

Palm Beach County The Best of Everything.

FIVE YEAR ROAD PROGRAM Annual Update and INFRASTRUCTURE UPDATE Engineering and Public Works

Presented By: David L. Ricks, P.E. County Engineer

Public Hearing December 20, 2022



FIVE YEAR ROAD PROGRAM

THE FIVE YEAR ROAD PROGRAM WAS ESTABLISHED BY ORDINANCE 85-40 TO SET FORTH THE ROAD PROJECTS TO BE FUNDED, DESIGNED AND CONSTRUCTED BY THE COUNTY WITHIN THE NEXT FIVE YEARS.

FUNDING SOURCES INCLUDE:

•IMPACT FEES •PROPORTIONATE SHARE •GAS TAXES •INFRASTRUCTURE SALES TAX •FDOT AGREEMENTS AND MISCELLANEOUS AGREEMENTS (SEE EXHIBIT A, PAGE 1 OF 5)

The Five Year Road Program <u>Annual Update</u> includes adjustments to projects funding for Fiscal Years 2023 through 2027.



ENGINEERING & PUBLIC WORKS INFRASTRUCTURE UPDATE

- 3,500 lane miles of paved roads
- 40 miles of shell rock roads
- 10 miles of asphalt milling roads
- 1,130 miles of concrete sidewalks
- 190 miles of asphalt pathways
- 2,500 acres of right of way to mow
- 8 bascule bridges, 1 swing bridge
- 291 fixed bridge structures
- Maintain about 10,000 beautification trees
- Maintain over 150 miles of beautified median landscaping on thoroughfare roadways.









- 1,307 traffic control signal devices with over
 70 coordinated signal systems
- 850 signals with real-time monitoring
- 180 CCTV installations
- 470 miles of fiber optic communications for Intelligent Transportation System (ITS) network



ENGINEERING & PUBLIC WORKS RECENT RECOGNITION



Of 96 Golden Palm winners in 2022, a total of 13 were from Team EPW:

- Daqaree Bartels-Gremling
- Stephen Bickhardt
- Kathleen Farrell
- Kristine Frazell-Smith
- Cody Hayes
- Charlesworth Jarvix
- Holly Knight
- Daniel McDiarmid
- Michael Popple
- Hui Shi
- Josue Lozada Sostre
- Michael Thomas
- Santiago (Jimmy) Valdez

VISION Engineering Infrastructure for the Future

<u>MISSION</u> Ensuring Palm Beach County Residents Enjoy Safe, Efficient, and Reliable Infrastructure





Team EPW just won 3 2022 NACo awards:

- ePermits
- ePlatting
- Stormwater Management

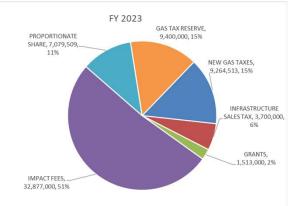


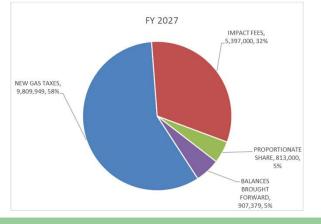
ANNUAL UPDATE (FY 2022 – FY 2026) MID-YEAR ADJUSTMENT (FY 2022 – FY 2026) ANNUAL UPDATE (FY 2023 – FY 2027)

Project Costs

	Annual Update Adopted December 7, 2021	Mid Year Adjustment BCC Resolution, July 12, 2022	Annual Update, Public Hearing December 20, 2022
•FY 2022	\$94,613,000	\$68,565,000	
•FY 2023	\$63,190,000	\$75,310,000	\$63,990,000
•FY 2024	\$45,577,000	\$41,570,000	\$71,130,000
•FY 2025	\$29,850,000	\$25,470,000	\$86,680,000
•FY 2026	\$11,880,000	\$9,520,000	\$11,870,000
•FY 2027			\$15,080,000
TOTAL	\$244,840,000	\$220,435,000	\$248,750,000

