

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

NEW CINGULAR WIRELESS PCS, LLC (AT&T)  
PETITION FOR A DECLARATORY RULING,  
PURSUANT TO CONNECTICUT GENERAL  
STATUTES §4-176 AND §16-50K, FOR THE  
INSTALLATION OF A WIRELESS  
TELECOMMUNICATIONS FACILITY ON  
PROPERTY LOCATED 480 HAMBURG ROAD,  
LYME, CONNECTICUT.

PETITION NO. \_\_\_\_\_

August 25, 2022

PETITION FOR A DECLARATORY RULING:  
INSTALLATION HAVING  
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

I. Introduction

Pursuant to Section 16-50j-38 and 16-50j-39 of the regulations of Connecticut State Agencies (“R.C.S.A.”), New Cingular Wireless PCS LLC (“AT&T”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Petition”) that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a new small cell wireless telecommunications facility on the cupola on The Town of Lyme Town Hall existing building located at 480 Hamburg Road, Town of Lyme (the “Site”). AT&T proposed facility consists of a cannister antenna approximately 2 feet in height located at the back part of the existing building cupola. The property is owned by the Town of Lyme and an authorization for AT&T to file this Petition is included in **Attachment 1**.

II. Factual Background

a. AT&T’s Need for the Proposed Facility

AT&T identified a need for additional coverage and/or capacity relief in its network in this area of Lyme and the Town Hall building. The proposed facility is designed to assure reliable wireless service to AT&T customers and emergency service providers in the area of the facility location.

b. The Site and AT&T’s Proposed Tower Facility

The Town Hall building is approximately 2.65 acres in size and is situated within an area of town buildings that includes the public library and the Lyme Consolidated School. It is

classified in the RU Rural Residence Zoning District. Surrounding land uses include rural residential and undeveloped land.

AT&T's proposed facility consists of a cannister antenna approximately 2 feet in height on an approximately 2.5-foot mount with the top of AT&T's antenna reaching a height of approximately 45'-2" above grade level ("AGL"). Associated equipment will be located within an equipment room on the first floor of the building, including remote radio ("RRU") units will be installed within the building cupola. AT&T will deploy their 1900 MHz, AWS and 5150 MHz frequencies. Specifications and details of AT&T's proposed facility are shown on the drawings included in **Attachment 2**. Also, included in **Attachment 3** is a structural analysis report confirming that AT&T's proposed facility can be structurally accommodated.

No back-up power for AT&T's proposed facility is proposed. Construction will take place five (5) days a week, only during weekdays (Monday – Friday). The total duration of construction and facility integration is 90 days. The approximate cost is \$50,000.

c. Council Jurisdiction

Connecticut law confers jurisdiction to the Council over certain "facilities", including "telecommunication towers." C.G.S. §16-50i(a)(6). State regulations define "tower" as a "structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and this is high relative to its surroundings... used principally to support one or more antennas for receiving or sending radio frequency signals...." R.C.S.A. §16-50j-2a(30)(A). Here, the proposed small cell wireless facility is a structure attached to a building that has a "height greater than its diameter" that will be used only to support AT&T's wireless services. Thus, the proposed small cell wireless facility constitutes a "facility" over which the Council has jurisdiction. This jurisdiction is consistent with the Council's August 4, 2016 Opinion in PURA Petition No. 16-0638.

III. Discussion

a. The Proposed Small Cell Facility Will Not Have A Substantial Environmental Impact

For the reasons set forth below, AT&T respectfully submits that its proposed facility will not have a substantial environmental impact and as such a Certificate pursuant to C.G.S. Section 16-50k(a) is not required .

i. Physical Environmental Effects

AT&T's proposed facility will not result in any physical or environmental change to the Site or any adjacent parcels. No disturbance is associated with the proposed facility.

ii. Visual Effects

The photosimulations included in **Attachment 4** demonstrate that the limited nature of AT&T's proposed facility will not result in any significant visual impacts to the area. Indeed, the photosimulations demonstrate that the small size of the proposed cannister antenna along with its color will blend in with the sky.

iii. FCC Compliance

The operation of AT&T's antenna will not increase the total radio frequency electromagnetic power density at the site to a level at or above applicable standards. A power density report is included in **Attachment 5**. The total radio frequency power density will be well within standards adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and the MPE limits established by the Federal Communications Commission.

b. Notice of Petition Filing

Pursuant to R.C.S.A. Section 16-50j-40(a), notice of AT&T's intent to file this Petition was sent to each person appearing of record as an owner of property that abuts the site, as well as the appropriate municipal officials and government agencies as required by Section 16-50l of the C.G.S. Certification of such notice, a copy of the notice and the list of property owners is included in **Attachment 6** along with the map from the Town's GIS website used to identify abutting property owners. **Attachment 6** also includes a certification of service to municipal officials and government agencies to whom notice was sent.

IV. Conclusion

As set forth above, AT&T's proposed facility will not result in any known adverse environmental effects. Therefore, and for all the foregoing reasons, AT&T petitions the Council for a determination that the proposed facility does not require a Certificate of Environmental Compatibility and Public Need and that the Council issue an order approving same.

Respectfully submitted,



Lucia Chiochio  
On behalf of the Petitioner

cc: Mayor Jay Moran  
Gary Anderson, AICP Director of Planning and Economic Development  
AT&T  
Centerline

# **Attachment 1**



**LETTER OF AUTHORIZATION**

**RE: New Cingular Wireless, LLC-Small Cell Installation // cRAN\_RCTB\_LYME\_003**

**ADDRESS: 480 Hamburg Road LymeCT**

The town of Lyme, CT, owners of the above-described property, authorize New Cingular Wireless PCS, LLC ("AT&T") and/or their agent, to act as our nonexclusive agent for the sole purpose of filing and consummating any land use or building permit application(s) necessary to obtain approval of the applicable jurisdiction for AT&T's modification to the existing wireless communications facility at the above described property.

We understand that this application may be denied, modified or approved with conditions, and that any such conditions of approval or modifications will be the sole responsibility of the carrier and will be complied with prior to issuance of a building permit.

Sincerely,

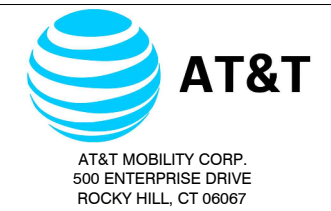
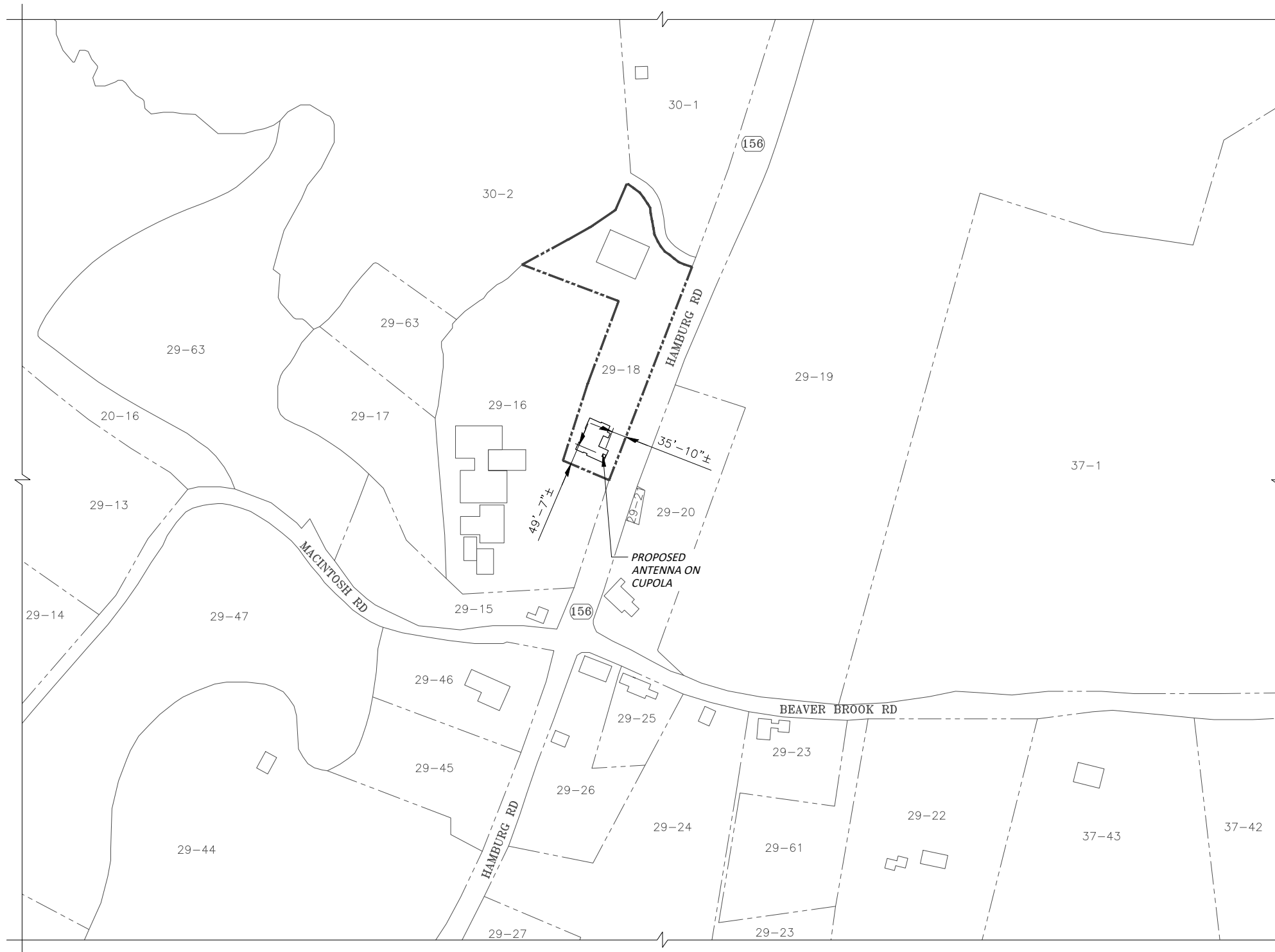
A handwritten signature in black ink, appearing to read "Steve Mattson", written in a cursive style.

