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Decision – 14-02
5 Craig Road
April 30, 2014



Planning Board

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DECISION
14 - 02

SBA Towers II, LLC – 5 Craig Road
Application for Wireless Communication Facility Special Permit
April 30, 2014

DENIED

Decision of the Acton Planning Board (hereinafter the "Board") on the application of SBA Towers II, LLC (hereinafter the "Applicant") for property in Acton, Massachusetts, owned by Palmer Realty Trust of 7 Craig Road. The property is located at 5 Craig Road and shown on the Acton Town Atlas map H4 as parcel 45 (hereinafter the "Site").

This Decision is in response to an application for a Wireless Communication Facility special permit, received by the Acton Planning Department on June 28, 2013, pursuant to Section 3.10 of the Acton Zoning Bylaw (hereinafter the "Bylaw") and the Personal Wireless Facility Rules and Regulations (hereinafter the "Rules") to install and operate a wireless communication facility, including a 110' monopole tower with twelve (12) antennas mounted to such tower and accessory radio equipment compound.

The Applicant presented the subject matter of the special permit application to the Board at a duly noticed public hearing on September 17, 2013 and was continued upon agreement between the Applicant and the Board to October 15, 2013 (without deliberation), December 3, 2013 (without deliberation), January 7, 2014, February 4, 2014 (without deliberation), February 18, 2014 (without deliberation), March 18, 2014 and then closed on April 1, 2014. The Applicant was represented by Brian S. Grossman, Esq., and Ricardo M. Sousa, Esq. and assisted in the presentation by Dan Goulet of C Squared Systems (hereinafter "C Squared"), Amjad Md of AT&T, and Stephen P. McGovern of Airosmith Development, Inc., a site acquisition specialist. Board members Jeff Clymer (Chairman), Derrick Chin, and Ray Yacoubi were present throughout the hearing. Mr. Michael Dube (Clerk) certified in writing, under Chapter 79 of the Acts of 2006 (MGL Ch. 39 Section 23D), that he examined all evidence received, including the transcript of the missed session on April 1, 2014 and was otherwise present throughout the hearing. Mr. Rob Bukowski (Vice Chair) certified in writing, under Chapter 79 of the Acts of 2006 (MGL Ch. 39 Section 23D), that he examined all evidence received, including the transcript of the missed session on September 17, 2013 and was otherwise present throughout the hearing.

The minutes and transcript of the hearing and submissions on which this decision is based upon may be referred to in the Planning Department or the Town Clerk's office at the Acton Town Hall.

1 EXHIBITS

Submitted for the Board's deliberation were the following exhibits:

1.1 Initial application documents as required by the Rules or additionally provided consisting of the following items:

- A properly executed Application for a Wireless Communication Facility Special Permit, dated 06/10/13, received in the Town of Acton Planning Department on 06/28/13.
- Application Form, signed 06/27/13.
- Supporting Statement by Brian S. Grossman, Prince Lobel Tye LLP, dated 06/27/13.
- Site Plans titled "Proposed 110' Monopole Tower", consisting of 17 sheets, dated 6/10/13.
- Site Notes and Site Layout Plan titled, "Proposed 110' Monopole Tower", consisting of 6 sheets, dated 6/10/13 and revised 10/16/13.
- Radio Frequency Affidavit Report from Deepack Rathore of AT&T, dated 06/17/13.
- Radio Frequency Propagation Maps, dated 05/2/13.
- FCC License of New Cingular Wireless PCS, LLC, expiration date of 01/03/17;
- Alternative Analysis, from Stephen P. McGovern of Airosmith Development Inc., dated 06/27/13.
- FAA Determination of No Hazard, expiration date of 10/29/14.
- Hydrological Calculations letter from J. Russell Hill of Tower Engineering Professionals, Inc., dated 6/10/13.
- Earth Removal Calculations letter from J. Russell Hill of Tower Engineering Professionals, Inc., dated 6/10/13.
- Drainage Calculations letter from J. Russell Hill of Tower Engineering Professionals, Inc., dated 6/10/13.
- Recorded Plan of Land in Acton, recorded 10/27/65 as book 10966 page end.
- Property Deed for the Site.

