

Connecticut Siting Council

APPLICATION OF CELLCO PARTNERSHIP
D/B/A VERIZON WIRELESS

verizon[✓]

LEBANON CENTER
917 EXETER CENTER ROAD
LEBANON, CONNECTICUT

DOCKET NO. _____

MARCH 12, 2018

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14. Radio Frequency Exposure Report
15. FEMA – Flood Insurance Rate Map
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17. Federal Airways & Airspace Summary Report
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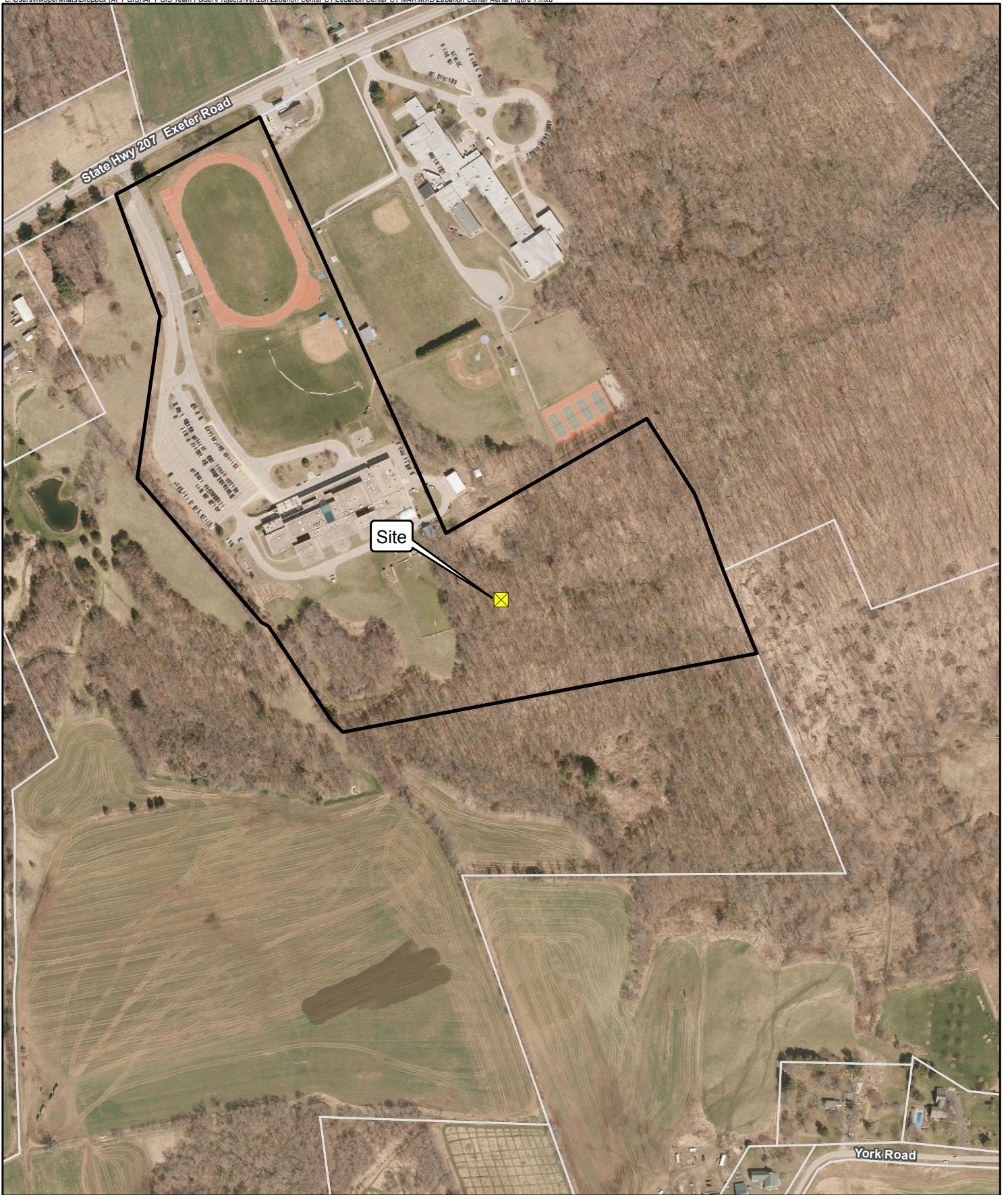
EXECUTIVE SUMMARY

Cellco Partnership d/b/a Verizon Wireless (“Cellco” or the “Applicant”), proposes to construct a telecommunications tower and related facility (the “Lebanon Center Facility”) in the southerly portion on an approximately 38.17-acre parcel at 917 Exeter Road in Lebanon, Connecticut (the “Property”). The Property is owned by the Town of Lebanon (“Town”) and is occupied by the Lyman Memorial High School. The southerly portion of the Property is largely undeveloped and used, in part, by the Lyman Memorial High School agricultural education program. The Lebanon Center Facility would provide improved wireless service to existing gaps in the area and along portions of Routes 16, 207, 87 and 289, as well as local roads in central Lebanon.




Cellco plans to construct a 150-foot monopole tower within a 50’ x 50’ facility compound (100’ x 100’ leased area) in the southern portion of the Property. The Town will install municipal and emergency service whip antennas at the top of the tower. Cellco will install up to twelve (12) panel-type antennas and nine (9) remote radio heads on a square antenna platform at the 140 foot level on the tower.

Equipment associated with the Town’s and Cellco’s antennas will be installed within the 50’ x 50’ fenced tower compound at the base of the tower. Cellco will install equipment and a battery cabinet on a 9’-4” x 16’ steel platform on concrete piers, with a steel canopy roof, in the southeast corner of the facility compound. Cellco will also install a 35 kW propane-fueled back-up generator on a 4’ x 11’ concrete pad and a 1,000 gallon propane fuel tank on a 5’ x 18’ concrete pad, all in the easterly portion of the facility compound. Vehicular access to the tower site would extend from Exeter Road over an existing paved driveway used to access the Lyman

Memorial High School, a distance of approximately 2,100 feet, then over a new gravel driveway extension, a distance of approximately 325 feet to the compound. Utilities would extend from existing service at the Lyman Memorial High School.



