



INVITATION TO BID AND INSTRUCTIONS TO BIDDERS

FY2014-103

**ELECTRIC POWER LINE CONSTRUCTION AND
MAINTENANCE PROJECT**

**NOTE: PRE-BID CONFERENCE JANUARY 31, 2014
AT 10:00 A.M., LOCAL TIME, IN THE
MULTIPURPOSE ROOM OF THE CENTRAL
SERVICES COMPLEX LOCATED AT 100
WOODBURY LANE**

BID OPENING

**February 14, 2014
10:00 a.m., Local Time**

**at the
Central Services Complex Multipurpose Room
City of Oak Ridge
100 Woodbury Lane
P. O. Box 1
Oak Ridge, Tennessee 37831-0001**

**Telephone: (865) 425-1819
Fax: (865) 482-8475
Attn: Lyn Majeski**

CITY OF OAK RIDGE, TENNESSEE
Invitation to Bid and Instructions to Bidders

FY2014-103

January 22, 2014

Project: Electric Power Line Construction and Maintenance Project

Invitation

Bids will be received by the City of Oak Ridge until 10:00 a.m., local time, February 14, 2014, then publicly opened in the Central Services Complex Multipurpose Room at 100 Woodbury Lane, Oak Ridge, Tennessee, for furnishing all labor, materials, supplies, tools, and equipment necessary to perform all work and services described in the Contract attached hereto, in strict accordance with the terms and provisions of said Contract and any attachments thereto. (See attached Specifications and Requirements)

All bids must be completed and submitted on the Bid Form provided. The bids shall be submitted on or before the time set for the opening of bids. Bids received after the time so set are late bids and will not be considered. Late bids, unmarked envelopes, and incorrectly marked envelopes will not be opened. Electronic bids are not accepted.

Pre-Bid Conference

A non-mandatory pre-bid conference will be held in the Multipurpose Room of the Central Services Complex located at 100 Woodbury Lane, Oak Ridge, Tennessee, on January 31, 2014 at 10:00 a. m., local time. Bidders are not required to attend this conference in order to submit a bid though attendance is highly encouraged.

Discrepancies

Should the Bidder find any discrepancies in, or omission from, the bid documents, or should the Bidder be in doubt as to their meaning, the Bidder shall at once notify Lyn Majeski at (865) 425-1819 and obtain an interpretation or clarification prior to submitting a bid. Any interpretation or clarification given in accordance with this provision shall be in writing and will be distributed to all known Bidders. Only questions answered in writing will be binding. Oral and other interpretations or clarifications will be without legal effect. All questions must be submitted to Lyn Majeski no later than six (6) days prior to the bid opening date in order to give sufficient time for responses to be sent to all prospective bidders.

Prices

The Bidder shall submit unit (hourly) bid price as specified on Bid Form. The schedule of prices portion of the Bid Form has been prepared in an Excel spreadsheet and will be sent to all prospective Bidders electronically. It is agreed that this bid document in its entirety is included in and made a part of the contract between the City and the successful Bidder.

Withdrawal of Bids

Bids may be withdrawn on written or telegraphic request received from Bidders prior to the time fixed for opening the bids.

Drug-Free Workplace Affidavit Form

A Drug-Free Workplace Affidavit form is included in this bid package and must be submitted with the bid.

Rejection of Bids

The City reserves the right to reject any and all bids when such rejection is in the interest of the City of Oak Ridge; to reject the bid of a Bidder who has previously failed to perform properly or complete on time jobs of a similar nature; to reject the bid of a Bidder who is not, in the opinion of the City, in a position to perform the Contract, and to reject the bid of a Bidder not submitted in accordance with this Invitation to Bid.

Equipment and Experience

Each Bidder shall furnish a list of five (5) electric power line contracts performed in the last twelve months, and a list of all such contracts presently being performed by the Bidder, along with the names and telephone numbers of the persons with whom the Bidder had primary contact. The City of Oak Ridge shall be entitled to inquire about the Bidder's performance under each such contract. The Bidder shall have available under Bidder's control, tools and equipment of the type, character and amount required to complete the proposed work within the specified time. Each Bidder shall furnish a list of the tools and equipment proposed for use on the work.

Experience – Personnel

Bidder shall have available or shall agree to have available under Bidder's control sufficient equipment and personnel to complete the proposed work within the specified time. Please see Specifications and Requirements for additional qualifications for Bidders.

Method of Work

Upon request, each Bidder shall describe the method or methods to be used in the performance of the required work.

Bidders Interested in More than One Bid

A party who has quoted prices to a Bidder is not thereby disqualified from quoting prices to other Bidders or from submitting a bid directly for the work; however, more than one bid for the same work from an individual or entity under the same or different name will not be considered.

Bid Surety

Each bid shall be accompanied by a bid guarantee payable to the City in the amount of ten percent (10%) of the total bid amount. The form of the bid guarantee shall be a bid bond or other suitable instrument (i.e. cashier's check, certified check, or Letter of Credit). The bid guarantees of unsuccessful Bidders shall be return to them by the City within fifteen (15) consecutive calendar days after execution of the Contract.

Insurance

The successful Bidder will be required to maintain Worker's Compensation, Comprehensive General Liability, and Comprehensive Automobile Liability and Property Damage Insurance in accordance with the provisions of the Contract Documents. The City of Oak Ridge, Tennessee shall be named as an additional insured.

Completion and Performance Bond, and Labor and Material Bond

The Contractor agrees to furnish a Completion and Performance Bond in the amount of twenty-five percent (25%) of the Contract price with good and sufficient surety or sureties acceptable to the City in connection with the performance of the work under this Contract. The form and conditions of said Completion and Performance Bond shall be as prescribed by the City.

The Contractor agrees to furnish a Labor and Material Bond in the amount of twenty-five percent (25%) of the Contract price with good and sufficient surety or sureties acceptable to the City, for the protection of persons furnishing labor and material in connection with the performance of the work under this Contract. The form and conditions of this bond shall be as prescribed by the City.

Award of Contract

The City will make the award as soon as practicable to the lowest responsible Bidder, price and other factors considered, provided it is reasonable and in the best interest of the City. The City reserves the right to award the contract to more than one bidder if in the best interest of the City. The successful Bidder(s) shall be required to execute the Contract attached hereto.

City Officers and Employees Not To Have Financial Interest

No contract shall be made with any officer or employee of the City or any firm or corporation in which any officer or employee of the City has financial interest.

Compliance with All Laws, Ordinances, Statutes, and Regulations

The Contractor shall comply with all federal, state, county and local laws, ordinances, statutes, and regulations. Pursuant to City Code § 5-413, the City may not accept bids from Bidders in default of any payment of any nature due to the City, including but not limited to taxes, licenses and fees.

Special Provisions for Secured Areas

The following are special provisions for access to secured areas such as the City's Water Treatment Plant, the Y-12 Plant, the K-25 Plant, and ORNL. All Interested Bidders are informed of these requirements at this time to give them an idea of the security requirements in place during this project. This list is by no means exhaustive of all requirements and is subject to change at any time.

Security Requirements: The Contractor shall conform to all applicable security requirements of the U.S. Department of Energy while performing work and services in secured areas.

U.S. Citizenship Requirement: All workers on site in secured areas must be citizens of the United States and shall provide proper, valid documentation, such as a certified birth certificate or a U.S. issued passport, proving such citizenship to the satisfaction of the U.S. Department of Energy.

Temporary Work Badges: Workers on site in secured areas must be able to apply for, and shall apply for, temporary work badges. Proper documentation such as a certified birth certificate or a U.S. issued passport will be required with the badge application.

Vehicles and Equipment over Eight Feet in Height: Vehicles and equipment over eight (8) feet in height are required to use the contractor's entrance to access the Water Treatment Plant and the Y-12 plant Site A lines.

Bid Submittal Instructions

Pursuant to Tennessee Code Annotated § 62-6-119, each bid must be submitted in an opaque sealed envelope marked and addressed on the outside as follows:

From: Bidder's Name
Bidder's Address
*General Contractor's State of Tennessee License Number
*Bidder's License Date of Registration
*Bidder's License Category or Classification
*Bidder's License Expiration Date

*If bid equals or exceeds \$25,000, include this information if a contractor's license is required for this project per the State of Tennessee's Contractors Licensing Board. (The same information must also be provided for major subcontractors.)

To:	<u>In Person or By Overnight Delivery</u>	<u>Regular Mail</u>
	Attn: Lyn Majeski Finance Department City of Oak Ridge 100 Woodbury Lane Oak Ridge, TN 37830	Attn: Lyn Majeski Finance Department City of Oak Ridge P.O. Box 1 Oak Ridge, TN 37831-0001

If the bid is submitted by mail rather than hand-delivery, the sealed envelope containing the bid must be enclosed in another envelope addressed as stated above. Bids submitted by mail should indicate on the outside envelope, lower left corner, the following: "Sealed bid for FY2014-103: Electric Power Line Construction and Maintenance Project to be opened February 14, 2014 at 10:00 a.m. local time" to ensure the bid is delivered to the appropriate person at the City in a timely fashion. Late bids are not accepted and will not be opened.

