Notice of Proposed Construction or Alteration

1. Nature of Proposal
   A. Type
      - [ ] New Construction
      - [X] Alteration

   B. Class
      - [X] Permanent
      - [ ] Temporary (Duration ___ months)

   * If Alteration, provide previous FAA Aeronautical Study Number, if available:

   3A. Name, address, and telephone number of individual, company corporation, etc. proposing the construction or alteration.
      (Number, Street, City, State, and Zip Code)
      Southwestern Bell Mobile Systems, Inc.
      dba Cellular One
      100 Lowder Brook Drive
      Westwood, MA 02090
      (617) 640-5190
      Area Code Telephone Number

   3B. Name, address and telephone number of proponent's representative, if different than 3A. above.

4. Location Of Structure
   A. Coordinates (to hundreds of seconds, if known)
      - Latitude 42 15 18.09
      - Longitude 071 54 24.57

   B. Nearest City or Town and State
      - Leicester, MA

   C. Nearest public or military airport, heliport, flight park, or seaplane base
      - ORH: WORCESTER REGIONAL

   D. Source of coordinate information
      - USGS 7.5' Quad Chart [X] Survey [ ] Other [ ] Specify

   E. Description of site location with respect to highways, streets, airports, prominent terrain, features, existing structures, etc.
      - Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site, if available, attach a copy of a documented site survey with the surveyor's certification.

5. Height and Elevation
   A. Elevation of site above mean sea level
      - 01057

   B. Height of structure including all appurtenances and lighting above ground or water
      - 0150

   C. Overall height above mean sea level (A + b)
      - 01217

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 14711), as well as the Fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. app. § 14722(b)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date: 04/09/1998

Typed or Printed Name and Title of Person Filing Notice

Jennifer A. Cavan
FCC/FAA Specialist

FOR FAA USE ONLY

The Proposal:
- [ ] Does not require a notice to FAA.
- [ ] Is not identified as an obstruction under any standard of FAR, Part 77, Subpart C, and would not be a hazard to navigation.
- [ ] Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to navigation.
- [ ] Should be obstruction marked [ ] lighted per FAA Advisory Circular 70274-5, Chapters:
- [ ] Obstruction marking and lighting are not necessary.

Supplemental Notice of Construction, FAA Form 7460-2, is required any time the project is abandoned, or
- [ ] At least 48 hours before the start of construction.
- [ ] Within five days after the construction reaches its greatest height.
- [ ] The determination expires on:
  - [ ] extended, revised or terminated by the issuing office;
  - [ ] the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that agency.

NAD 83 Coordinates (Use these coordinates for any future correspondence with the FAA)

<table>
<thead>
<tr>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FAA Form 7460-1 (Rev) Separates Post Release Edition
NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

2. COMPLETE DESCRIPTION OF STRUCTURE AT: Leicester, MA

A. For proposals involving transmitting stations, including effective radiated power (ERP) and assigned frequency. If not known, give frequency band and maximum ERP.


B. For proposals involving overhead wire, transmission lines, etc., include the size and the configuration of the wires and their supporting structures.

Proposed 150' tower.

C. For Buildings, include site orientation, dimensions, and construction materials.

D. Optional - Describe the type of obstruction marking and lighting system desired. The FAA will consider this in their study.

4. LOCATION OF STRUCTURE

4E. Description of site location with respect to highways, street, airports, prominent terrain, features, existing structures, etc.

Please attach a U.S. Geological Survey Map (or equivalent) showing the construction site. If available, attach a copy of a documented site survey with the surveyor’s certification.

Site is located at 180 Paxton Road in Leicester, MA.
NOTES:

1) LATITUDES AND LONGITUDES WERE DETERMINED USING GLOBAL POSITIONING SURVEY MEANS AND/OR MASSACHUSETTS STATE PLANE COORDINATE SYSTEM AND ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83).

2) ELEVATIONS WERE DETERMINED USING INSTRUMENT SURVEY AND/OR GPS MEANS, ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

3) THE HEIGHTS GIVEN ARE FROM GROUND LEVEL.

4) THE TOP OF OVERALL STRUCTURE IS DEFINED AS THE HEIGHT FROM GROUND LEVEL TO THE HIGHEST POINT OF THE EQUIPMENT ABOVE THE TOP OF THE STRUCTURE.

5) SURVEY PERFORMED JANUARY 29, FEBRUARY, 3 & 10 1998.

CENTER OF PROP. TOWER

NAD 83
LATITUDE 42° 15' 18.09"
LONGITUDE 71° 54' 24.57"
ELEVATION AT CENTER:
EXIST.: 1,065.0
PROP.: 1,067.0

NAD 27
42-15-18
71-54-26

Prepared for:
CELLULARONE
100 Lowder Brook Drive
Westwood, MA

I HEREBY CERTIFY TO SOUTHWESTERN BELL MOBILE SYSTEMS THAT THE LATITUDE, LONGITUDE AND ELEVATION SHOWN HEREON WERE DETERMINED FROM AN ACTUAL SURVEY PERFORMED ON THE GROUND BY OTHERS UNDER MY SUPERVISION AND THAT THE SAME ARE WITHIN THE FOLLOWING F.C.C. "1-A" TOLERANCES: HORIZONTAL-PLUS OR MINUS 15 FEET; VERTICAL-PLUS OR MINUS 2 FEET.

JOHN PRESTON
Le BLANC
No. 18845

TUTELA ENGINEERING ASSOCIATES, INC.
12 BAY STREET
WILMINGTON, MA

POSITIONAL SURVEY
CELL LOCATION
180 PAXTON STREET
LEICESTER, MA

SCALE: NONE MARCH 27, 1998 SHEET 1 OF 1
OBSTRUCTION EVALUATION FOR
CELLULAR ONE OF BOSTON

<table>
<thead>
<tr>
<th>ASAC Study Number:</th>
<th>COB 17286 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>January 23, 1998</td>
</tr>
<tr>
<td>Site ID/Name:</td>
<td>Leicестer</td>
</tr>
</tbody>
</table>

**Site Location:**

| Latitude: | 42° 15' 19" |
| Longitude: | 71° 54' 23" |
| NAD 83    |             |

| Site Elevation: | 1,073' AMSL |
| Tower Height:  | 150' AGL    |
| Overall Height:| 1,223' AMSL |

This study is conducted in accordance with the Federal Aviation Regulations (FAR) Part 77 and the Federal Communications Commission (FCC) Rules Part 17.
IMPACT:

MINIMUM EN ROUTE ALTITUDE:

No factor. The study site is located below airspace protected for V151, V270, V292. However, the proposed 150' AGL (1,223' AMSL) structure, located at the study site would not adversely affect low altitude en route airways or training routes in the area.

VFR ROUTES:

No factor. The proposed 150' AGL (1,223' AMSL) structure located at the study site would not adversely affect VR routes or VFR routes in the area.

AIRPORT IMPACT:

For regulatory compliance purposes, the nearest landing surface, the approach end of Runway 11 at Worcester Regional Airport is located 6,092' (1.00 NM) on a True Bearing of 43.87° from the study site. The airport reference point (ARP) at this public use, instrumented Airport is located 9,397' (1.55 NM) on a True Bearing of 62.09° from the study site.

The study site is located below airspace protected for the VFR traffic pattern at Worcester Regional Airport. However, the proposed 150' AGL (1,223' AMSL) structure located at the study site would not adversely affect this surface.

In the interest of flight safety, ASAC considers private use airports in every study. However, private use airports are not a factor for this site.

The proposed 150' AGL (1,223' AMSL) structure located at the study site would not adversely affect VFR flight operations or procedures at area airports or heliports.

IFR effects will be discussed under section FAR 77.23 of this report.
FAR 77 AND TERPS ANALYSIS:

FAR 77.13 (a)(1) (Construction over 200' AGL at its site);

The proposed 150 structure would not affect this surface.

FAR 77.13 (a)(2)(i) (Structure within 20,000' from the nearest runway at an airport with a runway length of more than 3,200');

The proposed 150' AGL (1,223' AMSL) structure would exceed this surface by 182'*. This exceed, by itself, would require FAA Notice of Proposed Construction.

FAR 77.13 (a)(2)(ii) (Structure within 10,000' from the nearest runway at an airport with a runway length of 3,200' or less);

No factor.

FAR 77.13 (a)(2)(iii) (Structure within 5,000' from the nearest point of the nearest landing and takeoff area of each specified heliport);

No factor.

FAR 77.13 (a)(4) (When requested by the FAA, any construction or alteration that would be in an instrument approach area and available information indicates it might exceed a standard of Subpart C);

The study site is located below airspace protected for IFR flight operations (see Enclosure 1). At a height of 150' AGL (1,223' AMSL), the FAA may request that Notice of Proposed Construction be provided along with "2C accuracy" survey data in order to verify the proposed structure's exact location and overall height (see Enclosure 2).

* "Notice of Proposed Construction" is required.
FAR 77.23 (a)(1)  
(Structure over 500’ AGL);

No factor. The proposed 150’ AGL structure would not affect this surface.

FAR 77.23 (a)(2)  
(Structure over 200’ AGL or above the established airport elevation, whichever is higher, within 3 NM of the established reference point of an airport which has a runway more than 3,200 feet in length. This height increases 100’ for each additional mile up to 500’ AGL);

No factor. The proposed 150’ AGL (1,223’ AMSL) structure would not affect this surface at its site.

FAR 77.23 (a)(3)  
(TERPS, Terminal Operations);

No factor. The study site is located below airspace protected for IFR terminal operations. The proposed 150’ AGL (1,223’ AMSL) structure located at the study site would not adversely affect IFR terminal flight operations or procedures established at Worcester Regional Airport or those established at other area airports. However, the FAA may request "2C accuracy" survey data for any structure which exceeds 1,190’ AMSL in order to verify exact site location and overall structure height (see Enclosure 2).

FAR 77.23 (a)(4)  
(TERPS, En Route Operations);

No factor.

FAR 77.23 (a)(5)  
(The takeoff and landing area of an airport or any imaginary surface established under FAR 77);

The study site is located below the Horizontal Surface at Worcester Regional Airport. The proposed 150’ AGL (1,223’ AMSL) structure located at the study site exceeds this surface by 64’. By itself, exceeding this surface does not indicate that the structure would be considered a Hazard to Air Navigation. It would however, trigger an extended study to be conducted by the FAA. This extended study would add approximately 90 days to the FAA’s normal processing time.
FINDINGS:

1. For regulatory compliance purposes, the nearest landing surface, the approach end of Runway 11 at Worcester Regional Airport is located 6,092' (1.00 NM) on a True Bearing of 43.87° from the study site. The airport reference point (ARP) at this public use, instrumented Airport is located 9,397' (1.55 NM) on a True Bearing of 62.09° from the study site.

2. The study site is located below airspace protected for the VFR traffic pattern at Worcester Regional Airport. However, the proposed 150' AGL (1,223’ AMSL) structure located at the study site would not adversely affect this surface.

3. In the interest of flight safety, ASAC considers private use airports in every study. However, private use airports are not a factor for this site.

