## AGENDA

Monday
August 21, 2017

## TOWN OF EASTHAM BOARD OF SELECTMEN AGENDA Monday, August 21, 2017 5:00PM

#### Location: Earle Mountain Room

#### I. PUBLIC/SELECTMEN INFORMATION

5:05PM Verizon Wireless Pole Hearing for Ocean View Drive, Eastham, MA – Attorney Elizabeth Mason, McLane Middleton

II. APPOINTMENTS (discussion & vote may be taken)

5:15PM EVERSOURCE Rate Case – CVEC and Legal Budget – Joe Bayne, Eastham

Representative

5:30PM Nauset Light Beach Road – Neil Andres, DPW Superintendent

5:45PM Water Project Update – Mark White & Wes Stinson, Environmental Partners Group

(Note: Other than public hearings, all times are approximate and items may be taken out of order.)

#### III. LICENSING

1. Transient Vendor Permits

#### IV. ADMINISTRATIVE MATTERS

A. Action/Discussion (votes may be taken)

- 1. Special Town Meeting (Vote to have and set meeting date of October 23, 2017)
- 2. Request from the Cape Cod Suicide Prevention Coalition to designate September 10-16, 2017 as Suicide Prevention Week (Vote to adopt and sign proclamation)
- 3. Committee Appointment Peter Weston, Planning Board
- 4. Wastewater Update and Discussion

#### V. TOWN ADMINISTRATOR'S REPORT

#### VI. OTHER BUSINESS

#### **Upcoming Meetings**

Wednesday, August 23, 2017	2:30p.m.	Small Meeting Room	Work Session
Tuesday, September 5, 2017	5:00p.m.	Earle Mountain Room	Regular Session
Wednesday, September 6, 2017	2:30p.m.	Small Meeting Room	Work Session

The listing of matters includes those reasonably anticipated by the Chair that may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may be brought up for discussion to the extent permitted by law.

This meeting is video recorded and broadcast over Local Access Channel 18 and on the Town website at www.easthamma.gov.

If you are deaf or hard of hearing or are a person with a disability who requires an accommodation, contact Laurie Gillespie-Lee, 5900 x3207

# Public Hearing

#### TOWN OF EASTHAM NOTICE OF PUBLIC HEARING

A Public Hearing will be held on Monday, August 21, 2017 at 5:05PM, in the Earle Mountain Room at Eastham Town Hall, 2500 State Highway, Eastham, MA 02642 on a petition from Cellco Partnership d/b/a Verizon Wireless requesting permission to replace the existing Utility Pole #6 and install and locate small cell wireless antennas, and the necessary sustaining and protecting fixtures, on the new Utility Pole #6, as located on a public way on Ocean View Drive, near 0 Ocean View Drive, Lot 023A in Tax Map 24, Eastham, Massachusetts.

Reason: To provide capacity relief and improve network service throughout Eastham and in the immediately surrounding area.

Published in the August 4, 2017 edition of the Cape Codder



#### TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 All Departments 508-240-5900 www.eastham-ma.gov

Date:

August 21, 2017

Memo To:

Eastham Board of Selectmen

Memo From: Jacqui Beebe, Town Administrator

Re: Request for Pole Hearing from Verizon – Ocean View Drive

Attached is the request for a Pole Hearing from Cellco Partnership d/b/a Verizon Wireless with the result to provide capacity relief and improve network service throughout Eastham and in the immediately surrounding area. Staff has reviewed the request and provided the following comments for your consideration:

#### Paul Lagg, Town Planner:

Commercial Communication Towers are allowed by right on Town owned property per the Eastham Zoning Bylaw. Ocean View Drive is a Town owned road and the pole will be located within the Town's right of way. No zoning issues of concern have been identified. Staff recommends placing a condition on approval requiring the applicant to obtain all requisite electrical permits and inspections that would be required for the installation.

#### Shana Brogan, Conservation Agent:

The pole does not appear to be located within a wetland resource area or buffer zone, therefore there is impact on these areas.

#### Neil Andres, DPW Superintendent:

The proposed installation will provide reliable wireless service at the Coast Guard Beach area. Reliable wireless service in this area is of public benefit as it will enhance safety at this busy beach. I recommend that the Board approve this installation.

#### Chief Edward V. Kulhawik, Police Chief

I have read through this packet and this has no Public Safety impact from what I can see. I have no issue with this new pole and transmitter.

#### Lauren McKean, AICP, Park Planner, Cape Cod National Seashore

Park management staff reviewed this proposal. We looked at the visual impact and were less concerned with the placement on the selected new taller pole than the two closer to the beach. We concur that it will be helpful for area cell coverage.

My recommendation is that we grant permission with the condition that Cellco Partnership d/b/a Verizon Wireless obtain all requisite electrical permits and inspections as required for the installation.



PETER D. ANDERSON Direct Dial: 603.628.1410 Email: peter.anderson@mclane.com Admitted in NH and MA 900 Elm Street, P.O. Box 326 Manchester, NH 03105-0326 T 603.625.6464 F 603.625.5650

#### PETITION FOR GRANT OF LOCATION

## UTILITY POLE #6, LOCATED NEAR 0 OCEAN VIEW DRIVE, TAX MAP 24-023A EASTHAM, MASSACHUSETTS

#### PERSONAL WIRELESS SERVICES FACILITY

#### TABLE OF CONTENTS

ITEM	TAB NUMBER
Town of Eastham Petition for Grant of Location	1
Town of Eastham Order for Grant of Location	2
Project Overview	3
Evidence of FCC Licensure	4
Plans and Representative Photographs	5
License Agreement with Eversource to replace and attach to pole	6
Radio Frequency Emissions Report & Radio Frequency Coverage Plots	7



PETER D. ANDERSON Direct Dial: 603.628.1410 Email: peter.anderson@mclane.com Admitted in NH and MA 900 Elm Street, P.O. Box 326 Manchester, NH 03105-0326 T 603.625.6464 F 603.625.5650

#### PETITION FOR POLE AND WIRE LOCATIONS

UNDER MGL c. 166, §§ 22 and 25A

July 20, 2017

Town of Eastham Office of Board of Selectmen Town Hall 2500 State Highway Eastham, MA 02642

Cellco Partnership, d/b/a Verizon Wireless, hereby requests permission to replace existing Utility Pole #6 and locate small cell wireless antennas, and the necessary sustaining and protecting fixtures, on the new Utility Pole #6, located on a public way that you own on Ocean View Drive, near **0 Ocean View Drive**, **Lot 023A of Tax Map 24**, **Eastham**, **Massachusetts**, located as more particularly shown on the plans attached hereto as <u>Tab 5</u>. Also attached as <u>Tab 6</u> is a letter of authorization from Eversource d/b/a NSTAR Electric.

Wherefore it prays that after due notice and hearing, it be granted a location for and permission to erect and maintain at said locations, all as shown on the aforementioned plans:

- New utility pole to replace Utility Pole #6;
- Antenna;
- Mounting brackets;
- Groundbars;
- Conduit;
- Cable:
- Disconnect; and
- such sustaining and protecting fixtures as it may find necessary.

All to be installed substantially in accordance with the plans filed herewith.

This petition does require a hearing and notice to the abutters. I understand that the Board of Selectmen meet every first and third Monday of the month. Please schedule us for the August 21, 2017 meeting.

Please let me know if you have any questions or require any further information or documentation.

CELLCO PARTNERSHIP, D/B/A VERIZON WIRLESS

Peter D. Anderson, Agent AP

DULY AUTHORIZED

#### ORDER FOR POLE AND WIRE LOCATIONS

UNDER MGL c. 166, §§ 22 and 25A

In the Town of Eastham, Massachusetts Notice having been given and public hearing held, as provided by law,

#### IT IS HEREBY ORDERED:

That Cellco Partnership d/b/a Verizon Wireless be and it is hereby granted a location for and permission to replace the existing utility pole #6 and install and maintain on such pole and wires to be placed thereon, together with such sustaining and protecting fixtures as said company may deem necessary, in the public way known as Ocean View Drive, near 0 Ocean View Drive, located in Lot 023A in Tax Map 24, as requested in petition of said Company dated July 20, 2017.

All construction under this order shall be in accordance with the following conditions:

#### See Plans filed with this order.

There may be attached to the replacement pole:

- Antenna;
- Mounting brackets;
- Groundbars;
- Conduit;
- Cable;
- Disconnect; and
- such sustaining and protecting fixtures as it may find necessary.

the Town of Eastham, Massachusetts held on t	1	
Town Clerk Massachusetts		, 2017
Received and entered in the records of location	orders of the Town of Eas	stham,
at Book, Page		n Town Clerk



PETER D. ANDERSON Direct Dial: 603.628.1410 Email: peter.anderson@mclane.com Admitted in NH and MA 900 Elm Street, P.O. Box 326 Manchester, NH 03105-0326 T 603.625.6464 F 603.625.5650

July 20, 2017

Town of Eastham Office of Board of Selectmen Town Hall 2500 State Highway Eastham, MA 02642

Re: Grant of Location to Replace Existing Utility Pole and Mount Wireless Canister Antenna

Attachments to the Utility Pole

Applicant: Cellco Partnership d/b/a Verizon Wireless ("VzW")
Authority: Wireless Telecommunications Towers and Facilities

#### Dear Board Members:

This letter serves to supplement VzW's enclosed petition for Grant of Location to install and operate "Small Cell" and Cloud Radio Access Network ("CRAN") wireless communication antennas that will be mounted to a replacement utility pole located on utility rights of way in Eastham. This petition covers Utility Pole #6 located on a public way that you own on Ocean View Drive, near **0 Ocean View Drive**, Lot **023A of Tax Map 24**, Eastham, Massachusetts, located as more particularly shown on the plans attached hereto as Tab 5.

This petition is being prepared in anticipation of the upcoming hearing on August 21, 2017. As described in further detail below, the proposed antennas will provide capacity relief and improve network service throughout Eastham and in the immediately surrounding area. This proposal is part of VzW's greater initiative to deploy non-intrusive wireless technology solutions, including both CRAN antennas and Small Cell antennas, in municipalities throughout New England to improve voice and data coverage in targeted areas of dense demand.

#### **APPLICANT INFORMATION**

VzW is one of the nation's leading FCC-licensed providers of wireless communications services, extending coverage to almost all of the top 100 markets in the United States. VzW has developed one of the largest and most reliable national wireless networks to provide wireless voice and data services to an ever-growing customer base, last counted at over 135 million.

VzW continuously works to enhance and improve its wireless network through the deployment of its voice, data, Long Term Evolution ("LTE" or "4G") and Advanced Wireless Services ("AWS")

communications services. One of the key design objectives of VzW's system is to provide seamless and reliable coverage without significant gaps or dead spots or the inability to handle and off-load voice and data traffic, particularly in areas of dense demand.

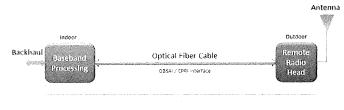
#### "CRAN" AND "SMALL CELL" TECHNOLOGY EXPLAINED

The strategic integration of CRAN and Small Cell antennas is a surgical approach to the continued deployment of VzW's LTE and AWS networks in Eastham and throughout the Cape and Islands, particularly in those areas of high data traffic. When a number of CRAN and Small Cell antenna installations are strategically placed throughout a targeted geographic coverage area, the end result of which is an overall increase in performance and efficiency, both within the target area and the network as a whole.

In both cases, cellular signals are transmitted from multiple antennas and remote radio heads spread throughout the high traffic area at elevations lower than those from traditional wireless communications facilities ("WCFs") such as towers or monopoles. The underlying difference between CRAN and Small Cells relates to the back-end processing: Small Cells process on-site, whereas CRAN installations process off-site at a centralized location connected via VzW's existing fiber optic network. VzW will be relying on both the Small Cell and CRAN antenna installations as it continues deployment of this network solution in Eastham in the months and years ahead. From a visual standpoint, the two are largely indistinguishable.

#### I. CRAN Antennas

In contrast to conventional WCFs, which combine all functionalities of the facility in a single location, CRAN leverages the existing fiber optic network infrastructure to allow for the separate component functionalities (namely, radio signal transmission/receiving and back-end data processing) of the facility to be located in *multiple* locations. CRAN wireless base stations ("CRAN Nodes") are primarily comprised of a remote radio head and antenna, which are separate and distinct from the baseband head unit responsible for handling the centralized processing of numerous CRAN Nodes strategically located throughout a wide geographic area. By mounting these CRAN Nodes to existing utility poles, VzW is able to improve its network using existing infrastructure without the need for further build-out.



Wireless Base Station

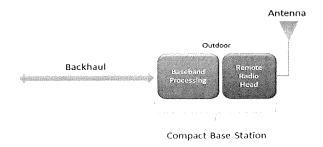
<u>Source</u>: <u>http://frankrayal.com/2012/03/17/cloud-ran-vs-small-cells-trading-processing-for-transport-cost/</u>

#### II. Small Cell Antennas

While the CRAN network architecture offers considerable advantages to handle the unique challenges and demands posed by high volumes of data traffic, this technology is only available in areas with there is

an existing fiber optic infrastructure to support it. Though VzW is constantly working to expand the reach of the fiber optic network, coverage is not yet universal.

In areas in which radio frequency engineers determine that CRAN technology cannot yet be deployed, VzW is using a similar utility pole-mounted canister antenna setup known as a "Small Cell". Whereas the CRAN bifurcates signal transmission and processing functions, the distinguishing characteristic of a Small Cell is that it combines the two functions in a single installation, albeit on a much smaller scale than a conventional WCF. Visually, a Small Cell canister antenna installation is virtually indistinguishable from that of a CRAN canister antenna installation.



<u>Source</u>: <u>http://frankrayal.com/2012/03/17/cloud-ran-vs-small-cells-trading-processing-for-transport-cost/</u>

#### INSTALLATIONS PROPOSED

The installation principally consists of a single 38.7" cylindrical canister antenna (roughly the size of an office waste basket) weighing approximately 22 pounds that will be mounted atop an existing utility pole.

The antenna itself resembles a traditional transformer and is virtually indistinguishable from those located on utility poles across the nation. Additional supporting equipment—a remote radio head, electrical junction box and meter, and fiber optic (if available) and power connections—will be mounted to the exterior of the utility pole, resulting in a self-contained antenna facility without the need for further infrastructure. With respect to visual impacts, this equipment is no different than the equipment of electric, telephone and cable utility providers.

Small Cell and CRAN equipment meets an ever-increasing demand for wireless service from the residents, businesses and tourists of Eastham, and indeed from all Americans nationwide. VzW is of course sensitive and responsive to the demands of its customers, and has thus begun deployment of network components such as those described in the attached plans in order to meet that demand.

Following installation, VzW technicians will monitor and occasionally visit the installation for maintenance purposes. All CRAN Nodes and Small Cell antenna sites will comply with applicable FCC regulations with respect to radio frequency emission standards. Except for standard electrical service, the Facility will not impact utilities, schools, traffic or other municipal resources.

With the aim of rapidly deploying CRAN and Small Cell technology throughout Massachusetts, VzW has entered into pole attachment licensing agreements with utility providers, including Eversource, National

Grid, and Verizon Telephone, among others, which allow for the installation of compact CRAN and Small Cell canister antennas on existing utility poles throughout the Commonwealth.

A key component of this technology, from VzW's perspective, is the ability to deploy this equipment quickly, without the arduous processes involved in typical WCF permitting. In light of the fact that the equipment is virtually identical in appearance to that of other utility providers on existing utility poles, we are requesting that CRAN and Small Cell deployments be treated similarly, subject to review by the Inspector of Buildings, but not otherwise subject to an elevated permitting standard.

#### STATEMENT OF LAW

### 1. Federal law preempts certain state and local regulations that prohibit the provision of wireless services.

In 1996, Congress enacted the TCA to facilitate the rapid deployment of telecommunications infrastructure in the United States. 47 U.S.C. § 332; City of Arlington, Texas v. Federal Communications Commission, 133 S.Ct. 1863, 1866-67 (2013). The TCA preserves state and municipal authority to regulate personal wireless service facilities, subject to five substantive and procedural limitations designed to prevent state and municipal government from delaying the application process and/or discriminating against specific wireless service providers. 47 U.S.C. § 332(C)(i)–(v); T-Mobile South, LLC v. City of Roswell, Ga., 135 S.Ct. 808, 814 (2015); City of Arlington, 133 S.Ct. at 1866-67; Rancho Palos Verdes v. Abrams, 544 U.S. 113, 115 (2005); Omnipoint Holdings, Inc. v. City of Cranston, 586 F.3d 38, 45 (1st Cir. 2009).

