



East Ferris

FIRE AND EMERGENCY SERVICES

Paging System Upgrades

EAST FERRIS FIRE AND
EMERGENCY SERVICES

Recommendation

That Council for the Municipality of East Ferris approves the purchase of equipment and services from Spectrum Group to supply and install all materials and labour specified in Option 2, to upgrade the paging system for East Ferris Fire and Emergency Services. The upgrade would be to a digital system on our own paging channel, all in one stage for an estimated cost of \$42,000.00 plus HST.



Budget Considerations

- 2024 approved amount for paging upgrades \$15,000.00
- Updated proposal cost for upgrades \$42,000.00 (\$30,000.00 for pagers and \$12,000.00 for other equipment)
- Surplus of \$20,000.00 from approved Dry Hydrant project
- Resale of current analog pagers \$2000.00
- Net additional funds required \$5000.00



Why the Need to Upgrade?

- CACC no longer wants us on MOH channel for paging
- We take up space and time on the channel
- Takes away from communications with ambulance service



Where we're at!!

- Right now, we are paged out in analog on the MOH channel
- We get coverage from the CACC tower in North Bay and the tower in Astorville
- Our analog repeater for our pagers is no longer supported and repair parts no longer available
- If our analog repeater goes down, we have no choice but to implement option 1 with limited coverage
- We will need to move to digital at some point to maintain tower coverage



Current Equipment Inventory

- Currently we own and operate an analog pager repeater and a digital radio repeater both located at the Astorville tower site
- Each unit works separately
- Public Works has their own analog radio repeater



New Required Equipment

- Digital pagers
- Digital repeater
- Filters from Public Work department (\$6000.00 value)
- Upgrade Public Works radios (no cost)
- Other small equipment and labour costs



Initial Request

- The initial quote for upgrades was to make the transition slowly (if needed)
- The plan was to reconfigure the Astorville tower radio repeater and relocate the analog pager repeater
- This would allow us to maintain pager coverage by having the 2 repeaters work together
- It was thought that the tower at the park hall was owned by the municipality (its owned by Spectrum)
- We could still use the tower for additional coverage but there would be a rental fee
- If we're going to pay a rental, we should use the best tower available to us (North Bay)



Revised Request

- Upgrade and migrate paging and pagers on the fire department's existing radio repeater system.
- Enhance the fire department's radio and paging coverage with the addition of a second repeater to be located in North Bay (Spectrum Telecom facility)
- Re-use some equipment from public works legacy analog system thereby upgrading public works communications to digital.



Why are Additional Funds Required?

- After some additional research it was found that the recommendation would not work, and some equipment is already no longer available
- We cannot reuse our old analog pager repeater with the digital system



Benefits of Going Digital

- Moving to digital will give us more options for the future and better coverage (linking towers)
- The use of digital pagers allows Firefighters to hear radio traffic
- Firefighters won't need to carry radios allowing us to keep them charged and, on the trucks
- Combining equipment with PW will give them better radio coverage



Option 1: \$1000.00

- Leave current equipment and reconfigure system to operate on current fire channel for paging and radio communications.
- This option allows us to get off the MOH channel, satisfying CACC and requires no additional funding. However, we would have a loss of coverage North of Quae Quae Rd and into North Bay. This is not a long-term solution, and the loss of coverage is not acceptable.



Option 2: \$42,000.00 (Recommended)

- The Municipality would purchase a new digital repeater that would be located on Spectrum's tower in North Bay. We would reuse the filters that are currently in use for PW (value of \$6000.00) and link the towers together. 30 new digital pagers would be purchased for the Fire Department and some PW radios would be traded.
- This option allows us to get off the MOH channel, satisfying CACC. It would also improve pager and radio coverage for both Fire and PW which is critical during a municipal emergency.



Option 3: \$30,000.00 this year followed by \$12,000.00 next year

- This is the same as option 2 but we would purchase the pagers this year and repeater next year
- This option allows us to get off the MOH channel, satisfying CACC. However, until the additional repeater is purchased, we would have loss of coverage to the North end and into North Bay



Conclusion

By implementing the recommended option 2

- Coverage for paging will be maintained, or better
- Radio coverage for both Fire and Public Works would be improved
- Would now have serviceable equipment for years to come
- Fire Department radios can be placed on the trucks, charged and ready when needed
- Communication during large scale emergencies would be improved