Revenues







2022 GRANT APPLICATIONS

US DOT BRIDGE INVESTMENT PROGRAM

- CR 880 OVER THE C-51 CANAL, REQUESTED \$5.1 MILLION
- PALM BEACH LAKES BLVD OVER THE FEC RAILROAD, REQUESTED \$12.5 MILLION
- PROSPERITY FARMS ROAD OVER THE C-17 CANAL, REQUESTED \$8.5 MILLION
- CR 880 AT SAM SENTER ROAD, REQUESTED \$8.1 MILLION

US DOT RAISE GRANT

- PALM BEACH LAKES BLVD OVER THE FEC RAILROAD, REQUESTED \$11.7 MILLION

US DOT MULTIMODAL PROJECT DISCRETIONARY GRANT (MPDG)

 "FARM TO MARKET ROAD": CR 880 FROM MARTIN LUTHER KING JR BLVD TO SOUTH OF CR880 AT 20-MILE BEND, REQUESTED > \$100 MILLION

FDOT CIGP GRANT

 FLAVOR PICT ROAD: LYONS RD TO HAGEN RANCH RD TO INCLUDE NEW BRIDGE OVER FLORIDA'S TURNPIKE, RECEIVED \$3.6 MILLION

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

- PENN PARK NEIGHBORHOOD RESURFACING, RECEIVED \$455K

Legend

- Awarded
- Under Review
- Not Received



Added

Revised

Delayed

Advanced

KEY FUNDING ADJUSTMENTS (Dist. 1)

5YR Road Program - FY 2023 District 1 Line Items (\$ in 1,000s)

PROJECT	PROJECT	LIMITS	DESCRIPTION	FY 202 Cost	23 Phase		2024 Phase	FY 2025 Cost Phas				FY 2027 e Cost Phase		IFA	Commissio District
2022503	Center Street	Loxahatchee River Rd. to Alt. A-1-A	1.7 mi., 3 L	1,000								2,500		1	1
N/A	Central Blvd.		0.5 mi., 3 L	700	D			300	R					1	1
2014503	Church St.	Limestone Creek Rd. to W. of Central Blvd.	0.5 mi, 2 L			2,000	с							1	1
2012517	Congress Ave.	N. of Northlake Blvd. to Alt. A-1-A	0.6 mi, 2 L & 3 L	100	R									1	1
2019502	Donald Ross Rd.	Ellison Wilson Rd.	Intersection Improvements (add 2nd NBL)			700	с							1	1
N/A	Donald Ross Rd.	U.S. 1	Intersection Improvements (add 3rd EBL & Free Flow SBRTL)	400	D			500	R/M					1	1
2018506	Royal Palm Beach Blvd. / Orange Blvd. / Coconut Blvd.	S. of Orange Blvd. to S. of 78th Place North	1.6 mi, 5 L	60	R									3	1&6
			TOTALS	2,260	1	2,700		800		0		2,500			



KEY FUNDING ADJUSTMENTS (Dist. 2)

			Li	Program District 2 ne Items in 1,000s		23									
			(V)	,	,			Add	led	Rev	ised	Dela	yed	A	dvanced
PROJECT NUMBER	PROJECT	LIMITS	DESCRIPTION	FY 2 Cost	023 Phas e	FY 20 Cost)24 Phas e	FY 2 Cost	025 Phas e	FY 2 Cost	2026 Phas e	FY 2 Cost	2027 Phas e	IFA	Commissio n District
2021827	Australian Ave. Drainage Improvements	Banyan Blvd. to 45th St.	Drainage Improvements & Multipurpose Path	950	D/R	7,000	R/C	22,000	с					2	2 & 7
2018501	Gun Club Rd.	Forest Estates Drive to LWDD E-3 Canal	0.5 mi., 3 L			3,320	с							2	2 & 3
2021501	Haverhill Rd.	Hypoluxo Rd. to Lantana Rd.	1.0 mi., 4 L			2,360	С							2	2&3
2020100	Haverhill Rd.	S. of Ceceile Ave. to N. of Century Blvd.	Intersection Improvements, 0.2 mi., 4/6 L	1,200	С									2	2
2019503	Miner Rd.	Military Trail to Lawrence Rd.	0.6 mi, 3 L			3,800	С							4	2
2016509C	Okeechobee Blvd.	Jog Road	Intersection Improvements (Add 3rd NBL LT. Ext. SB L RL & RTL)	1,370	с									3	2 & 7
2018104	Okeechobee Blvd.	Haverhill Rd.	Intersection Improvements (Add NB RTL & Ext. NB LTLs)	50	с									2	2
2005506	Roebuck Rd.	S.R. 7 to Jog Rd.	3.0 mi., 4 L									100	D/M	3	2, 6 & 7
2021503	Sherwood Forest Blvd.	Lake Worth Rd. to N. of 10th Ave. North	1.0 mi., 3 L			3,500	с							2	2
			TOTALS	3,570		19,980		22,000		0		100			



