

**UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

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**T-MOBILE NORTHEAST LLC,**

**Plaintiff,**

**v.**

**THE TOWN OF BARNSTABLE et al.,**

**Defendants.**

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**Civil Action No. 19-cv-10982**

**MEMORANDUM AND ORDER**

**CASPER, J.**

**June 17, 2020**

**I. Introduction**

Plaintiff T-Mobile Northeast, Inc (“T-Mobile”) has filed this lawsuit against the Town of Barnstable (“Barnstable”), the Town of Barnstable Zoning Board of Appeals (“ZBA”), the individual members of the ZBA, the Town of Barnstable Planning Board (the “Planning Board”) and the individual members of the Planning Board (collectively, “Defendants”). T-Mobile claims that Defendants’ denial of a special permit and regulatory agreement permitting T-Mobile to install and operate wireless antennas and equipment in a church steeple located in Barnstable violated the Telecommunications Act of 1996, 47 U.S.C. § 332 (the “TCA”). D. 1. Specifically, T-Mobile claims that the denials were not based on substantial evidence (Count I), that they have effectively prohibited T-Mobile from providing personal wireless services (Count II) and that the denials were impermissibly based on claims regarding the environmental effects of radio frequency emissions (Count III), all in violation of the TCA. Id. at ¶¶ 90-127. T-Mobile seeks declaratory and

injunctive relief. Id. T-Mobile has now moved for summary judgment on all counts. D. 49. For the reasons stated below, the Court **ALLOWS** T-Mobile's motion for summary judgment as to Counts I and II and **DENIES** the motion as to Count III. D. 49.

## **II. Standard of Review**

The Court grants summary judgment where there is no genuine dispute as to any material fact and the undisputed facts demonstrate that the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). "A fact is material if it carries with it the potential to affect the outcome of the suit under applicable law." Santiago-Ramos v. Centennial P.R. Wireless Corp., 217 F.3d 46, 52 (1st Cir. 2000). The movant bears the burden of demonstrating the absence of a genuine issue of material fact. Carmona v. Toledo, 215 F.3d 124, 132 (1st Cir. 2000); see Celotex v. Catrett, 477 U.S. 317, 323 (1986). If the movant meets its burden, the non-moving party may not rest on the allegations or denials in its pleadings, Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 256 (1986), but must come forward with specific admissible facts showing that there is a genuine issue for trial. Borges ex rel. S.M.B.W. v. Serrano-Isern, 605 F.3d 1, 5 (1st Cir. 2010). The Court "view[s] the record in the light most favorable to the nonmovant, drawing reasonable inferences in his favor." Noonan v. Staples, 556 F.3d 20, 25 (1st Cir. 2009).

## **III. Factual Background**

The following facts are drawn from T-Mobile's statement of material facts, D. 51, Defendants' response to this statement of material facts, D. 60, T-Mobile's further response to same, D. 64, and other supporting documents and are undisputed unless otherwise noted.

### **A. T-Mobile's Wireless Services in Barnstable**

T-Mobile provides wireless telecommunications services pursuant to licenses issued by the Federal Communications Commission ("FCC"). D. 64 ¶ 1. Cellular telecommunications systems operate on various wireless spectrums that are regulated by the FCC, which issues licenses to

carriers for each spectrum band allocated for cellular phone technology. D. 64 ¶ 4. T-Mobile currently holds licenses for frequency bands at 1900 MHz, 2100 MHz, 700 MHz and 600 MHz. D. 64 ¶ 5. Each band has different performance characteristics related to both coverage area and capacity. D. 64 ¶ 6. Low-band frequencies, such as the 700 MHz frequency, can serve a greater coverage area but have less capacity, whereas mid-band frequencies, such as 1900 MHz and 2100 MHz, are able to support a larger capacity of users with greater throughput, but have a more limited coverage range. Id. The 2100 MHz frequency is T-Mobile's primary frequency of operation, providing the most capacity and throughput. D. 64 ¶ 7. Cellular technology users are prioritized on the 2100 MHz frequency, then the 1900 MHz frequency and then, if needed, the low-band frequencies. D. 64 ¶ 8. As a user moves out of the coverage area for the low-band frequencies, their connection will drop. Id.

