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 AT 132 GREENWOOD AVENUE, BETHEL, CONNECTICUT.

PETITION NO._____

June 8, 2020

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 wireless telecommunications facility at 132 Greenwood Avenue, Bethel, Connecticut (the "Site")[1]. AT&T proposes to install a cannister antenna and a remote radio head unit ("RRH") to the existing building at the Site. The property owner's 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 Bethel. 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.

[1] The Site address is also known as 126-132 Greenwood Avenue and is listed as 126 Greenwood Avenue in the tax assessor's records.

b. AT&T's Proposed Tower Facility

AT&T's proposed Facility consists of a single canister antenna and one RRH mounted to the roof of the existing building located at the Site. The cannister antenna is approximately 24.7" in height and approximately 10" in diameter. Thus, AT&T's antenna is a tower as defined by R.C.S.A. §16-50j-2a(23).[2] The top of AT&T's antenna will reach a height of approximately 38'-6" above grade level. 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.

## 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 photosimulation included in Attachment 4 demonstrates that the limited nature of AT&T's proposed Facility will not result in any significant visual impacts to the area.

[2] R.C.S.A. §16-50j-20a(30) "Tower" means a structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and that is high relative to its surroundings, or that is used to support antennas for sending or receiving radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, which is or is to be:
(A) used principally to support one or more antennas for receiving or sending radio frequency signals, or for sending or receiving signals to or from satellites, or any of these,...

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 16-50*l* 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 Chiocchio

On behalf of the Petitioner

cc: First Selectman Matt Knickerbocker, Town of Bethel
Beth Cavagna, Town Planner, Town of Bethel
AT&T
Centerline
Riddar Nget

# ATTACHMENT 1

**LETTER OF AUTHORIZATION**

**RE: AT&T Small Cell Installation // cRAN_RCTB_DBRY_004 - Bethel, CT**

**ADDRESS: 132 Greenwood Avenue, Bethel, CT**

SRI RE LLC, 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, zoning or building permit application(s) necessary to obtain approval of the applicable jurisdiction for AT&T's installation of a rooftop small cell 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.

SRI RE LLC

By: _____

Name: Srikanth Popuri

Its: Member / Owner

Date: 4/16/2020

# ATTACHMENT 2

# AT&T SITE ID: CRAN_RCTB_DRBY_004
# 132 GREENWOOD AVE.
# BETHEL, CT 06801

FOR ZONING (NOT FOR CONSTRUCTION)

## SHEET INDEX

| SHEET NO. | DESCRIPTION | REV. |
|---|---|---|
| T-1 | TITLE SHEET | A |
| C-1 | SITE PLAN | A |
| A-1 | KEY PLAN AND ELEVATION | A |
| A-2 | EQUIPMENT DETAILS | A |

## PROJECT DESCRIPTION

1. INSTALLATION OF ANTENNA AND ASSOCIATED EQUIPMENT ON EXISTING ROOFTOP.
2. THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT SITE AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF IMPROVING CELLULAR AND WIRELESS INTERNET SERVICE.

## PROJECT SUMMARY

SITE ADDRESS: 132 GREENWOOD AVE.
BETHEL, CT 06801

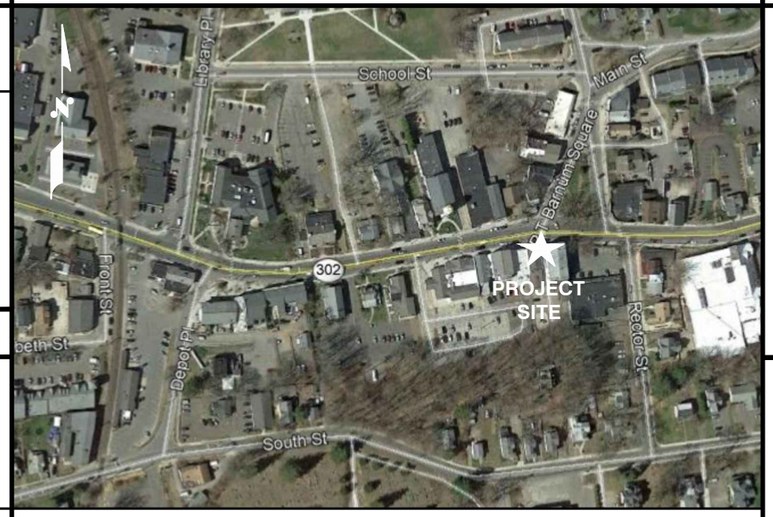
COUNTY: FAIRFIELD

LATITUDE: 41.371127° N

LONGITUDE: -73.411792° W

ARCHITECT/ENGINEER:
HUDSON DESIGN GROUP LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845

## VICINITY MAP (NOT TO SCALE)




## DRIVING DIRECTIONS

FROM ROCKY HILL CT:

HEAD SOUTHEAST TOWARD CAPITAL BLVD. TURN LEFT ONTO CAPITAL BLVD. TURN LEFT ONTO STATE HWY 411 TURN LEFT TO MERGE ONTO I-91 S. MERGE ONTO I-91 S. TAKE EXIT 18 FOR I-691 W TOWARD MERIDEN/WATERBURY. CONTINUE ONTO I-691 W. TAKE EXIT 1 ON THE LEFT FOR I-84 W TOWARD WATERBURY/DANBURY. MERGE INTO I-84. TAKE EXIT 11 TOWARD T-34/DERBY/NEW HAVEN. TURN LEFT ONTO WASSEMAN WAY. CONTINUE ONTO MILE HILL RD. TURN RIGHT ONTO CT-25 N/S MAIN ST. TURN LEFT ONTO CT-302 W/ SUGAR ST. TURN LEFT ONTO GREENWOOD AVE.

## GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.


at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET,
SUITE# 301
WEST BRIDGEWATER, MA 02379

HDG HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586


CHECKED BY: AT

APPROVED BY: DPH

SUBMITTALS

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CLUSTER AND NODE NUMBER:
CRAN_RCTB_DRBY_004

SITE ID:
CRAN_RCTB_DRBY_004

SITE ADDRESS:
132 GREENWOOD AVE.
BETHEL, CT 06801
FAIRFIELD COUNTY

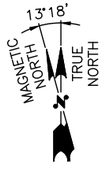
SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

## IMMEDIATE ADJOINING PROPERTY OWNER INFORMATION

| PARCEL | OWNER | PHYSICAL ADDRESS | MAILING ADDRESS |
|---|---|---|---|
| 22 30 09 | COLBY D LLC | 122 GREENWOOD AVENUE<br>DANBURY, CT 06810 | 7 FINANCE DRIVE<br>DANBURY, CT 06810 |
| 22 30 10 | DEMOURA & SON LLC | 116 GREENWOOD AVE.<br>DANBURY, CT 06810 | 131 CODFISH HILL ROAD<br>BETHEL, CT 06801 |
| 22 32 10 | ST JEAN OLIVA A | 123 GREENWOOD AVENUE<br>DANBURY, CT 06810 | 28 MOUNTAIN RD<br>DANBURY, CT 06810 |
| 22 32 09 | COPPOLA SANDRA P | 125 GREENWOOD AVE<br>DANBURY, CT 06810 | 25 WHIPPOORWILL ROAD<br>BETHEL, CT 06801 |
| 22 30 08 | ENGLISH BROTHERS LLC | 126 GREENWOOD AVE.<br>DANBURY, CT 06801 | 140 GREENWOOD AVE<br>BETHEL, CT 06801 |
| 22 32 11 | TOWN OF BETHEL | GREENWOOD AVE.<br>DANBURY, CT 06801 | 1 SCHOOL ST<br>BETHEL, CT 06801 |

APPROXIMATE COORDINATES: LAT: 41.371127° N LONG: −73.411792° W


**SITE PLAN** (1 / C-1)

22x34 SCALE: 1"=40'
11x17 SCALE: 1"=80'

GRAPHIC SCALE
0 20 40 80 120 FEET

INFORMATION SHOWN HEREON IS BASED ON EXISTING INFORMATION OBTAINED FROM TAX MAPS, MUNICIPAL GIS WEBSITE, & AERIAL IMAGERY. THE INFORMATION SHOWN IS NOT A RIGHT OF WAY OR BOUNDARY SURVEY AND DOES NOT SATISFY THE REQUIREMENTS FOR A BOUNDARY SURVEY. A SITE SURVEY WAS NOT PERFORMED BY HUDSON DESIGN GROUP, LLC


at&t
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FAX: (978) 336-5586


CHECKED BY: AT

APPROVED BY: DPH

SUBMITTALS

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CLUSTER AND NODE NUMBER:
CRAN_RCTB_DRBY_004

