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CAPE COD COMMISSION

CAPE COD COMMISSION STAFF REPORT
DEVELOPMENT OF REGIONAL IMPACT REVIEW

Date:	January 28, 2026
Project:	Great Neck Road North WCT (CCC Project No. 25028)
Project Applicant:	Cellco Partnership d/b/a Verizon Wireless
Property Owner:	Verizon New England, Inc.
Project Location:	524 Great Neck Road North, Mashpee
Map/Parcel:	Map 67, Lot 4 Title Reference: Book 25949 Page 149
Subcommittee:	Richard Roy (Chair), Ernest Virgilio, Robert Frangieh, John Druley, Catherine Ledec, Kevin Grunwald (Alternate)

Project Description and Context

The Applicant proposes development on a leased portion of a +/- 3-acre property ("Property"; "Project Site"). The Property currently contains a commercial building containing equipment for other business units of Verizon. The Applicant proposes the construction of a 130-foot multi-user monopole-style wireless communications tower with associated equipment ("Project"). The Applicant has legal standing to pursue the Project through a Memorandum of Lease with the Property Owner. As proposed, the development and construction of the wireless communications tower would consist of:

- clearing +/- 2,800 sf of vegetated area;
- constructing a +/- 2,500 square foot compound surrounded by a 12'-tall chain link fence with sound-attenuating material;
- installing the monopole tower, carrier antennas, concrete equipment pads, and all associated ground equipment within the fenced area; and
- installing an approximately 25' gravel driveway connecting the fenced area to the existing site parking areas.

Aside from the existing Verizon building, driveway, and parking lot on the parcel, the remainder of the property is undeveloped and wooded. To the west is Great Neck Road North and a Community Activity Center, and to the north, east, and south is forested and protected open space. Due to the surrounding context, Staff suggests the site most closely resembles the Suburban Development Area placetype. Suburban Development Areas include residential neighborhoods built primarily between the 1950s and 1990s as well as automobile oriented commercial and light industrial development established during the same time period.

The lease area is not in a mapped Natural Areas Placetype according to the 2025 RPP Data Viewer (Staff notes the RPP Data Viewer Map included with the application uses an old Natural Areas layer). The lease area where the telecommunications equipment will be located is within a forested upland. The southern portion of the parcel, outside the lease area, is mapped Natural Area due to the presence of a wetland and vernal pool and their buffers. The wetland and vernal pool to the south of the lease area were delineated by a professional wetland scientist, and the Project is outside the mapped 100-foot and 350-foot buffers to this wetland and vernal pool per the RPP Data Viewer and Project Plans. There are no other sensitive natural resources mapped on the site.

Ongoing operations and activity at the Property would be minimal, thus the Project does not involve regionally significant or sustained effects on the transportation network.

DRI Jurisdiction

The Project requires mandatory DRI review pursuant to Section 3 of the Commission's *Chapter A: Enabling Regulations Governing Review of Developments of Regional Impact ("Enabling Regulations")* (revised November 2021) as the "[c]onstruction of any Wireless Communication Tower exceeding 35 feet in overall height…".

The Commission received a mandatory Development of Regional Impact referral for the Project from the Town of Mashpee ("Town") on November 12, 2025.

The Applicant submitted a DRI application to the Commission on November 14, 2025. Additional materials were submitted on December 5, 2025. The hearing period was opened procedurally on January 12, 2026.

DRI Review Standards

Section 7(c)(viii) of the Commission's *Enabling Regulations* contains the standards to be met for DRI approval, which include, as applicable, consistency with the Cape Cod Regional Policy Plan (RPP), the Cape Cod Commission Act, municipal development bylaws, District of Critical Planning Concern (DCPC) implementing regulations and Commission-certified Local Comprehensive Plans. The Commission must also find that the probable benefit from the Project is greater than its probable detriment.

DRI review of the Project is subject to the 2025 RPP, which is the version of the RPP in effect at the time of the Commission's first substantive public hearing on the Project. The Commission determines the Project's consistency with the Act and 2025 RPP by determining whether the Project is consistent with the Goals and Objectives in Section 6 of the 2025 RPP, as particular goals and objectives are deemed applicable and material to the Project.

Cape Cod Regional Policy Plan

Applicable and Material RPP Goals and Objectives

Commission Staff reviewed the details of the DRI Application Materials and suggest that the following RPP Goals are applicable, material, and regionally significant and are thus subject to RPP consistency review: Community Design, Cultural Heritage, Water Resources, and Capital Facilities and Infrastructure.

