Update on Tower and Broadband Project – December 20, 2021

The CBAC Broadband Project has been going on now for almost 4 years. Before sending out RFPs for our project, CBAC talked extensively with CCI about their ability to upgrade their internet offering (DSL) and/or the possibility of co-locating our own solution on their tower. CCI stated they were unable to upgrade the existing copper DSL lines to faster speeds - it is technologically not possible. CCI also stated that they would not be able to allow us to co-locate on the tower because they were limited on space in the equipment hut (below the tower) and there would also be frequency interference issues from the multiple microwaves. Further, CCI did not respond to our RFP to build a new fiber-based network on the island. Redzone did not respond either. We then accepted Axiom's proposal and received our USDA grant approval at the end of 2019. Throughout 2020, we worked to put all the USDA, licensing (state and federal), land and air (FCC) use requirements in place to begin the rollout. The first USDA requirement was to hire an engineer to confirm the design and build a budget based on American made products and RFP-based buildout of the project. We hired Dean Mishke, Finley Engineering, as our engineer.

We sent out our first RFP (as USDA requires) for the tower build in mid-2021. Unfortunately, we received only one bid and it was for over $500k vs $155K in the Engineer's budget for the tower. The main reason for the disparity: Our location - RFP recipients have so many mainland broadband projects to bid on that working on a remote island with unexpected and incalculable (in their opinion) costs resulted in many RFP recipients not responding. The one bidder bid high because they did not really want the job.

As a result, we have been exploring several alternatives: 1) working on redesigning the new tower to lower the cost of the foundation (this was half of the $500k bid). Once the redesign is complete, we will try negotiating a contractor bid and 2) following the Island Institute's suggestion that CCI may be open to renewed conversations, we have been talking to the company again. We have these two parallel paths moving forward at the same time.

The first question that needs to be addressed regarding any future use of the CCI tower is whether it is structurally sound. A Structural Analysis was done by an independent firm, Tectonic Engineering, on Monday January 20th. Their report will inform us of our options: how many microwaves could go on the tower, could we co-locate on it, does it need structural enhancement and the cost, etc. Until this report is available, it is difficult to speculate on CCI's plans or CBAC's ultimate direction.

As for the future of landline phone service on the island, there is uncertainty in all circumstances, but we are carefully weighing all possibilities as they come up. We can say for sure that Axiom *cannot* provide traditional copper landline phone service. Axiom can provide Fiber-to-the-Home (VOIP) phone service. This is exactly what CCI, Verizon, AT&T and other traditional phone companies are rolling out on the

mainland. (Please see this link, https://www.bbcmag.com/tools-and-resources/ftth-top-100/2021 regarding phone company use of fiber for traditional phone service.)

We can also say for certain that the reliability of Axiom's microwaves will be far superior to CCI's based on technology improvements since CCI's were installed. Microwave outages and weather-related issues should be extremely rare with our new tower equipment. The last mile (fiber to the home) will also be more reliable than the aging copper lines. The only issue with fiber is that, unlike copper, an electrical outage disables the phone. All VoIP phone lines need a small battery backup in order to overcome this one issue. We are fortunate that our electrical outages are normally much shorter than winter storm outages on the mainland and within island control. Further, should any fiber line breaks happen, our plan is for an island resident to be a trained repair person, allowing for much quicker response time than CCI. If CCI does exit the island either by losing all their business to our broadband alternative (with our own tower) or by means of turning their tower over to the Plantation so we don't have to build a second tower, the reliability of Axiom's VoIP services will be far superior to CCI's aging system and in line with current mainland phone companies system upgrades today.

We hope this update is helpful. CBAC will be having a community wide update session once the Structural Analysis Report is available. In addition, please join our monthly CBAC zoom meetings. Our engineer would be happy to answer any technical questions.