

Capital Improvement Projects

2021 - 2022

2022 Sanitary Sewer Project, maintenance & repair:

Sewer Fund - 501-62-00-100-57000

Budget = \$2,776,659.00

The Public Works Engineering division has established the 2022 Sanitary Sewer Project within the Wildwood South sanitary sewer shed. Staff chose this location based on the Inflow/Infiltration (I/I) reduction investigation GBA engineers performed in 2020-2021. Staff also used NEER risk assessments on our sanitary sewer systems to assist in the development of this project as well. This sanitary sewer project will focus on high risk and very high-risk pipes/structures (sewers with risk factors of 3.7 to 5.0, where 5.0 is the worst).

-- Recommended methods for rehabilitation of sewer mains, service lateral connections, & manholes:

- Open cut point repairs for localized defects.
- Complete replacement of line segments using open cut or pipe bursting.
- Cured-in-place pipe lining (CIPP).
- Lateral connection open-cut repair or lateral connection full wrap short or long liner.
- Cementitious manhole lining.
- Manhole frame and cover replacement.
- Manhole rebuild bench & trough.

2022 Sanitary Sewer Project, project engineering:

Sewer Fund 501-62-00-100-57000

Budget = \$720,000.00

This sanitary sewer project will focus on reducing I/I in the below highlighted area of the Wildwood South sewer shed. This sewer project will consist of:

- Review City complaint records, emergency service records, past inspection records, cctv data.
- Conduct further closed-circuit television (CCTV) investigations within the project area.
- Conduct sanitary sewer manhole inspections within the project area.
- Make sanitary sewer system rehabilitation recommendations.
- Final sanitary sewer system project design.
- Bidding and construction contract administration services.

2022 Sanitary Sewer Project Location:

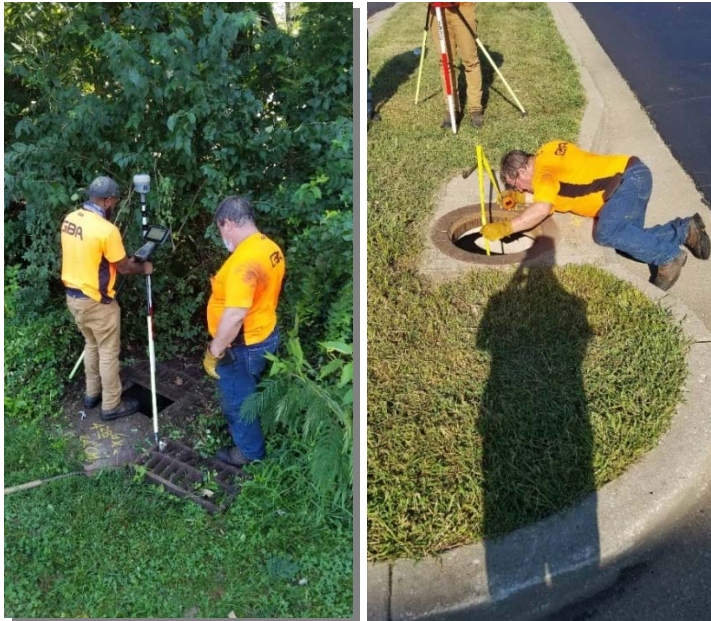


2022 Stormwater Master Plan Phase III & Phase IV Inventory:

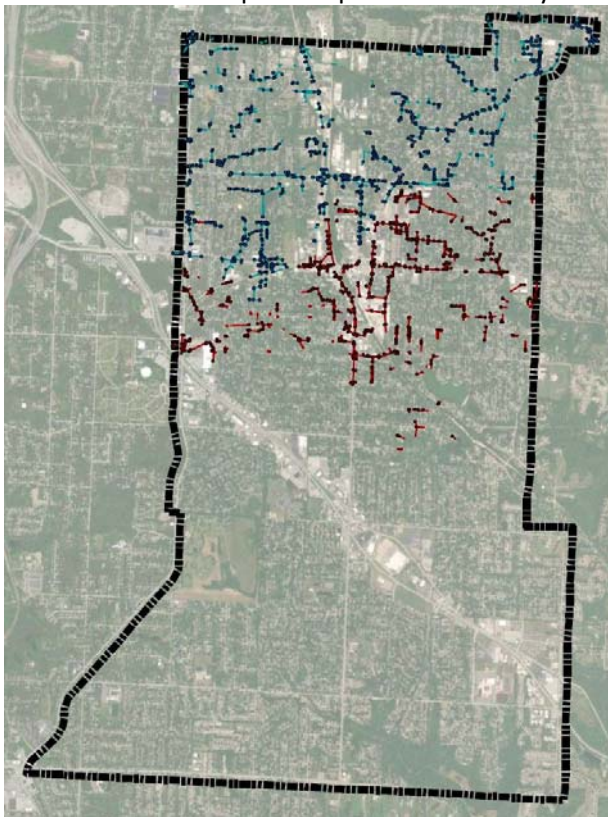
Capital Sales Tax Fund - 205-62-00-100-57000