FY2014-103 BID FORM

Project: Electric Power Line Construction and Maintenance Project

In compliance with the Invitation for Bids, dated January 22, 2014, the undersigned Bidder:

* a corporation organized and existing under the laws of the State of: _____

* a partnership consisting of: _____

*an individual trading as: _____

(*fill in as appropriate)

of the City of _____ in the State of _____ agrees that if this bid is accepted as hereinafter provided, it will furnish all labor, materials, supplies, tools, and equipment necessary to perform all work and services described in the Invitation for Bid and Instructions to Bidders, in strict accordance with the terms and provisions of the Contract attached thereto.

If written Notice of Award is received, the Bidder agrees to furnish to the City of Oak Ridge, within ten (10) working days after receipt of said Notice of Award, the Completion and Performance Bond; Labor and Material Bond or other suitable securities; and required insurance certificates naming the City of Oak Ridge as an additional insured.

Bidder understands that the City reserves the right to reject any or all bids and to waive any informality in the bidding.

Bidder agrees that this bid shall be good for a period of ninety (90) days from the date of opening.

Schedule of Prices

(Total amount carried forward from attached spreadsheet*)

In accordance with Bid Package
Electric Power Line Construction and Maintenance
Project

\$ _____

_____ Dollars and _____ Cents

* Attached is a hardcopy of the Excel spreadsheet for the Schedule of Prices. Bidder will be given an electronic copy of the spreadsheet (USB/thumbdrive) for completion of this portion of the Bid Form, however, Bidder must submit this portion in hardcopy form enclosed with the remainder of the Bid Form. Bidder may not submit this form electronically or by computer diskette. If Bidder cannot open the Excel file or cannot for other valid reasons use the file, Bidder shall contact Lyn Majeski at (865) 425-1819 to request another format or a hardcopy that can be filled out. An emailed file of the bid price sheets may be sent upon request.

The contractor will supply labor and equipment as requested by the city. The following unit prices will be used primarily in evaluating the bids, and calculating payment in a unit price contract.

LABOR CLASSIFICATIONS

Item #	Description	Regular Weekday Work			Overtime Weekday Work			Holiday Work			Saturday Work			Sunday Work			Storm Duty		
		Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost
1	Superintendent/Area Manager		2	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00
2	General Foreman		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
3	Working Foreman		8,800	\$0.00		100	\$0.00		8	\$0.00		8	\$0.00		8	\$0.00		120	\$0.00
4	Journeyman Lineman		14,650	\$0.00		500	\$0.00		16	\$0.00		16	\$0.00		16	\$0.00		300	\$0.00
5	Lineman		5	\$0.00		5	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		5	\$0.00
6	Apprentice Lineman 8th 6 months																		
			50	\$0.00		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		5	\$0.00
7	Apprentice Lineman 7th 6 months		1950	\$0.00		50	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
8	Apprentice Lineman 6th 6 months		2365	\$0.00		60	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		15	\$0.00
9	Apprentice Lineman 5th 6 months		5000	\$0.00		60	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		50	\$0.00
10	Apprentice Lineman 4th 6 months		4,000	\$0.00		165	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		100	\$0.00
11	Apprentice Lineman 3rd 6 months		1833	\$0.00		85	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		100	\$0.00
12	Apprentice Lineman 2nd 6 months		1,300	\$0.00		200	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		100	\$0.00
13	Apprentice Lineman 1st 6 months																		
			100	\$0.00		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
13	Underground Tech		13,345	\$0.00		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
14	Underground Apprentice		495	\$0.00		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
15	Equipment Operator		156	\$0.00		40	\$0.00		8	\$0.00		8	\$0.00		8	\$0.00		100	\$0.00
16	Groundman 2nd 6 months		7,624	\$0.00		143	\$0.00		8	\$0.00		8	\$0.00		8	\$0.00		50	\$0.00
17	Groundman 1st 6 months		1,000	\$0.00		100	\$0.00		8	\$0.00		8	\$0.00		8	\$0.00		40	\$0.00
18	Powderman		40	\$0.00		10	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00
19	Truck Driver-CDL		100	\$0.00		10	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		20	\$0.00
20	Flagger - traffic		100	\$0.00		10	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		5	\$0.00
21	Laborer		100	\$0.00		50	\$0.00		2	\$0.00		2	\$0.00		2	\$0.00		10	\$0.00
22	Reclaiming Foreman		100	\$0.00		50	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00
23	Reclaiming Equipment Operator																		
			100	\$0.00		50	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00
24	Reclaiming Laborer		100	\$0.00		50	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00
TOTALS			63,325	\$0.00		1,781	\$0.00		77	\$0.00		77	\$0.00		77	\$0.00		1,071	\$0.00

EQUIPMENT

Item #	Description	Regular Weekday Work			Overtime Weekday Work			Holiday Work			Saturday Work			Sunday Work			Storm Duty		
		Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost	Unit Price	Est Hours	Cost
25	Digger-Derrick Single Axle w/hydraulic impact wrench and hydraulic tamp		8,112	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		433	\$0.00
26	Digger-Derrick Tandem Axle w/hydraulic impact wrench and hydraulic tamp		100	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		10	\$0.00
27	Service Bucket Truck 40-45 Foot w/hydraulic impact wrench and hot line tools/rubber goods		40	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		10	\$0.00
28	Service Bucket Truck 40-45 Foot Material Handler w/hydraulic impact wrench and hot line tools/rubber goods		40	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		10	\$0.00
29	Bucket Truck 48-55 Foot w/hydraulic impact wrench and hot line tools/rubber goods		3,000	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		300	\$0.00
30	Bucket Truck 48-55 Foot Material Handler w/hydraulic impact wrench and hot line tools/rubber goods		5,000	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		1	\$0.00		189	\$0.00

31	Bucket Truck 65 Foot w/hydraulic impact wrench and hot line tools/rubber goods	1,000	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	4	\$0.00
32	Bucket Truck 65 Foot Material Handler w/hydraulic impact wrench and hot line tools/rubber goods	500	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	4	\$0.00
33	Bucket Truck 75 Foot w/hydraulic wrench and hot line tools/rubber goods	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
34	Bucket Truck 75 Foot Material Handler w/hydraulic wrench and hot line tools/rubber goods	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
35	Bucket Truck 100 Foot w/hydraulic impact wrench and hot line tools/rubber goods	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
36	Bucket Truck 100 Foot Material Handler w/hydraulic impact wrench and hot line tools/rubber goods	5	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
37	Pickup Foreman	8,112	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	433	\$0.00
38	Pickup Crew Extra	4,157	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	25	\$0.00
39	Backhoe Mini	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	25	\$0.00
40	Backhoe Standard <90hp	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
41	Backhoe Large >90 hp	50	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
42	Excuvator Small Track-Hoe	5,842	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
43	Construction Forklift	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
44	Compact Excavator <30 hp	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
45	Reclaiming Bobcat - Tracked w/bucket	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
46	Re-claiming Box for Bobcat	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
47	Rock Rake for Bobcat	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
48	Small Tractor w/Landscape Box	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
49	Dump Truck Single Axle	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
50	Dump Truck Tandem Axle	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	6	\$0.00
51	Dump Truck Flat Bed	7,442	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
52	Air Compressor w/Drilling Tools and air hose	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
53	Magnetic Drill - w/bits and coolant for steel poles	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
54	UG Hole Hog Air Operated	50	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
55	Puller UG Cable	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
56	Puller OH Wire	90	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
57	Tensioner OH Wire	90	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
58	Trencher Small	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
59	Trencher Large	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
60	Chipper Brush	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
61	Trailer Pole	3,124	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	40	\$0.00
62	Trailer Equipment	5,648	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	18	\$0.00
63	Trailer Wire One Reel	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	10	\$0.00
64	Trailer Wire 3-4 Reel	90	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	10	\$0.00
65	Dozer D-7 Size	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
66	Crane 18 Ton	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
67	Crane 28 Ton	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
68	Crane Platform 90 Ft	5	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
69	Travelers each for OH Cable	36,000	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	5	\$0.00
70	Chainsaw See Note Below	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	20	\$0.00
71	Generator-5 hp	10	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	5	\$0.00
72	Concrete Saw Gas Engine Powered	5,530	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	5	\$0.00
73	Portable Cutoff Saw Gas Engine Powered	600	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
74	Portable Battery Drill	4,750	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
75	Saw Zaw Battery Type	5,530	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
76	Street Steel 4x8 ft	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
77	Street Steel 4x10 ft	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
78	Street Steel 4x12 ft	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
79	Street Steel 5x10 ft	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
80	Street Steel 6x10 ft	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00

