

#### **Select Board Meeting**

Monday, October 3, 2022 7:00 PM Lifelong Learning Room at The Robb Center 30 Whittier Court, Andover, MA 01810

- I. Call to Order 7:00 P.M.
- II. Opening Ceremonies
  - A. Moment of Silence/Pledge of Allegiance
  - B. Proclamation for Community Media Day
- III. Communications/Announcements/Liaison Reports
- IV. Citizens Petitions and Presentations
- V. Public Hearings
  - A. Small Cell Wireless Installation (1st Reading)

Board to review an application by Cellco Partnership d/b/a Verizon Wireless for the approval of five (5) 4G small cell wireless facilities including one (1) canister style antenna, two (2) remote radio heads, and associated wires, cable, fiber demarcs, A/C converters, diplexers and electric meters attached to existing utility poles located within the public right of way at the following addresses:

ADDRESS	UTILITY POLE #
39 Stinson Road	6821
36 Vine Street	4540
164 Andover Street	4266/39
2 Hansom Road (Pole on Lovejoy Road)	7167/32
59 Dascomb Road	2857, 19/20

#### VI. Regular Business

#### A. Halloween Trick-or-Treating

Board to consider voting to set the date of Trick-or-Treating to October 31, 2022 from 5:00 p.m. to 7:00 p.m.

#### B. One Day Liquor License on Town Property

Board to review and consider voting to approve an application by Oak & Iron Brewing Co. for a one-day liquor license for the Run for the Troops on November 13, 2022.

#### C. <u>Liquor License Change of Manager</u>

Board to review and consider voting to approve the application of WHG Andover Inn, LCC for a Liquor License Change of Manager to James Siano at the Andover Inn, 4 Chapel Avenue.

TOWN CLERK'S OFFICE

2022 SEP 29 PM 4: 11

#### D. Town Governance

Board to receive public input on Town Governance Study Committee's recommendation on form of government.

#### E. Special Town Meeting

Board to consider voting to change the date of the proposed Special Town Meeting from November 30, 2022 to December 1, 2022 and location of the Special Town Meeting to the J. Everett Collins Center for the Performing Arts.

#### F. 2023 Annual Town Meeting and Town Election Calendar

Board to discuss and consider voting to approve the 2023 Annual Town Meeting and Town Election Calendar.

#### G. 25 mile-per-hour Speed Limit Opt-In

Board to consider voting to approve an application and application process for requests to reduce speed limit to 25 miles-per-hour.

#### H. Amended Conservation Restriction

Board to consider voting to approve and sign the Amended Conservation Restriction for Frenchman's Reserve.

#### VII. Consent Agenda

#### A. Appointments by the Town Manager

Board to vote that the following appointments by the Town Manager be approved.

Department	Name	Position	Rate/Term	Date of Hire
Town Clerk	Vanessa French	Assistant	\$79,547.91/yr	10/12/2022
	(Melissa Ripley)	Town Clerk		
Community Services	Seth Frye	Seasonal	\$15.00/hr	9/26/2022
– Youth Services				
Greater Lawrence	Christopher Cronin	Member	Term Expires	10/28/2022
Sanitary District	_	_	10/28/2025	_

#### VIII. Approval of Minutes

- A. Board to approve minutes from the following meetings:
  - 1. June 27, 2022
  - 2. August 15, 2022

#### IX. Adjourn

If any member of the public wishing to attend this meeting seeks special accommodations in accordance with the Americans with Disabilities Act, please contact Kathryn Forina in the Town Manager's Office at 978-623-8215 or by email at <a href="mailto:kathryn.forina@andoverma.us">kathryn.forina@andoverma.us</a>

#### PROCLAMATION

WHEREAS, the sharing of ideas and information builds common understanding and values within a community, and access to local news and information that community media organizations provide is critical for the healthy functioning of our town; and

*WHEREAS*, community media organizations provide a means for diverse communities to tell their stories, hear each other's stories, and create new stories together; and

WHEREAS, community media is an important resource for participating in local democratic policy and processes by connecting community organizations, schools, and local governments to their constituents; and

WHEREAS, in many communities, people are not aware of the diverse and valuable programming on public, education, and government access channels, and communities will benefit from increased general awareness of, viewing audiences for, and creators of media content created by and for the community; and

WHEREAS, AndoverTV plays a vital role in the building our community by encouraging conversations about our common interests, increasing discourse around policy issues, fostering understanding of local cultures, and sharing information to improve our lives.

**NOW, THEREFORE:** We, the Town of Andover Select Board do hereby proclaim October 20, 2022, as Community Media Day in the Town of Andover. We call upon the people of Andover to promote the importance of community media, training available at AndoverTV, and programming available on Comcast Channels 8, 22 and 99 and Verizon Channels 43, 45 and 47.

	IN WITNESS WHEREOF, we have hereunto set our hands and caused the seal of the Town of Andover to be affixed this third day of October in the year two thousand twenty-two.
Alexander J. Vispoli, Chair	Laura M. Gregory, Vice-Chair
Annie Gilbert, Clerk	Melissa Danisch, Member

Christian Huntress, Member

15 Chestnut Street 4<sup>th</sup> Floor Worcester, MA 01609

#### Paula Foley Network Real Estate / Regulatory

July 28, 2022

Andover Select Board c/o Office of the Town Manager Town of Andover 36 Bartlet Street Andover, MA 01810

Re: Verizon Small Cell Wireless Facilities Application

Dear Select Board and Town Manager:

Enclosed please find an Application for approval of five (5) small cell wireless facilities on existing utility poles located within the public right of way. We are submitting this Application, \$500.00 application fee, and supporting materials pursuant to the Town of Andover Policy concerning Applications for Small Cell Wireless Installations and Design Rules and Regulations effective April 11, 2019.

Thank you for your assistance in this matter. Should you have any questions, please feel free to contact me.

Yours sincerely,

## Paula Foley

Paula Foley
Network Real Estate / Regulatory
M: 508.296.0172
Paula.foley@verizonwireless.com

Attachments: Application and Exhibits



### Town of Andover Applications for Small Cell Wireless Installations Cover Sheet

Applicant's use of this cover sheet is mandatory. It is meant to provide a framework to ensure compliance with the Town of Andover's Policy for Applications for Small Cell Wireless Installations.

Total number of Small Wireless Facilities being requested on this application  5 (Per town policy, no application may exceed 5 proposed facilities)
Total number of applications filed by the applicant or closely held applicant in the last 60 days (Per town policy, no application will be accepted if more than 2 applications have been filed in that time period)
Date and Time stamped on each application
\$500 made out to the Town of Andover for up to five locations for initial application review \$100 for each additional location
All applications shall number each page with easily identifiable identifier numbers unique to each application
Specify whether the application is under the FCC Declaratory Ruling and Third Report and Order, §6409/Wireless Siting Order, or neither:   FCC Declaratory Ruling and Third Report and Order  18-133 ("FCC Small Cell Order")
a. If §6409 application, submit documentation to establish the basis for that conclusion
Specify which shot clock (60-90-150 day) applies and the basis for that conclusion:
60 day shotclock applies per 47 CFR § 1.6003(c)(1)(i) (review of application to collocate a Small Wireless Facility on an existing structure)
10 day receipt date <u>8/8/22</u>
Applications complete, including receipt of all permits or notification that a permit was not needed except for a building permit from other town boards and commissions applicable to the proposed locations and facilities? Yes No
Checklist of prior reviewing departments (insert Y, N, or N/A)
Police Fire Board of Health Conservation Commission Planning

Engineering Building
Other (specify)
a. Submit a copy of all such received permits or verification that no permit is needed
If no, which applications are incomplete (any incomplete applications will be rejected)
a. Identify how each application is incomplete
Date and time of re-submission
Public Hearing Notice published in a newspaper of general circulation and mailed to abutters within 300 feet of the proposed locations by applicant using notice provided by Town. The applicant must obtain the certified abutter's list from the Assessor's Office.
Public Hearing fee is paid for by applicant.
Ten (10) hard copies of the application are required One (1) electronic copy to <a href="mailto:manager@andoverma.gov">manager@andoverma.gov</a> sent on <a href="mailto:7/28/22">7/28/22</a>
Applicant's name Cellco Partnership d/b/a Verizon Wireless
Address 15 Chestnut Street, 4th Floor, Worcester, MA 01609
Telephone number <u>508-269-0172</u> Email address. <u>paula.foley@verizonwireless.com</u>
Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the
Applicant with respect to the application.  Paula Foley, Verizon Wireless Network Real Estate  Michael Fox, SAI Group LLO
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Worcester, MA 01609 Salem, NH 03079
508-269-0172 617-571-8835

12 Industrial Way

Ensure that wet stamps/wet signatures of professional designers are on all drawings

15 Chestnut Street, 4th Floor

Include detailed drawings and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:

Description of type of equipment Please refer to Exhibit 1, Site Drawings and see attached Narrative.

Specifications of equipment Please see attached Narrative.

Dimension of each piece of equipment and total dimensions of all equipment *Please see attached Narrative*.

Costs of all equipment and installation Please see attached Narrative.

Total weight at each location Please see attached Narrative.

How will equipment be mounted and what type of material will be used to mount equipment

Please see attached Narrative.

All power sources for equipment (comment on necessary wires, cables, and conduit)

Please see attached Narrative.

Expected life of equipment

Please see attached Narrative.

Coverage area of equipment on the location

Please see attached Narrative.

Amount of antennas

Antenna model

Antenna length remote radio units (RRU) count and power

Antenna height

Typical coverage area radius

Please see attached Narrative.

Call capacity of equipment, including:

Total RRUs

Max bandwidth per RRU

Multiple input, multiple output (MIMO) per RRU

Backhaul rate per RRU

Please see attached Narrative.

Hardening, including:

Is there battery backup

Is there generator backup

Will there be multiple fiber paths to switch

Please see attached Narrative.

Frequency of equipment proposed to be installed. *Please see attached Narrative*.

Photos, rendering and elevation of equipment proposed to be installed:

☑Include detailed map with locations of the poles or other facility on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service.

Location details must be provided to be compatible as an additional data layer to the Town's GIS map *Please refer to Exhibit 1, Site Drawings.* 

Include detailed map showing existing and proposed small cell installations within 500 feet of the Application site.

There are no existing small cell installations within 500' of Verizon's proposed sites, however Verizon does not know if other applicants have proposed installations. Please refer to Exhibit 2, Distance Maps.

☑ Include certification by a registered professional engineer that the pole/or location will safely support the proposed equipment. *Please refer to Exhibit 3, Pole Structural Certifications* 

☑ Include written consent from the pole, structure, or facility owner to the installation.

#### Please refer to Exhibit 4, Letter of Authorization

☑Include an affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Andover and how the installations address that need in Andover. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.

#### Please refer to Exhibit 5, RF Engineer Affidavit

☑Include insurance certificate evidencing workers' compensation and comprehensive general liability coverage for the installation.

#### Please refer to Exhibit 6, Certificate of Insurance

Include a description as to why the desired location is superior to other similar locations, from a community perspective, including:

☑Visual aspects Please refer to attached Narrative

☑ Proximity to residential structures Please refer to attached Narrative

Dinclude a description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.

#### Please refer to attached Narrative

☑ Include a narrative of how design requirements have been met.

#### Please refer to attached Narrative

Include an affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.

## Please refer to Exhibit 7, Project Engineer Affidavit

☐ Include surety bond on which the Town is obligee, in an amount equal to the cost of installation, to ensure removal of equipment. *Please refer to attached Narrative* 

#### Annual Re-Certification and Affidavit.

- Each year on July 1 the party responsible for the equipment maintenance shall submit an affidavit which shall list, by location, all small cell wireless installations it maintains within the Town of Andover by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance as required by MassDOT; and (3) each such installation which is no longer in use.
- The party responsible for the equipment maintenance shall pay an annual re-certification fee of \$100 per installation which remains in use.
- Any small cell wireless installation which is no longer in use shall be removed by the owner within 60 days of receipt of the annual re-certification affidavit, at that party's expense.
- Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day against the party responsible for the equipment's maintenance until such installation is removed.
- Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

⚠ Agree to annual re-certification and affidavit and payment as shown above. Conditions/Prohibitions.

- No small cell wireless installations shall be installed on double poles.
- No small cell wireless installation shall be installed on poles which are not ADA compliant.
- No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual re-certification affidavit.

• No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.

☑ Agree to Conditions/Prohibitions as set forth in town bylaws and policies.

As submitted by,

Paula Foley, Network Real Estate / Regulatory
Verizon Wireless
15 Chestnut Street, 4th Floor
Worcester, MA 01609



#### **VERIZON WIRELESS**

#### NARRATIVE IN SUPPPORT OF

#### SMALL CELL WIRELESS FACILITIES APPLICATION

DATE SUBMITTED: 7/28/22

#### PROPOSED LOCATIONS:

SITE NAME	ADDRESS	UTILITY POLE #
ANDOVER_MA_SC17	39 Stinson Road	6821
ANDOVER_MA_SC18	36 Vine Street (Pole on Andover Bypass Road)	4540
ANDOVER_MA_SC30	164 Andover Street	4266/39
ANDOVER_MA_SC33	2 Hanscom Road (Pole on LoveJoy Road)	7167/32
ANDOVER_MA_SC35	59 Dascomb Road	2857, 19/20

#### Description of type of equipment:

The proposed small cell installations will include one (1) canister style antenna, two (2) remote radio heads, and associated wires, cable, fiber demarcs, A/C converters, diplexers and electric meters attached to existing utility poles in the public rights of way in Andover, MA. Similar in appearance to equipment commonly seen on utility poles, the proposed small cell attachments consist of a single antenna and small radios that will be mounted on the top or the side of the existing utility poles which carry electric and communications services. The Verizon equipment will draw power by connecting to the existing electrical service on the pole. It will also tie into the fiber already on the pole to make a backhaul connection to an existing equipment room. The installations will not include any ground equipment or ground disturbance.

The small cell facilities will operate as an integral part of the Verizon network and will improve the reliability of wireless service for Andover residents and businesses. The small cell facilities will provide improved service to areas where wireless service is currently unavailable or unreliable because the wireless signal is dissipated by the distance from the nearest macro (i.e., tower) facility, obstructed by intervening terrain, or diverted by high demand. In order to upgrade service, Verizon will need to attach the proposed small cells to utility poles located in the Town rights of way that will address both gaps in reliable coverage and enhance system performance.

Small cell technology provides for the continued deployment of Verizon's network in Andover and the greater Commonwealth. The small size and unique design of small cell units allows Verizon to strategically install antennas in high demand locations while mitigating visual impact and increasing wireless performance in targeted areas.

In contrast to conventional, single-location, multi-function macro wireless facilities, small cell technology provides site-specific network solutions in small, visually unobtrusive units. Verizon uses small cell antennas to combine transmission and processing in a single canister style unit allowing antenna placement and signal creation without the need for ground equipment. This type of signal

processing is highly advantageous in high demand locations where network capacity is an issue during periods of peak use. Subsequently, municipalities can experience substantially improved wireless coverage by the use of this state of the art and discreet antenna technology.

Verizon proposes the attachment of one (1) small cell antenna on each of the five (5) existing utility poles. Each installation consists of a 14" D x 35.4" H canister antenna top or side mounted on the utility pole and resembles a common electric transformer. The antennas comply with all applicable FCC radio frequency emissions standards and regulations, and require minimal maintenance. Subsequently, the antennas will not impact utilities, schools, traffic or other municipal resources in the Town of Andover but will greatly improve wireless connectivity in the vicinity of the antennas in the least disruptive manner possible and thus facilitate benefits to nearby residents and businesses as well as enhancing access to 911 and emergency services.

#### Dimensions, Specifications and Weight at each location:

Equipment	Height (in)	Width (in)	Depth (in)	Weight (lbs)	Volume (cubic feet)
Cantenna	35.4	14 (diameter)	N/A	35.0	2.98
RRH #1	17.3	17.3	11.5	102.5	1.9
RRH #2	13.9	9.8	4.8	21.4	0.37
Diplexer	4.8	7.9	3.3	7.6	0.07

#### Cost of all equipment and installations:

Verizon shall be responsible for all direct and indirect costs (labor, materials and overhead) for purchasing and installing its equipment in accordance with the Town-approved plans and all applicable laws. Verizon does not publicly disclose its equipment or installation costs.

#### **Equipment mount type and materials:**

Please reference **Exhibit 1, Site Drawings**. Each Site Drawing includes, at page LE-3, a "Cantenna Mount Detail" and "Ancillary Equipment Mounting Bracket Mount Detail."

#### Power source or sources for equipment (comment on necessary wires, cables, and conduits):

The power source for the proposed equipment is the existing utility company power line fed to a utility meter then to an electrical load center/diplexer located on the pole. Please reference **Exhibit 1**, **Site Drawings**, each Site Drawing, at page LE-4, includes a "Fiber / Electrical One-Line Diagram."

#### Expected life of equipment:

Approximately 2+ years.

Coverage area of equipment, including amount of antennas, model, length and height, remote radio units (RRU) count and power, and typical coverage area radius:

Small cells typically have a range from ten meters to several hundred meters. Please refer to the table above for antenna length and height. The proposed antenna model is JMA CX16OMI236-1C. There are two (2) RRUs on each proposed installation, each with a power output of 320W.

<u>Call capacity of equipment, including Total RRUs, max bandwidth per RRU, multiple input, multiple</u> output (MIMO) per RRU, and backhaul rate per RRU:

The radios are capable of processing simultaneous traffic on a maximum of 1,200 unique devices. The backhaul rate per RRU is CPRI rate 7 (about 9.8304 Gbps). This is a radio interface and does not reflect the max throughput per RRU. The max bandwidth per RRU is 10 MHz of 700 MHz / 10 MHz of 850 MHz (20 MHz total). MIMO capability per RRU is 4 transmit, 4 receive.

Hardening, including if there is a battery or generator backup and whether there are multiple fiber paths to switch:

There are no battery backups, generators or multiple fiber paths to switch for the proposed small cells.

#### Frequency of equipment to be installed:

700 MHz LTE and 850 MHz LTE

<u>Description as to why the desired locations are superior to similar locations, from a community perspective, including visual aspects and proximity to residential structures:</u>

Choosing a location for small cell infrastructure involves many factors, including local zoning requirements, state and federal regulations as well as aesthetic requirements established by the municipality. In addition, Verizon has many guidelines on where small cells may be located in terms of having an effective wireless network infrastructure site including but not limited to height of the antenna above ground level, proximity to other wireless infrastructure sites, the existence and degree of tree cover, and access to power and fiber backhaul connections.

The five (5) locations proposed by Verizon in this Application are superior to other locations in the Town given that they are set in areas of coverage need in the Town and will be used to increase the bandwidth and cellular quality of Verizon network devices in the vicinity. The five (5) locations are all within the public rights-of-way and the proposed locations comply with all of the requirements of National Grid to attach to its poles such as the absence of transformers. In addition, all five (5) installations comply with the Town's desire as stated in its the Small Cell Policy and Design Rules and Regulations for equipment to be collocated on existing structures.

In addition, each proposed location is located at a reasonable distance from the nearest residential structure. Of the five (5) locations proposed, the closest proximity to a residential structure is 39 feet and the furthest is 157 feet.

Description of efforts to collocate the equipment on structures, poles or towers which currently exist or are under construction. A good faith effort to collocate is required and evidence of said efforts must be included within the application:

All of the equipment is proposed to be collocated on existing utility poles in the public rights of way. Please reference **Exhibit 1**, **Site Drawings**.

#### How design requirements have been met:

The Town of Andover Small Cell Wireless Facility Design Rules and Regulations ("Design Rules") contains detailed standards and aesthetics for the design and installation of small wireless facilities. Each section of the Design Rules is discussed below.

Siting Prohibitions: Verizon's proposed facilities comply with the section of the Design Rules as they are to be installed on existing utility poles and not double poles or poles which are not ADA compliant. Verizon is not proposing ground mounted equipment or cabinets.

Aesthetic Requirements: Verizon's proposed facilities comply with this section of the Design Rules as they are to be installed on existing wood utility poles without exposed wires or signage other than FCC required information. Verizon is not proposing to install standalone poles.

Antennas: Verizon's proposed facilities comply with this section of the Design Rules as the proposed antennas will be canister-style and located on the top or side of the utility pole at a height of more than 10' above ground level. There will be no improper tree pruning or topping. There will be no external wires hanging off the utility poles. The color of the proposed equipment is neutral grey and will blend with the wood utility poles. Verizon is not proposing equipment cabinets or enclosures.

Signage/Logos/Lights/Decals/Cooling Fans: Verizon's proposed facilities comply with this section of the Design Rules as no signage other than that required by the FCC will be attached to the utility poles, as well as no lights, logos or decals. Verizon is not proposing the use of cooling fans.

Location Requirements: Verizon's proposed facilities comply with this section of the Design Rules in that they are located in the public rights of way in areas of the Town where wireless service needs improvement. All of Verizon's proposed equipment will be collocated on existing structures (i.e., utility poles); Verizon is not proposing to install standalone poles. The proposed equipment is similar in size, shape and color to equipment (such as transformers, junction boxes and cable television equipment) that are already located on utility poles in the vicinity, therefore Verizon's proposed facilities will not look out of character with the existing streetscapes. Verizon also complies with the additional guidelines on placement contained in section 7.6(a) through (m) of the Design Rules.

Pedestrian Path and Amenity Zone: Verizon's proposed facilities comply with this section of the Design Rules because Verizon is not proposing to install standalone poles. All of Verizon's proposed equipment will be located on existing utility poles in the public rights of way.

Access, Circulation and Sight Distances: Verizon's proposed facilities comply with this section of the Design Rules because Verizon is not proposing to install standalone poles. All of Verizon's proposed equipment will be located on existing utility poles in the public rights of way.

Other Required Submission Information: Please refer to Exhibit 8, Composite Map, for a composite map of the five (5) proposed locations. With regard to sharing of infrastructure, Verizon's proposed equipment is designed for use by Verizon only because each service provider has its own equipment requirements consistent with its own network needs. In addition, while cell towers can accommodate the equipment of multiple providers due to size of the tower infrastructure, utility poles cannot ordinarily accommodate more than one set of small cell equipment, therefore sharing of these types of support structures is not feasible.

# SMALL CELL WIRELESS APPLICATION VERIZON WIRELESS

<u>Provide surety bond with Town named as oblige, in an amount equal to the costs of installation, to ensure removal of equipment:</u>

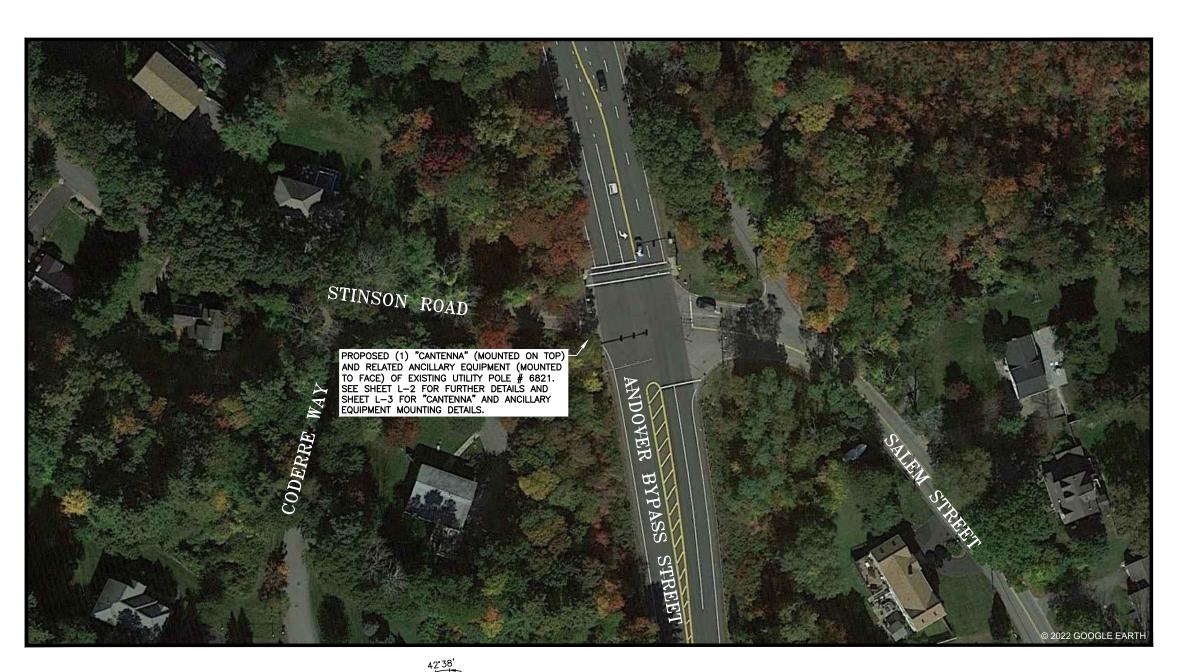
Verizon agrees to provide a surety bond in a mutually agreeable amount for the installations that are approved by the Town.

# **EXHIBIT 1: SITE DRAWINGS**

## **ANDOVER MA SC17**

nationalgrid

# 6821 **39 STINSON ROAD ANDOVER, MA 01810** 





CHECKED BY:

APPROVED BY:

SUBMITTALS

DPH

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REV.	DATE	DESCRIPTION	В	
			Г	
			Г	
0	07/22/22	LEASE EXHIBIT	S	

ANDOVER MA SC17

SITE ADDRESS: # 6821 39 STINSON ROAD ANDOVER, MA 01810

SHEET TITLE LOCATION PLAN/AERIAL IMAGE

**L**-1

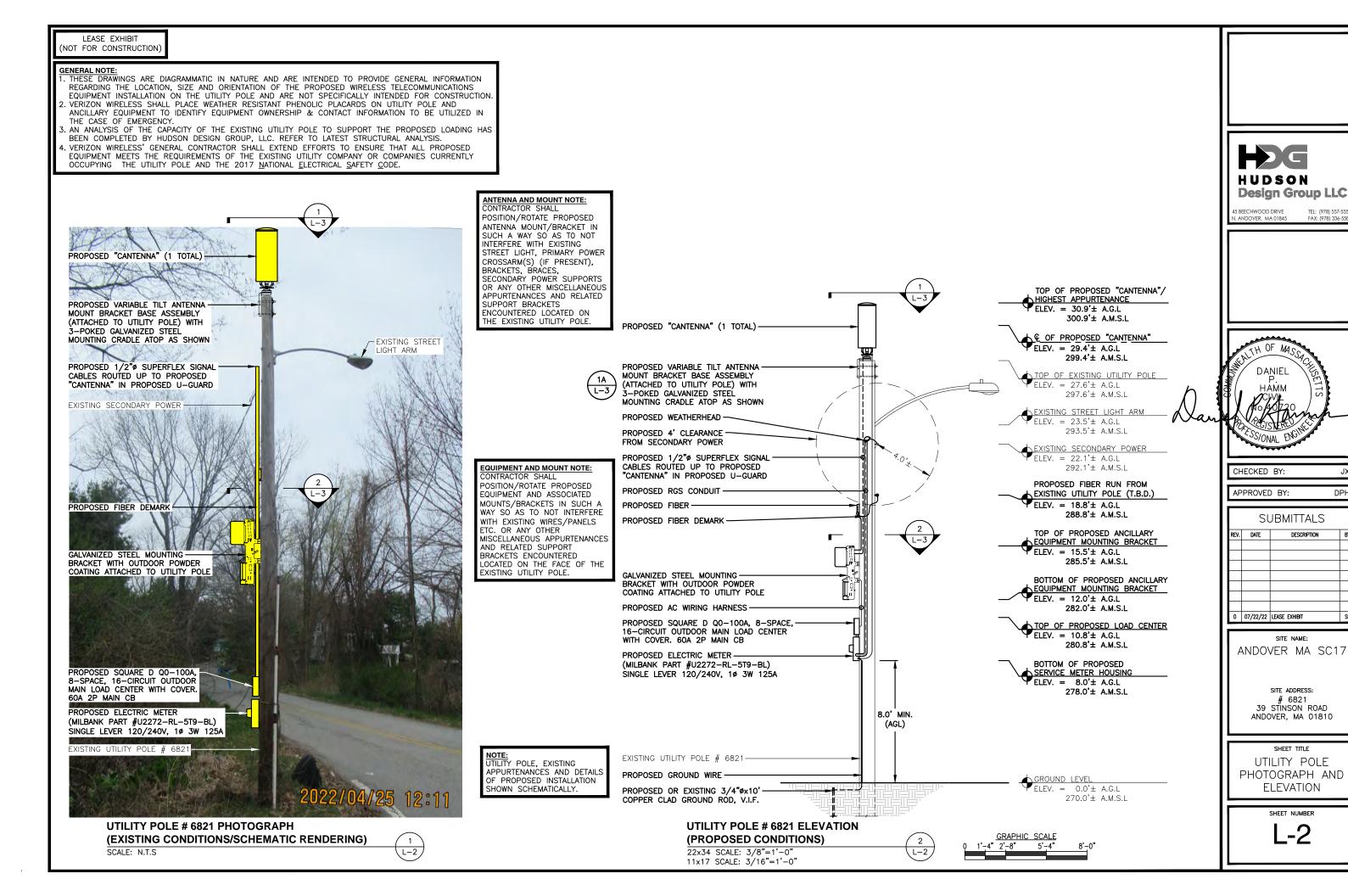
LOCATION PLAN-AERIAL IMAGE

SHEET INDEX				
SHEET NO.	DESCRIPTION			
L-1	LOCATION PLAN/AERIAL IMAGE			
L-2	UTILITY POLE PHOTOGRAPH AND ELEVATION			
L-3	ANTENNA & ANCILLARY EQUIPMENT ORIENTATION PLANS AND MOUNTING DETAILS			
1-4	ANTENNA & ANCILLARY FOLIPMENT SPECIFICATIONS AND ONE-LINE DIAGRAM			

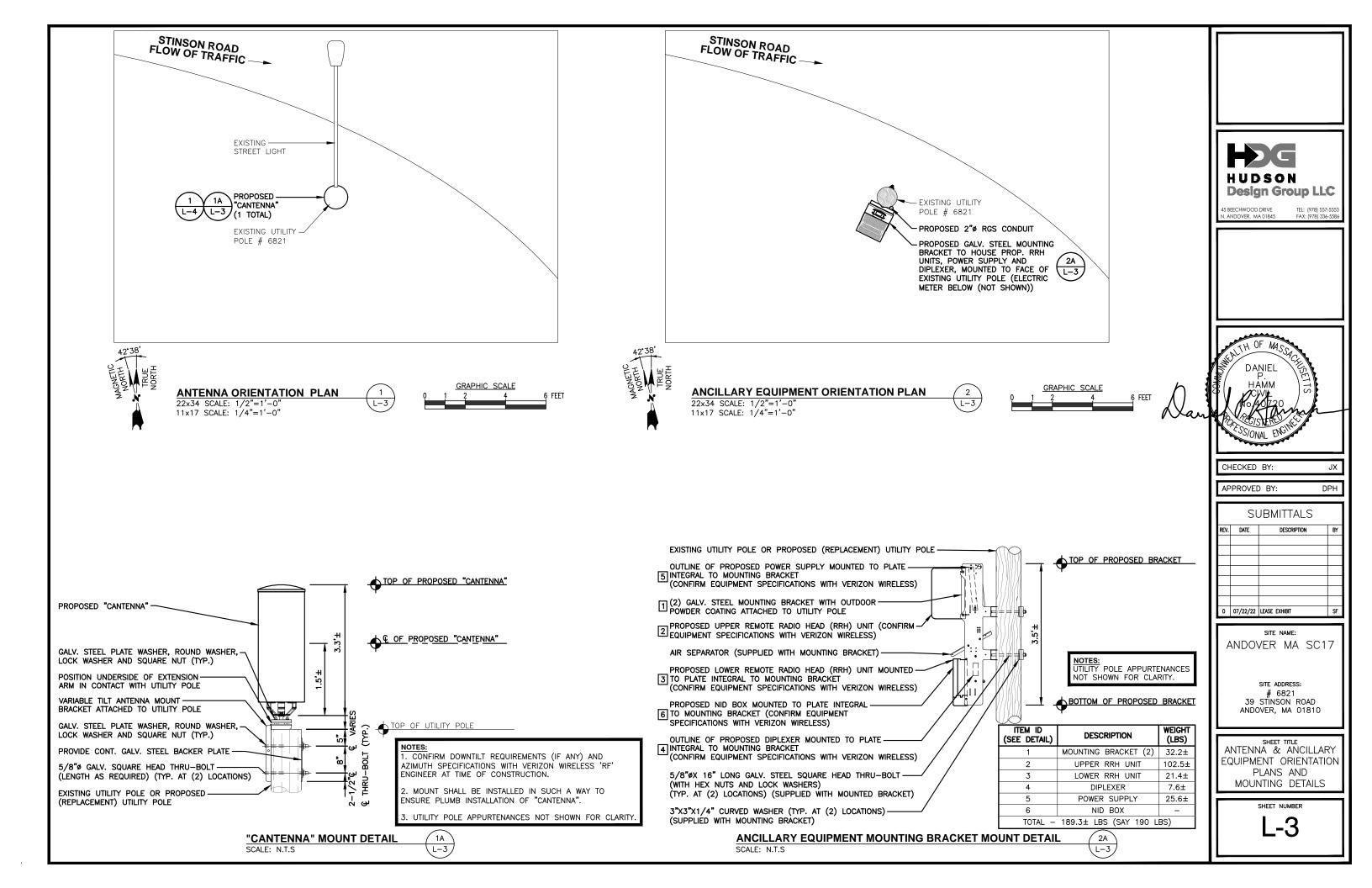
FIELD INSPECTION DATE: 04-25-2022

SITE COORDINATES: LAT: N42\* 38' 11.57"± LONG: W71\* 06' 55.82"± LAT: N42.636550°± LONG: W71.115508°±

APPROXIMATE GROUND ELEVATION: 270.0'± AMSL



DPH





SMALL CELL "CANTENNA"

DIMENSIONS: 14" $\pm 0$  x 35.4" $\pm H$  WEIGHT:  $35.0\pm$  LBS QUANTITY: TOTAL OF 1

## TYPICAL "CANTENNA" SPECIFICATIONS SCALE: N.T.S







#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 17.3" $\pm$ H x 17.3" $\pm$ W x 11.5" $\pm$ D WEIGHT: 102.5 $\pm$  LBS QUANTITY: TOTAL OF 1

#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 13.9" $\pm$ H x 9.8" $\pm$ W x 4.8" $\pm$ D WEIGHT: 21.4 $\pm$  LBS QUANTITY: TOTAL OF 1

#### TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS

SCALE: N.T.S





#### DIPLEXER

DIMENSIONS: 4.8" $\pm$ H x 7.9" $\pm$ W x 3.3" $\pm$ D WEIGHT: 7.6 $\pm$  LBS QUANTITY: TOTAL OF 1

#### TYPICAL DIPLEXER DIMENSIONS

SCALE: NIS



#### — (1) PROPOSED "CANTENNA" U-GUARD OF ADEQUATE SIZE TO ACCOMMODATE (8)-1/2" SUPERFLEX COAXIAL CABLES ON POLE PROPOSED METALLIC "CANTENNA" MOUNT - PROPOSED 1/2"Ø SUPERFLEX SIGNAL CABLES ROUTED WITHIN U-GUARD PROPOSED/EXISTING WEATHERHEAD (LEAVE 10' CONDUCTORS FOR UTILITY COMPANY TIE INS) ≥----EXIST. OHW EXISTING/PROPOSED SECONDARY POWER LINE(S) (SHOWN SCHEMATICALLY) EXISTING/PROPOSED FIBER FRONTHAUL & BACKHAUL LINE(S) (SHOWN SCHEMATICALLY) PROPOSED FIBER -TERMINATION BOX/DEMARK PROPOSED FIBER FRONTHAUL AND BACKHAUL (PROVIDE 1-1/2" UV RATED U-GUARD PROPOSED DIPLEXER IF LENGTH EXCEEDS 4') PROPOSED 1/2"ø SUPERFLEX -PROPOSED LOWER RRH UNIT SIGNAL CABLE BUNDLE (TYP.) PROPOSED UPPER RRH UNIT PROPOSED FIBER BUNDLE TO — PROPOSED RRH UNITS (PROVIDE PROPOSED DC JUMPERS 1-1/2" UV RATED U-GUARD IF PER MANUFACTURER LENGTH EXCEEDS 4') PROPOSED POWER SUPPLY PROPOSED AC POWER NOTE: USE PROVIDED DELTA MANUFACTURERS WIRING HARNESS PROPOSED AC BULKFEED TO RECTIFIER PROPOSED WEATHER PROOF SQUARE D PART #SDSA1175 SECONDARY SURGE ARRESTOR ON 20A 2P CIRCUIT BREAKER PROPOSED SQUARE D QO-100A, 8-SPACE, 16-CIRCUIT OUTDOOR MAIN LOAD CENTER WITH COVER. 60A 2P PROPOSED #2 AWG COPPER MAIN CB WITH 20A, 2P BRANCH CIRCUIT GROUND RISER (TYP.) BREAKERS (1 FOR SURGE ARRESTOR & (1) FOR AC/DC CONVERTERS). PROPOSED #2 AWG COPPER GROUND IN 1/2" UV-RATED PVC PROPOSED ELECTRICAL METER --PROPOSED/EXISTING 3/4"øX10' COPPER CLAD GROUND ROD (MILBANK PART #U2272-RL-5T9-BL) SINGLE LEVER 120/240V, 1ø 3W 125A

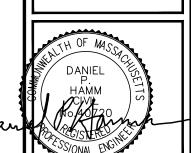
#### ONE-LINE DIAGRAM NOTES:

- PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
- COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

#### FIBER/ ELECTRICAL ONE-LINE DIAGRAM

SCALE: N.T.S





HUDSON

**Design Group LLC** 

CHECKED BY:

APPROVED BY:

SUBMITTALS

DATE DESCRIPTION

DPH

REV. DATE DESCRIPTION E

ANDOVER MA SC17

SITE ADDRESS: # 6821 39 STINSON ROAD ANDOVER, MA 01810

ANTENNA &
ANCILLARY EQUIPMENT
SPECIFICATIONS AND
ONE LINE DIAGRAM

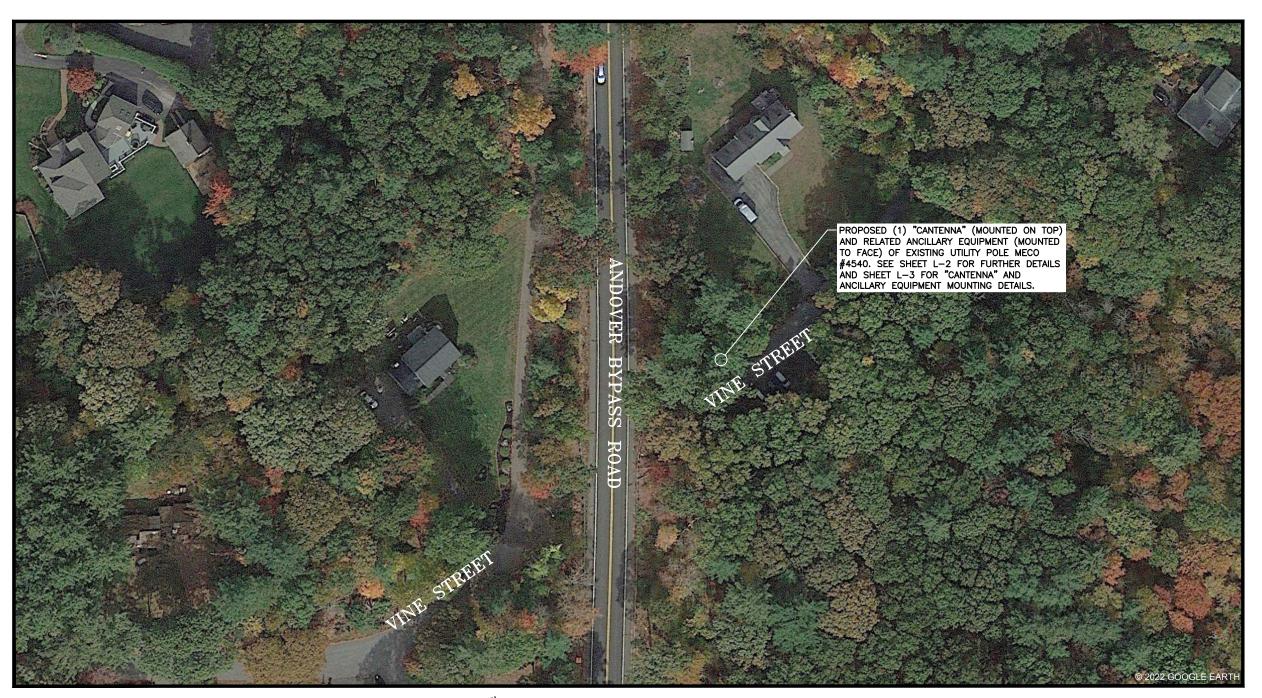
SHEET NUMBER

L-Z

## **ANDOVER MA SC18**

PRESIDING POWER COMPANY **EVERSURCE** 

MECO #4540 **36 VINE STREET** ANDOVER, MA



**Design Group LLC** 

CHECKED BY:

APPROVED BY:

SUBMITTALS DESCRIPTION

1 07/22/22 REVISED MOUNT 0 12/10/21 LEASE EXHIBIT

ANDOVER MA SC18

SITE ADDRESS: MECO #4540 36 VINE STREET ANDOVER, MA

SHEET TITLE LOCATION PLAN/AERIAL IMAGE

**L**-1

FIELD INSPECTION DATE: 11-30-2021

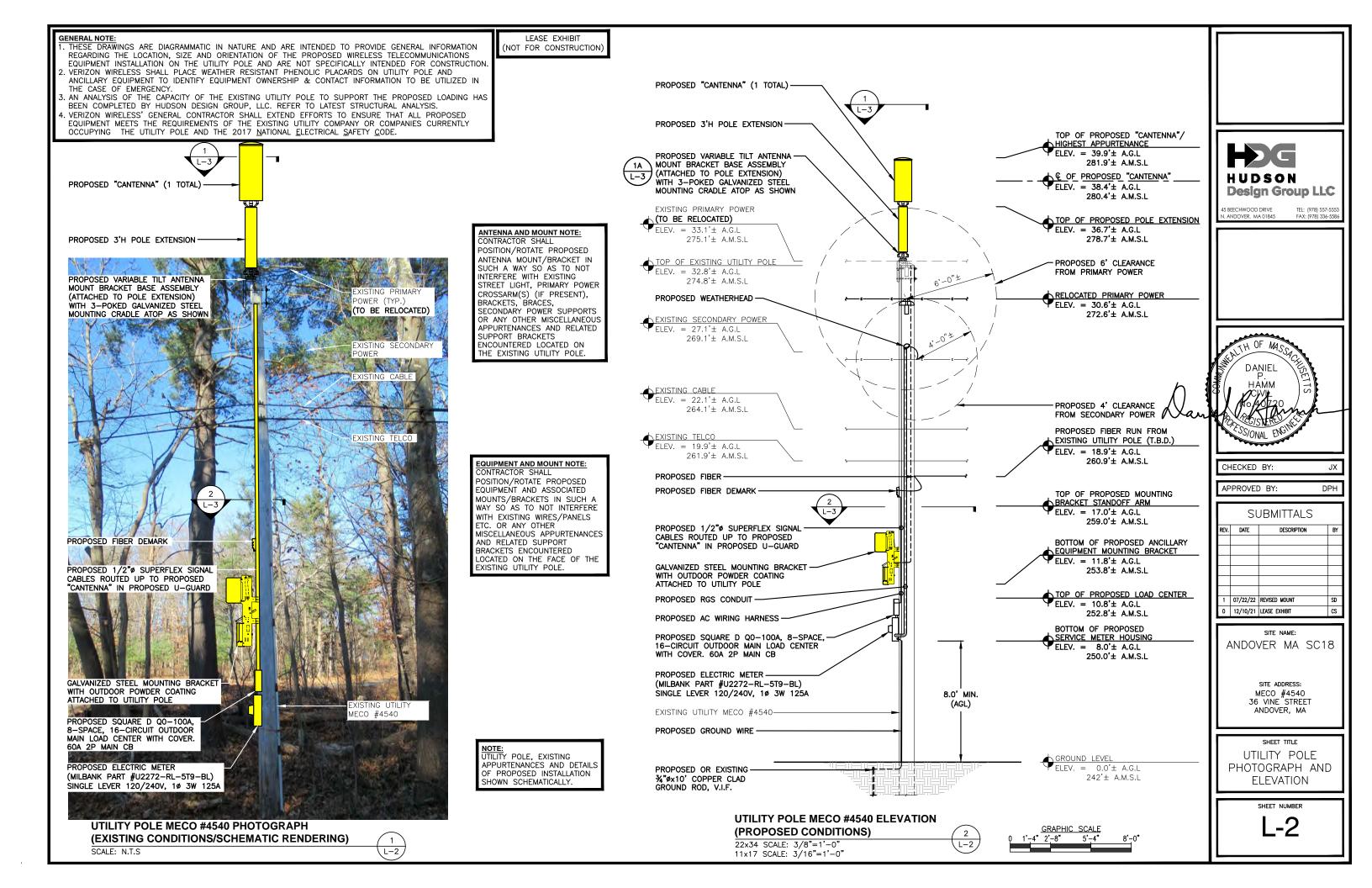
SITE COORDINATES: LAT: N42\* 37' 56.01"± LONG: W71\* 06' 53.10"± LAT:

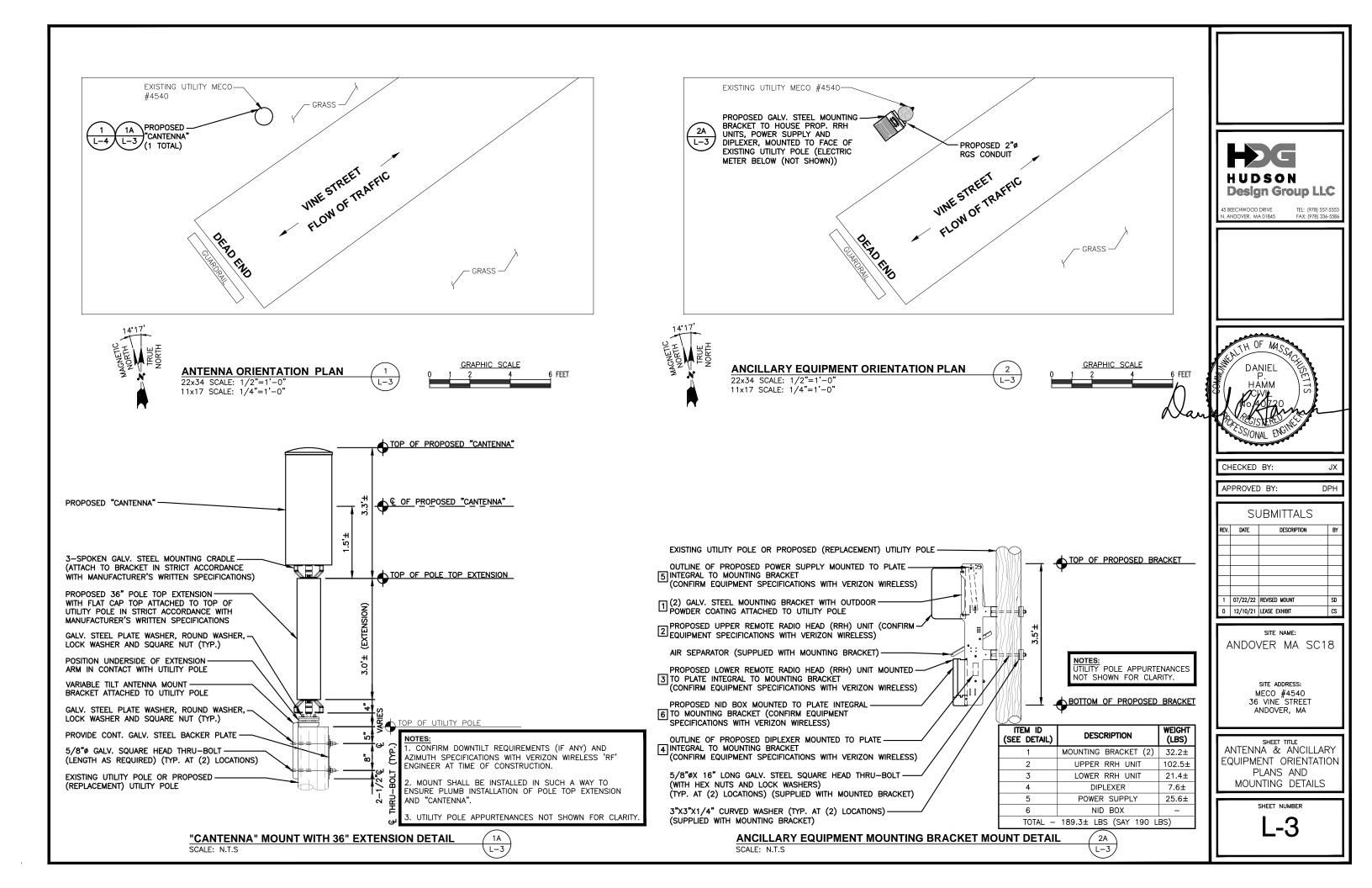
LAT: N42.632226°± LONG: W71.114750°± APPROXIMATE GROUND ELEVATION: 242'± AMSL



LOCATION PLAN-AERIAL IMAGE

SHEET INDEX			
SHEET NO.	DESCRIPTION		
L-1	LOCATION PLAN/AERIAL IMAGE		
L-2	UTILITY POLE PHOTOGRAPH AND ELEVATION		
L-3	ANTENNA & ANCILLARY EQUIPMENT ORIENTATION PLANS AND MOUNTING DETAILS		
L-4	ANTENNA & ANCILLARY EQUIPMENT SPECIFICATIONS AND ONE-LINE DIAGRAM		







SMALL CELL "CANTENNA"

DIMENSIONS: 14"±ø x 35.4"±H WEIGHT: 35.0± LBS QUANTITY: TOTAL OF 1

#### **TYPICAL "CANTENNA" SPECIFICATIONS** SCALE: N.T.S







#### REMOTE RADIO HEAD UNIT

DIMENSIONS:  $17.3"\pm H \times 17.3"\pm W \times 11.5"\pm D$ WEIGHT: 102.5± LBS QUANTITY: TOTAL OF 1

#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 13.9"±H x 9.8"±W x 4.8"±D WEIGHT: 21.4± LBS QUANTITY: TOTAL OF 1

#### TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS

SCALE: N.T.S



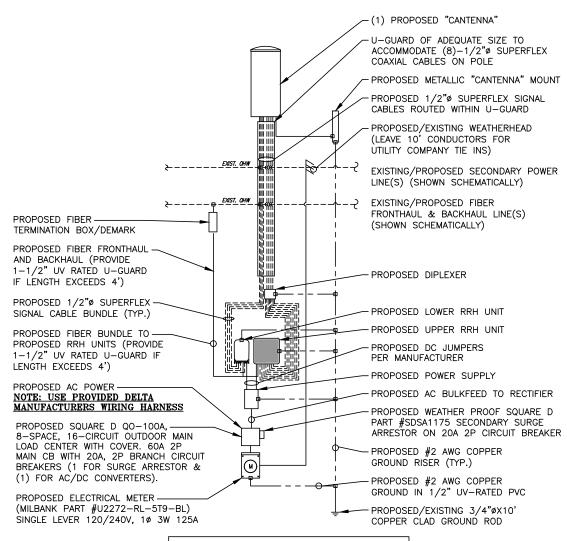


#### DIPLEXER

DIMENSIONS:  $4.8"\pm H \times 7.9"\pm W \times 3.3"\pm D$ WEIGHT: 7.6± LBS QUANTITY: TOTAL OF 1

#### TYPICAL DIPLEXER DIMENSIONS



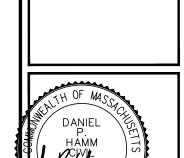


#### ONE-LINE DIAGRAM NOTES:

- 1. PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
- COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

#### FIBER/ ELECTRICAL ONE-LINE DIAGRAM





HUDSON

**Design Group LLC** 

CHECKED BY:

APPROVED BY:

SUBMITTALS

DPH

REV.	DATE	DESCRIPTION	В
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0	12/10/21	LEASE EXHIBIT	CS

ANDOVER MA SC18

SITE ADDRESS: MECO #4540 36 VINE STREET ANDOVER, MA

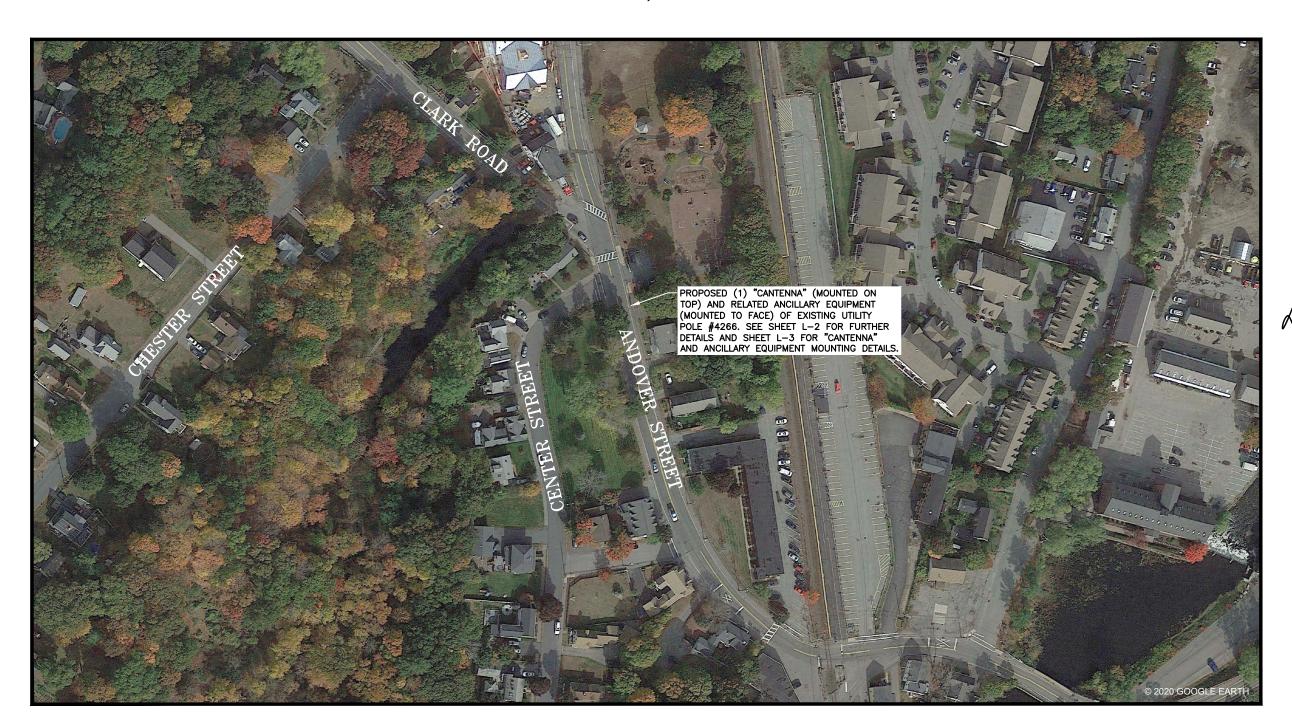
SHEET TITLE ANTENNA & ANCILLARY EQUIPMENT SPECIFICATIONS AND ONE LINE DIAGRAM

SHEET NUMBER

## **ANDOVER MA SC30**

presiding power company national**grid** 

#4266 164 ANDOVER STREET ANDOVER, MA 01810



HUDSON Design Group LLC

EECHWOOD DRIVE TEL: (\*
NDOVER, MA 01845 FAX: (\*

DANIEL P. HAMM CIVIL NO AOTZO

CHECKED BY:

APPROVED BY:

SUBMITTALS

REV. DATE DESCRIPTION

1 07/22/22 REVISED TO TOP MOUNT

SITE NAME: ANDOVER MA SC30

0 12/10/21 LEASE EXHIBIT

SITE ADDRESS: #4266 164 ANDOVER STREET ANDOVER, MA 01810

SHEET TITLE
LOCATION
PLAN/AERIAL IMAGE

SHEET NUMBER

L-1

FIELD INSPECTION DATE: 11-30-2021

SITE COORDINATES: LAT: N46° 37' 41.15"± LONG: W71° 09' 19.13"±

LAT: N46.628098°±
LONG: W71.160870°±
APPROXIMATE GROUND ELEVATION: 75.0'± AMSL



LOCATION PLAN/ AERIAL IMAG

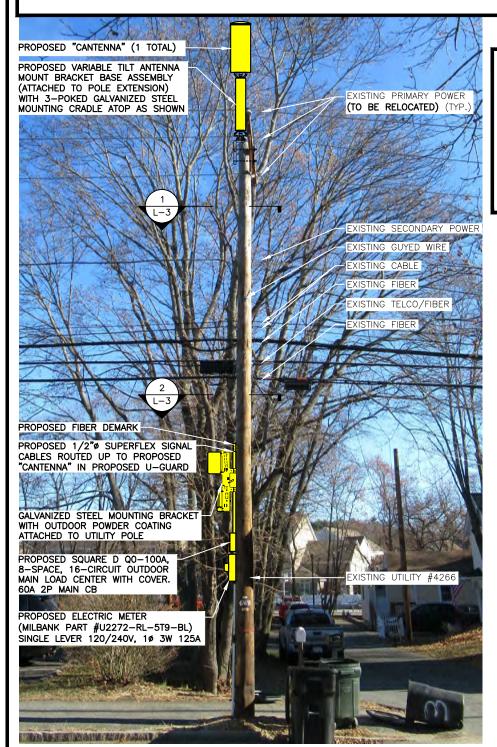
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SHEET NO.	DESCRIPTION
L-1	LOCATION PLAN/AERIAL IMAGE
L-2	UTILITY POLE PHOTOGRAPH AND ELEVATION
L-3	ANTENNA & ANCILLARY EQUIPMENT ORIENTATION PLANS AND MOUNTING DETAILS
L-4	ANTENNA & ANCILLARY EQUIPMENT SPECIFICATIONS AND ONE-LINE DIAGRAM

LEASE EXHIBIT (NOT FOR CONSTRUCTION)

#### GENERAL NOTE

- 1. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION, SIZE AND ORIENTATION OF THE PROPOSED WIRELESS TELECOMMUNICATIONS EQUIPMENT INSTALLATION ON THE UTILITY POLE AND ARE NOT SPECIFICALLY INTENDED FOR CONSTRUCTION.
- 2. VERIZON WIRELESS SHALL PLACE WEATHER RESISTANT PHENOLIC PLACARDS ON UTILITY POLE AND ANCILLARY EQUIPMENT TO IDENTIFY EQUIPMENT OWNERSHIP & CONTACT INFORMATION TO BE UTILIZED IN THE CASE OF EMERGENCY.
- 3. AN ANALYSIS OF THE CAPACITY OF THE EXISTING UTILITY POLE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC. REFER TO LATEST STRUCTURAL ANALYSIS.
- 4. VERIZON WIRELESS' GENERAL CONTRACTOR SHALL EXTEND EFFORTS TO ENSURE THAT ALL PROPOSED EQUIPMENT MEETS THE REQUIREMENTS OF THE EXISTING UTILITY COMPANY OR COMPANIES CURRENTLY OCCUPYING THE UTILITY POLE AND THE 2017 NATIONAL ELECTRICAL SAFETY CODE.



ANTENNA AND MOUNT NOTE:

CONTRACTOR SHALL
POSITION/ROTATE PROPOSED
ANTENNA MOUNT/BRACKET IN
SUCH A WAY SO AS TO NOT
INTERFERE WITH EXISTING STREE:
LIGHT, PRIMARY POWER
CROSSARM(S) (IF PRESENT),
BRACKETS, BRACES, SECONDARY
POWER SUPPORTS OR ANY
OTHER MISCELLANEOUS
APPURTENANCES AND RELATED
SUPPORT BRACKETS
ENCOUNTERED LOCATED ON THE
EXISTING UTILITY POLE.

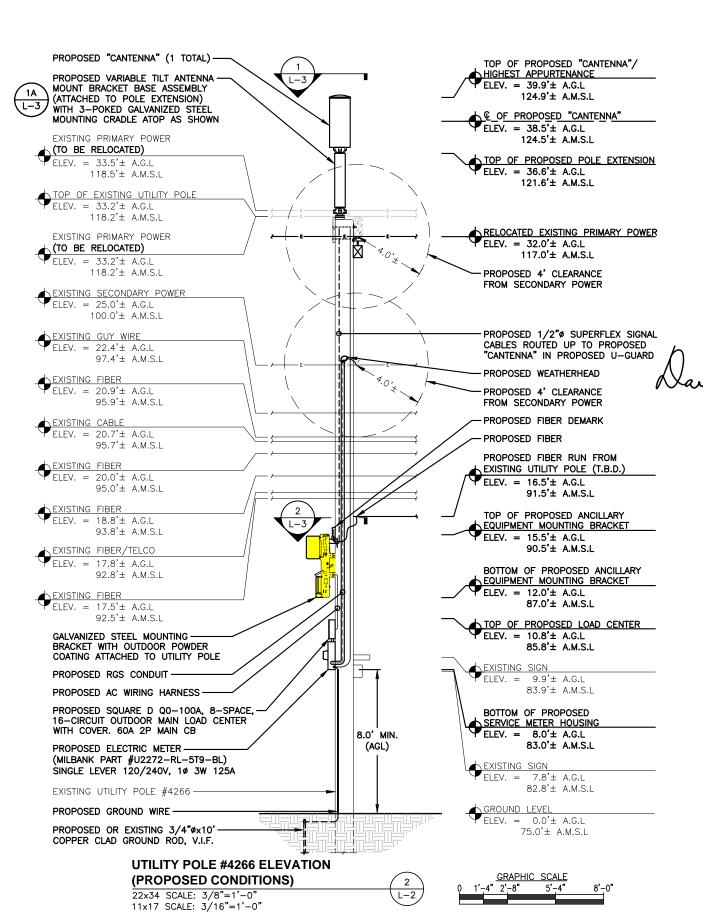
EQUIPMENT AND MOUNT NOTE:
CONTRACTOR SHALL
POSITION/ROTATE PROPOSED
EQUIPMENT AND ASSOCIATED
MOUNTS/BRACKETS IN SUCH A
WAY SO AS TO NOT INTERFERE
WITH EXISTING WIRES/PANELS
ETC. OR ANY OTHER
MISCELLANEOUS APPURTENANCES
AND RELATED SUPPORT
BRACKETS ENCOUNTERED
LOCATED ON THE FACE OF THE
EXISTING UTILITY POLE.

NOTE: UTILITY POLE, EXISTING APPURTENANCES AND DETAILS OF PROPOSED INSTALLATION SHOWN SCHEMATICALLY.

UTILITY #4266 PHOTOGRAPH
(EXISTING CONDITIONS/SCHEMATIC RENDERING)

SCALE: N.T.S







15 BEECHWOOD DRIVE



CHECKED BY:

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APPROVED BY:

DPH

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REV.	DATE	DESCRIPTION	BY	
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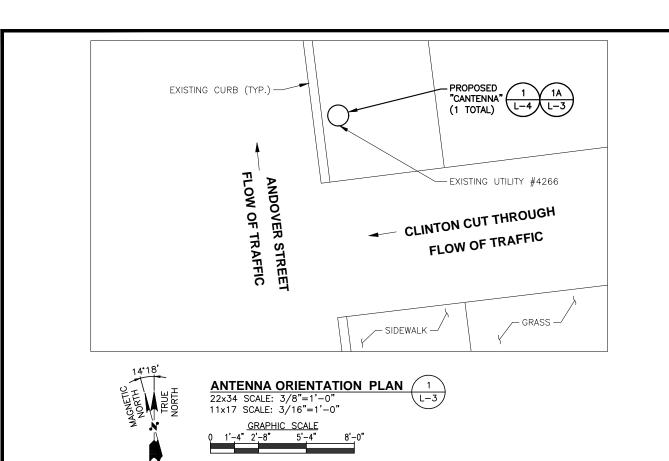
ANDOVER MA SC30

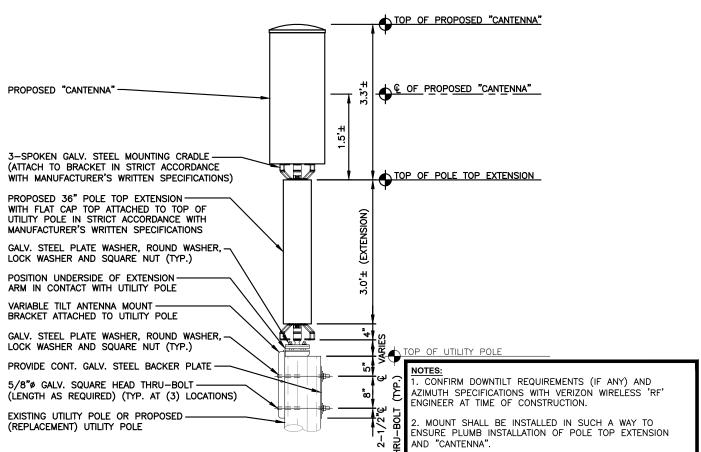
SITE ADDRESS: #4266 164 ANDOVER STREET ANDOVER, MA 01810

SHEET TITLE
UTILITY POLE
PHOTOGRAPH AND
ELEVATION

SHEET NUMBE

L-2

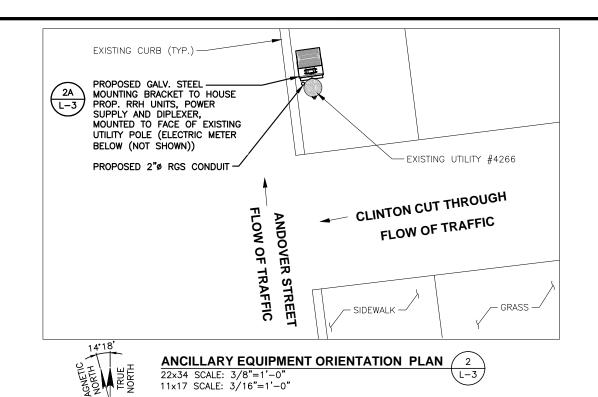




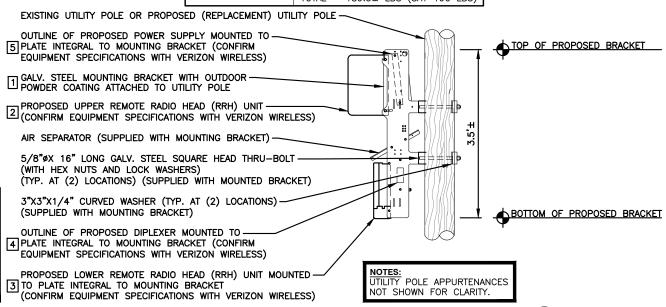
"CANTENNA" MOUNT WITH 36" EXTENSION DETAIL

UTILITY POLE APPURTENANCES NOT SHOWN FOR CLARITY

(L-3)



1'-4" 2'-8" 5'-4"



**ANCILLARY EQUIPMENT MOUNTING BRACKET MOUNT DETAIL** 



45 BEECHWOOD DRIVE

CHECKED BY:

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APPROVED BY: DPH

SUBMITTALS				
REV.	DATE	DESCRIPTION	BY	
1	07/22/22	REVISED TO TOP MOUNT	SF	
0	12/10/21	LEASE EXHIBIT	cs	

ANDOVER MA SC30

SITE ADDRESS: #4266 164 ANDOVER STREET ANDOVER, MA 01810

SHEET TITLE
ANTENNA & ANCILLARY
EQUIPMENT ORIENTATION
PLANS AND MOUNTING
DETAILS

SHEET NUMBER

L-3

L-3



#### SMALL CELL "CANTENNA"

DIMENSIONS: 14"±ø x 35.4"±H WEIGHT: 35.0± LBS QUANTITY: TOTAL OF 1

#### TYPICAL "CANTENNA" SPECIFICATIONS SCALE: N.T.S





#### REMOTE RADIO HEAD UNIT

DIMENSIONS:  $17.3"\pm H \times 17.3"\pm W \times 11.5"\pm D$ WEIGHT: 102.5± LBS QUANTITY: TOTAL OF 1

#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 13.9"±H x 9.8"±W x 4.8"±D WEIGHT: 21.4± LBS QUANTITY: TOTAL OF 1

#### TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS

SCALE: N.T.S



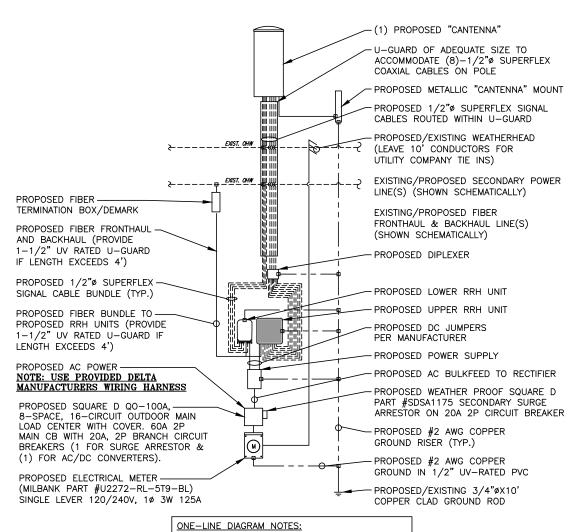


#### DIPLEXER

DIMENSIONS:  $4.8"\pm H \times 7.9"\pm W \times 3.3"\pm D$ WEIGHT: 7.6± LBS QUANTITY: TOTAL OF 1

#### TYPICAL DIPLEXER DIMENSIONS

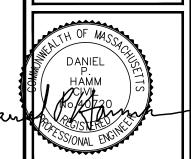




- 1. PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
- 2. COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

#### FIBER/ ELECTRICAL ONE-LINE DIAGRAM





HUDSON

**Design Group LLC** 

CHECKED BY:

APPROVED BY:

SUBMITTALS

1 07/22/22 REVISED TO TOP MOUNT

0 12/10/21 LEASE EXHIBIT

DPH

ANDOVER MA SC30

SITE ADDRESS: #4266 164 ANDOVER STREET ANDOVER, MA 01810

SHEET TITLE ANTENNA & ANCILLARY EQUIPMENT SPECIFICATIONS AND ONE LINE DIAGRAM

SHEET NUMBER

NOTE: POLE REPLACEMENT REQUIRED

## **ANDOVER MA SC33**

presiding power company national**grid** 

#7167/32 2 HANSOM ROAD ANDOVER, MA 01810



HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845

TEL: (978) 557-555.
FAX: (978) 336-558.

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CHECKED BY:

APPROVED BY:

SUBMITTALS

DPH

REV.	DATE	DESCRIPTION	B
2	07/25/22	POLE REPLACEMENT	S
-	05/10/22	REVISED TO TOP MOUNT	S
0	12/10/21	LEASE EXHIBIT	C

ANDOVER MA SC33

SITE ADDRESS: #7167/32 2 HANSOM ROAD ANDOVER, MA 01810

SHEET TITLE
LOCATION
PLAN/AERIAL IMAGE

SHEET NUMBER

L-1

FIELD INSPECTION DATE: 11-30-2021

SITE COORDINATES: LAT: N42° 38' 15.27"± LONG: W71° 10' 32.46"±

LONG: W/I 10 32.46 ±

LAT: N42.6375759\*±

LONG: W71.1756828\*±

APPROXIMATE GROUND ELEVATION: 203.0'± AMSL



LOCATION PLAN/ AERIAL IMAGE
SCALE: N.T.S

1
L-1

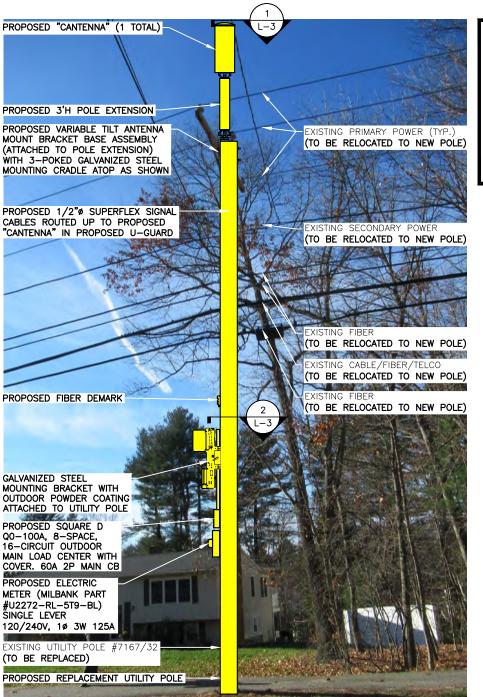
SHEET NO.	DESCRIPTION
L-1	LOCATION PLAN/AERIAL IMAGE
L-2	UTILITY POLE PHOTOGRAPH AND ELEVATION
L-3	ANTENNA & ANCILLARY EQUIPMENT ORIENTATION PLANS AND MOUNTING DETAILS
1 –4	ANTENNA & ANCILLARY FOLIPMENT SPECIFICATIONS AND ONE-LINE DIAGRAM

SHEET INDEX

LEASE EXHIBIT (NOT FOR CONSTRUCTION)

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- AN ANALYSIS OF THE CAPACITY OF THE EXISTING UTILITY POLE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC. REFER TO LATEST STRUCTURAL ANALYSIS.
- VERIZON WIRELESS' GENERAL CONTRACTOR SHALL EXTEND EFFORTS TO ENSURE THAT ALL PROPOSED EQUIPMENT MEETS THE REQUIREMENTS OF THE EXISTING UTILITY COMPANY OR COMPANIES CURRENTLY OCCUPYING THE UTILITY POLE AND THE 2017 NATIONAL ELECTRICAL SAFETY CODE.