Budget= \$220,000.00

A stormwater master plan has been developed to identify and map the City's stormwater infrastructure so that a proactive approach to stormwater maintenance and upgrade can be completed. This will aid the City staff to identify immediate and long term needs to continue improvements and/or replacements of these assets. A 5-year Capital Improvements Program will be developed as the master plan is completed. Staff is using the information to inspect Very-High Risk and High Risk pipes to determine where maintenance dollars should be spent.



- The picture below depicts the phase 1 & 2 areas that have been completed. Phases III & IV will inventory the remainder of the City's stormwater system. The blue lines below depict the phase 1 inventory area, and the red lines depict the phase 2 inventory area.



2022 Stormwater Maintenance Improvement Projects:

Capital Sales Tax Fund - 205-62-00-100-57000

Budget = \$374,000.00

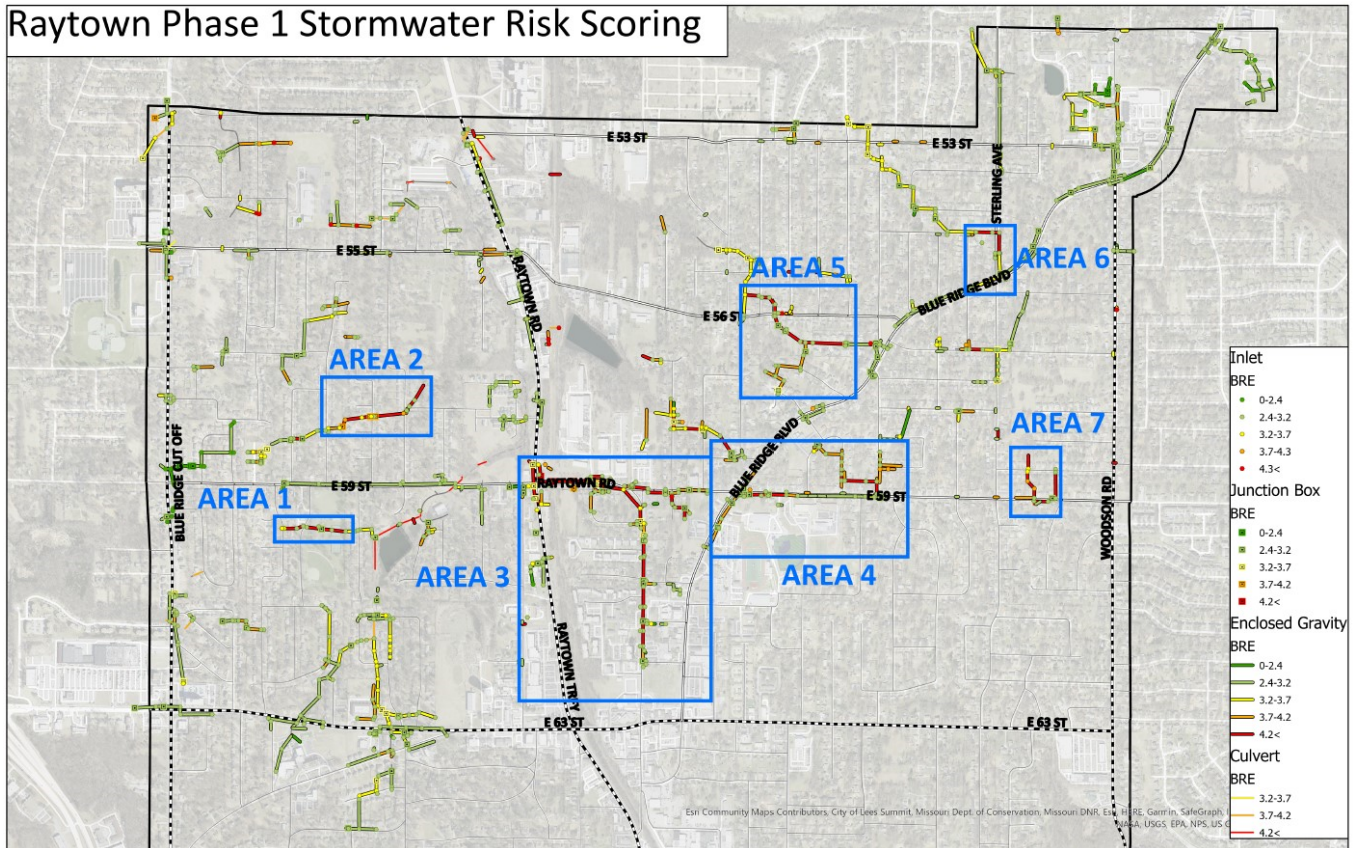
Storm Water Fund - 401-62-00-100-57000

Budget = \$150,000.00

Total Budget = \$524,000.00

- This project is being developed by staff using the Very-High and High Risk scores from NEER and using the CCTV inspections to determine the condition of the pipes. Public Works staff has chosen for this initial stormwater project study area to be within the top left corner of area 3 below. The remaining part of area 3 as well as the other 6 areas will be studied in future projects.

Raytown Phase 1 Stormwater Risk Scoring



2022 Street Reconstruction:

Transportation Sales Tax Fund - 204-62-00-100-57000

Budget = \$675,000.00

Staff has developed a strategy to begin reconstruction of our neighborhood streets based on the Pavement Condition Index (PCI) values and budget we currently have. The streets selected for our 2022 street reconstruction project are Evanston Avenue, 83rd Terrace, Hawthorne Avenue, and Overton Drive. This project will completely remove and replace the street asphalt surface, asphalt base, and subsurface. Staff will also evaluate with the engineer more lighting in the neighborhood. The curb/gutter, and stormwater pipe are in good shape, and we do not anticipate removing and replacing these items. Street reconstruction will be a Spring 2022 start of construction.