Gaps in wireless service coverage can result from a lack of reliable signal coverage and strength or a lack of system capacity. D. 64 ¶ 11. Gaps in service lead to an inability for users to place calls, low voice call quality, low connection speeds and an increase in dropped calls. D. 64 ¶ 12. Based upon analysis by radio frequency engineers, T-Mobile has identified a gap in its residential in-building wireless coverage and capacity in its 1900 MHz and 2100 MHz frequencies in Barnstable in the area in and around the South Congregational Church in Centerville, Massachusetts (the "Proposed Site"). D. 64 ¶¶ 10, 13. T-Mobile reviewed Key System Performance Indicator Data that indicated that the existing 700 MHz signal in the area of the gap is not able to meet T-Mobile's service and performance objectives, creating a gap in service for users. D. 64 ¶¶ 21-26. T-Mobile alleges that the gap in service is based on a lack of reliable in-building residential coverage. D. 64 ¶ 14. T-Mobile further claims that the gap encompasses residential homes, commercial establishments and Craigville Beach, a popular tourist destination.

D. 64 ¶ 17. Defendants do not dispute that the area includes commercial establishments, but counter that the commercial establishments are structurally similar to residential homes. Id. T-Mobile claims that, pursuant to census data, there are approximately 6,632 residents in the area of the coverage gap. D. 64 ¶ 18. Defendants do not dispute that they lack a factual basis to contradict T-Mobile's findings regarding the lack of coverage and capacity at the 2100 MHz frequency around the Proposed Site. D. 64 ¶ 20.

**B. T-Mobile's Proposed Solution to Address the Coverage Gap**

To remedy the gap in coverage, T-Mobile's engineers identified a "search ring" within the overall gap area within which a new facility would need to be constructed. D. 64 ¶ 28. An appropriate candidate for a new facility within the search ring would have to work within T-Mobile's existing network, comply with zoning requirements, have a landlord willing to allow the installation and be capable of being built on. D. 64 ¶ 32. T-Mobile evaluated numerous potential locations before concluding that the Proposed Site was the only one that satisfied the criteria. See D. 64 ¶¶ 33-58. Defendants have not identified another feasible location on which the wireless facility could be built that would provide the necessary coverage and capacity. D. 64 ¶ 59. On May 31, 2017, T-Mobile entered into a lease with the Proposed Site for the construction of the wireless facility at the location. D. 64 ¶ 61. On September 25, 2017, Defendants issued T-Mobile a building permit that authorized installation of the wireless facility at the Proposed Site. D. 64 ¶ 62.

**C. Proceedings Before the Zoning Board**

After construction was substantially complete, citizens of Barnstable claimed that the Proposed Site was located in a designated “District of Critical Planning Concern” (“DCPC”)<sup>1</sup>, which prohibited the telecommunications facility. See D. 64 ¶ 65. T-Mobile contends that none of the maps or records they reviewed while conducting due diligence indicated that the Proposed Site fell within a DCPC. Id. T-Mobile consulted with Defendants regarding next steps required to obtain permission to build the wireless telecommunications facility in the DCPC and submitted two applications—a zoning application and an application for a regulatory agreement. D. 64 ¶ 66. The zoning application, which was submitted to the ZBA, included an application for site plan review and an application for a special permit or, in the alternative, a use variance. D. 64 ¶ 67. The zoning application sought permission to install a wireless telecommunications facility that consisted of six antennas within the church steeple at a centerline height of sixty feet along with appurtenant equipment that would be located in the basement of the Proposed Site. D. 64 ¶ 68. The application also indicated that changes to the outer parts of the church would match the “color, texture and existing architectural characteristics” of the structure. D. 64 ¶ 69.

The ZBA held a hearing on T-Mobile’s application on September 26, 2018, which was then continued to November 7, 2018, January 9, 2019, February 27, 2019 and March 27, 2019. D. 64 ¶ 73. During the initial public hearing, the ZBA asked that T-Mobile submit a statement addressing whether the ZBA had jurisdiction to grant the relief sought. D. 64 ¶ 74. T-Mobile responded on October 12, 2018 with a statement explaining their conclusion that the ZBA had

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<sup>1</sup> The Cape Cod Commission Act Chapter 716 of the Acts of 1989 defines a DCPC, as “a geographic area of Cape Cod identified by the commission as requiring special protection and designated by the assembly of delegates in accordance with the criteria, procedures and requirements set forth in sections ten and eleven.” D. 64 at 37 ¶ 11.

