

# **CAPE COD COMMISSION**

3225 MAIN STREET P.O. BOX 226 BARNSTABLE, MA 02630 (508) 362-3828 FAX (508) 362-3136

E-mail: frontdesk@capecodcommission.org

April 9, 1998

Applicant:

Omnipoint Communications Enterprises, Inc.

50 Vision Boulevard

East Providence, RI 02914

(401) 588-5600

John Jadhon, Project Manager

Project #:

TR97031

Project:

Omnipoint Tower Proposal, Town of Falmouth

996 East Falmouth Highway

East Falmouth, MA

RE:

Development of Regional Impact Review

Cape Cod Commission, Section 3(i)

Lot/Plan:

Deed, Book 4435, Page 083;

Lot Book 227, Page 27 and Book 70, Page 39

Certif, #:

Owner:

Gilbert R. Allenby

# **DECISION OF THE CAPE COD COMMISSION**

### SUMMARY

The Cape Cod Commission (Commission) hereby approves with conditions the application of Omnipoint Communications Enterprises for the proposed tower located at 996 East Falmouth Highway, East Falmouth as a Development of Regional Impact (DRI) pursuant to Chapter A, Section 3(i) of the Commission's Regulations of General Application for a communications monopole of 90 feet in height with locations for three personal wireless service facilities and three storage shelters at the base of the monopole.

### PROJECT DESCRIPTION

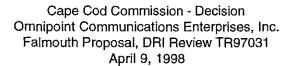
The project proposes the construction of a new 90-foot monopole on an 11.6 acre parcel that includes Davey Tree, an existing landscaping and arborist business. The applicant modified their original proposal for a 150-foot monopole, as specified in the DRI Referral Form from the Town of Falmouth, to the construction of a 100-foot monopole based on data collected by their site acquisition specialist. Also included as part of the project is the location of an equipment cabinet at the base of the monopole, 70"H x 51"W x 28"D. The project proposes to lease a 40' x 40' area for a total of 1600 square feet which will be a secured compound. Also proposed as part of the project is the co-location of personal wireless service facilities for another wireless carrier, Telecorp, and an additional equipment storage cabinet of similar size. The monopole can accommodate a third co-locator which would be accompanied by a third storage shelter. The project proposes a 12'-wide gravel access road where there is an existing 9'-wide cart path.

### **JURISDICTION**

The proposed project is being reviewed as a Development of Regional Impact (DRI) under Chapter A, Section 3(i) of the Commission's Regulations of General Application which state that "Construction of any wireless communication tower exceeding thirty-five (35) feet in height from the natural grade of the site on which it is located" is presumed to be a Development of Regional Impact.

### PROCEDURAL HISTORY

The Commission received a Development of Regional Impact (DRI) Referral Form from John L. Druley, Chairman of the Falmouth Zoning Board of Appeals on December 8, 1997. A duly noticed Public Hearing pursuant to Section 5 of the Cape Cod Commission Act was held by an authorized Subcommittee of the Commission on the DRI request on January 26, 1998 at the Morse Pond School, Falmouth. At this Hearing the Record and Hearing were left open. A second Public Hearing was held on Wednesday, March 4, 1998. A Subcommittee meeting was scheduled for March 12 at the Commission offices and a Public Hearing scheduled before the full Commission on March 26. Subsequently, due to the need for further information, the Subcommittee meeting was rescheduled to March 26 and the Public Hearing before the Commission was rescheduled to April 9, 1998.



### Materials Submitted for the Record:

# **Application Materials:**

- DRI Application
- •Black, 3-ring binder with photographs
- •Two sets of 7 site plans, full size
- •Tower Parts and Accessories '96 catalog, Pirod, Inc.
- Certified Abutters List
- •Wyle Laboratories Test Report, July 10, 1997
- ·Lease with Gilbert R. Allenby, Davey Tree
- Propagation printout "with proposed site" and "without proposed site"
- •Notification of Nonionizing Radiation Source, Mass. Dept of Public Health
- DRI Benefits/Detriments Analysis
- Copy of Application Fee check
- Letter from ATC Assoc., Inc. to Omnipoint, December 24, 1997
- Monopole specifications and data
- •Computer propagation printout, Jan 5, 1998
- Acknowledgment of Notice of Proposed Construction or Alteration, FAA

# Correspondence from Applicant:

- •Letter to CCC from Richard Detch, Omnipoint, January 9, 1998
- •Letter to CCC from E. Mark Malouf, Malouf Engineering, January 20, 1998
- •Letter to John Jadhon, Omnipoint, from K. Anthony Hoover, Cavanaugh, Tocci, Assoc., January 21, 1997.
- •Co-location Application with Telecorp Holding Corp, Inc.
- •Set of 7 site plans, 11" x 17"
- •Letter to Gay Wells, CCC, from Walter Cooper, Flack + Kurtz, November 13, 1997
- •Letter to Christine M. Lemay, CCC, from John Jadhon, Omnipoint, January 15, 1998
- •Letter to Jeffrey Shrimpton, Mass. Historical Commission, from Nicole Dobrowolsky, Omnipoint, January 15, 1998
- •Letter to Christine M. Lemay, CCC, from John A. Jadhon, Omnipoint, Jan. 22, 1998
- •Letter to Christine M. Lemay from John A. Jadhon, January 23, 1998
- •Copy of RFP for Wireless Communications Consulting, November 4, 1997
- •Letter to Walter A. Cooper, Flack + Kurtz, from Christine M. Lemay, January 27, 1998
- •Fax to John Jadhon from Christine Lemay, January 30, 1998
- •Letter to Christine M. Lemay from John A. Jadhon, February 4, 1998
- •Letter from Stephen Russell, Entel Technologies, to David Weisman, Cellular Realty Advisors (Omnipoint), February 6, 1998
- •Letter to Walter A. Cooper, Flack + Kurtz, from Gay Wells, February 9, 1998
- Letter to Gay Wells from John A. Jadhon, February 12, 1998

- •Letter to John Jadhon from K. Anthony Hoover, Cavanaugh Tocci Assoc., January 21, 1997 (1998?)
- •Letter to Philip A. Ricchiuti, ATC, from Brona Simon, Mass Historical Commission, February 23, 1998
- Copy of memo to David Vivian, Entel, from Turan Akin, Entel, March 13, 1998

# Correspondence from Cape Cod Commission:

- •Letter to William Fricke, Omnipoint, from Christine M. Lemay, Dec. 10, 1997
- •Letter to John Jadhon, Omnipoint, from Christine M. Lemay, Dec. 10, 1997
- Certified letter receipts
- •Letter to Morse Pond School, Falmouth, from Christine M. Lemay, Dec. 19, 1997
- •Letter to John Jadhon from Christine M. Lemay, Jan. 13, 1998
- •Fax form to John Jadhon from Christine Lemay, Jan. 22, 1998
- •Letter to John Jadhon from Christine M. Lemay, Jan. 22, 1998
- •Fax to Karen Wyke, Falmouth Enterprise, from Christine Lemay, Jan. 27, 1998
- •Set of site plans, reduced size
- •CCC Staff Report, Jan. 26, 1998
- •Letter to John Jadhon from Christine M. Lemay, Jan. 28, 1998
- •Fax form to John Jadhon from Christine Lemay, Jan. 28, 1998
- •Fax form to Jean McCluskey, Falmouth Historical Comm., from Christine Lemay, Feb. 17, 1998
- Letter to Christine M. Lemay from Walter A. Cooper, Feb. 20, 1998
- •Fax form to John Jadhon from Gay Wells, Feb. 25, 1998
- •Information on the Waquoit Standpipe
- •Letter to Walter A. Cooper from Gay Wells, Feb. 9, 1998
- •RFQ Wireless Communications Consulting, Nov. 4, 1997
- •Flagpole simulations (2)
- Computerized output, propagation
- •Letter to David Weisman, CRA, from Stephen Russell, Entel, Feb. 6, 1998
- •Letter to Christine M. Lemay from John A. Jadhon, Feb. 4, 1998
- •Letter to John Jadhon from Christine M. Lemay, Jan. 28, 1998
- •DRI Subcommittee Notice, Feb. 19, 1998
- •Memo to Subcommittee from Gay Wells, Feb. 27, 1998
- •Fax to Gay Wells from Walter Cooper, Mar. 6, 1998
- •Fax to Gay Wells from Walner Morriseau, Flack + Kurtz, Mar. 10, 1998
- •Letter to Gay Wells from Walter A. Cooper, Mar. 10, 1998
- •Letter to Walter A. Cooper from Gay Wells, Mar. 11, 1998
- Letter to John Jadhon from Gay Wells, Mar. 11, 1998
- Letter to David Vivian, Entel Technologies, from Gay Wells, Mar. 11, 1998
- •Memo to David Vivian from Gay Wells, Mar. 11, 1998
- •Fax to John Jadhon/Robert Anderson from Gay Wells, Mar. 11, 1998

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- •Letter to John Jadhon from Gay Wells, Mar. 19, 1998
- •Fax to John Jadhon from Gay Wells, Mar. 19, 1998
- •Letter to Gay Wells from Walter Cooper, March 24, 1998

# **Town Correspondence**:

DRI Referral form to CCC from John L. Druley, Chairman, Falmouth Zoning Board of Appeals, Dec. 3, 1997

### Other Information:

- •Building Use Permits, Jan. 5 and Feb. 9, 1998
- •Hearing Notice, Jan. 26, 1998
- •Minutes, Public Hearing, Jan. 26, 1998
- •Subcommittee Notices, Dec. 11,1997, January 8, 16, 22, 23,27 and Feb. 4 1998
- Omnipoint Contact List
- •Hearing Notice, Mar. 4, 1998
- •Minutes, Public Hearing, Mar. 4, 1998
- DRI Schedule
- Subcommittee List
- •Letter from Ann A. McLean, resident of Falmouth, Mar. 4, 1998
- •Newspaper article, Falmouth Enterprise, Mar. 6, 1998
- Waquoit Standpipe information
- •Part 77, Objects Affecting Navigable Airspace
- •14 CFR Part 77, Amendment 77-12, Dec. 28, 1995 and other information available on the internet
- Newspaper articles, Falmouth Enterprise, Jan. 9 and 30, 1998
- Photograph of balloon test
- Meeting notes
- •DTE Ruling, Jan. 21, 1998
- •CCC Technical Bulletin 97-001
- Notes
- •List of Falmouth Historic and Scenic places from Falmouth LCP
- •Minutes of Sprint Spectrum Communications Tower Scoping Session, Mar. 11, 1997
- Notes

### **TESTIMONY**

Public Hearing: Monday, January 26, 1998 - 7:00 p.m. (See minutes, in file)

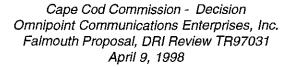
John Jadhon, Omnipoint Communications, gave an overview of Personal Communications Systems (PCS) technology and the Company's site-selection process. He stated that they have a commitment from Telecorp to co-locate on the tower.

Christine Lemay, staff planner, gave the Staff Report, noted the Technical Bulletin for Wireless Facilities and the standards and requirements therein. See Staff Report for specifics.

Subcommittee members had an opportunity to ask questions of the applicant and the staff. These had to do with definitions and technical questions. Sumner Kaufman asked about the Commission's jurisdiction for reviewing towers given the recent Nextel decision by the Department of Telecommunications and Energy. Ms. Lemay stated that Patty Daley, Commission Staff Counsel, has stated that the Commission continues to have jurisdiction.

Several residents spoke and had the following concerns: 1) Guarantees that there will be no harmful radiation to residents, some of whom have health concerns. 2) Curiosity about whether the antennas will affect the technology in residents' homes (TV, radio, computers, etc.). 3) Concerns about declines in property values. Further concerns were 1) Visibility of the nearby existing 40 ft. tower and its interference on weather band radio. 2) Trees are not tall enough to camouflage the tower.

Bill McClure, a resident of the Air Park at the airport, is the President of the Air Park Owners Association. He made the following comments: 1) There are 110 lots with access to the airport. He stated that there are Med-Evac helicopter ambulance flights to Boston once or twice a month all year, day or night. He believes that a 100 ft. antenna would be a problem to the helicopters as a collision hazard. He stated that the airplanes now have a 1000 ft. clearance. He also stated that transient pilots would not know the tower is there. 2) He is concerned about the type of lighting to be used on the tower and said that a strobe light would have potential impacts on residents. 3) He is concerned about potential radiofrequency hazards emanating from the antennas as well as interference to airplane instruments and technology. 4) He questioned whether the height would be increased in the future due to co-locators. 5) He stated that the clear-way slope requirements from the FAA where the tower would be could



only be met with a 35 ft. tower. 6) He objects to the tower on the grounds of safety and would like his objection to be placed in the record. 7) Mr. McClure also believes that we cannot count on adequate regulation from the FAA. Further comments were made by others who live at or use the Air Park.

William Gallagher stated that he built the airport. He said the water tower was built in 1945 and torn down around 1983. At his request the tower was painted in a checkerboard pattern and it was used as a landmark to find the airport. He believes that the antenna would be an asset.

Public Hearing: Wednesday, March 4, 1998, 7:00 pm. (See minutes, in file)

Gay Wells presented the staff's response to information provided to date by the applicant and stated the issues for discussion.

Walter Cooper of Flack + Kurtz in New York City, technical consultant to the Cape Cod Commission on wireless facilities, presented his comments on the project. He said he felt Omnipoint was generally responsive to his inquiries during this process. The issues he still wanted to raise were:

- Height of the tower. He ran radio propagation plots and determined that a 100' tower is not necessary. He said he believes the tower could be 75' with one co-locator at 65';
- Why alternate sites were rejected;
- Information on radiofrequency emissions. He said he was disappointed that the applicant had not provided him with this information;
- Grade of service and rate of service objectives. He said he found the goals of Omnipoint in this regard to be reasonable;
- Acoustics and power generator issues;
- The site's proximity to the airport. According to FAA guidelines, the tower should not technically create an obstruction or a hazard to the airport, but that does not mean there is no danger from the tower. The tower at present does not require lighting based on FAA guidelines, but that it might be appropriate given the concerns raised by pilots who use the airport;
- The issue of abandonment and that the applicant has agreed to bonding.

The Subcommittee members asked questions of Mr. Cooper regarding FAA regulations and other technical and airport issues.

John Jadhon from Omnipoint then introduced his colleagues who stated that the company had submitted a Massachusetts Department of Health form on RFR, which he said is far stricter than the federal form. He said they preferred a 100' tower. The Subcommittee asked questions of Mr. Jadhon and his colleagues.

Mr. Jadhon addressed Ms. Wells' key points. He said that FAA approval had been obtained for the site and an archaeological survey had been done of the site and found no significance. He said that he is willing to do whatever the Commission deems appropriate for landscaping. A bond to the Town of Falmouth is something Omnipoint is willing to do and that the exact amount of money would be determined by the town. The Subcommittee asked questions about co-location.

Members of the public addressed their concerns.

Steve Russell, representing Telecorp, spoke next. He said that they had originally planned on a 125-foot tower location, but that the 90-foot location could work.

Mr. Cooper asked to speak again on the RFR issue.

Subcommittee Meeting: Thursday, March 26, 1998.

Gay Wells reviewed recent materials received including a letter from Walter Cooper recommending that the tower be built at a maximum of 80 feet in height. The consultant had not yet received the RFR information from the applicant. She also stated that the landscape plan is being prepared and has not been received by the Commission.

There was a discussion of compliance with FCC radiofrequency emissions standards and the need to have that information in the project file.

The applicant gave a critique the consultant's findings and noted a belief that some inaccuracies may exist.

There was a discussion of the life of the tower and the term of the lease. There was a discussion of separation requirements between antenna arrays.

Mr. Schlaikjer questioned the applicant about alternate sites and the possible use of the Five Star site. The applicant showed photos of the Five Star site and its close proximity to residences. He also reiterated that repeated calls to Five Star were unsuccessful because calls were never returned. Mr. Tamsky asked about the use of core-ten steel which oxidizes. The applicant said that they must use what is available.

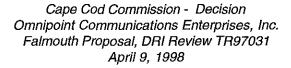
Cape Cod Commission - Decision Omnipoint Communications Enterprises, Inc. Falmouth Proposal, DRI Review TR97031 April 9, 1998 There was a discussion of the height of the tower and the ability to provide for colocation and the color of the tower. Ms. Wells recommended white for visibility to pilots. There was a discussion of a bond to the Town of Falmouth for dismantling and removal in the future to which Omnipoint agreed. The subcommittee voted and agreed upon a 90-foot height to provide for three carriers, white for visibility, and the need for a chain link fence. There was a discussion of a color flyer showing the tower and a site plan with its relationship to the airport which will be provided to the Falmouth Air Park and to local convenience stores.

### **FINDINGS**

The Commission has considered the proponent's application for a Development of Regional Impact review regarding the proposed Omnipoint Communications Enterprises' 100-foot monopole for wireless telephone services. Based upon consideration of such request, and information presented at the public hearings and submitted for the record, the Commission makes the following findings:

- 1. The proposed project is being reviewed as a Development of Regional Impact (DRI) under Chapter A. Section 3(i) of the Commission's Regulations of General Application which state that "Construction of any wireless communication tower exceeding thirty-five (35) feet in height from the natural grade of the site on which it is located" is presumed to be a Development of Regional Impact.
- 2. The project site is 11.6 acres of which the applicant proposes to lease a 40'x40', 1600 square foot area.
- 3. The proposed project is located within an Agricultural-A zoning district in the Town of Falmouth. A communications tower over 50' in height in this district requires a Special Permit from the Town.
- 4. The Omnipoint PCS installation is an unmanned private and secured compound. It is only accessed by trained technicians for periodic routine maintenance and, therefore, does not require any water or sanitary sewer service.
- 5. The project is not located in a wellhead protection zone.

- 6. Permanent standby emergency power will consist of wet cell batteries for Omnipoint. If necessary, during an extended power outage, a portable emergency generator will be used to provide temporary emergency backup power. There is no on-site bulk storage of flammable fuels for operating an emergency generator for the Omnipoint equipment. All carriers for the project will follow all hazardous materials Minimum Performance Standards (MPS) in the Regional Policy Plan for use, storage, and disposal of hazardous materials.
- 7. Security lighting in the equipment compound is controlled by a photoelectric-infrared (motion detector) sensor. Luminares consist of two 90-watt halogen spot lights. Lighting can be adjusted so as not to cause any objectionable glare on adjoining properties.
- 8. The proposed project is not located within a designated District of Critical Planning Concern nor a Significant Natural Resources Area. No Wetlands were observed within 100' of the site, per visual inspection by Bruce Chapman Wait, Registered Professional Land Surveyor for the applicant.
- The proposed project is located in close proximity to the Falmouth Airport.
  A light atop the monopole and painting it white will increase its visibility to aviators.
- 10. No Open Space provision is required for telecommunications projects.
- 11. There are no anticipated Transportation impacts from the proposed project.
- 12. There are no Affordable Housing requirements for telecommunications projects.
- 13. The site is visible from residences on the south side of Route 28 and landscaping is required to make the project less visible.
- 14. The Commission's radiofrequency consultant, Walter A. Cooper of Flack & Kurtz, recommends that a new tower be limited to 80 feet in height.
- 15. The Cape Cod Commission finds that it is appropriate to allow the tower to be 90 feet in height to ensure that three carriers can be located on it.
- 16. There are additive effects of radiofrequency radiation from co-locators.



### **CONDITIONS**

- 1. All conditions shall be met and the facility shall not become operational and shall not be used for commercial purposes prior to the issuance of a Certificate of Compliance by the Cape Cod Commission. Prior to the time that a Certificate of Compliance is needed by the applicant, notification shall be given to the Cape Cod Commission at least 30 days in advance to allow time for staff to inspect the site and ascertain that all conditions have been met.
- 2. The project is approved for a 90-foot telecommunications monopole which will locate up to three personal wireless service facilities.
- 3. All three wireless carriers are required to supply the Commission's radiofrequency consultant with RFR data showing all calculations and assumptions, using "worst case" calculation method in accordance with FCC OET Bulletin 65, dated August, 1997.
- 4. The project includes three equipment storage shelters at the base of the monopole. All storage shelters will be contained within the fenced area. The Omnipoint storage shelter will be 70"H x 51"W x 28"D with up to two other storage cabinets of a similar size.
- 5. The contents of the storage shelters, containment measures, and fuel shall meet all hazardous materials requirements in the Regional Policy Plan. In the event that a portable emergency generator is needed as emergency power, natural gas is required to be used as the fuel.
- 6. Fencing shall be a 6' chain link with two feet of barbed wire at the top.
- 7. Lighting at the site shall meet the requirements of the Commission's Technical Bulletin 95-001.
- 8. Upon completion of construction, the monopole will be painted white in color.
- 9. Upon completion of construction, the applicant will install at the top of the structure a red, non-flashing, double aviation obstruction light, as manufactured by Rohn, model number OB2 or FAA -approved equivalent to be agreed upon by the Falmouth Air Park. Lighting of the monopole is to be provided 24 hours per day and obstructed from ground visibility to any practical extent.

- 10. The applicant will provide a color, one-page flyer which shows a site plan showing the personal wireless service facility in relation to the Falmouth Air Park. The flyer will also include a color picture of the installed monopole with antenna arrays and will provide detailed information about its height, color, location, lighting, and surrounding area vegetation in reference to the Falmouth Air Park. One thousand copies of the color flyer will be made available to the Falmouth Air Park within one week of the construction of the monopole.
- 11. Landscaping based on a landscape plan by a licensed landscape architect is required which will provide a 6-foot high berm on the south side of the site with appropriate plantings per the Commission's letter and memo of March 19, 1998. The landscape plan shall be submitted to the Cape Cod Commission staff for approval and will be filed with this decision. Plantings consistent with the approved plan must be installed prior to receiving a Certificate of Compliance for the Commission.
- 12. The applicant is required to post a bond in an amount to be determined by the Town of Falmouth for future dismantling, removal, and site restoration costs of the facility. This is to be provided to the Town of Falmouth at the time of the building permit.

## CONCLUSION

Based upon the Findings above and subject to the Conditions, the Commission finds that the project is consistent with the Regional Policy Plan, that the benefits outweigh the detriments, and approves with the above Conditions a 90-foot monopole which will locate personal wireless service facilities for three carriers.

This decision is rendered pursuant to a vote of the Cape Cod Commission on April 9, 1998.

Madeleine Bebout, Chair, Cape Cod Commission

Afril 9, 1998

# Commonwealth of Massachusetts

Barnstable, ss.

Subscribed and sworn to before me this

\_day of \_//

1998

Name, Notary Public

My commission expires:

