

## Highlighted Projects - Water

Grant Gartrell, Director of Water Engineering

## **Active Projects Highlight Report**

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Project Name:  Water Plant Production Flow Measurement and Related Facility Improvements			
GLWA Project Manager:  Jorge Nicolas  Contractor:  LGC Global  Contract Number:  CON-133			
Project Start Date: 7/31/2017	Project Completion Date: 6/1/2020	Contract Amount: \$ 7,060,115	
Invoiced to Date: \$6,228,399	Balance Remaining: \$831,716	Project Schedule (% Complete) 92%	

Current Work Status	Project Projections
-Southwest Water Treatment Plant: all physical work is complete. Instrument calibration and testing is being performed nowNortheast Water Treatment Plant: Substantial completion of the project	- <u>Springwells Water Treatment Plant</u> : Conduct final meter testing
has been achieved. All rehabilitated meters are in satisfactory service.  - <u>Springwells Water Treatment Plant</u> : Rehabilitation of meters is complete. Meters are in performance demonstration testing period.	



### **CON-133 Water Plant Production Flow Measurement and Related Facility Improvements**

Southwest Plant – Removed blind flange from the end of VM-6 header in the North Pipe Gallery in the high lift building.







Springwells Plant – Sump discharge piping for de-watering located at Chamber 3-4.

Project Name: Water Works Park Chlorine Disinfection System Replacement and Improvements		
GLWA Project Manager:	Contractor:	Contract Number:
Mike Dunne	<b>Detroit Contracting Inc</b>	CON-208
Project Start Date:	Project Completion Date:	Contract Amount:
1/10/2018	4/10/2020	\$ 6,110,000.00
Invoiced to Date:	Balance Remaining:	Project Schedule (% Complete):
\$5,905,956.00	\$204,044	96%

Current Work Status	Project Projections
<ul> <li>All construction work is complete</li> <li>Contract is in process of being closed out</li> </ul>	- Close out contract



**CON-208 Water Works Park Chlorine Disinfection System Replacement and Improvements** 



Chlorine Room epoxy paint flooring

Resin wrapped FRP ductwork



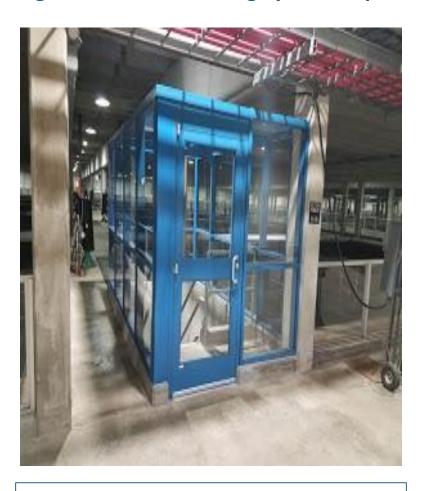


Project Name:  Lake Huron Water Treatment Plant Miscellaneous Mechanical Heating, Ventilating and Air-  Conditioning System Improvements		
GLWA Project Manager: Contractor: Contract Number:		
Brian VanHall	<b>Detroit Contracting Inc</b>	CON-212
Project Start Date:	Project Completion Date:	Contract Amount:
2/14/2018	5/14/2020	\$7,660,000.00
Invoiced to Date:	Balance Remaining:	Project Schedule (% Complete)
\$7,567,509	\$92,491	92%

Current Work Status	Project Projections
- Construction work is complete and all new HVAC systems are in satisfactory service	- Close out contract



### CON-212 Lake Huron Water Treatment Plant Miscellaneous Mechanical Heating, Ventilating and Air-Conditioning System improvements



1 of 7 newly completed stairwell enclosures

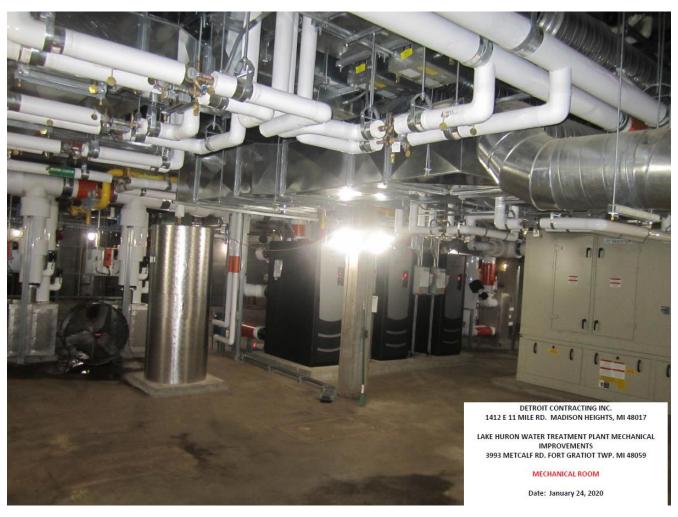


# CON-212 Lake Huron Water Treatment Plant Miscellaneous Mechanical Heating, Ventilating and Air-Conditioning System Improvements





# CON-212 Lake Huron Water Treatment Plant Miscellaneous Mechanical Heating, Ventilating and Air-Conditioning System Improvements





