



May 30, 2019

Mr. Anthony Bessette
Albemarle County Attorney's Office
401 McIntire Road
Charlottesville, Virginia 22902

ECS Project No. 47:7796

**Re: Emergency Communications Tower Improvement Project
Peters Mountain
Albemarle County, Virginia**

Dear Mr. Bessette:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide this summary of the proposed improvements to an emergency telecommunications tower located on Peters Mountain Road in Albemarle County. The existing tower is 105' tall and houses various RF antennas and microwave dishes utilized for communication purposes by Albemarle County, Charlottesville, and UVA Emergency Personnel. The tower is in a rural portion of the County with the nearest residence being approximately 2.3 miles away in a straight line of site, a much farther distance traveling along Peters Mountain Road. The tower itself is located within the Peters Mountain Historic District and was constructed with the Department of Historic Resources (DHR) approval under a 2002 Memorandum of Agreement (MOA).

The proposed project will include adding a 20' section to the top of the existing tower for the addition of 3 new 800 MHz RF antennas, a 6' microwave dish, and potentially a school division 2.5 GHz LTE array to provide broadband services, including for regional public safety. Three of the existing RF antennas and one microwave dish will be removed following completion of the upgrades. The added height of the tower will require the addition of 3 guy wires for structural support, all within the existing tower property. The project is considered necessary to provide the County/City/UVA Emergency Personnel with adequate and up-to-date communications capabilities in order to safely and quickly respond to the public's needs. The existing system has been deemed to provide insufficient coverage of the surrounding areas to support this mission.

The MOA in place was signed based on the tower construction specifications in the early 2000s and these proposed alterations require DHR review and approval. Photo simulations were prepared to visualize what the tower improvements would look like from the nearest public right's-of-ways and residences and given its isolated location miles from these features, the extension and guy lines will essentially be imperceptible to the public at large. The project will therefore not disrupt the viewshed of this rural portion of the County, and this assertion also requires review and approval by DHR to confirm it will not diminish the historic nature of the area. As a result, it is our belief this project will not have an adverse effect on the County and will allow Emergency Responders to adequately fulfill their mission to the public.

Attached for reference are the aforementioned photo simulations, a picture of the existing monopole tower, an aerial photograph showing the extent of the proposed guy lines, and a schematic drawing depicting the proposed 20' extension.

ECS is pleased to be of continued service on this project. If you have any questions concerning this or other matters, please feel free to contact us at (804) 353-6333.

Sincerely,

ECS MID-ATLANTIC, LLC

A handwritten signature in black ink, appearing to read 'G. B. Williams'.

Garnett B. Williams, CPG
Principal Geologist

A handwritten signature in black ink, appearing to read 'Adam M. Meurer'.

Adam M. Meurer, CHMM, PWS
Principal

Attachments



Prepared by
GTTELLC
email:
info@gttellc.com

**Project: Peters Mountain
Tower Extension**

**Location: Gordonsville Rd
/Strawberry Hill Fm**

Proposed View

This simulation is designed for viewing on a computer monitor. To achieve the correct scale the image should be increased or decreased in size until the scale (right) measures 4". When viewed with the eye approximately 25" from the monitor, the on screen image will have the same scale as if the viewer were standing at the camera location.





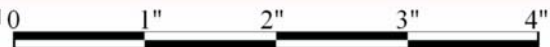
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Tower Extension**

**Location: Gordonsville Rd
/Strawberry Hill Fm**

Current View

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GTTELLC
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info@gttellc.com

**Project: Peters Mountain
Tower Extension**

**Location: Gordonsville Rd
/Strawberry Hill Fm**

Distance 2.37 miles

Project Description:

Existing 105ft tower, increase tower height 20ft.
Add 1 x 20' x 7" antenna and 2x7'x 7" antenna at 105ft each on 6' sidearm.
Add one 6' diameter microwave at 94' and lower existing microwaves
Add guy wires at 60' (not visible due to tree cover)



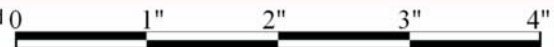
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**Project: Peters Mountain
Tower Extension**

**Location: Gordonsville Rd
/ Malin Ridge Ln**

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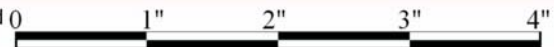
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02.05.2019 16:56



