# **Rochester Community Schools**

501 W University Drive Rochester, MI 48307

# Request for Proposals Self-Provisioned Fiber

**Request For Proposal Year: 2022/23 FY2022 E-Rate FORM 470 – 220000013** 

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# REQUEST FOR PROPOSALS – SELF-PROVISIONED FIBER (SPF)

# 1.0.0 <u>INVITATION TO BID</u>

#### 1.1.0 BID ACCEPTANCE

Rochester Community Schools, hereby known as "District", will accept sealed responses ("Bids") to this Request for Proposals (RFP) for a Self-Provisioned Fiber (SPF) project which comply with the Invitation to Bid, Bidder Instructions, General Conditions, Universal Service Fund (USF) Conditions, Scope of Work, Timeline Requirements, Awarded Contract Requirements, and Products and Services Specifications set forth below and submitted to the District at the following address:

Rochester Community Schools Purchasing Department – Attention: Jennifer Fickel 501 W University Drive Rochester, MI 48307

#### 1.2.0 TECHNOLOGY-NEUTRAL COMPETITIVE BID REQUEST

In accordance with USAC rules, this bid is a competitively technology-neutral request. Service providers interested in providing alternate telecommunication bids, such as lit fiber, dark fiber, or any other third-party network solutions, refer to the other RFP associated with this bid request for specific details. The Bidder may also combine other services with the self-provisioned fiber bid response. However, all bids must meet the 10Gbps connection speed requirement. The District reserves the right to perform a cost analysis of all bids received and decide which service type is the most cost-effective type of service (i.e., Self-Provisioned Fiber, Lit Fiber, Dark Fiber, or other third-party network solutions). Once the most cost-effective service type is selected by the District, a bid evaluation will only be performed on that type of service to decide the bid award.

#### 1.3.0 INTENT TO BID FORM

All Bidders must complete and submit the Intent to Bid Form, Appendix A, <u>no later than</u> **July 15, 2021.** The Bidder shall be responsible for the timely delivery of the Intent to Bid Form. The Bidder shall make no additional stipulations on the Intent to Bid Form or qualify their Bid in any other manner.

#### 1.4.0 FACILITIES/BUILDING WALKTHROUGH

No walkthrough is required for this RFP.

#### 2.0.0 BIDDER INSTRUCTIONS

#### 2.1.0 BID OPENING

All Bid responses to this RFP must be <u>in duplicate</u> in a sealed opaque envelope labeled as follows: Self-Provisioned Fiber (SPF) - FY2022 USF Bid and "August 05, 2021". The bidder must also include an electronic copy of all bid materials on a flash drive as well as the paper copies.

- **2.1.1** No oral, telephonic, telegraphic, e-mail or facsimile Bids will be considered.
- 2.1.2 No Bids will be considered after 12:00 P.M., August 05, 2021.
- 2.1.3 The Bidder shall be responsible for the timely delivery of the Bid; the District shall not be liable to any Bidder for any delivery or postal delays and postmarking to the bid opening date will not substitute for receipt of the Bid.
- 2.1.4 All timely submitted Bids received by the District will be opened virtually at the Administration Building, 501 W University Drive, Rochester, MI 48307 at 2:00 P.M., August 05, 2021 for recommendation to the Board of Education at a future regularly scheduled meeting. The opening will be viewable via a Zoom Meeting (Meeting ID: 945 7543 2341 Passcode: 654321).
- 2.1.5 If the District is closed due to unforeseen circumstances on the bid opening date, Bids will be due on the next day that the District is open.

#### 2.2.0 BID BONDS

The Bidder shall submit a five percent (5%) Bid Bond, of the total base Bid price, made payable to **Rochester Community Schools**, with the sealed Bid. Any Bids received without a Bid Bond will be rejected by the District.

#### 2.3.0 CLARIFICATIONS AND CORRECTIONS

Direct all questions regarding this RFP by email to: **Paul Tranchida at: rfp@rochester.k12.mi.us.** The resulting answers, along with the questions shall be posted on the USAC website.

#### 2.4.0 GENERAL REQUIREMENTS

- **2.4.1** The District or its representatives shall not be held responsible for expenses incurred in the preparation or subsequent presentation of the Bid response.
- **2.4.2** This RFP for (SPF) is not an offer to enter a contract, but rather a solicitation for Bids.
- **2.4.3** The Bidder shall supply, upon request, samples and/or brochures of the proposed materials and equipment with the Bid.
- 2.4.4 The District reserves the unconditional right to reject any Bid submitted without a five percent (5%) Bid Bond, signed Bid Signature Page, Bill of Materials, Familial Disclosure Affidavit, Iran Linked Business Affidavit, and list of four (4) references.

#### 2.5.0 BID IDENTIFICATION REQUIREMENTS

The Bid shall include the full legal name of the Bidder, its business address, telephone number, and a statement identifying the Bidder as a sole proprietorship, partnership, corporation, or other legal entity. A proprietorship shall state the full name of the proprietor, a partnership shall state the full names of the general partners, and a corporation shall identify the state in which it is incorporated. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract.

- **2.5.1** The Bidder shall complete and submit, along with the Bid, a Bid Signature Page, Appendix B, in long hand, in ink, by an authorized representative.
- **2.5.2** The Bidder shall complete and submit, along with the Bid, a Bill of Materials, Appendix C, summarizing the details of the Bid.
- **2.5.3** The submitted Bid shall include a Familial Disclosure Affidavit form, Appendix D, which is properly completed, signed by an authorized representative of the Bidder and notarized with an affixed, raised notary seal.
- 2.5.4 The submitted Bid shall include a list of at least four (4) references, one (1) of which must be a school or school district, for similar work performed within the past three (3) years.
- 2.5.5 The Bid shall be accompanied by a sworn and notarized affidavit that represents and warrants that the bidder, including its officers, directors and employees, is not an "Iran Linked Business" within the meaning of the applicable Michigan Public Act No. 517 of 2012, and that in the event bidder is awarded a contract as a result of this RFP, the bidder will not become an "Iran Linked Business" at any time during the course of performing under the contract. The Board of Education will not accept a Bid that does not include the sworn and notarized Iran Linked Affidavit, Appendix E. Bids in non-compliance with this request are subject to rejection.

#### 2.6.0 BLUEPRINTS AND DRAWINGS

Blueprints and/or drawings of the facilities will be made available to the Bidder by the District in the following manner:

**2.6.1** The District shall provide drawings associated with this project as part of this RFP. (Appendix F and G)

#### 2.7.0 **DEFINITIONS**

The foregoing definitions are made available for this Request for Proposals (RFP) only.

- **2.7.1 Alternate Bid** An amount stated in the Bid to be added or subtracted from the amount of the Base Bid, if said change in the Scope of Work, method of construction and/or materials is accepted by the District.
- **2.7.2 Base Bid** The sum stated in the Bid for which the Bidder offers to perform the Scope of Work wherein work may be added or subtracted for sums stated in the Alternate Bid, if any.
- **2.7.3 Bid(s)** A complete and properly executed proposal to perform the Scope of Work, or designated portion thereof, for the sums stated within the Bid.
- **2.7.4 Bidder(s)** Business Entities and/or Person(s) submitting the Bid.
- **2.7.5 District** Rochester Community Schools
- **2.7.6 Selected Vendor/Contractor** The Bidder(s) receiving formal notice of acceptance of his/her Bid(s) and has been duly served by an officer *or* agent of the District duly authorized to give such notice.
- 2.7.7 Self-Provisioned Fiber Wide Area Network (WAN) owned by the District.

#### 3.0.0 GENERAL CONDITIONS

#### 3.1.0 SUMMARY

The purpose of this Self-Provisioned Fiber RFP is to provide the necessary performance guidelines and criteria, bandwidth specifications, connectivity requirements, locations and timelines so that all potential Bidders may Bid their best solution(s) at the required USAC/SLD Lowest Corresponding Price (LCP) for E-rate reimbursements. Bidders shall adhere to all the technical requirements herein this RFP.

#### 3.2.0 RIGHTS OF ACCEPTANCE OR REJECTION

The District's Board of Education reserves the right to reject any or all Bids in whole, or in part, and accept any Bid or portion of the Bid that, in their opinion, best serves the interests of the District.

#### 3.3.0 OUALIFICATION OF BIDDERS

For the purpose of assuring the District of the quality of workmanship, materials, products and/or services, the Board of Education will retain the right and has complete discretion to qualify or disqualify any Bidders on the basis of available information concerning the Bidder's ability to perform as needed and the suitability of the products and/or services included in the Bid as described in sections 3.4.0 and 3.5.0. **Each Bidder, by submitting a Bid, represents that:** 

- **3.3.1** The Bidder has read and understands all the Bid requirements, conditions and specifications contained herein.
- **3.3.2** The Bidder has the option to visit the District work site and familiarized themselves with the local conditions under which the work is to be performed.
- **3.3.3** The Bid is based upon the materials, systems and equipment described, without exception, in all Bid documents supplied by the District.
- **3.3.4** The Bidder who does not attend the walkthrough meeting as scheduled section (1.3.0) may be disqualified at the District's discretion.

