DOCKET NO. 45

AN APPLICATION SUBMITTED BY THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN FAIRFIELD COUNTY.	:	CONNECTICUT SITING COUNCIL
	:	September 14, 1984

F I N D I N G S O F F A C T

1. Southern New England Telephone Company, (SNET), in accordance with provisions of sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on March 16, 1984, for a certificate of environmental compatibility and public need (certificate) for the construction, maintenance, and operation of five telecommunications towers and associated equipment buildings in the towns of Bridgeport, Norwalk, Shelton (including an alternate site) Stamford, and Westport, (including an alternate site) Connecticut, to provide Domestic Public Cellular Radio Telecommunication Service (cellular service). (Record)
2. The fee as prescribed by section 16-50v-1 of the Regulations of Connecticut State Agencies (RSA) accompanied the application. (Record)
3. The application was accompanied by proof of service as required by section 16-501 of the CGS. (Record)
4. Affidavits of newspaper notice as required by statute and section 16-501-1 of the RSA were also filed with the application. (Record)
5. The Council and its staff made an inspection of the proposed Stamford and Norwalk sites on June 19, 1984. (Record)
6. On June 20, 1984, members of the Council and its staff made an inspection of the proposed sites in Westport and Bridgeport, and

the proposed and alternate sites in Shelton. (Record)

7. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing in the City Administration Building in Stamford, Connecticut, at 7:00 P.M. on June 19, 1984. On June 20, 1984, the Council held public hearings at 2:30 P.M. in the Westport Town Hall, in Westport, Connecticut, and at 7:00 P.M. in the Bridgeport City Hall in Bridgeport, Connecticut. On August 14, 1984, the Council held a public hearing at 6:30 P.M. in the Westport Town Hall. (Record)
8. The parties to the proceeding are the applicant, SNET, and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)
9. The following state agencies filed written comments with the Council pursuant to section 16-50j of the CGS: the Department of Economic Development (DED), the Department of Environmental Protection (DEP), and the Department of Transportation (DOT). (Record)
10. The Council took administrative notice of its record in Dockets 35, 40, and 44. (Record)
11. Cellular service consists of small overlapping broadcast regions, 2-10 miles in diameter, known as cells. Each cell is served by a transmitter limited by the Federal Communications Commission (FCC) to no more than 100 watts effective radiated power per channel. Each cell has a central switching point containing electronic apparatus uniting the cells into a system. Mobile units are limited to a maximum of seven watts of transmitted power by the FCC. In the proposed system each cell would have a maximum of 45

channels. (Docket 35, Exhibit 1-II, pp. 5-8; Tr. Docket 40 4/21/84, p. 53)

12. Each proposed cell site would have approximately the same equipment. A single story masonry structure measuring 20'x24' would house electronic equipment on each site. Each building would have one door and no windows. As the equipment operates automatically, no personnel would be stationed on-site. (Docket 35, Exhibit 1-V, pp. 1-2)

13. Sites would each have a driveway and space for one vehicle, with no parking lots. Shrubs would be planted around each site to reduce the buildings' visibility. Fences would be constructed around the tower site with security and fire alarms inside. (Docket 35, Exhibit 1-V, pp. 1-2)

14. Each tower would be a self-supporting hollow steel pole. Towers would measure 36" in diameter at the base, tapering to 14" at the top. The towers would range from 75 to 150 feet. The masts would be 12-sided and would be painted blue-gray to blend in with the sky. (Docket 35, Exhibit 1-V, pp. 1-4)

15. Each mast would support a 10' wide triangular platform at the top, which would hold a minimum of four and a maximum of six whip-type omnidirectional antennas. (Docket 35, Exhibit 1-V, pp. 1-4)

16. Each triangular platform would have two functions: support of the transmit and receive antennas; and support of directional antennas in the future, if and when such antennas were required to subdivide the cells. (Docket 35, Tr. 9/30/83, pp. 42-43)

17. The omnidirectional antennas would be 12' long and 3" in diameter. These antennas and the support platform would add 17' to the

overall tower structure heights. (Docket 35, Exhibit 1-V, pp. 1-4)