- Letter of Owner Authorization Agreement, dated 04/02/13, providing proof of property owner's authorization to SBA Towers II, LLC.
- A certified abutters list.
- Filing fee.
- "Supplemental Information for Application for Special Permit for Wireless Communication Facility" by Ricardo M. Sousa, Esq., Prince Lobel Tye LLP, dated 10/30/13 with attached:
 - Drive Test Information
 - Balloon Test, Visual Analysis - Photographic Simulations – Monopine;
 - Balloon Test, Visual Analysis - Photographic Simulations – Concealed Antenna Monopole;
 - Balloon Test, Visual Analysis - Photographic Simulations – Monopole;
 - Balloon Test, Visual Analysis - Photographic Simulations – Alternative Concealed Tower;
 - Radio Frequency Propagation Map – 80 feet
- "Antenna Site Agreement" between New Cingular Wireless PCS, LLC and SBA Towers, received 1/27/14.
- Email from Ricardo Sousa Re: SBA Application – 5 Craig Road, dated 01/15/14 with attached:
 - MA1037_Acton – LTE Transmitter Information;
 - MA1037_Acton – 1900 Drive data
 - MA1037_Acton – POP Counts
 - MA10337A – Standalone Pop count of -74dBm of proposed Facility @ 100' (95' RAD Center)
 - MA10337A – Standalone Pop count of -74dBm of proposed Facility @ 80'
 - MA10337S – Pop count of -92dBm of Current coverage
 - MA10337A – Pop count of -92dBm of proposed coverage 100' (95'RAD Center)
 - MA10337A – Pop count of -92dBm of proposed coverage @80'
- Email from Evan Thibodeau of C Squared to Amjad Md, dated 12/23/13, regarding a supplement response to David Maxson's questions.
- Email from Ricardo Sousa entitled "Re: MA1037S – Acton – Craig Road," dated 01/06/14 with the following supplemental materials attached:
 - Canister profile, dated 10/31/13
 - Additional plots from AT&T's RF Engineer showing Propagation at 65', 80' and 100' for both 3G and 4G
 - Plots at alternative site located on 70 Hosmer Street
 - Supplement to Affidavit of Site Acquisition Specialist, Stephen P. McGovern, dated 12/30/13
- Response to Isotrope Wireless LLC "Report on Coverage Analysis of 5 Craig Road Tower Application" submitted by Dan Goulet of C Squared, dated 03/07/14.

1.2 Interdepartmental communication received from:

- Acton Collector, dated 07/11/13.
- Acton Health Department, dated 07/17/13.
- Acton Engineering Department, dated 07/15/13 and revised memo dated 10/31/13.
- Acton Historical Commission, dated 09/03/13.
- Acton Planning Department, dated 08/22/13.
- Acton Information Technology Department, dated 09/17/13.

1.3 Correspondence received from David Maxson of Isotrope Wireless LLC (hereinafter “Isotrope”):

- “Observations on the SBA Application for Special Permit to Install a Wireless Facility and Tower at 5 Craig Road, Acton, Massachusetts”, dated 09/13/13;
- Memorandum, received 12/03/13, regarding the status of review of the 5-7 Craig Road Wireless Tower.
- Email Correspondence between the David Maxson and Martin Polera of the Massachusetts Department of Transportation (hereinafter “MassDOT”), regarding alternative site locations.
- Memorandum, dated 01/09/14, regarding population count deliverables.
- Memorandum, dated 01/15/14, follow up memo regarding population count deliverables.
- Memorandum to Ricardo Sousa, dated 1/22/14, regarding drive test flaw.
- Report on Coverage Analysis of 5 Craig Road Tower Application, dated 1/23/14.
- Memorandum on New Report from Applicant, dated 03/13/14. Regarding David Maxson’s response to C Squared.

1.4 Letters and memos received from Parties in interest:

- Letter from Jim and Kathy Quinn, dated 12/01/13.
- Email from Hilary Maglothin, dated 01/07/14.
- Memorandum from Meagan Clark with YouTube link, dated 02/04/14.
- AT&T Advertisement Maps submitted by Kathy Quinn on 03/18/14.

Exhibit 1.1 is referred to herein as the “Plan”.

The proceedings were conducted under the authority of the Bylaw. The definitions therein are employed herein, unless context indicates otherwise. Specific notice is taken of these Bylaw definitions:

3.10.3.4 Coverage Gap or Service Gap – a “Coverage Gap” or “Service Gap” is considered to exist within a specific geographic area if a remote user of a Compatible User Service Device, while located within such geographic area, is highly likely to be unable to reliably connect to and communicate with the compatible Carrier’s Personal Wireless Services network, which gap is defined as less than -90 dBm received signal power, unless the Carrier in question demonstrates a different received signal power level or an alternative QoS metric reasonably applies.

