



State of New York County of Broome Government Offices

Office of Emergency Services

Jason T. Garnar, County Executive · Michael A. Ponticello, Director

MEMORANDUM

To: Public Safety & Emergency Services Committee

From: Michael A. Ponticello

Date: May 10, 2021

Re: Public Safety Radio System Update

Overview

Since our last report I am happy to report that we have finished the Laurel Lake site and construction has progressed very well on the remaining sites. Before legislature this month is the agreement for the Deposit site – this is the last site to be built.

We have had several key meetings with both Motorola and Aviat in the last two months. The schedule moving forward has begun to solidify. Although there is a chance we will be able to cutover in the fall this year, we are more realistically looking like spring of 2022. Motorola has identified a several components that they cannot get manufacturing commitment on. They are most concerned with a battery shortage and an extended delivery time associated with them.

Physical Infrastructure

Work is progressing on the physical sites for the radio upgrade project. Please see the attached Site Development Checklist. Lisle, Maine, and Windsor are mostly complete. Kirkwood and Deposit have just been released for construction.

Sites:

- Lisle (Town of Lisle): Structural work complete, fencing and grounding underway.
- Maine (Town of Maine): Structural work complete, fencing and grounding underway.
- Kirkwood (Town of Kirkwood): Road complete – structural construction underway.
- Ely Park (City of Binghamton): Complete
- Nabinger (Colesville): Complete
- Sanford (Town of Sanford): Complete
- Deposit (Town of Sanford): Agreement complete – before legislature this month. Road construction turned over to DPW.
- Laurel Lake (Town of Sanford): Complete.
- Windsor (Town of Windsor): Structural work complete, fencing and grounding underway.

14 of the 16 sites are ready for electrical work by DPW to power the Motorola equipment at each site. It is anticipated to be completed in the first quarter of 2021.



Lisle Tower and Generator



Windsor tower and compound.



Maine Tower Site and Compound

Requests for Proposals

- Construction - The last construction RFP has been awarded to Patriot Towers out of Scottsville NY. This covers the five remaining tower sites. We have released for construction Maine, Windsor, Lisle, Kirkwood. Deposit will be released shortly.
- Steel Lattice Towers and Shelters – Delivery to each site is scheduled by the contractor. Significant delays in tower and shelter procurement have delayed the project. From our understanding these delays are based on raw material availability to the vendor. In the last month we have also been notified by the vendor they are requesting Broome County compensate them for the increase in steel costs on the last two tower sites. We are in negotiations on this.
- Generators (cooperative purchase) – Generators were all delivered to OES and have been moved to each construction site where ready.

Road Construction



Kirkwood Access Road

The highway department has been an instrumental partner in constructing the roads to each of these sites. The road at the Kirkwood has been completed. The deposit road will be released for construction as soon as possible.

Microwave

Aviat has been contracted to install microwave connectivity to the nine new towers. Purchase Order has been issued. Engineering work is underway. This process will take approximately 3-4 months. Similar to Motorola they are reporting a raw material shortage and unable to confirm shipping dates.

Ely Park Microwave has been completed. This was a critical enhancement placing the Public Safety Facility in the microwave "loop."

Motorola Contract

- Frequency licenses are now complete.
- System design is finalized.
- OES staff have been designing preliminary talk path profiles for the end user.
- Motorola Lease agreement has been signed.
- First shipment of Motorola infrastructure equipment has been received and distributed to the tower sites.

Last week we completed the validation of subscriber units for approximately 90 agencies. We have submitted this information to Motorola. We are now awaiting their review of the validated information.

We anticipate Motorola starting to install infrastructure equipment in late Spring 2021.

We have been assigned a new Project Manager, overall this is a positive change.

We are currently review several change orders from Motorola, more information will be provided once review is complete.

We have received final RF coverage maps from Motorola – no significant changes.

911 Center Related Upgrades

In preparation for the new radio system we will be upgrading infrastructure in the 911 center to make it compatible with the new system.

Vesta 911 Phone upgrade is now scheduled to be completed in Q3 of 2021.

Log Recorder upgrade has been completed and is undergoing final configuration.

Zetron (radio console) upgrade was able to be completed in 2020.

Other

BAC has awarded the contract for Fiber connectivity to Onondaga county for connection to the Master Site.

A Master Site Agreement with Onondaga is before the legislature this month.

MOU's with neighboring county's for use of their microwave systems is being developed.

MOU's with agencies is under development.



Project Status Report

Client Name: Broome County Office of
Emergency Services

Project Name: Emergency Communications
Project – Phase 2

Client Contact: Mike Ponticiello, Director
cc: Chuck Rogers, Project Mgr.

C&S Project Number: 157.027.003

Period: April 2021

Significant activities underway or completed this period:

General:

- ✓ Provided a Project Status Report for March 2021 and an updated Site Development Checklist
- ✓ Provided agendas and conducted bi-weekly conference calls with Aviat
- ✓ Provided agendas and conducted bi-weekly conference calls with Motorola
- ✓ Provided agendas and conducted weekly conference calls with Patriot Towers

Building Permit (Deposit site):

- ✓ Revised Deposit Construction Drawings and a copy of a redacted site lease were forwarded to Hulbert Engineering on 4/22/2021.
- ✓ Awaiting issuance of Building Permit.

Ely Park:

- ✓ Aviat completed installation of the MW links to NYS Office Building and PSF
- ✓ Programming of T1 lines had been delayed. Dispatchers were hearing continuous static on some channels.
- ✓ Correction of T1 issue was completed on 4/27/2021 with onsite assistance from TuWay

Public Safety Facility:

- ✓ Aviat completed installation of the MW link to Ely Park.
- ✓ Correction of T1 issue was completed on 4/27/2021 with onsite assistance from TuWay

NYS Office Building:

- ✓ Aviat completed installation of the MW links to Ely Park
- ✓ Correction of T1 issue was completed on 4/27/2021 with onsite assistance from TuWay

Nabinger Hill Road:

- ✓ No activity
- ✓ The County has asked Aviat to prioritize the new MW hop to this site so the County can commission a Fire/EMS paging transmitter at Nabinger as soon as possible

Laurel Lake:

- ✓ Hulbert Engineering advised that power conductors did not have a sufficient depth of bedding sand. Condition was corrected by Mid-State.