81	Street Steel 6x12 ft.	100	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	0	\$0.00
82	69 KV Robotic Arm Small	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	5	\$0.00
83	69 KV Robotic Arm Medium	40	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	1	\$0.00	5	\$0.00
84	Pressure Digger w/24 and 36 inch augers	40	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$0.00
85	Fiber Optic Tension Stringing Pulling Machine Bull Wheel Type with Pulling Lines	120	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$0.00
86	Fiber Optic Stringing Blocks Each	10,000	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$0.00
87	Fiber Optic Cable Trailer	120	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$0.00
88	Fiber Optic Time Domain Reflectometer	120	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$0.00
=====													
TOTALS		117,257	\$0	59	\$0	59	\$0.00	59	\$0.00	59	\$0.00	1,577	\$0.00

SUMMARY

	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
LABOR	63,325	\$0	1,781	\$0	77	\$0	77	\$0	77	\$0	1,071	\$0
EQUIPMENT	117,257	\$0	59	\$0	59	\$0	59	\$0	59	\$0	1,577	\$0
TOTAL	180,582	\$0	1,840	\$0	136	\$0	136	\$0	136	\$0	2,648	\$0
=====												
TOTAL ALL LABOR HOURS	66,408		TOTAL ALL LABOR COSTS	\$0								
TOTAL ALL EQUIP. HOURS	119,070		TOTAL ALL EQUIP COSTS	\$0								
TOTAL ALL HOURS	0		TOTAL ALL COST	\$0								

SAFETY EXPERIENCE DATA

1. List your firm's Interstate Modification Rate for the three most recent years

2009 _____ 2010 _____ 2011 _____ 2012 _____

2. Please use your last year's TOSHA/OSHA No. 200 Log to fill in the number of injuries and illnesses:

a. Number of lost workday cases _____

b. Number of restricted workday cases _____

c. Number of cases with medical attention only _____

d. Number of fatalities _____

3. Employee hours worked last year (do not include non-work time, even though paid)
Hours _____

4. Has your organization been cited by TOSHA/OSHA in the last five (5) years?

Yes _____ No _____

If yes, how many times _____

5. Do you require that documented safety meetings be held for:

a. Field Supervisors Yes ____ No ____ Frequency ____

b. Employees Yes ____ No ____ Frequency ____

c. New hires Yes ____ No ____ Frequency ____

d. Subcontractors Yes ____ No ____ Frequency ____

6. Do you conduct documented safety inspections?

Yes ____ No ____ Frequency ____

7. Do you have a home office safety representative who visits and audits the job?

Yes ____ No ____ Frequency ____

If yes, Name _____ Title _____

Does the representative have the authority to make corrections?

Yes ____ No ____

To whom does the representative report?

Name _____

Title _____

8. Please submit evidence of your present safety program and practices, including your employee safety manual.

Does your firm have a written safety policy? Yes _____ No _____

If yes, attach a copy of policy. Date of Policy _____

Does your firm have a written safety manual? Yes _____ No _____

If yes, include copy of safety manual with bid. Date manual adopted or revised. _____

9. Does your safety program contain, as a minimum, requirements for compliance with all applicable OSHA/TOSHA rules and regulations?

Yes _____ No _____

10. Do you require a safety and planning meeting at the beginning of each shift and throughout the shift as work assignments change?

Yes _____ No _____

Are these sessions documented by the crew foreman?

Yes _____ No _____

11. Is all work planned from the standpoint of safe performance first?

Yes _____ No _____

By signing the Bid Form, the undersigned warrants and represents that this safety experience data is accurate in all respects.

STORM DUTY AND BILLING PROCEDURES FOR STORM WORK

Define Storm Duty:

Describe your billing procedures for labor and equipment utilized during storm duty:

Describe your billing procedures for meals and rooms during storm duty:

STORM DUTY AND BILLING PROCEDURES FOR STORM WORK (continued)

Is 8/10 hours of the normal daily weekdays or 40 hours of weekdays billed at the standard rate during storm duty?
Yes _____ No _____ Explain:

How is equipment road time to and from company headquarters billed?

How is labor road time to and from company headquarters billed?

Bidder attests that no officers or employees of the City of Oak Ridge are members of, or have financial interest in, the business submitting this bid.

By: _____
Signature

Telephone #: _____

Name: _____

Fax # _____

Title: _____

Email: _____

Business
Name: _____

Date: _____

Mailing
Address: _____

Physical
Address: _____

Tax ID Number: _____

Contractor's License Monetary Limit _____

Bidder acknowledges receipt of the following addenda:

Addendum No. _____ Date: _____
Addendum No. _____ Date: _____
Addendum No. _____ Date: _____

Addendum No. _____ Date: _____
Addendum No. _____ Date: _____
Addendum No. _____ Date: _____

NOTE: In accordance with the Invitation to Bid, the following attachments are required: a Bid Bond in the amount of ten percent (10%) of the total bid price and the Drug Free Workplace Affidavit.

BID BOND

FY2014-103

KNOW ALL MEN BY THESE PRESENTS,

That we, _____,
(hereinafter called the "Principal"), as Principal, and the _____, of
_____ a

corporation duly organized under the laws of the State of _____

(hereinafter called the "Surety"), as Surety, are held and firmly bound unto the City of Oak Ridge, Tennessee, (hereinafter called the "Obligee"), as Obligee, in the sum of ten percent (10%) of the bid price for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for:

_____.

NOW THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the Invitation to Bid and Instructions to Bidders with good and sufficient surety for the faithful performance of such contract, or in the event of the failure of the Principal to enter such contract and give such bond, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____ A.D. 2014.

IN THE PRESENCE OF:

_____(Seal)
Principal

Witness

Title

Witness

_____(Seal)
Surety

Title

DRUG-FREE WORKPLACE AFFIDAVIT

STATE OF _____)
)
COUNTY OF _____)

The undersigned principal officer of _____, an employer of five (5) or more employees, contracting with the City of Oak Ridge, Tennessee, to provide construction services, hereby states under oath as follows:

1. That the undersigned is a principal officer of _____ (hereinafter referred to as the "Company") and is duly authorized to execute this Affidavit on behalf of the Company.
2. The Company submits this Affidavit pursuant to Tennessee Code Annotated § 50-9-113, which requires each employer with no less than five (5) employees receiving pay who contracts with the state or any local government to provide construction services or who is awarded a contract to provide construction services or who provides construction services to the state or local government to submit an affidavit stating that such employer has a drug-free workplace program that complies with Title 50, Chapter 9 of the Tennessee Code.
3. The Company is in compliance with Tennessee Code Annotated § 50-9-113.

Further affiant saith not.

Principal Officer

State of _____)
)ss.
County of _____)

Before me personally appeared _____ with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence) and who acknowledged that such person executed the foregoing affidavit for the purposes therein contained.

Witness my hand and official seal this _____ day of _____, 2014.

Notary Public

My Commission Expires: _____.

CONTRACT

FY2014-103

This Contract entered into this _____ day of _____, 2014, by and between the City of Oak Ridge, Tennessee, 200 S. Tulane Avenue, Oak Ridge, Tennessee 37830 (mailing address of P.O. Box 1, Oak Ridge, Tennessee 37831-0001), a municipal corporation, hereinafter called the "City," and _____, a _____, hereinafter called the "Contractor."

WITNESSETH

In consideration of the mutual promises of the parties hereto, the parties do hereby agree as follows:

ARTICLE 1 – Scope of This Contract

The work to be done consists of furnishing all labor, materials, supplies, tools, equipment and other incidentals necessary to perform all work and services required for the proper completion of such jobs involving electric line construction, maintenance and changes in electric line services in the territories where the City operates its business as the City from time to time shall assign to the Contractor. All work performed under this Contract shall be in strict accordance with the terms and provisions of this Contract, the Specifications and Requirements, drawings, and the bid of the Contractor, all attached hereto and incorporated herein by reference.

In performance of this Contract, the Contractor binds himself to the City to comply fully with all provisions, undertakings, and obligations hereinafter set forth.

ARTICLE 2 – Term and Renewal

This Contract shall become effective upon its execution and, if not terminated sooner in accordance with the provisions of this Contract, shall continue in full force and effect for three (3) years or until the funds are expended, whichever is earlier.

Upon expiration of a term, the City may renew at its sole option for up to two (2) additional terms upon the same terms and conditions. For example, if the funding is exhausted within two years, the City may renew at the end of the two years for another term of three years or until funding is again expended. If three years expires before funding is exhausted, at the end of said three years the City may renew for an additional term of three years or until funding is again expended. The funding amount upon renewal shall be the original contract amount increased one hundred percent (100%) of the Annual Unadjusted Percent Change in the Consumer Price Index (all items, all urban consumers, United States, as published by the Bureau of Labor Statistics), using the CPI figure for the month of January.

The Contractor is entitled, upon renewal, to also adjust the Contractors individual rates, based upon one hundred percent (100%) of the January CPI. However, for engine related equipment that has been adjusted according to Article 22, (Fuel Escalation), those items may be only adjusted upon renewal to the amount of the original bid for that item adjusted by the CPI. If the item is already in excess of the original bid adjusted by the CPI, the item will not increase upon renewal (except as may be applicable by Article 22).

