

| Town of Cumberland / UPGRADE OF EXISTING SYSTEM BUDGETARY COST ESTIMATES | | | | | | | | | | |
|--|-----------|-----------|-----------|----------|-----------|-----------|-----|------------|---------------|-------------------|
| Description | Unit Cost | Town Hall | Chebeague | CFD West | Range Way | Val Halla | Qty | TOTAL | ITEM TOTAL | ITEM |
| RADIO SYSTEMS | | | | | | | | | | |
| VHF Repeater/ DMR | \$ 29,000 | 0 | 2 | 2 | 2 | 2 | 8 | \$ 232,000 | \$ 232,000 | REPEATERS |
| Repeater/digital/analog | \$ 12,000 | | | | | | | | | |
| Equipment licensing | \$ 1,000 | | | | | | | | | |
| Ant[2]/t-line/mtg hdwr/protection/install | \$ 16,000 | | | | | | | | | |
| Tx Antenna Combiner | \$ - | | | | | | | | | |
| Cumberland combiner + Install | \$ 19,000 | | | 1 | 1 | 1 | 3 | \$ 57,000 | | |
| Cumberland/Chebeague combiner + Install | \$ 41,000 | | 1 | | | | 1 | \$ 41,000 | \$ 124,000 | TX / RX COMBINERS |
| Rx Antenna Multicoupler | \$ 6,500 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 26,000 | | |
| Multicoupler | \$ 6,000 | | | | | | | | | |
| Install | \$ 500 | | | | | | | | | |
| Simulcast | \$ 15,500 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 62,000 | \$ 62,000 | SIMO |
| GPS | \$ 15,000 | | | | | | | | | |
| Install | \$ 500 | | | | | | | | | |
| Site IP Connectivity | \$ 5,000 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 20,000 | \$ 20,000 | IP GATEWAYS |
| Gateway/switches/routers | \$ 3,500 | | | | | | | | | |
| Provisioning | \$ 1,500 | | | | | | | | | |
| Receiver Voting System | \$ 14,000 | | | | 2 | | 2 | \$ 28,000 | \$ 28,000 | VOTING |
| Comparator | \$ 14,000 | | | | | | | | | |
| Network Monitoring & Alarms | \$ 34,500 | 1 | | | | | 1 | \$ 34,500 | \$ 34,500 | ALARMS |
| Radio system server/software | \$ 15,000 | | | | | | | | | |
| Microwave system server/software | \$ 18,000 | | | | | | | | | |
| Install | \$ 1,500 | | | | | | | | | |
| Grounding Upgrade | \$ 2,000 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 8,000 | \$ 8,000 | GROUNDING |
| each site | \$ 2,000 | | | | | | | | | |
| DC Rectify Power & Batteries | \$ 22,500 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 90,000 | \$ 90,000 | BATTERY/UPS |
| AC Distribution | \$ 2,500 | | | | | | | | | |
| DC Rectify Power & Batteries | \$ 18,000 | | | | | | | | | |
| Installation | \$ 2,000 | | | | | | | | | |
| FCC Licensing & Coordination | \$ 1,200 | 0 | 1 | 1 | 1 | 1 | 4 | \$ 4,800 | \$ 4,800 | LICENSING |
| | \$ 1,200 | | | | | | | | | |
| Spare Equipment | \$ 75,000 | 1 | | | | | 1 | \$ 75,000 | \$ 75,000 | SPARES |
| | \$ - | | | | | | | | | |
| Remove Old Equipment | \$ 1,500 | 1 | 1 | 1 | 1 | 1 | 5 | \$ 7,500 | \$ 7,500 | REMOVE EQPT |
| each site | \$ 1,500 | | | | | | | | | |
| RADIO SYSTEM TOTAL | | | | | | | | | \$ 685,800.00 | |
| MICROWAVE RADIO | | | | | | | | | | |
| Microwave/PER END | | | | | | | | | | |
| 6/11 GHz RING Radio | \$ 40,500 | | | | | | 0 | \$ - | | |
| 6/11 GHz SPUR Radio | \$ 61,500 | 0 | 1 | 1 | 3 | 1 | 6 | \$ 369,000 | \$ 369,000 | MICROWAVE |
| Microwave RING split mount radio | \$ 24,000 | | | | | | | | | |
| Microwave SPUR spur split mount radio HSB | \$ 45,000 | | | | | | | | | |
| Equipment provisioning | \$ 2,500 | | | | | | | | | |
| Antenna/T-line | \$ 5,000 | | | | | | | | | |
| Physical path survey/ per end | \$ - | Completed | | | | | | | | |
| Frequency coordination / Licensing | \$ 2,000 | | | | | | | | | |
| Microwave - Antenna hardware/installation | \$ 7,000 | | | | | | | | | |
| MICROWAVE SYSTEM TOTAL | | | | | | | | | \$ 369,000.00 | |