Project Status Report

- ✓ Mid-State completed the installation of utility power
- ✓ UL inspection was completed on 4/16/2021
- ✓ NYSEG installed the power meter and energized the utility power
- ✓ Mid-State's final grading was completed
- ✓ Mid-State has scheduled the generator start-up and load testing with Cummins for Thursday, May 6th at 9:00 AM
- ✓ C&S will schedule the shelter manufacturer commissioning following the completion of generator commissioning

Sanford:

- ✓ No activity

Lisle:

- ✓ The trench for primary power has been inundated with water waiting for Code inspection. Hulbert Engineering agreed to allow Patriot to backfill portions of the trench, leaving specified sections uncovered for Code inspection when inspector is available.
- ✓ Patriot set the generator on its foundation
- ✓ Tower stacking is scheduled for 5/3/2021
- ✓ Shelter delivery is scheduled for 5/5/2021

Maine

- ✓ Stacking of the 195' tower was completed on 4/28/2021
- ✓ FAA Form 7460-2 was submitted to the FAA on 4/29/2021 for notification that the tower installation has been completed
- ✓ Patriot completed installation of the stone base in the compound
- ✓ Patriot delivered the generator to the site and set it on its foundation
- ✓ Equipment shelter was delivered and set on its foundation on 4/29/2021

Windsor:

- ✓ Sabre tower was delivered to the site on 4/1/2021
- ✓ Stacking of 195' tower was completed on 4/21/2021
- ✓ Hulbert Engineering advised that power conductors did not have a sufficient depth of bedding sand. Condition was corrected by Patriot.
- ✓ Equipment shelter was delivered and set on its foundation 4/23/2021
- ✓ Patriot delivered the generator to the site and set it on its foundation

Kirkwood:

- ✓ Shumaker staked out the tower center, tower legs, fence corners and true north on 4/14/2021
- ✓ Broome County DPW completed construction of the site access road
- ✓ Patriot Towers schedule to start construction was delayed from the week of April 27 to the week of May 3. Tower foundation concrete placement will follow during the week of May 10.

Project Status Report

Deposit:

- ✓ Property owner signed the property lease on 4/14/2021
- ✓ Hulbert Engineering advised they have no code related comments on the submitted SWPPP
- ✓ County advised that the correct 911 address for this site is 465 Shaver Hill Road. Drawings updated.
- ✓ Revised Construction Drawings and a copy of a redacted site lease were forwarded to Hulbert Engineering on 4/22/2021.
- ✓ Awaiting issuance of Building Permit
- ✓ Hulbert Engineering advised they will not be doing any inspections of the access road construction by the County
- ✓ Legislature review and approval of the Deposit site lease is scheduled for May 20th

Ingraham:

- ✓ County advised that Verizon may not mobilize in time to relocate the Broome County antennas prior to Motorola's start date

Sabre:

- ✓ Sabre has completed manufacture of Kirkwood and Deposit 195' towers

Cummins:

- ✓ Generator start-up and load test at Laurel Lake is scheduled for 5/6/2021

Patriot Towers

- ✓ Held weekly progress conference calls with Patriot on 4/7, 4/14, 4/21, and 4/28/2021
- ✓ Patriot continues to adjust their schedules as needed to accommodate code inspections by Hulbert Engineering

Motorola:

- ✓ Progress calls were held with Motorola on 4/7 and 4/21/2021
- ✓ Motorola advised on 4/7/2021 that some equipment delivery dates will not support system completion in time for coverage testing prior to loss of foliage in Fall 2021. They were asked to provide details of all outstanding equipment deliveries and develop a recovery plan.
- ✓ Motorola so far has only provided a list of equipment with unknown delivery dates. They indicated a project completion schedule cannot be provided until they know when all needed equipment will be available for installation.
- ✓ C&S encouraged Motorola to do as much work as possible now at the existing tower sites to reduce the amount of work needed later
- ✓ The County indicated they will sign Change Order #1 once they receive and review Change Order #2
- ✓ Motorola is working to update Change Order #2 to add the additional (4th) FB8 frequency in the East Cell tower sites and Backup Control Stations (or possibly consolettes) for the Primary PSAP

Project Status Report

and Backup PSAP (Note: The control stations or consolettes will be added to the large subscriber order.)

- ✓ The County rejected Motorola's proposed Change Order # 3 for relocating some legacy antennas due to its extremely high pricing. The County decided to bid out this work.
- ✓ Motorola provided a proposal for configuring a microwave connection from Broome County through the Lapeer site in Cortland County, through Tompkins County, through Cayuga County, and through Onondaga County for connection to the Motorola CNYICC core located at the Onondaga County 911 Center. Motorola to provide this as draft Change Order #3 and possibly added to the Motorola lease.
- ✓ Motorola advised that their transition to their new PM Dan Ralph is complete. Manuel Lauren advised that his last progress call with the County was 4/21/2021.
- ✓ Tyler still has had no luck reaching anyone at Motorola to help them with the P25 data interface issues. Motorola was asked again to assist them.
- ✓ Motorola finally provided the long overdue updated coverage maps. The County pointed out a few areas along major highways that seemed to be in predicted dead spots. They asked Motorola to relook at those areas to see if improvements can be made.
- ✓ County is continuing to work with user agencies to develop a revised subscriber plan that falls within the County's budget
- ✓ C&S asked Motorola about the status of their site-specific installation drawings and floor plans. Motorola indicated they are in progress.

