

# **City of Columbia Planning & Zoning Work Session**

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Thursday, July 8, 2021

# **SANITARY SEWER CIP**

## Annual Sewer Projects

- Annual Sewer Rehabilitation – Replace and repair sewer lines and sanitary structures - \$2,700,000

# **SANITARY SEWER CIP**

FY 2022 Construction Funding

The following projects are in design phase and funding in FY2022 is for construction and from Enterprise Revenue:

- PCCE #18 – Spring Valley Road - \$50,000
- PCCE #27 – Grace Ellen - \$20,000
- PCCE #28 – Hickory Hill Dr & Sunset Dr - \$215,000

# **SANITARY SEWER CIP**

FY 2022 Construction Funding

The following projects are in design phase and funding in FY2022 is for construction and from Enterprise Revenue:

- Calvert Drive Sewer Relocation - \$260,000
- Hwy 63 Connector south of I-70 - \$190,000
- WWTP Mechanical Screens Wetland PS - \$2,800,000
- South Providence Sewer Replacement - \$90,000



# SANITARY SEWER CIP

## Sewer Mitigation Bank

- Developing an Army Corps of Engineers Wetland and Stream Mitigation Bank to mitigate for future infrastructure impacts
- \$150,000



# SANITARY SEWER CIP

## PCCE #29 East Sunset Lane

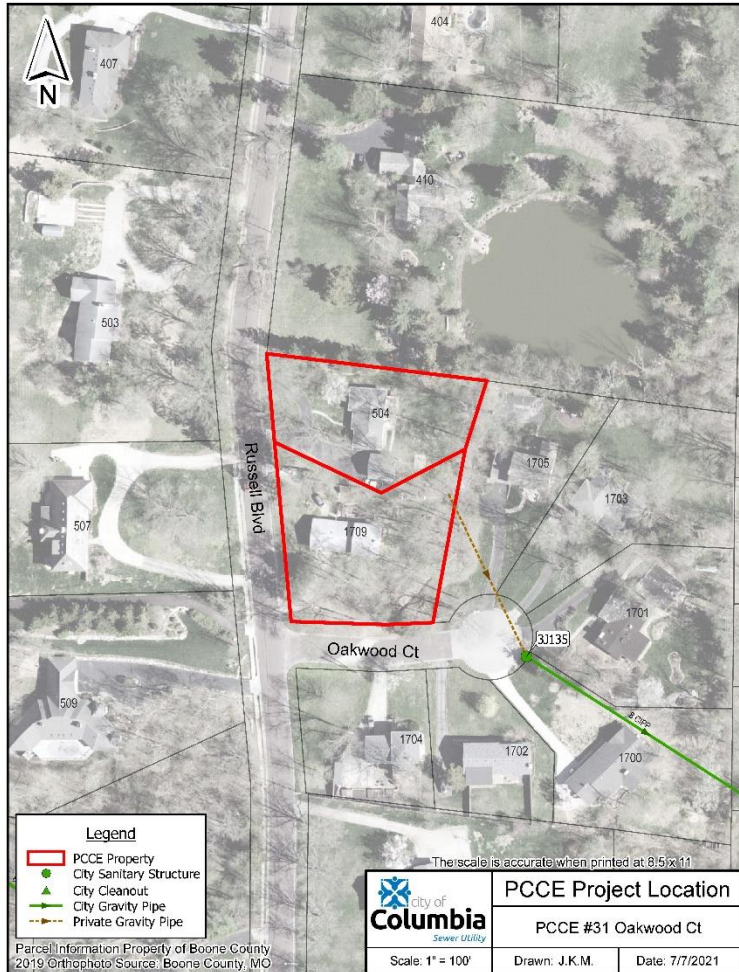
- Replace failing private common collector sewer
- \$50,000 in FY 2022 for design
- \$225,000 in FY 2023 for construction



# SANITARY SEWER CIP

## PCCE #31 Oakwood Court

- Replace failing private common collector sewer
- \$30,000 in FY 2022 for design
- \$120,000 in FY 2023 for construction

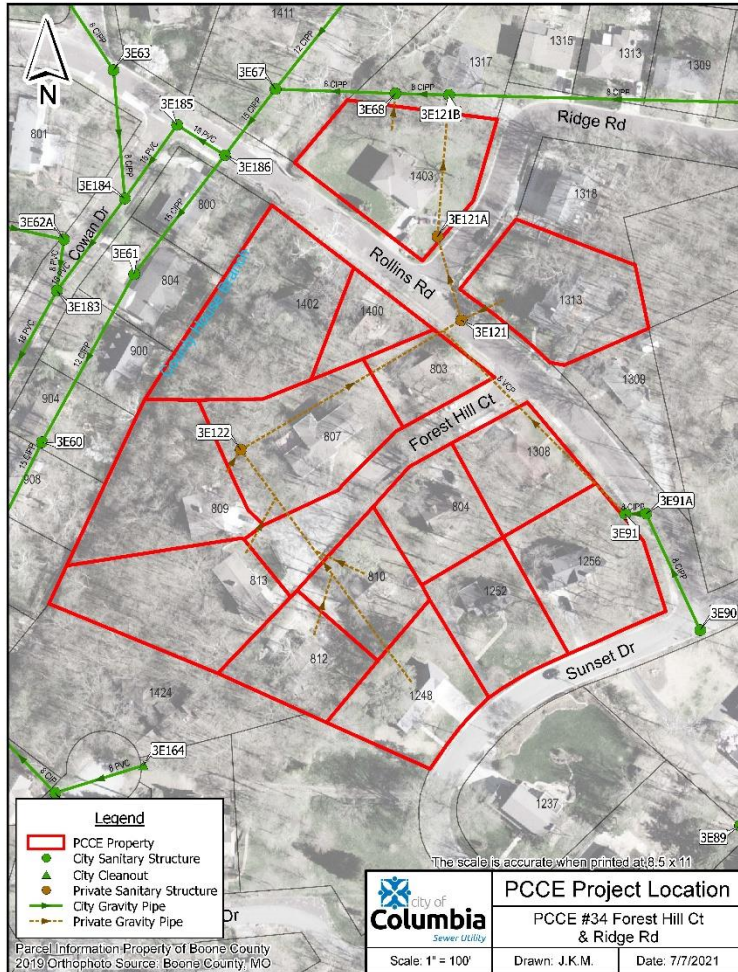




# SANITARY SEWER CIP

## PCCE #34 Forest Hill Ct & Ridge Road

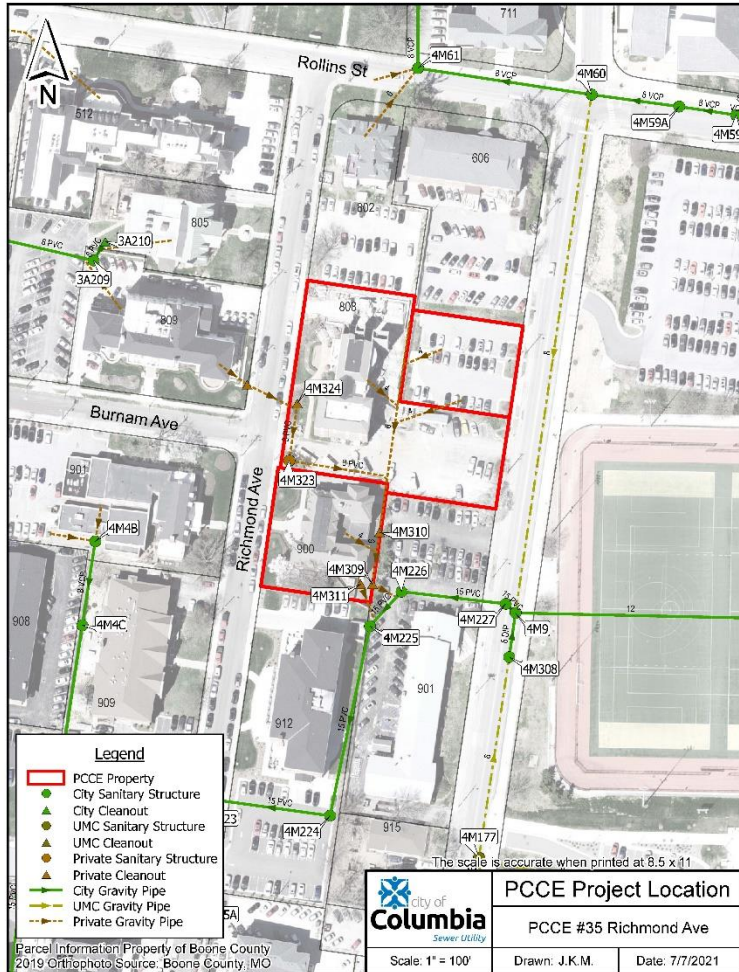
- Replace failing private common collector sewer
- \$80,000 in FY 2022 for design
- \$295,000 in FY 2024 for construction



