

Resource Recovery Farm Outlet Pipe Fort Collins, Colorado

Client: Mr. Daylan Figgs
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ANDERSON CONSULTING ENGINEERS, INC.
Civil • Water Resources • Environmental

The City of Fort Collins Natural Resources Department owns and manages the Running Deer Natural Area at the intersection of Prospect Road and Interstate 25 in Fort Collins. The area was previously a gravel mine that was in the process of being reclaimed by the mining company, prior to being turned over to the City. Groundwater and surface flows were being pumped out of the pit into the river; however the City did not want the continued cost of operating a pump system, and requested that Anderson Consulting Engineers, Inc. evaluate alternatives to gravity drain the pit, and provide final design, and project management services for the project.

The purpose of this project was to design and construct an outlet pipe for groundwater and surface flows to drain from the reclaimed gravel pit into the Cache la Poudre River. This project consisted of the following:

- **Formulation and hydraulic evaluation of conceptual alternatives** to meet the above referenced criteria;
- **Hydraulic analysis and final design of 670-feet of 24-inch Class III RCP;**
- **Final design of a siphon and protection measures around an existing 21-inch sanitary sewer;**
- **Final design of revetment measures in the Cache la Poudre River;**
- Preparation of **final construction drawings and contract documents;**
- Preparation of a **Nationwide 404 permit** from the USACE;
- **Floodplain use permitting** through both Larimer County and the City of Fort Collins;
- **Construction management** services during the approximately 1-month construction time period; and
- Preparation of **as-builts** and certification of the improvements to Larimer County and the City of Fort Collins.



Outfall Location in Cache la Poudre River



Installation of 24-inch RCP