

Staff Report

Subject: Approval of Genesee & Wyoming Railroad Utility Crossing Permit Application for the Effingham County Regional Water Supply Project

Author: Tre Wilkins, Project Manager

Department: Procurement, Engineering

Meeting Date: 7/21/2026

Item Description: Consideration to approve the Genesee & Wyoming (G&W) Railroad Utility Crossing Permit Application and supporting engineering documents for construction of the Effingham County Regional Water Supply Project.

Summary Recommendation: Staff recommends approval of the Genesee & Wyoming Railroad Utility Crossing Permit Application to authorize submission of the required railroad crossing documents for installation of the finished water transmission main beneath the G&W Railroad in Meldrim, Georgia.

Executive Summary / Background:

As part of the Effingham County Regional Water Supply Project, the County must obtain approval from Genesee & Wyoming Railroad to install a **30-inch fusible FPVC finished water transmission line** beneath the railroad right-of-way using **horizontal directional drilling (HDD)**. The proposed crossing includes installation of the 30-inch transmission main inside a **48-inch steel casing** designed to meet G&W Railroad engineering standards and provide long-term protection of the water infrastructure.

The permit package includes an engineering report prepared by Goodwyn Mills Cawood (GMC), detailed bore plan drawings, railroad crossing application, geotechnical boring plan, and a frac-out contingency plan for environmental protection during drilling operations. The engineering report states that the project is intended to improve drinking water infrastructure, increase water supply and system capacity, support economic development, enhance fire protection, and provide reliable service to existing and future customers throughout the Coastal Savannah River region.

The proposed railroad crossing has been designed in accordance with applicable engineering standards and G&W Railroad utility crossing requirements. Installation will utilize horizontal directional drilling to minimize impacts to railroad operations while safely constructing the transmission main beneath the existing railroad and future rail facilities. The permit package also includes operational safeguards such as isolation valves, pipeline markers, geotechnical investigations, and environmental response procedures to ensure compliance with railroad, environmental, and public safety requirements.

Approval of this permit application will allow staff to submit the completed engineering package to Genesee & Wyoming Railroad for review and permitting, which is a critical step toward construction of the Regional Water Supply Project.

Alternatives for Commission to Consider:

1. Approve the Genesee & Wyoming Railroad Utility Crossing Permit Application.
2. Do not approve.
3. Provide staff with direction.

Recommended Alternative: 1

Other Alternatives: 2, 3

Department Review: Procurement, Engineering

Funding Source: Capital Improvement Budget

Attachments (included in document ‘G&W RR Permit Package.pdf’):

- Genesee & Wyoming Railroad Utility Crossing Permit Application
- Utility Encroachment Engineering Report
- Bore Plan Drawings
- Frac-Out Contingency Plan
- Geotechnical Boring Plan