Aviat Microwave:

- ✓ Held weekly progress conference calls with Aviat on 4/7, 4/14, 4/21, and 4/28/2021
- ✓ On 4/7/2021 Aviat advised their schedule would not support completion by mid-July
- ✓ Microsoft Teams meeting was held with Aviat on 4/15/2021 where Aviat presented a recovery plan and schedule to get the microwave system operational by mid-July
- ✓ Aviat completed the installation of the microwave paths from NYS Office Building → Ely Park → Public Safety Facility. Temporary T1 configuration was operational but resulted in ongoing static on multiple consoles in Dispatch. Final T1 configuration completion lagged, but was completed on 4/27/2021. TuWay provided onsite assistance during these efforts.
- ✓ C&S encouraged Aviat to do as much work as possible now at the existing tower sites to reduce the amount of work needed later

Tyler:

- ✓ Tyler still has had no luck reaching anyone at Motorola to help them with the P25 data interface issues

Talkgroup/Fleetmap Planning:

- ✓ The County requested that this effort get restarted. An in-person meeting with C&S is scheduled for May 10th at the PSF.

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Zetron Dispatch CSSI Console Upgrades:

- ✓ Zetron will return at a later date to install the P25/trunking upgrades

Miscellaneous:

- ✓ County prepared an RFP for maintenance tower climbing and relocation of antennas that require moving to make room for Motorola P25 antennas

Next period's expected activities:

- ✓ Continue weekly progress calls with Aviat
- ✓ Continue bi-weekly progress calls with Motorola
- ✓ Continue weekly construction progress calls with Patriot Towers
- ✓ Patriot towers:
 - Pick up (2) 1000 gallon propane tanks from the Broome County Airport
 - Complete construction work at Lisle, Maine, and Windsor
 - Begin construction at Kirkwood and Deposit
- ✓ Motorola:
 - Provide a detailed project completion schedule showing completion of coverage testing this Fall prior to loss of foliage
 - Provide updated Change Order #2 for review
 - Revise Change Order #2 to include base stations for the a 4th channel in the East Cell; and Backup Control Stations at Primary PSAP and Backup PSAP
 - Provide draft Change Order #3 for multi-county microwave connectivity configuration to the CNYICC Motorola core
 - Provide site-specific installation drawings and floor plans. These are needed soon so C&S and the County can verify that all the needed A/C power circuits will be available.
 - Evaluate a few predicted coverage dead spots on major highways to determine if enhancements can be made
 - Finalize design requirements for MotoTrbo/WAVE interfaces for school districts
 - Provide design assistance to Tyler
 - Provide a field demo on Over The Air Programming
 - Meet with the County to review the updated subscriber requirements spreadsheet
- ✓ Aviat:
 - Provide detailed plan and schedule for the replacement of routers at all the operating tower sites
 - Provide detailed sequencing plan and schedule for the Phase 2 project

Project Status Report

- ✓ County:
 - Provide formal approval of Motorola Change Order #1 to update documentation to current design configuration
 - Legislature to review and approve the Deposit site lease (scheduled for May 20th)
 - Issue Deposit Building Permit
 - Tree clearing, access road construction, and SWPPP compliance
 - Finalize plans for a fiber data connection to the Motorola core located at the Onondaga County 911 Center in Syracuse
 - Construct Deposit access road
 - Resume talkgroup planning with C&S to incorporate feedback from CNYICC
 - Execute agreement for sharing of the Motorola core located at Onondaga County 911
 - C&S to provide a draft microwave system sharing agreement to County review
 - County and C&S to meet on May 10th to restart work on talkgroup/fleetmap planning
 - Meet with Motorola to review the updated subscriber requirements spreadsheet
 - Award contract to relocate some antennas at legacy sites to make room for P25 antennas
- ✓ NYSEG:
 - C&S to continue follow up with NYSEG on utility power installation schedules for Lisle, Maine, Kirkwood, Deposit, and Windsor
- ✓ Sabre:
 - Deliver shelter to Lisle site
- ✓ Kirkwood Site:
 - Patriot Towers to mobilize to this site and begin site construction
- ✓ Deposit Site:
 - County to issue revised Purchase Order to Patriot Towers to add this site
 - Hulbert Engineering to complete Code Review
 - County to issue Building Permit
 - County to clear trees and complete construction of site access road
 - County to document SWPPP compliance during access road construction and provide copies of weekly inspections to C&S
- ✓ Laurel Lake Site:
 - Mid-State to install (4) sidearm mounts on tower
 - C&S to conduct final site inspection to verify that punch list items have been corrected by Mid-State
 - Cummins to commission generator and complete load test
 - Sabre to inspect and commission the equipment shelter



Project Status Report

- ✓ Ingraham Site:
 - County to finalize SEQR process for the proposed lattice tower height extension from 195' to 220' to accommodate the addition of a Verizon cellular antenna system CNYICC
 - C&S to file Form 7460-2 when Verizon has completed the tower extension to 220' and obstruction light installation

Other important project information:

- ✓ None at this time

Information/direction needed from client:

- ✓ None at this time



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



Site Number -->	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 20	Site 17	Site 18	Site 19	
Site Name -->	Nabinger Road	Sanford	Ely Park	Laurel Lake	Maine	Lisle	Kirkwood	Deposit	Windsor	Tuscarora (Legacy Tower) MW & Legacy LMR Only	PSF Tower Site	Primary PSAP (Console Integration)	Backup PSAP (Console Integration)	Overall System
Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
PROPERTY ACQUISITION:														
Site Selection	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
Site Walk	9/11/2018	1/17/19 & 2/22/19	3/28/18, 4/30/18, 7/24/18 & 11/28/18	4/5/2019	4/5/19, 4/12/19, 6/26/19 & 9/22/19	4/15/2019	4/5/2019	1/17/19, 2/22/19 & 4/29/19	4/29/19 & 6/4/19					
Site Plan Concept Drawing	10/12/2018	1/24/19 Lower, 1/24/19 Upper & 2/26/19	4/9/2018 & 12/13/18	4/11/2019 & 5/2/19	4/16/19, 7/1/19 & 12/3/19	4/11/2019 & 9/30/19	4/11/2019	1/23/2019, 2/26/19, 4/18/19 & 5/2/19	4/30/2019 & 6/5/19					
Property Acquisition by Lease (private owner sites)	Complete	Complete	Complete	Complete	N/A	Complete	6/26/2020	4/14/2021	Complete					
Property Purchase	N/A	N/A	N/A	N/A	Purchase offer accepted May 2020. PURCHASE COMPLETE 9/25/2020	N/A	N/A	N/A	N/A					
CAUD Approval (City of Binghamton)	N/A	N/A	Complete	N/A	N/A	N/A	N/A	N/A	N/A					
Property Lease Application and Negotiations Commercial Tower Lease Company sites)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
County 911 Address Assitgned	331 Nabinger Hill Road, Nineveh, NY 13813	678 Marsh Pond Road, Deposit, NY 13746	63 Ridge Road, Binghamton, NY 13905	542 Laurel Lake Road, Deposit, NY 13746	Miller Road, Endicott, NY 13760 46 Town Rd, Maine NY 13802 (Maine #3)	104 Costello Road Lisle, NY 13797	205 Kutalek Road Kirkwood, NY 13795	445 465 Shaver Hill Road Deposit, NY 13754	541 Cresson Hill Road, Windsor, NY 13865	2380 E. Bosket Road, Windsor, NY 13865	153 Lt. VanWinkle Drive, Binghamton, NY 13905			
SITE SURVEYS:														
Site Survey	1/3/2019	3/18/2019	5/14/2018	5/7/2019	5/28/2020	7/11/2019	7/12/2019	Quote requested 9/27/2019. Revised quote requested 4/4/2020. Survey Completed 11/12/2020.	11/22/2019					
Site Stakeout - Clearing Limits & Access Road (unbudgeted)	Complete	4/30/2019	Complete	Complete	9/22/2020	11/12/2019	6/24/2020							
Site Stakeout - Tower Center, Fence Corners, North Marker	10/23/2019	11/12/2019	10/23/2019	10/23/2019	1/6/2021	1/6/2021	Scheduled for 4/14/2021		1/6/2021					
Survey Form 1A or 2C Issued														
Property Boundary Survey (unbudgeted)							7/30/2020	3/16/2021						
Metes & Bounds Survey (unbudgeted)							7/30/2020	3/16/2021						
GEOTECH:														
Soil Boring	1/17/2019	Complete	Complete	Complete	Complete	7/26/2019	7/31/2019 Repeated at new location on 9/28/2020	12/9/2019	12/13/2019					
Geotech Report	1/25/2019	6/5/2019	6/1/2018	6/5/2019	6/10/2020	8/14/2019	8/15/2019 Repeated for new location 10/14/2020	12/24/2019	12/24/2019					
MICROWAVE PATHS:														
Microwave Analytical (Paper) Path Profile by Aviat	Complete	Complete	Complete	Complete	Complete Need to repeat Path Blocked to Lisle. Gate to Popple instead. Complete	Complete Update: Need survey to Popple. Complete.	Complete	Complete	Complete	Complete	Complete THIS SITE ELIMINATED FROM P25 LMR SYSTEM	Complete (to Ely Park)		
Microwave Physical Path & Site Surveys by Aviat	Feb 2019 (Nabinger to Sanford) May 2019 (Nabinger to Hawkins)	Feb 2019 (Nabinger to Sanford)	Feb 2019 (Ely to Old State; Ely to NYS office Bldg) New path survey to PSF: Completed Week of July 28 2020. Complete.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.	Completed Week of July 28 2020. Report received 8/13/2020. Revised report received 8/25/2020.
Aviat Confirms Required Dish Heights	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete		
Aviat Procurement Contract Approved by County	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.		Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.	Aviat proposal approved by County Leg January 2021. PO#52157 issued 2/25/2021.



