

US Highway 117 Wastewater System Improvements Project

The purpose of this item is to discuss potential options for installation of a wastewater force main and associated pumping stations along US 117 from the Town of Burgaw to the Town of Wallace. Currently, the Town of Burgaw is investigating a project that would entail construction of two (2) wastewater pumping stations and 70,000 feet of sewer force main. The project would collect wastewater generated by the Town of Burgaw and pump it north along US 117 to the Town of Wallace's wastewater plant for treatment. In order to meet the long-term demands for Burgaw, projected at 1.25 MGD, this force main would need to be 16" in diameter.

Discussions with the Town of Burgaw and Pender County indicated a potential for joint venture to upsize the force main and pump stations to provide for additional sewer capacity to be utilized by the County. Potential options are briefly discussed as follows:

Option 1 – 16" Force Main from Burgaw to Wallace

- This is the primary option considered by the Town of Burgaw and provides no additional sewer capacity for County residents.
- Total Opinion of Probable Project Cost: \$9.3 million (\$7.44 per gallon)

Option 2 – 16" Force Main from Burgaw to Exit 390 & 20" Force Main from Exit 390 to Wallace

- This option provides the minimum sewer capacity required for Burgaw (1.25 MGD) plus an additional 1 MGD capacity available to County residents in the area of the Exit 390 interchange (Columbia Union).
- This option provides no additional sewer capacity to County residents in Central Pender County surrounding Burgaw
- According to the Wastewater Master Plan, approximately 1.14 MGD of wastewater needs is projected for Columbia Union. The additional 1 MGD of capacity provided by this option is in line with the Master Plan for Columbia Union.
- Total Opinion of Probable Project Cost: \$10.1 million
- Town of Burgaw Share: \$9.3 million (\$7.44 per gallon)
- Pender County Share: \$750,000 (\$0.75 per gallon)

Option 3 – 20" Force Main from Burgaw to Wallace

- This option provides the minimum sewer capacity required for Burgaw (1.25 MGD) plus an additional 1.5 MGD capacity available to County residents in the area of the Exit 390 interchange (Columbia Union) and Central Pender.
- According to the Wastewater Master Plan, approximately 1.82 MGD of wastewater needs is projected for Columbia Union and Central Pender. This option provides sewer to northern Pender County (Columbia Union) and a "portion" of Central Pender.
- Total Opinion of Probable Project Cost: \$11.2 million
- Town of Burgaw Share: \$9.3 million (\$7.44 per gallon)
- Pender County Share: \$1.9 million (\$1.27 per gallon)

Option 4 – 20" Force Main from Burgaw to Exit 390 & 24" Force Main from Exit 390 to Wallace

- This option provides the minimum sewer capacity required for Burgaw (1.25 MGD) plus an additional 2.5 MGD capacity available to County residents in the area of the Exit 390 interchange (Columbia Union) and Central Pender.
- According to the Wastewater Master Plan, approximately 1.82 MGD of wastewater needs is projected for Columbia Union and Central Pender. This option provides sewer to northern Pender County (Columbia Union) and Central Pender.
- Total Opinion of Probable Project Cost: \$12.8 million
- Town of Burgaw Share: \$9.3 million (\$7.44 per gallon)
- Pender County Share : \$3.5 million (\$1.40 per gallon)