ARTICLE 3 – Changes

- A. City may, by written order, and without notice to the Sureties, make changes in the specifications of this Contract within the general scope thereof. If any such changes cause an increase or decrease in the scope of this Contract or in the time required for its performance, an equitable adjustment shall be made and this Contract shall be modified in writing accordingly.
- B. Should the Contractor encounter conditions materially different from those shown in the specifications, the City shall be notified in writing immediately of such conditions before they are disturbed. The City shall thereupon promptly investigate the conditions and if it finds that they do so materially differ from those specified, this Contract shall be modified to provide for any increase or decrease of cost and difference in time resulting from the conditions so found.
- C. Except as otherwise herein provided, no charge for any extra work or material will be allotted unless the same has been approved in writing by the City, and the price stated.

ARTICLE 4 – Inspections and Defective Work

All workmanship and services shall be subject to inspections, examinations and tests by the City at any and all times during the performance of this Contract. The City shall have the right to reject defective workmanship and to require correction. Rejected workmanship shall be satisfactorily corrected without charge therefore. If the Contractor fails to proceed at once to correct such defective workmanship, the City may proceed with such corrective work and the Contractor shall be liable for all direct cost occasioned in the performance therefore.

This provision does not negate, modify or replace any warranties contained elsewhere in this Contract. This provision shall survive the termination or suspension of this Contract.

Neither payment nor any provisions in the Contract document shall relieve the Contractor of responsibility for faulty materials or defective workmanship. The City shall give notice of observed defects with reasonable promptness. The deterioration due to ordinary use and normal wear is excepted from this guarantee.

The Contractor shall reimburse the City for the cost of damage, if any, as well as the cost of replacing defective materials or workmanship. If replacements are not made within ten (10) days after notice is given of such defect in workmanship, or thirty (30) days in case of materials, then the City shall have the right to make replacements and charge the cost of same to Contractor or the Contractor's surety.

ARTICLE 5 – Site Investigation

The Contractor represents that it has visited the site and determined the nature of the work and the difficulties and facilities attending execution of the work, and all other matters, which can in any way affect the work under this Contract.

ARTICLE 6 – Delays, Damages

If the Contractor refuses or fails to prosecute the work with such diligence as will ensure its completion within the time specified in Article 2, or fails to complete the work within such time, the City may terminate this Contract. In such event, the City may take over the work and prosecute the same to completion by contract or otherwise, and the Contractor shall be liable to the City for any excess cost occasioned thereby. If this Contract is so terminated, the City may take possession of and utilize in completing the work such materials, appliances, tools and equipment as may be on the site of the work and necessary therefore.

ARTICLE 7 – Payment

The total cost of performance and completion of all work under this Contract shall not exceed \$ _____, without further written authorization by the City to exceed such amount. The Contractor shall submit invoices to the City at the end of each month for work performed under this Contract during such month and will attach to such invoices a copy of the time sheet, to be provided by the City, showing the name and classification of each employee of the Contractor and the number of hours worked by each employee. The Contractor shall furnish such additional information as the City may reasonably require to verify such invoices. Within thirty (30) days of the receipt of such invoice, the City will pay the Contractor for work covered by such invoices and satisfactory completed in accordance with this Contract.

ARTICLE 8 – Final Payment

Upon completion of the work and services covered by this Contract and before final payment, the Contractor must furnish evidence to satisfy the City that all suppliers of materials used and all labor and other employees working for the Contractor pursuant to this Contract have been fully paid. Upon final payment, the City is to be released from all liability whatsoever growing out of this Contract.

ARTICLE 9 – Indemnification by Contractor

To the fullest extent permitted by all applicable laws and regulations, the Contractor hereby agrees to protect, indemnify and hold harmless the City and their consultants, agents and employees from and against any and all claims, loss, expense, damage, charges and costs direct, indirect or consequential (including but not limited to fees and charges of engineers, architects, attorneys and other professional and court costs), collectively referred to as "claims," for injury to or death of persons and injury to or destruction of property suffered or alleged to have been suffered as a result of any act or omission on the part of the Contractor, any of the Contractor's subcontractors, anyone for whose acts any of them may be liable, or others whose services are engaged by the Contractor or anyone directly or indirectly employed or controlled by either of them in the course of the performance of the work provided for in the Contract, except such injury, destruction or death as may be caused by the sole negligence or fault of the City.

When the City submits notice, the Contractor shall promptly defend any aforementioned action. In any and all claims against the City or any of their consultants, agents or employees by any employee of the Contractor, any of the Contractor's subcontractors, anyone for whose acts any of them may be liable, or others whose services are engaged by the Contractor or anyone directly or indirectly employed or controlled by either of them in the course of the performance of the work provided for in the Contract, the indemnification obligation described herein shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts. The limits of insurance required in this Contract shall not limit the Contractor's obligations under this article.

The terms of this article shall survive the termination or suspension of this Contract.

ARTICLE 10 – Completion and Performance Bond and Labor and Material Bond

A. Completion and Performance Bond

Prior to commencing work under this Contract, the Contractor agrees to furnish and to maintain during the term of this Contract a Completion and Performance Bond in the amount of twenty-five percent (25%) of the Contract price with good and sufficient surety or sureties acceptable to the City in connection with the performance of the work under this Contract, including any amendments or extensions hereof. The form and conditions of said Performance Bond shall be

as prescribed by the City. The bond will be required at the beginning of each contract term and will be in an amount equal to the contract price for that year.

In lieu of a Performance Bond, the City will accept other suitable Securities agreed upon by both parties. At all times during the term of this Contract, the Contractor shall provide the City with evidence that the Contractor has obtained such Performance Bond or Securities. A certificate from the surety showing that the bond premiums have been paid by the Contractor shall accompany the bond.

B. Labor and Material Bond

Prior to commencing work under this Contract, the Contractor agrees to furnish and to maintain during the term of this Contract a Labor and Material Bond in the amount of twenty-five percent (25%) of the Contract price with good and sufficient surety or sureties acceptable to the City, conditioned that the Contractor shall promptly make payments to the persons supplying labor, material, or supplies to the Contractor or subcontractors in the performance of the work under this Contract and any amendment or extension thereof. The form and conditions of this bond shall be as prescribed by the City. The bond will be required at the beginning of each contract term and will be in an amount equal to the contract price for that year.

In lieu of a Labor and Material Bond, the City will accept other suitable Securities agreed upon by both parties. At all times during the term of this Contract, the Contractor shall provide the City with evidence that the Contractor has obtained such Labor and Material Bond or Securities. A certificate from the surety showing that the bond premiums have been paid by the Contractor shall accompany the bond.

ARTICLE 11 – Rate of Progress

Notwithstanding any other provisions in this Contract, the Contractor shall furnish sufficient labor, materials, supplies, tools, and equipment, and shall work such hours, including overtime, Sundays, and/or Holidays, as may be necessary to carry out the work in accordance with the approved schedules for its completion not later than the respective times allowed for completion set forth in these Contract Documents. Should the Contractor refuse or fail to comply with its obligations set forth in the preceding sentence after receipt of any written directive or request by the City that the Contractor furnish additional labor, materials, supplies, tools, and equipment, and/or work additional hours, including overtime, Sundays, and/or Holidays, the City may terminate the Contractor's right to proceed with the whole or any part of the work under this Contract.

ARTICLE 12 – Compliance with All Laws, Ordinances, Statutes, and Regulations

The Contractor shall comply with all federal, state, county and local laws, ordinances, statutes, and regulations. The Contractor shall comply with the requirements for work zone traffic control contained in Part 6 "Temporary Traffic Control" of the Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 (as revised in 2012) Edition, and subsequent revisions thereto while performing work under this Contract. It is the responsibility of the Contractor to provide adequate personnel for flagging and/or sign paddles for control of traffic in the work zone at all times.

ARTICLE 13 – Insurance

The Contractor shall at all times during the Contract maintain in full force and effect Comprehensive General Liability, Workers' Compensation and Property Damage Insurance in the amounts set forth below and naming the City of Oak Ridge, Tennessee as an *additional insured*.

The Contractor shall maintain policies providing the following insurance protection, each policy containing a requirement that, in the event of change or cancellation, thirty (30) days' prior written notice be sent by mail to the City. Certificates of Insurance describing the coverage shall be furnished by the Contractor and shall contain the following express obligation:

"This is to certify that the policies of insurance described herein have been issued to the insured for whom this certificate is issued and are in force at this time. In the event of cancellation or material change in a policy affecting the certificate holder, thirty (30) days' prior written notice will be given the certificate holder."

