

# North Carolina Department of Environment and Natural Resources

## Division of Water Infrastructure Application for Funding

(Last updated: July 2015)



### 1. General Information

Fill in the blanks and check the appropriate boxes.

**Applicant Name**

Town of Pittsboro

**Project Name**

Wastewater Treatment System Improvements

**Applicant Type**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Municipality   | <input type="checkbox"/> Sanitary District            |
| <input type="checkbox"/> County                    | <input type="checkbox"/> Non-Profit Water Corporation |
| <input type="checkbox"/> Water and Sewer District  | <input type="checkbox"/> For-Profit Water Corporation |
| <input type="checkbox"/> Water and Sewer Authority | <input type="checkbox"/> Other (Specify: _____)       |

**Funding Program(s) Requested**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Clean Water State Revolving Fund (CWSRF) | <input type="checkbox"/> Community Development Block Grant for Infrastructure (CDBG-I) |
| <input type="checkbox"/> Drinking Water State Revolving Fund (DWSRF)         |  |

**Project Type** (Check all that apply.)

- Drinking Water  
 Green Project/Stormwater  
 Wastewater

### 2. Other Information Required

For all projects, please complete the information below.

**County:** Chatham

**DUNS Number:** ([www.sam.gov](http://www.sam.gov)): 018283457

**Number of Current Residential**

**Number of Future Residential**

**Sewer Accounts:** 1,395

**Sewer Accounts:** 1,775

**Number of Current Residential**

**Number of Future Residential**

**Water Accounts:** 1,480

**Water Accounts:** 1,875

### 3. Supplemental CDBG-I Information

For projects requesting CDBG-I funding only or a combination of CDBG-I funding with other funding, please complete the following information.

**LMI Percentage**

**LMI Determination Methodology** (Check which applies.):  Survey  ACS Data

### 4. Applicant Contact Information

Provide the following contact information for the Applicant.

**Elected Official Name:**

William G. Terry

**Elected Official Title:**

Mayor

Is the Authorized Representative different from the Elected Official?

- Yes  No

**Authorized Representative Name** (if "Yes" box was checked):

**Authorized Representative Title:**

Mailing Address Line 1: 635 East Street

Mailing Address Line 2:

City: Pittsboro

State: North Carolina

Zip Code: 27312

Phone Number: (919) 542-4621

E-Mail Address: wgterry@gmail.com

### 5. Application Preparer Contact Information

Provide the following contact information for the application preparer.

Firm Name: The Wooten Company

Contact Name: Carl W. Scharfe

Mailing Address Line 1: 120 N. Boylan Avenue

Mailing Address Line 2:

City: Raleigh

State: North Carolina

Zip Code: 27603

Phone Number: (919) 828-0531

E-Mail Address: cscharfe@thewootencompany.com

### 6. Engineer Contact Information

Provide the following contact information for the engineer.

Is the engineering firm different from the application preparer?  Yes  No

Engineering Firm Name (if "Yes" box was checked):

Contact Name:

Mailing Address 1:

Mailing Address 2:

City:

State:

Zip Code:

Phone Number:

E-Mail Address:

### 7. Project Financial Information

Check the boxes for the programs for which you are applying and complete the requested information. For the amount of funding requested, state the amount of funding requested from each program.

Total Funding Requested:

#### Program Type

Clean Water State Revolving Fund Amount Requested: \$21,585,500

Will this project proceed if it does not receive principal forgiveness? (\*)  Yes  No

Drinking Water State Revolving Fund Amount Requested: \$

Will this project proceed if it does not receive principal forgiveness? (\*)  Yes  No

(\*)An Applicant must have less than 10,000 residential connections AND a minimum of 10 combined points in Questions 4.A and 4.B/4.C of the Priority Rating Systems or receive points under Line Item 1.A of the DWSRF priority system to be eligible for Principal Forgiveness.

