

**CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2024-2033 CIP**

DEPARTMENT:

DEPARTMENT PRIORITY:

(1) PROJECT NAME:
PROJECT STATUS:

<p>(2) PROJECT DESCRIPTION AND JUSTIFICATION:</p> <div style="border: 1px solid black; padding: 5px;"> <p>Continue municipal fiber network ring to include: Fire Dispatch, Brophy Elementary, Worcester Road Sewer Station and New York Ave Water Station. This fiber ring makes the City network connectivity more reliable and self-sufficient in the event of an emergency or a fiber break of the existing fiber network.</p> </div> <p>PROJECT ADDITIONS/CHANGES JUSTIFICATION:</p> <input type="text"/>	<p>(3) PURPOSE OF PROJECT:</p> <table border="0"> <tr><td><input type="checkbox"/></td><td>Replace existing infrastructure</td></tr> <tr><td><input type="checkbox"/></td><td>Replace existing capital asset</td></tr> <tr><td><input type="checkbox"/></td><td>Replace existing vehicle</td></tr> <tr><td><input type="checkbox"/></td><td>Replace equipment</td></tr> <tr><td><input checked="" type="checkbox"/></td><td>New infrastructure</td></tr> <tr><td><input type="checkbox"/></td><td>New capital asset</td></tr> <tr><td><input type="checkbox"/></td><td>New vehicle</td></tr> <tr><td><input type="checkbox"/></td><td>New equipment</td></tr> <tr><td><input type="checkbox"/></td><td>Strategic/Comprehensive/Master plan</td></tr> </table>	<input type="checkbox"/>	Replace existing infrastructure	<input type="checkbox"/>	Replace existing capital asset	<input type="checkbox"/>	Replace existing vehicle	<input type="checkbox"/>	Replace equipment	<input checked="" type="checkbox"/>	New infrastructure	<input type="checkbox"/>	New capital asset	<input type="checkbox"/>	New vehicle	<input type="checkbox"/>	New equipment	<input type="checkbox"/>	Strategic/Comprehensive/Master plan
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(4) BUDGET REQUEST BY YEAR:

	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29-33
a. Land Acquisition						
b. Planning / Feasibility						
c. Design						
d. Construction						
e. Equipment/Vehicles						
f. Contingency						
g. Other	223,000					
TOTAL	223,000	-	-	-	-	-

(5) PRIORITY:

a.	health and safety	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	level service maintenance	maintains City desired level of service
c.	economic development	adds to the City's economic vibrancy
d.	service improvement	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 24	FY 25	FY 26	FY 27	FY 28	FY29	YEARS 29-33
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):

-
-
-

(10) PROJECT OR EQUIPMENT LOCATION:
(11) ASSET TYPE:

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

(9) FINANCE DEPARTMENT NOTES:



**City of Framingham
Scope of Work - ITC 68
Fiber Optic Municipal Area Network**

Addition of Ring Closures on Worcester Road and Pleasant Street

Prepared by:	Comm-Tract Corp. 235 Summer Road, Bldg.# 4 Boxborough, MA 01719	Contact:	Bryan Hopkins
		Telephone:	(781) 890-5070 x6952
		Email:	bhopkins@comm-tract.com
Date:	October 11 th 2022		

Bid No.	Framingham FMAN – Addition of FD – Pleasant Ring Closure V.02
SPIN:	143008129
ITC 54:	209682
FCC Registration:	0024175408

Bill To:		Ship To:	
Company:	City of Framingham	Company:	City of Framingham
Address:	150 Concord Street Framingham, MA. 01720	Address:	150 Concord Street Framingham, MA. 01720
Contact Name:	Mr. James V. Schiavone	Contact Name:	Mr. James V. Schiavone
Phone:	508-922-8295	Phone:	508-922-8295
Fax:	508-532-5867	Fax:	508-532-5867
Email:	JVS@framinghamma.gov	Email:	JVS@framinghamma.gov

Description of Work

This Scope of Work (SOW) that follows was developed in with information as provided by the City of Framingham IT personnel and has been supplemented by field site surveys as conducted by Comm-Tract engineers.