1. Comprehensive General Liability:

Bodily Injury	\$500,000	each occurrence
	\$1,000,000	aggregate
Property Damage	\$500,000	each occurrence
Or Combined Single Limit of	\$1,000,000	
2. Workers' Compensation and Employer's Liability as provided for in applicable statutes.
3. Comprehensive Automobile Liability (Including all owned, non-owned and hired vehicles)

Bodily Injury	\$500,000	each person
	\$1,000,000	each occurrence
Property Damage	\$500,000	each occurrence
Or Combined Single Limit of	\$1,000,000	

The Contractor may purchase at its own expense such additional or other insurance protection as it may deem necessary. Maintenance of the required minimum insurance protection does not relieve the Contractor of responsibility for any losses not covered by the above-required policies.

Before commencement of work hereunder, the Contractor agrees to furnish to the City of Oak Ridge (Legal Department, P.O. Box 1, Oak Ridge, Tennessee 37831-0001) a Certificate of Insurance or other evidence satisfactory to the City to the effect that such insurance has been procured and is in force.

ARTICLE 14 – Permits and Licenses

The Contractor shall obtain, at the Contractor's expense, all permits, licenses and bonds required by law or ordinance and maintain the same in full force and effect.

ARTICLE 15 – Subcontracting and Assignment

- A. The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.
- B. The Contractor shall not award, assign, transfer or pledge any work to any subcontractor without prior written approval of the City, which approval will not be given until the Contractor submits to the city a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the City may require.

- C. The Contractor shall be as fully responsible to the City for the acts and omissions of subcontractors, and of persons either directly or indirectly employed by said subcontractors, as the Contractor is for the acts and omissions of persons directly employed by the Contractor.
- D. The Contractor shall make a condition of all subcontracts and/or cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the City may exercise over the Contractor under any provision of the Contract Documents.
- E. Nothing contained in this Contract shall create any contractual relation between any subcontractor and the City.

ARTICLE 16 – Superintendence by the Contractor

The Contractor shall give its personal superintendence to the work or have a competent foreman or superintendent satisfactory to the City on the site at all times during the progress of the work, with authority to act on behalf of the Contractor.

ARTICLE 17 – Termination

Notwithstanding any other provisions in this Contract, the Contractor shall furnish all labor, materials, supplies, tools and equipment necessary to perform the work and services within allowed times for completion as set forth in the Contract. Should the Contractor refuse or fail to comply with its obligations, or in the event the Contractor shall violate any of the provisions of this Contract, or the quality or quantity of the work performed is, in the judgment of the City, below standard and therefore unsatisfactory, the City shall notify the Contractor in writing giving the Contractor ten (10) days to correct such work. In the event such work is not corrected within said ten (10) days, the City shall have the right to cancel this Contract, terminate the Contractor's right to continue the work, and complete the work undertaken by the Contractor without incurring any liability to the Contractor except to pay the Contractor the fair value to the City of the work satisfactorily performed by the Contractor.

ARTICLE 18 – Termination of Contract for Cause

If, through any cause, the Contractor shall fail to fulfill in timely and proper manner the obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least twenty-four (24) hours before the effective date of such termination. In such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports prepared by the Contractor under this Contract shall, at the option of the City, become the City's property and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder.

Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the Contract by the Contractor, and the City may withhold any payments to the Contractor for the purpose of set-off until such time as the exact amount of damages due the City from the Contractor is determined.

ARTICLE 19 – Anti-Discrimination

The Contractor, in performing the work or furnishing the services covered by this Contract, shall not discriminate against any person because of race, creed, color, national origin, age, sex, sexual orientation, disability, religion or other legally protected status. The City of Oak Ridge encourages the utilization of minority and women-owned businesses in its contracting and subcontracting projects and the Contractor is encouraged to actively solicit the participation of these businesses. The Contractor shall inform all of its subcontractors and vendors providing work or services under this Contract of this requirement and shall ensure compliance therewith.

ARTICLE 20 – Personnel

- A. The Contractor represents that it has, or will, secure at the Contractor's expense, all personnel required to perform the work and services outlined in this Contract. Such personnel shall not be employees of or have any contractual relationship with the City.
- B. All of the services required hereunder will be performed by the Contractor or under the Contractor's supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state and local laws to perform such services.

ARTICLE 21 – Reports and Information

At such times and in such forms as the City may require, the Contractor shall furnish to the City such periodic reports as are requested by the City pertaining to the work and services covered by this Contract, the costs and obligations incurred or to be incurred in connection herewith, and any other matters covered by this Contract. The City can audit the Contractor's and the Contractor's subcontractors' financial records pertaining to this project.

ARTICLE 22 – Fuel Escalation

If the average price of unleaded fuel (reference AAA-Knoxville) exceeds \$3.75 per gallon, the City will allow the Contractor to increase the unit prices of all engine-related equipment based on the following formula:

$$\frac{\text{(Average price of unleaded fuel per gallon minus \$3.75)}}{\text{divided by 2}}$$

For example, if the average price of unleaded fuel (reference AM-Knoxville) is \$4.00 per gallon, the Contractor will be permitted to increase the unit prices of all engine-related equipment by 12.5 cents [(\$4.00- \$3.75) /2 = \$0.125].

This adjustment can only be considered every four (4) months beginning with the first date upon which the average price of unleaded fuel (reference AM-Knoxville) exceeds \$3.75 per gallon. To obtain a fuel adjustment, the Contractor must notify the City in writing of the proposed rate change and supply supporting documentation and the validity of the adjustment. The City shall have ten (10) days to review the request and documentation. Absent objection on the part of the City for reasons of documentation or fact, the adjustment shall be applied to the billing periods following the submittal.

ARTICLE 23 – Special Provisions for Secured Areas

The Contractor shall follow all U.S. Department of Energy (DOE) rules and requirements regarding contractors crews and crew members entry onto DOE property and into DOE facilities to perform the work necessary under this Contract. Current rules require that every contractor employee obtain a DOE badge by providing proper, valid proof of U.S. Citizenship. Each person badged has to go thru several hours of screening and training during the badging process. The Contractor is to make contact with DOE to secure the badges and is responsible for all costs associated with obtaining badges for their employees including training time. The City will cooperate with the Contractor by providing advice on the process to obtain DOE badges. DOE's badging process changes from time to time and the City does not have any control of the process. The Contractor will be responsible for arranging with DOE for a DOE escort where DOE requires that the crew be escorted in order for the required work to be performed.

ARTICLE 24 – Governing Law

This Contract is governed by the laws of the State of Tennessee.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and year first above written, the City of Oak Ridge, by its Mayor, by authority duly given.

APPROVED AS TO FORM AND LEGALITY:

CITY OF OAK RIDGE, TENNESSEE

City Attorney

Mayor

(CONTRACTOR)

Signature

(Printed or Typed Name and Title)

Attachments: Specifications and Requirements
Bid Documents
Contractor's Bid

Approved by Resolution _____

**Specifications and Requirements
for
Electric Power Line Construction and Maintenance
Labor and Equipment Rental**

1.0 General

- A. The City of Oak Ridge is seeking bids from qualified contractors employing skilled craftsman knowledgeable and experienced in the construction, maintenance, and servicing of underground and overhead electrical transmission and distribution systems. If the information supplied (or not supplied) with the bid; statements made by references or previous clients or others; questions regarding the safety, standing, or financial stability of the Contractor; or other factors in the sole opinion of the City raise substantial doubt as to the Contractor's ability to perform the work in full accordance with these specifications, industry standards, good safety policy and in full compliance with the law, the bid shall not be considered.
- B. All work done under this Contract shall be performed in a professional manner and in full compliance with the customary standards of work done by the City's own employees. The Contractor shall correct, at no expense to the City, all work not so performed.
- C. All construction and reconstructions shall be done in accordance with the plans, drawings and specifications provided by the City. The Contractor shall correct, at no expense to the City, all work not so performed.

2.0 Number and Types of Crews and Contract Workers to Provide:

- A. The City shall have the right to specify the number of crews and contract workers, the makeup of each crew and the make-up of equipment for any job. The contractor shall not assign the Contract or sublet any portion of the Work without the express written consent of the City.
- B. Initial requirements shall be for two (2) crews available to begin work within five (5) days of contract execution. The Contractor shall be capable of supplying an additional crew at any time with a ten (10) day notice per crew, up to five (5) crews and to supply contract workers as needed.
- C. The Contractor will be given at least ten (10) days advance notice of any reduction in the number of crews and/or contract workers to be provided unless the Contractor waives such notice requirement.
- D. In the case of emergencies, the Contractor agrees to supply a minimum of one (1) additional crew to the City of Oak Ridge within four (4) hours of the request for emergency assistance, and two (2) additional crews within twenty-four (24) hours of the request. The Contractor shall provide the City with a list of twenty-four hour phone numbers to initiate emergency services.