Steve Mattson,  
First Selectman

**Attachment 2**

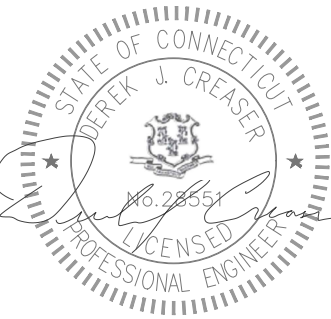


**NOTE:**  
 SITE PLAN IS NOT THE RESULT OF A SURVEY. IT IS BASED ON SCALED ASSESSORS MAPS AVAILABLE ONLINE. ALL INFORMATION SHOWN IS APPROXIMATE ONLY AND IS SUBJECT TO ANY CONDITION THAT A SURVEY MAY REVEAL



REVISIONS		
NO.	DATE	DESCRIPTION
1	07/14/22	REVISED FOR COMMENTS
0	07/11/22	ISSUED FOR REVIEW

DESIGNED BY: KT  
 APPROVED BY: DC

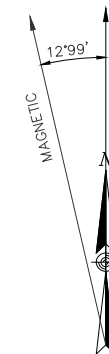
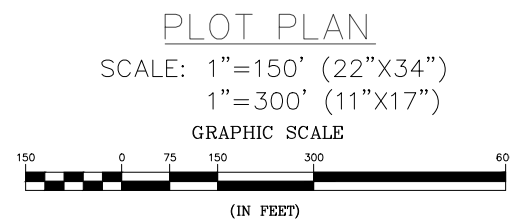


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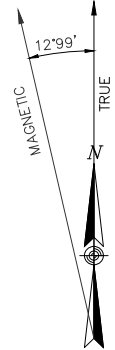
CLUSTER & NODE #:	TBD
AT&T SITE ID:	CRAN_RCTB_LYME_003
SITE ADDRESS:	480 HAMBURG ROAD OLD LYME, CT 06371 NEW LONDON COUNTY
PROJECT TYPE:	CUPOLA
SHEET TITLE:	PLOT PLAN
DRAWING #:	C-1
REVISION:	0

ABUTTER PROPERTY OWNER INFORMATION			
PARCEL	OWNER	PHYSICAL ADDRESS	MAILING ADDRESS
29-16	REGIONAL SCHOOL BOARD DISTRICT	478 HAMBURG RD, LYME, CT 06371	LYME ST, OLD LYME, CT 06371
29-18	TOWN OF LYME	480 HAMBURG RD, LYME, CT 06371	480 HAMBURG RD, LYME, CT 06371
29-19	GRISWOLD EVAN S & FISHER EMILY T.	0 HAMBURG RD, LYME, CT 06371	P.O. BOX 981, OLD LYME, CT 06371
29-20	SHELSKY DAVID M	473 HAMBURG RD, LYME, CT 06371	4 BEAVER BROOK RD, LYME, CT 06371
29-21	TOWN OF LYME	0 HAMBURG RD, LYME, CT 06371	480 HAMBURG RD, LYME, CT 06371
30-1	OLDERMAN STEVEN M TRUSTEE	492 HAMBURG RD, LYME, CT 06371	492 HAMBURG RD, LYME, CT 06371
30-2	NATURE CONSERVANCY INC	0 HAMBURG RD, LYME, CT 06371	55 CHURCH ST 3rd FL, NEW HAVEN, CT 06510

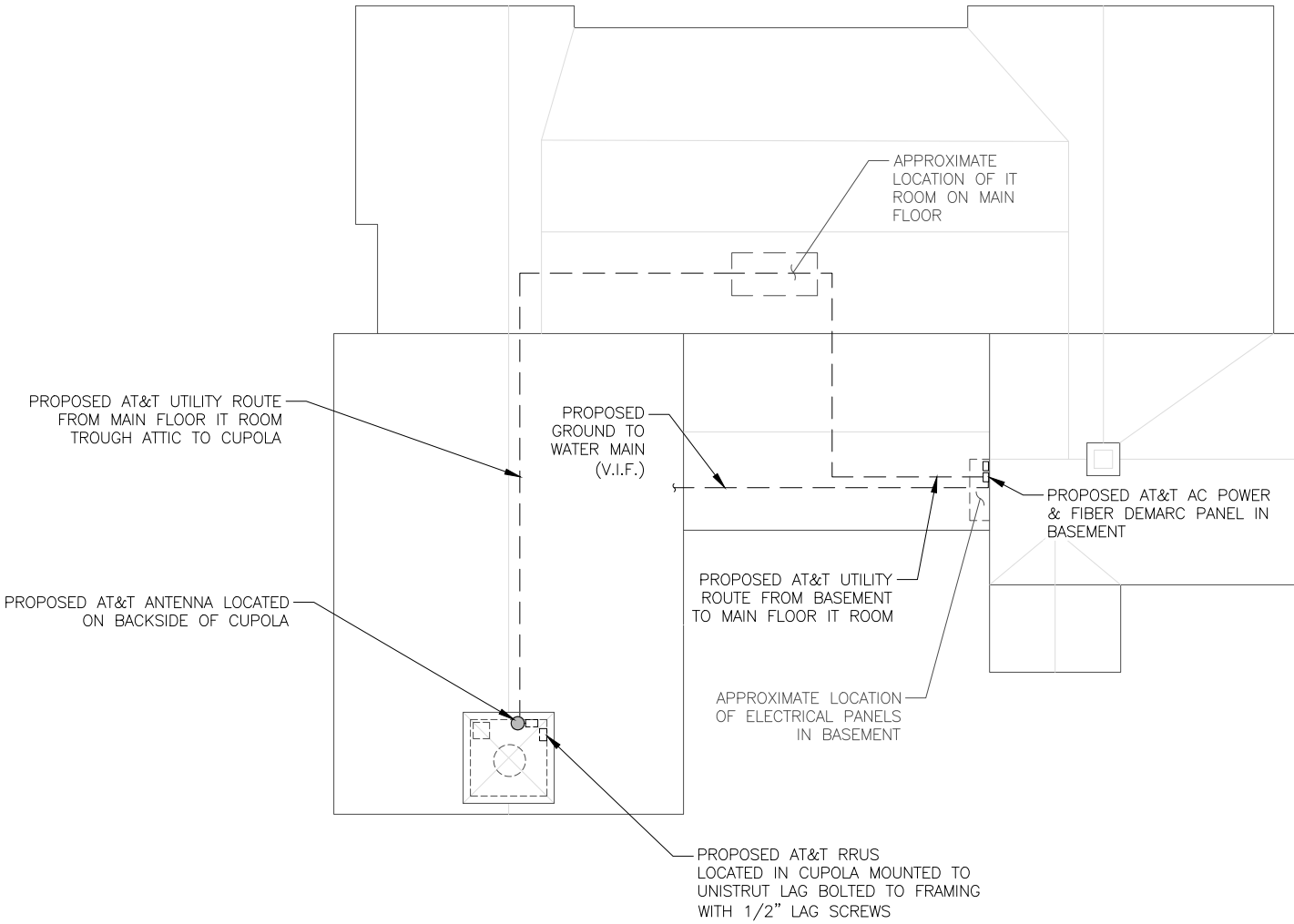




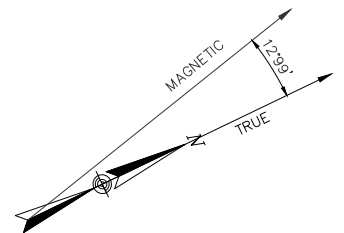
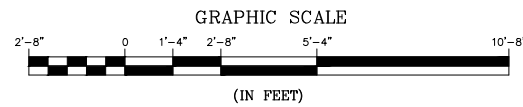
APPROXIMATE LAT: 41.413340° N  
 COORDINATES: LONG: -72.336835° W



KEY PLAN  
N.T.S.



ROOF PLAN  
 SCALE: 1/8" = 1'-0" (22"x34")  
 1/16" = 1'-0" (11"x17")



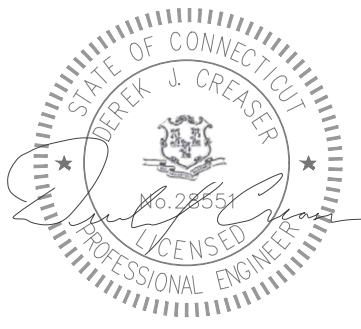
EXISTING PHOTO  
N.T.S.

AT&T MOBILITY CORP.  
 500 ENTERPRISE DRIVE  
 ROCKY HILL, CT 06067

CENTERLINE  
 ENGINEERING SERVICES, PA  
 750 W CENTER ST, SUITE 301  
 WEST BRIDGEWATER, MA 02379  
 PHONE: 781.713.4725

REVISIONS		
NO.	DATE	DESCRIPTION
1	07/14/22	REVISED FOR COMMENTS
0	07/11/22	ISSUED FOR REVIEW

DESIGNED BY: KT	APPROVED BY: DC
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AT&T SITE ID:	CRAN_RCTB_LYME_003
SITE ADDRESS:	480 HAMBURG ROAD OLD LYME, CT 06371 NEW LONDON COUNTY
PROJECT TYPE:	CUPOLA

SHEET TITLE: ROOF PLAN & KEY PLAN	
DRAWING #:	REVISION:
A-1	0



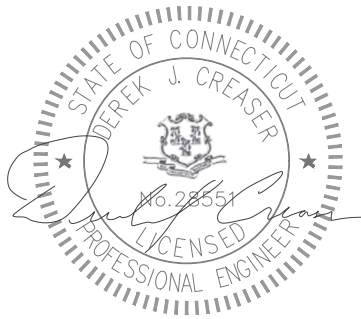
AT&T MOBILITY CORP.  
500 ENTERPRISE DRIVE  
ROCKY HILL, CT 06067



750 W CENTER ST, SUITE 301  
WEST BRIDGEWATER, MA 02379  
PHONE: 781.713.4725

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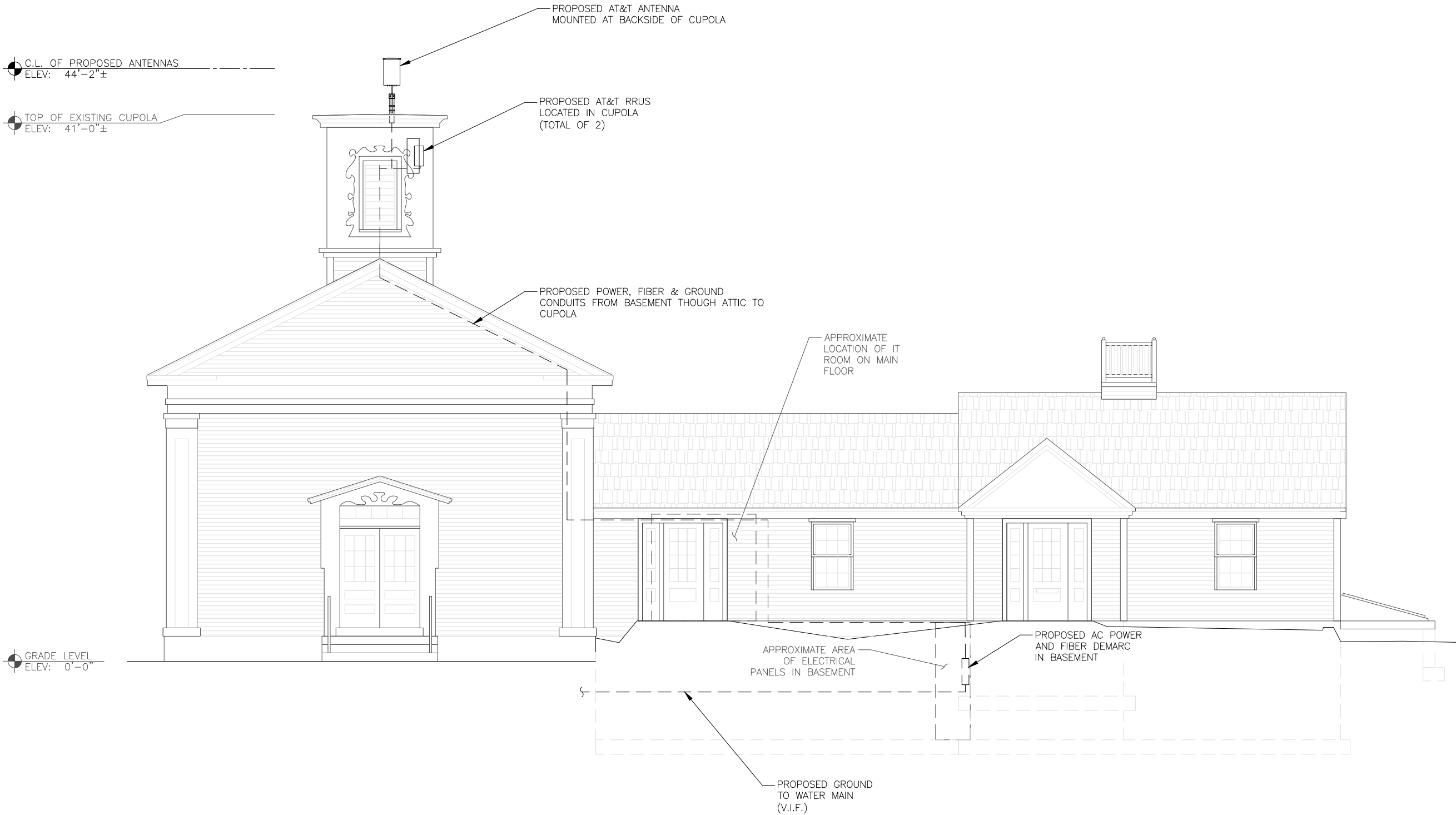