KEY FUNDING ADJUSTMENTS (Dist. 3)

5YR Road Program - FY 2023 District 3 Line Items (\$ in 1,000s)

Added

Revised

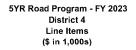
Delayed

Advanced

PROJECT NUMBER	PROJECT	LIMITS	DESCRIPTION	FY 2 Cost	023 Phase	FY 2 Cost	2024 Phase		2025 Phase		2026 Phase	FY 2 Cost	2027 Phase	IFA	Commission District
2012511	10th Ave. N.	Boutwell Rd.	Intersection Improvements	2,000	R/C									2	3
N/A	Cresthaven Blvd.	Jog Rd. to Military Tr.	Buffered Bike Lanes	760	D			5,000	с					т	3
2016500	Florida Mango Rd.	10th Ave. North to Edgewater Drive	0.9 mi, 3 L (L.W.D.D. L-9 & L-10 Canals Bridge Replacements)	6,600	с									2	3
2017517	Florida Mango Rd.	S. of Barbados Rd. to Myrica Rd.	0.7 mi, 3 L (L.W.D.D. L-7 Canal Culvert Replacement)	2,000	с									2	3
2014511	Florida Mango Rd.	Myrica Rd. to Summit Blvd.	0.5 mi, 3 L (L.W.D.D. L-6 Canal Bridge Replacement - Culvert)	2,300	R/C									2	3
2018501	Gun Club Rd.	Forest Estates Drive to LWDD E-3 Canal	0.5 mi., 3 L			3,320	с							2	2&3
2021501	Haverhill Rd.	Hypoluxo Rd. to Lantana Rd.	1.0 mi., 4 L			2,360	С							4	2&3
2018505	Kirk Rd.	LWDD L-7 Canal to Summit Blvd.	0.5 mi., 3/5 L			3,200	С							2	3
2018504	Kirk Rd.	Summit Blvd. to Gun Club Rd.	0.8 mi, 3/5 L	3,950	с									2	3
2019501	Melaleuca Lane	Jog Rd.	Intersection Improvements	2,300	с									4	3
2019501	Melaleuca Lane	Jog Kd.	Intersection Improvements TOTALS	2,300		8,880]	5,000]	0]	0]	4	



KEY FUNDING ADJUSTMENTS (Dist. 4)



Added Revised Delayed Advanced

PROJECT	PROJECT	LIMITS	DESCRIPTION	FY 2	2023	FY 2	2024	FY 2025		FY 2026				IFA	Commission
NUMBER	TROSECT	Limito	BECOMINICA	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	Cost	Phase	" ~	District
2018102	Clint Moore Rd.	Military Tr.	Intersection Improvements			2,500	с							5	4
2022506	George Bush Bascule Bridge	over Intracoastal Waterway	Bridge Replacement Study & Design	300	S/D									т	4 & 7
2021505	Jog Rd.	Glades Rd. to Yamato Rd.	1.8 mi., 6 L					700	D			500	R	5	4
2013500	Linton Blvd.	Military Tr.	Intersection Improvements (Add NBRTL & SBRTL)	200	с									5	4 & 5
2014500	Old Dixie Hwy.	Yamato Rd. to S. of Linton Blvd.	3.0 mi, 3 L	3,000	R			9,000	R/C					5	4
			TOTALS	3,500]	2,500		9,700		0		500]		



George Bush Blvd. Bascule Bridge

March 3, 2022 – Bascule bridge locked in the upward position due to failure of major shaft component on the western side