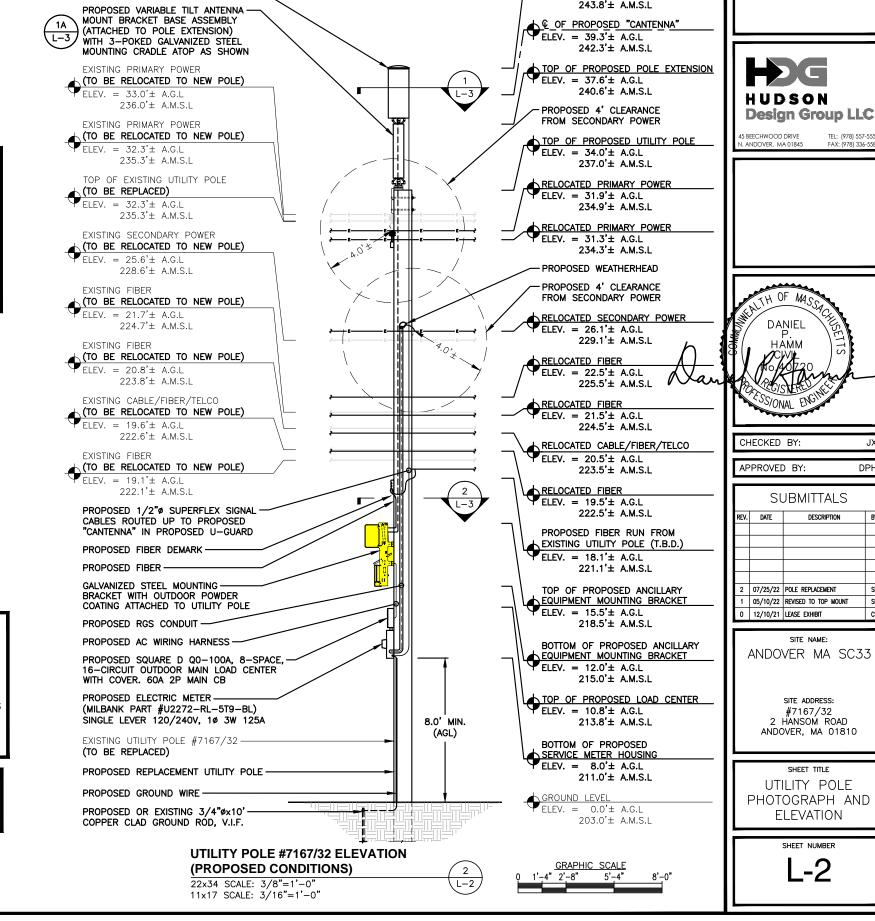
ANTENNA AND MOUNT NOTE: CONTRACTOR SHALL POSITION/ROTATE PROPOSED ANTENNA MOUNT/BRACKET IN SUCH A WAY SO AS TO NOT INTERFERE WITH EXISTING STREET LIGHT, PRIMARY POWER CROSSARM(S) (IF PRESENT) BRACKETS, BRACES, SECONDARY POWER SUPPORTS OR ANY OTHER MISCELLANEOUS APPURTENANCES AND RELATED SUPPORT BRACKETS ENCOUNTERED LOCATED ON THE EXISTING UTILITY POLE.

PROPOSED "CANTENNA" (1 TOTAL) -

EQUIPMENT AND MOUNT NOTE: POSITION/ROTATE PROPOSED EQUIPMENT AND ASSOCIATED MOUNTS/BRACKETS IN SUCH A WAY SO AS TO NOT INTERFERE WITH EXISTING WIRES/PANELS ETC. OR ANY OTHER MISCELLANEOUS APPURTENANCES AND RELATED SUPPORT BRACKETS ENCOUNTERED LOCATED ON THE FACE OF THE EXISTING UTILITY POLE.

NOTE:
UTILITY POLE, EXISTING APPURTENANCES AND DETAILS OF PROPOSED INSTALLATION SHOWN SCHEMATICALLY.

**UTILITY POLE #7167/32 PHOTOGRAPH** (EXISTING CONDITIONS/SCHEMATIC RENDERING)



TOP OF PROPOSED "CANTENNA"/

H OF MA

DANIEL

HAMM

ONAL

SUBMITTALS

SITE ADDRESS:

#7167/32

2 HANSOM ROAD

ANDOVER, MA 01810

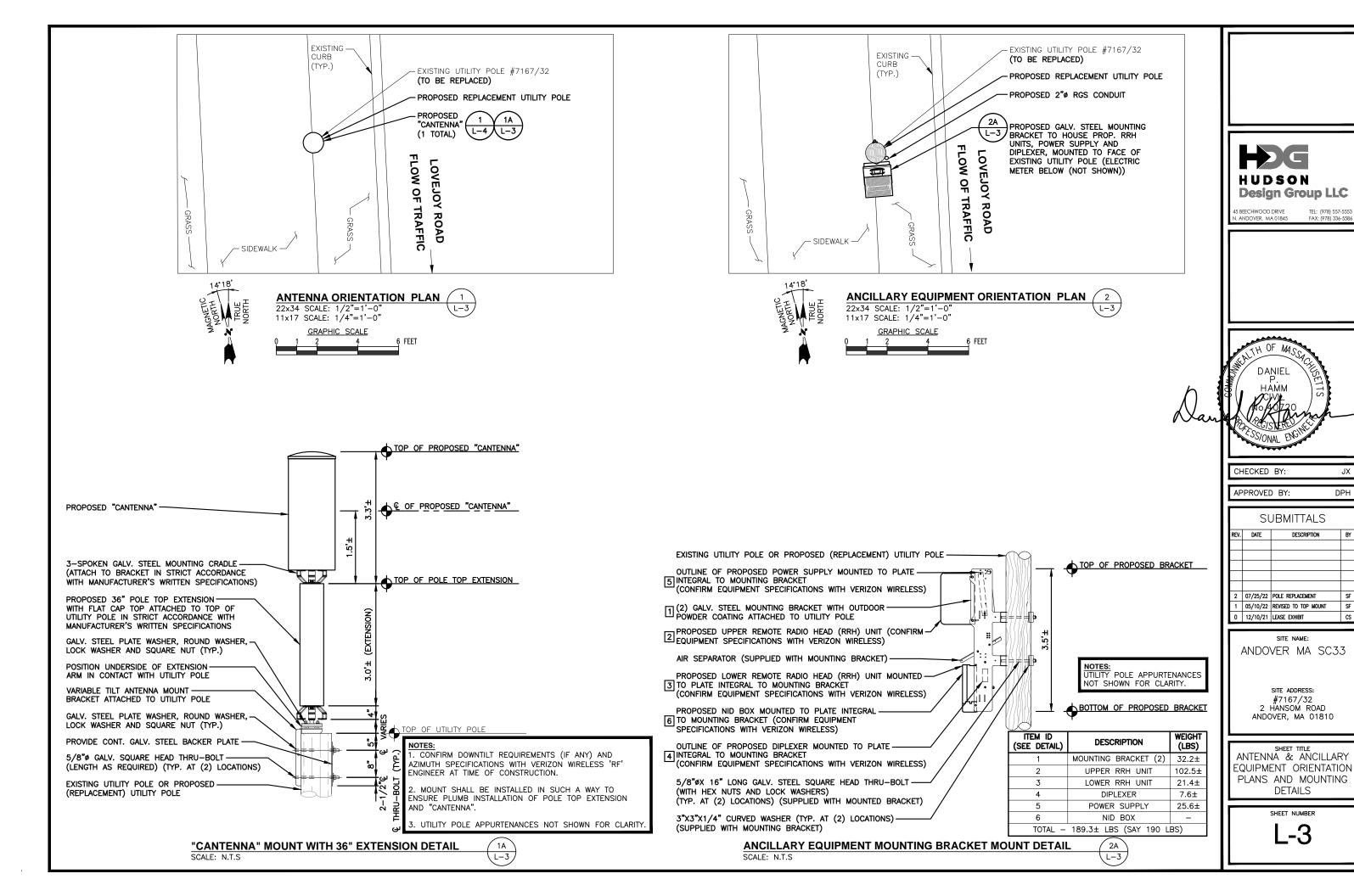
SHEET TITLE

UTILITY POLE

**ELEVATION** 

DPH

HIGHEST APPURTENANCE ELEV. = 40.8'± A.G.L



DPH



#### SMALL CELL "CANTENNA"

DIMENSIONS: 14"±ø x 35.4"±H WEIGHT: 35.0± LBS QUANTITY: TOTAL OF 1

#### TYPICAL "CANTENNA" SPECIFICATIONS SCALE: N.T.S







#### REMOTE RADIO HEAD UNIT

DIMENSIONS:  $17.3"\pm H \times 17.3"\pm W \times 11.5"\pm D$ WEIGHT: 102.5± LBS QUANTITY: TOTAL OF 1

#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 13.9"±H x 9.8"±W x 4.8"±D WEIGHT: 21.4± LBS QUANTITY: TOTAL OF 1

#### TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS

SCALE: N.T.S





#### DIPLEXER

DIMENSIONS:  $4.8"\pm H \times 7.9"\pm W \times 3.3"\pm D$ WEIGHT: 7.6± LBS QUANTITY: TOTAL OF 1

#### TYPICAL DIPLEXER DIMENSIONS



#### — (1) PROPOSED "CANTENNA" U-GUARD OF ADEQUATE SIZE TO ACCOMMODATE (8)-1/2" SUPERFLEX COAXIAL CABLES ON POLE PROPOSED METALLIC "CANTENNA" MOUNT - PROPOSED 1/2"Ø SUPERFLEX SIGNAL CABLES ROUTED WITHIN U-GUARD PROPOSED/EXISTING WEATHERHEAD (LEAVE 10' CONDUCTORS FOR UTILITY COMPANY TIE INS) ≥----EXIST. OHW EXISTING/PROPOSED SECONDARY POWER LINE(S) (SHOWN SCHEMATICALLY) EXISTING/PROPOSED FIBER FRONTHAUL & BACKHAUL LINE(S) (SHOWN SCHEMATICALLY) PROPOSED FIBER -TERMINATION BOX/DEMARK PROPOSED FIBER FRONTHAUL AND BACKHAUL (PROVIDE 1-1/2" UV RATED U-GUARD PROPOSED DIPLEXER IF LENGTH EXCEEDS 4') PROPOSED 1/2"ø SUPERFLEX -PROPOSED LOWER RRH UNIT SIGNAL CABLE BUNDLE (TYP.) PROPOSED UPPER RRH UNIT PROPOSED FIBER BUNDLE TO — PROPOSED RRH UNITS (PROVIDE 1-1/2" UV RATED U-GUARD IF PROPOSED DC JUMPERS PER MANUFACTURER LENGTH EXCEEDS 4') PROPOSED POWER SUPPLY PROPOSED AC POWER NOTE: USE PROVIDED DELTA MANUFACTURERS WIRING HARNESS PROPOSED AC BULKFEED TO RECTIFIER PROPOSED WEATHER PROOF SQUARE D PART #SDSA1175 SECONDARY SURGE ARRESTOR ON 20A 2P CIRCUIT BREAKER PROPOSED SQUARE D QO-100A, 8-SPACE, 16-CIRCUIT OUTDOOR MAIN LOAD CENTER WITH COVER. 60A 2P PROPOSED #2 AWG COPPER MAIN CB WITH 20A, 2P BRANCH CIRCUIT GROUND RISER (TYP.) BREAKERS (1 FOR SURGE ARRESTOR & (1) FOR AC/DC CONVERTERS). PROPOSED #2 AWG COPPER GROUND IN 1/2" UV-RATED PVC PROPOSED ELECTRICAL METER --PROPOSED/EXISTING 3/4"øX10' COPPER CLAD GROUND ROD (MILBANK PART #U2272-RL-5T9-BL) SINGLE LEVER 120/240V, 1ø 3W 125A

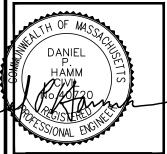
#### ONE-LINE DIAGRAM NOTES:

- 1. PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
- COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

#### FIBER/ ELECTRICAL ONE-LINE DIAGRAM







CHECKED BY

APPROVED BY:

DPH

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2	2		POLE REPLACEMENT	SF
Ľ	ı	05/10/22	REVISED TO TOP MOUNT	SF
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ANDOVER MA SC33

SITE ADDRESS: #7167/32 2 HANSOM ROAD ANDOVER, MA 01810

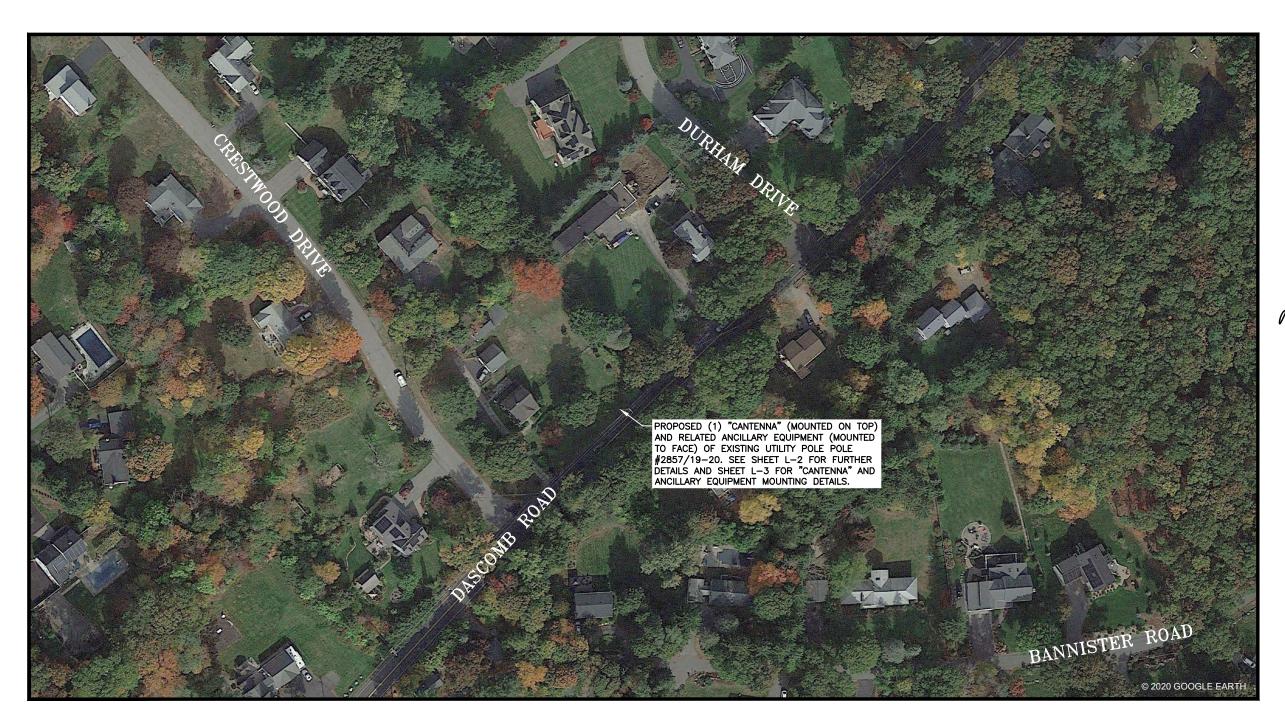
SHEET TITLE ANTENNA & ANCILLARY EQUIPMENT SPECIFICATIONS AND ONE LINE DIAGRAM

SHEET NUMBER

## **ANDOVER MA SC35**

presiding power company national**grid** 

POLE #2857/19-20 59 DASCOMB ROAD ANDOVER, MA 01810



HUDSON Design Group LLC

ECHWOOD DRIVE TEL: (978) IDOVER. MA 01845 FAX: (978)

DANIEL P. HAMM CIVIL NO ASTRONOMY CONTROL ENGINEERS

CHECKED BY:

APPROVED BY:

PPROVED BY:

	SUBMITTALS			
	REV.	DATE	DESCRIPTION	
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П	0	12/10/21	LEASE EXHIBIT	

SITE NAME:
ANDOVER MA SC35

SITE ADDRESS:
POLE #2857/19-20
59 DASCOMB ROAD
ANDOVER, MA 01810

SHEET TITLE
LOCATION
PLAN/AERIAL IMAGE

SHEET NUMBER

**L**-1

FIELD INSPECTION DATE: 11-30-2021

SITE COORDINATES: LAT: N42° 38' 02.68"± LONG: W71° 10' 0.213"±

LAT: N42.634078°±
LONG: W71.166726°±
APPROXIMATE GROUND ELEVATION: 147.0°± AMSL



LOCATION PLAN/ AERIAL IMAGE

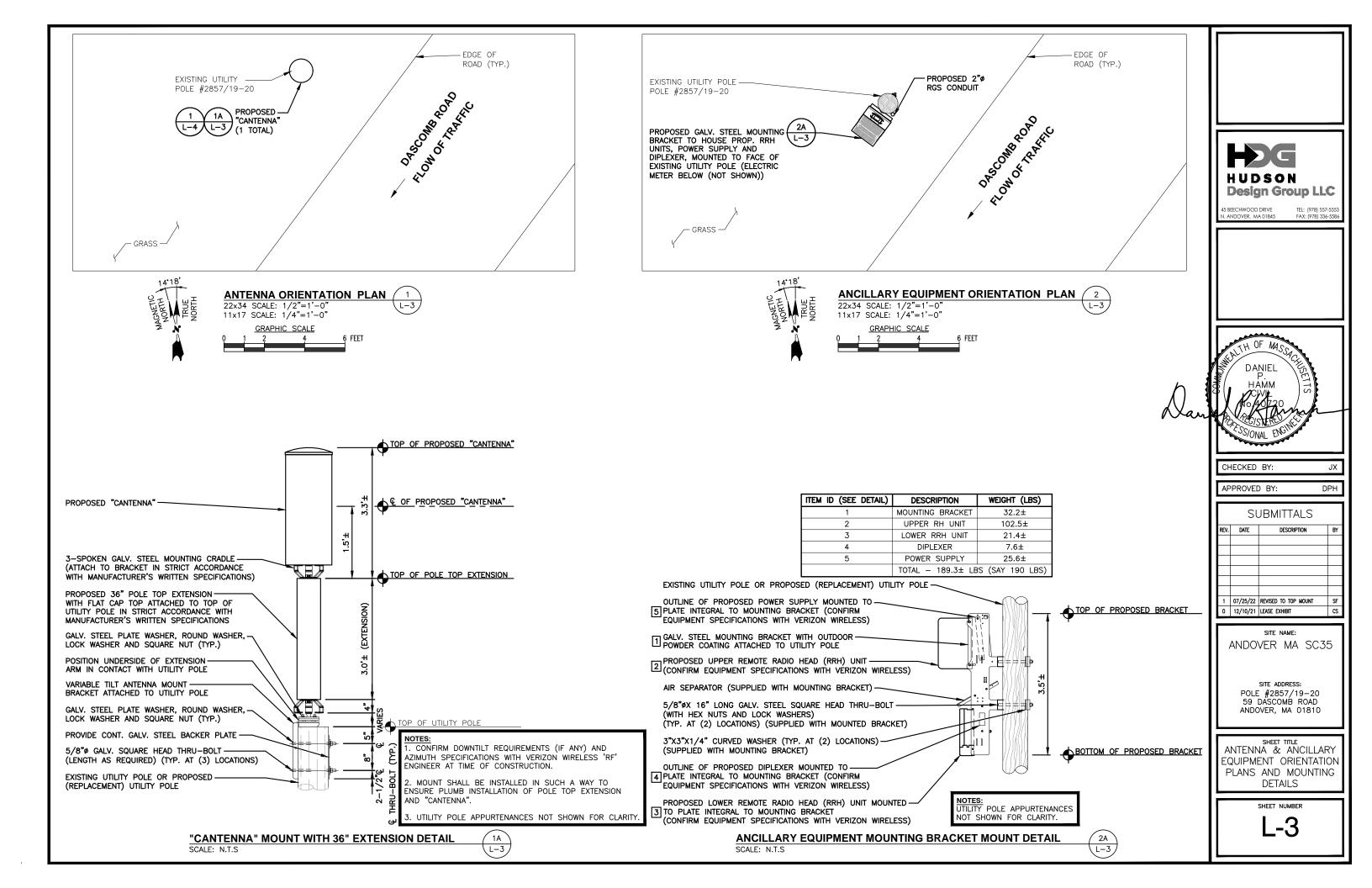
$\left(\begin{array}{c} 1\\1-1\end{array}\right)$

SHEET INDEX

	HEET NO.	DESCRIPTION
	1	LOCATION PLAN/AERIAL IMAGE
L	.–2	UTILITY POLE PHOTOGRAPH AND ELEVATION
L	.–3	ANTENNA & ANCILLARY EQUIPMENT ORIENTATION PLANS AND MOUNTING DETAILS
1 1	_4	ANTENNA & ANCILLARY FOLIPMENT SPECIFICATIONS AND ONE-LINE DIAGRAM

LEASE EXHIBIT PROPOSED "CANTENNA" (1 TOTAL) -(NOT FOR CONSTRUCTION PROPOSED VARIABLE TILT ANTENNA TOP OF PROPOSED "CANTENNA"/ MOUNT BRACKET BASE ASSEMBLY THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO PROVIDE GENERAL INFORMATION
REGARDING THE LOCATION, SIZE AND ORIENTATION OF THE PROPOSED WIRELESS TELECOMMUNICATIONS EQUIPMENT
INSTALLATION ON THE UTILITY POLE AND ARE NOT SPECIFICALLY INTENDED FOR CONSTRUCTION.
VERIZON WIRELESS SHALL PLACE WEATHER RESISTANT PHENOLIC PLACARDS ON UTILITY POLE AND ANCILLARY HIGHEST APPURTENANCE (ATTACHED TO POLE EXTENSION) ELEV. =  $45.2' \pm A.G.L$ WITH 3-POKED GALVANIZED STÉFI 192.2'± A.M.S.L MOUNTING CRADLE ATOP AS SHOWN € OF PROPOSED "CANTENNA" EQUIPMENT TO IDENTIFY EQUIPMENT OWNERSHIP & CONTACT INFORMATION TO BE UTILIZED IN THE CASE OF PROPOSED 4' CLEARANCE -ELEV. = 43.7'± A.G.L FROM SECONDARY POWER AN ANALYSIS OF THE CAPACITY OF THE EXISTING UTILITY POLE TO SUPPORT THE PROPOSED LOADING HAS BEEN 190.7'± A.M.S.L EXISTING PRIMARY POWER/ COMPLETED BY HUDSON DESIGN GROUP, LLC. REFER TO LATEST STRUCTURAL ANALYSIS. HIGHEST APPURTENANCE TOP OF PROPOSED POLE EXTENSION
ELEV. = 42.0'± A.G.L VERIZON WIRELESS' GENERAL CONTRACTOR SHALL EXTEND EFFORTS TO ENSURE THAT ALL PROPOSED EQUIPMENT MEETS THE REQUIREMENTS OF THE EXISTING UTILITY COMPANY OR COMPANIES CURRENTLY OCCUPYING. THE UTILITY POLE AND THE 2017 NATIONAL ELECTRICAL SAFETY CODE. (TO BE RELOCATED) ELEV. =  $38.7' \pm A.G.L$ 189.0'± A.M.S.L 185.7'± A.M.S.L RELOCATED EXISTING SPRIMARY POWER ELEV. = 37.5'± A.G.L **Design Group LLC** TOP OF EXISTING UTILITY POLE TOP OF LAIS....

ELEV. = 38.4'± A.G.L 184.5'± A.M.S.L 185.4'± A.M.S.L ANTENNA AND MOUNT NOTE: CONTRACTOR SHALL PROPOSED "CANTENNA" (1 TOTAL) POSITION/ROTATE PROPOSED EXISTING PRIMARY POWER ANTENNA MOUNT/BRACKET IN PROPOSED 3'H POLE EXTENSION (TO BE RELOCATED) (TYP. SUCH A WAY SO AS TO NOT PROPOSED VARIABLE TILT ANTENNA INTERFERE WITH EXISTING STREE MOUNT BRACKET BASE ASSEMBLY LIGHT, PRIMARY POWER CROSSARM(S) (IF PRESENT) (ATTACHED TO POLE EXTENSION) BRACKETS, BRACES, SECONDARY WITH 3-POKED GALVANIZED STÉEL POWER SUPPORTS OR ANY MOUNTING CRADLE ATOP AS SHOWN OTHER MISCELLANEOUS APPURTENANCES AND RELATED PROPOSED WEATHERHEAD SUPPORT BRACKETS PROPOSED 4' CLEARANCE ENCOUNTERED LOCATED ON THE H OF MA FROM SECONDARY POWER EXISTING UTILITY POLE. EXISTING SECONDARY POWER DANIEL ELEV. =  $26.5' \pm A.G.L$ 173.5'± A.M.S.L HAMM EXISTING FIBER/CABLE EXISTING SECONDARY POWER ELEV. =  $23.5' \pm A.G.L$ EXISTING FIBER/CABLE 170.5'± A.M.S.L EXISTING FIBER SS/ONAL ELEV. =  $22.0' \pm A.G.L$ 169.0'± A.M.S.L PROPOSED FIBER RUN FROM CHECKED BY EXISTING TELCO EXISTING UTILITY POLE (T.B.D.) ELEV. =  $20.9' \pm A.G.L$ ELEV. =  $18.6' \pm A.G.L$ APPROVED BY: DPH 167.9'± A.M.S.L 165.6'± A.M.S.L EXISTING FIBER/TELCO  $\bigoplus_{\text{ELEV.}} = 19.6' \pm \text{A.G.L}$ TOP OF PROPOSED ANCILLARY EQUIPMENT AND MOUNT NOTE: SUBMITTALS L-3 EQUIPMENT MOUNTING BRACKET CONTRACTOR SHALL EXISTING FIBER 166.6'± A.M.S.L DESCRIPTION POSITION/ROTATE PROPOSED 'ELEV. = 15.5'± A.G.L EQUIPMENT AND ASSOCIATED EXISTING TELCO 162.5'± A.M.S.L PROPOSED FIBER DEMARK PROPOSED FIBER DEMARK MOUNTS/BRACKETS IN SUCH A EXISTING TELCO/FIBER WAY SO'AS TO NOT INTERFERE PROPOSED FIBER BOTTOM OF PROPOSED ANCILLARY WITH EXISTING WIRES/PANELS EQUIPMENT MOUNTING BRACKET PROPOSED 1/2"ø SUPERFLEX SIGNAL ETC. OR ANY OTHER ELEV. =  $12.0' \pm A.G.L$ PROPOSED 1/2"ø SUPERFLEX SIGNAL MISCELLANEOUS APPURTENANCES CABLES ROUTED UP TO PROPOSED 159.0'± A.M.S.L CABLES ROUTED UP TO PROPOSED AND RELATED SUPPORT "CANTENNA" IN PROPOSED U-GUARD "CANTENNA" IN PROPOSED U-GUARD BRACKETS ENCOUNTERED 1 07/25/22 REVISED TO TOP MOUNT TOP OF PROPOSED LOAD CENTER GALVANIZED STEEL MOUNTING LOCATED ON THE FACE OF THE 0 12/10/21 LEASE EXHIBIT GALVANIZED STEEL MOUNTING BRACKET WITH OUTDOOR POWDER COATING ATTACHED TO UTILITY POLE BRACKET WITH OUTDOOR POWDER 'ELEV. = 10.8'± A.G.L EXISTING UTILITY POLE. COATING ATTACHED TO UTILITY POLE 157.8'± A.M.S.L PROPOSED RGS CONDUIT BOTTOM OF PROPOSED ANDOVER MA SC35 PROPOSED SQUARE D Q0-100A. SERVICE METER HOUSING ELEV. = 8.0'± A.G.L PROPOSED AC WIRING HARNESS 8-SPACE, 16-CIRCUIT OUTDOOR MAIN LOAD CENTER WITH COVER. PROPOSED SQUARE D Q0-100A, 8-SPACE, -155.0'± A.M.S.L POLE #2857/19-20 60A 2P MAIN CB 16-CIRCUIT OUTDOOR MAIN LOAD CENTER PROPOSED ELECTRIC METER WITH COVER. 60A 2P MAIN CB POLE #2857/19-20 8.0' MIN. (MILBANK PART #U2272-RL-5T9-BL) PROPOSED ELECTRIC METER 59 DASCOMB ROAD (AGL) SINGLE LEVER 120/240V, 1ø 3W 125A (MILBANK PART #U2272-RL-5T9-BL) ANDOVER, MA 01810 SINGLE LEVER 120/240V, 1ø 3W 125A EXISTING UTILITY POLE #2857/19-20 -SHEET TITLE PROPOSED GROUND WIRE UTILITY POLE GROUND LEVEL
ELEV. = 0.0'± A.G.L UTILITY POLE, EXISTING PHOTOGRAPH AND APPURTENANCES AND DETAILS PROPOSED OR EXISTING 3/4"øx10' OF PROPOSED INSTALLATION 147.0'± A.M.S.L COPPER CLAD GROUND ROD, V.I.F. **ELEVATION** SHOWN SCHEMATICALLY. **UTILITY POLE #2857/19-20 ELEVATION** UTILITY POLE #2857/19-20 PHOTOGRAPH (PROPOSED CONDITIONS) 1'-4" 2'-8" 5'-4" (EXISTING CONDITIONS/SCHEMATIC RENDERING) 22x34 SCALE: 3/8"=1'-0" L-2/ 11x17 SCALE: 3/16"=1'-0"





#### SMALL CELL "CANTENNA"

DIMENSIONS: 14" $\pm 0$  x 35.4" $\pm H$  WEIGHT:  $35.0\pm$  LBS QUANTITY: TOTAL OF 1

## TYPICAL "CANTENNA" SPECIFICATIONS SCALE: N.T.S

 $\begin{pmatrix} 1 \\ L-4 \end{pmatrix}$ 



#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 17.3" $\pm$ H x 17.3" $\pm$ W x 11.5" $\pm$ D WEIGHT: 102.5 $\pm$  LBS QUANTITY: TOTAL OF 1

#### REMOTE RADIO HEAD UNIT

DIMENSIONS: 13.9" $\pm$ H x 9.8" $\pm$ W x 4.8" $\pm$ D WEIGHT: 21.4 $\pm$  LBS QUANTITY: TOTAL OF 1

#### TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSIONS

SCALE: N.T.S





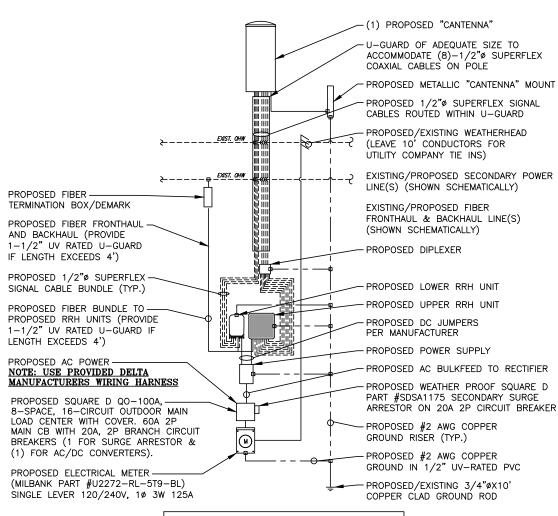
#### DIPLEXER

DIMENSIONS: 4.8" $\pm$ H x 7.9" $\pm$ W x 3.3" $\pm$ D WEIGHT: 7.6 $\pm$  LBS QUANTITY: TOTAL OF 1

#### TYPICAL DIPLEXER DIMENSIONS

SCALE: N.T.S.





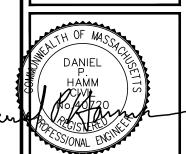
#### ONE-LINE DIAGRAM NOTES:

- PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
- COORDINATE ANY FURTHER MISCELLANEOUS WIRING AND CONDUIT REQUIREMENTS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

#### FIBER/ ELECTRICAL ONE-LINE DIAGRAM

SCALE: NITS





HUDSON

**Design Group LLC** 

CHECKED BY:

APPROVED BY:

SUBMITTALS

DATE DESCRIPTION

DPH

REV.	DATE	DESCRIPTION	В
1	07/25/22	REVISED TO TOP MOUNT	s
0	12/10/21	LEASE EXHIBIT	С

ANDOVER MA SC35

SITE ADDRESS:
POLE #2857/19-20
59 DASCOMB ROAD
ANDOVER, MA 01810

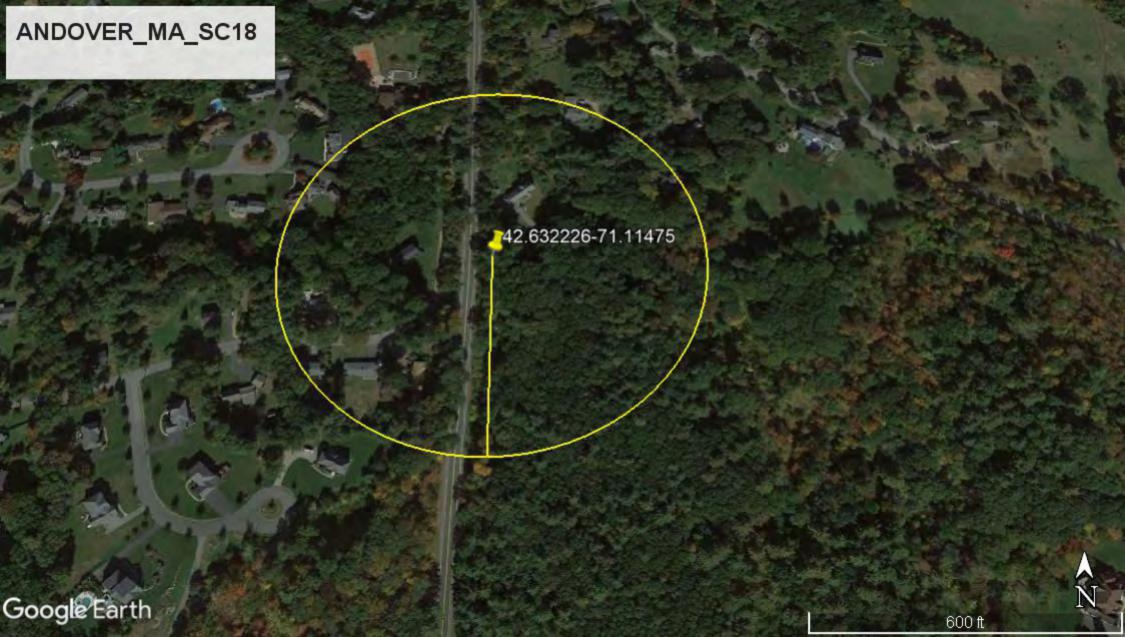
ANTENNA &
ANCILLARY EQUIPMENT
SPECIFICATIONS AND
ONE LINE DIAGRAM

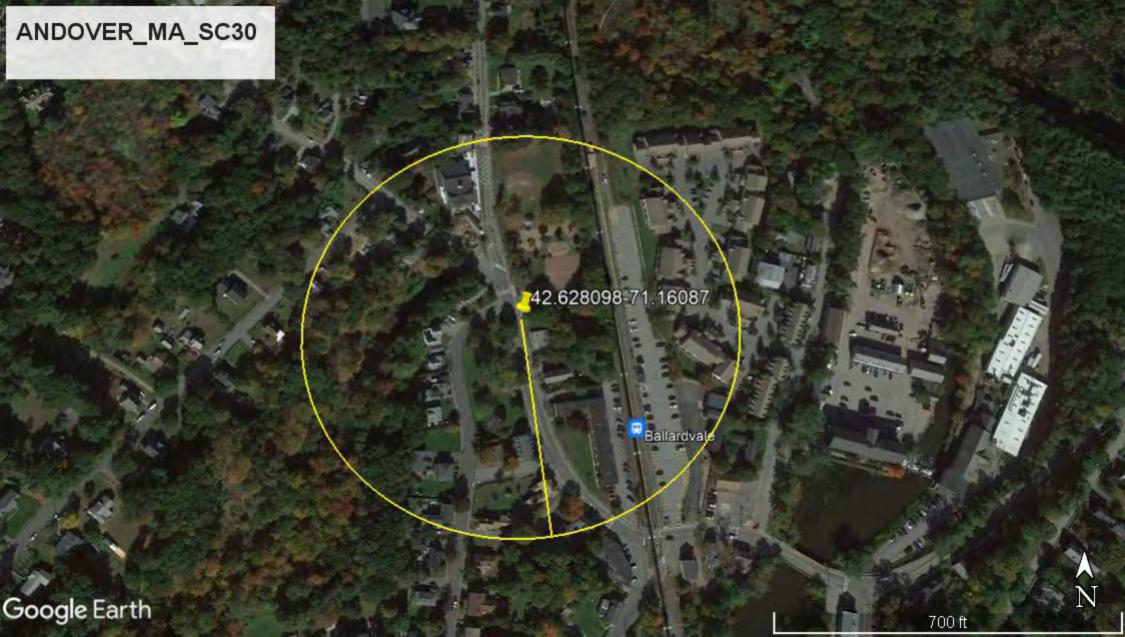
SHEET NUMBER

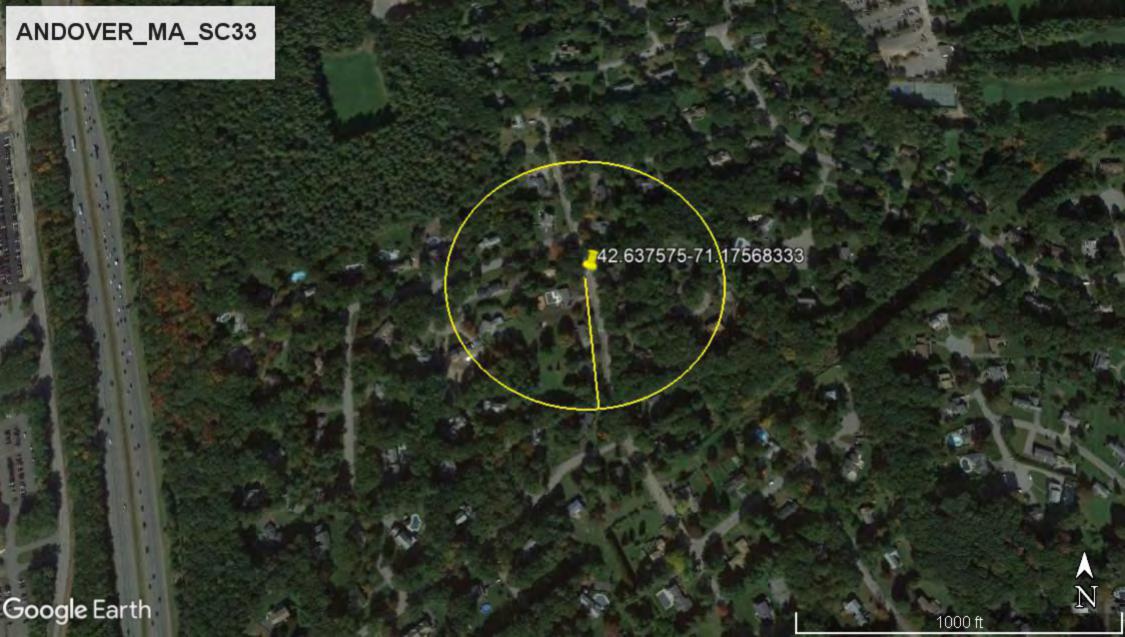
L-4

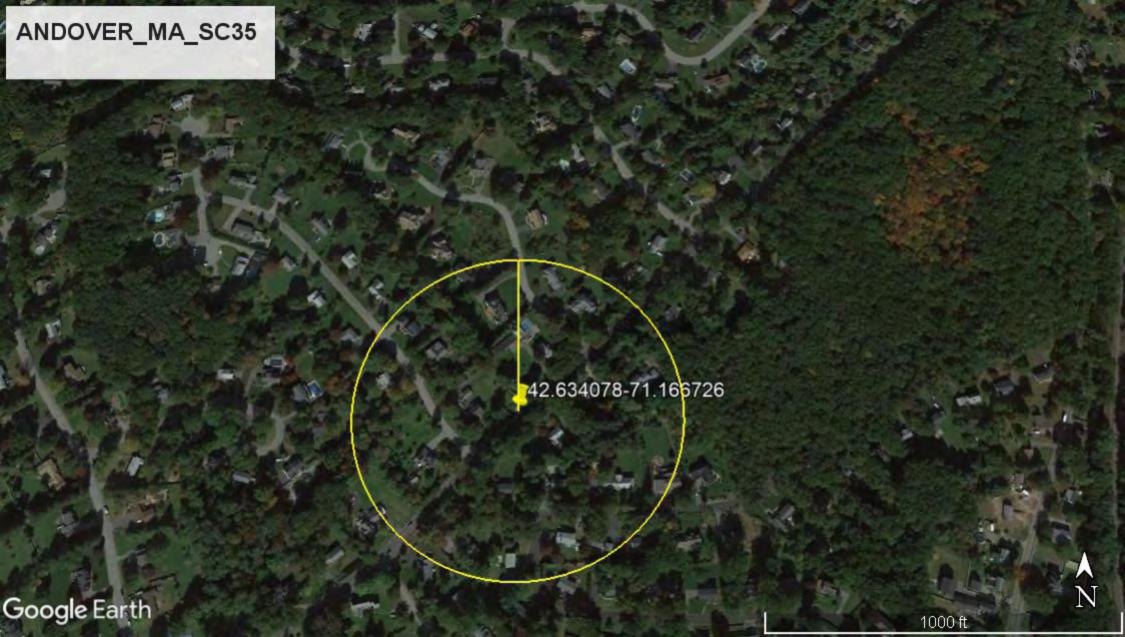
# EXHIBIT 2: DISTANCE MAPS











# EXHIBIT 3: POLE STRUCTURAL ANALYSES

# STRUCTURAL ANALYSIS REPORT

For

# ANDOVER\_MA\_SC17

39 Stinson Road Andover, MA 01810

# **Equipment Mounted on Utility Pole**



Prepared for:



900 Chelmsford Street Tower 2, Floor 5 Lowell, MA 01851

<u>Dated: August 29, 2022 (Rev. 1)</u> <u>July 15, 2022</u>





HUDSON Design Group LLC

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

www.hudsondesigngroupllc.com



#### **SCOPE OF WORK:**

Hudson Design Group LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the existing utility pole supporting the proposed Verizon equipment.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed Verizon equipment listed below.