Specifically, the TCA reflects Congress's intent to expand wireless services and increase competition among providers by preempting state and municipal regulations inconsistent with infrastructure development. *Rancho Palos Verdes*, 544 U.S. at 115; *Omnipoint Holdings*, 586 F.3d at 47; *Sprint Spectrum L.P. v. Town of Swansea*, 574 F.Supp. 2d 227, 235 (D. Mass. 2008). Although the TCA does not preempt all local zoning laws, it expressly preempts rules and laws attempting to regulate the "placement, construction, and modification of personal wireless service facilities that effectively prohibit the provision of personal wireless services." *City of Roswell, Ga.*, 135 S.Ct. at 814 (*citing Rancho Palos Verdes*, 544 U.S. at 115; 47 U.S.C. § 332(c)(7)(B)(i)(II)); *Green Mountain Realty Corp. v. Leonard*, 750 F.3d 30, 38 (1st Cir. 2014); *Town of Swansea*, 574 F.Supp. at 235; *Nextel Communications of the Mid-Atlantic, Inc. v. Town of Eastham*, 2003 WL 21497159, \*8 (D. Mass. 2003).

The resulting two-part inquiry requires that wireless service providers demonstrate 1) a significant coverage gap, and 2) that no alternatives to the carrier's proposed solution exist such that a denial of placement would constitute an effective prohibition of wireless services. *Green Mountain Realty*, 688 F.3d at 58; *Omnipoint Holdings, Inc.*, 86 F.3d at 48; *Nextel Communications v. Town of Wayland*, 231 F.Supp.2d 396, 406 – 407 (D. Mass. 2001). "Accordingly, the TCA significantly limits the ability of state and local authority to apply zoning regulations to wireless telecommunications." *Telecorp Realty, LLC v. Town of Edgartown*, 81 F.Supp.2d 257, 259 (D. Mass. 2000); *Town of Swansea*, 574 F.Supp. at 235; 47 U.S.C. § 332(c)(7)(B)(i)(II).

Here, Verizon's radio frequency analysis clearly identifies a significant coverage and capacity gap in the vicinity of the proposed site. Based on this analysis, Verizon chose a pole location to specifically fill that gap. This focused selection process specifically analyzed all relevant pole locations in the vicinity and yielded no alternative to the pole proposed herein. Accordingly, denial of this petition for Grant of

Location limits the Verizon's ability to provide wireless service in Eastham and expressly violates the TCA.

2. Federal law prohibits states and municipalities from evaluating radio frequency emissions when considering the placement or construction of personal wireless service facilities.

The TCA expressly prohibits the Town of Eastham from regulating Verizon's application based on radio frequency emissions.

No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency [RF] emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning such emissions. 47 U.S.C. § 332(c)(7)(B)(iv).

Verizon is licensed by the Federal Communications Commission ("FCC") to provide wireless services in Massachusetts. All facilities proposed herein are fully compliant with relevant FCC regulations. As such, the Town of Eastham is expressly prohibited from regulating Verizon's petition based on radio frequency emissions.

3. Federal and State law mandates that telecommunications service providers be given access to telephone poles.

The pole at issue is in the public right of way and owned by Eversource. Verizon has a master license agreement with Eversource and a specific pole license for the pole at issue. Both Federal and State law specifically authorize providers of telecommunications services to access telephone poles. See 47 USC §224(f) and M.G.L. ch.166 §25A. These statutes show a clear policy to encourage companies to utilize telephone poles to deploy wireless services.

#### Conclusion

In summary, while these small-scale antenna installations do not alone obviate the need for traditional wireless facilities, they are by far the least intrusive means available to address gaps in coverage in areas of dense demand for VzW's LTE voice and data services. Simply put, the equipment such as that proposed herein provides enhanced service to areas of concentrated demand, while avoiding the aesthetic impacts of traditional facilities.

For the foregoing reasons, as well as to satisfy the mandate of the federal government to facilitate competition, provide high quality services to American consumers, and encourage the rapid deployment of new technologies in the telecommunications industry as set forth in the Telecommunications Act of 1996, as amended, VzW respectfully requests the issuance of this Grant of Location so that it can meet the ever-increasing demand for high performance wireless service that the residents, businesses, and visitors of Eastham expect and deserve.

Thank you for your timely attention to this matter. I look forward to addressing the Board on August 21, 2017. In the meantime, if you should have any questions regarding the enclosed petition, please do not hesitate to contact me directly.

Sincerely,

Peter D. Anderson

PDA/amp Enclosures

cc.

S. Delsonno, SCG (w/o encl.)

C. Webberly, SCG (w/o encl.) T. Hildreth, MM (w/o encl.)

#### **ULS** License

#### PCS Broadband License - KNLF646 - Verizon Wireless Area Communications Inc.

Call Sign

KNLF646

Radio Service

CW - PCS Broadband

Status

Active

**Auth Type** 

Regular

Market

Market Submarket BTA051 - Boston, MA

Channel Block

Associated

Frequencies (MHz)

001895.000000000-001910.00000000 001975.000000000-

001990.00000000

**Dates** 

Grant

02/28/2007

Expiration

01/03/2017

**Effective** 

02/28/2007

Cancellation

**Buildout Deadlines** 

1st

12/07/2003

2nd

01/03/2007

**Notification Dates** 

1st

01/30/2002

2nd

12/21/2006

Licensee

FRN

0002964922

Type

Corporation

Licensee

Verizon Wireless Area Communications Inc. 1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30004 **ATTN Regulatory** 

P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Contact

Verizon Wireless Sonya R Dutton

1120 Sanctuary Pkwy, #150 GASA5REG

P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Alpharetta, GA 30004

Ownership and Qualifications

Radio Service Type Mobile

Regulatory Status Common Carrier

Interconnected

Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?

No

Is the applicant an allen or the representative of an allen?

No

Is the applicant a corporation organized under the laws of any

foreign government?

No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

No

Yes

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender



FCC Home | Search | Updates | E-Filing | Initiatives | For Consumers | Find People

#### Universal Licensing System

FCC > WTB > ULS > Online Systems > License Search

FCC Site Map

PCS Broadband License - KNLF646 - Verizon Wireless Telecom Inc.

#### Market

2 HELP

🔍 New Search 🔍 Refine Search 👺 Return to Results 👜 Printable Page 🖺 Reference Copy 💠 Map License

MAIN ADMIN MARKET

Call Sign

KNLF646

1

Radio Service

CW - PCS Broadband

Market

BTA051 - Boston, MA

Channel Block C

Submarket

Associated

001895.00000000-

Frequencies (MHz)

001910.00000000 001975.000000000-

001990.00000000

Auction

05 - BB PCS C

Define View: Spectrum and Market Areas

All Results Displayed

Spectrum & Market Area (MHz)

001895.00000000-001905.00000000 001975.00000000-001985.00000000

Market Areas

Type

Code

Population+

Boston, MA All Counties (7) **BTA** 

051

4391344

Refer to Auctions Cross References of market area types including MTA, BTA, counties, and more. t: Population data is based on 2000 Census.

**ULS Help** 

ULS Glossary - FAQ - Online Help - Technical Support - Licensing Support

**ULS Online Systems** 

CORES - ULS Online Filing - License Search - Application Search - Archive License

Search

**About ULS** 

Privacy Statement - About ULS - ULS Home

**Basic Search** 

By Call Sign

FCC | Wireless | ULS | CORES

Help | Tech Support

Federal Communications Commission 445 12th Street SW Washington, DC 20554

Phone: 1-877-480-3201 TTY: 1-717-338-2824 Submit Help Request

#### **ULS** License

#### Cellular License - KNKA201 - Cellco Partnership

Call Sign

KNKA201

Radio Service

CL - Cellular

Status

Active

Auth Type

Regular

Market

Market

CMA006 - Boston-Lowell-

Channel Block B

Brockton-Lawrence-Haverhill,

MA-NH

Submarket

Phase

2

**Dates** 

Grant

11/15/2004

Expiration

10/01/2014

Effective

11/15/2004

Cancellation

**Five Year Buildout Date** 

08/27/1989

**Control Points** 

2

180 Washington Valley Rd., SOMERSET, BEDMINSTER, NJ

P: (800)852-2671

Licensee

Licensee ID

L00000722 000

FRN

0003290673

Type

Partnership

SGIN Licensee

Cellco Partnership

One Verizon Place (MC: GA3B1REG)

Alpharetta, GA 30004-8511

**ATTN Regulatory** 

P:(678)339-4271 F:(678)339-8552

E:Pamelia.Hoof@VerizonWireless.com

**Contact** 

Verizon Wireless

Pamella Y Hoof

One Verizon Place (MC: GA3B1REG)

Alpharetta, GA 30004-8511

P:(678)339-4271

F:(678)339-8552

E:Pamella.Hoof@VerizonWireless.com

Qualifications, Ownership, and Demographics

Radio Service

Mobile

Type

Regulatory

Common Carrier

Interconnected? Yes

Status

Alien Ownership

Is the Applicant a foreign government or the representative of any

No

foreign government? Is the Applicant an alien or the representative of an alien?

No No

Is the Applicant a corporation organized under the laws of any foreign

government?

Is the Applicant a corporation of which more than one-fifth of the No capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? Is the Applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by allens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? **Basic Qualifications** Has the Applicant or any party to this application or amendment had No any FCC station authorization, license, or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, Ilcense, construction permit denied by the Commission? Has the Applicant or any party to this application or amendment, or No any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court? Has any court finally adjudged the Applicant or any party directly or No indirectly controlling the Applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of Is the Applicant or any party directly or indirectly controlling the Yes Applicant, currently a party in any pending matter referred to in the preceding two items?

Hispanic/Latino?

Gender

**ULS License** 

#### 700 MHz Upper Band (Block C) License - WQJQ689 - Cellco Partnership

Call Sign

**WQJQ689** 

Radio Service

WU - 700 MHz Upper Band

(Block C)

Status

Active

0

Auth Type

Regular

Market

Submarket

Market

REA001 - Northeast

Channel Block C

Associated Frequencies (MHz)

000746.00000000-000757.00000000 000776.00000000-000787.00000000

**Dates** 

Grant

11/26/2008

Expiration

02/17/2019

Effective

11/26/2008

Cancellation

**Buildout Deadlines** 

1st

02/17/2013

2nd

02/17/2019

**Notification Dates** 

1st

2nd

Licensee

FRN

0003290673

Type

General Partnership

Licensee

Celico Partnership

1120 Sanctuary Pkwy #150 - GASA5REG

Alpharetta, GA 30004

ATTN Regulatory

P:(770)797-1070 F:(770)797-1036

E:network.regulatory@verizonwireless.com

Contact

Verizon Wireless

P:(202)589-3760 F:(202)589-3750

1300 I Street, NW - Suite 400 West

Washington, DC 20005 ATTN John T. Scott, III E:john.scott@verizonwireless.com

**Ownership and Qualifications** 

Radio Service Type Mobile

Regulatory Status Common Carrier

Interconnected

Yes

Alien Ownership

Is the applicant a foreign government or the representative of

any foreign government?

No

Is the applicant an alien or the representative of an alien?

No

Is the applicant a corporation organized under the laws of any foreign government?

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by allens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a

foreign country?

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by allens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

#### **Demographics**

Race

**Ethnicity** 

Gender

No

No

Yes

### PCS Broadband License - KNLH242 - Cellco Partnership

Call Sign

KNLH242

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

Market

Market

BTA051 - Boston, MA

Channel Block

Submarket

0

Associated Frequencies (MHz)

001890.00000000-001895.00000000

001970.00000000-001975.00000000

**Dates** 

Grant

07/23/2007

Expiration

06/27/2017

Effective

06/11/2009

Cancellation

**Buildout Deadlines** 

1st

06/27/2002

2nd

**Notification Dates** 

1st

05/17/2002

2nd

Licensee

FRN

0003290673

Type

Joint Venture

Licensee

Cellco Partnership

1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30009-7630

ATTN Regulatory

P:(770)797-1070

F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

Contact

Verizon Wireless Sonya R Dutton

1120 Sanctuary Pkwy, #150 GASA5REG

Alpharetta, GA 30009-7630

ATTN Regulatory

P:(770)797-1070 F:(770)797-1036

E:Network.Regulatory@VerizonWireless.com

**Ownership and Qualifications** 

Radio Service Type

Mobile

Regulatory Status

Common Carrier

Interconnected

Yes

Alien Ownership

Is the applicant a foreign government or the representative of any

foreign government?

No

Is the applicant an alien or the representative of an alien?

No

Is the applicant a corporation organized under the laws of any foreign government?

No

No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by allens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

SITE NAME:

EASTHAM\_MA\_SC05

LOCATION CODE:

394734

SITE ADDRESS:

UTILITY POLE NO.: 6 OCEAN VIEW DR EASTHAM, MA 02642









 POLE COORDINATES
 LATITUDE (NAD83)
 LONGITUDE (NAD83)

 41\* 50\* 50.77" N
 69\* 56\* 54.56" W

 GROUND ELEVATION
 45\* A.M.S.L. (NAVD88)

PREPARED BY:

LEASE EXHIBIT



A&E OFFICE: 7A LYBERTY WAY WESTFORD, MA 01886 1 (972) 755-1882

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF NEXIUS AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

		SUBMITTALS	
REV	DATE	DESCRIPTION	BY
A	01/12/16	FOR REVIEW	GLP
В	01/18/16	REVISED PER COMMENTS	MEM
С	03/14/16	700/AWS	JM

SITE INFO:

SITE NAME:

EASTHAM\_MA\_SC05

SITE ADDRESS:

U/P NO.: 6 OCEAN VIEW DR EASTHAM, MA 02642

CHECKED BY:

DATE: 01/12/16

PROJECT NUMBER:

20151287498

SHEET NUMBER:

LE-1

GRAPHIC SCALE: 3/16"=1'-0"

3/16" = 1'-0"

#### NOTES:

AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS NOT BEEN COMPLETED BY NEXIUS. DRAWINGS ARE SUBJECT TO CHANGE PENDING OUTCOME OF A STRUCTURAL ANALYSIS.

#### LEASE EXHIBIT

THIS LEASE PLAN IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION FACILITY. THE SITE LAYOUT WILL BE FINALIZED UPON COMPLETION OF SITE SURVEY AND FACILITY DESIGN

LEASE EXHIBIT

PREPARED BY:

A&E OFFICE: 7A LYBERTY WAY WESTFORD, MA 01886 1 (972) 755-1882

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPYRIGHT OF NEXIUS AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPLICATION OR USE
WITHOUT THE EXPRESS WRITTEN
CONSENT OF THE CREATOR IS
STRICTLY PROHIBITED.

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED "NOT TO SCALE".

		SUBMITTALS	
REV	DATE	DESCRIPTION	BY
A	01/12/16	FOR REVIEW	GLP
В	01/18/16	REVISED PER COMMENTS	MEM
С	03/14/16	700/AWS	JM

SITE INFO:

SITE NAME:

EASTHAM\_MA\_SC05

SITE ADDRESS:

U/P NO.: 6 OCÉAN VIEW DR EASTHAM, MA 02642

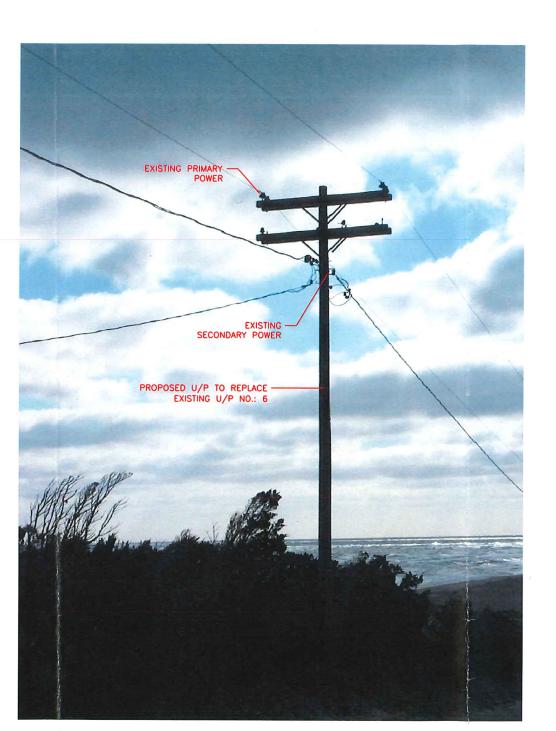
CHECKED BY:

DATE: 01/12/16

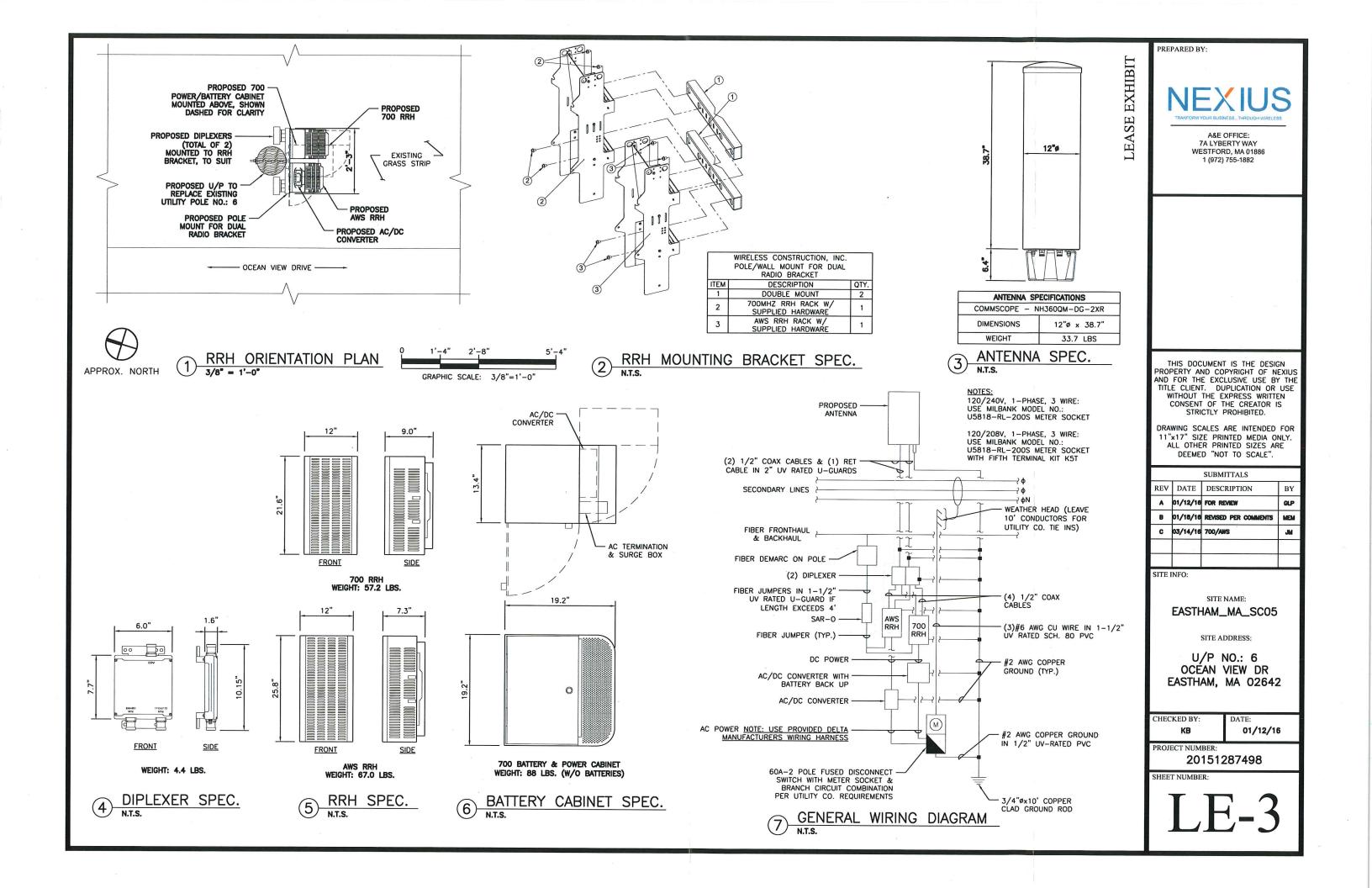
PROJECT NUMBER:

20151287498

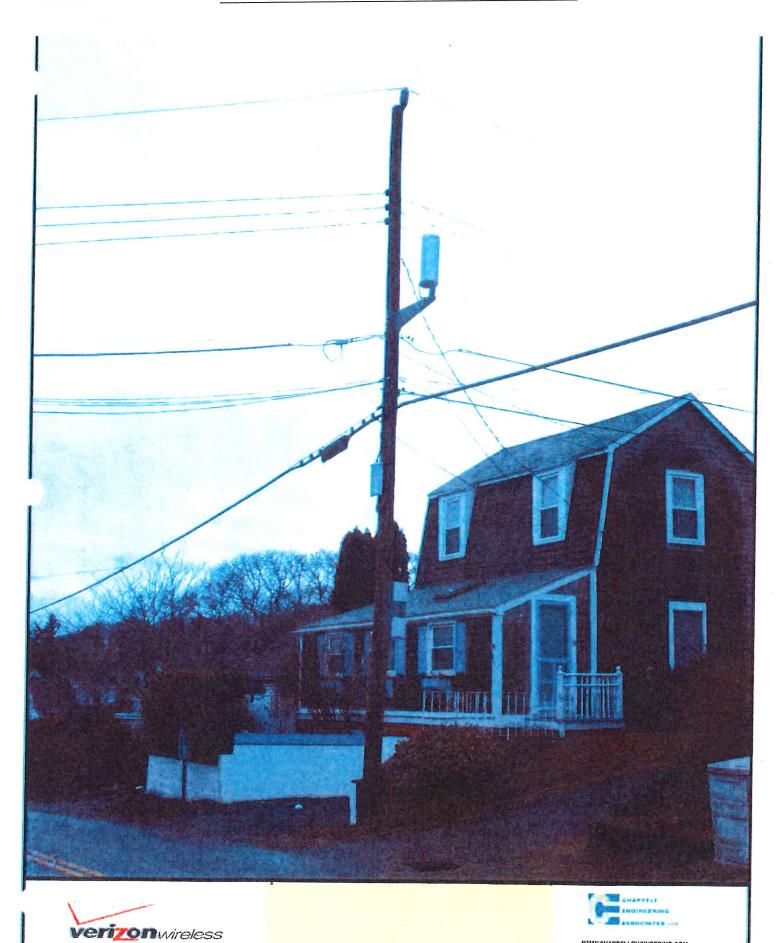
SHEET NUMBER:



EXISTING PHOTO DETAIL







WWW.CHAPPELLENGINEERING.COM

#### APPLICATION AND POLE ATTACHMENT LICENSE

Licensee Cellco Partnership, a Delaware Corporation, d/b/a Verizon Wireless Street Address One Verizon Way, Mail Stop 4AW100 City, State and Zip Basking Ridge, New Jersey Date 5/26/2016

In accordance with the terms and conditions of the Pole Attachment Agreement, application is hereby made for a license to make 1 Antenna, RRH/Cabinet and meter attachments to poles and 1 Power Supply(ies) located in the municipality of Eastham in the State of MA

	are my power supply	y specifications if ar	ion Number: Eastham Mapplicable. The cable's strar	
X Communication Spa	ce – POLE REPLACE	MENT   Power /	Supply Space	
	Licensee's Name	e (Print) Sean Conv	/ay	
	Signature	Seau	Conway	
EVERSOURCE Power Company	Title Real Estate	: Manager		
	Tel. No. 508-33	0-3392		
	Fax No.			
	E-mail Sean.conv	way@verizonwirele	ss.com	
Pole Attach granted to make the attac poles,attacl	ment License Applic hments described in nments to FO <sup>2</sup> poles,	ation Number this application to _ attachment uttachments located		*
Form 3.	Licensor's Name	e (Print)	109W CON	
	Signature	950	0-	
(AGREEMENT ID #)	Title	Supervise	حر	
	Date	6/5/17		
The Licensee shall subr Energy.	nit an original copy	of this application	to EVERSOURCE	
Revised 03/06/2015			Eversource Energy	

#### **AUTHORIZATION FOR FIELD SURVEY WORK**

Licensee: Bell Atlantic Mobile of MA, Ltd., a Bermuda corporation, d/b/a Verizon Wireless

In accordance with Article III & Appendix I of the Pole Attachment Agreement, following is a summary of the charges which will apply to complete a field survey covering Pole Attachment License Application Number Eastham MA SC05 - 394734 located in the municipality of Eastham in the State of MA

#### FIELD SURVEY CHARGES

Field Survey	# <u>Poles</u>	Unit Rate	<u>Total</u>
Field Survey Application Fee (includes 1st pole)	1 pole	\$139.00	\$139.00
Field Survey 2 -200 Poles		\$_13.45per Pole	\$
Additional Travel Time*		\$200.00 per Day	\$
TOTAL Charges			\$139.00

<sup>\*</sup> Based on average of 75 poles surveyed per day, add \$200.00 travel time for each additional day required to complete survey.

Please note, if you calculated the cost incorrectly, your check will be returned and a new check for the correct amount must be received by this office in order to schedule the survey. If you need assistance, please call the **HOTLINE on 800-340-9822**. The required field survey covering Pole Attachment License Application # Eastham MA SC05 - 394734 is authorized. I am enclosing an advance payment in the amount of \$139.00.

Licensee's Name (Print) Sean Conway

Signature Sean Conway

Title Real Estate Manager

Address 400 Friberg Pkwy Westborough MA, 01581

Tel. No. 508-330-3392

Date 5/9/2016

The Licensee shall submit an original copy of this application to EVERSOURCE Energy.

Revised 03/06/2015

Eversource Energy

FORM 3 – EVERSOURCE ITEMIZED Pole Make-Ready Work Charges

Licensee to complete bold italicized areas only. ( Provide ownership information if known )

PAGE 1 OF 1

RCE to Complete: Total Poles Surveyed \_\_\_\_\_ Total Poles Requiring NSTAR Make-Ready \_\_\_\_ Appendix IV Form 3 FIELD SURVEY / MAKE READY WORK FORM SURVEYORS: DATE OF SURVEY: CWO #: Exch Code: MUNIC: Eastham STATE: MA Munic Code: Verizon LICENSEE NAME: Vertzon LICENSEE APPLICATION #: Eastham SC05 MA Licensee Bryan Sarchi **ELCO NAME:** EVERSOURCE **NSTAR APPLICATION #** EVERSOURCE WORK DESCRIPTION LOCATION POLE # ATT OWNERSHIP CHARGE TASK #S / \* Height Tel El F/C J.U. YES NO TEL RTE / STREET NAME J.O. F.O. REMARKS Tel El Tel El Tel El of Att. List one pole per line P.S. Riser Ocean View Road TOTALS: Height of Attachment = Height of Licensee Attachment shall be 40" below ELCO MGN unless otherwise noted here by Verizon and EVERSOURCE surveyor.

FOR KEN KEN	IDRICK:			
Customer Bar	vuost In Sondo	- Data: 5/26/2016	WO Received Date.	
Customer Net	drest III-aei Aice	e Date3/20/2010	Town Costher	7: 02642
Service Addre	SS: Street: Oce	an view Road Suite	:Town: <u>Easthar</u>	nZip: <u>02642</u>
Customer Of	Record:			
Customer Respo	onsible for Payme	ent of Monthly Electric Bi	ills	
		Bill: Cellco Partnership (A	Delaware Corporation)	
	O Name: <u>Verizon V</u>			
		375, Spokane, WA 9921		
Telephon	e:	Tax IE	Number:	CONTROL CONTRO
Existing A	ccount or Meter Nu	ımber (if applicable):		
Property Owner	Name (if differen	t from above);		
Owner Ac	idress:			
Owner Ph	one Number:		work order (if different fro	
		on costs associated with	work oraer (it aiπerent tr	om above)
	erizon Wireless	Northernumb BAA 1691		
	mber: 508-320-20	, Westborough MA 1581		
			d for now commercial E	VEDCOURCE Customore
				VERSOURCE Customers
		(Circle Appropriate)		
			Camilaa Dalaaatian	Tamanana Candan
Dala Palacation	Service Upg	rade Pasannast	Service Relocation	Temporary Service
Pole Relocation	Service Upg Disconnect/F	rade Reconnect LIC Service from: I	Service Relocation Service Removal Piger-Pole # :	Temporary Service Metering Only Padmount # :
Pole Relocation OH Service from	Disconnect/F Pole, Pole#:	rade Reconnect UG Service from; I	Service Relocation Service Removal Riser-Pole # :	Temporary Service Metering Only Padmount # :
Pole Relocation OH Service from I	Disconnect/F Pole, Pole#:	Reconnect UG Service from; I	Service Removal Riser-Pole # :	Metering Only Padmount # :
Pole Relocation OH Service from I	Disconnect/Fole, Pole#:	Reconnect UG Service from; I	Service Removal Riser-Pole # :  Brief Desc	Metering Only Padmount # :
Pole Relocation OH Service from I	Disconnect/f Pole, Pole# : Customer Loadi	Reconnect UG Service from; I	Service Removal Riser-Pole # :  Brief Desc Verizon Smal	Metering Only Padmount # :  cription of Work    Cell Install - Attach 1
Pole Relocation OH Service from I	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from C Type of Load	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from C Type of Load Lighting	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from C Type of Load Lighting Electric heat	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from C Type of Load Lighting Electric heat Air Conditioning	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C  Type of Load  Lighting Electric heat Air Conditioning Refrigeration	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector  Single Phase	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip.	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector  Single Phase	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators Miscellaneous	Disconnect/f Pole, Pole#:  Customer Loadi  New Connector  Single Phase	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from  C Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector  Single Phase	Reconnect UG Service from; I ing ed Load in KVA	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from I  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators Miscellaneous Totals	Disconnect/FPole, Pole#:	Reconnect UG Service from; I  ing  ed Load in KVA Three Phase	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal	Metering Only Padmount # :  eription of Work  II Cell Install – Attach 1 binet and 1 meter to the
Pole Relocation OH Service from OH Service fro	Disconnect/FPole, Pole#:	Reconnect UG Service from; I  ing  ed Load in KVA Three Phase	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing	Metering Only Padmount #:  cription of Work  II Cell Install – Attach 1 binet and 1 meter to the le phase 60Amp Service
Pole Relocation OH Service from OH Service from OH Service from OH	Disconnect/FPole, Pole#:	Reconnect  UG Service from; I  ing  ed Load in KVA  Three Phase  Commercial:	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing	Metering Only Padmount #:  cription of Work  II Cell Install – Attach 1 binet and 1 meter to the le phase 60Amp Service
Pole Relocation OH Service from OH Service from OH Service from OH	Disconnect/FPole, Pole#:	Reconnect UG Service from; I ing  ed Load in KVA Three Phase Commercial:Amperage:	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing  Public: Phase:	Metering Only Padmount #:  cription of Work  II Cell Install – Attach 1 binet and 1 meter to the le phase 60Amp Service
Pole Relocation OH Service from I  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators Miscellaneous Totals  Number of Me Residenti Main Swit Service V Facility Ty	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector Single Phase  14.4  14.4  14.4  aters Required: ai: ch Voltage: foltage:	Reconnect UG Service from; I  ing  ed Load in KVA Three Phase  Commercial: Amperage: Amperage:	Service Removal Riser-Pole #:  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing  Public: Phase: Phase: New Building Sq	Metering Only Padmount #:  cription of Work  Il Cell Install - Attach 1 binet and 1 meter to the le phase 60Amp Service
Pole Relocation OH Service from I  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators Miscellaneous Totals  Number of Me Residenti Main Swit Service V Facility T  ALL 480V SERVICE	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector Single Phase  14.4  14.4  14.4  aters Required: ai: ch Voltage: foltage:	Reconnect UG Service from; I  ing  ed Load in KVA Three Phase  Commercial: Amperage: Amperage:	Service Removal Riser-Pole # :  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing  Public: Phase: Phase:	Metering Only Padmount #:  cription of Work  Il Cell Install - Attach 1 binet and 1 meter to the le phase 60Amp Service
Pole Relocation OH Service from I  Type of Load  Lighting Electric heat Air Conditioning Refrigeration Cooking Electric Dryer Water Heater Computer Process Equip. Motors/Elevators Miscellaneous Totals  Number of Me Residenti Main Swit Service V Facility Ty	Disconnect/F Pole, Pole#:  Customer Loadi  New Connector Single Phase  14.4  14.4  14.4  aters Required: ai: ch Voltage: foltage:	Reconnect UG Service from; I  ing  ed Load in KVA Three Phase  Commercial: Amperage: Amperage:	Service Removal Riser-Pole #:  Brief Desc Verizon Smal antenna 1 RRH/Cal pole. Requires sing  Public: Phase: Phase: New Building Sq	Metering Only Padmount #:  cription of Work  Il Cell Install - Attach 1 binet and 1 meter to the le phase 60Amp Service

Additional Equipment: Generator: KW:	Phase:	Purpose	:	
Motor(S): Total #:Largest HP:	Phase:		Locked Rotor	AMP:
Type of Starting Compensation (choose one):	Hard	Soft	Capacitor	VFD
*See Article 802 of EVERSOURCE Information Protection *	ion and Requiremen	its Book for Ma	ximum LR cur	rent and Three Phase
Contact Name (circle appropriate): Customer/Contractor/Consultant: Sean Co Street Address: 118 Flanders Road City, State, Zip: Westborough, MA 01581 Telephone: 508-320-2017 Pager: Cell: 508-330-3392	-			
Electrician: TBD	License	Number:		
Business Name: <u>Verizon Wireless</u> Street Address: <u>118 Flanders Road</u> City, State, Zip: <u>Westborough MA 01581</u> Telephone: <u>508-320-2017</u> Pager: Cell:				
Please note that by Interconnecting wit acknowledges that they have reviewed Requirements for Electric Service (Blue Bo	d and are in co			
For New Commercial Services, New Residuplease provide (2) copies of City/Town appropriation of the new utilities (electric, gas, water	roved site plans that	at illustrates the	new facility I	location and the proposed
For Service Increases at existing facilities, pl	ease submit a One-	-Line Diagram if	available.	
For New Residential Services where a pole proposed location of the new facilities.	must be set, pleas	se provide (2) co	pies of a site p	olan that illustrates the
For Temporary Service Requests, please pr	rovide (2) copies of	a site plan illustr	ating service lo	ocation.
West Tel: Fax: Cell:	l correspondence to: RSOURCE ENERG NSTAR Way twood, MA, 02090 (781) 441 – 3851 (781) 441-3194 339-987-7059 endrick SW340	: iY Electric and G	es :	
FOR NSTAR USE ONLY EVERSOURCE Revenue Allowance:			EVERSOURC	E Rate:
KVA or KW rating of Existing Loads (if app Existing Winter Peak Demand: Existing Summer Peak Demand:	olicable):	_	Date/Year: Date/Year:	

SITE NAME:

EASTHAM\_MA\_SC05

LOCATION CODE:

394734

SITE ADDRESS:

UTILITY POLE NO.: 6 OCEAN VIEW DR EASTHAM, MA 02642





1 KEY PLAN



POLE COORDINATES	LATITUDE (NADEJ)	
POLE COOKDINATES	41" 50" 50.77" N	69" 56" 54 55" W
OROUND ELEVATION	45" AMSL (NAVDO	ð)

LEASE EXHIBIT

<b>NEXI</b>	US

PREPARED BY:

A&E OFFICE: TA LYBERTY WAY WESTFORD, MA 01886 1 (972) 755-1882

THIS DOCUMENT IS THE DESIGN PROPERTY AND COPPRIGHT OF NEXUS AND FOR THE EXCLUSIVE USE BY THE TITLE CLIENT. DUPUCATION OR USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE CREATOR IS STRICTLY PROHIBITED.