# SANITARY SEWER CIP

## PCCE #35 Richmond Avenue

- Replace failing private common collector sewer
- \$30,000 in FY 2022 for design
- \$140,000 in FY 2023 for construction



# **STORM WATER CIP**

## Annual Storm Water Projects

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- Annual Projects – Replace failed or undersized storm drainage systems - \$150,000
- CAM Projects – Water quality improvements to address Hinkson Creek impairments - \$30,000
- Property Acquisition – Purchase property for WQ or flooding improvements - \$50,000
- Downtown Tree Planter – Install improved storm water tree planters around downtown as opportunity arises - \$25,000

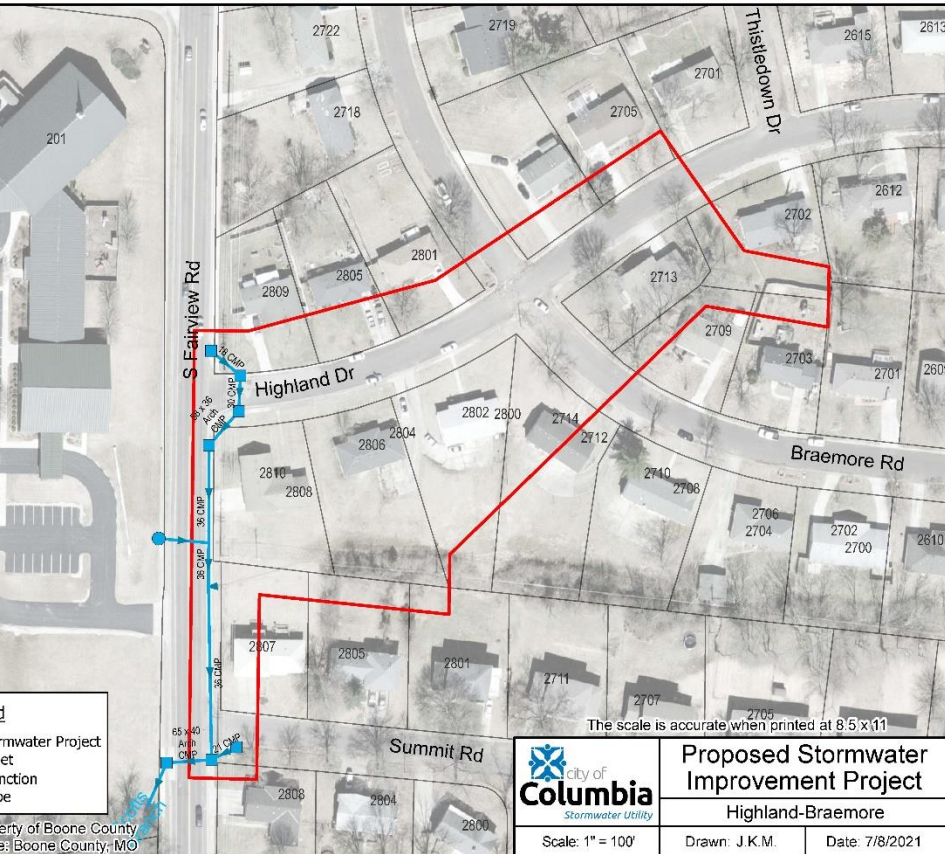
The following projects are in design phase and funding in FY2022 is for construction and from Enterprise Revenue:

- Bray/Longwell Drainage - \$50,000
- Calvert Drive - \$470,000
- Capri Estates Drainage - \$280,000
- Alan Lane - \$370,000



# STORM WATER CIP

## Braemore Drainage



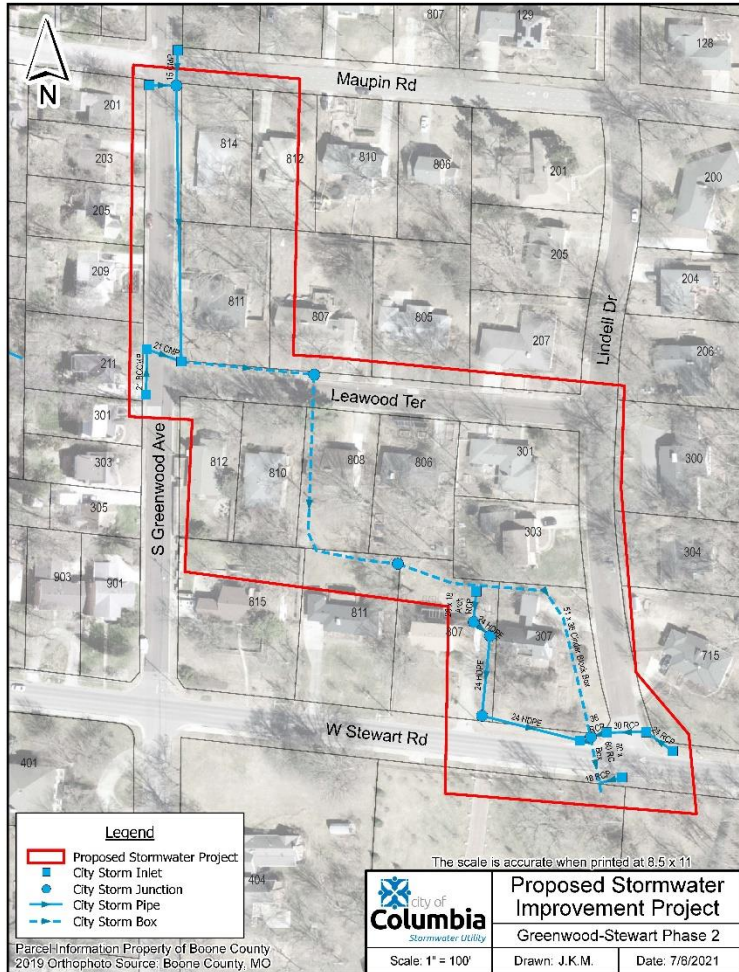
- Upgrade undersized storm system to reduce flooding
- Includes replacing storm system at Fairview and Braemore
- \$30,000 in FY 2022 for design
- \$270,000 in FY 2023 for construction