#### 3.4.0 VARIANCE AND PRICE

Any variance from the specifications in section 8.0.0 of this RFP must be fully explained in writing by the Bidder. All prices quoted in the Bid must be on a unit price basis and include the total price. The price of an item or unit of a given product as promised in a Bid cannot be changed by the selected vendor/contractor provider regardless of whether the District changes the quantity of the item or unit needed.

#### 3.5.0 MANUFACTURER(S) BRANDS/MODEL NUMBERS

The naming of a manufacturer(s), brand or model number will not be considered as excluding other brands or model numbers for purposes of later providing the products as promised in the Bid. Specifically, similar products with comparable construction, material and workmanship will be considered as equal. Notwithstanding, the Board of Education of the District has complete discretion to evaluate the merits of all Bids submitted and can take into consideration the brand and/or model numbers set forth in the Bids.

#### 3.6.0 MANUFACTURER(S) SUBSTITUTIONS

Any substitution from the specified products and/or services by the manufacturer(s) is acceptable if at no additional cost to the District and approved by an authorized district representative prior to placing the order for said products and/or services. The District reserves the right to refuse any and all manufacturer(s) substituted products and/or services.

#### 3.7.0 MANUFACTURER(S) DISCOUNTS

The District reserves the right to receive any and all manufacturer(s) price reductions, discounts or rebates that are received by the selected vendor/contractor for the specified products and/or services. The selected vendor/contractor agrees to pass any and all cost savings from the manufacturer(s) for the specified products and/or services to the District by way of a setoff of monies owed or refund of monies paid by the District.

7/8/2021

#### 3.8.0 CLEAN-UP

The selected vendor/contractor must, at all times, keep the premises free from accumulations of waste materials, caused by the work; and upon completing the work, must remove all work-related rubbish from and about the building(s) and must leave the work area broom clean, or its equivalent. In the case of a dispute, the District may remove the rubbish and charge the cost to the selected vendor/contractor.

#### 3.9.0 ROYALTIES AND PATENTS

The selected vendor/contractor must pay for all royalties, copyright, trademark and patents and must defend all suits for claims or infringements on copyrights, trademarks and/or patent rights and shall indemnify and hold the District harmless from any and all claims and/or loss related to claims and/or infringements on copyrights, trademarks and/or patent rights, including reasonable attorney fees and costs incurred by the District.

#### 3.10.0 ADDENDA

Any clarifications or modifications to the specifications for the RFP will be issued by the District in the form of an addendum. Any addendum issued during the bidding time will become part of the specifications and posted on the USAC website as set forth in section 2.3.0.

- 3.10.1 No verbal statements by the District will be considered as binding or enforceable against the District.
- **3.10.2** All requests for clarifications or modifications must be submitted within seven (7) days after the release of this RFP.

#### 3.11.0 FEDERAL, STATE AND LOCAL TAXES

All products and/or services furnished by the selected vendor/contractor must comply with all applicable federal, state, and local codes, and regulations. All Bids must include, and the selected vendor/contractor must pay, all taxes levied by the Federal, State, and Local Governments, on both labor and materials. The District reserves the right to require evidence of such tax payments prior to final payment of the contract. The District is exempt from Federal Excise and State Sales Taxes. To comply with these regulations, sales tax is not to be included in the Bid.

#### 3.12.0 PROJECT IMPLEMENTATION

The selected vendor/contractor shall have sufficient resources to complete the project within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to fulfill the Timeline Requirements in section 6.0.0 of this RFP.

#### 3.13.0 NO DISCRIMINATION

The selected vendor/contractor and their subcontractors are required not to discriminate against any employee or applicant for employment, to be employed in the performance of the Bid, with respect to hire, tenure, terms, conditions or privileges of employment, because of race, color, religion, national origin, or ancestry or also because of age or sex, except based on a legitimate occupational qualification. Violation of this requirement may be regarded as a material breach of the Michigan Fair Employment Practices Act and may be subject to prosecution.

#### 3.14.0 NO SMOKING POLICY

The District adheres to a mandatory no smoking policy on school premises and/or at school functions. All Bidders shall comply with this no smoking policy.

#### 3.15.0 PRODUCTS AND SERVICES SPECIFICATIONS

It is the intent of the specifications in section 8.0.0 of this RFP to define the minimum acceptable quality of products and/or services. The product line must be of known quality from a nationally recognized manufacturer(s) who regularly advertises, promotes, and distributes products and services to the school market.

#### 3.16.0 VARIATIONS FROM SPECIFICATIONS

All variations from the specified products and/or services, section 8.0.0, must be fully explained and included with the Bid. Manufacturer(s) Brands must be used in all cases.

- **3.16.1** The District reserves the right to increase or decrease quantities or modify the specifications.
- **3.16.2** The selected vendor/contractor shall agree to a written modification of the terms of its original Bid within five (5) business days of receiving written notification of the increase or decrease in quantities, or modification of the specifications.

#### 3.17.0 PARTIAL BIDS

Partial Bids will be considered, where appropriate.

# 3.18.0 CANCELLATIONS

The District reserves the right of cancellation for non-performance of the terms specified in the awarded contract.

#### 3.19.0 WITHDRAWAL OF BIDS

Upon presentation of proper identification, any Bidder may withdraw his/her Bid at any time prior to the scheduled Bid Opening date and time, section 2.1.0. No Bid shall be withdrawn for a period of ninety (90) days after the Bid Opening date and time.

#### 3.20.0 BID EVALUATIONS

Considerations for awarding contracts will include price, product quality, service, delivery, and maintenance of products and/or services, adherence to specifications, past performance to the District, vendor/contractor reliability, warranties and familiarity with the projects and the facilities of the District.

- **3.20.1** It is the intent of the District to award the contract to the Bidder submitting the "best" cost effective Bid for the project; provided the Bid has been properly submitted and delivered, including all required documentation herewith, and considered reasonable in price.
- **3.20.2** Price being the primary factor, consideration, other than price alone, may be used in determining the most successful Bid, such as technical experience, local service and support, and experience in educational environments.
- **3.20.3** The Board of Education of the District will evaluate the merits of all Bids submitted and reserves the unconditional right to accept or reject any or all Bids.

#### 3.21.0 NOTICE OF AWARD

The Bidder will be deemed as having been awarded when the formal notice of acceptance of his/her Bid has been duly served upon the intended awardees by an officer, or agent, of the District duly authorized to give such notice.

#### 4.0.0 UNIVERSAL SERVICE FUND (USF) CONDITIONS

#### 4.1.0 IDENTIFICATION NUMBER

The service provider's USF Service Provider Identification Number (SPIN) *must* be included in the Bid. Direct all questions regarding the USF requirements in this RFP to the Universal Service Administrative Company (USAC), Schools and Library Division (SLD) at (888) 203-8100.

#### 4.2.0 FY2022 FUNDING REQUESTS

The specified products and/or services are to be provided for FY2022 (July 1, 2022-June 30, 2023) and must qualify for universal service discounts under the FY2022 universal service support mechanism, E-Rate. However, for self-provisioned fiber projects, USAC allows a service start date of January 1, 2022 rather than July 1, 2022. The *E-rate Modernization Order* permits applicants to seek support for Category 2 eligible non-recurring services purchased on or after April 1, three months prior to the start of the funding year on July 1. No invoices to USAC/SLD will be DATED or PAID before July 1, 2022.

#### 4.3.0 UNIVERSAL SERVICE DISCOUNTS

The service provider contract is conditional upon the District receiving universal service discounts under the FY2022 universal service support mechanism, E-Rate. The District reserves the unrestricted right to reduce the contract amount by reducing the amount of services and/or products in order to meet budget requirements in the event the level of the universal service discounts is reduced. Any such reductions to the contract amount will be taken prior to the start of the specific work being reduced or eliminated on a given building and/or project.

#### 4.4.0 UNIVERSAL SERVICE DISCOUNT IMPLEMENTATION

The District reserves the unrestricted right to specify the filing option for the universal service discounts for each product and/or service offered within a Bid: Billed Entity Applicant Reimbursement (BEAR) or Service Provider Invoice (SPI).

#### 4.5.0 ELIGIBLE PRODUCTS AND SERVICES

The USF eligible products and/or services identified on the USAC FY2022 <u>Eligible Services List</u>, which is incorporated herein by reference, must be identified separately from any and all "ineligible" products and/or services in the Bid.

# 4.6.0 PROJECT FUNDING REQUIREMENTS

This project is entirely conditional upon receiving written notification in the form of a Funding Commitment Decision Letter from the USAC/SLD that the District has been approved for E-Rate Funding. If the District receives less than the full E-Rate Funding for which it applies, the District has the unrestricted right to reduce the number of units and services in the accepted Bid. In the event that E-Rate Funding is not available for the accepted Bid, District, in its discretion, may cancel and/or modify the Scope of Work (SOW) and subsequent purchases requested in this RFP.

# 4.7.0 LOWEST CORRESPONDING PRICE

Lowest Corresponding Price (LCP) is defined as the lowest price that a service provider charges to non-residential customers who are similarly situated to a particular E-rate applicant for similar services. Service Providers cannot charge E-rate applicants a price above the Lowest Corresponding Price (LCP) and must actually charge the rate that is the LCP, not just offer the LCP in the Bid. In addition, promotional rates offered by a Service Provider for a period of more than 90 days must be included among the comparable rates upon which the LCP is determined.

