PROJECT UPDATE #1 | A Review of MSA Projects in Your Community

City of Mount Carroll, IL

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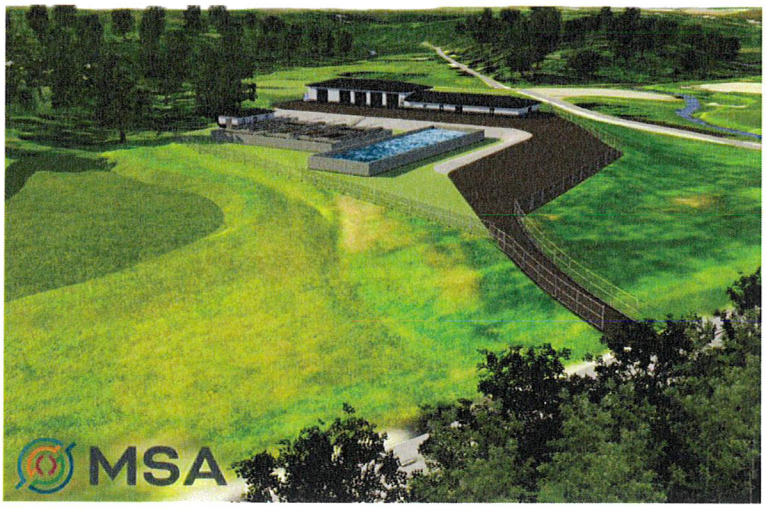


CONTRACTOR:
Leander Construction, Inc.
Chris Rossman, Superintendent

SUB-CONTRACTORS:
Fischer Excavating
G.A. Rich & Sons
Tri City Electric

DATE: March 23, 2020

WASTEWATER TREATMENT FACILITY & CENTER STREET LIFT STATION

The intent of this letter is to update you of the construction taking place at the new wastewater treatment facility.

COVID-19 Update: The Governor of Illinois' Executive Order in response to COVID-19 indicates that construction of public works infrastructure is essential, and can therefore continue. The City and Leander Construction (General Contractor) concur, therefore construction of the Wastewater Treatment Facility will proceed as planned. Leander Construction and their sub-contractors are implementing several measures to limit potential spread of COVID-19.

PLANT OVERVIEW

The existing WWTP was constructed in 1959 with the latest upgrade being completed in 1979. The plant is in close proximity of Carroll Creek and has experienced significant flooding in 1981 and 1982, and again in 2010 and 2011 during the 100-year rainfall events. The aging equipment and structures have been quickly deteriorating, and if left unaddressed, the plant will experience major failures in the foreseeable future.

The new activated sludge (Aero-Mod) plant being constructed will be above the 500-year flood elevation, greatly reducing any potential flooding that may occur. The plant will consist of preliminary treatment including influent pumping, vertical and manual screens, and grit removal. Secondary and final treatment will include aeration tanks, clarifiers, and UV disinfection. A flow equalization tank is also being constructed to allow for temporary storage of wastewater if the system were to experience high flows. Sludge that is produced by the treatment process will be stored in the aerobic digesters and sludge storage tank (part of the Aero-Mod footprint). A sludge belt press located in the Headworks Building will dewater the sludge which produces a cake sludge that can be land applied to farm field as fertilizer.

CONSTRUCTION PROGRESS

Leander and their subcontractors broke ground on the new wastewater treatment plant on August 20, 2019. Due to existing soil conditions, Fisher Excavating had to over excavate down approximately 10 feet to reach suitable load-bearing soil. After confirming bearing pressure was adequate to support all structures, engineered fill was imported to site to achieve designed grade elevations. Since then, the construction team has been moving forward erecting multiple structures throughout the new footprint of the plant. A semi-mild winter has allowed Leander to keep working, and in the next couple of months, the Headworks and UV buildings will be fully enclosed. Work on the EQ tank and Aero-Mod structures resumed earlier this week and are scheduled to be finished by mid-summer. By late summer the backbone of the plant will be done, and commissioning and startup will shortly follow. Switching over from the existing plant to the new plant is tentatively scheduled for October 13 of this year. After the new plant is up in running, complete demolition of the existing plant will take place.

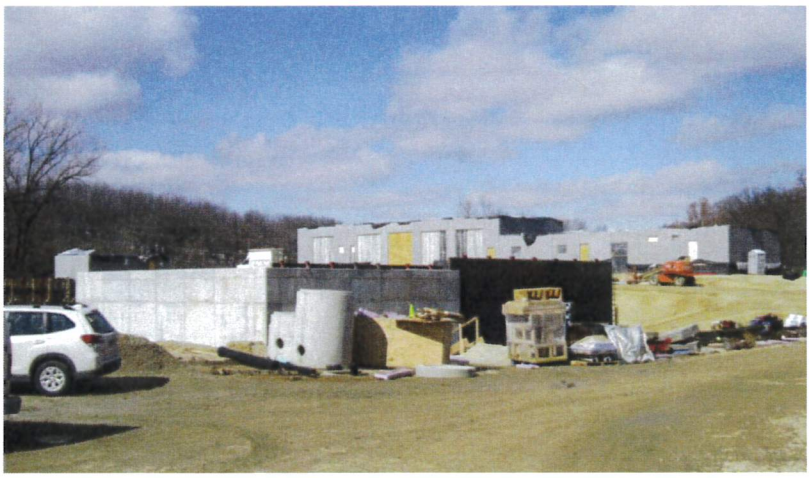
PROJECT SCHEDULE (TENTATIVE)

Remaining construction includes the following, along with the estimated final completion:

Ground Breaking	August 20, 2019
Mass Excavation & Compaction of Structures	September 2019 – February 2020
Aero-Mod & EQ Tank Building Foundations	October 2019 – July 2020
Installation of Pre-Cast, Trusses, & Roof	February 2020 – April 2020
Headworks HVAC, Plumbing, Electrical, & Equipment	April 2020 – September 2020
Substantial Completion (Plant Switch-Over)	October 13, 2020
Final Completion	February 10, 2021

FUNDING OVERVIEW

The total construction cost of the new WWTF is approximately $11.4 million. The low-interest loan for the project is being financed by the Illinois Environmental Protection Agency (IEPA) with 45% principal loan forgiveness, which greatly reduces the burden on the City utility users.



Final project completion is anticipated in *spring, 2021*. The City and I look forward to a successful and timely completion to this project, and we appreciate everyone's patience and understanding for any inconveniences caused by construction activities.

Respectfully,
MSA Professional Services, Inc.

Jared Fluhr, PE
Project Engineer