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Site Name -->	Nabinger Road	Sanford	Ely Park	Laurel Lake	Maine	Lisle	Kirkwood	Deposit	Windsor	Tuscarora (Legacy Tower) MW & Legacy LMR Only	PSF Tower Site	Primary PSAP (Console Integration)	Backup PSAP (Console Integration)	Overall System
Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
Aviat contract wording finalized and PO Issued	2/25/2021	2/25/2021	Change Order approved 12/29/2020. PO Issued Jan 2021.	2/25/2021	2/25/2021	2/25/2021	2/25/2021	2/25/2021	2/25/2021		Change Order approved 12/29/2020. PO Issued Jan 2021.			
PCN's Complete for MW Frequencies			Complete											
FCC License Issued for MW Path			Complete											
TOWER STRUCTURAL ANALYSIS:														
Structural Analysis of Existing Tower	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	July 2019 requested T-Mobile to provide				
Structural Reinforcement of Existing Tower (if required)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Cancelled. Site not to be used for P25 or MW loop.				
ARCHAEOLOGICAL/CULTURAL/NEPA:														
Cultural Resource Survey	Complete	3/14/2019	Complete	Complete	6/12/2020	2/10/2020	2/5/2020	11/20/2020	2/12/2020					
Cultural Resource Report	12/7/2017	3/25/2019	6/8/2018	5/6/2019	6/23/2020	2/14/2020	2/21/2020	12/4/2020	2/27/2020					
FCC Form 620	Complete	Complete	Complete	5/6/2019	6/30/2020	3/9/2020	3/9/2020	12/7/2020	3/9/2020					
SHPO Concurrence	12/14/2018	5/9/2019	7/19/2018	6/5/2019	7/15/2020	3/13/2020	3/13/2020	12/10/2020	3/13/2020					
Indian Tribe Consultations	1/21/2019	Complete	Complete	Complete	10/5/2020 Email 10/6/2020 US Mail	Complete	Complete	12/15/2020 Email 12/16/2020 US Mail	Complete					
NEPA Checklist	2/21/2019	8/20/2019	3/6/2019	8/20/2019	11/24/2020	8/27/2020	8/27/2020	1/27/2020	8/27/2020					
NYSEG POWER:														
C&S Submittal to NYSEG	Complete	Complete	Complete	Complete	6/17/2020	Complete	Complete	6/17/2020	Complete					
Power Utility Site Survey Walk	Complete	Complete	Complete	Complete	5/22/2020	5/14/2020	5/14/2020	Complete	Complete					
NYSEG Service Notification Number	10300545197	10300576340	10300492964	10300581969	10300684086	10300660704	10300660706	10300684088	10300611324					
NYSEG Work Order Number	801000237591	801000254691	801000256974	801000254656	801000365260	801000365087			801000259359					
Power Utility Easements Approved by Property Owner	Complete	Complete	7/7/2020	Eminent Domain approved by court on 3/2/2021	Complete	Complete			Complete					
Payment Issued to NYSEG	Complete	Complete	9/2/2020	Complete					Complete					
NYSEG Construction Complete	7/9/2020	Complete	Complete	Pole set 3/29/2021. Awaiting County underground wiring.										
County Contractor Wiring Complete	Complete	Complete	Complete	Complete										
UL 3rd Party Inspection	Complete	Complete	Complete	4/16/2021										
NYSEG Meter Installed/Energized	7/9/2020	Complete	10/14/2020	Complete										
FCC Tower Registration (if required)														
FCC TOWAIR Analysis	Tower >200'	Tower >200'	3/15/2018	6/21/2019	7/2/2019	6/21/2019	6/21/2019	1/23/2019	6/12/2020	Existing Tower				
FCC Tower Submittal	1/10/2019	2/4/2019 (1st site abandoned). Resubmitted 3/29/2019	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
Legal Notice Publication	2/13/2019	4/2/2019	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
FCC Issues ASR #	3/29/2019	5/22/2019	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
FCC ASR #	1309779	1310495	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
FCC Notice of Construction Complete	6/1/2020	6/3/2020	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
FAA Tower Registration (if required)														
FAA Tower Submittal	1/10/2019	2/1/2019 (site abandoned) Resubmitted new location 3/29/2019	N/A	N/A	7/2/2019 1st location 2nd location submitted 2/28/2020 Maine #3 submitted	N/A	N/A	N/A	N/A					
FAA Issues Determination of No Hazzard to Air Navigation	3/27/2019 2019-AEA-589-OE	4/30/2019 2019-AEA-3725-OE	N/A	N/A	2020 2nd location 3rd location in review 4/6/2020 2019-AEA-14839-OE	N/A	N/A	N/A	N/A					
FAA Form 7460-2 Submitted when tower construction reaches full height	3/17/2020	6/2/2020	Not Required	Not Required	4/29/2021	Not Required	Not Required	Not Required	Not Required					
SEQR:														
SEQR FEAF Part 1 Completed	Complete	Complete	Complete	Complete	5/11/2020	3/17/2020	3/17/2020	5/11/2020	3/17/2020					



