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ADMINISTRATIVE ASSISTANT  
TO THE SELECTMEN  
JAMES FORTUNE

## MEETING NOTES

### Cranberry Isles Municipal Broadband

Tuesday, February 28, 2017 at 2:00 P.M.  
at the Cranberry House on Great Cranberry Island

### AGENDA

- I. Call to Order
- II. New Business:
  - A. Discussion with Axiom: Network Design and Operation Details & MOU for Cranberry Isles Fiber Build-Out (*This meeting follows site visits with Axiom on Islesford in the morning & Great Cranberry in the afternoon*)
- III. Other Business

The committee met with representatives from Axiom Technologies to discuss the RFI, network design and capital costs. This followed site visits by Malcolm Fernald & Jim Fortune, and Mark Ouellette and Kim Emerson (network engineer) from Axiom on LCI and GCI. Present at the meeting was Malcolm Fernald, Skip Stevens, Rosalie Kell, Ingrid Gaither, Mark Ouellette (Axiom) a few members of the public attended.

Axiom provided the most recent spreadsheet for capital and operations costs (2/27/2017). There is a cover sheet that explains the overall cost/budget for build-out and operational costs/budgets; additional attachments cover build-out to the premises broken down by individual streets. Axiom also included a draft of a partnership agreement between them and the Town.

Axiom's share of the capital cost will depend on the operational cost vs. the capital costs.

The Town will need to carry insurance on the infrastructure built if it is to own the lines and tower. This would come under the Town's existing umbrella policy.

Axiom has been given permission by Fairpoint to lease the existing fiber optic line running from Southwest Harbor to Great Cranberry. There is capacity for Axiom to provide 1,000 gigs in a dedicated fiber connect to Cranberry Isles using this connection. Axiom has included this lease in their operational cost estimate.

The network would consist of an undersea fiber cable from SWH to GCI. A microwave backhaul will be needed on GCI to send a signal to a new tower to be built on Islesford. On Great

Cranberry and Islesford, fiber optic lines will be built in existing public rights of way and to each premise (fiber to the home). The tower on Islesford will serve as the backhaul from GCI to LCI and LCI to Sutton Island. Sutton Island will need to be served by a wireless connection from the LCI tower. The Sutton wireless will have speeds of 25/3. Further review will be needed to provide fiber to the home on Sutton. It could probably be done, but there are issues that need to be resolved. The cost would also increase. There would be a maximum of 32 customers per fiber line.

Sutton would be served using a newer technology called T.V. Whitespace. Mark Ouellette explained that uses a frequency use by television networks. That frequency is now underutilized and is available for wireless internet use. The lower frequency (700 MHz) allows for greater ground penetration of the wireless signal.

Proposed towers: 100 to 120-foot tower on LCI; 20 to 30-foot tower will be needed on GCI to transmit to tower on LCI (potential sites on: CI Boatyard, Beal's property, possibly other sites near the pool. Needs a line of site to LCI tower) Tower site on Islesford: Site behind Abel property and Chaplin property, owned by Evelyn Boxley and Harvey Bunker. The Town will need to get the property owners to agree to use the land for this purpose.

Fiber lines will be micro-trenched) placed in a covered trench 12" wide and a couple feet deep. This will be done in all public rights-of-way and as many other areas as possible. Lines to homes, most private roads and hard to reach areas will be overhead lines on poles where possible. Axiom offered in their RFI response to have community volunteers to help do the micro trenching to save costs. No decision was made with regard to the volunteer effort. Some committee members expressed a desire to have the Axiom do this instead, although it would increase the capital cost.

Town will own the network, with Axiom providing the service (the ISP). Only TCI will be on the network. It is a dedicated connection serving TCI with 1,000 gigs of dedicated data available to all the customers in TCI. It will design so that capacity can expand as use and demand grows. Sutton will be wireless using the T.V. white space. (Possibility for fiber to the home in the future).

Issues to resolve:

Environmental

Shoreland

Floodzone

Wetlands

Acadia National Park

The committee scheduled a community informational forum for Thursday, March 9<sup>th</sup> at 4:00 p.m. The forum will be available using Zoom video conferencing and teleconferencing. Forums can be attended in person at Longfellow School on GCI and Ashley Bryan School on Islesford. Others will be able to join the forum remotely using Zoom video conference or dial in using the teleconference. Axiom and the Island Institute will attend via Zoom or teleconference. Axiom will attend the Town Meeting on March 11<sup>th</sup>.

Meeting adjourned at 3:30 p.m.