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WHITE LAKE TOWNSHIP
DEPARTMENT OF PUBLIC SERVICES

7525 Highland Road, White Lake, Michigan 48383-2900, (248) 698-7700, www.whitelaketwp.com

April 7, 2026

Honorable Board of Trustees
Charter Township of White Lake
7525 Highland Road
White Lake, MI 48386

RE: Cranberry Lake and White Lake MHP Sanitary Station Rehabilitations

Honorable Board of Trustees,

Cranberry Lake Sanitary Pump Station and White Lake MHP pump station need electrical controls and pump replacements. These upgrades are identified in the Wastewater Asset Management Plan, the Township Capital Improvement Plan, and are reflected in the Sewer Rate Study that is currently being updated.

Cranberry Lake Pump Station is currently down to one pump. The repair estimate for the failed pump is 65% of the cost to replace the pump. The pump is at the end of its useful life cycle so replacing the pump is not recommended.

The estimates attached were developed by Drew Sandahl, Chief Engineer, OCWRC, and me using OCWRC contracts and engineering. The control panel will be competitively bid between the three companies they currently have contracts with. OCWRC would be managing the contracts and construction. Alternatively, we could commission the Township Engineer for design, bidding, contract management, and inspection. As OCWRC is involved in that process as well, my preference is to use OCWRC to manage the project. They have hundreds of these stations across the county using the county standard details. We did this with the Shotwell and Oxhill Relining Projects, and it went very smoothly.

I am requesting the Township Board approve OCWRC to move forward with the Cranberry Lake and White Lake MHP Pump Station Rehabilitation Projects in an amount not to exceed \$328,239. I request that the Township Supervisor or myself be authorized to sign any procurements that are part of the project included in the estimates.

Please feel free to contact me if you have any questions.

DPS Director
Charter Township of White Lake

Cranberry Lake Estates Pump Station

Description	Estimated Cost
Electrical Design	\$ 7,500
Electrical Equipment Procurement	\$ 22,000
Conduit Installation	\$ 2,500
DTE Equipment Procurement	\$ 3,000
WRC Electrical Installation	\$ 11,000
Pump Procurement	\$ 26,256
WRC Pump Installation	\$ 3,500
Subtotal	\$ 75,756
Contigency - 15%	\$ 11,363
Estimated Total	\$ 87,119

White Lake Estates Pump Station

Description	Estimated Cost
Control & Electrical Design	\$ 20,000
Control Panel Procurement & Fabrication	\$ 80,000
Electrical Equipment Procurement	\$ 30,000
Conduit Installation	\$ 2,500
WRC Installation, Temporary Controls Installation & Removal	\$ 23,700
Pump Procurement	\$ 59,000
WRC Pump Installation	\$ 4,000
Subtotal	\$ 219,200
Contigency - 10%	\$ 21,920
Estimated Total	\$ 241,120

Aaron Potter

From: Michael Leuffgen <mleuffgen@dlz.com>
Sent: Thursday, March 19, 2026 6:55 PM
To: Aaron Potter
Subject: FW: Pump selection for Cranberry Lk lift station

Aaron, wanted to make sure you were looped in on this. We will check it out and respond quickly due to the pump being out of service. Just wanted to make sure we were looking at it for you.

Mike

From: Schulz, Kevin T <schulzk@oakgov.com>
Sent: Thursday, March 19, 2026 1:57 PM
To: Michael Leuffgen <mleuffgen@dlz.com>
Cc: Sandahl, M. Drew <sandahlm@oakgov.com>
Subject: Pump selection for Cranberry Lk lift station

EXTERNAL: Message origin is from an external network. Use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Mike –

Drew Sandahl asked me to contact you regarding the #1 pump at the Cranberry Lake lift station. It has failed, and the cost to repair is 65% of replacement.

In requesting a quote for a replacement, the design specification is 390 GPM @ 76' TDH.

