



# CAPE COD COMMISSION

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DATE: April 8, 1999

RE: Development of Regional Impact  
Cape Cod Commission Regulations of General Application  
Chapter A, Section 3(i)

APPLICANT: Omnipoint Communications, MB Operations, LLC  
50 Vision Boulevard  
East Providence, RI 02914

PROJECT #: TR98020

PROJECT NAME: Bourne Tower

BOOK/PAGE: Book: 246  
Page: 75

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## DECISION OF THE CAPE COD COMMISSION

### SUMMARY

The Cape Cod Commission (Commission) hereby denies without prejudice the application of Omnipoint Communications, MB Operations, LLC, applicant (hereinafter the applicant or the proponent) for a Development of Regional Impact (DRI) permit, pursuant to the Cape Cod Commission Regulations of General Application, Chapter A, Section 3(i) for construction of a wireless communication tower exceeding thirty-five (35) feet in height from the natural grade of the site on which it is located.

### PROJECT DESCRIPTION

The proposed project is located off Route 3A in the Sagamore Beach section of the Town of Bourne. The project consists of an 80' high monopole with a 63" x 51" x 28" equipment cabinet at its base. The monopole is designed to accommodate one additional carrier at 70', and equipment cabinet sited within a six foot high chain link fence enclosing a 25' x 25' leased area. The proposed facility is located in and



adjacent to areas zoned for business uses. Limited mix use development including offices and apartments are located on Old Plymouth Road to the east of the proposed site.

### PROCEDURAL HISTORY

The above-referenced project was referred to the Commission on June 1, 1998 by the Planning Board of the Town of Bourne for review as a mandatory DRI. A hearing officer opened the public hearing on July 21, 1998, because application materials needed to hold a substantive hearing were not received by the required date. The hearing was continued to August 12, 1998 where it was determined that additional information was needed to address issues raised by the Subcommittee and staff. The hearing was continued to September 3, 1998; however, because the requested information was not submitted in time, a hearing officer continued the hearing to September 16, 1998. At this hearing, additional information was requested of the applicant and the hearing was continued to September 29, 1998. On September 29, 1998, a hearing officer continued the hearing to October 8, 1998 because the applicant needed additional time to collect information requested at the September 16, 1999 hearing. The hearing period was closed on October 8, 1998. A Subcommittee meeting was held on October 29, 1998. A 90 day extension of the decision period to March 12, 1999 was granted on November 16, 1998. Subsequent Subcommittee meetings were held on December 16, 1998, January 5, 1999, and January 21, 1999. At the January 21, 1999 meeting, the Subcommittee voted unanimously in favor of recommending to the full Commission that the proposed project be denied. The Subcommittee agreed to send the draft decision to the full Commission on March 4, 1999. A subsequent Subcommittee meeting was held on February 16, 1999 to review and make proposed amendments to the draft denial Decision. At the February 16, 1999 meeting, Peter Morin, attorney for the applicant, responded to the draft denial decision and presented two documents outlining Omnipoint's perspective on the Commission review of this project. The Subcommittee agreed to reconvene on February 22, 1999 to review these documents. On March 4, 1999, Mr. Morin submitted to the Subcommittee a memorandum outlining his review of the draft denial decision. In order to allow time for the review of these submittals, the applicant signed an agreement extending the decision period to April 9, 1999. At the March 4, 1999 full Commission meeting, the Subcommittee recommended that the draft decision be sent to the full Commission on April 8, 1999. The Subcommittee met on March 30, 1999 to review the documents submitted by Mr. Morin on February 16, 1999 and March 4, 1999, and proposed amendments to the draft decision. At this meeting, the Subcommittee voted to transmit the decision with amendments to the April 8, 1999 Commission meeting. The Commission voted to deny the project on April 8, 1999.

## MATERIALS SUBMITTED FOR THE RECORD

### *Applicant Submittals:*

- Letter dated May 28, 1998 to Bourne Planning Board with copy of application for Special Permit under Zoning Bylaw, project description, Bourne Assessor's book and page reference, and certified list of abutting property owners;
- Signed DRI application materials and attachments, including propagation maps, dated June 30, 1999 and received July 7, 1999;
- Project Plans dated April 28, 1998 for review, and May 5, 1998 for permitting;
- Letter to Cape Cod Commission members, dated July 7, 1998;
- Letter to Cape Cod Commission members dated August 3, 1998, with attachments including large 300' radius map, DEP Bordering Vegetated Wetland Delineation Field Data Form, revised site plans dated July 30, 1998 for clarifications; clearance letter from Massachusetts Department of Public Health dated February 2, 1998 and Massachusetts Notification of Nonionizing Radiation Source form;
- Supplemental application materials submitted at August 12, 1999 hearing, much of which was submitted earlier in the DRI application including Town of Bourne Special Permit application, DRI referral form and application, zoning analysis, copies of the July 7, 1998 and August 3, 1998 letters referenced above, structural report dated July 1, 1998, acoustical report by Cavanaugh Tocci Associates, Inc., test report by Wyle Laboratories dated July 10, 1997 regarding safety tests on lead batteries, a copy of the environmental screening report prepared by ATC Associates, Inc. dated June 11, 1998, and a copy of the DEP Bordering Vegetated Wetland Delineation Field Data Form, Aviation Systems Associates, Inc. report dated May 1, 1998, Massachusetts Historical Commission Project Notification Form, Omnipoint's Federal Communications Commission license, clearance letter from Massachusetts Department of Public Health dated February 2, 1998, Massachusetts Notification of Nonionizing Radiation Source form, undated radiofrequency report prepared by Robert E. Anderson, Omnipoint engineer, propagation maps, existing and proposed Omnipoint facilities within the Town of Bourne, letters from Omnipoint to other wireless carriers dated July 1, 1998 showing evidence of efforts to obtain collocators at the proposed site, signed property lease agreement dated August 6, 1998;
- Letter to Cape Cod Commission members dated September 2, 1998 with attached propagation maps;
- Letter to the Cape Cod Commission dated October 8, 1998 with attached propagation maps;

- Letter to Cape Cod Commission members dated October 19, 1998 with attached propagation maps, October 14, 1998 letter from Steven Andrade, Omnipoint Construction Manager to Jackie Slaga regarding construction feasibility at the Norris Street Water Tank. an alternative facility design photo, and Memorandum for the Record regarding Omnipoint engineering design and field measurement methodology;
- Signed extension agreement received on November 12, 1998;
- Letter to the Cape Cod Commission dated November 17, 1999 with enclosures and propagation maps;
- Letter to Cape Cod Commission members dated January 21, 1998 with attachments including January 15, 1998 letter from Robert J. Connors of ComElectric to Jackie Slaga, and December 14, 1998 letters from Omnipoint to Sprint, AT&T Wireless, Bell Atlantic NYNEX Mobile, and December 16, 1998 letter from Michael Procopio of Nextel to Jackie Slaga;
- Letter to the Cape Cod Commission dated January 21, 1998;
- Box chronology of DRI review and consistency analysis of Commission Technical Bulletin 97-001 submitted by Peter Morin, attorney for Omnipoint, both undated, received on February 16, 1999;
- Memorandum from Peter Morin, dated March 3, 1999;
- Extension agreement signed and dated March 4, 1999; and,
- Reply of Omnipoint to draft decision, undated, submitted on April 8, 1999.

*Commission Submittals:*

- Letter to Omnipoint dated June 3, 1998 regarding DRI referral;
- Memo to Subcommittee dated June 4, 1998 about the project;
- Memo to Subcommittee dated June 19, 1998 about site visit;
- Memo to Subcommittee dated July 2, 1998 about schedule change;
- Memo to Subcommittee dated July 14, 1998 about hearing;
- Letter to Omnipoint dated July 14, 1998 regarding hearing;
- Hearing notice on July 21, 1998 hearing;
- Hearing officer minutes dated July 21, 1998;
- Staff report dated August 5, 1998;
- Subcommittee notice dated August 7, 1998;
- July 21, 1998 hearing minutes signed and dated August 12, 1998;
- Hearing notice on August 12, 1998 hearing;
- Letter to Omnipoint dated August 14, 1998;
- Subcommittee notice dated August 25, 1998;
- Hearing notice form September 3, 1998 and September 16, 1998 hearings;
- Staff report dated September 9, 1998;

- Subcommittee notice dated September 10, 1998;
- Letter to Roger Laporte, Bourne Inspector of Buildings, dated September 24, 1998;
- Memo to Subcommittee dated September 24, 1998;
- Letter to Omnipoint dated September 28, 1998;
- Subcommittee notice dated October 2, 1998;
- Subcommittee notice dated October 21, 1998;
- Letter and extension agreement to Omnipoint dated November 2, 1998;
- August 12, 1998 hearing minutes signed and dated November 16, 1998;
- September 3, 1998 hearing officer minutes signed and dated November 16, 1998;
- September 16, 1998 hearing minutes signed and dated November 16, 1998;
- September 29, 1998 hearing officer minutes signed and dated November 16, 1998;
- October 8, 1998 hearing officer minutes signed and dated November 16, 1998;
- Staff report dated December 11, 1998;
- Letter from David Maxson to Paul Sutton dated December 11, 1998;
- Institute of Electrical Engineers, Inc. Entity Position Statement submitted by David Maxson for the record on December 11, 1998.
- October 29, 1998 hearing minutes signed and dated January 14, 1998;
- December 16, 1998 hearing minutes signed and dated January 14, 1998;
- Staff update dated January 4, 1999;
- Letter to Omnipoint dated February 2, 1999;
- "Guidelines for DRI Review of Wireless Communication Towers Consistency Analysis" submitted by Attorney Peter Morin on February 16, 1999;
- Omnipoint's chronological review of project submitted by Attorney Peter Morin on February 16, 1999; and,
- Memorandum from Peter Morin to Subcommittee dated March 4, 1999.
- Memorandum from David Maxson to Paul Sutton dated March 15, 1999;
- Letter to Omnipoint dated March 18, 1999; and,
- Memorandum from Patty Daley to Subcommittee dated March 25, 1999.

*Town Submittals:*

- DRI referral from Planning Board dated May 29, 1998 and received June 1, 1998;
- Zoning bylaw excerpts from Meredith Pickering received July 1, 1998; and,
- Violation letter from Bourne Building Inspector to Omnipoint, dated August 13, 1998 calling for the removal of the temporary antenna tower erected by Omnipoint without a permit.

*State Agency Comment:*

- Letter from Massachusetts Highway Department to Omnipoint, dated October 29, 1998.

*Interested Parties:*

- Faxed letter from David A. Di Giammerino, COM/Electric dated March 12, 1999.

The DRI application, plans, and notice of public hearings relative thereto, the Commission staff reports, correspondence, exhibits, minutes of the hearings and all written submissions received in the course of the proceedings, including all materials submitted on File TR98020 are incorporated into the record by reference.

### TESTIMONY

*August 12, 1998, Public Hearing (See minutes in project file)*

Jackie Slaga, representing the proponent, presented the project by commenting on its location, design, expected service coverage, visibility, and co-location feature. Mr. Robert Deane, Subcommittee member, asked if the Town of Bourne had granted Omnipoint permission to erect a functioning temporary mobile structure on the proposed site. During the month of August, 1998, the Town of Bourne Building Inspector issued Omnipoint a violation notice for having erected a mobile cell on wheels. Ms. Slaga said that permission had not been granted by the Town of Bourne, adding that electrical service was provided to the site due to concerns over a potential long term Bell Atlantic strike. Mr. Deane said the structure should not have been located on site if no permission had been granted. Meredith Pickering, Bourne Town Planner, commented on the project, indicating that the Town was very disappointed that the mobile structure was put up without permits. Mr. Jim Mulvey, Town resident, asked for clarification that the test structure was, in fact, erected without permission. Ms. Slaga confirmed that the test facility was erected and apologized on behalf of Omnipoint, adding that the structure had remained on site longer than expected. Mr. Mulvey said that Omnipoint should have contacted the town and county officials prior to erecting the structure. Mr. Mulvey asked if high tension wires could be used for co-location. Richard Detch, site acquisition staffer of Omnipoint, responded that there are no high tension wires in the vicinity.

Paul Sutton, project planner, presented the staff report, focusing his comments on the issues of facility location, height, setback, design, and co-location. He noted that the proponent had limited their search of existing structures and raw land to a one half mile service area, thereby excluding a geographical area near the Sagamore Bridge Rotary in which the carrier anticipated the potential need for an additional facility. The Sagamore Bridge Rotary is approximately 1.5 miles from the proposed site. He added that the proposed facility is not consistent with Commission height, design, and co-location standards relative to wireless telecommunication facilities. He added that the facility would be visible from Route 3, Route 3A, and Old Plymouth Road, a Scenic Road designated by the Town of Bourne.

Ms. Slaga reviewed the propagation maps with the Subcommittee and noted that there would be no need for an additional facility in Bourne. She distributed a color palette with potential colors for the proposed monopole and said that the equipment shelter could be constructed in a traditional Cape Cod architectural style. Ms. Slaga said that a 70' facility at the proposed site could fill a service hole, but that

the proposed height would be needed to meet Omnipoint's objective of linking to its facility to the north.

Mr. Schlaikjer, Subcommittee member, requested that Omnipoint contact the Canal Power Plant about the feasibility of locating on that facility. Staff and the Subcommittee also requested that the applicant provide additional information to address project inconsistencies with Commission review standards. Specifically, they requested that the applicant do the following: 1) extend their geographic search of existing structures to the south; 2) reassess the need for the proposed 80' height pending the identification of existing structures; 3) seek the commitment of another carrier to co-locate on the proposed facility; and, 4) identify ways to camouflage the proposed facility.

*September 16 1998, Public Hearing (See minutes in project file)*

Paul Sutton presented the Commission staff report. He noted that the mobile facility erected without permits had been removed per the August 3, 1998 order of the Bourne Building Inspector. Mr. Sutton said it was unclear whether the proponent had conducted a search of existing sites and structures as requested at the last hearing. He also noted ambiguities and incomplete information associated with the propagation maps developed by Omnipoint for two hypothetical 50' facilities along Route 3 and one hypothetical 120' facility at the Canal Station Power Plant. Mr. Sutton requested the following: 1) documentation of the site and structure search conducted by Omnipoint; 2) development of additional propagation maps; 3) evidence of contact with the new owner of the Canal Station Power Plant; and 4) evaluation of the redesign of the proposed facility.

Ms. Slaga presented a zoning and land use analysis, stating that the proposed project was appropriately located in a primarily commercial area away from residential neighborhoods. She said a site further south would have been preferable from a service coverage objective, but would have necessitated a variance from the Town of Bourne for a higher facility and would have resulted in visual impacts to more residential areas. Ms. Slaga said that the (Norris Road) water tank was too far away to meet Omnipoint's service coverage objectives. She said that there had been no public opposition to the site because it was appropriate in terms of location.

The Subcommittee and proponent discussed potential service coverage from the water tank and the Canal Power Plant smokestack. Mr. Broidrick, Subcommittee Chair, asked about the viability of co-locating on the Sagamore Bridge. Robert Anderson, Omnipoint radiofrequency engineer, spoke of logistical problems associated with securing permission from the U.S. Army Corps of Engineers and maintaining the equipment cabinet.

Mr. Deane said Omnipoint's earlier comment relative to the perceived lack of public opposition to the project was untrue, noting the Town of Bourne received calls from concerned residents about the temporary, mobile facility. Further, he indicated

that the applicant had made untrue statements regarding the nature of the activities occurring on site relative to the temporary facility. Ms. Slaga said that Omnipoint had obtained the electrical permit and had advised the electrical inspector that Omnipoint might be testing at the site. Mr. Deane said the Town did not know what testing was occurring and that the Town should have been contacted.

Mr. Olsen, member of the Subcommittee, asked if Omnipoint had conducted drive tests. Mr. Anderson said that Omnipoint transmitted from the cell on wheels and that the tests proved that the proposed 80' height was sufficient to provide service to the Sagamore Bridge Rotary. Mr. David Maxson, Commission radiofrequency consultant, asked what the height of the antenna at the temporary facility was during the drive tests. Mr. Anderson said drive tests were conducted at antenna heights of 80', 75', and 65' and that data from these tests was available. It was later reported by the proponent that the facility could only be extended to a height of 68'.

Mr. Maxson said the elevation of the water tank appears relatively high, and that the direct line of site between the water tank and the Sagamore Bridge Rotary does not appear to be obstructed by significant variations in the area topography. Mr. Anderson said that this location may work, adding that Omnipoint could look at this location.

Mr. Maxson asked if Omnipoint was prepared to develop a facility at the rotary to fill in a small service gap. Mr. Anderson said that he was comfortable that the proposed facility would cover the rotary; however, he added that they may need an additional facility at the rotary because Omnipoint wanted a strong signal at the rotary.

Mr. Maxson asked if the Sagamore Bridge was suitable for Omnipoint. Mr. Anderson said that the coverage up Route 3 would be decent, but that the placement of the antenna high above the Canal could result in network interference. Ms. Slaga cited issues of adequate capacity and facility access. Mr. Maxson said the viability of the scenarios under discussion needed to be demonstrated by the proponent. The Subcommittee did not want the proponent to pursue the potential option of locating its facility on the Sagamore Bridge.

Mr. Maxson and the Subcommittee agreed that the proponent should develop the following: 1) propagation maps for coverage expected from the water tank; 2) from the water tank and a utility pole at the Sagamore Rotary; and, 3) from the water tank and utility pole as they would connect with the proposed network.

Mr. Sutton asked if the Subcommittee wished Omnipoint to provide a plan for the redesign and camouflaging of the proposed facility. Ms. Slaga said that a flagpole design for the proposed facility would require an additional 30-50 feet. Mr. Anderson said the flagpole design for the proposed facility would require only an additional 15'.

*October 29, 1998, Subcommittee Hearing (See minutes in project file)*

Ms. Slaga reported to the Subcommittee that the North Sagamore Water District (NSWD) Board indicated at its October 21, 1998 meeting that they did not want wireless carriers locating on water tanks in their district, noting issues such as potential impacts to tank structural integrity. Mr. Sutton confirmed the North Sagamore Water District Board's position.

Mr. Maxson presented a facility siting options piece, explaining the pros and cons associated with each option. He stated that the proposed facility would be visible for a relatively long time to travelers along Route 3 and would require an additional facility at the rotary. He noted that the 80' limits the potential to accommodate additional carriers. Mr. Maxson suggested that three sleek mounting poles horizontally co-located at a lower height at the proposed site to allow room for more co-location would reduce the number of new facility sites needed.

Ms. Slaga said that a 120' single structure at the proposed site would eliminate the need for a site at the rotary. However, she noted that a greater height was not proposed due to setback requirements of the Town. Mr. Maxson said that such a structure would provide greater co-location opportunities.

Relative to the Canal Power Plant co-location alternative, Mr. Maxson cited propagation information supplied by the proponent, noting that a facility at the plant could not cover the service gap to the north without Omnipoint's facility on Hedge's Pond Road in Plymouth being modified.

Mr. Maxson discussed the possibility of using the ComElectric utility easement at the Plymouth/Barnstable county line, noting that this site has a direct line of view with Route 3 and is located in an already visually cluttered corridor. Ms. Slaga stated that co-location on the ComElectric poles to the north was not closely looked at due to the need for a full array antenna. She noted that a replacement structure would be needed and that she was not sure what height would be needed for such a structure. Mr. Travelo, Subcommittee member, asked if the ComElectric poles would provide the coverage. Ms. Slaga said that the ComElectric easement might not provide much coverage. Mr. Maxson said that if the proposed facility were moved slightly to the north onto a ComElectric pole, the height and coverage would be similar to that of the proposal.

The Subcommittee requested that Omnipoint look into the feasibility of co-locating on the ComElectric power poles. Ms. Slaga said that Omnipoint would look into project alternatives. She noted that the proposed site is on the northern fringe of the existing search ring and that the ComElectric easement is further to the north.

Mr. Deane asked what the proponent would be seeking at the Sagamore Bridge Rotary. Ms. Slaga said that Omnipoint was not currently looking for a facility at the

rotary, but that if they were, they would utilize an existing utility pole to locate at a height of 50-60'.

Mr. Sutton discussed Commission staff's meeting with representatives from ComElectric the previous day. He noted that ComElectric indicated that they would consider proposals for new monopoles within their easements, extensions on top of utility poles, and tower replacement. Mr. Sutton reiterated the Subcommittee's request that the applicant evaluate 1) co-location at the ComElectric easement; 2) project potential service coverage from the ComElectric easement; and, 3) examine zoning issues related with the co-location in the easement.

The Subcommittee agreed to a 90 day Extension Agreement to allow the proponent to look at project alternatives discussed. The proponent agreed to the extension.

*December 16, 1998, Subcommittee Meeting (See minutes in project file)*

The Subcommittee discussed co-location opportunities within the ComElectric easement at the Plymouth/Bourne county line. Mr. Deane relayed a conversation he had with the Sorenti family, who own the portion of the easement on which Pole #42 is located. In this conversation, Mr. Deane learned that the Sorentis had turned down a potential co-location deal because the wireless carrier's rent offer was insufficient. He said that he also learned that another site on Route 3A owned by Mr. Sorenti was being negotiated for sale.

Mr. Maxson reviewed potential project alternatives which included the construction of an 80-foot structure at the proposed site and a 60' structure at the Sagamore Rotary, the use or replacement of utility poles and the creation of a 60' structure at the Sagamore Rotary, and the construction of a 120' or 150' structure at the proposed site without a facility at the Sagamore Rotary. Mr. Maxson reviewed propagation maps that had been previously produced by Omnipoint and questioned their accuracy. In a memo dated December 11, 1998, Mr. Maxson indicated that in his opinion one of these propagation maps may have severely underestimated the possible coverage from the ComElectric easement location. He added that the sites within the easement were 30 - 40 feet higher in elevation than the proposed location. Mr. Maxson said he had requested that Omnipoint perform a terrain profile and path analysis to determine the accuracy of this propagation map. Omnipoint subsequently performed the requested analysis.

Ms. Slaga used propagation maps to present several development scenarios. She said that a re-evaluation of the propagation maps by Mr. Maxson and Omnipoint's radiofrequency engineer indicated that coverage from an 85' pole in the ComElectric easement was better than had originally been shown by the proponent. She noted, however, difficulties associated with negotiating with ComElectric and the underlying property owners. She also noted that zoning issues needed to be considered and that the ComElectric poles are located near a residential area.

The Subcommittee agreed that under most project alternatives, the proponent would probably be looking for a facility at the Sagamore Rotary to allow for future capacity. Ms. Slaga said that the proponent would not require an additional facility at the rotary with a 120' tower on the proposed site. Ms. Slaga noted that a 150' structure at the ComElectric site would also eliminate need for a future facility at the rotary; however, she noted the potential impact on nearby residential areas.

Mr. Sutton said that one of the outstanding questions, consistent with the standards of the Regional Policy Plan, was whether or not co-location on an existing structure within the ComElectric easement was feasible. He noted that ComElectric had indicated it is willing to entertain co-location proposals from wireless carriers. He also noted that a monopole within the easement could have a minimal impact on residential areas to the east.

The Subcommittee directed staff to discuss the project with other Commission staff members and to meet with Bourne Town officials prior to the next Subcommittee meeting.

*January 5, 1999, Subcommittee Meeting (See minutes in project file)*

Mr. Fox, Commission Chief Regulatory Officer, relayed to the Subcommittee the position of the Bourne Town officials relative to the proposed project. He said that at a recent meeting, Town officials expressed a preference for one facility able to locate several carriers versus several facilities in this area, and that co-location within the ComElectric easement was the most optimal alternative. He said that the Town officials did not support a series of towers along Route 3 or a facility at the rotary.

Mr. Sutton relayed to the Subcommittee the outcome of a Commission staff meeting on the proposed project. He said that staff collectively felt co-location is the option most consistent with the Regional Policy Plan and that it should be fully pursued before pursuing other options.

Mr. Travelo said that the proponent had earlier commented on difficulty in coordinating with ComElectric. Mr. Sutton said that Robert Connors of ComElectric had explained to him the procedures for developing lease agreements with carriers. He said that Mr. Connors had indicated that ComElectric's review of co-location proposals typically takes six weeks, assuming necessary survey work has been completed, for carriers such as Omnipoint who have master lease agreements with ComElectric.

Mr. Fox and Mr. Sutton discussed the options of denying the proposed project or extending the review time frame. Mr. Schlaikjer asked about the option of a taller facility at the proposed site rather than a clustering together of facilities at the ComElectric easement. Mr. Fox said that a higher facility at the proposed site would require a new application and re-advertising of the hearing.

Mr. Sutton noted that co-location on existing utility poles within the ComElectric easement had been proven technically feasible to provide coverage, albeit not capable of providing seamless coverage from the Sagamore Bridge Rotary to the county line. Mr. Schlaikjer said that it was his understanding that Mr. Maxson had concluded that the proposed 80' facility would require an additional facility at the rotary. Mr. Sutton said this conclusion was made assuming that 100% service coverage along the corridor needed to be provided. Mr. Fox said that this assumption should not be made, adding that reasonable coverage should be granted, but that the granting of seamless service coverage is not required.

Ms. Wells said that if the proponent were to propose an extension of up to 20' in height to an existing facility at the ComElectric easement, they would be exempt from Commission review. Ms. Slaga said only 5-10' extension would be feasible from a construction standpoint. Mr. Fox said that the proponent should explore alternatives associated with the ComElectric easement and return with its findings.

Ms. Slaga relayed a conversation she had with Charles Pickering of ComElectric on December 31, 1998 to discuss the option to locate within the ComElectric easement on the Bourne side. She said that although replacement of Pole #41 was technically feasible, ComElectric would not be amenable to this alternative because the easement was only 100' wide. She added that she had not yet investigated whether ComElectric would consider this option from a structural/engineering perspective.

Ms. Slaga said that it was her understanding that the Town wished to see one larger facility capable of accommodating multiple carriers. Meredith Pickering, Bourne Town Planner, said that the Town would prefer one structure with more co-location potential within the easement, whereas Commission staff appeared to prefer co-location on existing structures within the easement. Mr. Fox said that he felt there was a shared desire among Commission and Town staff to avoid a series of single carrier facilities and to utilize the existing utility corridor if feasible. Mr. Deane said that the feasibility of co-location within the easement is the first priority.

Mr. Sutton said that documentation from ComElectric was needed to determine whether this option was feasible. Mr. Olsen said a statement from ComElectric relative to the feasibility of co-location was needed, along with some general guidelines pertaining to wireless facility co-location. Mr. Sutton said he would provide a summary of a previous Commission staff meeting with ComElectric in which ComElectric outlined options they would consider for wireless facility co-location proposals.

Mr. Schlaikjer suggested the possibility of a tower which could be built at the proposed site in increments to accommodate additional carriers in the future. He noted that this might however require a new application.

Ms. Slaga showed propagation maps submitted earlier which showed that only a 150' facility at the ComElectric easement would provide Omnipoint with coverage to the rotary. She acknowledged that the problem with the application was that coverage depicted in the propagation maps submitted initially in the application was much more liberal than that derived from drive test data. She added that the review process highlighted the fact that the proposed 80' facility would not produce the coverage originally anticipated.

Mr. Sutton said that any specific feasibility request submitted from Omnipoint to ComElectric should include reference to Pole #42 which is 85' high. He noted that this pole is set further off of Route 3 on higher terrain than Pole #41 and is still a distance from the residential areas to the east. Ms. Slaga said the Town of Plymouth might be amenable to an 8-10' extension of Pole #42, but would not be amenable to a facility double in height visible to residential areas.

Mr. Sutton outlined the items the Subcommittee requested the proponent investigate: 1) a new freestanding pole installed within the easement; 2) the replacement of an existing utility pole, an extension on Pole #41; or 3) location on an existing tower without exceeding the pole height. Ms. Wells confirmed that the requests should be made for both Pole #41 and Pole #42.

Mr. Schlaikjer said that it had been concluded by the proponent that without a 180' pole at the easement or a tower at the proposed site of sufficient height, another facility would be required at the rotary. Mr. Deane asked if a tower of that height could be erected on site. Ms. Pickering said a special permit and a waiver from the Town's 1:1 fall zone requirement would be required for such a facility. Ms. Slaga said the proposed height was selected because it met the Town's setback requirements, and that she was unsure whether a waiver would be granted from the Town for a higher height.

Mr. Olsen asked for clarification on a point in the December 16th meeting minutes. He asked if it is true that a 120' facility at the proposed site would not require a second facility at the rotary, noting that this appeared to conflict with earlier statements. Ms. Slaga clarified this issue by saying that at a height of 120' at the proposed site, the proponent would not need a new structure because they could locate on an existing utility pole. She said that at an equivalent height at the ComElectric easement, a new structure of approximately 60' would be needed at the rotary to provide seamless coverage.

*January 21, 1999, Subcommittee Meeting (See minutes in project file)*

Mr. Sutton relayed a conversation he had with Robert Connors of ComElectric. Mr. Connors, he said, explained that ComElectric reviews wireless co-location proposals on a case by case basis, but agreed that formal guidelines for such proposals should be developed by ComElectric.

Ms. Slaga submitted correspondence she had with Mr. Connors relative to the issue of co-location at the county line utility easement. Mr. Sutton commented on this correspondence. In a letter dated January 15, 1999, Mr. Connors stated that the development of a 150' free standing tower within the easement (only that small portion in Bourne) would not be viable due to the narrow width of the easement in this location, and that replacement of Pole 41 with a new 150 foot tower would not be viable. He said, however, that location of a canister antenna on top of Pole #41 would be a viable option assuming the structure can accommodate the additional weight of the antenna, and that replacement of Pole #42 with a new pole to accommodate a canister antenna would be viable.

Ms. Slaga said that she had not investigated the option of an antenna mount not exceeding the top of a pole due to the fact that Pole #41 is already encumbered by wires. She added that co-location on ComElectric structures located on privately owned land would require a lease agreement with the landowner. She said that the landowner in this case had already rejected reasonable offers for similar installations in this easement. Mr. Broidrick asked for clarification of the meaning of "reasonable." Ms. Slaga indicated that there is an industry standard for easement rights.

Mr. Sutton asked if Omnipoint had made an offer to the landowner. Ms. Slaga indicated that Omnipoint had not made an offer to the property owner.

Ms. Wells said that she had spoken with a representative from another wireless carrier, Industrial Communications, who was purportedly interested in property owned by the same property owner located across from the proposed site. She said that the property owner had supposedly tripled the asking price and that the carrier had met this price.

Ms. Slaga said she had learned from a representative of Industrial Communications that the company had not been able to close the deal. She added that Industrial Communications could recoup losses by providing space for other carriers to co-locate on a tall facility. Ms. Wells said that she had learned that Industrial Communications would be proposing a 300' facility.

Mr. Broidrick asked if Omnipoint would be willing to locate on such a facility assuming it were approved. Ms. Slaga said this would be feasible assuming Omnipoint's service need in this area still existed.

Mr. Broidrick discussed possible scenarios for the project. He noted that each of these scenarios would require a denial decision since each was different from what was originally applied for. He said that he thought it would be wiser for Omnipoint to withdraw and resubmit, if necessary, when plans had been worked out.

The Subcommittee examined a proposal submitted by Omnipoint at the beginning of the meeting for an 80' tower capable of being expanded to 160'. The proponent

indicated that this proposal would address concerns relative to the issues of co-location and planning for future service needs in the area. In its letter submitted on January 21, 1999, the proponent indicated that neither the proposed project nor co-location within the ComElectric easement would address the issue of limited co-location potential. The proponent made a second finding that both scenarios would require one or two towers to complete its coverage footprint in this area. This second finding conflicts with testimony provided at the August 12, 1998 hearing in which the proponent said Omnipoint would not need another structure at the Sagamore Rotary.

Mr. Broidrick said that the new proposal put before the Subcommittee this evening was significantly different from the original proposal that it would need to be re-advertised.

Ms. Wells asked if a 160' facility could hypothetically be approved at the proposed site assuming the existence of committed co-locators, and then built at 80'. Mr. Fox said that a separate application, re-advertising for additional hearings, and crane tests would be required. However, for the purposes of the application fee, such a filing could be done as a continuation of this project.

Mr. Travelo asked if a 160' facility would be allowable under Town zoning. Ms. Slaga said the Town's 1:1 setback requirement could be waived under a special permit, indicating that the Town would be comfortable with a 50% fall zone.

Ms. Slaga discussed the proposal presented by Omnipoint earlier that evening. She said that this proposal would address concerns relative to tower siting and design. Ms. Slaga referred to letters from four carriers which expressed a need for service in the area. She said that Omnipoint's proposal presented earlier in the meeting constituted the same project with the option for a higher facility in the future to address the issue of co-location.

Mr. Broidrick noted that the proposed 80' facility would still require an additional facility at the rotary. Ms. Slaga said the proposed facility would meet Omnipoint's short term objectives, and that Omnipoint's future needs could be met by seeking a higher location on the 160' tower.

Mr. Sutton said that it was his understanding from the last Subcommittee meeting that the project would not proceed as proposed due to its inconsistencies with Commission review standards for wireless projects, as outlined in all of the staff reports submitted for the record. He added that a withdrawal and revised proposal would seem to make sense.

Mr. Olsen said the proposed project does not meet Commission review criteria, would not ensure the co-location of other carriers at 80', and, therefore, was not an approvable project. Mr. Deane indicated that the Town would prefer a proposal that would accommodate additional carriers and minimize the need for separate

structures. Mr. Broidrick said that the proposal made by Omnipoint that night was different from that originally proposed.

Ms. Wells said that it appeared that co-location in the ComElectric easement would be technically feasible, but that Omnipoint may not be able to work out lease arrangements.

Mr. Deane made a motion that the project be denied. Mr. Schlaikjer seconded the motion.

Mr. Sutton asked if the proponent would be willing to withdraw and resubmit the application based on tonight's discussion. Ms. Slaga said that she could come back with a new design but would need to consult with her company.

Mr. Olsen said that the proposed project does not address the interest of other carriers for service in this area, adding that this is one of the detriments of the project. Mr. Fox said that Omnipoint could return with a commitment from other carriers to co-locate.

The Subcommittee directed staff to draft a decision based on Subcommittee comments for their review. Ms. Wells asked that the Subcommittee reiterate reasons for the denial recommendation. Mr. Broidrick said the project did not include co-locators and that the project would require another facility at the rotary. Mr. Fox added that approval of the proposed project would encourage other single carrier towers of medium height to seek location in this area which is discouraged by the Town and the Commission. Mr. Olsen said the proposed project does not address the interest other carriers have for service in this area.

Mr. Travelo made a motion to recommend to the Executive Committee that the expenses incurred by Omnipoint for this project be applied to future applications for any other proposal at this site. All members voted in favor of the motion.

The Subcommittee recommended to send a draft denial decision to the full Commission on March 4, 1999 and agreed to leave the record open and continue the hearing to March 4, 1999. The Subcommittee also agreed to review the draft decision on February 16, 1999.

*February 16, 1999, Subcommittee Meeting (See minutes in project file)*

The Subcommittee reviewed the draft decision and proposed some minor amendments. Peter Morin, attorney for the applicant, made a presentation in response to the draft decision. He reviewed the history of the regulatory review of the project, and presented a document which explained Omnipoint's perspective. Mr. Morin stated that the Commission had expressed an initial interest in establishing a series of small towers, but in the end wanted a tall tower to allow for maximum co-location. He stated that the Town of Bourne also requested that the

applicant pursue a taller tower to allow for co-location of other facilities. He added that this additional height is inconsistent with the Bourne Zoning Bylaw.

Mr. Morin stated that Omnipoint had earlier proposed an eighty foot tower which could be designed with a strong enough base to allow for the construction of additional height at a future date. The Commission stated that such an application would require the submittal of a revised application and notice for a new public hearing. Omnipoint reiterated its position that a new application or public hearing should not be required.

Mr. Morin noted that the Subcommittee encouraged the applicant to locate their facilities on an existing Commonwealth Electric pole. He said that the owner of the property, where the pole was sited, was negotiating with a competitor to locate a tower on land he owned. Mr. Morin stated that he did not believe it was appropriate for the Commission to encourage location at the tower site.

Mr. Morin concluded by expressing his opinion that the denial decision is not defensible unless it refers to the Commission Act and the Commission's technical bulletin. Mr. Morin indicated that the reasons for denial of the application should be spelled out.

The Subcommittee agreed to reconvene on February 22, 1999 to review the document that Mr. Morin had submitted earlier in the meeting. However, in order to allow time for Commission counsel's legal review of Mr. Morin's February 16, 1999 submittal and subsequent memorandum dated March 4, 1999, the applicant signed an agreement extending the decision period to April 9, 1999, and the Subcommittee later agree to meet on March 30, 1999.

*March 30, 1999, Subcommittee Meeting (See minutes in project file)*

Patty Daley, Commission counsel, explained that staff had reviewed the decision and had made appropriate changes to the decision where it was warranted. She noted that the technical bulletin and the Regional Policy Plan constitute the framework for the Commission's review of wireless facilities. She explained that it is the Commission's goal to minimize visual impacts associated with these facilities. She noted that single user facilities can result in the proliferation of towers across Cape Cod.

Ms. Daley noted correspondence from ComElectric indicating that the construction of a free standing structure within the ComElectric easement on ComElectric-owned land was deemed to be a viable option. She stated that this option would remove the third party lease negotiation issue, and that the applicant should definitely pursue this option. She referenced the draft decision and noted that the ComElectric facility is an already visually blighted corridor, and that location of a facility within the easement versus the location of a free standing structure at the proposed site would be more acceptable and consistent with the Regional Policy Plan.

Ms. Daley stated that where taller, visible structures are proposed, the Commission looks for committed co-locators. She made a correction to her memorandum, noting that committed co-locators for a taller, visible structure is not a Minimum Performance Standard, but rather a policy drawn from the goals of the Regional Policy Plan and the technical bulletin.

Ms. Daley noted that, since the tower, as currently proposed, constitutes a single user facility, further efforts should be made to find ways to camouflage the facility, perhaps by following up on those options outlined earlier by David Maxson, Commission consultant.

Relative to procedural issues, Ms. Daley said that a tower substantially higher than 80' would require new public notice and an additional public hearing, noting that this would be in both the Commission's and the applicant's best interest. However, she said that this option would not require restarting a whole entire review process. She noted that a hearing could be held shortly after the 3 week advertising period.

In conclusion, Ms. Daley said that it appeared that the applicant had alternatives to the proposed project including the construction of a new free standing structure within the ComElectric easement, the proposal of a taller structure with committed co-locators at the proposed site, or the camouflaging of a facility at the proposed site. She said that it appears that there are options for approving projects which would allow Omnipoint service in the area, and urged the applicant to consider a short extension agreement to investigate these options.

Mr. Schlaikjer asked how tall a freestanding structure could be placed in the ComElectric easement. Paul Sutton said that an engineering analysis, requested by the applicant, would be required to determine the height ComElectric would allow. Mr. Sutton also noted that ComElectric had indicated in its March 12, 1999 letter that the replacement of two other utility poles, Poles 3946 and Pole 8949, for the purpose of accommodating a PCS facility, was also an option.

Mr. Broidrick asked if the applicant had a response to this information. Jackie Slaga said that she was not familiar with the utility poles being referred to.

Mr. Broidrick outlined options available to the applicant in order of preference: location within the ComElectric easement, proposal of a facility capable of accommodating committed co-locators and eliminate the Omnipoint's need for other facilities in the area, and, finally, a camouflaged single carrier facility at the proposed site.

Mr. Travelo noted that if the applicant were granted permission for an 80' tower, they would still need for another tower at the Sagamore Rotary. He said that he did not understand why the applicant was pursuing the proposed project.

Mr. Broidrick asked if the applicant had changed their mind relative to pursuing other alternatives which would warrant an extension agreement. Ms. Slaga said that Omnipoint had not definitively changed their mind. She said that, to the extent feasible, Omnipoint seeks to comply with public policy.

Mr. Olsen said that the Subcommittee had been over this issues many times, and unless the applicant is willing to withdraw and modify their application, they must proceed and act on the draft decision for the proposed 80' tower. He added that the discussion was not progressing, and recommended denial of project.

Mr. Schlaikjer said that he did not favor the granting of an extension. He said that the Subcommittee members could only state their preference relative to the proposed project for the applicant.

Ms. Daley said that the decision, as drafted, makes sense relative to the proposed project. She said, however, that it still appears that there is an option for Omnipoint to locate in the ComElectric easement; this option, she noted, could be pursued with a short extension. She said the question is whether Omnipoint would be willing to consider pursuing this option. She added that if Omnipoint is set on the proposed site, the extension agreement would not make sense.

Mr. Travelo and Mr. Schlaikjer asked why the option of extending the project review further was being raised, as opposed to denying the project. Mr. Sutton said that the reason for considering an extension was to try to find an alternate solution to an unapprovable project.

Gerald Marquis, Omnipoint Regional Zoning Manager, said that major problems associated with the project were not identified early in the review process. He said that it appeared that Omnipoint was in the midst of public policy formation. Mr. Marquis said that Omnipoint did not want to withdraw, because they did not know where they would then proceed. He said that under the extendable tower option, Omnipoint was not seeking anything greater than what was originally proposed, and that Omnipoint would be subject to future Commission review. Relative to the camouflaging option, he said that Omnipoint would be willing to engage in a discussion with the Commission, noting the possibility for a facility having a cleaner profile. Relative to the ComElectric site, he said that he was concerned about uncertainties tied to the fact that the ComElectric site was located in another jurisdiction and in closer proximity to residences. He said that a denial would not help, and expressed a desire that the Commission work with the applicant.

Mr. Sutton said that the Commission has been working with the applicant for months to fully explore options of locating on existing facilities. He noted the one Minimum Performance Standard of the Regional Policy Plan requiring that wireless carriers locate on existing facilities where feasible. Mr. Sutton noted that basic issues associated with land title and utility pole dimensions had still not been resolved by

the applicant, and that the applicant should have fully researched this option months ago. He mentioned that the first staff report and the Regional Policy Plan clearly outline the key issues surrounding review of this project.

Mr. Travelo referred to Page 7 of the draft decision which refers to Omnipoint engineer Robert Anderson's earlier comment that the proposed 80' height facility was sufficient to provide service to the Sagamore Rotary. Mr. Olsen pointed out that this comment was later contradicted. Mr. Sutton said that the applicant had mentioned at the first hearing that they would only need the one proposed facility in this area, and then subsequently stated that an additional facility would be needed. He added that Mr. Maxson agreed that an additional facility would be needed by the carrier at the rotary.

Mr. Schlaikjer said that he is concerned that at 80', the carrier would still need an additional facility at the rotary. Mr. Travelo said that he favors denial of the proposed project, noting that, even according to the applicant's November 17, 1999 letter, it does not meet the proponent's needs.

Mr. Olsen said that as long as the proposal remains unchanged, he favored denial. Mr. Schlaikjer and Mr. Broidrick agreed with Mr. Olsen.

The Subcommittee discussed minor changes to the draft decision.

Mr. Olsen made a motion seconded by Mr. Travelo to forward the draft decision as modified to the full Commission on April 8, 1999. All voted in favor of the motion.

### JURISDICTION

The proposed project qualifies as a Development of Regional Impact under Chapter A, Section 3(i) of the Commission's Regulations of General Application which states 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.

### CAPE COD COMMISSION WIRELESS FACILITY DRI REVIEW POLICIES

The Cape Cod Commission has an established hierarchy of preference with regard to locating personal wireless service facilities. Regional Policy Plan Minimum Performance Standard 4.3.2.1 states that "Whenever feasible, new telecommunications facilities shall be required to co-locate with existing facilities in order to minimize their visual impacts." The Commission's policy thus encourages locating on existing buildings and structures when feasible as an alternative to the construction of new towers or monopoles. Commission review is not required for facilities located on existing buildings or structures. In addition, Commission review is not required for the reinforcement, reconstruction or replacement of an

existing wireless communication tower on the same site with an addition of up to 20 feet in height.

The Commission's DRI review for wireless facilities first focuses on alternatives to proposed new towers or monopoles and looks very closely at existing buildings and structures in the vicinity of the proposed tower as possible alternative locations. The Commission has created GIS maps to assist carriers in identifying existing structures that may be available to site wireless facilities. These maps, entitled "Work Maps" were created in March, 1997, with information supplied by the Cape Cod towns, for the purpose of assisting wireless carriers in exploring various types of existing facilities on which to locate. These maps are draft documents which do not include all existing facilities and town-owned parcels potentially suitable for locating existing structures. It is the responsibility of the applicant to fully investigate the suitability of existing facilities and town-owned parcels prior to application to the Commission and the Town, and to adequately document why these sites have proven to be unsatisfactory to the carrier(s). The Commission's engineering consultants will assist in reviewing technical data provided by the primary carrier and all co-locating carriers to assess the feasibility of alternatives.

For new towers or monopoles, the Commission seeks sites with limited impact on significant scenic and historic resources, and seeks proposals with siting and design features which successfully camouflage the facility. The Commission also seeks proposals with at least three committed carriers. Although the Commission has reviewed facilities with fewer co-locators than three, it requires documentation that the proposing carrier has contacted in writing all other carriers licensed for Cape Cod regarding the proposed facility. In order to reduce adverse visual impacts from the development of new facilities, co-location for new towers or monopoles is stressed and single-carrier facilities are not encouraged. Single-carrier facilities should incorporate creative solutions which are effectively camouflaged.

### FINDINGS

The Commission has considered the DRI application of Omnipoint Communications, MB Operations, LLC, for the proposed construction of an 80 foot high wireless communications monopole on leased land located off Route 3 in Sagamore Beach, MA. Based on its review of this application, the testimony presented at the public hearings, and the information submitted for the record, the Commission makes the following findings:

#### General Findings:

G1. 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 states 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.

G2. The project site is located on a 3.12 acre parcel of which the proponent is leasing a 25' x 25' foot area for the construction of the proposed 80' high monopole with a 63" x 51" x 28" equipment cabinet at its base. The proponent signed a lease agreement for the proposed site on August 6, 1998.

G3. The proposed project is located within a B-2, Business, zoning district in the Town of Bourne. A communications tower over 40' feet in height in this district requires a Special Permit from the Bourne Planning Board.

G4. The review process was extended because the applicant provided incomplete and conflicting testimony relative to service coverage, the feasibility of locating on existing structures, and the need for additional wireless facilities at the Sagamore Rotary.

G5. Omnipoint's DRI application is predicated on providing 100% seamless coverage from Route 6 and the Sagamore Rotary northward along Route 3 and Route 3A to the Plymouth/Bourne county line. Construction of the proposed facility would not provide coverage at the Sagamore Bridge Rotary.

G6. The applicant's radiofrequency engineer, Robert Anderson, stated at the September 16, 1998 hearing that drive tests were conducted at heights of 80', 75', and 65'. Mr. Maxson, Commission technical consultant, requested that data from the test drive be submitted by the applicant.

G7. A drive test of the proposed site at the proposed mounting height of 80' was not conducted. The proponent's opinions are based on a drive test at 68' extrapolated to a height of 80'.

G8. According to the Bourne Building Inspector, Roger Laporte, the unpermitted COW (cell on wheels) remained on the proposed site for approximately two months. Further, after the violation notice was issued by Mr. Laporte, the facility was not removed for at least two weeks.

G9. Omnipoint representative Ms. Jackie Slaga acknowledged at the January 5, 1999 Subcommittee meeting that the review process highlighted the fact that an 80' facility at the proposed site would not produce the coverage originally anticipated in the DRI application. She noted that the coverage originally anticipated in the DRI application was much more extensive than was actually determined through the drive test.

G10. The proponent has the option of resubmitting an application for a facility at the same site which better addresses the issues of co-location and facility design/camouflaging, or, in the alternate, of pursuing location within the ComElectric easement (either in Bourne or Plymouth).

G11. Denial of this particular facility will not prohibit, nor have the effect of prohibiting, the provision of personal wireless services because the proponent has alternatives, including to utilize/replace existing facilities or to redesign the proposed monopole for co-location with commitments from other carriers. Both of these alternatives will provide the proponent with coverage in the target area.

G12. The Commission has adopted a technical bulletin to assist in the siting of wireless facilities on Cape Cod. The Commission has approved two previous Omnipoint proposals for wireless facilities on Cape Cod and has approved facilities of other carriers when the proposed facility meets the standards of the technical bulletin.

**Existing Facilities Findings:**

EF1. The applicant has not adequately proven that there are no alternatives to the proposed facility in the form of existing facilities that would be adequate in providing the proponent service coverage within the target area. As such, the proposed project does not meet MPS 4.3.2.1 of the RPP.

EF2. MPS 4.3.2.1 of the RPP requires, wherever feasible, new telecommunications facilities to co-locate with existing facilities in order to minimize their visual impacts. The intent of this standard is to encourage carriers to utilize and share existing structures rather than seek to construct new, visually obtrusive single carrier facilities in an uncoordinated and land consumptive manner.

EF3. A ComElectric utility easement forming the approximate boundary between Barnstable County and Plymouth County is located between .1 and .2 mile to the north of the proposed site. A steel pole (Pole #41) 85' in height and an 85' high wooden pole (Pole #42) are located within the portion of the easement located on privately owned land which crosses the Bourne/Plymouth town lines. The majority of the utility easement in Plymouth, including most of the area between Pole #42 and Route 3A, and between Pole #42 and Pole #43 (a steel pole approximately 85' in height) is located on land owned in fee by ComElectric.

EF4. At the January 5, 1999 Subcommittee meeting, the Subcommittee requested that the applicant more fully investigate the viability of options for locating its facilities at the ComElectric easement, including areas within both Bourne and Plymouth. These options included the following alternatives: a new freestanding pole installed within the easement, the replacement of an existing utility pole, antenna extensions on existing poles, and locating on an existing utility pole without exceeding the pole height.

EF5. The applicant did not fully investigate the viability of options for locating its facilities at the ComElectric easement as requested by the Subcommittee. In a letter dated January 15, 1999, Robert J. Connors, ComElectric Principal Engineer, responded directly to items listed in a January 8, 1999 letter of request submitted by Ms. Slaga.

From this letter, it is clear that Omnipoint's request was narrowly limited to the viability of locating a new freestanding 150' tower in a narrow portion of the easement where Pole #41 is currently located, or of replacing/extending existing structures located on privately-owned land.

EF6. In a letter dated March 12, 1999, David Di Giammerino, ComElectric Project Leader, stated that the location of a free standing structure on the parcel owned by ComElectric is a viable option pending engineering analysis, and that replacement of Structures 3946 and 8949 is a viable option for the installation of PCS equipment.

EF7. Under the Town of Plymouth's zoning bylaw, the development of communication towers over 35' in height, in both commercial and residentially zoned areas, require a special permit and a variance. Likewise, the replacement of existing towers with new towers exceeding the existing tower's height or the addition of an antenna extension exceeding the tower height would require similar Town approval.

EF8. The proponent stated in a letter dated July 7, 1998 that a comprehensive search of existing structures in the service area, defined as a one half mile radius from the proximate location of the proposed site, did not yield an existing tower or structure of sufficient height to accommodate a facility necessary to meet its coverage objective.

EF9. The proponent's service objective was described as the link required to provide seamless service to its facility on the existing ComElectric steel utility pole off Hedge's Pond Road to the north of the proposed site in Plymouth, and a second facility on an existing tower on Signal Hill in Bournedale. (See Attachment 1 - Omnipoint Area Coverage Propagation Map- submitted by the proponent on August 12, 1998, and Attachment 2 - Existing and Proposed Omnipoint Facility Map, submitted by the proponent on August 12, 1998).

EF10. The proponent stated in their August 12, 1998 submittal that the utility poles located to the north of the proposed site were only 50-60 feet in height. It was later confirmed by Robert Connors of ComElectric that the utility easement to the north of the site included utility poles 85' in height.

EF11. The proponent stated in their August 12, 1998 submittal that a site in the ComElectric easement was rejected from consideration due to its closer proximity and visibility to residences.

EF12. Relative to construction of a new facility at the proposed site, utilizing the existing ComElectric utility easement for the location of additional wireless facilities would serve to minimize adverse visual impacts in this area of Bourne. The ComElectric easement is a visually degraded utility corridor which already accommodates other wireless facilities.

EF13. The ComElectric-owned land located between Pole #42 and Pole #43/Route 3A is located within Omnipoint's one half mile search area on terrain approximately 30' to 40' higher than at the proposed site. The proponent has resisted the Subcommittee's repeated requests that the feasibility of this option be fully explored, stating that the easement is located slightly further north from the center of its search ring, and that coverage from this location was questionable.

EF14. David Maxson, Commission technical consultant, submitted a letter dated December 11, 1998 for the record in which he opined that propagation Map #10 supplied by Omnipoint in its November 17, 1998 submittal may have severely underestimated possible coverage from the Commonwealth easement location.

EF15. The proponent would be exempt from Commission DRI review if it were to propose up to a 20' high antenna extension on an existing utility pole.

EF16. The applicant noted difficulties in negotiating lease agreements for co-location with ComElectric at the December 16, 1998 Subcommittee meeting. According to ComElectric, the negotiation of lease agreements typically takes approximately 6 weeks for carriers, such as Omnipoint, who have master lease agreements with ComElectric. Omnipoint has negotiated with ComElectric for other sites. This process, however, can be lengthier when the facility is located on private property and involves a third party.

EF17. The Norris Road Water Tank was determined to be an infeasible existing structure due to concerns of the North Sagamore Water District which included potential impacts to the tanks' structural integrity.

EF18. The Commission asked the proponent to provide models to determine if the target area could be covered from the Canal Power Plant. It was the opinion of David Maxson, Commission technical consultant, and Robert Anderson, Omnipoint's radiofrequency engineer, that the Canal Power Plant was an infeasible existing structure because the models indicated the signal would not adequately penetrate the target area.

EF19. It is Mr. Maxson's opinion that a facility at the ComElectric easement of height comparable to that of the proposed facility at the proposed site would require the same number of additional facilities in the target area. In its letter dated January 21, 1999, the proponent indicated that both the proposed site at 80' and the ComElectric site at 85' would require a tower in the vicinity of the rotary. Based on the applicant's stated criteria, it appears that both scenarios would require a structure greater than 35' at the rotary to complete coverage.

### **Height Findings:**

H1. Under the Commission's review standards, wireless carriers have the option of pursuing two general strategies to minimize the visual impacts of wireless facilities: proposing facilities which may provide limited opportunity for co-location, but which are completely camouflaged to minimize visual impacts; or, proposing facilities which may be visible, but provide maximum opportunity for co-location.

H2. The proposed 80' monopole is inconsistent with Technical Bulletin 97-001 dimensional standards which state that personal wireless service facilities should be no higher than 10' above the average height of buildings within 300' of the proposed facility. The average height of buildings within 300' of the proposed facility are under 40'. The Commission has approved higher towers with greater opportunities for co-location to minimize the need for new towers.

H3. The Town of Bourne has not established a wireless facility overlay district in which wireless facilities of up to 150' could potentially be allowed according to height standards referenced in Technical Bulletin 97-001.

H4. According to the proponent, the 80' height of the proposed facility was selected in part to meet the Town of Bourne's setback requirements. The proposed facility meets the Town of Bourne's 1:1 fall zone setback requirement.

### **Co-location Findings:**

C1. The co-location standard of the Technical Bulletin 97-001 states that carriers should share personal wireless facilities and sites where feasible, and appropriate, thereby reducing the number of personal wireless service facilities that are stand-alone facilities, the need to construct new infrastructure in an uncoordinated and land-consumptive manner, and the visual impacts to community character associated with these facilities.

C2. The proposed project was designed to accommodate one other wireless carrier facility at a mounting height of 70'.

C3. The proponent submitted evidence of efforts to obtain co-locators at the site consistent with Technical Bulletin 97-001.

C4. The proponent has not received an application from another carrier to co-locate at the proposed facility.

C5. The Commission finds that the proposed project provides minimal opportunity for future co-location due to the height of the proposed facility, and that co-location applications for the proposed facility would not be likely until the carriers' networks are further developed. The first staff report, dated August 5, 1998,

noted that, "as presently designed, the proposed facility is not only inconsistent with Commission height standards, but provides minimal opportunity for co-location and no commitment from another carrier to locate on the proposed monopole."

C6. The proponent indicated in a letter dated January 21, 1999 that both the proposed site at 80 feet and the ComElectric site at 85 feet would require a tower in the vicinity of the rotary.

C7. The proposed application does not specifically address the future service needs of the applicant, as indicated in the proponent's letter to the Commission dated January 21, 1999, or those of other carriers in this area, as is evident in the proponent's December 14, 1998 letters to Sprint, AT&T Wireless, and Bell Atlantic, and in Nextel's December 16, 1998 letter to the proponent. The applicant stated that the term "future" in the wireless industry can translate into as short a time period as a year from the present.

C8. Bourne Town officials, in a December 22, 1998 regulatory staff meeting, indicated a preference for one large facility in the target area capable of providing co-location opportunities for other carriers versus the proliferation of several smaller towers in the target area.

C9. The Subcommittee recommended that the proposed project should be redesigned to address the issue of limited co-location potential, and ensure consistency with Commission co-location standard.

C10. The proponent indicated at the December 16, 1998 Subcommittee meeting that a 120 foot tower at the proposed site would eliminate the need for a second facility at the Sagamore Bridge Rotary, and that a 150' structure at the ComElectric site would eliminate the need for another facility at the rotary. Both would allow for greater co-location opportunities.

C11. To address the issue of limited co-location potential associated with the proposed facility, the applicant presented a brief written proposal for a design alternative at the January 21, 1999 Subcommittee meeting. Under this design alternative, the applicant proposed a 160' tower which could be built to the first 80' and then extended, as needed, through a separate review process to accommodate future wireless service needs. It is the applicant's position that this proposal will eliminate the need for a tower at the rotary and maximize the opportunity for co-location.

C12. The Commission finds that the design alternative referenced in Finding C11 is significantly different from the proposed project and, as such, would require a separate application, a re-advertising of the project, and additional hearing(s). Commission staff stated that much of the data submitted for the proposed project could be used for the design alternative, and that, the applicant could make a request

to the Executive Committee that application fees for the proposed project be applied to a modified project at the proposed site.

C13. The Commission finds that the design alternative referenced in Finding C.11 to be significantly different from the proposed project. The 80' monopole, as originally proposed and advertised, could not be extended an additional 80' in height. The proposed alternative facility, however, could be extended an additional 80' in height at a future date. The additional height associated with the design alternative could result in a facility which significantly deviates from the proposed project, as it was originally advertised and presented to the public in the hearing process.

C14. As proposed, the potential to extend the tower as discussed in Finding C11 above would provide no assurances that an additional 80' in height would be built in the future. If the design alternative were proposed and allowed, the project would essentially result in the facility originally proposed, which, as noted in Finding C5, Finding H2, and Finding EF1, is inconsistent with Commission standards pertaining to height, co-location, and existing facilities.

C15. The proponent may resubmit an application for another proposal at the proposed site or at a different site.

**Community Character Findings:**

CC1. The proposed facility is located approximately 1.5 miles north of the Sagamore Bridge and Rotary. The stretch of highway between the proposed site and the Sagamore Bridge is one of two primary access points for land traffic going to and from Cape Cod. The visual character of this gateway approach affects a significant number of travelers on a daily basis. In 1998, approximately 51,191 vehicles per day traversed the Sagamore Bridge.

CC2. Other Development Review Policy 4.3.1.4 of the Regional Policy Plan states the "public investments, including construction or expansion of infrastructure and facilities, including but not limited to municipal buildings, water supply and distribution, sewage collection and treatment, roads, telecommunications and related facilities should reinforce the traditional character and village development patterns of Cape Cod.

CC3. Goal 4.3.2 of the Regional Policy Plan is to "encourage the provision of adequate and appropriately-sited telecommunications facilities so as to promote economic development and preserve the quality of life and visual character of the Cape."

CC4. Minimum Performance Standard 4.3.1.2 states the "development of new infrastructure shall occur only after an analysis of the impacts of this infrastructure

with regard to land use, traffic, water quality, historic preservation, and community character ..."

CC5. The policy, goal and minimum performance standard referenced in CC2, CC3, CC4, were developed to ensure that wireless communication facilities are sited and designed in a manner which reinforces the quality of life and visual character of Cape Cod.

CC6. The proposed project is higher than ten feet above the average building height within 300 feet and higher than ten feet above the average tree canopy height. The proposed project exceeds the height of the vegetation at the proposed site by approximately 40' and would be visible from points along Route 3, Route 3A, and Old Plymouth Road. Old Plymouth Road has been designated by the Town of Bourne as a Scenic Road. As such, the project is inconsistent with design standards outlined in Technical Bulletin 97-001 which state that wireless service facilities located within the viewshed of a scenic road as designated by a town should not exceed the height of vegetation at the proposed site. The Commission has approved wireless towers well in excess of the treeline whenever a facility accommodates multiple co-locators, thereby minimizing adverse visual impacts resulting from the development of multiple facilities.

CC7. The proponent conducted a two day balloon test at the site on July 16, 1998 and July 17, 1998. This test confirmed that the proposed facility would be visible from the viewing points referenced in CC6.

CC8. Technical Bulletin 97-001 states that wireless service facilities should be "designed as to be camouflaged to the greatest extent possible from public view." The proposed facility was not designed specifically to provide camouflaging above the existing tree canopy, as would be required to approve a facility for which there is only one committed carrier.

CC9. Technical Bulletin 97-001 states that personal wireless facilities not camouflaged from public viewing areas should provide a year-round vegetated buffer of sufficient height and depth to effectively screen the facility. This buffering would be required to approve a facility for which there is only one committed carrier. The proposed facility would extend approximately 40' above the tree canopy.

CC10. As reflected in the minutes, Ms. Slaga stated at the August 12, 1998 Subcommittee meeting that with the proposed facility, there would be no need for an additional facility in Bourne. Contrary to this testimony, the proponent later indicated in a letter dated January 21, 1999, that, even with the proposed facility, Omnipoint would require a tower in the vicinity of the rotary.

CC11. The proponent is proposing a facility inconsistent with the scale of surrounding buildings and the height of surrounding vegetation in an area.

CC12. The applicant offered alternative design proposals which did not adequately address project inconsistencies with the Commission standards relative to height, visibility, co-location, and location on existing facilities, as noted in findings EF1, H2, and C5. These design alternatives included variations in facility color, a Cape Cod architectural style for the equipment shelter, a sleeker mounting profile at the same height (designed with arms as opposed to the omnidirectional hat).

CC13. The applicant indicated at the September 16, 1998 hearing that a flagpole design would require an additional 15-50 feet in height.

**Public Safety Findings:**

PS1. The proposed project is consistent with the 1:1 fall zone setback requirement of the Town of Bourne's zoning bylaws.

PS2. The acoustical engineering report prepared in association with the proposed project concluded that the proposed monopole installation, including the BTS unit, would only be audible within 15 feet of the equipment shelter.

PS3. The applicant submitted a letter dated February 2, 1998 from Robert Hallisey, Director of the Radiation Control Program of the Massachusetts Department of Public Health. This letter grants the proponent approval to maintain the proposed facility under the provisions of 105 CMR 122.021, which pertain to allowable radiation limits for general public exposure to electromagnetic fields.

**Other Findings:**

OF1. The proposed project is an unmanned, private, and secured compound. It is only accessed by trained technicians for periodic routine maintenance and, therefore, would not require any water or sanitary sewer service, and would not result in significant transportation impacts.

OF2. The proposed project is located within the North Sagamore Water Resource District. However, according to the Commission's Water Resources Classification Maps, the project is not located within a Wellhead Protection Area. As such, RPP MPS 4.2.2.3 would not apply to this project.

OF3. The proposed project is not located within an historic district or a District of Critical Planning Concern.

OF4. The proposed project is located within a Significant Natural Resource Area (SNRA) composed of unfragmented forest, as identified on the Commission's SNRA Map, dated September 5, 1996, which was adopted by the Barnstable County Assembly of Delegates and County Commissions in conjunction with the Cape Cod Regional Policy Plan. This map depicts significant wildlife habitat and natural

resource areas throughout Cape Cod, and is used by the Commission as a planning and regulatory tool used for site design and open space protection purposes.

OF5. The environmental screening report prepared in conformance with FCC guidelines for this project concluded that the project is not located within a wilderness area or wildlife refuge, would not impact listed or proposed endangered species or critical habitat, does not contain any historically significant structures or features, and is not located within a wetland area. Commission staff concurs with these findings.

#### BENEFITS/DETRIMENTS TEST

As currently proposed, the project's benefit of providing additional wireless facility infrastructure for Omnipoint in the Town of Bourne would not outweigh the detriments associated with the project. These detriments include the following:

- The proposed project would result in visual impact to public viewing areas along Route 3, Route 3A, and Old Plymouth Road, a Scenic Road designated by the Town of Bourne;
- The proposed project provides minimal opportunity for future co-location on the proposed facility;
- The proposed project provides no present commitment from other carriers to locate on the proposed facility;
- The proposed project does not address the future service needs of Omnipoint and other wireless carriers in this area; and,
- The proposed project would necessitate additional tower facilities in the target area, and, as such, runs counter to the Town and Commission's goals and policies aimed at minimizing the proliferation of wireless facilities for which there are only one committed carrier, and their associated visual impacts.

## CONCLUSION

The Commission's objective in formulating standards for the siting, design, and co-location of wireless telecommunications facilities is to allow for the provision of personal wireless services in a manner that minimizes any detrimental visual and aesthetic impacts from such facilities. To that end, the Commission encourages the use of existing facilities where feasible. If new structures are necessary, then they should be planned to minimize visual impacts, both by provisions for co-location of services so as to reduce the number of towers needed overall to serve a particular area, and by optimal placement and design of the individual structures. As discussed above, the applicant has not demonstrated that the proposed project meets the applicable standards. The concept and design are inadequate. The applicant has not fully explored options that would have fewer detrimental impacts and that would offer more potential for efficient land use planning through co-location by other carriers.

As proposed, the project would contribute to an unnecessary proliferation of wireless service towers to serve both the applicant itself and other carriers. A key premise for the applicant's choice of location has proven to be flawed. Initially, the applicant maintained that the proposed 80-foot tower would obviate its need for a second tower at the Sagamore Rotary. Further investigation and testing showed that this was not the case. Further, the proposed project is not conducive to co-location, and thereby increases the likelihood of tower proliferation by establishing a basis for other providers to act, likewise, in isolation rather than cooperatively.

The applicant has failed to investigate fully those alternative sites for facilities that would involve fewer environmental drawbacks and more potential for co-location. In particular, despite the Commission's urging, the applicant has given insufficient consideration to the possibilities for locating its facility on land owned by Com-Electric. The Commission staff's recent inquiry to COM Electric elicited the response that a number of viable options existed for the applicant to meet its needs through a new or rebuilt structure on the utility's property. In response to this information, the applicant has refused to examine these options, but has instead insisted that the Commission adhere to the current deadline for approving or denying the proposed project.

The applicant has sought to have the Commission decide on an alternative proposal, for a two-phased project in which the tower that is proposed in the current DRI application would be doubled in height at a later date. As a matter of legal procedure, the Commission cannot approve a proposal so significantly different in scope and impact from what was originally proposed without first providing notice to interested parties and an opportunity for additional public input. The second proposal therefore requires a new application, but the Commission has expressed its willingness to handle the new application expeditiously and to entertain a request to waive fees. The applicant has rejected the option of submitting the second proposal through a new application.

Any evaluation of the second proposal would require more data than the applicant has provided so far. Among the issues to be addressed are how the benefits and detriments of this option compare with that of a tower on the COM Electric property, and how a taller tower in either location would affect the need for additional towers in the vicinity, particularly at the Sagamore Rotary. (The applicant asserts that an alternative proposal for a two-phase tower would eliminate the need for a second tower at the rotary, but that a tower on the COM Electric property may not do so; however, these assertions have not been substantiated by evidence presented to the Commission). Also, the applicant would need to address the mechanisms that might be needed to ensure that the tower would ultimately be constructed to its full height and would be made available for co-location by other carriers on reasonable terms. Obviously, if the second phase is never built, then the applicant's suggested "alternative" would be the same as the currently proposed project, and subject to the same objections.

The Commission's standards and procedures are intended to ensure that the applicant for a cell tower DRI permit proposes a facility that meets the needs for service while minimizing adverse environmental impacts. The Commission's past performance demonstrates that its regulation of personal wireless facilities does not have the effect of prohibiting them. The Commission has approved other applications for DRI permits for cell towers, including others from this same applicant. Not all wireless facilities are even subject to DRI review; an antenna extension of up to 20 feet attached to an existing utility pole is exempt, and towers less than 35 feet high or facilities incorporated into existing structures are not presumed to be DRI's.

The length of time that has been involved in considering this project has been reasonable, taking into account the nature and scope of the proposal. As the record shows, the process could have been shortened if the applicant had provided necessary materials more promptly, and if the applicant had been more proactive in investigating design and location options. The Commission has given the project careful and complete consideration, in accordance with its statutory responsibilities and in fairness to the applicant. There has been no untoward delay.

In summary, the project as proposed is not in conformance with the Commission standards relative to the siting, design, and co-location of wireless telecommunication facilities as contained in Technical Bulletin 97-001. This conclusion is supported by the findings above. The proposed project is not consistent with Minimum Performance Standard 4.3.2.1 of the Regional Policy Plan. The applicant, however, has the opportunity to resubmit an application to address the problems associated with the siting, design and co-location of the proposed facility. Further, the applicant may apply to the Commission Executive Committee for an application fee waiver if they choose to submit a new DRI application at the proposed site.

The Commission hereby denies the Development of Regional Impact application of Omnipoint Communications, MB Operations, LLC, for Bourne Tower proposal, TR98020, located in Sagamore Beach, Massachusetts, pursuant to the Cape Cod Commission Regulations of General Application, Chapter A, Section 3(i) of Sections 12 and 13 of the Cape Cod Commission Act, as amended.

Herbert Olsen  
Herbert Olsen, Chairman

Date 4/12/99

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss.

Subscribed and sworn before me this 12<sup>th</sup> day of April, 1999

Katharine L. Peters  
NAME, Notary

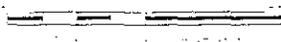
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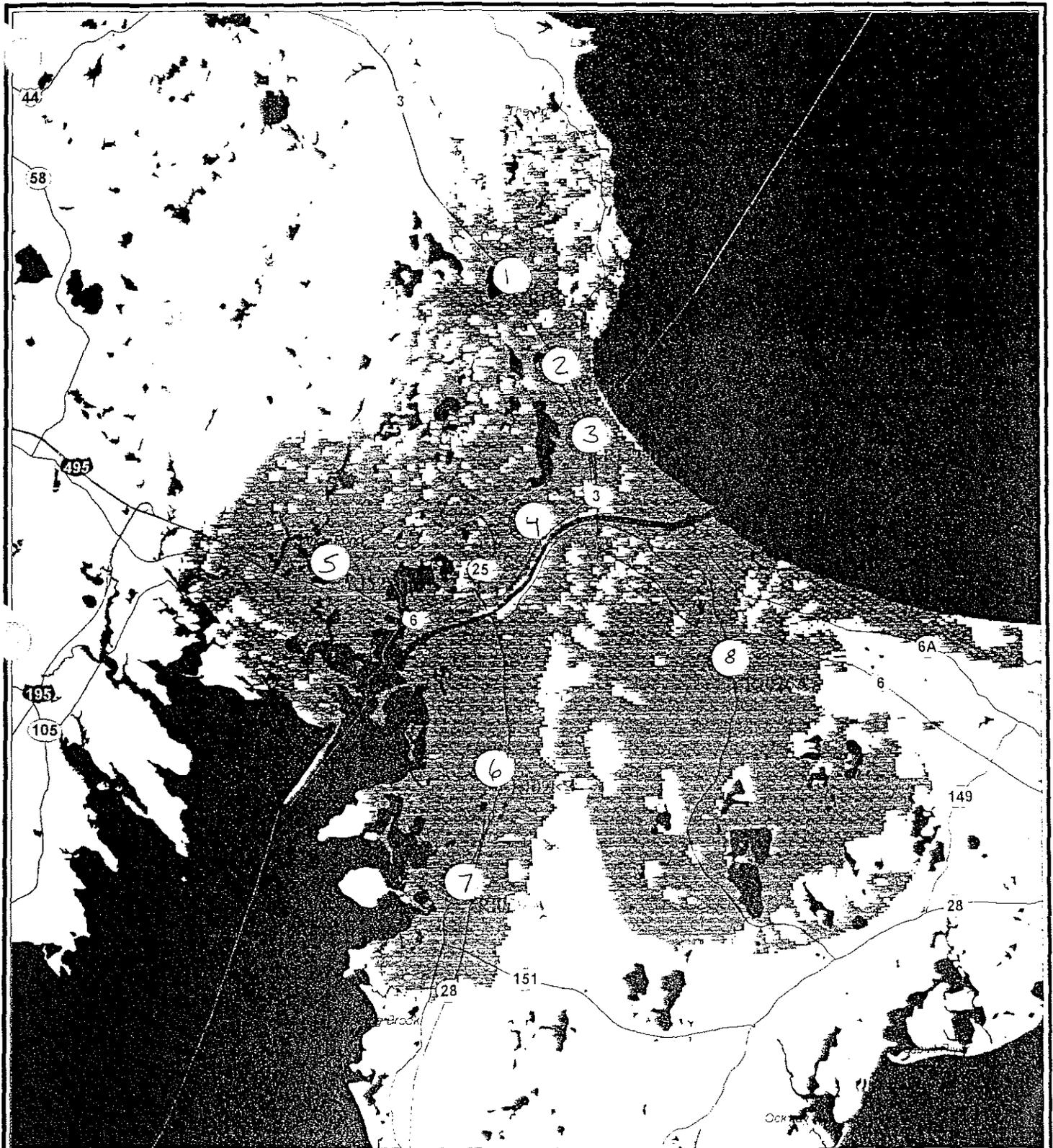


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RM Level	Range
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