jurisdiction. Id. An attorney for Barnstable testified at the January 9, 2019 hearing, opining that the DCPC regulations did not allow relief from their restrictions on wireless facilities through a special permit or variance. D. 64 at 35 ¶ 7. During the March 27, 2019 hearing, T-Mobile sought to introduce evidence, including testimony; however, the ZBA refused to hear the evidence and voted to deny the zoning application on the basis that it lacked jurisdiction to grant the requested relief. D. 64 ¶¶ 75-76. The ZBA issued “Suggested Findings Addressing Jurisdiction” on April 3, 2019 and issued a written final decision on April 10, 2019. D. 64 ¶¶ 77-78. In that written decision, the ZBA noted that the implementing regulations governing the DCPC do not include wireless telecommunications facilities as a permitted use. See D. 54-12 at 4. The ZBA further found that the section of the Barnstable Code that allows for the issuance of variances is not incorporated into the regulations governing the DCPC and, therefore, the ZBA lacked jurisdiction to grant a variance to install a wireless telecommunications facility. Id.

#### **D. Proceedings Before the Planning Board**

DCPC regulations allow the installation of wireless facilities upon the execution of a regulatory agreement with the town of Barnstable. D. 64 at 34, ¶ 4. T-Mobile and the Proposed Site filed a joint application for regulatory agreement with the Planning Board on January 10, 2019. D. 64 ¶ 79. In support of the application, T-Mobile submitted an affidavit of its site acquisition specialist, maps indicating the search ring, data resulting from a drive test conducted by T-Mobile engineers and wireless coverage maps. See D. 64 ¶¶ 81-82. The site acquisition specialist’s affidavit included a list of alternate locations that T-Mobile had considered and determined not to be feasible, including a cupola and chimney at the Christian Camp Meeting Association, the roof of Trade Winds Development-A, Inc., the steeple of the Our Lady of Victory Church and the roof of the Beach Club of Craigville. See D. 64 ¶¶ 33-58. The Planning Board

held a hearing on the application on January 28, 2019. D. 64 ¶ 84. Following this hearing, T-Mobile submitted additional materials, including a statement prepared by one of its engineers that explained the wireless signal needed to provide reliable in-vehicle, in-building residential and in-building commercial service within the gap area. D. 64 ¶ 84.

The Planning Board held additional hearings on T-Mobile's application for regulatory agreement on February 11 and February 25, 2019. D. 64 ¶ 87. T-Mobile's engineer testified at the hearings regarding, in part, the gap in service, the need for the wireless facility at the Proposed Site and the results of the drive test that was conducted to identify signal coverage. D. 64 ¶¶ 89-90. An attorney for the Proposed Site testified that construction of a wireless facility at the location would not damage the aesthetics of the church. D. 64 ¶ 91. At each of the hearings before the Planning Board, members of the public opposed the application for regulatory agreement, particularly noting that they had concerns about the health risks associated with wireless facilities. D. 64 ¶ 106. At the February 25, 2019 hearing, a representative of CityScape Consultants, Inc. ("Cityscape"), a third-party telecommunications firm that had been hired by Defendants, testified regarding the findings of its own report that concluded that there were no other viable sites within the search ring for construction of the wireless facility. D. 64 ¶¶ 92-96. Defendants do not dispute CityScape's conclusion regarding the unavailability of alternate sites. D. 64 ¶ 96.

On February 25, 2019, the Planning Board voted to deny T-Mobile's application for a regulatory agreement and read their findings into the record. D. 64 ¶ 100. The Planning Board issued a written final decision on March 26, 2019. D. 64 ¶ 101. The written decision stated that the wireless facility was not of "an appropriate scale and function" because it would "impact the historic integrity" of the Proposed Site. D. 54-18 ¶¶ 9-10. In the decision, the Planning Board indicated that the gap area consisted of the search ring; however, the search ring only consisted of

the area in which the wireless facility needed to be built and the actual gap area was significantly larger. See D. 54-18 ¶¶ 12-13. The decision also appeared to indicate that coverage maps showed in-building residential coverage to be mostly adequate and only commercial in-building coverage as “sub-optimal.” D. 54-18 ¶¶ 12-13; D. 64 at 36 ¶ 10. The Planning Board then noted that the problem area, which they conflate with the search ring area, was made up of only three percent commercial buildings, which were structured similar to residential buildings. D. 54-18 ¶ 13. Additionally, the Planning Board suggested that the Centerville-Osterville Marstons Mills water tower (the “Water Tower”) could be an appropriate alternative location, but acknowledged T-Mobile’s testimony that the Water Tower was outside the search ring and would, therefore, not provide optimal coverage in the gap area. D. 54-18 ¶ 14. The Planning Board also declined to accept T-Mobile’s representations regarding the other locations that they had considered and rejected, stating that T-Mobile had “offered no factual basis or evidence to support the conclusion that they had even contacted such property owners or that they had attempted to initiate contract negotiations for this purpose.” D. 54-18 ¶ 16.