This office conducted an on-site visual survey of the above areas on April 25, 2022. Attendees included Patrick Barrett (HDG – Field Technician).

## **CONCLUSION SUMMARY:**

Based on our evaluation, we have determined that the existing pole <u>is in conformance</u> with the National Electric Safety Code 2017 (NESC). <u>The utility pole structure is rated at 55.7%</u>.

## **APPURTENANCES CONFIGURATION:**

Appurtenances	Elev.	Mount
(1) Typical Antenna	29'-5"	Side of Wood Pole
(1) Demark Box	17'-6"	Side of Wood Pole
(1) Upper RRH Unit	14'-9"	Side of Wood Pole
(1) Lower RRH Unit	12'-9"	Side of Wood Pole
(1) Diplexer	12'-9"	Side of Wood Pole
(1) Load Center	10'-2"	Side of Wood Pole
(1) Elec. Meter	8'-9"	Side of Wood Pole

<sup>\*</sup>Proposed Equipment shown in bold.

# **ANALYSIS RESULTS SUMMARY:**

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
SP 5 (Existing)	55.7%	0 – 27'-7"	PASS



# **DESIGN CRITERIA:**

National Electric Safety	Code 2017 (NESC) o	and 780 CMR MA Building Code, 9 <sup>th</sup> Edition.
Wind		
City/Town:	Andover	
County:	Middlesex	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	С	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

<sup>1.</sup> Approximate height above grade to center of the proposed antenna: 29'-5" +/-

<sup>\*</sup>Calculations and referenced documents are attached.



#### **EXISTING STRUCTURE:**

The existing 27'-7" +/- wood pole is assumed to be Southern Pine Class 5 (Fb = 8000 psi) with a 10.0" diameter base. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

## **ANTENNA SUPPORT RECOMMENDATIONS:**

The proposed antenna is to be installed on a proposed top mount kit secured to the existing pole using thru bolts.

## RRH SUPPORT RECOMMENDATIONS:

The proposed RRH's are to be installed on a proposed RRH mounting bracket secured to the existing pole using thru bolts.

## **EQUIPMENT SUPPORT RECOMMENDATIONS:**

The proposed equipment is to be installed on the existing wood pole using the approved manufacturer's mount.

# <u>Limitations and assumptions:</u>

- 1. Reference the latest HDG construction drawings for all the equipment locations details.
- 2. Mount all equipment per manufacturer's specifications.
- 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. Contractor to perform pre-inspection prior to construction.
- 4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 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.
- 7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.



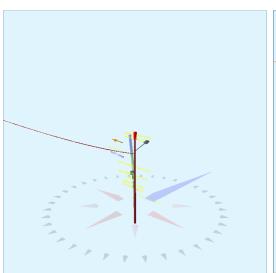
# FIELD PHOTOS:

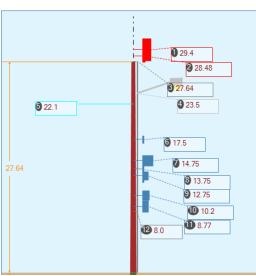


**Photo 1:** Sample photo illustrating the existing wood pole.



Pole Num:	#6821 Pole Length / Class:		35 / 5	Code:	NESC	Structure Type:		Deadend	
Pole Number:	#6821	Species:	SOUTHERN PINE		NESC Rule:	Rule 250B	Status	ı	Unguyed
Site Name:	Andover MA SC17	Setting Depth	ng Depth (ft): 7.36		Construction Grade:	С	Pole Strength Factor	r:	0.85
Address:	39 Stinson Road	G/L Circumfe	rence (in):	31.42	Loading District:	Heavy	Transverse Wind LF	:	1.75
Town, State:	Andover, MA	G/L Fiber Stre	G/L Fiber Stress (psi):		Ice Thickness (in):	0.50	Wire Tension LF:		1.30
Zip Code:	01810	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	39.53	Vertical LF:		1.90
Designed By:	JC	Fiber Stress I	Ht. Reduc:	No	Wind Pressure (psf)	: <b>4.00</b>			
Latitude:		42.6	<b>36563</b> Longit	ude:		-71.115541	Elevation:		89.6M





Pole Capacity Util	ization (%)	Height (ft)	Wind Angle (deg)
Maximum	55.7	0.0	277.0
Groundline	55.7	0.0	277.0
Vertical	5.4	16.1	277.0

Pole Moments (ft-	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	30,772	272.0	277.0
Groundline	30,772	272.0	277.0
GL Allowable	55,654		

Groundline Load Summar	Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 272.0°													
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)				
Powers	1,155	80.9	26,002	84.5	46.7	3,142	422	5	3,148	46.3				
GenericEquipments	72	5.1	1,401	4.6	2.5	169	563	7	176	2.6				
Pole	129	9.0	1,855	6.0	3.3	224	1,129	14	239	3.5				
Streetlights	40	2.8	966	3.1	1.7	117	114	1	118	1.7				
Risers	31	2.2	547	1.8	1.0	66	68	1	67	1.0				
Insulators	0	0.0	0	0.0	0.0	0	10	0	0	0.0				
Pole Load	1,426	100.0	30,772	100.0	55.3	3,719	2,305	29	3,748	55.1				
Pole Reserve Capacity			24,882		44.7	3,081			3,052	44.9				

Load Summary by Owner -	oad Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 272.0°													
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)				
Existing	1,195	83.8	26,969	87.6	48.5	3,259	545	7	3,266	48.0				
Proposed	103	7.2	1,948	6.3	3.5	235	630	8	243	3.6				
Pole	129	9.0	1,855	6.0	3.3	224	1,129	14	239	3.5				
Totals:	1,426	100.0	30,772	100.0	55.3	3,719	2,305	29	3,748	55.1				

**Detailed Load Components:** 

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Secondary	DUPLEX 1/0	Existing	22.05	5.83	0.9540	•	0.260	193.0	270.0	193.0			73	4	77
Secondary	DUPLEX 1/0	Existing	22.15	5.83	0.9540		0.260	193.0	270.0	193.0			73	4	77
Overlashed Bundle	8M	Existing	22.10	5.83	0.2720	3.94	0.131	193.0	270.0	193.2	888	25,778	61	9	25,849
											Totals:	25,778	207	17	26,002

GenericEquipm	nent	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Cylinder	Typical Antenna	Proposed	29.40	0.90	0.0	0.0	35.00	35.40		14.00		0	713	714
Cylinder	Top Mount Bracket	Proposed	28.48	0.10	180.0	0.0	5.00	20.00		5.00		0	144	144
Box	Elec. Meter	Proposed	8.77	6.87	180.0	0.0	15.00	18.50	5.00		10.00	-1	64	63
Box	Load Center	Proposed	10.20	6.12	180.0	0.0	19.80	15.50	3.70		11.30	-1	46	46
Box	Mounting Bracket	Proposed	13.75	8.02	180.0	0.0	32.20	42.00	2.00		3.00	-1	91	89

# O-Calc® Pro Analysis Report

Monday, August 29	, 2022 1:13 PM
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Вох	Upper RRH	Proposed	14.75	16.77	180.0	0.0	128.10	17.30	11.50	17.30	-12	215	203
l pox	Opper KKIT	rioposeu	14.73	10.77	100.0	0.0	120.10	17.30	11.50	 17.30	-12	213	203
Box	Lower RRH	Proposed	12.75	13.42	180.0	0.0	29.00	13.90	4.80	 9.80	-2	72	70
Box	DIPLEXER	Proposed	12.75	10.67	180.0	0.0	29.00	4.80	3.30	 7.90	-2	17	15
Box	Verizon Fiber Demarc	Proposed	17.50	5.45	180.0	0.0	3.00	12.30	3.40	 3.00	0	57	57
										Totals:	-18	1,419	1,401

Streetlight		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Flood Light	Streetlight - 6 ft. Arm	Existing	23.50	3.25	0.0	0.0	60.00	24.00	20.00	3.00	72.00	17	950	966
											Totals:	17	950	966

Riser		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Ground Wire 180.0° H:8.0	Ground Wire	Proposed	8.00	5.24	180.0	180.0	8.00	96.00	0.50	0.50	96.00	0	12	12
2" U-Guard 215.0° H:27.64	2" U-Guard	Proposed	27.64	5.24	215.0	215.0	27.64	331.68	2.00	2.00	331.68	6	529	535
											Totals:	6	541	547

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Bolt	Single Bolt	Existing	22.10	0.00	270.0	180.0	5.00	3.00	0.10	0	0	0
									Totals:	0	0	0

Pole Buck	ling												
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
2.00	16.08	33.45	9.23	4.82	6.05	10.01	2.13e+6	60.00	57.00	27.64	42,801	426.81	18.52



# FIELD PHOTOS:



Photo 1: Sample photo illustrating the existing wood pole.

# STRUCTURAL ANALYSIS REPORT

For

# **ANDOVER MA SC18**

36 Vine Street Andover, MA 01810

# **Equipment Mounted on Utility Pole**



**Prepared for:** 



HAMM

900 Chelmsford Street, Tower 2 Floor 5 Lowell, MA 01851

Dated: July 15, 2022



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



## SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the existing utility pole supporting the proposed Verizon equipment.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed Verizon equipment listed below.

This office conducted an on-site visual survey of the above areas on November 30, 2021. Attendees included Sam Foley (HDG – CAD Designer).

# **CONCLUSION SUMMARY:**

Based on our evaluation, we have determined that the existing pole <u>is in conformance</u> with the National Electric Safety Code 2017 (NESC). <u>The utility pole structure is rated at</u> 87.7%.

## APPURTENANCES CONFIGURATION:

Appurtenances	Elev.	Mount
(1) Typical Antenna	38'-5"	Top of Pole Extension
(1) Demark Box	17'-6"	Side of Wood Pole
(1) Upper RRH Unit	14'-7"	Side of Wood Pole
(1) Lower RRH Unit	12'-7"	Side of Wood Pole
(1) Diplexer	12'-7"	Side of Wood Pole
(1) Load Center	10'-2"	Side of Wood Pole
(1) Elec. Meter	8'-6"	Side of Wood Pole

<sup>\*</sup>Proposed Equipment in bold.

# ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
SP 3 (Existing)	87.7%	0-32'- <b>10</b> "	PASS



# DESIGN CRITERIA:

National Electric Safety	Code 2017 (NESC) a	and 780 CMR MA Building Code, 9 <sup>th</sup> Edition.
Wind		
City/Town:	Andover	
County:	Middlesex	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	С	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: 38'-5" +/-

<sup>\*</sup>Calculations and referenced documents are attached.



#### **EXISTING STRUCTURE:**

The existing 32'-10" +/- wood pole is assumed to be Southern Pine Class 3 (Fb = 8000 psi) with a 12.0" diameter base. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

## ANTENNA SUPPORT RECOMMENDATIONS:

The proposed antenna is to be installed on a proposed top mount kit secured to the proposed pole extension using thru bolts.

## RRH SUPPORT RECOMMENDATIONS:

The proposed RRH's are to be installed on a proposed RRH mounting bracket secured to the existing pole using thru bolts.

## **EQUIPMENT SUPPORT RECOMMENDATIONS:**

The proposed equipment is to be installed on the existing wood pole using the approved manufacturer's mount.

## <u>Limitations and assumptions:</u>

- 1. Reference the latest HDG construction drawings for all the equipment locations details.
- 2. Mount all equipment per manufacturer's specifications.
- 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. Contractor to perform pre-inspection prior to construction.
- 4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 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.
- 7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.



# FIELD PHOTOS:

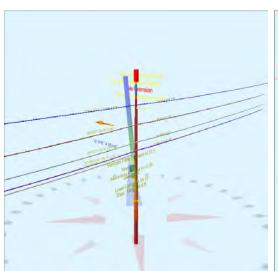


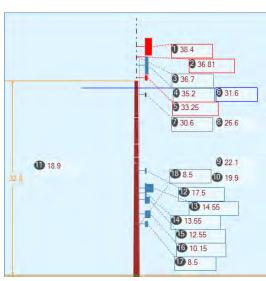
Photo 1: Sample photo illustrating the existing wood pole.



Calculations

Pole Num:	MECO #4540	Pole Length /	Class:	40 / 3	Code:	NESC	Structure Type:		Angle
Pole Number:	MECO #4540	Species:	SOU	THERN PINE	NESC Rule:	Rule 250B	Status		Unguyed
Site Name:	ANDOVER_MA_SC18	Setting Depth	n (ft):	7.2	Construction Grade:	C	Pole Strength Factor	r:	0.85
Address:	36 Vine Street	G/L Circumfe	erence (in):	37.70	Loading District:	Heavy	Transverse Wind LF	:	1.75
Town, State:	Andover, MA	G/L Fiber Str	ess (psi):	8,000	Ice Thickness (in):	0.50	Wire Tension LF:		1.30
Zip Code:	01810	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	39.53	Vertical LF:		1.90
Designed By:	JO	Fiber Stress	Ht. Reduc:	No	Wind Pressure (psf)	: <b>4.00</b>			
Latitude:		42.6	<b>32226</b> Longit	ude:		-71.11475	Elevation:		ОМ





Pole Capacity Utili	zation (%)	Height (ft)	Wind Angle (deg)
Maximum	87.7	0.0	316.3
Groundline	87.7	0.0	316.3
Vertical	8.6	19.8	316.3

Pole Moments (ft-	(b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	83,725	279.3	316.3
Groundline	83,725	279.3	316.3
GL Allowable	96,140		

Groundline Load Summar	Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 279.3°											
	Shear Load* (Ibs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)		
Powers	874	22.4	24,174	28.9	25.1	1,711	688	6	1,717	25.2		
Comms	2,788	71.5	54,731	65.4	56.9	3,873	1,533	14	3,887	57.2		
GenericEquipments	86	2.2	2,221	2.7	2.3	157	639	6	163	2.4		
Pole	148	3.8	2,468	3.0	2.6	175	1,941	17	192	2.8		
Crossarms	0	0.0	-2	0.0	0.0	0	21	0	0	0.0		
Risers	3	0.1	86	0.1	0.1	6	86	1	7	0.1		
Insulators	2	0.0	47	0.1	0.1	3	51	0	4	0.1		
Pole Load	3,901	100.0	83,725	100.0	87.1	5,925	4,959	44	5,969	87.8		
Pole Reserve Capacity			12,415		12.9	875			831	12.2		

Load Summary by Owner -	Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 279.3°											
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)		
Existing	2,010	51.5	47,605	56.9	49.5	3,369	1,996	18	3,386	49.8		
Proposed	1,743	44.7	33,652	40.2	35.0	2,381	1,023	9	2,390	35.2		
Pole	148	3.8	2,468	3.0	2.6	175	1,941	17	192	2.8		
Totals:	3,901	100.0	83,725	100.0	87.1	5,925	4,959	44	5,969	87.8		

**Detailed Load Components:** 

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	AAAC 123.3 KCM AZUSA	Existing	31.60	14.82	0.3980	1.44	0.115	88.3	44.0	88.3	1,313	-30,690	-55	934	-29,811
Primary	AAAC 123.3 KCM AZUSA	Existing	31.60	14.82	0.3980	1.59	0.115	165.6	232.0	165.6	1,313	36,564	-104	1,561	38,021
Secondary	DUPLEX 1/0	Existing	26.56	6.67	0.9540		0.260	88.3	44.0	88.3			-26	357	330
Secondary	DUPLEX 1/0	Existing	26.56	6.57	0.9540		0.260	88.3	44.0	88.3			-29	357	328
Secondary	DUPLEX 1/0	Existing	26.56	6.60	0.9540		0.260	165.6	232.0	165.7			-49	596	547
Secondary	DUPLEX 1/0	Existing	26.56	6.64	0.9540		0.260	165.6	232.0	165.7			-55	596	541
Overlashed Bundle	10M	Existing	26.60	6.60	0.3060	0.85	0.165	88.3	44.0	88.3	1,993	-39,205	-24	920	-38,310
Overlashed Bundle	10M	Existing	26.60	6.60	0.3060	2.82	0.165	165.6	232.0	165.7	2,179	51,038	-46	1,536	52,528
				•					•		Totals:	17,706	-389	6,857	24,174

Comm		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Overlashed Bundle	1/4" EHS	Existing	19.90	7.08	0.2500	0.60	0.121	88.3	44.0	88.3	2,986	-43,942	-19	769	-43,192
CATV	CATV 1.0	Existing	19.83	7.08	1.3300		1.200	88.3	44.0	88.3			-46	347	301
Overlashed Bundle	1/4" EHS	Existing	19.90	7.08	0.2500	2.34	0.121	165.6	232.0	165.7	2,955	51,802	-36	1,284	53,050
CATV	CATV 1.0	Existing	19.83	7.08	1.3300		1.200	165.6	232.0	165.7			-85	579	494
Overlashed Bundle	8M	Existing	22.10	6.92	0.2720	0.72	0.131	88.3	44.0	88.3	2,325	-37,998	-25	782	-37,241
Fiber	TELE 1.0	Existing	22.06	6.99	1.0000		0.400	88.3	44.0	88.3			-34	314	281
Telco	TELE 1.0	Existing	22.06	6.89	1.0000		0.400	88.3	44.0	88.3			-37	314	277
Overlashed Bundle	8M	Existing	22.10	6.92	0.2720	2.64	0.131	165.6	232.0	165.7	2,427	47,240	-47	1,306	48,500
Fiber	TELE 1.0	Existing	22.06	6.93	1.0000		0.400	165.6	232.0	165.7			-63	525	462
Telco	TELE 1.0	Existing	22.06	6.96	1.0000		0.400	165.6	232.0	165.7			-70	525	455
Overlashed Bundle	6M	Proposed	18.90	7.15	0.2420	2.92	0.104	165.6	231.7	165.7	1,780	29,471	44	1,221	30,736
Fiber	TELE 1.0	Proposed	18.82	7.15	1.0000		0.400	165.6	231.7	165.7			61	548	609
											Totals:	46,574	-358	8,516	54,731

GenericEquipme	nt	Owner	Height	Horiz.	Offset	Rotate	Unit	Unit	Unit	Unit	Unit	Offset	Wind	Moment
			(ft)	Offset (in)	Angle (deg)	Angle (deg)	Weight (lbs)	Height (in)	Depth (in)	Diameter (in)	Length (in)	Moment* (ft-lb)	Moment* (ft-lb)	at GL* (ft-lb)
Cylinder	Pole Extension	Proposed	35.20	0.06	46.7	0.0	40.00	36.00		6.86		0	337	337
Cylinder	Top Mount Bracket	Proposed	33.25	0.13	46.7	0.0	5.00	10.80		5.00		0	70	70
Cylinder	Typical Antenna	Proposed	38.40	0.26	46.7	0.0	35.00	35.40		14.00		-1	738	737
Cylinder	Top Mount Bracket	Proposed	36.81	0.13	46.7	0.0	5.00	2.70		5.00		0	19	19
Box	Verizon Fiber Demarc	Proposed	17.50	6.45	316.7	0.0	3.00	12.30	3.40		3.00	2	40	43
Box	Mounting Bracket	Proposed	13.55	6.03	316.7	0.0	32.20	42.00	2.00		3.00	24	106	130
Box	Upper RRH	Proposed	14.55	14.78	316.7	0.0	128.10	17.30	11.50		17.30	238	251	489
Box	Lower RRH	Proposed	12.55	11.43	316.7	0.0	29.00	13.90	4.80		9.80	42	114	156
Box	Diplexer	Proposed	12.55	8.68	316.7	0.0	29.00	4.80	3.30		7.90	32	32	63
Box	Load Center	Proposed	10.15	7.13	316.7	0.0	19.80	15.50	3.70		11.30	18	110	128
Box	Elec. Meter	Proposed	8.50	8.39	316.7	0.0	10.00	12.00	6.00		6.00	11	38	49
											Totals:	365	1,856	2,221

Crossarm		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Standoff	12" Standoff	Existing	30.60	4.57	46.7	46.7	11.30	4.75	1.50	12.00	-5	3	-2
										Totals:	-5	3	-2

Riser		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
1/2" Ground Wire 316.7° H:8.5	1/2" Ground Wire	Proposed	8.50	6.23	316.7	316.7	8.50	102.00	0.50	0.50	102.00	3	0	3

# O-Calc® Pro Analysis Report

Monday, July 18, 2022 9:08 AM

1/2" U-Guard 336.7° H:36.7 1/2" U-Guard Proposed 36.70 6.23 336.7 336.7 36.70 440.40 0.50 0.50 440.40 10 73 83 86 Totals: 13 73

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Pin	Pin Insulator - 15 kV	Existing	30.60	6.00	136.7	0.0	10.00	2.50	12.00	0	36	36
Spool	Spool 3"	Existing	26.60	0.00	136.7	0.0	2.00	3.00	3.19	0	10	10
Bolt	Three Bolt	Existing	19.90	0.00	159.8	23.1	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	22.10	0.00	136.7	0.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	18.90	0.00	226.7	90.0	5.00	3.00	0.10	0	0	0
									Totals:	0	47	47

Pole Buckl	ing												
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
2.00	19.81	33.53	11.05	6.49	7.32	12.01	2.13e+6	60.00	57.00	32.80	57,900	576.67	11.63

User:jcortez HDG OCP:6.02 \*Includes Load Factor(s) Page 4 of 4 <sup>2</sup>Worst Wind Per Guy Wire <sup>3</sup>Wind At 316.3°

# STRUCTURAL ANALYSIS REPORT

For

# **ANDOVER MA SC30**

164 Andover Street Andover, MA 01810

# **Equipment Mounted on Utility Pole**



Prepared for:



900 Chelmsford Street, Tower 2 Floor 2 Lowell, MA 01851

Dated: July 15, 2022



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



## SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the existing utility pole supporting the proposed Verizon equipment.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed Verizon equipment listed below.

This office conducted an on-site visual survey of the above areas on November 30, 2021. Attendees included Sam Foley (HDG – CAD Designer).

## **CONCLUSION SUMMARY:**

Based on our evaluation, we have determined that the existing pole <u>is in conformance</u> with the National Electric Safety Code 2017 (NESC). <u>The utility pole structure is rated at 77.4</u>%.

## APPURTENANCES CONFIGURATION:

Appurtenances	Elev.	Mount
(1) Typical Antenna	38'-6"	Top of Pole Extension
(1) Demark Box	16'-6"	Side of Wood Pole
(1) Upper RRH Unit	14'-9''	Side of Wood Pole
(1) Lower RRH Unit	12'-9"	Side of Wood Pole
(1) Diplexer	12'-9"	Side of Wood Pole
(1) Load Center	10'-4"	Side of Wood Pole
(1) Elec. Meter	8'-10"	Side of Wood Pole

<sup>\*</sup>Proposed Equipment in bold.

## ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
SP 4 (Existing)	77.4%	O <b>– 33</b> '- <b>2</b> "	PASS



# DESIGN CRITERIA:

National Electric Safety	Code 2017 (NESC) a	and 780 CMR MA Building Code, 9 <sup>th</sup> Edition.
Wind		
City/Town:	Andover	
County:	Middlesex	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	С	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: 38'-6" +/-

<sup>\*</sup>Calculations and referenced documents are attached.



#### **EXISTING STRUCTURE:**

The existing 33'-2" +/- wood pole is assumed to be Southern Pine Class 4 (Fb = 8000 psi) with a 11.0" diameter base. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

## ANTENNA SUPPORT RECOMMENDATIONS:

The proposed antenna is to be installed on a proposed mount kit secured to the proposed pole extension using thru bolts.

## RRH SUPPORT RECOMMENDATIONS:

The proposed RRH's are to be installed on a proposed RRH mounting bracket secured to the existing pole using thru bolts.

## **EQUIPMENT SUPPORT RECOMMENDATIONS:**

The proposed equipment is to be installed on the existing wood pole using the approved manufacturer's mount.

# <u>Limitations and assumptions:</u>

- 1. Reference the latest HDG construction drawings for all the equipment locations details.
- 2. Mount all equipment per manufacturer's specifications.
- 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. Contractor to perform pre-inspection prior to construction.
- 4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 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.
- 7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.



# FIELD PHOTOS:

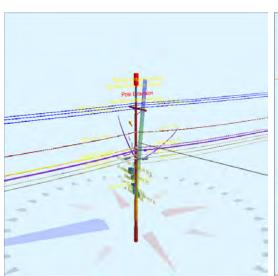


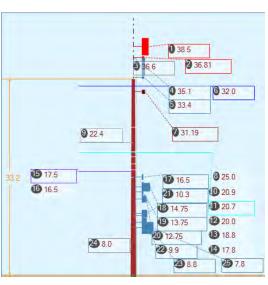
Photo 1: Sample photo illustrating the existing wood pole.



Calculations

Pole Num:		NG #4266 / VZ #39	Pole Length /	Class:	40 / 4	Code:	NESC	Structure Type:	Gu	yed Tangent
Pole Number:		NG #4266 / VZ #39	Species:	SOU	THERN PINE	NESC Rule:	Rule 250B	Status G	uy Wir	es Adequate
Site Name:	ΑN	NDOVER_MA_SC30	Setting Depth	n (ft):	6.8	Construction Grade:	С	Pole Strength Factor	r:	0.85
Address:		170 Andover Street		erence (in):	34.56	Loading District:	Heavy	Transverse Wind LF	<b>:</b>	1.75
Town, State:		Andover, MA	G/L Fiber Str	ess (psi):	8,000	Ice Thickness (in):	0.50	Wire Tension LF:		1.30
Zip Code:		01810	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	39.53	Vertical LF:		1.90
Designed By:		JC	Fiber Stress	Ht. Reduc:	No	Wind Pressure (psf):	4.00			
Latitude:			42.6	<b>528094</b> Longit	ude:		-71.160869	Elevation:		ОМ





Pole Capacity Utili	zation (%)	Height (ft)	Wind Angle (deg)
Maximum	77.4	0.0	102.8
Groundline	77.4	0.0	102.8
Vertical	2.6	20.4	65.5

Pole Moments (ft-l	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	56,368	146.4	102.8
Groundline	56,368	146.4	102.8
GL Allowable	74,063		

Guy System Component Summary	Load From Angle o		Individual Maximum Load With Overload Applied					
Description	Lead Length (ft)	Lead Angle (deg)	Height (ft)	Nominal Capacity (%)	Wind Angle (deg)	Max* Load Capacity (%)	Wind Angle (deg)	
? Anchor	126.0	245.5		12.6	102.8	15.1	70.0	
? EHS 3/8 (Span/Head)			22.4	18.2	102.8	21.8	70.0	
		System Capac	ity Summary:	Adeq	uate	Adequate		

Monday, July 18, 2022 10:09 AM

Groundline Load Summary	y - Reporting A	Angle Mode: L	oad - Reportii	ng Angle: 146	.4°					
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	336	10.8	11,091	19.7	15.0	987	911	10	997	14.7
Comms	2,887	93.0	49,548	87.9	66.9	4,411	4,309	45	4,456	65.5
GuyBraces	-370	-11.9	-8,554	-15.2	-11.6	-762	51	1	-761	-11.2
GenericEquipments	101	3.2	1,383	2.5	1.9	123	711	7	131	1.9
Pole	124	4.0	2,145	3.8	2.9	191	1,646	17	208	3.1
Crossarms	13	0.4	467	0.8	0.6	42	101	1	43	0.6
Risers	9	0.3	186	0.3	0.3	17	85	1	17	0.3
Insulators	3	0.1	103	0.2	0.1	9	213	2	11	0.2
Pole Load	3,103	100.0	56,368	100.0	76.1	5,018	8,027	84	5,102	75.0
Pole Reserve Capacity			17,695		23.9	1,782			1,698	25.0

Load Summary by Owner -	Reporting An	gle Mode: Loa	ad - Reporting	Angle: 146.4	•					
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (Ibs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Existing	1,301	41.9	25,679	45.6	34.7	2,286	5,396	57	2,343	34.5
<undefined></undefined>	1,583	51.0	26,981	47.9	36.4	2,402	101	1	2,403	35.3
Proposed	95	3.1	1,563	2.8	2.1	139	884	9	148	2.2
Pole	124	4.0	2,145	3.8	2.9	191	1,646	17	208	3.1
Totals:	3,103	100.0	56,368	100.0	76.1	5,018	8,027	84	5,102	75.0

Detailed Load Components:

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	3.52	0.3980	1.65	0.115	125.2	166.2	125.2	1,156	40,552	8	443	41,003
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	3.52	0.3980	1.55	0.115	103.1	346.6	103.1	986	-34,495	7	373	-34,115
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	44.31	0.3980	1.55	0.115	103.1	346.6	103.1	1,079	-37,782	-58	374	-37,466
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	44.31	0.3980	1.65	0.115	125.2	166.2	125.2	1,079	37,878	-70	443	38,251
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	44.31	0.3980	1.55	0.115	103.1	346.6	103.1	1,079	-37,782	105	374	-37,303

											Totals:	5,649	205	3,775	9,629
Overlashed Bundle	10M	Existing	25.00	6.38	0.3060	1.68	0.165	103.1	346.6	103.2	1,527	-41,727	12	341	-41,375
Overlashed Bundle	10M	Existing	25.00	6.38	0.3060	2.54	0.165	125.2	166.2	125.3	1,500	41,127	14	405	41,546
Secondary	DUPLEX 1/0	Existing	24.96	6.83	0.9540		0.260	103.1	346.6	103.2			15	132	148
Secondary	DUPLEX 1/0	Existing	24.96	5.94	0.9540		0.260	103.1	346.6	103.2			12	132	144
Secondary	DUPLEX 1/0	Existing	24.96	6.83	0.9540		0.260	125.2	166.2	125.4			18	157	175
Secondary	DUPLEX 1/0	Existing	24.96	5.94	0.9540		0.260	125.2	166.2	125.4			14	157	171
Primary	AAAC 123.3 KCM AZUSA	Existing	32.00	44.31	0.3980	1.65	0.115	125.2	166.2	125.2	1,079	37,878	128	443	38,449

Comm		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Overlashed Bundle	1/4" EHS	Existing	20.90	6.64	0.2500	2.37	0.121	125.2	166.2	125.3	1,650	37,781	16	353	38,149
CATV	CATV .75	Existing	20.84	6.64	1.0700		0.900	125.2	166.2	125.3			33	145	178
Overlashed Bundle CATV	1/4" EHS CATV .75	Existing Existing	20.90 20.84	6.64 6.64	0.2500 1.0700	1.48	0.121 0.900	103.1 103.1	346.6 346.6	103.2 103.2	1,696	-38,736	13 27	297 122	-38,426 150
Overlashed Bundle Fiber	1/4" EHS CATV .75	Existing Existing	20.70 20.64	6.65 6.65	0.2500 1.0700	2.37	0.121 0.900	125.2 125.2	166.2 166.2	125.3 125.3	1,650	37,419	16 33	349 144	37,784 177
Overlashed Bundle Fiber	1/4" EHS CATV .75	Existing Existing Existing	20.70	6.65 6.65	0.2500 1.0700	1.20	0.121 0.900	125.2 125.2 125.2	346.5 346.5	125.2 125.2	2,520	-57,027	16 33	356 146	-56,656 180
Overlashed Bundle Fiber	10M CATV 1.0	Existing Existing	20.00 19.92	6.70 6.70	0.3060 1.3300	2.16	0.165 1.200	125.2 125.2	166.2 166.2	125.3 125.3	5,581	122,273	14 37	326 128	122,614 165
Fiber	CATV 1.0	Existing	20.00	7.59	1.3300		1.200	125.2	166.2	125.3			47	128	175
CATV	CATV 1.0	Existing	20.08	6.70	1.3300		1.200	125.2	166.2	125.3			37	145	182
CATV	CATV 1.0	Existing	20.00	5.82	1.3300		1.200	125.2	166.2	125.3			28	128	156
Overlashed Bundle Fiber	10M CATV 1.0	Existing Existing	20.00 19.92	6.70 6.70	0.3060 1.3300	1.52	0.165 1.200	103.1 103.1	346.6 346.6	103.2 103.2	5,363	-117,200	12 31	275 108	-116,914 138
Fiber	CATV 1.0	Existing	20.00	7.59	1.3300		1.200	103.1	346.6	103.2			39	112	150
CATV	CATV 1.0	Existing	20.08	6.70	1.3300		1.200	103.1	346.6	103.2			31	112	143
CATV	CATV 1.0	Existing	20.00	5.82	1.3300		1.200	103.1	346.6	103.2			23	108	131
Overlashed Bundle Fiber	8M TELE 1.0	Existing Existing	18.80 18.76	6.78 6.32	0.2720 1.0000	2.47	0.131 0.400	125.2 125.2	166.2 166.2	125.3 125.3	1,647	33,935	15 18	312 127	34,262 145
Telco	TELE 1.0	Existing	18.76	7.26	1.0000		0.400	125.2	166.2	125.3			24	127	151
Overlashed Bundle Fiber	8M TELE 1.0	Existing Existing	18.80 18.76	6.78 6.32	0.2720 1.0000	1.79	0.131 0.400	103.1 103.1	346.6 346.6	103.2 103.2	1,548	-31,820	12 15	263 110	-31,545 125
Telco	TELE 1.0	Existing	18.76	7.26	1.0000		0.400	103.1	346.6	103.2			20	151	170
Overlashed Bundle Telco	6M TELE 1.0	Existing Existing	17.80 17.75	6.84 6.84	0.2420 1.0000	2.49	0.104 0.400	125.2 125.2	166.2 166.2	125.3 125.3	1,580	30,837	15 22	306 166	31,157 188
Fiber	TELE 1.0	Existing	17.67	6.84	1.0000		0.400	125.2	166.2	125.3			22	128	150
Overlashed Bundle Telco	6M TELE 1.0	Existing Existing	17.80 17.75	6.84 6.84	0.2420 1.0000	1.80	0.104 0.400	103.1 103.1	346.6 346.6	103.2 103.2	1,478	-28,759	13 18	258 109	-28,489 127

User:jcortez HDG OCP:6.02 \*Includes Load Factor(s) Page 3 of 5 2 Worst Wind Per Guy Wire 3 Wind At 102.8°

											Totals:	36,051	992	5,977	43,020
Fiber	TELE 1.0	Proposed	16.42	6.93	1.0000		0.400	125.2	165.5	125.3			61	128	189
Overlashed Bundle	6M		16.50	6.93	0.2420	2.58	0.104	125.2	165.5	125.3	1,271	23,096	44	286	23,426
CATV	CATV .75	Existing	17.50	6.86	1.0700	2.66	0.900	71.2	103.2	71.5	444	6,583	60	-3	6,641
CATV	CATV .50	Existing	17.50	6.86	0.5700	2.43	0.600	71.2	103.2	71.5	336	4,978	41	-2	5,016
CATV	CATV .50	Existing	17.50	6.86	0.5700	2.19	0.600	71.2	103.2	71.4	385	5,714	41	-2	5,752
CATV	CATV .50	Existing	17.50	6.86	0.5700	1.84	0.600	44.0	131.9	44.3	162	3,188	25	-39	3,175
CATV	CATV .50	Existing	17.50	6.86	0.5700	1.60	0.600	44.0	131.9	44.2	192	3,789	25	-39	3,776
Fiber	TELE 1.0	Existing	17.67	6.84	1.0000		0.400	103.1	346.6	103.2			18	108	126