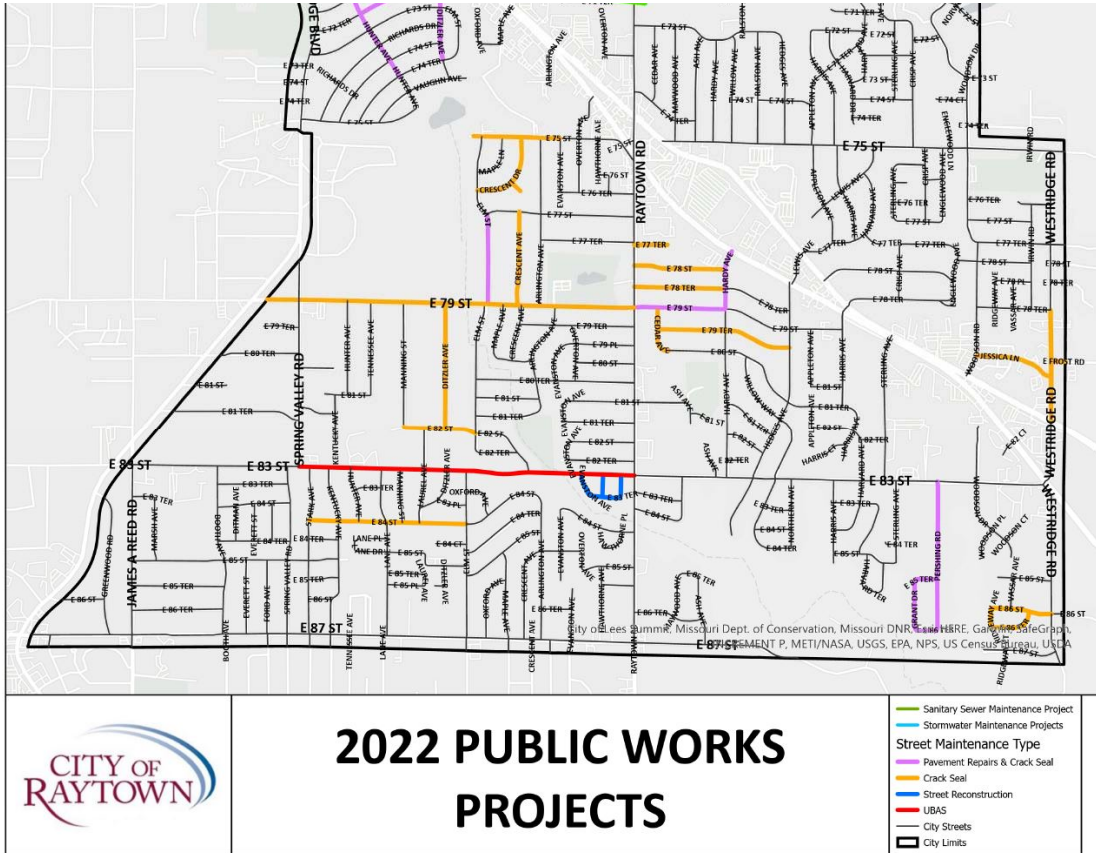


2022 Street Maintenance UBAS Project:

Transportation Sales Tax Fund - 204-62-00-100-53600

Budget = \$400,000.00 of the total funded \$550,000

Ultra-Thin Bonded Asphalt Surface (UBAS) will be constructed on 83rd Street between Spring Valley Road & Raytown Road. Highlighted below with a red line. UBAS program will be a Summer 2022 start of construction.

