



# City of Marco Island

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## MEMORANDUM

Date: December 28, 2023  
To: City Council  
Through: Michael A. McNees, City Manager  
From: Justin Martin, P.E., Director, Public Works  
Subject: Public Works Departmental Report – December 2023

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The City's public works department currently has 13 full time employee (FTE) positions as follows: (1) director, (1) Infrastructure & construction manager, (1) stormwater engineer, (1) administrative/project coordinator, (1) supervisor, (1) streets & drainage coordinator, (1) right of way coordinator, (4) maintenance workers, (1) street sweeper operator, and (1) water truck operator.

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

### **1170 San Marco Rd. Drainage Easement**

The City is constructing a canal interconnect pipe along the west property line of 1170 San Marco Rd. (senior living facility site that is presently under construction). The pipe has been installed and now connects the canals to the south and north of San Marco Rd. The area is being restored.



### **Lumen Fiber Optic Installation**

The city suspended fiber optic construction for one week on 12/13/23 because of drilling incidents that disrupted potable water and Summit Broadband service. Although Lumen was authorized to resume on 12/20/23, they did not resume operations in December.

**Concrete Wall Deterioration on Weeks Way**

The concrete wall on Weeks Way (behind Sunshine Ace Hardware) is deteriorating. There are several sections where the concrete wall slats have crumbled or have been damaged by others. PW staff issued a purchase order to the wall contractor for the repair of the sections that are in the worst condition. The landscaping from the adjacent residential area can easily break the concrete wall slats in a windstorm. Although this wall is at the right of way line, the city is not required to have a wall here. The wall benefits the adjacent residential area such that it provides a buffer from the hardware store commercial area. The city will continue to incur repair costs for the maintenance of this wall if it does not seek an agreement from the adjacent residential property owners and the hardware store.



Wall sections needing repair



Adjacent landscaping endangering integrity of wall

**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 including the preparation of meeting minutes, conducting research, updating city website related to committee functions, coordinating among committee members, and attending additional meetings, and responding to requests.

The Chair of Hideaway Beach Tax District met with the County Manager and County Commissioner regarding Tigertail and Sand Dollar Island. The County Manager directed the District and City to organize a management plan and methodology for cost sharing within the management plan.

**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 and Collier County. A pilot program will be presented to council in the FY 25 proposed budget next year.
inlet side slot filling	\$300/inlet	ongoing: 4 filled in month of December (142 total to date)
Exfiltration swales	\$12M	120 miles of swales in Marco Island. Seeking \$1.5M in grant funding. Adding exfiltration swale construction option

		to the N. Barfield Dr. shared use path project that will be bid in the first quarter of 2024.
inlet filters	\$600 ea	ongoing: 218 installed to date
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) Constructing exfiltration swales instead.
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. Adjustments being made to irrigation in the Collier Blvd. medians
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. Will be presented to council in Jan 2024
Dead-end canal interconnects	\$6M	State legislative appropriation approvals obtained. Design to commence in 1 <sup>st</sup> quarter of CY 2024.
Street sweeper	\$380k	sweeper delivered - 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 council regarding this.
Alternate water quality plan (4e)	\$50k	approved by FDEP and EPA. City is proceeding with projects in the plan as indicated in this table.
WQ testing	\$35k/yr	ongoing monthly sampling and testing
WQ monitoring evaluation	\$10k/yr	evaluation being conducted as part of MS4 permit

## Permitting Functions

Public works staff reviewed development and right of way permit applications and conducted inspections of active right of way permits as indicated below.

## Reviews

Permit Type	qty
ROW permits (residential)	09
ROW permits (commercial)	0
SDP stormwater reviews	1

## Inspections

Type	qty
Residential	106
commercial	1

### Infrastructure Maintenance Field Crew Activities (December 2023)

- Swept City roadways with new street sweeper 549 lane miles swept between 11/13/2023 and 12/22/2023).
- Inspected crosswalks.
- Installed and removed weekly Farmer's Market MOT.
- Filled side slots on inlets (7 for the month of December).
- Installed holiday banners on Collier Blvd.
- Installed Christmas Tree and lights on City Hall roof.
- Repaired and replaced numerous signs island wide.
- Repaired pothole in roadway on S. Barfield Rd.
- Unplugged storm drain at 1103 Bald Eagle Dr. (outfall pipe blocked with oysters).
- Removed roadkill on Bald Eagle Dr.
- Filled sinkhole on N. Barfield Dr. near Sheriffs sub-station.
- Repaired water truck, (leaking air valve behind dashboard).
- Removed roadkill on Collier Blvd.
- Repaired shared pathway on Barfield Dr. and Hawaii Ct.
- Filled small sinkhole on south seas bridge.
- Installed French drain and graded swale at McIlvaine Ct.
- Installed sod at S. Barfield Dr. swale job.
- Moved bleachers from Winterberry Field to Ace Hardware for Holiday Parade.
- Removed and replaced section of sidewalk at Ludlow St.
- Repaired Gradall DEF pump (DEF system maintenance and repair, engine computer code scanned and cleared).
- Collected trash along Collier Blvd., Bald Eagle Dr., and San Marco Rd.
- Repaired roadway/edge of road along S. Barfield Dr.
- Repaired turtle street light shield near Resident's Beach (Collier Blvd.).
- Cleaned Goodland shared pathway, near Goodland bridge (storm debris cleanup).
- Cleaned traffic light cameras.
- Trained employee for water truck driving routes (new CDL driver in training).
- Cleaned up spilled concrete on Bald Eagle Dr.
- Cleaned broken floor tile on Bald Eagle Dr.
- Repaired truncated dome at Camby Ct.
- Repaired depression in roadway on Treasure Ct.
- Replaced flag at Jolley Bridge.
- Repaired edge of roadway on S. Collier Blvd. near turtle parking lot.
- Repaired storm pipe at 967 Sundrop Ct. (hole in storm pipe).
- Repaired edge of roadway on Hernando Dr.
- Painted traffic arrows in City Annex parking lot.
- Cleaned debris under Herb Savage Bridge.

**French Drain Installation on McIlvaine Ct.**



**1103 Bald Eagle Storm Pipe repair**

