

# Request for Proposal FTTX Design/Build

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# **Section 1: General Information**

# 1.1 Background

SandyNet is a department of the City of Sandy that offers internet-related services to businesses and residents of Sandy as well as businesses and individuals outside of its civil township. SandyNet is an authorized Competitive Local Exchange Carrier (CLEC) through the Oregon Public Utility Commission (PUC) and a public utility of the City of Sandy that is owned and operated by the people of Sandy. SandyNet primarily focuses on fiber-to-the-home/business. In November of 2021, Sandy City Council allocated ARPA funds to SandyNet to build out underserved areas in town, including businesses, apartments/MDUs and mobile homes. Note: that this entire project is funded from multiple sources.

Additionally, the City of Sandy uses dark fiber from the SandyNet network to connect city owned/operated facilities. These facilities include department buildings as well as systems that run server, water and tower sites.

# 1.2 FTTH Project Overview

SandyNet already has fiber-to-the-home and fiber-to-the-business, which passes 100% of single family residential SFR and 60% of businesses. Since the deployment of fiber optic, those that do not have access to fiber, are left with little to no options for stable and affordable internet. This project aims to deploy as many underserved areas as possible, heavily using the infrastructure already built out. SandyNet desires to expand upon its existing GPON network, using the same ideas and standards used in the FTTH deployment of 2014.

# 1.3 RFP Process Overview

This RFP is soliciting proposals from qualified contractors to bid on a design/build implementation of a FTTH overbuild of the currently underserved areas in Sandy (see Appendix A: Drawings).

## 1.3.1 Acknowledgement

Contractors planning on responding to this RFP and/or submitting any clarification questions should submit an acknowledgement of receipt containing their intent to respond as well as contact information via email to rfp@sandynet.org by 2/14/2022.

## 1.3.2 Questions/Clarification

All questions in regard to this RFP must be submitted via email to rfp@sandynet.org. Answers to all submitted questions will be sent via email to all registered respondents (those who submitted a letter of intent to respond see: 1.3.1).

The last day for questions to be submitted is 2/21/2022. All responses to submitted questions will be issued by 2/24/2022.

## **1.3.3** Submission of response

#### Responses are due on 3/2/2022 no later than 5:00PM PST.

All responses should be submitted via email to rfp@sandynet.org. In the event that the response document size exceeds 20MB respondents are responsible for submitting the electronic document by another means. Either physically on a disc/portable storage device. Or by providing information to download the document(s) via http or ftp.

Upon receipt of submissions the City of Sandy will confirm via email that the document was received.

#### 1.4 Schedule

2/9/2022	RFP issued
2/14/2022	RFP Acknowledgement forms returned to City of Sandy
2/21/2022	Last date for submission of written questions
2/24/2022	Final responses to submitted questions
3/2/2022	Proposal submissions due.

# Section 2: FTTH Design/Build Requirements

## 2.1 Installation Requirements

This RFP is soliciting proposals from qualified contractors to bid on a design/build implementation of a FTTX overbuild of the areas identified as underserved in Sandy (see Appendix A: Drawings). The RFP response shall offer a single project with three separate BOMs and designs:

- Design and Bill of Materials for connection from the Sandy central office to Sandy's existing Wastewater Treatment Plant (WWTP)
- Design and Bill of Materials for non ARPA expendable funds for SandyNet overlay across new WWTP design (Exhibit B).
- Design and Bill of Materials for the MDU/Businesses for SandyNet ARPA The requirements of this implementation are as follows:

## 2.1.1 Installation methods

Installation method of fiber infrastructure is at the discretion of the contractor. Regardless of the method chosen the following requirements should be met. Any exceptions to these requirements should be noted in the response with an explanation of the reason for the exception.

- All fiber must be tested on the reel prior to being deployed, test results must be provided.
- Minimum of 36" cover for all cable installed in the Right of Way.
- All installed cable must be locatable. Contractors must submit specifications of how location methods will be installed and accessed.
- All landscaping, sidewalks, road surfaces, curbs and gutters, etc. must be restored to their previous condition upon completion of the installation.
- All installed cable must be pulled into appropriately sized conduit with innerduct to maximize available conduit space.