We performed a pump test to confirm existing conditions and found those to be 453 GPM @ 82' TDH.

As these conditions are a 16% increase in flow and an 8% increase in TDH, the conditions have changed enough to request a different pump spec than the original.

I want to know if DLZs model for the system confirms the need for a different pump spec than original.

Please examine at your earliest convenience and let me know if we should spec a pump to meet existing conditions, and whether a notification/permit requisition should be sent to EGLE for a change in equipment.

Thank you,

Kevin Schulz

Supervisor II
Pump Maintenance Unit



Oakland County Water Resources Commissioner
4860 Pontiac Lake Road
Waterford MI 48328
C: 248.431.7569

O: 248.618.9690
schulzk@oakgov.com
wrcpump@oakgov.com

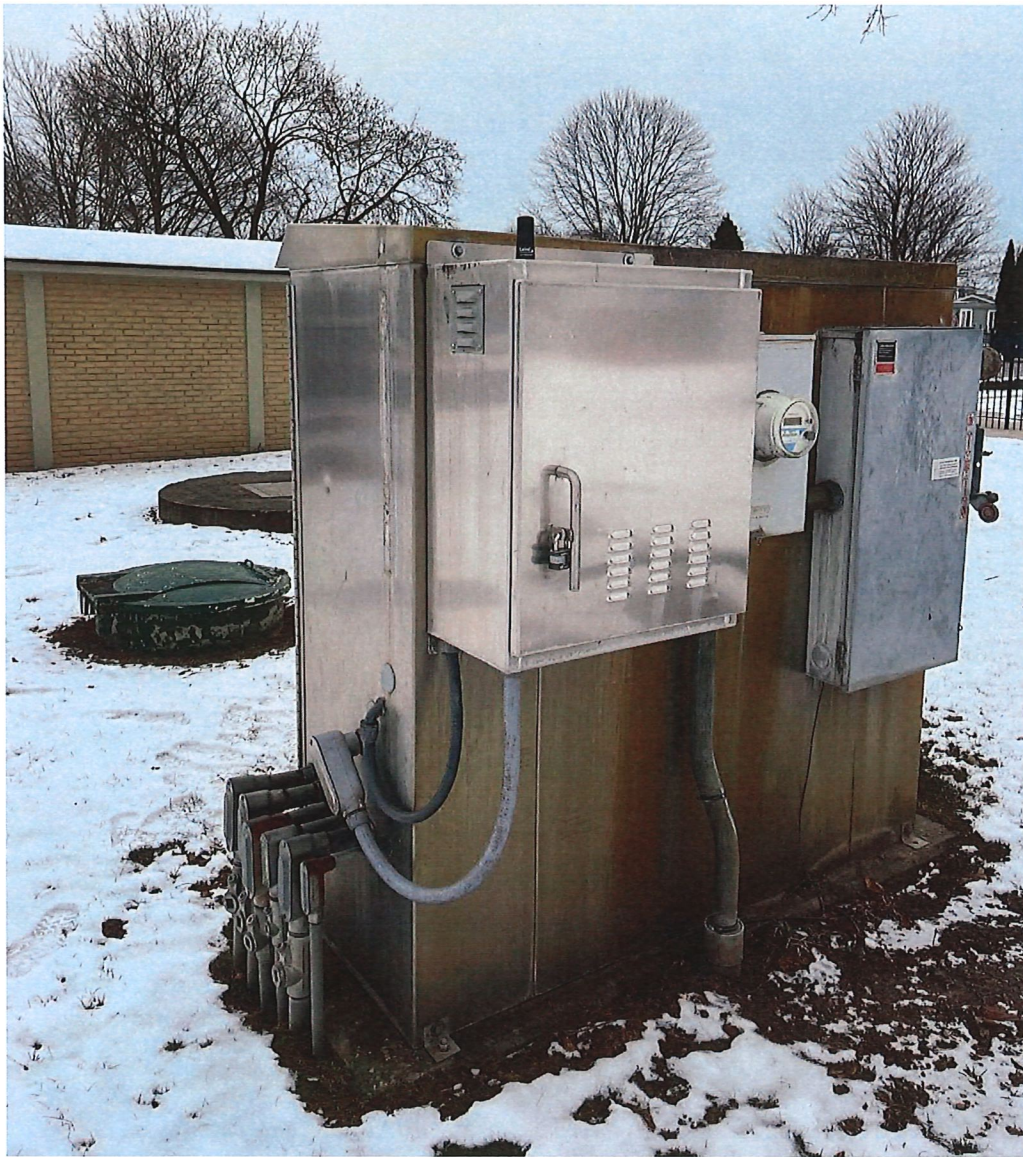
Office Hours 6:30AM to 4:30PM Monday- Thursday