3.10.3.16 Significant Gap – A Coverage Gap in a Carrier’s Personal Wireless Service network within a specific geographic area shall be considered to be a “Significant Gap” if such specific identified geographic area is so large in physical size and/or affects or is predicted to affect such a large number of remote users of Compatible User Service Devices as to fairly and reasonably be considered “significant” as opposed to merely being a small “dead spot”. In determining whether or not a particular Carrier’s Coverage Gap is significant, a relatively small or modest geographic area may be considered a “Significant Gap” if such geographic area is densely populated or is frequently used by a large number of persons for active recreational or similar purposes who are, or are predicted to be, remote users of Compatible User Service Devices, and/or such geographic area straddles one or more public highways or commuter rail lines regularly traveled, or predicted to be traveled, by remote users of Compatible User Service Devices, while a larger geographic area may be considered not to be a “Significant Gap”

if such geographic area does not straddle any public highways or rail lines and/or is sparsely populated. Whether or not a Significant Gap exists is to be determined separately for each Carrier's Personal Wireless Services network, regardless of whether or not any other Carrier(s) have Service Coverage in such geographic area.

2 FINDINGS AND CONCLUSIONS

Based upon its review of the exhibits and the record of the proceedings the Board finds and concludes that:

- 2.1 The Applicant proposed a new wireless communication facility tower (the "Tower," as such Tower may have antennas or other equipment mounted to it, the "Facility") on an approximately 3.65-acre parcel of land known as 5 Craig Road (the "Site"). The Tower is proposed on the easterly side of the Site, which is currently used for partial truck and trailer parking.
- 2.2 The Site is located in a Light Industrial District and in Zone 2 of the Ground Water Protection District. The Site is pre-existing nonconforming in regards to the minimum open space, minimum undisturbed open space, and maximum impervious cover requirements of the Light Industrial zoning district and Zone 2 of the Groundwater Protection District. The proposed project would slightly increase the amount of open space with the proposed landscaping shown on the Plan.
- 2.3 The Applicant's proposed use as a Personal Wireless Facility is subject to the standards, conditions, and special permit criteria and requirements of Section 3.10 of the Bylaw. The Plan is also subject to review under the Special Permit requirements of Section 10.3 of the Bylaw.
- 2.4 The Applicant does not constitute a Personal Wireless Service Carrier under the definitions set forth in Section 3.10.3.9 and 3.10.3.11 of the Bylaw. The application proposes AT&T (New Cingular Wireless PCS, LLC) as a tenant on the Tower. AT&T, operating on its 4G-LTE network, does not constitute a Personal Wireless Service Carrier under the definitions set for in Section 3.10.3.9 and Sections 3.10.3.11 of the Bylaw; however, AT&T, operating on its 3G network, *does* constitute a Personal Wireless Service Carrier.
- 2.5 The Board has received comments from various Town departments, which are listed in Exhibit 1.2 above, as well as comments from parties in interest, as listed in Exhibit 1.4 above, as well as the Board's technical consultant, David Maxson of Isotrope (hereinafter the "Town Consultant"). These comments were considered by the Board in its deliberations, were made available to the Applicant, and are incorporated into this decision as deemed appropriate by the Board.
- 2.6 The following are mandatory findings as set forth in the Bylaw, Section 3.10.6.17. The Planning Board shall not issue a special permit for a Personal Wireless Facility unless it finds that the Facility:
 - a) is designed to minimize any adverse visual or economic impacts on abutters and other parties in interest, as defined in M.G.L. Ch. 40A, S. 11;

Findings:

- The initial Personal Wireless Tower as proposed would be 110 feet tall, designed with materials, including antennas, disguised as a tree (*i.e.*, a so-called “monopole”) and in plain view across an open meadow to residential and agricultural uses as well as to heavily traveled thoroughfares in Acton. During the course of public hearings, Applicant indicated that it was willing to consider alternative designs, including Tower heights ranging from 100 feet to 124 feet.
- The visual impact of the proposed Tower is documented for the record through balloon testing and visual impact analysis. This analysis demonstrates that the proposed 110-foot high Tower would be highly visible from open fields and vistas along Route 2, in the local neighborhood and within the industrial park.
- It has been reported in the record that a substantial number of trees in the vicinity of the Tower have been cut since the visual impact analysis was performed, which further reduces the screening of the Tower from view.
- Adverse visual impacts are not minimized due to the height and the surrounding land cover and land uses.

