First Responders Communications Network

Milford Deliberative Session
January 30, 2021

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CTA Consultants Overview

CTA - Communications Technology Advancement

- 600+ public safety radio communications projects
- Relevant industry knowledge, we contribute to & drive what's next
- Specialize in multi-agency/multi-jurisdiction systems
- All phases of radio communications: assessment - implementation
- A collaborative partnership where we act on your behalf
- Independent, with a history of no successful protests

Dedicated to client success, driven to excellence!

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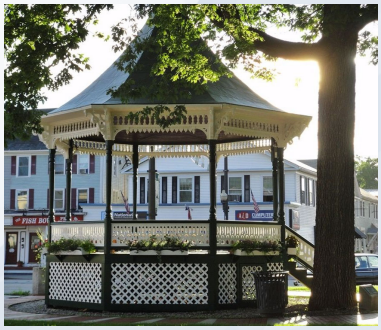
Agenda

- Dispatch Center Assessment
- Radio System Assessment
- Specifications / RFP
- Vendor Proposals Evaluation
- Competitive Negotiations
- Vendor Recommendation
- Notice of Intent to Award
- Contract Negotiations



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Assessment - Dispatch

- Milford Area Communications Center (MACC) Base Dispatches 9-1-1 calls for:
  - Ambulance: Milford and Wilton
  - Fire: Milford, Wilton, and Mont Vernon
  - Law Enforcement: Milford, Wilton, Mont Vernon, and Lyndeborough
- Identified Issues
  - Inability to hear and be heard by users
  - Site security
  - No monitoring / alarms
  - Aging Equipment

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Dispatch Alternatives

- MACC Base Dispatch Center Location and Operations
- Milford Police Department Location and Town of Milford – only Operations
- Milford Police Department Location and Regional Operations

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Assessment – Radio System

- Milford Area Communications Center (MACC) Base
  - 5-site, 4-channel analog VHF radio system
  - 4-site VHF low-band paging system
  - 2-site, 1-channel analog VHF low-band system - DF
- Milford Fire Department
  - 1-site, 1-channel, analog VHF radio system
- Identified Problems
  - Lack of Coverage / Capacity / Interoperability
  - Inability to hear and be heard by dispatch
  - Aging Equipment

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Alternatives - Radio System

- Milford Standalone VHF P25 Conventional System
- Milford Standalone 700/800 MHz P25 Conventional System
- Regional VHF Simulcast P25 Conventional System
  - Analog Infrastructure
  - Subscribers / Convert to Digital
- Regional 700/800 MHz Simulcast P25 Conventional System

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Opinion of Probable Costs

Milford ONLY VHF Simulcast P25 Phase 1 Radio System / Dispatch Center at Milford PD and Town of Milford ONLY Dispatch

	Town of Milford
Radio System Upgrade	$ 1,675,600
Dispatch Center Upgrade	$ 718,500
Radio System & Dispatch TOTAL	***$ 2,394,100***
Dispatch Operations Year 1	$ 550,000
Milford Financial Responsibility	***$ 2,944,100***

Regional VHF Simulcast P25 Phase 1 Radio System / Dispatch Center at Milford PD and Town of Milford Regional Dispatch

	Town of Milford	Town of Wilton	Town of Mont Vernon	Town of Lyndeborough	TOTALS
Radio System Upgrade	$ 1,736,350	$ 938,800	$ 870,300	$ 738,500	$ 4,283,950
Radio System Upgrade %	*40.5%*	*21.9%*	*20.3%*	*17.2%*	*100.0%*
Dispatch Center Upgrade	$ 654,800	$ -	$ -	$ -	$ 654,800.00
Dispatch Center Upgrade %	*100.0%*	*0.0%*	*0.0%*	*0.0%*	*100.0%*
Radio & Dispatch TOTAL	***$ 2,391,150***	***$ 938,800***	***$ 870,300***	***$ 738,500***	***$ 4,938,750***
Dispatch Operations Year 1	$ 471,250	$ 97,500	$ 65,000	$ 16,250	$ 650,000
Each Town's Financial Responsibility	***$ 2,862,400***	***$ 1,036,300***	***$ 935,300***	***$ 754,750***	***$ 5,588,750***

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Recommendations

- Radio System
  - Town of Milford procure and install a P25 *VHF conventional radio system.*
- Dispatch Center
  - Located at Milford Police Department
  - Operations under the control of the Town of Milford
  - Establish a Governance Committee
    - Operations & Finance Sub-Committee

Radio System and Dispatch Center are designed to accommodate the towns of Wilton, Mont Vernon, and Lyndeborough

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Dispatch Center Update

Radio System Update

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Dispatch Center

- Contracted with Cowan Goudreau Architects PLLC for design
- Constructed at Milford Police Department following NFPA 1221 guidelines
- Will serve Town of Milford and can accommodate:
  - Wilton
  - Mont Vernon
  - Lyndeborough
  - and others