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AT&T SITE ID: CRAN\_RCTB\_LYME\_003  
SITE ADDRESS: 480 HAMBURG ROAD  
OLD LYME, CT 06371  
NEW LONDON COUNTY  
PROJECT TYPE: CUPOLA

SHEET TITLE: SOUTHEAST ELEVATION  
DRAWING #: A-2 REVISION: 0

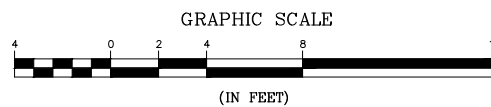


GRADE LEVEL  
ELEV: 0'-0"

C.L. OF PROPOSED ANTENNAS  
ELEV: 44'-2"±

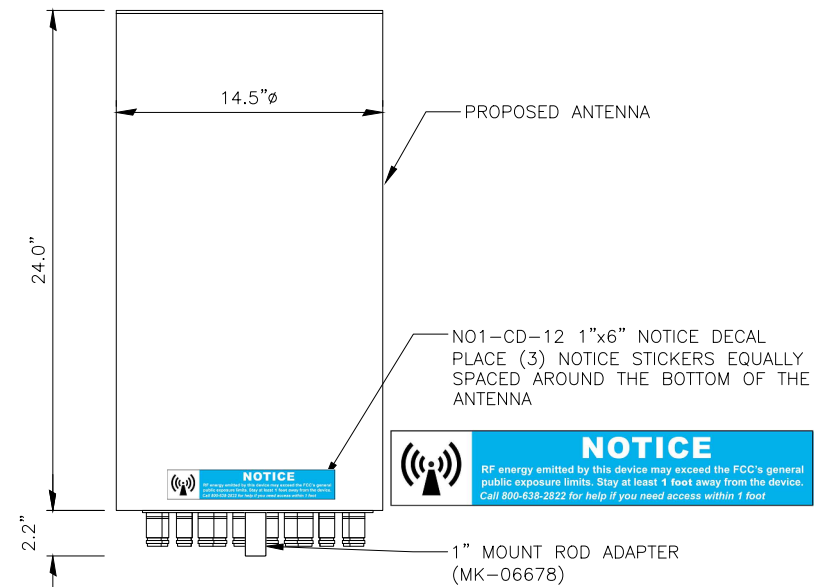
TOP OF EXISTING CUPOLA  
ELEV: 41'-0"±

SOUTHEAST ELEVATION  
SCALE: 1/4" = 1'-0" (22"X34")  
1/8" = 1'-0" (11"X17")



ANTENNA CHART					
MFG	MODEL	H	D	WEIGHT	VOLUME
GALTRONICS	GQ2414-B6790 (OR EQUAL)	24.0"	14.5"	22.5 LBS.	2.30 CU. FT.

NOTE:  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.



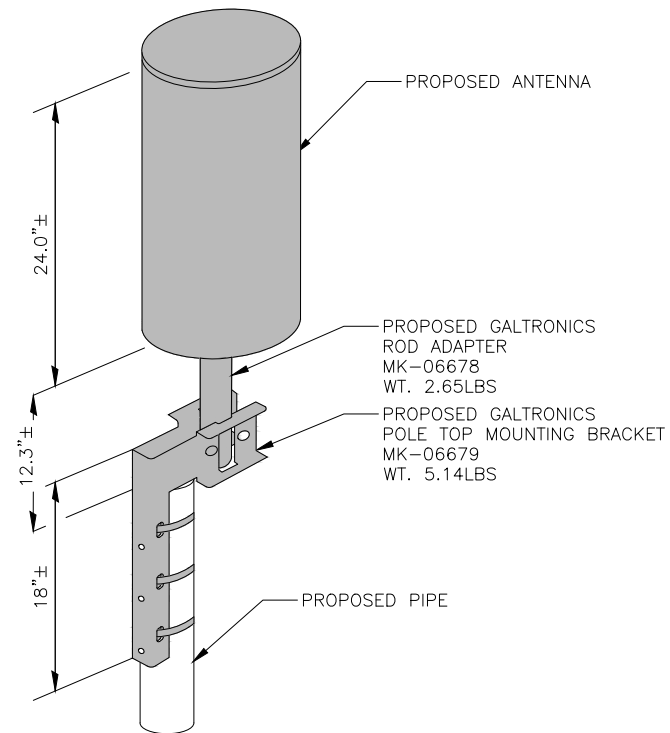
ANTENNA DETAIL  
N.T.S.

LOAD CENTER						
MFG	MODEL	H	W	D	WEIGHT	VOLUME
RAYCAP	EP-RSCAC-9457	10.4"	9.4"	5.0"	6.7 LBS.	.28 CU. FT.



LOAD CENTER DETAIL  
N.T.S.

NOTE:  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.



ANTENNA MOUNT DETAIL  
N.T.S.

RRU CHART

QUANTITY	MODEL	L	W	D	WEIGHT
1(P)	4478 B14	18.1"	13.4"	8.3"	59.4 LBS.
1(P)	4455 B5/B26 B66A	31.3"	10.9"	5.9"	67.2 LBS.

NOTE:  
MOUNT PER MANUFACTURER'S SPECIFICATIONS.



4478



4455

RRR DETAIL  
N.T.S.

METER SOCKET						
MFG	MODEL	H	W	D	WEIGHT	VOLUME
MILBANK	U2272-RL-5T9-BL	18.5"	10.0"	4.8"	16.25 LBS.	.51 CU. FT.



METER SOCKET DETAIL  
N.T.S.

SAFETY SWITCH						
MFG	MODEL	H	W	D	WEIGHT	VOLUME
SQUARE D	D223NRB	17.5"	10.5"	6.5"	15.0 LBS.	.69 CU. FT.



SAFETY SWITCH DETAIL  
N.T.S.



AT&T MOBILITY CORP.  
500 ENTERPRISE DRIVE  
ROCKY HILL, CT 06067



750 W CENTER ST, SUITE 301  
WEST BRIDGEWATER, MA 02379  
PHONE: 781.713.4725

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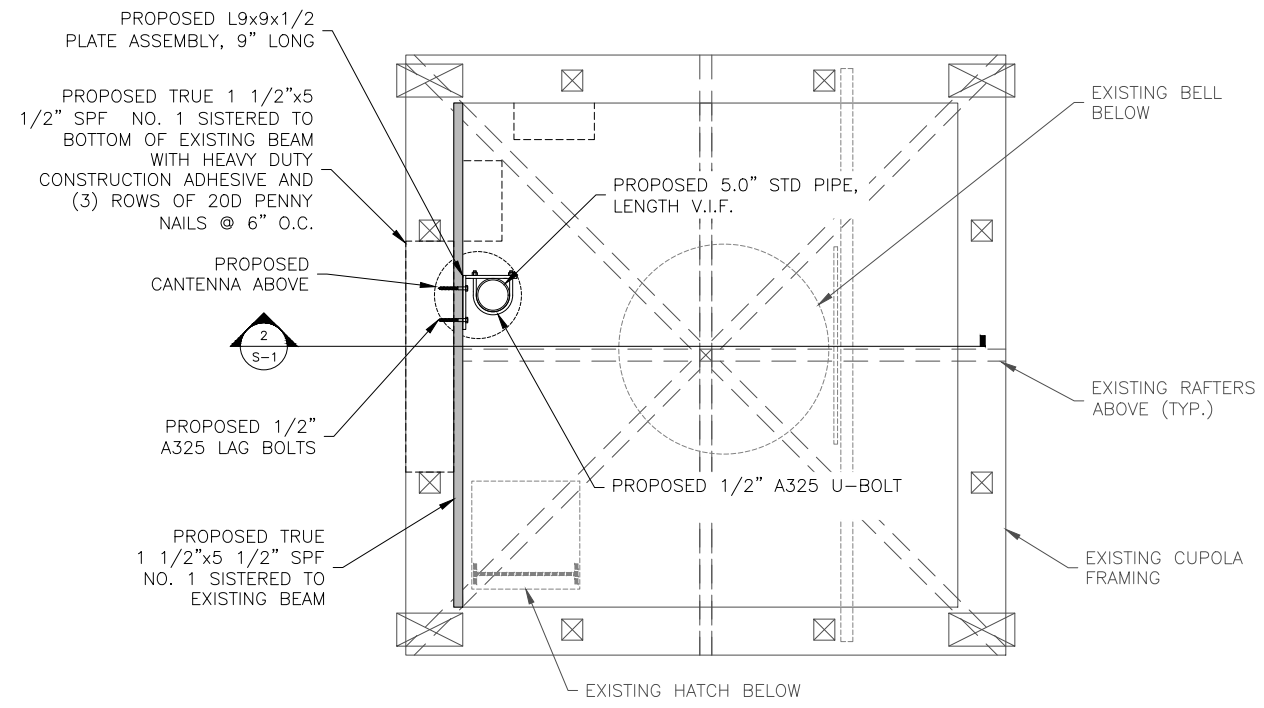


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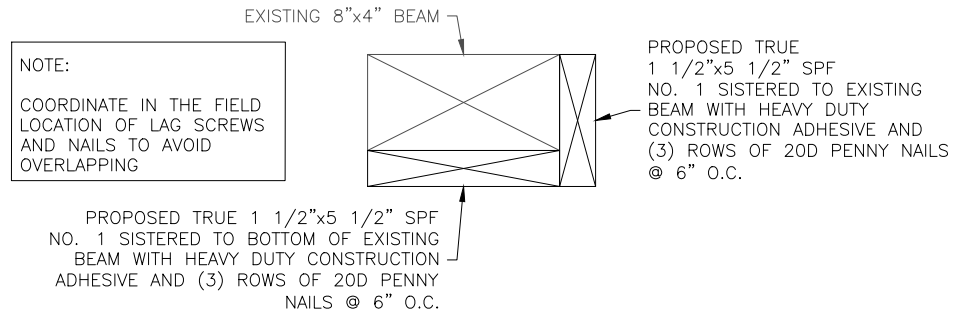
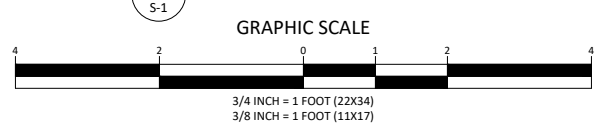