Community Development Block Grant for Infrastructure \$ (\$2 million maximum)

Will you accept a loan if you do not receive a grant?  Yes  No

## 8. Project Description

*In the space below, please provide a description of the project. Include in this description the project purpose (e.g., to address I/I issues or drinking water contamination issues) and what the project entails (e.g., rehabilitation of 2,000 l.f. of sewer, construction of a new well). Include information such as types of equipment to be included, capacity of equipment (if applicable), and estimates of line length.*

The Town of Pittsboro currently has a sewer collection system and wastewater treatment plant that serves customers inside the Town limits and extra-territory jurisdiction (ETJ). A 7,000-acre new development named Chatham Park is planned in and outside of the existing ETJ. The purpose of this project is to provide the first phase of wastewater service to accommodate future population growth needs for the Town's service area. A project location map showing the location of the Town boundaries, the ETJ, the future Town ETJ to be served and the Chatham Park development area is provided in the Supporting Documentation as Item 1.D.1. The Chatham Park development area is larger than the existing Town limits. The Town currently has a NPDES discharge permit allowing discharge of up to 1.249 mgd to Robeson Creek (existing outfall) and 1.971 to the Haw River (future outfall).

The current annual average wastewater flow from the Town is approximately 0.5 mgd. Peak daily flows can reach 1.4 mgd and the three-day sustained peak flow is 1.2 mgd. Future flow projections indicate an annual average wastewater flow increase for the Town and Chatham Park combined of 0.15 to 0.2 mgd per year. An evaluation of potential options for expansion of the existing WWTP, building a new treatment plant and pumping wastewater to Sanford was conducted. The project proposed in this application is the preferred option and has been approved by the Pittsboro Board of Commissioners.

The proposed project is to 1) refurbish the existing WWTP to replace older equipment and add treatment units for Total Nitrogen removal (to meet future NPDES permit requirements), and 2) construction of a 14-mile force main from the existing treatment plant area to the Big Buffalo Creek WWTP in Sanford, North Carolina. The map (Item 1.D.1) in the Supporting Documentation shows the location of the existing Pittsboro WWTP and the location of the proposed forcemain to Sanford. The map also shows the location of the 3M company which has a long term contract with the Town to buy reclaimed water from the Town's WWTP. There is an existing reclaimed water main from the WWTP to the 3M site.

The proposed project will provide a total of 2.75 mgd of sewer service capacity consisting of 0.75 mgd at the existing WWTP and 2.0 mgd of pumping capacity to Sanford. Wastewater pumped to Sanford will be treated and discharged at that facility. A total future sewer service capacity need of 4.5 mgd is projected for 2035 which would require a future project phase in approximately 10 to 12 years (if the projected growth rates materialize). This project applies only to the Phase 1, and provides flexibility in handling both peak flow events and potential variation in the actual growth rate associated with Chatham Park by providing two methods (treatment and pumping) to handle incoming wastewater.

The existing WWTP consists of influent screening, sidestream equalization pumping and storage, two activated sludge treatment package plants, tertiary filtration, UV treatment, reclaimed water treatment and pumping, and sludge storage. Over half of the WWTP units are over 30 years old. The reclaimed water system and equalization system components are less than ten years old and the Town is currently paying debt service costs on these improvements. The equalization system was installed to dampen the effect of peak storm events and I/I flows, however at times the tertiary filters still need to be bypassed when the equalization tanks are full.

The refurbishment of the WWTP will maintain the current design capacity of the WWTP (0.75 mgd) and provide the benefits of continued wastewater treatment, continued supply of reclaimed water, and continued use of the relatively new infrastructure (i.e. equalization and reclaimed water system components). Expansion at the existing site is constrained by the small site footprint and floodplain surrounding the WWTP.

The construction of the pump station and force main to Sanford is necessary because the combined flows of the Town and Chatham Park are estimated to exceed 0.75 mgd by the Year 2020 (or sooner). The 14-mile force main would be 18-inch diameter and be located primarily along US Highway 15-501. The route includes two water crossings and approximately 6 miles of line that will likely require easements because there is limited controlled access along the highway.

The pump station will also allow pumping a portion of the average and peak flows to Sanford resulting in more steady and lower flows to the existing WWTP, thereby improving performance and avoiding by-passing of the filters.

The City of Sanford is highly amenable to accepting the Town's wastewater as the Big Buffalo WWTP is operating at approximately one-third of the plant's 12 mgd capacity. The Town, Chatham Park, and the City of Sanford have held several meetings regarding the force main proposal and user and debt service charges. The City of Sanford has provided a proposed debt service schedule to reserve 2 mgd of capacity and has provided a proposed volume charge. Chatham Park has indicated it is prepared to contribute to a portion of the project cost as negotiated by the Town and Chatham Park.