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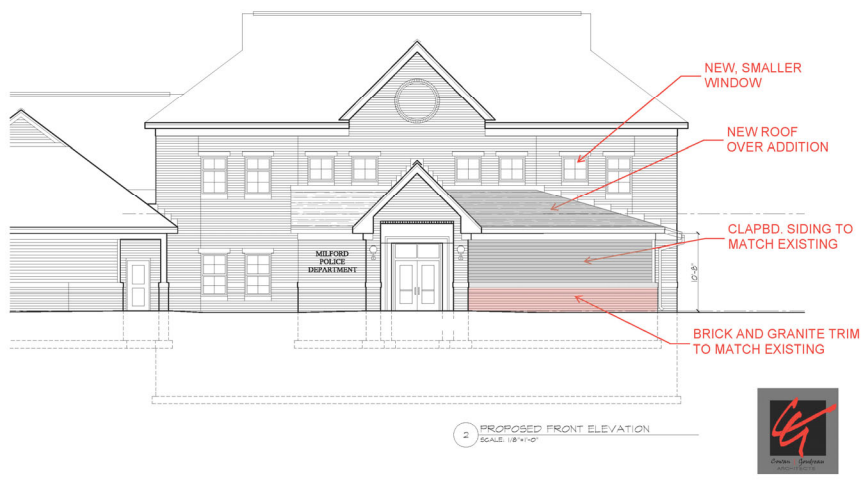
Dispatch Center



Warrant Article Value for Dispatch Center: $400,000

Proposed Annual Operating Budget: $595,950

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Radio System – Procurement Activities

- Published RFP
- Pre-proposal Conference / Site Visits
- Answered Vendors Questions
- Received Proposals from L3Harris and Motorola
- Initial Technical Evaluation
- Issued Technical Questions to Proposers / Evaluated Responses
- Issued Additional Technical Questions to Proposers
- Requested BAFO (Best and Final Offer)

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Radio System – Vendor Proposals

- VHF P25 Conventional Radio System
- 4 Voice Channels
- Monitored Hot Stand-by (MHSB) Microwave Network
- New P25 Conventional subscribers
- Paging for Milford Fire and Ambulance

- L3Harris
  - 1 RF Site
  - New Rooftop Antennas
- Motorola
  - 2 RF Sites
  - New 100 ft Tower

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Radio System - Evaluation

Evaluation Categories	Allowed Points	L3Harris	Motorola
Pricing	30.00	20.07	25.20
Technical	70.00	64.68	62.08
Total Cost and Technical Evaluation Points	100.00	84.75	87.28

P25 Public Safety Radio System	L3Harris	Motorola
Infrastructure Costs	$ 1,657,642.35	$ 728,008.31
Subscriber Costs	$ 495,477.25	$ 952,369.97
Total Contract Pricing	**$2,153,119.60**	**$ 1,680,378.28**

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Radio System – Intent to Award

CTA recommends issuing a Notice of Intent to Award to Motorola Solutions

Motorola Solutions will provide a P25 Public Safety communications system that meets the needs of the Town of Milford users for the next 15 – 20 years.

It is expandable to easily integrate surrounding Towns.

Warrant Article Value for Radio System: $2,000,000

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Radio System - Vendor Negotiations

- Resolve minor technical exceptions
- Resolve terms & conditions exceptions
- Resolve payment terms
- Assess cost savings vs risks: removing physical facilities from Motorola contract

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Radio System - Budget Details

- P25 Radio System Technology
- Public Safety Coverage Guarantee
- Public Safety Sites
- Public Safety Connectivity
- P25 Mobile and Portable Radios
- Communications Center Technology

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First Responders Communications Network Budget

Cost Elements	Competitive Estimate	Motorola Negotiations
RADIO INFRASTRUCTURE	$ 299,500	$ 339,867
MICROWAVE SYSTEM	$ -	$ 113,078
PHYSICAL FACILITIES	$ 375,100	$ 194,029
MOBILE/PORTABLE RADIOS	$ 538,400	$ 631,074
PAGING SYSTEM & PAGERS	$ 42,800	$ 50,836
VENDOR SERVICES	$ 254,400	$ 272,356
DISCOUNT	$ (445,700)	$ (476,845)
SPARES - MOBILE / PORTABLE RADIOS	$ 10,600	$ 10,600
SPARES - FIXED NETWORK	$ 29,000	$ 22,600
SPARES - DISPATCH	$ 18,000	$ 24,216
CONSULTING	$ 367,300	$ 250,000
CONTINGENCY	$ 186,200	$ 168,778
RADIO INFRASTRUCTURE TOTAL	***$ 1,675,600***	***$ 1,600,588***
DISPATCH CENTER - FACILITY	$ 400,000	$ 395,788
DISPATCH CENTER - CONSOLES/LOGGING/CAD	$ 318,500	$ 402,052
DISPATCH INFRASTRUCTURE TOTAL	***$ 718,500***	***$ 797,840***
FIRST REPONDERS COMMUNICATIONS NETWORK INFRASTRUCTURE TOTAL	***$ 2,394,100***	***$ 2,398,428***

Useful Life

- Subscribers: 10 yrs
- Infrastructure: 15-20 yrs

% of overall Cost

- Subscriber: 27%
- Infrastructure: 73%

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First Responders Communications Network

Current communications environment is inefficient at best and life-threatening at worst.

- Operability
  - Simplified communications
  - Communicate **when** and **where** needed
  - Consistently dependable system
- Interoperability
  - Between all agencies in the Town of Milford
  - With all surrounding Towns
- Protect the lives of those who serve the citizens of Milford

A public safety radio system is a paramount requirement for First Responders

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Thank you for sharing your time with us.
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