CLUSTER & NODE #: TBD
AT&T SITE ID: CRAN_RCTB_LYME_003
SITE ADDRESS: 480 HAMBURG ROAD OLD LYME, CT 06371 NEW LONDON COUNTY
PROJECT TYPE: CUPOLA

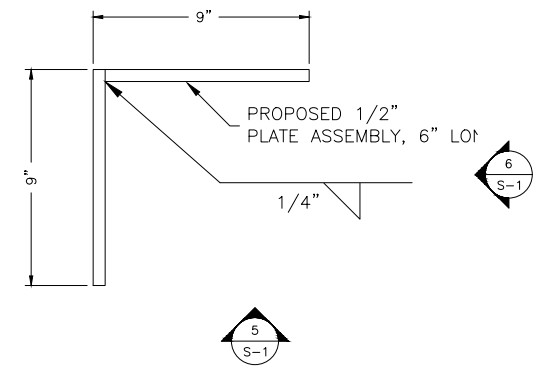
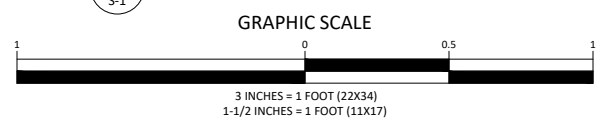
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DRAWING #: A-3	REVISION: 0



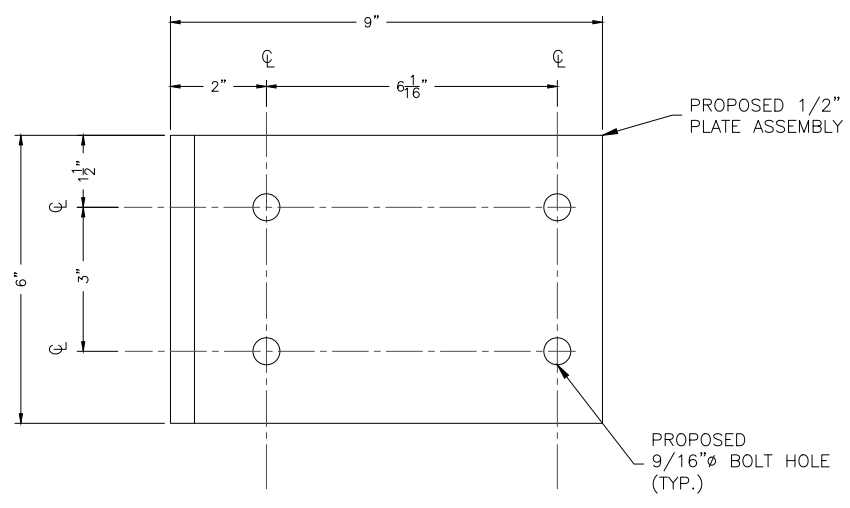
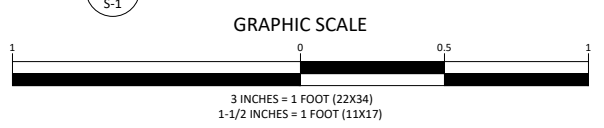
1 CONNECTION PLATE DETAIL



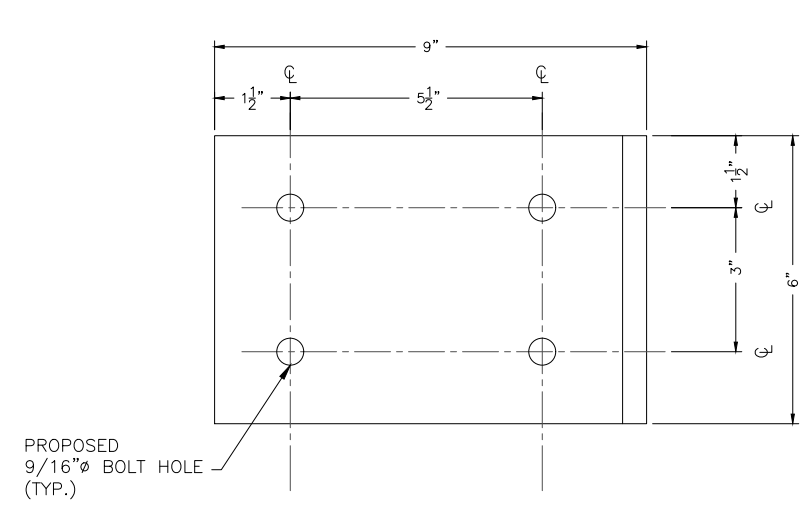
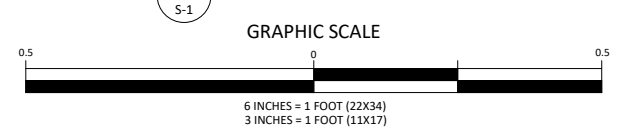
2 BLOCKING CONNECTION



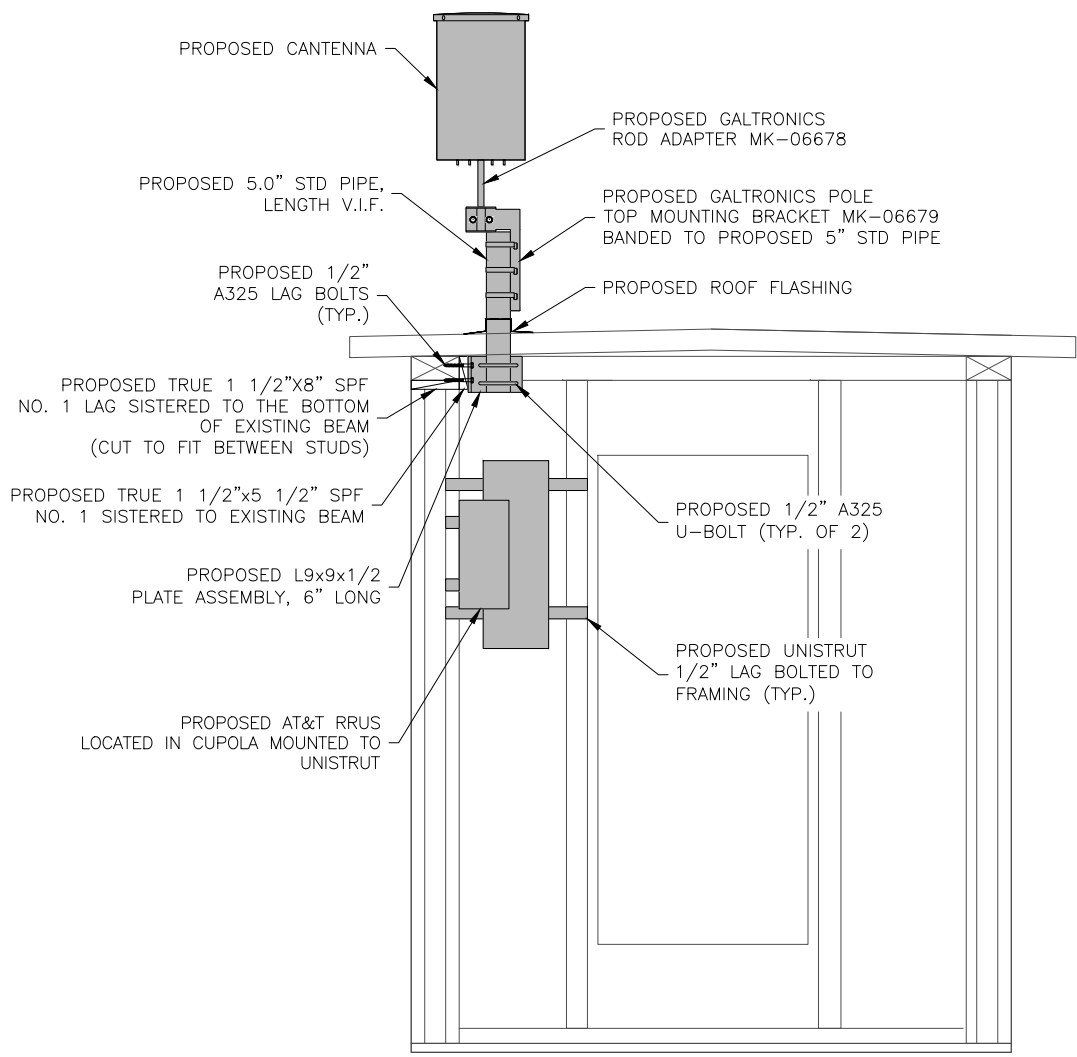
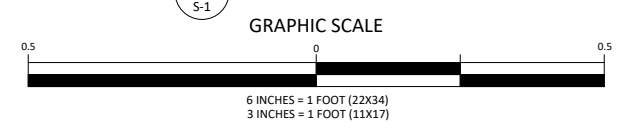
3 CONNECTION PLATE DETAIL



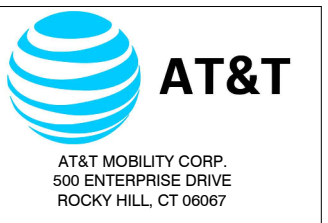
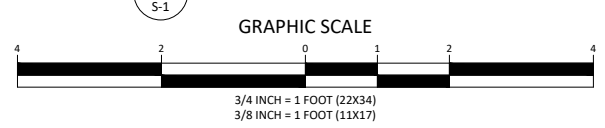
4 BOLT HOLE DETAIL



5 BOLT HOLE DETAIL

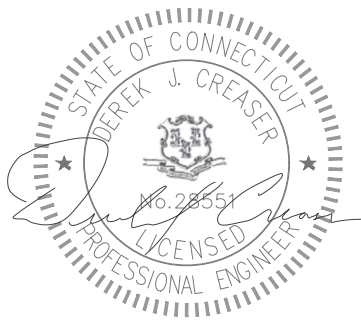


6 SECTION DETAIL



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 AT&T SITE ID: CRAN\_RCTB\_LYME\_003  
 SITE ADDRESS: 480 HAMBURG ROAD OLD LYME, CT 06371 NEW LONDON COUNTY  
 PROJECT TYPE: CUPOLA

SHEET TITLE: STRUCTURAL DETAILS  
 DRAWING #: S-1 REVISION: 0

## **Attachment 3**

July 5, 2022

AT&T Mobility Corp.  
550 Cochituate Road  
Framingham, MA 01701

Subject: Structural Analysis Report  
AT&T Site ID: cRAN\_RCTB\_LYME\_003  
Cluster & Node #: TBD  
Site Address: 480 Hamburg Road  
Old Lyme, CT 06371

To Whom It May Concern:

Centerline Communications was authorized by AT&T to perform an analysis of the proposed mount and existing structure to determine their capacity to support the proposed AT&T equipment listed in this report.

***Proposed Equipment:***

- (1) Galtronics GQ2414-B6790 Antenna (24.0" H, 14.5" Ø) (Weight= 22.5 lbs.)
- (1) 4478 B14 RRU (18.1" H, 13.4" W, 8.3" D) (Weight= 59.4 lbs.)
- (1) 4455 B5/B26 B66A RRU (31.3" H, 10.9" W, 5.9" D) (Weight= 67.2 lbs.)
- (1) Power Meter (18.5" H, 10.0" W, 4.8" D) (Weight= 16.0 lbs.)
- (1) Load Center (10.4" H, 9.4" W, 5.0" D) (Weight= 6.7 lbs.)
- (1) Safety Switch (17.5" H, 10.5" W, 6.5" D) (Weight= 15.0 lbs.)