Comm-Tract will provide and install the following fiber optic municipal area network (FMAN) addition:

A. Site Additions:

1. Brophy Elementary School – 575 Pleasant Street
2. Fire Dispatch – Station #1 – 1055 Worcester Road
3. Sewer Station – 1323 Worcester Road
4. Water Station – 92 New York Avenue

B. Overview of Network Additions:

1. One (1) new 96 count single mode fiber (SMF) ring closure will be installed. The starting point will be the Fire Dispatch at 1055 Worcester Road, run west on Worcester Road, north to New York Avenue, and east on Pleasant Street to close this ring addition at 1055 Worcester Road.
2. One (1) new 12 count SMF lateral connection will be installed to the Brophy School, the Sewer Station, and the Water Station.
3. The new 96 count will be spliced into the existing backbone at both ends of New York Avenue



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4. One (1) new 12 count fiber coupler panel and associated housing will be installed at each of the lateral connections. The 96 count will be terminated at Fire Dispatch.
5. The aerial cable will be attached to the joint owned pole within the existing municipal space.
6. All Optical Testing will conform to industry standards.
7. The Customer will receive OTDR traces and Power Meter test results at both 1310nm and 1550nm in electronic copy.
8. All fiber materials will be Corning
9. The Customer will receive the 25-year NPI Corning extended warranty covering all materials and workmanship.

C. Notes:

1. Fiber strand assignments will be determined jointly with Framingham IT personnel prior to installation of the additional site.
2. Pricing assumes access to the aerial routes, and/or conduit systems is not restricted in any way, and Comm-Tract will have free and clear access for installation purposes.
3. Pricing assumes the Customer would utilize existing location agreements with the carrier and/or utility for rights to the municipal space on the poles for the route(s).
4. Pricing assumes the project is installed in one deployment. Should any site(s) not be ready for installation and require return trip(s) additional costs may apply.
5. Customer is responsible for providing trash receptacle for non-hazardous waste disposal of fiber cable scrap, wooden fiber reels, and corrugated shipping boxes.
6. Customer is responsible for their Police Department providing adequate Police Details to support the installation work by Comm-Tract. Should such Police Details not be available and cause interruption or delay of the installation work, Comm-Tract may delay the scheduled work, and/or pass through the costs of the trucks, crews, and equipment that are deployed and unable to perform the scheduled work due to lack of Police Details.



City of Framingham
Scope of Work - ITC 68
Fiber Optic Municipal Area Network
Addition of Ring Closures on Worcester Road and Pleasant Street

D. Overview Map – Pleasant Street (Rt 30) Section - Ring Closure



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, OpenStreetMap contributors, and the GIS User Community