SITE ID:
CRAN_RCTB_DRBY_004

SITE ADDRESS:
132 GREENWOOD AVE.
BETHEL, CT 06801
FAIRFIELD COUNTY

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1

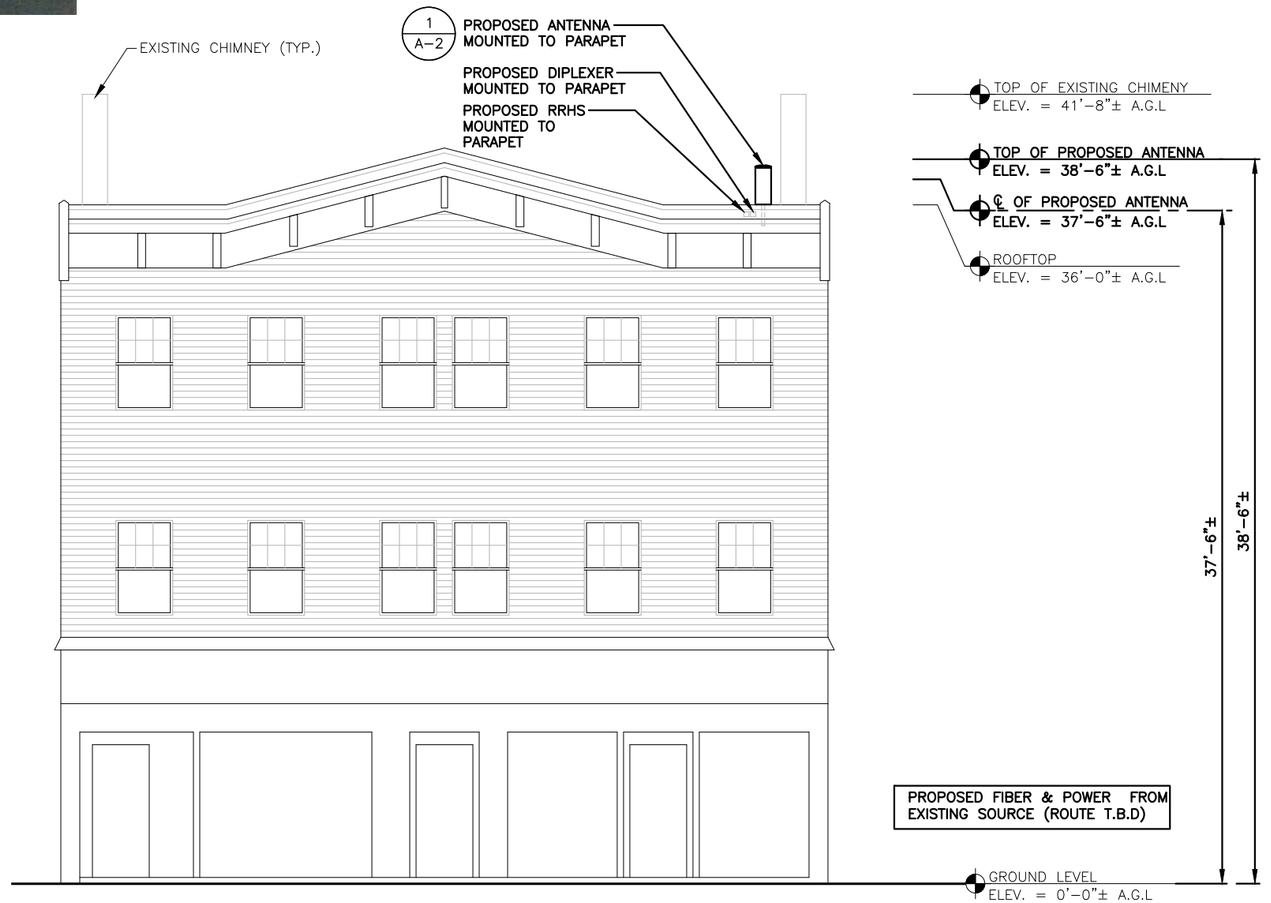

13°18'
MAGNETIC NORTH
TRUE NORTH

**KEY PLAN** (1 / A–1)
22x34 SCALE: 1"=20'
11x17 SCALE: 1"=40'

GRAPHIC SCALE
0 10 20 40 60 FEET


PROPOSED ANTENNA
MOUNTED ON EXISTING
BUILDING FACADE

**EXISTING CONDITIONS PHOTO DETAIL** (2 / A–1)
SCALE: N.T.S




**ELEVATION** (3 / A–1)
22x34 SCALE: 1/4"=1'–0"
11x17 SCALE: 1/8"=1'–0"

GRAPHIC SCALE
0 2 4 8 12 FEET

| | | |
|---|---|---|
| APPROXIMATE COORDINATES: | LAT: | 41.371127° N |
| | LONG: | –73.411792° W |

**NOTE:**

1. THE WIRELESS COMMUNICATIONS OPERATOR IS RESPONSIBLE FOR PLACING A WARNING SIGN ON THE POWER SUPPLY COMMUNICATING THE RF EMISSIONS IN COMPLIANCE WITH THE CURRENT EDITION OF IEEE STANDARD C95.2. THIS SIGN MUST ALSO HAVE A 24–HOUR CONTACT PHONE NUMBER IN CASE OF EMERGENCY. THIS NUMBER MUST BE VISIBLE FROM THE GROUND.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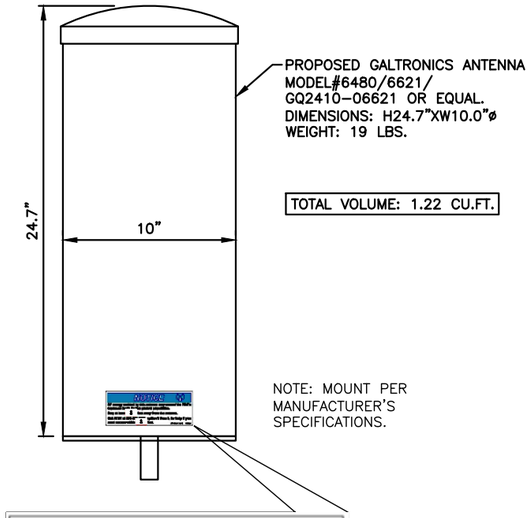
BETHEL, CT 06801
FAIRFIELD COUNTY

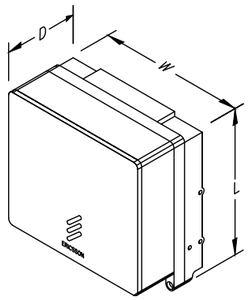
SHEET TITLE
KEY PLAN AND ELEVATION

SHEET NUMBER
A-1




STONEHOUSE SIGNS INC. P/N RD899
SIGN DIMENSIONS 2.5"x6.5"
TWO NOTICE STICKERS MUST BE PLACED OPPOSITE EACH OTHER ON THE ANTENNA

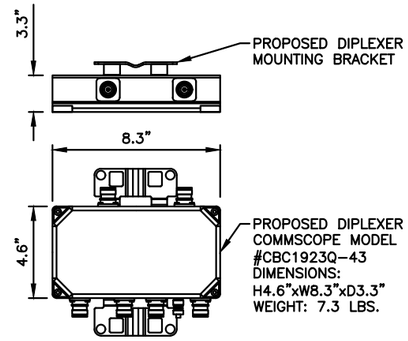
**ANTENNA DETAIL** (1 / A-2)
SCALE: N.T.S




| MODEL | QTY. | L | W | D | WGT. |
|---|---|---|---|---|---|
| 4402 | 2 | 8.0" | 8.0" | 4.0" | 11 LBS |
| 2205 | 1 | 8.0" | 8.0" | 4.0" | 11 LBS |

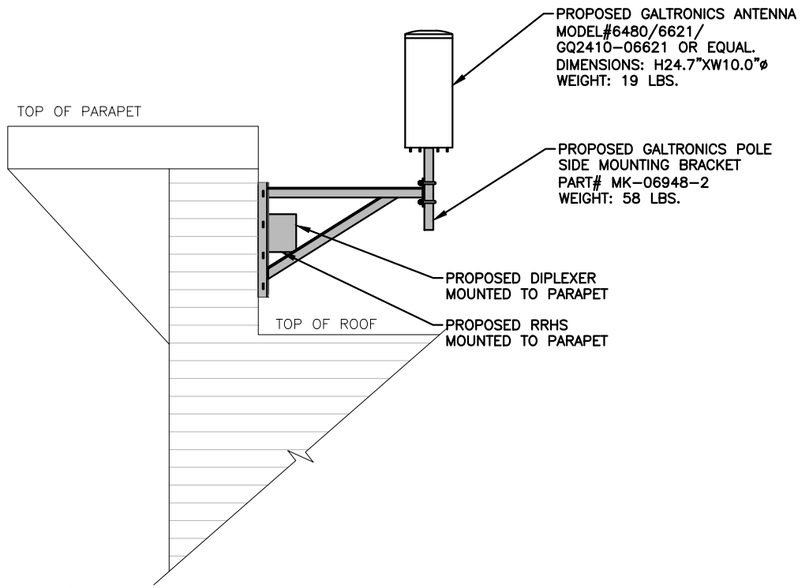
NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**RRH DETAIL** (2 / A-2)
SCALE: N.T.S




NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**DIPLEXER DETAIL (AS REQUIRED)** (3 / A-2)
SCALE: N.T.S




NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**ANTENNA MOUNT DETAIL** (4 / A-2)
SCALE: N.T.S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CHECKED BY: AT

APPROVED BY: DPH

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FAIRFIELD COUNTY

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-2

# ATTACHMENT 3

# STRUCTURAL ANALYSIS REPORT

For

# CRAN_RCTB_DBRY_004

132 Greenwood Avenue
Bethel, CT 06801

## Antenna Mounted on Steel Frame Secured to Building Parapet


**Prepared for:**

CENTERLINE COMMUNICATIONS

at&t

**Dated: January 16, 2020**

**Prepared by:**

HUDSON Design Group LLC

STATE OF CONNECTICUT
DANIEL HAMM
PROFESSIONAL ENGINEER
LICENSED

45 Beechwood Drive
North Andover, MA 01845
Phone: (978) 557-5553
www.hudsondesigngroupllc.com

HUDSON
Design Group LLC

## SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by AT&T to conduct a structural evaluation of the structure supporting the proposed equipment located in the areas depicted in the latest HDG construction drawings.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed AT&T equipment listed below.

An on-site visual survey of the above areas was conducted on December 20, 2019. Attendees included Sergio M. Anastacio (HDG – Assistant Project Manager).