b) is designed to provide, in the most community-compatible method practicable, Service Coverage to a Significant Gap within the Town. The applicant shall bear the burden of demonstrating, by clear and convincing evidence, the existence of such Significant Gap;

Findings:

- Due to its height, and its dominant visibility across unforested space, the proposed Plan is not designed in the most community-compatible method practicable.
- The Applicant has failed to meet its burden of showing by clear and convincing evidence the existence of a Significant Gap within the Town for the following reasons:

1. Inapplicability of 4G-LTE analysis in discussion of Coverage Gap

- Under the Telecommunications Act of 1996, as amended (the “TCA”), applicable case law, rulings by the Federal Communications Commission (the “FCC”) and the Bylaw, AT&T’s 4G-LTE service does not satisfy the definition of a Personal Wireless Service. The purpose of the TCA as interpreted through the Massachusetts and 1st Circuit case law is to ensure that a user of services can connect with a land-based national telephone network and maintain a connection capable of supporting a reasonably uninterrupted communication.¹
- The evidence on the record demonstrates that AT&T does not provide voice telephone service on its 4G-LTE service, either at the 1900 MHz band (the “1900 MHz 4G Band”)² or the 700 MHz band (the “700 MHz 4G Band”). AT&T’s 4G-LTE service is a wireless broadband internet service under the TCA.
- The FCC has stated in Declaratory Statement 07-53, that broadband wireless internet service is an Information Service, not a Telecommunications Service, and is thus not subject to the protections of the TCA. Therefore, facilities used solely to provide

¹ Celico v. Town of Grafton, citing Omnipoint v. City of Cranston, 586 F.3d 38 (1st Cir. 2009)

² There is also AT&T testimony (January 7, 2014 Transcript, p. 66) that AT&T is providing 4G service only on the 700 MHz Band and not presently providing 4G services on a 1900 MHz 4G Band. Yet, the only 4G data put on the record by the applicant is at 1900 MHz.

broadband service, and carriers that provide solely broadband wireless internet services, are similarly not protected by the TCA for that service. As such, AT&T's provision of 4G-LTE service is not subject to protection under the TCA.

- Furthermore, because AT&T does not currently provide voice service on either band of its 4G-LTE network, the FCC's exception for commingled Information and Telecommunications Services within FCC Declaratory Statement 07-53 is inapplicable.
- Under the relevant definitions of the TCA and the Bylaw (which mirror the TCA and the applicable case law), the 4G-LTE service is not a Personal Wireless Service. Personal Wireless Service has been defined in the TCA and interpreted by the FCC and the case law, and such interpretations are similarly applied to the Bylaw. 4G-LTE service does not satisfy the definition of Personal Wireless Service under the TCA or the Bylaw because it is not (i) a Commercial Mobile Radio Service; (ii) a common Carrier wireless exchange access service; or (iii) unlicensed wireless service.
- As such, AT&T's 4G-LTE service is not a Personal Wireless Service, and therefore analysis of any coverage gap in the 4G-LTE network is immaterial.
- However, AT&T's 3G service, which operates voice services on the 1900 and 850 MHz Band, is a Personal Wireless Service. Therefore, in order for a special permit to be granted, the Board must find that the Applicant demonstrated, by clear and convincing evidence on the record, the existence of a Significant Gap in AT&T's 3G Coverage within the Town.

2. Lack of Clear and Convincing Evidence of a Significant Gap in 850 MHz 3G Coverage

- (A.) As a preliminary matter, the Board finds that the Coverage that must be analyzed is the coverage of the AT&T Personal Wireless Service network, which includes both the 850 MHz 3G Band and 1900 MHz 3G Band (as those terms are defined below). However, as developed below, it is the coverage provided by the 850 MHz 3G Band that controls the gap analysis.
 - The applicant's initial representations were of a purported Significant Gap in AT&T's 3G coverage, and relied solely on evidence on the 1900 MHz PCS spectrum (the "1900 MHz 3G Band"). The Applicant dismissed the relevance of AT&T's provision of 3G service collectively in all its licensed spectrums, including voice service provided over the 850 MHz cellular spectrum (hereinafter the "850 MHz 3G Band").
 - There is clear testimony on the record that:
 - The 1900 MHz 3G Band is an "overlay" to the 850 MHz 3G Band. AT&T cell sites communicate with their surroundings on both the 1900 MHz 3G Band and 850 MHz 3G Band. However, it is essentially always the case in places like Acton that 850 MHz coverage from a cell site will exceed 1900 MHz coverage from the same site, assuming the same configurations on each, due to the frequency of signals and the penetration of such signals.³ AT&T wireless telephones are assigned to an available channel on either the 1900 MHz 3G Band or the 850 MHz 3G Band. Calls that are placed from an AT&T Compatible User Service Device (as such term is defined in the Bylaw), are routed to either the 1900 MHz 3G Band or the 850 MHz 3G Band at any given time.

