

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE: :  
: :  
A PETITION OF CELLCO PARTNERSHIP : PETITION NO. \_\_\_\_  
D/B/A VERIZON WIRELESS FOR A : :  
DECLARATORY RULING ON THE NEED TO : :  
OBTAIN A SITING COUNCIL CERTIFICATE : :  
FOR THE INSTALLATION OF A SMALL : :  
CELL TELECOMMUNICATIONS FACILITY : :  
AT THE PAVILION, 85 SWAN AVENUE, OLD : :  
LYME, CONNECTICUT : FEBRUARY 6, 2017

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

I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies (“R.C.S.A.”), Cellco Partnership d/b/a Verizon Wireless (“Cellco”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Petition”) that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a “small cell” telecommunications facility at The Pavilion located at 85 Swan Avenue in Old Lyme, Connecticut (the “Property”). The Property is owned by Long Island Sound Properties LLC and is used for commercial purposes. Cellco refers to the proposed facility as its “Old Lyme SC5 Facility”.

II. Factual Background

The Property is an approximately 0.46-acre parcel in Old Lyme’s R-10 zone district. *See Attachment 1* – Site Vicinity and Site Schematic Maps (Aerial Photograph). Cellco is licensed to

provide wireless telecommunications services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges in Old Lyme and throughout the State of Connecticut. Initially, the proposed Old Lyme SC5 Facility will provide wireless service in Cellco's 2100 MHz frequency range only.

A. Proposed Old Lyme SC 5 Facility

The proposed Old Lyme SC5 Facility would consist of a small tower mast attached in the northerly portion of the roof of The Pavilion building. The tower will support a single canister antenna (Model NH-180QS-DG 2100 MHz). A remote radio head ("RRH") (Model B25-RRH4x30) and associated electrical equipment boxes would be attached to the northerly façade of the building and will be screened by an eight-foot tall wood fence. The tower and antenna will extend to a height of approximately 25'-11" above ground level (AGL); approximately 7'-6" above the roof. (See Cellco's Project Plans included in Attachment 2). Power and telephone service to the Old Lyme SC 5 Facility will extend from existing service at the Property. Specifications for the Old Lyme SC 5 Facility antenna and RRH are included in Attachment 3.

III. Discussion

A. The Proposed Facility Modifications Will Not Have A Substantial Adverse Environmental Effect

The Public Utility Environmental Standards Act (the "Act"), C.G.S. § 16-50g *et seq.*, provides for the orderly and environmentally compatible development of telecommunications towers in the state to avoid "a significant impact on the environment and ecology of the State of Connecticut." C.G.S. § 16-50g. To achieve these goals, the Act established the Council, and requires a Certificate of Environmental Compatibility and Public Need for the construction of cellular telecommunication towers "that may, as determined by the Council, have a substantial adverse environmental effect". C.G.S. § 16-50k(a).

1. Physical Environmental Effects

Cellco respectfully submits that the installation of a small tower/mast attached to the roof and supporting a canister antenna and associated radio and electrical equipment attached to the façade of the building, will not involve a significant alteration in the physical and environmental characteristics of the Property. No tree removal is required and only minimal ground disturbance is needed to install the facility. There are no wetland areas on the Property and, therefore, no wetlands will be impacted by the installation of the proposed small cell facility.

2. Visual Effects

The visibility of the proposed “small cell” facility would be limited to locations within approximately 500 feet of the building, including the Old Lyme Beach area. (See Visual Assessment & Photo-Simulations (“Visual Assessment”) included in Attachment 4). All views of the Old Lyme SC5 Facility would include mechanical equipment and other appurtenances on The Pavilion building’s roof and facade as well as overhead utility infrastructure. The building-mounted radio and electrical equipment would be screened by a fence painted to match the building. Based on the results of a Visual Assessment, Cellco has determined that the proposed “small cell” facility will not have an adverse visual impact on the views of The Pavilion building or the character of the existing community.

3. FCC Compliance

Radio frequency (“RF”) emissions from the proposed installation will be far below the standards adopted by the Federal Communications Commission (“FCC”). Included in Attachment 5 is a worst-case MPE calculation for Cellco’s “small cell” antenna at a centerline height of 25 feet AGL. This calculation indicates that the Old Lyme small cell facility will operate well within (22.15% of the standard) the RF emission standards established by the FCC.

4. FAA Summary Report

Included in Attachment 6 of this Petition is a Federal Airways & Airspace Summary Report verifying that the new replacement pole described above would constitute an obstruction or hazard to air navigation and that notification to the FAA is not required.

B. Notice to First Selectman, Property Owner and Abutting Landowners

On February 6, 2017, a copy of this Petition was sent to Old Lyme First Selectwoman, Bonnie Reemsnyder and Long Island Sound Properties LLC, the owner of the Property. Notice of Cellco's intent to file the Petition was also sent to the owners of land that abuts the Property. Included in Attachment 7 is a copy of the letter sent to First Selectwoman Reemsnyder and Long Island Sound Properties LLC. Included in Attachment 8 is a sample abutter's letter and the list of those abutting landowners who were sent notice of the filing of the Petition.

IV. Conclusion

Based on the information provided above, Cellco respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of a small tower/mast used to support a "small cell" wireless antenna and related radio equipment will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON  
WIRELESS

By  \_\_\_\_\_




Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103-3597  
(860) 275-8200  
Its Attorneys

# **ATTACHMENT 1**





**Legend**

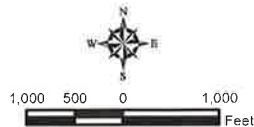
-  Proposed Verizon Wireless Facility
-  Surrounding Verizon Wireless Facilities
-  Municipal Boundary

**Site Vicinity Map**

Proposed Wireless Telecommunications Facility  
 Old Lyme SC5 CT  
 The Pavilion  
 85 Swan Avenue  
 Old Lyme, Connecticut



Base Map Source: 2012 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 2,000 feet  
 Map Date: January 2017










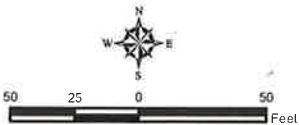


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopc, and the GIS User Community

**Legend**

-  Proposed Verizon Wireless Antenna
-  Proposed Verizon Wireless Equipment Area
-  Proposed Verizon Wireless Cable
-  Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)
-  Subject Property

Map Notes:  
 Base Map Source: ESRI World Imagery  
 Map Scale: 1 inch = 75 feet  
 Map Date: January 2017



**Site Schematic**

Proposed Wireless  
 Telecommunications Facility  
 Old Lyme SC5 CT  
 The Pavilion  
 85 Swan Avenue  
 Old Lyme, Connecticut





# **ATTACHMENT 2**



## WIRELESS COMMUNICATIONS FACILITY

SITE NAME: OLD LYME SC5 CT

THE PAVILION RESTAURANT  
85 SWAN AVE  
OLD LYME, CT 06371  
SMALL CELL ROOFTOP

Cellco Partnership  
d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY  
99 EAST RIVER DRIVE  
EAST HARTFORD, CT 06108

On Air Engineering, LLC

88 Foundry Pond Road  
Cold Spring, NY 10516  
onair@optonline.net  
201-456-4624

LICENSURE

DAVID WEINPAHL, P.E.  
CT LIC. NO. 22144

NO.	DATE	SUBMISSIONS
0	01.05.17	REVIEW
1	01.20.17	REVISED PER ATTORNEY COMMENTS

DRAWN BY: AS	CHECKED BY: DW
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### PROJECT SUMMARY

SITE NAME:	OLD LYME SC5 CT
SITE ADDRESS:	THE PAVILION RESTAURANT 85 SWAN AVE OLD LYME, CT 06371
PROPERTY OWNER:	LONG ISLAND SOUND PROPERTIES LLC 80 BANNAN LA BERLIN, CT 06037
PARCEL ID:	76-13
SITE COORDINATES:	41° 17' 04.68" N 72° 16' 37.97" W
APPLICANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DR., 9TH FL. EAST HARTFORD, CT 06108
VERIZON WIRELESS CONTACTS:	JOHN TIERNEY - CONSTR. (860) 999-1179 STEVE SCHADLER - SAC (508) 887-0357
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE, LLP (860) 275-8345

### DRAWING SCHEDULE

SHEET NO.	SHEET DESCRIPTION
T-1	TITLE SHEET
C-1	ROOF PLAN
C-2	NORTH ELEVATION, EQUIPMENT PLAN & DETAILS
C-3	ABUTTERS MAP & PROPERTY OWNER LIST



### PROJECT DESCRIPTION

- INSTALLATION OF (1) SMALL CELL ANTENNA PIPE MOUNTED TO A BUILDING PARAPET WALL
- INSTALLATION OF SMALL CELL EQUIPMENT AT GRADE BEHIND A NEW FENCED AREA
- ELECTRICAL, TELEPHONE & GROUNDING CONNECTIONS TO EXISTING UTILITIES