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



Site Number -->	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 20	Site 17	Site 18	Site 19	
Site Name -->	Nabinger Road	Sanford	Ely Park	Laurel Lake	Maine	Lisle	Kirkwood	Deposit	Windsor	Tuscarora (Legacy Tower) MW & Legacy LMR Only	PSF Tower Site	Primary PSAP (Console Integration)	Backup PSAP (Console Integration)	Overall System
Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
SEQR - Lead Agency Intent Letters Mailed	1/25/2019	4/11/2019	11/8/2019	5/31/2019	Complete	3/17/2020	3/17/2020	Complete	3/17/2020					
SEQR - 30-Day Public Comment Period Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
Local Planning Board Approval (if required)	N/A	N/A	Complete (CAUD)	N/A	N/A	N/A	N/A	N/A	N/A					
Local Zoning Board Approval (if required)	N/A	N/A	Complete (CAUD)	N/A	N/A	N/A	N/A	N/A	N/A					
SEQR - Lead Agency Declaration by Board	Complete	Complete	Complete	Complete	6/18/2020	Complete	Complete	6/18/2020	Complete					
DEC Concurrence	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
SEQR - FEAF Parts 2 & 3 Completed	Complete	Complete	Complete	7/11/2019	Complete	5/26/2020	5/26/2020	Complete	5/26/2020					
SEQR - Submit Negative Declaration to Public Safety Committee for Approval	Complete	5/7/2019	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
SEQR - Board Approval of Negative Declaration	3/21/2019	6/20/2019	Complete	Complete	9/17/2020	6/18/2020	6/18/2020	9/17/2020	6/18/2020					
EQUIPMENT PROCUREMENT:														
Equipment Bid Documents (Tower, Shelter, Generator, Propane Tank)	5/22/2019	5/22/2019	5/22/2019	5/22/2019	5/22/2019	5/22/2019	5/22/2019	5/22/2019	5/22/2019					
Equipment Bidding (Tower, Shelter)	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed					
Equipment Procurement Contract Award (Tower)	Delivered	Delivered	Delivered	Delivered	Delivered to site 3/15/2021	Delivered to site		Need to resolve Sabre cost-increase request. Tower released for production. Tower completed Apr 2021. Stored at Sabre.	Need to resolve Sabre cost-increase request. Tower released for production. Tower completed Apr 2021. Stored at Sabre.					
Equipment Procurement Contract Award (Shelter)	Delivered 3/11/20	Delivered	Delivered 4/13/20	Delivered 3/10/20	Released for production Nov. 2020. Expected delivery 4/16/2021 DELAYED to 4/29/2021.	Released for production Nov. 2020. Expected delivery 4/13/2021 DELAYED to 5/5/2021.	Released for production	Released for production		Released for production Nov. 2020. Expected delivery 4/21/2021. DELAYED. Delivered to site 4/26/2021.				
Equipment Procurement Contract Award (Generator)	Delivered to Wayne Street warehouse. Moved to site by Mid-State. Cummins Model: C50 N6 S/N: L190695478	Delivered to Wayne Street warehouse. Moved to site by Mid-State. Cummins Model: C50 N6 S/N: L190695477	Delivered to Wayne Street warehouse. Moved to site by Mid-State. Cummins Model: C50 N6 S/N: L190695475	Delivered to Wayne Street warehouse. Moved to site by Mid-State. Cummins Model: C50 N6 S/N: L190695476	Delivered to Wayne Street warehouse 3/15/2021. Moved to site by Patriot 4/23/2021. NEED S/N FROM PATRIOT.	Delivered to Wayne Street warehouse 3/15/2021. Moved to site by Patriot 4/23/2021. NEED S/N FROM PATRIOT.	Delivered to Wayne Street warehouse 3/15/2021.	Delivered to Wayne Street warehouse 3/15/2021.		Delivered to Wayne Street warehouse 3/15/2021. Moved to site by Patriot 4/23/2021. NEED S/N FROM PATRIOT.				
SITE ACCESS ROAD CONSTRUCTION:														
Access Road Tree Clearing	Complete	Complete	Complete	Complete	Complete	Complete	Complete	County DPW started work 3/19/2021. Complete.	To be scheduled by County DPW following Bldg permit being issued	Complete				
SWPPP Approved. NOI filed with NYS DEC.									4/28/2021					
Access Road Completed by County DPW	Complete	Complete	Complete	Complete	Complete	Complete	Complete	County DPW started work 3/19/2021. Road completed 4/8/2021.		Complete				
SITE CONSTRUCTION:														
Site Construction Drawings	Complete	Complete	Complete	Complete	Multiple drafts completed for review. Finalized 9/23/2020.	Multiple drafts completed for review. Finalized 9/23/2020.	Multiple drafts completed for review. Finalized 9/23/2020.	Multiple drafts completed for review. Finalized 9/23/2020.	Multiple drafts completed for review. Finalized 9/23/2020.	Multiple drafts completed for review. Finalized 9/23/2020.				
Add improved lightning protection to Construction Drawings					9/22/2020	9/22/2020	9/22/2020	9/22/2020	9/22/2020					
Site Construction Bid Documents	Complete	Complete	Complete	Complete	Multiple drafts completed for review. Finalized 10/9/2020.	Multiple drafts completed for review. Finalized 10/9/2020.	Multiple drafts completed for review. Finalized 10/9/2020.	Multiple drafts completed for review. Finalized 10/9/2020.	Multiple drafts completed for review. Finalized 10/9/2020.					



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



Site Number -->	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 20	Site 17	Site 18	Site 19	Overall System
	Site Name -->	Nabinger Road	Sanford	Ely Park	Laurel Lake	Maine	Lisle	Kirkwood	Deposit	Windsor	Tuscarora (Legacy Tower) MW & Legacy LMR Only	PSF Tower Site	Primary PSAP (Console Integration)	
Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
Shelster Rack Layout Design/Drawing (Initial Rollout)														
Shelster Rack Layout Design/Drawing (Future Motorola Core)														
Shelster HVAC Load Calculations														
Installation of County IT Equipment and UPS														
Site Construction Bidding	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
Recommendation of Award Letter	Complete	Complete	Complete	Complete	11/6/2020	11/6/2020	11/6/2020	11/6/2020	11/6/2020					
Notice of Intent to Award Construction Contract	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
Contractor Insurance Forms Received	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete					
Site Construction Contract Award	Complete	Complete	Complete	Complete	12/30/2020	12/30/2020	12/30/2020. PO# 52478 Issued 3/30/2021.	12/30/2020	12/30/2020					
Pre-Bid Code Review Submitted							5/21/2020		5/21/2020					
Pre-Bid Code Review Approved							6/12/2020		6/12/2020					
SWPPP Design Complete (Disturbance > 1 acre)								2/22/2021						
Building Permit Application Sunmittal	Submitted 9/10/2019	Submitted 9/10/2019	Submitted 9/10/2019	Submitted 9/10/2019	Submitted 10/22/2020.	Submitted 5/21/2020	Submitted 10/22/2020.	Submitted 3/11/2021	Submitted 5/21/2020					
Revised Building Permit Application Sunmittal							Submitted 2/15/2021							
Access Road Waiver from Fire Dept.			2/20/2020		5/7/2020	3/3/2020	2/20/2020	5/7/2020	2/13/2020					
Revised Access Road Waiver from Fire Dept.							2/4/2021							
Building Permit Issued	12/27/2019	12/27/2019	3/5/2020	12/27/2019	12/30/2020	6/12/2020	12/30/2020		6/12/2020					
Revised Building Permit Issued (for revised access road routing)							3/1/2021 revised permit not needed							
Site Construction Kick-Off Meeting	10/8/2019	10/8/2019	10/8/2019	10/8/2019	12/7/2020	12/7/2020	12/7/2020	12/7/2020	12/7/2020					
Site Construction Progress Meetings.	Wednesdays at 2 PM with Mid-State. Ended 9/9/2020.	Wednesdays at 2 PM with Mid-State. Ended 9/9/2020.	Wednesdays at 2 PM with Mid-State. Ended 9/9/2020.	Wednesdays at 2 PM with Mid-State. Ended 9/9/2020.	Wednesdays at 2 PM with Patriot Towers.	Wednesdays at 2 PM with Patriot Towers.	Wednesdays at 2 PM with Patriot Towers.	Wednesdays at 2 PM with Patriot Towers.	Wednesdays at 2 PM with Patriot Towers.					
Site Construction Start Date	1/13/2020	4/1/2020	March 2020	Feb 2020	Feb 2021	Jan 2021	Planned 5/3/2021		Feb. 2021					
Code Enforcement Inspections during Construction	Complete	Complete	Complete	Complete	In progress Feb 2021	In progress Jan 2021			In progress Mar 2021					
Tower Stacking Complete	3/17/2020	6/2/2020	4/8/2020	3/5/2020	4/28/2021	Planned 5/5/2021			4/21/2021					
Tower Obstruction Light Operational	3/17/2020 - Temp. battery light 7/15/2020 - Permanent Light operational	6/2/2020 - Temp. battery light 7/16/2020 - Permanent Light operational	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required					
Shelster Start-Up/Commissioning by Shelter Manufacturer	1/29/2021	1/29/2021	1/29/2021	Awaiting utility power. To be scheduled.										
Generator Start-Up and Load Test by Generator Manufacturer	9/8/2020	9/8/2020	10/20/2020	Awaiting utility power. Scheduled by Mid-State for 5/6/2021.										
Site Construction Final Inspection; Punch List	7/30/2020; 8/3/2020	7/30/2020; 8/3/2020	7/30/2020;	7/30/2020; 8/3/2020										
Site Construction Complete														
Legacy Tower Demo Complete														
AVIAT MICROWAVE:														
Aviat provided recovery schedule for July 2021 completion														4/15/2021
Aviat Equipment Delivered			April 2021								April 2021			
Aviat Dish(es) Installed on Tower			April 2021								April 2021			
Aviat Racks Installed in Shelter			April 2021								April 2021			
Aviat Microwave Path(s) Commissioned			April 2021								April 2021			
Ti Lines Reconfigured			4/27/2021								4/27/2021			