#### 5.0.0 SCOPE OF WORK

#### 5.1.0 GENERAL DESCRIPTION

The general description of the Scope of Work (SOW) for this project is to provide the District with a Self-Provisioned Fiber (SPF) system from twenty-six (26) buildings using minimum of 6 strands each, all connecting back to the new Admin building located at: 52585 Dequindre Road, Rochester, MI 48307 via a splice point located at: 501 W. University, Rochester, MI 48307. The Bidder must determine and include in the bid response if their proposal included replacing the existing splice case or replacement of a new splice case. The SOW also requires connecting the new Admin building to the splice point location using a 192 strand count fiber run. However, the district will accept higher strand counts, up to 384, if the higher strand count fiber is more readily available than 192. The bidder must include cost for creating the building entrance and termination of the new fibers inside the New Admin Building datacenter location. The estimated distance from the last fiber pole to the New Admin Building is 750 (seven-hundred and fifty) feet and the estimated distance from the New Admin Building entrance to the Data Center is 150 (one-hundred and fifty) feet. The SOW consists of providing the labor, equipment, supplies and materials, and all operations necessary for the successful design and installation of a fully-functional, outside fiber optic network, in accordance with the specifications and the accompanying drawings included herewith this RFP. The selected vendor/contractor shall not be required to install any fiber patch cables nor connect any network electronics to the fiber optic network. In addition to the forgoing SOW, all Bids must comply with all sections of this RFP and the Products and Services Specifications set forth in sections 8.0.0 through 10.0.0.

#### 5.2.0 SPF SITE LOCATIONS

**5.2.1** The District shall provide any available documentation regarding each buildings engineering and end-point terminations, where applicable.

Building Name	Address	City	State	Zip
John M. Schultz Educational Campus	1440 John R Rd.	Rochester Hills	MI	48307
Baldwin Elementary School	4325 Bannister Rd.	Rochester Hills	MI	48306
Brewster Elementary School	1535 Brewster Rd.	Rochester Hills	MI	48306
Brooklands Elementary School	490 E Auburn Rd.	Rochester Hills	MI	48307
Delta Kelly Elementary School	3880 Adams	Oakland Twp.	MI	48363
Hamlin Elementary School	270 W Hamlin Rd.	Rochester Hills	MI	48307
Hampton Elementary School	530 Hampton Cir.	Rochester Hills	MI	48307
Hart Middle School	6500 Sheldon Rd.	Rochester Hills	MI	48306
Hugger Elementary School	5050 Sheldon Rd.	Rochester Hills	MI	48306
Long Meadow Elementary School	450 Allston Dr.	Rochester Hills	MI	48309
McGregor Elementary School	1101 W. First	Rochester	MI	48307
Meadow Brook Elementary School	2350 Munster Rd	Rochester Hills	MI	48309
Musson Elementary School	3500 Dutton Rd	Rochester Hills	MI	48306
North Hill Elementary School	1385 Mahaffey Ave	Rochester Hills	MI	48307
Reuther Middle School	1430 E Auburn Rd	Rochester Hills	MI	48307
Rochester Adams High School	3200 W Tienken Rd	Rochester Hills	MI	48306
CSCC (Caring Steps Child Center)	3838 N. Rochester Road	Oakland Township	MI	48306
Rochester High School	1361 Walton Blvd.	Rochester Hills	MI	48309
Stoney Creek High School	6755 Sheldon Rd.	Rochester Hills	MI	48306
University Hills Elementary School	600 Croydon Rd.	Rochester Hills	MI	48309
Van Hoosen Middle School	1339 N Adams Rd.	Rochester Hills	MI	48306
West Middle School	500 Old Perch Rd.	Rochester Hills	MI	48309
Administrative Center	501 W. University	Rochester	MI	48309
Transportation	380 S. Livernois	Rochester Hills	MI	48307
FOC (Facility Operations Center)	1402 W. Hamlin	Rochester Hills	MI	48309
New Admin Building	52585 Dequindre Road	Rochester	MI	48307

#### 5.3.0 PROPOSED SPF ROUTES/PERMITS

- **5.3.1** The District has already identified the potential route(s) for the SPF, Appendix F. The service provider can choose to use the identified route(s) or design their own route if desired.
- 5.3.2 The selected vendor/contractor shall verify the viability of the route(s) and in the case of any changes or revisions, promptly notify the District of the proposed changes and any alternative(s).
- 5.3.3 The selected vendor/contractor shall provide the engineering and permitting for constructing the route(s) proposed by the District. Also, the District will consider alternative routes and will choose the most cost-effective route in accordance with E-rate program guidance.
- 5.3.4 The selected vendor/contractor shall field the proposed route(s) to obtain footages, pole locations, anchor locations, underground routing, etc., and any information necessary to fulfill the permit application requirements of all utilities and/or municipalities associated with the route(s).
- **5.3.5** The selected vendor/contractor shall overlay the fiber optic design onto routes, including FOC strand count(s), storage locations, and splice locations.
- 5.3.6 The selected vendor/contractor shall complete, submit, and follow-up until approval, all permit applications to the necessary authorities. In cases where access to certain permit authorities are required by the District (i.e. MDOT), the District shall work with the selected vendor/contractor to grant such access, as necessary.

#### 5.4.0 SELECTED VENDOR/CONTRACTOR RESPONSIBILITY

It shall be the responsibility of the selected vendor/contractor to provide the configuration and system quantities to all locations stated herein. The intentional or accidental omission of necessary component(s) or system(s) shall require the selected vendor/contractor to supply said missing component(s) or system(s) at no cost to the District. The District and any Consultants associated with this RFP are not responsible for any omission, failure to detect any requirement, or any other condition required to complete the Scope of Work. **The awarded Bidder shall:** 

- **5.4.1** Meet jointly with representatives of the District to exchange information and agree on details of equipment arrangements and installation interfaces for a Self-Provisioned Fiber (SPF) project.
- 5.4.2 Have sufficient resources to complete the SOW within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to complete the SOW within the specified timeframe.
- **5.4.3** Furnish all labor, supervision, tooling, and miscellaneous mounting hardware and consumables for the (SPF) system installed at the District.
- **5.4.4** Install all cable in accordance with the Product and Services Specifications and/or manufacturer's recommendations and best industry practices.
- **5.4.5** Develop and submit for approval a labeling system for the cable installation. At a minimum, the labeling system shall clearly identify all components of the system; racks, cables, panels, and outlets.
- 5.4.6 Install a fire stop system in accordance with the specifications and/or manufacturer's recommendations which shall be completely installed and available for inspection by the local inspection authorities prior to (SPF) system acceptance, section 8.6.0.
- **5.4.7** Provide a written guarantee/warranty covering the installed (SPF) system against defects in workmanship, components, and performance, and follow-on support after project completion for a period of five (5) years.

# 6.0.0 <u>TIMELINE REQUIREMENTS</u>

#### 6.1.0 PROJECT TIMELINE

The selected vendor/contractor shall have sufficient resources to complete the SOW, section 5.0.0, within the allotted timeframe and shall, upon request, demonstrate that they have the resources necessary to fulfill the timeline requirements for completing the entire project. The District is expecting the project to be completed in accordance with the following Project Timeline:

RFP available on-line or for pickup	[July 08, 2021]
Drawings are included as part of this RFP	[July 08, 2021]
Walk Through[10:00 A.M.].	[July 15, 2021]
Sealed Bids Due[12:00 P.M.]	[August 05, 2021]
Sealed Bids Opened [2:00 P.M.]	[August 05, 2021]
Board Approval	[August 09, 2021]
Sign Contracts/approve Implementation Schedule	[August 11, 2021]
Installation Begins	[January 01, 2022]
Installation Complete	[March 25, 2022]

#### 6.2.0 SCOPE OF WORK SCHEDULES

If or when the school buildings specified in the SOW are occupied with students and school is in session, the selected vendor/contractor is expected to perform the project after school hours and without any additional costs to the District. Areas of the school buildings that are otherwise unoccupied with students and whereby instruction is not disturbed, the selected vendor/contractor may perform the SOW with prior written authorization from the District.

#### 6.3.0 PROJECT IMPLEMENTATION SCHEDULES

All Bidders shall provide the District with a project implementation schedule that adheres to the timeline requirements stated above, section 6.1.0. Further, the project implementation schedule must demonstrate that the selected vendor/contractor has the means and capability to complete the SOW without disruption to school building instruction, activities, and meetings. This said project implementation schedule must be agreed upon by both the vendor/contractor and the District and shall be incorporated as part of the awarded contract.

#### 7.0.0 AWARDED CONTRACT REQUIREMENTS

#### 7.1.0 CONTRACT EXECUTION

The Bidder shall render, deliver and execute the awarded contract within ten (10) days of being notified that the Bid is accepted and that the selected vendor/contractor is awarded a contract to perform the SOW in accordance with all terms and conditions contained herein. The awarded contract must be SIGNED and DATED by both the District and the awarded vendor/contractor prior to start of any work and in compliance with, section 4.6.0.