Legend

-  Site
-  Subject Property
-  Approximate Parcel Boundary (CTDEEP GIS)

Map Notes:
 Base Map Source: CT ECO 2016 Imagery
 Map Scale: 1 inch = 400 feet
 Map Date: November 2017

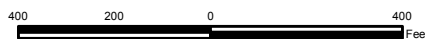
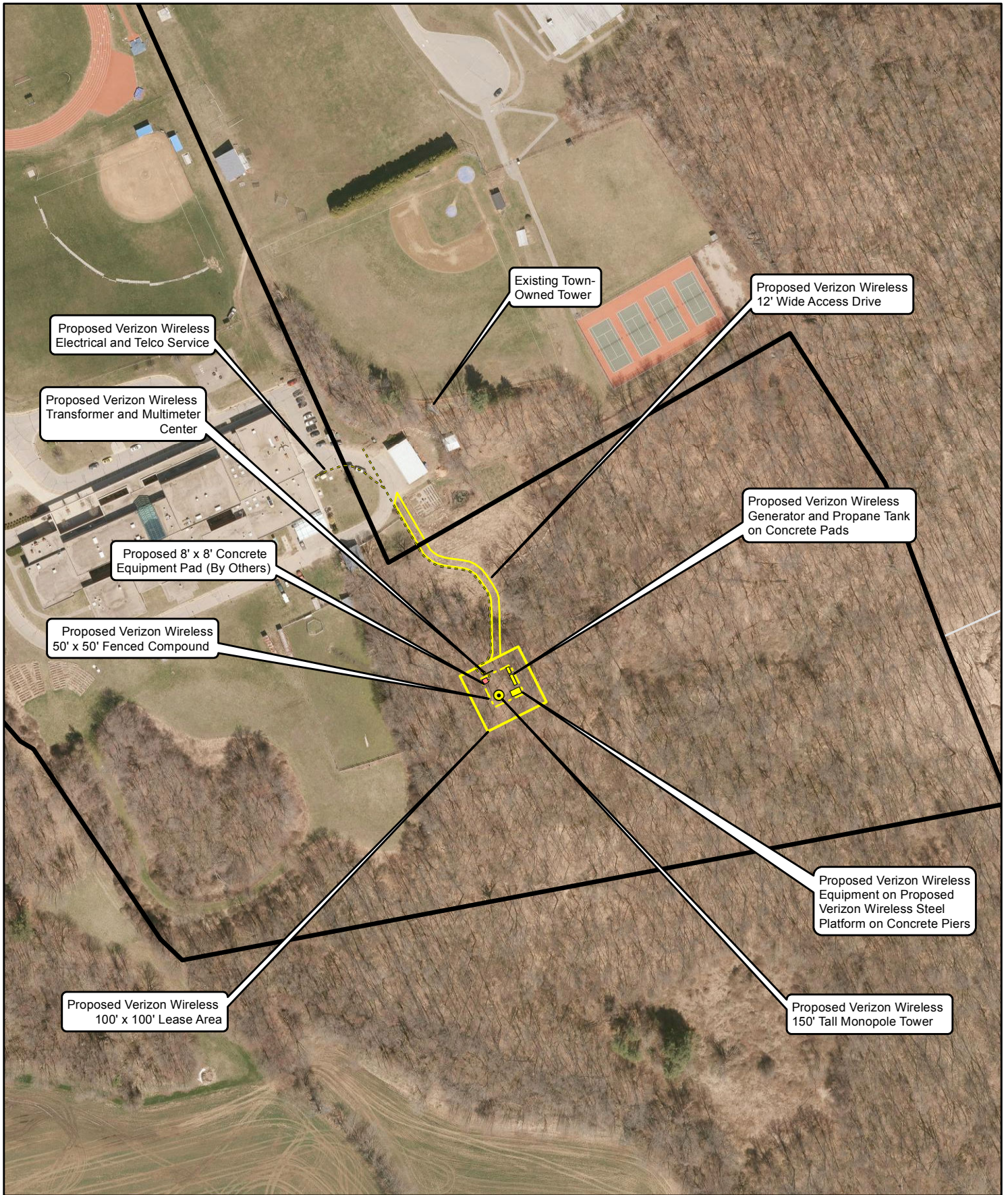


Figure 1 - Site Location Map

Proposed Wireless
 Telecommunications Facility
 Lebanon Center
 917 Exeter Road
 Lebanon, Connecticut

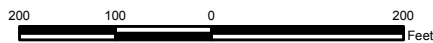




Legend

- Proposed Verizon Wireless Monopole Tower
- Proposed Verizon Wireless Equipment
- Proposed Verizon Wireless Lease Area
- Proposed Verizon Wireless Fenced Compound
- Proposed Verizon Wireless Access Drive
- Proposed Verizon Wireless Electrical and Telco Service

- Proposed Equipment (By Others)
- Subject Property
- Approximate Parcel Boundary



Site Schematic

Proposed Wireless Telecommunications Facility
 Lebanon Center CT
 917 Exeter Road
 Lebanon, Connecticut

Map Notes:
 Base Map Source: CT ECO 2016 Aerial Imagery
 Map Scale: 1 inch = 200 feet
 Map Date: November 2017



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
: :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. ____
D/B/A VERIZON WIRELESS FOR A :
CERTIFICATE OF ENVIRONMENTAL :
COMPATIBILITY AND PUBLIC NEED FOR :
THE CONSTRUCTION, MAINTENANCE :
AND OPERATION OF A WIRELESS :
TELECOMMUNICATIONS FACILITY AT :
917 EXETER ROAD, LEBANON, :
CONNECTICUT : MARCH 12, 2018

APPLICATION FOR CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

I. INTRODUCTION

A. Authority and Purpose

This Application and the accompanying attachments (the “Application”) is submitted by Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (collectively the “Applicant”), pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (“C.G.S.”), as amended, and Sections 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (“R.C.S.A.”), as amended. The Application requests that the Connecticut Siting Council (“Council”) issue a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility on an approximately 38.17-acre parcel at 917 Exeter Road in Lebanon, Connecticut (the “Property”). The Property is owned by the Town of Lebanon (“Town”). This site is identified throughout the Application as Cellco’s “Lebanon Center Facility”.