## 2.1.2 Backhaul Network

The City of Sandy currently has fiber optic infrastructure in place that will be used for backhaul access to feed the underserved locations. Locations of mainline in relation to each underserved area will be sent after acknowledgement of the RFP has been received (see 1.3.1). Responses must include a 1 ¼" or 2" conduit with innerduct and at least 12 strands of single-mode fiber pulled in from the primary

distribution cabinet to tie in with this vault location. Contractor will also leave a pull string in this conduit for future use.

## 2.1.3 Distribution Network

## a. Type of Deployment

The distribution network shall utilize the already existing GPON/AE network or the distribution network must be compatible with GPON requirements, such as not to exceed 20km from OIM. Electronics used are Calix ONT and OLTs and access systems. For AE connections, the design should reflect the use of a pair of fiber to offer a duplex connection.

# b. Distribution Vault(s)/Pedestals

Distribution vaults shall be installed as necessary for fiber splice points. Vaults/pedestals and pull points shall be placed every 500ft of mainline or distribution conduit to reduce friction and strain during installation. A minimum of 50ft of slack of each fiber cable (FO) shall be bundled in the vault, if a splice case is used. A minimum of 15ft of buffer tube shall be stored in the slack tray of a splice case or terminal.

# c. Distribution Conduit

All conduits for the distribution network should be a minimum of 1.25".

# d. Network capacity

Distribution feeder fiber bundles (F1 fiber) leaving the central office or distribution point shall maintain a minimum of 25% of excess fiber capacity for future growth.

Quality of product shall include the ability to deploy XGS-PON in the next two to five years.

Splitters shall not exceed a 1x32 split ratio. Cascade split distribution is acceptable if the tree is balanced and the optical budget to the CSP shall not exceed -18Dbm.

# 2.1.4 Customer/City Premise Connections

# a. Customer Splice Point/Terminal

The distribution network shall end at the customer splice point (CSP) or terminal (if the building contains multiple units/sites/suites). Terminals and CSPs shall be fed from F2 fibers.

# b. Customer Connection

After the CSP/Terminal, a design and deployment strategy should be explained on how to connect the modem inside the unit. Bringing fiber and placing an ONT in each unit/building, using G.fast to interface with existing cat3 cable or higher, or a combination of both throughout the project should reflect costs for install active or passive equipment, omitting the customer premise equipment (CPE) including, but not limited to electrical construction, fiber count, enclosures, etc.

## c. City Facilities Connections

After the CSP/Terminal, a design and deployment strategy should be explained on how to connect to new and existing City of Sandy facilities. Dark fiber shall connect city owned buildings, and shall demarc inside of a communications closet. Tie-in locations will use existing conduit or F1 strands on SandyNet mainline to connect back to the central office.

## 2.2 Response Contents

Responses must include a preliminary engineering design with the following information:

- Map of proposed locations of all distribution cases and vaults.
  - SandyNet MDU/Businesses
  - City of Sandy Facilities
- Map of proposed fiber path information including strand counts, splitter location/size, conduit size and, slack loop locations and lengths, and approximate overall lengths for each path.
- Overview of installation method(s) for all buried cable, including established cost per foot of each method.
- Splicing methods used and cost per splice.
- Labeling procedures and specifications for distribution cases and ONTs.

Pricing information must be submitted in two sections.

- 1. A lump sum cost with details on the unit costs specified above for the distribution network.
- 2. A unit cost on a price per dwelling/business unit basis to connect each unit to the distribution network. This cost per location model should also have a breakdown of unit costs specified above.

# **Section 3: Contract Requirements**

## 3.1 Contract Requirements

The successful proposer shall furnish a performance bond equal to the full amount of the final, negotiated contract price, in conformance with the requirements of ORS 279C.380.

