Capital Planning Committee Meeting Minutes October 18, 2018

In attendance: Stephen Andrew

> Joseph Barr Charlie Foskett

Phyllis Marshall-Hartman

Chris Moore Sandy Pooler Brian Rehrig Barbara Thornton Timur Yontar

Guests: Capt. Julie Flaherty, Arlington Police Department

Rob DeRosa, Mechanic, Arlington Fire Department

Chuck Nardone, Consultant, Nelson Communications

Not in attendance: Ida Cody, Comptroller

Amy Fidalgo, Management Analyst

Meeting Opened: Charlie Foskett called the meeting to order at 5:05pm. The minutes of the meeting of October 4, 2018 were unanimously approved.

Radio System Replacement: Julie Flaherty, Rob DeRosa, and Chuck Nardone presented in detail on this Police & Fire capital request and answered questions.

Initially this request was just for new portable radios, which were aging out and soon to be unsupported. Rob DeRosa did an investigation with vendor Motorola. Chief Ryan thought an independent evaluation not from a vendor was appropriate, and hired Nelson Communications to do a study.

The system has 3 main components: 911, Dispatch Center, and Radio System. The equipment dates to the 1970s-90s and needs enhancement. Specifically, "simulcast" – the ability to transmit and receive from multiple central locations – will enhance the coverage for police officers and firemen to communicate throughout Town. Currently significant areas are poorly covered, especially within buildings when using portables. The cost estimate includes Microwave Radio (to transmit digital Ethernet signals, which are not supported by the current copper cabling) and its Installation, the Radio System including the dispatch consoles, and Subscriber Equipment (portable radios) for both APD and AFD.

Steve Andrew noted that microwave requires line-of-sight (LOS) and asked whether that would interfere with future development. Chuck Nardone said other municipalities have required that if new development interferes with public safety communications then the developer must pay to remedy.

Sandy Pooler asked whether fiber-optic could be used. Chuck Nardone stated the cost-per-mile would be higher than microwave. Sandy Pooler and Charlie Foskett both noted that the Town may already have laid some fiber-optic in the past; as a follow-up we will inquire with David Good whether this is an option.

Charlie Foskett asked about the effect of weather on communications, and about bandwidth and carrier frequency. Chuck Nardone stated that the microwave system is all-weather with 99.999% reliability especially over the short (~1½ mile) distances involved. Bandwidth is ~10 Mb which is more than 10x

what is needed; frequency is 18 GHz, licensed by the FCC. Barbara Thornton asked whether future development could interfere with the system, and whether the system has self-monitoring. Chuck Nardone said that since frequencies are regulated, new equipment (e.g. WiFi) should not, unless they are operating in unauthorized frequencies; radio interference would set off alarms and/or officers' radios would go silent and they would then alert the dispatch center that they had lost connectivity. Joe Barr suggested that this install be coordinated with the Town's IT department re long-term communications strategy (since it would be adding substantial bandwidth capacity).

BR suggested a review of main components and costs:

- Last year's budget for this system, spread over 2 years, was \$375k for the dispatch consoles (FY19), \$482k for the remainder of the system ex AFD portables (FY20), and \$150k for AFD portables, totaling \$1.007m.
- Current estimate is \$1.552m.
- Difference is mostly driven by:
 - o Additional cost of Microwave Radio system (+\$207.5k) and its install (+\$222.8k)
 - o Increased cost of 60 AFD portables (\$210k, difference of +\$60k)

Higher cost for AFD portables is a recent change by Chief Jefferson, who noted that recent poor performance by the APX4000 units during the Merrimack Valley gas explosions convinced him to prefer the APX6000 units, which are \$3500 each not \$2500.

The portables are both digital and analog capable – often Police prefers digital while Fire prefers analog. Can interoperate, although need to switch between digital and analog. (Analog signal degrades with interference whereas digital continues to operate at full strength until too much interference is reached, at which point it cuts out entirely).

Charlie Foskett asked whether the project should be done in 1 year. Chuck Nardone said their estimate was for 12-14 months for the entire process, although it could conceivably be done in less, as little as 9 months. Sandy Pooler noted that this could go to competitive bid, although for specific equipment, or it might go through an existing state contract. Brian Rehrig observed that \$375k has already been appropriated for FY19 for the dispatch consoles and we need to decide very soon whether we want that money now or later since we are poised to borrow that money.

Charlie Foskett summed up 3 key issues: (1) Does the Town have fiber, which could remove the cost of microwaves; (2) Should we do this all at once or spread it over 2 years; (3) Can we get a final cost number? Re (1), we are following up with David Good.

Subcommittee Reports: Timur Yontar and Brian Rehrig presented Police and Fire, and the committee took preliminary votes on the line items. The following were approved, with FY20 items bolded:

- Police
 - o Cruiser replacement (\$135k, FY20)
 - o Traffic control (\$4.5k, FY20)
 - o **Bullet-proof vests (\$7k, FY20**; \$22k, FY21-FY24)
 - o AEDs (\$18k, FY22)
- Fire
 - o Ambulance replacement (\$260k, FY21)
 - O Turnout gear (\$25k/yr, FY21 & after)

- o Extrication tools (\$50k, FY21)
- o Engine 4 replacement (\$600k, FY22)
- o Lighting plant vehicle (\$70k, FY22)
- o Thermal imaging cameras (\$50k, FY22)
- o Ambulance replacement (\$280k, FY24)
- O Staff/support vehicle replacement (\$40k, FY24)
- o Central Station waterproofing (\$100k, FY24)
- o Air supply vehicle replacement (\$70k, FY24)

Some discussion whether firefighters are EMTs and at what skill level (Basic Life Services vs. Advanced Life Services), and whether AFD or Armstrong ambulance responds. BR noted that the number of ambulance runs justifies the vehicle replacement schedule, and that the ambulance revolving fund pays the debt service on ambulances.

On hold for further consideration are the Radio System Replacement and all requests pertaining to facilities, e.g. carpet, air handlers, parking lot resurfacing, garage bay doors. The Committee will invite Steve Nesterak to attend in November to discuss facilities needs across the Town's departments as well as whether these should be in departmental capital requests or centralized in a Facilities request.

Some prior balances from Police (license plate reader; PC tablets) and Fire (SCBA – awaiting FEMA grant) are not needed and may be swept – will coordinate with IC.

Other Business: Briefly noted that the DPW is on the December Special Town Meeting agenda, but currently there is no plan to request authorization at that meeting of the \$20m+ that this project is budgeted to cost.

Meeting Adjourned: The meeting was unanimously adjourned at 7pm.