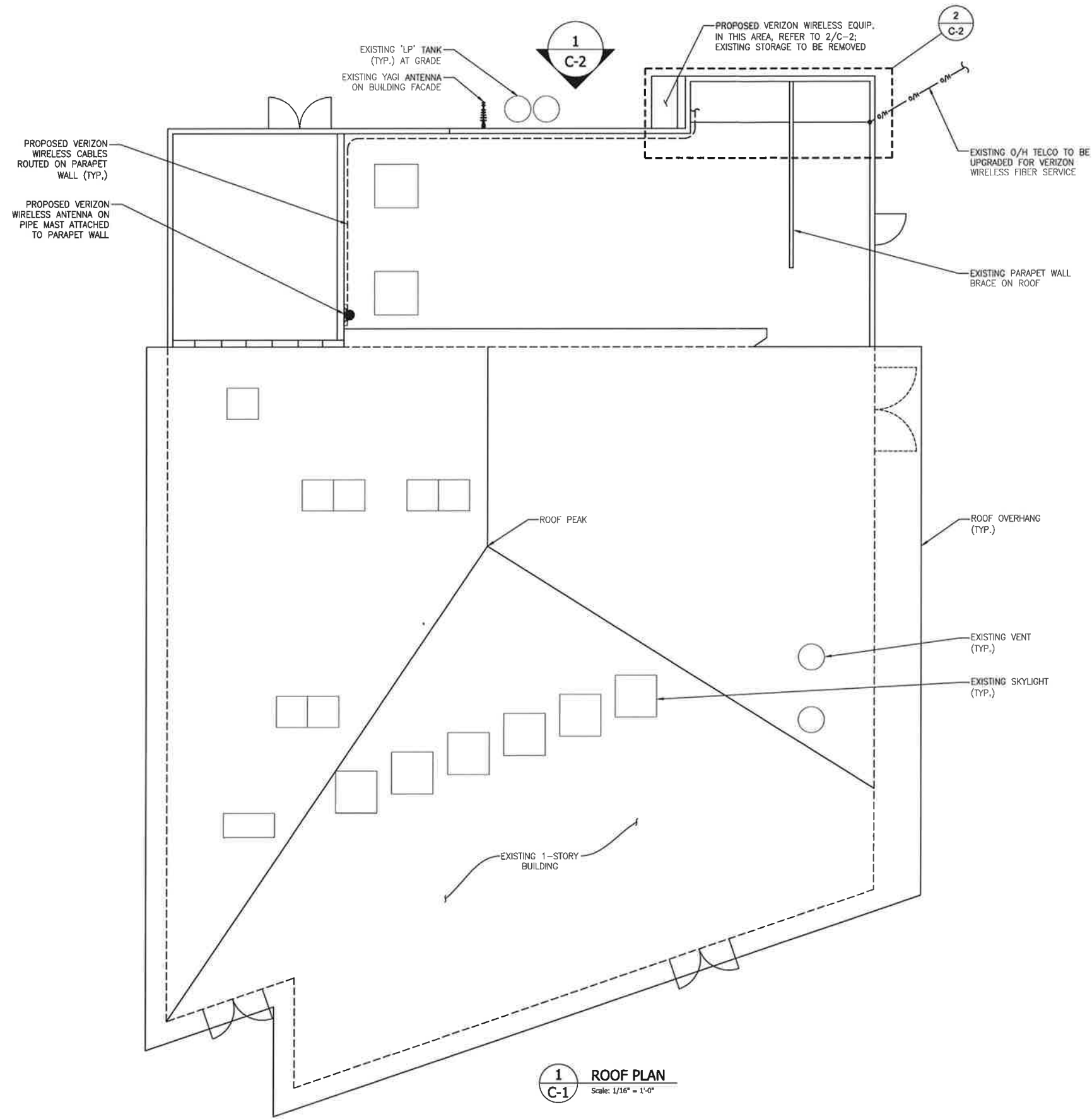
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**OLD LYME SC5 CT**

PROJECT DESCRIPTION:  
**SMALL CELL**

PROJECT INFORMATION:  
THE PAVILION RESTAURANT  
85 SWAN AVE.  
OLD LYME, CT 06371

DRAWING TITLE:  
**TITLE SHEET**

SHEET NUMBER:  
**T-1**



**1**  
C-1  
ROOF PLAN  
Scale: 1/16" = 1'-0"

SWAN AVE

Cellco Partnership  
d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY  
99 EAST RIVER DRIVE  
EAST HARTFORD, CT 06108

**On Air Engineering, LLC**

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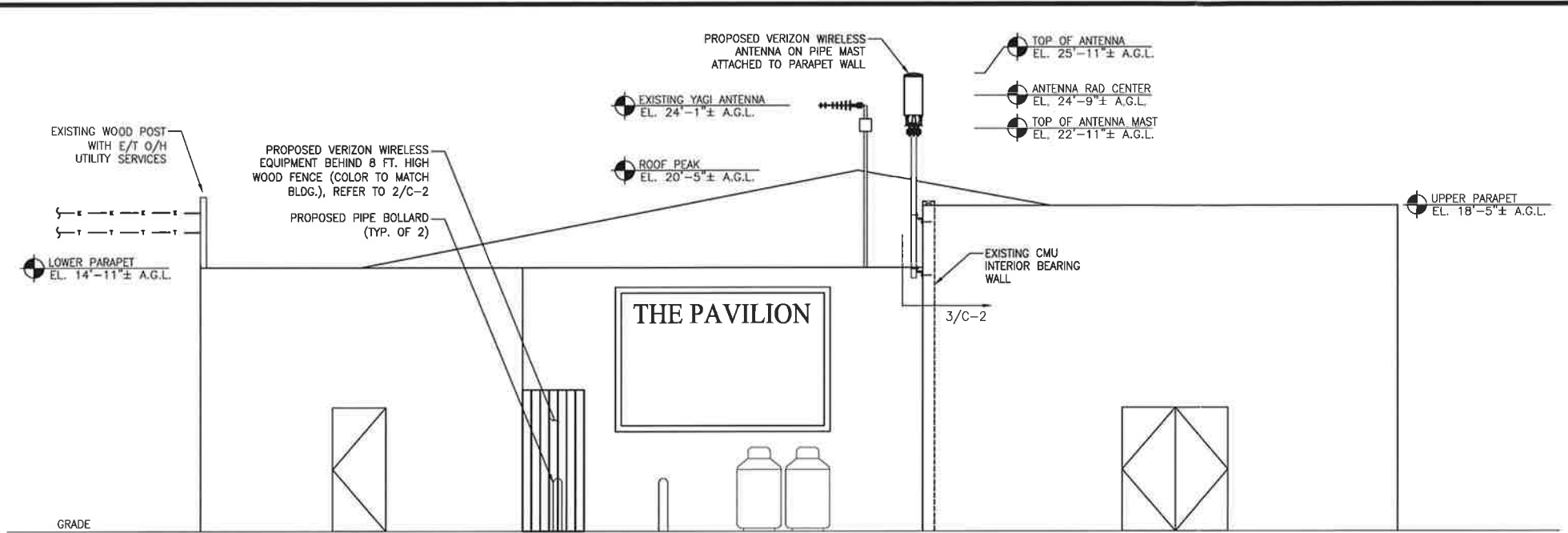
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**OLD LYME SC5 CT**

PROJECT DESCRIPTION:  
**SMALL CELL**

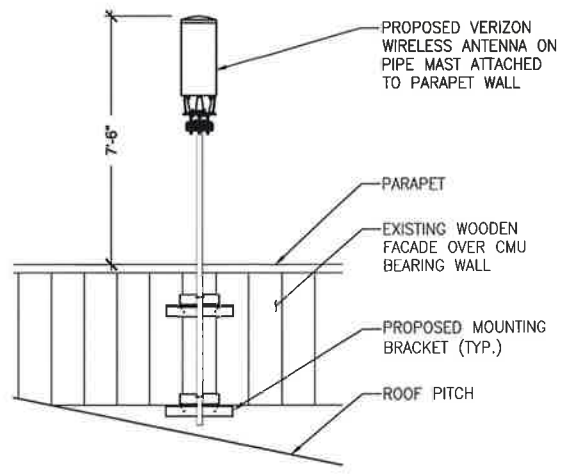
PROJECT INFORMATION:  
**THE PAVILION RESTAURANT  
85 SWAN AVE.  
OLD LYME, CT 06371**