The successful proposer shall furnish a Certificate of Insurance named the City of Sandy, its officers, agents and assigns as additionally insured. The certificate shall identify the following minimum coverages:

General Aggregate Products - Completed Operations Aggregate Personal Injury Each Occurrence (bodily injury and prop. damage) Property Damage Liability

Excess of Umbrella Liability

General Aggregate
 Each Occurrence
 Automobile Liability

The project is 100% federally-funded using funds from the American Rescue Plan and is subject to Oregon prevailing wage requirements found in ORS 270C.800 through 279C.870. For purposes of determining prevailing wages the BOLI website displays the Prevailing Wage Rate Book, (effective Jan 1st, 2022) published by the Oregon Bureau of Labor and Industries is adopted and incorporated in the contract documents by reference.

By submitting a proposal each proposer certifies that Oregon Prevailing Wages Rates are included in the price proposal.

# **Section 4: Scoring**

#### 4.1. Selection and Evaluation Process

The SandyNet General Manager and Administration will review the written proposals. Proposals will be evaluated to determine which ones best meet the needs of the ARPArequirements and the city. After meeting the mandatory requirements, the proposals will be evaluated on both their technical and feed aspects. The selection committee will select the Proposer which best meets these needs. Proposals will be evaluated in accordance with the following:

Proposal submitted with (1) paper copies and one (1) electronic copy		Pass/Fail
Adhere to ARPA requirements for broadband		Pass/Fail
<ul> <li>Relevant experience related to this project and network type</li> </ul>		35 points
d. Understanding of, and the approach to, the project		35 points
e. Cost proposal		30 points
	Total	100 points

#### 4.2. Presentation/Interview

At the option of the city, the top scoring proposers (based on the criteria points) may be asked to make a presentation of their proposal. This will provide an opportunity to clarify or elaborate on the proposal, but will not, in any way, provide an opportunity to change any fee amount originally proposed. The city's project manager will schedule the time and location of these presentations and notify the selected firms. If the city elects to conduct a presentation/interview process, 25 criteria points will be assigned to the process and will be added to the participating proposers' total points.

#### 4.3. Investigation of Reference

The city reserves the right to investigate references and the past performance of any proposer with respect to its successful performance of similar projects, compliance with specifications and contractual obligations, its completion or delivery of a project on schedule and its lawful payment of employees and workers.

#### 4.4. Clarification of Proposals

The city reserves the right to obtain clarification of any point regarding a proposal or to obtain additional information necessary to properly evaluate a proposal. Failure of a proposer to respond to such a request for additional information or clarification could result in rejection of their proposal.

## 4.5. Reservation in Evaluation

The selection committee reserves the right to either: (a) request "Best and Final Offers" from the two finalist firms and award to the lowest priced or (b) to reassess the proposals and award to the vendor determined to best meet the overall needs of the city.

## 4.6. Intent of Award

Upon review of the proposals submitted and recommendation by the selection committee, the SandyNet General Manager may negotiate a scope of work and a general services agreement with one firm or may select one or more firms for further consideration.

## 4.7. Protest of Award

A protest of the city's intent to award a contract may only be filed in accordance with OAR 137-047-0740 or OAR 137-049-0450, as applicable.

## 4.8. Proposal Rejection

The city reserves the right to:

- a. Reject any or all proposals not in compliance with all public procedures and requirements;
- b. Reject any proposal not meeting the specifications set forth herein;
- c. Waive any or all irregularities in proposals submitted;
- In the event two or more proposals shall be for the same amount for the same work, the city shall follow the provisions of LCRB 30.095 and Section 137-095 of the Oregon Attorney General's Model Public Contract Manual;
- e. Reject all proposals;
- f. Award any or all parts of any proposal; and
- g. Request references and other data to determine responsiveness.

# Appendix A

The following map has roughly 450 serviceable units. Unit addresses and mainline tie in locations will be provided after acknowledgement requests defined in 1.3.1.



# Appendix B

The following map shows the proposed design path from existing SandyNet infrastructure to the WWTP.