4. The study site is located below airspace protected for IFR terminal operations. The proposed 150' AGL (1,223’ AMSL) structure located at the study site would not adversely affect IFR terminal flight operations or procedures established at Worcester Regional Airport or those established at other area airports. However, the FAA may request "2C accuracy" survey data for any structure which exceeds 1,190' AMSL in order to verify exact site location and overall structure height (see Enclosure 2).

5. The study site is located below the Horizontal Surface at Worcester Regional Airport. The proposed 150' AGL (1,223’ AMSL) structure located at the study site exceeds this surface by 64'. By itself, exceeding this surface does not indicate that the structure would be considered a Hazard to Air Navigation. It would however, trigger an extended study to be conducted by the FAA. This extended study would add approximately 90 days to the FAA’s normal processing time.

6. The proposed 150' AGL (1,223’ AMSL) structure located at the study site would not adversely affect VFR or IFR terminal flight operations or procedures established at area airports.

7. The proposed 150' AGL (1,223’ AMSL) structure located at the study site would not adversely affect VFR or IFR en route flight operations or procedures in the area.

8. FAA Notice of Proposed Construction or Alteration along with "2C" accuracy survey data (see Enclosure 2) would be required for the 150’ AGL (1,223’ AMSL) structure located at the study site. However, the FAA most likely would approve the proposed structure after conducting an extended study.
OPTIONS AND RECOMMENDATIONS:

To avoid an extended study by the FAA, reduce the height to not exceed 1,159’ AMSL.

- FAA Notice is required.
- Marking and lighting is required. Maximum no marking and lighting height is 1,159’ AMSL.
- Extended study is required. Maximum no extended study height is 1,159’ AMSL.
- MAX height allowable with "2C" survey data is 1,240’ AMSL.

Should you have questions regarding this study, its findings, options, or recommendations, please contact ASAC.
IMPACT STUDY

PROPOSED TELECOMMUNICATION FACILITY
LEICESTER, MASSACHUSETTS

PREPARED FOR

Mr. Ralph A. Colorusso
Real Estate Consultant
CellularOne
100 Lowder Brook Drive
Westwood, Massachusetts 02090

DATE OF IMPACT STUDY

August 4, 1998

PROPOSED LOCATION OF TOWER

180 Paxton Street
Leicester, Massachusetts

PREPARED BY

Deborah B. Haskell, MAI, CRE
Winthrop Real Estate Advisors
11 Beacon Street - Suite 425
Boston, Massachusetts 02108
August 4, 1998

Mr. Ralph A. Colorusso
Real Estate Consultant
CellularOne
100 Lowder Brook Park
Westwood, Massachusetts 02090

Re: Impact Study
Proposed Telecommunication Facility
180 Paxton Street
Leicester, Massachusetts

Dear Mr. Colorusso:

In accordance with your request, we have completed our analysis of the impact of a telecommunication facility on real estate values in Leicester, Massachusetts. The accompanying report sets forth the rationale, assumptions, conditions and significant facts upon which the analysis is based and summarizes our conclusions. The Impact Study is based on our personal inspection of the proposed site at 180 Paxton Street in Leicester as well as other telecommunication tower sites throughout Worcester County.

As a result of the facts and analysis contained in the accompanying report, it is our opinion that the proposed telecommunication facility at 180 Paxton Street in Leicester will not have a detrimental impact on property values in the surrounding district.

Respectfully submitted,

[Signature]
Deborah B. Haskell, MAI, CRE

DBH:jr
IMPACT ANALYSIS OF SELECTED TOWER SITES IN WORCESTER COUNTY, MASSACHUSETTS

Executive Summary

The purpose of this analysis is to determine the impact of the presence of telecommunication facilities on real estate values. Specifically, this analysis focuses on the impact of a proposed telecommunication tower at 180 Paxton Street in Leicester, Massachusetts. This report will be used by CellularOne to evaluate the suitability of the site for this use. The objective of the client is to construct facilities on sites that will have the least impact on the value of surrounding properties.

Our analysis involved a review of the proposed telecommunication facility in Leicester as well as other facilities in residential communities throughout Worcester County. We identified existing facilities that are owned and/or operated by the major telecommunication companies including NYNEX Mobile Communications, Sprint PCS, Inc., OmniPoint Communications Services and Nextel Communications. We also located several privately owned towers that rent to the telecommunication companies. These structures range in height from 100 to 200 feet and consist of monopole or lattice construction.

Methodology

There are several methodologies that can be employed in an analysis of this type. The first methodology involves reviewing sales and resales of properties with and without the influence of telecommunication facilities. This methodology is appropriate when applied to properties in active markets over a long period of time. There were a limited number of telecommunication facilities in New England prior to 1995. These structures were primarily situated in urban locations, at major highway interchanges or in rural areas remote from residential or commercial development. In addition, New England experienced a prolonged economic recession during the late 1980's and early 1990's that adversely impacted the value of all types of real estate. Based on this, we do not feel an analysis of sales and resales is meaningful.

The second analytical technique is to review sales of properties with similar locational and physical characteristics. In this case, we analyzed sales of properties in neighborhoods with similar zoning and land use. In residential districts, we identified
dwellings that are similar in style, age, lot size and gross floor area. We compared sales of properties within close proximity to a telecommunication facility to sales of similar properties without this influence. We analyzed the data based on the proximity to the tower, gross floor area, lot size and unit price. In all circumstances, the tower appears to have no measurable impact on value. The results of our research are discussed on the following pages.

We also addressed the issue of marketability. Many citizens are concerned that the presence of a telecommunication facility in a neighborhood will adversely affect the marketability of surrounding properties. However, we found that this is not the case. The best example of this are sales of single family dwellings in new subdivisions. We identified several residential subdivisions near telecommunication facilities that demonstrated the same rate of absorption as subdivisions without this influence.

We also spoke with brokers and developers who stated that telecommunication facilities do not have a measurable impact on value. We asked Assessors in numerous cities and towns if land assessments were affected by proximity to a telecommunication tower. In all cases, the Assessors stated that they have found no evidence to support the assertion that telecommunication facilities adversely impact value. Thus, abatement applications claiming a diminution in value due to proximity to a telecommunication facility have been denied. This supports our conclusion that a telecommunication tower does not have a detrimental impact on property value.
PROPOSED TELECOMMUNICATION FACILITY
180 PAXTON STREET
LEICESTER, MASSACHUSETTS

CellularOne is seeking approval to construct a telecommunication facility at 180 Paxton Street in Leicester. The site is located on Carey Hill in a moderately developed residential district. The immediate neighborhood includes single family dwellings, the Leicester High School, two municipal water tanks and a fast food restaurant. The newest development in the district is Carey Hill Estates, a new residential subdivision north of the municipal water tanks.

The proposed site for the CellularOne telecommunication facility is identified as 180 Paxton Street. Paxton Street is also known as Route 56, which travels in a north/south direction from Paxton to Oxford. The telecommunication facility will be situated on land owned by the Town of Leicester Water Supply District. This parcel is currently improved with two municipal water tanks accessible by a gravel driveway. The proposed tower will be located between the water tanks and Paxton Street.

The Carey Hill neighborhood is zoned Suburban-Agricultural (SA). This classification is primarily oriented to residential, agricultural and municipal uses. The majority of the residential development is located along Paxton, Whittemore and Manville Streets as well as on the adjoining side streets. There are also large tracts of land that are undeveloped and several large bodies of water. The former municipal landfill is situated north of the subject property off Manville Street. Finally, the Worcester Municipal Airport is located northeast of the proposed CellularOne site in Leicester and Worcester.

The telecommunication facility proposed by CellularOne consists of a 150 foot, lattice structure that will be located between Paxton Street and the two municipal water tanks. It will be accessible by the existing gravel driveway that is currently used by the Leicester Water Supply District. The tower will be set back from the street about 350 feet and will be 130 feet from the nearest water tank.

CellularOne is requesting approval from the Town of Leicester to allow construction of the telecommunication facility. The proposed site is zoned Suburban Agricultural (SA), which is an appropriate classification for this type of use. The parcel is currently improved with two municipal water tanks and abuts the Leicester High School. The district includes large tracts of undeveloped land which provide a natural buffer from the residential development.
The telecommunication facility will consist of a 150 foot lattice structure on a concrete pad. There will also be an equipment shelter at ground level that will be fenced for security purposes. The CellularOne antenna array will be located at the top of the structure. The tower will be painted and lighted because of the proximity to the Worcester Municipal Airport. It will also have the capacity to accommodate additional carriers. The CellularOne system will provide enhanced communications to residents and businesses of the Town of Leicester. This will positively benefit the community from a convenience and public welfare perspective.

In order to estimate the possible impact on property values of the proposed facility, I analyzed sale activity in residential subdivisions in Leicester and the surrounding communities. As discussed, there is a new residential development adjacent to the Leicester Water Supply District property known as Carey Hill Estates. These homes are comprised of split entry, colonial and cape style dwellings ranging in size from 1,056 square feet to 1,632 square feet. Most of these properties will have views of the water tanks as well as the proposed CellularOne facility. The developer stated that about twelve houses are pre-sold. The base sale price is $131,900 for a 1,056 square foot split entry and $151,900 for a 1,632 square foot colonial. This indicates unit prices of $132.50 to $94.00 per square foot, respectively.

There is another residential subdivision that is being constructed off Charlton Street, identified as Leicester Woods. This development consists of split entry, colonial and cape style dwellings similar in size and quality to Carey Hill Estates. According to the marketing director, 1,170 square foot split entry homes are selling at a base price of $139,900, or $119.57 per square foot. A 1,750 square foot colonial has a base price of $149,900, or $85.66 per square foot.

The unit values at Leicester Woods and Carey Hill Estates are similar. Moreover, both developments have had favorable pre-sale activity. If the water tanks and proposed telecommunication facility had a detrimental impact on residential values, the unit prices generated for the homes at Carey Hill Estates should be lower than those at Leicester Woods. This is not the case. In addition, these influences do not appear to impact marketability as demonstrated by rapid pre-sales at both developments.

We also analyzed residential sale activity in several communities in Worcester County. Our findings are discussed in the following report sections.
JOHNSON CONSTRUCTION COMMUNICATIONS TOWER
307 PAKACHOAG STREET
AUBURN, MASSACHUSETTS

The Johnson Construction Company telecommunication facility in Auburn is located between Pakachoag Street and Goddard Drive. It is situated on land owned by Scott and Deborah Johnson. Johnson Construction Company originally erected the tower for mobile communications with trucks at various building sites. According to the Building Inspector, the structure was built in the 1960's and did not require a special permit or use variance. In the early 1990's, the owners began to lease space on the tower to several telecommunication companies. The tower is a lattice structure and is 100 feet in height.