March 30, 2022 to April 25, 2022 – Bridge personnel, H&H, and Seacoast forces: Return and begin initial installation, inspection (tolerances), components reshipped, machined, and reinstalled - extensive testing began with multiple fine tuning and adjustments





March 5, 2022 to March 30, 2022 – Bridge personnel, H&H, and Seacoast forces: Began the components removal, inspection, and shipped to the machinist



April 29, 200 - Bridge reopened



May 12, 2022 – Notice to consultants issued for bridge replacement





KEY FUNDING ADJUSTMENTS (Dist. 5)

5 YR oad Program - FY 2023 District 5 Line Items (\$ in 1,000s)

								Ad	ded	Rev	ised	Dela	ayed	A	dvanced
PROJECT NUMBER	PROJECT	LIMITS	DESCRIPTION		2024 Phase	FY 2 Cost	025 Phase		2025 Phase		2026 Phase	FY 2 Cost	2027 Phase	IFA	Commission District
2021502	Boca Rio Rd.	Palmetto Park Rd. to Glades Rd.	1.3 mi., 4/5 L					400	R					5	5
2023500	Flavor Pict Rd.	Lyons Rd. to Hagen Ranch Rd.	1.0 mi., 4 L	10	D	4,780	S/D/R							5	5
2019106	Half Mile Road	Brook Isles Ave. to Atlantic Ave.	Intersection Improvements (Realignment to Smith Sundy)	3,500	С									5	5
2013500	Linton Blvd.	Military Tr.	Intersection Improvements (Add NBRTL & SBRTL)	200	с									5	4 & 5
2021500	Lyons Rd.	Atlantic Ave. to S. of Flavor Pict Rd.	2.4 mi, 4 L	500	R/M			12,000	с					5	5
2018503	Lyons Rd.	S. of Flavor Pict Rd. to Boynton Beach Blvd.	3.0 mi, 4 L			14,000	с							5	5
2018107	Palmetto Park Rd.	Lyons Rd.	Intersection Improvements	900	С									5	5
2021504	Sims Rd.	Lakes of Delray Blvd. to Atlantic Ave.	0.6 mi, 2 L	50	R/M					2,500	с			5	5
2018105	S.W.18th Street	Boca Rio Rd.	Intersection Improvements (Add 2nd SBL)	150	с									5	5
2017518	Yamato Rd.	Lakeridge Blvd. W. of Fl Turnpike	1.4 mi, 6L	1,000	с									5	5
: Numbe	rs in \$1,000's		TOTALS	6,310]	18,780]	12,400]	2,500]	0			

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KEY FUNDING ADJUSTMENTS (Dist. 6)

5YR Road Program - FY 2023 District 6 Line Items (\$ in 1,000s)

Added

Revised

Delayed

Advanced

PROJECT NUMBER	PROJECT	LIMITS	DESCRIPTION	FY 2	2023 Phase	FY 2 Cost	024 Phase	FY 2	025 Phase		2026 Phase		2027 Phase	IFA	Commissior District
N/A	60th St. N.	Seminole Pratt Whitney Rd. to 140th Ave. N.	2.7 mi., 4 L	Cost	Phase	LOSI	Phase	COST	Phase	500		LOSI	Phase	3	6
2019500	60th St. N.		0.8 mi., 3 L					500	R					3	6
2017515	60th St. N.	Avocado Blvd. to E. of 120th Ave. N.	1.6 mi. 3 L			7,000	с							3	6
2018507	Coconut Blvd.	S. of 78th Place North to S. of Northlake Blvd.	1.3 mi. 5 L					3,300	с					3	6
N/A	CR 880	Belle Glade to Twenty Mile Bend	Rehabilitation/Heavy Maintenance	1,000	с	1,000	с	100	с	1,000	с	1,000	с	Т	6
2020501	CR 880	Sam Senter Rd. over SFWMD Ocean Canal	Intersection Improvements & Bridge Replacement					9,500	с					Т	6
2015500	CR 880	over C-51 Canal	Bridge Replacement	4,500	С									Т	6
N/A	Glades Area	R&R Throughout the Glades	Repair/Reconstruction	700	С	700	С	700	с	700	С	700	С	Т	6
2007500B	Lyons Rd.	S. of L.W.D.D. L-11 Canal to N. of L.W.D.D. L-10 Canal	0.6 mi, 2/3 L									100	Р	3	6
2005506	Roebuck Rd.	S.R. 7 to Jog Rd.	3.0 mi., 4 L									100	D/M	3	2, 6 & 7
2018502	Royal Palm Beach Blvd.	N. of Persimmon Blvd. to N. of M Canal	1.1 mi. 5 L	80	R							3,000	с	3	6
2014501	Royal Palm Beach Blvd.	M Canal to S. of Orange Blvd.	1.0 mi, 5 L	50	R			6,000	С					3	6
2018506	Royal Palm Beach Blvd. / Orange Blvd. / Coconut Blvd.	S. of Orange Blvd. to S. of 78th Place North	1.6 mi, 5 L	60	R									3	1&6
2017106	State Road 7	Weisman Way	Intersection Improvements (Add WB RTL & 2nd WBL)	450	с									3	6