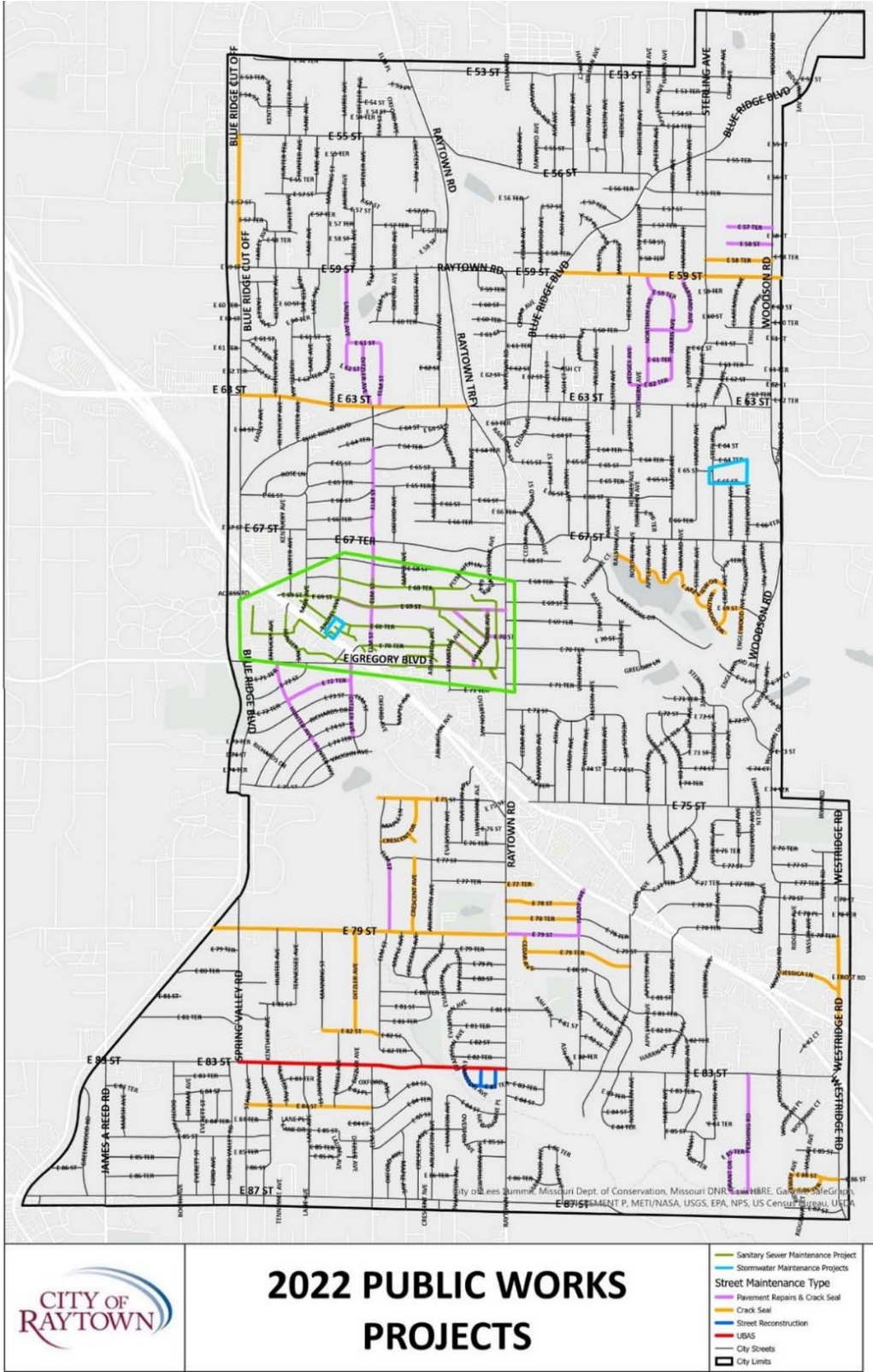


2022 Street Maintenance Surface & Base Repairs:

Transportation Sales Tax Fund - 204-62-00-100-53600

Budget = \$150,000.00 of the total funded \$550,000

Streets scheduled to have asphalt base & surface repairs are highlighted below with the pink lines. Asphalt surface & base repairs program will be a Winter/Spring 2022 start of construction.