GenericEquip	ment	Owner	Height	Horiz.	Offset	Rotate	Unit	Unit	Unit	Unit	Unit	Offset	Wind	Moment
			(ft)	Offset (in)	Angle (deg)	Angle (deg)	Weight (lbs)	Height (in)	Depth (in)	Diameter (in)	Length (in)	Moment* (ft-lb)	Moment* (ft-lb)	at GL* (ft-lb)
Box	Clinton Ct Sign	Existing	9.90	16.86	78.5	0.0	10.00	8.00	24.00		1.00	9	52	61
Box	Kids At Play Sign	Existing	7.80	5.49	168.5	45.0	10.00	24.00	1.00		24.00	7	125	133
Cylinder	Pole Extension	Proposed	35.10	0.65	258.5	0.0	40.00	36.00		6.86		-1	273	272
Cylinder	Top Mount Bracket	Proposed	33.40	0.83	258.5	0.0	15.16	4.80		5.00		-1	25	25
Cylinder	Typical Antenna	Proposed	38.50	1.00	258.5	0.0	37.90	35.40		14.00		-2	601	599
Cylinder	Top Mount Bracket	Proposed	36.81	0.79	258.5	0.0	5.00	5.10		5.00		0	30	30
Box	Mounting Bracket	Proposed	13.75	8.61	348.5	0.0	32.20	42.00	2.00		3.00	-36	74	37
Box	Upper RRH	Proposed	14.75	17.36	348.5	0.0	128.10	17.30	11.50		17.30	-292	175	-117
Box	Lower RRH	Proposed	12.75	14.01	348.5	0.0	29.00	13.90	4.80		9.80	-53	72	18
Box	Diplexer	Proposed	12.75	14.01	348.5	0.0	29.00	13.90	4.80		9.80	-53	72	18
Box	Load Center	Proposed	10.30	6.68	348.5	0.0	19.80	15.50	3.70		11.30	-17	62	45
Box	Elec. Meter	Proposed	8.80	7.43	348.5	0.0	15.00	19.00	5.00		10.00	-15	64	50
Box	Verizon Fiber Demarc	Proposed	16.50	6.13	348.5	0.0	3.00	12.30	3.40		3.00	-2	33	30
											Totals:	-457	1,658	1,200

Crossarm		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Normal	CROSSARM 3-1/2 X 4- 1/2 X 8	Existing	31.19	5.22	168.5	168.5	53.00	4.50	3.50	96.00	36	369	405
										Totals:	36	369	405

Riser		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
1/2" Ground Wire 348.5° H:8.0	1/2" Ground Wire	Proposed	8.00	5.68	348.5	348.5	8.00	96.00	0.50	0.50	96.00	-3	7	4
1/2" U-Guard 8.5° H:36.6	1/2" U-Guard	Proposed	36.60	5.68	8.5	8.5	36.60	439.20	0.50	0.50	439.20	-11	168	157
											Totals:	-14	176	162

Insulator		Owner	Height (ft)	Horiz. Offset	Offset Angle	Rotate Angle	Unit Weight (lbs)	Unit Diameter	Unit Length	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
				(in)	(deg)	(deg)	(zai)	(in)	(in)	(11-10)	(11-10)	(11-10)
Davit	Insulator, 15 kV	Existing	30.50	0.00	78.5	180.0	60.00	2.50	18.00	0	43	43

									Totals:	0	89	89
Bolt	Three Bolt		16.50	0.00	168.5	180.0	5.00	3.00	0.10	0	0	0
J-Hook	J-Hook	Existing	17.50	0.00	168.5	270.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	17.80	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	18.80	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	20.00	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
J-Hook	J-Hook	Existing	20.70	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
J-Hook	J-Hook	Existing	20.90	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
Bolt	Single Bolt	Existing	25.00	0.00	78.5	180.0	5.00	3.00	0.10	0	0	0
Pin	Pin Insulator - 5 kV	Existing	31.38	-44.00	85.3	0.0	6.00	3.00	7.50	0	22	22
Pin	Pin Insulator - 5 kV	Existing	31.38	44.00	251.8	0.0	6.00	3.00	7.50	0	22	22

Guy Wire and Brace		Owner	Attach Height (ft)	End Height (ft)	Lead/Span Length (ft)	Wire Diameter (in)	Percent Solid (%)	Lead Angle (deg)	Incline Angle (deg)	Wire Weight (lbs/ft)	Rest Length (ft)	Stretch Length (in)
EHS 3/8	Span/Head	Existing	22.40	22.40	126.00	0.375	75.00	245.5	0.0	0.273	123.35	1.96

Guy Wire and Brace (Loads and Reactio		Elastic Modulus (psi)	Rated Tensile Strength (lbs)	Guy Strength Factor	Allowable Tension (lbs)	Initial Tension (lbs)	Loaded Tension* <sup>2</sup> (lbs)	Maximum Tension <sup>2</sup> (lbs)	Applied Tension <sup>3</sup> (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (Ibs)	Moment at GL³ (ft-lb)
EHS 3/8	Span/Head	2.30e+7	15,400	0.90	13,860	700	3,023	2,748	2,525	0	2,525	-400	-8,294
									Totals:	0	2,525	-400	-8,294

Anchor/Rod Load Summary	Owner	Rod Length AGL (in)	Lead Length (ft)	Lead Angle (deg)	Strength of Assembly (lbs)	Anchor/Rod Strength Factor	Allowable Load (lbs)	Max Load² (lbs)	Load at Pole MCU <sup>3</sup> (lbs)	Max Required Capacity <sup>2</sup> (%)
Anchor	Existing	30.00	126.00	245.5	20,000	1.00	20,000	3,023	2,525	15.1

Pole Buckli	ing												
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
0.71	20.39	33.61	10.11	4.43	6.69	11.01	2.13e+6	60.00	57.00	33.20	306,046	3087.44	38.46

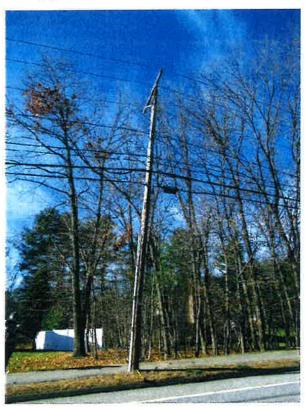
#### STRUCTURAL ANALYSIS REPORT

For

#### ANDOVER\_MA\_SC33

2 Hansom Road Andover, MA 01810

#### **Equipment Mounted on Proposed Utility Pole**



Prepared for:



900 Chelmsford Street, Tower 2 Floor 5 Lowell, MA 01851

Dated: July 20, 2022



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

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#### SCOPE OF WORK:

Hudson Design Group LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the proposed utility pole supporting the proposed Verizon equipment.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed Verizon equipment listed below.

This office conducted an on-site visual survey of the above areas on November 30, 2021. Attendees included Sam Foley (HDG – CAD Designer).

#### **CONCLUSION SUMMARY:**

Based on our evaluation, we have determined that the proposed pole <u>is in conformance</u> with the National Electric Safety Code 2017 (NESC). <u>The utility pole structure is rated at</u> 72.2%.

#### APPURTENANCES CONFIGURATION:

Appurtenances	Elev.	Mount
(1) Typical Antenna	39'-3"	Top of Pole Extension
(1) Demark Box	16'-0"	Side of Wood Pole
(1) Upper RRH Unit	14'-3"	Side of Wood Pole
(1) Lower RRH Unit	12'-3"	Side of Wood Pole
(1) Diplexer	12'-3"	Side of Wood Pole
(1) Load Center	10'-3"	Side of Wood Pole
(1) Elec. Meter	8'-9''	Side of Wood Pole

<sup>\*</sup>Proposed Equipment in bold.

#### ANALYSIS RESULTS SUMMARY:

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
SP 2 (Proposed)	72.2%	O <b>– 34</b> '- <b>0</b> "	PASS



#### DESIGN CRITERIA:

National Electric Safety	Code 2017 (NESC) a	and 780 CMR MA Building Code, 9 <sup>th</sup> Edition
Wind		
City/Town:	Andover	
County:	Middlesex	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	С	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: 39'-3" +/-

<sup>\*</sup>Calculations and referenced documents are attached.



#### PROPOSED STRUCTURE:

The proposed 34'-0" +/- wood pole is assumed to be Southern Pine Class 2 (Fb = 8000 psi) with a 11.62" diameter base. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

#### ANTENNA SUPPORT RECOMMENDATIONS:

The proposed antenna is to be installed on a proposed top mount kit secured to the proposed pole extension using thru bolts.

#### RRH SUPPORT RECOMMENDATIONS:

The proposed RRH's are to be installed on a proposed RRH mounting bracket secured to the side of the proposed pole using thru bolts.

#### **EQUIPMENT SUPPORT RECOMMENDATIONS:**

The proposed equipment is to be installed on the proposed wood pole using the approved manufacturer's mount.

#### Limitations and assumptions:

- 1. Reference the latest HDG construction drawings for all the equipment locations details.
- 2. Mount all equipment per manufacturer's specifications.
- 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. Contractor to perform pre-inspection prior to construction.
- 4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 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.
- 7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.



#### FIELD PHOTOS:

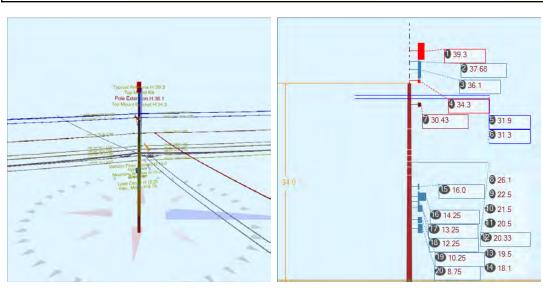


Photo 1: Sample photo illustrating the existing wood pole (to be removed and replaced).



Calculations

Pole Num:		Proposed	Pole Length /	Class:	40 / 2	Code:	NESC	Structure Type:	Ungu	yed Tangent
Pole Number:		Proposed	Species:	SOU	THERN PINE	NESC Rule:	Rule 250B	Status		Unguyed
Site Name:	ANDO'	VER_MA_SC33	Setting Depth	n (ft):	6.0	Construction Grade:	C	Pole Strength Factor	r:	0.85
Address:	2	Hansom Road	G/L Circumfe	rence (in):	36.50	Loading District:	Heavy	Transverse Wind LF	:	1.75
Town, State:		Andover, MA	G/L Fiber Stre	ess (psi):	8,000	Ice Thickness (in):	0.50	Wire Tension LF:		1.00
Zip Code:		01810	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	39.53	Vertical LF:		1.90
Designed By:		JC	Fiber Stress I	Ht. Reduc:	No	Wind Pressure (psf)	: <b>4.00</b>			
Latitude:			42.6	<b>37576</b> Longit	ude:		-71.175683	Elevation:		ОМ



Pole Capacity Uti	lization (%)	Height (ft)	Wind Angle (deg)
Maximum	72.2	0.0	77.0
Groundline	72.2	0.0	77.0
Vertical	19.6	21.3	77.0

Pole Moments (ft-	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	61,919	78.3	77.0
Groundline	61,919	78.3	77.0
GL Allowable	87,248		

Groundline Load Summary	y - Reporting A	ngle Mode: L	oad - Reportii	ng Angle: 78.3	3°					
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	1,316	57.9	38,088	61.5	43.7	2,830	1,273	12	2,842	41.8
Comms	652	28.7	18,220	29.4	20.9	1,354	4,475	42	1,396	20.5
GenericEquipments	112	4.9	1,974	3.2	2.3	147	673	6	153	2.3
Pole	188	8.3	3,403	5.5	3.9	253	1,929	18	271	4.0
Crossarms	1	0.1	42	0.1	0.1	3	101	1	4	0.1
Insulators	6	0.3	192	0.3	0.2	14	198	2	16	0.2
Pole Load	2,274	100.0	61,919	100.0	71.0	4,600	8,649	82	4,682	68.9
Pole Reserve Capacity			25,329		29.0	2,200			2,118	31.1

Load Summary by Owner -	- Reporting An	gle Mode: Loa	ad - Reporting	Angle: 78.3°						
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Existing	1,772	77.9	52,273	84.4	59.9	3,884	5,229	49	3,933	57.8
Proposed	314	13.8	6,242	10.1	7.2	464	1,490	14	478	7.0
Pole	188	8.3	3,403	5.5	3.9	253	1,929	18	271	4.0
Totals:	2,274	100.0	61,919	100.0	71.0	4,600	8,649	82	4,682	68.9

**Detailed Load Components:** 

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	AAAC 123.3 KCM AZUSA	Existing	31.30	45.35	0.3980	2.19	0.115	201.0	166.0	201.0	1,545	2,008	508	2,690	5,206
Primary	AAAC 123.3 KCM AZUSA	Existing	31.30	45.35	0.3980	1.68	0.115	146.9	346.0	146.9	1,545	-2,008	371	1,966	329
Primary	AAAC 123.3 KCM AZUSA	Existing	31.30	45.35	0.3980	2.19	0.115	201.0	166.0	201.0	1,545	2,008	-503	2,690	4,195
Primary	AAAC 123.3 KCM AZUSA	Existing	31.30	45.35	0.3980	1.68	0.115	146.9	346.0	146.9	1,545	-2,008	-368	1,966	-409
Secondary	DUPLEX 1/0	Existing	26.05	6.66	0.9540		0.260	201.0	166.0	201.1			-89	987	899
Secondary	DUPLEX 1/0	Existing	26.05	6.66	0.9540		0.260	146.9	346.0	146.9			-65	722	657
Secondary	TRIPLEX 1/0	Existing	25.90	60.37	1.0300	2.24	0.399	85.0	65.4	85.1	698	17,854	-6	60	17,908
Primary	AAAC 123.3 KCM AZUSA	Existing	31.90	3.89	0.3980	1.35	0.115	146.9	346.0	146.9	1,536	-2,033	32	2,003	2

Primary	AAAC 123.3 KCM AZUSA	Existing	31.90	3.89	0.3980	2.62	0.115	201.2	166.0	201.2	1,526	2,021	44	2,743	4,807
Overlashed Bundle	10M	Existing	26.10	6.66	0.3060	2.40	0.165	201.0	166.0	201.1	2,453	2,656	-78	2,593	5,171
Overlashed Bundle	10M	Existing	26.10	6.66	0.3060	1.28	0.165	146.9	346.0	146.9	2,324	-2,516	-57	1,895	-678
											Totals:	17,983	-211	20,315	38,088

Comm		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Overlashed Bundle	6M	Existing	22.50	6.89	0.2420	2.13	0.104	201.2	166.0	201.2	2,401	2,241	73	2,224	4,538
Fiber	TELE 1.0	Existing	22.45	6.89	1.0000		0.400	201.2	166.0	201.2			107	839	946
Overlashed Bundle	6M	Existing	22.50	6.89	0.2420	1.09	0.104	146.9	346.0	146.9	2,332	-2,177	54	1,624	-499
Fiber	TELE 1.0	Existing	22.45	6.89	1.0000		0.400	146.9	346.0	146.9			78	612	691
Overlashed Bundle	8M	Existing	21.50	6.95	0.2720	2.06	0.131	201.2	166.0	201.2	4,005	3,572	81	2,299	5,951
Fiber	TELE 1.0	Existing	21.45	6.95	1.0000		0.400	201.2	166.0	201.2			112	975	1,086
Fiber	TELE 1.0	Existing	21.37	6.95	1.0000		0.400	201.2	166.0	201.2			112	971	1,083
Overlashed Bundle	8M	Existing	21.50	6.95	0.2720	1.04	0.131	146.9	346.0	146.9	3,982	-3,551	59	1,679	-1,813
Fiber	TELE 1.0	Existing	21.45	6.95	1.0000		0.400	146.9	346.0	146.9			82	712	793
Fiber	TELE 1.0	Existing	21.37	6.95	1.0000		0.400	146.9	346.0	146.9			82	709	790
Overlashed Bundle	10M	Existing	20.50	7.02	0.3060	3.07	0.165	201.2	166.0	201.3	5,985	5,090	88	2,328	7,506
Telco	TELE 1.0	Existing	20.45	7.02	1.0000		0.400	201.2	166.0	201.3			116	1,090	1,205
Fiber	TELE 1.0	Existing	20.37	7.02	1.0000		0.400	201.2	166.0	201.3			116	1,061	1,176
CATV	CATV .75	Existing	20.29	7.02	1.0700		0.900	201.2	166.0	201.3			174	1,081	1,255
Fiber	TELE 1.0	Existing	20.20	7.02	1.0000		0.400	201.2	166.0	201.3			116	1,052	1,168
Overlashed Bundle	10M	Existing	20.50	7.02	0.3060	1.88	0.165	146.9	346.0	147.0	5,199	-4,421	64	1,700	-2,657
Telco	TELE 1.0	Existing	20.45	7.02	1.0000		0.400	146.9	346.0	147.0			85	778	862
Fiber	TELE 1.0	Existing	20.37	7.02	1.0000		0.400	146.9	346.0	147.0			85	774	859
CATV	CATV .75	Existing	20.29	7.02	1.0700		0.900	146.9	346.0	147.0			127	786	913
Fiber	TELE 1.0	Existing	20.20	7.02	1.0000		0.400	146.9	346.0	147.0			85	768	853
Telco	TELE 1.0	Existing	20.33	30.81	1.0000	2.39	0.400	85.0	65.4	85.1	752	15,368	8	47	15,423
Overlashed Bundle	6M	Existing	19.50	7.08	0.2420	2.13	0.104	201.2	166.0	201.2	2,401	1,942	75	1,928	3,945
Telco	TELE 1.0	Existing	19.45	7.08	1.0000		0.400	201.2	166.0	201.2			110	726	837
Overlashed Bundle	6M	Existing	19.50	7.08	0.2420	0.70	0.104	146.9	346.0	146.9	3,137	-2,537	55	1,408	-1,075
Telco	TELE 1.0	Existing	19.45	7.08	1.0000		0.400	146.9	346.0	146.9			81	711	791
Telco Telco	TELE 1.0 TELE 1.0	Existing	19.47 19.47	19.34 19.34	1.0000 1.0000	2.39 1.68	0.400 0.400	85.0 89.6	65.4 236.4	85.1 89.7	752 2,530	14,814 -47,469	14 15	45 139	14,873 -47,316
Overlashed Bundle	6M	Existing Proposed	19.47	7.17	0.2420	2.13	0.400	201.2	166.0	201.2	2,530	1,803	76	1,789	3,668
Fiber	TELE 1.0	Proposed	18.05	7.17	1.0000	2.10	0.400	201.2	166.0	201.2	<u>-,</u> -701	1,000	112	674	786
Overlashed Bundle	6M	Proposed	18.10	7.17	0.2420	0.70	0.104	146.9	346.0	146.9	3,137	-2,355	56	1,307	-993
Fiber	TELE 1.0	Proposed	18.05	7.17	1.0000	5.70	0.400	146.9	346.0	146.9	5,.51	_,550	82	492	574
		•								ı	Totals:	-17,682	2,577	33,326	18,220

User:jcortez HDG OCP:6.02 \*Includes Load Factor(s) Page 3 of 4 <sup>2</sup> Worst Wind Per Guy Wire <sup>3</sup> Wind At 77°

GenericEquip	oment	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Cylinder	Typical Antenna	Proposed	39.30	0.67	270.0	0.0	37.90	35.40		14.00		4	993	997
Cylinder	Pole Extension	Proposed	36.10	0.96	270.0	0.0	40.00	36.00		6.86		-6	455	448
Cylinder	Top Mount Kit	Proposed	37.68	1.14	270.0	0.0	15.16	5.10		3.50		-3	33	30
Cylinder	Top Mount Bracket	Proposed	34.30	1.14	270.0	0.0	5.00	7.20		5.00		-1	63	62
Box	Mounting Bracket	Proposed	13.25	5.97	256.0	0.0	32.20	42.00	2.00		3.00	-32	136	104
Box	Upper RRH	Proposed	14.25	14.72	256.0	0.0	128.10	17.30	11.50		17.30	-313	323	10
Box	Lower RRH	Proposed	12.25	11.37	256.0	0.0	29.00	13.90	4.80		9.80	-55	147	92
Box	Diplexer	Proposed	12.25	8.62	256.0	0.0	29.00	4.80	3.30		7.90	-42	41	-1
Box	Verizon Fiber Demarc	Proposed	16.00	6.50	256.0	0.0	3.00	12.30	3.40		3.00	-3	48	45
Box	Load Center	Proposed	10.25	7.26	256.0	0.0	19.80	12.60	4.20		8.80	-24	93	69
Box	Elec. Meter	Proposed	8.75	7.76	256.0	0.0	15.00	19.00	5.00		10.00	-19	136	116
											Totals:	-493	2,467	1,974

Crossarm		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Normal	CROSSARM 3-1/2 X 4- 1/2 X 8	Proposed	30.43	5.64	166.0	166.0	53.00	4.50	3.50	96.00	2	40	42

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Pin	Pin Insulator - 10 kV	Proposed	30.62	-45.00	83.1	0.0	7.00	4.50	8.50	0	60	60
Pin	Pin Insulator - 10 kV	Proposed	30.62	45.00	248.9	0.0	7.00	4.50	8.50	0	60	60
Bolt	Single Bolt	Proposed	26.10	0.00	256.0	256.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	22.50	0.00	76.0	346.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	21.50	0.00	76.0	346.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	20.50	0.00	76.0	346.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	19.50	0.00	76.0	346.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	18.10	0.00	76.0	346.0	5.00	3.00	0.10	0	0	0
Davit	Insulator, 15 kV	Proposed	30.43	0.00	76.0	76.0	60.00	2.50	18.00	0	70	70
									Totals:	0	192	192

Pole Buckli	Pole Buckling														
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety		
2.00	21.33	33.48	10.72	7.73	7.33	11.62	2.13e+6	60.00	57.00	34.00	44,140	441.28	5.10		

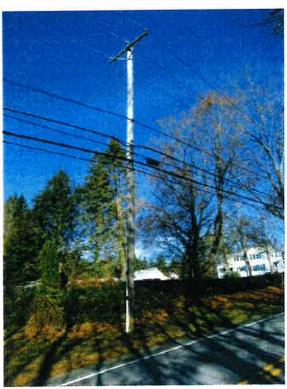
#### STRUCTURAL ANALYSIS REPORT

For

#### ANDOVER\_MA\_SC35

59 Dascomb Road Andover, MA 01810

#### **Equipment Mounted on Existing Utility Pole**



Prepared for:



900 Chelmsford Street Tower 2 Floor 5 Lowell, MA 01851

Dated: July 22, 2022





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

www.hudsondesigngroupllc.com



#### **SCOPE OF WORK:**

Hudson Design Group LLC (HDG) has been authorized by Verizon to conduct a structural evaluation of the existing utility pole supporting the proposed Verizon equipment.

This report represents this office's findings, conclusions and recommendations pertaining to the support of the proposed Verizon equipment listed below.

This office conducted an on-site visual survey of the above areas on November 30, 2021. Attendees included Sam Foley (HDG – CAD Designer).

#### **CONCLUSION SUMMARY:**

Based on our evaluation, we have determined that the existing pole <u>is in conformance</u> with the National Electric Safety Code 2017 (NESC). <u>The utility pole structure is rated at 67.1%.</u>

#### **APPURTENANCES CONFIGURATION:**

Appurtenances	Elev.	Mount
(1) Typical Antenna	43'-8"	Top of Pole Extension
(1) Demark Box	17'-6"	Side of Wood Pole
(1) Upper RRH Unit	14'-9''	Side of Wood Pole
(1) Lower RRH Unit	12'-9"	Side of Wood Pole
(1) Load Center	10'-2"	Side of Wood Pole
(1) Elec. Meter	8'-9"	Side of Wood Pole

<sup>\*</sup> Proposed equipment shown in bold.

#### **ANALYSIS RESULTS SUMMARY:**

Component	Max. Stress Ratio	Elev. of Component (ft.)	Pass/Fail
SP 3 (Existing)	67.1%	0 – 38'-5"	PASS



#### **DESIGN CRITERIA:**

National Electric Safety	Code 2017 (NESC) o	and 780 CMR MA Building Code, 9 <sup>th</sup> Edition.
Wind		
City/Town:	Andover	
County:	Middlesex	
NESC Rule	Rule 250B	NESC Section 25
Construction Grade	С	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

<sup>1.</sup> Approximate height above grade to center of the proposed antenna: 43'-8" +/-

<sup>\*</sup>Calculations and referenced documents are attached.



#### **EXISTING STRUCTURE:**

The existing 38'-5" +/- wood pole is assumed to be Southern Pine Class 3 (Fb = 8000 psi) with a 12.0" diameter base. If field conditions differ from what is assumed in this report, then the engineer of record is to be notified as soon as possible.

#### **ANTENNA SUPPORT RECOMMENDATIONS:**

The proposed antenna is to be installed on a proposed mount kit secured to the proposed pole extension using thru bolts.

#### RRH SUPPORT RECOMMENDATIONS:

The proposed RRH's are to be installed on a proposed RRH mounting bracket secured to the existing pole using thru bolts.

#### **EQUIPMENT SUPPORT RECOMMENDATIONS:**

The proposed equipment is to be installed on the existing wood pole using the approved manufacturer's mount.

#### <u>Limitations and assumptions:</u>

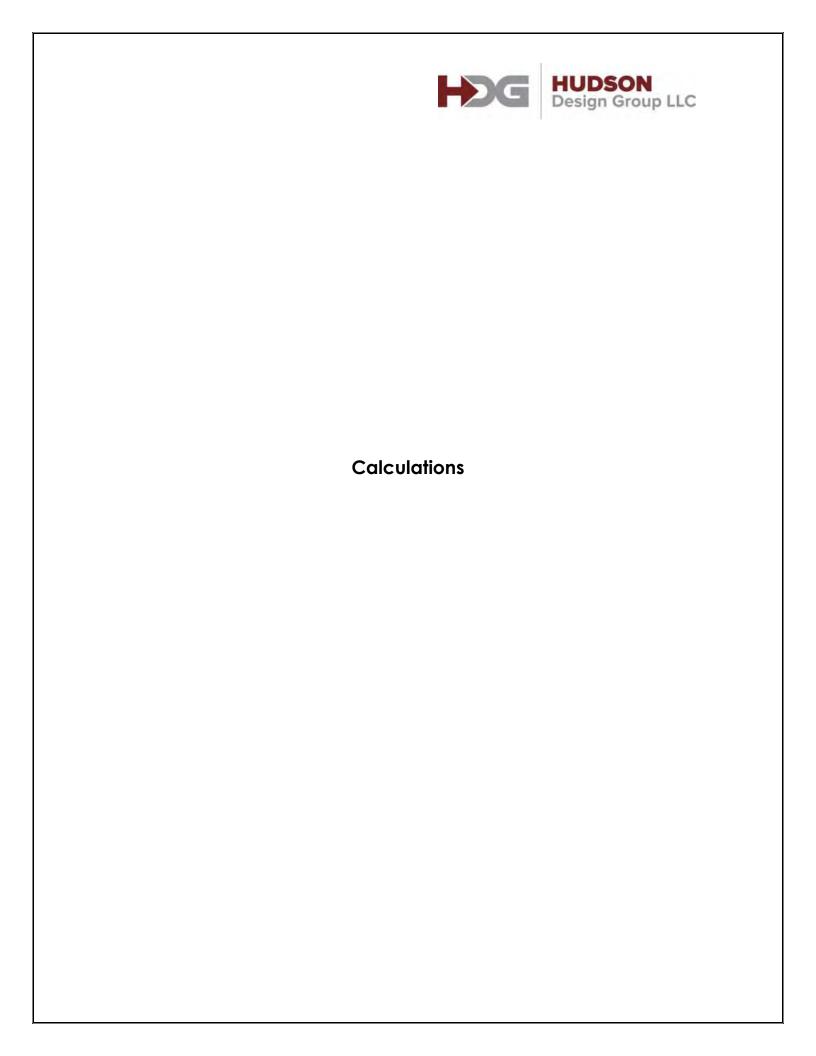
- 1. Reference the latest HDG construction drawings for all the equipment locations details.
- 2. Mount all equipment per manufacturer's specifications.
- 3. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities. Contractor to perform pre-inspection prior to construction.
- 4. All antennas and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 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.
- 7. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.



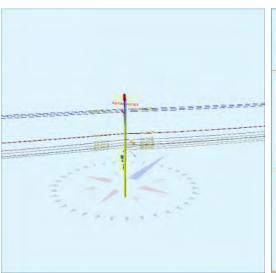
#### FIELD PHOTOS:

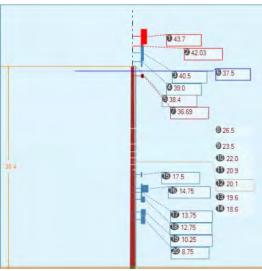


**Photo 1:** Sample photo illustrating the existing wood pole.



Pole Num:		MECO 2857/19-20	Pole Length /	/ Class:	45 / 3	Code:	NESC	Structure Type:	Ungu	yed Tangent
Pole Number		MECO 2857/19-20	Species:	sou	THERN PINE	NESC Rule:	Rule 250B	Status	Status	
Site Name	A١	IDOVER_MA_SC35	Setting Depth	ո (ft)։	6.6	Construction Grade:	C	Pole Strength Factor	r:	0.85
Address		59 Dascomb Road	G/L Circumfe	erence (in):	37.70	Loading District:	Heavy	Transverse Wind LF	:	1.75
Town, State		Andover, MA	G/L Fiber Str	ess (psi):	8,000	Ice Thickness (in):	0.50	Wire Tension LF:		1.00
Zip Code		01810	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	39.53	Vertical LF:		1.90
Designed By		LBW	Fiber Stress	Ht. Reduc:	No	Wind Pressure (psf)	4.00			
Latitude:			42.6	<b>34078</b> Longit	ude:		-71.166726	Elevation:		0'





Pole Capacity Util	ization (%)	Height (ft)	Wind Angle (deg)
Maximum	67.1	0.0	134.1
Groundline	67.1	0.0	134.1
Vertical	15.6	22.6	134.1

Pole Moments (ft-l	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	63,677	115.8	134.1
Groundline	63,677	115.8	134.1
GL Allowable	96,140		

Groundline Load Summary	y - Reporting A	Angle Mode: L	oad - Reportir	ng Angle: 115	.8°					
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	-116	-4.0	1,101	1.7	1.2	75	1,018	9	84	1.2
Comms	2,722	93.8	55,983	87.9	58.2	3,796	2,789	25	3,820	56.2
GenericEquipments	83	2.8	2,260	3.6	2.4	153	612	5	159	2.3
Pole	206	7.1	4,130	6.5	4.3	280	2,272	20	300	4.4
Crossarms	2	0.1	58	0.1	0.1	4	101	1	5	0.1
Risers	1	0.0	2	0.0	0.0	0	73	1	1	0.0
Insulators	4	0.1	143	0.2	0.2	10	101	1	11	0.2
Pole Load	2,901	100.0	63,677	100.0	66.2	4,317	6,965	62	4,379	64.4
Pole Reserve Capacity			32,463		33.8	2,483			2,421	35.6

Load Summary by Owner	Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 115.8°													
	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)				
Existing	2,060	71.0	46,491	73.0	48.4	3,152	3,839	34	3,186	46.9				
Proposed	635	21.9	13,056	20.5	13.6	885	854	8	893	13.1				
Pole	206	7.1	4,130	6.5	4.3	280	2,272	20	300	4.4				
Totals:	2,901	100.0	63,677	100.0	66.2	4,317	6,965	62	4,379	64.4				

**Detailed Load Components:** 

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	44.34	0.3980	1.21	0.115	106.8	47.4	106.8	1,570	22,626	230	1,582	24,438
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	44.34	0.3980	0.73	0.115	138.6	226.4	138.6	1,570	-21,595	298	2,069	-19,228
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	44.34	0.3980	1.21	0.115	106.8	47.4	106.8	1,570	22,626	-254	1,582	23,954
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	44.34	0.3980	0.73	0.115	138.6	226.4	138.6	1,570	-21,595	-330	2,069	-19,856
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	6.81	0.3980	1.21	0.115	106.8	47.4	106.8	1,570	22,626	-34	1,582	24,174
Primary	AAAC 123.3 KCM AZUSA	Existing	37.50	6.81	0.3980	0.73	0.115	138.6	226.4	138.6	1,570	-21,595	-45	2,069	-19,571
Secondary	DUPLEX 1/0	Existing	26.45	6.89	0.9540		0.260	106.8	47.4	106.8			46	578	624

											Totals:	-15,875	168	16,809	1,101
Overlashed Bundle	10M	Existing	26.50	6.89	0.3060	0.81	0.165	138.6	226.4	138.6	3,999	-38,843	52	1,803	-36,987
Overlashed Bundle	10M	Existing	26.50	6.89	0.3060	1.58	0.165	106.8	47.4	106.8	1,953	19,875	40	1,378	21,294
Secondary	DUPLEX 1/0	Existing	26.55	6.89	0.9540		0.260	138.6	226.4	138.6			59	759	819
Secondary	DUPLEX 1/0	Existing	26.45	6.89	0.9540		0.260	138.6	226.4	138.6			59	756	816
Secondary	DUPLEX 1/0	Existing	26.55	6.89	0.9540		0.260	106.8	47.4	106.8			46	580	626

Comm		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Overlashed Bundle	8M	Existing	23.50	7.07	0.2720	1.17	0.131	106.8	47.4	106.8	3,023	27,286	27	999	28,311
Fiber	TELE 1.0	Existing	23.47	6.56	1.0000		0.400	106.8	47.4	106.8			39	290	329
CATV	CATV .50	Existing	23.48	7.35	0.5700		0.600	106.8	47.4	106.8			56	290	346
CATV	CATV .50	Existing	23.43	7.18	0.5700		0.600	106.8	47.4	106.8			55	289	344
Overlashed Bundle	8M	Existing	23.50	7.07	0.2720	1.12	0.131	138.6	226.4	138.6	4,682	-40,338	35	1,306	-38,997
Fiber	TELE 1.0	Existing	23.47	6.56	1.0000		0.400	138.6	226.4	138.6			51	379	430
CATV	CATV .50	Existing	23.48	7.35	0.5700		0.600	138.6	226.4	138.6			73	379	452
CATV	CATV .50	Existing	23.43	7.18	0.5700		0.600	138.6	226.4	138.6			71	378	449
Overlashed Bundle	8M	Existing	22.00	7.16	0.2720	1.40	0.131	106.8	47.4	106.8	2,080	17,573	38	1,111	18,722
Telco	TELE 1.0	Existing	21.96	6.67	1.0000		0.400	106.8	47.4	106.8			50	446	497
Fiber	TELE 1.0	Existing	21.96	7.67	1.0000		0.400	106.8	47.4	106.8			58	446	504
Overlashed Bundle	8M	Existing	22.00	7.16	0.2720	1.02	0.131	138.6	226.4	138.6	3,600	-29,027	50	1,453	-27,524
Telco	TELE 1.0	Existing	21.96	6.67	1.0000		0.400	138.6	226.4	138.6			65	584	649
Fiber	TELE 1.0	Existing	21.96	7.67	1.0000		0.400	138.6	226.4	138.6			75	584	659
Overlashed Bundle	8M	Existing	20.90	7.23	0.2720	1.28	0.131	106.8	47.4	106.8	2,589	20,783	32	972	21,787
Telco	TELE 1.0	Existing	20.87	6.73	1.0000		0.400	106.8	47.4	106.8			45	341	386
Telco	TELE 1.0	Existing	20.87	7.73	1.0000		0.400	106.8	47.4	106.8			51	341	392
Telco	TELE 1.0	Existing	20.79	7.23	1.0000		0.400	106.8	47.4	106.8			48	340	388
Overlashed Bundle	8M	Existing	20.90	7.23	0.2720	1.24	0.131	138.6	226.4	138.6	3,844	-29,450	42	1,271	-28,136
Telco	TELE 1.0	Existing	20.87	6.73	1.0000		0.400	138.6	226.4	138.6			58	446	504
Telco	TELE 1.0	Existing	20.87	7.73	1.0000		0.400	138.6	226.4	138.6			67	446	513
Telco	TELE 1.0	Existing	20.79	7.23	1.0000		0.400	138.6	226.4	138.6			62	444	507
Overlashed Bundle	6M	Existing	19.60	7.31	0.2420	1.47	0.104	106.8	47.4	106.8	1,324	9,966	38	950	10,954
Fiber	TELE 1.0	Existing	19.55	7.31	1.0000		0.400	106.8	47.4	106.8			56	358	414
Overlashed Bundle	6M	Existing	19.60	7.31	0.2420	0.71	0.104	138.6	226.4	138.6	2,846	-20,452	49	1,243	-19,160
Fiber	TELE 1.0	Existing	19.55	7.31	1.0000		0.400	138.6	226.4	138.6			72	468	541
Overlashed Bundle	6M	Proposed	18.60	7.37	0.2420	1.47	0.104	106.8	47.4	106.8	1,324	9,457	39	902	10,398
Fiber	TELE 1.0	Proposed	18.55	7.37	1.0000		0.400	106.8	47.4	106.8			57	340	396
Fiber	TELE 1.0	Existing	20.10	7.28	1.0000	1.56	0.400	106.8	47.0	106.8	4,512	34,170	79	1,216	35,465
Fiber	TELE 1.0	Existing	20.10	7.28	1.0000	1.56	0.400	106.8	47.0	106.8	4,512	34,170	79	1,216	35,465
											Totals:	34,138	1,616	20,229	55,983

User:Ibrennan-white HDG OCP:6.02 \*Includes Load Factor(s) Page 3 of 5 2 Worst Wind Per Guy Wire 3 Wind At 134.1°

GenericEquip	ment	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Cylinder	Typical Antenna	Proposed	43.70	1.34	0.0	0.0	35.00	35.40		14.00		-3	1,043	1,040
Cylinder	Top Mount Bracket	Proposed	42.03	0.16	180.0	0.0	5.00	20.00		5.00		0	210	211
Cylinder	Pole Extension	Proposed	40.50	0.10	0.0	0.0	40.00	36.00		6.86		0	482	481
Cylinder	Top Mount Kit	Proposed	39.00	0.37	0.0	0.0	15.16	24.00		3.50		0	158	157
Box	Mounting Bracket	Proposed	13.75	9.16	223.0	0.0	32.20	42.00	2.00		3.00	-14	89	74
Box	Upper RRH	Proposed	14.75	17.91	223.0	0.0	128.10	17.30	11.50		17.30	-112	210	98
Box	Lower RRH	Proposed	12.75	14.56	223.0	0.0	29.00	13.90	4.80		9.80	-21	70	50
Box	Elec. Meter	Proposed	8.75	7.97	223.0	0.0	15.00	19.00	5.00		10.00	-6	64	58
Box	Load Center	Proposed	10.25	7.23	223.0	0.0	19.80	14.50	3.70		11.30	-7	42	35
Box	Verizon Fiber Demarc	Proposed	17.50	6.63	223.0	0.0	3.00	12.30	3.40		3.00	-1	56	55
											Totals:	-165	2,424	2,260

Crossarm		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Normal	CROSSARM 3-1/2 X 4- 1/2 X 8	Existing	36.69	-5.51	48.0	48.0	53.00	4.50	3.50	96.00	-18	77	58
										Totals:	-18	77	58

Riser		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
2" U-Guard 313.0° H:38.4	2" U-Guard	Proposed	38.40	6.16	313.0	313.0	38.40	460.80	2.00	2.00	460.80	-19	21	2
											Totals:	-19	21	2

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Pin	Pin Insulator - 5 kV	Existing	36.88	44.00	145.1	0.0	6.00	3.50	7.50	0	47	47
Pin	Pin Insulator - 5 kV	Existing	36.88	-44.00	310.9	0.0	6.00	3.50	7.50	0	47	47
Pin	Pin Insulator - 5 kV	Existing	36.88	-4.00	264.0	0.0	6.00	3.50	7.50	0	47	47
Bolt	Single Bolt	Existing	26.50	0.00	138.0	48.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	23.50	0.00	138.0	48.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	22.00	0.00	138.0	48.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	20.90	0.00	138.0	48.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Existing	19.60	0.00	138.0	48.0	5.00	3.00	0.10	0	0	0
Bolt	Three Bolt	Proposed	18.60	0.00	136.9	46.9	5.00	3.00	0.10	0	0	0
J-Hook	J-Hook	Existing	20.10	0.00	138.0	138.0	5.00	3.00	0.10	0	0	0
									Totals:	0	143	143

Friday, July 22, 2022 12:31 PM

#### O-Calc® Pro Analysis Report

Pole Buckl	Pole Buckling												
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
2.00	22.65	33.45	11.08	7.54	7.32	12.01	2.13e+6	60.00	57.00	38.40	44,696	446.50	6.41

# EXHIBIT 4: NATIONAL GRID LETTER OF AUTHORIZATION

### nationalgrid

July 1, 2022

Attn: Town of Andover, MA

To Whom It May Concern:

National Grid, as owner of certain utility poles in public rights-of-way in Andover, MA, is aware and authorizes Verizon Wireless to complete the process of permitting for the installation of necessary telecommunications equipment and corresponding aerial fiber optic cable on a National Grid-owned utility pole at the following location:

ANDOVER_MA_SC17	39 Stinson	Pole # 6821
ANDOVER_MA_SC18	36 Vine Street	Pole # 4540
ANDOVER_MA_SC30	164 Andover Street	Pole # 4266/39
ANDOVER_MA_SC33	2 Hanscom Road	Pole # 7167/32
ANDOVER_MA_SC35	59 Dascomb Road	Pole # 2857, 19/20

Accordingly, National Grid hereby submits its authorization for Verizon Wireless to install its antennae and appurtenant equipment and aerial fiber routes to the National Grid pole at the above location. Please be advised that the undersigned has entered into a master lease agreement authorizing Verizon Wireless to install, attach, maintain, repair, upgrade and use wireless communications equipment and appurtenances on certain utility poles. The installations on National Grid utility poles will be subject to the underlying terms and conditions of the aforementioned agreement by and between National Grid and Verizon Wireless, as the same may be in effect from time to time.

