

ISSUING DEPARTMENT INPUT DOCUMENT

CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

RTQ
 OTR
 Sole Source
 Bid Waiver
 Emergency
 Previous Contract/Project No. 9234-2/18-2

Contract
 Re-Bid
 Other – Access of Other Entity Contract
 LIVING WAGE APPLIES: YES NO

Requisition No./Project No.: RTQ-02124
 TERM OF CONTRACT YEAR(S) WITH YEAR(S) OTR

Requisition /Project Title: Telecom Services and Materials Pool

Description: The purpose is to establish a pool of Vendors that are capable of providing telecommunication installation services, repairs, equipment and materials.

Issuing Department: ITD
 Contact Person: Santiago A. Pastoriza
 Phone: 3053751084

Estimate Cost: \$13,000,000
 Funding Source: GENERAL
 FEDERAL
 OTHER Internal Ser

ANALYSIS

Commodity Codes:	<u>91579</u>	<u>72559</u>	<u>96435</u>	<u>72584</u>	<u>55725</u>
Contract/Project History of previous purchases three (3) years Check here <input type="checkbox"/> if this is a new contract/purchase with no previous history.					
	<u>EXISTING</u>	<u>2ND YEAR</u>	<u>3RD YEAR</u>		
Contractor:	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Small Business Enterprise:	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Contract Value:	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Comments:	<input type="text"/>				

Continued on another page (s): YES NO

RECOMMENDATIONS

	Set-Aside	Subcontractor Goal	Bid Preference	Selection Factor
SBE	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Basis of Recommendation:

Signed: <input type="text"/>	Date sent to SBD: <u>1/24/2022</u>
	Date returned to SPD: <input type="text"/>

**TECHNICAL SPECIFICATION
TELECOMMUNICATION SERVICES, EQUIPMENT, AND MATERIALS PRE-QUALIFICATION**

3. SCOPE

The purpose of this contract is to pre-qualify local vendors to provide telecom and low voltage services for future spot market telecommunications installation services, repairs, utilities locations, equipment, and material purchases. This contract is used County Wide for all new low voltage projects, as well for repair of low voltage underground utilities and wireless network implementation.

Vendors that meet or exceed the qualification requirements outlined in the solicitation may be awarded under the following groups:

- Group 1: Inside Cabling Installation, Maintenance, and Repair Services
- Group 2: Outside Plant Installation, Maintenance, and Repair Services
- Group 3: Wireless Systems Installation, Maintenance, and Repair Services
- Group 4: Materials

3.1. INDUSTRY STANDARDS AND PRACTICES

All work performed under the resultant contract and awarded in accordance with Section 2.11, "METHOD OF AWARD - SPOT MARKET SOLICITATIONS", shall comply with the telecommunications installation standards as set forth in the Building Industry Consulting Service International (BICSI) Telecommunications Distribution Methods Manual. Additionally, work performed under the resultant work orders must be in compliance with current Electronics Industry Alliance (EIA) / Telecommunication Industry Association (TIA) and National Technical Systems Standards including updates as may be applicable at the time of awards made through the Request for Quotation process.

3.2. DESCRIPTION OF PROJECTS-GROUPS 1,2 AND 3

3.2.1. **Group 1:** Inside Cabling Installation, Maintenance and Repair Services: Here below are some of the examples of services that vendors enrolled in this group may be requested to perform, this list is not inclusive of all projects that can be solicited through this contract.

- a) Design and install inside plant cables systems, using all types and sizes of cables including, plenum rated cable CAT, CAT 5e, CAT6, CAT 6e, and fiber optic.
- b) Fusion splice, terminate and troubleshoot inside plant fiber optic, voice, and data cable systems.
- c) Install cable trays and racking networks and infrastructure to support inside plant cable systems.
- d) Design and install small and medium-size PABXs, electronic key systems and ancillary telephone equipment.
- e) Design and install DC power plants to include batteries, rectifiers, inverters, and power distribution panels.

- f) Design and install AC panels, sub-panels, breakers, conduits and 110 VAC and 220 VAC outlets.
- g) Support, expand, update, and replace existing County-owned telephone and data systems, including legacy systems.
- h) Provide cabling design, installation and maintenance services at County facilities such as the Emergency 911 Call Center, 311 Call Centers and various correction facilities, without disrupting normal operations.
- i) Provide grounding specialist to design and install grounding systems to protect communication equipment from electrical transient current, brownouts, and power surges.
- j) Provide grounding specialist to design and install grounding systems to protect communication equipment from electrical transient current, brownouts, and power surges.

3.2.2. **Group 2:** Outside Plant Installation, Maintenance and Repair Services: Here below are some of the examples of services that vendors enrolled in this group may be requested to perform, this list is not inclusive of all projects that can be solicited through this contract.

- a) Outside Plant Design and Engineer Services for underground utilities and pathway solutions including outside plant fiber optic installation.
- b) Outside Plant Installation Project Management Services to supervise the activities of outside plant construction and modification projects.
- c) Outside Plan Communication construction and installation services, such as integration of new facilities into existing telecommunication system.
- d) Conduct pneumatic field test of installed outside plant equipment.
- e) Conduct utilities field test on existing outside plant infrastructure such as locate, proofing and sonding.
- f) Prepare and submit post installation and final blueprints or "As Built" and/or design documents
- g) Fiber installation, repair and fusion splicing
- h) Provide electrical grounding specialist to design and install grounding system
- i) Outside plant post installation and maintenance support services.
- j) Conduct utilities underground surveys.