#### **IV. Procedural History**

T-Mobile instituted this action on April 25, 2019, D. 1, and has now moved for summary judgment on all claims, D. 49. The Court heard the parties on the pending motion and took this matter under advisement. D. 65.

#### **V. Discussion**

Each of T-Mobile’s counts alleges that Defendants have violated provisions of section 332 of the TCA. D. 1 ¶¶ 90-126.

##### **A. Applicable Law**

The TCA “is an exercise in cooperative federalism” that “attempts, subject to five limitations, to preserve state and local authority over the placement and construction of facilities.”



Nat'l Tower, LLC v. Plainville Zoning Bd. of Appeals, 297 F.3d 14, 19 (1st Cir. 2002) (citing 47 U.S.C. § 332(c)). “Under the TCA, state and local governments and instrumentalities may regulate the placement of wireless service facilities, provided they (1) act on requests to authorize the placement, construction, or modification of such facilities within a reasonable time, (2) do not give consideration to any environmental effects of radio frequency emissions that comply with FCC regulations, (3) do not unreasonably discriminate among providers of functionally equivalent services, (4) make all decisions in writing and support those decisions with substantial evidence contained in a written record, and (5) do not make decisions that prohibit or have the effect of prohibiting the provision of personal wireless services.” Cellco P'ship v. Town of Leicester, No. 16-cv-10693-MGM, 2017 WL 4381673, \*2 (D. Mass. September 29, 2017) (citing 47 U.S.C. § 332(c)(7)(B)) (internal quotation marks omitted). Here, T-Mobile argues that the decisions of the ZBA and Planning Board were not supported by substantial evidence, that the denial effectively prohibited T-Mobile from providing personal wireless services and that the Planning Board's denial was improperly based on concerns about environmental effects. See D. 50 at 12-28. The provisions of the TCA preempt state and local laws to the extent that they conflict. Eco-Site, Inc. v. Town of Wilmington, No. 17-cv-10304-MBB, 2019 WL 1332621, at \*9 (D. Mass. Mar. 25, 2019).

Substantial evidence is “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion, taking into account contradictory evidence in the record.” Am. Towers LLC v. Town of Shrewsbury, No. 17-cv-10642-FDS, 2018 WL 3104105, at \*7 (D. Mass. June 22, 2018) (citing Green Mountain Realty Corp. v. Leonard, 688 F.3d 40, 50 (1st Cir. 2012)) (internal quotation marks omitted). “[T]o comply with the TCA, the reasons for denying an application need not be elaborate or even sophisticated, but rather . . . simply clear enough to

enable judicial review.” Eco-Site, Inc., 2019 WL 1332621, at \*9 (citing T-Mobile South, LLC v. City of Roswell, 574 U.S. 293, 302 (2015)). The written denial “must contain a sufficient explanation of the reasons for the denial ‘to allow a reviewing court to evaluate the evidence in the record supporting those reasons.’” Nat’l Tower, LLC, 297 F.3d at 21 (quoting S.W. Bell Mobile Sys. v. Todd, 244 F.3d 51, 60 (1st Cir. 2001)). In determining whether there was substantial evidence supporting a decision, a reviewing court “must consider the written record as a whole and is limited to the administrative record before the board.” Eco-Site, Inc., 2019 WL 1332621, at \*10. “[I]f the evidence permits inconsistent conclusions, the court will defer to the decision of the local authority, ‘provided the local board picks between reasonable inferences from the record before it.’” VWI Towers, LLC v. Town of N. Andover Planning Bd., 404 F. Supp. 3d 456, 466 (D. Mass. 2019) (quoting Nat’l Tower, LLC, 297 F.3d at 23).