## CONCLUSION SUMMARY:

Based on our evaluation, we have determined that the new connections **ARE CAPABLE** of supporting the proposed equipment loading.

| | Member | Stress Ratio | Pass/Fail |
|---|---|---|---|
| Lag Bolt Connection | 1/2" Ø Threaded Rod | 44% | **PASS** |

Based on our evaluation, we have determined that the new antenna mount **IS CAPABLE** of supporting the proposed equipment loading.

| | Member | Controlling Load Case | Stress Ratio | Pass/Fail |
|---|---|---|---|---|
| New Antenna Mount | 2 | LC11 | 5% | **PASS** |

HUDSON Design Group LLC

## APPURTENANCE CONFIGURATION:

| Appurtenances | Dimensions | Weight | **Elevation | Mount |
|---|---|---|---|---|
| **(1) GQ2410-06621 Antenna** | 24.7"x10.0" Ø | 19 lbs | 37'-6" | **Bracket Mount** |
| **(1) 2205 RRH** | 8.0"x8.0"x4.0" | 11 lbs | - | - |
| **(1) 4402 RRH** | 8.0"x8.0"x4.0" | 11 lbs | - | - |
| **(1) CBC 1923Q-43 Diplexer** | 4.6"x8.3"x3.3" | 8 lbs | - | - |

** Proposed equipment shown in bold.*
*** Elevation to antenna centerline.*

## DESIGN CRITERIA:

| **National Electric Safety Code 2017 (NESC) and the 2018 Connecticut State Building Code Amendments** | | |
|---|---|---|
| **Wind** | | |
| City/Town: | Bethel | |
| County: | Fairfield | |
| NESC Rule | Rule 250B | NESC Section 25 |
| Construction Grade | C | NESC Section 25 |
| Wind Load: | 39.53 mph | NESC Table 230-2 |
| **Ice** | | |
| Loading District | Heavy | NESC Figure 250-1 |
| Radial Ice Thickness: | 0.50 in | NESC Table 230-1 |

1. Approximate height above grade to center of the proposed antenna: 37'-6" +/-

***Calculations and referenced documents are attached.**

HUDSON Design Group LLC

## EXISTING ROOF CONSTRUCTION:

The existing roof construction consists of a roofing membrane over wood rafters supported by wood beams and wood stud walls.

## EXISTING PARAPET CONSTRUCTION

The existing parapet construction is assumed to consist of 2"x4" wood stud frame.

The existing parapet structure was not accessible during the inspection. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified immediately.

## ANTENNA SUPPORT RECOMMENDATIONS:

The new antenna is proposed to be mounted on a new side mount steel bracket secured to the building parapet framing with lag bolts.

## RRH/DIPLEXER SUPPORT RECOMMENDATIONS:

The new RRH's and diplexer are proposed to be secured to the building parapet framing with lag bolts.

Limitations and Assumptions:

1. Reference the latest HDG construction drawings for all the equipment locations and details.
2. All detail requirements will be designed and furnished in the construction drawings.
3. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities.
4. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
5. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
6. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

**FIELD PHOTOS:**

**Photo 1:** Sample photo illustrating the proposed location of the new antenna (secured on the back side of the parapet).

**Photo 2:** Sample photo illustrating the existing roof construction.

HUDSON
Design Group LLC

# Wind & Ice
# Calculations

**Date:** 1/16/2020
**Project Name:** CRAN_RCTB_ DBRY_004
**Designed By:** RL **Checked By:** MSC

HUDSON Design Group LLC

**2.6.5.2 Velocity Pressure Coeff:**

$K_z = 2.01 (z/z_g)^{2/\alpha}$

| | | |
|---|---|---|
| z= | 37.5 | (ft) |
| $z_g$= | 1200 | (ft) |
| α= | 7.0 | |

**$K_z$= 0.747**

Kzmin ≤ Kz ≤ 2.01

**Table 2-4**

| Exposure | $Z_g$ | α | $K_{zmin}$ | $K_c$ |
|---|---|---|---|---|
| B | 1200 ft | 7.0 | 0.70 | 0.9 |
| C | 900 ft | 9.5 | 0.85 | 1.0 |
| D | 700 ft | 11.5 | 1.03 | 1.1 |

**2.6.6.2 Topographic Factor:**

**Table 2-5**

| Topo. Category | $K_t$ | f |
|---|---|---|
| 2 | 0.43 | 1.25 |
| 3 | 0.53 | 2.0 |
| 4 | 0.72 | 1.5 |

$K_{zt} = [1+(K_c K_t/K_h)]^2$

$K_h = e^{(f*z/H)}$

**$K_{zt}$= #DIV/0!**

| | | |
|---|---|---|
| $K_h$= | #DIV/0! | |
| $K_c$= | 0.9 | (from Table 2-4) |
| $K_t$= | 0 | (from Table 2-5) |
| f= | 0 | (from Table 2-5) |
| z= | 37.5 | |
| $z_s$= | 400 | (Mean elevation of base of structure above sea level) |
| H= | 0 | (Ht. of the crest above surrounding terrain) |
| $K_{zt}$= | 1.00 | (from 2.6.6.2.1) |
| $K_e$= | 0.99 | (from 2.6.8) |

*(If Category 1 then $K_{zt}$ =1.0)*

Category= 1

**2.6.10 Design Ice Thickness**

| | | |
|---|---|---|
| Max Ice Thickness = | $t_i$ = | 1.00 in |
| Importance Factor = | I= | 1.0 (from Table 2-3) |
| | $K_{iz}$ = | 1.01 (from Sec. 2.6.10) |

$t_{iz} = t_i * I * K_{iz} * (K_{zt})^{0.35}$

$t_{iz}$ = 1.01 in

Date: 1/16/2020
Project Name: CRAN_RCTB_ DBRY_004
Designed By: RL Checked By: MSC

HUDSON Design Group LLC

**2.6.9 Gust Effect Factor**

*2.6.9.1 Self Supporting Lattice Structures*

$G_h$ = 1.0 Latticed Structures > 600 ft

$G_h$ = 0.85 Latticed Structures 450 ft or less

$G_h$ = 0.85 + 0.15 [h/150 - 3.0] h= ht. of structure

| | | | |
|---|---|---|---|
| h= | 36 | $G_h$= | 0.85 |
| *2.6.9.2 Guyed Masts* | | $G_h$= | 0.85 |
| *2.6.9.3 Pole Structures* | | $G_h$= | 1.1 |
| *2.6.9 Appurtenances* | | $G_h$= | 1.0 |

*2.6.9.4 Structures Supported on Other Structures*

*(Cantilivered tubular or latticed spines, pole, structures on buildings (ht. : width ratio > 5)*

| | | | |
|---|---|---|---|
| $G_h$= | 1.35 | Gh= | **1.00** |

**2.6.11.2 Design Wind Force on Appurtenances**

$F = q_z * G_h * (EPA)_A$

$q_z = 0.00256 * K_z * K_{zt} * K_s * K_e * K_d * V_{max}^2$

| | | | | |
|---|---|---|---|---|
| | | $K_z$= | 0.747 | (from 2.6.5.2) |
| | | $K_{zt}$= | 1.0 | (from 2.6.6.2.1) |
| | | $K_s$= | 1.0 | (from 2.6.7) |
| **$q_z$=** | **27.97** | $K_e$= | 0.99 | (from 2.6.8) |
| **$q_{z\,(ice)}$=** | **4.47** | $K_d$= | 0.95 | (from Table 2-2) |
| **$q_{z\,(30)}$=** | **1.61** | $V_{max}$= | 125 | mph (Ultimate Wind Speed) |
| | | $V_{max\,(ice)}$= | 50 | mph |
| | | $V_{30}$= | 30 | mph |

**Table 2-2**

| Structure Type | Wind Direction Probability Factor, Kd |
|---|---|
| Latticed structures with triangular, square or rectangular cross sections | 0.85 |
| Tubular pole structures, latticed structures with other cross sections, appurtenances | 0.95 |
| Tubular pole structures supporting antennas enclosed within a cylindrical shroud | 1.00 |

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Project Name: CRAN_RCTB_ DBRY_004
Designed By: RL Checked By: MSC

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**Determine Ca:**

**Table 2-9**

| Force Coefficients (Ca) for Appurtenances | | | | |
|---|---|---|---|---|
| **Member Type** | | **Aspect Ratio ≤ 2.5** | **Aspect Ratio = 7** | **Aspect Ratio ≥ 25** |
| | | **Ca** | **Ca** | **Ca** |
| **Flat** | | 1.2 | 1.4 | 2.0 |
| **Square/Rectangular HSS** | | 1.2 - 2.8($r_s$) ≥ 0.85 | 1.4 - 4.0($r_s$) ≥ 0.90 | 2.0 - 6.0($r_s$) ≥ 1.25 |
| **Round** | **C < 39** (Subcritical) | 0.7 | 0.8 | 1.2 |
| | **39 ≤ C ≤ 78** (Transitional) | $4.14/(C^{0.485})$ | $3.66/(C^{0.415})$ | $46.8/(C^{1.0})$ |
| | **C > 78** (Supercritical) | 0.5 | 0.6 | 0.6 |

Aspect Ratio is the overall length/width ratio in the plane normal to the wind direction.
(Aspect ratio is independent of the spacing between support points of a linear appurtenance,

Note: Linear interpolation may be used for aspect ratios other than those shown.

**Ice Thickness =** **1.01** in **Angle = 0 (deg)** **Equivalent Angle = 180 (deg)**

| Appurtenances | Height | Width | Depth | Flat Area | Aspect Ratio | Ca | Force (lbs) | Force (lbs) (w/ Ice) | Force (lbs) (30 mph) |
|---|---|---|---|---|---|---|---|---|---|
| **GQ2410-06621 Antenna** | 24.7 | 10.0 | 10.0 | 1.72 | 2.47 | 1.20 | **58** | **12** | **3** |
| **4402 RRH** | 8.0 | 8.0 | 4.0 | 0.44 | 1.00 | 1.20 | **15** | **4** | **1** |
| **4402 RRH (Side)** | 8.0 | 4.0 | 8.0 | 0.22 | 2.00 | 1.20 | **7** | **2** | **0** |
| **2205 RRH** | 8.0 | 8.0 | 4.0 | 0.44 | 1.00 | 1.20 | **15** | **4** | **1** |
| **2205 RRH (Side)** | 8.0 | 4.0 | 8.0 | 0.22 | 2.00 | 1.20 | **7** | **2** | **0** |
| **CBC 1923Q-43 Diplexer** | 4.6 | 8.3 | 3.3 | 0.27 | 0.55 | 1.20 | **9** | **3** | **1** |
| **CBC 1923Q-43 Diplexer (Side)** | 4.6 | 3.3 | 8.3 | 0.11 | 1.39 | 1.20 | **4** | **1** | **0** |
| **C 5-1/2x2** | 5.5 | 12.0 | | 0.46 | 0.46 | 2.00 | **26** | | |
| **C 4x2** | 4.0 | 12.0 | | 0.33 | 0.33 | 2.00 | **19** | | |
| **2" Pipe** | 2.4 | 12.0 | | 0.20 | 0.20 | 1.20 | **7** | | |