The district surrounding the Johnson telecommunication facility is zoned for residential development. Homes along Pakachoag Street are generally ten to forty years old. However, there are several new residential subdivisions in the immediate area. One of these subdivisions is a 27 lot development on Goddard Drive and Rice Road. B.A. Sundin & Sons began marketing homes in 1996. The project was virtually sold out by late 1997. Lot sizes range from 20,000 to 30,000 square feet and the dwellings vary from 2,000 to 2,400 square feet. All of the homes in the subdivision have direct views of the Johnson telecommunication tower. Five homes in the neighborhood sold in 1997.

In order to compare the sale prices of these properties with properties without the influence of a telecommunication facility, we identified several newly constructed dwellings in Auburn that are similar in design and construction quality to the Goddard Drive homes. We identified five recent sales of dwellings that are suitable for comparison. The properties on Jacob's Way and Fenwick Circle are situated in new residential subdivisions. The dwelling at 267 South Street is a newly constructed home in an established neighborhood. However, all four properties are located on lots of one or more acres.

We spoke with Kevin Maher, the builder of the homes on Jacob's Way and Fenwick Circle. He stated that, generally, one acre lots are more desirable than one half acre lots. Moreover, buyers are willing to pay a premium for larger home-sites. As a result, we included a recent sale of a dwelling at 120 South Street that is situated on a 24,203 square foot site. This property is comparable in lot size to the Goddard Drive homes. We have identified the properties which are impacted by the tower in red on the plan on the following page. The properties with no view of the tower are identified in blue.
The sales in our analysis occurred between April 1997 and the present. These are recent transfers and reflect current market conditions. While the dwellings differ in lot and building size, they are similar in design and construction quality. We checked records in the Building Department to verify our assumptions. The primary difference in the properties is lot size, dwelling area and the proximity to, and view of, the Johnson tower.

The comparable sales that we feel are meaningful are summarized in four exhibits on the following pages. Data is arranged by street address in Exhibit A. Exhibits B and C summarize the sales by gross floor area and unit price per square foot of dwelling area, respectively. Exhibit D displays the data according to lot size. An asterisk next to the property indicates that the tower is visible.

Exhibit A shows the street address of each comparable and indicates whether the property has a view of the tower. The values in the price per square foot column appear to be haphazard when the properties are ordered according to location. For this reason, we have concluded that the price per square foot is not influenced by location.

In Exhibits B and C, we have sorted the comparables in ascending order according to the gross floor area and the unit price per square foot of floor area. Typically, as the dwelling size increases, the unit price declines due to the economies of scale. This is not the case in this analysis as there is no correlation between dwelling size and unit price. In our opinion, lot size has a substantial impact on unit value. However, views of the telecommunication tower do not appear to have an influence.

Exhibit D displays the data in ascending order by lot size. This analysis shows a correlation between dwelling size and unit price in the properties with lots of 29,494 square feet or less. Unit prices increase dramatically for properties with lots of one acre or more. Views of the telecommunication tower appear to have no influence. This is demonstrated by a comparison of the unit prices for properties on Goddard Drive and at 120 South Street. If the tower negatively impacted value, we would expect that the unit price for 120 South Street would be higher than for the dwellings on Goddard Drive. This is not the case. Therefore, we have concluded that the telecommunications tower is not a significant influence on value.
**EXHIBIT A**
RESIDENTIAL SALE PRICE ANALYSIS
AUBURN, MASSACHUSETTS
SORTED BY STREET ADDRESS

<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Lot Size/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Goddard Drive</td>
<td>2,119</td>
<td>20,957</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$208,900</td>
<td>$98.58</td>
</tr>
<tr>
<td>9 Goddard Drive</td>
<td>2,084</td>
<td>29,494</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$207,760</td>
<td>$99.69</td>
</tr>
<tr>
<td>12 Goddard Drive</td>
<td>2,171</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>9/97</td>
<td>$225,000</td>
<td>$103.64</td>
</tr>
<tr>
<td>14 Goddard Drive</td>
<td>2,384</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>10/97</td>
<td>$227,200</td>
<td>$95.30</td>
</tr>
<tr>
<td>18 Goddard Drive</td>
<td>2,212</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/97</td>
<td>$222,140</td>
<td>$100.42</td>
</tr>
<tr>
<td>120 South Street</td>
<td>2,016</td>
<td>24,203</td>
<td>Colonial</td>
<td>1993</td>
<td>2/98</td>
<td>$189,500</td>
<td>$94.00</td>
</tr>
<tr>
<td>267 South Street</td>
<td>1,872</td>
<td>43,560</td>
<td>Colonial</td>
<td>1997</td>
<td>7/97</td>
<td>$215,000</td>
<td>$114.85</td>
</tr>
<tr>
<td>1 Jacobs Way</td>
<td>1,872</td>
<td>60,000</td>
<td>Colonial</td>
<td>1998</td>
<td>U/A</td>
<td>$200,000</td>
<td>$106.84</td>
</tr>
<tr>
<td>3 Jacobs Way</td>
<td>2,350</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>5/97</td>
<td>$267,700</td>
<td>$113.91</td>
</tr>
<tr>
<td>Fenwick Circle</td>
<td>2,128</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/98</td>
<td>$245,000</td>
<td>$115.13</td>
</tr>
</tbody>
</table>

* Indicates view of tower
### EXHIBIT B
RESIDENTIAL SALE PRICE ANALYSIS
AUBURN, MASSACHUSETTS
SORTED BY GROSS FLOOR AREA

<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Lot Size/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jacobs Way</td>
<td>1,872</td>
<td>60,000</td>
<td>Colonial</td>
<td>1998</td>
<td>U/A</td>
<td>$200,000</td>
<td>$106.84</td>
</tr>
<tr>
<td>267 South Street</td>
<td>1,872</td>
<td>43,560</td>
<td>Colonial</td>
<td>1997</td>
<td>7/97</td>
<td>$215,000</td>
<td>$114.85</td>
</tr>
<tr>
<td>120 South Street</td>
<td>2,016</td>
<td>24,203</td>
<td>Colonial</td>
<td>1993</td>
<td>2/98</td>
<td>$189,500</td>
<td>$94.00</td>
</tr>
<tr>
<td>* 9 Goddard Drive</td>
<td>2,084</td>
<td>29,494</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$207,760</td>
<td>$99.69</td>
</tr>
<tr>
<td>* 7 Goddard Drive</td>
<td>2,119</td>
<td>20,957</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$208,900</td>
<td>$98.58</td>
</tr>
<tr>
<td>Fenwick Circle</td>
<td>2,128</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/98</td>
<td>$245,000</td>
<td>$115.13</td>
</tr>
<tr>
<td>* 12 Goddard Drive</td>
<td>2,171</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>9/97</td>
<td>$225,000</td>
<td>$103.64</td>
</tr>
<tr>
<td>* 18 Goddard Drive</td>
<td>2,212</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/97</td>
<td>$222,140</td>
<td>$100.42</td>
</tr>
<tr>
<td>3 Jacobs Way</td>
<td>2,350</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>5/97</td>
<td>$267,700</td>
<td>$113.91</td>
</tr>
<tr>
<td>* 14 Goddard Drive</td>
<td>2,384</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>10/97</td>
<td>$227,200</td>
<td>$95.30</td>
</tr>
</tbody>
</table>

* Indicates view of tower
## EXHIBIT C
RESIDENTIAL SALE PRICE ANALYSIS
AUBURN, MASSACHUSETTS
SORTED BY PRICE PER SQUARE FOOT GFA

<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Lot Size/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 South Street</td>
<td>2,016</td>
<td>24,203</td>
<td>Colonial</td>
<td>1993</td>
<td>2/98</td>
<td>$189,500</td>
<td>$94.00</td>
</tr>
<tr>
<td>* 14 Goddard Drive</td>
<td>2,384</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>10/97</td>
<td>$227,200</td>
<td>$95.30</td>
</tr>
<tr>
<td>* 7 Goddard Drive</td>
<td>2,119</td>
<td>20,957</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$208,900</td>
<td>$98.58</td>
</tr>
<tr>
<td>* 9 Goddard Drive</td>
<td>2,084</td>
<td>29,494</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$207,760</td>
<td>$99.69</td>
</tr>
<tr>
<td>* 18 Goddard Drive</td>
<td>2,212</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/97</td>
<td>$222,140</td>
<td>$100.42</td>
</tr>
<tr>
<td>* 12 Goddard Drive</td>
<td>2,171</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>9/97</td>
<td>$225,000</td>
<td>$103.64</td>
</tr>
<tr>
<td>1 Jacobs Way</td>
<td>1,872</td>
<td>60,000</td>
<td>Colonial</td>
<td>1998</td>
<td>U/A</td>
<td>$200,000</td>
<td>$106.84</td>
</tr>
<tr>
<td>3 Jacobs Way</td>
<td>2,350</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>5/97</td>
<td>$267,700</td>
<td>$113.91</td>
</tr>
<tr>
<td>267 South Street</td>
<td>1,872</td>
<td>43,560</td>
<td>Colonial</td>
<td>1997</td>
<td>7/97</td>
<td>$215,000</td>
<td>$114.85</td>
</tr>
<tr>
<td>Fenwick Circle</td>
<td>2,128</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/98</td>
<td>$245,000</td>
<td>$115.13</td>
</tr>
</tbody>
</table>

* Indicates view of tower
<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Lot Size/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 12 Goddard Drive</td>
<td>2,171</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>9/97</td>
<td>$225,000</td>
<td>$103.64</td>
</tr>
<tr>
<td>* 18 Goddard Drive</td>
<td>2,212</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/97</td>
<td>$222,140</td>
<td>$100.42</td>
</tr>
<tr>
<td>* 14 Goddard Drive</td>
<td>2,384</td>
<td>20,000</td>
<td>Colonial</td>
<td>1997</td>
<td>10/97</td>
<td>$227,200</td>
<td>$95.30</td>
</tr>
<tr>
<td>* 7 Goddard Drive</td>
<td>2,119</td>
<td>20,957</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$208,900</td>
<td>$98.58</td>
</tr>
<tr>
<td>120 South Street</td>
<td>2,016</td>
<td>24,203</td>
<td>Colonial</td>
<td>1993</td>
<td>2/98</td>
<td>$189,500</td>
<td>$94.00</td>
</tr>
<tr>
<td>* 9 Goddard Drive</td>
<td>2,084</td>
<td>29,494</td>
<td>Colonial</td>
<td>1997</td>
<td>8/97</td>
<td>$207,760</td>
<td>$99.69</td>
</tr>
<tr>
<td>267 South Street</td>
<td>1,872</td>
<td>43,560</td>
<td>Colonial</td>
<td>1997</td>
<td>7/97</td>
<td>$215,000</td>
<td>$114.85</td>
</tr>
<tr>
<td>Fenwick Circle</td>
<td>2,128</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>4/98</td>
<td>$245,000</td>
<td>$115.13</td>
</tr>
<tr>
<td>1 Jacobs Way</td>
<td>1,872</td>
<td>60,000</td>
<td>Colonial</td>
<td>1998</td>
<td>U/A</td>
<td>$200,000</td>
<td>$106.84</td>
</tr>
<tr>
<td>3 Jacobs Way</td>
<td>2,350</td>
<td>60,000</td>
<td>Colonial</td>
<td>1997</td>
<td>5/97</td>
<td>$267,700</td>
<td>$113.91</td>
</tr>
</tbody>
</table>

* Indicates view of tower
The Nextel Communications tower in Shrewsbury is located at 157 Memorial Drive, or Route 140. It is situated on land owned by Dispatch Communications of New England. The parcel is zoned Limited Industrial, which allows a variety of uses including antennas and towers. Thus, the Nextel tower is a legal, conforming use and did not require a variance or special permit for construction.