The burden of showing that there has been an effective prohibition on the provision of personal wireless services is on the telecommunications provider—in this case, T-Mobile. See Cellco P’ship, 2017 WL 4381673, at \*2. “The effective prohibition clause can be violated even if substantial evidence exists to support the denial of an individual permit under the terms of the town’s ordinances.” Nat’l Tower, LLC, 297 F.3d at 20. A reviewing court considering whether there has been an effective prohibition is permitted to look beyond the administrative record. Green Mountain Realty Corp., 750 F.3d at 39 (stating that district courts “are ‘free to consider additional evidence’ beyond that which was introduced at the local level”) (quoting Second Generation Props., L.P. v. Town of Pelham, 313 F.3d 620, 629 (1st Cir. 2002)). In deciding whether there has been an effective prohibition, the First Circuit has required courts to first determine whether there was a “significant gap in coverage,” determined by reviewing the physical size of the gap, the area of the gap, the number of users affected, whether all users are similarly

affected by the gap and data about the level of inadequate service during calls in the gap area. VWI Towers, LLC, 404 F. Supp. 3d at 466-67 (citing First Circuit cases). It then must determine whether there are feasible alternatives to the carrier's proposed solution that would remedy the gap.<sup>2</sup> Id. at 467. "To demonstrate an effective-prohibition claim based on the denial of a particular proposal, the proponent of the tower has the burden to show 'that further reasonable efforts are so likely to be fruitless that it is a waste of time to even try.'" Am. Towers LLC, 2018 WL 3104105, at \*11 (quoting Nat'l Tower, LLC, 297 F.3d at 20). "While the carrier has the initial burden of conducting a systematic study of alternative sites and demonstrating that no feasible alternatives exist, once it has done so the local board must either show that the plaintiff's evidence was factually insufficient or come forward with evidence of its own to demonstrate a genuine dispute of fact." VWI Towers, LLC, 404 F. Supp. 3d at 467 (citing Indus. Tower & Wireless, LLC v. Haddad, 109 F. Supp. 3d 284, 303-04 (D. Mass. 2015)).

## **B. Analysis**

### *1. Regulatory Agreement Denial*

T-Mobile argues that the Planning Board's denial of a regulatory agreement was not supported by substantial evidence and that it effectively prohibited T-Mobile from providing wireless service in violation of the TCA. D. 50 at 19-32.

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<sup>2</sup> T-Mobile argues that a September 2018 declaratory ruling issued by the FCC rejected the First Circuit test, stating that an effective prohibition occurs "not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities." D. 50 at 20. The applicability of the FCC ruling to the denials by the ZBA and Planning Board is addressed further below.

a) Substantial Evidence

Section 168-5 of the Barnstable Code (the “Code”) permits the Town Manager to enter into a regulatory agreement with a qualified applicant<sup>3</sup> only after an “affirmative, majority vote by the Planning Board and the Town Council.” Barnstable, Mass., Code § 168-5(C). Further, the Code delineates permitted uses for properties located within a DCPC and states that “[o]ther uses of an appropriate scale and function may also be considered subject to a regulatory agreement.” Barnstable, Mass., Code § 240-130.3.

The Planning Board declined to recommend that the Town Manager enter into a regulatory agreement with T-Mobile based on its determinations that (i) the alterations proposed in the application for regulatory agreement would “impact the historic integrity” of the Proposed Site such that the proposed use is “not of an appropriate scale and function”; (ii) the in-building residential signal levels are adequate and in-building commercial coverage “is not necessary to provide adequate coverage given the unique character of the area, land use, and structures”; (iii) despite T-Mobile’s representations that the Water Tower was outside the search ring, “no evidence was submitted to the record identifying the level of coverage that would result” from installing the facility at the Water Tower; and (iv) T-Mobile did not offer sufficient “factual basis or evidence” that other potential locations were inadequate.<sup>4</sup> See D. 54-18 ¶¶ 8-16. Based on a review of the

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<sup>3</sup> “Qualified Applicant” is defined in the Code as “[a] person who has a majority legal or equitable interest in the real property which is the subject of the regulatory agreement. A qualified applicant may be represented by an authorized agent.”

<sup>4</sup> In their opposition to the present motion, Defendants state additional reasons for the denial of the regulatory agreement, including that T-Mobile did not include evidence of customer complaints and that residents testified that they had not experienced coverage problems in the area. In reviewing whether a denial was based on substantial evidence, the Court relies only upon the reasoning articulated in the written denial. See Nat’l Tower, 297 F.3d at 22 (stating that “a board’s decision may not present a moving target” and “we will not uphold a board’s denial of a permit on grounds that it did not present in its written decision”) and declines to consider these additional contentions by Defendants.

record before the Planning Board, the reasons for denying T-Mobile's application for regulatory agreement were not supported by substantial evidence.