# STORM WATER CIP

## Greenwood Stewart Phase 2

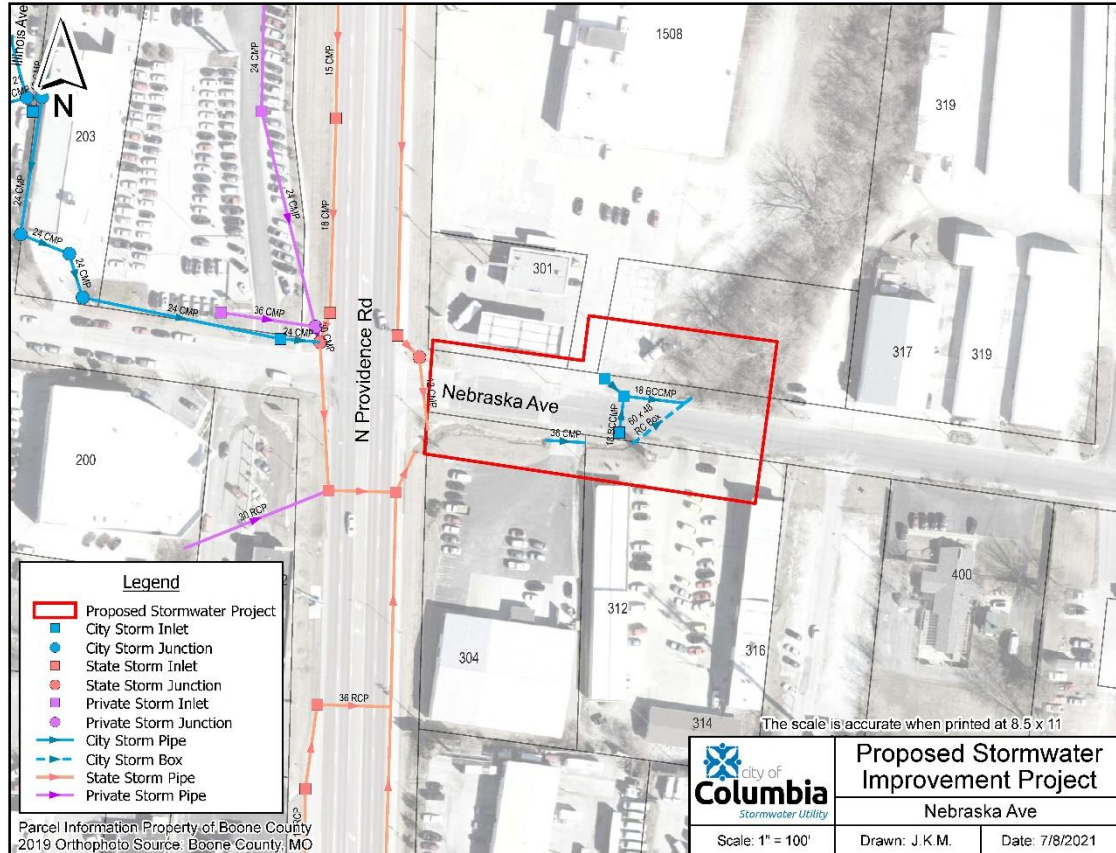
- Replace failing concrete box on new alignment and extend system to address flooding issues
- \$200,000 in FY 2022 for design
- \$670,000 in FY 2024 for construction



# STORM WATER CIP

## Nebraska Avenue

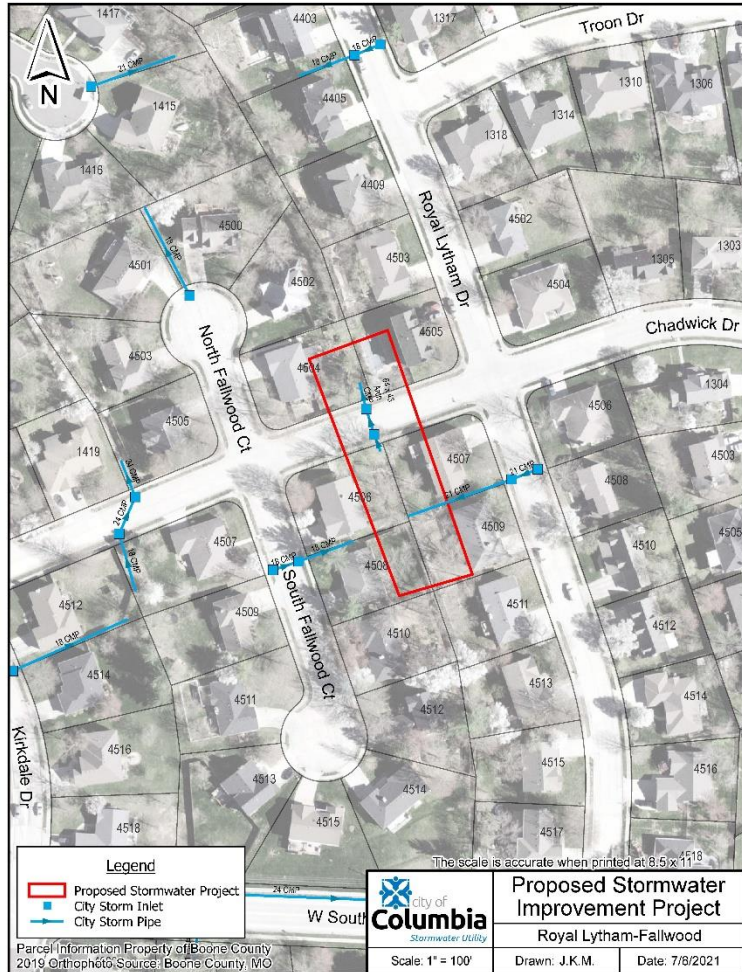
- Replace undersized system to reduce street flooding
- \$120,000 in FY 2022 for design
- \$675,000 in FY 2023 for construction



# STORM WATER CIP

## Royal Lytham - Fallwood

- Replace existing failing pipes and inlets to reduce flooding
- \$50,000 in FY 2022 for design
- \$150,000 in FY 2023 for construction