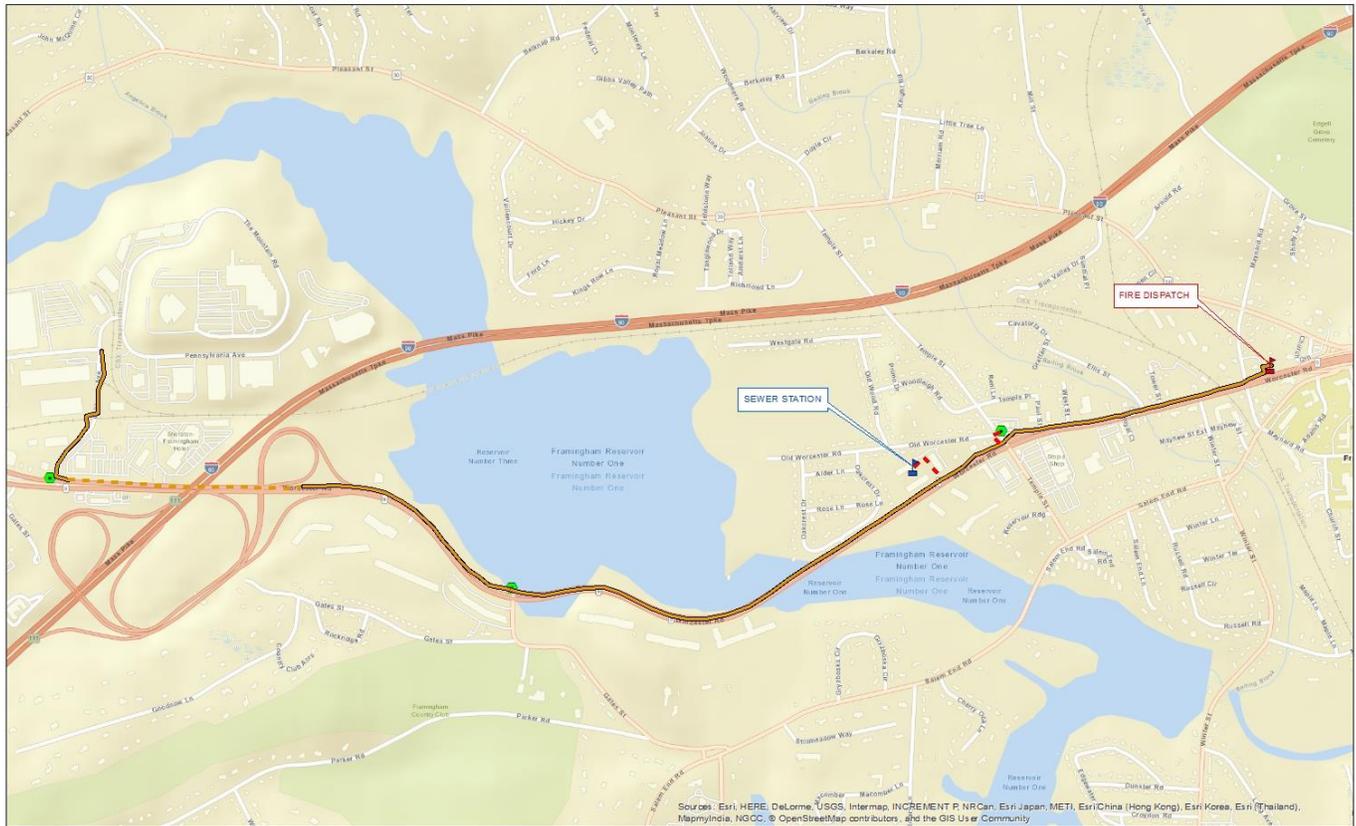
TOWN OF FRAMINGHAM, MA
96F RING VIA PLEASANT ST
TO FIRE DISPATCH

PREPARED BY: CORY AUCOIN
DATE: OCTOBER 11, 2022
PROPRIETARY AND CONFIDENTIAL



City of Framingham
Scope of Work - ITC 68
Fiber Optic Municipal Area Network
Addition of Ring Closures on Worcester Road and Pleasant Street

E. Overview Map – Worcester Road (Rt 9) Section - Ring Closure



TOWN OF FRAMINGHAM, MA
96F RING VIA ROUTE 9
TO FIRE DISPATCH

PREPARED BY: CORY AUCOIN
DATE: OCTOBER 11, 2022
PROPRIETARY AND CONFIDENTIAL



City of Framingham
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Bill of Materials	
Quantity	Description
33,438ft	96 count Corning OS 2 Single Mode Fiber aerial
2,999ft	12 count Corning OS 2 Single Mode Fiber aerial
303	5/8" Galvanized Pole Hardware
303	Cable spacers and clamps
12	Splice Case
900	Fusion Heat Shrinks
12	Snow Shoes for Aerial Slack Storage
19	Coupler Panel – 12 Way
4	Fiber Housing
	Other Miscellaneous Materials



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Warranty Information - Technical and Compliance Notes:

The Comm-Tract provided warranty and technical compliance with design and installation standards information is provided below as associated with this scope of work.

- Comm-Tract is a certified provider and partner for the Manufacturer and provides a 25 Year Warranty.
- The 25 Year Warranty commencing on the date of an accepted installation by the Customer covers all Manufacturer's products and materials, and covers the repair, and/or replacement of all installed components including, but not limited to fiber cable, fiber connectors, fiber patch panels, fiber jumpers and patch cords, and other materials as installed.
- The repair and/or replacement of any component in the certified and approved network solution as provided and installed by Comm-Tract under the 25 Year Warranty is provided at no cost to the Customer over the period of the 25 Year Warranty.

- Comm-Tract adheres to the following design and installation standards relative to the scope of work as provided.
- BICSI Design and Installation Applicable Standards
- Telecommunications Industry Association (TIA) Applicable Standards
- Electronics Industry Association (EIA) Applicable Standards

- ANSI/TIA/EIA – 568 Standards
- ANSI/TIA/EIA – 569 Standards
- TIA/EIA 604 Fiber Optic Standards
- TIA-492 Fiber Optic Installation Standards
- TSB-149 Fiber Optic Workmanship Standards
- IEEE 802.3 Standards



