
M E M O R A N D U M

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TO: Alan Thornton
FROM: T. Carter Hubard, PE
DATE: September 10, 2010
RE: Bay Street Pump Station
WKD # 20450.00.00.WL



As requested, we are providing this memorandum to provide a discussion of the Bay Street Pump Station condition and an opinion of cost for relocating the City of Southport Bay Street Pump station.

The Bay Street pump station was constructed in the 1960s to eliminate the discharge of raw wastewater to the Cape Fear River. The facility is located where the previous outlet pipe discharged to the River. The current facility collects wastewater from the municipal gravity sewer collection system that serves the commercial corridor on Howe Street and residential areas off of Howe Street. The flow at the pump station is approximately 150,000 gallons per day. The flow is pumped to the City of Southport Wastewater Treatment Facility on West West Street. The pumps have been replaced and the interior of the pump station rehabilitated with in the last 2 years.

Due to continued coastal erosion on the south side of the pump station and the structure being located in a coastal flood zone with velocity hazard, the facility is susceptible to catastrophic failure unless the shoreline is stabilized or the pump station moved. If the pump station structure were to have a spill there is the potential for up to 150,000 gallons per day of raw wastewater to discharge into the Cape Fear River until an emergency by pass established.

In order to relocate the pump station the gravity collection system would require rerouting and a new site utilized for a pump station. Due to the existing residential development, a potential relocation area is the southwest corner of South Caswell Avenue and West Moore Street. The opinion of probable cost for the land, pump station construction, gravity sewer rerouting, and professional services fees to relocate the pump station is \$1,996,000.