Sincerely,

Keith Amelin National Grid

Kest and

# EXHIBIT 5: RADIO FREQUENCY ENGINEER AFFIDAVIT



#### AFFIDAVIT OF RADIO FREQUENCY ENGINEER

The undersigned, in support of the application to install five (5) small wireless communications facilities (SWF) consisting of one antenna array and associated radio equipment on existing utility poles located in the Town of Andover, Massachusetts, states the following:

- My name is Syed Ali. I have a Bachelor of Science degree in Science and Information Technology
  from the Preston Institute of Management Science and Technology. I have been employed by
  Verizon Wireless for five (5) year as Network Assurance Engineer and for the past one (1) year as
  an RF (Radio Frequency) Engineer. I am responsible for network design in the area of
  Massachusetts that includes the Town of Andover, MA.
- Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.
- 3. The proposed small wireless facilities are within areas where Verizon Wireless has identified a need to install additional facilities in order to provide reliable wireless service for customers and emergency responders. The search areas for the proposed facilities was determined with reference to Verizon's existing network serving the Andover area and by identifying those areas in need of improved service. Furthermore, it was determined that the areas served by the facility would interact well with those of existing and proposed facilities in the surrounding areas.

The following table provides details of the proposed sites:

SITE NAME	ADDRESS	POLE#
ANDOVER MA_SC17	39 Stinson Road	6821
ANDOVER_MA_SC18	36 Vine Street (Pole on Andover Bypass Road)	4540
ANDOVER_MA_SC30	164 Andover Street	4266/39
ANDOVER_MA_SC33	2 Hanscom Road (Pole on LoveJoy Road)	7167/32
ANDOVER MA_SC35	59 Dascomb Road	2857, 19/20

- 4. Small cell deployments are intended to complement, not replace, macro network sites, and are typically target areas of heavy network usage (a.k.a "hotspots"). In doing so, small cells serve to offload the demand on the existing sites serving these hotspots. This not only improves service to the targeted area, but also improves overall system performance elsewhere in the network. In addition, small cells allow for Verizon's deployment of new technologies that will further enhance the network experience and reliability, including faster download time and lower latency.
- Pursuant to its Federal Communications Commission (FCC) licenses, Verizon Wireless is required to ensure that all radio equipment operating at the proposed communications facilities and the

- resulting radio frequency exposure levels are compliant with FCC requirements as well as federal and state health and safety standards.
- 6. Providing wireless communications services is a benefit to the residents of the Town of Andover, as well as to mobile customers traveling through the area. The proposed facilities reflect the locations and designs required to meet Verizon Wireless' network objectives with respect to capacity and coverage enhancement and deployment of new technologies, including 5G. Without the proposed facilities, Verizon Wireless will be unable to provide reliable wireless communication services in these areas of Andover; therefore, Verizon Wireless respectfully requests that the Town of Andover act favorably upon the proposed facilities.

Signed and sworn under the pains and penalties of perjury this 28 day of June, 2022.

Syed Ali

RF Design Engineer

Verizon Wireless

900 Chelmsford Street

Lowell, MA 01851

## EXHIBIT 6: CERTIFICATE OF INSURANCE



#### CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 07/05/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on

this certificate does not comer rights to the certificate holder in field of such endorse	meni(s).						
PRODUCER	CONTACT NAME:						
Aon Risk Services Northeast, Inc. New York NY Office	PHONE (A/C. No. Ext):	PHONE A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 36					
One Liberty Plaza 165 Broadway, Suite 3201	E-MAIL ADDRESS:						
New York NY 10006 USA		ERAGE	NAIC#				
INSURED	INSURER A:	Liberty Mutual Fire In	s Co	23035			
Cellco Partnership dba Verizon Wireless 1095 Avenue of the Americas	INSURER B:	LM Insurance Corporati	on	33600			
New York NY 10036 USA	INSURER C:	Liberty Insurance Corp	oration	42404			
	INSURER D:						
	INSURER E:						
	INSURER F:						

570094417718 **COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:** 

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,

INSR			ADDI	SUBR	T	POLICY FFF	POLICY EXP		wn are as requested	
INSR LTR	<u> </u>	TYPE OF INSURANCE	ADDL	SUBR WVD		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
Α	Х	COMMERCIAL GENERAL LIABILITY			ТВ2691550588142	06/30/2022	06/30/2023	EACH OCCURRENCE	\$2,000,000	
		CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$2,000,000	
	х	XCU Coverage is Included						MED EXP (Any one person)	\$10,000	
								PERSONAL & ADV INJURY	\$2,000,000	
	GEN	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$2,000,000	
	Х	POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$2,000,000	
Α	AUT	OMOBILE LIABILITY			AS2-691-550588-122 AOS	06/30/2022	06/30/2023	COMBINED SINGLE LIMIT (Ea accident)	\$2,000,000	
Α	х	ANYAUTO			AS2-691-550588-132	06/30/2022	06/30/2023	BODILY INJURY ( Per person)		
		OWNED SCHEDULED			NH - Primary			BODILY INJURY (Per accident)		
Α		AUTOS ONLY HIRED AUTOS ONLY NON-OWNED AUTOS ONLY			TL2-691-550588-182 NH - Excess	06/30/2022	06/30/2023	PROPERTY DAMAGE (Per accident)		
		UMBRELLA LIAB OCCUR						EACH OCCURRENCE		
		EXCESS LIAB CLAIMS-MADE						AGGREGATE		
		DED RETENTION								
В		RKERS COMPENSATION AND PLOYERS' LIABILITY			WA569D550588092	06/30/2022	06/30/2023	X PER STATUTE OTH-		
В		PROPRIETOR / PARTNER /	N/A		AOS WC5691550588082	06/30/2022	06/30/2023	E.L. EACH ACCIDENT	\$1,000,000	
_	(Ma	ndatory in NH)	\ \\^^		WI, MN	00, 30, 2022	00/30/2023	E.L. DISEASE-EA EMPLOYEE	\$1,000,000	
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE-POLICY LIMIT	\$1,000,000	
DESC	PIPTIC	ON OF OPERATIONS / LOCATIONS / VEHICLES (ACC	PD 101	Additio	nal Remarks Schedule, may be attached if more	enace is required)				

RE: Verizon Wireless Small Cell locations in Andover, MA.

CERTIFICATE HOLDER	CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast Inc.

The Town of Andover MA 36 Bartlet St. Andover MA 01810 USA

**AGENCY CUSTOMER ID:** 570000027366

LOC #:



#### **ADDITIONAL REMARKS SCHEDULE**

Pag	e	of	

		, <u>, , , , , , , , , , , , , , , , , , </u>	<u> </u>	**************************************	10 0011EB	<u> </u>		rage _ or _			
	Risk Services Northe	ast, Inc.	•		NAMED INSURED  Cellco Partner	rship dba Ve	rizon Wireles	is			
See		57009441	7718								
CARRIE		570094417	7712	NAIC CODE	EFFECTIVE DATE:						
	ITIONAL REMARKS	370034417	710								
	ADDITIONAL REMARKS FOR	M IS A SCHE	DULE	TO ACORD FORM,							
	M NUMBER: ACORD 25	FORM TITE		Certificate of Liability Insura	nce						
	INSURER(S)	AFFORDIN	IG C	OVERAGE	NAIC#						
INSU	RER										
INSU	RER										
INSURER											
INSURER											
ADDITIONAL POLICIES  If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.											
INSR LTR	MATERIA OF STREET	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIN	MITS			
	WORKERS COMPENSATION				(MM/DD/YYYY)						
С		N/A		WA769D550588072 MA	06/30/2022	06/30/2023					

## EXHIBIT 7: PROJECT ENGINEER AFFIDAVIT

#### AFFIDAVIT OF PROJECT ENGINEER

The undersigned, in support of the application to install small wireless telecommunications facilities consisting of antennas and associated radio equipment on the existing wooden utility poles located in the public rights of way in the Town of Andover, Massachusetts, states the following:

- 1. My name is Sean Conway. I am a 4G and 5G Small Cell Project Network Engineer for Verizon Wireless in Eastern Massachusetts.
- 2. Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.
- 3. Verizon Wireless certifies that it will be maintain the installations attached to the National Grid poles in Andover in good repair and in accordance to FCC standards.
- 4. Verizon Wireless certifies that it will remove any installation not in such good repair, or not in use, within 60 days of being taken out of service.

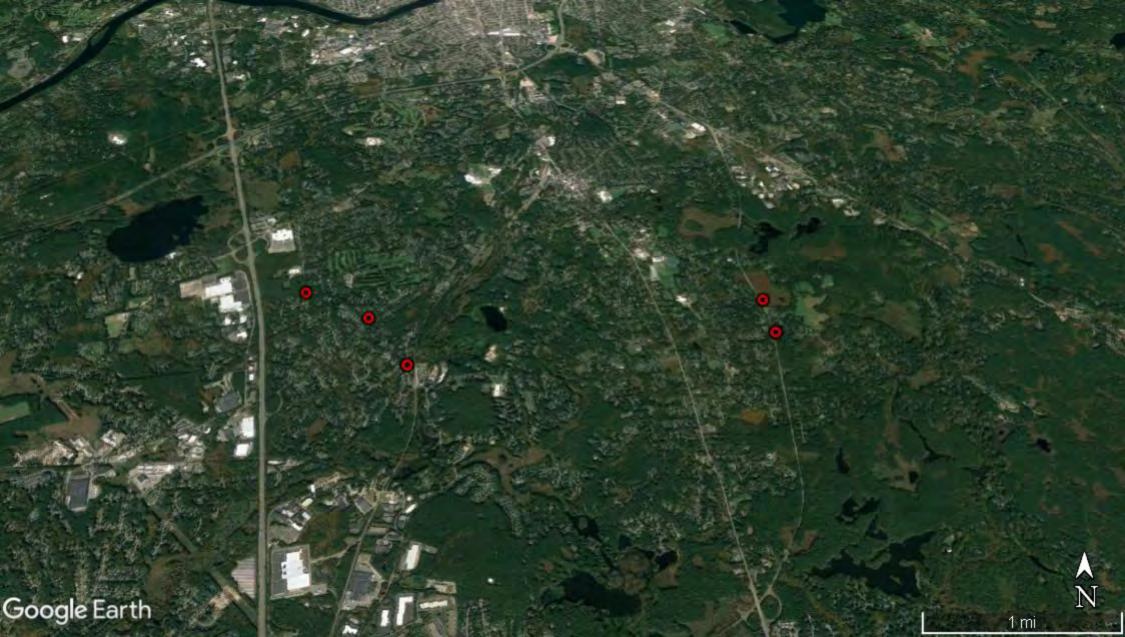
Signed and sworn under the pains and penalties of perjury this 28th day of June 2022.

#### Sean Conway

\_\_\_\_\_

Sean Conway
Engineer IV Specialist Real Estate / Regulatory
Verizon Wireless
900 Chelmsford Street
Lowell, MA 01851

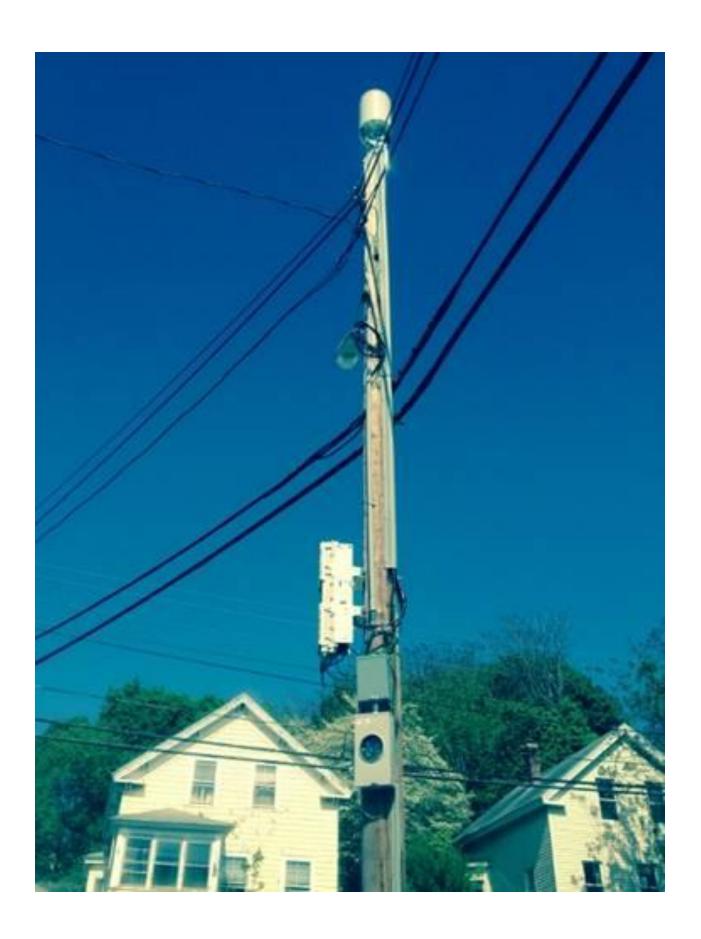
## EXHIBIT 8: COMPOSITE MAP



#### **Examples of Similar Installations**









### TOWN OF ANDOVER MASSACHUSETTS ONE DAY LIQUOR LICENSE

License fee is \$50. Payable to the Town of Andover.

Page 1 of 2

<b>BUSINESS/ORGANIZATION</b>	INFORMATION
Business/Organization Name:	OAK & IRON Brewing Co.
Address:	18 Red Spring RD ANDOVER MA 01810
Social Security/FID No.:	019442262146-5492915
INDIVIDUAL APPLICANT IN	FORMATION Saldwa lagrange
Individual's Name:	James CASS
Address:	15 Great lake lane
Telephone: Description and the	1973.1936.13510 more reasonable rough year and An
Is the Applicant' a United State	
Driver's License & State:	MA S72609724
E-Mail Address	Jim @ OAKAND IRON brewing, Com
EVENT INFORMATION	Exertify under the paint and is unline at perfure than the above inferious at a
Date of Event:	11.13.22 Time: from ~ 9:00 AMED 12:00 PM
Location of Licensed Activity:	TOWN HALL PARK
Purpose of Event:	RUN FOR the TROOPS
Will there be entertainment?	Yes □ No □
Is the event being catered?	Yes D No D
Name of Caterer:	
Number of People Attending: A	AdultsChildren value gal to studi
TYPE OF LICENSE (circle one)	AND STORY WILLIAM STREET, AND
One-Day All-Alcoholic One	e-Day Beer & Wine Charitable Wine Pouring Charitable Wine Auction
PURCHASE AND SERVICE	THE
Is the alcohol being donated?	Yes D No D
Where is the liquor being purch	nased from? OAK & IRON BREWING CO.
Are they a licensed wholesaler?	Yes No D
Who will be serving the alcohol	? OAK & IRON BREWING Ca
Does the server have liquor liab	pility insurance? Yes

\*\*Continue to page 2\*\*

DETERMINATION OF LICE	NSE REC	DUIREN	MENTS		
Is the event held by, or held for	r the bene	fit of, a	business or no	n-prof	fit group?
	Yes	No		Yes	No
Business:			Non-Profit:	0.31	
Will there be a cash bar:					
Is there an entrance fee or donation required?		10/			
Is the event open to the general public?	□				
	OPE	N TO	FOLKS who	PAR	TICIPATE IN RUN FOR the Trap
If the answer to ANY of these o	questions	is YES:			**
					ntion is true and that I will comply wi policies and regulations of the Town
Signature:		978-62.		y licen	
Date of log entry	By:		_ License Boar	d Hea	ring Date:
Prior Approval Required: Town Mgr: Police Dept: Fire Dept: Health Dept: Town House: Treasurer:		E SENT		E APP	
Add'l conditions for licens	Δ.				Crainsaigh bannail a raitear
Add I Conditions for ficells					
0 0 10 W <sub>2</sub> 7 0 0	A _ 11	TOWN	CLERK USE ONL	<u>Y</u>	
	License:	requir	ed no	ot requ	ired
		initia		•	

Ellen Munick

12 Jaillea

Chestnut St

enotibeensty - 1998 9v13

Andover Senior Cer

Fence / Barricade

# Beer Garden Execution Plan

Town Permit:

Oak & Iron Brewing Co. secures 1-day pouring permit

insurance:

Location:

Oak & Iron liability/damage \$1M incident / \$2M total

Tent & Barricade

Town Park / North of gazebo

Attempt to get tables and barriers close to Sunday's needs Oak & Iron "Whirlwind" set up 9:00 - 9:30 AM 11.13.22 Promania set up 2:00PM Saturday 11.12.22

Set up/Shut down:

Shut down and remove by 12:00PM Sunday 11.13.22

Serving Time:

~9:30AM - ~12:00PM

## Beer Garden Execution Plan

### Beer Garden

- Tent 30' \* 40' (registration tent)
- Perimeter barricade around the tent to secure alcohol area. (excludes enter / exit and rear access for beer inventory)
- One side barricade pushed out so runners not exclusively under the tent.
- Signage throughout "Beer in Beer Garden ONLY"
- Occupancy: 125 people (seated and standing)

## **Entrance Requirements**

ID, Stamp, Serve

## Anyone may enter the beer garden

- These activities are handled in the "ID, Stamp & Serve" area
- (3 or 4) ID and Stamp Entrance lanes
- Valid ID presented
- Hand stamped (ID verification)
- Beer purchased at serving table (credit card only)
- "one valid ID/Stamped person one beer"
- Beer poured into clear recyclable cups.
- Beer pouring handled by Oak & Iron TIPS trained staff

### Beer Garden Execution Plan

Beer Consumption:

Beer consumed in the Beer Garden only
No beer allowed outside Beer Garden
Police officer or Oak & Iron staff at Entrance / Exit

Beer

Beer cans on ice transported by Oak & Iron early Sunday AM

Logistics & Storage

Inventory stored behind servers, inside the barricade

Trash:

Recycle barrels dispersed throughout the beer garden

Clean up / Leave:

By 1:00PM Sunday

Redacted

### TOWN OF ANDOVER GENERAL LICENSE APPLICATION

APPLICANT'S D/B/A:	ndover Inn		TIME STAMP
	HG Andover Inn, LLC		
APPLICANT'S ADDRESS	4 Chapel Avenue, Andover, M	A	
APPLICANT'S TEL. NUM	BER:		
CONTACT PERSON:	ames Siano		
TELEPHONE:	E-MAIL		
MAILING ADDRESS: 4 C	rapel Avenue, Andover, MA		
	**************************************		*******
LOCATION OF LICENSE AC	TIVITY: 4 Chapel Avenue, Andov	er, MA	
APPLICATION/LICENSE FEI	B:_ <u>\$125</u>	D/SS #	
DATE OF ACTIVITY	N/ATIME from	<u>N/A</u> to	N/A
I certify under penalties of perjury	**************************************	that named applicant has	complied with all laws of the
	**************************************		
Date of log entry	By License Bo	ard Hearing Date:	
Prior Approval Required: Police Dept: Fire Dept: Building: Health: Treasurer: Add'l conditions for license		ATE APPROVED	
This license requires: (circlè	all that apply)		
Select Board Approval	Business Certificate	Letter of t	Clearance

### **Payment Confirmation**

### YOUR PAYMENT HAS PROCESSED AND THIS IS YOUR RECEIPT

Your account has been billed for the following transaction. You will receive a receipt via email and via text message.



Transaction Processed Successfully.

INVOICE #: 9743e112-f6c1-42ad-9c4d-d2b1055e9739

Description	Applicant, License or Registration Number	Amount
FILING FEES-RETAIL		\$200.00
		\$200.00

Total Convenience Fee: \$4.70

Total Amount Paid: \$204.70

Date Paid: 9/7/2022 12:19:42 PM EDT

Payment On Behalf Of

License Number or Business Name:

Fee Type:

FILING FEES-RETAIL

Billing Information

First Name:

John

Last Name:

Connell

Address:

112 water street

City:

boston

State:

MA

Zip Code:

02109

**Email Address:** 



### The Commonwealth of Massachusetts Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3, Chelsea, MA 02150-2358 www.mass.gov/abcc

### RETAIL ALCOHOLIC BEVERAGES LICENSE APPLICATION MONETARY TRANSMITTAL FORM

### **AMENDMENT-Change of Manager**

APPLICATION SHOULD BE COMPLETED ON-LINE, PRINTED, SIGNED, AND SUBMITTED TO THE LOCAL LICENSING AUTHORITY.

**ECRT CODE: RETA** Please make \$200.00 payment here: ABCC PAYMENT WEBSITE PAYMENT MUST DENOTE THE NAME OF THE LICENSEE CORPORATION, LLC, PARTNERSHIP, OR INDIVIDUAL AND INCLUDE THE **PAYMENT RECEIPT** ABCC LICENSE NUMBER (IF AN EXISTING LICENSEE, CAN BE OBTAINED FROM THE CITY) 00052-HT-0026 ENTITY/ LICENSEE NAME WHG Andover Inn, LLC ADDRESS 4 Chapel Avenue STATE MA ZIP CODE 01810 CITY/TOWN Andover For the following transactions (Check all that apply): Change Corporate Structure (i.e. Corp / LLC) Change of Location New License Change of Class (i.e. Annual / Seasonal) Pledge of Collateral (i.e. License/Stock) Transfer of License Alteration of Licensed Premises Change of License Type (i.e. club / restaurant) Management/Operating Agreement Change of Manager Change Corporate Name Change of Category (i.e. All Alcohol/Wine, Malt) Change of Hours Change of Officers/ Change of Ownership Interest Issuance/Transfer of Stock/New Stockholder (LLC Members/LLP Partners, **Directors/LLC Managers** Change of DBA Other Trustees)

THE LOCAL LICENSING AUTHORITY MUST SUBMIT THIS APPLICATION ONCE APPROVED VIA THE ePLACE PORTAL

Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3 Chelsea, MA 02150-2358



### The Commonwealth of Massachusetts Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3, Chelsea, MA 02150-2358 www.mass.gov/abcc

### **AMENDMENT-Change of Manager**

1. BUSINESS ENTITY II		<u>ION</u>			Municipa	lity			DCC Harman Neural au
Entity Name					Municipa	iity	<del></del>		BCC License Number
WHG Andover Inn, LLC	•			Andover				00052-	HT-0026
2. APPLICATION CON	TACT								
The application conta		erson who	should	be contact	ted with an	v auesti	ons regarding th	nis applica	tion.
Name		Title			Email	, ,			Phone
Joseph H. Devlin		Attorney	i.						
3A. MANAGER INFOR	-7								
The individual that h	as been ap	ppointed t	o mana	ge and cor	ntrol of the	license	d business and p	premises.	
Proposed Manager Na	me James	Siano				ate of Bi	rth	SSN	
Residential Address	2 Broo	kside Drive,	Execter,	, NH 03833					
Email	j					Pho	ne		-
Please indicate how ma			40+	Last-App	proved Lice	nse Mana	ger Stephan Am	nesoeder	
		heimses [					P = 200		
3B. CITIZENSHIP/BACI		INFORMA	TION			© Vos	S (No *Mana		IIC eitinen
Are you a U.S. Citizen?* If yes, attach one of the Have you ever been co		as proof of	citizensl	hip US Pass	sport, Voter'	s Certifica	ate, Birth Certifica	100	
If yes, fill out the table									
necessary, utilizing th			maavie	orovialing ti	ie details of	arry arra	an convictions. A	ttacii add	icional pages, ii
Date	Municipa	lity		Cha	rge			Dispos	ition
							·		
3C. EMPLOYMENT IN									
Please provide your e				additional			utilizing the for		
Start Date End Da		Positio			cmt	oloyer		Sup	ervisor Name
	Please	see attache	ea.					40	
3D. PRIOR DISCIPLINAR	Y ACTION								
Have you held a benefi									
disciplinary action? Yes No If yes, please fill out the table. Attach additional pages, if necessary, utilizing the format below.									
Date of Action N	lame of Lic	ense	State	City	Reason fo	r suspen	sion, revocation o	or cancella	tion
	$\nearrow$	$\overline{}$			4	201 5200			
I hereby swear under the p	hereby swear under the pains and denalties of perjury that the information I have provided in this application is true and accurate:								
Managar's Signature	6	/) (	Carrier and	$\sim$			Date C	1 /	7077



### **TOWN OF ANDOVER**

### TOWN CLERK'S OFFICE

36 Bartlet Street Andover, MA 01810 978-623-8230 www.andoverma.gov

SUBJECT INFORMATI	ON:				
Siano	James				I
Last Name	First Name	e I	Middle Name	Suffix	
Maiden Name (or otl	her name(s) by which	ı you have been know	n)		*
Date of Birth	Pla	ace of Birth		_	
Last Six Digits of Yo	our Social Security N	umber (REQUIRED	):	*5.	,
Sex: M Heigh	ht: <u>5</u> ft. <u>6</u> in.	Eye Color:Brow	n Ra	ce:	
Driver's License or I	D Number:		State of	Issue:	
Whitebirch					
Mother's Full / Maid	len Name	Father's	Full Name		-
Current and Former 2 Brookside Drive,					
Street Number & Na	me	City/Town	State	Zip	
Street Number & Na	me	City/Town	State	Zip	
The above informati identification:	on was verified by re	eviewing the following	g form(s) of gover	nment issued	
VERIFIED BY:	Name of Verifyin	g Employee (Please I	Print)	_	

Signature of Verifying Employee



### TOWN OF ANDOVER

### TOWN CLERK'S OFFICE

36 Bartlet Street Andover, MA 01810 978-623-8230 www.andoverma.gov

### CRIMINAL OFFENDER RECORD INFORMATION (CORI) ACKNOWLEDGEMENT FORM

TO BE USED BY ORGANIZATIONS CONDUCTING CORI CHECKS FOR EMPLOYMENT, VOLUNTEER, SUBCONTRACTOR, LICENSING, AND HOUSING PURPOSES

Town of Andover Town Clerk's Office is registered under the provisions of M.G.L. c. 6, § 172 to receive CORI for the purpose of screening current and otherwise qualified prospective employees, subcontractors, volunteers, license applicants, current licensees, and applicants for the rental or lease of housing.

As a prospective or current employee, subcontractor, volunteer, license applicant, current licensee, or applicant for the rental or lease of housing, I understand that a CORI check will be submitted for my personal information to the Department of Criminal Justice Information Services (DCJIS). I hereby acknowledge and provide permission to Town of Andover Town Clerk's Office to submit a CORI check for my information to the DCJIS. This authorization is valid for one year from the date of my signature. I may withdraw this authorization at any time by providing Town of Andover Town Clerk's Office with written notice of my intent to withdraw consent to a CORI check.

FOR EMPLOYMENT, VOLUNTEER, AND LICENSING PURPOSES ONLY: The Town of Andover Town Clerk'/Andover Public Schools may conduct subsequent CORI checks within one year of the date this Form was signed by me provided, however, that Town of Andover/Andover Public Schools must first provide me with written notice of this check.

By signing below, I provide my consent to a CORI check and acknowledge that the information provided on Page 2 of this Acknowledgement Form is true and accurate.

MIGNATURE.

DATE

Your identity and signature must be verified by examining a government-issued identification in person

\*All CORI forms must be returned, in person, along with your ID\*

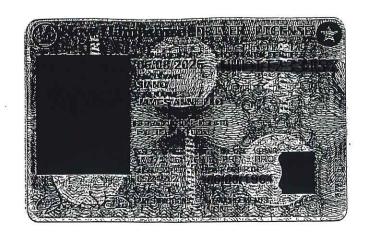


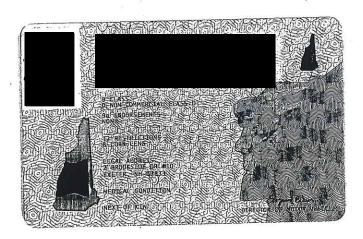
DATE: 928 22

### Town of Andover CRIMINAL RECORD INFORMATION FORM

CRIMINAL RECORD INFORMATION FORM	== =]	
Managers, Directors, Stockholders, Officer and Others		C0 1/3
NAME Of BUSINESS WHG Andover Inn, LLC	<u>e</u>	-10 -10
APPLICANT James Siano	5 °	5 P
ADDRESS <sup>2</sup> Brookside Drive, Exeter, NH 03833	10 + 400 401	ڻ 
OCCUPATION Manager		
BIRTHPLACE Springfield, MA DATE OF BIRTH		, it
If you have any record of misdemeanors including: drunkenness, simple as minor traffic violations, affray or disturbance of the peaceand such offend disposed of ten or more years prior to the filing of this applicationyou may to have NO RECORD for the purpose of furnishing this department information of the purpose of furnishing this department information.	ces were y be cons mation as	idered
I, APPLICANT FO		OF
All Alcoholic Beverages Section 12 Hotel  ANDOVER HEREBY STATE THAT I HAVE NOT BEEN CONVICTED FOR		
OF A STATE OR FEDERAL NARCOTIC LAW.	K VIODII.	11011
I DO HEREBY STATE THAT I HAVE NO RECORD OF CRIMINAL CONV ANY STATE OR FEDERAL COURT EXCEPT THOSE LISTED AS FOLLOW		IN
I DO HEREBY STATE THAT I HAVE NO PENDING CRIMINAL CHARGE FOR ANY CRIMINAL VIOLATIONS IN ANY STATE OR FEDERAL COURTHOSE LISTED AS FOLLOWS:		
SIGNED AND SUBSCRIBED TO UNDER THE PAINS AND PENALTIES OF THIS DAY, OF 5 - 7 , 20	1010 <u>0</u> 0	RY
Signature: Signature:	Þ	
Any statements contained havein found to be untrue shall be cause for the	cancellati	on

Any statements contained herein found to be untrue shall be cause for the cancellation and/or revocation of any license granted to the applicant or corporation in which he is a principal or agent.





### TAX FORM

APPLICANT NAME: WHO Andover Inn, LLC
I certify under penalties of perjury that the above named applicant has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.
Signature of Individual or Corporate Name (Mandatory)
N/A
By: Corporate Officer (if corporation)
N/A Social Security# (if individual)
Federal Identification Number (FID# if Corporation or Non Profit#)

This license will not be issued unless the certification clause is signed by the applicant.

Your Social Security or FID number will be furnished to the Massachusetts Department of Revenue to determine if you have met tax filing or tax payment obligations. Licensees who fail to correct their non-filing or delinquency will be subject to license suspension or revocation. This request is made under the authority of Mass. General Laws C. 62c s.49A.



### The Commonwealth of Massachusetts Department of Industrial Accidents 1 Congress Street, Suite 100 Boston, MA 02114-2017

www.mass.gov/dia

Workers' Compensation Insurance Affidavit: General Businesses.
TO BE FILED WITH THE PERMITTING AUTHORITY.

