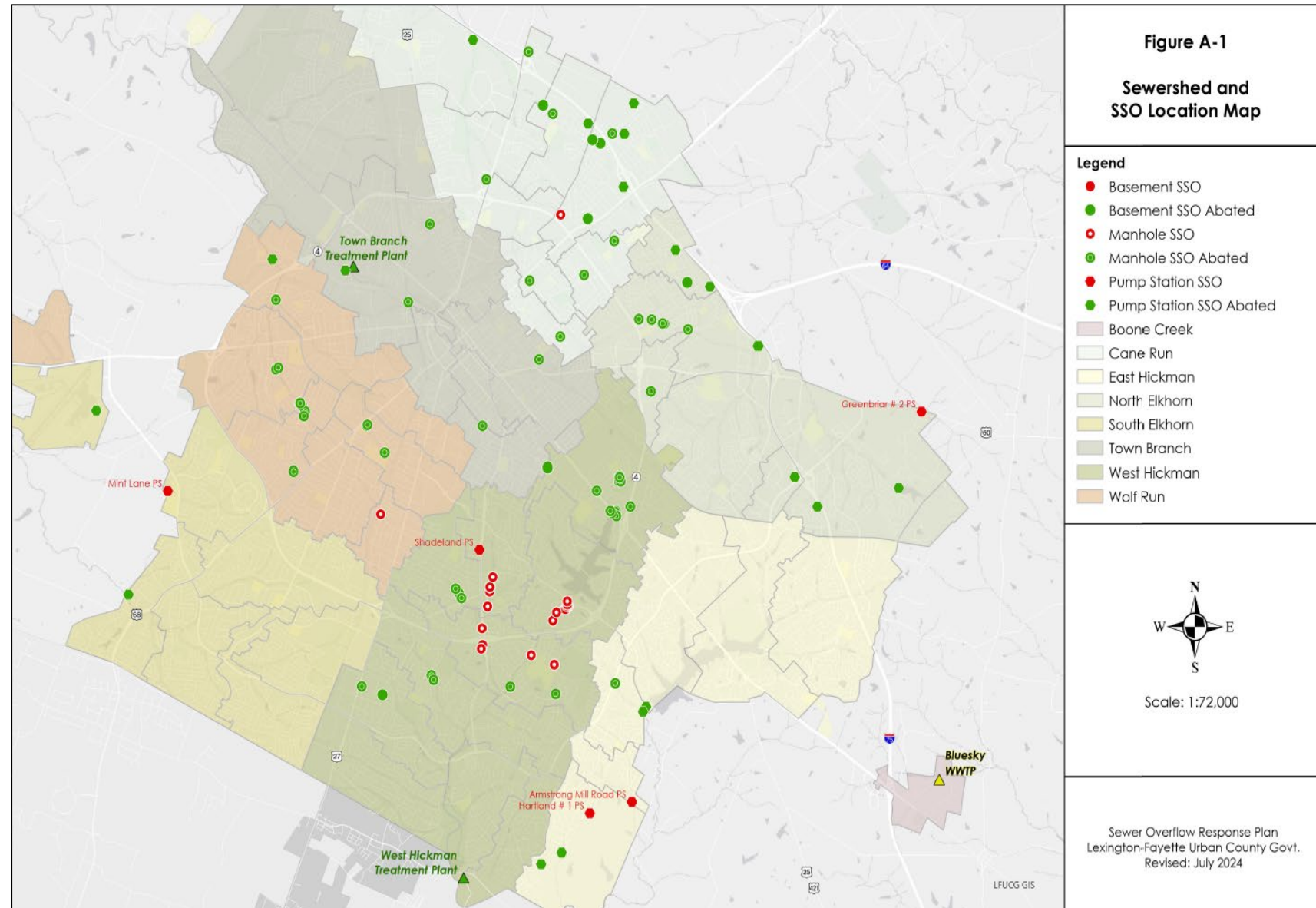




AGENDA

- Overall Consent Decree Status
- Remaining Capital Obligation - Overview
- Active and Upcoming Projects (12-month view)
- Questions







OVERALL CONSENT DECREE STATUS

- All stormwater and supplemental project obligations are complete.
- Capacity, Management, Operations and Maintenance (CMOM) obligations are ongoing / last forever.
- Sanitary Sewer Remedial Measures Plan (RMP) projects continue pending final approval of a revised schedule.





SCHEDULE MODIFICATION STATUS

Modification Approved - September 2024

- Extended the full compliance deadline to 12/31/30.
- Reduced Quarterly Report obligation to Semi – Annual.
- Reporting modification not subject to approval by the courts – electronic submissions (no more hardcopies!)



Next Steps

Submit project specific schedule for review and approval.





Remaining Capital Obligation Projects

	TOTAL PROJECTS**	COMPLETE	ACTIVE	PENDING
Collection & Conveyance*	80	53	16	11
Treatment Plants	37	23	8	6
TOTAL	117	76	24	17

* Includes Blenheim Way project not yet on approved list.