CRAMING SCALES ARE INTERDED FOR 11"x17" SIZE PRINTED MEDIA ONLY. ALL OTHER PRINTED SIZES ARE DEEMED THOT TO SCALE".

		SUBMITTALS	
REV	DATE	DESCRIPTION	ĐΥ
A	21/12/10	POR RECEDI	æ
	DI/14/14	MONRIO HER COMMONS	-
c	22/14/10	707/ED	24
	-		1

SITE INFO:

SITE NAME:
EASTHAM\_MA\_SCOS

SITE ADDRESS:

U/P NO.: 6 OCEAN VIEW DR EASTHAM, MA 02642

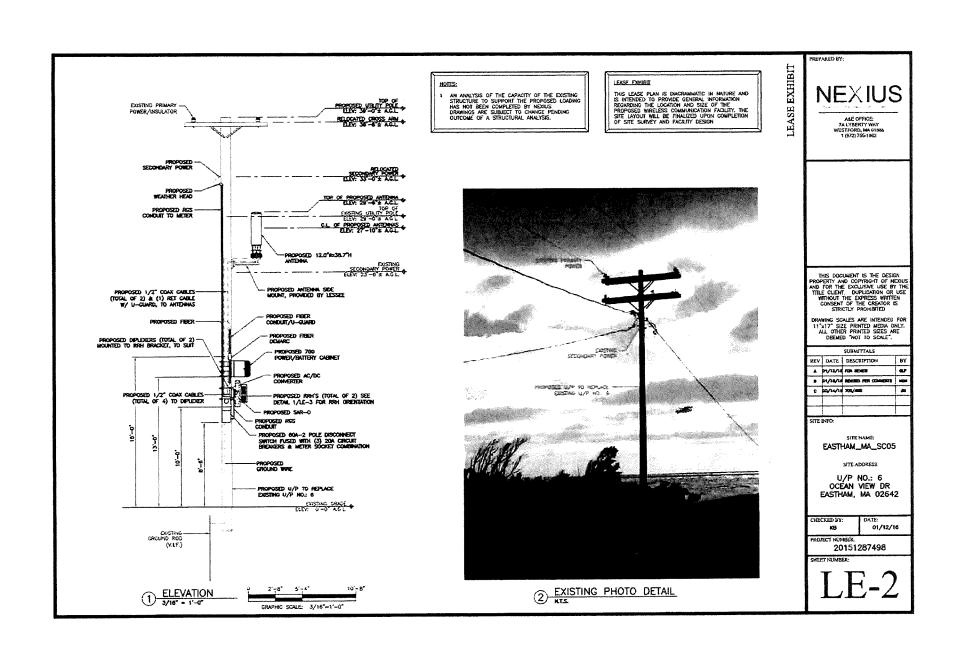
CHECKED BY:

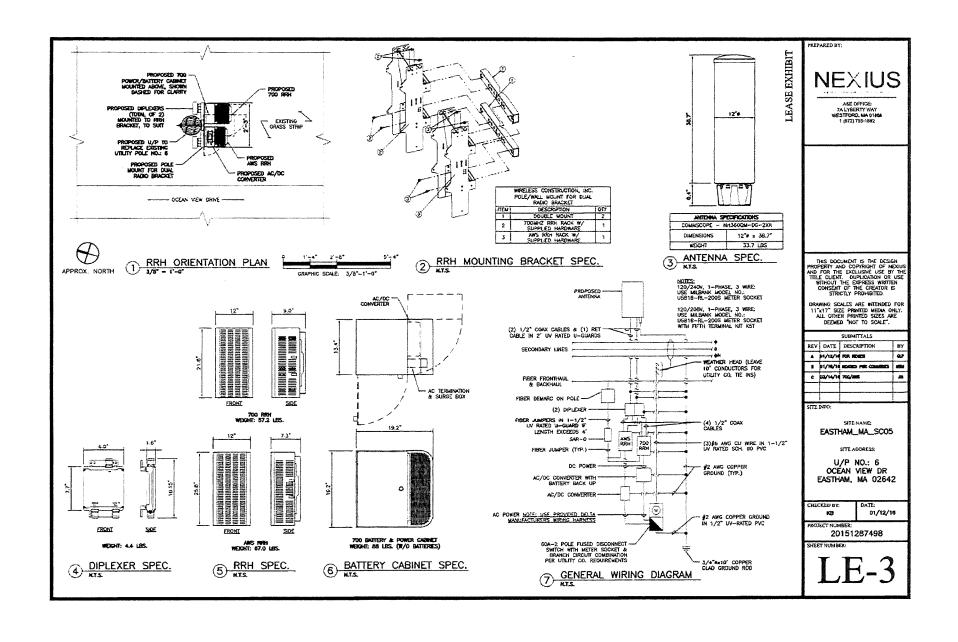
DATE: 01/12/18

PROJECT NUMBER: 20151287498

HEET NUMBER:

LE-1





CASH ONLY IF ALL Checklock \* SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

STRUCTURE CONSULTING GROUP, INC.

OPERATING ACCOUNT 49 BRATTLE STREET ARLINGTON, MA 02474

SANTANDER BANK 60-7269/2313

5714

6/1/2016

PAY TO THE ORDER OF

Eversource Energy

**\$** \*\*139.00

APROTECTED AGAINST FRAUDA



**Eversource Energy** Steven M Owens One NSTAR Way NWBED180 Westwood, MA 02090

Vold after 180 days



MEMO

EASTHAM MA SC05-394734

#OO5714# #231372691#

2741117756#

STRUCTURE CONSULTING GROUP, INC.

Eversource Energy

6/1/2016

139.00

5714

5714 EASTHAM MA SC05

Santander - Operating EASTHAM MA SC05-394734

139.00



C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions Report



Eastham MA – SC05

Ocean View Drive, Eastham, MA 02642

#### Table of Contents

1. Introduction	l
2. FCC Guidelines for Evaluating RF Radiation Exposure Limits	1
3. RF Exposure Prediction Methods	2
4. Antenna Inventory	2
5. Calculation Results	3
6. Conclusion	4
7. Statement of Certification	4
Attachment A: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns	5
Attachment B: References	6
Attachment C: FCC Limits for Maximum Permissible Exposure (MPE)	7
<u>List of Figures</u>	
Figure 1: Graph of General Population %MPE vs. Distance	3
Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)	8
<u>List of Tables</u>	
Table 1: Proposed Antenna Configuration	2
Table 2: Maximum Percent of General Population Exposure Values @ 6'/16' AGL	4
Table 3: FCC Limits for Maximum Permissible Exposure	7



#### 1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for Verizon Wireless' installation of a side-mounted small cell antenna on the side of a proposed replacement utility pole (U/P #6) along Ocean View Drive in Eastham, MA. The coordinates of the utility pole are 41° 50′ 50.77″ N, 69° 56′ 54.56″ W.

This report uses the planned antenna configuration for Verizon Wireless to derive the resulting % MPE, once the proposed installation has been completed.

#### 2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm²). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

Eastham MA – SC05 1 July 13, 2017



#### 3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

Power Density = 
$$\left(\frac{EIRP}{\pi \times R^2}\right) \times Off$$
 Beam Loss

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance =  $\sqrt{(H^2 + V^2)}$ 

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor of 2.0

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final installation.

#### 4. Antenna Inventory

Table 1 below outlines Verizon Wireless' proposed antenna configuration for this location. The associated data sheet and antenna patterns for this specific antenna model are included in Attachment A.

Location	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBi)	Power EIRP (Watts)	Antenna Model	Beam Width	Mech. Tilt	Length (ft)	Antenna Centerline Height (ft)	Antenna Location on Pole
SC05	751	120	6.1	489	NH360OM-DG-2XR 0	360	0	2.2	27.0	C:1-
3003	2100	180	9.9	1759	NH300QWI-DG-ZAR_U	300	U	3.2	27.8	Side

Table 1: Proposed Antenna Configuration 1 2

<sup>&</sup>lt;sup>1</sup> Antenna height is in reference to the Nexius Lease Exhibit, dated March 14, 2016.

<sup>&</sup>lt;sup>2</sup> Transmit power assumes 0 dB of cable loss.



#### 5. Calculation Results

The maximum calculated % MPE results are shown in Table 2, which also include the distance that each maximum value occurs from the base of the utility pole. The graph in Figure 1 below shows calculated % MPE vs. distance for SC05.

For completeness, the calculations consider both a 6' individual standing at ground level around the utility pole, and also at 10' above ground level, to represent an individual standing on a 2<sup>nd</sup> floor deck at a nearby home/business. Please note that % MPE values inside any neighboring buildings would be lower than the calculated values shown in this report, as the calculated values do not account for building penetration losses.

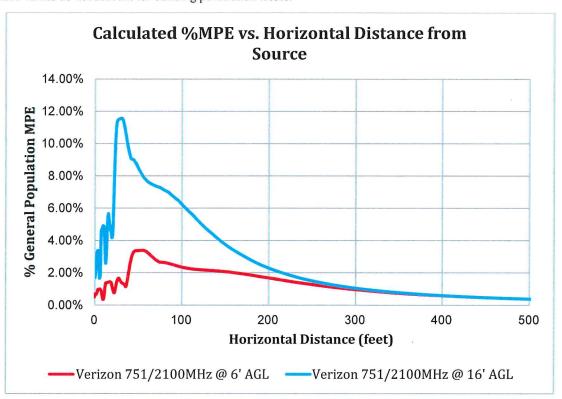


Figure 1: Graph of General Population %MPE vs. Distance

The percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antenna used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 100' and beyond, one would now be in the main beam of the antenna pattern and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.



As stated in Section 3, all calculations assume that the antenna is operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are significantly higher than the actual signal levels will be from the final installation. In addition to the other worst case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antenna were completed using a local maximum off beam antenna gain (within ± 2 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

			@ 6' AGL		@ 16'	AGL
Location	TX Freq. (MHz)	Antenna Height (ft)	Distance to the Base of Antenna (ft)	Max. %MPE	Distance to the Base of Antenna (ft)	Max. %MPE
SC05	751/2100	27.8	56'	3.39%	30'	11.57%

Table 2: Maximum Percent of General Population Exposure Values @ 6'/16' AGL

#### 6. Conclusion

The above analysis verifies that RF exposure levels from the proposed small cell will be below the maximum levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the highest maximum percent of MPE calculated at ground level is 3.39% of the FCC General Population limit and the highest percent of MPE calculated at 10° above ground level is 11.57% of the FCC General **Population limit.** These maximum percent of MPE values are calculated to occur 56' away and 30' away from SC05, respectively.

#### 7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Report Prepared By: Evan Thibodeau RF Engineer

C Squared Systems, LLC

Keith bellante

Evan Thibdean

July 13, 2017

Date

Reviewed/Approved By:

Keith Vellante RF Manager

C Squared Systems, LLC

July 14, 2017 Date



#### Attachment A: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns

#### **751 MHz LTE**

Manufacturer: Commscope

Model #: NH360QM-DG-2XR 0

Frequency Band: 698-806 MHz

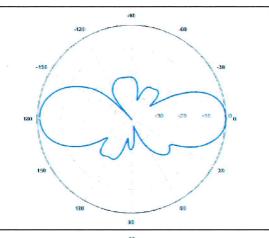
Gain: 6.1 dBi

Vertical Beamwidth: 28.6°

Horizontal Beamwidth: 360°

Polarization:  $\pm 45^{\circ}$ 

Size L x W: 38.7" x 12.0"



#### **2100 MHz LTE**

Manufacturer: Commscope

Model #: NH360QM-DG-2XR\_0

Frequency Band: 1920-2200 MHz

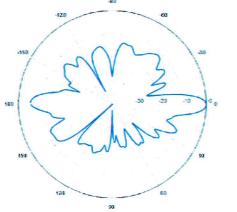
Gain: 9.9 dBi

Vertical Beamwidth: 10.1°

Horizontal Beamwidth: 360°

Polarization: ± 45°

Size L x W: 38.7" x 12.0"





#### **Attachment B: References**

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz IEEE-SA Standards Board



#### Attachment C: FCC Limits for Maximum Permissible Exposure (MPE)

#### (A) Limits for Occupational/Controlled Exposure<sup>3</sup>

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

#### (B) Limits for General Population/Uncontrolled Exposure<sup>4</sup>

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)*$	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz \* Plane-wave equivalent power density

Table 3: FCC Limits for Maximum Permissible Exposure

Eastham MA – SC05 7 July 13, 2017

<sup>&</sup>lt;sup>3</sup> Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

<sup>&</sup>lt;sup>4</sup> General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.



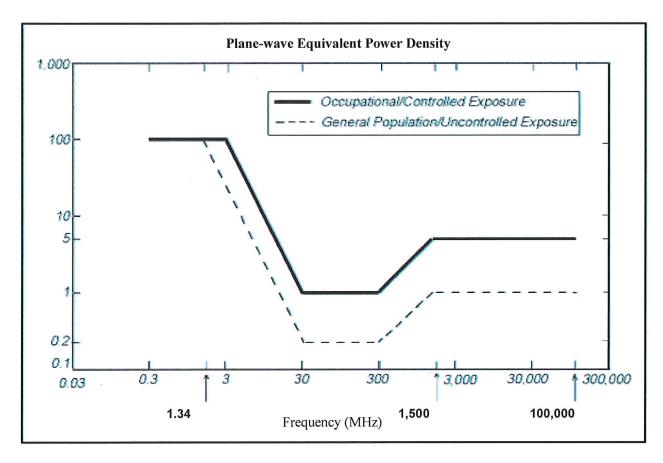


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)



#### AFFIDAVIT OF RADIO FREQUENCY ENGINEER

The undersigned, in support of the application to install a wireless communications facility consisting of one antenna and associated radio equipment on a replacement utility pole located at Ocean View Drive Road in Eastham, Massachusetts, states the following:

- My name is Keith Vellante. I have a Bachelor of Science degree in Electrical Engineering from the University of New Hampshire and I am employed as a Radio Frequency (RF) Engineer for C Squared Systems, LLC.
   C Squared Systems has entered into a contract with Verizon Wireless to provide RF consulting services on behalf of Verizon Wireless. I have reviewed the proposed site with the Radio Frequency Engineer responsible for the Verizon Wireless network design in the area of Massachusetts that includes the Town of Eastham, MA.
- Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.
- 3. The proposed facility is located within an area where Verizon Wireless has identified a need to install a wireless telecommunications facility in order to provide reliable wireless service. The search area for the proposed facility was determined by the fact that wireless service needs significant improvement throughout the surrounding areas and stretches of roadway in the immediate proximity of the proposed location. Furthermore, it was determined that the area served by the facility would interact well with those of existing facilities in the surrounding area.

The following table provides details of the proposed facility:

Site Name:	Site Address:	Utility Pole Number:	Latitude:	Longitude:	Ground Elevation (AMSL):	Antenna Height (AGL):
Eastham MA SC05	Ocean View Drive	6	41.8474	-69.9484	~45*	27.8`

- 4. A conventional Verizon Wireless LTE macro-site consists (in part) of RRH's (Remote Radio Heads) located near the antennas on a tower, rooftop, or other support structure, which are connected via fiber optic cables to a BBU (Baseband Unit) located on site in an equipment shelter or other weatherproof enclosure. The BBU performs network signal processing between the RRH's at the site, and Verizon's LTE core network.
- 5. C-RAN (Cloud Radio Access Network) nodes and Small Cells also utilize RRH's at each site, however a centralized BBU capable of supporting RRH's at multiple sites is implemented to gain certain efficiencies, both from a network and environmental standpoint. The proposed location is one of multiple small cells planned to address capacity and coverage deficiencies in Eastham and the surrounding area.