Applicant Information  TO BE FILED WITH THE PERMITTING AUTHORITY.  Please Print Legibly
WHG Andover Inn, LLC Business/Organization Name:
Address:4 Chapel Avenue
City/State/Zip: Andover, MA Phone #:
Are you an employer? Check the appropriate box:  1. I am a employer with \( \frac{\sqrt{\sq}}}}}}}}}}} \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}}}}
I am an employer that is providing workers' compensation insurance for my employees. Below is the policy information.  Insurance Company Name: SEMPE AMERICA INSURANCE COMPANY.  Insurer's Address: 777 3RD AVENUE #28B
City/State/Zip: NEW York NY 10017
Policy # or Self-ins. Lic. # WCDS1079130 Expiration Date: 12/1/22  Attach a copy of the workers' compensation policy declaration page (showing the policy number and expiration date).
Failure to secure coverage as required under Section 25A of MGL c. 152 can lead to the imposition of criminal penalties of a fine up to \$1,500.00 and/or one-year imprisonment, as well as civil penalties in the form of a STOP WORK ORDER and a fine of up to \$250.00 a day against the violator. Be advised that a copy of this statement may be forwarded to the Office of Investigations of the DIA for insurance coverage verification.
I do hereby certify, under the pains and penalties of perjury that the information provided above is true and correct.
Signature: Date: 9/26/27 Phone #:
Official use only. Do not write in this area, to be completed by city or town official.
City or Town: Andover Permit/License #
Issuing Authority (circle one):  1. Board of Health 2. Building Department 3. City/Town Clerk 4. Licensing Board 5. Selectmen's Office  6. Other
Contact Person: Austin Simko, Town Clerk Phone #: 978-623-8230

### **APPLICANT'S STATEMENT**

Len Wo	the: sole proprietor; partner; corporate principal; LLC/LLP manager
),	Authorized Signatory
of WHG	Andover Inn, LLC
T.	Name of the Entity/Corporation
hereby : Beverag	submit this application (hereinafter the "Application"), to the local licensing authority (the "LLA") and the Alcoholic ges Control Commission (the "ABCC" and together with the LLA collectively the "Licensing Authorities") for approval.
Applicat	eby declare under the pains and penalties of perjury that I have personal knowledge of the information submitted in the tion, and as such affirm that all statements and representations therein are true to the best of my knowledge and belief. I submit the following to be true and accurate:
	I understand that each representation in this Application is material to the Licensing Authorities' decision on the Application and that the Licensing Authorities will rely on each and every answer in the Application and accompanying documents in reaching its decision;
(2)	I state that the location and description of the proposed licensed premises are in compliance with state and local laws and regulations;
(3)	I understand that while the Application is pending, I must notify the Licensing Authorities of any change in the information submitted therein. I understand that failure to give such notice to the Licensing Authorities may result in disapproval of the Application;
(4)	I understand that upon approval of the Application, I must notify the Licensing Authorities of any change in the ownership as approved by the Licensing Authorities. I understand that failure to give such notice to the Licensing Authorities may result in sanctions including revocation of any license for which this Application is submitted;
(5)	I understand that the licensee will be bound by the statements and representations made in the Application, including, but not limited to the identity of persons with an ownership or financial interest in the license;
(6)	I understand that all statements and representations made become conditions of the license;
(7)	I understand that any physical alterations to or changes to the size of the area used for the sale, delivery, storage, or consumption of alcoholic beverages, must be reported to the Licensing Authorities and may require the prior approval of the Licensing Authorities;
(8)	I understand that the licensee's failure to operate the licensed premises in accordance with the statements and representations made in the Application may result in sanctions, including the revocation of any license for which the Application was submitted; and
(9)	I understand that any false statement or misrepresentation will constitute cause for disapproval of the Application or sanctions including revocation of any license for which this Application is submitted.
(10)	I confirm that the applicant corporation and each individual listed in the ownership section of the application is in good standing with the Massachusetts Department of Revenue and has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting of child support.
	Signature: Date: 8/31/22
	Title: CEO

### **James Siano**

Maintenance Manger Hands On Exeter, NH 03833

### Work Experience

### **Hands on Area Chief Engineer**

Spire Hospitality IHG Hotels 2019 to Present

As the Area Chief I oversee all operations for 360 rooms and all public spaces. I am a full-time hand on chief while working with vendors. I am out on the floors working in the buildings working on guest rooms and HVAC Units. I report to all GM on the properties while dealing with a small staff due to COVID-19. My position is doing the renovation of the rooms while performing work orders in both hotels. We as a team take care of all outdoor work to both properties as well. Trash removal snow removal and lawn care. All restaurant equipment in all hotels Shawn Smith Regional GM

### Hands on Area Chief Engineer

Colwen Hotels Hilton and Marriott 2017 to 2019

As the area chief engineer for two Hotels in Worcester ma I oversee a total of 289 rooms. This is a full time hands on maintenance position running the physical plant of both Hotels. Both properties are back to back one is a Marriott and the other is a Hilton. I work with four team members in the renovation of the guest rooms and the public spaces. Both properties had been for sale for the past year. We as a team also assume all outside work on the property as well. Trash pick up to lawn care and snow removal. All restaurant equipment is serviced in house and maintained Ron Rockland VP Colwin

### Hands on Chief Engineer

Interstate Hotels Double Tree 2016 to 2017

For a 389 room Hotel with an indoor water park. This Hotel is a bank owned property with an engineering team of 8. As the hands on chief engineer I work with the team to ensure the water park and the public spaces are well maintained. As a team we are responsible for all the life safety in the Hotel and the water park. The team and I do the renovations of the guest rooms in-House and we take care of the outside of the buildings as well. All restaurant equipment is serviced in-house and maintained. Sold Property. Eli Kock VP Interstate

### Hands on Chief Engineer

TPG Hotels Marriott Boston 2011 to 2016

470 room Hotel with 25 banquet rooms and two full service restaurants As the Chief engineer I am responsible for all of the cooling heating and all of the physical plant operations thru out the Hotel. We a team of 10 employees we take care of all of the renovations of the guest rooms and the public spaces. The team and I also take care of any outside duties that pertain to the Hotels. Daily checks of the meters gas and water or completed in house and rounds are completed by the staff of the property. All restaurant equipment in serviced in house and maintained in- house Christopher Allen GM

### **Hands on Chief Engineer**

Interstate Hotels Sheraton Hotels 2008 to 2011

For a 280 room Hotel full service. As the hands on chief engineer my hands on duties include taking care of all 280 guest rooms as well as the outside of the Hotel. All physical plant operations and the grounds are the responsibility of the team and myself. With two full service restaurants and the upper deck we maintain all of the kitchens and bars in the hotel in- house Steve Smith GM

### Hands on Area Chief Engineer for three Hotels

True North Hotels Hilton and Marriott 2005 to 2008

As the hands on chief engineer my duties were to take care of two Hotels totaling 325 rooms and a conference center. One Hotel was a Springhill suites the other was a Hampton inn and suites. The conference center was in the middle of both Hotels and space was sold there. With a team of six and myself we were able to maintain the physical plant of all three properties as well as all outdoor work that need to be performed. Laura Peeler VP

### Hands on Chief Engineer

Remington Hotels - West Palm Beach, FL 1999 to 2005

For a 380 room Hotel in West Palm Beach. This high end Embassy Suite Hotel was a full service Hotel with a team of engineers totaling 7. As the hands on chief my duties included taking care of the entire physical plant including the 9 story office building next to the Hotel. Allen Johnson VP

### **Police Officer and Deputy Sheriff**

Commonwealth of Massachusetts 1983 to 1999

As a Police officer for a community in the state of Massachusetts and a Deputy Sheriff my duties were to uphold the laws of the state of Massachusetts and patrol the areas for crime investigation Chief of Police

### Education

Associate's degree in Hospitality Management

Johnson and wales

Skills HVAC License CPO License

### **ENTITY VOTE**

The Board of Directors or LLC Managers of	ndover Inn, LLC	
The board of birectors of LLC Managers of	Entity Name	
duly voted to apply to the Licensing Authority of	The state of the s	and the
Commonwealth of Massachusetts Alcoholic Bever	City/Town	Aug 31, 2022
Commonwealth of Massachusetts Alcoholic Bever	ages control commission on	Date of Meeting
the following transactions (Check all that apply):		*
Change of Manager		
Other		
	z	
"VOTED: To authorize Len Wolman		
VOIED. 10 additionize	Name of Person	
and the state of t		
to sign the application submitted and to execute of		cessary papers and
do all things required to have the application gran	iteu.	
"VOTED: To appoint James Siano		
"VOTED: To appoint James Siano	1 (00) 40 pt 14 _ 3	<u></u>
Name of	f Liquor License Manager	
as its manager of record, and hereby grant him	n or her with full authority an	d control of the
premises described in the license and authorit	ā	
therein as the licensee itself could in any way l		natural person
residing in the Commonwealth of Massachuse	tts."	e.
A true copy attest,	For Corporations ONL	<u>Y</u>
2 -	A true copy attest,	
Cello		
Corporate Officer /LLC Manager Signature	Corporation Clerk's Si	gnature
LEN WOLMAN		
(Print Name)	(Print Name)	



CITY OF SPRINGFIELD, MASS.

### CITY CLERK'S OFFICE

November 25 2005

William Bu

James Anniello Siano

MALE X

WAS BORN IN SPRINGFIELD, MASS.

I HEREBY CERTIFY THAT THE ABOVE ABSTRACT IS A TRUE COPY FROM THE RECORD OF BIRTHS IN THIS OFFICE.

WPROHIBITED

CITY CLERK



36 Bartlet St., Andover, Massachusetts 01810 Telephone - (978) 623-8230

### 2023 ANNUAL TOWN MEETING & ELECTION CALENDAR

Andover Town Election & Annual Town Meeting					
ANNUAL TOWN ELECTION:	Tuesday, March 28, 2023 7:00AM - 8:00PM	(Fourth Tuesday in			
		March			
ANNUAL TOWN MEETING:	May 1, 2, 3 & 4, 2023 7:00PM				
	J. Everett Collins Center Auditorium				
	Andover High School, Shawsheen Road				
BUDGET DUE TO TOWN:	Friday, February 3, 2023	(First Friday of Feb.)			
ANNUAL TOWN REPORT:	Tuesday, March 21, 2023	(7 days before town election)			
FINANCE COMMITTEE REPORT:	Friday, April 21, 2023	(10 days before			
REPORT:		business meeting)			
TOWN WARRANT:	Opens: Monday, October 24, 2022				
	Closes: Friday, January 20, 2023				

ANDOVER TOWN ELECTION DEADLINES			
Last day to submit nomination papers to the Board of Registrars for Town Election	Tuesday, February 7, 2023 5:00PM	(49 days)	
Last day to withdraw from Town Election (notarized statement in writing)	Thursday, February 23, 2023 5:00PM	(33 days)	
Last Day to register to vote for the Town Election for non-registered voters:	Saturday, March 18, 2023	(10 days)	
Warrant Posted & Published:	No later than Tuesday, March 14, 2023	(14 days)	

<u>PLEASE NOTE</u>: Mail-in voter registration forms are available at the Registry of Motor Vehicles, Memorial Hall Library, all four Post Offices, the Secretary of the Commonwealth's website, and the Town Offices on Bartlet Street. If you are not registered to vote, to be eligible to vote at an Election or Town Meeting, your mail-in form must be received or postmarked by the last day to register per State law. Online voter registration is now available on the Secretary of the Commonwealth's web site.



36 Bartlet St., Andover, Massachusetts 01810 Telephone - (978) 623-8230

ANNUAL TOWN MEETING DEADLINES		
Last Day to Register to vote for the Annual Town Meeting for non- registered voters:	Tuesday, April 21, 2023	(10 days)
Warrant Posted & Published:	No later than Monday, April 17, 2023	(14 days)

2023 CAMPAIGN FINANCE REPORTING			
REPORT NAME	REPORT DUE	REPORTING PERIOD DATES	
2022 End-of-Year:	Due Jan. 20, 2023	<ul> <li>Reporting Period Ending:</li> <li>April 21, 2022 – December 31, 2022 (2022 candidates not dissolved)</li> <li>January 1, 2022 – December 31, 2022 (all others)</li> </ul>	
8 Day Pre-Election:	Due March 20, 2023	Reporting period:  • January 1, 2023 – March 10, 2023  (accounting closes 10 days before due date)	
30 Day Post- Election:	Due April 27, 2023	Reporting period:  • March 11, 2023 – April 17, 2023 (accounting closes 10 days before due date)	
2023 End-of-Year:	Due Jan. 20, 2024	<ul> <li>Reporting Period Ending:</li> <li>April 18, 2022 through December 31, 2023 (all 2023 candidates not dissolved)</li> <li>January 1, 2023 through December 31, 2023 (all others)</li> </ul>	
Dissolution Report:	Due when balance is zero with written notice		

### **2023 STATE ELECTIONS**

None scheduled.

### TOWN OF ANDOVER PETITION FORM: REQUEST TO REDUCE STREET SPEED TO 25 MPH

Massachusetts General Law Chapter 90, Section 17C: Establishment of 25-miles-per-hour speed limit in thickly settled or business district in city or town; violation

Section 17C. (a) Notwithstanding section 17 or any other general or special law to the contrary, the city council, the transportation commissioner of the city of Boston, the board of selectmen, park commissioners, a traffic commission or traffic director of a city or town that accepts this section in the manner provided in section 4 of chapter 4 may, in the interests of public safety and without further authority, establish a speed limit of 25 miles per hour on any roadway inside a thickly settled or business district in the city or town on any way that is not a state highway.

(b) Upon establishing a speed limit under this section, the city or town shall notify the department. The operation of a motor vehicle at a speed in excess of a speed limit established under this section shall be a violation of section 17.

Petitioner Name:	Address:
E-mail Address:	Tel #
Street Name:  (One street per application)	
Date Street Accepted as a Public Way:	
RESIDENCE, STREET AND NUMBER A REDUCE THE SPEED LIMIT OF A PUBI THE TOWN OF ANDOVER. SIGNATUR	OF ANDOVER RESIDENTS OVER THE AGE OF 18 WITH THEIR ARE REQUIRED TO REQUEST THAT THE SELECT BOARD LIC WAY IN THICKLY SETTLED OR BUSINESS DISTRICTS IN RES MUST APPEAR ON THE SAME SHEET AS THE BODY OF EPTED. (Therefore, print two-sided sheets.)
entire text of the request, attach additional p	ed in by the petitioner. If space is insufficient on this page for the page(s) of text to each petition form before signatures are gathered. signatures to be certified must be on a petition form):

WE, THE UNDERSIGNED ADULT RESIDENTS OF THE TOWN OF ANDOVER, CERTIFY THAT WE HAVE READ AND UNDERSTAND BOTH MASSACHUSETTS GENERAL LAW CHAPTER 90, SECTION 17C AND THE REQUEST OF THIS PETITION TO REDUCE THE SPEED LIMIT OF THE AFOREMENTIONED PUBLIC WAY IN THE TOWN OF ANDOVER, AND RERESPECTFULLY REQUEST THAT THE SELECT BOARD REDUCE THE SPEED OF THE AFOREMENTIONED PUBLIC WAY TO 25 MPH PER MASSACHUSETTS GENERAL LAW CHAPTER 90, SECTION 17C:

READ THE REQUEST ON THE OPPOSITE SIDE OF THIS PAPER AND ANY ATTACHED PAGES BEFORE SIGNING BELOW. PLEASE SIGN YOUR LEGAL NAME AND <u>CLEARLY PRINT YOUR ADDRESS WITH STREET & NUMBER</u>.

NAME	ADDRESS
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
Certification of Names: I certify that signatures checke	d above are the names of adult residents of the Town of Andover.
Town Clerk	Date

### **INSTRUCTIONS**

### TOWN OF ANDOVER: REQUEST TO REDUCE STREET SPEED TO 25 MPH

- 1. This petition form is intended for use to request that the Town of Andover Select Board reduce the speed of a public way in the Town of Andover located in a thickly settled or business district to 25 mph per Massachusetts General Law Chapter 90, Section 17C.
- 2. Petitioners are encouraged to contact the Police Safety Office to review and discuss the request before signatures are collected. The Police Safety Officer can be reached by telephone at 978-623-3500.
- 3. If printing the form from the web site, print the form double sided so that the signatures lines are on the back side of the request. This is to demonstrate that the persons signing the petition had the opportunity to review the request. Separate signature pages, even if stapled to the petition, are prohibited.
- 4. Complete the contact information for the Petitioner. This is important so we can contact you in preparation for the Select Board meeting. It is required that the petitioner present the request to the Select Board at a meeting scheduled by the Chair of the Select Board.
- 5. The signatures of TEN (10) residents over the age of 18 of the Town of Andover, with their residence, street and number, are required to make this request.
- 6. Use as many petition forms as needed to gather the necessary number of signatures. The signatures must be those of adult residents of the Town of Andover with their current residence including street and number. A petition may be filed with one or more signatures; there is no requirement that all the signature lines be completed on each petition.
- 7. Often we cannot certify all of the signatures on a petition. This happens for a variety of reasons; for example, the individual cannot provide proof of residency, the signature or the address is illegible or the individual has moved and not notified us of his/her new address. For this reason we recommend that you submit more than the minimum number of signatures required.

### AMENDED CONSERVATION RESTRICTION

Cormier-Andover Greenbelt Corporation, a Massachusetts non-profit corporation, having its principal place of business at 3 Crenshaw Lane, Andover, Essex County, Massachusetts (the "Grantor"), for and in consideration of the issuance by the Planning Board of the Town of Andover, Massachusetts of its Special Permit SP 15-04, as modified by SP 20-12, pursuant to Article VIII, Sec. 7.3 of the Town of Andover Zoning Bylaw, to Yvon Cormier, Trustee of CA Investment Trust of 3 Crenshaw Lane, Andover, Massachusetts, and of other good and valuable consideration, the exchange of which is hereby acknowledged, hereby grants to the INHABITANTS OF THE TOWN OF ANDOVER, acting by and through its Conservation Commission (the "Grantee"), whose address is Town Offices, 36 Bartlett Street, Andover, Massachusetts 01810, the following described Conservation Restriction.

This Amended Conservation Restriction is intended as an amendment to an original Conservation Restriction dated November 5, 2004, and recorded with Essex North District Registry of Deeds in Book 9194 Page 98, as amended an Amended Conservation Restriction dated January 30, 2007, recorded at Book 10651, Page 102, and the Amended Conservation Restriction, dated August 9, 2010 and recorded at Book 12351, Page 255 and the Amended Conservation Restriction dated February 25, 2011 and recorded at Book 12424, Page 122 and the Amended Conservation Restriction dated May 15, 2014 and recorded at Book 13914, Page 210 (as amended, the "Conservation Restriction") by placing additional land under conservation restriction as described below. No other provisions of the Conservation Restriction are hereby changed and the Conservation Restriction is hereby ratified and confirmed by the Grantor herein.

That the land hereinafter described shall be kept in an open or natural state and shall not be built upon for residential use or developed for accessory uses such as parking or roadway, nor built upon or developed for other uses contrary to or incompatible with the use of land intended to be kept and maintained in an open or natural state, subject to the reserved rights as set forth below:

The said land to which this restriction applies being described as follows:

A certain parcel of land being a portion of the premises located at 90 Beacon Street, Andover, Essex County, Massachusetts, more particularly designated as "Restricted Common Area, Area= 425,030± SF, 9.757± Acres" on a plan of land entitled, "Frenchman's Reserve Condominium, Phasing Plan in Andover, Massachusetts – Frenchman's Reserve", Scale: 1"=60', Date: August 30, 2022, Prepared for/Owner CA Investment Trust, 3 Crenshaw Lane – Andover, MA, Prepared by Land Engineering & Environmental Services, Inc., One Bridgeview Circle, Tyngsboro, Massachusetts 01879, which plan is recorded with the Essex North District Registry of Deeds as Plan No.

\_\_\_\_\_\_\_(the "Plan"), and reference may be had to said plan for a more particular description of said Restricted Common Area. The total Restricted Common Area contains 425,030 square feet of land, more or less, according to said plan.

Being a portion of the same premises described in Deed dated December 29, 1986, recorded with the Essex North District Registry of Deeds at Book 2395, Page 196.

Said premises are conveyed subject to easements and other matters as shown on said Plan and subject to a Golf Easement dated November 5, 2004 and recorded with said Registry at Book 9194, Page 12, as affected by Amended Golf Easement dated January 30, 2007 and recorded with said Registry at Book 10651, Page 84, as affected by Amended Golf Easement dated July 16, 2010, recorded at Book 12107, Page 221, and Golf Easement dated March 1, 2011, recorded at Book 12424, Page 54, and the Golf Easement dated May 23, 2014 and recorded at Book 13864, Page 60, and the Golf Easement dated September 8, 2022, and recorded at Book \_\_\_\_\_\_, Page \_\_\_\_\_.

The terms and provisions of this Conservation Restriction are as follows:

- 1. Prohibited Activities: Except as otherwise herein provided, the Grantor shall neither perform nor permit others to perform any of the following activities on the Premises;
  - a. Construction or placing of any buildings, permanently affixed houseboats or mobile homes, roads, signs, billboards or other advertising, utilities or other structures on or above the ground, except for golf course maintenance, equipment and storage buildings, golf huts, seating, and paved golf cart paths;
  - b. Dumping or placing of trash, waste or unsightly or offensive materials.
  - c. Removal or destruction of trees, shrubs or other vegetation;
  - d. Excavation, dredging or removal of loam, peat, gravel, soil, rock or other mineral substances or natural deposits in such manner as to affect the surface of the premises;
  - e. Activities detrimental to drainage, flood control, water or soil conservation or erosion control;

- f. Other acts or uses detrimental to the preservation of the Premises; or
- g. Any act or acts prohibited under the above-noted Cluster Development By-Law.
- 2. Reserved Rights: Notwithstanding anything contained in Paragraph 1 above the Grantor reserves to itself, its successors, assigns and lessees, the right to conduct or permit the following activities on said parcels, as the activities are necessary and incidental to the normal operation and maintenance of the golf course and to the conservation of open space;
  - a. The planting, removal and relocation of trees and shrubs, and the mowing of grass.
  - b. The dredging, relocation and expansion of the ponds and brooks located therein.
  - c. The erection and maintenance thereon of footbridges and bridges for golf carts and equipment crossing the brooks.
  - d. The installation, maintenance, repair, replacement and relocation of underground utilities, including but not limited to electricity, telephone, cable television, gas, water, drainage and sewerage facilities and appurtenances thereto for the benefit of the Premises above described and for premises adjacent thereto now owned by CA Investment Trust together with the right of access and egress to and from the same and the right to grant easements for the within purposes to third parties, including but not limited to such utility companies as the Grantor shall select, and to the Town of Andover.
  - Operation and maintenance, repair, replacement and relocation of a golf e. course, including but not limited to the right to install, relocate, and extend a watering system and drainage facilities, to relocate or regrade existing tees, greens, traps, fairways and roughs, and to install, maintain, relocate and extend paths (not to exceed fifteen (15) feet in width) for golf carts and maintenance equipment, and all other installations and facilities insofar as such activities may be necessary or convenient and incidental to proper golf course management procedures. To perform selective noncommercial cutting, pruning and thinning of dead, diseased, overgrown or overcrowded trees, brush and vegetation, for fire prevention and protection, unpaved trail and road maintenance, pest control, and golf course maintenance all in accordance with sound woodland conservation management techniques and without changing the general character of the Premises. To plant and maintain for recreational, scenic and soil conservation purposes, grass areas, walkways and sitting benches

throughout the above-noted area, and other installations and facilities normally used in connection with a golf course.

3. Access by Conservation Commission; Enforcement; Access by Public: The Conservation Restriction hereby conveyed shall not operate to grant to The Inhabitants of the Town of Andover, or its successors or to the general public any right to enter onto the Premises, except (i) that the Conservation Commission through one or more duly designated member(s) or agent(s) shall have the right to enter the Premises at reasonable times and in reasonable manner for the purpose of inspecting the Premises insuring compliance with the terms of this Conservation Restriction and preventing, abating or remedying any violations thereof. The rights herein granted shall be in addition to any other remedies, by appropriate legal proceedings or otherwise, which may be available to the Town of Andover or the Conservation Commission for the enforcement of this Conservation Restriction.

It is the intent of the Grantor that the aforesaid restriction in favor of The Inhabitants of the Town of Andover run with the land and that it complies with the intent and purpose of Chapter 40A, Section 9 of the Massachusetts General Laws and Town of Andover Zoning Bylaw Article VIII, sec. 7.3.5 regarding special permits for Cluster Developments. Grantor acknowledges its agreement with the Grantee to seek approval from the Secretary of the Executive Office of Energy and Environmental Affairs for a conservation restriction pursuant to M.G.L. c.184, sections 31-33 covering the land affected by the original Conservation Restriction dated November 5, 2004, the Amended Conservation Restriction dated January 30, 2007, August 9, 2010, February 25, 2011 and May 15, 2014 referred to herein, this Amended Conservation Restriction, the Conservation Restriction dated February 10, 1997, recorded at the Essex North District Registry of Deeds at Book 5694, Page 27, and the land affected by the Conservation Restriction and Easement granted by the Grantor to the Grantee dated November 19, 1991 and approved by the Conservation Commission of the Town of Andover, as amended and described in Attachment A hereto.

This Restriction shall be recorded at the Essex North District Registry of Deeds and shall be enforceable in perpetuity by The Inhabitants of the Town of Andover, and the Conservation Commission of the Town of Andover. The Grantors, for themselves and their successors and assigns, agree to execute and record any instrument which may be necessary to provide for continuation of this Restriction in perpetuity.

No documentary stamps are required, the consideration for this conveyance being nominal.

7 day of Septuber, 2022. Executed as a sealed instrument this Cormier-Andover Greenbelt Corporation By: Yvon Cormier Its: President and Treasurer COMMONWEALTH OF MASSACHUSETTS ESSEX, ss. On this 27 day of September, 2022, before me, the undersigned notary public, personally appeared Yvon Cormier, as President and Treasurer of Cormier-Andover Greenbelt Corporation, who proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose and that he has the authority to sign in that capacity. Name: MANC A Notary Public My Commiss on ExpiratARK B. JOHNSON Notery Public WEALTH OF MASSACHUSETTS Commission Expires MAY 6, 2027

### APPROVAL OF THE CONSERVATION COMMISSION

We, the undersigned Conservation Commission of the Town of Andover, Massachusetts, pursuant to Massachusetts General Laws Chapter 40, Section 8C approve the foregoing conveyance to said Town.

Squall D. Corps	My audra Brescoll
Much	Eller Tourson
COMMONWEALTH	OF MASSACHUSETTS
Essex, ss.	Sept. 28, 2022
On this <u>30</u> day of <u>Suptember</u> , 2022, personally appeared:	before me, the undersigned notary public,
Donald D. Cooper, C	Chairman
agency, oath or affirmation of a crediundersigned, to be the person whose nam	evidence of identification, which was issued by a federal or state governmental ble witness, personal knowledge of the are signed on the preceding or attached y signed it voluntarily for its stated purpose.
	Name: Lynn m. Viselli
	Notary Public My Commission Expires: 8/15/2025

### **APPROVAL OF SELECT BOARD**

We, the undersigned Select Board of the Town of Andover, Massachusetts, pursuant to Massachusetts General Laws Chapter 40, Section 8C approve the foregoing conveyance to said Town. COMMONWEALTH OF MASSACHUSETTS Essex, ss. On this day of , 2022, before me, the undersigned notary public, personally who proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, and oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose.

Name:

Notary Public

My Commission Expires:

#### Attachment A

1. Six certain parcels of land situated in the Town of Andover, County of Essex, Commonwealth of Massachusetts, being shown as "Parcel C", "Parcel D", "Parcel E", "Parcel F", "Parcel G", and "Parcel H", as shown on North Essex District Registry of Deeds Plan Number 8202, and reference may be had to said plan for a more particular description.

Parcel C contains 3.57 acres.

Parcel D contains 1,948 square feet.

Parcel E contains 2,986 square feet.

Parcel F contains 7.61 acres.

Parcel G contains 2,880 square feet.

Parcel H contains 3,875 square feet, all according to said plan.

Parcel F is conveyed subject to easements as shown on North Essex District Registry of Deeds Plan Number 8202, and there is excluded from Parcel F those two parcels of land designated as Parcel A and Parcel B as shown on Plan Number 12538.

Also, another parcel shown as "Parcel I – Open Space", on a plan of land entitled "Modification of Section I, Plan of Land in Andover, Massachusetts of Andover Country Club", which plan is recorded with Essex North District Registry of Deeds as Plan Number 11763, and referenced may be had to said plan for a more particular description.

Parcel I contains 6.24 acres according to said plan. Said Parcel is conveyed subject to utility easements as shown on said plan.

The foregoing premises are those described in deed recorded at Book 3198, Page 259.

2. Four certain parcels of land situated in the Town of Andover, County of Essex, Commonwealth of Massachusetts being shown as Parcels J-C and J-D on North Essex District Registry of Deeds Plan Number 12445, Parcel K as shown on North Essex District Registry of Deeds Plan Number 8886 and Parcel I-B as shown on North Essex District Registry of Deeds Plan Number 8943, to which plans reference may be had for more particular description.

Parcel J-C contains 3,304 square feet according to said plan;

Parcel J-D contains 14,358 square feet according to said plan;

Parcel K contains 3.2± acres according to said plan;

Parcel I-B contains .583 acres according to said plan.

Parcels J-C and J-D are conveyed subject to easements shown on the referenced plan.

The foregoing premises are described in deed recorded at Book 17399, Page 134.

FOUR (4) TEN-FOOT WIDE PATHWAY EASEMENTS: As shown on the following plans:

- a. A plan of land entitled "Plan of Land in Andover, Massachusetts #68
  Beacon Street" Scale 1"=40' Date: February 19, 1997, prepared by Dana
  F. Perkins, Inc. Consulting Engineers and Land Surveyors 1215 Main
  Street, Unit 111, Tewksbury, MA 01876, 125 Main Street, Reading, MA
  01867, Prepared for: John F. & Eugenie M. Moffit, 68 Beacon Street,
  Andover, Massachusetts, recorded with the Essex North District Registry
  of Deeds as Plan Number 13060.
- b. A plan of land entitled "Definitive Subdivision of Section 5 Modification Plan of Land Andover Country Club Andover, Massachusetts" Scale 1"=40' Date: July 8, 1994, Dana F. Perkins, Inc. Consulting Engineers and Land Surveyors 1215 Main Street, Unit 111, Tewksbury, MA 01876 125 Main Street, Reading, MA 01867 Owner: CA Investment Trust, 59 Chandler Circle, Andover, Massachusetts recorded with the Essex North District Registry of Deeds as Plan Number 12513 and affecting Lots 116 and 117 thereon.
- c. A plan of land entitled "Easement Plan of Land Andover Country Club Andover, Massachusetts Scale 1"=40' Date: July 11, 1991 Dana F. Perkins, Inc. Consulting Engineers and Land Surveyors 1215 Main Street, Unit 506, Reading, MA 01867 Owner: CA Investment Trust, 59 Chandler Circle, Andover, Massachusetts recorded with the Essex North District Registry of Deeds as Plan Number 12041.
- d. A plan of land entitled "Easement Plan of Land Stafford Lane Andover, Massachusetts Scale 1"=40' Date: July 7, 1991 Dana F. Perkins, Inc. Consulting Engineers and Land Surveyors 1215 Main Street, Unit 506, Reading, MA 01867 Owner: CA Investment Trust, 59 Chandler Circle, Andover, Massachusetts recorded with the Essex North District Registry of Deeds as Plan Number 12040. The easement in this instance being on the entire parcel shown as "Parcel J-A Open Space and Pathway Easement" on said Plan.

For title see deed recorded at Book 1364, Page 745, Book 1380, Page 103, and Book 2395, Page 196. The foregoing easements are the same easements as described in deed to Town of Andover recorded at Book 2813, Page 135.

### Select Board

# Minutes of Monday, June 27, 2022

Town Offices 3<sup>rd</sup> Floor Select Board Conference Room 36 Bartlet Street, Andover, MA 01810

#### I. Call to Order – 7:00 P.M.

The Chair of the Select Board, Alex Vispoli, called the meeting to order at 7:00 PM. Members in Attendance: Annie Gilbert, Chris Huntress, Laura Gregory, Melissa Danisch.

Others in Attendance: Deputy Town Manager, Mike Lindstrom, Asst. Town Manager Patrick Lawlor, Town Counsel Tom Urbelis, Finance Director Donna Walsh, Chief Assessor, David Billard.

# II. Opening Ceremonies

A. Moment of Silence/Pledge of Allegiance

The meeting began with a Moment of Silence followed by the Pledge of Allegiance.

# III. Communications/Announcements/Liaison Reports

Mike Lindstrom reported that fireworks for the 4<sup>th</sup> of July will be held on Saturday, July 2<sup>nd</sup> at AHS starting around 9:15 PM. In addition, they are soliciting public feedback on a number of town initiatives, information is available on the Town website. They have multiple portals open including the Sidewalk Master Plan in terms of what environmental partners are recommending, including current conditions along with feedback that they will report back to the Board in August.

The Chandler Road Recreation portal is also available on the Town website. There are some initial concepts on the portal for the public to look at, but are by no means a final design. To date, they have held three public meetings soliciting public feedback. They will reconvene in September.

The Shawsheen River Master Plan portal is open with the goal to reconvene the public in late July to re-engage the public in this project. They have been collecting data for the past several months and are starting the process to break off into more specific-targeted areas.

Patrick Lawlor said they are in the middle of conducting the annual solicitation for vacancies on several boards and committees. Information and lists of available vacancies are available on the Town website. People are also encouraged to fill out a Talent Bank Form.

Laura Gregory attended the DEI Commission Retreat last week which was a great experience full of exciting ideas and things planned to move the Town forward. She is grateful for the work of the Commission.

Melissa Danisch reported that the 375<sup>th</sup> Anniversary Committee held the sponsorship event at the Peabody Institute which was a great opportunity to thank the volunteers and the sponsors that made the 375<sup>th</sup> Committee a success. The car show held in Andover yesterday was great and the Pride Parade and picnic held on Saturday was a nice event.

Alex Vispoli also attended the car show yesterday and was given the job to pick a trophy to present from the Select Board. There were 20 cars and his choice was a 1938 Chevy Impala.

The Select Board is "going on the road" for their next two meetings; the July 20<sup>th</sup> meeting will be held at the new Ballardvale Fire Station and the August 1<sup>st</sup> meeting will be held at the Municipal Services Facility on Campanelli Drive. Anyone with ideas for other venues should contact the Town Manager's Office. The meetings will also be live-streamed.

The  $4^{th}$  of July Pancake Breakfast will be served by the Select Board and School Committee on the  $4^{th}$  of July at the Robb Center at 8:30-10:30 in the morning followed by the Spirit Parade and a program at the Gazebo in the Park based on Andover History and the  $4^{th}$  of July.

### IV. Citizens Petitions and Presentations

Jane Gifun, Castle Heights Road, thanked Jemma Lambert, Director of Community Services and her group for arranging the first kayaking group held at Pomp's Pond. They have decided to hold it every Thursday at 8:30 AM in the month of July. Sign up is available on the Town Website.

### V. Regular Business

### A. <u>Year End Transfers</u>

Finance Director, Donna Walsh reported on the year-end transfers. They have requests from the Compensation Fund, Operating Budget Transfers and the Revolving Fund Spending Limit requests. <u>Budget Transfers</u>: Under MGL Chapter 44 Section 33B during May and June and the first 15 days of July of the new fiscal year, the Board with the agreement of the Finance Committee, may transfer any amount from a department or other appropriation to any other appropriation (except a school department). There are no limitations on the amount.

Operating Budget Transfer – Compensation Fund (to cover vacancies)

Fire Salaries	\$100,000	Transfer from Library Salaries
Fire Salaries	\$ 30,000	General Government Salaries
Police Salaries	\$180,000	General Government Salaries

Laura Gregory voted that in accordance with MGL, Chapter 44, Section 33B, the Select Board approve the Fiscal Year 2022 operating budget transfers as presented. Motion seconded by Chris Huntress. Motion passes 5-0.

Recreation Revolving Fund Transfer:

The Recreation Revolving Fund was established under MGL Chapter 44 Section 53E ½. Acceptance of this statute by Town Meeting requires that the warrant article/motion state the dollar limit of expenditures that can be made from the fund each fiscal year and that the amount be re-authorized each year at Town Meeting. The current authorized spending limit is \$750,000. It was increased to \$1,000,000 at the May 2022 the Annual Town Meeting.

The statute specifies that the amount spent from a revolving fund may be increased with the approval of the Select Board and Finance Committee outside of Town Meeting by a majority vote. In FY-17 the Recreation Department began offering an after school care program through their revolving account. Total revenues to date for all programs are \$1,687,610, but spending limit was \$750,000. It is estimated that \$1,300,000 will be spent from this fund through June 2022. The request for the recreation revolving fund is to increase the limit to \$1.3M (just for FY-22). This program is self-funded.

CDMP Legal Notices: MGL Chapter 44 Section 53E ½. Limit of \$20,000 voted this year, total revenues to date are \$29,003.70 so they estimating about \$30,000 will be spent due to increase in advertising fees, legal notices, etc.

Chris Huntress moved that in accordance with the requirements of MGL Chapter 44, Section 53E ½, the Select Board approve increasing the FY22 spending limit for the Community Development & Planning Legal Notices Revolving Fund to \$30,000 and further that the Select Board approve increasing the FY22 spending limit for the Recreation Revolving Fund to \$1.3M. Motion seconded by Melissa Danisch. Motion voted 5-0 to approve.

### B. <u>Tax Classifications Impacts</u>

Chief Assessor, Dave Billard presented information relative to the impacts of the tax classification process. (see attached). Alex Vispoli asked Mr. Billard to talk about the process of tax classifications which the Board is required to do this every year.

This past year, they have seen some fluctuations on items and impact that Mr. Billard talked about in his presentation. Mr. Billard started with the Average Single tax rate as follows:

Family/Commercial/Industrial rates triggered by the tax shift of 171: Residential rate: 4.3% Commercial rate: 8.8% Industrial rate: 12.1% are very much average tax bill impacts and is an estimated average for the three specific property types.

As an average, there are reasons that a property may not be realizing these percentages; the data on the home or the valuation increases. If you are a new growth parcel and additions are added, you will most likely not be of that average tax bill. Annually, the Assessor's Office conducts cyclical re-inspections of homes/businesses and annually updates the information on the sales that occurred in the town to verify the assessments.

Annually, the office also updates the assessed values determined by sales in the area and to determine market value. They look at use, lot, location, size, and condition among other benchmarks to determine assessed value.

Given the diverse uses associated with the commercial class, each are looked at separately. Due to sales activities and assessment indexes, smaller office space increased above the average. Hotels were below the average.

The goal of the assessment changes to a full and fair cash value is to have all of the classes of property be at a relatively uniform rate of market value annually. If someone thinks their assessed value is wrong, taxpayers have a right to file an abatement application annually. They also have an appeal process that is reviewed by the public tax office in Boston. Mr. Billard also reviewed Proposition 2 ½ and the effects on individual tax bills. The Board thanked Mr. Billard for his presentation.

## C. <u>Information Technology Surplus Property Disposal</u>

Board to consider voting to authorize the Town Manager to dispose of some or all of the 891 units of information technology surplus property; 80% of the items are iPads or workstations.

Wally McKenzie from the IT Department reported on the request to dispose of the surplus property going out to bid to recycling companies. All requirements for disposal are listed in the bidder's requirements list. The December 2021 disposal resulted in \$13,500.00 of revenue for the Town. IT extended the use of workstations for an additional year beyond their planned replacement due to supply chain issues.

Annie Gilbert moved that the Board vote to authorize the Town Manager to dispose of some or all of the 891 units of information technology surplus property as described on the list presented to the Board and to authorize the Town Manager to do so in his discretion by public auction or competitive bids pursuant to General Laws Chapter 30B. Motion seconded by Melissa Danisch and voted 5-0 to approve.

#### D. Town Manager Review Process Timeline

Board to consider voting to approve the timeline for the Town Manager review process.

The Board has two different options to consider:

Option A: The Town Manager would provide the self-evaluation material and an information packet by July 1<sup>st</sup> to the Board for review. The Board would send their completed review and recommendation to the HR Director and Chair and the Board by July 11<sup>th</sup> to review at July 20<sup>th</sup> meeting.

Option B: Town Manager to provide self-evaluation and material on July 1st and the Board to complete a review document to HR Director and Chair on July 22nd and Board to vote to approve at their August 1, 2022 Select Board meeting.