The proposed location of the wireless facility on the site reflects the Applicant's response to comments by Staff on an earlier proposed design that showed the tower and ground compound located further to the east of the building in an area that would have required more tree clearing and may have impacted buffers to vernal pools and/or wetlands. Staff appreciates the Applicant revising their plans to move the facility as close to the building as possible, minimizing the amount of tree clearing to +/- 2,800 sf and reducing site grading. Thus, Staff suggests the issue areas of Open Space, Wetlands, and Wildlife and Plant Habitat are not applicable to the Project.

Ongoing operations and activity at the Property would be minimal, thus the Project does not involve regionally significant or sustained effects on the transportation network.

Commission Staff make the following recommendations relative to the Project's consistency with these RPP Goals and relevant Objectives and Technical Bulletin guidance:

Community Design

The Community Design Goal of the RPP is to protect and enhance the unique character of the region's built and natural environment based on the local context. The following Community Design Objectives are applicable and material to the Project:

- Minimize the amount of newly disturbed land and impervious surfaces (CD2); and
- Avoid adverse visual impacts from infrastructure on scenic resources (CD3)

The Project proposes to site a cell tower on a new gravel compound approximately 50' by 50', accessed by a new 25' gravel driveway. While the gravel compound and driveway will be new impervious surfaces, access to the gravel driveway and tower site will utilize an already existing paved driveway for the building on the front portion of the property which minimizes the amount of newly disturbed land and impervious surfaces needed for the Project. Thus, the Project is consistent with Objective CD2.

Based on photo simulations provided by the Applicant, the proposed tower will be most visible from the location of Photo 1, on Great Neck Road North, directly in front of the property. At that

location, the lower portion of the tower and ground-level equipment is shielded from view from the roadway by the building on the property. From the other locations, it is either not visible or has minimal visual impacts. Thus, Staff suggests the Project is consistent with Objective CD3.

Cultural Heritage

The Cultural Heritage Goal of the RPP is to protect and preserve the significant cultural, historic, and archaeological values and resources of Cape Cod. The following Cultural Heritage Objective is applicable and material to the Project:

- Protect and preserve archaeological resources and assets from alteration or relocation (CH2)

According to the Massachusetts Cultural Resource Information System, there are no inventoried historic or cultural resources in the project vicinity that would be impacted by the proposed tower. However, there is potential for archaeological impacts because the Project involves some new clearing.

As detailed in the January 21, 2026 letter from the Applicant, Massachusetts Historical Commission (MHC) consultation began in March 2022. The Applicant conducted an archaeological survey for the Project Site, with a field investigation report submitted to MHC in January 2023. MHC provided a letter noting the report for the Project meets the permit standards under 950 CMR 70. Based on this, Staff suggests the Project is consistent with Objective CH2.

Water Resources

The Water Resources Goal of the RPP is to maintain a sustainable supply of high-quality drinking water and protect, preserve, or restore the ecological integrity of Cape Cod's fresh and marine surface water resources. The following Water Resources Objectives are applicable and material to the Project:

- Protect and preserve groundwater quality (WR1);
- Protect, preserve or restore marine water resources (WR3); and
- Manage and treat stormwater to protect and preserve water quality (WR4)

The primary source of nitrogen for the Project is stormwater runoff, as there is no wastewater associated with the cell tower, and no fertilized turf areas proposed. According to the nitrogen load calculation site wide nitrogen load is expected to be 0.06 ppm, well below the required 5 ppm. Thus, Staff suggests the Project consistent with Objective WR1.

The Project is located on 3.07 acres of land in the Popponesset Bay watershed, a nitrogen impaired Marine Water Recharge Area (MWRA). The proposed gravel swale along the northern border leading to an infiltration trench, along the eastern border, will direct, treat, and infiltrate stormwater runoff. Given the minimal amount of impervious surface, any potential impacts to

the marine water resources are expected to be minimal and do not appear to be significant on a regional scale. Thus, Staff suggests the Project is consistent with Objective WR3.