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



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Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
Aviat Router Upgrade 8611 to 8740														
Aviat MW Phase 2 System Commissioned														
MW Final Inspection & Punch List														
MW Punch List Items Corrected														
County Final Acceptance of Microwave System														
SUBSCRIBER UNITS:														
Request for Motorola to schedule demonstration of various models														12/4/2019
Demonstration of various subscriber units by Motorola														3/5/2020
Final Subscriber Model Numbers and Quantities Approved by County														In Progress. Working to revise list to reduce costs.
Initial Draft of Talkgroup/Channel Plan														In Progress (ongoing)
Agency Reviews/Input on Talkgroup/Channel Plan														
Talkgroup/Channel Plan Finalized														
Codeplugs Developed for Each Agency														
Portable Radios Programmed														
Mobile Radios Programmed														
Mobile Radios Installed in Vehicles														
SIMPLEX/NON-TRUNKED FREQUENCIES														
Select FCC Licensing Vendor														3/30/2020
Issue Contract to Vendor (Copper City)														6/1/2020
Kickoff Meeting with Copper City														6/19/2020
Frequencies Identified														8/3/2020
APCO Coordination														Submitted 8/3/2020. Completed 9/28/2020
5-Day Inter-Service Review														Submitted 9/28/2020 - Completed 10/7/2020
Applications Submitted to FCC														10/7/2020 File # 0009253712
FCC Licenses Issued														10/8/2020 WRJQ426
Final Frequency Assignments for each Off-Network Channel														
NICE DATA LOGGING RECORDERS														
Determine if recording from P25 or from Console														9/17/2020- Will be from Zetron Consoles
Final Vendor Selection (Eventide vs. NICE) - NICE Selected														County selected NICE - 9/30/2020
Resolve additional software requirements														
Contract finalized/approved														
Design Finalized														
Installation at Primary PSAP														
Installation at Backup PSAP														
Cutover to Trunked System - Primary PSAP														
Cutover to Trunked System - Backup PSAP														
ZETRON														
Console Upgrade Order Placed														Complete
Zetron Equipment Delivery														Complete
Console Upgrades Scheduled														Rescheduled for Dec. 2020
Console Upgrades Complete - Primary PSAP														Dec. 2020
Console Upgrades Complete - Backup PSAP														Dec. 2020
P25 Interface Complete - Primary PSAP														
P25 Interface Complete - Backup PSAP														
CNYICC MOTOROLA CORE														



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



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Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
MOU In place for sharing CNYICC Core for initial rollout														
Cortland County MW link complete to Onondaga County														Not funded as of Sept. 2020
Cortland County Upgrade of Motorola M2 Core. Needed for use of DSR in Broome County.														Not funded as of Sept. 2020
Tompkins - Cayuga MW Connection to Core Finalized														Need to schedule site visits
Motorla - Provide fiber data link minimum requirements														8/12/2020
Fiber Connection from Broome to Onondaga P.O. Issued by County														
Fiber Connection from Broome to Onondaga Installed & Operational														
MW Link Site Visits (Cortland, Tompkins, Cayuga counties)														
MW Link Configuration (Cortland, Tompkins, Cayuga counties)														
MW Link Operational (Cortland, Tompkins, Cayuga counties)														
CNYICC Funding in place for 2nd Core located in Broome County														Not funded as of Sept. 2020
Motorola contracted to supply 2nd Core														Not funded as of Sept. 2020
Motorola Installs and configures 2nd Core														Not funded as of Sept. 2020
LEGACY SITE ANTENNA RELOCATIONS														
Antenna Relocations Completed by County to make room for Motorola Antennas														County requested quotes Nov 2020
MOTOROLA														
Motorola Equipment & Services Lease Executed														8/31/2020
Motorola Proposal for CNYICC Shared Core														In review by CNYICC. Grant funding is a concern.
Motorola to provide updated gauranteed countywide 95% coverage maps														4/20/2021
Motorola to provide updated 20 dB urban building reference coverage maps														4/20/2021
Motorola to provide reference out-of-county spillover coverage maps														4/20/2021
Motorola Contract Revised via Change Order #1 for using CNYICC Shared Core; deleting DSR														Draft Motorola Change Order received 3/3/2021. In review.
Motorola Contract Revised via Change Order #2 for added console lcenses. Subscriber licenses, extra combiners, paging CCGW, etc.														Draft Motorola Change Order #2 received 3/12/2021. In review.
FCC License Issued for Trunked Sites - East Cell (and Part 22 Agreements Complete)	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020				
FCC License Issued for Trunked Sites - West Cell (and Part 22 Agreements Complete)	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020	6/15/2020				