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**Project Name:** CRAN_RCTB_ DBRY_004
**Designed By:** RL **Checked By:** MSC

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## ICE WEIGHT CALCULATIONS

Thickness of ice: 1.01 in.
Density of ice: 56 pcf

### GQ2410-06621 Antenna

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Depth (in): | 24.7 | |
| Diameter(in): | 10.0 | |
| Total weight of ice on object: | | 28 lbs |
| Weight of object: | 19 lbs | |
| Combined weight of ice and object: | | 47 lbs |

### 4402 RRH

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Height (in): | 8.0 | |
| Width (in): | 8.0 | |
| Depth (in): | 4.0 | |
| Total weight of ice on object: | | 8 lbs |
| Weight of object: | 11.0 lbs | |
| Combined weight of ice and object: | | 19 lbs |

### 2205 RRH

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Height (in): | 8.0 | |
| Width (in): | 8.0 | |
| Depth (in): | 4.0 | |
| Total weight of ice on object: | | 8 lbs |
| Weight of object: | 11.0 lbs | |
| Combined weight of ice and object: | | 19 lbs |

### CBC 1923Q-43 Diplexer

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Height (in): | 4.6 | |
| Width (in): | 8.3 | |
| Depth (in): | 3.3 | |
| Total weight of ice on object: | | 5 lbs |
| Weight of object: | 8.0 lbs | |
| Combined weight of ice and object: | | 13 lbs |

### C 5-1/2x2

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Height (in): | 5.5 | |
| Width (in): | 2 | |
| Per foot weight of ice on object: | | 8 plf |

### C 4x2

Weight of ice based on total radial SF area:

| | | |
|---|---|---|
| Height (in): | 4 | |
| Width (in): | 2 | |
| Per foot weight of ice on object: | | 7 plf |

### 2" Pipe

Per foot weight of ice:

| | | |
|---|---|---|
| diameter (in): | 2.4 | |
| Per foot weight of ice on object: | | 4 plf |

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# New Mount
# Calculations

Bentley

**Current Date:** 1/16/2020 4:56 PM
**Units system:** English
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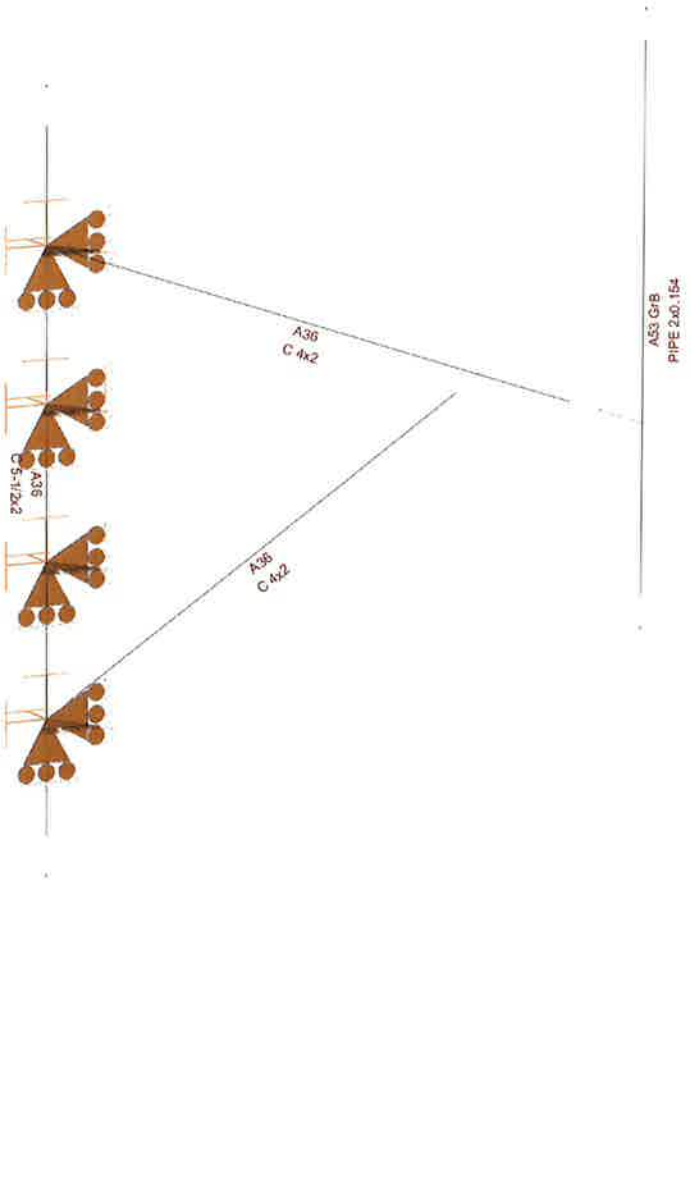
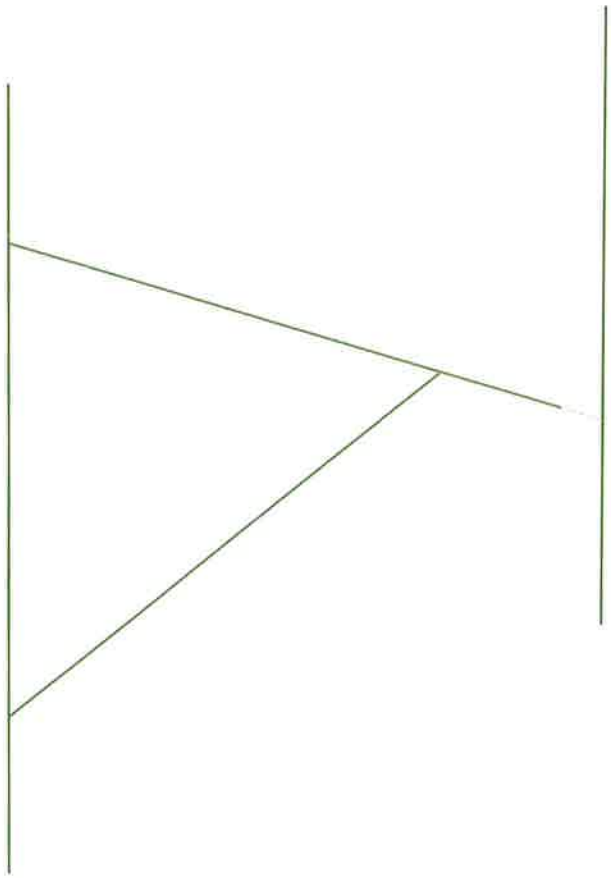
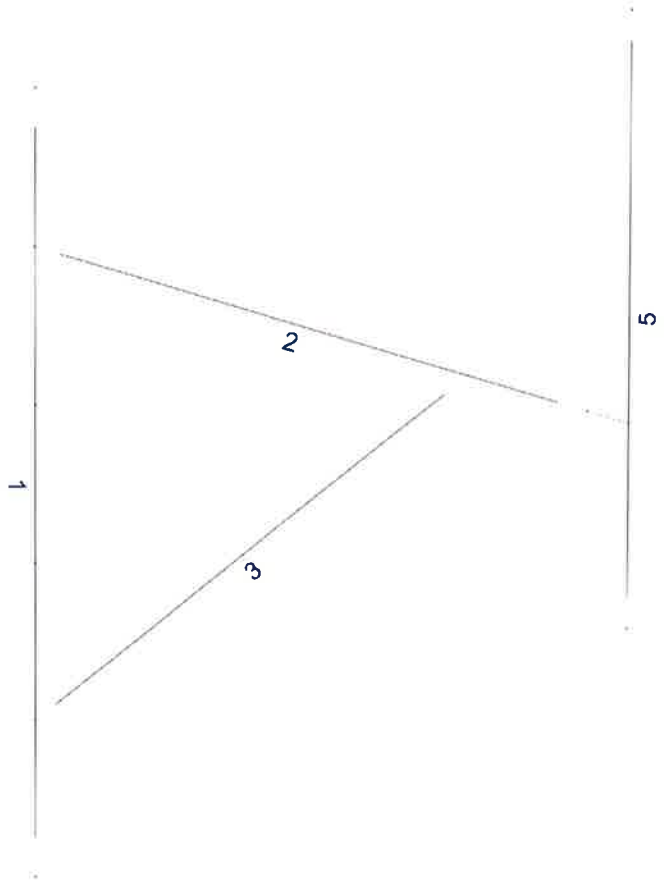

A36
C 4x2
A36
C 5-1/2x2
A36
C 4x2
A53 GrB
PIPE 2x0.154
Y
X
Z

Bentley

**Current Date:** 1/16/2020 4:56 PM
**Units system:** English
**File name:** W:\STRUCTURAL DEPARTMENT\ANALYSIS SOFTWARE\RAM Elements\RAM Projects\AT&T\CT\CT Small Cell\CRAN_RCTB_DRBY_004\CRA

Design status
- Not designed
- Error on design
- Design O.K.
- With warnings




1
2
3
5


Y
X
Z

**Current Date:** 1/16/2020 5:00 PM
**Units system:** English
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# Load data

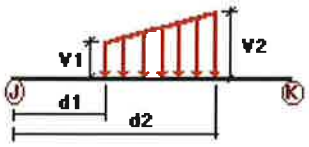
GLOSSARY

Comb : Indicates if load condition is a load combination

## Load Conditions

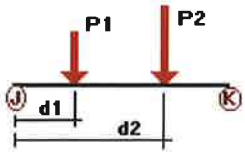
| Condition | Description | Comb. | Category |
|---|---|---|---|
| DL | Dead Load | No | DL |
| Wf | Wind Load (FRONT) | No | WIND |
| Ws | Wind Load (SIDE) | No | WIND |
| Wif | Wind with Ice (FRONT) | No | WIND |
| Wis | Wind with Ice (SIDE) | No | WIND |
| Di | Ice Load | No | LL |

