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## Special Provision to Item 2

### Instructions to Bidders

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Item 2, "Instructions to Bidders," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 2.2., "Eligibility of Bidders,"** is supplemented by the following.

- 2.3. **Technical Qualification.** The Department will not accept bids from Bidders that have not met the technical qualifications established by the Traffic Safety Division. Technical qualification is required for certain categories of Intelligent Transportation Systems (ITS) work. This technical qualification is in addition to all other Bidder qualifications required by the Department.

Electronically submit ITS Technical Qualification Forms and supporting documentation demonstrating the capability of the Bidder or the Bidder's proposed subcontractors to successfully perform the categories of work in accordance with Sections 2.3.1.–2.3.7 of this Specification. Use the ITS Technical Qualification Form pertinent to each work category. Submit the forms and supporting documentation by 12:00 P.M. (CST), 10 calendar days before bid opening, to [ITS\\_Tech\\_Qual@txdot.gov](mailto:ITS_Tech_Qual@txdot.gov). Incomplete submittals or submittals that do not meet the technical qualifications will be rejected, and additional information will be required. Failure to submit the qualification forms and supporting documentation by the deadline will be sufficient reason for declaring the bid nonresponsive in accordance with Article 2.7., "Nonresponsive Bid." The categories of work pertinent to this Contract are listed in "Important Notice to Contractors" Special Provisions in the Contract.

ITS Technical Qualification Forms and additional information on becoming a qualified Bidder may be found on the Department's website or by contacting the Traffic Safety Division by email at [ITS\\_Tech\\_Qual@txdot.gov](mailto:ITS_Tech_Qual@txdot.gov) or by calling (512) 416-3118.

Once a Bidder or the Bidder's proposed subcontractor has been approved as having met the requirements of this Special Provision, any substitutions or replacement contractors must be submitted to the Traffic Safety Division for approval before performing work on the pertinent work category.

A Bidder or the Bidder's proposed subcontractor must have the level of expertise needed to successfully complete the work. The experience requirements for each work category listed below include three completed projects, one of which must have been completed within the past 5 yr. Vendor reference statements for equipment experience are required under certain work categories but may be waived if the Bidder has acceptable documentation from a vendor demonstrating their experience installing the equipment without onsite assistance.

- 2.3.1. **Category A. Pulling Fiber Optic Cable.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the installation of fiber optic cable through an outdoor conduit system and terminating in ground boxes, field cabinets or enclosures, or buildings; and
- **Completed Projects.** Three completed projects where the personnel pulled fiber optic cable, minimum 5 mi. in length, through an outdoor conduit system for each project. The completed fiber optic cable systems must have been in continuous satisfactory operation for at least 1 yr.

2.3.2. **Category B. Splicing and Testing of Fiber Optic Cable.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the fields of fusion splicing and testing of fiber optic cable installed through a conduit system and terminating in ground boxes, field cabinets or enclosures, or buildings. Experience must include the following:
  - termination of at least 48 fibers within a fiber distribution frame,
  - optical time-domain reflectometer (OTDR) testing and measurement of end-to-end attenuation of single-mode and multi-mode fibers,
  - system troubleshooting and maintenance,
  - training of personnel in system maintenance,
  - use of watertight splice enclosures, and
  - fusion splicing of fiber optic cable that meets the tolerable decibel (dB) losses shown in Table 1; and

**Table 1**  
**Sample Table**

Mode	dB Loss Range
Single mode	0.05–0.10
Multi-mode	0.20–0.30

- **Completed Projects.** Three completed projects where the personnel performed fiber optic cable splicing and terminations, system testing, and system troubleshooting and maintenance during the project and provided training on system maintenance. Each project must have consisted of a minimum 5-mi. length of fiber optic cable. The completed fiber optic cable systems must have been in continuous satisfactory operation for at least 1 yr.

2.3.3. **Category C. System Integration.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. of providing system integration on wire line and wireless projects including, but not limited to, programming of Layer 2 Ethernet switches, integrating into existing systems, and coordination with traffic management centers; and
- **Completed Projects.** Three completed projects requiring system integration and configuration of hardware including, but not limited to, Ethernet switches, video encoders and decoders, and radios.

2.3.4. **Category D. Dynamic Message Sign (DMS) Installation.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the installation of DMS signs;
- **Completed Projects.** Three completed projects consisting of at least two signs in each project where the personnel installed, integrated, and tested DMS on outdoor, permanently mounted overhead structures and pertinent sign control equipment. The completed sign system installations must have been in continuous satisfactory operation for at least 1 yr.; and
- **Equipment Experience.** One project (may be one of the three projects in the preceding bulleted item) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform the installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier that was referenced in the qualification documentation.

2.3.5. **Category E. Closed-Circuit Television (CCTV) Equipment Installation.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the installation of CCTV camera systems;
- **Completed Projects.** Three completed projects consisting of at least five cameras in each project where the personnel installed, tested, and integrated CCTV cameras on outdoor, permanently mounted

structures and pertinent camera control and transmission equipment. The completed CCTV camera system installations must have been in continuous satisfactory operation for at least 1 yr.; and

- **Equipment Experience.** One project (may be one of the three projects in the preceding bulleted item) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier that was referenced in the qualification documentation.

2.3.6.

**Category F. Wireless Communications.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the installation of wireless communications. Experience must include the following:
  - conducting radio installation studies, which include signal noise studies, spectrum analysis, antenna gain and radio power calculations, system attenuation, and measurement of standing wave ratios;
  - installation, troubleshooting, and repair of broadband radio systems, which include equipment installation, configuration of radios, antenna calibration, and cabling; and
  - installation, troubleshooting, and repair of interconnected Ethernet networks (local area network [LAN] and wide area network [WAN]), which include cabling, switch or router configuration, and network analysis;
- **Completed Projects.** Three projects consisting of wireless communications installation, troubleshooting, and repair. Each project must include transmitting signals over a minimum 1-mi. distance and installation of at least three devices; and
- **Equipment Experience.** One project (may be one of the three projects in the preceding bulleted item) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier that was referenced in the qualification documentation.

2.3.7.

**Category G. Radar Detection Systems.** Meet the following experience requirements.

- **Minimum Experience.** Three yr. continuous existence offering services in the installation of radar detection systems. Experience must include the following:
  - freeway and arterial management;
  - forward-fire and side-fire applications;
  - single-zone and dual-beam detection; and
  - equipment setup, testing, and troubleshooting;
- **Completed Projects.** Three projects consisting of installation, configuration, and setup of radar detection systems; and
- **Equipment Experience.** One project (may be one of the three projects in the preceding bulleted list) in which the personnel worked in cooperation with technical representatives of the equipment supplier to perform installation, integration, or acceptance testing of the work. The Contractor will not be required to furnish equipment on this project from the same supplier that was referenced in the qualification documentation.