

NORTH CAROLINA  
GUILFORD COUNTY

**DESIGN BUILD UTILITY AGREEMENT**

DATE: 4/30/2015

NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION

AND

Project: I-5110  
WBS Element: 42345.3.FS1

CITY OF GREENSBORO

THIS AGREEMENT is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the "Department" and the City of Greensboro, hereinafter referred to as the "Municipality";

**WITNESSETH:**

WHEREAS, the Department has prepared and adopted plans to make certain street and highway improvements under Project I-5110, in Guilford County, said plans consisting of I-73 From NC 68 to Greensboro Western Loop; Guilford County; said project having a right-of-way width as shown on the project plans on file with the Department's office in Raleigh, North Carolina; and,

WHEREAS, the parties hereto wish to enter into an agreement for certain utility work to be performed by the Department's construction contractor with full reimbursement by the Municipality for the costs thereof as hereinafter set out.

NOW, THEREFORE, it is agreed as follows:

1. As requested by the Municipality, the Department shall issue a supplemental lump-sum agreement for Project I-5110 for the design build contractor to install water and sewer lines. Said work shall be accomplished in accordance with special provisions (Exhibit A), plans (Exhibit C), and the project supplemental agreement between the Department and the design-build contractor.
2. The Municipality shall be responsible for the entire lump-sum cost as shown on the attached Exhibit B. The lump-sum cost to the Municipality is \$420,523.00. The Municipality shall reimburse the Department for said costs as follows:

- A. Upon completion of the highway work, the Department shall submit a lump-sum invoice to the Municipality for cost incurred. Billing will be based upon the approved lump-sum cost.
  - B. Reimbursement shall be made by the Municipality in one final payment within sixty (60) days of said invoice.
  - C. If the Municipality does not pay said invoice within sixty (60) days of the date of the invoice, the Department shall charge interest on any unpaid balance at a variable rate of the prime plus (1%) in accordance with G.S. 136-27.3.
  - D. Said interest rate shall be set upon final execution of the Agreement by the Department. The Municipality will be notified of the set interest rate by the Department's approval letter upon receipt of the fully executed agreement.
  - E. Any cost incurred due to additional utility work requested by the Municipality after award of the construction contract, shall be solely the responsibility of the Municipality. The Municipality shall reimburse the Department 100% of the additional utility cost.
3. In the event the Municipality fails for any reason to pay the Department in accordance with the provisions for payment hereinabove provided, North Carolina General Statute 136-41.3 authorizes the Department to withhold so much of the Municipality's share of funds allocated to said Municipality by North Carolina General Statute, Section 136-41.1, until such time as the Department has received payment in full.
4. Upon the satisfactory completion of the relocations and adjustments of the utility lines covered under this Agreement, the Municipality shall assume normal maintenance operations to the said utility lines. Upon completion of the construction of the highway project, the Municipality shall release the Department from any and all claims for damages in connection with adjustments made to its lines; and, further, the Municipality shall release the Department of any future responsibility for the cost of maintenance to the lines. Said releases shall be deemed to be given by the Municipality upon completion of construction of the project and its acceptance by the Department from its contractor unless the Municipality notifies the Department, in writing, to the contrary prior to the Department's acceptance of the project.
5. It is further agreed that the following provisions shall apply regarding the utilities covered in this Agreement.
- A. The Municipality obligates itself to service and to maintain its facilities to be retained and installed over and along the highway within the Department's right-of-way limits in

accordance with the mandate of the North Carolina General Statutes and such other laws, rules, and regulations as have been or may be validly enacted or adopted, now or hereafter.

- B. If at any time the Department shall require the removal of or changes in the location of the encroaching facilities which are being relocated at the Municipality's expense, the Municipality binds itself, its successors and assigns, to promptly remove or alter said facilities, in order to conform to the said requirement (if applicable per G.S. 136-27.1), without any cost to the Department.
7. By Executive Order 24, issued by Governor Perdue, and N.C. G.S. § 133-32, it is unlawful for any vendor or contractor ( i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor).

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate, the day and year heretofore set out, on the part of the Department and the Municipality by authority duly given.