## Distributed force on members




| Condition | Member | Dir1 | Val1 [Kip/ft] | Val2 [Kip/ft] | Dist1 [ft] | % | Dist2 [ft] | % |
|---|---|---|---|---|---|---|---|---|
| Wf | 1 | z | -0.026 | -0.026 | 0.00 | No | 100.00 | Yes |
| | 2 | z | -0.019 | -0.019 | 0.00 | No | 100.00 | Yes |
| | 3 | z | -0.019 | -0.019 | 0.00 | No | 100.00 | Yes |
| | 5 | z | -0.007 | -0.007 | 0.00 | No | 100.00 | Yes |
| Ws | 1 | x | -0.026 | -0.026 | 0.00 | No | 100.00 | Yes |
| | 2 | x | -0.019 | -0.019 | 0.00 | No | 100.00 | Yes |
| | 3 | x | -0.019 | -0.019 | 0.00 | No | 100.00 | Yes |
| | 5 | x | -0.007 | -0.007 | 0.00 | No | 100.00 | Yes |
| Di | 1 | y | -0.008 | -0.008 | 0.00 | No | 100.00 | Yes |
| | 2 | y | -0.007 | -0.007 | 0.00 | No | 100.00 | Yes |
| | 3 | y | -0.007 | -0.007 | 0.00 | No | 100.00 | Yes |
| | 5 | y | -0.004 | -0.004 | 0.00 | No | 100.00 | Yes |

## Concentrated forces on members




| Condition | Member | Dir1 | Value1 [Kip] | Dist1 [ft] | % |
|---|---|---|---|---|---|
| DL | 5 | y | -0.019 | 0.00 | No |
| Wf | 5 | z | -0.058 | 0.00 | No |
| Ws | 5 | x | -0.012 | 0.00 | No |
| Wif | 5 | z | -0.058 | 0.00 | No |
| Wis | 5 | x | -0.012 | 0.00 | No |
| Di | 5 | y | -0.028 | 0.00 | No |

## Self weight multipliers for load conditions

| Condition | Description | Self weight multiplier | | | |
|---|---|---|---|---|---|
| | | Comb. | MultX | MultY | MultZ |
| DL | Dead Load | No | 0.00 | -1.00 | 0.00 |
| Wf | Wind Load (FRONT) | No | 0.00 | 0.00 | 0.00 |
| Ws | Wind Load (SIDE) | No | 0.00 | 0.00 | 0.00 |
| Wif | Wind with Ice (FRONT) | No | 0.00 | 0.00 | 0.00 |
| Wis | Wind with Ice (SIDE) | No | 0.00 | 0.00 | 0.00 |
| Di | Ice Load | No | 0.00 | 0.00 | 0.00 |

## Earthquake (Dynamic analysis only)

| Condition | a/g | Ang. [Deg] | Damp. [%] |
|---|---|---|---|
| DL | 0.00 | 0.00 | 0.00 |
| Wf | 0.00 | 0.00 | 0.00 |
| Ws | 0.00 | 0.00 | 0.00 |
| Wif | 0.00 | 0.00 | 0.00 |
| Wis | 0.00 | 0.00 | 0.00 |
| Di | 0.00 | 0.00 | 0.00 |

Bentley

**Current Date:** 1/16/2020 5:01 PM
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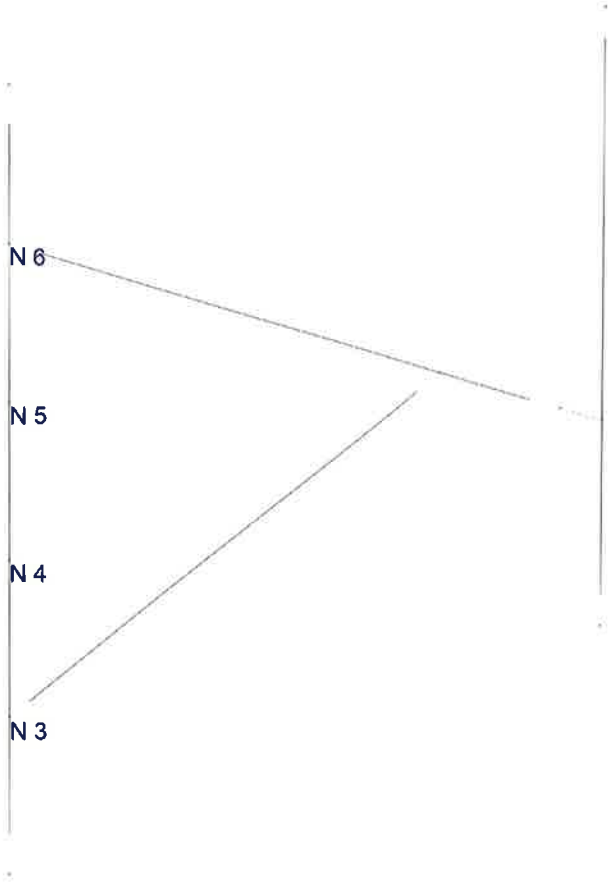
# Steel Code Check

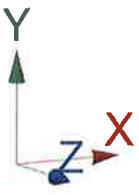
**Report: Summary - Group by member**

**Load conditions to be included in design :**

LC1=1.2DL+Wf
LC2=1.2DL+Ws
LC3=1.2DL-Wf
LC4=1.2DL-Ws
LC5=0.9DL+Wf
LC6=0.9DL+Ws
LC7=0.9DL-Wf
LC8=0.9DL-Ws
LC9=1.2DL+Wif+Di
LC10=1.2DL+Wis+Di
LC11=1.2DL-Wif+Di
LC12=1.2DL-Wis+Di
LC13=1.2DL
LC14=0.9DL

| Description | Section | Member | Ctrl Eq. | Ratio | Status | Reference |
|---|---|---|---|---|---|---|
| | ***C 4x2*** | **2** | LC11 at 81.25% | **0.05** | **OK** | |
| | | **3** | LC11 at 0.00% | 0.03 | OK | |
| | ***C 5-1/2x2*** | **1** | LC1 at 80.00% | **0.00** | **OK** | |
| | ***PIPE 2x0.154*** | **5** | LC1 at 65.63% | **0.03** | **OK** | |


N 6
N 5
N 4
N 3


Y
X
Z

Bentley

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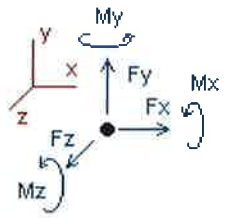
# Analysis result

## Reactions




*Direction of positive forces and moments*

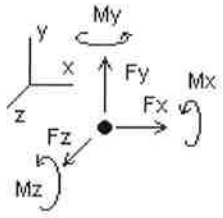
| | Forces [Kip] | | | Moments [Kip*ft] | | |
|---|---|---|---|---|---|---|
| **Node** | **FX** | **FY** | **FZ** | **MX** | **MY** | **MZ** |
| Condition **LC1=1.2DL+Wf** | | | | | | |
| 3 | 0.00000 | 0.05749 | 0.08326 | -0.01306 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00399 | 0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | 0.02873 | 0.04374 | -0.01264 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.09420 | 0.14953 | -0.02569 | 0.00000 | 0.00000 |
| Condition **LC2=1.2DL+Ws** | | | | | | |
| 3 | 0.06674 | 0.07603 | 0.11875 | -0.00129 | 0.08432 | -0.04361 |
| 4 | 0.01127 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.01127 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.09842 | 0.01019 | -0.11875 | -0.00087 | 0.13541 | -0.00210 |
| SUM | 0.18769 | 0.09420 | 0.00000 | -0.00216 | 0.21973 | -0.04571 |
| Condition **LC3=1.2DL-Wf** | | | | | | |
| 3 | 0.00000 | 0.09457 | 0.15424 | 0.01047 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00399 | -0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | -0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | -0.00835 | -0.28124 | 0.01090 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.09420 | -0.14953 | 0.02138 | 0.00000 | 0.00000 |
| Condition **LC4=1.2DL-Ws** | | | | | | |
| 3 | -0.06674 | 0.07603 | 0.11875 | -0.00129 | -0.08432 | 0.04361 |
| 4 | -0.01127 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | -0.01127 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | -0.09842 | 0.01019 | -0.11875 | -0.00087 | -0.13541 | 0.00210 |
| SUM | -0.18769 | 0.09420 | 0.00000 | -0.00216 | -0.21973 | 0.04571 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Condition **LC5=0.9DL+Wf** | | | | | | |
| 3 | 0.00000 | 0.03849 | 0.05358 | -0.01273 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00299 | 0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00299 | 0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | 0.02618 | 0.07342 | -0.01242 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.07065 | 0.14953 | -0.02515 | 0.00000 | 0.00000 |
| Condition **LC6=0.9DL+Ws** | | | | | | |
| 3 | 0.06674 | 0.05703 | 0.08906 | -0.00097 | 0.08432 | -0.04361 |
| 4 | 0.01127 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.01127 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.09842 | 0.00764 | -0.08906 | -0.00065 | 0.13541 | -0.00210 |
| SUM | 0.18769 | 0.07065 | 0.00000 | -0.00162 | 0.21973 | -0.04571 |
| Condition **LC7=0.9DL-Wf** | | | | | | |
| 3 | 0.00000 | 0.07557 | 0.12455 | 0.01080 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00299 | -0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00299 | -0.01127 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | -0.01090 | -0.25155 | 0.01112 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.07065 | -0.14953 | 0.02192 | 0.00000 | 0.00000 |
| Condition **LC8=0.9DL-Ws** | | | | | | |
| 3 | -0.06674 | 0.05703 | 0.08906 | -0.00097 | -0.08432 | 0.04361 |
| 4 | -0.01127 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | -0.01127 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | -0.09842 | 0.00764 | -0.08906 | -0.00065 | -0.13541 | 0.00210 |
| SUM | -0.18769 | 0.07065 | 0.00000 | -0.00162 | -0.21973 | 0.04571 |
| Condition **LC9=1.2DL+Wif+Di** | | | | | | |
| 3 | 0.00000 | 0.11966 | 0.16160 | -0.01434 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | 0.03237 | -0.10360 | -0.01537 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.16000 | 0.05800 | -0.02972 | 0.00000 | 0.00000 |
| Condition **LC10=1.2DL+Wis+Di** | | | | | | |
| 3 | -0.00616 | 0.13827 | 0.22659 | -0.00181 | 0.00713 | -0.00392 |
| 4 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.01816 | 0.01375 | -0.22659 | -0.00143 | 0.03127 | -0.00008 |
| SUM | 0.01200 | 0.16000 | 0.00000 | -0.00323 | 0.03840 | -0.00399 |
| Condition **LC11=1.2DL-Wif+Di** | | | | | | |
| 3 | 0.00000 | 0.15688 | 0.29157 | 0.01073 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | -0.00486 | -0.34957 | 0.01252 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.16000 | -0.05800 | 0.02325 | 0.00000 | 0.00000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Condition **LC12=1.2DL-Wis+Di** | | | | | | |
| 3 | 0.00616 | 0.13827 | 0.22659 | -0.00181 | -0.00713 | 0.00392 |
| 4 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | -0.01816 | 0.01375 | -0.22659 | -0.00143 | -0.03127 | 0.00008 |
| SUM | -0.01200 | 0.16000 | 0.00000 | -0.00323 | -0.03840 | 0.00399 |
| Condition **LC13=1.2DL** | | | | | | |
| 3 | 0.00000 | 0.07603 | 0.11875 | -0.00129 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00399 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | 0.01019 | -0.11875 | -0.00087 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.09420 | 0.00000 | -0.00216 | 0.00000 | 0.00000 |
| Condition **LC14=0.9DL** | | | | | | |
| 3 | 0.00000 | 0.05703 | 0.08906 | -0.00097 | 0.00000 | 0.00000 |
| 4 | 0.00000 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 5 | 0.00000 | 0.00299 | 0.00000 | 0.00000 | 0.00000 | 0.00000 |
| 6 | 0.00000 | 0.00764 | -0.08906 | -0.00065 | 0.00000 | 0.00000 |
| SUM | 0.00000 | 0.07065 | 0.00000 | -0.00162 | 0.00000 | 0.00000 |