DRAWING TITLE:  
**ROOF PLAN**

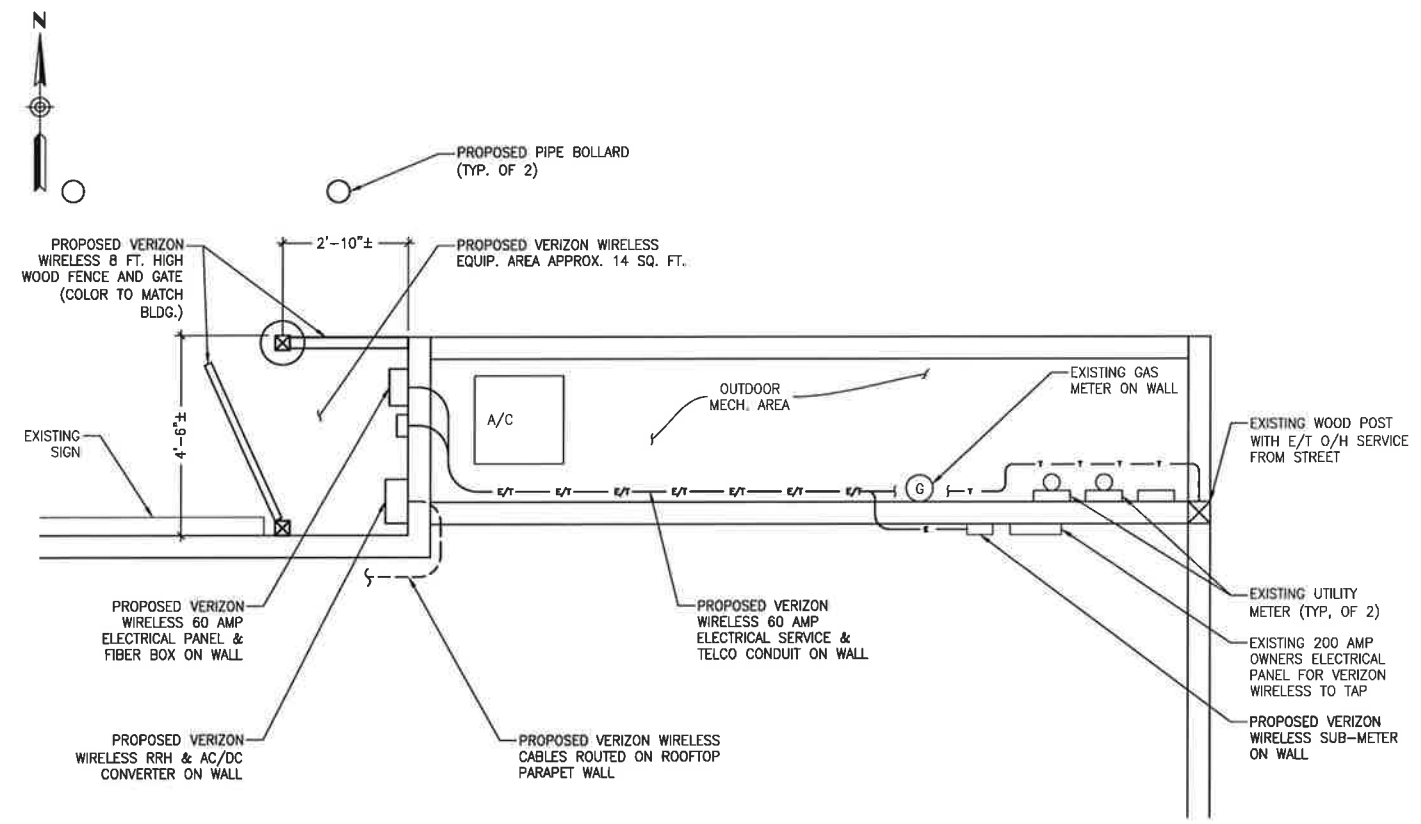
SHEET NUMBER:  
**C-1**



**3**  
**C-2** NORTH ELEVATION  
Scale: 1/4" = 1'-0"



**3**  
**C-2** ANTENNA MOUNTING DETAIL  
Scale: 3/8" = 1'-0"

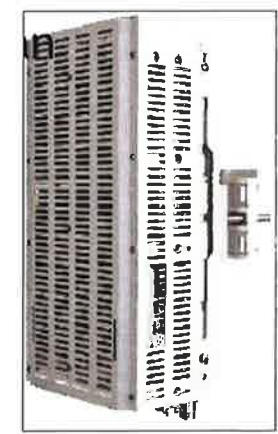


**2**  
**C-2** EQUIPMENT PLAN - GRADE  
Scale: 1/2" = 1'-0"

SCHEDULE OF PROPOSED EQUIPMENT					
ITEM DESCRIPTION	HEIGHT (in)	WIDTH (in)	DEPTH (in)	WEIGHT (lbs)	COMMENTS
SMALL CELL ANTENNA	28.7	12 Ø	--	26.7	COMMSCOPE NH180QS-DG-FOM
REMOTE RADIO UNIT (RRH)	25.8	12.0	7.3	77	ALU RH_4x45-AWS; WEIGHT INCLUDES MTG. BRACKET
AC/DC CONVERTER	8.3	14.1	3.5	5	ADVANTAGE 1KW POWER SUPPLY
FIBER DEMARC	12	10	4	5	VERIFY FINAL SPECS WITH TELCO PROVIDER



**4**  
**C-2** ANTENNA DETAIL  
Scale: N.T.S.



**5**  
**C-2** RRH & MOUNTING BRACKET  
Scale: N.T.S.

Cellco Partnership  
d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY  
99 EAST RIVER DRIVE  
EAST HARTFORD, CT 06108

**On Air Engineering, LLC**

88 Foundry Pond Road  
Cold Spring, NY 10516  
onair@optonline.net  
201-456-4624

LICENSURE

DAVID WEINPAHL, P.E.  
CT LIC. NO. 22144

NO.	DATE	SUBMISSIONS
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1	01.20.17	REVISED PER ATTORNEY COMMENTS

DRAWN BY:	CHECKED BY:
AS	DW

SITE NAME:  
**OLD LYME SC5 CT**

PROJECT DESCRIPTION:  
**SMALL CELL**

PROJECT INFORMATION:  
**THE PAVILION RESTAURANT  
85 SWAN AVE.  
OLD LYME, CT 06371**

DRAWING TITLE:  
**NORTH ELEVATION,  
EQUIPMENT PLAN  
& DETAILS**

SHEET NUMBER:  
**C-2**



**1**  
**C-3** ABUTTERS MAP  
Scale: 1/32" = 1'-0"

ABUTTERS LIST FROM PARCEL 76-13			
PARCEL #	OWNER NAME	OWNER MAILING ADDRESS	PROPERTY ADDRESS
76-14	FALLO THOMAS P & KAREN M W/S	12 WINTERWOOD TERR, FARMINGTON, CT 06032	81 SWAN AVE
76-18	SERAPILIA MARGARET A & STOKES TIMOTHY J & JAMIE LYNN	84 SWAN AVE, OLD LYME, CT 06371	84 SWAN AVE
76-55-1	PAULA DARCY	6308 ABILENE TRAIL, AUSTIN, TX 78749	88 SWAN AVE
76-55-2	MARILYN & PAUL FANELLI JR	25 OLD WOLCOTT RD, BRISTOL, CT 06010	88-1 SWAN AVE
76-55-3	JAMES & STEPHANIE LIVESY	88-2 SWAN AVE, OLD LYME, CT 06371	88-2 SWAN AVE
76-55	KAREN CAMP	29 WORTHINGTON DRIVE, FARMINGTON, CT 06032	90A SWAN AVE
76-55-4	CHRISTINE KISS	3 NAUSET LANE, UNIONVILLE, CT 06085	90B SWAN AVE
76-56	OLD COLONY BEACH ASSOC	PO BOX 10, OLD LYME, CT 06371	OLD COLONY RDS
76-12	LONG ISLAND SOUND PROPERTIES LLC	80 BANNAN LA, BERLIN, CT 06037	92-1 HARTFORD AVE
76-11	SOUND VIEW PROPERTY MANAGEMENT LLC	30 EAST MAIN ST, AVON, CT 06011	88 HARTFORD AVE
76-9	LONG ISLAND SOUND PROPERTIES LLC	80 BANNAN LA, BERLIN, CT 06037	86 HARTFORD AVE
76-7	ORZEL PAUL J & CHRISTINE I	84 HARTFORD AVE, OLD LYME, CT 06371	84 HARTFORD AVE

NOTES TO ABUTTERS MAP & OWNERS LIST:  
1. ALL INFORMATION TAKEN FROM THE TOWN OF OLD LYME WEBSITE "GIS" MAPPING, DECEMBER 2016.