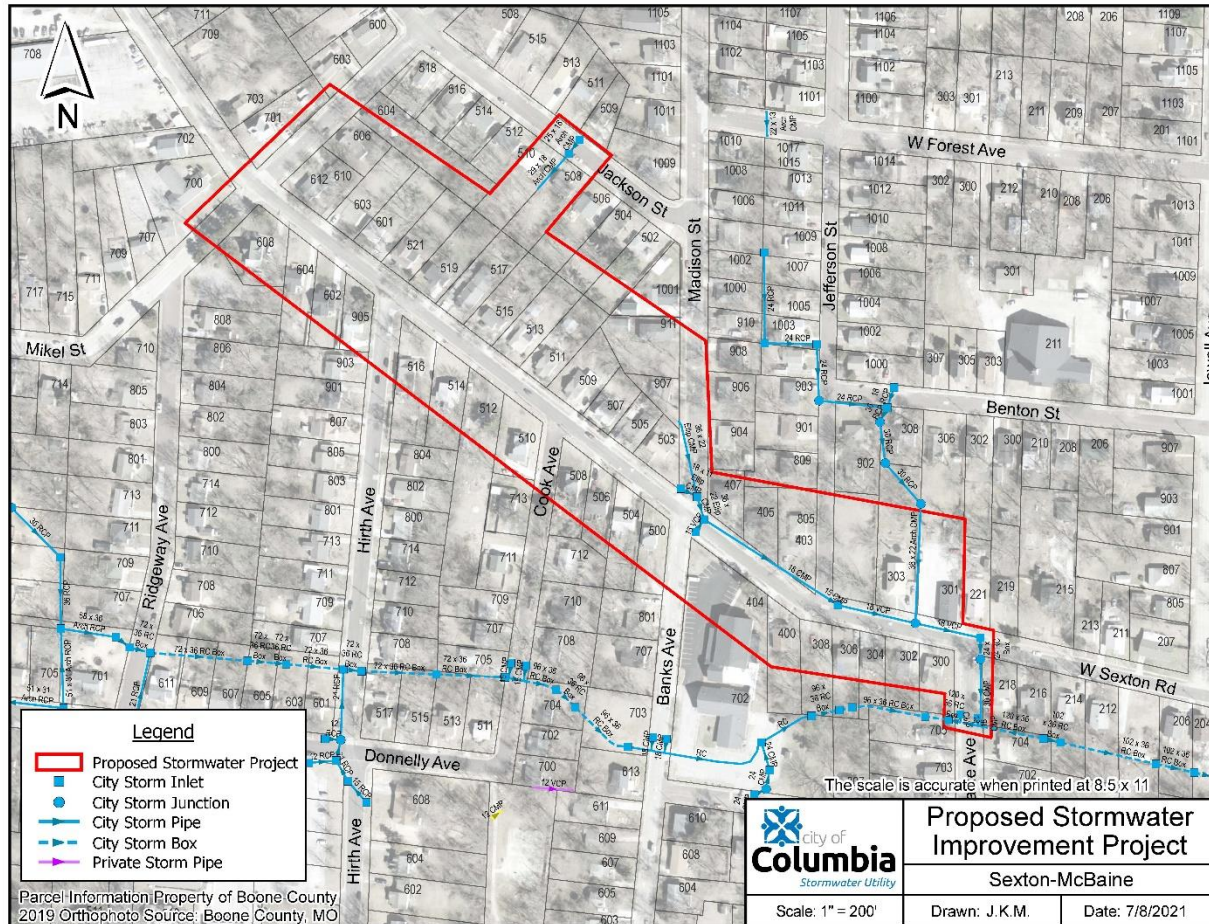




# STORM WATER CIP

## Sexton/McBaine Drainage

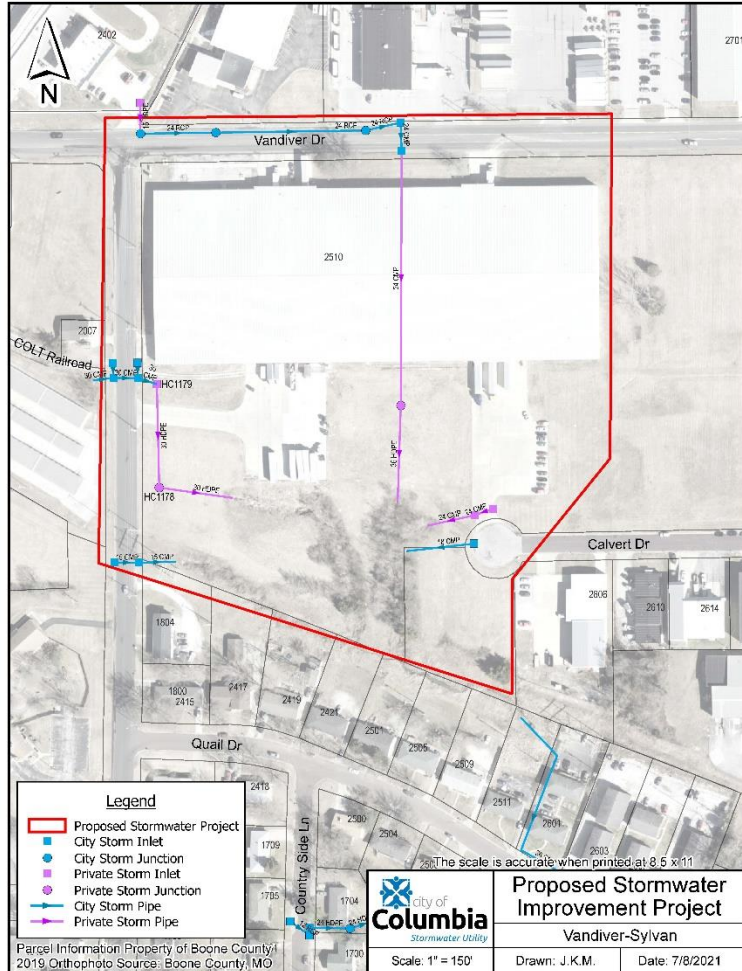
- Replace existing storm system to reduce flooding
- \$50,000 in FY 2022 for design
- \$230,000 in FY 2023 for construction



# STORM WATER CIP

## Vandiver/Sylvan Drainage

- Upgrade existing undersized storm system to reduce flooding
- Quail Drive and Calvert Drive associated projects
- \$340,000 in FY 2022 for design
- \$425,000 in FY 2024 for construction

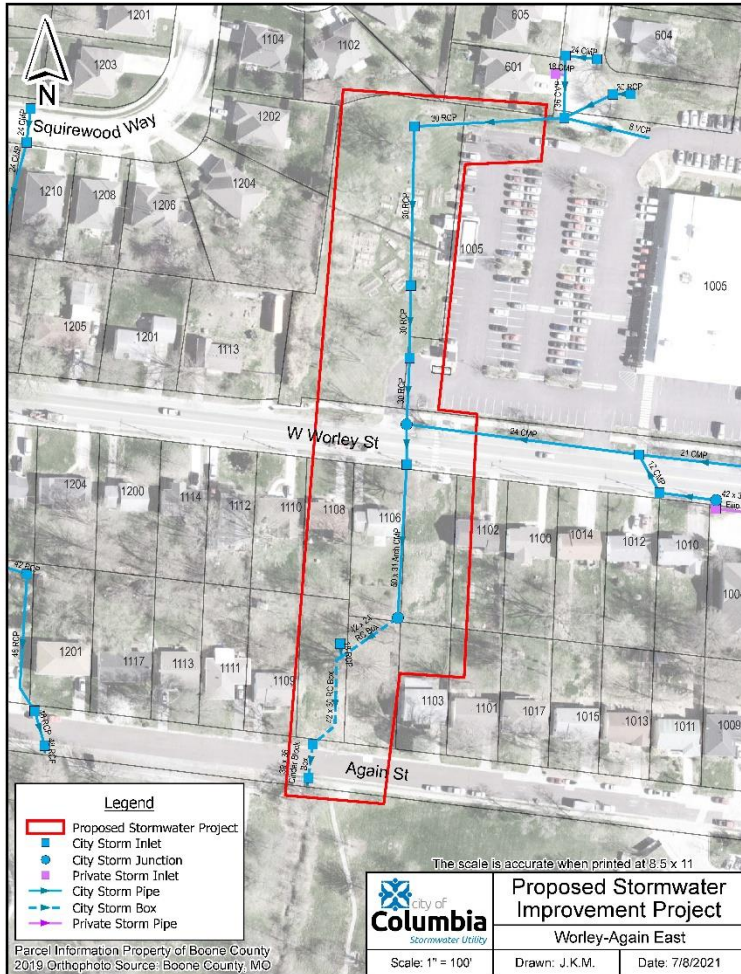




# STORM WATER CIP

## Worley Again East Phase 1

- Upgrade existing undersized storm system to reduce flooding
- Install detention where feasible
- \$60,000 in FY 2022 for design
- \$240,000 in FY 2023 for construction





# **Planning and Zoning Commission Meeting**

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Monday, July 8 , 2021



# FY22 Electric Capital Improvement Program

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- **Integrated Electric Resource and Master Plan**
  - Integrated Resource Plan
  - Electric Master Plan
  - Cost of Service Study / Rate Analysis
- **Annual Projects**
  - 13.8 kV System Automation - **\$100,000**
  - Conversion of Overhead to Underground - **\$800,000**
  - 13.8 kV Substation Feeder Additions - **\$1,600,000**
  - Commercial / Residential Expansion - **\$1,300,000**

# MUNICIPAL POWER PLANT

Elimination of Obsolete Equipment  
(E0208)

- Asbestos Abatement
- Removal of Obsolete Equipment
- FY22 - **\$300,000**
- FY23 - **\$300,000**

# LANDFILL GAS

Addition of Landfill Gas Generation Unit #4  
(E0175)

- Final Generating Unit for Existing Landfill
- Peak Generation of 1 MW (4 MW Total)
- FY18 – **\$1,350,000**
- FY22 - **\$650,000**

# SUBSTATIONS

## Addition of Substation Transformer and Switchgear (E0184)

- Future Substation Transformer and Switchgear
- Location and Voltage Level to be determined
- FY22 – **\$300,000**
- FY23 - **\$500,000**

## Phase 5 Undergrounding (E0140)



- Diagram 2 of 2

# FY22 Water Capital Improvement Program

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- **Annual Projects**

- Deep Well Abandonment - **\$100,000**
- Differential Payments - **\$50,000**
- Water Main Replacements - **\$750,000**
- Installation of New Mains to Create Loops - **\$100,000**
- Fiber to Water Facilities - **\$125,000**

# WATER SUPPLY

## Refurbish Existing Deep Well for Emergency Supply (W0140)

- Location to be Determined
- Provide Approximately 2 MGD of Emergency Supply
- FY20– **\$100,000**
- FY21 - **\$100,000**
- FY22 - **\$350,000**

# WATER SUPPLY

New Well Platforms  
(W0279)

- New Well Platforms for Safer Ingress and Egress
- Modernization of Control Equipment
- FY22 - **\$1,000,000**