In the Planning Board's denial, it focused on the installation of cables on the outside of the Proposed Site in determining that the wireless facility would "impact the historic integrity" of the Proposed Site. D. 54-18 ¶ 9. T-Mobile argues that this reasoning does not consider the fact that wire covering had not been completed because "T-Mobile stopped work before completion at the behest of [Barnstable]." D. 50 at 29; see D. 64 ¶ 65. Further, photos were submitted to the Planning Board that showed the Proposed Site both before and after the installation of the telecommunications facility that appeared to show no aesthetic changes to the structure and there is no contrary evidence in the record to suggest otherwise. D. 54-7 at 69-79. The Massachusetts Historical Commission also determined that installing the wireless facility at the Proposed Site would "have 'no adverse effect' on significant historic or archaeological properties." D. 64 ¶ 72. With this evidence before the Planning Board, this Court cannot conclude that the Planning Board's denial of the application for regulatory agreement based on aesthetic impacts was based on substantial evidence.

To support the Planning Board's second basis for denial of the application, it stated that in-building residential coverage was adequate in the "problem area." D. 54-18 ¶ 12. Notably, the Planning Board appears to have misinterpreted the evidence regarding the area in which T-Mobile has identified a coverage gap. The Planning Board conflates the "problem area" with the "search ring" outlined on maps of the area showing coverage. See D. 54-18 ¶ 13. The "search ring," however, only indicates a smaller portion of the overall coverage gap area within which engineers determined that the wireless facility must be located to adequately remedy the larger coverage gap. Compare D. 54-2 (maps showing coverage gaps), with D. 54-15 (map indicating the identified

search ring within the coverage gap area). The coverage maps indicate that there is currently a gap in coverage at the 2100 MHz band, limiting coverage to only in-car service. See D. 54-2. The gap shown on the maps was corroborated by testimony from T-Mobile’s engineers and data from “drive tests” that tested the quality of coverage throughout the area. See D. 64 ¶ 90; D. 54-16. Additionally, CityScape, the independent consultant hired by Barnstable to evaluate T-Mobile’s proposal, confirmed that “indoor levels are spotty” across all frequencies and that, regarding the 2100 MHz band, which CityScape noted “is important for T-Mobile’s service,” coverage “is limited to in-vehicle in most places and outdoor only in some areas.” D. 64 ¶ 93. CityScape ultimately concluded that “a new site within the Search Ring is needed and justified for T-Mobile.” D. 64 ¶ 94. The Planning Board’s error in conflating the search ring with the coverage gap area, considered alongside the evidence submitted by both T-Mobile and CityScape, lead to the conclusion that the Planning Board’s denial based on adequate in-building residential coverage was not supported by substantial evidence.

The Planning Board’s third and fourth reasons for denying the application for a regulatory agreement are based upon its determination that T-Mobile had failed to submit sufficient evidence regarding the inadequacy of alternate sites for the wireless facility. D. 54-18 ¶¶ 14-16. Regarding the Water Tower specifically mentioned by the Planning Board as a potential site, T-Mobile provided coverage maps indicating that locating the wireless facility at the Water Tower would not provide the necessary coverage to remedy the gap. See D. 54-2. There is no evidence in the record contradicting this conclusion. Further, Defendants do not dispute that a representative from CityScape testified that the Water Tower is located too far away from the search ring to adequately address the coverage gap. See D. 64 ¶ 95. Defendants also do not dispute CityScape’s conclusion that the Proposed Site is the only viable location for the wireless facility. D. 64 ¶¶ 96-99.

Additionally, Defendants admit that they cannot identify an alternative location for the wireless facility that would adequately remedy the coverage gap. D. 64 ¶ 59. The Planning Board's denial based on a lack of evidence regarding alternative sites is not based on substantial evidence in the record. Each of the reasons enumerated in the Planning Board's denial of the application for regulatory agreement falls short as, based on a review of the record before the Planning Board, the reasoning is not supported by substantial evidence.

b) Effective Prohibition

Having concluded that the Planning Board's denial was not based on substantial evidence, the Court need not reach whether the denial constituted an effective prohibition on T-Mobile's provision of wireless services, T-Mobile Ne. LLC v. City of Lowell, No. 11-cv-11551-NMG, 2012 WL 6681890, at \*6 (D. Mass. Nov. 27, 2012), but does so here in the interest of thoroughness and because this ground is asserted as the basis of Count II. Although T-Mobile urges this Court to adopt the standard discussed in the FCC's September 2018 Declaratory Ruling, this Court, having determined that the First Circuit's test has been met, declines to resolve the applicability of the FCC standard at this time. See Omnipoint Holdings, Inc. v. City of Cranston, 586 F.3d 38, 48 (1st Cir. 2009) (discussing the First Circuit "significant gap" standard); see In re Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment, 33 FCC Rcd. 9088 (2018) (FCC Declaratory Ruling). "Through the significant-gap analysis courts 'determine whether a coverage problem exists at all.'" Omnipoint Holdings, Inc. 586 F.3d at 48-49 (quoting Second Generation Props., 313 F.3d at 631). "When relevant, courts assessing whether a coverage gap is significant should consider, inter alia, the physical size of the gap, the area in which there is a gap, the number of users the gap affects, and whether all of the carrier's users in that area are similarly affected by the gaps." Id. at 49.