3.2.3. **Group 3:** Wireless System Installation, Maintenance and Repair Services: Here below are some of the examples of services that vendors enrolled in this group may be requested to perform, this list is not inclusive of all projects that can be solicited through this contract.

- a) Wireless Systems & Spectrum Range: EVDO, WCDMA (UMTS), HSPA, WLAN (802.11b, 802.11g), WiMAX (802.16e), Spectrum (2.4, 2.5, 4.9 GHz, 700 MHz (4G LTE), 60 & 80 GHz gigabit wireless microwave for backhaul and building connectivity.
- b) Wireless Network Surveys: Radio Frequency (RF) line of sight survey.

- c) Wireless Engineering Design Services: Path planning and design for Point to Point and Point to Multi-point wireless connections, operating in a hub-and spoke, back-to-back repeater configurations, or deployed in redundant ring or mesh topologies.
- d) Wireless Systems Installation Services: Transmitter, Receivers and Antennas.
- e) Documentation of System Design: Perform link analysis and path profiles for wireless connections points in network.
- f) Perform tests to verify throughput (at minimum Ethernet 100mb) utilizing NetIQ Chariot software or other industry accepted software.
- g) System Security utilizes County standards of encryption and authentication methods for securing wireless networks.
- h) Troubleshoot and resolve wireless connection and equipment problems on existing Exalt, Proximal, BridgeWave, IP Wireless, Digi modems, Sierra modems, InMotion Mobile gateways, and other wireless network equipment or Andrew and similar Antenna systems.
- i) Structural Engineering services for erection of antenna towers or antenna poles in accordance with ANSI/TIA/EIA to include Wind Load Calculations etc.
- j) System grounding services for lighting protection
- k) Selection and implementation of the best Distributed Antennas Solution for wireless network integration

3.3. TELECOMMUNICATION MATERIALS, EQUIPMENT AND RELATED ACCESSORIES

All materials, equipment, parts, and components to be provided to Miami-Dade County by vendors awarded a specific County Purchase Order under the resultant work order shall conform to current ANSI/TIA/EIA-568-B Standards or the replacement thereof, and engineering requirements set forth by the original manufacturer.

The County reserves the right to order any brand of equipment, materials, or accessories, consistent with defined scope of this contract, and to request that installation, maintenance, or warranty services under the applicable contract groups be performed only by vendors who are authorized to perform such services by the OEM.

3.3.1. Original Equipment Manufacturer OEM Listing

The list below represents some of the Original Equipment Manufacturers (OEM) that the County may request to purchase from vendors pre-qualified under this group. County OEM requirements are not to be limited to the manufacturers listed below. The County reserves the right to conduct spot market purchases and request equipment under this contract from other manufacturers not referenced as needed.

AMPHONEL	ANDREW ANTENNA SYSTEMS
APC	BELDEN
BERK-TEK	BOGAN COMMUNICATIONS
BRIDGEWAVE	CARLON
CEECO TELEPHONE EQUIPMENT	CIRCA PROTECTORS
COMPU-LINK CABLE ASSY	COMSCOPE

CORNING CABLE	CORTELCO EXCEL TECH
CRADLE POINT	DANTONA INDUSTRIES
DIGI INTERNATIONAL	DOLPHIN COMPONENT
EXALT COMMUNICATIONS	GENERAL CABLE
GENERAL ELECTRIC	GREAT LAKES WIRE & CABLE
GREENLEE	HP-3COM
IMATION	INMOTION TECHNOLOGY
IP WIRELESS	ITW LINX
KRONE TOOL	LYNN ELECTRONICS
NORTEL	ORTRONIC
PANASONIC	PANDUIT
PLANTRONICS	POLYCOM
PROXIM	QUEST MANUFACTURING
RADWIN	RUCKUS
SIERRA MODEMS	SIEMENS
THOMAS & BETTS	SIGNAMAX
TRIPP-LITE	TOSHIBA
ULTRATEC	UBIQUITI
VALCOM SPEAKERS	UNIDEN
VODAVI PHONES	VIKING PHONES
VIKING PHONES	WIALAN

3.3.2. Equipment and Installation Hardware List

Listed below represents some of the telecommunication's equipment and installation hardware that may be purchased by the County, the list is not all inclusive and may not reflect mergers, acquisitions, or new industry practices.

- a) New Telephones and accessories (exclude Cellular & Satellite phones)
- b) Telecom Hardware Racks, Cabinets, Mount Boxes and Accessories such as connectors, adapters, plugs, jacks, etc
- c) Network and telecommunication Switches and Accessories.
- d) Control Cards.
- e) Telecommunication power module, amplifiers, and rectifiers.
- f) Telecommunications Antennas; Distributed Antennas Systems (DAS)
- g) Structured Low Voltage Telecommunication Cable and Accessories such as Cat 5, Cat6 Fiber, Plenum cable, patch cabler, conduits, etc.
- h) Wireless Headsets and Accessories
- i) Text Telephone Devices and Accessories
- j) Rechargeable Batteries – Telecom Equipment
- k) Expansion Boards for Digital Hybrid Systems (DHS);
- l) Telecommunication's Software
- m) Telecommunications Tools (All Types);
- n) Wireless Broadband and Wi-Fi Modems

- o) Wireless broadband mobile gateways
- p) Wireless Access Point