White Lake Sewer System

Recommended Improvements





White Lake Estate Pump Station

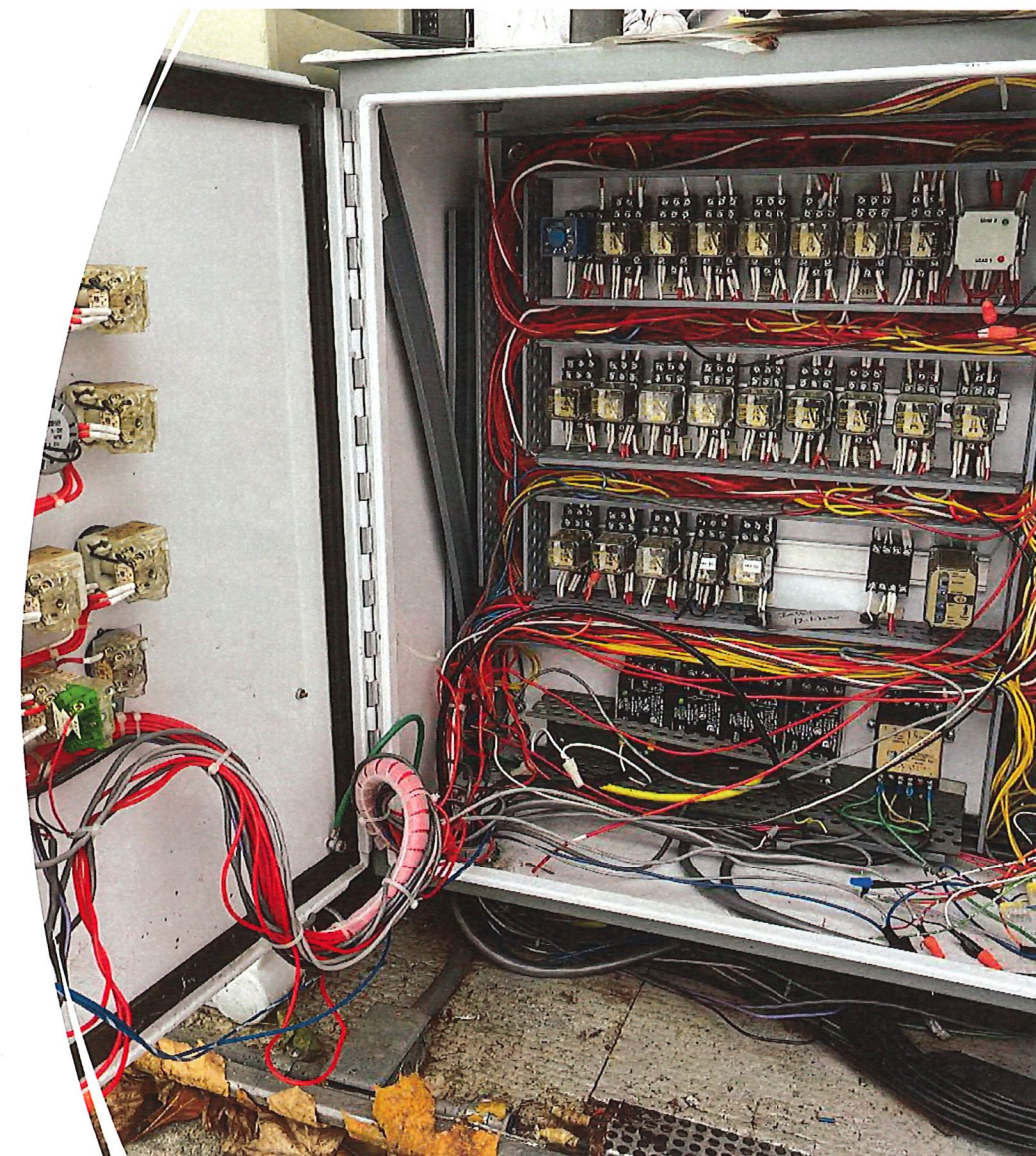
Electrical and Controls Replacement



Obsolete Equipment