The northerly portion of the Property is occupied by the Lyman Memorial High School,

and related athletic fields and parking areas. The southern portion of the Property is largely undeveloped and used, in part, by the Lyman Memorial High School agricultural education department. The proposed Lebanon Center Facility would be located in the undeveloped (wooded) portion of the Property. At this location, Cellco would construct a 150-foot self-supporting monopole telecommunications tower within a 50' x 50' facility compound and 100' x 100' leased area. Municipal and emergency service antennas would be mounted and extend above the top of the tower. Cellco would install up to twelve (12) panel-type antennas and nine (9) remote radio heads ("RRHs") on a square antenna platform at the 140-foot level on the tower.¹ Equipment associated with Cellco's antennas would be installed on a 9'-4" x 16' steel platform with a canopy roof structure located in the southeast portion of the facility compound. Cellco would also install a 35 kW propane fueled generator and a 1,000 propane storage tank in the easterly portion of the compound. Municipal radio equipment will be installed in the northwest portion of the facility compound. Vehicular access to the Lebanon Center Facility would extend from Exeter Road over an existing paved driveway serving the high school a distance of 2,100 feet; then over a new gravel driveway extension, an additional distance of approximately 325 feet to the cell site. Utilities will extend from existing service at the high school.

Included in this Application, as Attachment 1, is a factual summary and project plans for the proposed Lebanon Center Facility. This information, along with the other attachments submitted as part of this Application, contain all of the site-specific information required by statute and the regulations of the Council.

¹ In order to maintain the antenna azimuths required, Cellco must install a square antenna platform at the 140-foot level rather than the traditional triangular platform.

B. The Applicant

Cellco is a Delaware Partnership with an administrative office located at 20 Alexander Drive, Wallingford, CT 06492. Cellco is licensed by the Federal Communications Commission (“FCC”) to operate a wireless telecommunications system in the State of Connecticut within the meaning of C.G.S. Section 16-50i(a)(6). Cellco has extensive national experience in the development, construction and operation of wireless telecommunications systems and the provision of wireless telecommunications service to the public. Operation of the wireless telecommunications systems and related activities are Cellco’s sole business in the State of Connecticut.

Correspondence and/or communications regarding this Application may be addressed to:

Cellco Partnership d/b/a Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492
Attention: Anthony Befera, Principle Engineer – Real Estate/Regulatory

A copy of all such correspondence or communications should also be sent to:

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

C. Application Fee

The estimated total construction cost for the Lebanon Center Facility would be less than \$5,000,000. Therefore, pursuant to Section 16-50v-1a(b) of the Regulations of Connecticut State Agencies, an application fee of \$1,250 accompanies this Application in the form of a check payable to the Council.

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50(b)

Copies of this Application have been sent to municipal, regional, state and federal officials, pursuant to C.G.S. Section 16-50(b). A certificate of service, along with a list of the officials served with a copy of the Application, is included as Attachment 2.

Notice of Cellco's intent to submit this Application was published on March 8 and March 9, 2018, by Cellco in *The Bulletin* pursuant to C.G.S. Section 16-50(b). The text of the published legal notice is included as Attachment 3. An Affidavit of Publication from *The Bulletin* will be forwarded to the Council as soon as it is available.

Attachment 4 contains a certification that notice of Cellco's intent to file this application was sent to each person appearing of record as an owner of land that may be considered to abut the Property in accordance with C.G.S. Section 16-50(b), as well as a list of the landowners to whom such notice was sent and a sample notice letter.

III. STATEMENT OF NEED AND BENEFITS FOR THE PROVISION OF ADVANCED AND RELIABLE WIRELESS SERVICES INFORMATION

The purpose of this section is to provide an overview and general description of the proposed Lebanon Center Facility.

A. Federal Policy

In 1996, the United States Congress adopted the federal Telecommunications Act (the "Act"). (Pub. L. No. 104-104, 110 Stat. 56). The Act recognized, among other things, an important nationwide need for high-quality wireless telecommunication services of all varieties. The Act also expressly promotes competition and seeks to reduce federal, state and local government regulation in all aspects of the telecommunications industry, including facility siting, in order to foster lower prices for consumers and to encourage the rapid deployment of new and advanced wireless service

and technologies.

Because the FCC and the United States Congress have determined that there is a pressing public need for high-quality wireless telecommunications service nationwide, the federal government has preempted the determination of public need by state and municipal authorities, including the Council, with respect to public need for the service to be provided by the facility described in this application. In addition, the FCC has promulgated regulations containing technical standards for wireless systems, including design standards, in order to ensure the technical integrity of each system and nationwide compatibility among all systems. State and local regulation of these matters is likewise preempted. The FCC has also exercised its jurisdiction over and preempted state and local regulation with respect to radio frequency emission and interference issues by establishing regulations and requirements in these areas as well.

Pursuant to FCC authorizations, Cellco has constructed and currently operates a wireless system throughout Connecticut. This system, together with Cellco's system throughout its New England and nationwide markets, has been designed and constructed to operate as one integrated, contiguous system, consistent with Cellco's business policy of developing compatibility and continuity of service on a regional and national basis.