NOTE: Numbers in \$1,000's

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KEY FUNDING ADJUSTMENTS (Dist. 7)

5YR Road Program - FY 2023 District 7 Line Items (\$ in 1,000s)

Added Revised Delayed Advanced

PROJECT NUMBER	PROJECT	LIMITS	DESCRIPTION	FY 2 Cost	2024 Phas e		2025 Phas e	FY 2 Cost	025 Phas e	FY 2 Cost	2026 Phas e	FY 2 Cost	027 Phas e	IFA	Commissio n District
2016501	45th St.	E. of Haverhill Rd. to E. of Military Trail	0.6 mi., 6 L	50	С									2	7
2021827	Australian Ave. Drainage Improvements	Banyan Blvd. to 45th St.	Drainage Improvements & Multipurpose Path	950	D/R	7,000	R/C	22,000	с					2	2&7
2013520	Congress Ave.	Palm Beach Lakes	Intersection Improvements	50	С									2	7
2022506	George Bush Bascule Bridge	over Intracoastal	Bridge Replacement Study & Design	300	S/D									т	4 & 7
2016509C	Okeechobee Blvd.	Jog Road	Intersection Improvements (Add 3rd NBL TL. Ext. SB L RL & RTL)	1,370	с									3	2&7
N/A	Park Ave.	E. of Congress Ave. to Old Dixie Hwy.	0.6 mi., 3 L					700	D/R					1	7
2005506	Roebuck Rd.	S.R. 7 to Jog Rd.	3.0 mi., 4 L									100	D/M	3	2, 6 & 7
2018106	Woolbright Rd.	Seacrest Blvd.	Intersection Improvements (Add EBRTL)			1,400	с							4	7
			TOTALS	2,720		8,400		22,700]	0		100			



PROJECTS SCHEDULED FOR CONSTRUCTION AWARD IN FY 2023

Project Name and Limits	Description	Estimated Construction Cost	Commission District
A1A: US1 to Donald Ross Rd	Drainage Improvements	\$1,200,000	1
Beach Road - North of Old A1A	Parking Pavement Installations	\$1,000,000	1
Benoist Farms Rd: SR 80 to Belvedere Rd	0.9 mi, 3L	\$7,200,000	2
Blue Heron Blvd and Congress Ave	Intersection Improvements	\$2,300,000	7
Congress Ave and Palm Beach Lakes Blvd	Intersection Improvements	\$4,600,000	7
Del Prado Circle N. and Palmetto Circle N.	Intersection Improvements	\$210,000	4
Del Prado Circle S. and Palmetto Circle N.	Intersection Improvements	\$162,000	4
Half Mile Rd: Brook Isles Ave. to Atlantic Ave.	Intersection Improvements	\$3,500,000	5
Haverhill Rd: Ceceile Ave. to Century Blvd.	Intersection Improvements	\$750,000	2&7
Highview Road	Drainage Improvements	\$375,000	7
Lawrence Rd: S. of Ponza Place to Lantana Rd	0.8 mi, 3L	\$7,800,000	3
Linton Blvd and Old Dixie Hwy.	Intersection Improvements	\$400,000	5
Northlake Blvd and Steeplechase Dr.	Intersection Improvements	\$150,000	1
Northlake Blvd: E. of Hall Blvd. to west of Coconut Blvd.	1.5 mi, 4/6L	\$15,500,000	1&6
Northlake Blvd: E. of Seminole Pratt Whitney Rd. to E. of Hall Blvd	1 mi, 4L	\$10,000,000	6
Palmetto Circle N. and Del Prado Circle N.	Intersection Improvements	\$65,000	4
Palmetto Park Rd and SR 7	Intersection Improvements	\$250,000	5
SR 7 and Weisman Way	Intersection Improvements	\$1,400,000	6
SW 18th St and Boca Rio Rd	Intersection Improvements	\$2,000,000	5
Yamato Rd: Lakeridge Blvd to W. of FL Turnpike	1.4 mi, 6L	\$8,000,000	5
	Tota	l: \$66,862,000.00	