Annie Gilbert moved to approve the 30-day Review Timeline for the Town Manager Review process (option B). Motion seconded by Chris Huntress. Motion passes 5-0.

# VI. Consent Agenda

# A. Appointments by the Town Manager

Laura Gregory moved to vote that the following appointments by the Town Manager and as listed in the Consent Agenda. be approved. Motion seconded by Melissa Danisch. Motion passes 5-0.

Department	Name	Position	Rate/Ter m	Date of Hire
Community Services – Recreation	Eric Strong	Seasonal	\$14.75/hr	6/20/2022
Community Services – Recreation	Kyla Kelley	Seasonal	\$14.75/hr	6/20/2022
Community Services – Recreation	Nico DeLeo	Seasonal	\$14.75/hr	6/20/2022
Community Services – Recreation	Reid Giribaldi	Seasonal	\$14.50/hr	6/27/2022
Community Services – Recreation	Will Beeny	Seasonal	\$14.00/hr	6/27/2022
Community Services – Recreation	Hanna Medwar	Seasonal	\$14.00/hr	6/27/2022
Community Services – Recreation	Hannah Ratner	Seasonal	\$14.00/hr	6/27/2022
Community Services – Recreation	Ethan Daly	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Sergey Bielecki	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Gavin Lohan	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Jonathan Oatman	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Taylor Henderson	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Margaret Borenstein	Seasonal	\$13.75/hr	6/27/2022

Community Services – Recreation	Cole Robinson	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Nicholas Vaccaro	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Anthony DeLuca	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Jake Zannini	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Alex Lugo	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Ian Robinson	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Robert Hauser	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Nathaniel Hemman	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Emma Wiltshire	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Owen Collins	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Dominic Mazzariello	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Brodie Miolla	Seasonal	\$13.75/hr	6/28/2022
Community Services – Recreation	Jake Bowab	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Ava Vieira	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Austin Pace	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Jack Van Buren	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Olivia Janasik	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Darby Hackett	Seasonal	\$13.75/hr	6/27/2022

Community Services – Recreation	Cooper Conroy	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Brody Conroy	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Aidan Burke	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Luca Beltrandi	Seasonal	\$13.75/hr	6/27/2022
Community Services – Recreation	Michael Andelman	Seasonal	\$13.75/hr	6/27/2022
Community Services – Youth Services	Leilani Vasquez	Seasonal	\$15.00/hr	6/28/2022
Ballardvale Historic District Commission	Joanna Reck	Member	Term Expires 6/30/2025	7/1/2022
Ballardvale Historic District Commission	Sara Nigrelli	Member	Term Expires 6/30/2025	7/1/2022
Board of Assessors	David Billard	Member	Term Expires 6/30/2025	7/1/2022
Board of Health	Dr. Deborah Enegess	Member	Term Expires 6/30/2025	7/1/2022
Commission on Disability	Katherine Ananis	Member	Term Expires 6/30/2025	7/1/2022
Commission on Disability	Justin Coppola, Sr.	Member	Term Expires 6/30/2025	7/1/2022
Commission on Disability	S. David Kahan	Member	Term Expires 6/30/2025	7/1/2022
Commission on Disability	(Mary) Eileen Reilly	Member	Term Expires 6/30/2025	7/1/2022

Council on Aging	Gail Bloom	Member	Term Expires 6/30/2025	7/1/2022
Council on Aging	Amanda Preston	Member	Term Expires 6/30/2025	7/1/2022
Council on Aging	Kimberly Butler-Rainen	Member	Term Expires 6/30/2025	7/1/2022
Council on Aging	Thomas Rando	Member	Term Expires 6/30/2025	7/1/2022
Cultural Council	Paul Graveline	Member	Term Expires 6/30/2025	7/1/2022
Cultural Council	Tanja King	Member	Term Expires 6/30/2025	7/1/2022
Cultural Council	Amie Joof Senghore	Member	Term Expires 6/30/2025	7/1/2022
Design Review Board	Eric Daum	Member	Term Expires 6/30/2025	7/1/2022
Design Review Board	Paul Maue	Member	Term Expires 6/30/2025	7/1/2022
Economic Development Council	Amy Brearley	Member	Term Expires 6/30/2025	7/1/2022
Economic Development Council	Michael Morris, Jr.	Member	Term Expires 6/30/2025	7/1/2022
Emergency Management	Patrick Keefe	Director	Term Expires 6/30/2023	7/1/2022
Forest Warden	Michael Mansfield	Fire Chief	Term Expires 6/30/2023	7/1/2022

Keeper of the Lockup	Patrick Keefe	Police Chief	Term Expires 6/30/2023	7/1/2022
Merrimack Valley Regional Transit Authority	Jacki Byerley	Member	Term Expires 6/30/2023	7/1/2022
Merrimack Valley Regional Transit Authority	Paul Materazzo	Alternate	Term Expires 6/30/2023	7/1/2022
Merrimack Valley Regional Transit Authority	Lisa Schwarz	Alternate	Term Expires 6/30/2023	7/1/2022
Merrimack Valley Planning Commission	Jacki Byerley	Alternate	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	James Bedford	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	Calvin Deyermond	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	Brian Masterson	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	Mark Comeiro	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	Michael Mansfield	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	R. Scott Parish, Jr.	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	Calvin Perry	Member	Term Expires 6/30/2023	7/1/2022
Patriotic Holiday Committee	H. Francis Ritterhaus	Member	Term Expires 6/30/2023	7/1/2022

Patriotic Holiday Committee	Stephen Wallingford	Member	Term Expires 6/30/2023	7/1/2022
Permanent Town Building Advisory Committee	Daniel Casper	Member	Term Expires 6/30/2025	7/1/2022
Permanent Town Building Advisory Committee	Richard Feldman	Member	Term Expires 6/30/2025	7/1/2022
Permanent Town Building Advisory Committee	David Giangrande	Member	Term Expires 6/30/2025	7/1/2022
Permanent Town Building Advisory Committee	Mark Johnson	Member	Term Expires 6/30/2025	7/1/2022
Permanent Town Building Advisory Committee	Ellen Keller	Member	Term Expires 6/30/2025	7/1/2022
Preservation Commission	Amy Bloom	Member	Term Expires 6/30/2025	7/1/2022
Preservation Commission	Eric Daum	Member	Term Expires 6/30/2025	7/1/2022
Preservation Commission	Joanne Michalik	Member	Term Expires 6/30/2025	7/1/2022
Scholarship Committee	Eric Stubenhaus	Member	Term Expires 6/30/2025	7/1/2022
Towle Fund Trustees	Sandra Levine	Member	Term Expires 6/30/2025	7/1/2022
Town Seal Review Committee	Thomas Adams	Member	Term Expires 6/30/2023	7/1/2022
Town Seal Review Committee	Elaine Clements	Member	Term Expires 6/30/2023	7/1/2022

Town Seal Review Committee	Andrew Flanagan	Member	Term Expires 6/30/2023	7/1/2022
Town Seal Review Committee	John Hess	Member	Term Expires 6/30/2023	7/1/2022
Town Seal Review Committee	Melissa Litton	Member	Term Expires 6/30/2023	7/1/2022
Town Seal Review Committee	Karen Van-Welden Herman	Member	Term Expires 6/30/2023	7/1/2022
Trustees of Memorial Hall Library	Carolyn Fantini	Member	Term Expires 6/30/2025	7/1/2022
Trustees of Spring Grove Cemetery	William Canane	Member	Term Expires 6/30/2025	7/1/2022
Veterans Service Agent	Mark Comeiro	Agent	6/30/2023	7/1/2022

# VII. Approval of Minutes

A. Annie Gilbert moved to approve the Select Board minutes of February 28, 2022. Motion seconded by Chris Huntress. Motion passes 3-0-2 Laura Gregory and Melissa Danisch abstained.

Annie Gilbert moved to approve the Select Board minutes of March 14, 2022. Motion seconded by Chris Huntress. Motion voted 3-0-2 to approve. Laura Gregory and Melissa Danisch abstained.

Annie Gilbert moved to approve the minutes of Select Board April 4, 2022. Motion seconded by Melissa Danisch. Motion voted 4-0-1 to approve. Laura Gregory abstained.

Annie Gilbert moved to approve the minutes of April 21, 2022. Motion seconded by Melissa Danisch. Motion voted 4-0-1 to approve. Laura Gregory abstained.

Note: \*Minutes of April 14th should be listed as April 13, 2022. No action taken.

### VIII. Adjourn

At 8:05 PM on a motion by Chris Huntress and seconded by Annie Gilbert, the Select Board voted 5-0 to adjourn.

Respectfully submitted, Dee DeLorenzo, Recording Secretary

# **Select Board Meeting**

Minutes of Monday, August 15, 2022 Bancroft Elementary School Cafetorium 15 Bancroft Road, Andover, MA 01810

### I. Call to Order – 7:00 P.M.

Select Board Chair Alex Vispoli called the Select Board Meeting of August 15, 2022 to order at 7:00 P.M in the Cafetorium at the new Bancroft School which opened in 2014.

**Members present**: Laura Gregory, Annie Gilbert, Melissa Danisch, Alex Vispoli. Chris Huntress absent.

Others in attendance: Town Manager Andrew Flanagan, Deputy Town Manager Mike Lindstrom.

# II. Opening Ceremonies

## A. Moment of Silence/Pledge of Allegiance

The meeting began with a Moment of Silence followed by the Pledge of Allegiance.

As a member of the Bancroft School Building Committee, Annie Gilbert provided an overview of the Bancroft School Building. The original school was an open space concept design built in 1969 and was a wood-framed structure which did not have one piece of structural steel which proved to not be structurally sound and very expensive to maintain. The new Bancroft School was designed to bring Bancroft into the 21st Century and include elements that honored the old school and designed to accommodate 680 students at @ 100,000 sq. ft. They honored the past by incorporating similar features of the original Bancroft School to mimic the open concept where possible. The new school is a LEED certified building; sustainability was a priority to get the long-term payback and cost minimalization. MSBA selected the new Bancroft School to be one of the State's model school-designs that other communities could draw on.

Alex Vispoli introduced and welcomed Beth Leavitt the new principal of Bancroft School.

Ms. Leavitt is honored to be here and shared that the most exciting part for her is the community base at Bancroft. The way that the layout was designed allows for a community feel within a large building. She brings over 30-years as an educator. Ms. Leavitt recognized the school custodians who prepared the building over the weekend for tonight's meeting.

# III. Communications/Announcements/Liaison Reports

The Town Manager shared the following updates:

1. Update on the Warrant Article approved at Town Meeting to implement the 25-mph Speed Limit. Police Chief Keefe and his team will make a presentation and recommendation to the Board in early September. There will be a first and second reading of this proposal.

- 2. Andover Days will be held on Friday, September 23 and Saturday, September 24. Opening ceremonies will start at 10:00 AM with Main Street closed until 4:00 PM. A few of the many events include a Park Street Beer Garden opening at noon facilitated by Oak and Iron, as well as an outdoor movie setting and fireworks. The Town Manager thanked the Andover Chamber of Commerce for their work in planning for this event. The organizers met with all of the town Departments who are involved in this event.
- 3. Update on water drought: The water operation in terms of treatment and distribution has held up marginally well and we continue to fill our tanks at the end of every night which is a tribute to the staff and leadership of the Water Treatment Plant.

Mike Lindstrom thanked everyone who attended the update on Phase I of the Shawsheen River Master Plan. The next big event is Sept 22<sup>nd</sup> at 6:30 PM with an in-person meeting at Memorial Hall Library with stakeholder-groups present. This project is going to accelerate as they start creating a shared vision across all the different areas and stakeholder groups.

Alex Vispoli reported that the Town's Governance Study Committee will present their findings to the Board on September 12<sup>th.</sup> The Board will then discuss next steps.

### IV. Citizens Petitions and Presentations

### **WECan Presentation**

Kate Margolese spoke on behalf of WECAN members to talk about Andover's Sustainability Resolution. They are a resident led group and instrumental in bringing Andover Community Power forward. They were also instrumental in working with the Town Manager on the position of the Sustainability Coordinator, Joyce Losick-Yang, and co-hosted the climate summit with her. They are hosting Andover's first Sustainability Fair at Andover Days and will have information on electrifying your appliances, yard, and solar power. The presentation also included their Andover Sustainability Resolution.

Electrify Your Life Campaign will educate people on why it is important to have a clean power supply, respond to the climate crisis and align to the Commonwealth's goals to reach net-zero emissions by 2050.

Andover's Sustainability Action Presentation included advocating for and taking advantage of state programs, promoting actions for residents and businesses, prioritizing the reduction of Town GHG emissions, adopting nature-based solutions, equitably align costs, and developing a Climate Action Plan.

To stabilize the climate, we need to have a sustainability resolution that aligns to what the State is doing and gives residents the opportunity to share what they want to see and an opportunity to attract businesses. Mary Pritchard distributed a copy of the Sustainability Resolution for Andover to the members of the board which Kate Margolese read.

Six elements of action include: Advocate for action, promote actions, prioritize the reduction of fossil fuels, accelerate adaptation of nature-based solutions, equitably align costs, develop and implement a climate action plan. Andover Town Meeting 2023 deems

that funding and implementation of a climate action plan needs to be a top priority. They will have a citizen article for the 2023 Town Meeting Warrant.

The scope and scale of climate issues requires engaging residents community-wide in a conversation; one way to do that is to bring a statement before Town Meeting. The Select Board hopes that as a community, we can support all of the ideas and remain open for more opportunities.

Dick Howe, 3 Robandy Road asked about the status of the MINCO Development for 11 Lewis Street. The Town Manager said the town is in active negotiations finalizing a land distribution (LDA) and expects to have a public update in early fall. Alex Vispoli shared that the Town must decide if they want to go through the zoning change presented by the State.

Town Governance Study Committee: Mr. Howe hopes the Board will review the report, deliberate on the prioritization for each of the recommendations, hold public hearings, and make decision afterwards.

## V. Public Hearings

A. <u>Liquor License Wines and Malt Beverages to be Drunk on Premises – Brooksy's</u> Board to review and consider voting to approve the application of Paradise City Hospitality, LLC d/b/a Brooksy's, for a new Wines and Malt Beverages to be Drunk on Premises License at 90 Main St., Andover, MA.

Atty Robert Lavoie spoke on behalf of Brooks Brice, who is requesting that the Board approve the application of Paradise City Hospitality at 90 Main Street (former location of Bertucci's Restaurant). Mr. Brice introduced himself to the Board and explained his plan for Paradise City to the Board.

Annie Gilbert moved to approve the application of Paradise City Hospitality, LLC d/b/a Brooksy's, for a new Wines and Malt Beverages to be Drunk on Premises License at 90 Main St., Andover, MA, subject to the condition that all other requirements of the Town are met prior to issuance. Motion seconded by Melissa Danisch and voted 4-0 to approve.

### VI. Regular Business

### A. Sustainability Update

Dr. Joyce Losick-Yang, Director of Sustainability and Energy for the Town of Andover, provided an update to the Board that included a mission statement and responsibilities, grant writing and oversight, energy and sustainability management, and Public/Town coordination and engagement. The presentation included development of a climate and sustainability action plan to address climate impacts and sustainability for the residents of Andover developed two years ago. Since her hire, Joyce was involved with passing the Andover Community Power Plan, the town-wide greenhouse gas emissions assessment, and appointed to be on the Selection Committee for the development of the Town Yard.

The Shawsheen Resilience Project included understanding land use, profiles and design that should go into the restoration efforts of the Shawsheen River and funded by the State's Preparedness Action Grant, a process that was initiated by the Town's leadership before she came on board.

The Climate Summit: Andover was recognized as Best-in-Class Engagement by The State Agency (DOER), and released draft guidelines for the Green Communities 2.0 program. Communities must demonstrate energy leadership in clean energy policies/planning, community engagement, and a clean transportation plan. They have also been very successful in obtaining grants for Andover for this initiative.

Grants have been a big part of their ability to get things done. Joyce has been very successful in obtaining grants for the Andover Community more than equal to the investment for her position. She has applied for more than \$1M in grants already for 2023.

Goal for FY23: Development of Climate Action Plan and setting in motion a series of community engagement sessions on goals and priorities and obtaining buy-in with the involvement of residents in the many events that will be coming forward.

Melissa Danisch asked if there will be a Climate Summit again this year? Joyce replied that they hope to revisit the Climate Summit and host it again.

Annie Gilbert appreciates all of the work Joyce has been doing in this dedicated position and the extent in which she has engaged the community. She asked about the bill Governor Baker recently signed that gives communities the option to make new construction carbon free. What does that mean across the State and for Andover?

Gov. Baker signed a version 2.0 Climate Act that gives ten communities the option to ban fossil fuel infrastructure in new construction and major renovations, the more controversial aspect of the new climate act. Andover is not among the communities petitioning for that. There is a new stretch code that will soon be promulgated by the DOER and an update to the stretch code Andover adopted. The stretch energy codes will be revamped and come more stringent. There is also an opportunity for future town meetings to take part in a "specialized stretch code" that will ask builders to pre-wire new construction buildings for an all-electric future; the choice is now still with the builder or the owner of the building. The most cost burdensome aspect is the pre-wiring. Andover also launched a newsletter on sustainability.

Laura Gregory thanked Joyce on her leadership in this area and for keeping this a high priority area that we all need to continue understand that this is an emergency and needs to be treated that way. Sustainability Coordinator, Joyce Losick-Yang, thanked the Board and Andover's Leadership team.

#### **B.** Communications Goal Update

Board to receive an update on the plan for establishing the proposed responsibilities and funding plan for a dedicated resource for town-wide communications.

The Town Manager presented information on the proposed communications resource and consistent with the Select Board's Goal to establish a Communications Resource. The Town Manager recognized Patrick Lawlor and Kathryn Forina for their work in this area.

The presentation included the following:

### General responsibilities

- ~Develop & distribute content for regular and reoccurring communications.
- ~Coordinate/Centralized Town-wide departmental communications.
- ~Create information campaigns focused on increasing participation and attendance at important meetings, forums and events.
- ~Integrate Andover Central/311 with communication strategy.
- ~Identify trends and areas of interest/concern. Develop content accordingly.
- ~Increase engagement through social media while maintaining the Town's presence in social media groups.
- ~Manage website content and regularly identify navigational improvements.
- ~Develop branding strategy to ensure that the format of all communications is consistent.
- ~Develop neighborhood initiatives and communication plans for community and special events.
- ~Manage media and develop content for emergency/incident communications.

#### Areas of Focus and Deliverables

- Regular Communications manage website and regularly identify management communications and concerns and post regular updates.
- Social Media Refine the Town's strategy for increasing its presence on social media channels and platforms and monitor channels for resident concerns, information gaps and other issues.
- Website Content Management Serve as the Town's webmaster and improve integration of website content and other communication channels. (newsletters) and coordinate all town websites.
- Community Programs/Mobile Town Hall increase promotion of community programs and events and enhance program and coordinate schedule for Mobile Town Hall. Develop a framework and establish strategy for deploying Mobile Town Hall that correlates with the schedule and department/division staffing.
- Email Newsflash Increase number of subscribers by fully developing the 'menu based' options for receiving alerts.

The funding for the position, in the amount of \$93,000, will come from a reallocation of existing PR consultant costs, personnel costs (salaries) overtime, and department revolving funds from Recreation, Water Enterprise Fund, and the Parking Revolving Fund. The position will be funded within the approved budget and does not have any incremental tax impact.

#### Responsibilities:

- Manage Town Offices Blog
- Coordinate communications across departments to highlight initiatives and ensure messaging consistency.

- Develop and manage information campaigns.
- Manage Communication Plan for Annual Town Meeting.

Goal: Define and establish the scope for a dedicated resource.

Deliverable: Present a plan to the Board summer of 2022.

Information on other comparable communities who have a dedicated communications resource showed that this position has been necessary to offset loss of local media coverage. Having a dedicated resource builds trust in a community, the position becomes a critical member of the Town Manager's Senior Leadership Team and that they are 'in the room' when decisions are made in order to most effectively collect, pull, and distribute information. The position has been overwhelmingly well received, subscriber growth and open rate increased across all communication channels. Being available 24/7 is part of the job.

Board members commented on the number of deliverables that underscores the need to have a dedicated resource.

Next steps: They will incorporate the feedback received with the plan to hire after Labor Day and bring to the board for approval.

# C. Establishment of Town Manager's FY 2023 Annual Salary

Board to vote to establish Town Manager's FY 2023 Annual Salary.

The Board previously met in Executive Session following the review goal process and discussed action on the salary of the Town Manager and decided to provide a base 2% increase in the Town Manager's Salary.

Annie Gilbert moved that the Town Manager's annual salary for FY-2023 be adjusted to \$222,646 which reflects a 2% general wage adjustment, and consistent with the adjustment given to all other Town employees. Such adjusted salary to be effective as of July 1, 2022. Motion seconded by Melissa Danisch. Motion voted 4-0 to approve.

Melissa Danisch added that they complimented the great work staff has done but wanted to add the work that the Town Manager has done and appreciates the partnership the Select Board has with the Town Manager.

### VII. Consent Agenda

- A. Appointments by the Select Board
- B. Annie Gilbert to approve the appointments by the Select Board as listed in the Consent Agenda. Motion seconded by Laura Gregory. Motion passes 4-0.

Department	Name	Position	Rate	Date of Hire
Town Clerk	David Berman	Election Worker	\$10.25	8/15/2022

Town Clerk	Champa Bilwakesh	Election Worker	\$10.25	8/15/2022
Town Clerk	Jack Hall	Election Worker	\$10.25	8/15/2022
Town Clerk	Ellen Marcus	Election Worker	\$10.25	8/15/2022
Town Clerk	Jim Redman	Clerk	\$11.25	8/15/2022
Town Clerk	Martha Mahoney	Election Worker	\$10.25	8/15/2022
Town Clerk	Judy Reghitto	Warden	\$12.25	8/15/2022
Town Clerk	Walter Salvi	Election Worker	\$10.25	8/15/2022
Town Clerk	Edna Allen	Election Worker	\$10.25	8/15/2022
Town Clerk	Mary Bausemer	Election Worker	\$10.25	8/15/2022
Town Clerk	Roberta Brodie	Election Worker	\$10.25	8/15/2022
Town Clerk	Patrick Donahue	Election Worker	\$10.25	8/15/2022
Town Clerk	Patricia Donahue	Election Worker	\$10.25	8/15/2022
Town Clerk	Alexander Iannicelli	Election Worker	\$10.25	8/15/2022
Town Clerk	Vicki Keene	Election Worker	\$10.25	8/15/2022
Town Clerk	Kathy Salvi	Election Worker	\$10.25	8/15/2022
Town Clerk	Susan Schwarz	Election Worker	\$10.25	8/15/2022
Town Clerk	Rajiv Chopra	Election Worker	\$10.25	8/15/2022
Town Clerk	Betsey Couture	Election Worker	\$10.25	8/15/2022
Town Clerk	Robert Decelle	Warden	\$12.25	8/15/2022
Town Clerk	Norma Gammon	Election Worker	\$10.25	8/15/2022
Town Clerk	Amy Janvosky	Election Worker	\$10.25	8/15/2022
Town Clerk	Iris Roskell	Election Worker	\$10.25	8/15/2022
Town Clerk	Jim Sellers	Election Worker	\$10.25	8/15/2022
Town Clerk	Lora Bates	Election Worker	\$10.25	8/15/2022
Town Clerk	Joan Fox	Election Worker	\$10.25	8/15/2022
Town Clerk	Jason Stellakis	Election Worker	\$10.25	8/15/2022
Town Clerk	Cynthia Barakatt	Election Worker	\$10.25	8/15/2022
Town Clerk	Patricia Boutin Skene	Election Worker	\$10.25	8/15/2022

Town Clerk	Cynthia Campbell	Election Worker	\$10.25	8/15/2022
Town Clerk	Gail Demaso	Election Worker	\$10.25	8/15/2022
Town Clerk	Rhonda Fisher	Election Worker	\$10.25	8/15/2022
Town Clerk	Ann Grecoe	Election Worker	\$10.25	8/15/2022
Town Clerk	Lois Kelly	Election Worker	\$10.25	8/15/2022
Town Clerk	MaryRuth Luther	Warden	\$12.25	8/15/2022
Town Clerk	Grenda Mosca	Election Worker	\$10.25	8/15/2022
Town Clerk	Steven Rosenfeld	Election Worker	\$10.25	8/15/2022
Town Clerk	Patricia Simpson	Election Worker	\$10.25	8/15/2022
Town Clerk	Margaret Tenczar	Election Worker	\$10.25	8/15/2022
Town Clerk	George Thomson	Election Worker	\$10.25	8/15/2022
Town Clerk	Kevin Twohig	Election Worker	\$10.25	8/15/2022
Town Clerk	Nancy Vogel	Election Worker	\$10.25	8/15/2022
Town Clerk	Kirsten Ahearn	Election Worker	\$10.25	8/15/2022
Town Clerk	Barbara Burgeios	Election Worker	\$10.25	8/15/2022
Town Clerk	Kathleen Dolan	Election Worker	\$10.25	8/15/2022
Town Clerk	Sandra Levine	Election Worker	\$10.25	8/15/2022
Town Clerk	Mary McGettrick	Election Worker	\$10.25	8/15/2022
Town Clerk	Peter Schwind	Clerk	\$11.25	8/15/2022
Town Clerk	Lenard Zohn	Election Worker	\$10.25	8/15/2022
Town Clerk	Dolores Cleland	Election Worker	\$10.25	8/15/2022
Town Clerk	Cal Perry	Warden	\$12.25	8/15/2022
Town Clerk	Rita Arsenault	Election Worker	\$10.25	8/15/2022
Town Clerk	John Doherty	Election Worker	\$10.25	8/15/2022
Town Clerk	Denise Doherty	Warden	\$12.25	8/15/2022
Town Clerk	Clinton Reiser	Election Worker	\$10.25	8/15/2022
Town Clerk	Francis Rittershaus	Election Worker	\$10.25	8/15/2022
Town Clerk	Suzanne Soo Hoo	Election Worker	\$10.25	8/15/2022

Town Clerk	Sheila Wescott	Election Worker	\$10.25	8/15/2022
Town Clerk	Peter Witman	Election Worker	\$10.25	8/15/2022
Town Clerk	Danielle Crompton	Election Worker	\$10.25	8/15/2022
Town Clerk	Christine Curran	Election Worker	\$10.25	8/15/2022
Town Clerk	Eleanor Everett	Warden	\$12.25	8/15/2022
Town Clerk	Amanda Gasse	Election Worker	\$10.25	8/15/2022
Town Clerk	Kenneth Gasse	Election Worker	\$10.25	8/15/2022
Town Clerk	William Profenna	Election Worker	\$10.25	8/15/2022
Town Clerk	Michael Wartman	Election Worker	\$10.25	8/15/2022
Town Clerk	Susan Wartman	Election Worker	\$10.25	8/15/2022
Town Clerk	Constantine Bassilakis	Election Worker	\$10.25	8/15/2022
Town Clerk	Mary Kate Allard	Election Worker	\$10.25	8/15/2022
Town Clerk	Sumana Behara	Election Worker	\$10.25	8/15/2022
Town Clerk	Alice Friedenson	Election Worker	\$10.25	8/15/2022
Town Clerk	Bob Friedenson	Election Worker	\$10.25	8/15/2022
Town Clerk	John Gardner	Election Worker	\$10.25	8/15/2022
Town Clerk	Matthew Gosselin	Election Worker	\$10.25	8/15/2022
Town Clerk	Carol Hopkinson	Clerk	\$11.25	8/15/2022
Town Clerk	Susan Hunter	Election Worker	\$10.25	8/15/2022
Town Clerk	Linda Kosinski	Election Worker	\$10.25	8/15/2022
Town Clerk	Ken Ozoonian	Election Worker	\$10.25	8/15/2022
Town Clerk	Nancy Simili	Election Worker	\$10.25	8/15/2022
Town Clerk	Julianne Stein	Election Worker	\$10.25	8/15/2022
Town Clerk	Kathy Vieira	Election Worker	\$10.25	8/15/2022
Town Clerk	David Cleary	Election Worker	\$10.25	8/15/2022
Town Clerk	Susanne Dillman	Election Worker	\$10.25	8/15/2022
Town Clerk	Maureen Finneran	Election Worker	\$10.25	8/15/2022
Town Clerk	Charlie Heseltine	Warden	\$12.25	8/15/2022

Town Clerk	Geraldine Jacobson	Election Worker	\$10.25	8/15/2022
Town Clerk	Shirley Kountze	Election Worker	\$10.25	8/15/2022
Town Clerk	Scott Dianie	Election Worker	\$10.25	8/15/2022
Town Clerk	Shiva Sheel	Clerk	\$11.25	8/15/2022
Town Clerk	Mary Barry	Election Worker	\$10.25	8/15/2022
Town Clerk	Wendy Cassidy- Grobicki	Election Worker	\$10.25	8/15/2022
Town Clerk	Phyllis Jardine	Election Worker	\$10.25	8/15/2022
Town Clerk	Lynn Landry	Election Worker	\$10.25	8/15/2022
Town Clerk	Joanne Lepine	Election Worker	\$10.25	8/15/2022
Town Clerk	John McCarthy	Election Worker	\$10.25	8/15/2022
Town Clerk	Genee Morrissey	Election Worker	\$10.25	8/15/2022
Town Clerk	David Tomlinson	Election Worker	\$10.25	8/15/2022
Town Clerk	Alix Driscoll	Election Worker	\$10.25	8/15/2022
Town Clerk	Chris Hayward	Warden	\$12.25	8/15/2022
Town Clerk	Gal Gramer	Election Worker	\$10.25	8/15/2022
Town Clerk	Nancy Mulvey	Election Worker	\$10.25	8/15/2022
Town Clerk	Ameera Mazraany	Election Worker	\$10.25	8/15/2022
Town Clerk	Judith Birtles	Election Worker	\$10.25	8/15/2022
Town Clerk	Timothy Carter	Election Worker	\$10.25	8/15/2022
Town Clerk	Cynthia Cohen	Election Worker	\$10.25	8/15/2022
Town Clerk	Dianne DeLucia	Election Worker	\$10.25	8/15/2022
Town Clerk	Abigail Harris	Election Worker	\$10.25	8/15/2022
Town Clerk	Brewster LaMacchia	Election Worker	\$10.25	8/15/2022
Town Clerk	Tanner O'ssulivan	Election Worker	\$10.25	8/15/2022
Town Clerk	Joy Sapienza	Election Worker	\$10.25	8/15/2022
Town Clerk	Anthony Sofia	Election Worker	\$10.25	8/15/2022
Town Clerk	Gisella Spreizer	Election Worker	\$10.25	8/15/2022
Town Clerk	Molly Bicking	Election Worker	\$10.25	8/15/2022

Town Clerk	Trish Fleming	Warden	\$12.25	8/15/2022
Town Clerk	Yvette Goulet	Election Worker	\$10.25	8/15/2022
Town Clerk	Paul Hickman	Election Worker	\$10.25	8/15/2022
Town Clerk	Dorothy Hollenbeck	Election Worker	\$10.25	8/15/2022
Town Clerk	Sharon Magunson	Election Worker	\$10.25	8/15/2022
Town Clerk	Sandra Minkkinen	Election Worker	\$10.25	8/15/2022
Town Clerk	Micheline Pelletier	Election Worker	\$10.25	8/15/2022
Town Clerk	Gail Ralston	Election Worker	\$10.25	8/15/2022
Town Clerk	Judith Norton	Clerk	\$11.25	8/15/2022
Town Clerk	Nancy Earnley	Election Worker	\$10.25	8/15/2022
Town Clerk	Marilyn Fulginiti	Election Worker	\$10.25	8/15/2022
Town Clerk	Jennifer Hickman	Election Worker	\$10.25	8/15/2022
Town Clerk	Amy Jaromin	Election Worker	\$10.25	8/15/2022
Town Clerk	Liz Kochakian	Election Worker	\$10.25	8/15/2022
Town Clerk	Jeanne Paskowsky	Election Worker	\$10.25	8/15/2022
Town Clerk	Sarah Slaughter	Election Worker	\$10.25	8/15/2022
Town Clerk	Charlotte Taylor	Clerk	\$11.25	8/15/2022
Town Clerk	Hellen Waldruff	Clerk	\$11.25	8/15/2022
Town Clerk	Dave Brown	Warden	\$12.25	8/15/2022
Town Clerk	George Fulginiti	Election Worker	\$10.25	8/15/2022
Town Clerk	Amy Holland	Election Worker	\$10.25	8/15/2022
Town Clerk	Sandra Morrison	Election Worker	\$10.25	8/15/2022
Town Clerk	Pam Newman	Election Worker	\$10.25	8/15/2022
Town Clerk	Suzanne Rice	Election Worker	\$10.25	8/15/2022
Town Clerk	Catherine Robie	Election Worker	\$10.25	8/15/2022
Town Clerk	Linda Salzman	Election Worker	\$10.25	8/15/2022
Town Clerk	Donna Cooper	Election Worker	\$10.25	8/15/2022
Town Clerk	Donna Dooley	Election Worker	\$10.25	8/15/2022

Town Clerk	Suzanne Hornick	Election Worker	\$10.25	8/15/2022
Town Clerk	Steven Knapp	Election Worker	\$10.25	8/15/2022
Town Clerk	Judith Lugus	Clerk	\$11.25	8/15/2022
Town Clerk	Matt Murphy	Election Worker	\$10.25	8/15/2022
Town Clerk	Marcia O'Donnell	Election Worker	\$10.25	8/15/2022
Town Clerk	Amy Belscher	Election Worker	\$10.25	8/15/2022
Town Clerk	Ruth Shapiro	Election Worker	\$10.25	8/15/2022
Town Clerk	Luan Giannone	Election Worker	\$10.25	8/15/2022
Town Clerk	George Kakridas	Election Worker	\$10.25	8/15/2022
Town Clerk	Sandra DiVencenzo	Election Worker	\$10.25	8/15/2022
Town Clerk	Jane Gifun	Election Worker	\$10.25	8/15/2022
Town Clerk	Joe Gifun	Election Worker	\$10.25	8/15/2022
Town Clerk	Phyliss Herskovits	Election Worker	\$10.25	8/15/2022
Town Clerk	Adam Ibitsky	Election Worker	\$10.25	8/15/2022
Town Clerk	Paul Ordman	Warden	\$12.25	8/15/2022
Town Clerk	Carolyn Page	Election Worker	\$10.25	8/15/2022
Town Clerk	Mildred Raymond	Election Worker	\$10.25	8/15/2022
Town Clerk	Lisa Reid	Election Worker	\$10.25	8/15/2022
Town Clerk	John Saba	Election Worker	\$10.25	8/15/2022
Town Clerk	George Woodward	Election Worker	\$10.25	8/15/2022
Town Clerk	Kitty Craig Comin	Election Worker	\$10.25	8/15/2022
Town Clerk	Susan Fried	Election Worker	\$10.25	8/15/2022
Town Clerk	Remi Machet	Warden	\$12.25	8/15/2022
Town Clerk	Cynthia Stoltz	Election Worker	\$10.25	8/15/2022
Town Clerk	Betsey Streeter	Election Worker	\$10.25	8/15/2022
Town Clerk	Nancy Buckley	Election Worker	\$10.25	8/15/2022
Town Clerk	Deb Hartman	Election Worker	\$10.25	8/15/2022
Town Clerk	Carol Towle	Election Worker	\$10.25	8/15/2022

Town Clerk	Susan Yavner	Election Worker	\$10.25	8/15/2022
Town Clerk	Jennifer Zhang	Election Worker	\$10.25	8/15/2022
Town Clerk	Alice Pincujs	Clerk	\$11.25	8/15/2022
Town Clerk	Sarah Atwood	Election Worker	\$10.25	8/15/2022
Town Clerk	Patricia Dell-Ross	Election Worker	\$10.25	8/15/2022
Town Clerk	Karen Dobbelarr	Election Worker	\$10.25	8/15/2022
Town Clerk	Traci Connor	Election Worker	\$10.25	8/15/2022
Town Clerk	Linda D'Andrea	Election Worker	\$10.25	8/15/2022
Town Clerk	Nancy Donahue	Election Worker	\$10.25	8/15/2022
Town Clerk	Clair Enos	Election Worker	\$10.25	8/15/2022
Town Clerk	Linda O'Connell	Election Worker	\$10.25	8/15/2022
Town Clerk	Daniela Roubicek	Election Worker	\$10.25	8/15/2022
Town Clerk	Dora Volpe	Election Worker	\$10.25	8/15/2022

## C. Appointments by the Town Manager

Melissa Danisch moved to approve the appointments by the Town Manager as listed in the consent agenda. Motion seconded by Annie Gilbert and voted 4-0 to approve.

Department	Name	Position	Rate/Term	Date of Hire
CD&P – Planning Division	Monica Gregoire (Anthony Collins)	Associate Planner	\$73,758.29/yr	9/6/2022
Facilities	Nicholas Cantone (Richard Reid)	Electrician	\$72,643.70/yr	9/6/2022
Community Services  – Recreation	Michael DiTroia	Seasonal	\$24.00/hr	8/2/2022

### VIII. Executive Session

Melissa Danisch moved that the Board vote to go into Executive Session pursuant to purpose 3 for confidential communication with Town Counsel to discuss strategy with respect to litigation filed by Yvon Cormier, and to approve and not release Executive Session Minutes of June 13, 2022, and for the Chair to declare that an open session may have a detrimental effect on the negotiating position of the Town; and not to return to open session. The Chair so declared that an open session may have a detrimental effect on the negotiating position of the Town. Motion seconded by Laura Gregory. Roll call: Laura Gregory-Y, Annie Gilbert-Y, Melissa Danisch-Y, Alex Vispoli-Y. Motion passes 4-0.

# IX. Adjourn

At. 8:55 P.M. the Select Board adjourned from Open session and voted 4-0 to move to Executive Session not to return to Open Session.

Respectfully submitted,

Dee DeLorenzo Recording Secretary