## Envelope for nodal reactions

Note.- **Ic** is the controlling load condition




*Direction of positive forces and moments*

Envelope of nodal reactions for :

LC1=1.2DL+Wf
LC2=1.2DL+Ws
LC3=1.2DL-Wf
LC4=1.2DL-Ws
LC5=0.9DL+Wf
LC6=0.9DL+Ws
LC7=0.9DL-Wf
LC8=0.9DL-Ws
LC9=1.2DL+Wif+Di
LC10=1.2DL+Wis+Di
LC11=1.2DL-Wif+Di
LC12=1.2DL-Wis+Di
LC13=1.2DL
LC14=0.9DL

| Node | | Forces | | | | | | Moments | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fx [Kip] | lc | Fy [Kip] | lc | Fz [Kip] | lc | Mx [Kip*ft] | lc | My [Kip*ft] | lc | Mz [Kip*ft] | lc |
| 3 | Max | 0.067 | LC2 | 0.157 | LC11 | 0.292 | LC11 | 0.01080 | LC7 | 0.08432 | LC2 | 0.04361 | LC4 |
| | Min | -0.067 | LC4 | 0.038 | LC5 | 0.054 | LC5 | -0.01434 | LC9 | -0.08432 | LC4 | -0.04361 | LC2 |
| 4 | Max | 0.011 | LC2 | 0.004 | LC1 | 0.011 | LC1 | 0.00000 | LC3 | 0.00000 | LC1 | 0.00000 | LC2 |
| | Min | -0.011 | LC4 | 0.003 | LC5 | -0.011 | LC3 | 0.00000 | LC1 | 0.00000 | LC1 | 0.00000 | LC4 |
| 5 | Max | 0.011 | LC2 | 0.004 | LC1 | 0.011 | LC1 | 0.00000 | LC1 | 0.00000 | LC1 | 0.00000 | LC4 |
| | Min | -0.011 | LC4 | 0.003 | LC5 | -0.011 | LC3 | 0.00000 | LC3 | 0.00000 | LC1 | 0.00000 | LC2 |
| 6 | Max | 0.098 | LC2 | 0.032 | LC9 | 0.073 | LC5 | 0.01252 | LC11 | 0.13541 | LC2 | 0.00210 | LC4 |
| | Min | -0.098 | LC4 | -0.011 | LC7 | -0.350 | LC11 | -0.01537 | LC9 | -0.13541 | LC4 | -0.00210 | LC2 |

| | |
|---|---|
| **Design Method** | Allowable Stress Design (ASD) |
| **Connection Type** | Lateral loading |
| **Fastener Type** | Lag Screw |
| **Loading Scenario** | Single Shear |

Submit Initial Values

| | |
|---|---|
| **Main Member Type** | Southern Pine |
| **Main Member Thickness** | 3.5 in. |
| **Main Member: Angle of Load to Grain** | 0 |
| **Side Member Type** | Steel |
| **Side Member Thickness** | 1/4 in. |
| **Side Member: Angle of Load to Grain** | 0 |
| **Washer Thickness** | 0 in. |
| **Nominal Diameter** | 1/2 in. |
| **Length** | 3 in. |
| **Load Duration Factor** | C_D = 1.6 |
| **Wet Service Factor** | C_M = 1.0 |
| **End Grain Factor** | C_eg = 1.0 |
| **Temperature Factor** | C_t = 1.0 |

**Calculate Connection Capacity**

Connection Yield Mode Descriptions | Limits of Use

Diaphragm Factor Help | Load Duration Factor Help | Technical Help

Show Printable View

# Connection Yield Modes

| | |
|---|---|
| Im | 2225 lbs. |
| Is | 3228 lbs. |
| II | 1065 lbs. |
| IIIm | 1235 lbs. |
| IIIs | 861 lbs. |
| IV | 903 lbs. |

| | |
|---|---|
| **Adjusted ASD Capacity** | **861 lbs.** |

- Lag Screw bending yield strength of 45000 psi is assumed.
- The Adjusted ASD Capacity is only applicable for lag screws with adequate end distance, edge distance and spacing per NDS chapter 11.
- ASTM A36 Steel is assumed for steel side members 1/4 in. thick, and ASTM A653 Grade 33 Steel is assumed for steel side members less than 1/4 in. thick.



The Connection Calculator was designed and created by Cameron Knudson, Michael Dodson and David Pollock at Washington State University. Support for development of the Connection Calculator was provided by American Wood Council.

| | |
|---|---|
| **Design Method** | Allowable Stress Design (ASD) |
| **Connection Type** | Withdrawal loading |
| **Fastener Type** | Lag Screw |
| **Loading Scenario** | N/A |

Submit Initial Values

| | |
|---|---|
| **Main Member Type** | Southern Pine |
| **Main Member Thickness** | 3.5 in. |
| **Side Member Type** | Steel |
| **Side Member Thickness** | 1/4 in. |
| **Washer Thickness** | 0 in. |
| **Nominal Diameter** | 1/2 in. |
| **Length** | 3 in. |
| **Load Duration Factor** | C_D = 1.6 |
| **Wet Service Factor** | C_M = 1.0 |
| **End Grain Factor** | C_eg = 1.0 |
| **Temperature Factor** | C_t = 1.0 |

**Calculate Connection Capacity**

Connection Yield Mode Descriptions | Limits of Use

Diaphragm Factor Help | Load Duration Factor Help | Technical Help

Show Printable View

| | |
|---|---|
| **Adjusted ASD Capacity** | **1179 lbs.** |

- The Adjusted ASD Capacity only applies to withdrawal of the fastener from the main member. It does not address head pull-through capacity of the fastener in the side member.

While every effort has been made to insure the accuracy of the information presented, and special effort has been made to assure that the information reflects the state-of-the-art, neither the American Wood Council nor its members assume any responsibility for any particular design prepared from this on-line Connection Calculator. Those using this on-line Connection Calculator assume all liability from its use.

The Connection Calculator was designed and created by Cameron Knudson, Michael Dodson and David Pollock at Washington State University. Support for development of the Connection Calculator was provided by American Wood Council.

**Date:** 1/21/2020
**Project Name:** CRAN_RCTB_ DBRY_004
**Designed By:** RL **Checked By:** MSC

HUDSON Design Group LLC

## CHECK CONNECTION CAPACITY (Worst Case)

**Reference:** American Wood Concil

**Bolt Type =** A36 1/2" Lag Bolt

**Allowable Tensile Load =**

$F_{Tall}$ = 1179 lbs.

**Allowable Shear Load =**

$F_{Vall}$= 861 lbs.

## TENSILE FORCES

**Reaction** **F =** 292 lbs. (See Bentley Output)

## SHEAR FORCES

**Reactions in X direction:** 67 lbs. (See Bentley Output)
**Reactions in Y direction:** 157 lbs. (See Bentley Output)

**Resultant:** 171 lbs.

**No. of Supports =** 1
**No. of Bolts / Support =** 1

**Tension Design Load /Bolts =**

$f_t$= 292.00 lbs. < 1179 lbs. **Therefore, OK !**

**Shear Design Load / Bolts=**

$f_v$= 170.70 lbs. < 861 lbs. **Therefore, OK !**

## CHECK COMBINED TENSION AND SHEAR

| $f_t / F_T$ | + | $f_v / F_V$ | ≤ | 1.0 | | | |
|---|---|---|---|---|---|---|---|
| 0.248 | + | 0.198 | = | 0.446 | < | 1.0 | **Therefore, OK !** |

# ATTACHMENT 4

# Prepared For:
# CENTERLINE-AT&T
# Site Number:
# CRAN_RCTB_DRBY_004
# Site Name:
# CRAN_RCTB_DRBY_004

132 GREENWOOD AVE
BETHEL, CT 06801


**SITE NO:** CRAN_RCTB_DRBY_004
**SITE NAME:** CRAN_RCTB_DRBY_004
**ADDRESS:** 132 GREENWOOD AVE
BETHEL, CT 06801


at&t
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

PREPARED FOR:
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
SUITE #301
WEST BRIDGEWATER, MA 02379

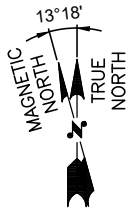
HDG HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586


SITE TYPE: ROOFTOP
DATE: 05/29/2020 | REV: 0
DRAWN BY: VP
SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