** Otherwise as totaled by 2Q2024 report.

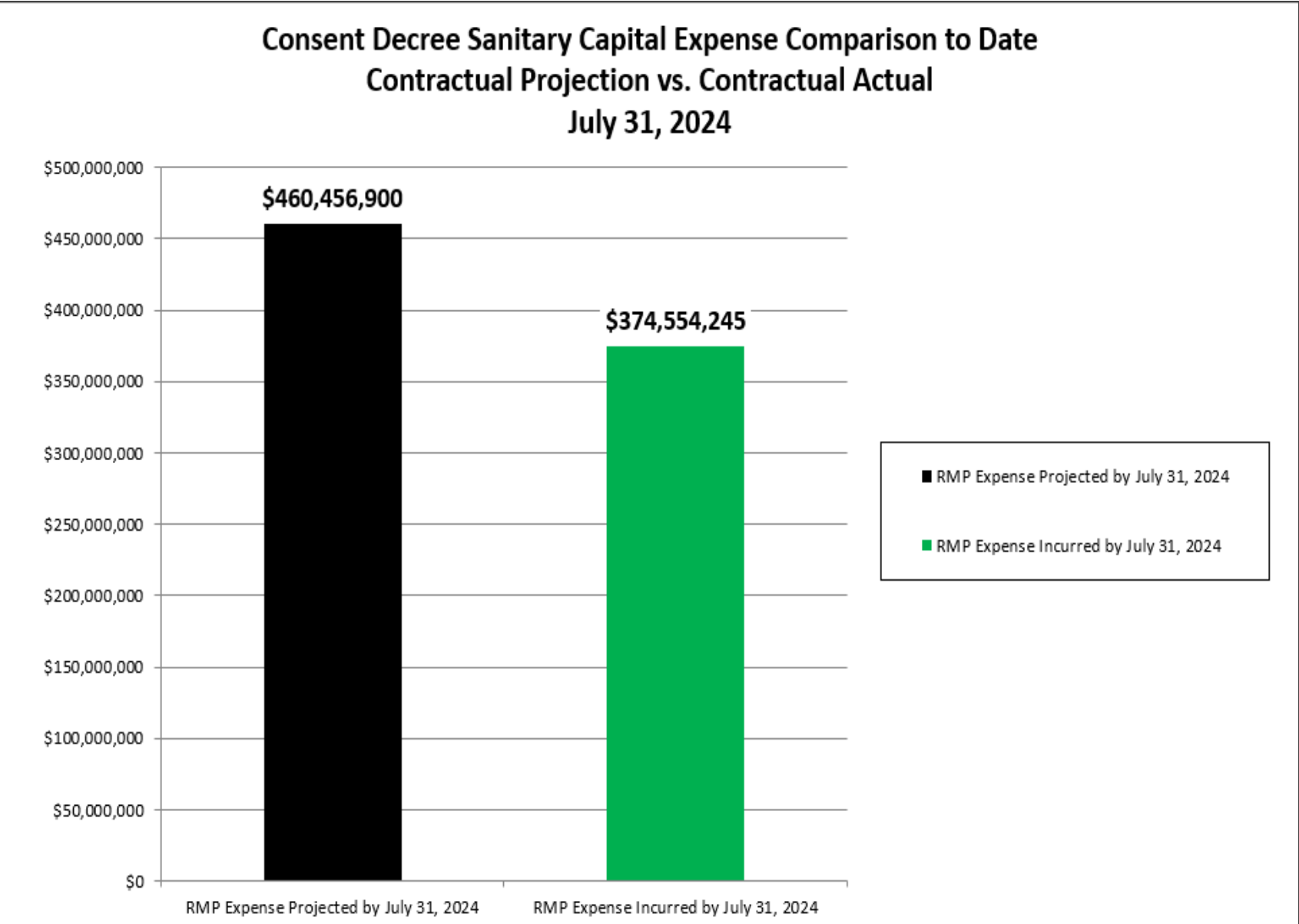




RMP Projects and Cleaner Water Ky Grant Funds

GRANT	PROJECT	BASE \$ AMOUNT	10% ADDED?	CURRENT FUNDING AMOUNT
21CWS027	WWTP UV Disinfection Retrofit	\$11,868,095	\$1,186,810	\$13,054,905
22CWS171	WWTP UV Disinfection Retrofit	\$1,165,178	\$116,518	\$1,281,696
22CWS007	Furlong SW	\$906,645		\$906,645
22CWS008	Town Branch WWTP Dewatering	\$3,725,000		\$3,725,000
22CWS009	Veterans Park SW	\$1,345,000		\$1,345,000
22CWS010	Brownfields	\$2,995,383		\$2,995,383
22CWS011	Armstrong Mill	\$9,497,206		\$9,497,206
21CWS143	Blenheim Way Sanitary Trunk Sewer	\$2,220,000		\$2,220,000
21CWS142	East Hickman PS Phase 2	\$2,780,000		\$2,780,000