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Pricing and Terms	
Customer agrees to the following payment schedule:	
30% upon Acceptance of Materials:	\$ 66,891.66
65% on Actual Project Progress:	\$ 144,931.93
5% upon Completion:	\$ 11,148.61

- The Project Price shall be subject to adjustment in the event of any mutually agreed upon written changes made to the Scope of Work.
- Prices are valid for 90-days.
- The Project Price does not include licensing of pole or underground facilities.
- The Project Price does not include the cost of police details.
- The Project Price does not include permitting is applicable.
- The Project Price does not include any new underground construction.
- The Project Price does not include any applicable taxes as the project is tax exempt.
- The Project Price includes shipping charges.
- The Project Price assumes access to each location is free and clear for installation and all sites are ready for installation under a single deployment. Should a site not be ready, and a second deployment is needed, additional charges will apply.
- Comm-Tract will perform during normal business hours – Monday through Friday, 8:00 a.m. to 5:00 p.m., unless otherwise specified in the Description of Work.
- Customer hereby agrees to the terms and conditions set forth in the Scope of Work by signing below or issuing a Purchase order referencing this Scope of Work.
- This Scope of Work is governed by the terms and conditions of the Commonwealth of Massachusetts ITC 68 blanket contract.

Site Surveys:	Included
Design and Engineering:	Included
Certification and Warranty:	Included
Materials:	\$ 116,892.20
Labor:	\$ 106,080.00
Total:	\$ 222,972.20

Customer Name:	
Authorized Signature:	
Name:	
Date:	

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DEPARTMENT PRIORITY:

(1) **PROJECT NAME:**
PROJECT STATUS:

<p>(2) PROJECT DESCRIPTION AND JUSTIFICATION:</p> <div style="border: 1px solid black; padding: 5px;"> <p>The current Fire Apparatus laptops will exceed their 5 year useful life in the next budget cycle and will no longer be covered under original warranty. Continued use of this equipment after useful life will likely result in more in-service equipment failures. This equipment is utilized by the Fire Department 7 days a week, 24 hours a day. It is responsible for communications between Dispatch operations and the Apparatus Crew, including event information, response actions, Hazardous materials information, building plans, and hydrant locations. Each Fire Apparatus will be equipped with a new ruggedized laptop; vehicle docking station with power, antenna, and networking connections; and software for Fire operations. There are 10 Fire Apparatus and 5 ambulances; the project also includes 5 units as spare.</p> </div> <p>PROJECT ADDITIONS/CHANGES JUSTIFICATION:</p> <input type="text"/>	<p>(3) PURPOSE OF PROJECT:</p> <table border="0" style="width: 100%;"> <tr><td><input type="checkbox"/></td><td>Replace existing infrastructure</td></tr> <tr><td><input type="checkbox"/></td><td>Replace existing capital asset</td></tr> <tr><td><input type="checkbox"/></td><td>Replace existing vehicle</td></tr> <tr><td><input checked="" type="checkbox"/></td><td>Replace equipment</td></tr> <tr><td><input type="checkbox"/></td><td>New infrastructure</td></tr> <tr><td><input type="checkbox"/></td><td>New capital asset</td></tr> <tr><td><input type="checkbox"/></td><td>New vehicle</td></tr> <tr><td><input type="checkbox"/></td><td>New equipment</td></tr> <tr><td><input type="checkbox"/></td><td>Strategic/Comprehensive/Master plan</td></tr> </table>	<input type="checkbox"/>	Replace existing infrastructure	<input type="checkbox"/>	Replace existing capital asset	<input type="checkbox"/>	Replace existing vehicle	<input checked="" type="checkbox"/>	Replace equipment	<input type="checkbox"/>	New infrastructure	<input type="checkbox"/>	New capital asset	<input type="checkbox"/>	New vehicle	<input type="checkbox"/>	New equipment	<input type="checkbox"/>	Strategic/Comprehensive/Master plan
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(4) **BUDGET REQUEST BY YEAR:**

	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29-33
a. Land Acquisition						
b. Planning / Feasibility						
c. Design						
d. Construction						
e. Equipment/Vehicles	117,000					
f. Contingency						
g. Other						
TOTAL	117,000	-	-	-	-	-

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(6) **EFFECTS ON ANNUAL OPERATING BUDGET:**

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Personnel							
Operating							

(7) **PROPOSED FUNDING SOURCE(S):**

- 1)
- 2)
- 3)

(10) **PROJECT OR EQUIPMENT LOCATION:**

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(8) **PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)**

