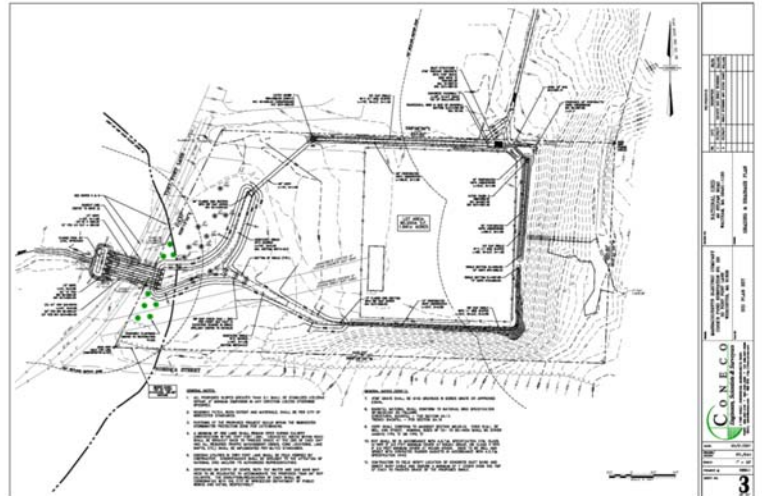


National Grid

Cooks Pond Substation Drainage Improvements

Project Description

The Cooks Pond Substation, located in a hollow, is at the discharge point of an intermittent stream with a 90 plus acre tributary drainage area, leading to widespread flooding across the substation during most rain events. With the modernization



of the substation planned, Coneco was called on to address the existing stormwater management concerns, which impacted the neighboring properties in addition to the substation. In solving this problem, Coneco provided preliminary and final design services as well as bid phase services and full time construction support. Tasks included ground survey, drainage investigations, pre and post hydraulic analyses, stormwater management system design, civil permitting support and pre-construction value engineering. The stormwater management system consisted of an inlet control structure to capture flows from the intermittent stream, a perimeter swale with underdrain system, closed pipe network and GEOGRID vegetated swales, including a culvert under the road with a level spreader. The photos presents herein represent the pre (top row) and post (bottom row) conditions at the substation.

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