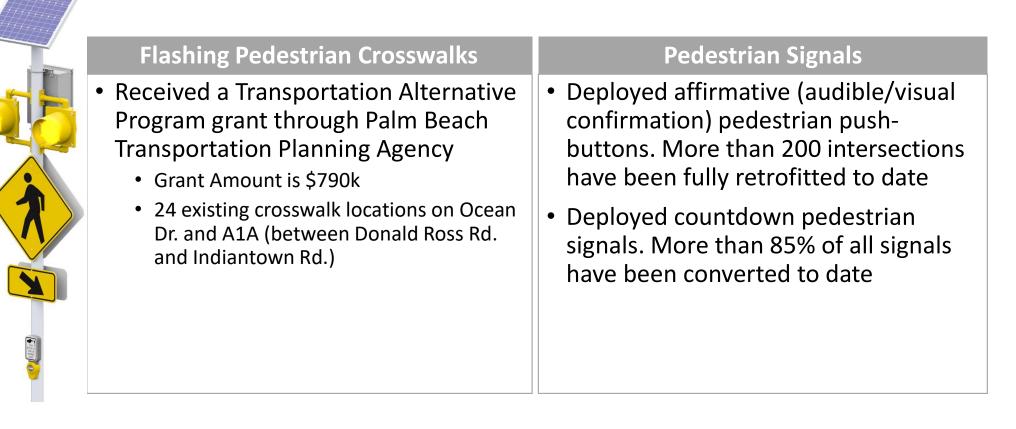
* Traffic Signal Infrastructure Improvements

Safety Initiatives

- Transit Signal Priority (TSP) system deployment on US Hwy 1 and Okeechobee Blvd Corridors in FY-23 and FY-24 in cooperation with Palm Tran through a grant from Palm Beach TPA
- Emergency Vehicle Preemption (EVP) system in cooperation with PBC Fire Rescue. Deployment on several major corridors following the TSP deployment
- Installing reflective back plates to improve signal display visibility on all new signals
- Upgrading 19 signals from span wire to mast arm through FDOT (funded for design only)



Pedestrian Safety Improvement Updates





2022 TRAFFIC SAFETY GRANT APPLICATIONS

STAGE 1 SMART GRANT

- CONCEPT DEVELOPMENT AND DESIGN OF PALM BEACH COUNTY TRAFFIC MANAGEMENT CENTER (TMC), REQUESTED \$850K
- (IF SUCCESSFUL, WE'LL APPLY FOR STAGE 2 SMART GRANT FOR TMC CONSTRUCTION)

SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT

- DEVELOPMENT OF PALM BEACH COUNTY TRAFFIC SAFETY ACTION PLAN, REQUESTED \$800K

Legend
Under Review



Sidewalk Program

- \$1.5M in annual capital funding.
- Focuses on providing a system of safe pedestrian sidewalks within the County, especially safe access to Schools and other community resources.



