



Gavin Power Plant

Stingy Creek Spillway to Entact

Total Contract: \$8,800,000
Project Start: August 2019
Project Completion: July 2020



Resourceful.



Responsive.



Results.



CHESHIRE
OHIO



Gavin Power Plant

Stingy Creek Spillway to Entact / Cheshire, OH
Project Size: \$8,800,000 / August 2019 - July 2020

The Owner is permanently closing their 400 acre ash ponds at the Gavin Power Plant. Bowen was contracted to construct a 850 LF Concrete Spillway to receive rain runoff from a 1,000 acre watershed that will divert rain runoff into local tributaries which eventually lead to the Ohio River.

Project Challenges:

- **Working on a Slope.** The main chute of the spillway is 550 LF at a 13% slope which created obstacles in terms of moving materials, setting up cranes and pump trucks, and employees working on a sloped surface. The project also had various slab sections that ranged from a 13% slope to a 50% slope, which also created challenges with placing concrete.
- **Weather Impacts.** The project had a total rainout percentage of 20% which created schedule impacts for the Spillway. The Main Dam was constructed using bottom ash and clay which presented challenges in moving equipment up to 3 days after a weather event. The project team was able to stage materials and equipment in a manner that if a weather event occurred, it created minimal impact.
- **Project Design.** The overall design was completed prior to mobilizing to site, but due to multiple departments and agencies reviewing drawings and work installed, the installation methods had to be revised. The main chute needed to be "checker boarded" to eliminate cracking in the slab sections. Bowen was able to assist the Owner and Engineer in the design revisions to the Approach Area to help reduce cost and schedule impacts.

Bowen Resourceful:

- During the pre-planning phase of the project, Bowen identified construction methods that would improve the overall schedule and reduce cost.

Bowen Responsive:

- Bowen was able to assist the Owner and design engineers to value engineer the Approach Slab Area with minimal schedule and cost impacts.

Bowen Results:

- On time schedule completion based on original schedule.
- Zero Injuries

PROJECT SCOPE

- Civil/Concrete
- Underground Piping

PROJECT SPECS

- 8,600 CY Concrete
- 470 CY Largest Single Pour
- 900 Tons Rebar
- 5,700 LF Schedule 40 PVC Piping (8")
- 100,000 SF Fabric Form Concrete
- Zero Injury
- Zero Incident
- On Time Completion

PROJECT TEAM

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