Recognizing the public safety benefits that enhanced wireless telecommunications networks can provide, the United States Congress also enacted the Wireless Communications and Public Safety Act of 1999 to promote and enhance public safety by making 911 the universal emergency assistance number, furthering the deployment of wireless 911 capabilities and further encouraging the construction and operation of seamless, ubiquitous and reliable wireless networks. In 2004, Congress enacted the Enhanced 911 Act for the specific purpose of enhancing and promoting

public safety and citizen activated emergency response capabilities. These goals and other related responsibilities imposed on wireless service providers can only be satisfied if Cellco maintains a ubiquitous and reliable wireless network.

In December of 2009, President Obama issued President Proclamation No. 8460 (74 C.F.R. 234 (2009)), which recognizes the need to protect the nation's "critical infrastructure", including, among others, "cellular phone towers". In 2010, the FCC developed a national broadband policy² to ensure that all Americans would have access to broadband capability, whether wired or wireless; to establish the United States as a leader in wireless service innovation; and to establish, in America, the fastest and most extensive wireless network.

In an effort to encourage a more timely review and approval of wireless facility siting applications, the FCC, in 2011, established specific time limits for local and State land use decisions on wireless facilities.³ In 2012, Congress passed the Middle Class Tax Relief and Job Creation Act which included a provision, Section 6409, which mandates the approval of certain eligible wireless facility modifications. The provisions of Section 6409 were further clarified in the FCC's October 17, 2014 Report and Order (FCC No. 14-153) and are specifically designed to accelerate broadband deployment by improving the efficiencies of the wireless facility siting process.

Included as Attachment 5 is a copy of Cellco's FCC licenses for its wireless service in Connecticut. The FCC's rules permit a licensee to modify its system, including the addition of new cell sites, without prior approval by the FCC, as long as, by doing so, the licensee's authorized

² Connecting America: The National Broadband Plan, Federal Communications Commission (2010).

³ FCC Declaratory Ruling WT Docket No. 08-165.

service area is not enlarged. The addition of the Lebanon Center Facility would not enlarge Cellco's authorized service area.

B. Public Need and System Design

1. Need for the Lebanon Center Facility

As noted above, the Act has pre-empted any state or local determination of public need for wireless services. In Connecticut, Cellco holds an FCC License to provide wireless services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges. Initially, Cellco intends to deploy its 700 MHz and 2100 MHz service at the Lebanon Center Facility. Pursuant to its FCC Licenses, Cellco has developed and continues to develop a network of cell sites to serve the demand for enhanced wireless services throughout the nation and more specifically, the State of Connecticut.

Cellco currently provides wireless service in the Town of Lebanon and the adjacent Towns of Colchester, Columbia, Coventry, Franklin and Bozrah. Plots showing the extent of reliable wireless service in the area reveals significant "gaps" in wireless service in each of Cellco's operating frequencies. All or significant portions of these gaps will be filled by service from the proposed Lebanon Center Facility. (See Attachment 6).

2. Cell Site Information

Cellco intends to construct a 150-foot self-supporting monopole tower within a 50' x 50' fenced compound in the southerly portion of the Property. Cellco would install up to twelve (12) panel type antennas and nine (9) RRHs on a square antenna platform at the 140-foot level. The Town will install municipal and emergency service antennas at the top of the tower. Equipment associated with Cellco's and the Town's antennas will be located near the base of the tower

within a fenced compound. Cellco will install two (2) equipment cabinets and a battery cabinet on a 9'-4" by 16' steel platform with a canopy roof in the southeast portion of the compound. Cellco's equipment cabinets would house radio receiving, transmitting, switching, processing and performance monitoring equipment. Cellco will also install a 35 kW propane-fueled back-up generator and 1,000 gallon propane tank within the facility compound. The equipment would remain unstaffed, except as required for maintenance. Once the site is operational, maintenance personnel will visit the cell site once every two months. More frequent visits may be required if there are problems with the antennas or associated equipment. The proposed Lebanon Center Facility will provide reliable wireless service to a 7.68 mile portion of Route 207, a 8.85 mile portion of Route 87, a 1.7 mile portion of Route 16, a 2.8 mile portion of Route 289, and an overall area of 48.69 square miles at 700 MHz frequencies; and a 3 mile portion of Route 207, a 4 mile portion of Route 87, a 0.25 mile portion of Route 16, and an overall area of 9.05 square miles at 2100 MHz frequencies.

The proposed Lebanon Center Facility will interact with nine (9) of Cellco's existing telecommunications facilities all located within approximately eight (8) miles of the Property.

- Cellco's existing Colchester cell site consists of antennas on a tower at 63 Windham Avenue in Colchester and is located approximately 5 miles southwest of the proposed Lebanon Center Facility.
- Cellco's existing Colchester East cell site consists of antennas on a tower at 29 Mahoney Road in Colchester and is located approximately 4.2 miles south of the proposed Lebanon Center Facility.

- Cellco's existing Columbia South cell site consists of antennas on a tower at 330 Middletown Road in Columbia and is located approximately 6.5 miles northwest of the proposed Lebanon Center Facility.
- Cellco's existing Coventry South cell site consists of antennas on a tower at 141 Thompson Hill Road in Columbia and is located approximately 7.4 miles northwest of the proposed Lebanon Center Facility.
- Cellco's existing Franklin cell site consists of antennas on a tower at 89 Dr. Nott Road in Franklin and is located approximately 5.1 miles southeast of the proposed Lebanon Center Facility.
- Cellco's existing Franklin North cell site consists of antennas on a tower at 36 Ayer Road in Franklin and is located approximately 5.8 miles northeast of the proposed Lebanon Center Facility.
- Cellco's existing Gilman cell site consists of antennas on a tower at 12 Polly Lane in Bozrah and is located approximately 4 miles southeast of the proposed Lebanon Center Facility.
- Cellco's existing Lebanon cell site consists of antennas on a tower at 236 Gates Road in Lebanon and is located approximately 4.5 miles north of the proposed Lebanon Center Facility.
- Cellco's existing Lebanon South cell site consists of antennas on a tower at 1593 Exeter Road in Lebanon and is located approximately 3.6 miles west of the proposed Lebanon Center Facility.

