



**Hyannis Main Street Waterfront  
Historic District Appeals Committee**

367 Main Street  
Hyannis, Massachusetts 02601

**APPROVED AS AMENDED MINUTES**

**HYANNIS MAIN STREET WATERFRONT HISTORIC  
DISTRICT APPEALS COMMITTEE HEARING  
NOVEMBER 13, 2019**

20 JAN 27 1:30

BARNSTABLE  
TOWN CLERK

Members Present: Alison Alessi, Mary-Ann Agresti, Sarah Colvin  
Members Absent: None

Others Present: Paul Wackrow, Senior Planner, Karen Herrand, Principal Assistant, Planning & Development and First Assistant Town Attorney David Houghton.

To all persons deemed interested or affected by the Town of Barnstable's Hyannis Main Street Waterfront Historic District Appeals Committee under Chapter 112, Article III of the Code of the Town of Barnstable, you are hereby notified that public hearings on two items will be held at Town Hall, 367 Main Street, Hyannis, MA Selectmen's Conference Room, 2<sup>nd</sup> Floor at **6:00 P.M.** on Thursday, **November 13, 2019**.

Please note that this meeting will be recorded and broadcast on Channel 18 and, in accordance with MGL Chapter 30A §20, anyone taping this meeting please make their presence known.

**Call to Order**

**Verizon New England, Inc.**

**v.**

**Hyannis Main Street Waterfront Historic District Commission, Appellee**

(On application of Verizon New England, Inc. for a Certificate of Appropriateness for the communications tower extension at 49 Ocean Street, Hyannis – 2019-01)

(On application of Verizon New England, Inc. for a Certificate of Hardship for the communications tower extension at 49 Ocean Street, Hyannis – 2019-02)

**Continued Business**

**Appeal 2019-01**

Verizon New England, Inc. has appealed the decision of the Hyannis Main Street Waterfront Historic District Commission (HMSWHDC) to disapprove the Appellant's request for a Certificate of Appropriateness for the communications tower extension at 49 Ocean Street, Hyannis as described in the application submitted on October 23, 2018. The HMSWHDC voted to disapprove the application on June 5, 2019 and issued a determination of disapproval on June 11, 2019. The Appellant seeks reversal of the HMSWHDC decision and issuance of the Certificate of Appropriateness, consistent with proposed findings provided by the Appellant, or a remand to the HMSWHDC for further proceedings consistent with the Decision of the Appeals Committee. The subject property is located at 49 Ocean Street, Hyannis, as shown on Assessor's Map 326 as Parcel 025. *Continued from July 25, 2019, September 12, 2019, and October 24, 2019.*

Attorney Michael Ford in attendance for the Applicant/Petitioner/Verizon.

Gives a summary. Evidence submitted which supports the findings of the local commission or the local commission created error.

Options: either Certificate of Appropriateness (COA) or Certificate of Hardship (COH) – void decision or alternatively to remand back to Hyannis Main Street Waterfront Historic District Commission (HHDC) for further proceedings.

Verizon was procedural. Prejudged at HHDC level/draft findings were substantially set forth before hearing – it appeared that HHDC members had prejudged the matter. Felt certain comments from HHDC members supported that. Verizon asks to decide to either not adopt HHDC findings, make your own or alternatively the evidence would have it remanded back. Verizon prefers a decision one way or other on both cases.

Focused on the finding by local HHDC that insufficient evidence submitted for a hardship finding in order to continue to adequately operate as a provider system, Nantucket and Hyannis. Additional evidence came in form of measuring the radio waves, data showed the weakness of the signal. Both technicians Bayer and Baker showed the problems with the system. Baker and his experience over time proved that without raising up the antenna – diversification memo. Evidence showed 145 where top antenna had to go. Peer report – and looking for a list of dropped calls, complaints cant' be shown that way. There is a problem with the system. This is the last resort, there will come a day when there are serious problems/issues, may be grave implications. This is not a money making proposition for Verizon, this is simply to improve the system and make it work. Provider trying to avoid a big problem with 911 and back up of. This is a unique structure. Works with the switching bldg. and they have to be together to work, this is an exception that can fit into the hardship request.

Peer reviewer and experts all agree that if this system designed now/today that this would be the right proposed height.

Planning Board did move this for that reason.

He thanks the Committee members.

First Assistant Town Attorney David Houghton in attendance, in representation of HHDC. In summary - Supported or not by substantial evidence. COA – HHDC made conclusions that the extension as proposed is not within the character of HHDC district, visual analysis and testimony of residents as well. Section 106, finding no. 7 report covers entire HHDC district, but in fact it does not. HHDC looked more broadly at the waterfront area as well, this would have the most negative impact, pg. 12 of Staff Report, Exhibit A, refers to this and the extension re the view.

COH – relevant to the issue HHDC finding no. 6, Isotope report, Sept. 12, 2018, one stated that Verizon had produced no records of any dropped calls, substantiated on Oct. 24<sup>th</sup>. Ticketing system if there were more dropped calls. Evidence is clear that there is no present problem. The only issue is only if there is a risk/need. The computer analysis in Sept. 12, 2018 report indicated that presently there is 99.99.89 reliable. Risk of .0011 percent. A total of 34 seconds per year.