³ c.f. Isotrope Report January 23, 2014, p.6.

- If, at a particular location, the carrier's 1900 MHz 3G Band portion of its network is at capacity or provides insufficient signal quality, the network will hand off the call to the 850 MHz 3G Band portion of the network, so long as there is service available in the 850 MHz 3G Band at that location.
 - Because the network will always hand down a call to the 850 MHz 3G Band where there is insufficient signal quality in the 1900 MHz 3G Band so long as there is service available in the 850 MHz 3G Band, the assessment of whether a Significant Gap exists in the AT&T 3G network turns on whether or not there is a Significant Gap in coverage provided on the 850 MHz 3G Band (such coverage, the "850 MHz 3G Coverage").
- (B.) The Applicant has not satisfied its burden to demonstrate a Significant Gap in 850 MHz 3G Coverage.
 - Under the TCA, the burden of proof is on the Provider to demonstrate a Significant Gap in coverage. Under the Bylaw, the Applicant must prove the existence of a Significant Gap by clear and convincing evidence. Under the Rules, the Applicant must submit written statements that explain how the proposed Personal Wireless Facility is necessary to satisfy a Significant Gap in service, including demonstrating that a Significant Gap exists. Absent such evidence, the Board cannot issue the special permit.
 - The Applicant has declined to provide evidence of AT&T's 850 MHz 3G Coverage or the degree to which its 850 MHz 3G Coverage complements the coverage provided on the 1900 MHz 3G Band (such coverage, the "1900 MHz 3G Coverage"), despite the Board's request for this information pursuant to the Bylaw and the Rules. Specifically, the Board has requested evidence regarding 850 MHz 3G Coverage in the form of coverage maps and drive test results, which the Applicant declined to provide. Moreover, the Board requested substantial evidence regarding the allegations of a shortage of coverage and/or capacity in Acton in the form of, among other things, dropped or blocked call statistics and so called "Switch Data" demonstrating the relationship between the 1900 MHz 3G Band and the 850 MHz 3G Band. The Applicant alleges that this information is proprietary. Absent such information the Applicant has not satisfied its burden to prove a Significant Gap in its 850 MHz 3G Coverage under the TCA or the Bylaw.
 - The Applicant has offered evidence regarding its 1900 MHz 3G Coverage in the form of drive tests and RF Propagation Maps. However, this evidence is not only immaterial, but it has been discredited by the Town Consultant as well as the Applicant's contractor. The Applicant's drive test map was represented as being a direct presentation of the data collected in a drive test by a contractor and forwarded to the Applicant's engineer. Upon further review, it was determined that the Applicant's drive test map had an arbitrary 6 dB coloration adjustment in favor of the Applicant, and one sector of one cell site was not operating during the drive test. There was no indication of such an important variation in performance in the presentation of the map. As such, this evidence is unreliable and is not clear and convincing evidence of a Significant Gap.