***Results:***

Based on the results of the analysis, Centerline Communications has determined that the proposed antenna mount and existing structure are adequate to support the proposed AT&T equipment loading.

	Stress Ratio	Overall Result
Proposed Mount	71%	PASS
Existing Structure	52%	PASS

***Assumptions and Limitations:***

- The calculations performed by Centerline Communications are limited to the structural members in these calculations only.
- The analysis is only for the AT&T equipment loading listed in the report.
- The calculation assumes all structural members to be in good condition i.e. no damage, rust, or other defects.

***Recommendations:***

Centerline Communications recommends the following changes to the existing conditions in order for this analysis to be considered valid:

- Install a new custom mount using a 5.0" STD Pipe connected to the existing cupola beam with a L8x8x1/2 steel angle and lag bolts. Length of proposed pipe to be verified in field.
- Install a new true 1 1/2" x 8" SPF No.1 to the bottom of existing beam (Cut to fit between studs).
- Install a new true 1 1/2" x 5 1/2" SPF No.1 sistered to the existing beam.

All equipment and recommendations proposed in this report shall be installed in accordance with the latest Centerline Communications Drawings.

Should you have any questions, please do not hesitate to contact us.

Sincerely,

Derek Creaser, PE  
Director - A&E Services

Site Details	
Site Name	cRAN_RCTB_LYME_003
Carrier	AT&T
City, State	Old Lyme, CT
Project	NSB

Mount Details	
Mount Type	Pipe Mount
Mount Height, z	44.17 ft
Number of Sectors	1
Tower Type	Steeple
Tower Height, h	41 ft

Topographic Factors	
Topographic Category	1
Feature	Flat
Crest Height, H	N/A ft
Distance from Crest, x	N/A ft
Slope (H/L)	N/A
Topographic Factor, $K_{zt}$	1.00

Seismic Factors	
Importance Factor, $I_E$	1
Short Period Spectral Acceleration, $S_s$	0.169 g
1 Second Period Spectral Acceleration, $S_1$	0.06 g
Long-Period Transition Period, $T_L$	6
Design Category	B
Short Period Site Coefficient, $F_a$	1.60
Long-Period Site Coefficient, $F_v$	2.4

Site Parameters	
Ultimate Wind Speed, $V_{ULT}$	131 mph
Nominal Wind Speed, V	101 mph
Wind Speed with Ice, $V_i$	50 mph
Design Ice Thickness, $t_i$	0.75 in
Structural Class	II
Exposure Category	B
Site Soil Class	D-Stiff Soil (Assumed)

Code	
Building Code	IBC 2015
TIA Code	TIA-222-G
ASCE Code	7-10

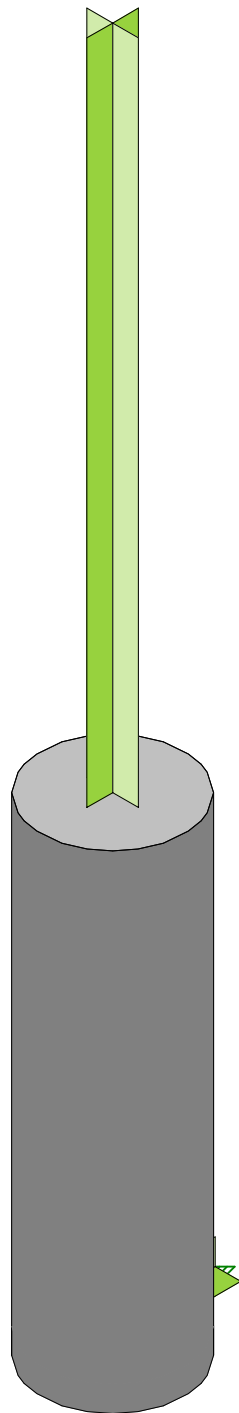
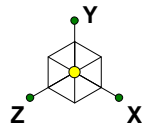
Site Constants	
Importance Factor, I (Wind no Ice)	1.00
Importance Factor, I (Ice Thickness)	1.00
Importance Factor, I (wind with Ice)	1.00
Wind Direction Prob. Factor, $K_d$	0.95
Velocity Pressure Coefficient, $K_z$	0.78
Gust Effect Factor, $G_h$	1.00
Design Ice Thickness, $t_{iz}$	1.54 in
Velocity Pressure, $q_z$	19.59 psf
Velocity Pressure with Ice, $q_{zi}$	4.76 psf
Shielding Factor, $K_a$	1.00
Flat Velocity Pressure (Ca = 2.0)	39.19 psf
Round Velocity Pressure (Ca = 1.2)	23.51 psf
Round Velocity Pressure with Ice (Ca = 1.2)	5.71 psf
Engineer Initials	LP











Centerline Communcation...

LP

cRAN\_RCTB\_LYME\_003

cRAN\_RCTB\_LYME\_003 Analysis

RENDER

July 5, 2022 at 2:58 PM

cRAN\_RCTB\_LYME\_003 Mount A...



Company : Centerline Communications, LLC  
 Designer : LP  
 Job Number : cRAN\_RCTB\_LYME\_003  
 Model Name : cRAN\_RCTB\_LYME\_003 Analysis

July 5, 2022  
 2:59 PM  
 Checked By: DC

### Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/...	Density[lb/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	490	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	490	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	490	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	490	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	490	50	1.25	65	1.15
8	A913 Gr.65	29000	11154	.3	.65	490	65	1.1	80	1.1

### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE_5.0	Column	Pipe	A53 Gr.B	Typical	4.01	14.3	14.3	28.6

### Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	N1	0	-1	0	0	
2	N2	0	18	0	0	
3	N3	0	44	0	0	
4	N4	0	0	0	0	
5	N5	0	0	-4	0	

### Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N5	max	65.685	12	218.449	22	65.685	9	136.363	9	21.895	12	0	80
2		min	0	1	0	80	-65.685	8	-188.31	8	0	1	-158.628	5
3	Totals:	max	65.685	12	218.449	22	65.685	9						
4		min	0	1	0	80	-65.685	8						

### Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N1						
2	N5	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction



Company : Centerline Communcations, LLC  
 Designer : LP  
 Job Number : cRAN\_RCTB\_LYME\_003  
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### Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	M1	Mount Pipe	19									Lateral

### Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
2	MP1	N3	N2			RIGID	None	None	RIGID	Typical
3	M3	N4	N5			RIGID	None	None	RIGID	Typical

### Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	MP1						Yes	** NA **			None
3	M3						Yes	** NA **			None

### Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Dead Load	DL		-1			1		
2	Wind 0	WLZ					2		
3	Wind 30	None					2		
4	Wind 60	None					2		
5	Wind 90	WLX					2		
6	Wind 120	None					2		
7	Wind 150	None					2		
8	Wind 180	WLZ					2		
9	Ice Weight	DL					1	3	
10	Ice + Wind 0	WLZ					2		
11	Ice + Wind 30	None					2		
12	Ice + Wind 60	None					2		
13	Ice + Wind 90	WLX					2		
14	Ice + Wind 120	None					2		
15	Ice + Wind 150	None					2		
16	Ice + Wind 180	WLZ					2		
17	Distri. Wind Z	WLZ						3	
18	Distri. Wind X	WLX						3	
19	Distri. Ice + Wind Z	WLZ						3	



Company : Centerline Communcations, LLC  
 Designer : LP  
 Job Number : cRAN\_RCTB\_LYME\_003  
 Model Name : cRAN\_RCTB\_LYME\_003 Analysis

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### Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
20	Distr. Ice + Wind X	WLX						3	
21	Seismic Load Z	ELZ					1	3	
22	Seismic Load X	ELX					1	3	
23	Live Load 1	LL							
24	Live Load 2	LL							
25	Live Load 3	LL							

### Load Combinations

	Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
1	1.4D	Yes	Y		1	1.4																	
2	1.2D + 1.6W 0°	Yes	Y		1	1.2	2	1.6	17	1.6	18												
3	1.2D + 1.6W 30°	Yes	Y		1	1.2	3	1.6	17	1.3...	18	.8											
4	1.2D + 1.6W 60°	Yes	Y		1	1.2	4	1.6	17	.8	18	1.3...											
5	1.2D + 1.6W 90°	Yes	Y		1	1.2	5	1.6	17		18	1.6											
6	1.2D + 1.6W 120°	Yes	Y		1	1.2	6	1.6	17	-.8	18	1.3...											
7	1.2D + 1.6W 150°	Yes	Y		1	1.2	7	1.6	17	-1....	18	.8											
8	1.2D + 1.6W 180°	Yes	Y		1	1.2	8	1.6	17	-1.6	18												
9	0.9D + 1.6W 0°	Yes	Y		1	.9	2	1.6	17	1.6	18												
10	0.9D + 1.6W 30°	Yes	Y		1	.9	3	1.6	17	1.3...	18	.8											
11	0.9D + 1.6W 60°	Yes	Y		1	.9	4	1.6	17	.8	18	1.3...											
12	0.9D + 1.6W 90°	Yes	Y		1	.9	5	1.6	17		18	1.6											
13	0.9D + 1.6W 120°	Yes	Y		1	.9	6	1.6	17	-.8	18	1.3...											
14	0.9D + 1.6W 150°	Yes	Y		1	.9	7	1.6	17	-1....	18	.8											
15	0.9D + 1.6W 180°	Yes	Y		1	.9	8	1.6	17	-1.6	18												
16	1.2D + 1.0Di + 1.0Wi 0°	Yes	Y		1	1.2	9	1	10	1	19	1	20										
17	1.2D + 1.0Di + 1.0Wi 30°	Yes	Y		1	1.2	9	1	11	1	19	.866	20	.5									
18	1.2D + 1.0Di + 1.0Wi 60°	Yes	Y		1	1.2	9	1	12	1	19	.5	20	.866									
19	1.2D + 1.0Di + 1.0Wi 90°	Yes	Y		1	1.2	9	1	13	1	19		20	1									
20	1.2D + 1.0Di + 1.0Wi 120°	Yes	Y		1	1.2	9	1	14	1	19	-.5	20	.866									
21	1.2D + 1.0Di + 1.0Wi 150°	Yes	Y		1	1.2	9	1	15	1	19	-.8...	20	.5									
22	1.2D + 1.0Di + 1.0Wi 180°	Yes	Y		1	1.2	9	1	16	1	19	-1	20										
23	1.2D + 1.0Eh 0°	Yes	Y		1	1.2	21	1	22														
24	1.2D + 1.0Eh 30°	Yes	Y		1	1.2	21	.866	22	.5													
25	1.2D + 1.0Eh 60°	Yes	Y		1	1.2	21	.5	22	.866													
26	1.2D + 1.0Eh 90°	Yes	Y		1	1.2	21		22	1													
27	1.2D + 1.0Eh 120°	Yes	Y		1	1.2	21	-.5	22	.866													
28	1.2D + 1.0Eh 150°	Yes	Y		1	1.2	21	-.8...	22	.5													
29	1.2D + 1.0Eh 180°	Yes	Y		1	1.2	21	-1	22														
30	0.9D + 1.0Eh 0°	Yes	Y		1	.9	21	1	22														