- 6. C-RAN and Small Cell deployments are intended to complement, not replace, the conventional LTE macronetwork sites, and are typically used as a capacity solution targeting isolated areas of heavy network usage, a.k.a. "hot spots." In doing so, the C-RAN nodes and Small Cells serve to offload the demand on the existing sites serving these "hot spots." This not only improves service to the specifically targeted area, but also improves overall system performance elsewhere in the network.
- 7. The purpose of the proposed facility is to provide coverage improvement and additional service capacity along Coast Guard Beach and key roadways such as Ocean View Drive and Doane Road immediately surrounding the location, where Verizon Wireless does not currently provide acceptable LTE service.
- 8. To find a site that provides acceptable capacity and coverage improvement, the Verizon Wireless RF Design Group utilizes computer modeling to define a search area. The search area is designed such that a site located within the area and at a given height would have a high probability of completing the capacity and coverage objectives in the target areas. The RF Design Group develops the network by working off existing sites from which to build out the network.
- Verizon Wireless' search of the area and subsequent analysis determined that installing the proposed facility on the subject replacement utility pole would be the most appropriate solution to meet its network capacity and coverage objectives.
- 10. I have reviewed the proposed installation to be placed on the subject utility pole as well as the other existing antenna site locations used in Verizon Wireless' system in and around the surrounding areas. I have analyzed the potential benefits this site would represent to Verizon Wireless' network and its users. I employ computer simulations, which incorporate the results of field tests of existing facilities, to determine existing radio frequency (RF) coverage for Verizon Wireless' system. These simulations model characteristics such as antenna types, antenna height, output power, terrain, ground elevations and RF propagation effects of the frequency utilized.
- 11. The following table provides details of the surrounding Verizon Wireless telecommunications facilities used to generate the RF maps attached hereto as an exhibit to Verizon Wireless' application.

Site Name:	Latitude:	Longitude:	Street Address:	City/Town:	Structure Type:	Antenna Height (ft AGL):	Status:
Brewster	41.7569	-70.0911	1657 Main Street	Brewster	Lattice	119	On-Air
Eastham	41.8672	-69.9811	Nauset Road	Eastham	Lattice	140	On-Air
Eastham 2	41.8317	-69.973	2540 & 2550 State Highway	Eastham	Monopole	82	On-Air
Orleans	41.7763	-69.9972	Finlay Road	Orleans	Lattice	150	On-Air
Wellfleet 2	41.8968	-69.9845	724 Route 6	Wellfleet	Monopole	87	On-Air
Wellfleet Repl	41.9472	-70.0174	Gross Hill Road	Wellfleet	Monopole	130	On-Air

12. The signal propagation plots included as attachments were produced using deciBel Planner™, a Windows-based RF propagation computer modeling program and network planning tool. The software considers the topographical features of an area, land cover, antenna models, antenna heights, RF transmitting power, and receiver thresholds to predict coverage and other related RF parameters used in site design and network expansion.

- 13. The RF map titled "Eastham MA SC05 Existing 700 MHz LTE Sector Footprints" attached hereto depicts the areas primarily served by the sectors (a.k.a. signal "footprints") of the existing "On-Air" Verizon Wireless macro sites in the area, which are shown by a unique color for each particular sector of interest. For clarity, all other sectors of less interest with respect to the proposed small cell are shown in grey. As demand for wireless voice and data services continues to grow, Verizon Wireless manages the footprint of each sector so that it can support the demand within the area it is primarily serving. In addition to improving coverage to the immediate area, the proposed site is also needed to serve existing and anticipated demand in the vicinity and thereby offload some of the burden experienced by the surrounding sites. In that way, those sites will be able to more adequately serve the demand for service in the areas nearer to those surrounding sites. Please note that the outer parts of each sector footprint include areas that presently have signal strength below the targeted value required for reliable service to Verizon Wireless' customers. The fact that low-level signal may reach these areas does not mean that these areas experience adequate coverage. These unreliable areas of low signal level impose a significant capacity burden on the sites primarily serving the area.
- 14. The RF map titled "Eastham MA SC05 Existing 700 MHz LTE Coverage" attached hereto shows the coverage provided to areas of Eastham from the "On-Air" Verizon Wireless macro-sites in the area. The green shaded areas represent the minimum desired level of coverage for this area, whereas the orange shaded areas represent a slightly lower signal strength. The deficient areas of coverage are defined by the unshaded or "white" areas. Areas of deficient service are characterized by poor service quality, low data throughput, and the substantial likelihood of unreliable service. As can be seen from the coverage plot, the surrounding network of Verizon Wireless sites are unable to provide sufficient LTE coverage to much of eastern Eastham, due in large part to the distances between the sites and the intervening topography. In addition to providing additional network capacity, the proposed small cell will also improve coverage to areas along Coast Guard Beach, Ocean View Drive, and Doane Road, immediately surrounding this location.
- 15. The map titled "Eastham MA SC05 Area Terrain Map" attached hereto details the terrain features around the proposed small cell. These terrain features play a key role in dictating both the unique coverage areas served by the surrounding facilities, and the coverage gaps within the network. This map is included to provide a visual representation of the terrain variations that must be considered when determining the appropriate location and design of a proposed wireless facility.
- 16. As shown in the aforementioned plots, the proposed facility is located in an area of deficient service, making it suitable to provide coverage improvement to the immediately surrounding areas along Coast Guard Beach and key roadways such as Ocean View Drive and Doane Road. The proposed facility will provide a dominant server and additional capacity to this seasonal "hot spot" of network usage, and offload the existing sectors currently serving this area, which will in turn improve the overall system performance.
- 17. I have concluded that the proposed facility will satisfy the present capacity and coverage needs that motivated Verizon Wireless to establish a search ring in this vicinity. Any reduction in the proposed antenna configuration and/or equipment would also limit optimal performance of the site, which would substantially limit the site's effectiveness.
- 18. Verizon Wireless certifies that the proposed facility will not cause interference to any lawfully operating emergency communication system, television, telephone, or radio in the surrounding area. The FCC has licensed Verizon Wireless to transmit and receive in the Upper C-Block of the 700 MHz band, B Block of the Cellular (850 MHz) band, the C4, C5, E and F Blocks of the PCS (1900 MHz) band, and the A and B Blocks of the AWS (2100 MHz) band of the RF spectrum. As a condition of the FCC licenses, Verizon Wireless is prohibited from interfering with other licensed devices that are being operated in a lawful manner. Furthermore, no emergency communication system, television, telephone, or radio is licensed to operate on these frequencies, and therefore interference is highly unlikely.

- 19. Pursuant to its Federal Communications Commission (FCC) licenses, Verizon Wireless is required to ensure that all radio equipment operating at the proposed communication facility and the resulting radio frequency exposure levels are compliant with FCC requirements as well as federal and state health and safety standards.
- 20. Providing wireless communication services is a benefit to the residents of the Town of Eastham, as well as to mobile customers traveling throughout the area. The proposed facility is well suited to meet Verizon Wireless' network requirements for the intended area. The absence of a wireless telecommunications facility at or near this immediate location will result in the continued existence of inadequate service and coverage gaps in this area. Without the proposed facility, Verizon Wireless will be unable to provide reliable wireless communication services in this area of the Town of Eastham; therefore, Verizon Wireless respectfully requests that the Town of Eastham act favorably upon the proposed facility.

Signed and sworn under the pains and penalties of perjury	July 13th . 20	017.
---	----------------	------

Keith Vellante

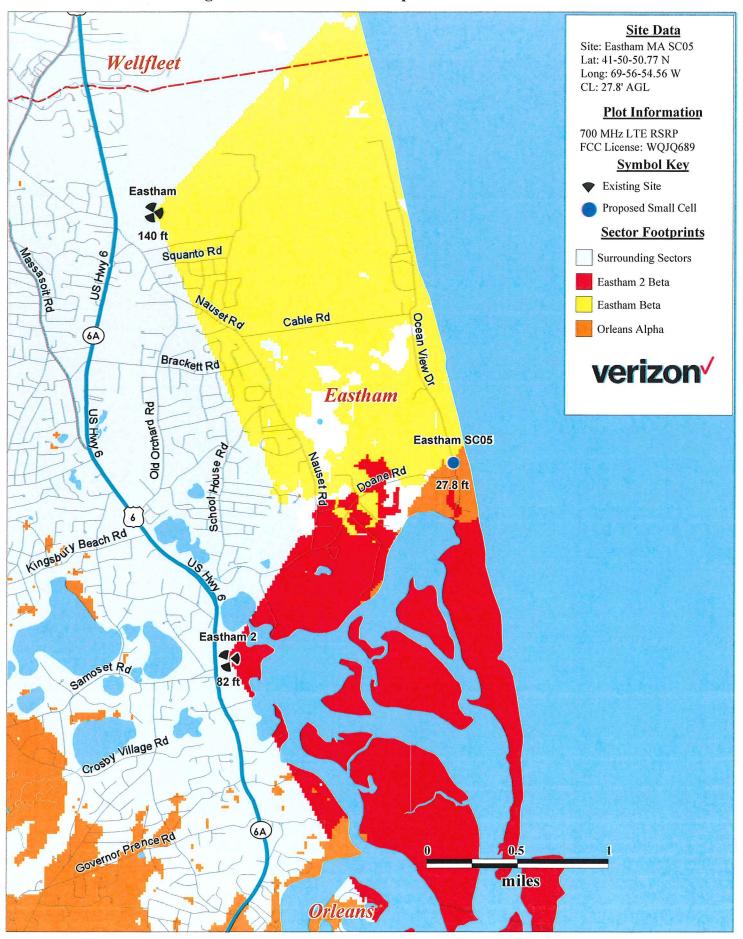
Radio Frequency (RF) Engineer

C Squared Systems, LLC

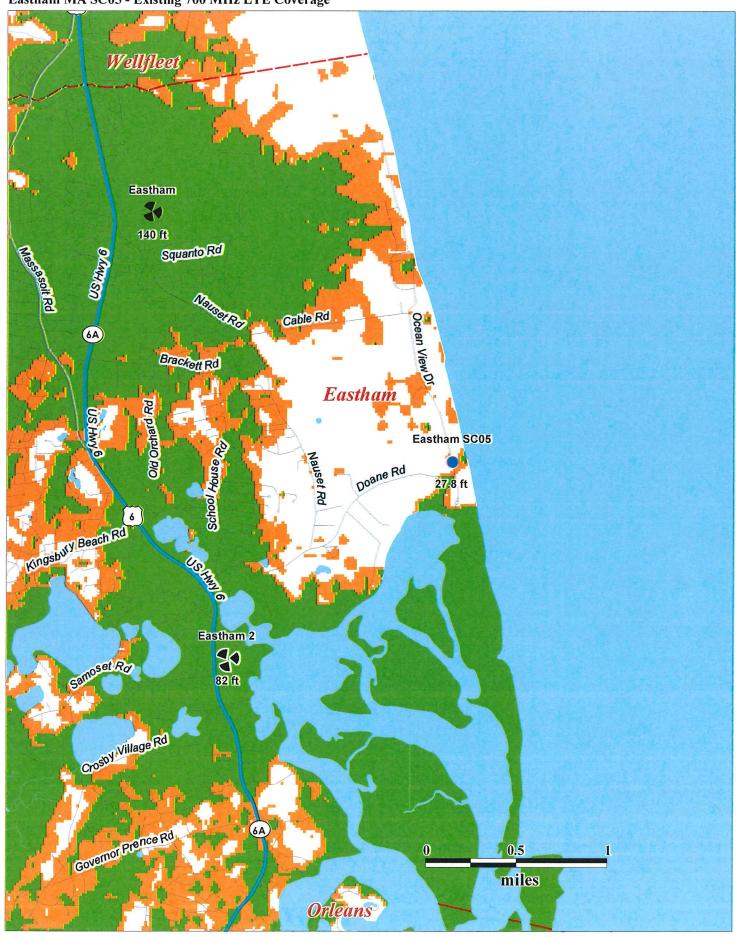
65 Dartmouth Drive

Auburn, NH 03032

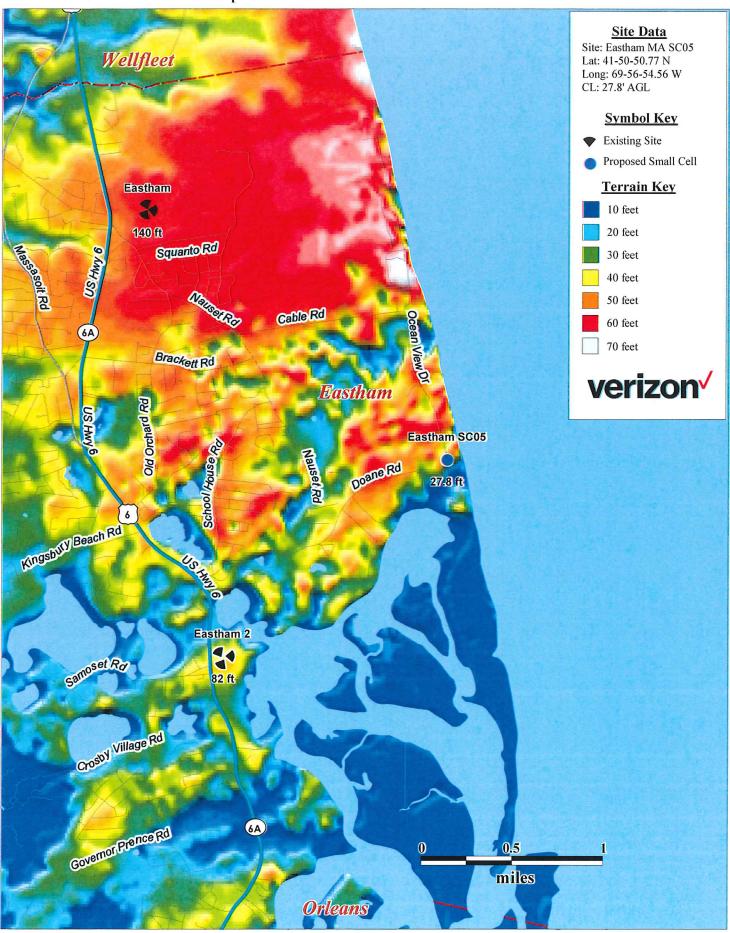
Eastham MA SC05 - Existing 700 MHz LTE Sector Footprints



Eastham MA SC05 - Existing 700 MHz LTE Coverage



Eastham MA SC05 - Area Terrain Map



#### **NOTIFICATION TO ABUTTERS**

You have been identified as a direct abutter to the work detailed below:

### TOWN OF EASTHAM NOTICE OF HEARING

A Public Hearing will be held on **Monday, August 21, 2017** at 5:05PM, in the Earle Mountain Room at Eastham Town Hall, 2500 State Highway, Eastham, MA 02642 on a petition from **Cellco Partnership d/b/a Verizon Wireless** requesting permission to replace the existing Utility Pole #6 and install and locate small cell wireless antennas, and the necessary sustaining and protecting fixtures, on the new Utility Pole #6, as located on a public way on Ocean View Drive, near 0 Ocean View Drive, Lot 023A in Tax Map 24, Eastham, Massachusetts.

Reason: To provide capacity relief and improve network service throughout Eastham and in the immediately surrounding area.

You are invited to attend the public hearing and will be heard.

Please call Laurie Gillespie-Lee at Eastham Town Hall (508-240-5900) with any questions. Thank you.

# **APPOINTMENTS**



#### Cape & Vineyard Electric Cooperative, Inc.

23H2 White's Path, Suite 2, South Yarmouth, MA 02664

774-722-1812 www.cvecinc.org

8.14.17

#### Re: Items for Consideration by Town and County Officials

Dear CVEC Director,

As you know, the next CVEC Board meeting is August 24<sup>th</sup>, 2017. In anticipation of Board discussions and possible voting on two items I am sending detailed information on those items. It is hoped that in your role as your town or county's appointed representative, you will bring these items to the attention of your Boards of Selectmen or Commissioners in preparation for possible voting at the August 24<sup>th</sup> CVEC Board meeting.

1. <u>Rate Case.</u> Following a June 29<sup>th</sup> Board vote instructing CVEC to file for intervenor status in the Department of Utilities hearing on the Eversource Rate Case, CVEC was granted limited intervenor status. The Town of Barnstable was also granted limited intervenor status.

As a limited intervenor, CVEC has prepared a case that calculates the losses to our participating Net Metering Credit beneficiaries and the effects that these losses in NMC savings will have on our towns, counties and schools in combination with the proposed rate increases. CVEC is arguing that it is the responsibility of the DPU to protect both public interest and public policy, and that the proposed rate restructuring should be denied because of the financial consequences to our communities and the desecration of public policy that mandates support of renewable energy.

The Town of Barnstable is making similar arguments with the addition of their argument that the changes' effects on our contracts constitute a breach of constitutional law.

To make CVEC's case, our general legal counselor, Robert Troy, is working with our expert witness, Paul Gromer of Peregrine Energy Group. Peregrine's services have been contracted solely using CVEC's resources. CVEC's case consists of testimony from Paul Gromer, D-Y Regional School District's Superintendent of Schools, Carol Woodbury, and the Town of West Tisbury's Administrator and CVEC's Vice President, Jennifer Rand.