- Beginning with the Town Consultant's observation in the September 13, 2013 Isotrope report,⁴ and after considerable efforts to resolve discrepancies in the submitted AT&T data, the Applicant submitted a report, dated March 7, 2014, prepared by the Applicant's contractor. This contractor's report largely corroborated the Town Consultant's findings regarding the discrepancies in AT&T's 1900 MHz 3G Coverage analysis and generally mirrored the findings of the Town Consultant. Therefore, even with its supplemental submissions of coverage analysis, the Applicant did not provide clear and convincing evidence of a Significant Gap in Coverage.
- The Town Consultant's analysis indicated a strong likelihood of the presence of AT&T provision of Personal Wireless Service in the locus of the Site when considering the AT&T network as a whole. The Town Consultant reported in detail in the January 23, 2014 Isotrope Report that reliable voice call continuity and quality was obtained on the AT&T network in a circuit of the subject area. The Town Consultant also submitted a computer coverage map of AT&T 850 MHz 3G Coverage (as well as 700 MHz 4G coverage). The Town Consultant modeled coverage from the AT&T cell sites at 850 MHz and presented a map in Appendix 7 of the Isotrope Report of January 23, 2014. This map shows that there is already available a substantial amount of 850 MHz 3G Coverage in the vicinity of the proposed Facility. The Town Consultant's Report and map of 850 MHz Coverage are consistent with one another in indicating there is no Significant Gap in AT&T 3G service.
- The Applicant was given the opportunity to provide additional data or rebut the evidence presented by the Town Consultant; however, the Applicant declined to provide any evidence regarding 850 MHz 3G Coverage or AT&T's actual provision of Personal Wireless Services in the area. With ample opportunity to provide counterweight to the evidence of no Significant Gap in AT&T's provision of Personal Wireless Service in the area, the Applicant remained silent. In the absence of any evidence whatsoever to the contrary, the weight of the evidence in the record is sufficient to justify a finding of no Significant Gap in AT&T's provision of Personal Wireless Services in the area, as well as justifying a finding that the Applicant failed to provide clear and convincing evidence of such a Gap.
- Population counts provided by the Applicant in its initial coverage map and separately provided by the Town Consultant demonstrate that, even allowing for the discrepancies between the two analyses, the number of residents that would receive improved residential service from the Facility as proposed in the Plan is less than one percent (<1%) of the entire population of the Town. Pursuant to the TCA, relevant case law, and the Bylaw, such evidence negates a suggestion that the proposed Facility is "necessary" to satisfy a "Significant" Gap in Coverage, or that the Facility is "designed in the most community-compatible method practicable."

⁴ E.g. [AT&T's representation of]"Existing coverage from the Annursnac Hill facility in Concord (MAU3403) appears to be remarkably dismal considering the significant advantage over the local terrain that the hilltop offers. Our first-approximation analysis on our computer suggests there is more coverage in the direction of the proposed facility than the map shows. We suggest that AT&T look for a possible data entry error in the setups of this site on their computer."

- (C.) Evidence presented by the Applicant regarding the (hypothetical) 1900 MHz 4G Coverage (as defined below) is immaterial to the discussion of whether a Significant Gap exists in 850 MHz 3G Coverage.
 - As discussed above, the evidence presented by the Applicant regarding 1900 MHz 3G Coverage does not provide clear and convincing evidence of a Significant Gap in the 850 MHz 3G Coverage.
 - AT&T supplemented its application with evidence of its coverage over the 1900 MHz 4G Band (such coverage hereinafter referred to as the “1900 MHz 4G Coverage”). Evidence of the 1900 MHz 4G Coverage, however, does not provide clear and convincing evidence of a Significant Gap in 850 MHz 3G Coverage.
 - As a preliminary matter, as discussed above, analysis of the coverage provided by AT&T’s 4G-LTE network is immaterial to this discussion, as services currently provided through 4G-LTE are not Personal Wireless Services under the TCA or the Bylaw.
 - Additionally, the Applicant’s initial submissions were determined to be inaccurate by the Town Consultant, and such finding was corroborated by the Applicant’s contractor.
 - Furthermore, the provision of telephone services over the 3G network is not currently, and will not be in the future, affected by any provision of 4G-LTE service. AT&T has presented evidence that in the future, 4G-LTE service is intended to include voice services among both the 1900 MHz 4G Band and the 700 MHz 4G Band, with the 1900 MHz 4G Band acting as an “overlay” to the 700 MHz 4G Band to increase capacity within the cell. However, evidence presented by the Applicant’s contractor demonstrates that neither at present nor in the future will any voice services transmitted over the 1900 MHz 4G Band be handed down to the 850 MHz 3G Band, nor will voice services transmitted over the 1900 MHz 4G Band be handed off to the 1900 MHz 3G Band. As such, the analysis of 1900 MHz 4G Coverage is immaterial as it does not at present (and will not in the future) have any effect on the 850 MHz 3G Coverage.
 - Furthermore, the Town Consultant and the Applicant’s contractor have demonstrated that accounting for a) differences in transmitted reference power and b) differences in receiver sensitivity, between the 1900 MHz 3G Coverage and the 1900 MHz 4G Coverage, the 1900 MHz 3G Coverage and the 1900 MHz 4G Coverage are substantially the same. As such, even if analysis of any Coverage Gap in the 1900 MHz 4G Coverage were material in this instance under the TCA or the Bylaw, any conclusions about 1900 MHz 4G Coverage would be identical to those about 1900 MHz 3G Coverage. Moreover, because the 700 MHz 4G Coverage is nearly identical to the 850 MHz 3G Coverage for the same reasons as above, based on the representations of the Town Consultant and the Applicant’s contractor, and on the Town Consultant’s 700 MHz 4G coverage map, any conclusions about AT&T’s provision of “4G Personal Wireless Services” would be identical to those about 850 MHz 3G Coverage. Since the Board was unable to find a Significant Gap in the AT&T 850 MHz 3G Coverage, the Board cannot conclude there is a Significant Gap in the 700 MHz 4G Coverage.