Cellco Partnership  
d/b/a Verizon Wireless



WIRELESS COMMUNICATIONS FACILITY  
99 EAST RIVER DRIVE  
EAST HARTFORD, CT 06108

On Air Engineering, LLC

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LICENSURE

DAVID WEINPAHL, P.E.  
CT LIC. NO. 22144

NO: DATE: SUBMISSIONS

NO	DATE	SUBMISSIONS
0	01.05.17	REVIEW
1	01.20.17	REVISED PER ATTORNEY COMMENTS

DRAWN BY: AS CHECKED BY: DW

SITE NAME:  
**OLD LYME SC5 CT**

PROJECT DESCRIPTION:  
**SMALL CELL**

PROJECT INFORMATION:  
**THE PAVILION RESTAURANT  
85 SWAN AVE.  
OLD LYME, CT 06371**

DRAWING TITLE:  
**ABUTTERS MAP &  
PROPERTY OWNER LIST**

SHEET NUMBER:  
**C-3**



# **ATTACHMENT 3**

# Product Specifications

## NHT 80QS-DG-F0M

**Andrew® Dualband half Quasi omni Metro Cell Antenna, 698-896 and 1710-2170 MHz with fixed tilt in the low band and manual tilt in the high band. Contains internal diplexer and active GPS L1 band antenna**

POWERED BY



### Electrical Specifications

Frequency Band, MHz	698-806	806-896	1710-1880	1850-1990	1920-2170
Gain, dBi	6.0	6.8	9.7	9.7	9.9
Beamwidth, Horizontal, degrees	193	180	181	182	179
Beamwidth, Vertical, degrees	36.8	33.9	15.3	14.1	13.3
Beam Tilt, degrees	0	0	0-16	0-16	0-16
USLS, dB	14	14	9	10	9
Isolation, dB	25	25	25	25	25
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	125	125	125	125	125
Polarization	±45°	±45°	±45°	±45°	±45°

### Mechanical Specifications

Color   Radome Material	Light gray   ASA, UV stabilized
Connector Interface   Location   Quantity	7-16 DIN Female   Bottom   2
GPS Connector Interface   Quantity	4.1-9.5 DIN Female   1
Wind Loading, maximum	167.0 N @ 150 km/h 37.5 lbf @ 150 km/h
Wind Speed, maximum	241.0 km/h   149.8 mph
Antenna Dimensions, L x OD	728.0 mm x 305.0 mm   28.7 in x 12.0 in
Net Weight	11.5 kg   25.4 lb

# ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

**Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity**, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.



The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

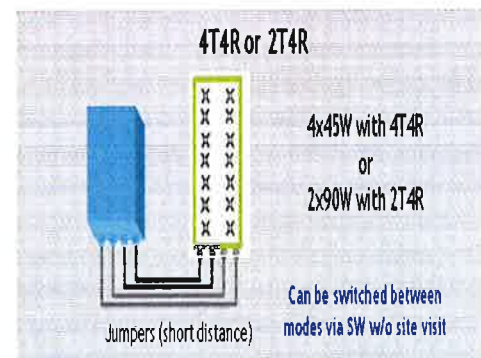
Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

## FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

## BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



# TECHNICAL SPECIFICATIONS

Features & Performance	
<b>Number of TX/RX paths</b>	4 duplexed (either 4T4R or 2T4R selectable by SW)
<b>Frequency band</b>	AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz
<b>Instantaneous bandwidth - #carriers</b>	70 MHz – 4 LTE MIMO carriers (In 70 MHz occupied bandwidth)
<b>LTE carrier bandwidth</b>	5, 10, 15, 20 MHz
<b>RF output power</b>	2x90W or 4x45W (selectable by SW)
<b>Noise figure – RX Diversity scheme</b>	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity
<b>Receiver Sensivity (FRC A1-3)</b>	-104.5 dBm maximum
<b>Sizes (HxWxD) in mm (in.)</b>	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield)
<b>Volume in Liters</b>	35.5 (with solar shield) 29.7 (without solar shield)
<b>Weight in kg (lb) (w/o mounting HW)</b>	25.8kg (56.8lb) (with solar shield)
<b>DC voltage range</b>	Nominal: -48V, -40.5 to -57V at full performance; -38 to -57V with relaxation on power consumption
<b>DC power consumption</b>	750W typical @100% RF load (In 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
<b>Environmental conditions</b>	-40°C (-40°F) / +55°C (+131°F) UL50E Type 4 Enclosure
<b>Wind load (@150km/h or 93mph)</b>	250N (56lb) Frontal/150N (34lb) Lateral
<b>Antenna ports</b>	4 ports 4.3-10 female (50 ohms) VSWR < 1.5
<b>CPRI ports</b>	2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF)
<b>AISG interfaces</b>	1 AISG 2.0 output (RS485) Integrated Smart-Bias Tees (x2)
<b>Misc. Interfaces</b>	4 external alarms (1 connector) 1 DC connector (2 pins)
<b>Installation conditions</b>	Pole and wall mounting
<b>Regulatory compliance</b>	3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE

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# **ATTACHMENT 4**



# Visual Assessment & Photo-Simulations

OLD LYME SC5 CT  
THE PAVILION  
85 SWAN AVENUE  
OLD LYME, CT 06371

Prepared in January 2017 by:  
All-Points Technology Corporation, P.C.  
3 Saddlebrook Drive  
Killingworth, CT 06419

Prepared for Verizon Wireless



# VISUAL ASSESSMENT & PHOTO-SIMULATIONS

At the request of Celco partnership LLC d/b/a Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed this visual assessment and prepared computer-generated photo-simulations depicting the proposed installation of a small cell wireless telecommunications Facility at The Pavilion, located at 85 Swan Avenue in Old Lyme Connecticut (the "Property").

## Project Setting

The Property is located at the southwest terminus of Swan Avenue in a mostly residential area on Old Lyme Beach. The Property is currently developed with a single story building that is used as a seasonal restaurant and bar. The proposed Facility would include the installation of a single, pipe-mast mounted omni-directional canister antenna affixed to the building's parapet wall. The top of the antenna would rise to a height approximately eight (8) feet above the existing parapet and nearly six (6) feet above the building's peaked roofline. A proposed equipment area would be located within a wood fence enclosure on the north side of the building. The enclosure will be painted to match the building exterior.

## Methodology

On January 5, 2017, APT personnel conducted field reconnaissance and photo-documented existing conditions. Six (6) nearby locations were selected to depict existing and proposed conditions and to provide an approximate extent of the proposed installation's visibility. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens, with the lens set to 50 mm to present a consistent field of view.

Three-dimensional computer models were developed for the building and proposed small cell components from AutoCAD information. Photographic simulations were then generated to portray scaled renderings of the proposed installation. Using field data, site plan information and image editing software, the proposed Facility was scaled to the correct location and height, relative to the existing structure and surrounding area. A photolog map and copies of the existing conditions and photo-simulations are attached.

The six (6) photo locations were chosen in the field because they presented generally unobstructed view lines towards at least a portion of the building and represent the approximate limits of visibility associated with the proposed installation. Five (5) of these locations were simulated to depict the proposed installation. The simulations are however static in nature and do not necessarily fairly characterize the prevailing views from all locations within a given area. The simulations provide a representation of the proposed Facility under similar settings as those encountered during the field reconnaissance. Views of the Facility can change substantially throughout the seasons as well as the time of day, and are dependent on weather and other atmospheric

conditions including but not necessarily limited to haze, fog, and clouds; the location, angle and intensity of the sun; light conditions, and the specific viewer location.

### Photograph Locations

The table below summarizes characteristics of the photographs and simulations presented in the attachment to this report including a description of each location, view orientation, and the distance from where the photo was taken relative to the proposed Facility. The photo locations are depicted on the visibility analysis map provided as an attachment to this report.

View	Location	Orientation	Distance to Site
1	Old Lyme Beach	North	±222 Feet
2	Old Lyme Beach	Northeast	±188 Feet
3	Portland Avenue	Southeast	±407 Feet
4	Portland Avenue	Southeast	±407 Feet
5	Swan Avenue	Southwest	±161 Feet
6	Old Lyme Beach (Facility will not be visible from this location)	Northwest	±572 Feet