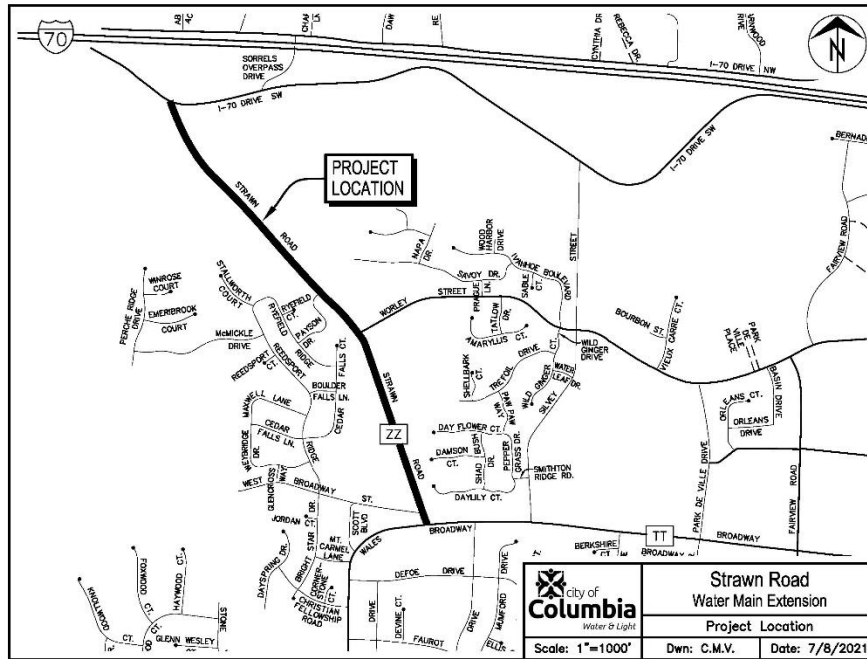
# WATER SUPPLY

Replace Alluvial Well #1  
(W0301)

- Replacement of Existing Degenerated Well
- New Well Platform for Safer Ingress and Egress
- Modernization of Control Equipment
- FY22 - **\$700,000**

# STRAWN ROAD

## 12-Inch Water Main Extension (W0303)



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- Provide Service to City Owned Property
- Provide for Future I-70 Crossing
- FY22 - \$600,000

## **FY 2022 Parks and Recreation CIP**

### **Funded Projects:**

- \$599,648 Annual Land Acquisition
- \$20,000 City/School Park Improvement Project
- \$150,000 Annual Roads and Parking
- \$100,000 Annual Trails
- \$25,000 ADA Improvements
- \$53,792 Cosmo Rec Area - Football Field Improvements (Funded by Private Donation)
- \$45,000 - Hickman Pool HVAC Replacement - Project includes funding from FY 2020 (\$115,000) and FY 2021 (\$115,000). The project is a co-op project with Columbia Public Schools (CPS) to replace the HVAC system for the pool. Parks and Recreation will reimburse CPS for 50% of the costs as outlined in the agreement. A new HVAC system will reduce maintenance costs and increase efficiency. (FY2022 funding is from \$20K City/School and \$25 Annual Park Improvements)
- \$47,000 Replacement of the 2-5 year old playground at Cosmo Park (\$47k Annual Park Maintenance)
- \$48,000 Park Management Center improvements (\$48k Annual Park Maintenance)
- \$20,000 Shepard Park Tennis Court improvements (\$20k Annual Park Maintenance)
- \$25,000 Indian Hills Basketball Court improvements (\$25k Annual Park Maintenance)
- \$135,000 - ARC Waterzone Flooring Replacement - The planned improvements will include replacement of the Pebbletech flooring in the ARC Waterzone pool (Funding from the Park Sales Tax Balance)

### **Future Ballot Projects:**

- \$700,000 (Future Ballot) - Columbia Cosmopolitan Recreation Area Rainbow Softball Center Improvements - Project will include renovated restrooms, concession area, shade, ADA parking, playground replacement and additional storage.
- \$300,000 (Future Ballot)- Columbia Cosmopolitan Recreation Area Shelter Replacements - Replacement of the Burford shelter and the renovation of Lamb and Nickell shelters.
- \$100,000 (Future Ballot) - Columbia Cosmopolitan Recreation Area Fitness Trail Improvements - Complete an asphalt overlay of the existing 1.25 mile fitness trail at Cosmo Park. Project will also include replacement of bollards at each road crossing.
- \$375,000 (Future Ballot) - Columbia Sports Fieldhouse Phase II Planning and Design - Architectural design for the addition of four additional courts at the Columbia Sports Fieldhouse located in Philips Park.

	<b>DRAFT</b>				
	<b>2021 Potential Park Sales Tax Ballot Projects</b>	<b>Based on 10-year renewal</b>			
<b>No.</b>	<b>Project</b>	<b>Project Description</b>	<b>Project Type</b>	<b>Ballot Budget</b>	<b>Ward</b>
	<b>Land Acquisition and Annual Park Funding</b>				
1	Annual Land Acquisition	Parks, greenways and natural areas	A	\$2,075,000	All
2	Annual Park Improvements	Major maintenance program funding projects under \$50,000	M	\$1,500,000	All
3	Annual City/School Playground Improvements	Replacement of playgrounds, walking trails and backstops	M	\$200,000	All
4	Annual Roads and Parking Improvements	Asphalt and concrete improvements	M	\$1,500,000	All
5	Annual Trails	Acquisition, improvements and grant match funding	A	\$1,000,000	All
6	ADA Improvements	Completion of ADA projects	M	\$250,000	All
7	Annual Maintenance Equipment Replacement	Replacement of Equipment and Vehicles	F	\$795,000	All
8	Annual Scholarship Program	Scholarships for recreational programs and events	F	\$500,000	All
	<b>Sub-Total Land Aquisition and Annual Funding</b>			<b>\$7,820,000</b>	
	<b>Improvements to Existing Parks and Facilities</b>				
9	ARC Improvements	Replacement of the water play structure, natatorium painting & general indoor improv.	M	\$650,000	1
10	Albert-Oakland Park Improvements	Pickleball/tennis renovations, shelter #2 & shelter #3 replacement & new playground	M	\$640,000	2
11	Antimi Sports Complex Improvements	Renovation of black and gold fields	M	\$200,000	2
12	Atkins Baseball Complex Improvements	Construction of shade structures, small shelter, playground, batting cages, lighting	M	\$150,000	3
13	Battle Park Phase II Development	Construction of shelter, playground and outdoor stage/classroom	M	\$150,000	3
14	Clary-Shy Park Improvements	MU Health Care Pavilion expansion, Event Center construction and additional parking	M	\$250,000	1
15	Cosmo-Bethel Park Improvements	Renovation of tennis courts 1-4	M	\$300,000	5
16	Cosmo Rec Area: Quarry Improvements	Development of site including Rhett's Run Trailhead/bike park	M	\$225,000	2
17	Cosmo Rec Area: Shelters	Replacement of Burford shelter & renovation of Nickell and Lamb shelters	M	\$300,000	2
18	Cosmo Rec Area: Parks Management Center Improv.	Renovation of existing buildings at PMC	M	\$200,000	2
19	Columbia Sports Fieldhouse Phase II	Construction of 4 additional hardwood courts, restrooms and offices	M	\$5,800,000	6
20	Douglass Park Improvements	Bathhouse renovations, skate park expansion and LED park lighting	M	\$225,000	1
21	Field Park Improvements	Renovation of existing park with playground and basketball court	M	\$100,000	1
22	Gans Creek Recreation Area Improvements	Construction of a shelter, playground and parking	M	\$225,000	6
23	Lake of the Woods Recreation Area	Swimming pool renovations, parking and new maintenance building	M	\$700,000	3
24	MLK Jr. Memorial @ Battle Gardens Improvements	Renovation of existing memorial and retaining walls	M	\$100,000	4
25	Rainbow Softball Improvements	Replacement of concession/restroom facility and field improvements	M	\$750,000	2
26	Rock Quarry Park Improvements	Replacement of playground, tennis court renovation and parking	M	\$350,000	6
27	Rothwell Park Improvements	Replacement of playground and new small shelter	M	\$125,000	4
28	Shepard Park Improvements	Replacement of medium shelter, trail improvements & new park sign	M	\$150,000	6
29	Smithton Park	Replacement of playground, safety surfacing and shelter renovations	M	\$100,000	1
30	Strawn Park Improvements	Installation of 4 pedestrian bridges	M	\$250,000	2
31	Stephens Lake Park Improvements	Amphitheater improvements and spraygrounds/playground replacement	M	\$675,000	3
32	Twin Lakes Recreation Area Improvements	Spraygrounds & playground replacement, new shelter and parking	M	\$350,000	4
33	Westwinds Park Improvements	Replacement of playground structure, swings and retaining walls	M	\$150,000	4
34	Waters-Moss Memorial Wildlife Area Improvements	Renovation of the Jones House	M	\$175,000	6
	<b>Sub-Total Improvements to Existing Parks and Facilities</b>			<b>\$13,290,000</b>	
	<b>New Facility/Park Development</b>				
35	Creek Ridge Park Development	Development of neighborhood park including playground, trails & shelter	N	\$125,000	5
36	Gates Nature Area Development	Development of nature area including concrete trail system & parking	N	\$200,000	5
37	Northeast Regional Park Development	Construction of synthetic turf fields, outdoor track and renovation of indoor buildings	N	\$4,275,000	3
38	Sinclair Park Development	Development of neighborhood park including playground, basketball court & shelter	N	\$150,000	5
39	Nature Area Development: Northeast Columbia	Development of nature area including nature trails, prairie restoration & parking	N	\$375,000	3
40	Silver Mill Park Development	Development of neighborhood park including playground, small shelter & play field	N	\$150,000	2
41	Whitegate Park Development	Development of neighborhood park including playground, basketball court & shelter	N	\$200,000	3
42	Joint City/School Improvement Project	Development of joint use project between City & Columbia Public School District	N	\$200,000	All
43	Downtown Park Improvement Project	Development of downtown park property including installation of park amenities	N	\$200,000	1
	<b>Sub-Total New Facility/Park Development</b>			<b>\$5,875,000</b>	
	<b>Trails and Greenbelts</b>				
44	Perche Creek Trail Phase II	Construction of trail from Gillespie Bridge Road to Smith Drive	T	\$1,300,000	4
45	Grindstone Nature Area Trailhead Improvements	Trailhead parking lot expansion	T	\$125,000	6
46	Hinkson Creek Trail - Clark Lane to Vandiver	Construction of HCT from Clark Lane to Vandiver Road	T	\$1,240,000	3
47	Stephens Lake Park Trailhead Improvements	Expansion of southeast parking lot including new restroom & bike repair equipment	T	\$125,000	3
48	Cosmo Rec Area: Fitness Trail Improvements	Renovations to existing 1.25 mile asphalt trail	T	\$100,000	2
49	MKT Bridge Replacements	Replacement of bridges #2, #9 and #10	T	\$275,000	4/5
	<b>Sub-Total Trails and Greenbelts</b>			<b>\$3,165,000</b>	
	<b>TOTAL CIP BALLOT PROJECTS</b>			<b>\$30,150,000</b>	
	Contingency			\$750,000	
	<b>TOTAL BALLOT PROJECT FUNDING</b>			<b>\$30,900,000</b>	
	<b>2015 PST Renewal - 6 years @ \$18.4 million</b>	<b>2021 PST Renewal - 10 years @ \$30.9 Million</b>			