CVEC spending has been limited to \$20,000 in accordance with the June 29<sup>th</sup> Board meeting directive. Spending to date has been about \$5,500. Based on estimates from legal counsel and Peregrine Energy Group, future expenses to get through the final act of filing our brief are anticipated to be at least the remaining \$14,500.

However, it has been suggested that CVEC's Board should remove the cap of \$20,000 and allow CVEC's broadening of its case to include the Town of Barnstable constitutional breach argument, and to allow for legal expenses should the case require appeal. If the towns and counties comprising CVEC agree that the case should be broadened and readied for possible appeals processes, CVEC would need additional monies.

Thanks to last winter's agreements with our 15 participants to pay the half penny Adder on the Round 1 projects, CVEC's books are in balance. The balanced books include an FY18 budget of \$40,000 for legal expenses, \$3,000 of which has been spent to date on general legal matters and, as noted, \$20,000 was reserved for the rate case. Thus \$17,000 remains in the legal budget.

Ultimately the Board will decide on August 24<sup>th</sup> 1) whether the case should be expanded, and 2) whether CVEC is in a position to spend more than the cap set previously by the Board. If the Board decides to increase the cap to expand the case and ready for an appeal, they may decide that the added monies cannot come from CVEC's legal budget, as the reserve of \$17,000 is needed to provide CVEC adequate legal coverage through next June 2018. In this case, CVEC would need to turn to its member towns and counties for financial support of the expanded case and possible appeal.

To prepare for the August 24<sup>th</sup> discussion and possible vote, it is important that CVEC's Directors assess their towns' and counties' stances on both an expanded CVEC case against Eversource, as well as the willingness for towns and counties to contribute financially towards the case. With the input from town and county officials, the CVEC Board will be prepared to vote accordingly.

2. <u>Bay State Wind</u>. Last spring CVEC held a strategy meeting and, in our role as an electric cooperative, a preferred strategy discussed was a search for energy purchases. Such an energy purchase was part of the original concept behind CVEC back in 2007. The original concept was that the cooperative would then sell the energy to a power supplier, perhaps to our sister organization, the Cape Light Compact.

To that end, this July CVEC met with individuals representing Dong Energy, a Danish company participating in the ongoing Eversource/DOER offshore wind RFP, hoping to contract a power sale for their offshore wind project known as Bay State Wind. Dong's interest in our proposal for possible additional power sales to CVEC was strong and Dong representatives are working with CVEC towards a non-binding Letter of Intent.

While this option with Dong's Bay State Wind is in its infancy, CVEC notes that any agreement with Bay State Wind would be exclusive. Therefore, we urge our Vineyard

Directors to advise CVEC if they foresee any conflict with possible arrangements that are in existence with a similar offshore wind farm known as Vineyard Power.

As always staff is standing by to help with any questions or concerns and can always be made available to accompany Directors when presenting to boards and commissions.

See you August 24<sup>th</sup>.

Yours Truly,

Leo Cakounes President

The Cape & Vineyard Electric Cooperative, Inc.

#### Town of Eastham

Department of Public Works 555 Old Orchard Road Eastham, MA. 02642



508 240-5973 Fax 508 240-6687

To:

Jacqui Beebe, Town Administrator

From:

Neil Andres, Superintendent DPW

Date:

August 17, 2017

RE:

Nauset Light Beach Road Relocation

The Nauset Light Beach area of Eastham's coast is an erosion hot spot. Most of Nauset Light Beach Road has already fallen over the coastal bank- only a short section of the original road remains. As Nauset light Beach Road disappeared, traffic was bypassed onto side roads. The last major relocation was authorized by the 1995 Town meeting – see attached plan. There was also a private access re-location for the Ells property in 2010. Given current rates of erosion, it is likely that the remaining section of road will no longer be safely passable in three to five years. This would result in loss of access for approximately 25 homes. Given the Town has not caused nor can stop the natural process, past opinions of Town Counsel indicated the town has no legal obligation to provide a new access road. As a practical matter, however, there are a lot of homes in this neighborhood and the process of providing public or private access will proceed much faster if coordinated by the town.

There is no easy solution to the relocation of this last section of Nauset Light beach Road. Many options exist - each with advantages and disadvantages. The attached aerial photograph illustrates some conceptual roadway alignments based on paper roadways which were created many decades ago. Locating a new road on an existing paper street or recorded woods road is typically easier because the town and/or residents may have rights on many of these ways. These alternatives are by no means a definitive list. They are a starting point, however, to engage the stakeholders in the area.

The next step in the process is to work with the National Seashore to schedule a public information meeting to discuss a new access road for the neighborhood. Many times area

residents offer valuable advice. Based on the comments received form the public as well as environmental and archeological information from the National Seashore, the list of proposed alternates can be short listed to one or two for preliminary design. Additionally, a future location of Eastham's iconic Nauset Light should be considered during this planning process.

522-51 LOCUS MAP DETA PATRICK H. PAY K. MELTZER HAY K. MELTECK FAYBAR (TRUSTERS OF FAYBAR REALTY TRUST) PAVID MARGOL ACCEPTED AT THE ANNUAL TOWN MEETING HELD UNDER ARTICLE SB.

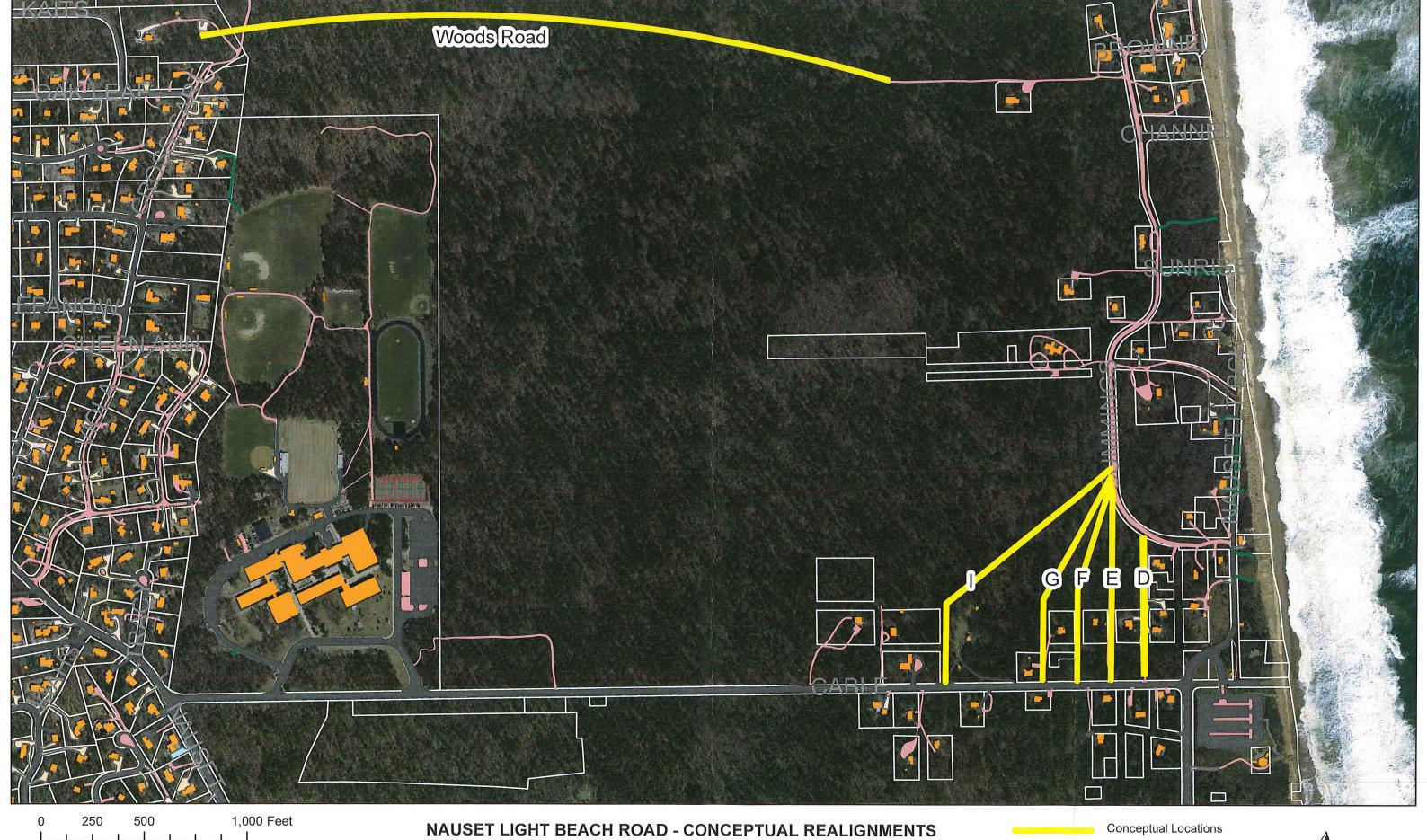
CATE: William Subject 11 1945

Milliam Subject 12 1945

METHAM SWIN CERK P PAGE 2. Town of Eastham Agsessor Sheet 25. ACEA LEGEND 3.107 0.568 2 THE AVENUE TOBERT TOWN et ali. 3 0.102 4 0.170 0.423 DRIVEWAY ACCESS 0.552 6 SUNRIGE AVE. TOTAL AREA = 4,902 AC.T UNITED ST DINEBICA PLAN OF LAND EASTHAM, MASS. LEGEND SHOWING PROPOSED RELOCATION WESTE BOOKS FOUND TOWN OF EASTHAM

CAPE COD NATIONAL SEASHORE PLAN BOOK 24, PAGE 35 น์ให באן דוףב הטואט SCALE: IN.: 40 PF. ALLY & , 1811: SCHOFIBLO BROTHERS, INC. REGISTRED

PROFESSIONAL ENGINEERS & LAND SURVEYORS
ROUTE 64-90.80X 101-00RLEANS, MASS, 02855
(206) 295-2058 PRICE CALLET TAS CHECKED BY POR PRICE COMPUTED BY TAS CHECKED BY TAS APPRICED BY TAS APPRICED BY TAS COMPUTED BY TAS COMPUTED





For discussion purposes only, locations not to scale

## Water System Update BOS Meeting – August 21, 2017

- Phase 1
  - Construction Status
  - Budget Status
- Phase 2 Schedule
- Phase 2A
  - Permits received
  - Schedule
  - Curb stop program



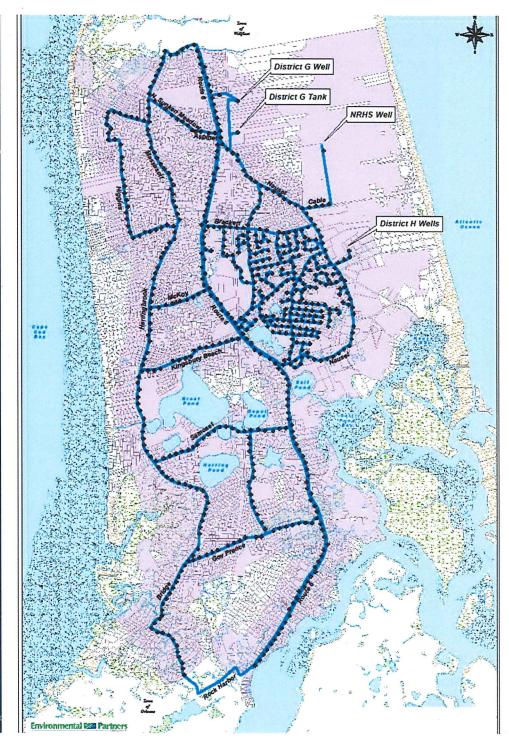
## Phase 1 – Construction Update

- All Contracts substantially complete
- All Curb Stops completed
- Landfill area paving completed
- Orleans Loop is completed and in service
- Remaining:
  - Final paving of Orleans loop (Sept/Oct)
  - Connecting Eastham parcels on Orleans system
  - Punch list items



## Fire Protection

Active for entire Phase 1 system



# Phase 1 Budget Status Through July 2017

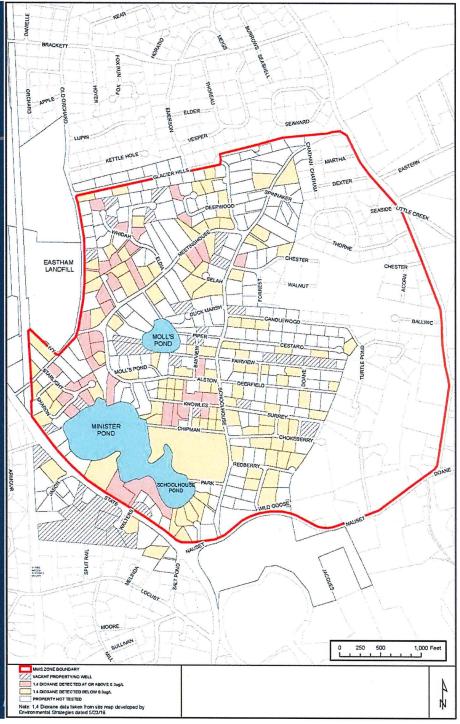
	Original Budget		Cu	rrent Budget	Tot	al Completed
TOWN MEETING APPROPRIATION		45,800,000	\$	45,800,000	\$	45,800,000
Construction	\$	35,670,000	\$	31,254,117	\$	30,763,678
Police Details	\$	2,320,000	\$	1,200,000	\$	1,186,716
Engineering	\$	5,400,000	\$	5,400,000	\$	4,979,304
Additional Items		TO THE CONTROL OF SHAPE OF THE PROPERTY AND ADMINISTRATION OF THE PROPERTY OF	\$	3,165,837	\$	1,785,881
TOTAL	\$	43,390,000	\$	41,019,954	\$	38,715,579
BALANCE, Phase 1	\$	2,410,000	\$	4,780,046		

\$4.8M under budget (to be carried forward into Phase 2)



# Mandatory Connection Area

- 462 connections made
- 6 connections pending
- 4 refusals
- Final report on landfill remediation being prepared (by Environmental Strategies & Management)



A partnership for eng

## **Update on Connections**

- 583 current homes connected, about 1,500 people (not including school populations)
- 42 current outstanding applications awaiting installation
- 121 homes connected outside mandatory area
- Slow application during the summer (1/week). Expected to increase during off season.

### Free Meter End Dates

Contract 3 March 29, 2018

Contract 4 February 27, 2018

Contract 5 November 14, 2017

Contract 6 December 7, 2017

Contract 7 November 14, 2017

Contract 8 March 3, 2018



## Connecting Your Property

Get multiple quotes for the work

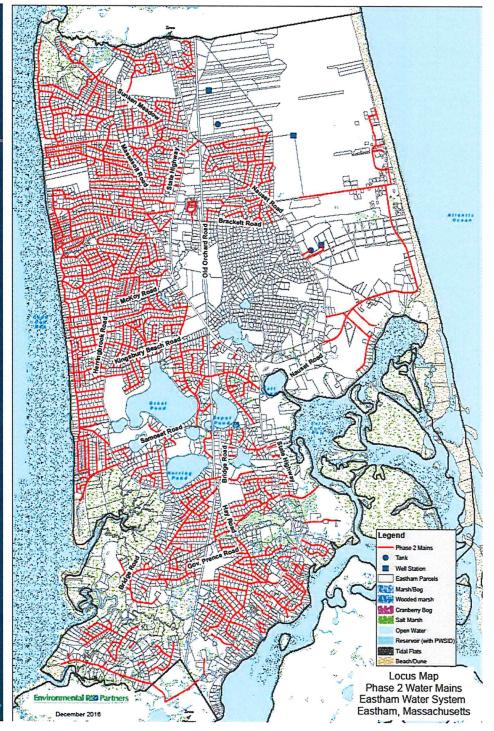
Have a contractor or plumber file your application

- If you choose <u>not</u> to keep you well for irrigation:
  - Cut and cap below grade (3' or more)



## Phase 2 Program

- 85 miles of pipe
- 3<sup>rd</sup> wellfield at
   District H
- 2<sup>nd</sup> storage tank
   at District H



### Phase 2

## Construction start dates

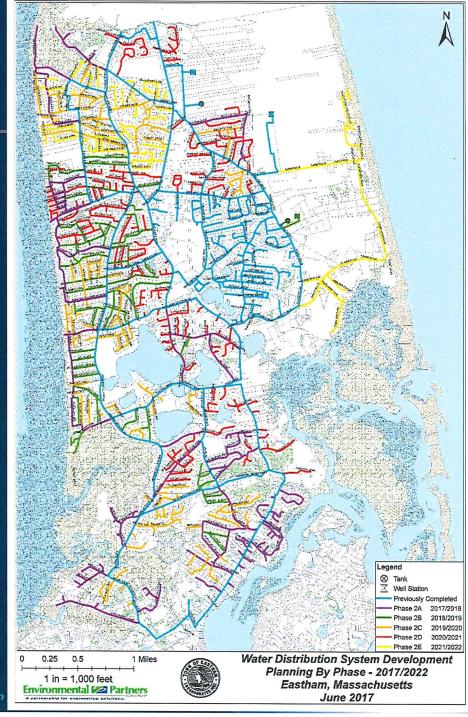
2A - Fall 2017

2B - Fall 2018

2C - Fall 2019

2D - Fall 2020

2E - Fall 2021



# When is my street going to get water?

- Go to "Eastham Municipal Water Project" web page
- Under "More..", then "Phase 2" tab
- Phase 2 Water System Plans and Schedule



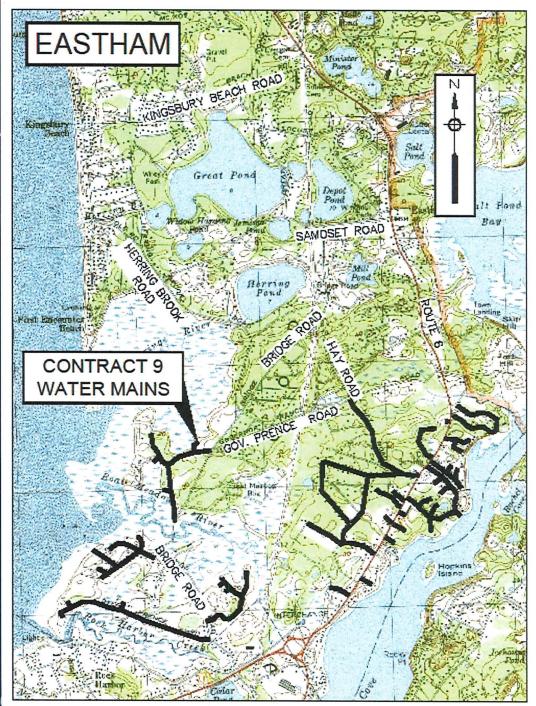
### Permit approvals received from

- MEPA (July 28<sup>th</sup>)
- Cape Cod Commission (August 11<sup>th</sup>)
- DEP (July 17<sup>th</sup>)
- Eastham Conservation Commission (May 9<sup>th</sup>)

Proceed with bidding and construction.