3.0 Hours of Work for Compensation:

- A. The City shall specify to the Contractor where and when to start and stop work. The City shall pay only for hours actually worked. The City shall specify the working hours for the Contractor including number of days and hours per day per work week, but no crew or contract worker shall be required to work more than 40 hours per week without the consent of the Contractor. Extra rates for work beyond 40 hours per week will be paid to the Contractor at the rate bid only when such time is specifically authorized by the City.
- B. In the event of inclement weather conditions on a day previously scheduled for work, at the beginning of the day's work, the Contractor shall be allowed compensation for a period not exceeding two (2) hours, during which time a decision will be made as to whether the day's work will proceed. In the event inclement weather conditions arise during the day, the Contractor will be allowed compensation for two (2) hours or the actual time worked if greater than two (2) hours.
- C. Equipment used on the job such as line trucks, bucket trucks and materials truck will be allowed the same hours as the hours worked by the crew members or contract workers. Special equipment not normally used on the job such as conductor or cable pulling and tensioning machines, cranes, and air compressors will be allowed only for the hours actually used. Also included in the hours of actual use category is street steel, gas or air powered pavement saws, chainsaws, pumps, cutoff saws, similar battery powered hand held tools and gas engine generators, Such equipment is considered tools of the trade and is to be furnished for a crew to use as needed. Minimum charges for delivery of specialized equipment must be approved by the City before use.
- D. The Contractor shall locate a crew assembly point within five miles of the work area or at a greater distance if approved by the City. One-way travel time from crew assembly point to the job site will be allowed. Limited space may be available from time to time at Substation 600 for Contractor-owned equipment. If the Contractor elects to use this space, no travel time is allowed. The City does not guarantee the safety or security of any item belonging to the contractor left on City property or elsewhere. The City may cease to make space available at any time.
- E. The Contractor shall keep the City informed on work progress and each day shall furnish the Superintendent of Operations a time report for each employee and the time charged for each piece of equipment on City supplied forms. The Contractor shall furnish a monthly report of all materials used, labor, and equipment charges itemized for each job to which charges were made during the month.

4.0 Additional Contractual Requirements

- A. During work time, the Contractor's crew shall maintain radio contact with the City's Electrical Department and shall operate switches, jumpers or any other system device only on order from the Electrical Department. The Contractor shall have said radio close at hand during work operations. The Contractor shall not be authorized to act on directions from the City other than directions by the Electrical Director or his representative.
- B. The City shall have the right from time to time to examine or audit the Contractor's books, records and accounts by authorized City personnel, at the office of the Contractor during normal business hours.

- C. The Contractor crews shall request caution orders and releases when working in close proximity to energized power lines. The Contractor will promptly notify the City of Oak Ridge if an energized line is contacted by the Contractor's equipment, material, or personnel while performing work under this Contract.
- D. Damage Claims – The Contractor or the Contractor's designee shall promptly investigate all damage claims and adjust all damages to the satisfaction of the City.
- E. Nothing contained herein shall limit the right of the City to do work such as that covered by this contract on force account, or to have such work done by other contractors.
- F. Monthly, the Contractor shall submit to the City through its Manager, Electric Operations Division, and an invoice of amounts due in accordance with the schedules of charges submitted herewith as a part of this proposal, together with such substantiating data as may be required by the City. Payments due will be made in full by the City to the Contractor within thirty (30) days from receipt and approval of said statement.

5.0 Tasks Required to be Performed by Contractor

- A. *Task 1. General Work Assignments:* Provide crews made up of contractor employees and equipment to perform work under supervision of Contractor's foreman. Crews supplied must construct, repair and maintain 13 kV underground and overhead distribution, including "hot" work; and with supplemental manpower from the Contractor, construct, repair and maintain 69 kV sub-transmission line "hot" or cold.
- B. *Task 2. Supply Contract Workers.* Provide contract employees to perform work under supervision of City's foreman. Contract workers supplied must construct, repair and maintain 13 kV underground and overhead distribution, including "hot" work or, construct, repair, and maintain 69 kV sub-transmission line "hot" or cold.
- C. *Task 3. Provide Equipment to be used under Supervision of City's Foreman.* Equipment supplied will be used to construct, repair and maintain 13 kV underground and overhead distribution, including "hot" work; or construct, repair and maintain 69 kV sub-transmission line "hot" or cold.
- D. *Task 4.* Provide crews made up of contractor employees and equipment to perform work under the supervision of Contractors foreman for Fiber Optic Cable installation. Crews supplied must construct, repair and maintain fiber optic cable for the City Of Oak Ridge, both underground and overhead on new or existing power lines owned by the city, including "make ready" work to modify the existing power line facilities to accommodate new fiber optic cable for the city.

6.0 Requirements for Personnel and Equipment to be supplied

- A. *General Employee Requirements:* All crew employees and/or contract workers supplied to do the work must be thoroughly trained in the proper and safe operations, construction and maintenance of an electrical system to a level congruent with their classification.
- B. *General Equipment Requirements:* All equipment supplied must be maintained and operated in strict accordance with the manufacturer's recommendations and safe practices. Maintenance and inspection records must be made available upon request.

C. Qualifications of Labor:

1. General Foreman: More than 12,000 hours of experience in the operation, maintenance, construction, installation, and removal of 120, 480, 7200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state. Experience shall include at least 5 years as a working foreman. General Foreman shall be expected to perform any and all work the same as a journeyman lineman.
2. Working Foreman: More than 8,000 hours of experience in the operation, maintenance, construction, installation, and removal of 120, 480, 7,200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state. Experience shall include at least 12 months as a working foreman. Working foreman shall be expected to perform any and all work the same as a journeyman lineman.

Working Forman Fiber Optic Cable Crew: Including experience in 2 above plus at least 4000 hours of experience in the operation, maintenance, construction, installation, and removal of fiber optic cable underground and on overhead poles.

3 Journeyman Lineman: More than 8,000 hours of experience in the operation, maintenance, construction, installation, and removal of 120, 480, 7,200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state. Also expected to be able to operate equipment used on the job.

4. Equipment Operator: More than 4,000 hours of experience in the operation of heavy equipment used in the operation, maintenance, construction, installation, and removal of 120, 480, 7,200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state.
5. Ground man: More than 2,000 hours of experience in the assistance to others in the operation, maintenance, construction, installation, and removal of 120, 480, 7,200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state. May also operate equipment.
5. Apprentice Lineman: No experience requirement, but trained in safety and basic techniques and able to help others in the operation, maintenance, construction, installation, and removal of 120, 480, 7,200, 13,500, and 69,000 volt 1 and 3 phase overhead and underground electric power lines and facilities, both in an energized or un-energized state. May also operate equipment.
6. On fiber optic cable crews, at least two of the linemen class workers to have at least 2000 hours of experience in the operation, maintenance, construction, installation, and removal of fiber optic cable underground and on overhead poles.

- D. Prior to assigning an employee to the job, the City shall have the right to request information concerning his or her training and experience. The City shall have the right to request that any employee be removed from the contract and replaced.

- E. Any motor trucks provided by the Contractor shall bear company number and shall be well marked and identified with company insignia or name designating the vehicles as property of the Contractor.
- F. The Contractor shall observe all generally recognized safety rules (including without limitation the provisions of the National Electric Safety Code), regulations, and methods to prevent injury to all employees and other persons or damage to property arising from the Contractor's operations, including OSHA requirements, the APPA safety manual, Worker's Compensation, Social Security payment, tax withholding payments, contractor's licenses, etc. The Contractor shall hold a valid Tennessee State Contractor's License at all times while under this Contract.
- G. Qualifications for Equipment: Equipment supplied must be in good working order and capable of performing the work.

7.0 Items to be submitted with Bid:

- A. A list of five (5) electric power line contracts performed in the last twelve months and a list of all such contracts presently being performed by the Contractor along with the names and telephone numbers of the persons with whom the Contractor had primary contact. The City of Oak Ridge shall be entitled to inquire about the Contractor's performance under each such contract.
- B. List projects within the last two years which demonstrate the ability of the crews to be supplied or available to do the following:
 - Install underground 13 kV distribution
 - Install overhead 13 kV distribution
 - Maintain 13 kV overhead distribution "hot"
 - Maintain 13 kV underground distribution "hot"
 - Maintain 69 kV Sub-transmission "hot"
 - Substation maintenance and repair.
 - Fiber Optic Cable Installation

Projects may be the same as listed in "a" above. Supply contacts for all projects and a brief description of equipment installed, crew and crew equipment types used.
- C. The foreman to be assigned to the first crew to be provided by the Contractor and their qualifications. Include as a minimum the following:
 - Employee's name.
 - Previous employers with dates of employment and positions held.
 - Employment dates and description of responsibilities during the tenure with the contractor.
- D. A description of the company safety program and a copy of the company safety manual.
- E. Substance abuse policy. List any drug-screening program.
- F. Describe your quality control and assurance program.
- G. Describe your employee training program for line workers. List the requirements of that program for each class of worker bid.