2022 Street Maintenance Crackseal Program:

Transportation Sales Tax Fund - 204-62-00-100-53600

Budget = \$150,000.00

Streets scheduled to be crack sealed are highlighted above with the pink & orange lines. Crack seal repairs program will be a Spring/Summer 2022 start of construction.

Picture of a crack sealed street



Capital Expenses by Project and Fiscal Year

Project Name	FY 2019-2020	Amended FY 2020-2021	FY 2021-2022	Total Project
Sanitary Sewer Project				
2021 Design		\$200,000		
2021 Summer/Fall Construction		\$1,455,454		
2022 Sewer Maintenance & Repair			\$2,776,659	
2022 Sewer Metering			\$150,000	
2022 Backflow and Sump Pump Install			\$30,000	
2022 Project Engineering			\$720,000	
2023 Preliminary Engineering			\$92,000	
Total Sanitary Sewer Project	\$0	\$1,655,454	\$3,768,659	\$5,424,113
Stormwater Master Plan				
2020 Phase I		\$50,000		
2021 Phase II		\$115,000		
2022 Phase III & IV			\$220,000	
2022 Maintenance Improvements			\$524,000	
Total Stormwater Master Plan	\$0	\$165,000	\$744,000	\$909,000
2021 Stormwater Capital Projects				
84th and Arlington		\$253,000		
63rd and Woodson		\$231,000		
Total Stormwater Capital Projects	\$0	\$484,000		\$484,000
2021 Contract Street Maintenance				
Summer 2020 Street Maintenance		\$525,000		
Total Contract Street Maintenance	\$0	\$525,000		\$525,000
350 Highway and Raytown Road				
Base Bid	\$1,450,000	\$437,180		
Alternate 1		\$174,934		
Alternate 2		\$46,470		
Alternate 3		\$77,689		
Contingency 10%		\$218,627		
Total 350 Highway and Raytown Road	\$1,450,000	\$954,900		\$2,404,900
Street Reconstruction				
2022 Street Reconstruction			\$675,000	
2023 Street Reconstruction Design			\$150,000	
Total Street Reconstruction			\$825,000	\$825,000
Parks Improvements				
Kenagy Tennis Courts			\$450,000	
Kenagy Playground Replacement			\$90,000	
Pond Wall			\$50,000	
Total Parks Improvements			\$590,000	\$590,000
	\$1,450,000	\$3,784,354	\$5,927,659	\$11,162,013

Capital Projects Funding Sources by Project and Fiscal Year

Project	FY 2019-2020	Amended FY 2020-2021	FY 2021-2022	Total Project
Sanitary Sewer Project				
CDBG Grant		\$0		
Sewer Fund		\$1,655,454	\$3,768,659	
Total Sanitary Sewer Project	\$0	\$1,655,454	\$3,768,659	\$5,424,113
Stormwater Master Plan				
Stormwater Sales Tax Fund		\$50,000	\$150,000	
Capital Sales Tax Fund		\$115,000	\$594,000	
Total Stormwater Master Plan	\$0	\$165,000	\$744,000	\$909,000
2021 Stormwater Capital Projects				
Capital Sales Tax Fund		\$484,000		
Total 2020-20201 Stormwater Capital Projec	\$0	\$484,000		\$484,000
2020-2021 Contract Street Maintenance				
Transportation Sales Tax fund	\$0.00	\$525,000		
Total 2020- 2021 Contract Street Meintenan	\$0	\$525,000		\$525,000
350 Highway and Raytown Road				
Capital Sales Tax Fund	\$450,000			
Transportation Sales Tax Fund	\$362,500	\$954,900		
Grants	\$637,500			
Total 350 Highway and Raytown Road	\$1,450,000	\$954,900		\$2,404,900
Street Reconstruction				
Transportation Sales Tax Fund			\$825,000	
Total Street Reconstruction			\$825,000	\$825,000
Parks Improvements				
Parks Fund			\$590,000	
Total Parks Improvements			\$590,000	\$590,000
	\$1,450,000	\$3,784,354	\$5,927,659	\$11,162,013