**10. Project Budget**

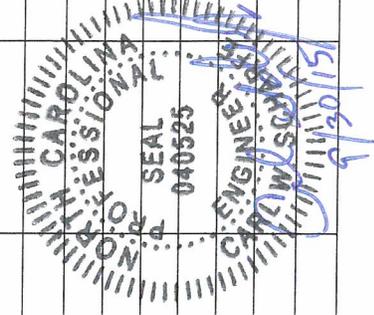
Complete the project budget by addressing the categories provided in the table below (Insert rows as needed). Total the cost amount for each line, and provide the total cost amount.

	Division Funding Source(s)				Reserve Grants/Loans	Other Secured Funding Source(s)	Total Cost Amount
	CWSRF	DWSRF	CDBG-I				
Indicate construction costs by line item (e.g., linear feet of different-sized lines)							
<b>Construction Costs</b>							
<b>WWTP Refurbishment</b>							
Headworks/Flow Instrumentation	\$150,000						\$150,000
Equipment Rehabilitation	\$2,000,000						\$2,000,000
Anoxic Treatment System	\$250,000						\$250,000
Chemical Feed System	\$125,000						\$125,000
Tertiary Filter Upgrade	\$350,000						\$350,000
UV Upgrade	\$150,000						\$150,000
Dewatering	\$20,000						\$20,000
<b>2.0 MGD Lift Station to Sanford</b>							
New Lift Station	\$1,550,000						\$1,550,000
Headworks Improvements	\$750,000						\$750,000
18" C-905 PVC Force Main – 72,200 LF	\$6,200,000						\$6,200,000
18" RJD1 Forcemain – 240 LF	\$50,000						\$50,000
18" DI Forcemain – 120 LF	\$20,000						\$20,000
18" Fusible PVC Forcemain via Directional Drill (Multiple Sites) – 1,850 LF	\$750,000						\$750,000
30" Steel Encasement Bored and Jacked w/ Carrier Pipe (Multiple Sites) – 1,280 LF	\$1,500,000						\$1,500,000
18" Plug Valve – 25 EA	\$350,000						\$350,000
Pigging Station – 7 EA	\$250,000						\$250,000
Air Release Valve – 9 EA	\$60,000						\$60,000
Gravel Driveway Repair – 380 SY	\$15,000						\$15,000
Erosion Control	\$250,000						\$250,000
Traffic Control	\$75,000						\$75,000
Rock Excavation – 12,000 CY	\$720,000						\$720,000
Select Backfill – 25,000 CY	\$625,000						\$625,000
Asphalt Repair	\$75,000						\$75,000
<b>General Construction Costs</b>							

**10. Project Budget**

Complete the project budget by addressing the categories provided in the table below (Insert rows as needed). Total the cost amount for each line, and provide the total cost amount.

	Division Funding Source(s)				Other Secured Funding Source(s)			Total Cost Amount
	CWSRF	DWSRF	CDBG-I	Reserve Grants/Loans				
Indicate construction costs by line item (e.g., linear feet of different-sized lines)								
Site Work	\$75,000							\$75,000
Yard Piping	\$125,000							\$125,000
Misc. Metals	\$20,000							\$20,000
Electrical	\$300,000							\$300,000
Mob./Dembo./Bonding/Insurance	\$600,000							\$600,000
<b>Construction Administration (CDBG-I only):</b>								
Contingency (10% of construction costs):	\$1,740,500							\$1,740,500
<b>Construction Subtotal:</b>	<b>\$19,145,500</b>							<b>\$19,145,500</b>
<b>Engineering Costs</b>								
Engineering Design	\$1,175,000							\$1,175,000
Engineering CA/CO	\$435,000							\$435,000
Permitting	\$15,000							\$15,000
Geotechnical Investigation	\$15,000							\$15,000
Wetlands Investigation/Delineations	\$25,000							\$25,000
O&M Manual Preparation	\$25,000							\$25,000
Start-Up Services	\$20,000							\$20,000
<b>Administration Costs</b>								
Easement Acquisition and Preparation	\$565,000							\$565,000
Loan Administration (if applicable)	\$15,000							\$15,000
ER/EID Preparation	\$100,000							\$100,000
Legal/Administrative Costs	\$50,000							\$50,000
Other								
<b>Administration Subtotal:</b>	<b>\$2,440,000</b>							<b>\$2,440,000</b>
<b>TOTAL PROJECT COST:</b>	<b>\$21,585,500</b>							<b>\$21,585,500</b>



Certification by Chief Elected Official/Authorized Representative

Please read each statement and initial in the space to the left.