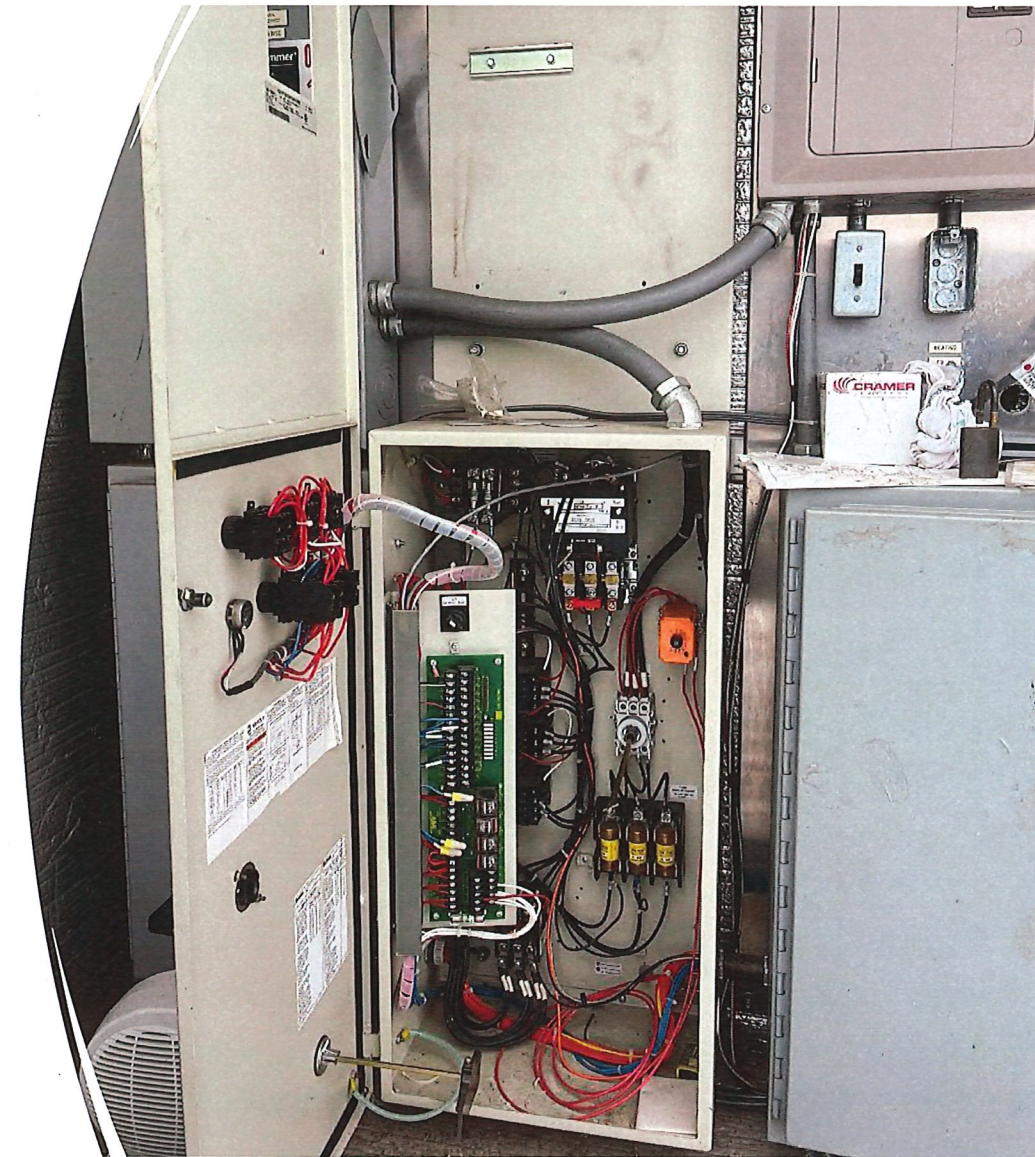
- Some obsolete equipment which has been abandoned remains in place
- Finding parts for remaining equipment is challenging
- Failed cabinet heaters, space heater added to cabinet





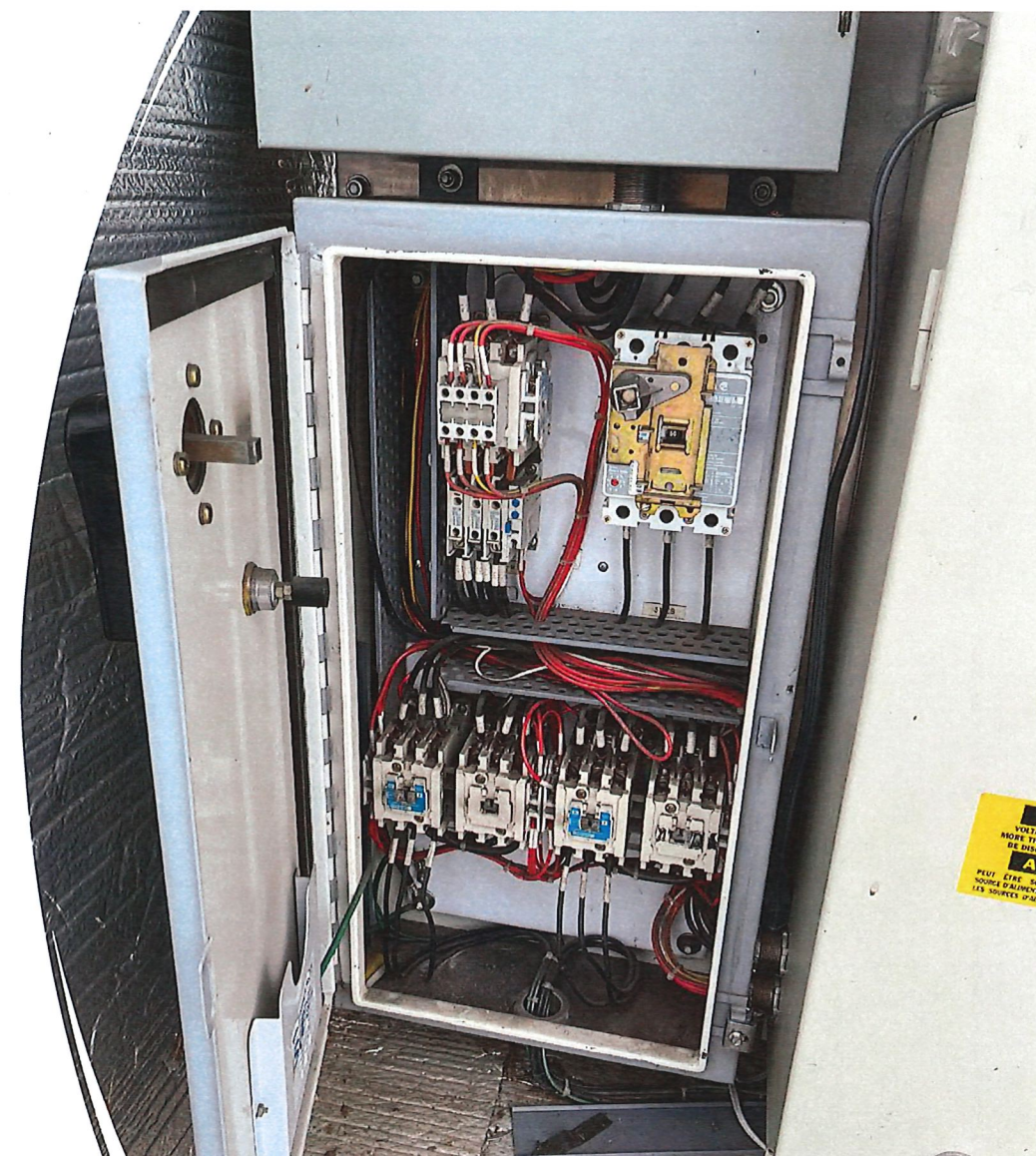
30 Years of Repairs

- Last electrical/controls improvements circa 1998
- Antiquated and complex site controls
- Pump starters well past useful life
- ~30 years of replacements and repairs leading to poor wire labels and difficult troubleshooting



Unused Equipment Remains

- Soft-starter cabinet from original design
- Soft-starter failed and was replaced with starter/contactor
- Components in this cabinets are obsolete, some unused, and add to complexity of troubleshooting



Old Technology

- Almost 30 year old starter/contactors remain
- Standard WRC starter configuration would eliminate unnecessary contactors
- Reducing site equipment reduces long term maintenance cost



Interior Corrosion

- Failed cabinet heaters due to corrosion
- New cabinet will provide proper protection from elements

Estimated Control Panel & Electrical Cost

- SAW Grant report recommended controls and electrical improvements in 2022 fiscal year, estimated cost at \$156,000
- Costs have increased since SAW grant recommendation
- **Estimated cost** now on the order of **\$180,000** (excluding cathodic protection system)

Electrical & Control Work Orders Since 2018

Year	Work Orders	Cost
2018	5	\$795.69
2019	9	\$2,696.14
2020	17	\$8,297.30
2021	8	\$8,880.23
2022	5	\$1,049.74
2023	2	\$535.96
2024	10	\$2,595.74
2025	1	\$432.98
TOTAL	57	\$25,283.78





White Lake Estates Pump Replacements

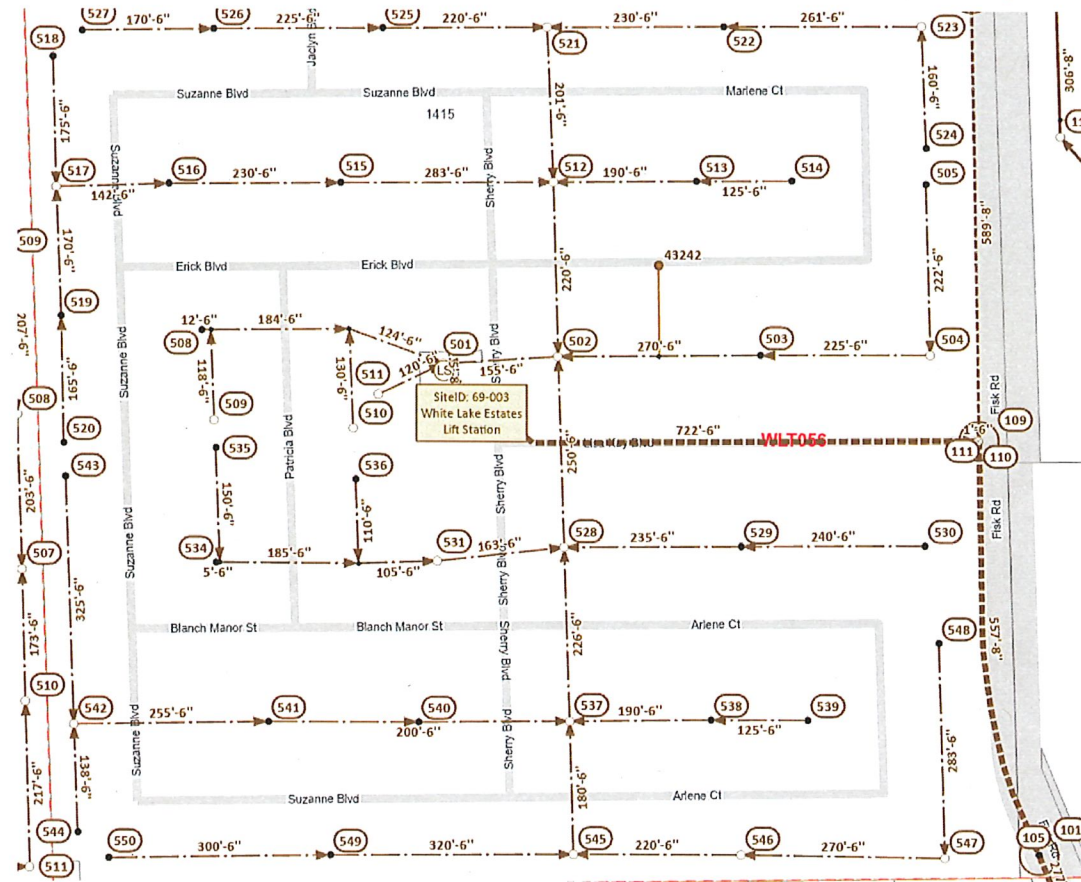
- Last condition assessment in 2024
- Significant corrosion and metal loss observed
- Both pumps approx. 30 years old
- Obtained quotes to replace like kind
- Estimated cost: \$62,000



White Lakes Estates Summary



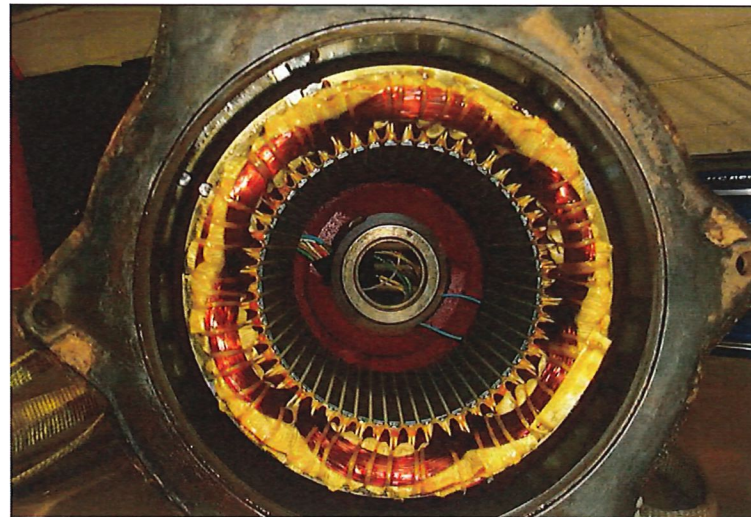
- Controls & Electrical: \$180,000
- Pump Replacements: \$62,000
- Total: \$242,000





Cranberry Lake Estates Pump Station

- Pump 1 has failed
- Pump 26 years old
- Electrical, mechanical, and seals compromised
- Estimated replacement cost: \$30,000



