

Task Order Request #25-004 - IT Fiber Enhancements

Status Assignees Open Dean Hansen

Created Date Nov 20, 2024 **Issued Date** Nov 20, 2024

TASK ORDER IDENTIFICATION

24-03814 Contract No

Contractor Name ROCKY MOUNTAIN SYSTEMS SERVICES Contract Start Date 06/14/24

Account Code(s) TBD

1.0 SCOPE OF SERVICES

The contractor's scope letter and price estimate is hereby attached and incorporated into this Task Order 25-004 IT Fiber Enhancements Final Scope-DH.pdf, 25-004 IT Fiber Enhancements_RMSS-

52720-031 Proposal.pdf

2.0 SCHEDULE

The Substantial **Completion Date for**

07/29/25

this Task is

The Final **Acceptance Date**

for this Task is

09/11/25

3.0 PRICING

The pricing agreement for this item is one of the following:

Lump Sum

Invoices will be \$394,579 billed on a monthly basis for completed work to date. The price for this item is in the amount of

Provisional Sum \$0 Amount (if applicable). Note: Any unused amount of this provisional sum amount will be deducted from the contract upon

closeout of the task

order.

Independent Cost Estimate (ICE) link, if applicable

25-004 IT Fiber Enhancements ICE.pdf

4.0 APPLICABILITY OF FEDERAL CLAUSES

Does this Task Order include federal assistance funds which requires the application of the **Federal Clauses** appended as Exhibit D to the Contract?

No

funds are anticipated, the UTA of Race Neutral. Civil Rights group has set a Disadvantaged

Business Enterprises (DBE) participation goal

If federal assistance SGR410 does not have federal funding in 2025, but the use of federal dollars is optional. Received goal

for this Task Order of

UTAH TRANSIT AUTHORITY:

Required Project Manager \$0 - 24,999
Signatures Legal Review \$25k or greater

Figure 1 Project Manager \$0 - 24,999

Legal Review \$25k or greater

Explanation Dir. of Capital Projects \$25k - 74,999 Chief Service Dev. Ofcr. \$75k - 199,999

Executive Director \$200,000+ Procurement/Contracts (for all)

Signature (Legal)

DocuSigned by:

By:

Mike Bell

Name: MTKE BELL

Name: MTKE

Date: 11/21/2024

PM Approval

The costs associated with this item have been measured against the standard schedule of rates and the agreed contract pricing, (where applicable) and have been deemed consistent and appropriate for the proposed scope of work.

Signature (Project Manager)

By: Dean Hansen
Name: Dean Hansen
Date: 11/21/2024

Director Approval

I have evaluated the content of this task order and the scope of work described in the task ordering agreement and have made the determination that this Task Order is within the scope of work contemplated and described by the contracting parties when they executed the original task ordering agreement.

Signature (Director)

Date: 11/21/2024

Signature (Procurement)

Ву: _____

Name: _____

Date: _____

Signature (Chief Service

Development Officer)

Ву: _____

David Hancock, Chief Service Development Officer

Date:

Signature

(Executive Director) By:

Date:

COMPANY:

COMPANY: ROCKY MOUNTAIN SYSTEMS SERVICES

RMSS Required Signature Explanation

- Up to \$100K Josh Lafleur (jlafleur@modrailsystems.com)
- \$100K \$500K Anthony Ortolani (aortolani@modrailsystems.com)
- \$500K \$2.5M Shon Tulik (stulik@modrailsystems.com)
- >\$2.5M or Contract Time Extensions Paul Reiger (preiger@modrailsystems.com)

Task Order Request #25-004 - IT Fiber Enhancements

Project: SGR410 Fiber Rehab / Replacement

Signature (Contractor)

By: Anthony Ortolani
Name: Anthony Ortolani

Date: 11/21/2024

Page 3 of 3 Printed On: Nov 20, 2024 04:16 PM MST



November 7th, 2024 RMSS-52720-031

Mr. Dean Hansen Manager of Systems Engineering 2264 South 900 West Salt Lake City, UT 84119

Reference: Utah Transit Authority – Systems On-Call Services

Subject: PTO031 IT Fiber Upgrades Main St. to FLHQ

Dean,

Rocky Mountain Systems Services (RMSS) is pleased to provide a proposal for scope changes requested by UTA's IT department for additional fiber optic backbone upgrades.

Our lump sum price for this proposal is: \$394,579.00.