L.S. ATTEST:

CITY OF GREENSBORO

BY: \_\_\_\_\_ BY: \_\_\_\_\_

TITLE: \_\_\_\_\_ TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Approved by \_\_\_\_\_ of the local governing body of the City of Greensboro  
as attested to by the signature of Clerk of said governing body on \_\_\_\_\_ (Date)

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

(SEAL)

\_\_\_\_\_  
(FINANCE OFFICER)

Federal Tax Identification Number

\_\_\_\_\_  
Remittance Address:

City of Greensboro

\_\_\_\_\_  
DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_  
(CHIEF ENGINEER)

DATE: \_\_\_\_\_

APPROVED BY BOARD OF TRANSPORTATION ITEM O: \_\_\_\_\_ (Date)

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## EXHIBIT A

**PRELIMINARY PROJECT SPECIAL PROVISIONS**  
City of Greensboro; Water & Sanitary Sewer Line Construction  
October 20, 2014

### GENERAL CONSTRUCTION REQUIREMENTS:

#### **Specifications:**

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation "Standard Specifications for Roads and Structures" dated January 2012, City of Greensboro's "Standards for Water, Sewer and Sewage Lift Station Design" date January 2014 and the provisions outlined below.

Contractor shall meet the installation standards of the AWWA or ASTM for water line construction.

Construct gravity sanitary sewer in conformance with NCDENR "Gravity Sewer Minimum Design Criteria".

#### **Owner and Owner's Requirements:**

The existing water mains and sanitary sewer mains are owned by the City of Greensboro. The primary contact person for the owner is Mr. Brian Boyd; office phone: (336) 373-2055. The contractor shall provide access for the owner's representatives to all phases of construction. The owner shall also be notified two (2) weeks prior to commencement of any work and one (1) week prior to service interruption. Interruption of water service on main lines shall be limited to a maximum of 4 hours during regular working hours unless otherwise approved by the City of Greensboro.

It shall be the Contractor's responsibility to notify customers affected by necessary shut downs of the existing water system at least 24 hours in advance.

Only the City of Greensboro's Public Works personnel shall operate valves and hydrants except in the case of an emergency. Notify the owner immediately of an emergency requiring valve or hydrant operation.

All removed water meters and fire hydrants shall be stockpiled by the Contractor in one area accessible for the owner to pick up.

Any cracked, damaged, or defective pipe, fittings, or other attachments discovered as a result of the pressure test, shall be removed and replaced with sound material. The tests shall be repeated until test results are satisfactory.

Revise the NCDOT 2012 "Standard Specifications for Roads and Structures" as follows:

**Page 15-6, Subarticle 1510-3 (A) Construction Requirements:**

Follow the allowable leakage formula from the most current versions of AWWA C600 (for ductile iron pipe) or AWWA C605 (for PVC pipe). The allowable leakage formula is:

$$W = LD(P)^{1/2} / 148,000$$

For disinfection, use the "Continuous-Feed Method" as described in the most current version of AWWA C651, Section 4.4.3 and as directed in NCDENR "The Rules of Governing Public Water Systems", Section .1003. This method requires a solution of at least 50ppm chlorine to be introduced into the new pipe line and held for at least 24 hours. During this time, the residual concentration of chlorine shall remain at least 10ppm. If the chlorine concentration drops below 10ppm, the test shall be repeated. Collected samples shall be analyzed at a state approved laboratory and the result provided to the utility owner.

The testing, cleaning and sterilization shall be performed consecutively.

**Page 15-11, Article 1520-3(A)(2) Testing, line 5:**

Test all 24" and smaller gravity sewer lines for leakage using infiltration, exfiltration, or air test. Perform visual inspection on gravity sewer lines larger than 24". Perform line and grade testing and deflection testing on all gravity sewer lines.

**Utility Locations Shown on the Plans:**

The locations, sizes, and type material of the existing utilities shown on the plans are from the best available information. The contractor will be responsible for determining the exact location, size, and type of material of the existing facilities necessary for the construction of the proposed utilities and to avoid damage to existing facilities. All water and sanitary sewer services disturbed during construction shall be reconnected, even if not shown on the plans. Contractor is to make the Engineer aware of any plan discrepancies.



Water line location in relation to sewers shall conform to NCDOT's 2012 "Standard Specifications for Roads and Structures" Section 1500-5 and NCDENR's "The Rules of Governing Public Water Systems" Section .0906.

Ductile iron pipe fittings shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile iron bends and tees shall be in accordance with the applicable requirements of ANSI A21.10 (AWWA C110). Joints for such bends and tees shall be in accordance with ANSI A21.11 (AWWA C111) and be epoxy lined. All ductile iron pipe fittings shall have a minimum working pressure of 250 PSI.

For the purpose of identification of buried plastic or non-metallic pressurized pipes during future trenching or location, a continuous "detectable" identification wire shall be installed. The wire shall be a minimum 12 gauge, single strand, coated copper wire that is suitable for underground use. The wire shall be buried continuously along the pipe.

