



# City of Marco Island

## MEMORANDUM

Date: April 26, 2024  
To: City Council  
Through: Michael A. McNees, City Manager  
From: Justin Martin, P.E., Director, Public Works  
Subject: Public Works Departmental Report – April 2024

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The City's public works department has 13 dedicated employees that administer, repair, and maintain the city's public infrastructure including traffic signals, streetlights, roads, sidewalks, swales, street signs, stop signs, median landscaping and irrigation, city street trees, storm sewer drainage, and bridges.

The following summarizes the department's notable activities over the month of April:

### **Capri Pass/Sand Dollar Spit Sand Management Plan**

The City's cost sharing request for tourist development funds from the County for the needed beach berm maintenance is slated for consideration at the County's Coastal Advisory Committee (CAC) meeting on 5/9/24. The Tourist Development Council (TDC) and County Commission meetings will follow in successive months. The cost sharing will require an interlocal agreement between the City and the County. The interlocal agreement will be presented to council for approval prior to being presented at the county commission meeting. Public Works is coordinating this effort and will attend and participate in the committee, council, and commission meetings.

### **N. Barfield Shared Path**

Construction of the new 8ft. wide shared path that will replace the existing 4ft wide sidewalk on N. Barfield Dr. between N. Collier Blvd. and Bald Eagle Dr. will commence in May. The project also includes pedestrian crosswalks for the roadway crossings and reconfiguration of the existing roadside swales to exfiltration swales to provide water quality.

### **Construction Standards Handbook ("*Right of Way Manual*") Update**

The City's right of manual is being updated to include exfiltration swales and more resilient sidewalks. The update and corresponding resolution will be presented to council for approval at the 5/20/24 city council meeting. Currently, the city is constructing exfiltration swales as part of new shared path projects and other city construction projects within the right of way. The revision will include the standard details for exfiltration swales and add a requirement for property owner to construct exfiltration swales as part of site or building construction that require right of way permits. This includes new single family home construction and new multifamily residential or commercial site development construction. The update will also include requirements for sidewalks to be constructed with 6" depth (thickness) rather than 4". The additional thickness is needed to withstand vehicular loads and to minimize breaks in

sidewalks which require frequent repairs or replacement. Also, wire mesh will be required at sidewalk sections that abut roadway pavement such as pedestrian crossings and at driveways.

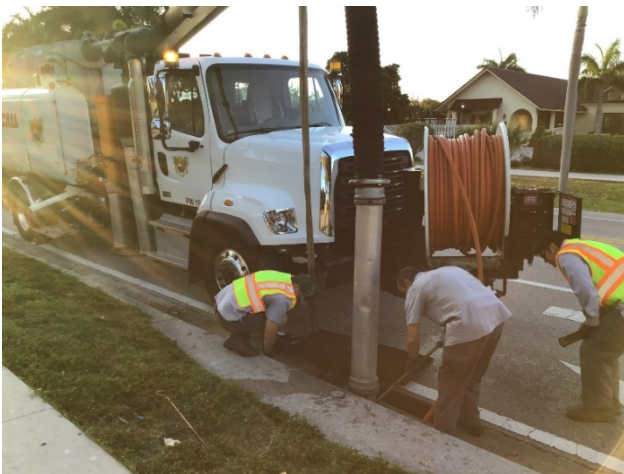
### Traffic Signal Posts and Mast Arm Painting

The posts and arms painting at the Bald Eagle Dr./Elkcam Cir. intersection is complete. Public Works will contract the re-painting of the Bald Eagle Dr./Collier Blvd. posts and arms next.



### Annual Storm Drain Cleaning

Each year, a Public Works crew spends three months cleaning the city-owned storm drainage structures prior to the start of the rainy season. The crew pulls the cast iron grates and uses the vacuum excavation truck to remove sediment that has settled in the bottoms of the structures.



Public Works is also adding “no dumping” warnings on storm drains to alert the public that the storm sewers drain to the city’s waterways.

### Painted Pavement Stop Bars

A Public Works crew painted stop bars on Watson Rd. and Newell Ter. at the intersections.



### Advisory Committee Support

In addition to the above projects, PW staff attends and supports the Waterways Advisory Committee, the Beautification Advisory Committee, and the Hideaway Beach Tax District Committee, and the Bike Lane and Shared Path Ad-Hoc Committee including the preparation of meeting minutes, conducting research, updating the city website related to committee functions, coordinating among committee members, and attending additional meetings, and responding to requests.

### Water Quality Action Items

The following table lists the water quality action items being considered or performed by the city. The items appearing in gray text are not recommended, not feasible, and not implemented.