	<b>DRAFT</b>				
	<b>2021 Potential Park Sales Tax Ballot Projects - PRIORITY 2</b>				
No.	Project	Project Description	Project Type	Ballot Budget	Ward
<b>Priority 2 Land Aquisition and Annual Funding - Increase funding amounts on annual basis</b>					
1	Annual Land Acquisition	Parks, greenways and natural areas	A	\$200,000	All
2	Annual Park Improvements	Major maintenance program funding projects under \$50,000	M	\$50,000	All
3	Annual City/School Playground Improvements	Replacement of playgrounds, walking trails and backstops	M	\$10,000	All
4	Annual Roads and Parking Improvements	Asphalt and concrete improvements	M	\$100,000	All
5	Annual Trails	Acquisition, improvements and grant match funding	A	\$50,000	All
6	ADA Improvements	Completion of ADA projects	M	\$10,000	All
7	Annual Maintenance Equipment Replacement	Replacement of Equipment and Vehicles	F	\$50,000	All
8	Annual Scholarship Program	Scholarships for recreational programs and events	F	\$20,000	All
<b>Priority 2 Improvements to Existing Parks - Not Included</b>					
9	Garth Nature Area improvements	Dog park improvements including loop walking trail	M	\$100,000	2
10	Flat Branch Park Phase II improvements	Playground replacement, bridge refurbishment and sprayground replacement	M	\$150,000	1
11	Cosmo Rec Area: Skate Park Improvements	Add lights to existing skate park	M	\$40,000	2
12	Proctor Park Improvements	Trail Improvements and swing set/playground replacement	M	\$75,000	2
13	Kiwanis Park Improvements	Renovation of the Odor shelter and parking renovations	M	\$75,000	4
14	Armory Sports & Community Center	Building improvements	M	\$250,000	1
15	Paquin Park	Replacement of raised garden beds	M	\$75,000	1
16	Philips Park Tennis - Phase II Improvements	Construction of two additional tennis courts or four pickleball courts	M	\$100,000	6
17	Playground Surfacing Replacement	Replace mulch playgrounds with synthetic turf	M	\$30,000	All
18	American Legion Park Improvements	Convert large field to 250' fencing, add irrigation and adjust infield skin	M	\$100,000	3
19	Nifong Park Improvements	Historic Village improvements	M	\$200,000	6
20	Magnolia Falls Park: Phase II Improvements	Bridge Replacement	M	\$75,000	5
21	Cosmo Rec Area: Tennis Court Renovation	Replace 8 existing tennis courts	M	\$400,000	2
22	Fairview Tennis Court Renovation	Removal and new construction of 4 tennis courts	M	\$350,000	4
23	HighPointe Park	Replacement of playground equipment and trail renovations	M	\$150,000	6
<b>Priority 2 New Facility/Park Development - Not Included</b>					
24	Ameren Missouri Downtown Site Development	Phase I Park Development including greens space and art installation	N	\$100,000	1
25	Indoor Ice Skating Facility	Construction of an indoor ice facility with one sheet of ice	N	\$8,000,000	All
26	Indoor Aquatics Facility	Construction of an indoor competition swimming and diving facility	N	\$12,000,000	All
27	Dog Park Development	Potential dog park at Potterfield property	N	\$250,000	2
<b>Priority 2 Trails and Greenbelts - Not Included</b>					
28	BCT Trail Improvements	Improvements to existing trail entering Cosmo Park	T	\$400,000	2
29	Hominy Creek Trail Improvements	Construction of trailhead off St. Charles Road and neighborhood connector	T	\$150,000	3
30	County House Trail at TLRA	Dedicated trail around TLRA parking lots	T	\$100,000	4
31	Bear Creek Trail Connector - Proctor Park	Trail connecting BCT to Proctor Park	T	\$250,000	2
32	Auburn Hills Park - Bodie Drive Access	Trail connectioning Bodie Drive neighborhood to Auburn Hills Park	T	\$75,000	2
33	Colt Railroad Trail - Phase I	Trail from College Street to Vandiver	T	\$1,500,000	1/3
34	Grindstone Creek Trail - South Fork	Trail from Maguire Street to Vineyards Lake Park	T	\$1,600,000	6
35	Bear Creek Trail - North Extension	Trail from Albert-Oakland Park to Lange Park	T	\$1,000,000	2
36	Perche Creek Trail - Phase III	Trail from Smith Drive to Strawn Park	T	\$1,600,000	2
37	MKT Bridge Replacement	Replacement of bridges 1-4	T	\$450,000	4/5