According to town records, Nextel constructed a 190 foot high communications tower in October, 1994. The tower is of lattice construction and includes a 200 square foot support shed. It is visible from Memorial Drive and from portions of the surrounding residential district.

We identified one residential neighborhood for our analysis which includes properties with and without views of the Nextel telecommunication tower. This neighborhood is comprised of a single family subdivision off Gold Street which is known as Winchester Estates. The development includes Farmington Drive, Rockwell Drive and Ashton Drive. Farmington Drive begins at Gold Street and inclines to Rockwell Drive. Ashton Drive is a short cul de sac off Rockwell Drive. The telecommunication tower is visible from portions of Farmington and Rockwell Drives as well as from Ashton Drive. Homes on the lower ends of Farmington and Rockwell Drives do not have views of the tower due to the elevation and contour of the land.

This is a relatively new subdivision and construction of dwellings is on-going. Good quality, colonial style homes began selling in mid 1995. As stated, the telecommunications tower was erected in late 1994. Properties at the top of Farmington Drive and on Ashton Drive have views of the tower. Properties closer to Gold Street are not impacted by this influence. We have identified properties with views of the tower in red on the following plan. The properties with no tower influence are identified in blue.

We compiled data from sales of properties in the neighborhood which is summarized in three exhibits on the following pages. Data is arranged by street address in Exhibit A. Exhibit B summarizes the sales by gross floor area while Exhibit C displays the data according to unit price. An asterisk next to the property indicates that the tower is visible. These properties transferred between February 1996 and the present. These are all recent sales and reflect current market conditions.
We feel the most meaningful unit of comparison for the properties is price per square foot due to the differences in dwelling size. Exhibit A reflects each property's location and proximity to the tower. The highest numbered houses on Farmington Drive and on Ashton Drive are closest to the tower. See Exhibit A. The values in the price per square foot column appear to be haphazard when the properties are ordered according to location. For this reason, we have concluded that the price per square foot is not influenced by the location of the properties.

In Exhibit B, we have sorted the comparables in ascending order according to the gross building area. This analysis reveals a trend in the price per square foot column. As the size of the building increases, the price per square foot tends to decrease with some exceptions. Thus, there is a correlation between dwelling area and unit price. This reflects that smaller homes generally sell for higher unit values due to the economies of scale.

Exhibit C displays the data in ascending order by price per square foot. It is interesting to note that there appears to be no correlation between the proximity to the telecommunications tower and unit price. The asterisks, which indicate a view of the tower, are in the middle of the range. If the tower negatively impacted price, we would expect that the asterisks would be clustered at the top of the chart, connected to the properties with the lowest unit values. This is not the case. Therefore, we have concluded that proximity to the tower is not a significant influence on value.
NEXTEL COMMUNICATIONS TOWER
157 MEMORIAL DRIVE
SHREWSBURY, MASSACHUSETTS
## EXHIBIT A
RESIDENTIAL SALE PRICE ANALYSIS
SHREWSBURY, MASSACHUSETTS
SORTED BY STREET ADDRESS

<table>
<thead>
<tr>
<th>Location</th>
<th>GBA</th>
<th>Style</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1,884</td>
<td>Colonial</td>
<td>11/97</td>
<td>$229,900</td>
<td>$122.03</td>
</tr>
<tr>
<td>6</td>
<td>2,448</td>
<td>Colonial</td>
<td>4/98</td>
<td>$253,000</td>
<td>$103.35</td>
</tr>
<tr>
<td>21</td>
<td>2,651</td>
<td>Colonial</td>
<td>6/96</td>
<td>$300,000</td>
<td>$113.16</td>
</tr>
<tr>
<td>22</td>
<td>2,527</td>
<td>Colonial</td>
<td>5/98</td>
<td>$308,000</td>
<td>$121.88</td>
</tr>
<tr>
<td>* 24</td>
<td>2,522</td>
<td>Colonial</td>
<td>4/96</td>
<td>$273,430</td>
<td>$108.42</td>
</tr>
<tr>
<td>* 25</td>
<td>2,222</td>
<td>Colonial</td>
<td>5/96</td>
<td>$247,725</td>
<td>$111.49</td>
</tr>
<tr>
<td>* 26</td>
<td>2,508</td>
<td>Colonial</td>
<td>2/96</td>
<td>$273,135</td>
<td>$108.91</td>
</tr>
<tr>
<td>* 32</td>
<td>2,488</td>
<td>Colonial</td>
<td>8/97</td>
<td>$265,000</td>
<td>$106.51</td>
</tr>
<tr>
<td>* 8</td>
<td>2,548</td>
<td>Colonial</td>
<td>4/97</td>
<td>$275,000</td>
<td>$107.93</td>
</tr>
<tr>
<td>2</td>
<td>2,240</td>
<td>Colonial</td>
<td>7/97</td>
<td>$235,000</td>
<td>$104.91</td>
</tr>
<tr>
<td>20</td>
<td>2,432</td>
<td>Colonial</td>
<td>9/97</td>
<td>$268,500</td>
<td>$110.40</td>
</tr>
</tbody>
</table>

* Indicates view of tower
EXHIBIT B
RESIDENTIAL SALE PRICE ANALYSIS
SHREWSBURY, MASSACHUSETTS
SORTED BY GROSS FLOOR AREA

<table>
<thead>
<tr>
<th>Location</th>
<th>GBA</th>
<th>Style</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Farmington Drive</td>
<td>1,884</td>
<td>Colonial</td>
<td>11/97</td>
<td>$229,900</td>
<td>$122.03</td>
</tr>
<tr>
<td>* 25 Farmington Drive</td>
<td>2,222</td>
<td>Colonial</td>
<td>5/96</td>
<td>$247,725</td>
<td>$111.49</td>
</tr>
<tr>
<td>2 Rockwell Drive</td>
<td>2,240</td>
<td>Colonial</td>
<td>7/97</td>
<td>$235,000</td>
<td>$104.91</td>
</tr>
<tr>
<td>20 Rockwell Drive</td>
<td>2,432</td>
<td>Colonial</td>
<td>9/97</td>
<td>$268,500</td>
<td>$110.40</td>
</tr>
<tr>
<td>6 Farmington Drive</td>
<td>2,448</td>
<td>Colonial</td>
<td>4/98</td>
<td>$253,000</td>
<td>$103.35</td>
</tr>
<tr>
<td>* 32 Farmington Drive</td>
<td>2,488</td>
<td>Colonial</td>
<td>8/97</td>
<td>$265,000</td>
<td>$106.51</td>
</tr>
<tr>
<td>* 26 Farmington Drive</td>
<td>2,508</td>
<td>Colonial</td>
<td>2/96</td>
<td>$273,135</td>
<td>$108.91</td>
</tr>
<tr>
<td>* 24 Farmington Drive</td>
<td>2,522</td>
<td>Colonial</td>
<td>4/96</td>
<td>$273,430</td>
<td>$108.42</td>
</tr>
<tr>
<td>22 Farmington Drive</td>
<td>2,527</td>
<td>Colonial</td>
<td>5/98</td>
<td>$308,000</td>
<td>$121.88</td>
</tr>
<tr>
<td>* 8 Ashton Drive</td>
<td>2,548</td>
<td>Colonial</td>
<td>4/97</td>
<td>$275,000</td>
<td>$107.93</td>
</tr>
<tr>
<td>21 Farmington Drive</td>
<td>2,651</td>
<td>Colonial</td>
<td>6/96</td>
<td>$300,000</td>
<td>$113.16</td>
</tr>
</tbody>
</table>

* Indicates view of tower
<table>
<thead>
<tr>
<th>Location</th>
<th>GBA</th>
<th>Style</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Farmington Drive</td>
<td>2,448</td>
<td>Colonial</td>
<td>4/98</td>
<td>$253,000</td>
<td>$103.35</td>
</tr>
<tr>
<td>2 Rockwell Drive</td>
<td>2,240</td>
<td>Colonial</td>
<td>7/97</td>
<td>$235,000</td>
<td>$104.91</td>
</tr>
<tr>
<td>* 32 Farmington Drive</td>
<td>2,488</td>
<td>Colonial</td>
<td>8/97</td>
<td>$266,000</td>
<td>$106.51</td>
</tr>
<tr>
<td>* 8 Ashton Drive</td>
<td>2,548</td>
<td>Colonial</td>
<td>4/97</td>
<td>$275,000</td>
<td>$107.93</td>
</tr>
<tr>
<td>* 24 Farmington Drive</td>
<td>2,522</td>
<td>Colonial</td>
<td>4/96</td>
<td>$273,430</td>
<td>$108.42</td>
</tr>
<tr>
<td>* 26 Farmington Drive</td>
<td>2,508</td>
<td>Colonial</td>
<td>2/96</td>
<td>$273,135</td>
<td>$108.91</td>
</tr>
<tr>
<td>20 Rockwell Drive</td>
<td>2,432</td>
<td>Colonial</td>
<td>9/97</td>
<td>$268,500</td>
<td>$110.40</td>
</tr>
<tr>
<td>* 25 Farmington Drive</td>
<td>2,222</td>
<td>Colonial</td>
<td>5/96</td>
<td>$247,725</td>
<td>$111.49</td>
</tr>
<tr>
<td>21 Farmington Drive</td>
<td>2,651</td>
<td>Colonial</td>
<td>6/96</td>
<td>$300,000</td>
<td>$113.16</td>
</tr>
<tr>
<td>22 Farmington Drive</td>
<td>2,527</td>
<td>Colonial</td>
<td>5/98</td>
<td>$308,000</td>
<td>$121.88</td>
</tr>
<tr>
<td>4 Farmington Drive</td>
<td>1,884</td>
<td>Colonial</td>
<td>11/97</td>
<td>$229,900</td>
<td>$122.03</td>
</tr>
</tbody>
</table>

* Indicates view of tower
CELLULARONE TELECOMMUNICATION TOWER
364 CHURCH STREET
NORTHBOROUGH, MASSACHUSETTS

The CellularOne telecommunication facility in Northborough is located at 364 Church Street, within close proximity to the Route I-290 interchange. It is situated on a wooded 6.13 acre site in a residentially zoned neighborhood. The parcel is primarily undeveloped and abuts Route I-290. According to the town, a special permit was required for construction of the tower. The structure is 150 feet in height and is of lattice construction. OmniPoint Communications Services recently co-located on the facility.

The tower is visible from Church Street, Route I-290 as well as from the surrounding residential neighborhoods. We reviewed sales of modern single family residential properties in the district surrounding the CellularOne facility. We specifically identified properties that have direct views of the lattice structure. These colonial style homes were built between 1984 and the present and are of good quality construction.

We compared the sale prices of these properties to sales of similar modern colonial style dwellings in Northborough that are not impacted by a telecommunication tower. The most similar development is on Woodstone Road and Pleasant Street. These properties are easily accessible to major roadways and have similar locational and physical characteristics to the study group.

We analyzed sale prices from May, 1997 to the present. As stated, the dwellings are similar in age and construction quality. Moreover, these are recent transfers and reflect current market conditions. Therefore, we do not think an adjustment for time is necessary. The comparable sales are summarized in three exhibits on the following pages. Data is arranged by street address in Exhibit A. Exhibit B summarizes the sales by gross floor area while Exhibit C displays the data according to unit price. An asterisk next to the property indicates that the tower is visible. A plan on the following page identifies the properties with a view of the tower in red. The properties with no tower influence are identified in blue.

We feel the most meaningful unit of comparison for the properties is price per square foot due to the differences in dwelling size. Exhibit A reflects each property's location and proximity to the tower. The values in the price per square foot column
appear to be random when the properties are ordered according to location. For this reason, we have concluded that the price per square foot is not influenced by the tower.

In Exhibit B, we have sorted the comparables in ascending order according to the gross floor area. This analysis reveals a weak correlation in the price per square foot column. Generally, as the size of a dwelling increases, the price per square foot tends to decrease due to the economies of scale. In this case, the reverse appears to be true demonstrating the desirability of more living space. Properties with views of the CellularOne tower appear at the top and bottom end of the range.

Exhibit C displays the data in ascending order by price per square foot. It is interesting to note that in this case there appears to be no correlation between the proximity to the telecommunication tower and unit price. If the tower negatively impacted price, we would expect that the asterisks would be clustered at the top of the chart, connected to the properties with the lowest unit values. This is not the case. Therefore, we have concluded that proximity to the tower is not a significant influence on value.
<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 365</td>
<td>2,164</td>
<td>Colonial</td>
<td>1985</td>
<td>5/97</td>
<td>$229,900</td>
<td>$106.24</td>
</tr>
<tr>
<td>* 2</td>
<td>3,263</td>
<td>Colonial</td>
<td>1995</td>
<td>11/97</td>
<td>$379,900</td>
<td>$116.43</td>
</tr>
<tr>
<td>* 8</td>
<td>3,300</td>
<td>Colonial</td>
<td>1995</td>
<td>Offering</td>
<td>$399,000</td>
<td>$120.91</td>
</tr>
<tr>
<td>* 20</td>
<td>2,734</td>
<td>Colonial</td>
<td>1989</td>
<td>12/97</td>
<td>$406,000</td>
<td>$148.50</td>
</tr>
<tr>
<td>37</td>
<td>2,746</td>
<td>Colonial</td>
<td>1996</td>
<td>2/98</td>
<td>$339,000</td>
<td>$123.45</td>
</tr>
<tr>
<td>144</td>
<td>3,200</td>
<td>Colonial</td>
<td>1998</td>
<td>3/98</td>
<td>$389,900</td>
<td>$121.84</td>
</tr>
<tr>
<td>148</td>
<td>3,350</td>
<td>Colonial</td>
<td>1998</td>
<td>4/98</td>
<td>$403,850</td>
<td>$120.55</td>
</tr>
<tr>
<td>159</td>
<td>2,905</td>
<td>Colonial</td>
<td>1984</td>
<td>8/97</td>
<td>$327,500</td>
<td>$112.74</td>
</tr>
</tbody>
</table>

* Indicates view of tower
<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 365 Church Street</td>
<td>2,164</td>
<td>Colonial</td>
<td>1985</td>
<td>5/97</td>
<td>$229,900</td>
<td>$106.24</td>
</tr>
<tr>
<td>* 20 Woodstone Road</td>
<td>2,734</td>
<td>Colonial</td>
<td>1989</td>
<td>12/97</td>
<td>$406,000</td>
<td>$148.50</td>
</tr>
<tr>
<td>37 Woodstone Road</td>
<td>2,746</td>
<td>Colonial</td>
<td>1996</td>
<td>2/98</td>
<td>$339,000</td>
<td>$123.45</td>
</tr>
<tr>
<td>159 Pleasant Street</td>
<td>2,905</td>
<td>Colonial 1,984</td>
<td>8/97</td>
<td></td>
<td>$327,500</td>
<td>$112.74</td>
</tr>
<tr>
<td>144 Pleasant Street</td>
<td>3,200</td>
<td>Colonial</td>
<td>1998</td>
<td>3/98</td>
<td>$389,900</td>
<td>$121.84</td>
</tr>
<tr>
<td>* 2 Foxwood Lane</td>
<td>3,263</td>
<td>Colonial</td>
<td>1995</td>
<td>11/97</td>
<td>$379,900</td>
<td>$116.43</td>
</tr>
<tr>
<td>* 8 Woodstone Road</td>
<td>3,300</td>
<td>Colonial</td>
<td>1995</td>
<td>Offering</td>
<td>$399,000</td>
<td>$120.91</td>
</tr>
<tr>
<td>148 Pleasant Street</td>
<td>3,350</td>
<td>Colonial</td>
<td>1998</td>
<td>4/98</td>
<td>$403,850</td>
<td>$120.55</td>
</tr>
</tbody>
</table>

* Indicates view of tower
## EXHIBIT C
RESIDENTIAL SALE PRICE ANALYSIS
NORTHBOROUGH, MASSACHUSETTS
SORTED BY PRICE PER SQUARE FOOT

<table>
<thead>
<tr>
<th>Location</th>
<th>GFA/SF</th>
<th>Style</th>
<th>Age</th>
<th>Sale Date</th>
<th>Sale Price</th>
<th>Price PSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 365 Church Street</td>
<td>2,164</td>
<td>Colonial</td>
<td>1985</td>
<td>5/97</td>
<td>$229,900</td>
<td>$106.24</td>
</tr>
<tr>
<td>159 Pleasant Street</td>
<td>2,905</td>
<td>Colonial 1,984</td>
<td></td>
<td>8/97</td>
<td>$327,500</td>
<td>$112.74</td>
</tr>
<tr>
<td>* 2 Foxwood Lane</td>
<td>3,263</td>
<td>Colonial</td>
<td>1995</td>
<td>11/97</td>
<td>$379,900</td>
<td>$116.43</td>
</tr>
<tr>
<td>148 Pleasant Street</td>
<td>3,350</td>
<td>Colonial</td>
<td>1998</td>
<td>4/98</td>
<td>$403,850</td>
<td>$120.55</td>
</tr>
<tr>
<td>* 8 Woodstone Road</td>
<td>3,300</td>
<td>Colonial</td>
<td>1995</td>
<td>Offering</td>
<td>$399,000</td>
<td>$120.91</td>
</tr>
<tr>
<td>144 Pleasant Street</td>
<td>3,200</td>
<td>Colonial</td>
<td>1998</td>
<td>3/98</td>
<td>$389,900</td>
<td>$121.84</td>
</tr>
<tr>
<td>37 Woodstone Road</td>
<td>2,746</td>
<td>Colonial</td>
<td>1996</td>
<td>2/98</td>
<td>$339,000</td>
<td>$123.45</td>
</tr>
<tr>
<td>* 20 Woodstone Road</td>
<td>2,734</td>
<td>Colonial</td>
<td>1989</td>
<td>12/97</td>
<td>$406,000</td>
<td>$148.50</td>
</tr>
</tbody>
</table>

* Indicates view of tower
CONCLUSIONS

The purpose of this analysis was to determine the impact of telecommunication facilities on surrounding real estate values. This study focuses on three communities in Worcester County including Auburn, Shrewsbury and Northborough. We analyzed sales of properties within close proximity to existing telecommunication towers. We compared these sales to transfers of similar properties with no tower influence. We analyzed the data based on location, gross floor area, lot size and price per square foot.

Our methodology utilized the paired sales approach. We identified sales that were locationally and physically similar with the exception of the tower influence. The real estate market in Worcester County has experienced a rebound over the last three years. However, we utilized recent sales for each community that reflect current market conditions.

We interviewed brokers, owners and developers regarding the influence of telecommunication towers on the value and marketability of real estate. The general consensus is that towers do not influence achievable sale prices or rent levels. We also spoke with Assessors in various cities and towns in Worcester County. They concurred that telecommunication towers do not impact property value. In fact, real estate tax abatement applications are limited that cite an existing tower as reason for a lower property value. This confirms our conclusions.

Therefore, based on our statistical analysis as well as discussions with real estate professionals, we feel that telecommunication towers do not have a detrimental effect on neighboring property values. Moreover, the proposed CellularOne facility at 180 Paxton Street will not adversely impact property values in the Carey Hill neighborhood of Leicester.
DEBORAH B. HASKELL, MAI, CRE

QUALIFICATIONS IN REAL ESTATE ADVISORY SERVICES

Deborah B. Haskell has eighteen years of experience in real estate valuation, investment analysis and project evaluation consultation. Ms. Haskell's experience includes a diversified background in the valuation of real estate on a local, regional and national basis for a wide range of applications including market value appraisals, property condemnation, partial acquisitions, portfolio consulting and management, investment advisory service, appraisal support for financing bond issues and property syndication and allocation of purchase prices resulting from corporate acquisitions or mergers. She has been involved in a number of appraisals of contaminated properties including one of the largest Superfund sites in the country.

Ms. Haskell was retained as a consulting MAI for a major Boston bank in 1990 to help assess the value of the real estate portfolio. She is currently being retained by Bechtel/Parsons Brinckerhoff as a consultant and review appraiser for the Central Artery Project. She has worked on behalf of the CA/T Project in various negotiation sessions with governmental agencies, institutional users and private owners. Ms. Haskell has represented major telecommunication companies as an expert witness at public hearings and performed real estate impact studies in the New England region. She was recently retained by the Commonwealth of Puerto Rico as a consultant on the Tren Urbano Project in San Juan. Ms. Haskell has also done extensive condemnation appraisal work for private and public clients.

Ms. Haskell has specialized expertise in analyzing leasehold and leased fee interests, air rights, orderly and forced liquidations and expert witness testimony for litigation. She has performed appraisals, market studies and feasibility analyses for major private and public development projects. These activities have been conducted on behalf of domestic and foreign investment firms, major industrial corporations, financial institutions, individual investors, leading law firms, accounting firms and government agencies.

Ms. Haskell's experience in appraisal and consulting has encompassed a diverse range of property. Past appraisal assignments include the valuation of investment grade office complexes and regional shopping malls in many of the nation's most dynamic urban centers; industrial and distribution facilities for Fortune 500 corporations; large scale tracts of land requiring development analyses; major hospitals, nursing homes and related health care facilities; medical and bio-technical research laboratory complexes; multifamily residential properties; and hotel and resort properties. She has also appraised a variety of mixed use complexes including the Canton Commerce Center, One Kendall Square in Cambridge, Great Woods Park in Norton, Commonwealth Flats in Boston, the U.S. Postal Service facility in Boston and the Raytheon Submarine Signal Facility in Portsmouth, Rhode Island.
QUALIFICATIONS OF DEBORAH B. HASKELL, (CONT.)

Ms. Haskell has been involved in appraisal and consulting assignments in Rhode Island including major downtown Providence office buildings such as Westminster Square, the Union Station complex, the Greater Providence Bank Building, 40 Fountain Street and 86 Weybosset Street. She has also been involved in the appraisal of large multi-tenant retail complexes including Providence Place, the Sears Plaza in Providence and Bald Hill Commons Condominium in Warwick. Past appraisals of large, multi-tenant residential properties include Narragansett Pier Village in Narragansett and Woodland Manor I in Coventry.

Deborah B. Haskell has had extensive experience in valuing all types lodging facilities. She managed the New England Real Estate Practice for Laventhal & Horwath from 1987 to 1989. The division specialized in appraising for the hospitality industry. Appraisals ranged from individual hotel or motel properties to large mixed use resorts. Assignments included the valuation of limited and full service hotels in urban and suburban locations in Massachusetts, Rhode Island, Connecticut, New Hampshire, Vermont and Maine. Past appraisals of resort properties include the Ascutney Mountain Resort, the Mount Washington Hotel as well as hotel and conference centers in eastern and western Massachusetts including Cape Cod. Ms. Haskell was also involved in the appraisal of large national portfolios of lodging facilities for major corporations including Marriott and Sheraton as well as brokerage firms such as Soloman Brothers and Paine Webber.

Ms. Haskell received a B. S. Degree in Economics from the University of California at Berkeley. She is a member of the Appraisal Institute, MAI, and a member of The Counselors of Real Estate, CRE. She is also a Massachusetts Certified General Real Estate Appraiser, License #813 and a Rhode Island Certified General Real Estate Appraiser, License #A00428G. She represented the New England Region on the Member and Chapter Services Committee and is currently a member of the Ethics and Counseling Committee for the Appraisal Institute. She also served on the Applications Sub-Committee for the State Board of Real Estate Appraisers as well as on the Executive Committee of NAIOP, the National Association of Commercial Real Estate. Ms. Haskell has appeared as guest speaker at various professional seminars and conferences.

Ms. Haskell has testified in the following courts as an expert witness for private and public clients.

Suffolk Superior and Probate Court
Norfolk Superior and District Court
Essex Superior Court
Middlesex Superior and District Court
Plymouth District Court
Federal Bankruptcy Court
State of Rhode Island Superior Court
CERTIFICATION

I certify 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, and are my personal, unbiased professional analyses, opinions and
  conclusions.

- I have no present or prospective interest in the property that is the subject of this report and I
  have no personal interest or bias with respect to the parties involved.

- my compensation 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 estimate, the attainment of a
  stipulated result, or the occurrence of a subsequent event.

- this assignment was not based on a requested minimum valuation, a specific valuation, or the
  approval of a loan

- my compensation is not contingent on an action or event resulting from the analyses, opinions,
  or conclusions in, or the use of, this report.

- the appraiser has accepted this appraisal assignment having the knowledge and experience
  necessary to complete the assignment competently.

- my analyses, opinions, and conclusions were developed, and this report has been prepared, in
  conformity with the requirements of the Code of Professional Ethics and the Standards of
  Professional Practice of the Appraisal Institute and in conformity with the Uniform Standards of
  Professional Appraisal Practice.

- I certify that the use of this report is subject to the requirements of the Appraisal Institute
  relating to review by its duly authorized representatives.

- As of the date of this report, I have completed the requirements of the continuing education
  program of the Appraisal Institute.

- I have made a personal inspection of the property that is the subject of this report.

[Signature]
Deborah B. Haskell, MAI, CRE
Massachusetts Certified General Real Estate Appraiser #813

I. GUIDELINES FOR FACILITY SITING IMPLEMENTATION

A. Local governments and the wireless industry should work cooperatively to facilitate the siting of wireless telecommunication facilities. Moratoria, where necessary, may be utilized when a local government needs time to review and possibly amend its land use regulations to adequately address issues relating to the siting of wireless telecommunications facilities in a manner that addresses local concerns, provides the public with access to wireless services for its safety, convenience and productivity, and complies with the Telecommunications Act of 1996.

B. If a moratorium is adopted, local governments and affected wireless service providers shall work together to expeditiously and effectively address issues leading to the lifting of the moratorium. Moratoria should be for a fixed (as opposed to open ended) period of time, with a specified termination date. The length of the moratorium should be that which is reasonably necessary for the local government to adequately address the issues described in Guideline A. In many cases, the issues that need to be addressed during a moratorium can be resolved within 180 days. All parties understand that cases may arise where the length of a moratorium may need to be longer than 180 days. Moratoria should not be used to stall or discourage the placement of wireless telecommunications facilities within a community, but should be used in a judicious and constructive manner.

C. During the time that a moratorium is in effect, the local government should, within the frame work of the organization's many other responsibilities, continue to accept and process applications (e.g., assigning docket numbers and other administrative aspects associated with the filing of applications), subject to ordinance provisions as may be revised during the moratorium. The local government should continue to work on the review and possible revisions to its land use regulations in order that the moratorium can terminate within its defined period of time, and that both local planning goals and the goals of the Telecommunications Act of 1996 with respect to wireless telecommunications services be met. Wireless service providers should assist by providing appropriate, relevant and non-proprietary information requested by the local government for the purposes of siting wireless telecommunications facilities.

D. Local governments are encouraged to include both the community and the industry in the
to the wireless service provider's explanation of the issues. If necessary, the volunteers will ask appropriate follow-up questions, then will make appropriate contacts, as [they] he or she deems necessary. The volunteers will then discuss the issues as they understand them, and attempt to reach a mutually agreeable proposed course of action. The volunteer [s] will then contact each party individually, (the local government volunteer contacting the local government, and the wireless service provider volunteer contacting the wireless service provider) and will inform each party of his or her opinion as to whether the present activities comply with the moratoria guidelines, making recommendations as may be appropriate. The recommendation and mediation process by the volunteers should be concluded within 60 days.

5. Neither party is bound by the recommendations of the volunteer[s]. Should the complaining part[ies] be dissatisfied with the result, the part[ies] retain the option to bring legal action.

6. This process is intended as a mechanism to resolve issues short of court action, if possible. As a result, none of the discussions, statements, or information conveyed in the informal process, or even the fact that the informal process was undertaken, are subject to discovery, or admissible in a judicial or quasi-judicial proceeding.

D. Upon agreement with LSGAC on the moratoria guidelines and informal dispute process described herein, CTIA will withdraw without prejudice its petition seeking preemption of zoning moratoria, docket number DA96-2140, FCC97-264.
Opinion and Order, as well as its August 1996 Report and Order, are available below. Also available is OET Bulletin No. 65 which provides information on RF compliance issues.

- RF Second Memorandum Opinion and Order
- RF First Memorandum Opinion and Order
- RF Report and Order
- OET Bulletin No.65

On August 25, 1997, the Commission initiated a proceeding concerning whether state and local governments may regulate the RF emissions of personal wireless service providers. A copy of the Commission's Notice of Proposed Rulemaking is attached below. Electronic copies (Word Perfect 5.1) of comments filed in this proceeding will be made available upon receipt.

- RF Notice of Proposed Rulemaking
- Notification of Correct Docket Number for Commission Rulemaking Concerning Preemption of State and Local RF Regulations -Public Notice
- Comments
- Reply Comments

On October 27, 1997, 360° Communications Company filed a Petition for Declaratory Ruling seeking a declaratory ruling by the Wireless Telecommunications Bureau that Section 332(c)(7)(B)(iv) of the Communications Act preempts state courts from regulating or enjoining the placement or construction of cellular facilities based upon radio frequency (RF) emission concerns, where such facilities comply with federal emission regulations. On December 3, 1997, the Commission issued a Public Notice seeking comments on this petition.

- Public Notice
- Comments

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE**

- Guidelines on NEPA Compliance
- Frequently Asked Questions Concerning NEPA Compliance
- NEPANet-A One Stop Shop for NEPA Related Information
- On August 10, 1998, the Commercial Wireless Division released an order granting the application of Mid-Missouri Cellular to construct a tower that would affect a district listed on the National Register of Historic Places. This order clarifies licensees' responsibilities in complying with the National Historic Preservation Act. - MO&O

**LINKS TO RELATED SITES**

- Electromagnetic Fields and Human Health - John E. Moulder, Ph.D. - Professor of Radiation
August 5, 1998

CHAIRMAN WILLIAM E. KENNARD ANNOUNCES HISTORIC AGREEMENT BY LOCAL AND STATE GOVERNMENTS AND WIRELESS INDUSTRIES ON FACILITIES SITING ISSUES

Today, Chairman William E. Kennard announced a facilities siting agreement between the Commission’s Local and State Government Advisory Committee (LSGAC), the Cellular Telecommunications Industry Association (CTIA), the Personal Communications Industry Association (PCIA), and the American Mobile Telecommunications Association (AMTA). The groups presented Chairman Kennard with a joint agreement involving appropriate guidelines for tower and antennae siting, as well as an informal dispute resolution process for siting issues.

"One of the most contentious issues I have faced as Chairman of the FCC is the issue of tower siting," said Chairman Kennard. "This agreement presents an important breakthrough. The towers and antennae that make up our nation's wireless infrastructure are essential to delivery of the benefits of these important new technologies to the public. Competition has made wireless an increasingly affordable and convenient telecom choice for a growing number of consumers. On the other hand, local governments and citizens clearly have a legitimate interest in where and how towers are sited."

The Commission has served as facilitator of this new agreement. The LSGAC, established by the FCC in March 1997, under the supervision of then General Counsel Kennard, is a body of elected and appointed local and state officials. It provides advice and information to the Commission on key issues that concern local and state governments and communicates state and local government policy concerns regarding proposed Commission actions pursuant to the Telecommunications Act of 1996. CTIA, PCIA and AMTA are trade associations representing the wireless industry.

The Agreement sets forth two main initiatives. First, it establishes guidelines for facilities siting implementation. These are a set of "best practices," by which the wireless industry and local governments can work cooperatively when siting towers or antennae. Second, the Agreement adopts an informal dispute resolution process. This process can be used by the wireless industry and local governments when moratoria or other delays seem to be adversely affecting the siting of wireless telecommunications facilities. This process will greatly reduce the need for litigation when resolving these disputes. However, if a dispute proves to be intractable, parties are not foreclosed from seeking the legal remedies they feel are necessary.

- over -
PRESS STATEMENT
Kenneth S. Fellman, Chair
Local & State Government Advisory Committee
City Councilmember, Arvada, Colorado
August 5, 1998

On August 1, 1997 I sent a letter to Tom Wheeler inviting CTIA to attend the next meeting of the local and state government advisory committee, and begin a dialogue on issues impacting the wireless industry, and state and local government. We are fortunate that Mr. Wheeler agreed that a meeting was a good idea, and that he assigned Brian Fontes to serve as CTIA's point person to work with us.

That first meeting took place last September. Over the past 10 1/2 months, the LSGAC has worked with Brian, Mark Golden of PCIA, Alan Shark of AMTA, Roz Allen of the FCC's wireless bureau, and members of their respective staffs, in an attempt to address the issues of siting wireless facilities and local zoning moratoria.

The agreement that we announce today is significant. Local governments have asserted for quite some time that section 704 of the Telecommunications Act of 1996 did not, for the most part, preempt local zoning authority, and that moratoria are proper zoning tools to utilize in appropriate situations. The wireless industry has been concerned that zoning moratoria can be used inappropriately, and I believe that the declaratory proceeding before the commission was intended to seek a way to insure that improper uses of moratoria could not occur.

The LSGAC has continually taken the position in this proceeding and in others, that in our federalist system of government, unless there is both clear legal authority and a widespread example of a nationwide problem, preemption of state or local government authority should not be considered by the federal government.

Believing that improper uses of zoning moratoria were not widespread, the LSGAC sought a way to resolve the problem based upon education and intervention on a case by case basis, rather than a broad national preemption of local authority. This agreement achieves that goal.

The wireless industry, recognizing that there are valid uses for zoning moratoria, sought an agreement on guidelines suggesting the proper activities to be undertaken while zoning moratoria are in effect, in order that they might terminate in a reasonable period of time and facilitate the build out of wireless telecommunications systems. This agreement achieves that goal.

When disputes do arise, the informal dispute resolution process described in this agreement creates the opportunity for local government and industry experts familiar with local zoning and section 704 to take an outsider's look at the facts of a particular case, and offer suggestions to the parties involved. There will be no risk for any party utilizing this process, as all parties retain their legal rights.

A number of individuals and organizations need to be commended. CTIA, PCIA, and AMTA, and particularly Brian Fontes, deserve our thanks for recognizing there was a mutually beneficial solution to be found, and equally important, for taking the opportunity to begin building bridges toward better communications with local government.

The LSGAC, and its staff members who have been assisting us in our work, deserve credit for what has
PCS Monopole

Tower fig. #1. A typical three sector PCS panel array, with two panel antennas per sector, mounted on a monopole. The site is pictured while still under construction. Monopoles are often presented as more “aesthetically pleasing” and less “obtrusive” than guyed or self-support lattice towers.
"Collo" Monopole

Tower fig. #7. This monopole is occupied by a PCS carrier (top mounted) and a cellular carrier (next slot down). As you can see, the top of the tower gets pretty "opaque" with collocated arrays, especially when viewing it up close. In the picture on the right, taken from about 1000' feet away and with a tree-line in the foreground, the value of collocation versus constructing two new towers is a bit more evident.
Short SS Cell Tower

Tower fig. #5. Even when they’re short they can be ugly. This 120’ SS lattice tower has huge double sidearms which support the panel arrays. While this tower is in an industrial setting, the use of a single sidearm mounting technique would make the tower a little less “opaque” and less obtrusive on the urban landscape.
Self-Support Lattice Tower

Tower fig. #2. A typical three sector cellular panel array, with two panel antennas per sector, mounted on a self-support (SS - no guy wires) lattice tower. A 180' SS tower can have a triangular base up to 17' wide. This cellular carrier uses Micro-wave to tie together its network, ergo the micro-wave dishes on the tower.
HR 3016 IH

105th CONGRESS

1st Session

H. R. 3016

To amend section 332 of the Communications Act of 1934 to preserve State and local authority to regulate the placement, construction, and modification of certain telecommunications facilities, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

November 9, 1997

Mr. SANDERS (for himself, Mr. SHAYS, and Mr. DEFAZIO) introduced the following bill; which was referred to the Committee on Commerce

A BILL

To amend section 332 of the Communications Act of 1934 to preserve State and local authority to regulate the placement, construction, and modification of certain telecommunications facilities, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. FINDINGS AND PURPOSES.

(a) FINDINGS- The Congress finds the following:

(1) States and localities should be able to exercise control over the construction and location of such towers through the use of zoning, planned growth, and other controls relating to the protection of the environment and public health.

(2) The placement of commercial telecommunications, radio, or television towers near homes can greatly reduce the value of such homes, destroy the views from such homes, and reduce substantially the desire to live in such homes.

(3) There are alternatives to the construction of additional telecommunications towers to effectively provide wireless services, including the collocation of transmitters on existing towers and the use of alternative technologies, including satellites.

(4) The Federal Communications Commission does not consider itself a health agency...
CONSTRUCTION, AND MODIFICATION OF CERTAIN TELECOMMUNICATIONS FACILITIES.

(a) REPEAL OF LIMITATIONS- Section 332(c)(7)(B) of the Communications Act of 1934 (47 U.S.C. 332(c)(7)(B)) is amended--

(1) in clause (i), by striking 'thereof--' and all that follows through the end and inserting 'thereof shall not unreasonably discriminate among providers of functionally equivalent services.,'

(2) by striking clause (iv);

(3) by redesignating clause (v) as clause (iv); and

(4) in clause (iv), as so redesignated--

(A) in the first sentence, by striking `30 days after such action or failure to act' and inserting `30 days after exhaustion of any administrative remedies with respect to such action or failure to act'; and

(B) by striking the third sentence and inserting the following: `In any such action in which a person seeking to place, construct, or modify a tower facility is a party, such person shall bear the burden of proof.'

(b) PROHIBITION ON ADOPTION OF RULE- Notwithstanding any other provision of law, the Federal Communications Commission may not adopt as a final rule the proposed rule set forth in "Preemption of State and Local Zoning and Land Use Restrictions on Siting, Placement and Construction of Broadcast Station Transmission Facilities", MM Docket No. 97-182, released August 19, 1997.

END
Section

22.01: Purpose and Authority
22.02: Definitions
22.03: Compliance
22.04: Construction, Operation and Maintenance of Public Water Systems
22.05: Maximum Microbiological Contaminant Levels, Monitoring Requirements and Analytical Methods
22.06: Inorganic Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.06A: Special Monitoring for Sodium, Reporting and Analytical Methods and Frequency
22.06B: Control of Lead and Copper in Drinking Water
22.06C: Fluoride Secondary Maximum Contaminant Level and Public Notification
22.07: Trihalomethanes Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07A: Synthetic Organic Maximum Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07B: Volatile Organic Maximum Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07C: Unregulated Special Monitoring For Inorganic and Organic Chemicals, Monitoring Requirements and Analytical Methods
22.08: Turbidity Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods for Unfiltered Systems and for Filtered Systems not in Compliance with 310 CMR 22.20A
22.09: Radionuclide Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods
22.10: Alternative Analytical Methods
22.11A: Laboratory Certification
22.11B: Public Water Systems Certified Operator Staffing Requirements
22.12: Consecutive Public Water Systems
22.13: Variances
22.14: Exemptions
22.15: General Reporting Requirements
22.16: Public Notification Requirements
22.17: Record Maintenance
22.18: Right of Entry
22.19: Distribution System Requirements
22.20A: Surface Water Treatment Rule
22.20B: Surface Water Supply Protection
22.21: Ground Water Supply Protection
22.22: Cross Connections Distribution System Protection
22.23: Use of Non-Centralized Treatment Devices and Bottled Water
22.24: Sale, Transfer of Property Interest, or Change in Use of Water Supply Land
22.25: Abandonment of Water Supply Sources
22.26: Severability
310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 22.00: DRINKING WATER

Section

22.01: Purpose and Authority
22.02: Definitions
22.03: Compliance
22.04: Construction, Operation and Maintenance of Public Water Systems
22.05: Maximum Microbiological Contaminant Levels, Monitoring Requirements and Analytical Methods
22.06: Inorganic Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.06A: Special Monitoring for Sodium, Reporting and Analytical Methods and Frequency
22.06B: Control of Lead and Copper in Drinking Water
22.06C: Fluoride Secondary Maximum Contaminant Level and Public Notification
22.07: Trihalomethanes Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07A: Synthetic Organic Maximum Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07B: Volatile Organic Maximum Chemical Contaminant Levels, Monitoring Requirements and Analytical Methods
22.07C: Unregulated Special Monitoring For Inorganic and Organic Chemicals, Monitoring Requirements and Analytical Methods
22.08: Turbidity Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods for Unfiltered Systems and for Filtered Systems not in Compliance with 310 CMR 22.20A
22.09: Radionuclide Maximum Contaminant Levels, Monitoring Requirements and Analytical Methods
22.10: Alternative Analytical Methods
22.11A: Laboratory Certification
22.11B: Public Water Systems Certified Operator Staffing Requirements
22.12: Consecutive Public Water Systems
22.13: Variances
22.14: Exemptions
22.15: General Reporting Requirements
22.16: Public Notification Requirements
22.17: Record Maintenance
22.18: Right of Entry
22.19: Distribution System Requirements
22.20A: Surface Water Treatment Rule
22.20B: Surface Water Supply Protection
22.21: Ground Water Supply Protection
22.22: Cross Connections Distribution System Protection
22.23: Use of Non-Centralized Treatment Devices and Bottled Water
22.24: Sale, Transfer of Property Interest, or Change in Use of Water Supply Land
22.25: Abandonment of Water Supply Sources
22.26: Severability
22.01: Purpose and Authority

(1) 310 CMR 22.00 is intended to promote the public health and general welfare by ensuring that public water systems in Massachusetts provide to the users thereof water that is safe, fit and pure to drink. 310 CMR 22.00 is promulgated pursuant to the authority conferred by M.G.L. c.21A, '2(28), and M.G.L. c. 111, '160. Pursuant to M.G.L. c.30A, '1(5), 2 and 3, 310 CMR 22.00 is promulgated to set forth those standards and requirements of general application and future effect which shall be used to implement, interpret and enforce M.G.L. c.40, '15B, 38, 39B, 39C, 40, 41, and 41A; M.G.L. c.111, '2C, 5E, 5F, 5G, 17, 143, 159, 160A, 160B, 162 and 165; M.G.L. c.114, '35 and 36; M.G.L. c. 140, '32B and 32H; and M.G.L. c. 165, '4B and 6.

(a) The Department affirms its authority to determine compliance or initiate enforcement actions related to 310 CMR 22.00 based upon analytical results and other information compiled by its sanctioned representatives and agencies.
(b) 310 CMR 22.22 is promulgated pursuant to the authority conferred by M.G.L. c. 111, '160 and 160A.
22.23: continued

(c) Responsibility The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system via door-to-door bottled water delivery.

(4) POE or POU Devices: Public water systems that use point-of-use or point-of-entry devices as a condition for obtaining a variance or an exemption from NPDWRs must meet the following requirements:

(a) It is the responsibility of the public water system to operate and maintain the point-of-use and/or point-of-entry treatment system.
(b) Before point-of-use or point-of-entry devices are installed, the public water system must obtain the approval of a monitoring plan which ensures that the devices provide health protection equivalent to that provided by central water treatment.
(c) The public water system must apply effective technology under a Department approved plan. The microbiological safety of the water must be maintained at all times.
(d) The Department will require adequate certification of performance, field testing, and, if not included in the certification process, a rigorous engineering design review of the point-of-use and/or point-of-entry devices.
(e) The design and application of the point-of-use and/or point-of-entry devices must consider the potential for increasing concentrations of heterotrophic bacteria in water treated with activated carbon. It may be necessary to use frequent backwashing, post-contactor disinfection, and Heterotrophic Plate Count monitoring to ensure that the microbiological safety of the water is not compromised.
(f) The Department must be assured that buildings connected to the system have sufficient point-of-use or point-of-entry devices that are properly installed, maintained, and monitored such that all consumers will be protected.

22.24: Sale, Transfer of Property Interest, or Change in Use of Water Supply Land

(1) No supplier of water may sell, lease, assign, or otherwise dispose of, or change the use of, any lands used for water supply purposes without the prior written approval of the Department. The Department will not approve any such disposition or change in use unless the supplier of water demonstrates to the Department's satisfaction that such action will have no significant adverse impact upon the supplier of water's present and future ability to provide continuous adequate service to consumers under routine and emergency operating conditions, including emergencies concerning the contamination of sources of supply, failure of the distribution system and shortage of supply.

(2) Land Transfers Any sale, transfer of property interest or change in use of land acquired for water supply purposes may also require approval by a two-thirds vote of the Legislature, in addition to Department approval. (Massachusetts Constitution Amend. Art. XCVII, Section 243)
CTC Cellular Tower Coalition

Local Government and Tower Siting: A Simple Strategy

First, order by telephone (sorry, no internet access) the guidebook developed by the National League of Cities for local officials and planners. This well organized and comprehensive manual was prepared by the National League of Cities Washington-based staff lawyers who participated in the drafting of Sec. 704 (the tower siting provisions) of the Telecommunications Act of 1996.

Second, based on e-mail to this web site and newspaper articles, a disturbing pattern of behavior by local officials is emerging across the country. From Massachusetts to California, from Florida to Washington state, local councils and boards are caving in to cellular tower applications despite strong community opposition. Tower sites are being approved wholesale without proper review procedures. Cellular carrier technical representations (more often misrepresentations) are being accepted at face value.

Unquestionably, this official timidity is in response to the legal strategy of cellular carriers of bringing "slam suits", in an effort to build a body of favorable case law. Typically these suits are filed against small towns and suburban communities with limited financial resources to stave off a determined legal assault.

What to do?

Just tell your local officials that they are wrong. Back it up with documentation: the Sprint Spectrum v. Ontario Planning Board opinion and order, the recent policy shift from the FCC. Mention (gently at first) the fact that some towns are facing an increasing number of suits brought by residents opposed to inappropriately sited towers (e.g. Littleton, Concord and Franklin, Massachusetts, North Barrington, Illinois).

The '96 Telecom Act has been referred to as the National Lawyers Relief Act. All too true. However, if you can't afford a lawyer, take careful, thorough notes at public hearings. These will have standing in court in the absence of verbatim transcripts. Assign a single individual to keep and maintain these notes. Review them as a group to make sure they are accurate.

FINALLY TELL LOCAL OFFICIALS that legal experts and municipal organizations like the National League of Cities recommend the following steps:

1. Enact a local tower moratorium (upheld so far by several federal courts) of limited duration.
2. Use the time to rewrite your zoning laws to accommodate towers in appropriate sites.
3. Continue to accept and process applications for permits, but put approval on hold for the duration of the moratorium. This is vitally important in proving that the community is not seeking to ban towers outright.
4. Check out legal and planning resources available from state, county and regional commissions and agencies.
5. Appoint a telecommunications task force or ad hoc committee to study model tower siting by-laws and ordinances, state-of-the-art tower design and camouflaging technology.
6. Generate ample local press coverage about the task force and local government response in
Auburn rejects plans for two communications towers

By Gerard F. Russell
TELEGRAM & GAZETTE STAFF

AUBURN — In the first test of a new zoning bylaw limiting the height of communications towers in town, plans for two proposed towers have been nixed.

The Zoning Board of Appeals turned down requests for variances Thursday for a 150-foot Bell Atlantic Mobile tower and a 190-foot tower by a Wilmington company.

In May, the annual town meeting adopted a bylaw that limits towers to a height of 100 feet.

Calico Partnership, doing business as Bell Atlantic Mobile, wanted a 150-foot single pole tower at 198 Washington St.

MCF Communications had hoped to build a similar 190-foot monopole at the Interchange Industrial Park on Route 20.

Leo J. Lessard, chairman of the Auburn ZBA, yesterday said state law requires that applicants for zoning variances show a hardship exists regarding land, soil and topography.

"The board felt the justification for the hardship just was not there," Lessard said.

Auburn Town Planner Michael O'Hara yesterday said the company could still seek special permits from the Planning Board for towers that comply with the town's 100-foot height restriction. A Planning Board hearing is scheduled for the towers Aug. 25.

Michael J. McFadden, of MCF Communications in Wilmington, yesterday said he needs at least a 150-foot tower and does not know what his next step will be.

"One-hundred feet doesn't do us much good," McFadden said.

Unlike Bell Atlantic Mobile, McFadden constructs towers on speculation and rents space to communications companies. He builds them to accommodate six antennas.

To make a profit, he said, he needs at least three carriers on a tower.

By denying the variance, McFadden suggests, the town will likely have more smaller towers as a result. The tower he proposed would only be visible from the Mass Pike, he said.

McFadden said he is still interested in the area which will experience more growth with the opening of the nearby Mass Pike-Route 146 interchange.

A spokeswoman for Bell Atlantic could not be reached yesterday for comment on that company's plans.

The zoning restriction was passed to protect residential neighborhoods from adverse visual effects from towers. It was adopted to comply with the federal Telecommunications Act of 1996.

There are three towers in town, a Bell Atlantic tower on Southbridge Street behind the bowling alley near Interstate 90 and two towers behind BJ's Wholesale Club. One of the towers at BJ's will soon be taken down, according to Bell Atlantic.

Bell Atlantic Mobile has argued the taller towers allow more companies to co-locate on them, thereby reducing the need for more towers.

Hawk Hill Orchards
63 Carabine Rd., Millbury MA • (508) 885-6037
569 Main St., Narragansett

Maurice
Kelley Sq., WORC
Daily 9-5; Sun. 11-5; Cash Only

Fairtrain!

Take the P&W Train from P&W Station on Saturday, August 29th and head South to the Oldest, Continuously Active Agricultural Fair in the United States - the Brooklyn Fair. Call us at 1-800-711-3338 by August 24th to reserve your seat and enjoy the fair!

Tickets just $20

That includes your ticket to the fair

How about a real deal?

See the Hyundai ad in the classifieds.

Driving is Believing
DETERMINATION OF NO HAZARD TO AIR NAVIGATION

<table>
<thead>
<tr>
<th>SPONSOR</th>
<th>CONSTRUCTION LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwestern Bell Mobile Systems, Inc. dba Cellular One 100 Lowder Brook Drive Westwood, MA 02090</td>
<td>PLACE NAME Leicester, MA</td>
</tr>
<tr>
<td>CONSTRUCTION PROPOSED</td>
<td>DESCRIPTION ANTEENNA TOWER</td>
</tr>
</tbody>
</table>
| | LATITUDE 42°15'18.09"
| | LONGITUDE (NAD83) 071°54'24.57"
| | HEIGHT (IN FEET) 150 1217 |

An aeronautical study of the proposed construction described above has been completed under the provisions of Title 14, Code of Federal Regulations, Part 77. Based on the study it is found that the construction would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the construction would not be a hazard to air navigation providing the following conditions are met:

- The structure shall be marked and lighted in accordance with Chapters 3, 4, 5, and 13, in FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting,

Supplemental notice of construction is required any time the project is abandoned (use enclosed FAA form), or

- At least 48 hours before the start of construction (use the enclosed FAA form)
- Within five days after the construction reaches its greatest height (use the enclosed FAA Form)

This determination expires on June 1, 1999 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

This determination is subject to review if an interested party files a petition on or before November 21, 1998. In the event a petition for review is filed, it should be submitted in triplicate to the Manager, Flight Information and Obstructions Branch, AAT-210, Federal Aviation Administration, Washington, D.C. 20591, and contain a full statement of the basis upon which it is made.

This determination becomes final on December 1, 1998 unless a petition for review is timely filed, in which case the determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

An account of the study findings, aeronautical objections, if any, registered with the FAA during the study, and the basis for the FAA’s decision in this matter will be found on the following page(s).

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

This determination, issued in accordance with CFR, Part 77, concerns the effect of this proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

SIGNED: Luis A. Ramirez
TITLE: Manager, Airspace Branch, ANE-520
ISSUED IN New England Region, Burlington, MA ON October 22, 1998
FAA FORM 7460-9 (2/83) SUPERSEDES PREVIOUS EDITION
The proposed structure will be located in the town of Leicester, MA, approximately 1.5 NM west of Worcester Regional Airport (ORH) in Worcester, MA.

The proposal will exceed the obstruction standards of Title 14 Code of Federal Regulation (CFR), Part 77 subpart C as follows:

Section 77.25(a) by 58 feet, structures that exceed the horizontal surface—a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of the runway. The arcs are then connected by tangents and the radius of each arc is:

(1) 5,000’ for all runways designated as utility or visual;
(2) 10,000’ for all other runways

as pertains to ORH.

The proposal was circularized and no comments were received.

The study for Instrument Flight Rules (IFR) effect disclosed that the structure would have no effect on arrivals, departures, or enroute traffic.

The study for Visual Flight Rules (VFR) indicated that structure would have an adverse affect on VFR arrivals and departures. The proposed tower would penetrate the horizontal surface but would not penetrate a plane 300’ below the traffic pattern for arrivals. It could have an adverse affect on departures remaining in the pattern but the distance from the airport combined with the climb gradient should place the proposed structure below the traffic pattern. To further mitigate the adverse affect on both arrivals and departures, the proposed structure should be marked and lighted. The proposed structure would not have an adverse affect on enroute aircraft; nor would it affect any known existing or proposed public-use airport or navigation facility.

There is no cumulative impact of the proposed structure, when combined with other existing and proposed structures.

Therefore, as a result of the study, it is determined that the proposed structure would not have a substantial adverse affect on VFR or IFR operations and would not be a hazard to air navigation provided:

1. The structure is lighted and monitored in accordance with chapters 3, 4, 5, 13 of FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting.
2. The sponsor provides notice to the FAA X at least 48 hours before the start of construction (use the enclosed FAA Form 7460-2) and/or X within five days after the construction reaches it greatest height. (Use the enclosed FAA Form 7460-2)

This determination concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of compliance relating to laws, ordinances, or regulations required by other governmental bodies.

Please refer to Aeronautical Study Number 98-ANE-0268-OE in any future correspondence concerning this structure.