- (D.) Evidence presented by the Applicant regarding any Annursnac Hill capacity shortfall is unpersuasive.
 - The Applicant alleges that there is a Significant Gap in Coverage in the area of Annursnac Hill due to an alleged capacity shortfall in the 1900 MHz 3G Band.
 - To support its theory, the Applicant has offered as evidence: (1) a 1900 MHz 3G Coverage map marked *Exhibit 5* in the C-Squared Systems Supplemental RF Report showing the area in Acton served by the Annursnac Hill AT&T beta sector; and (2) MassDOT traffic data of three roads that converge in Concord under the coverage of that same sector (*ibid* p.4).
 - The 1900 MHz 3G Coverage map provided by the Applicant does not demonstrate a Significant Gap in 1900 MHz 3G Coverage. Furthermore, the Applicant expects the Board to infer that the combination of a coverage map and traffic data prove a capacity shortfall exists. The capacity shortfall and resulting Significant Gap in Coverage alleged by the Applicant could be demonstrated by providing evidence of inferior actual network performance in the subject area. However, the Applicant declined to provide network performance data for the sector in question. For the Board to draw the conclusion that there is a capacity shortfall in the 1900 MHz 3G Band in the subject area in Acton based on the evidence provided would be an inappropriate inference based on insufficient and unsubstantial evidence.
 - Even assuming, *arguendo*, that persuasive evidence was presented to the Board that the alleged capacity shortfall of the Annursnac Hill beta sector creates a Coverage Gap, the Applicant has failed to satisfy its burden to demonstrate such Gap is "Significant." Exhibit 3 of the C Squared report dated March 7, 2014 indicates that in-vehicle 1900 MHz 3G Coverage (that which is better than -82 dBm) exists along a stretch of the first ¼ mile along Route 2 in Acton. This data suggests that the Applicant's consultant believes AT&T 1900 MHz 3G Coverage to vehicles from Annursnac Hill only extends into Acton on this short segment of Route 2. Moreover, Exhibit 6 of the same report shows that the Applicant's proposed Facility does not take over from the Annursnac Hill beta sector as the dominant server on said first ¼ mile length of Route 2 in Acton. As a result, despite the Applicant's assertions that the proposed Facility would relieve Annursnac Hill of substantial demand for 1900 MHz 3G capacity from vehicles on Route 2 in Acton, Annursnac Hill still bears the brunt of the demand as the dominant server. This information further reinforces the lack of clear and convincing evidence that the proposed Facility will truly relieve Annursnac Hill of the alleged capacity overload at 1900 MHz.
 - Furthermore, as discussed above, the number of residents that would receive improved residential service in the AT&T 3G 1900 MHz Band from the proposed Facility is less than one percent (<1%) of the entire population of the Town.

For all the foregoing reasons, the Applicant has failed to satisfy its burden of demonstrating by clear and convincing evidence the existence of a Significant Gap in coverage.

c) is designed in the most community-compatible method practicable and is necessary to satisfy a Significant Gap in service. The applicant shall bear the burden of demonstrating that other methods preferred by the Town are not feasible for providing Service Coverage to satisfy such Significant Gap;

Findings:

- Under the TCA and applicable case law, as well as the Bylaw, the Applicant has the burden of developing a record demonstrating that it has made a full effort to evaluate other available alternatives and that the alternatives are not feasible to serve its customers. In order to demonstrate this, the Applicant must show that it "investigated thoroughly" the possibility of other viable alternatives before concluding no other feasible plan is available.⁵
- The Applicant identified a number of parcels in the area surrounding the proposed Facility that it asserts are not feasible for various reasons. The Applicant's site agent excluded some sites for clear, justifiable reasons, particularly relating to strong disinterest expressed by an owner. Certain sites were excluded less rigorously, based on claims that entire parcels were undevelopable because the parcel included recognized contaminated areas. However, some sites were excluded without making personal contact beyond sending a registered letter, or on the basis of vague generalizations that parts of the parcel were not developable for wireless facilities use owing to "wetlands" and/or "contamination" among other things. Based on the foregoing, the Board finds that among the parcels reportedly considered for a 110 foot Tower by the Applicant, full due diligence has not been presented to rule out certain parcels.
- The Applicant also did not propose, as an alternative to mitigate impacts, a shorter tower for the proposed Facility, which height could be as low as 65 feet and provide substantially similar area of coverage based on testimony in the record. Moreover, the Applicant failed to consider how employing two or more shorter towers that might be more in proportion to the surroundings, on sites that are more visually screened from view, and not necessarily central to the proposed Facility's location, may redistribute the desired coverage with less overall community impact.
- The record indicates that MassDOT is preparing to release a large wooded parcel by Hosmer Street at Route 2 (the "MassDOT Parcel") for lease by wireless interests in "March or April" of 2014. The Town Consultant has indicated that placement of a tower on the MassDOT Parcel or one near to it would provide better coverage improvement to the Town of Acton and to Route 2 in Acton. That the parcel is large and wooded gives the Board confidence a 110 foot tower so situated would create significantly less community impact than the proposed Facility. The Applicant did not dispute these findings, and has not investigated thoroughly the possibility of this alternative.

d) cannot for technical or physical reasons be located on an existing Personal Wireless Facility or Tower that would be expected to provide comparable Service Coverage. Such alternative existing location or locations need not provide full service to the entire Significant Gap if, in the determination of the Planning Board, the remaining Gap to have been served by the proposed Facility is not Significant and/or if remaining portions of the Significant Gap can be served by new Facilities preferred by the Planning Board;

Finding:

- No such alternative existing Facility was identified in the subject area.

⁵ Omnipoint Holdings v. City of Cranston, 586 F.3d 38, 48 (1st Cir. 2009).

e) cannot be located at any other practicably available site that is less objectionable to the general public due to technical requirements, topography, or other unique circumstances. The applicant shall have the burden of showing what alternative sites and technologies it considered and why such sites and technologies are not practicably available;

Finding:

- The findings of Section (c) above are incorporated herein by reference.

f) is sited in such a manner that it is suitably screened;

Finding:

- The overall height, bulk, location, surrounding topography and land cover create conditions that prevent the proposed Facility from being suitably screened.

g) is colored so that it will as much as possible blend with or be compatible with its surroundings;

Finding:

- If the proposed Facility were suitably screened and of suitable size for the visual character of the area, a color could be selected as a condition of an approval; however, the proposed color cannot mitigate the proposed Facility's objectionable visual impact as proposed.

h) is designed to accommodate the maximum number of users technologically feasible;

Finding:

- The Applicant would agree to construct the Tower in a manner that would enable other carriers to occupy it on a space-available basis. The prime Applicant is a tower company in the business of maximizing the use of tower space by wireless tenants.

i) is necessary because there is no other existing Facility or Facilities with available space or capacity available to satisfy the Significant Gap;

Finding:

- The findings of Sections (b) and (c) above are incorporated herein by reference.

j) is in compliance with applicable Federal Aviation Administration (FAA), FCC, Massachusetts Aeronautics Commission, and the Massachusetts Department of Public Health regulations;

Finding:

- As proposed, the Facility would satisfy these criteria.

k) complies with all applicable requirements of this Bylaw, including Section 10.3.

Finding:

- The proposed Facility is not sufficiently in compliance with the requirements of Bylaw Section 3.10.6.17 or Section 10.3 for approval.

3 BOARD ACTION

The Board took up action on the requested special permit on April 15, 2014. A motion to deny the special permit received 5 votes in favor, 0 votes opposed, and 1 abstention. As a result the requested special permit is denied.

4 APPEALS

Appeals, if any, shall be made pursuant to MGL, Ch. 40A, S. 17 and shall be filed within 20 days after the date of filing this decision with the Town Clerk.

Signature page follows.

The Town of Acton Planning Board

Signed on behalf of the Acton Planning Board



Roland Bartl, AICP, Planning Director
for the Town of Acton Planning Board

This is to certify that the 20-day appeal period on this decision has passed and there have been no appeals made to this office.

Eva Szkaradek, Town Clerk

Date

Copies furnished:

Applicant - certified mail #	Building Commissioner	Health Director
Town Clerk	Engineering Administrator	Municipal Properties Director
Fire Chief	Conservation Administrator	Town Manager
Owner	Police Chief	Acton Water District
Information Technology Director	Historical Commission	Assistant Assessor

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