According to the stormwater report, proposed drainage patterns will resemble the existing drainage patterns. The gravel road and gravel storage compound area will be designed to encourage infiltration. Additionally, there is a proposed drainage swale that will direct stormwater flow towards the proposed infiltration trench, designed to encourage infiltration of runoff into the ground. However, there are inconsistencies between the civil plan set and the Stormwater Report, namely the length of the infiltration trench. The Applicant should clarify this information, ensure drainage calculations are correct, and resubmit the Stormwater Report. Provided these minor clarifications can be made, Staff suggests the Project is consistent with Objective WR4.

Capital Facilities & Infrastructure

The Capital Facilities & Infrastructure Goal of the RPP is to guide the development of capital facilities and infrastructure necessary to meet the region's current and demonstrated future needs. The following Capital Facilities & Infrastructure Objective is applicable and material to the Project:

- Enhance the coordinated provision of services and facilities that respond to the needs of the region (CAP2)

Wireless network connectivity is influenced by many factors, including proximity to a cell site, physical obstacles, signal interference, severe weather, topographical features, or large structures or other objects between a phone and the nearest cell site.

The Applicant suggests that the tower is necessary to address a potential gap in wireless coverage and identified the proposed site as the only feasible location to close the potential gap. Provided such gap has been verified, the Project would improve cellular coverage in Mashpee for Verizon customers and includes space for up to three additional carriers.

Based on the information provided in the DRI Application, the proposed tower is infrastructure that would improve cellular service in the area of the proposed site in response to the needs of the region, and thus Staff suggests the Project is consistent with Objective CAP2.

Other DRI Standards of Review

Consistency with Technical Bulletin 97-001: Guidelines for DRI Review of Wireless Communication Towers (Revised September 2010)

Commission Staff direct applicants to Technical Bulletin 97-001 for guidance on location and design of wireless towers. The Commission has retained Isotrope Wireless, LLC ("Isotrope") as its wireless technical consultant to review the Project relative to, among other things, consistency with these guidelines.

Detailed analysis as to the Project's consistency with Technical Bulletin 97-001 can be found in Isotrope's report, which is attached to this staff report. The wireless technical consultant will present his report to the subcommittee at the February 2nd hearing on the Project.

Consistency with applicable Municipal Development Ordinances/Bylaws (including DCPC implementing regulations) and the Local Comprehensive Plan

The Project is located within the Town of Mashpee Wireless Facility Overlay Zoning District. The Project will require a Special Permit from the Mashpee Planning Board. Consistency with Local Development Bylaws will be evidenced by the Applicant receiving all required permits and assents.

Commission Staff has requested a letter regarding consistency with Municipal Development Ordinances/Bylaws and the Local Comprehensive Plan from the Town. Commission Staff expects to have comments from the Town in advance of a second hearing on the Project.

No DCPC implementing regulations apply to the Project.

EXHIBIT A

ISOTROPE WIRELESS – REVIEW OF APPLICANT'S DEVELOPMENT OF REGIONAL IMPACT APPLICATION

Thinking outside the sphere

Initial Review of Application for DRI: New Tower at 524 Great Road North, Mashpee, MA

January 22, 2026

Cellco Partnership d/b/a Verizon Wireless (Applicant) proposes a 130-ft monopole tower at 524 Great Road North, Mashpee which was referred on November 5, 2025 for Development of Regional Impact (DRI) approval by the Cape Cod Commission (Commission). It would be a new structure.

Summary:

The application materials are complete and describe a proposed facility that has a design familiar to the Commission. From a wireless communications perspective, the proposed design raises no red flags on topics such as radio energy safety, facility size and capacity.

The application includes information provided by C-Squared Systems on behalf of Verizon Wireless depicting predicted existing and proposed coverage at 700 MHz and 2100 MHz, as well as measured coverage data (drive data) in the area of the proposed monopole, in order to demonstrate the need for the site (for Verizon Wireless).

Application Requirements:

The DRI Review requirements state, by section (summarized):

- **Demonstration of a coverage and/or capacity problem requiring a solution**

As mentioned in the summary, above, the application includes information as Tab 6 from C-Squared Systems on behalf of Verizon Wireless to demonstrate the need for the proposed facility. There are several prediction plots (Attachment A and B) and 2 plots of drive data, (Attachments F and G) collected December 16, 2021.

Turning to a broader analysis, the Subcommittee can interpret the plots in this way:

- White areas on Attachment A indicate areas where Verizon is predicted to have sub-standard coverage on both bands (700 and 2100) that are being presented here,
- Green areas are areas where Verizon is predicted to have acceptable coverage at 700 MHz but not at 2100 MHz.

