

Sean Gormley  
Project Manager  
Blue Sky Towers II, LLC  
352 Park Street, Suite 106  
N. Reading, MA 01864

RE: Proposed Wireless Communication Facility  
Site: Mashpee Fire Station #2  
101 Red Brook Rd  
Mashpee, MA 02649

December 20, 2018

Dear Mr. Gormley,

I have completed a market study investigating the potential impact that cellular towers may have on adjacent residential property values.

The intended user of this report is the Mashpee, MA Land Use Permitting Boards in their deliberations relative to the applications submitted by your firm.

The purpose of this study is to provide substantive data to answer the following question: *Will the granting of the application diminish the value of surrounding properties?*

This letter contains a summary of my research into this question and the rationale used to arrive at my conclusions.

The work consists of a viewing of the area around the tower site, a review of the materials relating to the proposed tower and research into sales of properties throughout the region that are in close proximity or have visual exposure to a cellular communication tower.

Also included in this report are the results of a national survey of appraisers regarding this question and information obtained from other appraisers known to have researched this same question.

It is my opinion that the proposed tower will have no measurable impact on surrounding property values due to proximity or visibility.

Sincerely,



Mark Correnti, SRA  
Massachusetts Certified Residential Appraiser, 103752  
New Hampshire Certified Residential Appraiser, NHCR-460  
Managing Member  
FairMarket Advisors, LLC

Copyright

This report is copyrighted. ALL RIGHTS RESERVED. It is only for the use of the Mashpee, Massachusetts Land Use Permitting Boards. No part of this document may be reproduced, stored or transmitted in any form, for any reason or by any means, whether re-drawn, enlarged or otherwise altered including mechanical, photocopy, digital storage & retrieval or otherwise, without the prior written permission from FairMarket Advisors, LLC., the copyright owner. The text, layout and designs presented in this document, as well as the document in its entirety, are protected by the copyright laws of the United States (17 U.S.C. 101 et seq.) and similar laws in other countries.

Assumptions and Limiting Conditions

This report is written subject to the following assumptions and limiting conditions. Because a proper understanding of the analysis and conclusions contained in this report requires an awareness of these assumptions and limiting conditions, parties using this report are asked to carefully review and consider them when reading the report.

This report is written with the understanding and intention that it is to be used *only* in conjunction with the request before the Mashpee, MA Land Use Permitting Boards.

The information contained in this report is specific to the needs of the client and for the intended use stated in the report. Parties using this report for any purpose other than that stated herein must assume full responsibility and do so at their own risk. FairMarket Advisors, LLC cannot accept any responsibility for any damages suffered by third parties because of the unauthorized or inappropriate use of this report.

This report is prepared for the exclusive use of the client identified in this report. The report is based upon the data available to me at the time of preparation of this document.

Distances estimated from the sales to the towers are based upon GIS technology, not physical measurements by the author.

Because of this report, I am not required to give further consultation, testimony, depositions, or be in attendance for any legal proceeding regarding the subject matter unless prior arrangements have been previously made.

Information contained herein that has been obtained from third parties is assumed to be correct and reliable.

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General comment

A commonly held opinion is that the value of a home is negatively affected if it is close to a cell tower or a cell tower can be seen from the property.

Randall Bell, PhD. MAI has written extensively about property damages: in his work Real Estate Damages: An Analysis of Detrimental Conditions<sup>1</sup>, makes the following statement:

“The most significant issue in assessing the consequences of a detrimental condition on residential property values is the general predisposition of people to believe that detrimental conditions affect residential property values...*If market value is going to be affected, then this particular detrimental condition has to be given enough weight in the decision process of buyers and sellers to have a material effect on the price.*

In other words, the detrimental condition issue has to be important relative to all the other variables that influence the home purchase decision, (public safety, quality of schools, access to employment ... special features of the home, affordability, etc.)”

Appraisers can examine data to determine if a detrimental condition (cell tower) affects value by application of sensitivity analysis which is a method used to isolate the effect of individual variables on value.

The two most common types of sensitivity analysis used in general real estate practice are:

1. Paired sales by which two properties - one with cell tower influence is matched to a similar property without cell tower influence to see if there is a price difference that can be attributed to the cell tower.
2. Grouped data analysis which matches a property with cell tower influence to the median price paid for groups of sales of similar properties without the cell tower influence. Again, to see if there is a price difference attributable to the cell tower. Similar properties are properties a typical buyer would find to be acceptable alternatives to the property with the cell tower influence (similar style, size, etc.).

Due to the diversity of home styles in New England, most appraisers use grouped data analysis.

Buyers are the *market makers*; only through their buying decisions can it be determined if and to what extent the presence or absence of a neighborhood attribute influences value.

For this report sales in residential neighborhoods in Mashpee and Barnstable located close to cell towers were identified and grouped data analysis is used to see if the presence of the tower impacted the sale price.

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<sup>1</sup>Bell, Randall, Real Estate Damages: An Analysis of Detrimental Conditions, Chicago: Appraisal Institute 1999, page 38.

Data limitations – Scarcity

To understand the impact of cell towers on residential values we attempt to locate sales of single-family residences that have recently sold and also have a view of a cell tower.

Whenever possible an attempt to obtain local data is made first, however sales located less than 1,000 feet or closer to a tower or that have a view of a tower are scarce.

The FCC maintains a database of registered communication towers and arrays. In Mashpee there is currently four towers located in the community. Two towers are located on Industrial Drive and the other two are located on Echo Rd. The two towers on Echo Rd are in close proximity to runways at the Otis Air National Guard base. The two towers on Echo Rd are dismissed as a viable study area to use as there is a competing external influence in the form low flying aircraft.

This report contains information on four residences that have sold in Mashpee and two in Barnstable; all having some visibility of a cell tower. The view from each sale included in this report is different and depends on topography, distance, tree cover and home orientation to the tower.

Certification

The undersigned certifies that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, are my personal, impartial, and unbiased professional analyses, opinions, conclusions and recommendations.

I have provided the following valuation<sup>2</sup> services on the property within the preceding three years from the date of this letter: None.

I have no present or prospective interest in the subject property, I have no personal interest with respect to the parties and I have no bias with respect to the subject property or to the parties involved with this assignment.

My engagement in this assignment was not contingent upon developing or reporting predetermined results.

My compensation for completing this assignment is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this information.

My analyses, opinions and conclusions were developed, and this letter has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice.

I have inspected the subject property. I have studied the plans, reviewed the community GIS data and municipal records about the property. I have also discussed the property with the client and believe I have a sufficient understanding of the attributes unique to the property.

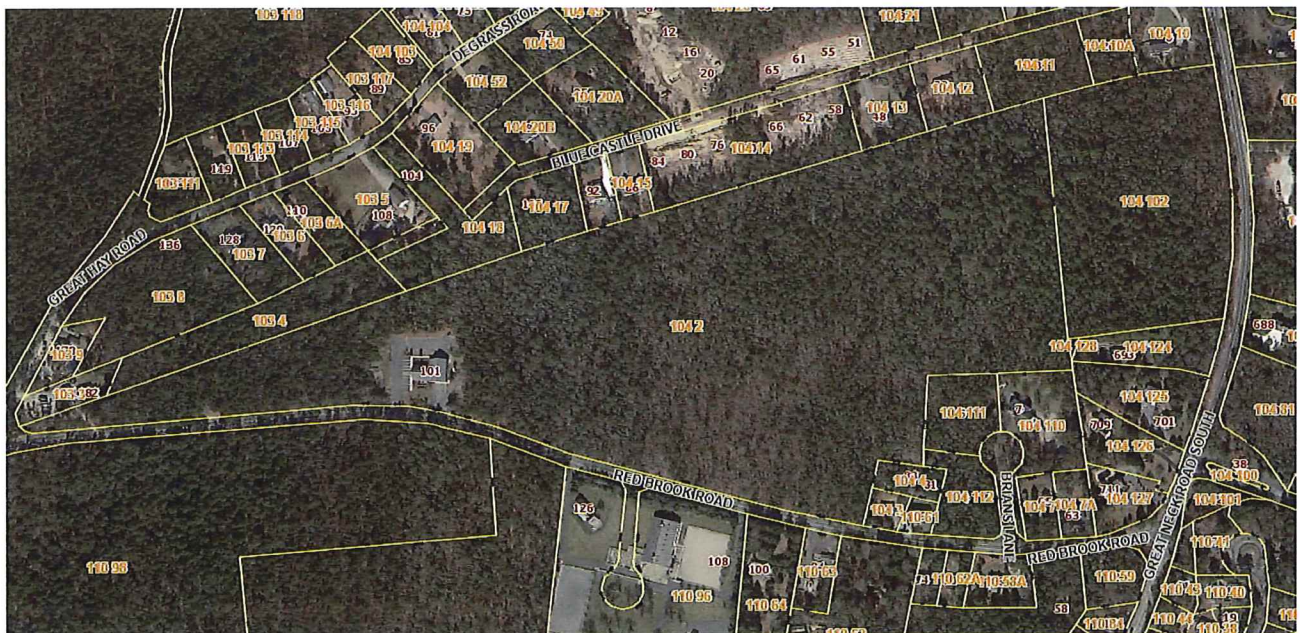
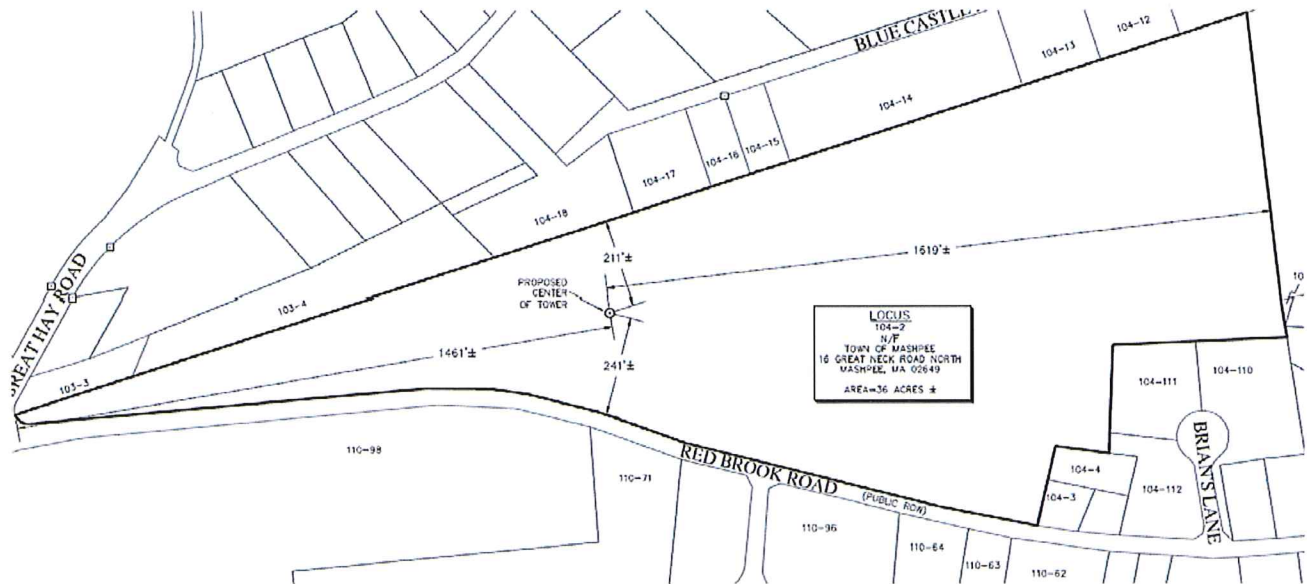


Mark Correnti, SRA  
Massachusetts Certified Residential Appraiser, 103752  
New Hampshire Certified Residential Appraiser, NHCR-460  
Managing Member  
FairMarket Advisors, LLC

Property description: 101 Red Brook Rd Mashpee, MA (Mashpee Tax Map 104 Lot 2)

Proposed Site

The proposed site is in the Residential District (R-3) zoning district and is subject to the requirements of both the Wireless Facility Overlay and Groundwater Protection Overlay districts. The site is 36 acres in size, is owned by the town of Mashpee, and is being used as the town of Mashpee fire station. With the exception of the 5,200-sf fire station the parcel is primarily wooded.



Town of Mashpee GIS System tax parcel mapping. Subject parcel is 104-2

Surrounding land uses are primarily single-family residential. The surrounding residential sites vary significantly in terms of size, style, and value.

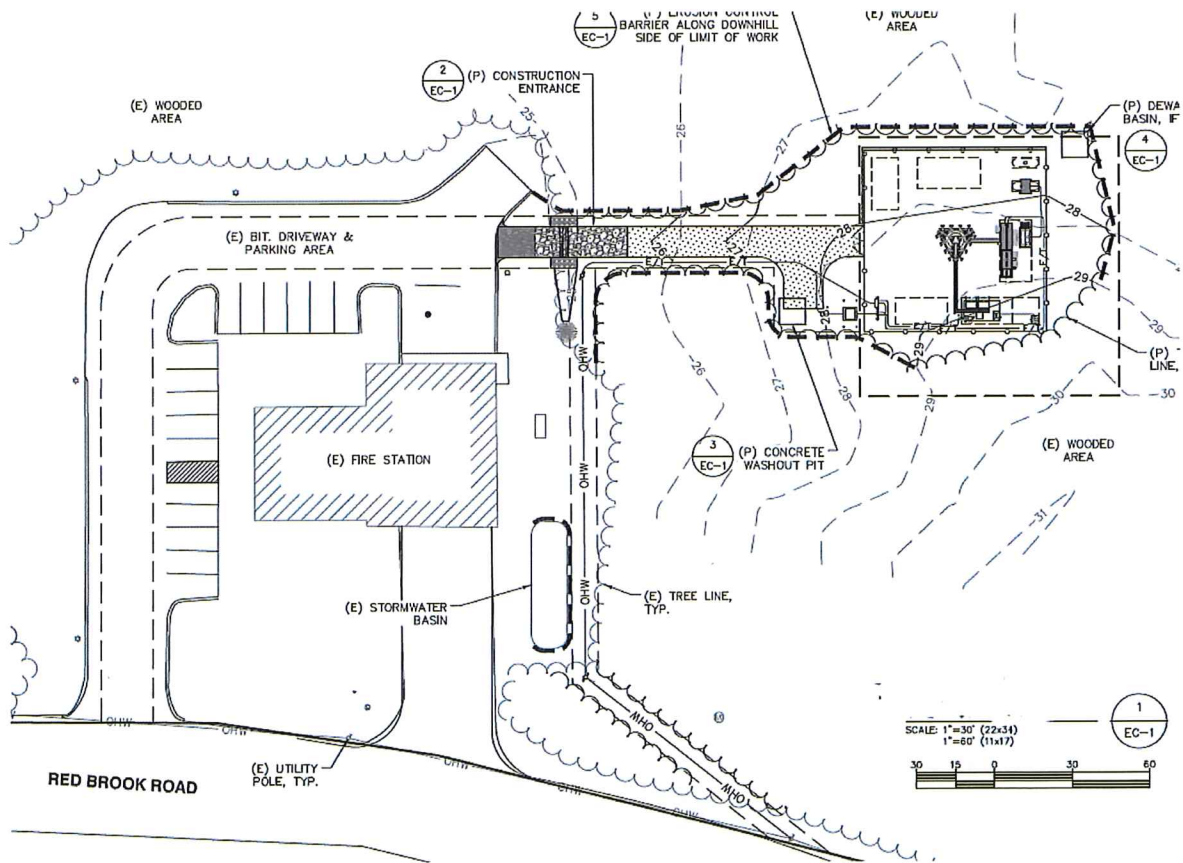


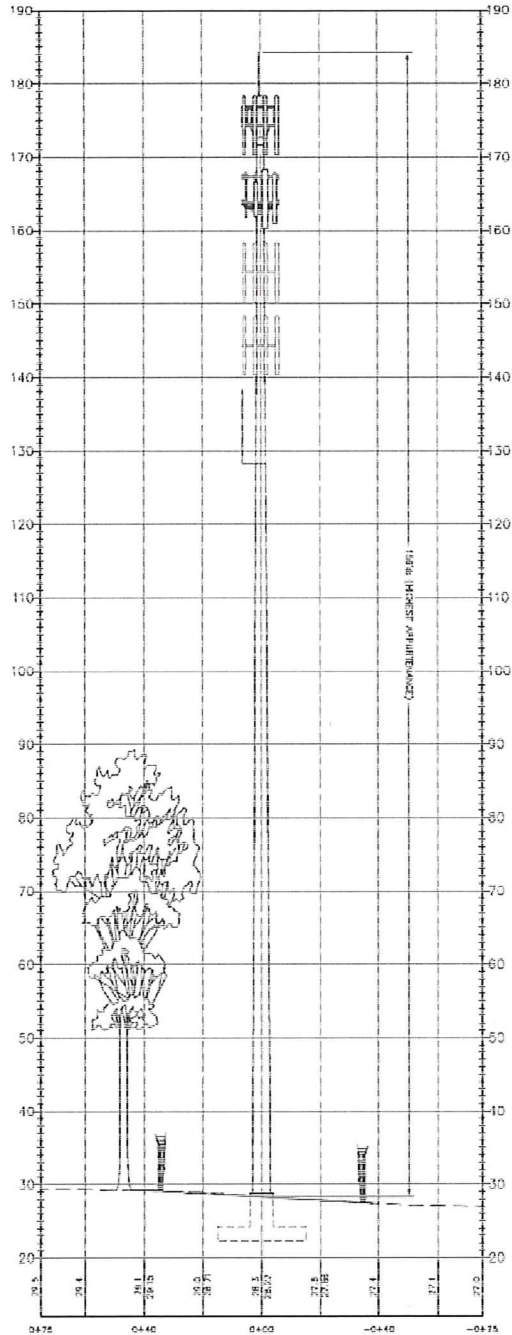
Proposed site as seen on October 4, 2018



Entrance/street scene

A 150' monopole with a 70' x 70' fenced compound is proposed to be located in a wooded section of the parcel approximately 200' east of the fire station. The proposed 150' tower (156' with lightning rod) would be located at Latitude: 41 degrees 35 minutes 2.89 seconds north and Longitude 70 degrees 29 minutes 3.08seconds west as depicted on the following pages.







Community based research

Over the past several years I have researched the issue of residential property values and cell towers throughout New England, the primary focus being in New Hampshire and Massachusetts.

The research consists of identifying recent sales of homes having either proximity to or a view of a communication tower within the community considering the development of a new tower. Often data from surrounding communities is researched and included to supplement local data. The communities may differ in characteristics, but together provide a good indication of the effect on the value of residential properties located near or having view of cell towers.

My research focuses on sales that have visibility of a tower or are 1,000 feet or closer to the tower. All sales found to have visibility are included regardless of distance to provide additional data for the reader to consider.

Each property sale is shown in *bold italics* underneath each are the medians calculated for the competitive sales examined. The data (from left to right) is: the number of competitive sales, the size range examined, the median lot size in acres, listing price, sale price, percent variance between the list and sale price, room, bedroom, bath count, garage size and average days on market.

This type of comparison enables identification of sales with substantial deviation from the median. If a sale presents a substantial deviation from the median further review is done to determine the reason for the deviation. An explanation for the deviation is provided as needed.

Mashpee, MA research

The property located at 9 Nancy Ln sold July 21, 2006 for \$370,000. This is a 6- room 3-bedroom cape from which the 250-foot-high tower located on Industrial Drive can clearly be seen.



The tower on Industrial Dr is 879' from 9 Nancy Dr. and is visible from the front yard



Driveway to 9 Nancy Ln at white mailbox at left.

9 Nancy Ln sold for more than the median price of 37 similar style homes in a shorter time frame.

| count      | Street                  | Acres       | Style       | Yr Built    | Closed           | List             | Sale             | Spread     | SqFt Fin     | Rms      | BR       | Baths      | Gar.     | DOM       |
|------------|-------------------------|-------------|-------------|-------------|------------------|------------------|------------------|------------|--------------|----------|----------|------------|----------|-----------|
| 75         | Median                  | 0.44        |             | 1987        | ≥ 6 months ≤     | \$369,000        | \$357,500        | 99%        | 1,638        | 6        | 3        | 2.0        | 1        | 74        |
| <b>Viz</b> | <b>9 Nancy Ln</b>       | <b>0.94</b> | <b>Cape</b> | <b>1993</b> | <b>7/21/2006</b> | <b>\$374,900</b> | <b>\$370,000</b> | <b>99%</b> | <b>1,428</b> | <b>6</b> | <b>3</b> | <b>2.0</b> | <b>1</b> | <b>43</b> |
| 37         | ≥ 1,200 sf - 1,800 sf ≤ | 0.48        |             | 1987        | ≥ 6 months ≤     | \$339,450        | \$327,500        | 96%        | 1,525        | 6        | 3        | 2.0        | 1        | 87        |

This sale indicates the view of the tower had no effect on the price or marketing time.

12 Windermere Way sold on December 15, 2010 for \$252,100. It is a 1,332-sf ranch built in 1988. From the front yard it has a view of the same cell tower that is visible over a house directly across the street from it.





View of cell tower from the front yard of 12 Windermere Way

Although 12 Windermere Way is 1,130' from the tower, it is clearly visible from the residence.

| count      | Street                  | Acres       | Style        | Yr Built    | Closed            | List             | Sale             | Spread     | SqFt Fin     | Rms      | BR       | Baths      | Gar.     | DOM       |
|------------|-------------------------|-------------|--------------|-------------|-------------------|------------------|------------------|------------|--------------|----------|----------|------------|----------|-----------|
| 103        | Median                  | 0.39        |              | 1988        | ≥ 6 months ≤      | \$339,000        | \$317,000        | 94%        | 1,700        | 6        | 3        | 2.0        | 1        | 91        |
| <i>Viz</i> | <i>12 Windermere Wy</i> | <i>0.92</i> | <i>Ranch</i> | <i>1988</i> | <i>12/15/2010</i> | <i>\$289,000</i> | <i>\$252,100</i> | <i>87%</i> | <i>1,332</i> | <i>5</i> | <i>3</i> | <i>2.0</i> | <i>1</i> | <i>88</i> |
| 35         | ≥ 1,100 sf - 1,800 sf ≤ | 0.39        |              | 1988        | ≥ 6 months ≤      | \$254,900        | \$245,000        | 96%        | 1,428        | 6        | 3        | 2.0        | 1        | 83        |

12 Windermere sold slightly above its peers in relatively the same time period.

114 Dover Road is 1,687 sf cape that sold on June 30, 2015 for \$362,000. It has a view of a different tower that is 775' away and is also on Industrial Drive.





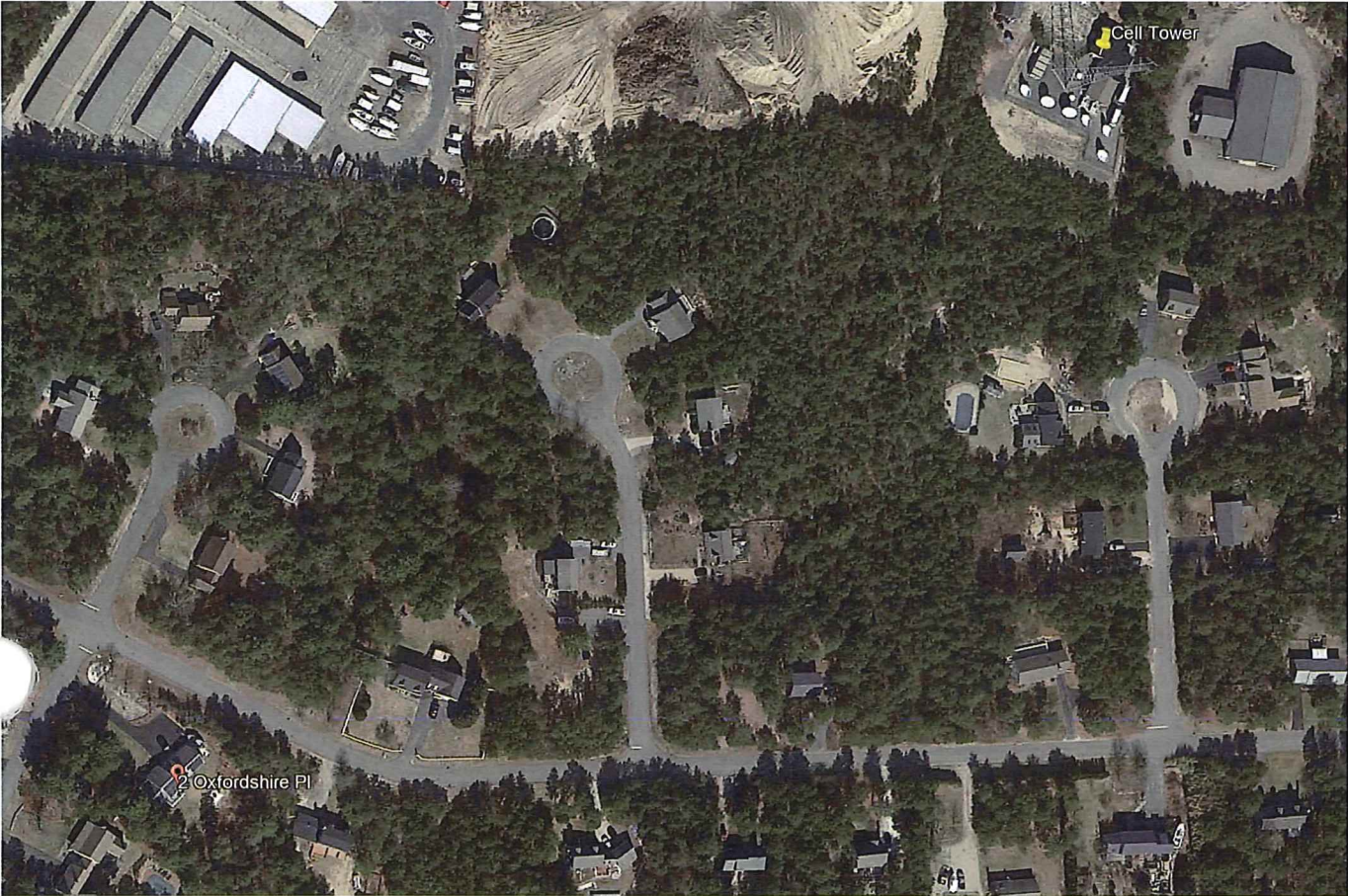
114 Dover Rd is the cape style residence on the right.

114 Dover Rd is unique as it also has an inground pool. It was compared to other residences that sold in Mashpee that were similar in age, style, and size, that also had an inground pool. At the time of its sale in 2015, 114 Dover Rd did not have solar panels. Because this was a feature added after the 2015 sale, the solar panels were not considered in the analysis.

| count      | Street              | Acres       | Style       | Yr Built    | Closed           | List             | Sale             | Spread     | SqFt Fin     | Amenity              | Rms      | BR       | Baths      | Gar.     | DOM       |
|------------|---------------------|-------------|-------------|-------------|------------------|------------------|------------------|------------|--------------|----------------------|----------|----------|------------|----------|-----------|
| 180        | Median              | 0.35        |             | 1987        | ≥ 6 months ≤     | \$349,900        | \$345,250        | 99%        | 1,710        | No pool              | 6        | 3        | 2.0        | 1        | 51        |
| <b>Viz</b> | <b>114 Dover Rd</b> | <b>0.93</b> | <b>Cape</b> | <b>1994</b> | <b>6/30/2015</b> | <b>\$369,900</b> | <b>\$360,000</b> | <b>97%</b> | <b>1,687</b> | <b>Inground pool</b> | <b>6</b> | <b>3</b> | <b>2.0</b> | <b>0</b> | <b>13</b> |
| 4          | Inground pool       | 0.31        |             | 1980        | ≥ 6 months ≤     | \$354,450        | \$359,950        | 102%       | 1,692        | Inground pool        | 7        | 3        | 2.0        | 1        | 191       |

The data shows that 114 Dover Rd sold at relatively the same price as similar residences with inground pools in significantly less time.

Oxfordshire Pl is located 1,250' from a cell tower on Industrial Dr. and is included in this analysis as it es have a view of one of the aforementioned cell towers.





View of cell tower from the street at 2 Oxfordshire Pl

| count      | Street                  | Acres       | Style       | Yr Built    | Closed           | List             | Sale             | Spread     | SqFt Fin     | Rms      | BR       | Baths      | Gar.     | DOM       |
|------------|-------------------------|-------------|-------------|-------------|------------------|------------------|------------------|------------|--------------|----------|----------|------------|----------|-----------|
| 162        | Median                  | 0.34        |             | 1987        | ≥ 6 months ≤     | \$359,000        | \$344,250        | 99%        | 1,662        | 6        | 3        | 2.0        | 1        | 77        |
| <b>Viz</b> | <b>2 Oxfordshire Pl</b> | <b>0.94</b> | <b>Cape</b> | <b>1993</b> | <b>6/26/2014</b> | <b>\$374,900</b> | <b>\$370,000</b> | <b>99%</b> | <b>2,051</b> | <b>7</b> | <b>3</b> | <b>2.5</b> | <b>2</b> | <b>17</b> |
| 19         | ≥ 1,800 sf - 2,400 sf ≤ | 0.48        |             | 1989        | ≥ 6 months ≤     | \$379,900        | \$355,000        | 93%        | 2,100        | 7        | 3        | 2.0        | 2        | 70        |

2 Oxfordshire Pl is a 2,051-sf cape that sold on June 26, 2014 for \$370,000. It sold above its peers in significantly less time.

With regards to any of the above-mentioned properties in Mashpee, On October 4, 2018 I had inquired with the assessing office in person if there had been any tax abatements filed due to a view of a cell tower. Tax abatement material was not available for public viewing, however the Director of Assessing, Mr. Jason Streebel had told me that in his years in service on the Mashpee Board of Assessors that he has never seen an abatement filed due to a view or proximity to a cell tower.

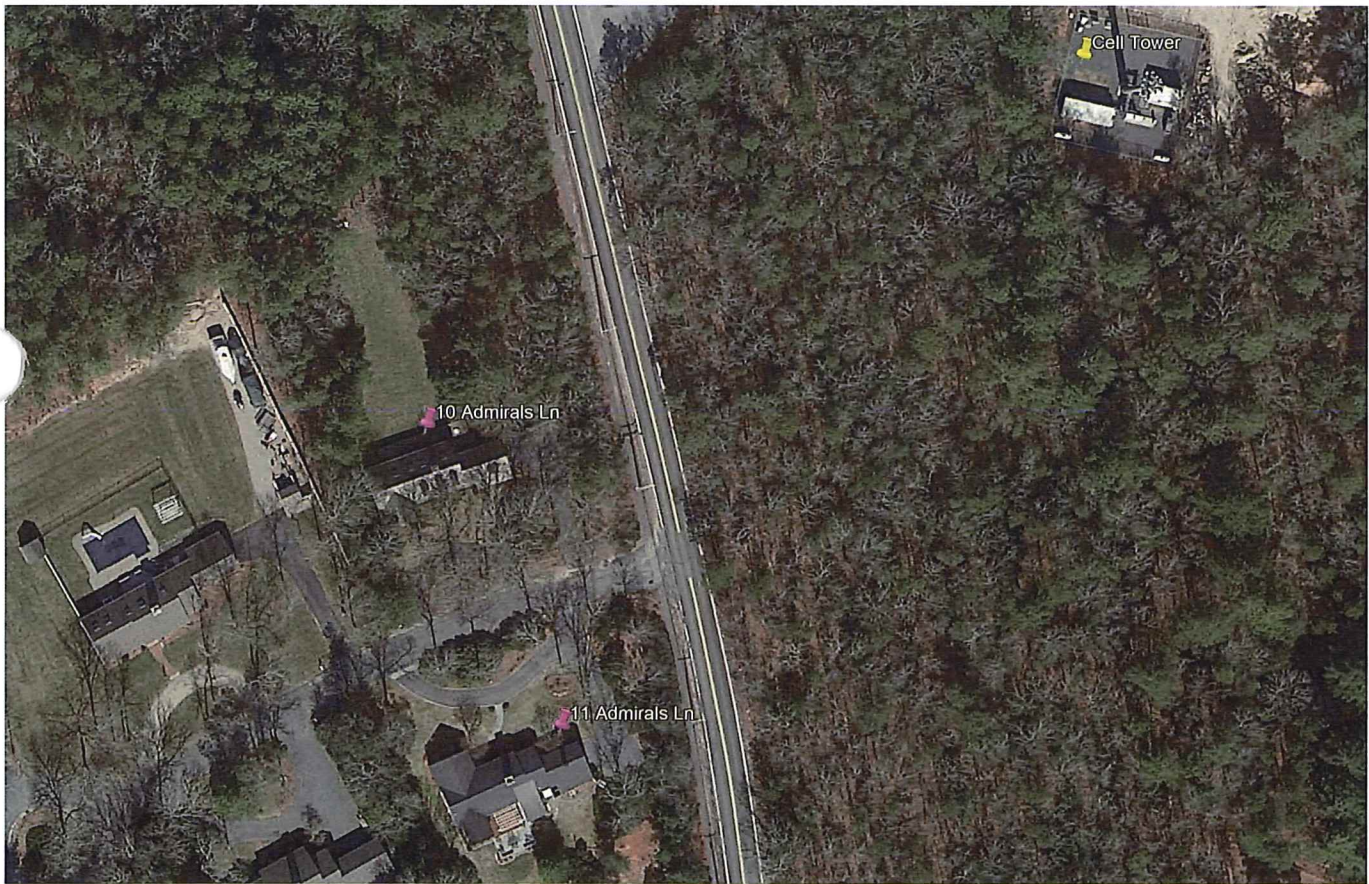


Barnstable, MA research

Due to the lack of cell towers in Mashpee coupled with the lack of residential sales that had views of cell towers, the search parameters were expanded to include the nearby town of Barnstable.

The two towers in Mashpee were visible from a single neighborhood in Mashpee. Expanding the search parameters to include different neighborhoods allows a different perspective from neighborhoods with different price points.

Admirals Lane in Osterville is a street of high-end residences. Both 10 and 11 Admirals Ln are located at the corner of Admirals Lane and Main Street. Directly across the street is a 150' cell tower.



10 and 11 Admirals Lane are 400' and 490' respectively from the cell tower. The tower is visible from the driveways of each - more so in the winter months.

| count      | Street                  | Acres       | Style       | Yr Built    | Closed           | List             | Sale             | Spread     | SqFt Fin     | Rms      | BR       | Baths      | Gar.     | DOM        |
|------------|-------------------------|-------------|-------------|-------------|------------------|------------------|------------------|------------|--------------|----------|----------|------------|----------|------------|
| 51         | Median                  | 0.42        |             | 1977        | ≥ 6 months ≤     | \$399,000        | \$390,000        | 99%        | 1,636        | 6        | 3        | 2.0        | 1        | 37         |
| <b>Viz</b> | <b>10 Admiral Way</b>   | <b>1.22</b> | <b>Cape</b> | <b>1978</b> | <b>5/21/2018</b> | <b>\$849,000</b> | <b>\$815,000</b> | <b>96%</b> | <b>2,300</b> | <b>6</b> | <b>3</b> | <b>2.5</b> | <b>2</b> | <b>222</b> |
| 87         | ≥ 1,800 sf - 2,800 sf ≤ | 0.56        |             | 1986        | ≥ 6 months ≤     | \$479,900        | \$459,900        | 96%        | 2,114        | 7        | 3        | 2.5        | 2        | 60         |

| count      | Street                  | Acres       | Style       | Yr Built    | Closed           | List             | Sale             | Spread     | SqFt Fin     | Rms      | BR       | Baths      | Gar.     | DOM      |
|------------|-------------------------|-------------|-------------|-------------|------------------|------------------|------------------|------------|--------------|----------|----------|------------|----------|----------|
| 534        | Median                  | 0.43        |             | 1978        | ≥ 6 months ≤     | \$384,900        | \$365,000        | 95%        | 1,600        | 6        | 3        | 2.0        | 1        | 41       |
| <b>Viz</b> | <b>11 Admiral Way</b>   | <b>1.18</b> | <b>Cape</b> | <b>1979</b> | <b>11/2/2017</b> | <b>\$849,000</b> | <b>\$835,000</b> | <b>98%</b> | <b>2,348</b> | <b>9</b> | <b>3</b> | <b>2.5</b> | <b>2</b> | <b>6</b> |
| 115        | ≥ 1,800 sf - 2,800 sf ≤ | 0.53        |             | 1985        | ≥ 6 months ≤     | \$499,000        | \$475,000        | 95%        | 2,127        | 7        | 3        | 2.5        | 2        | 53       |

The sales data for both show that Admirals Ln is an exclusive and desirable location, both residences are well appointed and updated. The relatively close proximity and slight views of the nearby 150' cell tower has not negatively impacted the desirability, marketability, or value of either.

#### Additional research materials

To augment the findings presented thus far included in the addendum is the results of a survey of assessors and appraisers and statements and conclusions from reports prepared by other appraisers who have completed similar research to determine if verifiable market data exists supporting the opinion that the presence of a cell tower has a deleterious impact on surrounding property values.

The additional data all indicates that there is no data to support the contention that there is a measurable impact on home values due to the proximity of a communication tower.

#### Summary and Conclusion

Objection to site development for cell towers usually comes from a change in the view from an abutting property. This change causes surrounding landowners to assume that their property will lose value because the of a view of a tower reduces value. This report contains sale data of homes with a view of a cell tower that have sold; these sales do not support the value loss assumption.

Based upon the national e-mail survey of appraisers and assessors, research into properties located close to or having visual exposure to communication towers that have sold in Massachusetts, data obtained from other appraisers researching this same issue and a review of numerous reports prepared by other qualified appraisers; I am unable to find any data or proof that there is a measurable impact on home values due to the proximity of a communication tower, or that property values are diminished due to the ability to see a tower from a property.

Therefore, it is my opinion that the construction at the proposed location identified in this report will have no measurable impact on surrounding property values.

ADDENDUM

General market research

A national e-mail survey of appraisers and assessors was initiated. The purpose of this survey is to obtain input from appraisal and assessment professionals from a broader perspective to see what other professionals have observed. On the following pages is an explanation of how the survey was conducted, quotations received from some of the respondents and a tabular summary of the communities covered by the responses.

The survey information is followed by statements and conclusions from reports prepared by other appraisers who have completed site-specific analysis or general market research to determine if verifiable market data exists supporting the opinion that the presence of a cell tower has a deleterious impact on surrounding property values.

National Survey of Appraisers & Assessors

A national e-mail survey of appraisers and assessors was initiated in 2009. The purpose of this survey is to obtain input from appraisal and assessment professionals from a broader perspective to see what other professionals have observed.

A total of 172 replies were received from 146 communities in 15 states with a total population more than 13,500,000 people. The communities range in size from Waterville Valley NH population 257 to Seattle WA population 3,554,760. This is a very diverse mix of communities with differences in socio-economic and geographic influences.

The survey solicited responses to the follow three questions:

1. *Have you observed or are you aware of any loss in residential property value due to the presence of a cell tower? YES / NO*
2. *Have you observed or are you aware of any appeals filed in the last two years timing property value loss due to the presence of a cell tower? YES / NO*
3. *Have you observed or are you aware of any property value loss due to the ABILITY to see ANY part of a cell tower from a residential property, regardless of distance? YES / NO.*

**All of the respondents answered “NO” to each of the above three questions.**

Some of the respondents simply replied “no” without additional comment while others expanded their answers to include local information and experience. The expanded comments start on the following page. The survey data tabulated by State, Community and Population follow the comments.

Janet LePage  
Monday, September 07, 2009 11:42 AM  
RE: Residential Appraisal Survey from Fellow AI Member

*"I just completed an assignment of a manufactured home on acreage with a cell tower. The sales price did not appear to be impacted by the cell tower; in fact, the purchaser told me that it was a plus for him due to the income. It should be noted that the cell tower was VERY far from the house and could hardly be seen from the road."*

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Dick Harriman,  
CEO/Assessor  
Town of Orrington

*"I have one tower and no problems or complaints"*

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Michelle Boisjoly,  
Assessor  
Dayton, Ohio

*"No to all three questions; we have 2 towers in town with several sales near 1 of them. Dayton is rural with 1.5-3 acre minimum house lots."*

---

Marlene Tepper  
Certified Residential Appraiser  
Westchester, NY

*"My experience results in a "no" on all three questions"*

---

Leland T Bookhout MAI, SRA  
Rhinebeck, NY

*"New buyers tell me in interviews that I have conducted that they did not pay less because of cell towers. I recognize that existing property owners feel they have been invaded thus scream and yell that the world has come to an end.*

*The bigger issue is that the potential pool of buyers for any home today is so sophisticated that they will use the issue of a nearby cell tower to get the purchase price down but when they resell in a few years - no reduction in asking price to list their property! Those who really do not want to live near a cell tower, or any other conceivable excuse, will go elsewhere, they have choices. We lose sight of the fact that any pool of potential buyers has choices. Ask any developer the question and they will almost always say that a particular buyer backed away from the purchase but someone came along to buy at the full price.*

*Part of the reaction by buyers is different in a sellers market vs. a buyers market. In the latter the alternatives are greater and the buyers can be picky."*

---

Duane P. Willenbring CGB :GMB: CGP  
Willenbring Const. Inc  
St. Cloud, MN

*"I am a Builder, Developer and Realtor and I serve on the Rockville, Mn. City Council. The answer to all three questions is No. I have not heard of any adverse opinions regarding cell towers"*

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Melinda Fonda  
Assessor  
Stratford, CT

1. *Have you observed or are you aware of any loss in residential property value due to the presence of a cell tower? "NO"*
2. *Have you observed or are you aware of any appeals filed in the last two years claiming property value loss due to the presence of a cell tower? "NO we have not had any appeals regarding loss in value due to cell towers"*
3. *Have you observed or are you aware of any property value loss due to the ABILITY to see ANY part of a cell tower from a residential property, regardless of distance? "I have had people claim their value is affected because they have an obstructed view. I have not seen this affect value."*

---

Alfred D. Jablonski, MAI  
Real Estate Appraiser  
Washington, DC

*"In this market there is no evidence that cell tower, which is not allowed in residential zoning, has a negative effect on residential properties. In Fairfax County the light poles on our high school football fields are being converted to cell monopoles and the school system is receiving money and benefiting from the new monopoles."*

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From: Orban Winton  
Socorro, NM

*"I have not had the opportunity to appraise or be associated with questions 1 and 2. The majority of our small town can see a part of a cell tower and have not noted any reduction in sale prices"*

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Carl Brinegar, SRA, SRPA  
San Angelo, TX

*"Sorry I can't help much. Answer is no. For all of the properties that can see cell towers in this area, I have never noted any reduction in price, nor had a seller or Realtor tell me that there was a reduction in price due to that situation & some towers are quite visible from new moderate priced residential property subdivisions & builders are continuing to build closer & closer to the towers, apparently without any ill pricing effects yet at least."*

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Linda Truitt, MAI  
Springfield, MO

*"Hi - I am not aware of any reduction in value to properties near a cell tower. I know a local appraiser that an assignment to appraise a rural property with a small house before and after a cell tower was installed on their 10 acres. It was his opinion that the property was actually worth more with the tower because of the land lease income. Not much help I'm afraid."*

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Frederick B. Jones  
Abilene, TX

*"Hello, a group in an affluent neighborhood on the east side of town fought unsuccessfully to prohibit a cell tower's installation, claiming it would devalue the neighborhood and their individual property. They were unable to show how the property would be devalued and lost the case. The tower was installed several years ago with no apparent value issues. I don't remember the exact dates, but the tower has had no long term devaluation. We had a similar case recently with wind turbines – our area is the wind capital of the nation - with similar results. There is simply insufficient data to extract to show the plaintiff's were damaged. Hope this helps."*

---

Ned Farrone, MAI  
Larchmont, NY

*"The answer is "NO" to all three questions. We have been doing ongoing studies of neighborhoods with cell towers for more than 10 years. Never once have we found that there was a diminution in value due to being able to see a cell tower."*



Survey of New Hampshire, Massachusetts and Vermont Assessors

All assessors were asked the follow three questions:

1. *Have you observed or are you aware of any loss in residential property value due to the presence of a cell tower?*
2. *Have you observed or are you aware of any appeals filed in the last two years claiming property value loss due to the presence of a cell tower?*
3. *Have you observed or are you aware of any property value loss due to the ABILITY to see ANY part of a cell tower from a residential property, regardless of distance?*

In New Hampshire twenty-six communities with populations from 2,000 to 110,000 responded. **All twenty-six communities answered "NO" to each of the above three questions.**

| Population | Town       | Population | Town      | Population | Town        | Population | Town       |
|------------|------------|------------|-----------|------------|-------------|------------|------------|
| 2,042      | Newbury    | 5,620      | Hopkinton | 13,040     | Durham      | 28,486     | Dover      |
| 2,215      | Andover    | 6,561      | Newport   | 13,388     | Claremont   | 29,558     | Salem      |
| 2,460      | Plainfield | 7,098      | Stratham  | 15,450     | Hampton     | 42,336     | Concord    |
| 3,537      | Gilmanton  | 7,322      | Belmont   | 17,060     | Laconia     | 87,321     | Nashua     |
| 4,463      | New London | 8,020      | Bow       | 22,778     | Keene       | 109,691    | Manchester |
| 4,867      | Henniker   | 8,434      | Seabrook  | 24,568     | Hudson      |            |            |
| 4,880      | New Boston | 11,156     | Hanover   | 24,837     | Londonderry |            |            |

Massachusetts assessor results

|           |   |            |                             |
|-----------|---|------------|-----------------------------|
| Andover   | <i>Never seen an abatement for that</i> | Chelmsford | <i>Nothing</i>              |
| Bedford   | <i>No</i>                               | Lexington  | <i>None to my knowledge</i> |
| Belmont   | <i>Haven't seen any</i>                 | Lowell     | <i>There were none</i>      |
| Billerica | <i>No haven't seen anything yet</i>     | Reading    | <i>No</i>                   |
| Carlisle  | <i>Not in this town</i>                 | Waltham    | <i>Have not had any</i>     |
|           |   | Woburn     | <i>No</i>                   |

Vermont assessors / lister results

|               |   |             |           |
|---------------|---|-------------|-----------|
| Bethel        | <i>No; Our tower is 2 yrs old, no immediate neighbors; can be seen form Rte 107 &amp; 12.</i> |             |           |
| Cabot         | <i>No; We have 2 towers</i>   | Poultney    | <i>No</i> |
| Charoltte     | <i>No; not aware of any grievances re cell towers</i>   |             |           |
| So Burlington | <i>No; never had anyone broach the subject</i>  | Dover       | <i>No</i> |
| Weathersfield | <i>No to all 3 questions</i>  | Mount Tabor | <i>No</i> |
| Royalton      | <i>No; We have 2 towers in remote locations</i>   |             |           |
|               |   |             |           |

The following statements and the conclusions are from reports by other appraisers who have completed site-specific analysis or general market research in order to determine if verifiable market data exists supporting the opinion that the presence of a cell tower has a deleterious impact on surrounding property values.

*Edward J. Ferrarone, MAI – September 2008 – Danbury, CT*

As you see from the data, the sales prices and price per square foot (a recognized unit of comparison) for those residences situated near a communication facility site are consistent with, and in some cases higher than, the prices achieved in the neighborhood further away from the communication facility site.

I have been conducting surveys of sales prices such as these for the last decade. The areas covered include Westchester, Rockland, Putnam, Dutchess, Orange, and Ulster Counties. In no instance have I ever found that values have been reduced by the presence of communications facilities such as those which are proposed for this site.

As a result of the foregoing analysis, it is our conclusion the installation, presence and/or operation of the proposed Facility on the subject Property, will not result in the diminution of real estate values of nearby properties or reduce the marketability of properties in the immediate area.

U.S. District Court Judge Charles L. Brieant, in a decision dated January 25, 2001, agreed with the conclusion "that the actual experience with similar wireless facilities within ... other communities has not supported a conclusion that these antennae have reduced the value of nearby property." Judge Brieant further states that "generalized concerns about a potential decrease in property values stemming from the construction of the proposed communications antenna, especially in light of the expert reports contained in this record before the Court, are not adequate to support the conclusion that a special use permit should be denied."

See U.S. District Court Southern District of New York (White Plains)  
Civil Docket for case #: 7:00-CV-04828-CLB Sprint Spectrum, LP v Cestone et al.

Bill Pastuszek, Jr. SRA, MAI, MRA – December 2007 – Pepperell, Massachusetts

*Summary.* The preceding analysis demonstrates that cellular telecommunications facilities in competitive residential locations do not affect real estate prices adversely. Research and analysis in other areas supports this conclusion: there is no measurable impact on residential sales prices due to the presence of such facilities. *Conclusion.* Based upon my inspection of the subject site and neighborhood, of comparable sites, my detailed review of the proposed project, and my review of pertinent empirical studies, it is my professional opinion that the construction and operation of the project will not have any adverse effect upon the property values of any real estate located near the site.

Vern J. Gardner Jr. , SRA, MAI – February 2007 – Londonderry, New Hampshire

Based upon the material presented herein it is this appraiser's opinion that the Market Value of the Fee Simple Title to any of the properties in the vicinity of the proposed cell tower will experience no diminution in value resulting from its construction as of February 05, 2007.

Patricia Amadon, MAI - October 2006 – Falmouth ME

In terms of marketing time, I researched sales in the general area to investigate the number of days on the market for residential properties. The marketing time ranged from 0 days to 371 days. When the maximum and minimum values were eliminated, this range narrowed from 11 days to 134 days. The sales of the two properties in proximity to towers took 66 and 72 days to sell, selling times well within the range of residential properties within the area. Therefore, marketing time does not appear to be affected.

Based on my investigation summarized above, I have concluded the following:

The nearest property has sufficient natural coverage and distance from the proposed tower to significantly diminish visibility.

The addition of the proposed tower and associated equipment will have no measurable adverse impact on the value of surrounding property.

From a valuation perspective, the proposed tower is the most appropriate location for a telecommunications facility in the area.

Robert G. Bramley, MAI - May 2006 - Cornish NH

**In summary, while the existing tower, if constructed, may be visible at a distance, I know of no instance where local property values in rural locations such as the subject will diminish with the construction of said facilities nor will the region be impacted, except in a positive way, from said facilities because of improved communication facilities.**

J. Nathan Godfrey Appraiser October 2002 – West Tisbury, Ma

“The surrounding neighborhood area will be unchanged by the introduction of the proposed wireless communications facility. The equipment shelter and base of the pole will not be visible from Old Courthouse Road and there will be no change to the overall character of the site. My research and investigations have concluded that there would be no diminution of value or difficulty in marketing a residence in the immediate area around the proposed installation.”

Donald E. Watson, Certified General Appraiser – June 1998 – 5 communities in Southern NH

**The study of sales in Bedford, Nashua, Merrimack, Candia, and Manchester did not indicate any discernible trends or variations in the sale prices of properties in the vicinity of telecommunications towers or similar structures in relation to the overall sales ratios found in each community. The lack of any trend would indicate that in fact there is no diminution of value of properties near these structures. Given federally mandated guidelines, I am of the opinion that as more telecommunications towers are constructed, their presence will become more common, similar to the existing telephone poles. If any diminution of value were to occur, it would be evident during the early stages of placement of telecommunications towers.**

*Michael P. Wicker, MAI - April 1994 - Sullivan, New York*

At your request, we have performed a detailed analysis of the effects of radio communication towers on surrounding property values. It is the conclusion of this analysis that the subject's proposed cell site to contain a 180-foot guyed tower and a 293 square foot prefabricated concrete shelter will have no effect upon surrounding property values. The location, nature, and height of buildings, walls, and fences will not discourage the appropriate development and use of adjacent land and buildings or impair their value.

Enclosed please find the results of this analysis which support the above conclusion.

*Robert G. Bramley, MAI - August 1990 - Candia NH*

demand. In short, diminution in value of surrounding property was not found in nearby areas of Chester or Candia and, as a matter of fact, in areas surrounding tower sites in more densely populated areas of Hudson and Merrimack, New Hampshire. Conversation with residents in periphery areas suggests that the sites are not objectionable from an aesthetic viewpoint and may in fact contribute somewhat to retaining the undeveloped or sparsely developed character of the area, unless of course development pressures are greater, in which case housing development appears to take place without any real measurable detriment to price or value. Safety is also not a detriment since towers are constructed to withstand hurricane force winds.

Robert H. McKennon, CRE, MAI - Wilmington, Delaware

Robert has researched the impact of telecommunications towers on residential property values in his area. The following summarizes the results of his research.

To all who took the time to respond to my AI forum request for info on the impact of telecommunications towers on residential property values: -Thanks very much for your input.

I looked this time at a potential tower site in a heavily developed and desirable residential area that was slated for a monopole installation behind a supermarket at a major commercial intersection.

**After reviewing 8 tower sites in residential locations with varying price ranges, I was unable to find any evidence that there is a measurable impact on value due to the proximity of a tower.**

For example: A Toll Brothers development currently underway has three contiguous towers that loom over the residential lots currently being sold. These are being developed with \$700,000 homes that are selling at a similar absorption pace to other similar Toll communities in the area. The site manager indicated that the towers were not a factor in pricing or marketing. The developer did not provide extra buffers, larger lots, or open space nearby to alleviate any potential impact the towers might have.

Another area development has an unsightly latticework tower nearby that can be seen from various points in the development. **There is absolutely no difference in pricing of similar model homes that can see the tower as opposed to those that cannot.** The sales agent who sold the project noted that the tower had no impact on sales. Another agent who has sold several homes in the neighborhood indicated that her daughter lives in the neighborhood, that she has been in the neighborhood many times over the years and had never noticed it during her walks with her granddaughter, and that it was not a factor with buyers.

In another neighborhood, there was some anecdotal evidence from agents that sold houses that were contiguous to a 1960's vintage latticework tower that there was some buyer resistance expressed by some prospects for those particular houses. However, a close analysis of these properties did not produce any evidence of a value diminution. The houses were listed at similar prices to those away from the tower and sold for similar prices, in similar time frames. When this data was discussed with the agents they indicated that although there were some prospective buyers who may have "walked" from the sites next to a tower, they were in fact able to obtain a satisfactory price. I could not reasonably justify any value diminution even in these extreme cases and believe me I looked. These cases are akin to a Rubik's Cube in some ways. 99.9% of the evidence can point one way, but if any stone is left unturned, the Board may disregard the entire study.

## Mark Correnti, SRA

P.O. Box 276 ♦ Hollis, NH 03049 ♦ (603) 371-0525 ♦ mark@nhappraiser.com

### New Hampshire Certified Residential Appraiser

- Founding partner of Amoskeag Appraisal Company, LLC a residential appraisal firm that provides real property appraisal and consulting services in New Hampshire.
  - Conduct real estate appraisals of single and 2-4 family residences, condominium units, land appraisals. Complex residential properties and multi-million dollar residences.
  - New Hampshire Real Estate Appraiser Board - Investigative Review Appraiser 2005-2011. Board Member and Grievance Officer 2011-2014
  - New Hampshire Chapter of the Appraisal Institute - Chapter President 2011-2012
- Real Estate Appraiser since 1997
  - Past NH Real Estate Appraiser Board Member
  - Admitted as an expert witness in MA & NH courts
  - NH Real Estate Broker
  - Approved HUD-FHA and VA Appraiser
  - Awarded SRA Designation from Appraisal Institute

#### Work Experience

1999 to present *Certified Residential Appraiser NHCR-460*

Residential state certified appraiser specializing in complex residential properties. Fee assignments include appraisal of 1-4 family residences, vacant land, and quality control appraisal review assignments. Admitted as an expert witness in NH court system. Testified as an expert in various ZBA hearings regarding diminution of value cases. Client base includes large regional banks, mortgage companies, real estate agents, and law firms.

1997 to 1999 *Gary Driscoll Appraisal Services, Fremont, NH  
Apprentice Appraiser*

1996-1997 *Citizens Bank, Manchester, NH  
Construction Operations Supervisor*

Review residential construction loan requests, facilitate build out of project. Interact with builder, homeowner, and originator. Oversee construction of home, monitor project to ensure that construction budget is in balance. Resolve discrepancies and manage delinquencies.

1994-1996 *Retail Loan Officer - Citizens Bank (f/k/a First NH Bank)*

Underwrite consumer loan requests generated by 90-branch network. Emphasis on real estate mortgages and equity lines of credit. Assisted branch personnel and loan originators with complex credits. Product underwriting experience includes home equity lending, small unsecured requests, and indirect auto financing and high LTV loans.

1992-1994 *Fleet Bank-NH, Nashua  
Regional Lender*

Responsible for consumer loan volume and small commercial loan portfolio. Originated, processed, and closed all consumer and commercial loans. Process and closed commercial loans up to \$200M, including SBA 504 and 7(a) programs. Responsible for credit training, setting loan goals, and supervising southern NH consumer production staff. Met with local merchants to establish deposit and loan relationships.

- 1990-1992 *First Union, Frammingham, MA loan production office  
Asst. Sales Mgr.*  
Developed and cultivated network of mortgage companies in developing a large loan portfolio.  
Conducted property evaluations of 1-4 family properties in MA, RI, and NH. Identified, corrected, and assisted in managing all risk factors affecting bank's portfolio.
- 1989-1990 *Transamerica Financial, Watefield, MA  
Asst. Manager*  
Initiated and executed all aspects of consumer finance branch operations.
- Education** *The University of Massachusetts at Amherst; 1989  
Bachelor degree - Economics*

#### **Appraisal Organizations**

*Appraisal Institute - NH Chapter - Board Member 2007-2012, Chapter President, 2011-12  
Designated Member of the Appraisal Institute. Awarded SRA designation in 2009.*

#### **Committees/Panels**

*2006 Franconstown Conservation Commission - Committee Member.  
2004-2008 New Hampshire Real Estate Appraiser Board - Review Panel  
2005-2011 NH Real Estate Appraiser Board - Contracted Investigative Review Appraiser  
2011-2014 NH Real Estate Appraiser Board - appointed as board member and Grievance Officer*

#### **Appraisal Courses and Seminars (abbreviated list)**

*Basics of Real Estate Appraisals, January 1998 & February, 2006  
Appraising 1-4 Family Properties, March 1998 & March 2006  
Appraising Income Properties, April 1999  
New Hampshire Current Use Law, March, 2000 and March, 2008  
Appraising High Value and Historic Homes, June 2000  
Real Estate Fraud and the Appraiser, October, 2001  
Appraiser as an Expert Witness, October, 2001  
Real Estate Law and the Investor Perspective, October, 2001  
Real Estate Development Issues and Land Management, May, 2002  
Mobile/Manufactured Home Review, July, 2002  
Attacking and Defending an Appraisal in Litigation, September, 2003  
Loss Prevention Seminar - October, 2003 and March 2006  
Appraisal Reports and USPAP compliance, November, 2003  
HUD-FHA Appraisal Requirements, December, 2003  
NH Real Estate Appraiser Board Review Panel Training Seminar, October, 2004  
NH Real Estate Appraiser Board Supervisory Appraiser Seminar, September, 2005  
Appraisal Institute Business Practice and Ethics, October, 2005  
Residential Highest and Best Use, March 2006  
Residential Site Valuation and Cost Approach, April 2007  
Residential Sales Comparison and Income Approaches, May 2007  
Real Estate Finance Statistics and Valuation Modeling, June 2007  
Advanced Residential Applications & Case Studies, November 2007  
Valuation of Green Housing, January 2008  
Advanced Residential Report Writing, January 2008  
REO Appraisals: Appraisals of Foreclosed Properties, September, 2008  
Appraiser Regulatory Agency (ASC) Investigator Training Level I, August, 2009  
Appraiser Regulatory Agency (ASC) Investigator Training Level II, October, 2010  
Appraiser Regulatory Agency (ASC) Investigator Training Level III, September, 2014*



Town of Mashpee Planning Board  
16 Great Neck Road North  
Mashpee, MA 02649

June 13, 2019

Members of the Board,

I am in receipt of and have reviewed the following material submitted to the Board:

- Business Wire article titled “Survey by the National Institute for Science, Law, & Public Policy Indicates Cell Towers and Antennas Negatively Impact Interest in Real Estate Properties”
- Realtor Magazine article “Cell Towers, Antennas Problematic for Buyers”.
- Electromagnetic Health.org “EMF Real Estate Survey Results: ‘Neighborhood Cell Towers & Antennas-Do They Impact a Property’s Desirability?’.
- Memo from Mashpee Director of Assessing, Jason R. Streebel dated October 3, 2018. RE: Cell Tower- Impact on Properties.

I feel that it would be helpful to the board in their deliberations to understand the differences in the conclusions of the above material and the FairMarket Advisors property impact study that I presented on April 17, 2019.

Both the Business Wire and Realtor articles directly reference the survey by the National Institute for Science, Law, & Public Policy (NISLPP) which publishes the ElectromagneticHealth.org blog.

The Business Wire, the Realtor article, and the Streebel memo all reference an article by Sandy Bond, PhD, and Ko-Kang Wang titled “The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods” (the Bond study).

Concisely, there are only two data sources in the above-mentioned material, the NISLPP survey and the Bond study.

#### Survey by the National Institute for Science, Law, & Public Policy

Directly from the The NISLPP’s ElectromagneticHealth.org blog’s website:

*The National Institute for Science, Law and Public Policy’s survey “Neighborhood Cell Towers & Antennas—Do They Impact a Property’s Desirability?” initiated June 2, 2014, has now been completed by 1,000 respondents as of June 28, 2014. The survey, which circulated online through email and social networking sites, in both the U.S. and abroad, sought to determine if nearby cell towers and antennas, or wireless antennas placed on top of or on the side of a building, would impact a home buyer’s or renter’s interest in a real estate property.*

I would like to point out that the question in this survey – “wireless antennas placed on top of or on the side of a building” is significantly different than the placement of the cell tower on a 36-acre parcel that is primarily wooded on Red Brook Rd in Mashpee. The tower is not proposed to be placed on top of any building that provides residential housing.

## The Bond Study

The Bond study was completed in 2003 in the suburbs of Christchurch, New Zealand. The conclusion of the study emphasized by both the Business Wire and the Realtor article is that there is a 20 percent reduction in value due to proximity to a CPBS (Cell Phone Base Station).

I have read the Bond study in its entirety as it is published in The Appraisal Journal and feel that the Board should be aware of limitations of the study. Specifically, TAJ page 271:

*"Limitations of the Research: The main limitation affecting this survey was in the selection of the case study areas. Specifically, the areas selected has CPBSs that were not highly visible to residents."*

TAJ Page 267:

*"Thus, views were not included in the analysis. Further due to the large number of sales included in the analysis, inspections of each individual property were not made to determine the view, if any, of a CPBS from each house....hence view of a CPBS was not included as an independent variable..."*

Effectively, the Bond study does not know or account for a data point that has a view of a cell tower or not.

## Conclusion

Both reports arrive at conclusions; however, I feel that the Mashpee Planning Board should also be aware of both the context and scope of work used to arrive at these conclusions.

The NISLPP survey effectively asks if a buyer would purchase or reside in a residence with a cell tower on or attached to it. The Bond study does not take into consideration view of a tower yet concludes that residences over a kilometer away with no view of a tower have been negatively impacted.

I would refer the board to the FairMarket Advisors property impact study that I presented to the Board on April 17, 2019. The FairMarket Advisors property impact study uses residences located in Mashpee. Not in a foreign country.

In that report I had personally viewed each of the data points in Mashpee and verified that each one does in fact have a view of a cell tower. I included a photograph that I physically took of each tower from each data point to assist the board in understanding both view and proximity.

The data points in Mashpee all sold relatively quick and at a price competitive to their peers showing no negative impact on value or extended market time due to proximity.

Mr. Streebel, Mashpee Director of Assessing in his memo commented:

*"in sixteen years, not one home owner, property appraiser, or resident has suggested to this office that the nearby cell towers were a detriment to their property value or purchase price."*

The NISLPP survey addresses a question that is not relevant to the proposed tower location in Mashpee.

The Bond study is significantly limited and distant with regards to what is proposed in Mashpee.

The Mashpee town assessor has not seen any evidence of value diminution due to the existing cell towers in Mashpee.

The FairMarket Advisors property impact report uses local and relevant data in Mashpee in arriving at the conclusion that a 150' monopole tower on 36 acres located 200' east of the fire station on Red Brook Road will have no measurable impact on surrounding property values due to proximity or visibility.

Respectfully submitted,



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