TOTAL**\$37,805,834**



Projected Verses
Actual Expense
August 2024

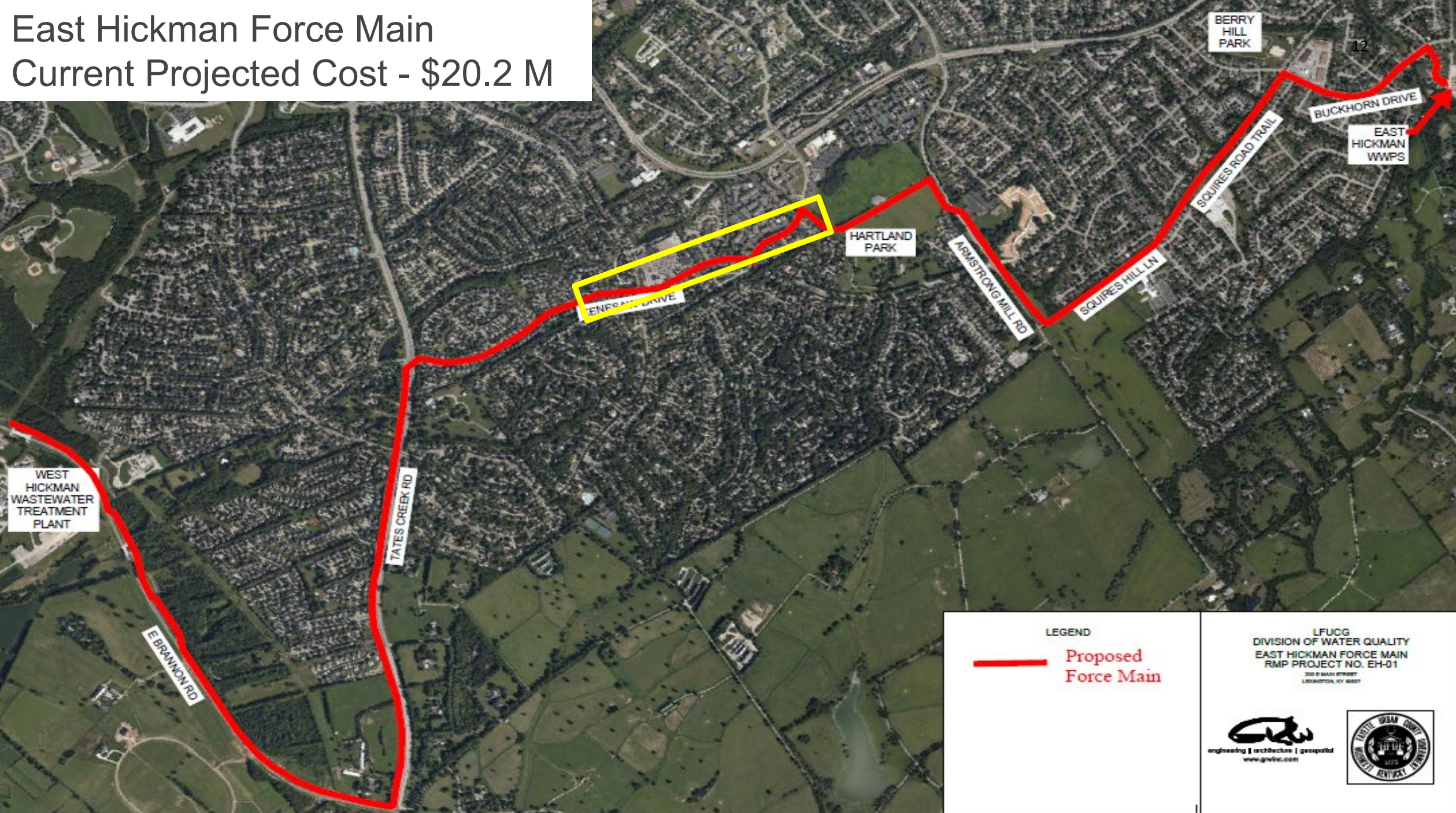


Active Projects



East Hickman Force Main

Current Projected Cost - \$20.2 M





Delong Road Pump Station
Active – Completion mid 2025
Current Projection - \$9.5 M
(grant funded)