T-Mobile has shown that there is a significant gap in coverage in the area around the Proposed Site. T-Mobile submitted testimony and data indicating that the gap covers approximately 5.7 square miles and that approximately 6,632 residents are affected by the in-building coverage gap. D. 64 ¶¶ 16-18. The maps also indicate that the coverage gap includes residential homes, commercial establishments and Craigville Beach. D. 64 ¶ 16. Defendants dispute T-Mobile's estimate of the number of residents affected, which was based on census data, but their dispute is premised on a misunderstanding of the difference between the coverage gap area and the search ring.<sup>5</sup> See id. Further, coverage maps and drive test data indicate the significant gap in coverage, particularly at the 2100 MHz band, which Barnstable's consultant determined was necessary for sufficient T-Mobile coverage. D. 64 ¶¶ 21-27, 81; D. 54-2; D. 54-14; D. 54-16. Defendants do not dispute that they have no scientific or technical evidence contradicting T-Mobile's demonstration that a significant gap in coverage exists. D. 64 ¶ 19. Defendants also do not dispute that they lack facts that contradict T-Mobile's determination that there is a coverage gap at the 2100 MHz band in the area around the Proposed Site. D. 64 ¶ 20.

"[I]f local authorities reject a proposal that is the only feasible plan, that denial could amount to prohibiting personal wireless service." Omnipoint Holdings, Inc. 585 F.3d at 52 (internal quotation marks omitted). T-Mobile bears the burden of proving that it "investigated thoroughly the possibility of other viable alternatives before concluding no other feasible plan was available." Id. (citing VoiceStream Minneapolis, Inc. v. St. Croix County, 342 F.3d 818, 833, 834-

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<sup>5</sup> Defendants argue that an affidavit by Robert Conroy, an expert for T-Mobile, discussing the coverage gap area is inconsistent with the coverage gap area delineated by Ryan Monte de Ramos, an engineer for T-Mobile, in an affidavit he submitted to the Planning Board. See D. 59 at 11. This alleged inconsistency does not create a material issue of fact as Conroy describes the gap based on scientific and mapping tools, whereas Monte de Ramos broadly discusses a particular area within the coverage gap. See D. 54-7 at 86; D. 52-1 ¶¶ 21-22.



35 (7th Cir. 2003)); see VWI Towers, LLC, 404 F. Supp. 3d at 468 (noting that the applicant bears the burden of establishing that it has analyzed potential locations and determined that the proposed site is the “only feasible alternative”). As discussed previously, T-Mobile satisfied this second element of the First Circuit’s effective prohibition test because it has demonstrated that there are no viable alternatives for the installation of the wireless facility. T-Mobile provided extensive testimony as to its evaluation of other potential sites and the reasons for its rejection of those sites, including an affidavit from its site acquisition specialist detailing the alternate sites considered and the reasons that they were determined to be inadequate. D. 64 ¶¶ 30-55; D. 53. Defendants do not dispute that T-Mobile reviewed the appropriateness of these sites and does not dispute T-Mobile’s reasons for rejecting them. See D. 64 ¶¶ 30-55. As such, T-Mobile has sufficiently demonstrated that the Planning Board’s denial was an effective prohibition on its ability to provide wireless services in the area of the coverage gap.