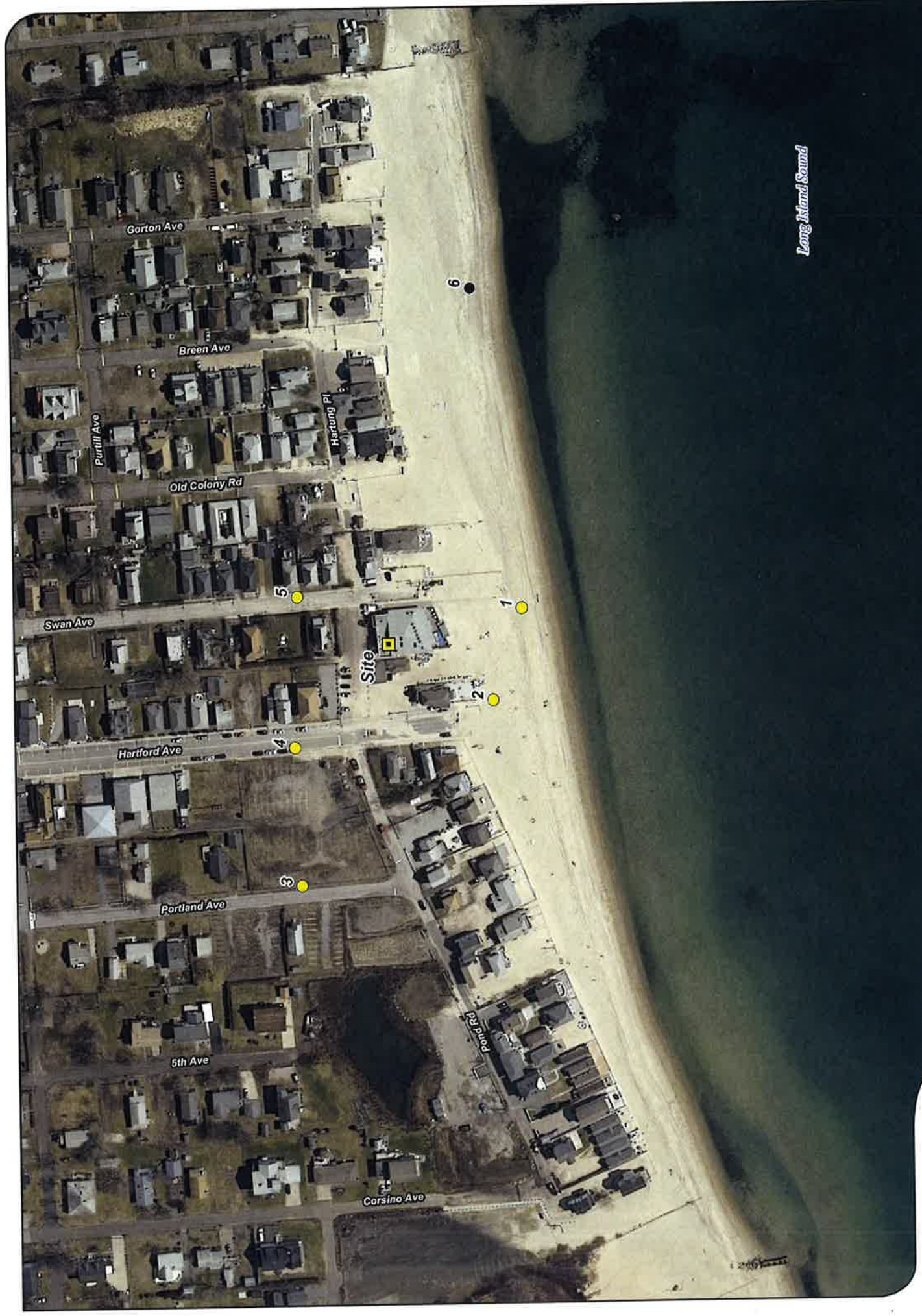
### Conclusions

The visibility of the proposed installation would be limited primarily to nearby locations within ±500 feet of the building, including portions of Old Lyme Beach and its shoreline. All views of the Facility would include mechanical equipment and other appurtenances affixed to the building's roof and sides, as well as overhead utility infrastructure. The Facility's design incorporates concealment with the exterior ground equipment enclosed within a wood fence and gate that will be painted to match the building.

Based on the results of this assessment, it is our opinion that the proposed installation of the Verizon Wireless communications facility will not have an adverse visual impact on existing views of this building or the character of the community.

