



# Town of Pittsboro, North Carolina

Engineering Department

## Memorandum

To: Mayor Bill Terry and the Town Board of Commissioners

From: Mr. Fred Royal, PE, Town Engineer  
In coordination with, Mr. Bryan Gruesbeck, Town Manager

Re: NC Division of Water Infrastructure Clean Water Loan Application

Date: March 24, 2014

**Background:** The Town of Pittsboro has applied for and received Revolving Loan Funding for water and sewer projects in the past. It has come to our attention that this loan program has loan funds available, however with a higher degree of competition from other local units of government. We believe that this cycle is a good time for the Town to apply for two loans: a loan to “find and fix” sewer collection system infiltration and inflow (I&I) and another loan to design, permit and prepare a Preliminary Engineering Report (PER) for a bulk reclaimed water station. The wastewater treatment plant has been experiencing unusually high inflows since approximately December, 2013. The wet weather is seen as the cause for this relatively sudden spike in influent flows. We suspect ground water (very high water tables) are reaching new or existing defects. However, we will not limit our search to groundwater. Surface water inflow from stormwater runoff can also be the cause.

We also believe that the Town will qualify for zero percent interest rates and a level of principal forgiveness (no payback required) for a portion of the loan.

The loan applications are due on April 1, 2014. They also are required to include a Resolution approving the loan applications (please see the attached Resolution). Although we do not know the exact amount of the loan at this time, we will work to complete the applications and include the exact amount the town is requesting for each project.

The project general description and cost estimates are as follows:

1. Develop a plan to investigate, identify and repair defective sanitary sewer pipes, junctions and manholes, where stormwater or groundwater infiltration and inflow in suspect sewer collection sub-watersheds occur. This process will generally include monitoring where required, smoke testing, video camera detection, assessment of type and location of defects, planning and engineering design to repair defects and contracts to perform the

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defect repairs. Similar to the previous Credle Street pipe bursting project, we believe that the requested loan amount for this work will be in the range of \$250,000 – 500,000. We will work to detail the costs and loan request for the application submittal requirement.

2. Planning and preliminary engineering report, including alternatives, for a new bulk re-claimed water filling station. This project would increase our sales of re-claimed water from the 3M contract by installing a bulk filling station on a piece of property with easy access to the existing line and vehicle traffic. The project would include hiring a firm to perform all aspects required to develop a plan and cost estimate to construct the station. We believe that this planning, engineering and cost analysis would cost \$25,000 – \$50,000. We will work to detail the costs and loan request for the application submittal requirement.

The project cost estimates are as follows:

1. I&I Find and Fix Loan estimated range: \$250,000 - \$500,000
  2. Bulk re-claimed water station: \$25,000 - \$50,000
- Total Loan Application Value estimate: \$275,000 - \$550,000*

We note that a significant debt service will be paid off (2016) and prior to the start or any loan payments for these loan applications (2017). We also note that a fee of two percent will be required up-front if awarded, which could be budgeted in the up-coming FY '14 Capital Improvements budget.

If you approve the attached resolution, and should the State approve our application, this project would not interfere or delay any due diligence that we undertake toward improving or expanding our Waste Water Treatment Plant and its capacity.

**Action Requested:** Approve the Resolution authorizing an application to the North Carolina Department of Environment and Natural Resources Division of Water and Infrastructure Funding Program/Clean Water Program