18. The Federal Aviation Administration (FAA) has determined that none of the tower structures would present a hazard to air navigation. Therefore, no lights would be necessary on any of the proposed towers. (Docket 35, Exhibit 1-V, p. 4)

19. The antenna tower structures would have a wind loading design of 40 lbs. per square foot, which would withstand a basic wind speed of 125 mph. This design includes the additional load which would be created by a 2" radial ice build-up on the structure. (Docket 35, Exhibit 3, Q. 6; Docket 40, SNET Exhibit 13)

20. SNET has no plans to place equipment not related to cellular communications, such as microwave dishes, on the towers. (Docket 35 Tr. 9/29/83, p. 73)

21. Transmitters at the tower sites would broadcast in the frequency band of 880-890 MHz. (Docket 35, Exhibit 1-IV, p. 3)

22. For the purposes of cellular service construction permit applications, the FCC has defined a New England County Metropolitan Area (NECMA) consisting of Fairfield County. This Fairfield NECMA is part of SNET's planned Cellular Geographic Service Area (CGSA) in Connecticut, which includes three NECMAs. Hartford County and Hartford County constitute the other NECMAs within SNET's planned Connecticut CGSA. The Connecticut CGSA would include 17 cell sites as an integrated network. (Docket 35, Exhibit 1-III, pp. 2-3; Docket 35, CSC Exhibit 3; Docket 35, Tr. 9/29/83, p. 95)

23. The planned system contains the fewest number of towers and cells possible for adequate coverage of the Connecticut CGSA. (Docket 35, Tr. 9/30/83, p. 23)

24. The FCC requires that a licensee serve at least 75% of its licensed service area within three years of obtaining an operating license or risk losing the license. (Docket 35, Exhibit 1-VI(g), p. 2, CSC Exhibit 3, Tr. 9/30/83, pp. 30-34)

25. Cellular service would be an improved mobile telephone service. To date, mobile telephone service has been regulated by the Connecticut Department of Public Utility Control (DPUC). Eventually, cellular service could replace the existing simplex mobile service. Cellular service has been classified by the FCC as a form of basic local exchange service, which would also be subject to DPUC regulation. (Docket 35, Exhibit 2, Q. 4; Docket 35, Tr. 9/29/83, p. 58; Docket 35, Tr. 9/30/83, pp. 4, 84)

26. SNET has informed the FCC that it will seek DPUC direction regarding state franchise and/or other applicable state or local authorizations to implement and maintain a cellular service. (Docket 35, CSC Exhibit 3)

27. In the United States, cellular service is now provided in the cities of Chicago; Washington, D.C.; Baltimore; and Indianapolis. (Docket 40, Tr. 3/21/84, p. 18)

28. Nationally, a public need exists to improve the present mobile telephone service, due to the current system's limited capacity, long waiting lists nationally, and poor quality service, which

have created congested channels and long waiting times. (Docket 35 Exhibit 1-I, pp. 3-4; Docket 35, Exhibit 1-II, pp. 2-3; Docket 40, DOT Comments of 3/22/84)

29. SNET has 675 mobile customers who are being served by only five radio channels in the present simplex system in Connecticut. There are no customers waiting to obtain the present simplex mobile system service in the State of Connecticut. (Docket 35, Tr. 9/30/83, pp. 62-63)

30. The proposed coverage for all three Connecticut NECMA's would encompass approximately 77% of all Connecticut residences and approximately 82% of all Connecticut businesses located within the three NECMAs. (Docket 40, SNET 1-IV, p. 12; Docket 35, CSC Exhibit 3)

31. Monthly service costs could range from $100 to $130 in the three Connecticut NECMAs. Average monthly charges would be approximately $150.00, including the leasing of mobile unit equipment. (Docket 35, CSC Exhibit 3, Docket 35 Exhibit 3, Q. 33)

32. List prices for the mobile cellular automobile radio units generally range from $2500 - $3800 per unit. (Tr. Docket 40, 3/22/84, p. 162)

33. The greatest initial potential use of the cellular mobile system is in the business community. (Docket 35, Tr. 9/30/83, p. 60)