## **ATTACHMENTS**





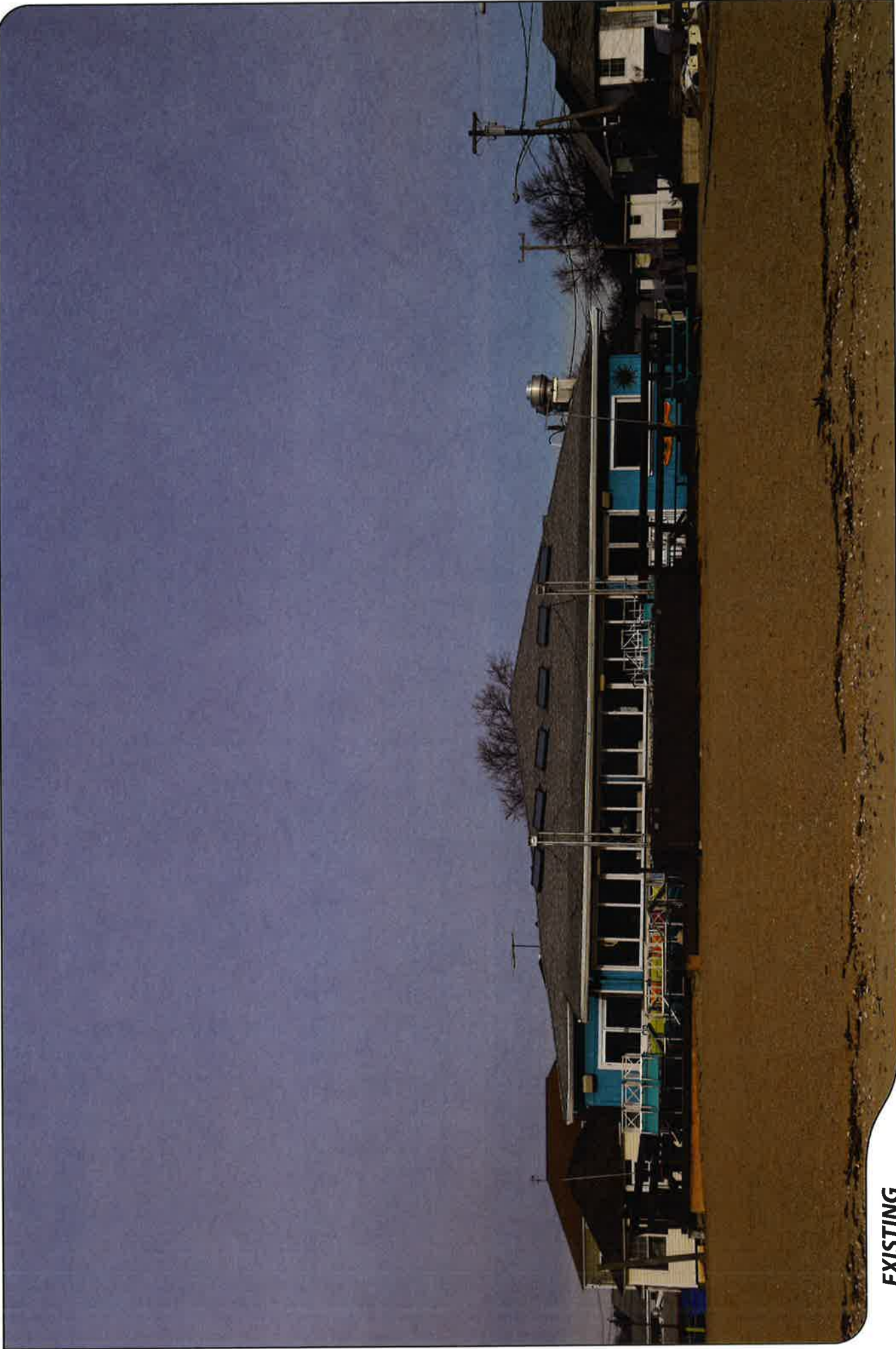
Long Island Sound

# PHOTO LOG

- Legend
- Site
  - Year-Round Visibility
  - Not Visible







**EXISTING**

PHOTO

1

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTH**

DISTANCE TO SITE

**+/- 222 FEET**





**PROPOSED**

PHOTO

1

LOCATION

**HOST PROPERTY**

ORIENTATION

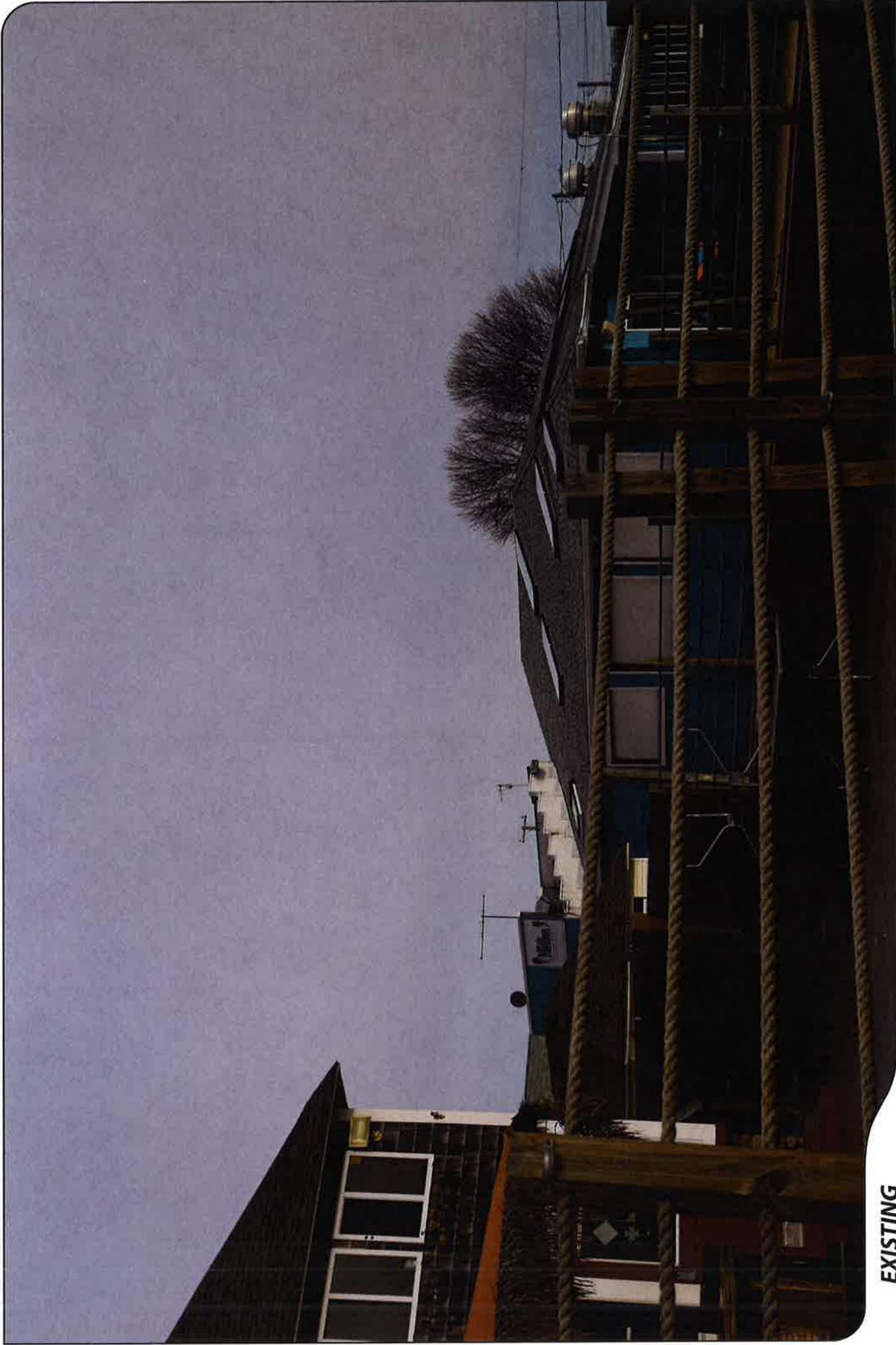
**NORTH**

DISTANCE TO SITE

**+/- 222 FEET**







**EXISTING**

PHOTO

2

LOCATION

**HOST PROPERTY**

ORIENTATION

**NORTHEAST**

DISTANCE TO SITE

**+/- 188 FEET**



ALL-POINTS  
TECHNOLOGY CORPORATION

**verizon**



**PROPOSED**

PHOTO

2

LOCATION

**HOST PROPERTY**

ORIENTATION

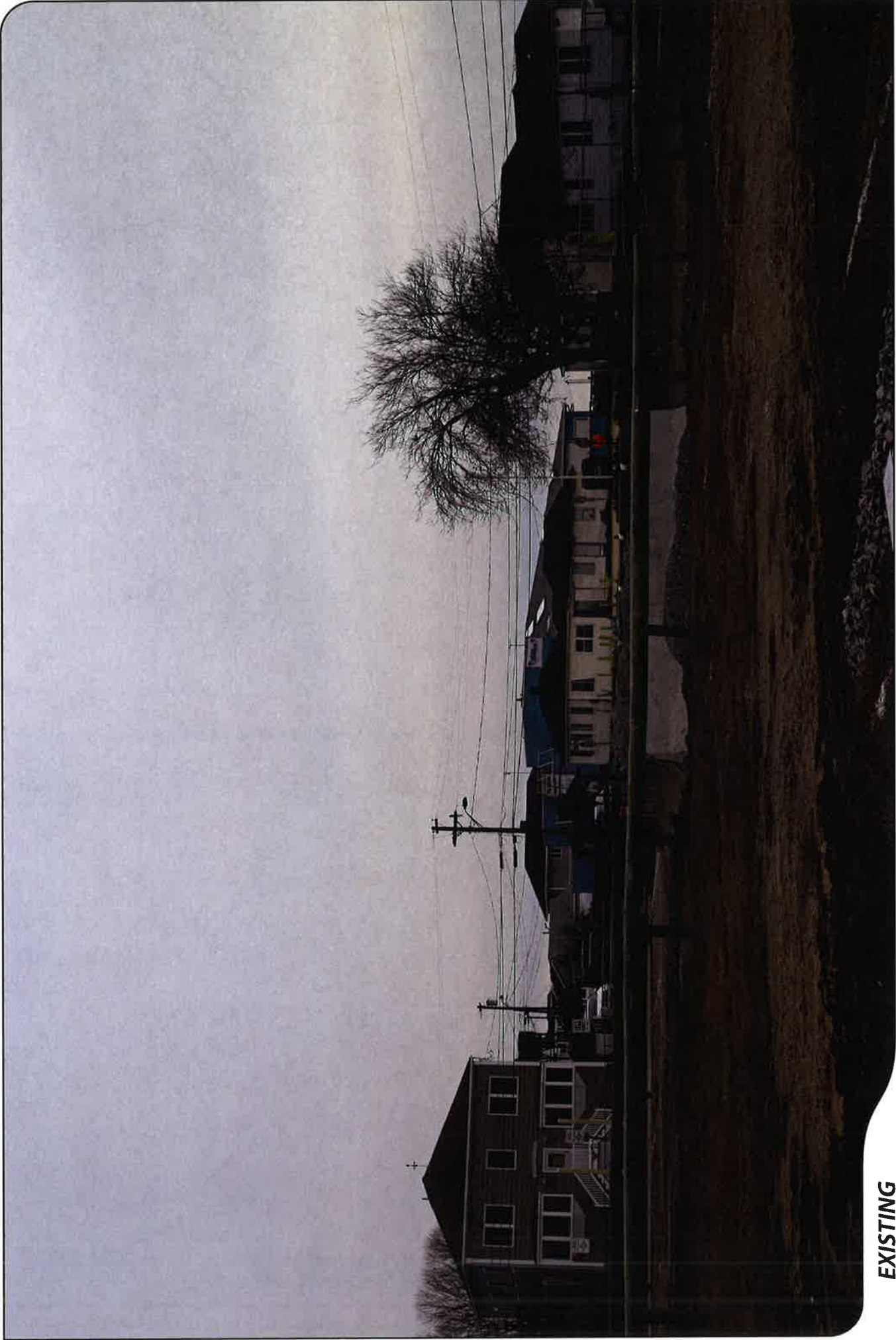
**NORTHEAST**

DISTANCE TO SITE

**+/- 188 FEET**







**EXISTING**

PHOTO

3

LOCATION

**PORTLAND AVENUE**

ORIENTATION

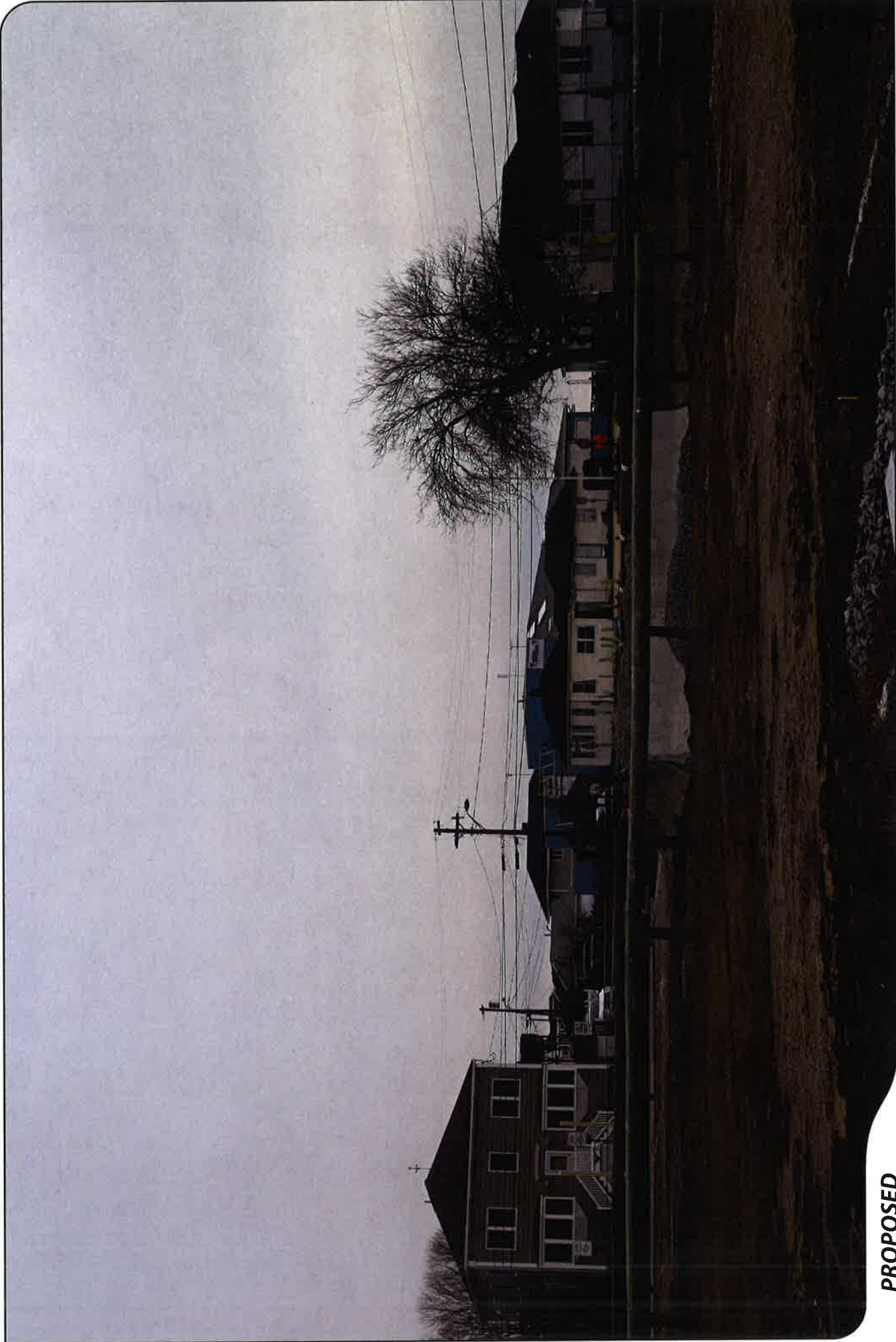
**SOUTHEAST**

DISTANCE TO SITE

**+/- 407 FEET**







**PROPOSED**

PHOTO

3

LOCATION

**PORTLAND AVENUE**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 407 FEET**





**EXISTING**

PHOTO

4

LOCATION

**PORTLAND AVENUE**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 407 FEET**



ALL-POINTS  
TECHNOLOGY CORPORATION







**PROPOSED**

PHOTO

4

LOCATION

**PORTLAND AVENUE**

ORIENTATION

**SOUTHEAST**

DISTANCE TO SITE

**+/- 407 FEET**





**EXISTING**

PHOTO

5

LOCATION

**SWAN AVENUE**

ORIENTATION

**SOUTHWEST**

DISTANCE TO SITE

**+/- 161 FEET**



ALL-POINTS  
TECHNOLOGY CORPORATION







**PROPOSED**

PHOTO

5

LOCATION

SWAN AVENUE

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

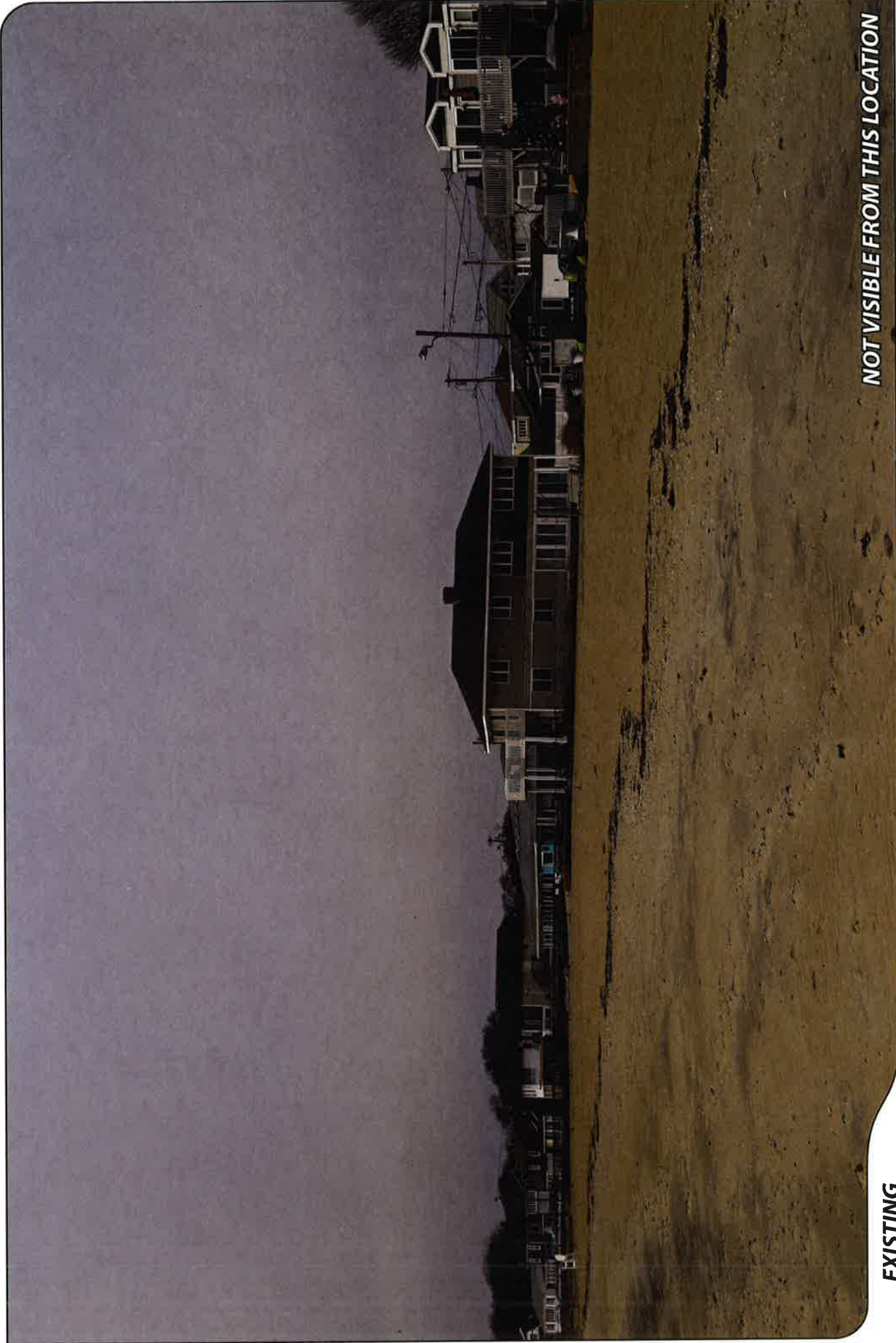
+/- 161 FEET



ALL-POINTS  
TECHNOLOGY CORPORATION