- H. A letter certifying that the Contractor is aware of the hazards of working near or on conductors and that employees have received training as required under TOSHA/OSHA guidelines.
- I. Completed safety information sheet provided and attached to these specifications.
- J. Listing of approximate number of aerial lifts, digger derrick trucks and number of Journeyman Lineman available today within a radius of 150 miles of Oak Ridge, Tennessee who might be available for emergency work. Describe how you appropriate emergency crews to meet the City's requirement as listed.
- K. List of emergency contact information. Provide names, titles and phone numbers.
- L. Describe how you appropriate emergency crews to meet the City's requirement as listed.
- M. For equipment that breaks down on the job, describe:
 - How many spare units are available and where are they located?
 - Where will repairs take place?
 - How many full time auto-mechanics do you employ?
 - Do you have "through the night" equipment repair?
- N. Written inspection and maintenance program for major equipment pieces to be provided. Certification that required insulation levels are met and have been tested.

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**Specifications and Requirements
for
Electric Power Line Construction and Maintenance
Installing Fiber Optic Cable**

9.0 FIBER OPTIC CABLE INSTALLATION

9.1 General

9.1.1 Prior to starting construction, optical time domain reflectometer (OTDR) reports shall be provided by the OWNER to verify that it has not been damaged during shipment. Readings obtained shall be kept as part of a records package and shall be available to the CONTRACTOR at any time. The CONTRACTOR may wish to witness OWNER tests. If the CONTRACTOR is unable to witness the test, the CONTRACTOR may option to accept the OWNER's test in good faith or verify the test at CONTRACTOR's own expense with the OWNER to witness the retest. These OTDR Traces will be used later for comparison at completion of the WORK and acceptance criteria of the WORK. There shall be NO change in attenuation (i.e. slope of OTDR trace) at both 1310 nanometers and 1550 nanometers.

9.1.2 The CONTRACTOR shall install the fiber optic cable in accordance with the drawings and specifications and the fiber optic cable manufacturer's installation manual provided.

9.1.3 The ADSS fiber optic cable shall be installed using the stationary reel method and not the moving reel method.

9.2 Tension Stringing Equipment

9.2.1 The tension stringing equipment shall be of the double bull wheel type with a bottom of the groove diameter at least equal to 35 times (35x) the cable diameter and shall have a minimum capacity of five (5) turns of the cable over the bull wheels.

9.2.2 The bull wheel groove diameter shall be between 1.10 and 1.25 times the cable diameter. The grooves shall be lined with neoprene not less than 1/4 inch thick or other approved material. The depth and flare of the grooves shall be adequate for the CONTRACTOR's methods of stringing.

9.2.3 Brakes on the tensioners shall be designed so that the desired tension will be held as long as the brakes are left at that particular setting.

9.2.4 The cable reels shall be stationary with provision for light braking to prevent overrunning of the reels. The heat from the brakes shall not be transmitted to the fiber optic cable.

9.2.5 Tension machines shall be designed and maintained to provide even tension during stringing and sagging operations, and to assure safe and damage-free handling and stringing of the cable.

9.3 Cable Sheaves

9.3.1 The stringing sheaves shall be equipped with high quality ball or roller bearings with adequate provision for lubrication. Sheaves shall be so designed and used that the

pulling line does not damage the sheaves or deposit foreign matter in the cable grooves which may damage the fiber optic cable or where foreign matter may be deposited on the cable.

- 9.3.2 The minimum sheave diameter at the bottom of the cable groove shall not be less than 40 times the cable diameter, or the cable manufacturer's recommendation, whichever is larger. The groove depth shall be at least 1.25 times the cable diameter.
- 9.3.3 The cable grooves shall be suitably lined with neoprene or other approved material. If bare metal sheaves are used, they must be total free of burrs or ruts, with a smooth polished surface. The metal sheave must pass the 'Blood Test', i.e. if the sheave can spin freely with a person's hand riding in the bottom of the groove without their hand bleeding, the sheave is usable.
- 9.3.4 Sheaves will be maintained in first class condition and damaged sheaves will be immediately replaced.

9.4 Controlled-Tension Stringing

- 9.4.1 The maximum pulling tension shall not exceed the installation tensions shown on the sag charts provided by the OWNER.
- 9.4.2 The cable pullers, tensioners, pulling lines, and stringing blocks shall have an adequate margin of capability over the sagging tension.
- 9.4.3 The fiber optic cable shall be strung by the controlled-tension method.
- 9.4.4 The method of controlled-tension stringing proposed by the CONTRACTOR and the equipment to be used are subject to review by the OWNER, who shall have the right to reject or to order modifications if, in his opinion, the desired results could not be attained using the CONTRACTOR's proposed method or equipment. Such action by the OWNER does not relieve the CONTRACTOR of full responsibility for producing a complete, acceptable fiber optic installation.
- 9.4.5 The setup locations proposed by the CONTRACTOR for stringing the fiber optic cable shall be approved by the OWNER prior to commencement of stringing.
- 9.4.6 The slope of the fiber optic cable between either the tensioner and the stringing block at the first structure, or the puller and the first stringing block shall not be steeper than four (4) horizontal to one (1) vertical.
- 9.4.7 The swivel and pulling grip for connecting the cable to the pulling line shall be a balanced design to transmit the pulling force to the fiber optic cable evenly and maintain alignment during stringing without inducing torque.
- 9.4.8 The swivel and pulling grip shall be designed so that it will guide the cable into the sheave grooves and pass through the stringing blocks without imposing excessive angular deflection of the sheave.
- 9.4.9 Only approved gripping and pulling devices are to be used when tensioning, or temporarily holding fully tensioned self-supporting cable. Wire mesh grips are intended only for pulling the cable through the system. WIRE MESH GRIPS ARE NOT TO BE USED TO TENSION OR TO HOLD CABLE UNDER TENSION. Only approved ADSS dead ends or Yale-Grip[®] shall be used for mid-span tensioning.

- 9.4.10 The cable shall not be pulled around an angle of more than 30 degrees without approval of the set-up by the OWNER. If the line angle is between 15 and 30 degrees, a double set of stringing blocks may be used. If it is necessary to pull through a structure where the line angle is greater than 30 degrees, the stringing block arrangement must be approved by the OWNER.

9.5 Care of the ADSS Fiber Optic Cable During Stringing

- 9.5.1 Care must be taken to assure the cable is not mishandled or installed improperly causing subsequent damage and to ensure that the cable is not to be kinked and the minimum bend radius is not to be exceeded. All precautions must be taken to ensure that the cable is never scraped, crushed, kinked, abraded or twisted. Any such damage will alter the transmission characteristic of the fiber and may require replacement of the damaged cable section.
- 9.5.2 Under no circumstances shall the cable be pulled at more than the maximum allowable pulling tension. Use a calibrated dynamometer to monitor pulling tension and stop when the tension approaches the maximum allowable tension. Resolve the cause of the tension increase (i.e. cable climbing the sheave, binding in the yoke, out of alignment sheaves, etc.) and continue to pull cable. If replacement of the damaged section is necessary, the CONTRACTOR shall be fully liable for the cost of the replacement piece and associated installation costs.
- 9.5.3 The fiber cable shall be pulled directly into the tensioner and into the stringing blocks without touching the ground. The fiber cable shall not be allowed to touch the ground during pulling.
- 9.5.4 If any nicks or other damage to the fiber optic cable jacket are detected by the CONTRACTOR, the OWNER shall be notified before the cable is permanently installed. If the cable can be patched without scarifying the optical performance over the next forty years, the OWNER will coordinate the patching process with the cable manufacturer. If replacement of the damaged sections is necessary, the CONTRACTOR shall be fully liable for the cost of the fiber optic cable so damaged.
- 9.5.6 UNDER NO CIRCUMSTANCES SHALL THE CABLE BE CUT without prior approval of the OWNER. Changes to the total number of splice points can potentially degrade quality of transmission of the system. The number and location of splices has been determined in the initial system design.
- 9.5.7 The CONTRACTOR shall inspect the sheaves daily for free and easy movement in the blocks during stringing and sagging operations.
- 9.5.8 The cable shall not be allowed to stand in the stringing blocks for more than five days before being pulled to the specified sag. The cable shall be brought up (never down) to sag. If circumstances require the cable to stay in the sheaves for more than 5 days, the OWNER must be notified and action must be taken to insure the safety of the ADSS cable while in the sheaves.
- 9.5.9 When temporary intermediate dead ends are used, they shall be of suitable type and of sufficient strength to hold the cables without putting undue stress on adjacent structures. Wood and steel structures will require temporary guying. The method of temporary guying during cable stringing operations shall be subject to the approval of the OWNER.