Carly Melo cp@framinghamma.gov 508-532-5555

(9) **FINANCE DEPARTMENT NOTES:**

Haywood Associates Incorporated

dba TransCOR Info Technologies
124 Jewett Street
Georgetown, MA 01833

QUOTATION

Quote Number: 22-1096
Quote Date: Oct 11, 2022
Page: 1

Voice: (978) 352-3100
Fax: (978) 352-9199

Quoted To:

Framingham Fire Department
10 Loring Drive
Framingham, MA 01702

Customer ID	Good Thru	Payment Terms	Sales Rep
FRA02	11/10/22	1% 20, Net 30 Days	RRH

Quantity	Item	Description	Unit Price	Amount
1.00	COMMENT A	ATTN: AJ Abreau E-M: aabreu@framinghamma.gov TEL: -----		
1.00	COMMENT M5 ITC73	REF: Massachusetts State Contract ITC73 Category 4 Rugged Mobile Devices Terms & Conditions through 2/2028 -----		
1.00	COMMENT	Quote for 20 CF-33's. 15 for existing vehicles and 5 Spares. -----		
20.00	MISCELLANEOUS	CF-33GZ041KM:Win10 Pro (Win11 DG), Intel Core i5-10310U 1.7GHz vPro (4.4GHz), AMT, 12.0" QHD Gloved Multi Touch+Digitizer, 16GB, 512GB OPAL SSD 4G LTE Band 14 (EM7511), GPS, Dual Pass (Ch1:WWAN/Ch2:GPS), Infrared Webcam, 8MP Rear Camera, Standard Batteries (2), TPM 2.0, Flat, Bundle, Premium Keyboard	4,331.04	86,620.80
20.00	FZ-SVCTPNF5Y	Panasonic Protection Plus - Toughpad PC w/ 2 Years Extended Warranty (Years 1,2,3,4 & 5)	712.50	14,250.00
5.00	HA-33LDS2	Havis Laptop 2-in-1 Veh Dock (DPT) for Panasonic CF-33.USB 2.0 (4), USB 3.0 (2), Serial, Eth (2), HDMI, VGA, Dock Cnctor,	1,036.00	5,180.00
			Subtotal	Continued
			Sales Tax	Continued
			TOTAL	Continued

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Framingham Fire Department
 10 Loring Drive
 Framingham, MA 01702

Customer ID	Good Thru	Payment Terms	Sales Rep
FRA02	11/10/22	1% 20, Net 30 Days	RRH

Quantity	Item	Description	Unit Price	Amount
5.00	LN-PA1580-3772	Dual RF, Power, Rel Lever, Lock 120W Auto Adapter for Panasonic CF19/31/53/74, Output -10' Shen Ming , Input 1' Stripped /Tinned, Auto Reset, Output Short Circuit, Lo Input Volt Protection	153.13	765.65
1.00	COMMENT	----- Adapter Plate-Needed to go from older docking station to new docking station. -----		
5.00	GJ-7160-0794	VESA to Gamber-Johnson Adapter Plate	29.75	148.75
1.00	COMMENT	----- Antenna (Cellular & GPS) -----		
15.00	AP-MMF-CG-Q-S11-BL21	Antenna Plus Antenna - Threaded Bolt, Cellular/LTE GPS, 21' Cables, TNC M, Black - MOQ 20	189.00	2,835.00
1.00	COMMENT	----- Swap 5 computers from Dell to Panasonic and install new antennas for all 15 vehicles -----		
5.00	INSTL-TSV-EMW	Vehicle Installation - Computers, Mounts, Electrical, Shut Down Timer, Antenna and/or Modems - 90 Day Warranty	588.88	2,944.38
10.00	INSTL-ENAMB-EW	Engine/Ambulance/Marine Installation - Modems, Antennas, Electrical - 90 Day Warranty	393.75	3,937.50
			Subtotal	Continued
			Sales Tax	Continued
			TOTAL	Continued

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Framingham Fire Department
10 Loring Drive
Framingham, MA 01702

Customer ID	Good Thru	Payment Terms	Sales Rep
FRA02	11/10/22	1% 20, Net 30 Days	RRH

Quantity	Item	Description	Unit Price	Amount
20.00	S & H	Shipping & Handling: Computers & Mounts	15.00	300.00
			Subtotal	116,982.08
			Sales Tax	
			TOTAL	116,982.08