# CON-212 Lake Huron Water Treatment Plant Miscellaneous Mechanical Heating, Ventilating and Air-Conditioning System Improvements



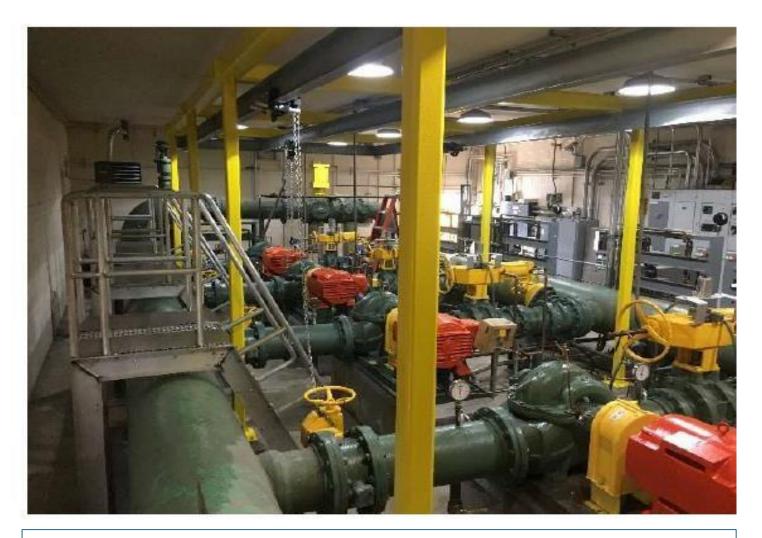


Project Name: Orion Pumping Station Improvements		
GLWA Project Manager: Jorge Nicolas	Contractor:  Detroit Contracting, Inc.	Contract Number: CON-225
Project Start Date: 1/9/2018	Project Completion Date 7/26/2019	Contract Amount: \$1,747,000.00
Invoiced to Date: \$1,657,376.00	Balance Remaining: \$0	Project Schedule (% Complete) 100%

Current Work Status	Project Projections
<ul> <li>All construction work is complete</li> <li>Contractor has demobilized from the site</li> <li>New pumping units, motors, VFDs, and monorail system are in satisfactory service</li> </ul>	-Contract is closed out The original contract amount was \$1,747,000 and was closed out at \$1,687,085



#### **CON-225 Orion Pumping Station Improvements**



Painting of pipes and pumps



Project Name:		
Springwells Water Treatment Plant 1958 Rapid Mix Improvements		
GLWA Project Manager:	Contractor:	Contract Number:
Pete Fromm	J.F. Cavanaugh Company	CON-251
Project Start Date:	Project Completion Date:	Contract Amount:
5/15/2018	July 14, 2019	\$ 803,647.00
Invoiced to Date: \$751,793.00	Balance Remaining: \$0	Project Schedule (% Complete) 100%

Current Work Status	Project Projections
<ul> <li>All construction work is complete</li> <li>Contractor has demobilized from the site</li> <li>All new rapid mixing units are in satisfactory service</li> </ul>	-Contract is closed out The original contract amount was \$803,647, and was closed out at \$751,793



#### **CON-251 Springwells Water Treatment Plant 1958 Rapid Mix Improvements**



Removed existing 24" Butterfly Valve & Wall Thimble

New 24" Butterfly valve





Project Name: Springwells Water Treatment Plant Reservoir Fill Line Improvements		
GLWA Project Manager:	Contractor:	Contract Number:
Erich Klun	Ric-Man Construction	CON-253
Project Start Date:	Project Completion Date:	Contract Amount:
4/20/2018	9/1/2020	\$4,270,500.00
Invoiced to Date:	Balance Remaining:	Project Schedule (% Complete)
\$2,919,535	\$1,350,965.00	80%

Current Work Status	Project Projections
-New reservoir fill pipeline, energy dissipating valves and valve vault are constructed and connected into the reservoir	- Performance demonstration testing will be performed in a couple months once CON-281 has the high-lift pump discharge valve replacement work completed.
- New fiber optic communication line for the control system is almost complete	



#### **CON-253 Springwells Water Treatment Plant Reservoir Fill Line Improvements**





#### **CON-253 Springwells Water Treatment Plant Reservoir Fill Line Improvements**





Project Name:		
Lake Huron Water Treatment Plant Electrical Tunnel Rehabilitation  GLWA Project Manager: Contractor: Contract Number:  Jorge Nicolas Clark Construction CON-288		
Project Start Date: 9/24/2018	Project Completion Date: 9/25/2019	Contract Amount: \$3,627,468
Invoiced to Date: \$3,627,468	Balance Remaining: \$0	Project Schedule (% Complete) 63%

Current Work Status	Project Projections
<ul> <li>Construction work is complete</li> <li>New electrical systems are in satisfactory service</li> </ul>	- Contract is closed out The original contract amount was \$3,888,000 and was closed out at \$3,627,468



#### **CON-288 Lake Huron Water Treatment Plant Electrical Tunnel Rehabilitation**



Completed exterior of stairwell structure.

Crane lowering precast planks into place



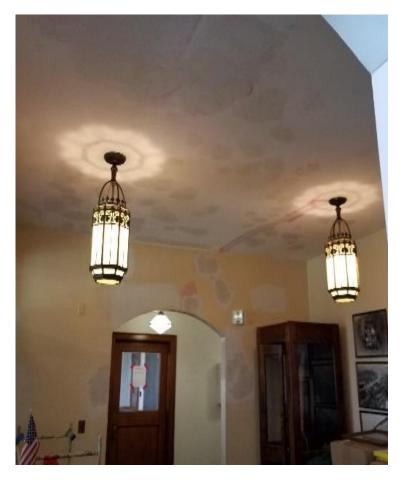


Project Name:  Springwells Water Treatment Plant, 1958 Filter Rehabilitation and Auxiliary Facility Improvements		
GLWA Project Manager: Khader Hamad	Contractor: Walsh Construction	Contract Number: SP-563
Project Start Date: 7/8/2013	Project Completion Date: 12/31/2018	Contract Amount: \$75,899,000.00
Invoiced to Date: \$76,736,937	Balance Remaining: \$ 112,063	Project Schedule (% Complete) 93%

Current Work Status	Project Projections
<ul> <li>Construction work is substantially complete</li> <li>Contractor is working on punch list items now</li> </ul>	- Complete punch list items and begin contract closeout
	process



#### SP-563 Springwells Water Treatment Plant. 1958 Filter Rehabilitation and Auxiliary Facility





Repairs to wall & ceiling in 1930 Admin Building



#### SP-563 Springwells Water Treatment Plant. 1958 Filter Rehabilitation and Auxiliary Facility



Digital read out for phosphoric acid storage tanks

New distiller and deionizer





	Project Name:	
Fairview Sewage Pumping Station Improvements		
GLWA Project Manager: Michael Graham	Contractor: Weiss Construction	Contract Number: CON-297
Project Start Date: 1/07/2019	Project Completion Date: 3/25/2022	Contract Amount: \$32,545,540
Invoiced to Date: \$8,405,108	Balance Remaining: \$ 29,289,258.00	Project Schedule (% Complete) 36%

Current Work Status	Project Projections
<ul> <li>Temporary heating system is in service</li> <li>Asbestos abatement work is being conducted on the building mechanical systems as a prerequisite to selective demolition</li> <li>The temporary sewage bypass pump station is under construction</li> <li>The new, permanent raw sewage pumps have been delivered</li> </ul>	<ul> <li>The temporary sewage bypass pump station is scheduled to be completed and placed in service mid-April 2020</li> <li>Once the temporary station is in service, selective demolition of the existing pumping units, electrical and building mechanical systems inside the station will be commenced</li> </ul>



#### **CON-297 Fairview Sewage Pumping Station Improvements**



Delivery of pump motors



Lifting of Pumps



## **CON-297 Fairview Sewage Pumping Station Improvements**



Trench Backfilling with gravel



Delivery of pumps



## **CON-297 Fairview Sewage Pumping Station Improvements**





## **CON-297 Fairview Sewage Pumping Station Improvements**



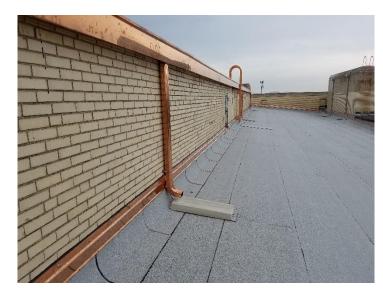


Project Name:		
Roofing Replacement Various Water Facilities		
GLWA Project Manager: Nick Hoffman	Contractor: Schreiber Corp.	Contract Number: 1803483
Project Start Date: 9/3/2019	Project Completion Date: 7/15/2020	Contract Amount: \$3,031,089
Invoiced to Date: \$1,216,533	Balance Remaining: \$ 1,814,556	Project Schedule (% Complete) 60%

Current Work Status	Project Projections
<ul> <li>Roofing systems replacement completed on various roofs at WWP Raw Water Booster Station, Franklin Pumping Station, Springwells Turbine House, Orion Pump Station, and Conner Creek Sewage Pump Station</li> <li>Two remaining facilities include Springwells Machine Room and WWP High-Lift Pumping Plant Building</li> </ul>	<ul> <li>WWP High-Lift Pumping Plant Building roof to be replaced by about mid-May 2020</li> <li>Springwells Machine Room roof to be replaced early June 2020</li> </ul>







Springwells Water Treatment Plant – New Turbine House Roofing and Gutters





Water Works Park Raw Water Booster Station – New Roofing and Vent Flashing







WWP High-Lift Pumping Plant – Delivery of New Copper Metal Roofing Product





Rear of WWP High Lift Pumping Plant







WWP High-Lift Building – Installation of Ice & Water Shield

### Water 2019 - It was a busy board year

#### In calendar year 2019:

- 21 new contracts approved at a total value of \$257,230,429
- 12 change orders to construction contracts approved at a total value of \$93,174,876
- 12 amendments to engineering services contracts approved at a total value of \$8,870,417