#### 7.2.0 SEPARATE CONTRACTS

The District reserves the unrestricted right to award different portions of the project, as broken out in the Bill of Materials, Appendix C, to separate vendors/contractors as separate contracts. Said separate contracts shall be based on the District's evaluation and interpretation of the "most cost effective" means for the District to complete the SOW for this project.

#### 7.3.0 CHANGES TO SCOPE OF WORK

The District, without invalidating the Contract, may order changes within the SOW consisting of additions, deletions, and/or modifications, the Contract Sum and the Contract Time being adjusted accordingly. All said changes in the SOW shall be authorized by written "Change Order(s)", signed by the District, and will be executed under applicable condition of contract documents.

- **7.3.1** The Contract Sum and The Contract Time may be changed only in writing.
- **7.3.2** The cost or credit to the District from all "Change Order(s)" shall be determined by mutual, written, agreement.
- **7.3.3** The District will not pay invoices for work performed by verbal authorization.

#### 7.4.0 PERFORMANCE BOND REQUIREMENTS

The Bidder shall furnish a Performance Bond covering the faithful performance of the awarded contract and a labor and material payment Bond in the TOTAL amount of the Bid in such form and with such sureties as the District shall approve, which such approval will not be unreasonably withheld. If the selected vendor/contractor defaults, neglects or fails to perform any provisions of the awarded contract, the District may, at its discretion, and after seven (7) days written notice to the selected vendor/contractor, notify the bonding company that the selected vendor/contractor is in default.

- 7.4.1 The selected vendor/contractor shall provide, and present with the sealed Bid, a bid bond or cashier's check in the amount equaling five percent (5%) of the Bid total.
- 7.4.2 The selected vendor/contractor shall provide, and maintain in force, a bond with surety, and on forms approved by the District in the amount of one-hundred percent (100%) of the contract amount that the selected vendor/contractor shall promptly and faithfully perform all obligations under the awarded contract.
- 7.4.3 The selected vendor/contractor shall provide and maintain, in force, a bond with Surety and on forms approved by the District that selected vendor/contractor shall make payment to all claimants for all labor and material used or reasonably required for use in the performance of the awarded contract.
- **7.4.4** Final Bid price may not exclude costs to secure or hold performance or bid bonds.

#### 7.5.0 TERMINATION OF AWARDED CONTRACTS

If the selected vendor/contractor defaults or neglects to carry out the SOW and sections referenced therein, in accordance with the awarded contract and/or fails to perform any provision of the awarded contract, the District may, after seven (7) days' written notice to the selected vendor/contractor and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the selected vendor/contractor or, at its option, may terminate the awarded contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the selected vendor/contractor and may finish the project by whatever method it may deem expedient. If such expense exceeds such awarded contract price, the selected vendor/contractor shall pay the difference to the District.

#### 7.6.0 EMPLOYMENT PRACTICES

The selected vendor/contractor, by signing a contract, agrees to comply with the provision of the State of Michigan policy regarding "Non-Discrimination of Employment", section 3.12.0.

#### The selected vendor/contractor shall also:

- **7.6.1** Provide all selected vendor/contractor employees with picture ID.
- **7.6.2** Upon arrival and departure, have all employees sign in and out at the main office for each school building location.
- **7.6.3** Supply the District, by email, weekly work schedules no later than the Wednesday of the preceding week. Failure to do so may result in the schedule being rejected by the District.

#### 7.7.0 SELECTED VENDOR/CONTRACTOR PERFORMANCE

The selected vendor/contractor will be responsible for construction means, methods, techniques, sequences or procedures, and safety precautions and programs in connection with the SOW, section 5.0.0, and the Timeline Requirements, section 6.0.0. The selected vendor/contractor shall also:

- 7.7.1 Provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for proper execution and completion of the SOW.
- 7.7.2 At all times enforce strict discipline and good order among its employees and shall not employ any unfit person or anyone not skilled in the tasks assigned to them.
- **7.7.3** Give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work performed.
- 7.7.4 Be responsible for the acts and omissions of all his employees and all Subcontractors, if any, their agents and employees and all other persons performing any of the work under a contract with the selected vendor/contractor.

#### 7.8.0 SUBCONTRACTOR PERFORMANCE

A Subcontractor is a person, firm, company, or corporation who has a contract with the Bidder to perform any work for completing the project. The awarded Bidder shall be responsible for the actions, inactions, and work performed by the subcontractor. Contracts between the Bidder and the subcontractor shall be in accordance with the terms of the awarded contract by the District to complete the SOW, section 5.0.0. The selected Bidder shall furnish to the District, in writing, a list of any/all subcontractors proposed to perform any part or portion of the SOW to complete the project. The selected Bidder shall not employ any subcontractor to whom the District objects and may withdraw their Bid or submit an acceptable substitute.

#### 7.9.0 SUPPLEMENTAL INFORMATION REQUESTS

The Bidder shall be prepared to provide the District, within ten (10) days of being notified of the awarded contract, the names of the suppliers for the equipment and materials used to complete the work. The District may request all Bidders to also submit, within ten (10) days of being notified, the following:

- **7.9.1** The Bidder's performance record(s).
- **7.9.2** An itemized list of the Bidder's equipment, plant, and personnel.
- **7.9.3** The Bidder's financial statement(s).
- **7.9.4** A description of any project, which the Bidder has completed in a satisfactory manner.
- **7.9.5** Any additional information that will satisfy the District that the Bidder is adequately situated and able to fulfill the terms of the proposed contract.
- 7.9.6 A description of any other project(s) that will be performed simultaneously with the District's project(s).
- 7.9.7 A statement regarding any past, present or pending litigation for contracted products and services.

#### 7.10.0 INSPECTIONS

The District and its agents have the right to inspect the selected vendor/contractor's work periodically to determine that proper materials were used and that the progress and quality of work completed is in accordance with the contract.

- **7.10.1** Prior to the start of the SPF project, the selected vendor/contractor will have materials on site and available for inspection by the District's designated authorized representative. All cable reels must be inspected by an authorized representative of the District prior to installation.
- **7.10.2** All equipment used for the SPF project must be compliant with the specified part numbers contained in the successful Bid.
- **7.10.3** Prior to completion of the work, all ceiling tiles will be left open until the District has inspected the work. After said inspections, the selected vendor/contractor will replace all ceiling tiles.

# 7.11.0 INVOICE/PAYMENT REQUIREMENTS

Invoicing for payment(s) will be made 100% upon completion of the SOW and acceptance by the District. All invoices must comply with the USF E-Rate Conditions, section 4.6.0. No invoices will be DATED or PAID before July 1, 2022. **Payments will be paid NET 30 days AFTER:** 

- **7.11.1** Acceptance by the District of "AS-BUILT" drawing(s) in **both** paper and electronic copy per section 10.2.0.
- 7.11.2 After installation of the SPF and each single mode fiber strand is tested per section 8.5.0
- **7.11.3** When applying for payments, the selected vendor/contractor shall submit to the District an itemized invoice based upon the installation schedule and supporting documentation required herein.
- 7.11.4 The project shall be considered complete when the SOW has been completed, accepted by the District and the following items are furnished; a) required guarantees, b) test documentation, and c) waivers of lien submitted showing all payrolls, material bills and other indebtedness connected with the project have been paid. The selected vendor/contractor must submit both a) and b) before the final payment is requested.
- 7.11.5 Payment may be withheld by the District for; a) defective work not remedied, b) claims filed and unresolved, c) failure of the selected vendor/contractor to properly pay for labor, materials or equipment, or proper payment to Subcontractors, and/or d) damages to the District or another Contractor.

#### 7.12.0 GUARANTEES

The selected vendor(s)/contractor(s) must furnish the District a written guarantee of the services and/or products provided to the district for, at least, three (3) years after the final payment covering all workmanship and materials specified in the contract. Any defects in workmanship or materials for which a claim is submitted by the District within the three (3) year period must be corrected or replaced within thirty (30) days.

#### 7.13.0 WARRANTIES

The selected vendor/contractor(s) must furnish the District written warranty documentation. This warranty documentation shall include cable and connectivity components and have one (1) point of contact person for all (SPF) system issues, where applicable.

- **7.13.1** The selected vendor/contractor must warrant that all materials and supplies incorporated within the Bid, is new, unless otherwise specified, and that all work performed will be of good quality, free from faults and defects, and in adherence to the Product and Services Specifications in this RFP.
- **7.13.2** The warranty shall provide a complete system warranty to guarantee an end-to-end high performance (SPF) system that meets the system application requirements. The (SPF) system shall be warranted under this provision for five (5) years.
- **7.13.3** If the manufacturer repairs any product under the warranty, they may use new or reconditioned replacement parts. If the manufacturer replaces the product under the warranty, they may replace it with a new or reconditioned product of similar or same design.
- 7.13.4 Any such repairs or replacement by the manufacturer will be warranted for either a) ninety (90) days or b) the remainder of the original five (5) year warranty period, whichever is longer.