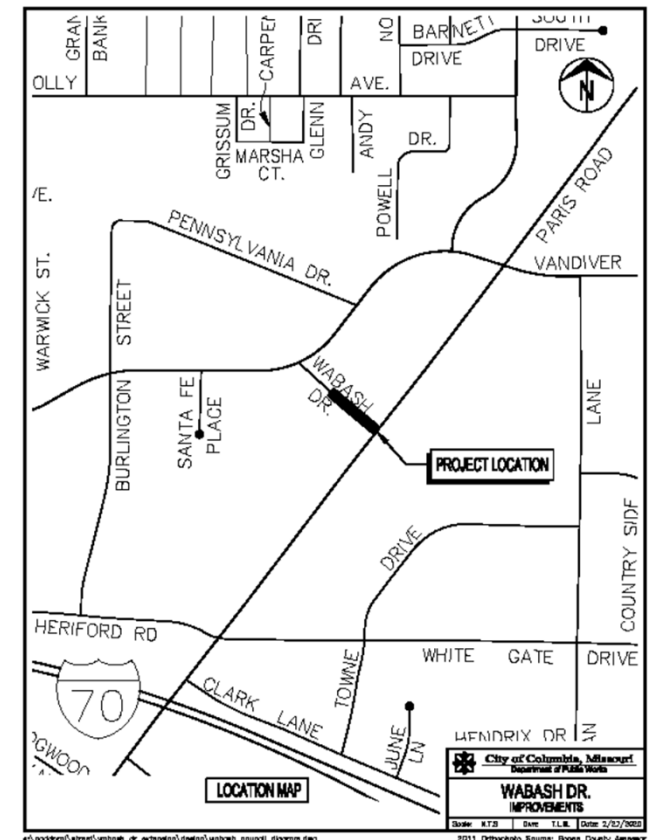
# City of Columbia Public Works Street and Sidewalk FY 2022 CIP Construction Projects



July 2021

# Wabash Drive Extension

*Project includes the connection of Wabash to Paris/Route B in order to allow right turns onto Paris. The connection is being made to relieve congestion at the Vandiver/Paris intersection.*





# 4<sup>th</sup> Street Pedestrian Crossing

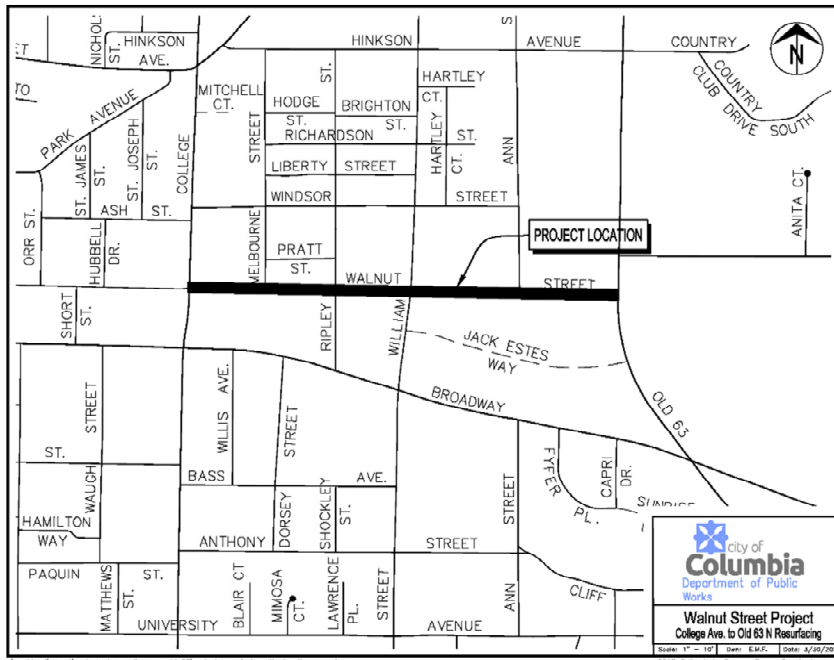
*Project includes construction of a crosswalk at 4<sup>th</sup> and Broadway which will include pedestrian islands, flashing beacons, and stormwater improvements.*





# Walnut Street Improvements

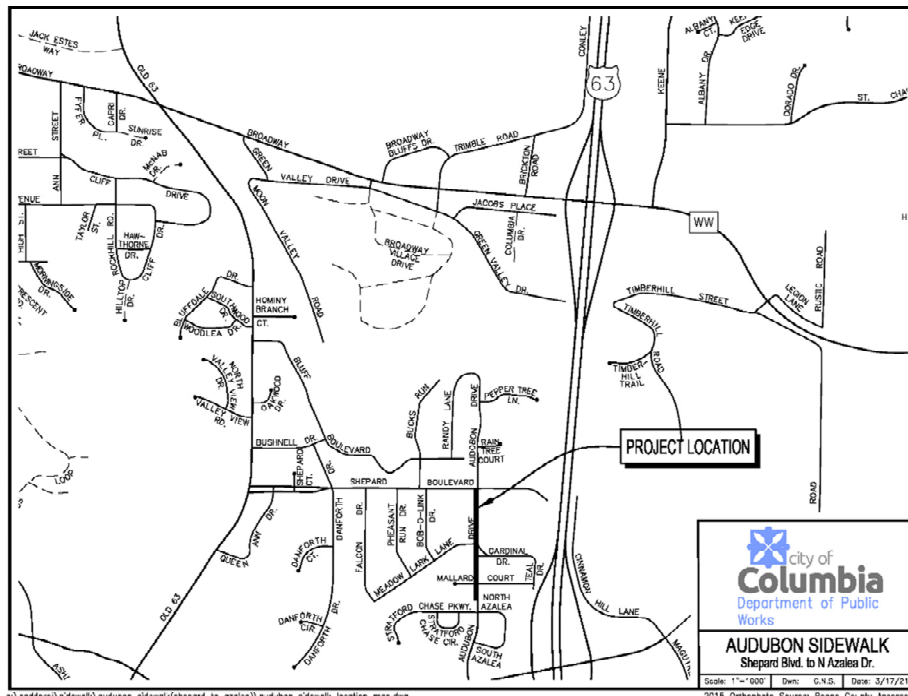
*Project includes curb and gutter repairs, sidewalk repairs, subgrade repairs, and an asphalt overlay along Walnut between College and Old Highway 63.*





# Audubon Drive Sidewalk

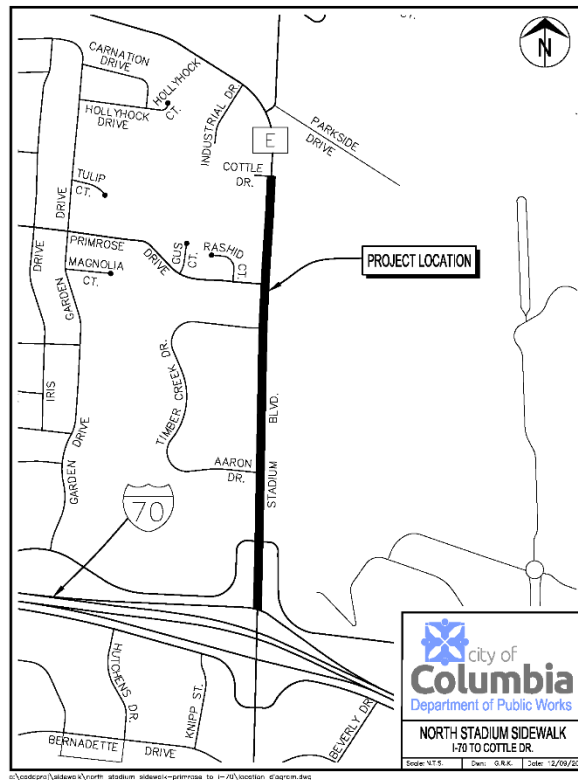
*Project includes construction of a sidewalk along the west side of Audubon between Mallard and Shepard.*





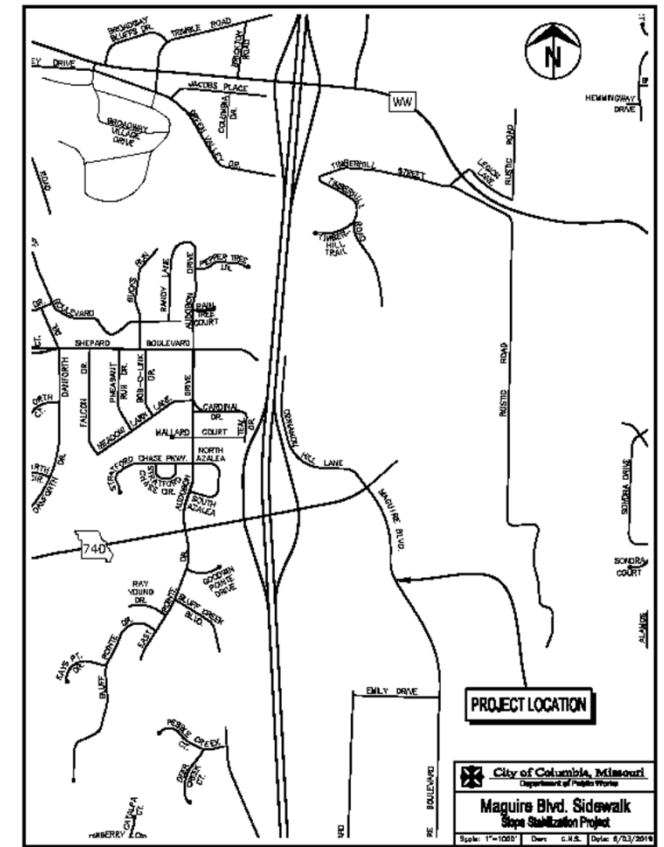
# North Stadium Blvd Sidewalk

*Project includes construction sidewalk along the west side of Stadium to fill in sidewalk gaps between I-70 and Primrose, a crossing/connection to Cosmo Fitness Trail, and a sidewalk connection at Rose.*