WQ Action Item	Cost	Status
dredging	\$30M (\$6M/yr x 5yrs)	coordinated permitting feasibility with FDEP. A pilot program will be presented to council in the FY 26 proposed budget.
inlet side slot filling	\$300/inlet	ongoing: 2 filled in month of April (147 total to date)
Exfiltration swales	\$12M	There are 120 miles of swales in Marco Island. Seeking \$1.5M in grant funding. New exfiltration swales will be constructed as part of the N. Barfield Shared Path project. Construction plans underway for exfiltration swales on S. Collier Blvd. from Huron Ct. to the end of Collier Ct.
inlet screens	\$600 ea	ongoing: 218 installed to date. More will be installed as part of the N. Collier Blvd./N. Barfield Dr. intersection improvements project.
rain barrells/gardens	borne by homeowner	add to education campaign for homeowner implementation
seawall denitrification beds	borne by homeowner	not recommended - media can migrate into canals (unintended consequence)
reuse disposal alternatives	\$5M+	not feasible - FDEP will not permit the discarding of reuse water into deep injection well. Defeats the purpose of re-using treated water.
reuse irrigation inspections	included in operating budget	ongoing: city-owned irrigation inspected and repaired by city landscape contractor. Condo HOA's and hotels inspect and repair their systems
reuse educational program	included in operating budget	W&S dept prepared and distributed educational material. Follow up with HOA's annually
golf course irrigation	borne by golf courses	W&S dept coordinated with golf courses regarding irrigation rates. Golf courses effectively manage their irrigation
golf course interconnecting culverts	borne by golf courses	golf course water management systems detain stormwater and irrigation runoff onsite. Discharge to offsite is through outfall weirs. Interconnecting culverts are internal to golf course SWM systems.
Hydrodynamic study for dead-end canal circulation	\$50k	completed in Dec 2023 and presented to council in Jan 2024

Dead-end canal interconnects	\$6M	state legislative appropriation approvals obtained. The first interconnect project has been designed, and bids open in May.
Street sweeper	\$380k	street sweeping program underway
fertilizer education campaign	low	city environmental staff coordinating
fertilizer enforcement	low	ongoing - city code enforcement
fertilizer ordinance revision	low	not recommended - unenforceable
stormwater utility	property owner assessments	requires stormwater system inventory, master plan update, and rate study by consultant. Staff has not received direction from city council to proceed with this.
Alternate water quality plan (4e)	\$50k	Approved by FDEP in Sept 2023. City is proceeding with projects in the plan as indicated in this table.
WQ testing	\$50k/yr	ongoing
WQ monitoring evaluation	\$10k/yr	evaluation being conducted as part of the MS4 permit. PW staff submitted the NPDES Annual Report for the Phase II MS4 permit for year 2 on 2/28/24. FDEP issued comments and city staff subsequently responded to FDEP's comments. Awaiting FDEP final approval.

### Permitting Functions

Public works staff reviewed the development and right-of-way permit applications and conducted inspections of the active right-of-way, SDP, and Seawall permits as indicated below.

#### Reviews

Permit Type	qty
ROW permits (residential)	25
ROW permits (commercial)	3
SDP reviews	4
SEAW Seawall Work	31

#### Inspections

Type	qty
Residential	78
commercial	0

### Infrastructure Maintenance Field Crew Activities

- Swept City roadways with street sweeper (517 lane miles swept Between 3/18/2024 and 4/19/2024).
- Inspected crosswalks.
- Filled two side slot inlets.
- Cleaned storm drain filters island wide (approximately 544 to date).
- Inspected and grinded city-owned sidewalks and shared paths to remove trip hazards.
- Installed flashing crosswalk system at Rose Marina.
- Filled sinkhole caused by Lumen contracting service, pipe in need of repair.
- Repaired speed limit sign on N. Barfield Dr.
- Inspected stormwater complaint 900 Collier Ct., no issues found.
- Repaired stop sign at Sand Hill & Winterberry Dr.
- Repaired pothole on Capt. Horr Way.
- Re-lined outfall pipe on Stone Ct.
- Repaired Stop sign on Peacock Ter.
- Replaced wood sign pole with metal pole on Strawberry Ct.
- Removed small dead tree on Bald Eagle Dr. swale area.
- Removed broken glass and trash on Muspa Way.

- Removed potted plant from waterway on Moon Ct.
- Plumbed street signs along Landmark St.
- Removed roadkill on Winterberry Dr.
- Replaced three bike lane signs on San Marco Rd.
- Investigated a line-of-sight issue on S. Collier Blvd. Directed Affordable Landscaping to trim the landscaping that was partially obstructing the issue.
- Cleaned broken glass on San Marco Rd. & Heathwood Rd.
- Troubleshooted and repaired traffic light issue on Elkcam and Bald Eagle. Discovered and replaced a damaged signal wire.
- Installed safety light bar on vehicle PW 25.
- Investigated a traffic light complaint on Collier Blvd. and Kendall Dr. No issues found.
- Synchronized the timing on traffic signals along Collier Blvd.
- Installed traffic signal battery backups with the service contractor. Four backup systems installed.
- Repaired depression in settled brick pavers on Collier Blvd. in front of JW Marriott.
- Removed and replaced one concrete sidewalk section at City Annex building.

Sidewalk Grinding on Shared Pathways



Completed Sidewalk Grinding



Brick Paver Repair on Collier Blvd near Marriott



Yearly Storm Drain Filter Cleaning (MS4 Compliance)



broken sidewalk repair at city annex



public works crew repairing sidewalk section