Therefore proves no substantial risk. October 24<sup>th</sup>, hearing that this is a sub fraction error, aka weather problem with this path, pg. 10 of Peer Review report. The tower has a performance history. There is more data that can be investigated. Performance logs prove on an average there are peaks and dips, this might be a fail performance.

Procedural problem – HHDC concerned – feel unjustly accused of prejudging something. Report from staff April 25<sup>th</sup> based on evidence, June 5<sup>th</sup>, also evidence was submitted prior to – May 1<sup>st</sup> hearing many pgs. of documents, and a number of continuances. The had proposed findings both positive and negative. There was more appropriate detailed information on the negative draft findings. June 5<sup>th</sup> heard from Mr. Mayer. This Committee has had more time to review evidence, June 5<sup>th</sup> information submitted. Ample evidence to do denial of COA and COH. HHDC respectfully asks not to remand back to them. They would prefer that this committee make the decision.

#### **Chair Alison Alessi asks for any Public Comment.**

Attorney Ford reminds Chair that it was discussed at last meeting that there be no already addressed public comment only new comments.

Chair Alison Alessi agrees – only new comment tonight.

Milton Berglund of Hyannis in attendance. Location of the tower should not be in a residential district. Distance appropriate from switching station to the tower, not addressed that they had to be contiguous. The precedent was different than today's standard. Don't perpetuate a prior mistake. Ask Verizon to solve this problem at another location.

Attorney Ford replies that a previous meeting it was addressed about a location and moving with the switching station. It was answered and there is a reason for it. History of location – there were previous COA that was issued for this tower. The language of the ordinance hasn't changed and it was then as it is now.

Mary- Ann Agresti stated that a thorough study was not done on how this wasn't in character of the district. She is submitting some examples of how other places have solved similar problems, companies dedicated of the concealment issue. For the record, Exhibit B.

Attorney Houghton interjects that he has been informed by Cheryl Powell Chair of HHDC that they had a submission like this and they were told that Verizon stated this could not be done.

Attorney Ford in reviewing the submitted exhibits from Mary- Ann Agresti requests a time to review.

**Chair Alison Alessi calls for a short recess so both attorneys can review these Exhibits – five minutes taken at 6:40 p.m.**

Reconvene: Attorney Ford stated that this issue did come up briefly, the concept of concealment is one that Verizon has looked at, they have asked to tell Committee they are willing to look at it again. They are willing to go back and review with their engineers and see if they can come back with a more concealed design for approval/recognition.

Verizon thinks this is this is constructive/keep public hearing open and report back to Committee. If new design it would go back to the Commission HHDC.

Sarah Colvin agrees that this is HHDC purview. Mary-Ann Agresti agrees as well.

**Chair Alison Alessi entertains a motion to close the Public Hearing, moved by Sarah Colvin, so voted unanimously.**

COA Application – confirmed review of all draft findings submitted by Attorney Ford and Attorney Houghton.

Chair Alison Alessi – scale different a 50% increase and the photos showing/visual analysis.

Sarah Colvin agrees – reasons for putting up tower don't balance enough per detractor of the character of the village.

Mary- Ann Agresti – design problem/factors and being within the character of the district hasn't been addressed to counter the technical needs.

Sarah Colvin comments that there are challenges of broadcasting over water, she understands but maybe a better way of doing it.

**Chair Alison Alessi entertains a motion to accept the Findings for the COA, Mary- Ann Agresti moves to make the following Findings.**

Mary-Ann Agresti makes a motion summarizing draft Findings, seconded by Sarah Colvin, this motion does not pass.

Paul Wackrow points out that certain findings deviate from this draft and document references, so Committee can confirm the intention. Supporting information to be read in as well.

Mary- Ann Agresti replies that these are being accepted as written with the notations in the draft. These would be the exact.

~~**Chair Alison Alessi entertains a motion to amend the Findings that they be read into record exact, seconded by Sarah Colvin, so voted unanimously. — Second Motion on Findings — read into record by Sara Colvin (as identified above).—**~~

**Chair Alison Alessi entertains a motion to accept the Findings of Attorney David Houghton as written, moved by Sarah Colvin (read into record by Sarah Colvin), seconded by Mary-Ann Agresti, so voted unanimously.**

The Findings are read into record: - Attorney Houghton's HHDC COA Findings:

1. The purpose of the Hyannis Main Street Waterfront Historic District is to “promote the educational, cultural, economic and general welfare of the inhabitants of the Town of Barnstable, and the Town's unique community character” through several measures, including “the preservation, maintenance and improvement of appropriate settings for such buildings, structures, and places, and the encouragement of new design which is compatible with the existing historical and community character.” Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-24.
2. The Hyannis Main Street Waterfront Historic District (hereinafter “district”) includes all of the land as shown on the official map on file with the Town Clerk (Appeal doc. no. 15). Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-26.
3. The Hyannis Main Street Waterfront Historic District Commission (hereinafter “Commission”) is responsible for overseeing the Hyannis Main Street Waterfront Historic District. Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27(A).
4. The Commission shall have the power, authority and duty to carry out the purposes of the Hyannis Main Street Waterfront Historic District. Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27.
5. “In exercising its powers and duties hereunder, the Commission shall pay due regard to the distinctive characteristics of each building, structure, site and setting, and to the district as a whole.” Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-28(B).
6. Verizon New England, Inc. (hereinafter “Verizon” filed an application with the Commission for a Certificate of Appropriateness (Appeal Doc no. 10, Comm. doc. no. 1) on October 23, 2018 to reinforce and extend by fifty (50) feet the height of its existing steel tower at 49 Ocean Street in Hyannis located within the district.
7. The Commission convened public hearings on Verizon’s applications on May 1, 2019 (minutes Appeal doc. no. 10. Comm. doc. no. 14) and June 5, 2019 (minutes Appeal doc. no. 10. Comm. doc. no. 37).
8. The Commission issued a decision dated June 11, 2019 denying Verizon a certificate of appropriateness (Appeal doc. no. 10. Comm doc. no. 42).
9. Verizon filed an appeal of the Commission denial on June 28, 2019 (Appeal doc. no. 1)
10. The tower’s proposed extended height at one hundred fifty (150) feet far exceeds that of other surrounding structures; for comparison, the height of Town Hall, one of the tallest buildings in the district, from grade to ridge is 71’. (Appeal doc. no. 10. Comm. Decision finding no. 2 Comm. doc. no. 42)
11. The district includes the waterfront area of Hyannis Inner Harbor as shown on the district map (district map Appeal doc. no. 15) and included in the name of the district as the Hyannis Main Street Waterfront Historic District.
12. The proposed tower extension has the greatest imposition of site on the waterfront area (testimony George Jessop AIA emeritus former HHDC Chair minutes May 1, 2019 Appeal doc. no. 10. Comm. doc. no. 14 pg. no. 5).
13. The proposed tower extension will constitute a permanent eyesore immediately noticeable to anyone coming from Nantucket (Appeal doc. no. 10. Comm. doc. no. 30 email Jane Walsh).
14. The proposed extension will degrade the viewshed and exacerbate the tower visibility from the scenic areas of Aselton Park and Bismore Park and from Hyannis Harbor as boats enter (letter Felicia Penn Appeal doc. no. 10 Exhibit D June 5 hearing Comm. doc. no. 41).

15. The position of view #5 of the Visual Analysis dated August 20, 2018 prepared for Verizon by Advanced Engineering Group, P.C. (Appeal doc. no. 10 Comm. doc. nos. 1 and 4) shows the lower dish on the existing tower screened from view by the Hyannis Harbor Motel building across Ocean Street from the Hyannis waterfront public park known as Bismore Park located within the district (district map Appeal doc. no. 15).
16. The position of View # 4 of the Visual Analysis dated August 20, 2018 prepared for Verizon by Advanced Engineering Group, P.C. shows the lower dish screened by the Town Hall and full foliage during tourist season from South Street in the district (district map Appeal doc. no. 10. photo location map Comm. doc. no. 4) but exposed to view by the proposed tower extension under the same conditions (Appeal doc. no. 10. Comm. doc. nos. 1 and 4).
17. The position of View # 2 of the Visual Analysis dated August 20, 2018 prepared for Verizon by Advanced Engineering Group, P.C. shows the lower dish screened from view by the TD Bank building at the intersection of Old Colony Road and Main Street within the district but exposed to view by the proposed tower extension (photo location map and view # 2 Appeal doc. no. 10. Comm. doc. no. 4).
18. The position of View # 1 of the Visual Analysis dated August 20, 2018 prepared for Verizon by Advanced Engineering Group, P.C. shows the height of the tower even with the tree line but above the tree line with the proposed tower extension (photo location map and view # 1 Appeal doc. no. 10. Comm. doc. nos. 4).
19. The EBI Consulting report dated January 19, 2018 (hereinafter "EBI report") prepared for Verizon pursuant to Section 106 of the National Historic Preservation Act determining that the tower extension would have no adverse effect on historic properties within the visual Area of Potential Effect (APE) is limited to a five hundred (500) foot radius around the proposed tower extension (Appeal doc. no. 10. Comm. doc. no. 18).
20. Views 1, 2, 4 and 5 of the visual impact analysis are outside of the five hundred (500) foot radius and were not reviewed as part of the EBI report (visual analysis photo location map Appeal doc. no. 10. Comm. doc. no. 4 and EBI report photo location map Appeal doc. no. 10. Comm. doc. no. 18).
21. "The analysis provided by EBI's 'Section 106 Review' is generally intended to determine whether the tower extension will impact any characteristics that qualify nearby properties for inclusion in the National Register of Historic Places. The district's criteria for Commission determinations do not depend on any property's eligibility for, or inclusion in, the National Register of Historic Places and do not place a specific radius around a site when considering the appropriateness of a structural addition in relation to other sites in the vicinity" (staff memo Appeal doc. no. 10. Comm. doc. no. 34).
22. The evidence supports the Commission's decision that the proposed tower extension will dramatically increasing the visibility of a structure that will be incompatible with the character of the Hyannis Main Street Waterfront Historic District from major streets, public parks, and Hyannis Harbor (Appeal doc. no. 10. Comm. Decision finding no. 2 Comm. doc. no. 42), with the district's historical and community character in relation to buildings included on the National Register of Historic Places (Appeal doc. no. 10. Comm. Decision finding no. 3 Comm. doc. no. 42) and with the preservation and protection of the district (Appeal doc. no. 10. Comm. Decision finding no. 6 Comm. doc. no. 42).
23. The evidence supports the Commission's decision as being within the Commission's authority to oversee the Hyannis Main Street Waterfront Historic District (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27(A)) to carry out the purposes of the Hyannis Main Street Waterfront Historic District (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27) to promote the educational, cultural, economic and general welfare of the inhabitants of the Town of Barnstable, and the Town's unique community character by preservation, maintenance and improvement of appropriate settings for

such buildings, structures, and places, and the encouragement of new design which is compatible with the existing historical and community character (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-24).

24. Of four certificates of appropriateness previously granted for the existing tower only one raised the height by four (4) feet to the present height of one hundred four (104) feet (in 1998): the remaining three all certified work within the height of one hundred four (104) feet as appropriate (2003 for the installation of an emergency generator and fence at the tower base; 2008 for more fence; and 2013 to install two panel antennas, two remote radio heads and two surge arrestors within the eight (80) foot lease area and one panel antenna within the sixty-six (66) foot lease area) (staff memo 11/5/2018 Appeal doc. no. 10. Comm. doc. no. 5 Verizon proposed findings no. 2).
25. Verizon states in the narrative portion of its original application that it had obtained a Special Permit Modification from the Planning Board for the proposed tower extension (Appeal doc. no. 10. Comm. doc. no. 1).
26. Verizon included the Visual Analysis dated August 20, 2018 as an attachment to its original application to the Commission (Appeal doc. no. 10 Comm. doc. nos. 1 and 4)
27. At the May 1, 2019 hearing Verizon referred to the 106 report and peer review by Isotrope both of which were filed with the Planning Board (Appeal doc. no. 10. Comm. doc. no. 14). Verizon submitted the following exhibits, all originally filed with the Planning Board in Verizon's application for special permit modification: FAA Determination of no hazard to air navigation and section 106 excerpt (Exhibit C Appeal doc. no. 10. Comm. doc. no. 16); the full section 106 report (Exhibit D Appeal doc. no. 10. Comm. doc. no. 18); Visual Impact Analysis by Advanced Engineering Group, P.C. dated August 20, 2018 (Exhibit D Appeal doc. no. 10. Comm. doc. no. 4). Verizon also introduced its site plan approval as part of Exhibit C (Appeal doc. no. 10. Comm. doc. no. 16).
28. The evidence supports the Commission's proper reliance within time constraints in its decision on exhibits submitted by Verizon to the Planning Board and Site Plan Review and incorporated in Verizon's application and exhibits submitted to the Commission as well as references in its presentation.
29. The Commission's hearing was scheduled to commence on May 1, 2019 and the deadline to make a decision was May 7. With no agreement to continue the hearing and deadline for a decision in place prior to the May 1 scheduled meeting the May 1 meeting would be the only opportunity for the Commission to act prior to the May 7 decision deadline. Planning and Development Department staff prepared a staff report and distributed its staff report to Commission members and Verizon's Attorney Michael D on April 25, 2019 (Senior Planner Paul Wackrow memorandum dated October 10, 2019 Appeal doc. no. 15). The April 25, 2019 staff report contains proposed findings for approval and disapproval of Verizon's application for a certificate of appropriateness for the proposed tower extension (Appeal doc. no. 10. Comm. doc. no. 13) based on materials submitted by Verizon and referenced by Verizon's application (Paul Wackrow memorandum dated October 10, 2019 Appeal doc. no. 15).
30. The Commission hearing commenced on May 1, 2019. Verizon submitted draft findings at the hearing (Appeal doc. no. 10 Exhibit C Comm. doc. no. 16). After testimony, exhibits and public comment were introduced the hearing was continued to June 5, 2019 (minutes May 1 Appeal doc. no. 10 Comm. doc. no. 14) and the decision deadline was extended to June 12, 2019 by agreement (Appeal doc. no. 10 Comm. doc. no. 33).
31. As occurred prior to the May 1 meeting and May 7 deadline no agreement to continue the hearing and deadline for a decision were in place prior to the June 5 hearing and June 12 decision deadline. Without a continuance of the June 12 decision deadline in hand prior to the June 5 continued hearing the June 5 meeting would be the only opportunity for the Commission to act prior to the June 12 deadline (Senior Planner Paul Wackrow memorandum dated October 10, 2019 Appeal doc. no. 15). Planning and Development staff prepared draft motions to approve and deny a certificate

- of appropriateness (Appeal doc. no. 10. Comm. doc. no. 35) and modified the April 25 staff report to include information regarding resources listed on the National Register, details on resources within the Municipal Group Historic District, additional language from the Ordinance criteria for Commission determinations, a finding on public welfare related to the tower fall zone and the Commission's ability to review if additional technical evidence was submitted at the June 5 hearing (potential technical evidence (Senior Planner Paul Wackrow memorandum dated October 10, 2019).
32. The evidence establishes that the reports of April 25 and the draft motions submitted on June 5 were prepared and submitted by staff independently and in support of the Commission.
  33. Verizon requested and the Commission agreed to the following extensions totaling six (6) months to make a determination on its application: to January 23, 2019 requested at November 7, 2018 Commission meeting for unavailability of Verizon's consultant dated November 8, 2018 (Appeal doc. no. 10. Comm. doc. no. 6); to February 13, 2019 requested at January 16, 2019 Commission meeting for absence of 3 Commissioners dated February 4, 2019 (Appeal doc. no. 10. Comm. doc. no. 8); to February 27, 2019 dated February 4, 2019 for unavailability of Verizon Project Manager at February 6, 2019 Commission meeting (Appeal doc. no. 10. Comm. doc. no. 10); to April 10, 2019 for unavailability of Verizon Project Manager at February 20, 2019 Commission meeting dated February 14, 2019 (Appeal doc. no. 10. Comm. doc. no. 11); and to May 7, 2019 for unavailability of Verizon project management team member at April 3, 2019 Commission meeting dated April 1 and 2, 2019 (Appeal doc. no. 10. Comm. doc. no. 12).
  34. At the hearing on May 1, 2019 Verizon submitted 6 exhibits totaling 322 pages (Appeal doc. no. 10. Exhibits C - G Comm. doc. nos. 16 - 19) and testimony. Seven members of the public testified and eight members submitted exhibits totaling eight (8) pages (Appeal doc. no. 10. Exhibits J, N - T Comm. doc. nos. 20 - 24 and 26 - 31).
  35. At the hearing on May 1, 2019 Commission Chair Cheryl Powell requested additional time and a continuance of the hearing to review material submitted at the May 1, 2019 hearing and to place on the next meeting agenda a discussion of referral of Verizon's application to the Cape Cod Commission. Verizon's Attorney stated that Verizon was agreeable to a continuance of the hearing including a discussion of referral to the Cape Cod Commission. The hearing was continued to June 5 and the time to make a determination to June 12, 2019 (May 1 meeting minutes Appeal doc. no. 10. Comm. doc. no. 14).
  36. The Commission re-convened the hearing on June 5, 2019 and discussion of a referral to the Cape Cod Commission. Following discussion of a continuance Verizon presented oral testimony and the resume (Exhibit B Appeal doc. no. 10. Comm. doc. no. 39) of George Maier, Onion Broadcast Solutions and written testimony from Kevan Williams NEC Senior Systems Engineer (Exhibit C Appeal doc. no. 10. Comm. doc. no. 40) in rebuttal to comments made at the May 1 hearing (June 5 meeting Appeal doc. no. 10. Comm. doc. no. 37).
  37. The meeting on June 5, 2019 was the final Commission meeting prior to the June 12, 2019 decision deadline.
  38. The evidence demonstrates the lack of a continuance of the June 12 decision deadline left the Commission with insufficient time of one (1) month to hear and decide on the evidence presented at the May 1 and June 5 hearings.

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### Appeal 2019-02

Verizon New England, Inc. has appealed the decision of the Hyannis Main Street Waterfront Historic District Commission (HMSWHDC) to disapprove the Appellant's request for a Certificate of Hardship for the communications tower extension at 49 Ocean Street, Hyannis as described in the application submitted on October 23, 2018. The HMSWHDC voted to disapprove the application on June 5, 2019 and issued a determination of disapproval on June 11, 2019. The Appellant seeks reversal of the HMSWHDC decision and issuance of the Certificate of Hardship, consistent with proposed findings

provided by the Appellant, or a remand to the HMSWHDC for further proceedings consistent with the Decision of the Appeals Committee. The subject property is located at 49 Ocean Street, Hyannis, as shown on Assessor's Map 326 as Parcel 025. *Continued from July 25, 2019, September 12, 2019, and October 24, 2019.*

Mary- Ann Agresti states that not sure proven by the charts.

Chair Alison Alessi, based on the Isotrope report, gave a lot of reasons why other and/or another way to go , other opportunities. The Isotrope report. Data hard to read through, she hasn't heard from state or Nantucket that this is a total problem. Over water, she doesn't see the evidence that this is significant in relation to emergency services.

Sarah Colvin does understand communications over water a bit but it seems that if it was that much of a threat we would have heard more about this.

**Chair Alison Alessi entertains a motion to accept the Findings for the COH, moved by Mary- Ann Agresti , seconded by Sarah Colvin, so voted unanimously.**

Read into record:

- The Hyannis Main Street Waterfront District Commission specifically incorporates herein by reference finding numbers 1 through 5, inclusive, of its proposed findings in Verizon New England, Inc.'s (hereinafter "Verizon") appeal of the denial of a certificate of appropriateness for the proposed tower extension. The Appeals Committee accepts these findings (attached).
2. Verizon filed an application with the Commission for a Certificate of Hardship on October 23, 2018 to reinforce and extend by fifty (50) feet the height of its existing steel tower at 49 Ocean Street in Hyannis located within the district (Appeal doc. no. 10 Comm. doc. no. 2).<sup>1</sup>
  4. Verizon states in the narrative portion of its original application that it had obtained a Special Permit Modification from the Planning Board for the proposed tower extension (Appeal doc. no. 10 Comm. doc. no. 2).
  5. The Commission convened public hearings on Verizon's applications on May 1, 2019 (minutes Appeal doc. no. 10 Commn doc. no. 14) and June 5, 2019 (minutes Appeal doc. no. 10 Comm. doc. no. 37).
  6. The Commission issued a decision dated June 11, 2019 denying Verizon a certificate of hardship (Appeal doc. no. 10 Comm doc. no. 43).
  7. Verizon filed an appeal of the Commission denial on June 28, 2019.
  8. Planning and Development Department staff prepared and submitted supplementary materials related to the September 2018 Planning Board decision to the Commission dated January 11, 2019 consisting of the September, 2018 Planning Board decision granting special permit modification, undated Verizon comments attached to letter of Attorney Michael Ford dated August 22, 2018 on the last peer review report, affidavit from Michael Shea, affidavit from Joseph Baker and final peer review report to the Planning Board by Isotrope LLC funded by Verizon and conducted by David Maxson, WCP, of Isotrope, LLC dated September 12, 2018 (hereinafter "consultant's final report") (Appeal doc. no. 10 Comm. doc. no. 7).
  9. In his affidavit dated July 26, 2018, Mr. Baker states that "[K]nowing the history" of the path ("hop") of RF (Radio Frequency) transmissions between Hyannis and Nantucket over water is highly susceptible to atmospheric conditions, especially fog and rain delay, the transmitter heights between Hyannis and Nantucket are too low, and the combination would first cause minor signaling errors that would eventually lead to intermittent path failure especially during times of atmospheric volatility (Baker affidavit Appeal doc. no. 10 Comm. doc. no. 7).



10. Verizon was not experiencing a loss of voice calls to/from the mainland (including 911 calls) with the present system through September 12, 2018 (consultant's final report Appeal doc. no. 10 Comm. doc. no. 7).
11. "Knowing the history of the path" to establish a risk of minor signaling errors that could eventually lead to intermittent path failure especially during times of atmospheric volatility is based on intuition from observing fluctuations over time and not measurements by any quantifiable engineering methods (consultant's final report Appeal doc. no. 10 Comm. doc. no. 7).
12. The best practice to assess the risk of subrefraction events that cause the link to degrade or fail is to study historical logs of link performance, but "the Applicant keeps no logs." (consultant's final report Appeal doc. no. 10 Comm. doc. no. 7).
13. In 2014 Verizon replaced the existing Alcatel-Lucent radios and antennas providing the link from Hyannis to Nantucket in an effort to further improve the reliability of the "hop" (comments to Attorney Ford letter dated August 22, 2018 Appeal doc. no. 10 Comm. doc. no. 7).
14. A supplemental submittal analysis dated Feb 2014 of the existing 6GHz link predicts the existing link has a 99.99989% availability (34 seconds per year typical outage). (consultant's final report pg. 4 Appeal doc. no. 10 Comm. doc. no. 7).
15. The originally submitted proposed design analysis dated Mar 29, 2016 prepared by Verizon's vendor, NEC Corporation of America using the new antenna heights projected a 99.9995% availability (15 seconds per year typical outage). (consultant's final report pg. 4 Appeal doc. no. 10 Comm. doc. no. 7).
16. George Jessop, AIA Emeritus and former chair of the Commission submitted a letter dated January 16, 2019 which states the final consultant's report to be most credible, Verizon failed to show a need to increase the tower height, the link failure including 911 calls total 34 seconds per year at present, increasing the tower heights would reduce failure to 15 seconds per year, no loss of voice calls including 911 occurs with the present tower system and Verizon no data illustrating failure (Appeals doc. no. 10 Comm. doc. no. 23).
17. There is an alternate route already established via the Nantucket-Edgartown microwave link (George Jessop letter (Comm. doc. no. 23).
19. The Commission specifically incorporates herein by reference finding numbers 29 through 38, inclusive, of its proposed findings in Verizon's appeal of the denial of a certificate of appropriateness for the proposed tower extension. The Appeals Committee accepts these findings (attached).
20. The evidence establishes that the reports of April 25 and the draft motions submitted on June 5 were prepared and submitted by staff independently and in support of the Commission.
21. The Commission specifically incorporates herein by reference finding numbers 33 through 38, inclusive, of its proposed findings in Verizon's appeal of the denial of a certificate of appropriateness for the proposed tower extension. The Appeals Committee accepts these findings (attached).
22. Following discussion of a continuance Verizon submitted testimony of George Maier, Onion Broadcast Solutions and written testimony from Kevan Williams NEC Senior Systems Engineer (Exhibit C Appeal doc. no. 10 Comm. doc. no. 40) in rebuttal to the final consultant's report (June 5 minutes Appeal doc. no. 10 Comm. doc. no. 37).
23. George Maier testified that the circuits in the 1960s when the original height of one hundred (100) feet was established were analog, modern circuits are digital, the final consultant's report did not address fog and NEC did not take the worst case path profile (minutes June 5 Appeal doc. no. 10 Comm. doc. no. 37).
24. Kevan Williams' written testimony states in 2013 the path was using a 6Ghz radio, new 5000S microwave radio equipment was installed in 2014, Pathloss 5 software was used to model performance of the new 5000S microwave radio equipment, the new 5000S microwave radio equipment was evaluated in 2016, Verizon technicians asserted alarms and outages were occurring and he concluded the Hyannis tower height needed to be raised (Appeal doc. no. 10 Comm. doc. no. 40).

25. Pathloss software is “common off-the-shelf” used to predict link behavior for a new design with no logged performance, Verizon does not have logged performance data and the modeler uses the coarse estimation method in Pathloss that results in excessive antenna heights instead of Pathloss documentation which offers a more accurate method to estimate required antenna height (final consultant’s report page 3 Appeal doc. no. 10 Comm. doc. no. 7).
26. Neither Mr. Maier nor Mr. Williams rebut or contradict the final consultant’s report that reliance on path loss history volatility is based on intuition from observing fluctuations over time and not measurements by any quantifiable engineering methods, the 6GHz link predicts a 99.99989% availability (34 seconds per year typical outage) and Verizon kept no performance logs or logs showing any dropped calls.
27. The evidence supports the Commission’s finding that no conclusive evidence demonstrates failure to approve the proposed tower extension will involve substantial hardship, financial or otherwise, to Verizon (finding number 1 Appeal doc. no. 10 Comm. doc. no. 43), the tower extension results in a nearly imperceptible increase in reliability and there is no pressing need for the tower extension with respect to either public safety or the provision of Verizon’s telecommunications service (finding number 1(c) Appeal doc. no. 10 Comm. doc. no. 43).
28. The evidence supports the Commission’s finding that the Commission had insufficient time to consider the testimony of Mr. Maier and Mr. Williams submitted at the June 5 hearing (finding no. 4 Appeal doc. no. 10 Comm. doc. no. 43).
29. The Commission specifically incorporates herein by reference finding numbers 11 through 21, inclusive, of its proposed findings in Verizon’s appeal of the denial of a certificate of appropriateness for the proposed tower extension. The Appeals Committee accepts these findings (attached).
30. The evidence supports the Commission’s finding that the proposed tower extension will involve substantial derogation from the intent and purpose of the chapter to preserve, maintain and improve appropriate settings for buildings, structures and places (finding 2(a) Appeal doc. no. 10 Comm. doc. no. 43) and the district generally (Code 112-12(B)(1)) by significantly increasing the visibility of a structure that will be incompatible with the character of the Hyannis Main Street Waterfront Historic District from major streets, public parks and Hyannis Harbor.
31. The evidence supports the Commission’s finding (finding no. 3 Appeal doc. no. 10 Comm. doc. no. 43) that the proposed tower extension will involve substantial detriment to the public welfare, including “educational, cultural, economic and general welfare of the inhabitants of the Town of Barnstable” referenced in in Section 112-24, Purpose, of District regulations, by:
  - a. Significantly increasing the height and visibility of a structure incompatible with the preservation and protection of the distinctive characteristics of buildings, structures, and places significant in the history and architecture of Barnstable;
  - b. Extending a tower that will be incompatible with the preservation of appropriate settings for such buildings, structures, and places significant in the history and architecture of Barnstable;
  - c. Extending a tower that will be in incompatible with the existing historical and community character; and
  - d. Failing to preserve and enhance the amenities and historical aspects of the various villages and areas which make Barnstable a desirable place to live and for tourists to visit.
  - e. Extending a tower in a location approximately eighty (80) feet from Town Hall, approximately twenty-five (25) feet from the Village Green landscape, the Harbor Overlook, and Artist Shanties, all within the tower’s fall zone (EBI 106 report Appx. C site plan Z-1 Appeal doc. no. 10 Exhibit D May 1 hearing Comm. doc. no. 18 Exhibit A June 5 hearing Appeal doc. no. 10 Comm. doc. no. 38).

32. The evidence supports the Commission's decision as being within the Commission's authority to oversee the Hyannis Main Street Waterfront Historic District (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27(A)) to carry out the purposes of the Hyannis Main Street Waterfront Historic District (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-27) to promote the educational, cultural, economic and general welfare of the inhabitants of the Town of Barnstable, and the Town's unique community character by preservation, maintenance and improvement of appropriate settings for such buildings, structures, and places, and the encouragement of new design which is compatible with the existing historical and community character (Code of the Town of Barnstable, General Ordinances, Chapter 112, Article III, Section 112-24).
33. Isotrope LLC ("Isotrope") previously found that the basis for Verizon's proposed Hyannis tower extension project was anecdotal based on a Verizon technician's opinion observing network outages lacking the fundamentals of best-practices in communication engineering and without the benefit of technical logs of network performance (Commission proposed hardship finding nos. 11 and 12 Commission proposed appropriateness finding nos. 25 – 28 peer review 10/11/2019 pg. 1 Appeals doc. no. 16).
34. Verizon submitted a written statement dated September 10, 2019 by Kevan Williams Senior Systems Engineer for Verizon's equipment vendor, NEC Corporation of America ("written statement") (Appeals Comm. doc. no. 12) , twelve graphs of logged network performance of the Hyannis/Nantucket microwave link performance ("link") in the form of powerpoint slides ("graphs") (Appeals Comm. doc. no. 12) and testimony of George Maier, Orion Broadcast Solutions at the September 12, 2019 Committee meeting.
35. The Committee commissioned a peer review by Isotrope of the written statement and graphs and the minutes and exhibits of the June 5, 2019 Commission hearing.
36. Isotrope delivered its peer review report ("peer review") to the Committee on October 11, 2019 (Appeal Committee doc. no. 16).
37. The graphs show no depressed averages of logged data (blue lines) indicating any prolonged deep fades occurred on any day on any system of the link during the measured time period (peer review pg. 8 Appeal Committee doc. no. 16).
38. The graphs' threshold for a deep link fade at or below -70 dBm (graph red lines) only indicate a deep link fade at least once on the particular day and not any quantity, frequency or duration of link fades on any given day (peer review pg. 8, fn. 1 pg. 8, pg. 25 Appeal Committee doc. no. 16).
39. The detailed log data collected by Verizon for the graphs should provide the "fingerprint" of link performance comprised of signal levels, antenna diversity status, loss of synch, bit error rate thresholds, loss of RF and similar information over the long term (peer review pg. 8 Appeal Committee doc. no. 16).
40. Without data characterizing the current outage fingerprints it cannot be assumed that any incremental improvement by greater antenna spacing by the tower extension in Hyannis (Commission proposed hardship finding nos. 14 and 15) will be substantial (peer review 10/11/2019 pg. 11 Appeals Comm. doc. no. 16). The link on the graphs with the most days with deep fades across the 38-day period is the Nantucket System (4 days with deep fades). Nantucket already has the desired forty (40) foot antenna separation. A change in the Hyannis antenna separation by raising the Hyannis tower height as proposed will not affect Nantucket reception issues (peer review pg. 8 Appeal Committee doc. no. 16).
41. The PNMSj+ software used to prepare the graphs shows only the link toward Nantucket had more than four (4) days below the -70dBm threshold and cannot be characterized as significant signal loss during the 38 days Verizon monitored the microwave link using the PNMSj+ software without outage logs (peer review 10/11/2019 pg. 24 Appeal doc. no. 16).
42. The graphs show an average signal level of approximately -38dBm level overall (blue lines). The deep link fade level at or below -70dBm which is consistent with Mr. Maier's testimony of a threshold is 32dB below average and an approximately 54% drop in received signal not a 70% drop in received signal as stated by Mr. Williams' written statement. Peer review 10/11/2019 pg. 24 Appeal doc. no. 16.

43. Signal drops that fall below the threshold and cause outages are not logged (peer review 10/11/2019 pg. 24 Appeal doc. no. 16).
44. The data verifies the path is not optimized to minimize reflective fades according to Mr. Williams' written statement, however the proposed tower height increase does not address reflective fading but Verizon's belief that subrefractive events will cause signal blockage which is key to the proposed height (peer review 10/11/2019 pg. 25 Appeal doc. no. 16).
45. The data is insufficient to prove that the existing twenty (20) foot antenna separation at Hyannis and increasing the height of the tower as Verizon proposes will materially reduce signal fading (peer review 10/11/2019 pg. 25 Appeal doc. no. 16).
46. Verizon's equipment vendor, NEC Corporation of America, installed the very capable Model 5000S point-to-point three-channel digital microwave radio to the system in 2013 (Exhibit C June 5 2019 Commission hearing Appeal doc. no. 10 Comm. doc. no. 40). Model 5000S radios are designed for frequency diversity using all but one of the radio channels for regular service to allow the inactive channel to activate during a fade on a regular service channel. According to the testimony there are no capacity issues prohibiting one of the existing three channels or a fourth channel to become inactive and active when fading occurs. (peer review 10/11/2019 pgs. 28 - 29 Appeal doc. no. 16).
47. The peer review evidence supports the Commission's or Committee's finding that no conclusive evidence demonstrates failure to approve the proposed tower extension will involve substantial hardship, financial or otherwise, to Verizon.

**Chair Alison Alessi entertains a motion to uphold the HHDC Decision, moved by Mary- Ann Agresti, seconded by Sarah Colvin, so voted unanimously.**

**Approval of Minutes:** October 24, 2019

Paul Wackrow states that we can do both sets of draft minutes at the next meeting/schedule a separate meeting.

### **Adjourn**

**Chair Alison Alessi entertains a motion to adjourn, moved by Sarah Colvin, seconded by Mary- Ann Agresti, so voted unanimously.**

### **Matters not Reasonably Anticipated by the Chair**

The meeting adjourned at 7:59 p.m.

Respectfully Submitted  
Karen Herrand

### **List of Exhibit Documents**

**Exhibit A** – Staff Report dated November 13, 2019 – Petitions for Appeal

**Exhibit B** - Exhibits from Mary-Ann Agresti handed out at meeting – pictures/examples of concealed towers