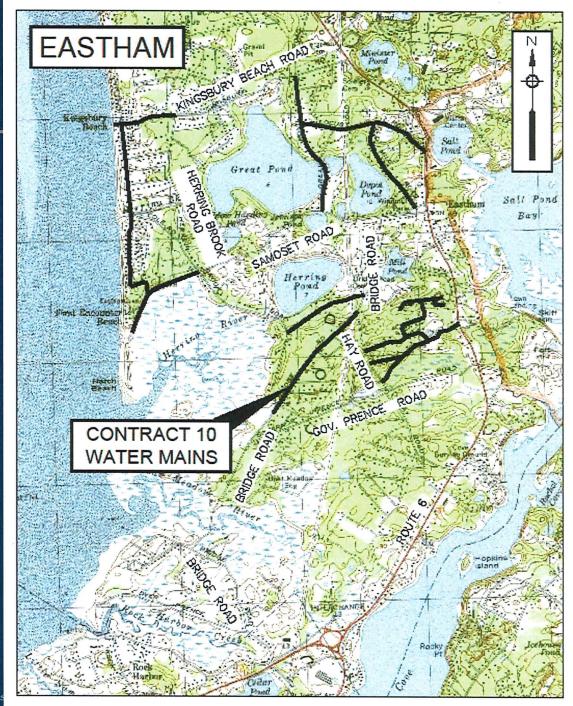


# Contract 9 South Eastham



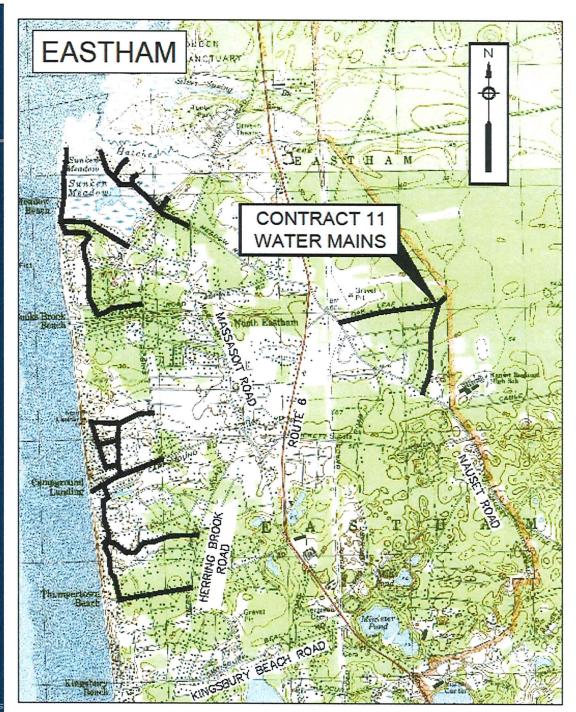
A partnershi

## Contract 10 -Central Eastham



A partner

# Contract 11 - North Eastham



A partners

## Phase 2A Schedule Contracts 9, 10 and 11

**Bidding Starts** 

**Bids Received** 

**Contract Award** 

**Construction Start** 

Construction Complete

August 23<sup>rd</sup>

3rd week of Sept.

September 25<sup>th</sup>

mid-October

August 2018



## Phase 2A – Curb Stop Locations

- Property owners being contacted this summer and early fall
- Door hangers with information
- Flag placed at proposed curb stop location
- Email <u>easthamwater@envpartners.com</u> if you want to change the location



## Phase 2 Permitting Activities

- MEPA
- Cape Cod Commission
- DEP Design Review for all Phase 2 water mains
- Conservation Commission (received)



## Mass. Fish & Wildlife Endangered Species

- Eastern Spadefoot Toad habitat evaluation
- Conclusions:
  - No substantial permanent impacts to habitat
  - Requesting permit from Natural Heritage program
- Site walk with Mass Fish & Wildlife Aug. 31st





### Phase 2 Permitting Program

- MEPA Draft and Final Supplemental EIR
   October 2017 January 2018
- Cape Cod Commission Development of Regional Impact – January-February 2018
- Conservation Commission NOI done
- DEP design reviews with each Phase and contract area
- Water Management Act spring 2017



### Where Can I Get Information?

Eastham web page http://easthamwaterproject.weebly.com

Eastham Water Projects Email Address:
<u>easthamwater@envpartners.com</u>

Eastham Water Project Phone Number 617-657-0279



## Billing Questions?

- Phone 800-553-5191
- Email –<u>customer-service@pennichuck.com</u>

Emergency before or after Business Hours – Please contact WhiteWater:

Phone - 888-377-7678



## LICENSING



### TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 - 2544

All departments 508 240-5900 Fax 508 240-1291

www.eastham-ma.gov

Date: August 21, 2017

To: Board of Selectmen

From: Jacqueline W. Beebe, Town Administrator

Re: Transient Vendor Permits

40<sup>th</sup> Annual Anniversary Eastham Windmill Weekend - September 8-11, 2017

Please find below the Transient Vendor applicants for approval by the Board of Selectmen. In each case, the \$20.00 fee has been received. The following permits valid as stated below.

I ' N ' D (G G ' D' )	Deulinson Don (Como Dondo)
Levine, Martin R. (Cape Coin Rings)	Parkinson, Don (Cape Bends)
27 Four Season's Drive	346 Circuit Ave
S. Yarmouth, MA 02664	Pocasset, MA 02559
Valid: August 21, 2017- August 21, 2018	Valid: August 21, 2017- August 21, 2018
Smith, Sarah (Pure Haven)	Freeman, Marissa C. (Sea Turtle Designs)
23 Allen Drive	125 Rocky Hill Road
Brewster, MA 02631	Brewster, MA 02631
Valid: August 21, 2017- August 21, 2018	Valid: August 21, 2017- August 21, 2018
	,
8	

# ADMINISTRATIVE MATTERS

Kevin A. Marshall Co-Chair

Deborah K. Martin Co-Chair



P.O. Box 119 Barnstable, Massachusetts 02630

www.suicideispreventable.net

July 17, 2017

### Dear Board of Selectmen:

Each year, we lose more than 30 Cape & Island residents to suicide. For each of these suicide deaths, it is estimated more than 40 people are affected, 6 of them profoundly. Suicide is a public health issue in our communities; and it is preventable.

In recognition of National Suicide Prevention Month, the Cape & Islands Suicide Prevention Coalition is once again seeking to have the week of September 10-16 2017 named "Suicide Prevention Awareness Week" in all of the Cape and Islands towns.

We aim to recognize this painful and often hidden part our communities, to demonstrate our commitment to suicide prevention, and to send a message of hope to those struggling, grieving, or affected in any way by suicide. We know that by decreasing the stigma that surrounds suicide, we increase the likelihood that someone will reach out for help.

Please accept this proclamation request for the selectman's agenda for an early September or late August meeting (Sample proclamation wording is attached) we appreciate your consideration of this request, and look forward to hearing from you.

The proclamation can be emailed to me at <a href="mailed-suicide-prevention@capecoalition.com">suicide-prevention@capecoalition.com</a> or mailed to me at: Cape and Islands Suicide Prevention Coalition, P.O. Box 119, Barnstable, MA 02630

Warm Regards,

Sunny Lee Jones

**Steering Committee Member** 

Cape & Islands Suicide Prevention Coalition

## PROCLAMATION SUICIDE PREVENTION AWARENESS WEEK

WHEREAS, in the United States, one person dies by suicide every 12 minutes; and 117 people die by suicide each day; and

WHEREAS, 20 veterans die by suicide each day; and

**WHEREAS**, suicide is the second leading cause of death for Massachusetts residents ages 15-44 and the suicide rate on the Cape and Islands is 1.4 times higher than the State average; and

**WHEREAS,** suicide is a tragic and disruptive event for families and communities  $\sim$  it is estimated that annually, there are 6.3 million suicide loss survivors who have lost a loved one to suicide; and

**WHEREAS**, suicide is a public health issue and a community concern, and through increased education and awareness of the issue a great number of suicides can be prevented;

**THEREFORE**, we do hereby officially designate the week of September 10 - 16, 2017 as "SUICIDE PREVENTION AWARENESS WEEK" in Eastham, MA.

*IN WITNESS THEREOF*, the Eastham Board of Selectmen have hereunto set our hands and caused the Official Seal of the town of Eastham in Massachusetts to be affixed this 21<sup>st</sup> day of August in the year 2017.

William O'Shea, Chair	Wallace F. Adams, II, Vice Chair
John F. Knight, Clerk	Martin F. McDonald
Aimée J. Eckman	



### TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 - 2544 All departments 508 240-5900 Fax 508 240-1291 www.eastham-ma.gov

Date:

August 21, 2017

To:

Board of Selectmen

From:

Jacqueline W. Beebe, Town Administrator

Re:

**Committee Appointments** 

The following is the information needed for the following committee appointment.

### **Peter Weston**

The Search Committee recommends the appointment of Peter Weston to the Planning Board as an **Alternate** member.

If the Board appoints him, his first term would commence July 1, 2017 and expire June 30, 2020.

The following is the information needed for the following committee appointment.

#### STAFF MEMO

TO:

**BOARD OF SELECTMEN** 

FROM:

JACQUI BEEBE

SUBJECT:

WASTEWATER AND REGIONAL VS. ORLEANS PLAN

DATE:

AUGUST 18, 2017

Several residents as well as board and committee members have expressed concern regarding recent news items reporting on the progress of the Town of Orleans Wastewater Treatment Plans (see attached article from the Cape Codder).

After watching tape of the Orleans Board of Selectmen meeting that the article references, I am not sure if there is a misunderstanding or just confusion regarding where the Town of Eastham stands on potentially sending either septage from our septic systems or sewage from pumping to the potential wastewater treatment site in Orleans. While the Town of Eastham has always expressed a desire to be involved in a regional plan with Orleans and Brewster (see studies from 2009 in Dropbox), we have been focused on water system construction and have not met with the Town of Orleans on this matter in over a year.

With the Board's consent, I would like to meet with the Town Administrator from Orleans and possibly Brewster, to see if we can revive these discussions between the three towns, and if so, try to schedule a joint BOS meeting to discuss any future collaborations.

Domenica added that the town has had four consultants over the last decade or more, and they all have done reports and they are all on file. And all the consultants have made the same recommendations.

"There is no conspiracy here - this is real information," he said.

Fuller didn't disagree.

"And you are right. We have spent a lot of money over a lot of years to get the same recommendation," he said.

But at least in one case the information hadn't been talked about in a few years and some board members as well as finance committee members, who joined selectmen at the meeting, had no memory of it.

They did not know that state and county edicts required Orleans to take sewage and/or septage from Brewster and Eastham.

"We have never had the discussion of treating Eastham's or Brewster's (sewage)," said Mathison.

Selectman Alan McClennen said neither community had professed interest in shipping sewage to Orleans. They would, perhaps, need septage from septic systems treated, but so would Orleans as only about 12 percent of the town is going to be sewered.

The town's proposed wastewater plant would treat both sewage and septage. The town's earlier plan called for about half of the town being sewered, which would have cost about \$200 million using today's numbers. Since a smaller portion of the town is being sewered, and other methods, such as aquaculture are being used to reduce nitrogen pollution, the price tag has dropped.

A recent letter from Town Administrator John Kelly puts the figure closer to \$90 million.

Although a site has been chosen for the plant how it would be built has not been decided upon. Some town officials said they thought Domenica and other consultants had been heavily in favor of a design-build-operate system - which a private entity would operate - because it was

cheaper. They were caught off guard when he heartily recommended a design-bid-build plant, which would give the town more control. The board opted to delay any decision on that until they had a chance to digest the new information.

Selectmen did approve a preferred discharge site for wastewater disposal – the exit 12 cloverleaf – between the Skaket Motel and the Underground Plaza. But whether that will happen remains a question mark as the state Department of Transportation still has to agree.

Tom Parece, with the consulting firm AECOM, said he had met with state officials that morning and he characterized the meeting as very positive.

State officials are amenable to the town using the site, but want to make sure the town proves it has a unique need – so other communities in the Commonwealth don't start clamoring for the use of cloverleafs.

McClennen said the town had plenty of evidence to justify the need as officials had been looking for sites for more than 40 years and most of the promising ones had been developed.

"This is the most viable and attractive site in the town of Orleans," he said.

Lynn Bruneau, chairman of the finance committee, said she wanted it made clear the site would discharge into Namskaket Marsh. There has been a lot of concern in the community about any treated effluent entering the marsh – in 2014 selectmen took a vote saying that wouldn't happen.

The current board of selectmen isn't bound by that vote and members of the board have emphasized that little discharge would enter the marsh.

Scientists have said the marsh would not be harmed by the small amount of nitrogen and fresh water that would enter it.

Additional freshwater into the sensitive salt marsh system was of particular concern, but models have shown the amount would be less than 3 percent of the freshwater already entering the system.

Folks in town seemed particularly concerned with the town's second choice for a disposal site, site 1A, which is on the old Tri-Town Septage Plant property and near where the treatment plant would be built.

But effluent from that site would discharge roughly the same amount of nitrogen into the marsh as the cloverleaf.

"The numbers are virtually the same," said finance committee member Robert Renn.



### **BOS** says it still lacks details on wastewater plans

By <u>Doreen Leggett</u> dleggett@wickedlocal.com

Posted at 6:18 AM

ORLEANS -- "I guess I have been asleep for six months."

"I am troubled by that approach."

"I find that hard to believe."

Those words from town officials who were at turns surprised and frustrated by a presentation from wastewater consultants Wednesday.

As an Oct. 16 special town meeting looms, Selectman Mark Mathison appeared particularly concerned about the lack of information available to the board. He said wastewater plans have failed at town meetings in the past because the information came forward too late and there was no time for the board to build a case for the proposed solutions.

He said the board should have the 25 percent design for the wastewater system, and he and the rest of the board were shocked that the 25 percent design documents for the treatment plant had been submitted in June.

None of the board had seen the documents and Mathison said that shouldn't have happened.

Selectman Chairman Jon Fuller was also wondering why a detailed explanation of how the cost of the project was arrived at wasn't given to the board.

"We need to sell this," he said.

The town's lead consultant, Mike Domenica, said the board generally got summaries of reports, but the whole reports were available.

"There is no shortage of information here," he said.

## INFORMATION





### **Town of Eastham**

Fire Department / Emergency Medical Services 2520 State Highway Eastham, MA 02642 (508)255-2324 Fax (508)240-5932 Kent Farrenkopf – Fire Chief



### Invitation

Eastham Fire is pleased to announce the swearing in and badge pinning ceremony for **Deputy Fire Chief** 

### Daniel Keane

Tuesday, September 5, 2017 at 09:00

Eastham Fire Department 2520 State Highway

Please join us to celebrate this special day for Deputy Chief Keane and the Town of Eastham

Fire Service uniform of the day will be regular duty uniform

Light refreshments will be served

ADMINISTRATION
AUG 1 4 2017
RECEIVED



3225 MAIN STREET • P.O. BOX 226 BARNSTABLE, MASSACHUSETTS 02630

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

CAPE COD COMMISSION

### HEARING NOTICE CAPE COD COMMISSION

Dollar General #DR17013 September 1, 2017

A hearing officer for the Cape Cod Commission will hold a pro-forma hearing on **Friday, September 1**, **2017 at 10:00 a.m. at the Cape Cod Commission**, **3225 Main Street**, **Route 6A**, **Barnstable**, **MA** for the purpose of procedurally opening the public hearing period on Development of Regional Impact (DRI) review for the following project. The project was referred to the Cape Cod Commission as a Discretionary Referral by the Town of Eastham pursuant to Section 3 of the Cape Cod Commission's *Enabling Regulations Governing Review of Developments of Regional Impact*. At its meeting on July 6, 2017, the Commission voted to accept the Discretionary Referral from the Town of Eastham for DRI review of the project in the Regional Policy Plan issue areas of land use, economic development, water resources, transportation and heritage preservation/community character. This notice is being published pursuant to Section 5 of the *Cape Cod Commission Act*.