Plots showing coverage from these existing Cellco facilities in the area, alone and together with coverage from the proposed Lebanon Center Facility in Cellco's 700 MHz and 2100 MHz operating frequencies, are included as Attachment 6.

3. System Design and Cell Site Equipment

a. System Design

Cellco's wireless system in general and the proposed Lebanon Center Facility, in particular, have been designed and developed to allow Cellco to achieve and to maintain high quality, reliable wireless service. The system design is capable of orderly expansion and is compatible with other wireless systems. The resulting quality of service compares favorably with the quality of service provided by conventional wireline telephone service. The wireless system is designed to assure a true cellular configuration of base transmitters and receivers in order to cover the proposed service area effectively while providing the highest quality of service possible.

Cellco's mobile telephone switching offices ("MTSOs") in Windsor and Wallingford are interconnected and operate Cellco's wireless systems in Connecticut as a single network, offering the subscriber uninterrupted use of the system while traveling throughout the State. This network is further interconnected with fiber optic networks, local exchange company networks and long distance carrier networks. Cellco has designed its wireless system to conform with applicable standards and constraints for wireless systems and to minimize the need for additional cell sites in the absence of additional demand or unforeseen circumstances.

b. Cellular System Equipment

The key elements of the cellular system are Cellco's two MTSOs located in Windsor and Wallingford and the various connector cell sites around the state. The major electronic components

of each cell site are radio frequency transmission and receiving equipment and cell site controller equipment. This equipment is capable of expanding in modules to meet system growth needs. The cell site equipment primarily provides for message control on the calling channels; call set-up and supervision; radio frequency equipment control; internal diagnostics; response to remote and local test demand; data from the wireless units in both directions and on all channels; scan receiver control; transmission of power control commands rescanning of all timing and commands and voice channel assignment.

Cellco intends to install up to twelve (12) panel-type transmit/receive antennas (Antenna Model JAHH-65B-R3B) and up to nine (9) remote radio heads mounted behind its antennas on the antenna platform. Cellco will also install two (2) HYBRIFLEX™ fiber optic antenna cables and one (1) GPS antenna attached to the equipment platform canopy roof. Back-up power to the Lebanon Center Facility will be provided by an onsite battery system and a 35 kW propane-fueled generator. Cellco's back-up generator will also provide back-up power to the Town's emergency service communications equipment. Specifications for Cellco's antennas, RRHs, antenna cables and generator are included in Attachment 7.

4. Technological Alternatives

Pursuant to its FCC licenses, Cellco is authorized to provide wireless telecommunications services throughout the State of Connecticut. Cellco submits that there are no equally effective technological alternatives that would allow Cellco to provide its wireless service to the area than those described in this Application. In fact, Cellco's wireless system represents state-of-the-art technology offering high-quality wireless service. Cellco is aware of no viable and currently available alternatives to its system design for carriers licensed by the FCC.

C. Site Selection and Tower Sharing

1. Cell Site Selection

The goal of any cell site selection process is to locate a facility in such a manner as to allow the particular wireless carrier to build and to operate a high-quality wireless network with the least overall environmental impact. The methodology of cell site selection for a wireless system generally limits the search for possible locations to a specific search area or search ring established by Cellco's Radio Frequency (RF) Engineers and network designers. In any search area, a wireless carrier first examines the availability and use of existing towers or other sufficiently tall structures that might help satisfy its wireless service objectives.

Cellco currently maintains nine (9) macro-cell tower sites within approximately eight (8) miles of the proposed Lebanon Center Facility. Each of these existing facilities would, to some extent, interact with the proposed Lebanon Center Facility and are identified on the coverage maps included in Attachment 6. None of these existing facilities, however, can satisfy the wireless service objectives of the Lebanon Center Facility. The use of existing, non-tower structures in an area, when available, are also suggested as an alternative to building a new tower. There are no existing non-tower structures of suitable height in or near the Lebanon Center search area.

Cellco initiated its site search process for the Lebanon Center Facility in March of 2015, and contacted the Town about its interest in sharing the existing Town-owned tower located to the east of the Lyman Memorial High School. The existing tower is used to support municipal and emergency service communications antennas. It was quickly determined that the existing Town-owned tower was not structurally capable of supporting both the Town's and Cellco's antennas and related equipment. The Town and Cellco then agreed to negotiate a land lease for the construction

of a replacement tower at the Property. Cellco determined that an antenna centerline height of 140 feet at the Property would satisfy its wireless service objectives in the area. The Town expressed a need to install antennas at the top of a 150-foot tall structure. Cellco and the Town negotiated and ultimately entered into an Option and Land Lease for the use of the southerly portion of the Property. The Site Search Summary (Attachment 8) together with the information contained in the Application supports the Applicant's position that the construction of a new 150-foot tower on Town-owned property is feasible and would not have a significant adverse environmental effect.

2. Tower Sharing

Cellco has designed the proposed tower and compound to be shared by a minimum of four (4) wireless carriers and the Town. This type of tower sharing arrangement would reduce, if not eliminate, the need for these other carriers or municipal entities to develop a separate tower in this same area in the future.

3. Overall Costs and Benefits

Aside from the limited visual impacts discussed further below, the Applicant believes that there are no significant costs attendant to the construction, maintenance, and operation of the proposed cell site. In fact, the public will benefit substantially from its increased ability to receive high-quality, reliable wireless services throughout significant portions of Lebanon. The Lebanon Center Facility would be a part of a communications system that addresses the public need identified by the FCC and the United States Congress for high-quality, competitive wireless service. Moreover, the proposed cell site would be part of a system designed to limit the need for additional cell sites in the future. The overall costs to the Applicant for development of the proposed cell site are set forth in Section III.D. of the Application.