Company : Centerline Communcations, LLC  
 Designer : LP  
 Job Number : cRAN\_RCTB\_LYME\_003  
 Model Name : cRAN\_RCTB\_LYME\_003 Analysis

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### Load Combinations (Continued)

Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
31 0.9D + 1.0Eh 30°	Yes	Y		1	.9	21	.866	22	.5												
32 0.9D + 1.0Eh 60°	Yes	Y		1	.9	21	.5	22	.866												
33 0.9D + 1.0Eh 90°	Yes	Y		1	.9	21		22	1												
34 0.9D + 1.0Eh 120°	Yes	Y		1	.9	21	-.5	22	.866												
35 0.9D + 1.0Eh 150°	Yes	Y		1	.9	21	-.8...	22	.5												
36 0.9D + 1.0Eh 180°	Yes	Y		1	.9	21	-1	22													
37 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	2	.328	17	.328	18									
38 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	3	.328	17	.284	18	.164								
39 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	4	.328	17	.164	18	.284								
40 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	5	.328	17		18	.328								
41 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	6	.328	17	-.1...	18	.284								
42 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	7	.328	17	-.2...	18	.164								
43 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	23	1.5	8	.328	17	-.3...	18									
44 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	2	.328	17	.328	18									
45 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	3	.328	17	.284	18	.164								
46 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	4	.328	17	.164	18	.284								
47 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	5	.328	17		18	.328								
48 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	6	.328	17	-.1...	18	.284								
49 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	7	.328	17	-.2...	18	.164								
50 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	24	1.5	8	.328	17	-.3...	18									
51 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	2	.328	17	.328	18									
52 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	3	.328	17	.284	18	.164								
53 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	4	.328	17	.164	18	.284								
54 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	5	.328	17		18	.328								
55 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	6	.328	17	-.1...	18	.284								
56 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	7	.328	17	-.2...	18	.164								
57 1.0D + 1.5Lv + 1.0W (60 ...	Yes	Y		1	1	25	1.5	8	.328	17	-.3...	18									
58 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	2	.092	17	.092	18									
59 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	3	.092	17	.079	18	.046								
60 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	4	.092	17	.046	18	.079								
61 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	5	.092	17		18	.092								
62 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	6	.092	17	-.0...	18	.079								
63 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	7	.092	17	-.0...	18	.046								
64 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	23	1	8	.092	17	-.0...	18									
65 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	2	.092	17	.092	18									
66 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	3	.092	17	.079	18	.046								
67 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	4	.092	17	.046	18	.079								
68 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	5	.092	17		18	.092								
69 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	6	.092	17	-.0...	18	.079								
70 1.2D + 1.0Lv + 1.0W (30 ...	Yes	Y		1	1.2	24	1	7	.092	17	-.0...	18	.046								







**Calculate Lag Bolt Anchor Capacity**

Lag Bolt Anchor Properties	
Nominal Diameter	3/8 in.
Length	4 in.
Allowable Tensile Load	734 lbs.
Allowable Shear Load	409 lbs.

Lag Bolt Capacity (LRFD)			
	Allowable Load (lbs.)	# of Anchors	Total Load (lbs.)
<b>Tension, Tn</b>	734	1	734
<b>Shear, Vn</b>	409	1	409

**Forces From Antenna Supports: Node 5**

**Tension Forces:**

Translation Reaction

4 Bolts	Tz =	32.8	lbs.
1 Bolt	Tz =	8.2	lbs.

Moment Reaction

Arm =	0.25	ft.
Rods in T =	2	Rods
M =	110.6	lbs.-ft.
Tm =	221.3	lbs.

	Applied		Allowable	
Total Tension, t (lbs.):	229.47	≤	734	<b>OK</b>

**Shear Forces:**

4 Bolts	V =	105.7	lbs.
1 Bolt	V =	26.4	lbs.

Moment Reaction

Arm =	0.25	ft.
Rods in V =	4	Rods
M =	137.3	lbs.-ft.
Vm =	137.3	lbs.

	Applied		Allowable	
Total Shear, v (lbs.):	163.75	≤	409	<b>OK</b>

**Interaction Check:**

$$t/\phi T_n + v/\phi V_n \leq 1.0$$

$$= 0.71 \quad \text{OK}$$

SITE NUMBER: cRAN RCTB LYME 003

DATE: 07/05/2022

BY: LP CHECKED BY: DC



**STRUCTURE MEMBER CHECK**

**Beam Check: 4x8 Hem Fir No.1 (Assumed)**

Tributary Width:	5.00	ft
Beam Length:	7.00	ft

Roof Loads:		
Dead Load:	12	psf
Live Roof Load:	20	psf
Flat Roof Snow Load:	30	psf

Antenna Mount		
Dead Load:	74	lbs
Wind Vertical:	24	lbs
Wind Moment:	87	lbs-ft

## Wood Beam

Lic. #: KW-06013597

File: Roof Check.ec6  
 Software copyright ENERCALC, INC. 1983-2020, Build:12.20.8.24  
 Centerline Communications

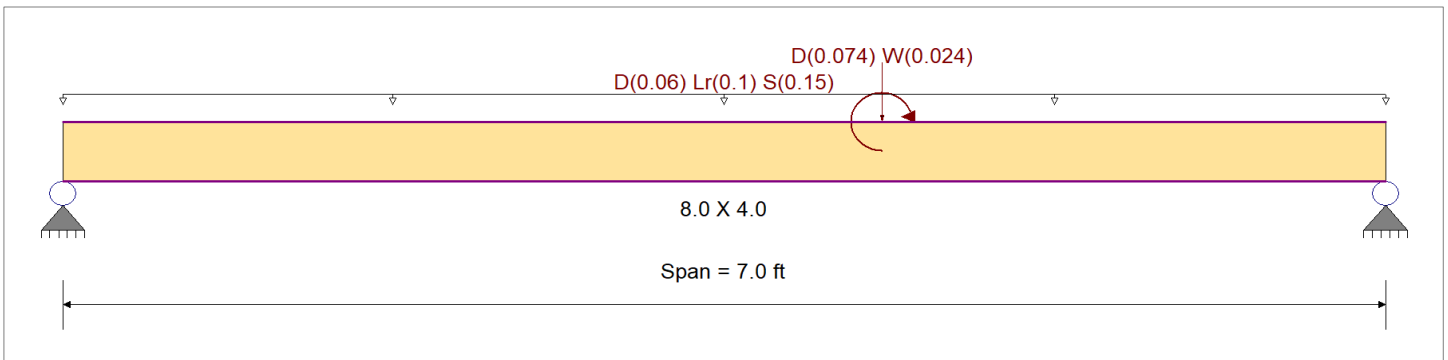
DESCRIPTION: Existing Beam

### CODE REFERENCES

Calculations per NDS 2015, IBC 2015, CBC 2016, ASCE 7-10  
 Load Combination Set : ASCE 7-10

### Material Properties

Analysis Method : Load Resistance Factor D	Fb +	975.0 psi	E : Modulus of Elasticity
Load Combination :ASCE 7-10	Fb -	975.0 psi	Ebend- xx
	Fc - Prll	1,350.0 psi	Eminbend - xx
Wood Species : Hem Fir	Fc - Perp	405.0 psi	
Wood Grade : No.1	Fv	150.0 psi	
	Ft	625.0 psi	Density
Beam Bracing : Beam is Fully Braced against lateral-torsional buckling			26.840pcf



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Uniform Load : D = 0.0120, Lr = 0.020, S = 0.030 ksf, Tributary Width = 5.0 ft, (Roof Loads)  
 Point Load : D = 0.0740, W = 0.0240 k @ 4.340 ft, (Antenna Mount)  
 Moment : W = 0.0870 k-ft, Location = 4.340 ft from left end of this span, (Antenna Mount)

### DESIGN SUMMARY

**Design OK**

Maximum Bending Stress Ratio	=	<b>0.522</b>	1	Maximum Shear Stress Ratio	=	<b>0.191</b>	: 1
Section used for this span		<b>8.0 X 4.0</b>		Section used for this span		<b>8.0 X 4.0</b>	
fb: Actual	=	1,142.39	psi	fv: Actual	=	49.55	psi
Fb: Allowable	=	2,190.24	psi	Fv: Allowable	=	259.20	psi
Load Combination	=	+1.20D+1.60S		Load Combination	=	+1.20D+1.60S+0.50W	
Location of maximum on span	=	3.602	ft	Location of maximum on span	=	6.668	ft
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	
<b>Maximum Deflection</b>							
Max Downward Transient Deflection		0.127	in	Ratio =		659	>=360
Max Upward Transient Deflection		0.000	in	Ratio =		0	<360
Max Downward Total Deflection		0.192	in	Ratio =		438	>=240
Max Upward Total Deflection		0.000	in	Ratio =		0	<240

### Maximum Forces & Stresses for Load Combinations

Load Combination	Segment Length	Span #	Max Stress Ratios										Moment Values			Shear Values					
			M	V	$\lambda$	$C_{F/V}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv				
+1.40D	Length = 7.0 ft	1	0.227	0.080	0.60	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.66	372.10	1642.68	0.00	0.00	0.00	0.33	15.48	194.40
+1.20D+0.50Lr	Length = 7.0 ft	1	0.223	0.080	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.87	489.39	2190.24	0.00	0.00	0.00	0.44	20.70	259.20
+1.20D+0.50S	Length = 7.0 ft	1	0.263	0.094	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	1.02	575.07	2190.24	0.00	0.00	0.00	0.52	24.41	259.20
+1.20D+1.60Lr	Length = 7.0 ft	1	0.396	0.143	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	1.54	867.12	2190.24	0.00	0.00	0.00	0.79	37.03	259.20
+1.20D+1.60Lr+0.50W	Length = 7.0 ft	1	0.394	0.145	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	1.54	863.73	2190.24	0.00	0.00	0.00	0.80	37.67	259.20
+1.20D+1.60S	Length = 7.0 ft	1	0.522	0.189	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	2.03	1,142.39	2190.24	0.00	0.00	0.00	1.04	48.91	259.20

**Wood Beam**

File: Roof Check.ec6  
 Software copyright ENERCALC, INC. 1983-2020, Build:12.20.8.24  
 Centerline Communications

Lic. #: KW-06013597

**DESCRIPTION:** Existing Beam

Load Combination	Segment Length	Span #	Max Stress Ratios			Moment Values						Shear Values									
			M	V	$\lambda$	$C_{F/V}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv				
+1.20D+1.60S+0.50W	Length = 7.0 ft	1	0.520	0.191	0.80	1.300	1.00	1.00	1.00	1.00	1.00	1.00	2.02	1,139.04	2190.24	0.00	0.00	0.00	1.06	49.55	259.20
+1.20D+0.50Lr+W	Length = 7.0 ft	1	0.190	0.068	1.00	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.92	519.04	2737.80	0.00	0.00	0.00	0.00	0.00	0.00
+1.20D+0.50S+W	Length = 7.0 ft	1	0.219	0.079	1.00	1.300	1.00	1.00	1.00	1.00	1.00	1.00	1.07	600.17	2737.80	0.00	0.00	0.00	0.55	25.69	324.00
+1.20D+0.20S	Length = 7.0 ft	1	0.154	0.055	1.00	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.75	421.00	2737.80	0.00	0.00	0.00	0.38	17.73	324.00
+0.90D+W	Length = 7.0 ft	1	0.101	0.035	1.00	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.49	277.78	2737.80	0.00	0.00	0.00	0.00	0.00	0.00
+0.90D	Length = 7.0 ft	1	0.087	0.031	1.00	1.300	1.00	1.00	1.00	1.00	1.00	1.00	0.43	239.21	2737.80	0.00	0.00	0.00	0.00	0.00	0.00

