

ATLANTIC
broadband
a Cogeco company

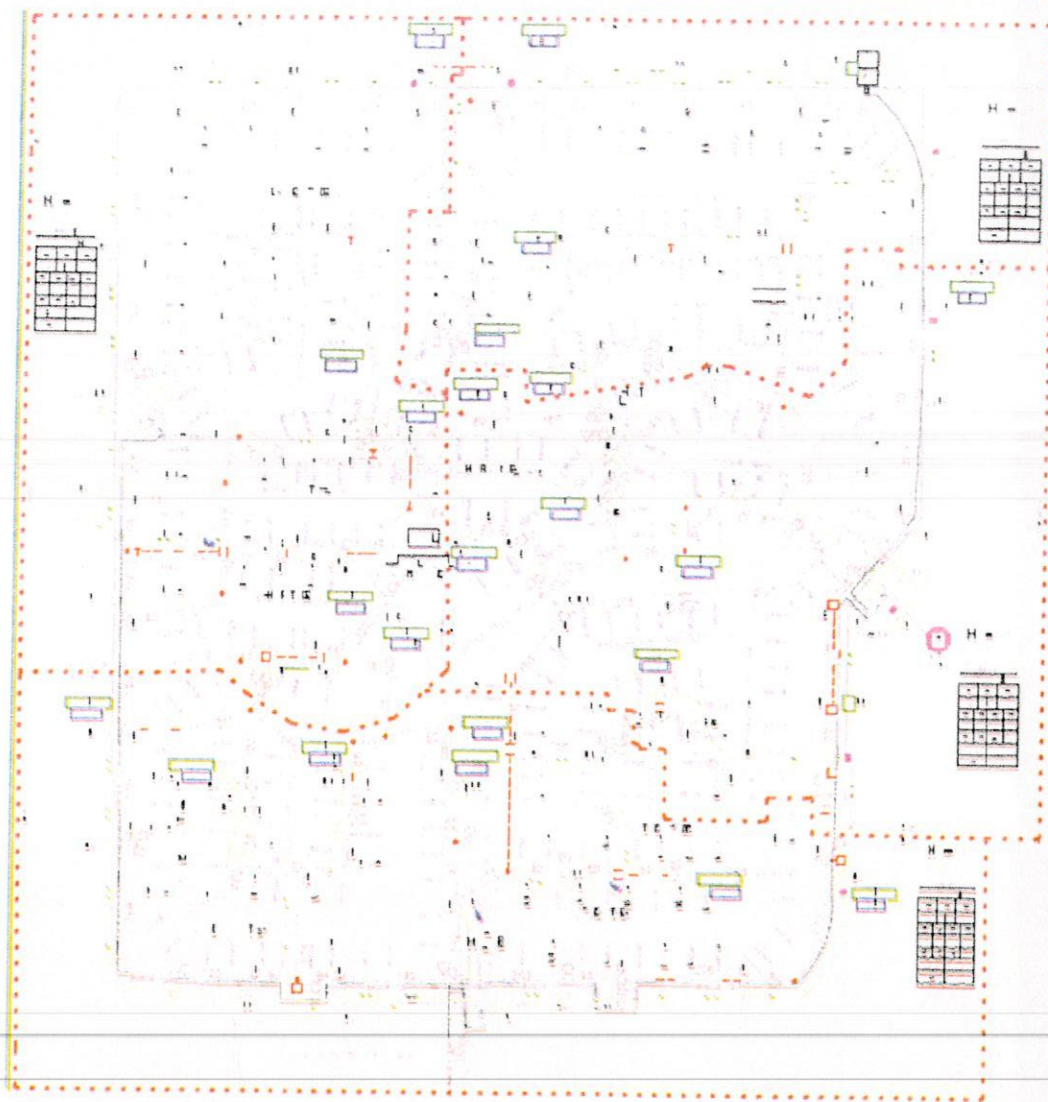
Bent Tree Villas Boynton Beach, FL

Network Construction Activity



NODE+ 0 DESIGN

- **Fiber Optic Nodes will be strategically placed on the property.**
- **The Fiber Optic Nodes are the only active pieces of equipment on the property. This increases system reliability and performance.**
- **We will install one Power Supply. In case of FPL outage, our Power Supply will have backup batteries capable of keeping the system operating for approximately 5 hours**



CONSTRUCTION

- **Approximately 3.5 miles of fiber/coaxial construction is required to serve the property both inside and out.**
- **Equipment pedestals for fiber optic nodes, RF signal taps and power supplies will be placed strategically throughout the property in areas to avoid high water, downspout drainage, environmental concerns and with the permission of the property officials.**
- **New resident drops will be buried to every unit.**
- **Existing coaxial cable will be tested and used wherever practical. Coaxial cable that is faulty will be replaced at the time of installation.**