Broome County Emergency Communications Project - Phase 2 Site Development Checklist



Task	Site Number -->	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 20	Site 17	Site 18	Site 19	
	Site Name -->	Nabinger Road	Sanford	Ely Park	Laurel Lake	Maine	Lisle	Kirkwood	Deposit	Windsor	Tuscarora (Legacy Tower) MW & Legacy LMR Only	PSF Tower Site	Primary PSAP (Console Integration)	Backup PSAP (Console Integration)	Overall System
	Tower Height -->	340'	300'	195'	199'	195'	195'	195'	195'	195'	198'	190'	N/A	N/A	
	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
Extend FCC FB8 Construction Buildout Deadline to 2021 (multiple channels and sites)															July 2020
FCC License Issued for VCALL/VTAC's															
FCC License Issued for UCALL/UTAC's															
FCC License Issued for SCALL/STAC's															
Detailed Cutover Plan and Repurposed Frequency Cutover Plan Developed															
Install Juniper equipment at Onondaga County 911 Center															Dec. 2020
Equipment Staging/Factory Acceptance Test (Virtual due to COVID travel restrictions)															12/17/2020
FNE Equipment delivered to Broome County Warehouse															Dec 2020
FNE Equipment Delivered to Site	2/23/2021	Delayed by snow	2/23/2021												
Legacy Antennas Relocated (if required)															
Antennas Installed on Tower															
Equipment Racks Installed in Shelter															
Dispatch Consoles Configured & Operational															
Core Configuration with Cortland County															
Core Configuration with Onondaga County															
Individual Site Optimization by Motorola ST's															
Overall System Optimization by Motorola ST's															
System Coverage Acceptance Testing															
Radio System Final Inspection & Punch List															
Radio System Punch List Items Corrected															
County Final Acceptance of Radio System															



Broome County Emergency Communications Project - Phase 2

Site Development Checklist

Older Sites



Task	Site Number -->	10	11	12	13	14	15	16	Overall System
	Site Name -->	Andrews	Hawkins Hill	Ingraham Hill	Kopernik	Old State Road	Pease Hill	Union	
	Tower Height -->	195	195	195' --> 220'	195	195'	195'	195'	
	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	
AVIAT MICROWAVE:									
Aviat Router Upgrade 8611 to 8740									
Aviat software updated to latest version									
Aviat Equipment Delivered									
Aviat Dish(es) Installed on Tower									
Aviat Racks Installed in Shelter									
Aviat Microwave Path(s) Commissioned									
Aviat MW System Commissioned									
MW Final Inspection & Punch List									
MW Punch List Items Corrected									
MOTOROLA									
FNE Equipment Delivered to Site	2/23/2021	2/23/2021	Delayed by snow	2/23/2021	2/23/2021	2/23/2021	2/23/2021	2/23/2021	
Legacy Antennas Relocated by County (if required)									
Antennas Installed on Tower									
Equipment Racks Installed in Shelter									
Individual Site Optimization by Motorola ST's									
Radio System Final Inspection & Punch List									
Radio System Punch List Items Corrected									
VERIZON - Tower Extension from 195' to 220'									
FCC Tower Registration									
FCC TOWAIR Analysis			REQUIRED (Tower is > 200')						
FCC Tower Submittal			1/25/2021						
Legal Notice Publication			2/3/2021						
FCC Issues ASR #			3/15/2021						
FCC ASR #			1318742						
FCC Notice of Construction Complete									
FAA Tower Registration									
FAA Tower Submittal			1/25/2021						
FAA Issues Determination of No Hazzard to Air Navigation			3/10/2021						
FAA Study #			2021-AEA-1164-OE						



Broome County Emergency Communications Project - Phase 2 Site Development Checklist Older Sites



Site Number -->	10	11	12	13	14	15	16	
Site Name -->	Andrews	Hawkins Hill	Ingraham Hill	Kopernik	Old State Road	Pease Hill	Union	Overall System
Tower Height -->	195	195	195' --> 220'	195	195'	195'	195'	
Task	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed	Date Completed
FAA Form 7460-2 Submitted when tower construction reaches full height								
SEQR:								
SEQR FEAF Part 1 Completed			2/19/2021					
SEQR - Lead Agency Intent Letters Mailed								
SEQR - 30-Day Public Comment Period Complete								
Local Planning Board Approval (if required)								
Local Zoning Board Approval (if required)								
SEQR - Lead Agency Declaration by Board								
DEC Concurrence								
SEQR - FEAF Parts 2 & 3 Completed								
SEQR - Submit Negative Declaration to Public Safety Committee for Approval								
SEQR - Board Approval of Negative Declaration								
CONSTRUCTION								
Tower Height Extension Complete								
Tower Obstruction Light Operational								
County's Legacy Antennas Relocated								
Verizon Equipment Installed								