4. Environmental Compatibility

Pursuant to Section 16-50p of the General Statutes, in its review of the Application, the Council is required to find and to determine, among other things, the nature of the probable environmental impact, including a specification of every significant adverse effect, whether alone or cumulatively with other effects, on, and conflicting with the policies of the state concerning the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish and wildlife.

a. Primary Facility Impact is Visual

The wireless system of which the proposed Lebanon Center Facility would be a part has been designed to meet the public need for high-quality, reliable wireless service while minimizing, to the extent possible, any potential adverse environmental impacts. In part because there are few, if any other adverse impacts, the primary impact of facilities such as this is visual. This visual impact will vary from location to location around a proposed tower, depending upon factors such as vegetation, topography, the distance of nearby properties from the tower and the location of buildings and roadways in a “sight line” toward the tower. Similarly, visual impact of a tower facility can be further reduced through the proper use of alternative tower structures; so-called “stealth or disguised installations.” Where appropriate, telecommunications towers camouflaged as trees, for example, could help to further reduce visual impacts associated with these structures. A Visibility Analysis prepared by All-Points Technology Corporation (“APT”) for the Lebanon Center Facility is included in Attachment 9. The Visibility Analysis assesses the visual impact of the proposed 150-foot monopole tower on the surrounding areas and includes photographic simulations for the Council’s review and consideration.

According to the Visibility Analysis, areas where the top portion of the tree tower would be visible above the tree canopy comprise approximately 288 acres or 3.6% of the 8,042 acre study area. Year-round visibility of the Lebanon Center Facility tower would generally occur from locations within approximately 1.0 miles north and south of the proposed tower site where open fields allow for unobstructed views of the proposed tower. When the leaves are off the trees, seasonal views, through intervening trees and branches are anticipated to occur in some locations within an area of approximately 667 additional acres (11.8% of the study area) around the tower site. Due to undulating topography in the area, seasonal views would generally be limited to locations with approximately one mile or less from the proposed tower site.

There are no residences within 1,000 feet of the proposed Lebanon Center Facility.

Weather permitting, the Applicant will raise balloons with a diameter of at least three (3) feet at the Lebanon Center Facility location on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council.

b. Environmental Reviews and Agency Comments

Section 16-50j of the General Statutes requires the Council to consult with and to solicit comments on the Application from the Commissioners of the Departments of Energy and Environmental Protection, Public Health, Public Utilities Regulatory Authority, Economic Development, and Transportation, the Council on Environmental Quality, and the Office of Policy and Management, Energy Division. In addition to the Council's solicitation of comments, Celco, as a part of the National Environmental Policy Act ("NEPA") Checklist, solicits comments on the proposed cell site from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS"), Environmental and Geographic Information Center of the Connecticut Department of Energy

Environmental Protection (“DEEP”) and the Connecticut Historical Commission, State Historic Preservation Officer (“SHPO”). Information on the USFWS and DEEP reviews regarding impacts on known populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the proposed site are included in Attachments 10 and 11.

(1) **USFWS, Migratory Birds and NDDB Compliance Determination**

(A) **USFWS Determination**

According to the November 15, 2017 USFWS, Migratory Birds and NDDB Compliance Determination prepared by APT, a federally-listed species is known to occur in the vicinity of the Property documented as the *Northern Long-Eared Bat* (“NLEB”). For the reasons discussed in the compliance determination, Cellco submits that the proposed Lebanon Center Facility will not adversely affect the NLEB. (See Attachment 10). A formal response from the USFWS has not yet been received by the Applicant but will be forwarded to the Council as soon as it is available.

(B) **Migratory Birds**

The proposed Lebanon Center Facility would comply with the USFWS recommended guidelines for reducing impacts for migratory birds. (See Attachment 10).

(C) **NDDB Determination**

No known areas of State-listed species are currently depicted on the most-recent DEEP NDDB maps in the location or in the vicinity of the proposed Lebanon Center Facility. Although no impacts on State-listed species are anticipated, Cellco has consulted with the DEEP to confirm this finding. In a determination letter dated November 8, 2017, the DEEP stated that extant populations of the *eastern box turtle*, a State Species of Special Concern, is known to occur in the vicinity of the project site. The DEEP has recommended strategies for the protection of these

turtles. These strategies will be incorporated into the final D&M Plans for the Lebanon Center Facility if approved by the Council. (See Attachment 10).

(2) Wetlands Inspection Report and Vernal Pool Analysis

As discussed in Section III.C.5.d. below, the development of the Lebanon Center Facility will have no direct impact on wetlands or watercourses, the closest of which is located approximately 107 feet to the northeast (Wetland No. 2) of the proposed facility compound. The facility compound is located approximately 109 feet south of Wetland No. 1. A portion of the proposed access road would extend with 26 feet of Wetland No. 1, an isolated wetland pocket on the Property. A Wetland Inspection report is included in Attachment 11. Wetland No. 2 contains potential vernal, which drains to the east as a narrow intermittent watercourse. A Vernal Pool Analysis is also included in Attachment 11.

Provided that the proper wetland and vernal pool protection plan is implemented during construction activities at the Property, the proposed development should not result in any adverse impact to the nearby vernal pool or wetland resources.

(3) State Historic Preservation Officer

According to a Preliminary Historic Resources Determination prepared by APT for the Lebanon Center Facility, there are no historic resources (e.g. sites listed or eligible for listing on the National Register of Historic Places) located within one-half mile of the proposed Lebanon Center Facility. Also, there are no State-registered or locally designated historic sites located proximate to the Lebanon Center Facility. A copy of APT's November 25, 2017 determination is included in Attachment 12.