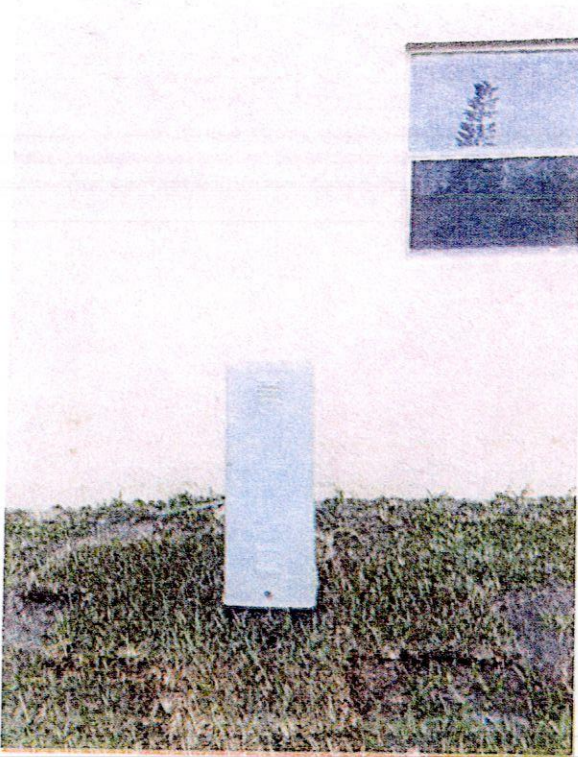
CONSTRUCTION

- Main line fiber and coaxial cable will be buried inside SDR (PVC) pipe at a minimum depth of 24" to 36".
- A typical trench could contain as many as four (4) pipes depending on final design.
- Home run drops are buried at a minimum depth of 8" to 12".
- Locates : Every utility is contacted to locate their facilities prior to any digging activity.
- Potholing : Crews will physically dig down find any utility, wire, waterline, etc. that crosses in the path of our construction prior to any digging.
- Property owned facilities are always difficult. We will work closely with Management and Maintenance staff to locate any electrical, water or irrigation lines to avoid accidents.