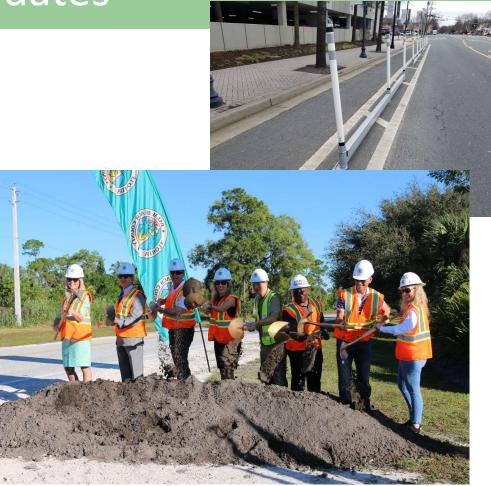
Forest Hill Elementary School





Bike Lane Updates

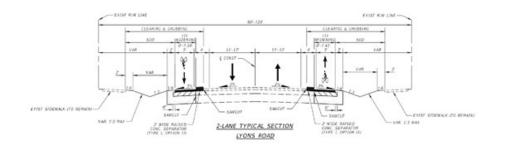
- Lyons Road / Sansbury's Way (Forest Hill Boulevard to Okeechobee Blvd.) – Separated Bike Lanes
 - First of its kind project for Palm Beach County
 - Project cost is approximately \$5.86 million with \$4.2 million of that from a Florida Department of Transportation / Palm Beach Transportation Planning Agency grant.
 - Approximately 2.8 miles
 - Groundbreaking Ceremony Held on October 28, 2022
 - Scheduled for construction in 2023 and work is expected to be complete in one year.





Bike Lane Updates

- Cresthaven Boulevard (Jog Road to Military Trail) – Buffered Bike Lanes
 - \$4.6M
 - Approximately 2.1 miles
 - Scheduled for construction FY 2024
- Prosperity Farms Road (Northlake Boulevard to Donald Ross Road) – Standard Bike Lanes
 - \$13M
 - Approximately 5 miles
 - Scheduled for construction FY 2026
- Camino Real (intracoastal waterway to Ocean Blvd)
 - Joint project with City of Boca Raton and TPA
 - PBC to apply to TPA Grant for construction and share design/CEI costs with Boca Raton
- PBC has added or refurbished 311,608 linear feet of bike lanes since 2017.







Railroad Safety

DYNAMIC ENVELOPE PAVEMENT MARKINGS

- We are in the process of applying for a permits to add the new "Dynamic Envelope Pavement Markings" at certain existing crossings with FEC, SCFE and USSC railroads. These are enhanced pavement markings to warn the public of the railroad crossing.
- SFRTA railroad have been adding these marking to their crossings.
- FEC is adding them to the crossings they are working on in north County.
- The FDOT has a federal grant (CRISI) that will add them to several crossings out in the Glades area and several along CSX. The FDOT project along the Beeline will be adding them to impacted railroad crossings as well.
- Striping and MOT plans were completed for 14 railroad crossings in February 2022.
- The County applied for a permit to install the Dynamic Envelope Striping. 10 locations at the FEC, 3 with the SCFE and 1 with USSC railroad
 - Feedback was received from FEC on the County's application in November 2022 and is currently being reviewed
 - Engineering staff is requesting an update on the permit application with SCFE and USSC to see when we can schedule the work



Linton Blvd and SFRTA Rail as installed by FDOT.





2022 ROAD & BRIDGE RESURFACING, PATHWAY, AND STORMWATER UPDATES

Resurface Projects:

- 14 Mill and Resurface
- **\$9,500,000**







Pathway Projects:

- 21 Pathway
- **\$775,000**









Road & Bridge: Stormwater Section

Section Goal

Operation and maintenance of County stormwater road conveyances, swales, ditches and supporting infrastructure.

Equipment & Staff

- CCTV Van: Operated by MEO IV Operator & MEO II Assistant
- > Pathway Sweepers: Operated by MEO II Operators
- Street Sweepers: Operated by MEO IV Operators
- Vactor Trucks: Operated by MEO III Operators & MEO II Assistants
- Menzi Muck: Operated by MEO IV Operators
- Storm-water Team leaders: PW Crew Chief and PW Supervisor
- There are currently (17) active storm-water positions and (27) pieces of equipment/vehicles.