34. SNET has no plans to expand its system statewide but intends to apply to the FCC to expand into the Danbury and New London NECMAs when they become available. Future expansion of the system would depend on demand. (Docket 35, Tr. 9/30/83, p. 57)

35. The FCC has established the technical standards for cellular service to insure the efficient use of the allotted frequency spectrum and to insure nationwide compatibility. (Docket 35, Exhibit 1-I, p. 4)

36. The FCC has preempted the states' regulation of cellular service in three major areas: technical standards, market structure, and state certification prior to federal application for a construction permit. (Docket 35, Exhibit 1-III, p. 4)

37. The FCC has reserved to the states jurisdiction with respect to charges, classifications, practices, services, facilities, and regulation of service by licensed carriers. (Docket 40, SNET 1-III, p. 8)

38. According to FCC rules, there will be two licenses awarded in each NECMA to provide competition. One will be awarded to a wireline company, the other to a non-wireline applicant. (Docket 40, SNET 1-I, p. 4)

39. The FCC defines a Reliable Service Contour as an area having a signal quality greater than or equal to 39 dbu as determined by the Carey method. This is the required method of estimating coverage for FCC permit applications. (Docket 35, Tr. 9/29/83, pp. 96-97)

40. Cell-splitting is a technique for accommodating the future growth of demand for cellular mobile service. It consists of adding a cell between existing cells, thus increasing the number of calls which can be handled in an area. Cell-splitting can be achieved by the addition of cell sites containing lower power omnidirectional antennas, the conversion to directional antennas, or both.

(Docket 35, Exhibit 1-II, p. 8)

41. Each new cell achieved by cell-splitting would require additional towers and/or associated equipment. (Docket 35, Exhibit 3, Q. 7)

42. An omnidirectional antenna is designed to radiate in 360 degrees, but may be blocked by part of the tower itself, thus causing an effect on its radio pattern known as shadowing. Terrain and buildings can also cause shadowing. (Docket 35, Tr. 9/30/83, pp. 14-18)

43. Shadowing in urban areas can be reduced by overlapping coverage from two cell sites. Such overlapping of coverage fills in holes from shadowing and increases the possible number of simultaneous conversations. (Docket 35, Tr. 9/30/83, pp. 18-19)

44. The potential for intermodulation interference and shadowing may be significant when antennas are located on the same tower. (Docket 35, Exhibit 1-IV, p. 7)

45. SNET investigated the possibility of mounting antennas on existing towers which were not identified. Such existing towers were deemed not suitable, generally because they were of insufficient height. SNET investigated roof tops as antenna sites. If other antennas are already on a roof top, antenna spacing and intermodulation interference are major concerns. (Docket 35, Exhibit 1-IV, pp. 6, 11; Docket 35, Tr. 9/29/83, pp. 74-75)

46. SNET is willing to consider sharing of the proposed facilities, on a case by case basis, with public or private entities including competing cellular companies. (Docket 35, Tr. 9/30/83, pp. 59, 106; Docket 40, Tr. 3/22/84, p. 173)

47. If for some reason cellular mobile service is not provided or ceases, SNET would assume the responsibility of dismantling the proposed towers. (Docket 35, Tr. 9/30/83, p. 92)

48. In order for the cellular mobile system to work, there must be a close inter-relationship between the cell sites. (Docket 35, Tr. 9/29/83, p. 67)

49. As the first step in the site selection process, SNET considered the state as a whole and determined where within the state cellular coverage was needed, where the population centers were located, and where cellular service should be offered first. The next step was the identification of locations for sites, given the restriction of the inter-relationships between sites. This resulted in a grid. (Docket 35, Tr. 9/29/83, pp. 91-92)

50. The cellular grid forms the foundation for the entire design of SNET's system. This design would also allow for an orderly expansion of the system in the future. SNET next identified areas which would be compatible with the grid design. (Docket 35, Exhibit 1-IV, p.4; Docket 35, Tr. 9/30/83, p. 92)