Cranberry Lake Transfer Switch



- Generator sporadically failing to transfer during scheduled testing
- Increase in service callouts for failure to transfer
- Recommend replace transfer switch
- Perform electrical service upgrades at same time (SAW)
 - Scope and design needed
- Anticipated cost range: \$45,000 - \$60,000

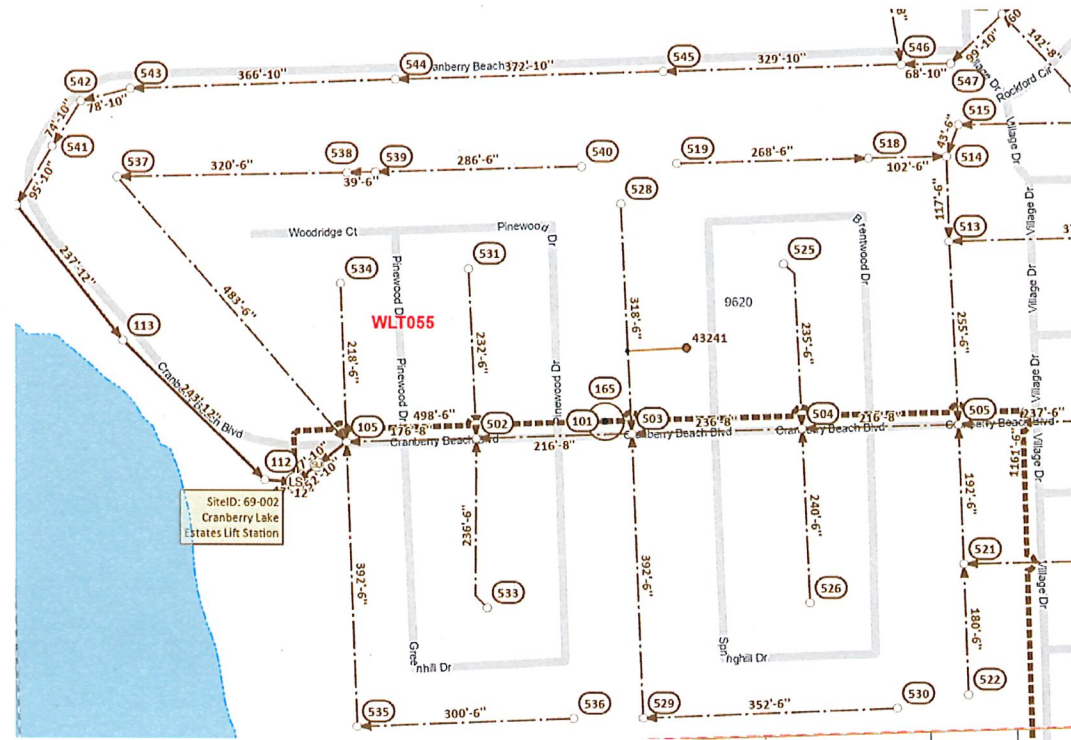
Generator Work Orders Since 2018

Year	Work Orders	Cost
2018	3	\$346.31
2019	4	\$2,759.41
2020	8	\$2,852.59
2021	4	\$1,867.48
2022	3	\$1,743.76
2023	8	\$4,968.79
2024	5	\$1,376.18
2025	7	\$2,605.26
TOTAL	44	\$20,180.18

Cranberry Lake Estates Summary



- Pump 1 Replacement: \$30,000
- Automatic Transfer Switch & Electrical Service Replacement: \$45,000 - \$60,000
- **Total:** \$75,000 - \$90,000





Odor Control Installation Assistance

- Dedicated breaker needed for chemical pump & compressor: ~\$3,000 per site
- Bury conduit and dosing lines (by contractor): ~\$2,500 per site
- Estimated total per site: \$5,500
- Four locations
 - Marketplace
 - Suburban Knolls
 - White Lake Estates
 - Cranberry Lake Estates
- **Total Estimated Cost: \$22,000**