Wolf Run Trunk F

Active – completion in 2024
Current Projection - \$6.3 M





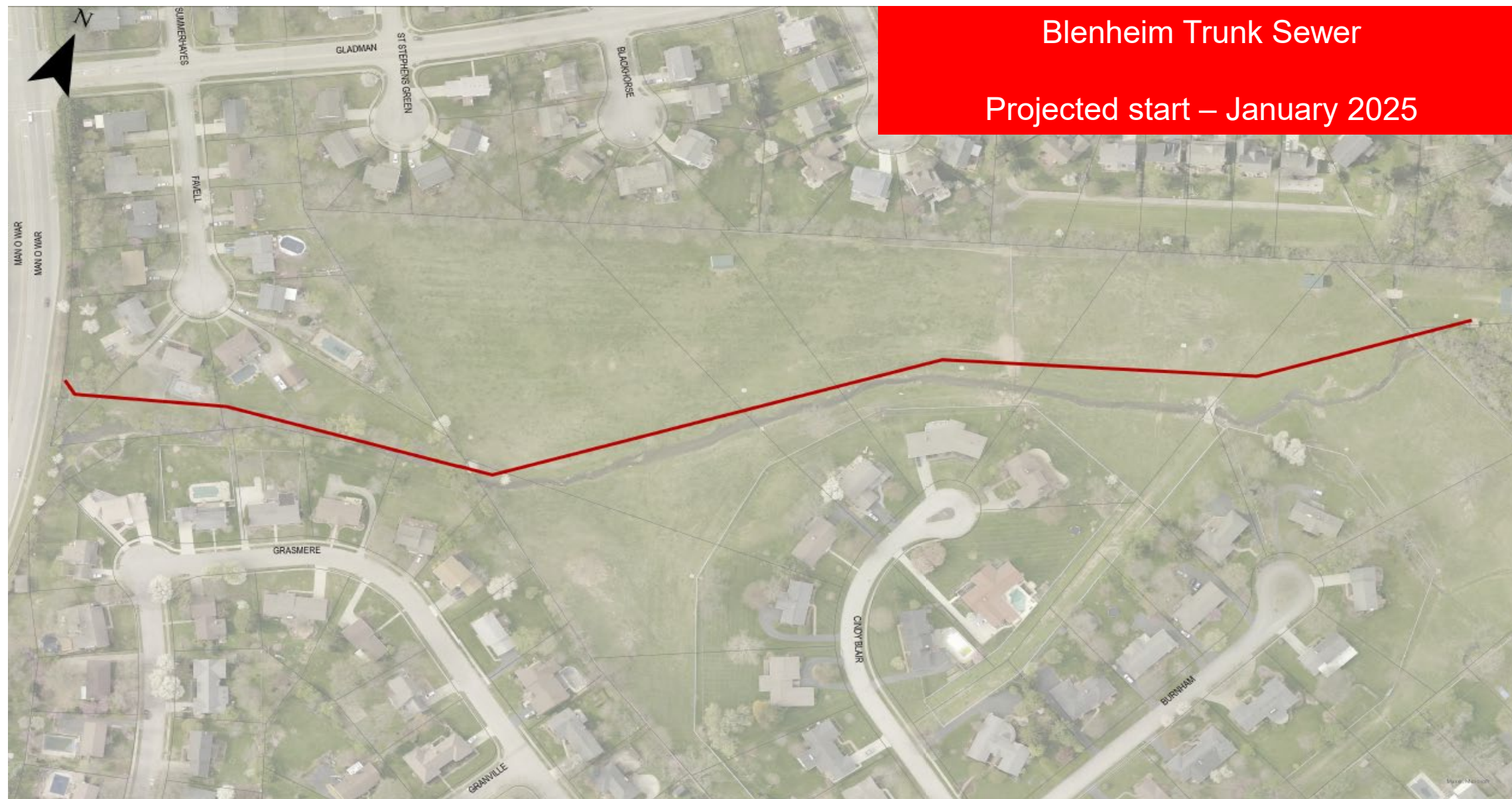
Pending Projects



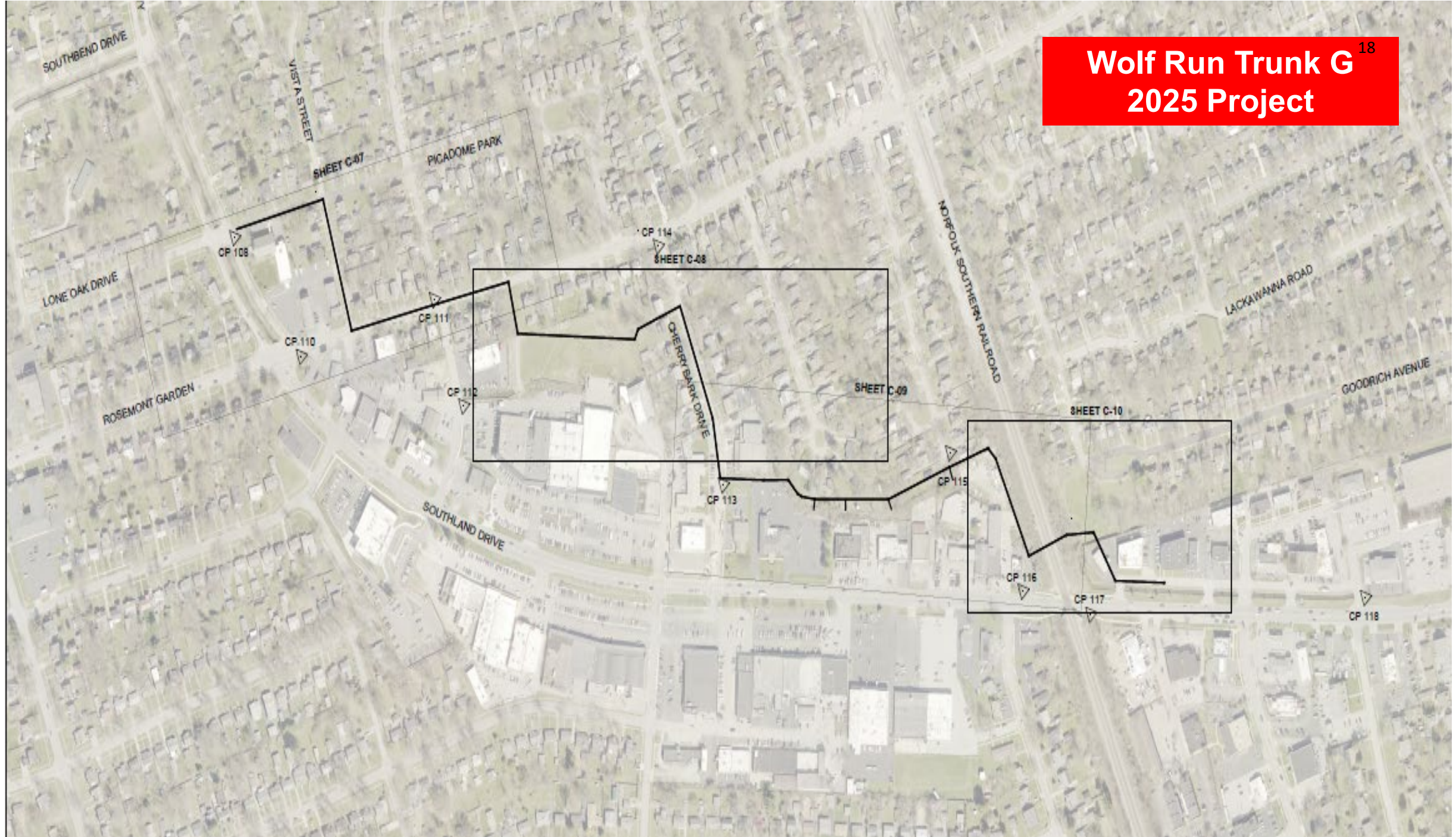
Legend
RMP Project Pipe
CR 14 - New Circle Trunk A
CR 15 - New Circle Trunk B