## 2. *Zoning Board of Appeals’ Denial*

T-Mobile also argues that the ZBA’s denial of its zoning application based on the ZBA’s finding that it lacked jurisdiction to grant a special permit or zone variance was not based upon substantial evidence and was an effective prohibition. D. 50 at 30-32. The ZBA based its determination that it lacked jurisdiction on the sections of the Code that govern structures within the DCPC. See D. 54-11 ¶¶ 3-7 ( the ZBA’s written denial). Section 240.130.3 lists the permitted uses in the DCPC, which do not include wireless communications. Barnstable, Mass., Code § 240-130.3. T-Mobile, therefore, based its application on section 240-130.4, which is titled “Continuation; changes to use; damaged structures” and states that “[a]lterations or expansions of a building or structure . . . shall be permitted only by a special permit from the Zoning Board of Appeals[]”. In granting such special permit, the [ZBA] must find that the proposed alterations

and/or expansion are not substantially more detrimental, by standards set out herein, to the surrounding neighborhood under this chapter, § 240-130.1A, Purposes and intent, § 240-130.3A, Use limitations, and, where applicable, § 240-130.2, Definitions.” The ZBA determined that this section did not grant them the authority to issue special permits for a change of use, but only for the alteration and expansion of a building and structure. D. 54-11 ¶ 7. T-Mobile argues that the ZBA’s interpretation is contradicted by the language of section 240-130.2 because the title of that section indicates that it applies to changes in the use of a structure and because subsection (B) states that it addresses “[c]hange, expansion or alteration of uses and structures.” D. 50 at 31.

Although the ZBA based its denial on an interpretation of the Code rather than a review of evidence, its determination can satisfy the substantial evidence test if its interpretation was reasonable. See Nextel Communs. of the Mid-Atlantic, Inc. v. Town of Brookline, 520 F. Supp. 2d 238, 250 (D. Mass. 2007) (citing Omnipoint Communs. MB Operations, LLC v. Town of Lincoln, 107 F. Supp. 2d 108, 115-16) (D. Mass. 2000)) (finding that a zoning board’s “informed interpretation of its own By-Law [was] reasonable and [was] entitled to deference” and did not violate the substantial evidence requirement). The prior analysis regarding effective prohibition, however, also applies to the ZBA’s determination such that an effective prohibition will be found where T-Mobile demonstrates that there is a significant gap in coverage and that there are no other feasible alternative sites. See Cellco P’ship, 2017 WL 4381673, at \*19. For the same reasons discussed above, T-Mobile has demonstrated that there is a significant gap in its provision of wireless services around the Proposed Site and that it considered and rejected alternative sites, concluding that the Proposed Site was the only viable location for the installation of the wireless facilities. As such, T-Mobile’s motion for summary judgment is granted as to Count II.

### 3. *Unlawful Denial Based on Environmental Effects*

T-Mobile additionally claims that both the Planning Board's and the ZBA's denials were impermissibly based on the environmental effects of radio frequency emissions in violation of 47 U.S.C. § 332(c)(7)(B)(iv), which states that "[n]o 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 emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." See D. 50 at 32-34. Here, the Planning Board, in its denial, noted that it had received "a significant amount of written and oral public comment in opposition to the application . . . [that] cited health-related concerns" but acknowledged that it was not permitted to base its denial on environmental concerns. See D. 54-18 at 3, 5. The Planning Board went on to discuss its basis for the denial, which did not include the environmental concerns raised by the public. The ZBA did not mention environmental concerns or public opposition in its denial, relying solely on its determination that it lacked jurisdiction to issue a special permit for the wireless facility. See D. 54-11. Without more, this Court cannot conclude that the denials issued by the Planning Board and the ZBA were improperly based upon environmental concerns, either directly or indirectly, and summary judgment on T-Mobile's third claim, Count III, is denied.

### C. **Remedy**

T-Mobile argues that the appropriate remedy in this case is an order mandating that Defendants issue all necessary permission to conclude installation and operation at the Proposed Site. D. 50 at 34. "[I]njunctive relief is the preferred form of relief under the TCA." Am. Towers LLC, 2018 WL 3104105, at \*13 (citing Nat'l Tower, 297 F.3d at 21-22). Having found in favor of T-Mobile on the violations of the TCA, Counts I and II, as indicated by counsel for Defendant

at the motion hearing, injunctive relief compelling the Planning Board and Town to approve execution of a regulatory agreement is the only measure needed to accomplish this purpose. Accordingly, the Court orders that T-Mobile file a proposed order of judgment reflecting the injunctive and declaratory relief that they seek by July 8, 2020.

**VI. Conclusion**

For the foregoing reasons, the Court ALLOWS T-Mobile's motion for summary judgment, D. 49, as to Counts I and II and DENIES the motion as to Count III. Given that T-Mobile agrees that a ruling in their favor on one of more of its counts disposes of the claims and relief, further proceedings as to Count III are unnecessary and this Court will enter judgment after considering the proposed order of judgment that the Court has now ordered T-Mobile to file by July 8, 2020.

**So Ordered.**

/s/ Denise J. Casper  
United States District Judge