**Overall Maximum Deflections**

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S	1	0.1915	3.526		0.0000	0.000

**Vertical Reactions**

Support notation : Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	0.763	0.781
Overall MINimum	-0.003	0.027
D Only	0.238	0.256
+D+Lr	0.588	0.606
+D+S	0.763	0.781
+D+0.750Lr	0.501	0.518
+D+0.750S	0.632	0.650
+D+0.60W	0.236	0.272
+D+0.750Lr+0.450W	0.499	0.531
+D+0.750S+0.450W	0.630	0.662
+0.60D+0.60W	0.141	0.170
+0.60D	0.143	0.154
Lr Only	0.350	0.350
S Only	0.525	0.525
W Only	-0.003	0.027

## **Attachment 4**



Location 1

Location 2

Location 3



cRAN\_RCTB\_LYME\_003  
Location Map



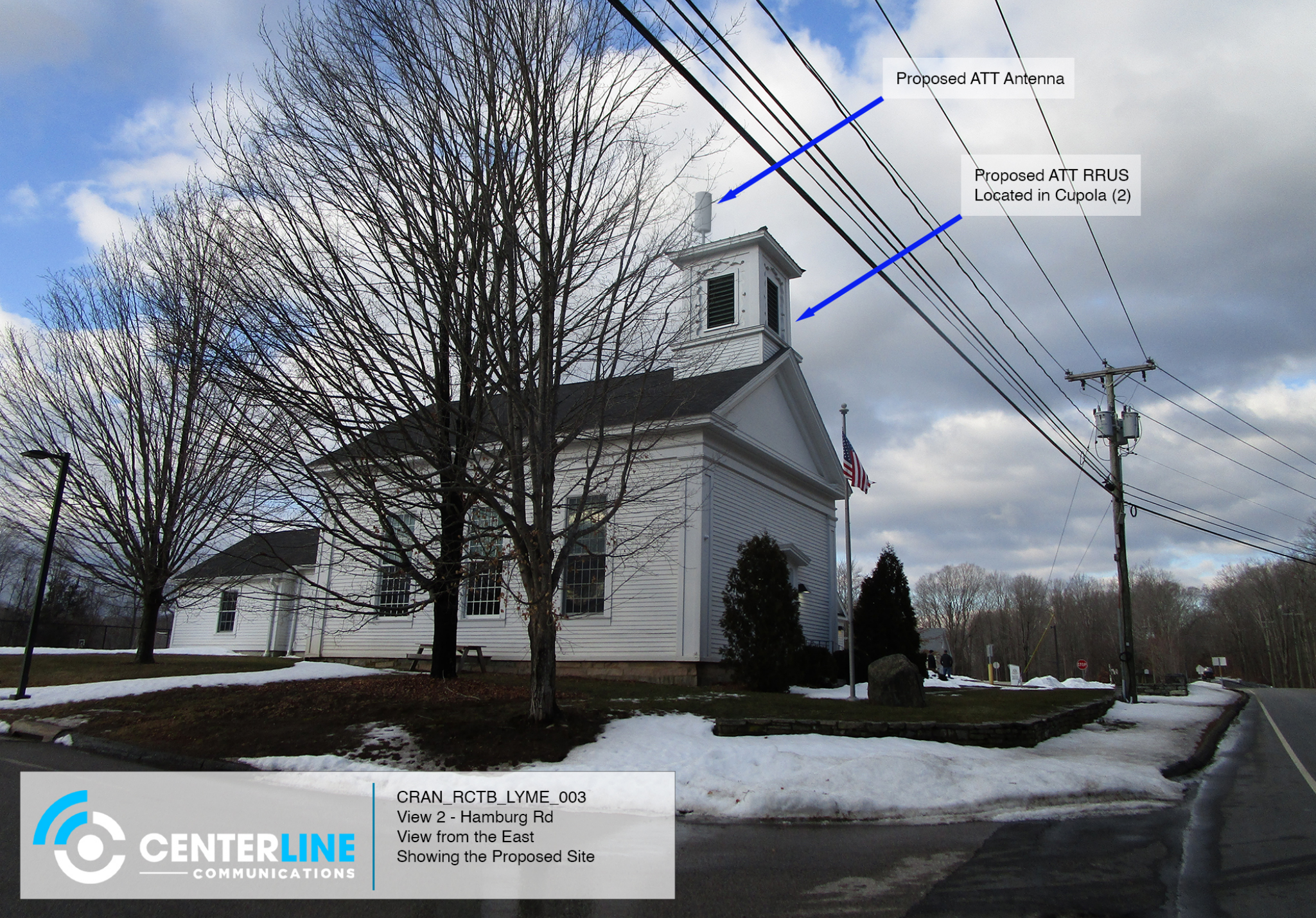
CRAN\_RCTB\_LYME\_003  
View 1 - Beaver Brook Rd &  
Hamburg Rd  
View from the South  
SITE NOT VISIBLE





CRAN\_RCTB\_LYME\_003  
View 2 - Hamburg Rd  
View from the East  
Showing the Existing Site





Proposed ATT Antenna

Proposed ATT RRUS  
Located in Cupola (2)

CRAN\_RCTB\_LYME\_003  
View 2 - Hamburg Rd  
View from the East  
Showing the Proposed Site





CRAN\_RCTB\_LYME\_003  
View 3 - Hamburg Rd  
View from the North  
Showing the Existing Site



Proposed ATT Antenna

Proposed ATT RRUS  
Located in Cupola (2)

SCHOOL ZONE  
AHEAD  
FINES DOUBLED

LYME  
480

CRAN\_RCTB\_LYME\_003  
View 3 - Hamburg Rd  
View from the North  
Showing the Proposed Site



## **Attachment 5**



# Radio Frequency Exposure Analysis Report

May 19, 2022

Centerline on behalf of AT&T  
Centerline Communications Project Number: 520970

AT&T Site Name: cRAN\_RCTB\_LYME\_003  
AT&T Site Number: cRAN\_RCTB\_LYME\_003  
FA#: 15717984  
USID: 316138

Site Address: 480 HAMBURG ROAD, OLD LYME, CT 06371



Michael Fischer, P.E.  
Registered Professional Engineer (Electrical)  
Connecticut License Number 33928  
Expires January 31, 2023

Signed 23 May 2022

## Site Compliance Summary

AT&T Compliance Status:	Compliant
Cumulative Calculated Power Density (Ground Level):	0.76292 $\mu\text{W}/\text{cm}^2$
Cumulative General Population % MPE (Ground Level):	0.13554%



May 19, 2022

Centerline  
Attn: Jilian Fancher  
750 W Center St, Suite 301  
West Bridgewater, MA 02379

RF Exposure Analysis for Site: **CRAN\_RCTB\_LYME\_003**

Centerline Communications, LLC (“Centerline”) was contracted to analyze the proposed AT&T facility at **480 HAMBURG ROAD, OLD LYME, CT 06371** for the purpose of determining whether the predictive exposure from the proposed facility is within specified federal limits.

All information used in this report was analyzed as a percentage of the Maximum Permissible Exposure (% MPE) limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ) or microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The exposure limits vary depending upon the frequencies being utilized. The General Population/Uncontrolled MPE limit (in  $\text{mW}/\text{cm}^2$ ) for frequencies between 300 and 1500 is defined as frequency (in MHz) divided by 1500 ( $f_{\text{MHz}}/1500$ ). Frequencies between 1500 and 100,000 MHz have a General Population/Uncontrolled MPE limit of  $1 \text{ mW}/\text{cm}^2$  ( $1000 \mu\text{W}/\text{cm}^2$ ). The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Wireless carriers use different frequency bands with varying MPE limits; therefore, it is useful to report results in terms of % MPE as opposed to power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the MPE limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.



## **Calculation Methodology**

Centerline Communications, LLC has performed theoretical modeling of the site using a software tool, RoofMaster®, which incorporates calculation methodologies detailed in FCC OET 65. RoofMaster® uses a cylindrical model for conservative power density predictions within the near field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations, the power decreases inversely with the square of the distance. The modeling is based on worst-case assumptions in terms of transmitter power and duty cycle. No losses were included in the power calculations unless they were specifically provided for the project.

In OET 65, a far field model is presented to calculate the spatial peak power density. The RoofMaster® implementation of this model incorporates antenna manufacturer's horizontal and vertical pattern data to determine the power density in all directions. This model yields the power density at a single point in space. In order to determine the spatial power density for comparison to the FCC limits, the average of several points calculated within the human profile (0-6') must be conducted. RoofMaster® calculates seven power density values between 0-6' above the specified study plane and performs a linear spatial average.





## **Data & Results**

The following table details the antennas and operating parameters for the AT&T antenna system as well as any other antenna systems at the site. This is based on antenna information provided by the client and data compiled from other sources where necessary. The data below was input into Roofmaster® to perform the theoretical exposure calculations at cRAN\_RCTB\_LYME\_003.

The theoretical calculations performed in Roofmaster® determine the cumulative exposure at all sample points at ground level (0-6' spatial average). The results from highest cumulative sample point at ground level surrounding the site are displayed in the table below. The contribution from directional antennas to the maximum cumulative totals varies greatly depending on location; therefore, the contribution from one antenna sector at the highest calculated exposure point may be greater or less than other sectors since sectorized directional antennas are pointed in different directions and there is not much overlapping exposure.

The contribution to the cumulative power density and % MPE for each antenna/frequency band is listed in the table. The cumulative power density and cumulative % MPE are displayed at the bottom of the table.



**Maximum Calculated Cumulative Power Density @ Ground**  
**(Location: approximately 4' west of site)**

Antenna ID	Make / Model	Frequency Band (MHz)	Antenna Gain (dBd)	Antenna Centerline (ft)	Channel Count	TX Power/Channel (watts)	ERP (watts)	Calculated Power Density ( $\mu\text{W}/\text{cm}^2$ )	General Population MPE Limit ( $\mu\text{W}/\text{cm}^2$ )	General Population % MPE
AT&T A 1	GALTRONICS GQ2414-06790	700	1.35	41.75	4.00	40.00	218.33	0.51838	466.67	0.11108
AT&T A 1	GALTRONICS GQ2414-06790	1900	5.85	41.75	2.00	30.00	230.76	0.09825	1000.00	0.00983
AT&T A 1	GALTRONICS GQ2414-06790	2100	5.45	41.75	2.00	30.00	210.45	0.14629	1000.00	0.01463
							<b>Cumulative Power Density:</b>	<b>0.76292 <math>\mu\text{W}/\text{cm}^2</math></b>	<b>Cumulative % MPE:</b>	<b>0.13554%</b>



## Summary

The theoretical calculations performed for this analysis yielded cumulative power density totals in all areas at ground that are **within** the allowable federal limits for public exposure to RF energy. Therefore, the site is **compliant** with FCC rules and regulations.