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|--|------------|----------------------|-----------|----------|-----------|-----------|-----|------------|---------------|---------------------------------|
| Description | Unit Cost | Town Hall | Chebeague | CFD West | Range Way | Val Halla | Qty | TOTAL | ITEM TOTAL | ITEM |
| TOWER SITES | | | | | | | | | | |
| Site Facilities Work | | | | | | | | | | |
| Structural Analysis: | \$ 2,500 | 0 | 1 | 0 | 0 | 1 | 2 | \$ 5,000 | \$ 206,000 | TOWER SITES/ ANTENNA INSTALL |
| New 8 x 10 wood shelter; elec, foundation: | \$ 35,000 | | 1 | 1 | 1 | 1 | 4 | \$ 140,000 | | |
| Site prep, fencing, utility power, etc.: | \$ - | | | | | | 0 | \$ - | | |
| Generator: | \$ 20,000 | | | 1 | | 1 | 2 | \$ 40,000 | | |
| Other/misc site work [assumption]: | \$ 3,000 | | 1 | | | 2 | 3 | \$ 9,000 | | |
| Site cameras: | \$ 3,000 | | 1 | 1 | 1 | 1 | 4 | \$ 12,000 | | |
| TOWER SITE TOTAL | | | | | | | | | \$ 206,000.00 | |
| SERVICES | | | | | | | | | | |
| Services / % of Eqpt: | \$ 214,336 | | | | | | | | \$ 214,336.00 | SERVICES |
| Installation: | \$ - | Included w/equipment | | | | | | | | |
| Performance Bond: | \$ - | | | | | | | | | |
| Vendor Project Management: | \$ 63,040 | | | | | | | | | |
| Vendor Engineering: | \$ 50,432 | | | | | | | | | |
| Staging & Acceptance: | \$ 25,216 | | | | | | | | | |
| Coverage Testing: | \$ 25,216 | | | | | | | | | |
| Shipping: | \$ 50,432 | | | | | | | | | |
| SERVICES TOTAL | | | | | | | | | \$ 214,336.00 | |

| MOBILE & PORTABLE EQUIPMENT | | | | | | | | | | |
|--|----------|--|--|--|--|--|----|-----------|---------------|--|
| Police MOBILE - assumes dash mount: | \$ 1,200 | | | | | | 8 | \$ 9,600 | | |
| Police PORTABLE: | \$ 1,100 | | | | | | 16 | \$ 17,600 | | |
| Fire/EMS MOBILE [assumes remote mount] | \$ 1,800 | | | | | | 15 | \$ 27,000 | | |
| Fire/EMS PORTABLE: | \$ 1,100 | | | | | | 58 | \$ 63,800 | | |
| Fire/EMS ALERT PAGER: | \$ 1,000 | | | | | | 66 | \$ 66,000 | | |
| Mobile Removal: | \$ 110 | | | | | | 23 | \$ 2,530 | | |
| SUBSCRIBER RADIO TOTAL | | | | | | | | | \$ 186,530.00 | |

| | |
|------------------------------------|-----------------------|
| RADIO SYSTEMS | \$685,800.00 |
| MICROWAVE RADIO | \$369,000.00 |
| SITE FACILITIES | \$206,000.00 |
| SERVICES | \$214,336.00 |
| INFRASTRUCTURE TOTAL | \$1,475,136.00 |
| MOBILE/PORTABLE RADIO TOTAL | \$186,530.00 |
| GRAND TOTAL | \$1,661,666.00 |

ESTIMATED RECURRING YEARLY COST:

| | |
|--------------------------|----------------------------|
| Radio system maintenance | \$50,000 - \$75,000 |
| Monthly site lease fees | \$0.00 |
| Total | \$50,000 - \$75,000 |