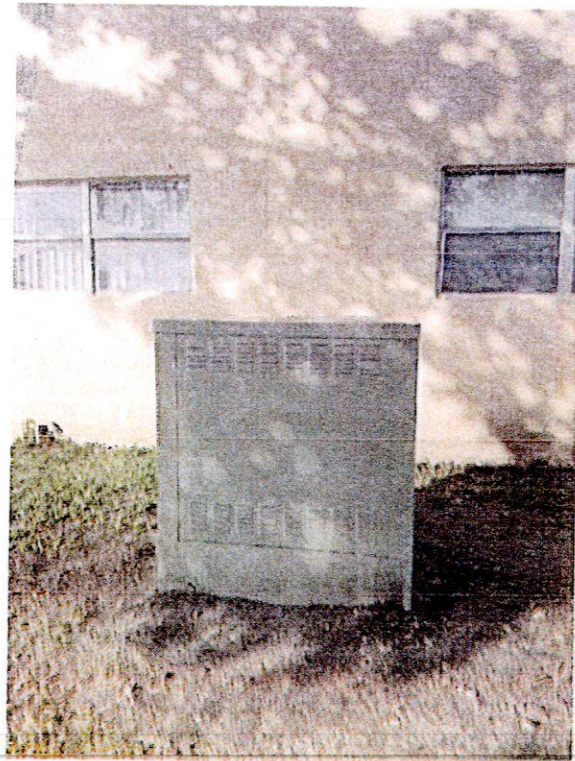


CONSTRUCTION

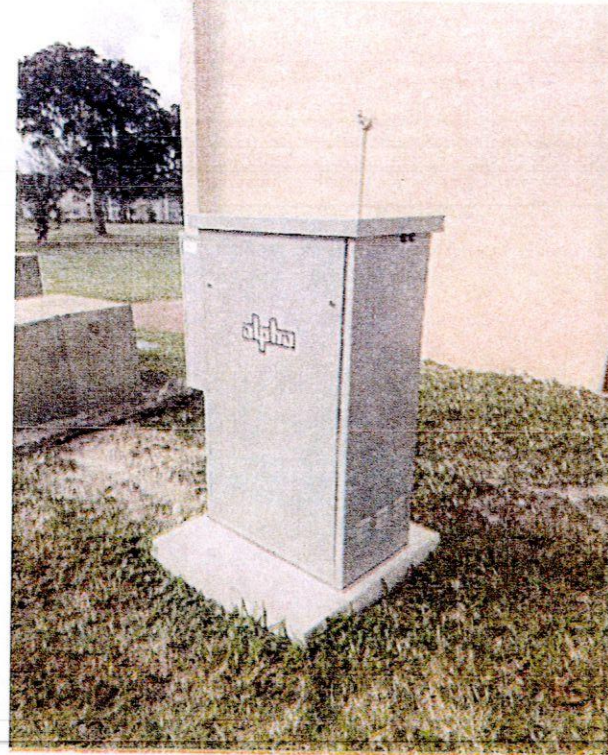
• TAP PEDESTAL



• FIBER OPTIC
NODE PEDESTAL



• POWER SUPPLY



CONSTRUCTION

• DIRECTIONAL DRILLING



■ TRENCHING



CONSTRUCTION

HAND DIGGING



CLEAN-UP



CONSTRUCTION RESTORATION

- **NO open holes during working hours without a worker physically guarding it**
- **If any hole must be left open overnight it will be fenced off with safety fencing**
- **All trench lines will be backfilled and tamped to eliminate sinkholes.**
- **Any ground that has been disturbed from digging, vehicle tire tracks or for any other reason will be restored to its former or better condition after construction is completed.**
- **Sod will be replaced when and if needed.**



NETWORK PROOF AND ACCEPTANCE

- **Quality Control – This process starts at the very beginning of the project**
 - **Conduit Depth**
 - **Bore Depth under roads**
 - **Pedestal Installation and Placement**
 - **Fiber Splicing**
 - **Coaxial Splicing**
 - **Node testing**
 - **Proper signal levels out of the taps**
 - **Property restoration**

Testing and Commission of Network

- **Every piece of equipment is tested before and after construction**
 - **Fiber Optic NODES**
 - Light levels
 - RF Levels
 - Electric power (AC/DC) levels
 - Additional Tests to measure noise and signal distortions in the signal
 - **Taps**
 - RF Levels
 - Noise and signal distortion tests
 - Home Certifications

SAFETY

- **Conduct Daily Safety Meeting at the start of the day.**
- **PPE – Safety Glasses, Hardhats, Gloves, Footwear, Reflective vests**
- **Equipment Checks – Vehicles – Directional Drills – Support Equipment**
- **Traffic – Cones – Barriers - Flags**
- **Pedestrian Traffic – Tape and Cone off hazardous areas**

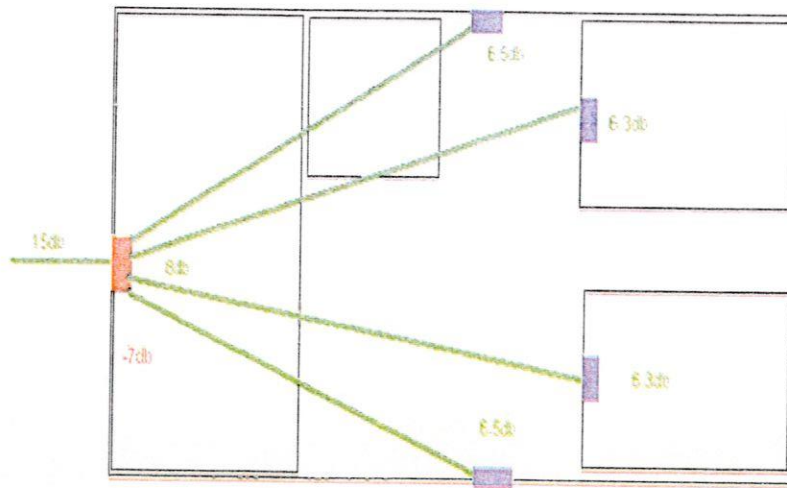
RESIDENTIAL INSTALLATION

WIRING

LOOP WIRING



HOME RUN WIRING



RG6 Coaxial

Signal Loss: 3.5 db(100ft) @ 100MHz (Coax modems typically run between 500 and 900MHz)

RESIDENTIAL INSTALLATION

WIRING

- The ABB Select Community Coordinator Team will set up dates with property Management and the Board of Directors to meet with individual residents and schedule the installations in their homes.
- Every home will get a new underground drop buried 8"-12" deep from ABB equipment to the outside of the residence.
- Existing wiring inside the house will be used. Drop cable must be commercial quality RG-6 or larger passing 1.2 MHz. Any faulty or substandard wiring will be replaced.
- All connectors and splitters inside the house will be replaced.

Construction Activities / Timeline

- **Contract Completed** January 2020
- **Planning, Walkout and Design** January-March
- **Permitting** March-May
- **Material Procurement** March-June
- **Installation of Conduit** April-June
- **Installation of Fiber and Coax** May-June
- **Equipment Splicing** June
- **Activation and Testing** June
- **Home Installations** July
- **COMPLETION** **July 31, 2020**