51. A search area was created around individual grid points. Within each search area SNET first looked for areas of higher terrain which would require the lowest antenna heights. The environmental considerations for each tower site included local housing; population density; land use; and proximity of historic, scenic, and recreational areas. Other factors considered in site selection were the impact of construction on the environment, the number of trees to be cut, how much fill would be required, and degree of screening by trees. SNET's final determination was whether land

was available at reasonable cost. (Docket 35, Tr. 9/29/83, pp. 92-93; Docket 35, Tr. 9/30/83, pp. 12-13)

52. Computer modeling was used by SNET to predict cell site coverages. Modeling was also used to establish the antenna mast heights necessary at each site. Tower heights shorter than those proposed would degrade the performance of the system. (Docket 35, Exhibit 1-IV, p. 5)

53. SNET could not eliminate a cell and still maintain its desired level of performance. (Docket 35, Tr. 9/30/83, p. 24)

54. The location of each of the 17 cells in the planned system affects the position of other sites on the grid. Although the search areas allow some flexibility, any relocation of a site may cause deficiencies which may require adjustment in adjacent cells. (Docket 35, Exhibit 1-IV, p. 3; Docket 35 Tr. 9/29/83, pp. 65, 92-95; Docket 35, Metromedia A, p. 4; Docket 35, Exhibit 3, Q. 20)

55. Use of an alternate site which did not substantially affect the proposed coverage area would not require SNET to file a major application with the FCC. (Docket 35, Exhibit 3, Q. 28)

56. The deletion of a tower from a proposed service area system could have an effect not only upon the system for which a license is sought, but also on other adjacent systems because of technical characteristics of cellular development. (Docket 35, Metromedia A, pp. 4-5)

57. The State Historic Preservation Officer concluded that the sites in this application would have no effect on the state's historic, architectural, or archaeological resources. (Docket 40, SNET 5, SNET 10; Docket 45, SNET 15)

58. The construction of the proposed facilities would not contribute any significant air, water, or noise pollution. (Docket 40, SNET 1-VI, pp. 7-9)

59. For the frequency range to be used by these proposed facilities, the American National Standards Institute (ANSI) advisory guideline for radiofrequency electromagnetic radiation (RFER) exposure is approximately 3 milliwatts per square centimeter (mW/cm^2). The exact standard is determined in this frequency range by dividing the frequency by 300. (Docket 35, CSC Exhibit 2; Docket 35, Tr. 9/30/83, pp. 76-77)

60. The future addition of directional antennas would not change the expected levels of electromagenetic power densities. (Docket 35 Tr. 9/30/83, p. 78)

61. The power densities at these tower sites would be approximately 100 times lower than the present ANSI. Figures calculated by SNET for power densities were the worst case, and such conditions are expected only intermittently, if at all. (Docket 35, Tr. 9/30/83, pp. 76-77; Docket 35, DEP Comments of 9/15/83)

62. None of the proposed or alternate sites in this application appear to be the preferred habitat of any rare and/or endangered species, according to the DEP. (SNET 5)

63. Cell site construction would take place during normal daytime working hours. (Docket 40, Tr. 3/22/84)

64. The proposed Bridgeport tower site is located off of Kaechele Place and owned by Mulloy, Rynne, Feely, Rauschez and Cook, 23 Woodhill Street, Trumbull, Connecticut. The site proposed

measures 60'x120' and is within a Residential (R-A) zoning district. (SNET 1-VI, pp. 14-15)

65. The elevation of the proposed Bridgeport site is 237' Above Mean Sea Level (AMSL), and the height of the proposed tower structure is 167'. (SNET 1-VI, p. 23)

66. Based on conservative assumptions, the RFER at the proposed Bridgeport site would be .01488 mW/cm^2 or less at the antenna mast base. (SNET 1-VI, p. 23)

67. The Elton Rogers Woodland Park, owned by the City of Bridgeport, is located directly across the street from the proposed Bridgeport site. This park is undeveloped and presently utilized as open space. (SNET 3, Q. 3; Tr. 6/20/84, p. 28)