(4) Agriculture

Farmland soils suitable for agricultural use includes land that is defined as prime or farmland of Statewide or local importance, based on soil type. It identifies the location and extent of the most suitable land for producing food, feed, fiber, forage, and oilseed crops and is available for these uses.⁴ According to the National Cooperative Soil Survey (U.S. Department of Agriculture, Natural Resources Conservation Service), southern portions of the Property including the area that will be impacted by construction of the Lebanon Center Facility compound contain “Locally Important” Farmland soils. A portion of the new gravel driveway extension may contain “Prime” Farmland soils. (See Farmland Soils Map included in Attachment 13).

c. Maximum Permissible Exposure Calculation

The FCC has adopted a standard for exposure to Radio Frequency (“RF”) emissions from telecommunications facilities like the one proposed in this Application. To ensure compliance with the applicable standards, Cellco asked C-Square Systems, LLC to prepare a Radio Frequency Exposure Report (the “RF Report”) for the proposed Lebanon Center Facility. (See Attachment 14). The RF Report calculates the maximum permissible exposure (“MPE”) levels from both the Cellco and Town antennas on the proposed tower, at twenty-six (26) different locations on or near the Property. The highest composite (measured and calculated) power density would be 4.66% of the FCC General Population MPE limit.

d. Other Environmental Issues

No sanitary facilities are required for the Lebanon Center Facility. The operations at the proposed Lebanon Center Facility will not cause any significant air, water, noise or other

⁴ Connecticut Environmental Conditions Online (CTECO Resource Guide) www.cteco.uconn.edu.

environmental impacts, or hazard to human health.

Based on agency comments received and field investigations by the Cellco project team, the Applicant submits that the Lebanon Center Facility will have no significant adverse effect on scenic, natural, historic or recreational features, and that none of the potential effects alone or cumulatively with other effects is sufficient reason to deny this Application.

5. Consistency with Local Land Use Controls

The Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended in July 2012, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Conservation and Development (the "Plan") and Zoning Regulations, as well as a description of planned and existing uses of the site location and surrounding properties.

a. Planned and Existing Land Uses

The proposed Lebanon Center Facility is located on an approximately 38.17-acre parcel owned by the Town. The Property is located in the Town's Rural Agricultural Residential (RA) zone district and is used for municipal purposes, including the Lyman Memorial High School, athletic fields, and undeveloped land.

b. Plan of Conservation and Development

The Town of Lebanon's 2010 Plan of Conservation & Development (the "Plan"), does not identify telecommunications facilities as a land use consistent or inconsistent with the general planning and conservation principles or policies of the Town.

c. Zoning Regulations

According to the Town's Zoning Map, the Property is located in the RA zone. According

to Section 4.3.1 of the Lebanon Zoning Regulations, the Town of Lebanon has identified certain siting preferences regarding wireless telecommunications facilities. These preferences include collocation of antennas on existing or approved towers; collocation at existing tower sites; the use of existing non-residential buildings, water tanks, electric transmission towers, steeples, clock or bell towers and farm silos; new towers on parcels containing existing towers; new towers less than 60 feet in height on property containing existing towers; and new towers greater than 60 feet in height located on parcels not currently occupied by existing towers.

In addition, the Lebanon Zoning Regulations set out wireless telecommunications facility standards as follows.

- Applications must be made by a licensed wireless provider.
- No tower may be located within 500 feet of a residence and the “tower fall circle” must be maintained within the requirements setbacks for the zone district.
- No tower that exceeds 60 feet in height may not be located within 1,000 feet of any historic district.
- Towers shall be erected to the minimum height necessary to satisfy that technical requirements of the service provider.
- The tower must comply with applicable setback requirements in the zone where the tower is located.
- The tower must be located on a legal building lot.
- The tower can be a principal or accessory use.
- The tower must be a monopole design or a camouflaged alternative if appropriate.

- The tower shall maintain a grey or neutral color unless FAA marking or lighting is required.
- The tower shall be designed so that it may be shared by other wireless service providers.
- The facility will comply with the FCC requirements for RF emissions.
- Service utilities shall be installed underground.
- Facilities shall be properly secured by a fence of adequate height.
- Landscaping and screening should be included if necessary.

Cellco submits that the proposed Lebanon Center Facility complies with each of these standards.

d. Inland Wetlands and Watercourses Regulations

The Lebanon Inland Wetlands and Watercourses Commission Regulations (the “IWWC Regulations”) define Regulated Activity as any operation within, or use of, a wetland or watercourse involving removal or deposition of materials, or any obstruction, construction, alteration or pollution of such wetlands or watercourses or any such activity within 100 feet of any wetland or watercourse boundary. Four (4) copies of the Lebanon IWWC Regulations were filed, in bulk, with the Council.

Dean Gustafson, Professional Soil Scientist with APT, conducted a field investigation and completed a Wetland Inspection report for the proposed Lebanon Center Facility. The proposed facility compound is located approximately 109 feet to the south of a small isolated wetland pocket at the edge of an existing clearing (“Wetland No. 1”). A portion of the site access drive will extend within approximately 26 feet of Wetland No. 1. The proposed facility

compound is also located approximately 107 feet southwest of a complex of hillside seep, inundated depression/potential vernal pool and intermittent watercourse system (“Wetland No. 2”). Hydrology in Wetland No. 2 drains to the north, away from the Lebanon Center Facility. Likewise, the potential vernal pool area identified drains to the east as a narrow intermittent watercourse. Provided erosion and sedimentation controls are installed and maintained during construction, no adverse impacts to these wetland areas should occur. The Wetland Inspection report is included in Attachment 11.