Begins in early 2025
Bid price - \$12 M





Wolf Run Trunk G¹⁸ 2025 Project

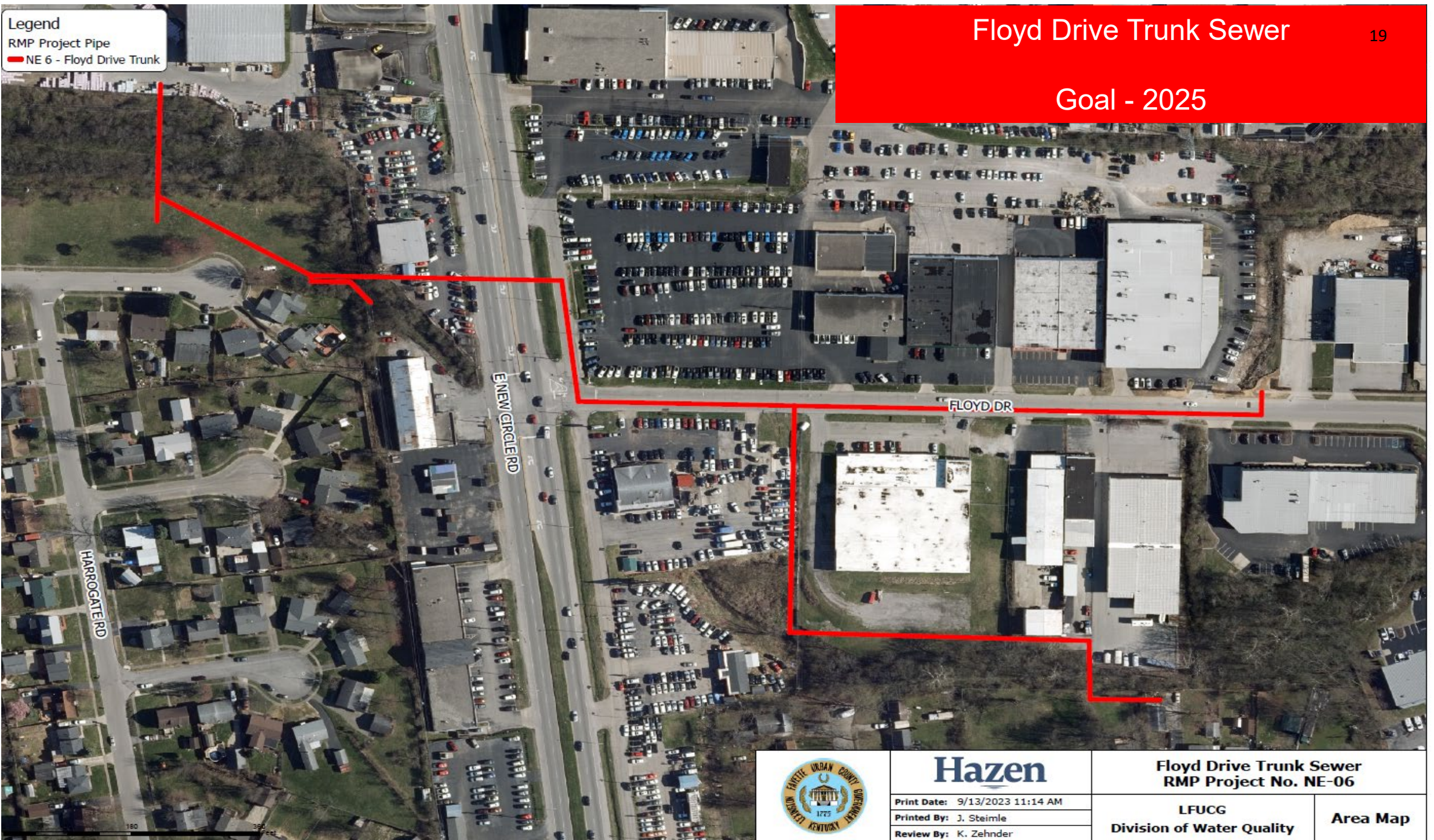


Legend
RMP Project Pipe
NE 6 - Floyd Drive Trunk

Floyd Drive Trunk Sewer

19

Goal - 2025



Hazen

Print Date: 9/13/2023 11:14 AM

Printed By: J. Steimle

Review By: K. Zehnder

**Floyd Drive Trunk Sewer
RMP Project No. NE-06**

**LFUCG
Division of Water Quality**

Area Map

Legend
RMP Project Pipe
— WH 7 - Merrick Trunk

Merrick Trunk Sewer Goal - 2025

20





Other Projects “In the Queue”

- West Hickman Trunk F
 - 5th District Impact.
 - Residential parcel impacts – easements acquisition challenges.