# Maguire Blvd Slope Stabilization

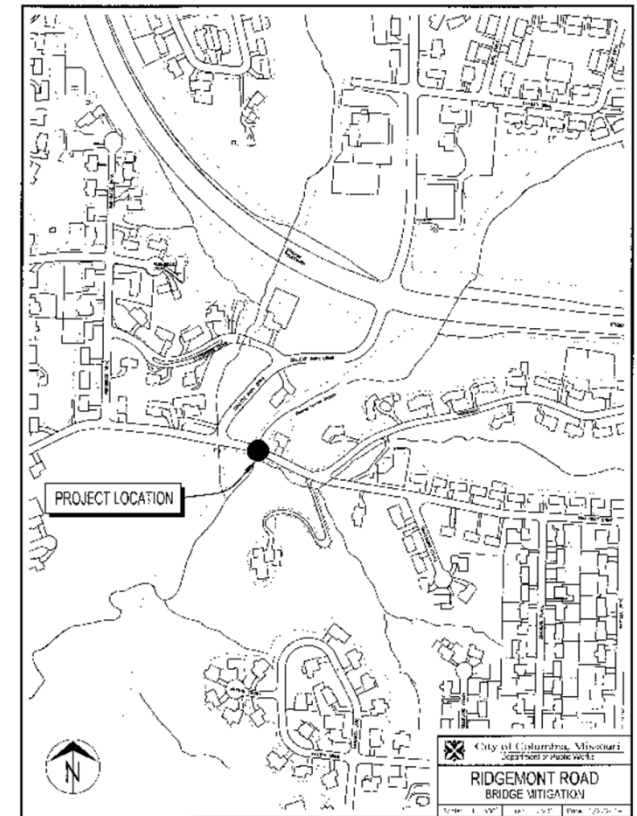
*Project includes stabilization of the rock cut-slopes along both sides of Maguire to eliminate rock and debris falling along the sidewalk.*





# Ridgemont Bridge Replacement

*Project includes replacing the bridge over County House Branch in order to remove the 3-ton restriction.*



# FY 2022 - Traffic Calming Projects

- **Maplewood Drive:** Includes a series of five speed humps along Maplewood Drive between West Broadway and Rollins Road, and a series of two speed humps along Maplewood Drive between Rollins Road and Stanford Drive.
- **Bray Avenue:** Includes a series of three speed humps and two speed tables along Bray Avenue between South Fairview Road and Bray Court.
- Smith Drive/Louisville Drive
- Proctor Drive
- Ridgemont Road/Highridge Drive/  
Ridgefield Road
- Audubon Drive/Shepard Boulevard





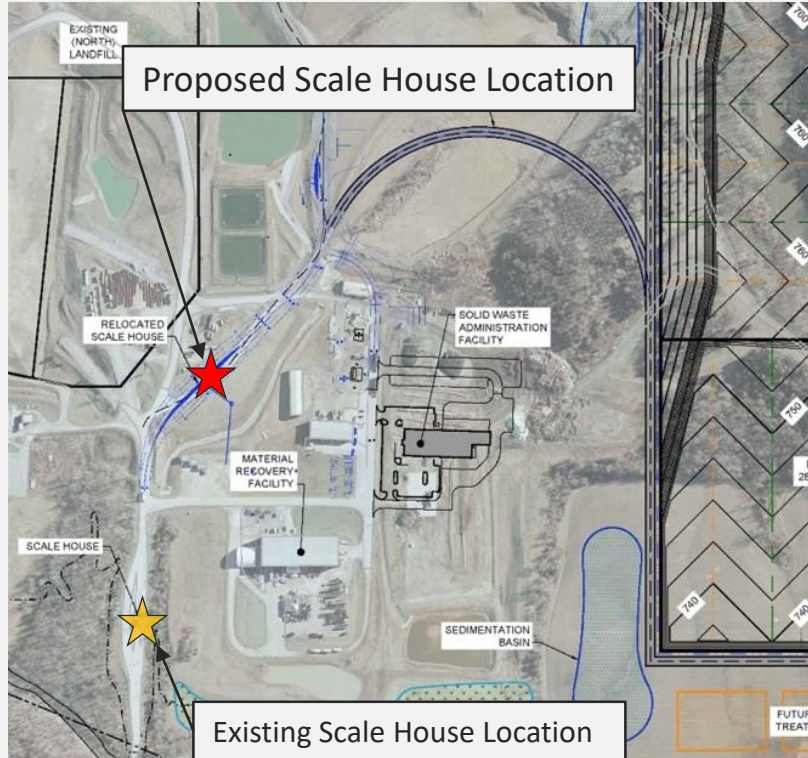
Questions?





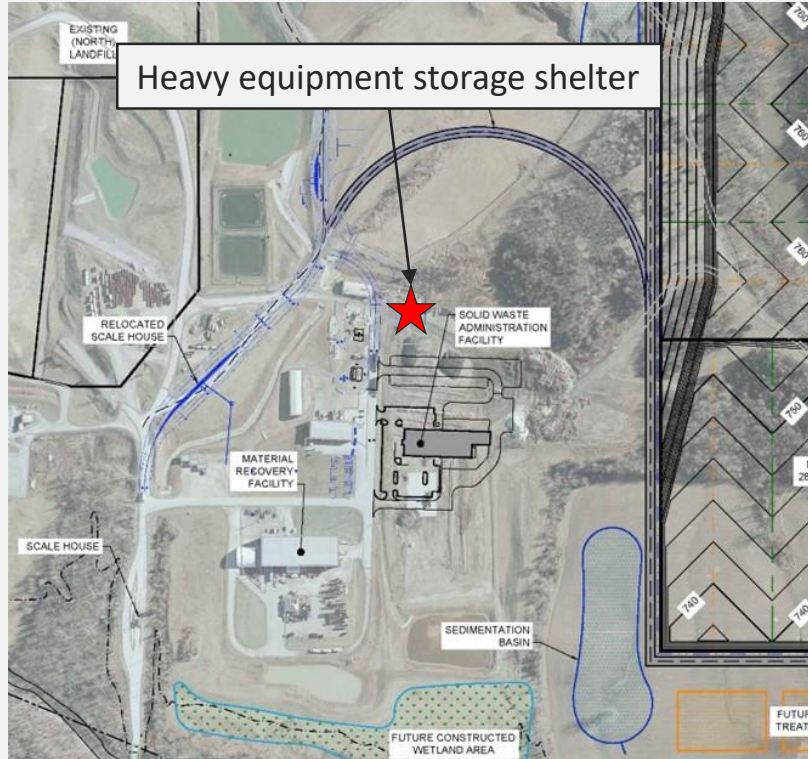


# LANDFILL SCALE HOUSE RELOCATION & RD IMPROVEMENT



- Site grading, road construction, new scale house, relocating two existing scales, two new scales, vehicle wheel wash system, security cameras and demolish existing scale house.
- FY 2022: \$250,000
- FY 2023: 2,250,000
- Total Cost: \$2,500,000

# LANDFILL HEAVY EQUIPMENT STORAGE SHELTER



- Construct a heavy equipment storage shelter for approximately 20 pieces of landfill equipment.
- FY 2021: \$50,000
- FY 2022: \$450,000
- Total Cost: \$500,000