**NOT VISIBLE FROM THIS LOCATION**

**EXISTING**

PHOTO

6

LOCATION

**OLD LYME BEACH**

ORIENTATION

**NORTHWEST**

DISTANCE TO SITE

**+/- 572 FEET**



ALL-POINTS  
TECHNOLOGY CORPORATION

**verizon**

# **ATTACHMENT 5**

General Power Density

Site Name: Old Lyme SC 5, CT  
 Cumulative Power Density

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm <sup>2</sup> )	Maximum Permissible Exposure* (mW/cm <sup>2</sup> )	Fraction of MPE (%)
VZW PCS	1970	11	0	0	25	0.0000	1.0	0.00%
VZW Cellular	869	9	0	0	25	0.0000	0.579333333	0.00%
VZW AWS	2145	1	385	385	25	0.2215	1.0	22.15%
VZW 700	746	1	0	0	25	0.0000	0.497333333	0.00%

**Total Percentage of Maximum Permissible Exposure**

22.15%

\*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm<sup>2</sup> = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.

# **ATTACHMENT 6**

OLD\_LYME\_SC\_5\_CT.txt  
 \*\*\*\*\*  
 \* Federal Airways & Airspace \*  
 \* Summary Report: Existing Structure \*  
 \* Antenna Structure \*  
 \*\*\*\*\*

Airspace User: Your Name

File: OLD\_LYME\_SC\_5\_CT

Location: Fenwick, CT

Latitude: 41°-17'-04.68" Longitude: 72°-16'-37.97"

SITE ELEVATION AMSL.....8 ft.  
 STRUCTURE HEIGHT.....26 ft.  
 OVERALL HEIGHT AMSL.....34 ft.

NOTICE CRITERIA

- FAR 77.9(a): NNR (DNE 200 ft AGL)
- FAR 77.9(b): NNR (DNE Notice Slope)
- FAR 77.9(c): NNR (Not a Traverse Way)
- FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for GON
- FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for OB8
- FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required  
 NNR = Notice Not Required  
 PNR = Possible Notice Required (depends upon actual IFR procedure)  
 For new construction review Air Navigation Facilities at bottom of this report.

The location and analysis were based upon an existing structure. However, no existing aeronautical study number was identified. If the 'existing' structure penetrates an obstruction surface defined by CFR 77.17, 77.19, 77.21 or 77.23 (see below) it is strongly recommended the FAA be notified of the 'existing' structure to determine obstruction marking or lighting requirements. It is not uncommon for the FAA to issue a Determination of No Hazard (DNH) for an existing structure and modify the airspace to accommodate the structure, should that be required. If the FAA issues a DNH enter the aeronautical study number (ASN) in the space provided on the Airspace Analysis Window Form and re-run Airspace.

The below analysis reflects the aeronautical conditions that exist as of the date stamped on this analysis.

Notice to the FAA is not required at the analyzed location and height for slope, height or Straight-In procedures. Please review the 'Air Navigation' section for notice requirements for offset IFR procedures and EMI.

OBSTRUCTION STANDARDS

- FAR 77.17(a)(1): DNE 499 ft AGL
- FAR 77.17(a)(2): DNE - Airport Surface
- FAR 77.19(a): DNE - Horizontal Surface
- FAR 77.19(b): DNE - Conical Surface
- FAR 77.19(c): DNE - Primary Surface
- FAR 77.19(d): DNE - Approach Surface
- FAR 77.19(e): DNE - Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: GON: GROTON-NEW LONDON

Type: A RD: 64081.45 RE: 8.7  
 FAR 77.17(a)(1): DNE



OLD\_LYME\_SC\_5\_CT.txt  
 FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.  
 VFR Horizontal Surface: DNE  
 VFR Conical Surface: DNE  
 VFR Approach Slope: DNE  
 VFR Transitional Slope: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: 0B8: ELIZABETH FIELD  
 Type: A RD: 67167.29 RE: 7  
 FAR 77.17(a)(1): DNE  
 FAR 77.17(a)(2): Does Not Apply.  
 VFR Horizontal Surface: DNE  
 VFR Conical Surface: DNE  
 VFR Approach Slope: DNE  
 VFR Transitional Slope: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)  
 FAR 77.17(a)(3) Departure Surface Criteria (40:1)  
 DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)  
 FAR 77.17(a)(4) MOCA Altitude Enroute Criteria  
 The Maximum Height Permitted is 1500 ft AMSL

PRIVATE LANDING FACILITIES

FACIL IDENT TYP NAME	BEARING TO FACIL	RANGE IN NM	DELTA ARP ELEVATION	FAA IFR
5CT7 AIR MILE CREEK DNE Horizontal Surface. Check Runway Approach Surface. Within 1 NM. No Impact to Private Landing Facility. DNE 200 ft AGL within 3 NM of Airport.	320.99	1.36	+4	
CT78 SEA LORD CREEK No Impact to VFR Transitional Surface. Below surface height of 433 ft above ARP.	318.73	5.33	+34	

AIR NAVIGATION ELECTRONIC FACILITIES

APCH BEAR	FAC IDNT	ST TYPE	DIST AT	DELTA FREQ	DELTA VECTOR	DELTA (ft)	DELTA ELEVA	DELTA ST	DELTA LOCATION	GRND ANGLE
	GON	VOR/DME	R	110.8	74.85	64092	+25	CT	GROTON	.02
	MAD	VOR/DME	R	110.4	275.47	114519	-186	CT	MADISON	-.09
	ORW	VOR/DME	I	110.0	37.49	124955	-276	CT	NORWICH	-.13
	HTO	VORTAC	I	113.6	184.66	133672	+12	NY	HAMPTON	.01
	HFD	VOR/DME	R	114.9	330.4	149513	-815	CT	HARTFORD	-.31
	HVN	VOR/DME	R	109.8	267.01	167321	+28	CT	NEW HAVEN	.01
	QVH	RADAR ARSR	Y	1326.9	217.26	186157	-317	NY	RIVERHEAD	-.1
	FOK	TACAN	R	NA	210.88	189934	-16	NY	SUFFOLK CO	0.00
	CCC	VOR/DME	R	117.2	227.85	193383	-51	NY	CALVERTON	-.02
	SEY	VOR/DME	R	117.8	102.72	197549	-66	RI	SANDY POINT	-.02

OLD\_LYME\_SC\_5\_CT.txt

KOKX RADAR WXL Y 226.46 222442 -161 NY NEW YORK -.04

CFR Title 47, §1.30000-§1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station.  
Movement Method Proof as specified in §73.151(c) is not required.  
Please review 'AM Station Report' for details.

Nearest AM Station: WLIS @ 10460 meters.

Airspace® Summary Version 17.1.429

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01-31-2017  
14:40:14

# **ATTACHMENT 7**

February 6, 2017

*Via Certificate of Mailing*

Bonnie Reemsnyder, First Selectwoman  
Town of Old Lyme  
52 Lyme Street  
Old Lyme, CT 06371

Re: **Proposed Installation of a Wireless Telecommunications Facility at  
The Pavilion, 85 Swan Avenue, Old Lyme, Connecticut**

Dear Ms. Reemsnyder:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at The Pavilion, 85 Swan Avenue in Old Lyme (the “Property”). The facility will consist of a tower/mast attached to the building and supporting a canister antenna. The top of the antenna would extend to a height of approximately 25’-11” above grade, approximately 7’-6” above the top of the roof. Equipment associated with the antenna will be attached to the northerly façade of the building, and will be screened by an 8-foot fenced enclosure, painted to match the building.

A full copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16008073-v1



# Robinson + Cole

Bonnie Reemsnyder, First Selectwoman  
February 6, 2017  
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,



Kenneth C. Baldwin

Attachment

February 6, 2017

*Via Certificate of Mailing*

Long Island Sound Properties LLC  
80 Bannan Lane  
Berlin, CT 06037

Re: **Proposed Installation of a Wireless Telecommunications Facility at  
The Pavilion, 85 Swan Avenue, Old Lyme, Connecticut**

Dear Sir or Madam:

This firm represents Celco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at The Pavilion, 85 Swan Avenue in Old Lyme (the “Property”). The facility will consist of a tower/mast attached to the building and supporting a canister antenna. The top of the antenna would extend to a height of approximately 25’-11” above grade, approximately 7’-6” above the top of the roof. Equipment associated with the antenna will be attached to the northerly façade of the building, and will be screened by an 8-foot fenced enclosure, painted to match the building.

A full copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16008090-v1

# Robinson + Cole

Long Island Sound Properties LLC  
February 6, 2017  
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,



Kenneth C. Baldwin

Attachment

# **ATTACHMENT 8**



KENNETH C. BALDWIN

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

February 6, 2017

*Via Certificate of Mailing*

«Name\_and\_Address»

**Re: Notice of Intent to File a Petition for Declaratory Ruling with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at The Pavillion, 85 Swan Avenue, Old Lyme, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at The Pavilion, 85 Swan Avenue in Old Lyme (the “Property”). The facility will consist of a tower/mast attached to the building and supporting a canister antenna. The top of the antenna would extend to a height of approximately 25’-11” above grade, approximately 7’-6” above the top of the roof. Equipment associated with the antenna will be attached to the northerly façade of the building, and will be screened by an 8-foot fenced enclosure, painted to match the building. A copy of Cellco’s Petition is attached for your review.

This notice is being sent to you because you are listed on the Town Assessor’s records as an owner of land that abuts the Property. If you have any questions regarding the Petition, the Council’s process for reviewing the Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

February 6, 2017  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment

**CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS**

**ABUTTING PROPERTY OWNERS**

**85 SWAN AVENUE  
OLD LYME, CONNECTICUT**

	<b><u>Property Address</u></b>	<b><u>Owner's and Mailing Address</u></b>
1.	81 Swan Avenue	Thomas P. and Karen M. Fallow 12 Winterwood Terrace Farmington, CT 06032
2.	84 Swan Avenue	Margaret A. Serapilia and Timothy J. and Jamie Lynn Stokes 84 Swan Avenue Old Lyme, CT 06371
3.	92-1 Hartford Avenue	Long Island Properties LLC 80 Bannan Lane Berlin, CT 06037
4.	88 Hartford Avenue	Sound View Property Management LLC 30 East Main Street Avon, CT 06011
5.	86 Hartford Avenue	Long Island Properties LLC 80 Bannan Lane Berlin, CT 06037
6.	88 Swan Avenue	Paula Darcy 6308 Abilene Trail Austin, TX 78749
7.	88-1 Swan Avenue	Marilyn A. and Paul Fanelli, Jr. 25 Old Wolcott Road Bristol, CT 06010
8.	88-2 Swan Avenue	James and Stephanie Livesey 88-2 Swan Avenue Old Lyme, CT 06371
9.	90A Swan Avenue	Karen A. Camp 29 Worthington Drive Farmington, CT 06032

	<u>Property Address</u>	<u>Owner's and Mailing Address</u>
10.	90B Swan Avenue	Christine Kiss 3 Nauset Lane Unionville, CT 06085
11.	Old Colony Road	Old Colony Beach Association P.O. Box 10 Old Lyme, CT 06371
12.	84 Hartford Avenue	Christine and Paul Orzel 84 Hartford Avenue Old Lyme, CT 06371