- Plainview Trunk
 - 5th District Impact.
 - Easement on one parcel transitions will transition it into construction phase.

- East Hickman Pump Station Phase 2
 - Grant funded.
 - Odor control component.





Summary

- New Consent Decree full compliance deadline – December 31, 2030.
- 65% of capital projects complete / 20% in construction/design/easement phase.
- Consent Decree identified 117 Recurring SSOs. 86 of those locations have been abated.
- Total project cost still trending below the 2014 projection but cost escalation risks remain.



Questions?



LEXINGTON





WASTE DIGESTER TASK FORCE REPORT OUT

Environmental Quality & Public Works Committee

December 3, 2024

Nancy Albright, Commissioner, Environmental Quality & Public Works





Task Force Members

- Dave Sevigny – 10th District Councilmember, Chair
- Hannah LeGris – 3rd District Councilmember
- Jennifer Reynolds – 11th District Councilmember
- Nancy Albright – Commissioner, Environmental Quality & Public Works
- John Howard – Deputy Director, Waste Management
- Lauren Monahan – Environmental Initiatives Specialist, Waste Management
- Alicia Larmour – Council Research Analyst
- Kendra Thompson – Council Research Analyst





Task Force Background

**2015 and
2022**

- LFUCG staff and council members visited Sevier Solid Waste in Sevierville, TN.
- Toured the facility and learned about its waste digester.
- Discussions on composting options continued.

May 2022

- Commissioner Albright presented to the EQPW Committee on Sevierville waste digester tours.
- A feasibility study of waste digesters in Lexington was recommended.

October 2023

- Commissioner Albright presented the results of the Waste Digester Feasibility Study to the EQPW Committee.
- The consultant recommended Source Separated Organic Aerated Static Pile composting.

**November
2023**

- VM Wu formed the Waste Digester Task Force to further review the study's 3 composting options.
 1. Rotary Drum Digester
 2. Tunnel Reactor Digester, and
 3. Aerated Static Pile





Purpose

More vigorously review the August 2023 Feasibility Study In-Vessel Waste Composting Digester Solution Report.

Understand the financial, operational, and environmental impact of proposed solutions.

Determine the solution investment that aligns with Imagine Lexington 2045 for which the city should plan and prioritize.





Timeline of Work

■ January 18, 2024

- Established our purpose and scope of work and set expectations.

■ February 1 & 15, 2024

- Extensively reviewed the consultant's report and formed questions for the consultant.

■ March 21, 2024

- Held a virtual Q&A meeting with Jamie Zawila from GT Environmental and Craig Coker from Coker Consultants
- Planned composting and waste facility tours.





Timeline of Work (continued)

■ May 9, 2024

- Held a virtual Q&A meeting with US Composting Council Executive Director Frank Franciosi, and Rich Riedel (Virginia Composting Facility)
- **Voted to remove the Rotary Drum and Tunnel Reactor Digesters from further discussions.**
 - The Rotary Drum Waste Digester has higher capital, operational, and maintenance costs. Due to contamination rates, it is seen less frequently in other municipalities (only four remain as of 2023). It would require a larger scale to handle the amount of our waste.
- **Voted to focus on Source-Separated Organics Aerated Static Pile (SSO ASP) composting.**
 - The SSO ASP has lower capital, operational, and maintenance costs. It can be more easily scaled to handle our waste (2 – 3 bunkers). It is easier to pilot-test and is commonly used in the US with over 300 current programs. Currently, about 32% of our divertible waste stream is suitable for the SSO ASP composting stream. Additionally, it supports the 2045 Comprehensive Plan and 2023 Empower Lexington Plan.





Timeline of Work (continued)

▪ August 13, 2024

- Visited Smith Creek's composting facility in Borden, IN
 - The Task Force is interested in pursuing a composting model like this.



165-acre facility focusing on grocery, manufacturing, and restaurant food waste.

Manages Louisville Metro's Central Business District's composting program.



Before composting, there is about 30,000 tons of waste on 22 acres; after composting, there is about 80,000 tons of waste on 15 acres.

80% of the cost for composting needs to be collected from the supply side.



20% of their income comes from end-user product sales.

Their suppliers are fined/billed for any contaminated material they send to the facility.

It was a hot day, but no smell was noticed.





Timeline of Work (continued)

▪ August 21, 2024

- Visited UK's Food Waste & Organics Diversion Program – student center and farm/research facility in Woodford Co.



All prep and post-food waste at the Student Center is ground into a sludge/slurry.

Most establishments on campus participate in at least the prep side of food waste collection.



They use washable utensils and plateware.

They switched to brown napkins as they compost better.



All their product is used on campus property.

In November, a new on-campus system on < 2 acres began operating. It creates compost in 21 days.





Timeline of Work (continued)

- **August 22, 2024**
 - Visited Waste Management's Landfill in Morehead, KY



Trucks and transport are the biggest carbon emitters in the collection process.

An example of landfills reducing their carbon footprint by generating electricity or vehicle fuel on-site.



Gas is captured to generate power.

An on-site grid allows it to connect for electricity.



In general, landfills compact 1 ton per cubic yard.

The facility grounds were clean and did not smell.





