

The City of Fullerton is requesting fixed price estimates to provide a fiber-optic Ethernet infrastructure for the City of Fullerton, California. **Responses are due by September 25, 2009.**

Proposals should be submitted to the  
City Manager's Office  
303 W. Commonwealth Ave  
Fullerton, CA 92832  
Attention: Robert S Ferrier.

Technical questions should be directed to the project manager for the project, Ms Helen Hall, IT Manager for the City of Fullerton, who may be reached at 714-738-5309.

## 1.0 SCOPE

The City of Fullerton referred to hereinafter as the "City," is requesting firm fixed price estimates to construct a fiber optic institutional network (I-Net).

The City contemplates using the information and pricing data from the selected estimate to complete a city request for Federal Government Stimulus under the Broadband Technology Opportunities Program to support high bandwidth connectivity. The solicitation should result in a cost estimate in sufficient detail to provide the City and the selected company with a 'shovel ready' project and plan, ready to go upon receipt of Federal government funds and go-ahead. Should the City be awarded funding, the City may issue a subsequent request for proposals for construction of the I-Net. At this time, the City is not prepared to move forward with actual construction of the I-Net, nor has it identified funding for that task.

The proposed I-Net project implementation shall include, but not necessarily limited to, all aspects of detailed design, construction, installation, test and verification, documentation, training, and follow-on support service as set forth, herein.

## 2.0 APPLICABLE DOCUMENTS

2.1 Technical Requirements, Appendix A.

2.2 Fullerton Site map, showing city fire stations, city hall, existing and planned fiber hardware, and city trails, etc. Appendix B

2.3 Independent Evaluation and Cost/Benefit Study of Institutional Network (I-Net) Communication Options for the City of Fullerton, CA, January 2009. Appendix C

2.4 Fullerton City Standards and Regulations: The Work hereunder shall be done in accordance with the APWA Standard Specifications for Public Works Construction ("Green Book"), 2006 Edition, and all current supplements thereto, insofar as the same may apply and in accordance with these Special Provisions.

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

## 2.5 Industry Telecommunications Standards and Specifications

## 2.6 Federal and State Standards and Specifications

### 3.0 REQUIREMENTS

3.1 General. The objective of the I-Net is to create a private, customer-owned fiber optic backbone Ethernet infrastructure that could serve the current and future bandwidth needs of institutions of the City of Fullerton. It would be constructed in such a manner that it becomes a permanent part of the city infrastructure, using construction methods, parts, materials, and processes to insure long life with a minimum of maintenance.

Initially, the I-Net would connect city-owned facilities; however, it should also embody potential for growth so that it could in time support the schools located within the City, local medical facilities, local institutions of higher learning, and additional public and private use.

In addition, the system could be implemented to meet the demands for future telecom services, many of which will require very high bandwidth. In order to best meet the demands of educational, governmental, medical and other public institutions, the goal is to construct an I-Net that is customer-owned and controlled, but for which the operation and maintenance can be outsourced. Fiber is expected to be the backbone of a network that not only serves the sites where it terminates, but myriad devices, both wired and wireless, that may be connected to it by partner institutions through gateways at those sites.

3.2 The specific technical requirements are shown in Appendix A.

### 4.0 DELIVERABLES

4.1 Respondents shall deliver a complete cost estimate for a fiber optic network that meets the routing and technical requirements of Appendix A. The cost estimate will be complete with an updated specification, to include testing requirements, installation drawings and instructions, and operation and support requirements.

4.2 Respondents shall deliver a cost estimate for a tested and installed fiber optic network that meets the routing and technical requirements of Appendix A.

4.3 Respondents shall deliver the cost estimate for installed equipment to house the terminals at each of the hubs as well as the operation and maintenance equipment to be located within Fullerton City Hall, the standard access and connection equipment in the hubs, and the standard connection devices in each of the facilities.

4.4 All documentation shall be in two forms: DVD and paper formats. Documentation shall include a minimum of one DVD and 3 copies of the paper format.

4.5 The cost estimate shall include consideration for two training sessions to educate the city operators and technicians on the operation and maintenance of the system. The two sessions would be one within month of the completion of the installation of the system, and a second session within six months, at a mutually agreed date, to ensure all necessary employees have completed the training.

Attachments:

- A. Technical Requirements
- B. Fullerton Site map, showing city fire stations, city hall, existing and planned fiber hardware, city trails, etc.
- C. Independent Evaluation and Cost/Benefit Study of Institutional Network (I-Net) Communication Options for the City of Fullerton, CA, January 2009.
- D. The Case for Creating a Telecom Institutional Network, A Proposal for the Fullerton City Council, dated December, 20, 2007