- 9.5.10 Pulling and stringing operations are only to take place when conditions permit and shall cease when the temperature is expected to be below 15 °F or when a hazardous condition exists or is created by pulling and stringing operations.
- 9.6 Fiber Optic Cable Sagging
 - 9.6.1 The CONTRACTOR shall sag the cable using sag tables provided by the OWNER.
 - 9.6.2 The length of cable sagged in one operation shall be limited to the length that can be sagged to the OWNER's satisfaction.
 - 9.6.3 The sags shall be determined by means of a transit (sight sagged) or other means approved by the OWNER.
 - 9.6.4 The CONTRACTOR shall provide at least one (1) sagger to measure the correct sag for pulls of five (5) spans or more.
 - 9.6.5 The CONTRACTOR shall check the sags for several spans in each sagging section by selecting one near each end and one in the center. A minimum of three (3) spans shall be checked in a one-reel pulling section.
 - 9.6.6 The CONTRACTOR will provide to the OWNER the same facilities for checking sags as are employed for sagging.
- 9.7 Clipping in Fiber Optic Cable
 - 9.7.1 At all tangent structures (angles less than 30 degrees), the cable shall be attached to the structure by the appropriate suspension hardware.
 - 9.7.2 At all dead-end structures or strain structures (angles greater than 30 degrees); the cable shall be attached to the structure by a double dead-end assembly.
 - 9.7.3 All nuts and fittings shall be adequately tightened to the specified torque values.
 - 9.7.4 All drip loops between double dead ends shall be smooth uniformly curving appearance without sharp bends or kinks and keeping in consideration the minimum bending radius of the fiber optic cable. The depth of the drip loop shall be 18 inches and formed downward.
- 10.0 UNDERGROUND INSTALLATION OF FIBER OPTIC CABLE
 - 10.1 Conduit
 - 10.1.1 All exposed ends of conduit shall be plugged or sealed during and after construction. Burrs or sharp projections which might damage the cable shall be removed. The minimum size of conduit, conduit joints, or riser guard suitable with specified cable arrangements shall be specified by the OWNER.
 - 10.1.2 In direct buried cable systems the conduit or U-Guard should be extended below grade to the required cable burial depth.
 - 10.2 Cable Duct Installation
 - 10.2.1 Under no circumstances shall cable be pulled at more than maximum allowable pulling tension. Use a calibrated dynamometer to monitor pulling tension when it is

possible for tension to approach maximum cable specifications. At no time shall cable be pulled around more than four sweep 90° turns in a 1,000 foot segment.

- 10.2.2 Only a cable lubricant approved for use on fiber optic cable shall be used.
- 10.2.3 Generously lubricate the first 20 feet of cable with a suitable fiber optic cable lubricating compound (a clean rag may be used) to reduce the initial duct friction. The amount of lubricant required during the remainder of the pull should be determined by the conditions being encountered. Bends, long pulls, pulling through manholes, etc., may require more lubricant.
- 10.2.4 At the beginning of the cable pull, go slowly until at least five feet of it has entered the duct. At this point, the cable may be pulled steadily and continuously, at a rate of 50 to 60 feet per minute. If it is necessary to stop the cable during the pull because of reel trouble or other reasons, some tension on the pulling line should be maintained.
- 10.2.5 When cable has been pulled to within 20 feet of the riser or manhole, as determined by the quantity of cable remaining on the reel, the pulling speed should be reduced.
- 10.2.6 When the swivel link is 6 inches from the roller block, slowly release the tension and replace the roller block with a 90° corner block, making sure that the rollers do not allow the cable to exceed the minimum bend radius.
- 10.2.7 The speed should then be increased gradually until the cable moves freely, not exceeding 50 or 60 feet per minute. Release the tension at end of pull and remove equipment. Before cutting the cable, allow enough slack to reach termination point, remembering that about twenty (20) feet of cable is cut off at the wire mesh grip to assure no damaged fiber is used at splicing.

11.0 ACCEPTANCE OF THE ADSS FIBER OPTIC CABLE

11.1 General

- 11.1.1 Acceptance testing of ADSS fiber optic cable shall be made only by qualified personnel using equipment approved by the OWNER.
- 11.1.2 Prior to acceptance of each installed fiber optic section of the system, the OWNER shall use an OTDR to document and verify that each fiber, each fiber pigtail and each splice is within the OWNER'S parameters. The labor to perform the splicing is not part of this bid request. The OWNER or splicing contractor from a separate bid process will evaluate the quality of the cable after the installation is complete.
- 11.1.3 OTDR plots of each fiber in a fiber optic cable and its terminated pigtail shall be made by the OWNER and kept with the project records.
- 11.1.4 The CONTRACTOR shall mount the splice closure and excess cable 18 feet above the ground per the drawings provided. The splice will be performed by a separate contractor and the Construction CONTRACTOR shall mount the closure and excess cable after the SPLICING CONTRACTOR has completed their work.
- 11.1.5 Each of the fibers in each of the cables shall be completely tested with an Optical Time Domain Reflectometer (OTDR) in accordance with EIA-455-59 and EIA-455-61 at 1310 nm and 1550 nm on a bidirectional averaged basis and final attenuation test data recorded and reported to the OWNER.

11.1.6 There shall be no fiber attenuation point discontinuity greater than 0.1 dB at 1310 nm and 1550 nm using an OTDR.

LABOR AND MATERIAL BOND

FY2014-103

Know all men by these presents

That We _____

AS PRINCIPAL, and

AS SURETY are held firmly bound unto the

hereinafter called the Obligee, in the penal sum of

Dollars (\$ _____)

lawful money of the United States, for payment of which sum well and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS: Said Principal has entered into a certain Contract with said Obligee dated _____ 20 _____ (hereinafter called the Contract) for the full and complete performance of

which Contract and the specifications for said work shall be deemed a part hereof as fully as if set out herein.

NOW, THEREFORE, the condition of this obligation is such that if said Principal and all contractors to whom any portion of the work provided for in said Contract is sublet and all assignees of said Principal and of such contractors shall promptly make payments to the persons supplying him, or them, with labor, material, fuel or supplies, for or in the prosecution of the work provided for in said Contract, or in any amendment or extension of or addition to said Contract, and for payment of reasonable attorney's fees, incurred by the Claimant or Claimants in suits on said Bond, then the above obligation shall be void; otherwise to remain in full force and effect. Provided, however, that this Bond is subject to the following conditions and limitations:

- (a) Any person, firm or corporation that has furnished labor, materials, fuel or supplies for or in the prosecution of the work provided for in said Contract shall have a direct right of action against the Principal and Surety of this Bond which right of action shall be asserted in a proceeding, instituted in the county in which the Principal does business. Such right of action shall be asserted in a proceeding instituted in the name of the Claimant or Claimants for his or their use and benefit against said Principal and Surety or either of them, (but not later than one year after the final settlement of said Contract) in which action such claim or claims shall be adjudicated and judgment rendered thereon.

Labor and Material Bond
(continued)

(b) The Principal and Surety hereby designate and appoint

Tom Beehan
(Executive Officer of the Obligee)

as the agent of each of them to receive and accept service of process or other pleading issued or filed in any proceeding instituted on this Bond and hereby consent that such service shall be the same as personal service on the Principal and/or Surety.

(c) The Surety shall not be liable hereunder for any damages or compensation recoverable under any worker's compensation or employers' liability statute.

(d) This bond is furnished in compliance with Tennessee Code Annotated Section 12-4-201 et seq.

In Witness whereof the parties hereto have executed this agreement on the day and date first above written in two counterparts, each of which shall without proof or accounting for the other counterpart, be deemed an original contract.

SIGNED, SEALED AND DELIVERED this _____ day of _____, 2014.

Attest: _____

By: _____ (Seal)
Principal

Attest: _____

By: _____ (Seal)

COMPLETION AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

FY2014-103

THAT _____
(Name and address of legal title of Contractor)

as Principal, hereinafter called Contractor, and _____
SURETY, hereinafter called Surety, and held and firmly bound unto the City of Oak Ridge, as Obligee, in
the amount of _____ Dollars (\$ _____)

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators,
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____, 20____ entered into a
Contract with the City of Oak Ridge for _____
in accordance with the specifications and approved amendments, which Contract is by reference made a
part hereof, including all the obligations thereunder, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that, if Contractor shall promptly and faithfully
perform said Contract, including all the obligations thereunder, then this obligation shall be null and void,
otherwise it shall remain in full force and effect.

Whenever Contractor shall be, and declared by City to be, in default under the Contract or any part
thereof, the City having performed the City's obligation thereunder, the Surety may promptly remedy the
default, or shall promptly at the City's option:

- (1) Complete the Contract in accordance with its terms and conditions; OR
- (2) Obtain a bid or bids for submission to the City for completing the Contract in accordance with
the terms and conditions, and upon determination by Owner and Surety of lowest responsible
bidder, arrange for a contract between such bidder and the City and make available as work
progresses (even though there shall be a default or a succession of defaults under the
Contract or contracts of completion arranged under this paragraph) sufficient funds to pay the
cost of completion or any obligations thereunder.

Any suit under this bond must be instituted before the expiration of two years from the date on which final
payment under the Contract falls due.

SIGNED AND SEALED THIS _____ DAY OF _____ A.D., 2014
IN THE PRESENCE OF:

Witness

By _____
Principal (Seal)

Witness

By _____
Surety (Seal)