Big Tree

Clear 20'
Wide Path
To Fence

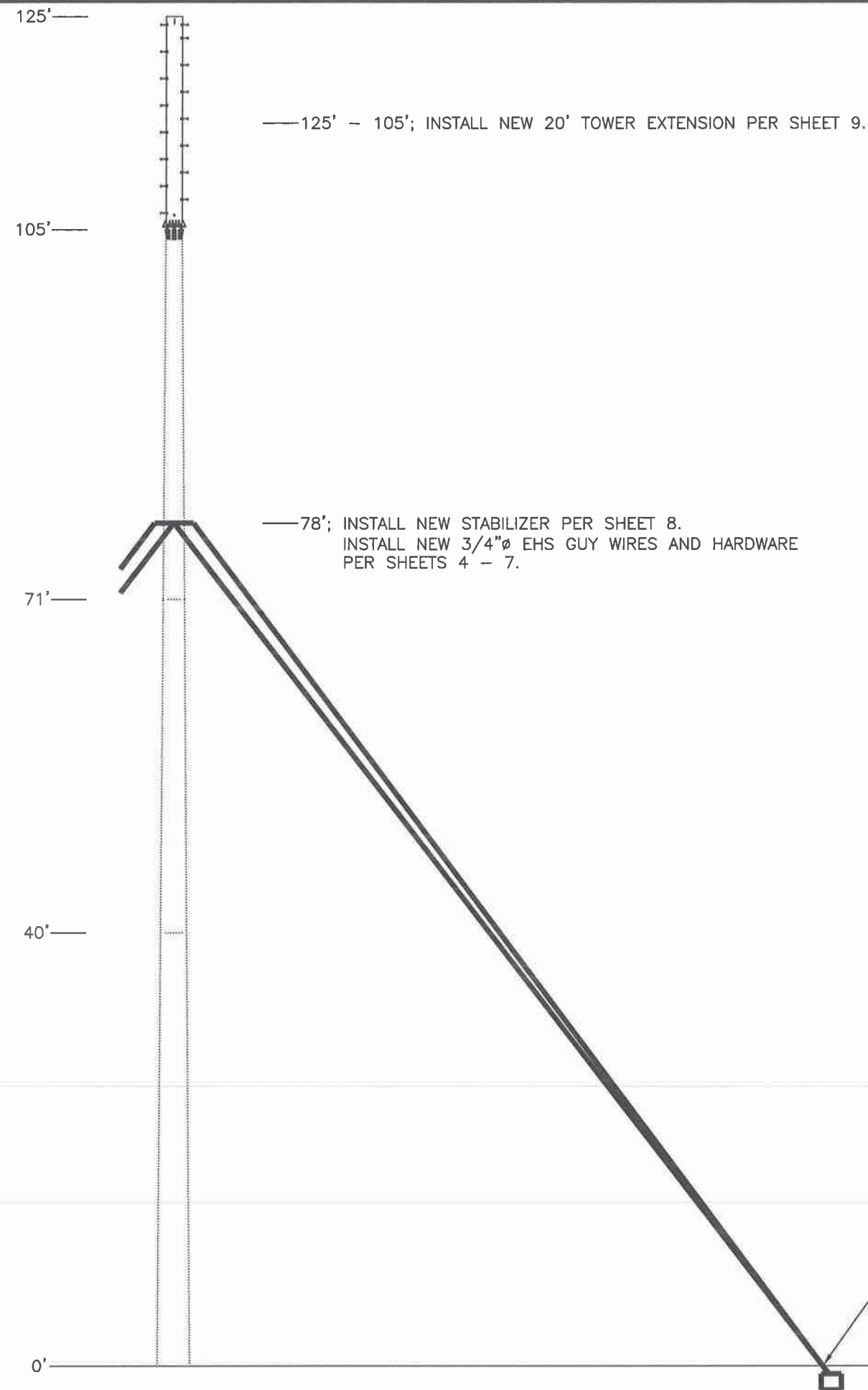
0 Degree

Clear From Fence To
10' Behind Daylight
Point of Anchor

60' Typical
To Daylight
Point Of
Anchor

240 Degree

120 Degree



AFTER ALL WORK IS COMPLETE
PLUMB AND TENSION ENTIRE
TOWER PER SHEET 4.

A MINIMUM OF 18- 15/16"Ø & 15- 1 3/16"Ø
FIELD DRILLED HOLES ARE REQUIRED FOR THESE
MODIFICATIONS. HOLES MUST HAVE TWO COATS
OF ZINC RICH COMPOUND PER NOTE 8 ON
SHEET 3 BEFORE ASSEMBLY.

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STRUCTURAL MODIFICATIONS:
THIS DRAWING DEPICTS THE REWORK REQUIRED TO REMEDY
THE DEFICIENCIES FOUND IN THE PETER'S MOUNTAIN, VA
TOWER PER THE REPORT PUBLISHED BY VERTICAL
STRUCTURES ON 1-19-2018, PROJECT# 2018-311-003.
(REWORK PER FINAL MODIFIED TNX TOWER MODEL,
PROJECT# 2018-311-008.)

A	ORIGINAL RELEASE	ANP	SWB <i>SWB</i>	BG <i>BG</i>	2-20-18
REV.	DESCRIPTION	DRAWN BY:	CHECKED BY:	ENGINEERED BY:	DATE
		FOR			
		HARRIS			
		2018 MODIFICATIONS TOWER REWORK FOR A 105' VALMONT MONOPOLE W/ A 20' EXT. PETER'S MOUNTAIN, VA			
SHEET NUMBER: 1 OF 16		PROJECT NUMBER: 2018-311-008		SCALE: NONE	