#### 7.14.0 CORRECTION OF WORK

The selected vendor/contractor shall correct any work that fails to conform to the requirements of the awarded contract where such failures or any defects is due to faulty materials, equipment or workmanship which appear within a period of three (3) years from the date of completion of the contract *or* within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract. These provisions apply to all work performed by employees of the selected vendor/contractor and any Subcontractors.

#### 7.15.0 RIGHT TO REJECT OR STOP THE WORK

The District may reject work which does not conform to the Bid or awarded contract specifications. If the selected vendor/contractor fails to correct any defective work or fails to supply labor, materials, or equipment in accordance with the specifications of the awarded contract, the District may order the selected vendor/contractor to stop all work, or any portion thereof, until the cause for such order has been eliminated.

#### 7.16.0 INDEMNIFICATION

The selected vendor/contractor shall indemnify and hold harmless the District and its agents and employees from and against all claims, damages, losses and expenses including attorneys' fee arising out of or resulting from the performance of the project; provided that any such claim, damage, loss or expense is attributable to a) bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting from and b) is caused in whole or in part by any act or omission of the selected vendor/contractor, and/or Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. In any and all claims against the District or any of its agents or employees, by any employee of the selected vendor/contractor, and/or Subcontractor, anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitations on the amount or type of damages, compensation or benefits payable by or for the selected vendor/contractor and/or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts.

#### 7.17.0 FORCE MAJEURE

Except for the District's obligation to pay the selected vendor/contractor, neither party shall be liable for any failure to perform its obligations under the awarded contract or any SOW if prevented from doing so by a cause or causes beyond its control, including without limitations, acts of God or public enemy, failure of suppliers to perform, fire, floods, storms, earthquakes, riots, strikes, war, and restraints of government.

# 7.18.0 LIABILITY REQUIREMENTS

The selected vendor/contractor shall be responsible for initiation, maintaining, and supervising all safety precautions and programs in connection with the project. The selected vendor/contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to 1) all employees on the project and other persons who may be affected thereby, 2) all the SOW and all materials and equipment to be incorporated therein, and 3) other property at the site or adjacent thereto.

- **7.18.1** The selected vendor/contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss.
- **7.18.2** All damage or loss to any property caused in whole or in part by the selected vendor/contractor, any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the selected vendor/contractor, except damage or loss attributable to the fault or negligence of the District.

#### 7.19.0 INSURANCE REQUIREMENTS

No work connected with this project may start until the selected vendor/contractor has submitted a Certificate of Insurance executed by the selected vendor/contractor's insurance carrier showing required insurance coverage and Rochester Community Schools is named as additional insured on said policy. An endorsement or statement waiving the right of cancellation or reduction in coverage, unless thirty (30) days prior written notice is given to the District by registered or certified mail, shall be included. As a condition of performing work as a vendor/contractor, you must provide the District with satisfactory evidence of insurance coverage as follows:

- **7.19.1** Workers Compensation and Employer's Liability Insurance covering your statutory obligations in the State of Michigan.
- **7.19.2** Automobile Liability Insurance with a limit of \$1,000,000 per accident covering your owned, non-owned and hired automobiles.
- **7.19.3** Commercial General Liability Insurance written on an OCCURRENCE policy form includes coverage for your operations, personal injury, XCU (explosion, collapse and underground), independent Contractors, contractual and products-completed operations with limits of liability as follows:
  - **7.19.3.1** If your policy is written on the 1986 ISO Simplified form, minimum limits are as follows:
    - \$1,000,000 Occurrence
    - \$2,000,000 General Aggregate
    - \$2,000,000 Product-Completed Operations Aggregate
    - If your policy's general aggregate is per job, then a \$1 million limit of liability is acceptable for the general aggregate and the products-completed operations aggregate.
  - **7.19.3.2** If your policy is written on a form other than the 1986 ISO Simplified form, minimum limits are as follows:
    - \$1,000,000 Occurrence (bodily injury & property damage combined)
    - \$1,000,000 Aggregate (applicable to products-completed operations only)
  - **7.19.3.3** Products-completed operations liability must be maintained for not less than one (1) year after acceptance of completion of your work.
- **7.19.4** Evidence of your insurance coverage's, required herein, is to be provided to the District on Accord Certificate form 25 or 25-S and must indicate the following:
  - **7.19.4.1** That your Commercial General Liability insurance policy includes coverage for items specified in 7.19.3 above.
  - **7.19.4.2** A "Best" rating for each of your insurance carriers at B+ VII or better.
  - **7.19.4.3** That the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed.
  - 7.19.4.4 That Rochester Community Schools are additional insured on the General Liability policy certificate.
  - **7.19.4.5** Any deviations in coverage provided by the Standard 1986 ISO Simplified General Liability policy form, and any deductible over \$1,000 applicable to any coverage.
  - **7.19.4.6** General Liability and Auto Liability limits may be attained by individual policies or by a combination of underlying polices with umbrella and/or excess policies.
  - 7.19.4.7 The District does not carry theft, glass breakage, or builders risk insurance. The selected vendor/contractor will make arrangements if these coverages are desired. The selected vendor/contractor must provide an Installation Floater for the value of the contract to protect the District. The selected vendor/contractor must furnish to the District, a binder certifying each insurance policy required.

#### 7.20.0 MISCELLANEOUS CONTRACT PROVISIONS

The awarded contract will be governed by the laws of the State of Michigan. The selected vendor/contractor shall not assign the contract or sublet it or portions thereof without the written consent of the authorized District representative.

#### PRODUCTS AND SERVICES SPECIFICATIONS

# 8.0.0 <u>SELF-PROVISIONED FIBER (SPF) SPECIFICATIONS</u>

#### 8.1.0 INTRODUCTION

These Product and Services Specifications provide the Bidder with the requirements for an end-to-end Self-Provisioned Fiber (SPF) system that includes all necessary engineering, permitting, materials, installation equipment, services, configuration, coordination, installation, testing, documentation, and warranties requested by the District in this RFP. The intent of the (SPF) specifications is to provide relevant information that allows the Bidder to bid the engineering, permitting, labor, supervision, tooling, materials, and miscellaneous mounting hardware and consumables to install a complete (SPF) system.

- **8.1.1** The selected vendor/contractor is responsible for proposing any/all items required for a complete (SPF) system even though it may not be identified in the specifications incorporated herein, drawings and/or Bill of Materials, Appendix C, attached with the Bid.
- **8.1.2** The successful Bidder shall meet or exceed all requirements for the (SPF) system described in this RFP and any Bid attachment documents provided by the District.
- **8.1.3** If, for any reason, any Bid attachment document is in conflict with the details in the specifications herein this RFP, the forgoing written specification shall take precedence.

#### 8.2.0 APPLICABLE DOCUMENTS

The (SPF) system described within the specifications is derived, in part, from the recommendations in industry standard manuals and documents. The Bidder is responsible for determining and adhering to the most recent release of applicable documents when developing their proposal for the (SPF) installation. The following list of applicable documents has influence on the desired (SPF) system and incorporated herein by reference.

- **8.2.1** 1) All technical specification and associated drawings provided by the District
  - 2) Local Building, Fire, and Right-of-Way Codes, along with Utilities specifications.
  - 3) BICSI's Information Technology Systems Installation Methods Manual (ITSIMM) latest edition
  - 4) BICSI's Telecommunications Distribution Methods Manual (TDMM) latest Edition
  - 5) National Fire Protection Agency (NFPA) 70, National Electrical Code (NEC) 2018
- **8.2.2** If a conflict exists between the applicable documents, then the aforementioned numeric list of applicable documents shall dictate the order of precedence in resolving such conflicts. This order of precedence shall be maintained unless a lesser order document has been adopted as code by a local, state, or federal entity. If a conflict further exists, documents adopted as code shall take precedence.
- **8.2.3** If the specifications incorporated herein and any of the aforementioned applicable documents are in conflict with each other, then the more stringent requirement shall apply. All applicable documents listed are, to the best of the District's knowledge, considered to be the most current releases of said documents.

#### 8.3.0 PURPOSE AND BIDDER RESPONSIBILITIES

The intent of these (SPF) specifications is to make available to all Bidders a standard specification for (SPF) installation(s) in all K-12 educational facilities identified in the SOW, section 5.0.0.

- **8.3.1** The (SPF) specifications identify the minimum performance criteria for the components and subsystems encompassing a complete (SPF) system that shall accommodate the District's Infrastructure Requirements, section 5.3.0.
- **8.3.2** The product specifications, general design considerations, and installation guidelines are incorporated herein this RFP.
- **8.3.3** Typical installation details, cable routing and outlet types for the specific educational facilities will be provided by the District herein this RFP.
- **8.3.4** The successful Bidder is required to furnish all labor, supervision, tooling, and miscellaneous mounting hardware and consumables for the (SPF) system installed at the District.

**8.3.5** The forgoing specifications define the (SPF) system and subsystem components including cable, termination hardware, supporting hardware, and miscellany required to furnish and install a complete (SPF) system supporting data and fiber.