Stormwater:

- 42,708 LF Culvert Cleaned
- 2,540 Stormdrain Structures Cleaned
- Removed 2,604 CYD's of Storm System Debris
- Equivalent to 1,302 Refrigerators





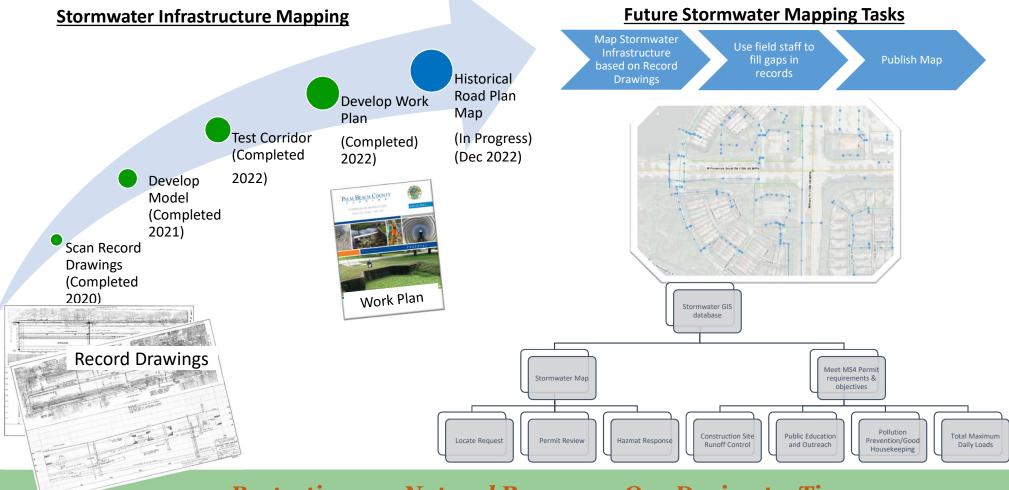
CCTV Van & Street Sweeper Vehicle Graphic Wraps: Designed through Champion 4 Group







2022 STORMWATER MAPPING UPDATE



Protecting our Natural Resources One Drain at a Time



FY 2023 Proposed Bridge Safety Projects

Woolbright Bascule Bridge:

• East abutment slope repair.

Linton Boulevard Bascule Bridge:

- Concrete median/deck repair (west side).
- Steel rehab/painting.
- Study/design for new northwest traffic gate.
- Replace machinery room doors (2 sets, double doors).

George Bush Boulevard Bascule Bridge:

- Continue equipment monitoring/ strain gauge testing (until replaced).
- Complete replacement of stand by generator annunciator panel.



Palmetto Park Boulevard Bascule Bridge:

- Rehab/replace surface in fenced parking area (crushed concrete).
- Steel, fender, lock rehab and control console replacement (design).
- Replace doors on generator room and FPL vault (2 sets of double doors).

Camino Real Bascule Bridge:

• Replace gearbox fluid.

Point Chosen Swing Bridge:

Steel rehab.

L-2 Pump Station:

- Rebuild pump #3 2nd time (damaged).
- Rebuild Pump #2
- Complete replacement and installation of new slide gate actuator (parts procured previously).
- Complete process of remote monitoring access for bridge personnel (ISS and CC Control Inc.).



George Bush Blvd. Bascule Bridge



Bascule Bridge CCTV

- Camera system will assist with the safe operation of these bascule bridges by providing an additional tool to monitor site conditions (i.e. pedestrians, roadway vehicles, marine vessels and people under the bridges in the waterway)



 L2MP / 30 (ps sensor for fine details with smooth motion
 Edge or client-side dewarping for easy integration
 Intelligent Video Analytics on full panoramic overview
 Discret and aesthetic, low-profile design

Easy twist-click installation

Camera Systems **\$2M Total** Installation to begin at CR707 AKA - Cato's Bridge Equipment Acquisition – In Progress Installation / Setup – To be Scheduled Director Reals Director Reals

Shaded areas depict video and analytic coverage above and below bridge (typical for all bridges)

- Identified areas will be monitored for the presence of anyone or anything - triggering an alert (audible / warning)
- Bridge Geometry
- Site conditions
- Trigger Alerts
- Intelligent Analytics programmable to learn and log objectives - such as vessel height





Palm Beach County The Best of Everything.