At the time of the site inspection conducted by APT, a small isolated depression was identified within Wetland No. 2. This depression demonstrated a potential to support vernal pool breeding habitat. A second site inspection was performed to confirm, if any, obligate vernal pool species were utilizing this depression for breeding. A summary of APT’s findings are provided in the Vernal Pool Analysis also included in Attachment 11. As discussed in more detail and the Vernal Pool Analysis, APT has recommended the establishment of certain best management practices to protect the nearby wetland resources from temporary impacts and avoid unintentional impact or mortality on vernal pool species during construction activity. Provided the wetland and vernal pool protection plan is properly implemented during construction activity, it is APT’s opinion that the proposed development will not result in a likely adverse impact to nearby vernal pool and wetland resources.

In accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation, adequate and appropriate soil erosion and sedimentation control measures will be established and maintained throughout the cell site construction period. In addition, the Applicant will employ appropriate construction

management practices to ensure that no pollutants would be discharged to any nearby watercourse or wetland areas or to area groundwater during the construction process.

According to the Federal Emergency Management Agency Flood Insurance Rate Map (“FIRM”), Map Number 09011C0176G (Effective July 18, 2011) the proposed facility would be located in an unshaded Flood Zone X, an area outside the 100 year and 500 year flood zones. A copy of the FIRM is also included in Attachment 15.

6. Local Input

Section 16-50l(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. Cellco approached the Town of Lebanon’s former First Selectwoman, Joyce Okonuk in the Summer of 2015, to discuss its interest in sharing the Town’s existing tower at the Property. The existing tower is currently used to support Town emergency service antennas. It was quickly determined that the existing tower could not support both the Town’s and Cellco’s antennas and equipment and would have to be rebuilt, taller than the existing structure. The Town and Cellco then discussed three (3) alternative locations on the Property for the replacement tower. The initial location explored was the location of the existing tower adjacent to the ball field. The remaining two (2) options called for relocating of the tower to the south into the wooded portion of the Property.

On May 23, 2017, Cellco appeared at a public hearing before the Lebanon Board of Selectmen (“BOS”) to discuss the proposed tower development at the Property. Cellco made a formal presentation on the proposed tower site and answered questions from the BOS and members of the public in attendance. On June 6, 2017, the BOS voted to hold a Special Town Meeting on July 10, 2017, to discuss and vote on the proposed leasing of Town Property to Cellco for the new

tower site. Cellco made a second formal presentation to those in attendance on the tower proposal at the Special Town Meeting on July 10, 2017. The Option and Land Lease Agreement was approved at the Town meeting that evening.

In November 2017, Lebanon's First Selectwoman Betsy Petrie, referencing the municipal consultation and local input process already completed, requested that Cellco proceed immediately to the submission of the Council application and formally waived the need for any further municipal consultation on the tower proposal. A copy of Ms. Petrie's letter waiving any further municipal consultation is included in Attachment 16.

7. **Consultations With State and Federal Officials**

Attachments 10, 11, 12, 13 and 15 and Section III.C. of the Application describes consultations with state and federal officials regarding the proposed Lebanon Center Facility.

a. **Federal Communications Commission**

FCC approval of a particular tower site is not required where the authorized service area of the licensed carrier is not enlarged. The FCC did not, therefore, review this particular proposal.

b. **Federal Aviation Administration**

An FAA-approved Federal Airways & Airspace Summary Report for the proposed Lebanon Center Facility is included in Attachment 17. This evaluation confirms that the proposed tower would not constitute an obstruction or hazard to air navigation and no obstruction marking or lighting of the structure is required and that notification to the FAA was not required.

c. **United States Fish and Wildlife Service**

See Section III.C.4.b.(1) above.

d. Connecticut Department of Energy and Environmental Protection

(1) Environmental and Geographic Information Center

See Section III.C.4.b.(2) above.

(2) Bureau of Air Management

Under normal operating conditions, Cellco’s equipment at the Lebanon Center Facility would generate no air emissions. During power outage events and periodically for maintenance purposes, Cellco would utilize a propane-fueled generator to provide emergency back-up power. Cellco’s back-up generator will be managed to comply with the “permit by rule” criteria established by the Connecticut Department of Energy and Environmental Protection (“DEEP”) Bureau of Air Management pursuant to R.C.S.A. § 22a-174-3b, and therefore is exempt from general air permit requirements.

e. Connecticut State Historic Preservation Officer

See Section III.C.4.b.(3) above.

D. Estimated Cost and Schedule

1. Overall Estimated Costs

The total estimated cost of construction for the Lebanon Center Facility is \$445,000.

This estimate includes:

(1)	Cell site radio equipment	\$150,000
(2)	Tower	60,000
(3)	Generator	35,000
(4)	Miscellaneous (site preparation, access and grading)	200,000

2. Overall Scheduling

Site preparation and engineering would commence following Council approval of the Development and Maintenance (“D&M”) Plan and are expected to be completed within two to four weeks. Due to the delivery schedules of the manufacturers, installation of the platform and installation of the tower are expected to take an additional two to four weeks. Equipment installation is expected to take an additional two weeks after installation of the platform and installation of the tower. Cell site integration and system testing is expected to require two weeks after equipment installation.

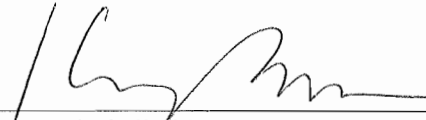
IV. CONCLUSION

Based on the facts contained in this Application, the Applicant submits that the establishment of the Lebanon Center Facility will not have any substantial adverse environmental effects. A public need exists for high quality reliable wireless service in the Town of Lebanon and throughout northern New London County, as determined by the FCC and the United States Congress, and a competitive framework for providing such service has been established by the FCC and the Telecommunications Act of 1996. Cellco submits that the need for these services, in general, and the Lebanon Center Facility, in particular, far outweighs any possible environmental effects resulting from the construction of the proposed cell site.

WHEREFORE, Cellco respectfully requests that the Council approve this Application for a Certificate of Environmental Compatibility and Public Need for the proposed Lebanon Center Facility.

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON
WIRELESS

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