The attached statements and exhibits are hereby made part of this application, and the undersigned representatives of the Applicant certifies that the information in this application and the attached statements and exhibits is true, correct, and complete to the best of his/her knowledge and belief. By initialing each item and signature at the end of this application, he/she further certifies that:

- 1.  as Authorized Representative, he/she has been authorized to file this application by formal action of the governing body;
- 2.  the governing body agrees to provide for proper maintenance and operation of the approved project after its completion;
- 3.  the Applicant has substantially complied with or will comply with all federal, state, and local laws, rules, and regulations and ordinances as applicable to this project;
- 4.  the Applicant will adopt and place into effect on or before the completion of the project a schedule of fees and charges which will provide for the adequate and proper operation, maintenance, and administration and repayment of all principle and interest on loans (if applicable) of the project;
- 5.  the Applicant has followed proper accounting and fiscal reporting procedures, as evidenced by the Applicant's most recent audit report, and that the Applicant is in substantial compliance with provision of the general fiscal control laws of the State;
- 6.  the project budget provided on Page 5 of this application form includes all funding requested from all sources of funding proposed for this project; and
- 7.  the (Town or County), North Carolina is organized and chartered under the laws of North Carolina. All officials and employees are aware of, and in full compliance with NCGS 14-234, "Director of public trust contracting for his own benefit, participation in business transaction involving public funds; exemptions." (For units of local government only. All others should initial "N/A.")
- 8.  the Applicant acknowledges that all loans are subject to approval by the Local Government Commission.
- 9.  In accordance with G.S. 120-157.1 through 157.9, for local government debt to be issued greater than \$1,000,000, the local government must submit a letter to Committee Chairs, Committee Assistant, and the Fiscal Research Division of the General Assembly at least 45 days prior to presentation before the Local Government Commission.

**Completeness Checklist\***

In addition to this application, the following items must be included for complete application package; please initial that each item is included in this submittal.

X	Resolution by Governing Body of Applicant with Certification by Recording Officer
X	NCDENR Water & Sewer Rate Form (Not applicable for stormwater projects)
X	Fund Transfer Certification (all programs except for CDBG-I)
X	Applicable Priority Rating System Form with supporting narratives and documentation
X	Form LGC 108A (all programs except for CDBG-I)
X	Form LGC 108C (Wastewater and Drinking Water Projects) or LGC 108D and 108E (Stormwater Projects)

\*All forms are available separately on the DWI website.

Send one (1) original and one (1) copy (CWSRF and DWSRF) or (2) copies (CDBG-I only) of the Application and all items above to:

**Mailing Address\* (US Postal Service only)**

Division of Water Infrastructure  
1633 Mail Service Center  
Raleigh, NC 27699-1633

**Physical Address (FedEx, UPS)\***

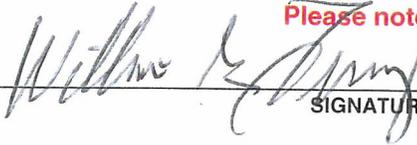
Division of Water Infrastructure – 8<sup>th</sup> Floor, Archdale Building  
512 North Salisbury Street  
Raleigh, NC 27604  
919.707.9160

\*Mail delivery to the Division's offices may take longer than anticipated. Please allow for ample time if mailing via the US Postal Service.

†For all courier services, please use the physical address, as having a courier deliver to the mailing address will delay package delivery.

**Application Signature**

**Please note: Original signatures are required for each application.**



SIGNATURE OF CHIEF ELECTED OFFICIAL/AUTHORIZED REPRESENTATIVE

William G. Terry  
TYPED NAME

Mayor  
TYPED TITLE

SEP 28, 2015  
DATE