How do We Prepare for Success

- Addressing contamination is key
 - **Our current contamination rates**
 - Recycling: 30 – 35%
 - Yard waste: 50 – 60%
 - **National contamination rates**
 - Recycling: 17%
 - Yard Waste: no average contamination rate for municipal yard waste available because so few municipalities do it
 - To have the greatest impact, most efficiently, contamination should be addressed first





Task Force Recommendations

■ Recommendation #1

- Develop and begin implementation of a recycling and yard waste contamination reduction plan by 12/31/2025.
- Reduction plan could include:
 - Workgroup creation
 - Public outreach and education
 - Marketing
 - Modification of ordinances and/or resolutions

■ Recommendation #2

- Develop and implement aerated static pile (ASP) composting as an offering to commercial clients by 12/31/2027.

■ Recommendation #3

- Develop and implement ASP composting as an offering to residential clients by 12/31/2029.

■ Recommendation #4

- EQPW staff will update the committee every six months beginning July 1, 2025, until implementation is complete





Costs and Funding

- Current costs
 - <\$75,000 (Professional Services-Solid Waste) to develop the recycling and yard waste reduction plan
- Future costs
 - FY 2026- TBD-Implementation of pilot contamination reduction plan, Educational and marketing materials, additional staff, violation tracking, etc.
 - FY 2027-2029-Capital cost ^\$8 million for ASP facility (per study)
 - FY 2027-203X Operating cost per year ^\$1.4 million + collection cost method TBD (per study)
- Sources of funding
 - Budget request(s) from Environmental Quality & Public Works
 - Urban Services Fund Balance and Annual Ad Valorem
 - Landfill Fund Balance and Annual Fees
 - Potential grant opportunities (e.g., KY Pride Composting, EPA, USDA)



Questions?



LEXINGTON





RECYCLING UPDATE

*Nancy Albright, Commissioner of Environmental Quality and Public Works
Environmental Quality and Public Works Committee
December 3, 2024*



Agenda:

- We Currently Accept
- What We Accepted in 2020
- 2022 Recycling Facility Upgrades
- 2023 EPA and The Recycling Partnership Grants
- 2024 New Baler Purchase and Installation
- Timeline



We Currently Accept:

MIXED CURBSIDE RECYCLING



Recycling is local. Please support our recycling program by recycling right.



Recycle ONLY these items in Central Kentucky.



**#1 and #2 Plastic
Bottles, Jugs & Jars**



**Glass Bottles
& Jars**



**Steel & Aluminum Cans,
Canisters and Lids**



**Dry Cardboard &
Paperboard**



Paper



**Food & Beverage
Cartons**

**MATERIALS SHOULD BE CLEAN, DRY AND LOOSE.
NEVER BAG RECYCLABLES.**



What We Accepted in 2020

- Suspended curbside paper collection in 2019
 - Poor quality product was unsellable
- Several equipment breakdowns at MRF
- Council subcommittee on recycling formed
- Pilot to recycle 3-6 plastics unsuccessful
- Commitment to continue exploring technical upgrades to improve recyclable products



 **RECYCLING**
Recycling is local. Please recycle right.

MIXED CURBSIDE RECYCLING

The following items are accepted in the blue curbside recycle carts. No plastic bags.

 Plastic screw top bottles and jugs

 Glass bottles and jars

 Paperboard (not packaging for refrigerated/frozen goods)

 Aluminum and steel cans

 Dry cardboard

PAPER DROP-OFF RECYCLING

Mixed paper can be taken to a yellow paper-only bin. Mixed paper is not currently accepted in blue curbside recycle carts. No plastic bags.

 Mixed paper

DO NOT BAG RECYCLABLES.
Never put trash, plastic bags, liquids, food or wet materials in the recycling.

 @LiveGreenLex #RecycleRightLex

 **LEXINGTON**
Live Green

Additional information:
LexingtonKY.gov/Recycle
LexingtonKY.gov/PaperRecycling





2022 Recycling Facility Upgrades

- LFUCG invested \$4.2 million to upgrade equipment and improve the sorting process
- Received \$150,000 grant from the Carton Council
 - Added 2nd optical sorter to improve plastic & carton sorting
- Cartons (broth boxes, milk cartons, and juice boxes) added to the list of acceptable materials
- Glass sorted out earlier in the process to reduce equipment damage from broken glass
- Began accepting commingled paper again after source-separating for nearly two years



Optical sorter



April 2022 Re-opening Event

2023 EPA and The Recycling Partnership Grants

- In 2023 Waste Management applied for and was awarded a \$1.8 million EPA SWIFR Grant (Solid Waste Infrastructure for Recycling)
- The grant is part of \$2,452,816 in EPA awards to expand recycling infrastructure and waste management systems across Kentucky
- Additionally, The Recycling Partnership has awarded \$300,000 towards facility upgrades
 - Includes an educational component to assist in community outreach efforts





EPA and The Recycling Partnership Grants

- The proposed upgrades will:
 - Expand recyclable items to include polypropylene plastic (yogurt cups, butter tubs)
 - Upgrade areas of the facility with state-of-the-art equipment including a duel eject optical sorter, a robotic arm, conveyors, and an upgraded compressor
 - Robotic component will assist in more efficient sorting of HDPE plastic into natural HDPE (colorless bottles) and mixed HDPE (mixed colors)
- Polypropylene can be recycled into plastic packaging, household products such as laundry baskets, children's toys, automotive parts, machinery parts, and more