# LOCUS MAP

# TAKEN FROM GOOGLE.COM ON 05-29-20


# PHOTO LOCATION

| | |
|---|---|
| SITE NO: | CRAN_RCTB_DRBY_004 |
| SITE NAME: | CRAN_RCTB_DRBY_004 |
| ADDRESS: | 132 GREENWOOD AVE<br>BETHEL, CT 06801 |

at&t
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

PREPARED FOR:
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
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# EXISTING CONDITIONS | LOCATION # 1 | DATE OF PHOTO: 12/20/2019


## VIEW SOUTH FROM GREENWOOD AVE

| | |
|---|---|
| SITE NO: | CRAN_RCTB_DRBY_004 |
| SITE NAME: | CRAN_RCTB_DRBY_004 |
| ADDRESS: | 132 GREENWOOD AVE<br>BETHEL, CT 06801 |


at&t
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

PREPARED FOR:
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
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N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586


SITE TYPE: ROOFTOP

DATE: 05/29/2020 | REV: 0

DRAWN BY: VP

SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

# PROPOSED CONDITIONS

# LOCATION # 1

# DATE OF PHOTO: 12/20/2019


## VIEW SOUTH FROM GREENWOOD AVE

| | |
|---|---|
| SITE NO: | CRAN_RCTB_DRBY_004 |
| SITE NAME: | CRAN_RCTB_DRBY_004 |
| ADDRESS: | 132 GREENWOOD AVE<br>BETHEL, CT 06801 |


at&t
500 ENTERPRISE DRIVE
SUITE 3A
ROCKY HILL, CT 06067

PREPARED FOR:
CENTERLINE COMMUNICATIONS
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WEST BRIDGEWATER, MA 02379

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45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586


| | |
|---|---|
| SITE TYPE: ROOFTOP | |
| DATE: 05/29/2020 | REV: 0 |
| DRAWN BY: VP | |
| SCALE: N.T.S. | |

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

# ATTACHMENT 5

# Radio Frequency Emissions Analysis Report

AT&T

Site Name: **cRAN_RCTB_DBRY_004**

132 Greenwood Ave
Bethel, Connecticut 06801

**May 18, 2020**

**Centerline Communications Project Number: 950010-178**

| Site Compliance Summary | |
|---|---|
| Compliance Status: | **Compliant** |
| Site total MPE% of FCC general population allowable limit: | **0.49%** |

750 West Center St. Suite 301 | West Bridgewater, MA 02379

May 18, 2020

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 01701

Emissions Analysis for Site: **cRAN_RCTB_DBRY_004**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility to be located on **building facade** near **132 Greenwood Ave, Bethel Connecticut 06801** for the purpose of determining whether the emissions from the proposed facility are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (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.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 1900 MHz (PCS), 2100 MHz (AWS) and 5 GHz (B46) bands is 1000 $\mu W/cm^2$.

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.

# CALCULATIONS

Calculations were performed for the proposed facility using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing focused omnidirectional antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. This is a very conservative estimate since the gain reduction in actual applications is typically greater than 10 dB in the direction of ground immediately surrounding the facility. Real world emissions values from this facility are expected to be lower than values listed in this report at ground level. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

| RRH # | Technology | Frequency Band | Channel Count | Transmit Power per Channel (W) |
|---|---|---|---|---|
| 1 | LTE | 1900 MHz (PCS Band) | 2 (2 x 2 MIMO) | 5 |
| 2 | LTE | 2100 MHz (AWS Band) | 2 (2 x 2 MIMO) | 5 |
| 3 | LTE | 5 GHz (Band 46) | 2 (2 x 2 MIMO) | 0.316 |

*Table 1: Channel Data Table*

The following antennas listed in *Table 2* were used in the modeling for transmission in the 1900 MHz (PCS), 2100 MHz (AWS) and 5 GHz (Band 46) frequency bands. This is based on information from the carrier with regard to anticipated antenna selection. Maximum gain values for all antennas are listed in the AT&T Antenna Inventory & Power Levels table (Table 3) below in the Results section. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

| Sector | Antenna Number | Antenna Make / Model | Antenna Centerline (ft) |
|---|---|---|---|
| A | 1 | Galtronics GQ2410-06621 | 37.5 |

*Table 2: Antenna Data*

All calculations were done with respect to uncontrolled / general population threshold limits.

## RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

| Antenna ID | Antenna Make / Model | Frequency Bands | Antenna Gain (dBd) | Antenna Height (ft) | Channel Count | Total TX Power (W) | ERP (W) | MPE % |
|---|---|---|---|---|---|---|---|---|
| Antenna A1 | Galtronics GQ2410-06621 | 1900 MHz (PCS Band) | 6.75 dBd | 37.5 | 4 | 20 | 94.63 | 0.24 % |
| Antenna A1 | Galtronics GQ2410-06621 | 2100 MHz (AWS Band) | 6.75 dBd | 37.5 | 4 | 20 | 94.63 | 0.24 % |
| Antenna A1 | Galtronics GQ2410-06621 | 5 GHz (Band 46) | 3.35 dBd | 37.5 | 4 | 1.3 | 2.73 | 0.01 % |
| | Sector A Composite MPE% | | | | | | | **0.49 %** |

*Table 3: AT&T Antenna Inventory & Power Levels*

FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). Since this proposed facility is utilizing an omnidirectional antenna there is only one sector for this site (Sector A).

| AT&T _ Frequency Band / Technology Max Power Levels | # Channels | Watts ERP (Per Channel) | Height (feet) | Total Power Density (□W/cm²) | Frequency (MHz) | Allowable MPE (□W/cm²) | Calculated % MPE |
|---|---|---|---|---|---|---|---|
| AT&T 1900 MHz | 2 | 23.66 | 37.5 | 1.21 | 1900 MHz | 1000 | 0.12% |
| AT&T 1900 MHz | 2 | 23.66 | 37.5 | 1.21 | 1900 MHz | 1000 | 0.12% |
| AT&T 2100 MHz | 2 | 23.66 | 37.5 | 1.21 | 2100 MHz | 1000 | 0.12% |
| AT&T 2100 MHz | 2 | 23.66 | 37.5 | 1.21 | 2100 MHz | 1000 | 0.12% |
| AT&T 5200 MHz | 2 | 0.68 | 37.5 | 0.03 | 5200 MHz | 1000 | 0.00% |
| AT&T 5200 MHz | 2 | 0.68 | 37.5 | 0.03 | 5200 MHz | 1000 | 0.00% |
| | | | | | | **Sector A Total:** | **0.49%** |

*Table 6: AT&T Maximum Sector MPE Power Values*

## Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

| AT&T Sector | Power Density Value (%) |
|---|---|
| Sector A: | 0.49% |
| AT&T Maximum Site Total: | 0.49% |
| | |
| Site Total: | **0.49%** |
| | |
| Site Compliance Status: | **Compliant** |

The anticipated composite MPE value for this site assuming all carriers present is **0.49%** of the allowable FCC established general population limit sampled at the ground level.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Michelle L. Stone
RF Compliance Consultant
**Centerline Communications, LLC**
750 West Center St. Suite 301
West Bridgewater, MA 02379

# ATTACHMENT 6

**CERTIFICATION OF SERVICE**

I hereby certify that on the 4th day of June 2020, a copy of the following notice of intended filing of a Petition with the Connecticut Siting Council for a declaratory ruling was sent by first class certified mail to the list below.

Dated: 6/4/20

Lucia Chiocchio

Cuddy & Feder LLP
45 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Attorneys for:
New Cingular Wireless PCS, LLC ("AT&T)

**State**

| | |
|---|---|
| THE HONORABLE WILLIAM TONG<br>ATTORNEY GENERAL<br>OFFICE OF THE ATTORNEY GENERAL<br>165 CAPITOL AVENUE<br>HARTFORD, CT 06106 | DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT, CULTURE AND TOURISM<br>DAVID LEHMAN, COMMISSIONER<br>450 COLUMBUS BLVD, HARTFORD<br>HARTFORD, CT 06103 |
| DEPARTMENT OF PUBLIC HEALTH<br>DEIDRE S. GIFFORD, MD, MPH,<br>ACTING COMMISSIONER<br>410 CAPITOL AVENUE<br>HARTFORD, CT 06134 | DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION<br>PUBLIC UTILITIES REGULATORY AUTHORITY<br>MARISSA P. GILLETT, CHAIRMAN<br>TEN FRANKLIN SQUARE<br>NEW BRITAIN, CT 06051 |
| COUNCIL ON ENVIRONMENTAL QUALITY<br>PETER B. HEARN, EXECUTIVE DIRECTOR<br>79 ELM STREET, 6th FLOOR<br>HARTFORD, CT 06106 | DEPARTMENT OF TRANSPORTATION<br>JOSEPH GIULIETTI, COMMISSIONER<br>2800 BERLIN TURNPIKE<br>P.O. BOX 317546<br>NEWINGTON, CT 06131 |
| DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION<br>KATIE DYKES, COMMISSIONER<br>79 ELM STREET<br>HARTFORD, CT 06106 | DEPARTMENT OF AGRICULTURE<br>BRYAN P. HURLBURT, COMMISSIONER<br>450 COLUMBUS BOULEVARD<br>SUITE 701<br>HARTFORD, CT 06103 |
| OFFICE OF POLICY AND MANAGEMENT<br>MELISSA MCCAW, SECRETARY<br>450 CAPITOL AVENUE<br>HARTFORD, CT 06106 | DEPARTMENT OF EMERGENCY SERVICES & PUBLIC PROTECTION<br>DIVISION OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY<br>JAMES C. ROVELLA, COMMISSIONER<br>1111 COUNTRY CLUB ROAD<br>MIDDLETOWN, CT 06457 |

| | |
|---|---|
| STATE HISTORIC PRESERVATION OFFICER DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT<br>450 COLUMBUS BLVD., 5TH FLOOR,<br>HARTFORD, CT 06103 | SECRETARY OF STATE<br>DENISE MERRILL<br>165 CAPITOL AVENUE<br>HARTFORD, CT 06106 |
| STATE HOUSE REPRESENTATIVE-DISTRICT 2<br>RAGHIB ALLIE-BRENNAN<br>LEGISLATIVE OFFICE BUILDING,<br>ROOM 4000<br>300 CAPITOL AVENUE<br>HARTFORD, CT 06106 | STATE HOUSE REPRESENTATIVE-DISTRICT 107<br>STEVE HARDING<br>LEGISLATIVE OFFICE BUILDING,<br>ROOM 4044<br>300 CAPITOL AVENUE<br>HARTFORD, CT 06106 |
| STATE SENATOR- DISTRICT 24<br>JULIE KUSHNER<br>LEGISLATIVE OFFICE BUILDING,<br>ROOM 3800<br>300 CAPITOL AVENUE<br>HARTFORD, CT 06106 | STATE SENATOR- DISTRICT 26<br>WILL HASKELL<br>LEGISLATIVE OFFICE BUILDING,<br>ROOM 1800<br>300 CAPITOL AVENUE<br>HARTFORD, CT 06106 |
| WESTERN CONNECTICUT COUNCIL OF GOVERNMENTS<br>JAYME STEVENSON, CHAIRMAN<br>1 RIVERSIDE ROAD<br>SANDY HOOK, CT 06482 | |