68. The proposed Bridgeport tower would be visible from residences along Kaechele Place, Oliver Street, and Hillview Street. It would be intermittently visible from Main Street, Luther Street, Cambridge Street, and Oxford Street. (SNET 1-VI, p. 19)

69. SNET proposes to construct an 8' high chain link fence around the proposed Bridgeport site and a 12' wide access drive. (SNET 1-VI, p. 12)

70. The proposed Norwalk tower site is on Connecticut Avenue on property owned by the Friday Company, 205 Church Street, Suite 1014, New Haven, Connecticut. The proposed site is on a 40'x60' parcel within a Residential (B) zoning district. (SNET 1-VII, pp. 12-13)

71. The proposed Norwalk site is behind several large commercial buildings. The proposed site is 2/3 asphalt, with the remainder consisting of brush. (SNET 1-VII, p. 18; Tr. 6/19/84, pp. 33-34)

72. The elevation of the proposed Norwalk site is 90' AMSL, and the proposed tower structure height is 167'. (SNET 1-VII, p. 20)

73. Based on calculations using conservative assumptions, the RFER power density at the proposed Norwalk site would be .01488 mW/cm^2 or less at the antenna mast base. (SNET 1-VII, p. 20)

74. There are no wetlands on the proposed Norwalk site; however, the site is within the 100' setback area of a wetland. No construction would take place within the wetlands. (SNET 3, Q. 8)

75. The proposed Norwalk tower would be intermittently visible along Junasz Road, Keeler Avenue, Connecticut Avenue, and Richards Avenue. (SNET 1-VII, p. 16)

76. The proposed Shelton tower site is on Old Kings Highway on a 1 3/4 acre parcel of land within a Rural Residence (R-1) zoning district. The property is owned by Andrew J. Cybart, 40 Applewood Drive, Shelton, Connecticut. (SNET 1-VIII, pp. 1, 14, 15)

77. The proposed Shelton site is near an existing 195' tower owned by Cable Management Services. (SNET 1-VIII, p. 3)

78. The elevation of the proposed Shelton site is 400' AMSL, and the proposed tower structure height is 167'. (SNET 1-VIII, p. 24)

79. Based on calculations using conservative assumptions, the RFER power density at the proposed Shelton site would be .01488 mW/cm^2 or less at the antenna mast base. (SNET 1-VIII, p. 24)

80. The proposed Shelton tower would be visible to residences along Buddington Road, John Dominick Drive, and Nells Rock Road. The proposed tower would be visible from Bridgeport Avenue and Route 8. (SNET 1-VIII, p. 20)

81. The nearest residence to the proposed Shelton tower is 300' away on Buddington Road. (SNET 1-VIII, p. 23)

82. For access to the proposed Shelton site, SNET would improve an existing gravel driveway. A new 8' high chain link fence would be constructed around the proposed site. (SNET 1-VIII, p. 12)

83. At the proposed Shelton site, SNET would replant any mountain laurel remove during site or access drive construction. (SNET 1-VIII, p. 21)

84. SNET has proposed an alternate Shelton tower site, located 7/10 of a mile north of the original site, on Nells Rock Road. This 1.3 acre alternate site presently owned by SNET would utilize an existing 162' tower. (SNET 1-VIII, p. 1; SNET 3, Q. 3)

85. The existing SNET tower on Nells Rock Road could support a proposed addition without experiencing intermodulation interference or antenna shadowing. (SNET 1-VIII, p. 4)

86. The elevation of the alternate Shelton site is 460' AMSL, and the height of the tower structure, including additions, would be 189.5'. (SNET 1-VIII, p. 36)

87. Based on calculations using conservative assumptions, the RFER power density at the alternate Shelton site would be .01147 mW/cm^2 or less at the antenna mast base. (SNET 1-VIII, p. 36)

88. The alternate Shelton site is preferable to the original proposed tower site because it would be located on an existing tower on SNET property, and no new tower would be necessary. (SNET 1-VIII, p. 39)

89. Access to the alternate Shelton site would be via an existing bituminous driveway. A new fence would be attached to the existing one. (SNET 1-VIII, p. 32)