Abandon/remove the existing 12" AC water line in accordance with Federal, State and local regulations.

All water services being installed or relocated shall be provided with copper tubing. PE tubing or piping will not be used on this project. Copper water tubing shall be Type K, soft copper manufactured in accordance with ASTM B88. The minimum pressure rating for the copper water pipe shall be 65 PSI. Valves on water mains that are being abandoned shall either be removed or closed and the top of the valve box removed and backfilled in accordance with NCDOT standards.

PVC gravity sewer pipe shall meet the requirements of ASTM 3034 with a minimum SDR of 35. Joints shall be push on type.

#### **Open Cut Installation:**

All water and sanitary sewer line construction performed using open cut installation within or adjacent to traffic shall have the final approved traffic control measures in place prior to beginning any open cut installation.

#### **Material Specifications:**

When brand names of materials have been determined, the Contractor shall obtain approval, through the engineer and the owner prior to their use and/or installation.

Then Contractor shall furnish, but is not limited to furnishing, catalog cuts and/or shop drawings of the materials. Thirty days shall be allowed for the Engineer's review of each submittal. Eight copies of each catalog cut and/or shop drawing (signed and sealed) shall be submitted.

**COMPENSATION:**

No direct payment will be made for utility construction work required by the preceding provisions which are general requirements applying to utility construction, and all of the requirements stated will be considered incidental work, paid for under the various contract pay items.



**I-5110, R-2413A Preliminary Utility Quantities  
(Greensboro )**

**Exhibit B**

	UC-6	UC-7	UC-8	UC-9	UC-10	UC-11	UC-12	UC-13	UC-15	TOTALS	
16" WATER LINE					616		236		276	1128	LF
FIRE HYDRANT					1				1	2	EA
GENERIC UTILITY ITEM - REBUILD MANHOLE									1	1	EA
8" SANITARY GRAVITY SEWER					390				117.5	507.5	LF
ABANDON 8" UTILITY PIPE					390				171	561	LF
ABANDON 12" UTILITY PIPE	194	1300	660	1453						3607	LF
ABANDON 16" UTILITY PIPE					672		228		262	1162	LF
REMOVE WATER METER				1	2					3	EA
REMOVE FIRE HYDRANT					1		1		1	3	EA
REMOVE UTILITY MANHOLE									1	1	EA
16" ENCASEMENT PIPE					340					340	LF
30" ENCASEMENT PIPE					336		106		30	472	LF
GENERIC UTILITY ITEM- CONCRETE BOLLARD					4					4	EA
GENERIC UTILITY ITEM - REBUILD MANHOLE									1	1	EA

**Estimate of Greensboro Cost \$ 407,000.00**

## Utilities Engineering Services DOT Agreement Estimate

**Project**                      TIP I-5110                      Project WBS \_\_\_\_\_  
    County Guilford  
**Estimator**                Roger Worthington                      Date 19-Nov-14  
**Utility Owner**            City of Greensboro

DOT Estimate	Utility Coordinators	Utility Engineers	Totals
Ut Analysis & Routing report			0
Ut Env Permit Data		8	8
Ut Agreement plans & estimate		16	16
Ut Construction PS&E		96	96
			0
			0
Total Manhours	0	120	<b>120</b>
Total Mandays (Manhours/8)	0	15	<b>15</b>
Budgeting Hourly rate (L & OH)	\$ 82.00	\$ 101.00	
Subtotal (L&OH)	\$ -	\$ 12,120.00	\$ 12,120.00
Fee (9%)	\$ -	\$ 1,091.00	\$ 1,091.00
Subtotal	\$ -	\$ 13,211.00	\$ 13,211.00
Direct Costs			\$ 312.00
Total Cost subject to City of Greensboro reimbursement			<b>\$ 13,523.00</b>

### Direct Costs

items	quantity	rate	total
Copies      8-1/2" x 11"	400	\$ 0.04	\$ 16.00
Copies      11" x 17"	300	\$ 0.10	\$ 30.00
Copies      22" x 34"	100	\$ 0.42	\$ 42.00
Mileage	400	\$ 0.560	\$ 224.00
Permit Fees			\$ -
			\$ -
			\$ -
			\$ -
Total			\$ 312.00

This budget estimate is for the reimbursement of probable costs. Actual costs will not be determined.

The Utility Construction PS&E (plans, specifications & estimates) are for use in the NCDOT Highway project contract only.

This budget estimate has insufficient information for use in negotiations or support of a Professional Services contract.