**Federal**

| | |
|---|---|
| FEDERAL COMMUNICATIONS COMMISSION<br>445 12TH STREET SW<br>WASHINGTON, DC 20554 | FEDERAL AVIATION ADMINISTRATION<br>800 INDEPENDENCE AVENUE, SW<br>WASHINGTON, DC 20591 |
| U.S. SENATOR CHRISTOPHER MURPHY<br>COLT GATEWAY<br>120 HUYSHOPE AVENUE<br>SUITE 401<br>HARTFORD, CT 06106 | U.S. SENATOR RICHARD BLUMENTHAL<br>90 STATE HOUSE SQUARE, 10TH FLOOR<br>HARTFORD, CT 06103 |
| U.S. CONGRESSWOMAN–5TH DISTRICT<br>JAHANA HAYES<br>108 BANK STREET, 2ND FLOOR<br>WATERBURY, CT 06702 | |

**Town of Bethel**

| | |
|---|---|
| MATTHEW KNICKERBOCKER, FIRST SELECTMAN<br>CLIFFORD J. HURGIN MUNICIPAL CENTER<br>1 SCHOOL STREET<br>BETHEL, CT 06801 | PLANNING & ZONING COMMISSION<br>CLIFFORD J. HURGIN MUNICIPAL CENTER<br>1 SCHOOL STREET<br>BETHEL, CT 06801 |

| | |
|---|---|
| INLAND WETLANDS & WATERCOURSES COMMISSION<br>CLIFFORD J. HURGIN MUNICIPAL CENTER<br>1 SCHOOL STREET<br>BETHEL, CT 06801 | TOWN CLERK<br>LISA BERGH, CCTC<br>CLIFFORD J. HURGIN MUNICIPAL CENTER<br>1 SCHOOL STREET<br>BETHEL, CT 06801 |
| HISTORIC PROPERTIES & PRESERVATION COMMISSION<br>CLIFFORD J. HURGIN MUNICIPAL CENTER<br>1 SCHOOL STREET<br>BETHEL, CT 06801 | |

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 June 8, 2020 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 commercial building.

The proposed telecommunications facility is located on property owned by SRI RE LLC at 132 Greenwood Avenue, in the City of Bethel (the "Property"). AT&T's proposed Facility consists of a canister antenna, approximately 24.7" in height and 10" in diameter, and one small remote radio head unit mounted to the roof of the existing building located at the Property. The top of AT&T's antenna will reach a height of approximately 38'-6" 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 June 8, 2020 at the following:

Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Town Clerk of Bethel
Lisa Bergh, CCTC
Clifford J. Hurgin Municipal Center
1 School Street
Bethel, CT 06801

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 4th day of June 2020, 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: 6/4/20

Lucia Chiocchio

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

| | |
|---|---|
| COLBY D LLC<br>7 FINANCE DRIVE<br>DANBURY, CT 06810 | DEMOURA & SON LLC<br>131 CODFISH HILL ROAD<br>BETHEL, CT 06801 |
| BETHEL UNITED METHODIST CHURCH<br>141 GREENWOOD AVENUE<br>BETHEL, CT 06801 | SANDRA P COPPOLA<br>25 WHIPPOORWILL ROAD<br>BETHEL, CT 06801 |
| ENGLISH BROTHERS LLC<br>140 GREENWOOD AVENUE<br>BETHEL, CT 06801 | ENGLISH BROTHERS LLC<br>140 GREENWOOD AVENUE<br>BETHEL, CT 06801 |

June 4, 2020

**VIA CERTIFIED MAIL/**
**RETURN RECEIPT REQUESTED**

Re: New Cingular Wireless PCS, LLC ("AT&T")
Installation of A Small Cell Wireless Telecommunication Facility
132 Greenwood Avenue, Bethel, 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 the installation of a small cell wireless telecommunication facility on an existing commercial building (the "Facility") at above-captioned property owned by SRI RE LLC.

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 June 8, 2020 the date that the petition is expected to be on file.

Very truly yours,

Lucia Chiocchio
Enclosure

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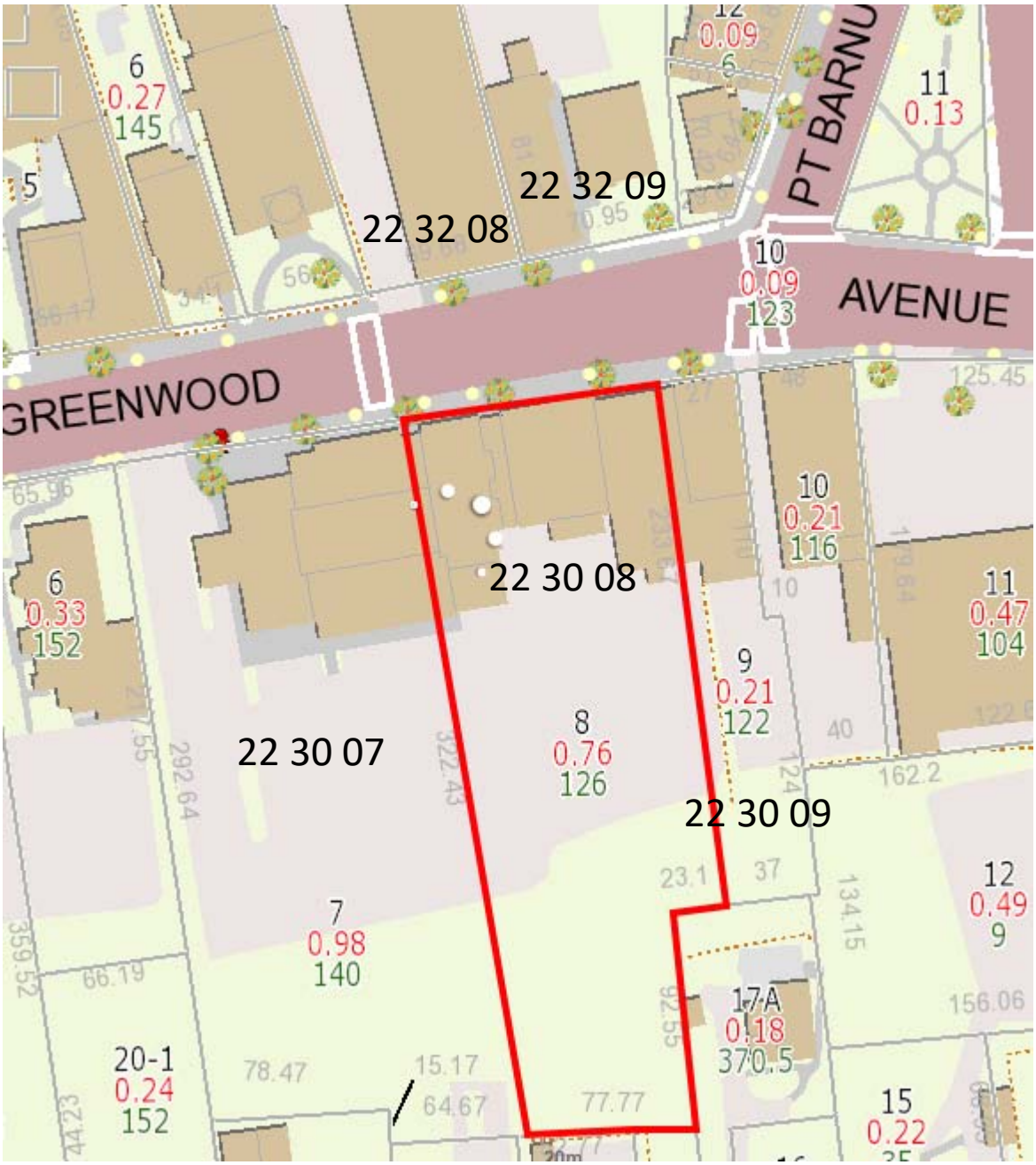
Lucia Chiocchio, Esq.
Cuddy & Feder LLP
445 Hamilton Ave, 14th Floor
White Plains, New York 10601
(914) 761-1300
Attorneys for the Petitioner

**Abutter's Map**



| Parcel ID | Site Address | Owner Name | Mailing Address | City | State | Zip |
|---|---|---|---|---|---|---|
| 22 30 09 | 122 GREENWOOD AVENUE | COLBY D LLC | 7 FINANCE DRIVE | DANBURY | CT | 06810 |
| 22 30 10 | 116 GREENWOOD AVENUE | DEMOURA & SON LLC | 131 CODFISH HILL ROAD | BETHEL | CT | 06810 |
| 22 32 09 | 125 GREENWOOD AVENUE | SANDRA P COPPOLA | 25 WHIPPOORWILL ROAD | BETHEL | CT | 06810 |
| 22 30 08 | 126 GREENWOOD AVENUE | ENGLISH BROTHERS LLC | 140 GREENWOOD AVENUE | BETHEL | CT | 06810 |
| 22 30 07 | 140 GREENWOOD AVENUE | ENGLISH BROTHERS LLC | 140 GREENWOOD AVENUE | BETHEL | CT | 06810 |
| 22 32 08 | 137 GREENWOOD AVENUE | BETHEL UNITED METHODIST CHURCH | 141 GREENWOOD AVENUE | BETHEL | CT | 06810 |