#### 8.4.0 SELF-PROVISIONED FIBER (SPF) SYSTEM REQUIREMENTS

Fiber strands are to be 9/125-micron, single mode, Corning SMF-28E or equivalent. The optical fiber cable will be of loose tube (filled or water blocking tape), single jacket/single armored construction for all applications. All underground shall be installed in 1.25" outdoor grade conduit. The maximum allowed fiber attenuations shall be .35/.25 dB/km at 1310/1550 nm. The attenuation shall not vary by greater than 0.10 dB/km across the operating temperature range of the cable (measured at 1300 nm). In addition, the selected vendor/contractor shall adhere to all the following (SPF) system specifications.

- **8.4.1** Fiber Cable Reels The selected vendor/contractor shall supply a copy of the factory test results for each reel to the District. If there is visible damage to the reel, and the reel is accepted at delivery, the selected vendor/contractor shall be responsible for ensuring that the integrity of the fiber strands has not been compromised.
  - **8.4.1.1** All cable must be new from the manufacturer. Re-reeled cable shall not be accepted.
  - **8.4.1.2** All cable splicing shall be of fusion type. Mechanical splices will not be accepted. Maximum estimated loss to be no greater than .05dB. All splices must be recorded for estimated loss and results presented to the District.
- **8.4.2 Facilities Environment** Each building identified in the SOW, section 5.0.0, has one (1) Main Distribution Facility (MDF) room. All fiber cable(s) will be rack mounted in these MDF locations.
  - **8.4.2.1** It is recommended that each Bidder visits each facility to confirm the SOW conditions, per section 1.3.0.
  - **8.4.2.2** Bidders may request, from the District, a copy of the blueprints and/or drawings, per section 2.6.0.
  - **8.4.2.3** All proposed building entrances and interior routes are to be coordinated with and approved by a representative for the District.
  - **8.4.2.4** All above-grade entrances will 2.0" or larger PVC conduit, with appropriate LB's and clamps/straps as needed to secure the conduit to the building. All entrance penetrations will be sealed to avoid moisture from entering the building.
  - **8.4.2.5** All below-grade entrances will be sealed to avoid moisture from entering the building.
  - **8.4.2.6** The selected vendor/contractor is responsible for coring and sleeve installation through walls as necessary to rout fiber optic cable into the designated facilities.
  - **8.4.2.7** All interior cable will be routed through flex plenum-rated duct from entrance point to the building MDF. The selected vendor/contractor will be responsible for installing pathway(s) if it is not currently present.
  - **8.4.2.8** The selected vendor/contractor is responsible for fire stopping both sides of any penetrations they install in walls intended for the new fiber optic cable. (section 8.6.0)
  - **8.4.2.9** All interior routes that are 50' or longer from the entrance point will require the fiber cable to be transitioned to plenum-rated interior cable. Outdoor or indoor/outdoor-rated cable will not be accepted for lengths exceeding 50'.
  - **8.4.2.10** The selected vendor/contractor will abate any existing cable in each building, where applicable, and will properly dispose of such cable at the selected vendor/contractors' expense.
- **8.4.3** Outdoor Splice Capsules All outdoor splice capsules shall be hung from the strand with proper brackets, and tail(s) shall be secured to the strand. Any return bends in the cable(s) shall be stored in sno-shoes of the proper size to meet the cable manufacturer's minimum bend radius.
  - **8.4.3.1** Locations involving cables of 48 strands as the largest: Use CommScope 450B6, Preformed/Coyote PUP 8006622 or other approved equivalent.

- **8.4.3.2** All capsules shall contain sufficient and proper trays to hold single-fusion, heat shrunk splices and for the storage of unused buffer tubes (if applicable). Splices will be held in place by manufacturer provided receptacles. RTV, tape, or other non-standard method will not be accepted.
- **8.4.3.3** The selected vendor/contractor shall not be required to install any fiber patch cables nor connect any network electronics to the fiber optic network.
- **8.4.4 Termination Shelves -** All indoor fiber termination shelves to be rack-mounted, with strain relief for the cable(s) to be terminated, and trays/brackets for the proper storage of single-fusion, heat shrunk splices. All connector panels shall be SC-type single-mode, blue in color. All termination shelves shall be clearly labeled.
  - **8.4.4.1** All strands to be terminated shall be manufactured 1-meter single-mode pigtails with SC-type connector fusion spliced to the strand. No mechanical or epoxy/polished connectors attached directly to the strands will be accepted.
  - **8.4.4.2** A storage coil of cable, 20' minimum in length, shall be left as close to the termination shelf as possible. Coil shall be no smaller than the cable manufacturer's minimum bend radius and shall be neatly attached with clamps or brackets as needed. Locations involving terminations of 0-24 strands, the shelf shall be 1RU in height. Locations involving 25 or more terminations, the shelf shall be 4RU in height.
- **8.4.5** Fiber Installation Installation of the fiber optic cable shall be in strict compliance with the manufacturer's recommendations.
  - **8.4.5.1** Mechanical aids may be used, provided a tension-measuring device is used at the end of the cable and does not exceed the manufacturer's recommended pulling tension.
  - **8.4.5.2** Cable pulling lubricant recommended by the manufacturer shall be used when installing fiber in conduit.
  - **8.4.5.3** The selected vendor/contractor shall, at their own expense, replace any cables that have had excess strain and tension applied to them, or otherwise damaged during installation.
- **8.4.6** Aerial Construction The selected vendor/contractor shall be responsible for confirming that there is clearance between the installed fiber and other utilities, as well as ground clearance, per the permitted utility's requirements.
  - **8.4.6.1** Aerial cable storage locations to be placed every 1500' +/- and shall be 150' in length. In/out footage identification numbers and total storage length shall be recorded.
  - **8.4.6.2** Cable shall be supported by lashing to a ½", 7-wire, EHS galvanized, support strand using industry-standard hardware.
  - **8.4.6.3** All anchors shall be 6' screw-type. Strain insulators and yellow guy guards shall be installed at all anchor locations. Guying to other utility's anchors will not be accepted.
  - **8.4.6.4** Cable rollers must be placed on the strand at least every 30 feet to support the cable as it is being pulled out.
  - **8.4.6.5** All fiber shall be double lashed. All lashing wire will be .045" stainless steel. "D" lashing clamps are required on either side of all attachments. "Speed lashing" will not be accepted.
  - **8.4.6.6** Non-lashed cable(s) shall be secured to the strand with plastic strap/spacer combinations of sufficient length for the application. Excess strap tails must be cut off. Zinc or stainless-steel straps will not be accepted. A minimum of four (4) straps/spacers shall be installed per straight-through attachments.
  - **8.4.6.7** All fiber shall be installed in accordance with the manufacturer's bend radius and tension rating specifications. All storage loops shall be stored in sno-shoes of the proper size to meet the cable manufacturer's minimum bend radius.

- **8.4.7 Underground Construction -** All underground conduit(s) shall be 1.25" SDR11 HDPE, orange in color, unless otherwise specified.
  - **8.4.7.1** All conduit(s) shall be installed via horizontal directional boring.
  - **8.4.7.2** All conduit(s) shall be placed at a minimum 36" depth or deeper, depending on permitting authority's requirements.
  - **8.4.7.3** A locate/tracer wire will be placed along with all underground conduit(s). Wire to be 14 gauge, insulated, stainless steel.
  - **8.4.7.4** All conduit splices shall be of the approved type and size for the conduit. Tape, or any other non-mechanical type of splice is not acceptable.
  - **8.4.7.5** All underground "vaults" must meet the following specifications: 17" x 30"x 24" polymer concrete enclosure w/15K load rated single piece lid unless otherwise required. The lid shall be marked "FIBEROPTIC" Recommended Manufacturer: Quazite PD2436BB26/PG2436HA00 or *equivalent*.
    - **8.4.7.5.1** Vaults are to be placed every 650' +/- of linear underground route.
    - **8.4.7.5.2** Underground cable storage will be placed in each vault and shall be 100' in length. In/out footage identification numbers and total storage length shall be recorded.
  - **8.4.7.6** A pull line or mule tape shall be left in all conduit(s) after cable installation for any future installation(s).
  - **8.4.7.7** The selected vendor/contractor shall be responsible for all cleanup and restoration of areas disturbed during construction.
  - **8.4.7.8** The selected vendor/contractor shall be responsible for calling in all locate requests through the MISS DIG system and recording all ticket numbers for those requests.

#### 8.5.0 SELF-PROVISIONED FIBER (SPF) SYSTEM TESTING

All cables and termination hardware shall be 100% tested by the selected vendor/contractor for defects in installation and to verify cable performance under installed conditions. All conductors of each installed cable shall be verified useable by the selected vendor/contractor prior to system acceptance. Any defect in the (SPF) system installation including but not limited to cable, connectors, feed through couplers, patch panels, and connector blocks shall be repaired or replaced to ensure 100% useable conductors in all cables installed.

- **8.5.1** The District shall be notified prior to all testing procedures so that they may attend.
- **8.5.2** All cables shall be tested in accordance with the specifications contained herein and/or best industry standards and practices.
- **8.5.3** If any of these specifications are in conflict, the selected vendor/contractor shall be responsible to bring any discrepancies to the attention of the project team for clarification and/or resolution.
- **8.5.4** After installation, each single mode fiber strand will be tested at 1310 nm and 1550 nm.
  - **8.5.4.1** All single mode optical fiber cable will be tested with an Optical Time Domain Reflectometer (OTDR).
  - **8.5.4.2** All event thresholds will be set and tested at .01 dB.
  - **8.5.4.3** All attenuation tests shall be performed with a laser optical power meter at 1310 nm and 1550 nm.
  - **8.5.4.4** All terminated strands will be tested bi-directionally utilizing a 100-meter launch cable to ensure that all connectors and splices are accurately measured.
- **8.5.5** Test documentation shall be provided in an electronic media per the System Documentation specifications, section 10.0.0, within (3) three weeks after completing the (SPF) project.

#### 8.6.0 FIRE STOP SYSTEMS

A fire stop system is comprised of the item or items penetrating the fire rated structure; the opening in the structure and the materials and assembly of the materials used to seal the penetrated structure. Fire stop systems comprise an effective block for fire, heat, vapor and pressurized water stream.

- **8.6.1** All penetrations through fire rated building structures (walls and floors) shall be sealed with an appropriate fire stop system. This requirement applies to through penetrations (complete penetration) and membrane penetrations (through one side of a hollow fire rated structure).
- **8.6.2** Any penetrating items i.e., riser slots and sleeves, cables, conduit, cable tray, and raceways, etc. shall be properly fire stopped.
- **8.6.3** Fire stop systems shall be UL Classified to ASTM E814 (UL 1479) and shall be approved by a qualified Professional Engineer (PE) licensed in the state where the work is to be performed. A drawing showing the proposed fire stopped system, stamped/embossed by the cognizant PE shall be provided to the District's Technology Director prior to installing the fire stop system(s).
- **8.6.4** All fire stop systems shall be installed in accordance with the manufacturer's recommendations and shall be completely installed and available for inspection by the local inspection authorities prior to (SPF) system acceptance.

#### 8.7.0 MAKE-READY FEES AND PERMIT COSTS

The selected vendor/contractor shall provide the engineering and permitting for constructing any route(s) proposed by the Bidder.

- **8.7.1** The Bidder is required to include its best estimate of make-ready fees and permitting costs in the Bid.
  - **8.7.1.1** The selected vendor/contractor is responsible for informing the District if and/or when those costs differ from the original cost estimate in the Bid.
- **8.7.2** The selected vendor/contractor shall complete, submit, and follow-up until approval by District, of all permit applications to the necessary authorities.
  - **8.7.2.1** In cases where access to certain permit authorities are required by the District (i.e., MDOT), the District shall work with selected vendor/contractor to grant such access, as necessary.

#### 9.0.0 SELF-PROVISIONED FIBER (SPF) MAINTEANCE REQUIREMENTS

The District will require on-going maintenance and operations of the SPF. When pricing maintenance and operations, the Bidder shall include an overview of the fiber maintenance practices including:

- **9.0.1** Schedule and perform routine maintenance and inspections.
- **9.0.2** Perform Fiber monitoring including information on what fiber management software is used, what fiber monitoring system is used, and who performs the monitoring.
- **9.0.3** Scheduled maintenance windows and scheduling practices for planned outages.
- **9.0.4** Handling of unscheduled outages and customer problem reports.
- 9.0.5 Contact the assigned district representative before any dig location services are performed.
- **9.0.6** Repair and/or replace damage fiber or fiber that no longer meets specifications.

#### 9.1.0 (SPF) SYSTEM TAGGING

The selected vendor/contractor will provide and install identification tags of all exterior (Outside Plant) cables. Such tagging will be done to the following specifications, unless superseded by local utility or municipality requirements.

- 9.1.1 Tags shall be a minimum 6" x 1.5" clip-on, panel type, clip size to match appropriate cable diameter. Tag label will be Black letters on Orange background, unless otherwise specified. Text height to be 0.75" to 1". Tags will be printed with the District Name, and a contact telephone number provided by the District.
- **9.1.2** Preferred product is William Frick Co "Cable Clipper", or other approved equivalent.
- **9.1.3** For Aerial applications, tags will be placed at every other pole minimum, all corner poles, and at all splice locations. Where multiple cables are present, only one (1) tag needs to be placed.
- **9.1.4** For Underground applications, one (1) tag will be placed at every vault location.
- **9.1.5** At building entrances, one (1) tag will be placed inside closest to the entry point as practicable.

#### 10.0.0 SELF-PROVISIONED FIBER (SPF) DOCUMENTATION

The following sections describe the minimum installation, administration, testing, and as-built documentation required from and/or maintained by the selected vendor/contractor during the entire (SPF) installation project.

- **10.0.1** Drafting all route information into base .dwg file(s) and creating base maps in .dwg (AutoCAD) format.
- 10.0.2 Create charts for all splice and termination locations. The charts shall include location name, closure type, cable strand counts and footage identifiers, date(s) of splicing activity, and estimated splice loss.
- 10.0.3 Copies of all the test results will be provided to District upon completion per section 10.3.0.

#### 10.1.0 (SPF) SYSTEM LABELING

The selected vendor/contractor shall develop and submit for approval by the authorized District representative a labeling system for the cable installation. The District will negotiate an appropriate labeling scheme with the selected vendor/contractor. At a minimum, the labeling system shall clearly identify all components of the system: racks, cables, panels, and outlets.

- 10.1.1 The labeling system shall designate the cables origin and destination and a unique identifier for the cable within the system. Racks and patch panels shall be labeled to identify the location within the (SPF) system and as follows:
- **10.1.2** Provide location and labeling plan in frame with clear plastic cover in each MDF and/or IDF, where applicable.
- **10.1.3** All labeling information shall be recorded on the "As-Built" diagrams and all test documents shall reflect the appropriate labeling scheme.
- 10.1.4 All label printing will be machine generated using indelible ink ribbons or cartridges.
- **10.1.5** Self-laminating labels will be used on cable jackets, appropriately sized to the OD of the cable, and placed within view at the termination point on each end.
- **10.1.6** Each cable shall be clearly labeled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties.

#### 10.2.0 "AS-BUILT" DOCUMENTATION

The selected vendor/contractor shall provide the District with drawings prior to the start of any construction, either in paper and/or electronic format. One (1) set of said drawings shall be kept at a designated location within the District for documenting all "As-Built" information as it occurs during project configuration and installation.

- **10.2.1** Provide installation, administration, testing, and "As-Built" documentation required from and/or maintained by the selected vendor/contractor during the entire (SPF) cabling installation project.
- 10.2.2 The drawings will be maintained by the selected vendor/contractor's foreman daily and will be available to the District's authorized representative upon request during the entire project.
- 10.2.3 The selected vendor/contractor shall add (mark-up) any changes and/or deviations to the "As-Built" diagrams as needed. The marked-up drawings will accurately depict the "As-Built" status of the system including termination locations, cable routing, and all administration labeling for the (SPF) system.
- 10.2.4 The selected vendor/contractor shall provide a set of "As-Built" drawing(s) to the District after the project is complete. These said "As-Built" drawing(s) will be submitted to the District in electronic copy, .dwg (AutoCAD) format.
- 10.2.5 The District shall require a narrative that describes any areas of difficulty encountered by the selected vendor/contractor during the installation that may potentially cause future problems with the (SPF) system.

#### 10.3.0 TESTING DOCUMENTATION

Test documentation shall be provided on electronic media (CD, Thumb-drive, etc.) within (3) three weeks after completing the project. This said electronic media shall be clearly marked on the outside front cover with the words "Test Results", Project Name, and Completion Date (month and year).

- **10.3.1** Each Testing Type section of the electronic media files shall include one (1) folder for each test performed; fiber optic attenuation test results, and continuity test results.
- 10.3.2 The test equipment by name, manufacturer, model number and last calibration date will also be provided on the electronic media files. Unless a more frequent calibration cycle is specified by the manufacturer, an annual calibration cycle is anticipated on all test equipment used for this installation.
- 10.3.3 The testing documentation shall detail the test method(s) used and the specific settings of the equipment during the test(s). When repairs and re-tests are performed, the problem found and corrective action taken shall be noted, and both the failed and passed test data shall be co-located on the electronic media.
- 10.3.4 In order to read the documentation, a copy of the applicable viewer program shall be placed on the electronic media to read the file(s).

#### 10.4.0 WARRANTY DOCUMENTATION

The selected vendor(s)/contractor(s) must furnish the District written warranty documentation. The warranty documentation shall include cable and connectivity components and have one (1) point of contact person for any/all (SPF) system issues, where applicable.

- 10.4.1 The warranty shall cover the installed (SPF) system against defects in workmanship, components, and performance, and follow-on support after project completion for a period of five (5) years from the date of the system installation acceptance by the District.
- 10.4.2 The warranty shall cover all labor and materials necessary to correct any/all failed portion(s) of the (SPF) system and to demonstrate performance within the original installation specifications after repairs are accomplished.
- **10.4.3** The selected vendor/contractor shall provide said (SPF) system warranty at no additional cost(s) to the District.

# APPENDIX A – INTENT TO BID FORM

If the Bidder intends to submit a Bid for the Self-Provisioned Fiber (SPF) project at Rochester Community Schools, this Intent to Bid Form must be completed and returned via mail or email to the District no later than July 15, 2021.

Please complete and return to:

**Rochester Community Schools** Jen 501 W University Drive

Rochester, MI 48307

ınifer Fickel	Phone: 248.726.3045
1 W University Drive	Email: rfp@rochester.k12.mi.us

Name of Company:	
Address:	
City, State, Zip	
Contact Name:	
Title:	
Telephone Number: Fax Number: Email Address:	
Date:	

# APPENDIX B – <u>BID SIGNATURE PAGE</u>

I have examined the RFP Bid conditions and specifications herein and agree that if my company is awarded a contract to provide any of the products and/or services sought in this RFP, my company will provide the District with the products and/or services according to the Invitation to Bid, Bidder Instructions, General Conditions, Universal Service Fund (USF) Conditions, Scope of Work, Timeline Requirements, Awarded Contract Requirements, and Products and Services Specifications of this RFP and the Bid submitted herewith. Any and all deviations from this RFP Bid specifications are in writing and attached.

Su	bmitted By:		
	Company Name:		
	Company Address:		
	City, State & Zip:		
	Telephone:		
	Fax:		
	Email:		
	Representative Name:		
	Title:		
	Signature:		
	Date:		
Do	not write below this line: For District Use Only		
The	e following items are enclosed and/or included on the	Bid:	
	Proposal(s) (in duplicate)		Intent To Bid Form (Appendix A)
	Bid Bond/Cashier's Check (5% of Bid)		Bid Signature Page (Appendix B)
	USF E-Rate SPIN		Bill of Materials (Appendix C)
	Four (4) references, one (1) of which is a		Familial Disclosure Affidavit (Appendix D)
	school or school district		Iran Linked Business Affidavit (Appendix E)

# APPENDIX C – BILL OF MATERIALS

I/we, the Bidder, hereby propose to furnish, deliver and install the below listed items for the unit price indicated in accordance with the terms, conditions and specifications included in the Request For Proposals – Self-Provisioned Fiber.

NOTE: The Bidder must use the attached excel spreadsheet provided on the USAC website associated with the Form 470.

BASE BID - Self-Provisioned Fiber (Must include all components and installation costs)

BUILDING NAME:					
Manufacture	Part No.	I HASCEINTIAN I		Unit Price	Total Price

<u>ALTERNATE 1 BID – Self-Provisioned Fiber</u> (Must include all components and installation costs)

BUILDING NAME:						
Manufacture Part No.		Description	Qty	Unit Price	Total Price	

FY2022 Self-Provisioned Fiber RFP-220000013

7/8/2021

# APPENDIX D - FAMILIAL DISCLOSURE AFFIDAVIT

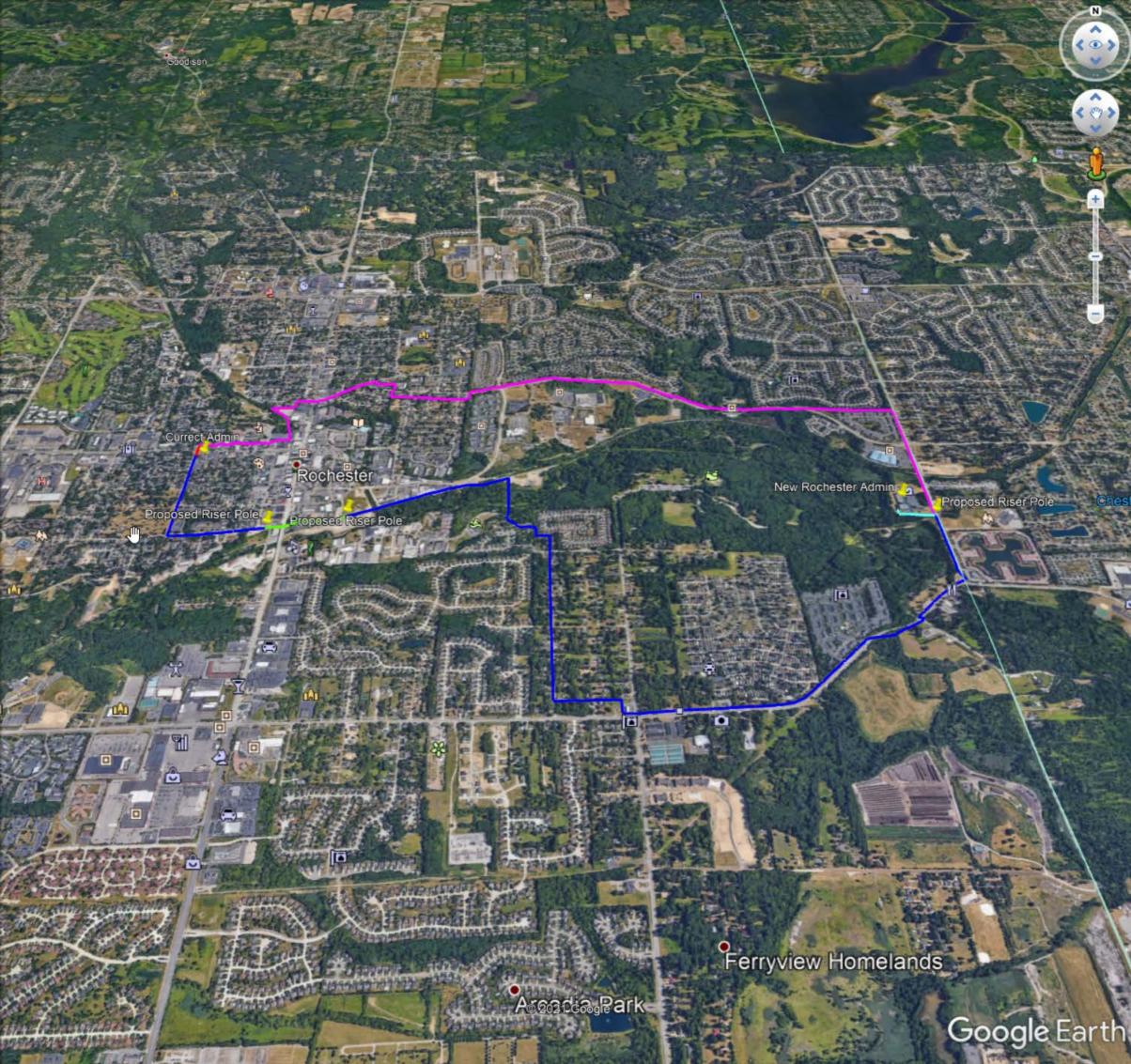
owner	ids shall be accompanied by a sworn statem (s) or any employee of the Bidder and any intendent of the District.		
Servi famil	andersigned, owner or authorized officer ant to the familial disclosure requiremen ce Fund Request for Proposals, hereby ial relationships exist between the Bidde ester Community Schools Board of Educat	represent and warrant, excep or or any employee of the Bi	t as provided below, that no dder, and any member of the
	The following are the Bidders familial	relationship(s) with the Roc	hester Community Schools:
	Bidder/Employee	Name Related to:	Relationship
1.			
2.			
	(Attach additional pages, if n	necessary, to disclose all familial r	elationships.)
	There is no familial relationship that and any member of the Rochester Superintendent.		
	Bidder:		
		(Company Name)	
	Ву:	(Signature)	
		(Title)	
This	instrument was acknowledged before m	e, a Notary Public, in and f	or
Coun	ty, on this day of	f, 20_	_ <del>.</del>
		SS:	
	(Notary Public Signature)		
My C	fommission expires:		
Actin	g in the County of:		

# APPENDIX E - IRAN LINKED BUSINESS AFFIDAVIT

All Bids shall be accompanied by within the owners, including its of				ked Busine	ss relationsh	ip that ex	ists
The undersigned, owner or at pursuant to Michigan Public Ad Rochester Community School warrants that the bidder, include within the meaning of the applic of this RFP, the bidder will reperforming under the contract. submitted a false certification is amount of the contract or proposithe cost of the District investig person who submitted a false certification the contract or proposition who submitted a false certification the cost of the District investig person who submitted a false certification the date	s <u>Universal So</u> ling its officers cable Public Ac not become an The bidder for s responsible for sed contract for ation, and reas ertification shal	ervice Fund s, directors et, and that i "Iran Link further acknor a civil per r which the onable attor I be ineligible	d Request fand employers the event be deed Business owledges the nalty of not false certificancy fees, in the bid on	ees, is not bidder is average at any permore than eation was a addition future Receivers.	als hereby an "Iran Li varded a cor time during rson who is \$250,000.00 made, which to the fine. quests for Pr	represent nked Bush tract as a general term of found to the found to t	its and siness' a resul- urse of o have nes the greater er, any (RFPs)
There is not an "In officers, directors and en		Business"	that exists	_within t	he bidder	and/or	owner
Bidder:	(Company Nam	ne)					
By:	(Signature)						
	(Title)						
This instrument was acknowled	ged before me,	a Notary Pı	ıblic, in and	for			
Cou	nty, on this	day of _			, 20,		
(Notary Public Signature)				SS:			
My Commission expires:							
Acting in the County of:							

Rochester Community Schools

APPENDIX F – SFP ROUTES



Rochester Community Schools

APPENDIX G – BUILDING MAPS