Katrina Styx  
RF EME Technical Writer  
Centerline Communications, LLC

A handwritten signature in black ink, appearing to read "Katrina Styx", written in a cursive style.

## **Attachment 6**

**CERTIFICATION OF SERVICE**

I hereby certify that on the 23<sup>rd</sup> day of August 2022 a copy of the following notice of the intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by certified mail, return receipt requested, to the list below:



Dated: 8/23/2022

Cuddy & Feder LLP  
45 Hamilton Avenue, 14<sup>th</sup> Floor  
White Plains, New York 10601  
Attorneys for:  
New Cingular Wireless PCS, LLC

**State**

WILLIAM TONG, ATTORNEY GENERAL OFFICE OF THE ATTORNEY GENERAL 165 CAPITOL AVENUE HARTFORD, CT 06106	DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT OFFICES OF CULTURE AND TOURISM DAVID LEHMAN, COMMISSIONER 450 COLUMBUS BOULEVARD HARTFORD, CT 06103
DEPARTMENT OF PUBLIC HEALTH DR. MANISHA JUTHANI, COMMISSIONER 410 CAPITOL AVENUE HARTFORD, CT 06134	PUBLIC UTILITIES REGULATORY AUTHORITY MARISSA GILLETT, CHAIRMAN TEN FRANKLIN SQUARE NEW BRITAIN, CT 06051
COUNCIL ON ENVIRONMENTAL QUALITY PETER B. HEARN, EXECUTIVE DIRECTOR 79 ELM STREET HARTFORD, CT 06106	DEPARTMENT OF TRANSPORTATION JOSEPH GIULIETTI, COMMISSIONER 2800 BERLIN TURNPIKE P.O. BOX 317546 NEWINGTON, CT 06131
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION KATIE DYKES, COMMISSIONER 79 ELM STREET HARTFORD, CT 06106	DEPARTMENT OF AGRICULTURE BRYAN P. HURLBURT, COMMISSIONER 450 COLUMBUS BOULEVARD SUITE 701 HARTFORD, CT 06103
OFFICE OF POLICY AND MANAGEMENT JEFFREY R. BECKHAM, SECRETARY 450 CAPITOL AVENUE HARTFORD, CT 06106	GOVERNOR NED LAMONT STATE CAPITOL 210 CAPITOL AVENUE HARTFORD, CT 06106
DEPARTMENT OF EMERGENCY SERVICES & PUBLIC PROTECTION DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND	SECRETARY OF THE STATE MARK F. KOHLER STATE OF CONNECTICUT 165 CAPITOL AVENUE, SUITE 1000 P.O. BOX 150470

SECURITY JAMES C. ROVELLA, COMMISSIONER 1111 COUNTRY CLUB ROAD MIDDLETOWN, CT 06457	HARTFORD, CT 06106
STATE REPRESENTATIVE- DISTRICT 023 DEVIN R. CARNEY LEGISLATIVE OFFICE BUILDING ROOM 4200 300 CAPITAL AVENUE HARTFORD, CT 06106	STATE SENATOR – DISTRICT S33 NORMAN NEEDLEMAN LEGISLATIVE OFFICE BUILDING LOB ROOM 3300 300 CAPITAL AVENUE HARTFORD, CT 06106
LOWER CONNECTICUT RIVER VALLEY COUNCIL OF GOVERNMENTS 145 DENNISON ROAD ESSEX, CT 06426	

### Federal

FEDERAL COMMUNICATIONS COMMISSION 45 L STREET NE WASHINGTON, DC 20554	FEDERAL AVIATION ADMINISTRATION 800 INDEPENDENCE AVENUE, SW WASHINGTON, DC 20591
U.S. SENATOR CHRISTOPHER MURPHY COLT GATEWAY 120 HUYSHOPE AVENUE; SUITE 401 HARTFORD, CT 06106	U.S. SENATOR RICHARD BLUMENTHAL 90 STATE HOUSE SQUARE, 10 <sup>TH</sup> FLOOR HARTFORD, CT 06103
U.S. CONGRESSMAN – 2ND DISTRICT JOE COURTNEY 55 MAIN STREET, SUITE 250 NORWICH, CT 06360	

### Town of Lyme

FIRST SELECTMAN, DAVID LAHM TOWN HALL 480 HAMBURG ROAD LYME, CT 06371	PLANNING & ZONING COMMISSION TOWN HALL 480 HAMBURG ROAD LYME, CT 06371
CONSERVATION COMMISSION INLAND WETLANDS AGENCY TOWN HALL 480 HAMBURG ROAD LYME, CT 06371	BUILDING COMMITTEE TOWN HALL 480 HAMBURG ROAD LYME, CT 06371
LINA WINZER, TOWN CLERK TOWN HALL 480 HAMBURG ROAD LYME, CT 06371	

## NOTICE

Notice is hereby given, pursuant to Section 16-50j-40(a) of the Regulations of Connecticut State Agencies of a Petition being filed with the Connecticut Siting Council (“Siting Council”) on or after August 25, 2022 by New Cingular Wireless PCS, LLC (“AT&T”). AT&T seeks a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a new “small cell” wireless telecommunications facility on an existing building.

The proposed telecommunications facility will be installed on the cupola of the Town of Lyme Town Hall building located at 480 Hamburg Road, in the Town of Lyme, and identified on the Town of Lyme’s GIS as Parcel ID 29-18 (the “Property”). AT&T’s proposed Facility consists of a cannister antenna approximately 2 feet in height located at the back part of the existing building cupola and associated equipment located within an equipment room on the first floor of the building. The top of AT&T’s antenna will reach a height of approximately 45’-2” above grade level. The proposed Facility is designed to assure reliable wireless service to AT&T customers and emergency service providers in the area of the Facility location.

The Petition will provide additional details of the proposal and explain why AT&T submits that this proposed small cell Facility presents no significant adverse environmental effects. The location, height and other features of the proposal are subject to review and potential change under the provisions of Connecticut General Statutes Sections 16-50g et. seq.

Copies of the Petition will be available for review during normal business hours on or after August 25, 2022, at the following:

Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

Town of Lyme  
Linda Winzer, Town Clerk  
480 Hamburg Road  
Lyme, CT 06371

or the offices of the undersigned. A copy of the Petition will also be available on the Connecticut Siting Council website: <https://www.ct.gov/cSc/site/default.asp> under Pending Matters. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Lucia Chiocchio, Esq.  
Cuddy & Feder LLP  
445 Hamilton Ave, 14th Floor  
White Plains, New York 10601  
(914) 761-1300  
Attorneys for the Petitioner

**CERTIFICATION OF SERVICE**

I hereby certify that on the 23<sup>rd</sup> day of August 2022, a copy of the following letter and notice of the intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by certified mail, return receipt requested, to the attached list of abutting property owners:



Dated: 8/23/2022

\_\_\_\_\_  
Cuddy & Feder LLP  
45 Hamilton Avenue, 14<sup>th</sup> Floor  
White Plains, New York 10601  
Attorneys for:  
New Cingular Wireless PCS, LLC (AT&T)

REGIONAL SCHOOL BOARD DISTRICT LYME STREET OLD LYME, CT 06371	TOWN OF LYME 480 HAMBURG ROAD LYME, CT 06371
EVAN S. GRISWOLD EMILY T. FISHER P.O. BOX 981 OLD LYME, CT 06371	DAVID M. SHELSKY 4 BEAVER BROOK ROAD LYME, CT 06371
STEVEN M. OLDERMAN TRUSTEE 492 HAMBURG ROAD LYME, CT 06371	NATURE CONSERVANCY INC. 55 CHURCH STREET, 3 <sup>RD</sup> FLOOR NEW HAVEN, CT 06510



August 23, 2022

**VIA CERTIFIED MAIL/  
RETURN RECEIPT REQUESTED**

Re: New Cingular Wireless PCS, LLC (“AT&T”)  
Installation of A Small Cell Wireless Telecommunication Facility  
The Town of Lyme, CT  
480 Hamburg Road, Lyme, Connecticut

Dear Sir or Madam:

We are writing to you on behalf of our client New Cingular Wireless PCS, LLC (“AT&T”) with respect to the above referenced matter and our client’s intent to file a petition for a declaratory ruling with the State of Connecticut Siting Council for approval of installation of a small cell wireless telecommunication facility on an existing building (the “Facility”) to be installed on the cupola of the Town of Lyme Town Hall building located at 480 Hamburg Road, in the Town Lyme, CT.

State law requires that record owners of property abutting a parcel on which a facility is proposed be sent notice of an applicant’s intent to file a petition with the Siting Council.

Included with this letter please find a Notice of this submission and details of the proposal. Of note, the location, height and other features of the Facility are subject to review and potential change by the Connecticut Siting Council under the provisions of Connecticut General Statutes §16-50g et seq.

If you have any questions concerning this petition, please contact the Connecticut Siting Council or the undersigned after August 25, the date that the petition is expected to be on file.

Very truly yours,

Lucia Chiocchio  
Enclosure

## NOTICE

Notice is hereby given, pursuant to Section 16-50j-40(a) of the Regulations of Connecticut State Agencies of a Petition being filed with the Connecticut Siting Council (“Siting Council”) on or after August 25, 2022 by New Cingular Wireless PCS, LLC (“AT&T”). AT&T seeks a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a new “small cell” wireless telecommunications facility on an existing building.

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The Petition will provide additional details of the proposal and explain why AT&T submits that this proposed small cell Facility presents no significant adverse environmental effects. The location, height and other features of the proposal are subject to review and potential change under the provisions of Connecticut General Statutes Sections 16-50g et. seq.

Copies of the Petition will be available for review during normal business hours on or after August 25, 2022, at the following:

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New Britain, Connecticut 06051

Town of Lyme  
Linda Winzer, Town Clerk  
480 Hamburg Road  
Lyme, CT 06371

or the offices of the undersigned. A copy of the Petition will also be available on the Connecticut Siting Council website: <https://www.ct.gov/cSc/site/default.asp> under Pending Matters. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Lucia Chiocchio, Esq.  
Cuddy & Feder LLP  
445 Hamilton Ave, 14th Floor  
White Plains, New York 10601  
(914) 761-1300  
Attorneys for the Petitioner

**Abutter's Map**



Parcel ID	Site Address	Owner Name	Co-Owner Name	Mailing Address	City	State	Zip
29-16	478 HAMBURG RD	REGIONAL SCHOOL BOARD DISTRICT		LYME STREET	OLD LYME	CT	6371
29-18	480 HAMBURG RD	TOWN OF LYME		480 HAMBURG ROAD	LYME	CT	6371
29-19	0 HAMBURG RD	EVAN S. GRISWOLD	EMILY T. FISHER	P.O. BOX 981	OLD LYME	CT	6371
29-20	473 HAMBURG RD	DAVID M. SHELSKY		4 BEAVER BROOK ROAD	LYME	CT	6371
29-21	0 HAMBURG RD	TOWN OF LYME		480 HAMBURG ROAD	LYME	CT	6371
30-1	492 HAMBURG RD	STEVEN M. OLDERMAN TRUSTEE		492 HAMBURG ROAD	LYME	CT	6371
30-2	0 HAMBURG RD	NATURE CONSERVANCY INC.		55 CHURCH STREET 3RD FLOOR	NEW HAVEN	CT	6510