**Project Name:** 

Dollar General

**Project Applicant:** 

Lisciotti Development/Eastham DG, LLC

Project Site/Location:

4615 State Highway, Eastham, MA

**Project Description:** 

Proposed 9,100 square foot-retail store on an undeveloped 2.8 acre-lot.

NOTE: The purpose of this hearing is to open the DRI hearing period on the project for procedural purposes only. No substantive presentations will be made, no testimony will be taken and no substantive action will be taken regarding this project at this hearing. Further notice will be provided at a future time when substantive project review commences.

Project documents may be viewed at the Cape Cod Commission office located at 3225 Main Street, Route 6A, Barnstable, MA 02630 between the hours of 8:30 a.m. and 4:30 p.m. For further information or to schedule an appointment, please contact the Commission office at (508) 362-3828. If you are deaf or hard of hearing or are a person with a disability who requires an accommodation, contact the Cape Cod Commission at (508) 362-3828; for Telecommunications Relay Services (TRS) dial 711.

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI da MPO pelo telefone (508)362-3828 or Para serviços de retransmissão de telecomunicações, disque 711.





## Cape Cod and Islands Selectmen & Councilors Association Representing 22 Municipalities & 105 Elected Officials capecodsca.org

August 3, 2017

Dear Selectmen, Councilors, Town Administrators and Clerks, Associate and Affiliate Members,

Here is hoping your summers are going well. Enclosed is your dues notice for the coming year. Please forward this on to the appropriate person for payment. The only change to the dues structure is, after 9 years, the membership voted to increase the Associate/Affiliate rate from \$25 a year to \$35 per year.

As you are aware, at last year's meeting in Boston the association made a commitment to alter the timing and place of some meetings to facilitate attendance from towns on the Vineyard. To that end the exec. com. approved the attached calendar. It provides for the October and March meetings to start at 8:30 and be located in Falmouth. The January meeting will be at the MMA conference in Boston. Please take note of this schedule in planning ahead to attend the monthly meetings. The board will also look into the possibility of holding either the May or June meeting on the Vineyard like we have done on Nantucket in the past.

Please take at look at the web site, <u>capecodsca.org</u>. Stephen Mealy has done a great job updating it and will be coordinating the posting of materials and agendas, minutes and other items of interest. As to interest, if there is a topic

you think should presented please let us know. Also, as clerk, I will be sending the monthly meeting and other materials to a single contact for each town to be forwarded on to the town's selectmen/councilors and administrators. Attempting to keep current on 175 odd email addresses has become quite a chore.

Sincerely,

Ed McManus, Clerk

September 15- Hyannis Golf Course, Hyannis- 7:30 a.m.

October 14- Sea Crest Inn, Falmouth- 8:30 a.m.

November 10- Four Points Sheraton, Eastham- 7:30 a.m.

December 8- Dan'l Webster Inn, Sandwich- 7:30 a.m.

January 19- Sheraton Boston, Boston- 5:30 p.m.

February 9- Four Points Sheraton, Eastham- 7:30 a.m.

March 9- Sea Crest Inn, Falmouth- 8:30a.m.- Legislative Breakfast

April13- PB Boulangerie, Wellfleet- 7:30 a.m.

May 11 Hyannis Golf Course, Hyannis- 7:30 a.m.

June 8- Dan'l Webster Inn, Sandwich- 7:30 a.m.- Annual Meeting

To: All Interested Parties

From: Jane Crowley, Eastham Health Agent

Date: August 10, 2017

Re: Molls Pond

Please be advised a potentially Harmful Algae Bloom has been identified in Molls Pond. You are advised not ingest the water. Do not allow your children or pets to drink or swim in the water and rinse off immediately after contact with an algae bloom. Further examination will be conducted to determine changes in the conditions. The levels do not appear to be high at this time to warrant closure to all activities.

If you notice any changes in condition or for further information call Eastham Health Department Jane Crowley at 508-240-5900 ext 3229.

Info



### THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF THE ATTORNEY GENERAL

CENTRAL MASSACHUSETTS DIVISION 10 MECHANIC STREET, SUITE 301 WORCESTER, MA 01608

> (508) 792-7600 (508) 795-1991 fax www.mass.gov/ago

August 9, 2017

Susanne Fischer, Town Clerk Town of Eastham 2500 State Highway Eastham, MA 02642

RE: Eastham Annual Town Meeting of May 1, 2017 - Case # 8427

Warrant Articles # 21, 22 and 23 (Zoning)

Warrant Article # 4 (General)

Dear Ms. Fischer:

Articles 4, 21, 22 and 23 - We approve Articles 4, 21, 22 and 23 from the May 1, 2017 Eastham Annual Town Meeting. Our comments regarding Articles 4 and 23 are provided below.

Article 4 - Article 4 amends the Town's general by-laws by adding a new Section 92-1, "Revolving Funds." General Laws Chapter 44, Section 53E ½, requires revolving funds to be established by by-law. Section 53E ½ authorizes municipalities to establish revolving funds for "any fees, charges or other receipts from the departmental programs or activities supported by the revolving fund," to be accounted for separately from other monies in the town, and authorizes expenditures from such fund without further appropriation, subject to the provisions of Section 53E ½. According to the Department of Revenue/Division of Local Services (DOR/DLS), the purpose of a departmental revolving fund is to enable the department to separately account for money received from a specific program or activity and to make expenditures from that separate account for that specific program or activity.

However, according to DOR/DLS, not all receipts may lawfully be deposited in a revolving fund. For example, property taxes, motor vehicle taxes, or revenues from general municipal activities, rather than those of a particular department, are not properly categorized as "fees, charges or other receipts from the departmental programs or activities supported by the revolving fund." See G.L. c 44, §§ 53 and 53E ½. In addition, receipts reserved by law (for example, betterment payments under G.L. c. 44, § 53J), or receipts authorized by law for expenditure for a particular purpose (for example, local acceptance of G.L. c. 44B, Community Preservation Act), are expressly prohibited from being included in a revolving fund under the statute.

The DOR/DLS has published several informational guidelines to provide information regarding municipal revenues and special funds. In particular, DOR/DLS has published Bulletin 2017-01B, "Authorization of Departmental Revolving Funds and Model By-law/Ordinance:" <a href="http://www.mass.gov/dor/docs/dls/publ/bull/2017/2017-01b.pdf">http://www.mass.gov/dor/docs/dls/publ/bull/2017/2017-01b.pdf</a> and an "Overview of Statutory Treatment of Municipal Revenues:" <a href="http://www.mass.gov/dor/docs/dls/training/overview.pdf">http://www.mass.gov/dor/docs/dls/training/overview.pdf</a>

We approve the by-law adopted under Article 4. However, the Town should consult closely with Town Counsel to ensure that receipts designated for each revolving fund are not already reserved under other funds or statutes, and are properly included in the designated revolving fund. In addition, the Town should consult closely with Town Counsel to ensure that any deposits into a revolving fund are properly from "fees, charges or other receipts" associated with a specific departmental program or activity and that the funds are expended in connection with that specific program or activity, not for the general use of the department.

Further, G.L. c. 44, § 53E ½, requires the establishment of any revolving fund to be "made not later than the beginning of the fiscal year in which the fund shall begin." The Town established these revolving funds by by-law at a vote of Town Meeting on May 1, 2017, apparently with the intention that these funds be used during Fiscal Year 2018 (beginning July 1, 2017). According to DOR/DLS, all receipts collected during Fiscal Year 2018 can be credited to the revolving funds created under Article 4. The Town should consult with Town Counsel and/or DOR/DLS with any questions on this issue.

Article 23 - Article 23 amends several sections of the zoning by-laws pertaining to the North Eastham Overlay District (NEOD). One change amends Section V, "Uses Table of Principle Uses," by deleting the existing table in its entirety and inserting a new Table. We offer comments on the new Table of Principal Uses.

### 1. Agriculture.

The new Table of Principal Uses ("Table") for the NEOD provides that (1) "Plant nursery; other horticulture or floriculture" is allowed in the "A" district only by Special Permit; and (2) "Kennel, Commercial" is allowed in the "A" and "E" districts only by Special Permit.

The Town must apply these portions of the Table consistent with the protections afforded to commercial agricultural uses in G.L. c. 40A, § 3. To the extent the use of land or structures constitutes commercial agriculture, the Town cannot require a special permit for, unreasonably regulate, or prohibit such activities (1) on land zoned for agriculture; (2) on land that is greater than five acres in size; or (3) on land of 2 acres or more if the sale of products from the agricultural use generates \$1,000 per acre or more of gross sales. In addition, in certain circumstances, a kennel may be considered a protected agricultural use pursuant to G.L. c. 40A, § 3. See Sturbridge v. McDowell, 35 Mass. App. Ct. 924, 926 (1993). The Town should consult with Town Counsel regarding the proper application of these sections of the Table in light of the protections given to commercial agriculture under G.L. c. 40A, § 3.

### 2. Assisted Living; Hospice; Nursing or Convalescent Facility.

The new Table for the NEOD provides that "assisted living residence;" "hospice care facility;" and "nursing or convalescent facility" are allowed only by Special Permit. The Town must apply this portion of the Table in a manner consistent with the protections provided to disabled persons under G.L. c. 40A, § 3, as follows:

Notwithstanding any general or special law to the contrary, local land use and health and safety laws, regulations, practices, ordinances, by-laws and decisions of a city or town shall not discriminate against a disabled person. Imposition of health and safety laws or land-use requirements on congregate living arrangements among non-related persons with disabilities that are not imposed on families and groups of similar size or other unrelated persons shall constitute discrimination. The provisions of this paragraph shall apply to every city or town, including, but not limited to the city of Boston and the city of Cambridge.

The Town should consult with Town Counsel to ensure that it applies this portion of the Table consistent with the protections given under G.L. c. 40A, § 3.

Note: Pursuant to G.L. c. 40, § 32, neither general nor zoning by-laws take effect unless the Town has first satisfied the posting/publishing requirements of that statute. Once this statutory duty is fulfilled, (1) general by-laws and amendments take effect on the date these posting and publishing requirements are satisfied unless a later effective date is prescribed in the by-law, and (2) zoning by-laws and amendments are deemed to have taken effect from the date they were approved by the Town Meeting, unless a later effective date is prescribed in the by-law.

Very truly yours,

MAURA HEALEY ATTORNEY GENERAL

Nicole B. Caprioli

By: Nicole B. Caprioli Assistant Attorney General Municipal Law Unit 10 Mechanic Street, Suite 301 Worcester, MA 01608 (508) 792-7600 ext. 4418 nicole.caprioli@state.ma.us

cc: Town Counsel John Giorgio



### Gillespie-Lee, Laurie

From:

POCCA CAPE COD <poccacapecod@gmail.com>

Sent:

Thursday, August 10, 2017 8:05 AM Gillespie-Lee, Laurie; Jane Crowley

To: Cc:

Jim Garb

Subject:

Fight spraying on power lines to protect Cape's and MV's aquifer

**Attachments:** 

Lenses.pdf

Dear Town Manager/Admin and Chairperson Board of Selectman in Eastham and Board of Health:

POCCA has been fighting Electric Power Company spraying of toxic chemicals along power lines and potentially into Cape Cod and Martha's Vineyard's one and only precious aquifer for several years. And while we have not prevailed yet, we have had numerous modest victories that have helped create significant opportunities to achieve our goal through legal channels. The endgame of this effort will take place in the coming months, and the more <u>united</u> the Cape and Martha's Vineyard towns can be in this endeavor, the greater the chance for success.

To this end, our good friends in the Town or Brewster, their selectmen, and town manager, Mike Embury, have offered to convene a strategy meeting at the Brewster Town Hall on Wednesday, August 23rd at 10:30 A.M. in Basement Meeting Room "B".

This meeting's agenda will include open discussions on:

- 1) an update on the status of the 2017 Yearly Operational Spraying Plan appeals of BREWSTER, CHATHAM and YARMOUTH,
- 2) documents needed for a meeting on September 7th as we are on the agenda of the Massachusetts Pesticide Advisory Board (PAB) requesting a moratorium.
- 3) And even more importantly a discussion about gearing up for the inevitably tougher, more significant, and possibly more winable fight against the 2018 Five Year "Vegetation Management Plan," which is what the polluters rely upon each year when justifying their Yearly Operational Plans.

Attorney Bruce Taub, who continues to appear on behalf of Brewster in these matters in a "Special Counsel" capacity and serves in an "of counsel" role to POCCA, will be in attendance to answer questions, as well as, members from the POCCA team: Dr. Jim Garb and President Laura Kelley.

Please join us at this meeting on August 23<sup>rd</sup>, and bring or send a representative, <u>ideally from your town's</u>

<u>Water Department or from your Public Board of Health Department.</u> Thank you for being present at this critical time for the preservation of our water supply.

I am sending this email to the 8 Cape and MV towns who reached out with strong documents to help stop more spraying by Eversource along power lines in their towns on June 12, 2017. Your willingness to write letters in support of this goal has been very important and is greatly appreciated and will be needed again soon. I will also be reaching out to CCC and APCC and hydrologists we suggest to be present at this meeting who can help educate us, as well as, PAB when questions arise.

<u>Please let me know whom from your town will be attending this important meeting.</u> Any and all representatives are welcome at this open discussion where we will be sharing our best strategy and the planned course of action for the coming year on this issue we all face together.

Thank you again for being a part of this important mission at this time.

Best,

Laura Kelley

President of POCCA Cape Cod

**Laura Kelley** 774.353.6511

Helping to protect our quality of life on Cape Cod
President: Protect Our Cape Cod Aquifer (POCCA)

Facebook: POCCA Cape Cod





#### THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS OFFICE OF COASTAL ZONE MANAGEMENT 251 Causeway Street, Suite 800, Boston, MA 02114-2136 (617) 626-1200 FAX: (617) 626-1240

COPY TO MOS ADMINISTRATION
AUG 1 6 2017

RECEIVED

August 10, 2017

Jacqueline Beebe Town of Eastham 2500 State Highway Eastham, MA 02642

Dear Ms. Beebe:

It is my great pleasure to inform you that your application to the FY18 Coastal Resilience Grant Program has been selected for a \$79,676 award. It was a very competitive pool of submissions, and we recognize the significant time and effort that went into the development of your project proposal.

Please move forward with securing the required match (at least 25% of the total project cost, not the award), and keep in mind that projects are funded on a reimbursement basis according to the final scope of work and contract. We want to remind you that work done on projects prior to contract execution is not reimbursable and the scheduled completion date for all projects is no later than June 30, 2018.

Patricia Bowie, Coastal Resiliency Specialist, will be contacting you shortly to schedule a meeting to finalize the scope of work and execute a contract for your project. If you have any immediate questions, please don't hesitate to contact Patricia at <a href="mailto:patricia.bowie@state.ma.us">patricia.bowie@state.ma.us</a> or 617-626-1186.

We look forward to working with you and your team on this important project and helping to advance the Town of Eastham's efforts to improve coastal resilience.

Sincerely,

Bruce K. Carlisle

Director



### TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 *All Departments* 508-240-5900 www.eastham-ma.gov

August 15, 2017

Naomi Reiss Michael Klayman 3162 State Highway Eastham, MA 02643

I would like to inform you about current efforts and activities involving Schoolhouse Minister Pond.

- An Aquatic Vegetation and Water Quality Survey was conducted by Solitude Lake Management in June 2017. We expect the final report in September/October.
- Weekly testing for bathing beach water quality for E. Coli have all been within acceptable limits. Results can be found at the following link.
   <a href="http://www.barnstablecountyhealth.org/programs-and-services/bathing-beach-water-quality/beach-sample-results">http://www.barnstablecountyhealth.org/programs-and-services/bathing-beach-water-quality/beach-sample-results</a>
- 3. Two rounds of volunteer water sampling will be done in 2017. Water Quality analysis by PCCS (Provincetown Center for Coastal Studies) was conducted in April 2017 and a second round of sampling will be done in September 2017 by SMAST (UMass School of Marine Science).
- 4. Stormwater sampling was conducted at Schoolhouse Pond outlet 7/24/17 to determine nitrogen and phosphorus levels.

Once all data and reports are received, our water consultant Liz Moran from Ecologic will review results and make a recommendation for remediation options.

Do not hesitate to contact me if I could provide any additional information.

Sincerely,

Jane Crowley, M.S., R.S.

Eastham Health Agent

CC: Eastham BOH/Eastham Board of Selectmen Eastham WMC