General

UTA proactively issued a series of task orders to replace the aging fiber optic backbone for the rail signal network as well as the IT network. It was recently determined that the fiber backbone from Main St. to FLHQ and from Meadowbrook Station to the Meadowbrook office building require 288-strands of fiber. As such, UTA has requested pricing to upgrade this segment of the network to a 288-strand fiber optic cable. Additionally, the UTA's IT department has requested additional terminations at junction and terminus locations to allow for network expandability and flexibility.

Procurement

RMSS will procure the following materials under this scope of work:

Material Description	Location	Unit	Quantity
144-Strand Fiber Distribution Panel	FLHQ	EA	2
(Total of 288 Termination Points)			
288-Strand Underground Splice Enclosure	Main St.	EA	10
Splice Trays			
144-Strand SC Fiber Distribution Panel	Union	EA	3
(Total of 432 Termination Points)			
144-Strand SC Fiber Distribution Panel	Medical	EA	1
NEMA Box to house FDP	Medical	EA	1
144-Strand SC Fiber Distribution Panel	JRSC	EA	1
144-Strand SC Fiber Distribution Panel	Meadowbrook	EA	2
(Total of 288 Termination Points)			
288-Strand Underground Splice Enclosure	Meadowbrook St.	EA	10
Splice Trays			
144-Strand SC Fiber Distribution Panel	Fashion Pl. West	EA	1
19in Rack for mounting of FDP	Fashion Pl. West	EA	1

144-Strand SC Fiber Distribution Panel	Midvale SC	EA	1
144-Strand SC Fiber Distribution Panel	Sandy Civic Center	EA	1
NEMA Box to house FDP	Sandy Civic Center	EA	1
SC-Fiber Pigtails (Packs of 12)		EA	175
288-Strand SMFO Cable	Main St - FLHQ	FT	18500
288-Strand SMFO Cable	Meadowbrook Station	FT	8500
	 Meadowbrook SC 		
SC Bulkhead Adapters for all FDP's	Various	EA	150
Splice Trays for FDP's	Various	EA	50
Heat-shrink Splice Protectors	Various	EA	2500

Installation

RMSS and our subcontractors will perform the following installation activities under this scope of work:

- Hardware installation
 - Procured fiber distribution panels will be installed at the locations shown in the table above
- Fiber installation
 - RMSS will install approximately 18,500ft of 288-strand fiber from Main Street Interlocking to FLHQ
 - RMSS will install approximately 8,500ft of 288-strand fiber from Meadowbrook Station to the Meadowbrook office building comm room
 - o Notes:
 - Approximately 50ft of fiber will be coiled up in each pull-box
 - The existing 144-strand fiber will be utilized to pull in the upgraded 288-strand fiber for both runs
 - Fiber lengths include approximately 18.5% extra for waste, service loops at final locations, and unknowns
- Fiber Splicing & Terminations

The following splicing is included in the scope of this proposal:

Location	Type of Splice	# of Splices
Main Street	Underground Fusion Splice	288
FLHQ	FDP Pigtail Termination	288
UP Diamond	FDP Pigtail Termination	432
JRSC	FDP Pigtail Termination	144
Meadowbrook	FDP Pigtail Termination	288
Meadowbrook Station	Underground Fusion Splice	288
Fashion Place West	FDP Pigtail Termination	144
Midvale Service Center	FDP Pigtail Termination	144
Sandy Civic Center	FDP Pigtail Termination	144
Medical Center	FDP Pigtail Termination	144

- Fiber Testing
 - All fiber will be tested with an OTDR calibrated within the previous 12-month period from the date of testing
 - 1310nm test of each terminated fiber
 - 1550nm test of each terminated fiber
 - All tests shall be bi-directional



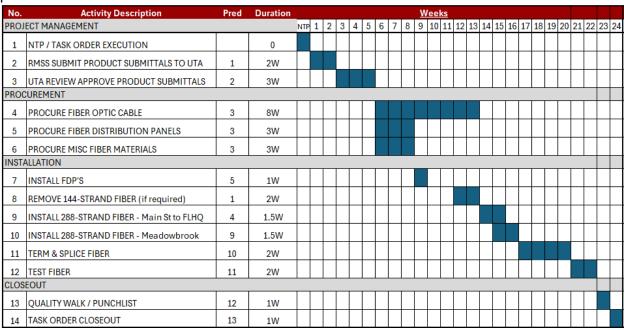
Deliverables

RMSS will provide the following deliverables under the scope of this proposal:

CDRL#	Description
PTO031-001	Product Submittals
PTO031-002	OTDR Test Reports – Fiber Reel Tests
PTO031-003	ORDR Test Reports – Field Tests

Execution Timeline

RMSS anticipates the following schedule for the execution of this task order from notice to proceed:



*RMSS & UTA will develop a mutually agreed upon schedule upon task order execution based on the priority of other active task orders and available resources at that time.