Robotic arm



2024 New Baler Purchase and Installation

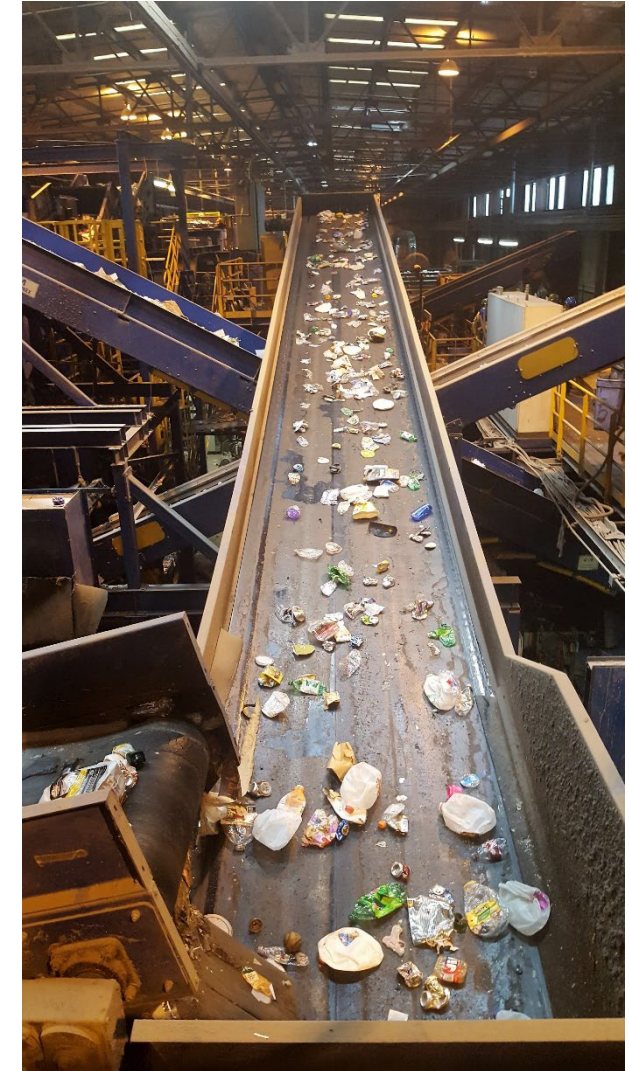
- The current materials baler is 12 years old and has reached the end of its lifespan
- A new baler was bid out in early 2024 and BE Equipment, Inc. won the project bid
- The new baler is currently being built to specification
- Installation to begin in a few days
- Will provide improved reliability and more efficient processing of bales





Timeline

- We will stop collecting recycling later this week.
- During this shut down we will also:
 - Replace the roof over the material drop area
 - Make repairs to the loading dock where we ship out the baled material
 - Clean and maintain the rest of the sorting equipment
- Materials will be collected again beginning December 16*





Questions?



ITEMS REFERRED TO COMMITTEE

Environmental Quality & Public Works

Referral Item	Current Sponsor	Date Referred	Last Presentation	Status	Legistar File ID
1 Waste Digester Feasibility Study	L. Sheehan/D. Seigny	March 29, 2022	October 24, 2023		0445-22
2 Streets and Roads Fleet Depreciation and Replacement	H. LeGris	May 30, 2023			
3 Odor Control Plan at the Waste Water Treatment Plant	J. Reynolds	October 31, 2023	February 6, 2024		
4 Microtransit	C. Ellinger	November 14, 2023	February 6, 2024		
5 Coordination of ongoing maintenance for plans including infrastructure, beautification, and planting projects	J. Reynolds	August 20, 2024			
6 Neighborhood Traffic Management Program Update	L. Sheehan	August 20, 2024			
7 Traffic Calming with Public Art and Quick Installations	L. Sheehan	August 20, 2024			
Annual / Periodic Updates					
8 Recycling General Practices * Note: Several recycling items were combined into this one item on March 9, 2021	P. Worley	March 9, 2021	June 18, 2024	December 3, 2024	0292-19
9 Backyard Composting - Home Compost Pilot Program (includes a Community Outreach Update)	H. LeGris	February 2, 2021	October 22, 2024		0500-21
10 Urban Forestry and Street Trees Update (includes Chapter 16 and 17 Ordinance Changes , Lex Grow Trees Program)	H. LeGris	September 17, 2019	April 30, 2024		0501-21
11 Capacity Assurance Program (CAP) Audit Update	L. Sheehan	August 30, 2018	April 18, 2023		0964-20
12 Annual Energy Improvement Fund Update	L. Sheehan	January 10, 2017	March 12, 2024		0572-22
13 Annual Snow/Ice Removal Plan	L. Sheehan	February 15, 2014	October 22, 2024		1034-22
14 Annual Pavement Management Plan / Curbs Assessment	L. Sheehan	May 26, 2020	April 30, 2024		0440-22
15 Annual Stormwater Priority List Update	L. Sheehan	February 20, 2018	August 20, 2024		0922-22
16 Annual Municipal Separate Storm Sewer System (MS4) Program Update	L. Sheehan	February 20, 2018	October 22, 2024		1122-22
17 Annual Consent Decree and Remedial Measures Plan Update	L. Sheehan	January 22, 2019	December 5, 2023	December 3, 2024	0222-22
18 Annual Division and Program Review (Pilot Program)	L. Sheehan	November 30, 2021	November 1, 2022		0127-22
Subcommittees, Workgroups, Task Forces					
19 Waste Digester Task Force	D. Seigny	November 14, 2023		December 3, 2024	1200-24

Updated 10.22.24, KJT