- Yellow areas are where Verizon is predicted to have acceptable coverage at both 700 MHz and 2100 MHz.

This portion of the submission raises several questions:

1. Is drive data collected in 2021 the most recent and accurate drive data available?
2. The RF report was done in May, 2023. Do the report, the drive data and the prediction plots reflect current operating conditions (sites on air, operating parameters and bands, etc.)?
3. Verizon is building and attaching to a number of small cells on Cape Cod, yet this report contains no indication that any small cells exist in the area shown on the plots. Does this remain the case? Are any proposed or approved for the future that would be in the area of the plots?
4. Based on both the drive data and predictions provided, the area of the proposed site appears to be well covered by Verizon at 700 MHz. There are areas of predicted and measured substandard coverage at 2100 MHz. We do not see any data or claims to support a "network capacity" concern or argument supporting this site. Therefore, can we conclude the applicant's justification/demonstration of need for this site is as a 2100 MHz coverage enhancement only?

- **Demonstration that all existing structures have been identified and fairly rejected**

We have reviewed the "Alternative Site Analysis" under tab "D" of the application narrative. We find the "search ring" shown on the bottom of page 26 to be confusing. Taken at face value, the outlined area on the map appears quite large. In fact, the search area as defined on the map includes one existing wireless site that Verizon has located upon (NW corner of the map, near Otis) and is adjacent to another site (250 Currier Road, near the Fairgrounds). The search ring also includes Ashtaumet, Moody and Johns Ponds. We do not believe any of these locations would have been reasonable locations for siting a new tower, either because they are a pond, or because they are quite close to locations where Verizon has already placed a site and has coverage.

That analysis aside, we have researched all the available records and it does not appear that there are any existing structures of height near the proposed location, either existing wireless facilities or tall structures without wireless.

- **Demonstration that proposed location and height will solve (the) problem**

And

- **Demonstration that proposed height is minimum necessary to achieve coverage of target area.**

We do not see any plots of lower height to demonstrate that the proposed height is the minimum necessary to meet the applicant's needs. Please provide them.

- **Demonstration of visual impact of proposed new structure.**

Included and noted. There has been a balloon flight (July 13, 2023) and 2 photosimulations done based on that balloon flight. The location does appear to be well chosen for minimum visual impact of the ground level compound, nearby the site, with significant tree screening around the site location. There may be seasonal views of the ground equipment from Old Barnstable Road but it is unlikely that the ground equipment will be visible from any other public way or structure other than the Verizon building on site. However, the height of the proposed tower does result in some visibility of the tower over the trees on nearby roads, particularly on Great Neck Road.

- **Demonstration of Camouflaged Siting and Design Features**

Included. As above, the ground equipment does appear to be screened from public view to the extent possible (by site selection) by the surrounding vegetation (which will not be removed, according to the plans) and the setback from the roads.

- **Demonstration of Co-Location Capability**

The applicant (Verizon) has indicated that the tower is designed for colocation but no number of potential colocators is listed. How many carriers additional to Verizon will the proposed tower be designed to support?

- **Radiofrequency Radiation (RFR) Filing Requirements**

The radio frequency energy safety analysis confirms the facility would be compliant with the FCC requirements, which is the extent to which the placement of the facility on this basis can be controlled. The analysis only includes Verizon and therefore, any future carrier tenants will need to provide (to the town of Mashpee, in their permit application) their own safety analysis, including any existing carriers (Verizon initially) and their proposed operation in aggregate. The carriers' final designs of their facilities, in combination with the other carriers on site, are required to be always compliant under the terms of their FCC licenses.

- **Hazardous Materials Filing Requirements**

Attorney Giaimo's statement on Hazardous Materials is "*As is typical for its other cell sites in this area, the facility will use batteries, installed within a cabinet, for power back-up. The exact type and number will be determined before the Applicant applies for a building permit.*"

- **Noise Filing Requirements**

In the application, we do not find any reference to a Generator proposed on site. If the applicant is not proposing a generator now or in the future, then noise from the facility should be inconsequential and the applicant has also commissioned a noise study (Tab 11) which reaches the same conclusion.

Conclusion:

The applicant has addressed most sections of the DRI review requirements, as listed above.

This concludes our initial review of the application.

Michael Lawton