Capital Assets

There will be no new capital assets created as a part of this project. The entire N/S fiber network is a single asset and will be created as part of a separate project

Assumptions

- 1. The proposed fiber (see attachment) has been selected as it will fit in the existing 14mm innerduct currently installed throughout the system. This proposal assumes that this fiber will be acceptable and that the innerduct is still functional after the 144-strand is removed.
- 2. This proposal assumes 50ft of spare 288-strand fiber will be coiled up in each manhole
- 3. This proposal assumes that the 288-strand fiber will be installed at nighttime during non-revenue service periods on weekdays.



4. This proposal assumes that installation of FDP's, splicing, and terminations will occur during revenue service hours on weekdays.

Exclusions

1. All IT network design.

This proposal is valid for 60 days, unless extended in writing by RMSS.

If you need any additional information, please don't hesitate to contact us.

Sincerely,

Josh LaFleur Project Manager

Rocky Mountain Systems Services

CC:

Marshall Wilson – RMSS Anthony Ortolani - RMSS Troy Nelson – RMSS

Our pricing is in U.S. Dollars, F.O.B. Salt Lake City UT, and excludes all allowances, taxes, tariffs, licenses, and permits

Attachments:

• CommScope 288-strand SMFO Cut Sheet

PTO 031 - IT Fiber Optic Backbone Enhancement Task Order Estimate Summary



10/23/2024

Subcontractors	\$ 194,939.00
Materials	\$ 56,732.00
Administrative	\$ 26,008.00
Design/Engineering	\$ -
Construction/Testing	\$ 67,886.00
Travel & Perdiem	\$ -
Other Costs and Fee	\$ 49,014.00
Total:	\$ 394.579.00



Fiber OSP cable, Zero Water Peak® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube 200um Fiber Arid-Core® Construction, 288 fiber, Singlemode G.657.Al, Gel-filled, Feet jacket marking, Black jacket color

 *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117-58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series B-LN

Government Funding Build America Buy America (BABA) compliant*

General Specifications

Cable Type Stranded loose tube

 Construction Type
 Non-armored

 Subunit Type
 Gel-filled

Filler, quantity 0

Jacket Color Black

Jacket Marking Feet

Jacket Marking Method Laser

Jacket Marking Text COMMSCOPE GB (YYYY) 810009731/DB 288 X G657A1 200um (Serial number) (feet) FT

Subunit, quantity 12
Fibers per Subunit, quantity 24
Total Fiber Count 288

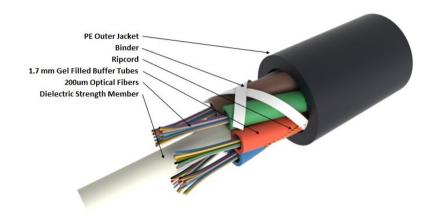
Dimensions

Buffer Tube/Subunit Diameter1.7 mm0.067 inDiameter Over Jacket9.5 mm0.374 in

Page 1 of 4



Representative Image



Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded143 mm | 5.63 inMinimum Bend Radius, unloaded95 mm | 3.74 inTensile Load, long term, maximum335 N | 75.311 lbfTensile Load, short term, maximum1000 N | 224.809 lbf

Compression 10 N/mm | 57.101 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

Impact 0.3 N-m | 2.655 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

COMMSC PE®

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 769 m | 2,522.966 ft

Optical Specifications

Fiber Type G.657.A1, TeraSPEED®

Environmental Specifications

Installation temperature-30 °C to +70 °C (-22 °F to +158 °F)Operating Temperature-40 °C to +70 °C (-40 °F to +158 °F)Storage Temperature-40 °C to +70 °C (-40 °F to +158 °F)

Cable Qualification Standards IEC 60794-5-10

Environmental Space Air-blown, microduct

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Drip 70 °C | 158 °F

Drip Test Method FOTP-81 | IEC 60794-1 E14

Heat Age -40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-30 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-22 °F to +140 °F)

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

Temperature Cycle $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 77.5 kg/km | 52.078 lb/kft

Included Products

CS-8W-200UM-LT – 200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

Fiber



* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable