

Executive Summary

The City of Philadelphia Department of Streets (City) and Southeastern Pennsylvania Transportation Authority (SEPTA) jointly funded the design and construction of the replacement of a 331-foot long masonry retaining wall located adjacent to Cresson Street and SEPTA's Norristown Regional Rail Line.

The wall, located between Calumet and Midvale Avenues in Philadelphia, separates SEPTA's tracks and facilities from Cresson Street, public utilities and neighboring residences. The urgency to replace the wall led the two agencies to enter into a unique partnering agreement in which a hybrid project team was assembled through two separate General Engineering contracts. SEPTA procured geotechnical and environmental services while the City procured civil and structural engineering design services using an existing General Engineering Contract with Gilmore Associates and JMT. The construction contract was awarded through the City's standard bidding process and met SEPTA's general conditions, railway construction specifications, standards and regulations. Construction costs totaled \$1.2M and were evenly divided between the two agencies.

As the lead designer, JMT developed a post and panel wall design and precast moment slab with a unique barrier design which would deter the collection of debris. The project minimized railroad and community impacts, and was built without removing the existing wall. Aesthetic treatments included form liner treatments to resemble the existing masonry and an ornamental fence constructed above the roadway barrier. Complete bid documents were prepared in an accelerated two-month schedule in order to allow all construction activities to occur in tandem with a previously planned track outage.