90. The proposed Stamford tower site is off of Newfield Avenue on property owned by the Low-Heywood Thomas School, 1570 Newfield Avenue, Stamford, Connecticut. A lease has been negotiated with the school. The proposed site is zoned Residential. (SNET 1-IX, pp. 13-14, 29)

91. The elevation of the proposed Stamford site is 225' AMSL, and the proposed tower structure height is 167'. (SNET 1-IX, p. 23)

92. Based on calculations using conservative assumptions, the RFER power density at the proposed Stamford site would be .01488 mW/cm^2 or less at the antenna mast base. (SNET 1-IX, p. 23)

93. Properties surrounding the proposed Stamford tower site include the Italian Center of Stamford, the King School, the Low Heywood Thomas School, and the High Ridge Park office complex. (SNET 1-IX, p. 13)

94. There are no inland wetlands on the proposed Stamford site. An existing streambed on this proposed site would have to be relocated for a distance of about 80'. SNET would be willing to consult with the Stamford Environmental Protection Board in the preparation of a drainage and erosion control plan. (SNET 3, Q. 8; Tr. 6/19/84, pp. 37-38)

95. The proposed Stamford tower would be intermittently visible along Norvel Lane, Gaxton Lane, and Buxton Farm Road. It would only be visible from Newfield Avenue at the Italian Center's exit drive. (SNET 1-IX, p. 19)

96. The closest building to the proposed Stamford tower is 1300' away and shielded by trees. (SNET 1-IX, p. 22)

97. SNET proposes to construct a new 12' wide gravel access driveway to the proposed Stamford site, which would be surrounded by a new 8' high chain link fence. The driveway would connect to an existing driveway extending from Newfield Avenue. (SNET 1-IX, p. 11; SNET 3, Q. 3)

98. The proposed Westport tower site is located off of Bayberry Lane on property owned by the State of Connecticut, Department of Transportation. The site is zoned Residential. (SNET 1-X, pp. 1, 3, 29)

99. The elevation of the proposed Westport site is 207' AMSL, and the proposed tower structure height is 167'. (SNET 1-X, p. 28)

100. Based on calculations using conservative assumptions, the RFER power density at the proposed Westport site would be .01488 mW/cm^2 or less at the antenna mast base. (SNET 1-X, p. 23)

101. The originally proposed Westport tower site is located in a residential neighborhood which contains many large, well maintained homes. Residents of the area raised concerns about the proposed tower's effects on their property values. (SNET 3, Q. 3; Tr. 6/20/84, pp. 134-135; SNET 1-X, p. 22)

102. A portion of the originally proposed Westport site contains an inland wetlands. (SNET 3, Q. 8)

103. The originally proposed Westport tower would be visible from Bayberry Lane, Apache Drive, and along portions of the Merritt Parkway, Highland Road, and Vineyard Lane. (SNET 1-X, p. 19; DEP Comments, 8/13/84)

104. On July 27, 1984, SNET filed an amendment to this application, which added an alternate Westport tower site located on a former Nike Control Site off of Bayberry Lane on property owned by the Town of Westport. The site is within a residential zone. (SNET 8, pp. 37, 50)

105. The elevation of the alternate Westport site is 254' AMSL, and the alternate tower structure height is 117'. (SNET 8, p. 52)

106. Based on calculations using conservative assumptions, the RFER power density at the alternate Westport site would be .03112 mW/cm^2 or less at the antenna mast base. (SNET 8, p. 52)

107. The alternate Westport tower site is a 75'x75' wooded parcel which contains buildings used by the Westport Board of Education and the Aspetuck Health District. The Rolnick Observatory is 300' away. SNET has cooperated with the Westport Astronomical Society in order to locate the tower structure in a position which would minimize obstruction of the observatory viewing area. (SNET 8, pp. 43, 51; Tr. pp. 83-84)

108. The alternate Westport tower would be over 450' from the nearest home. The top portion of the tower would be visible from Bayberry Lane, Tower Ridge Road, and the Merritt Parkway. In general, visual effects would be minor. (SNET 8, pp. 62, 48; DEP Comments, 8/13/84)

109. The Westport Board of Selectmen prefers the alternate site over the originally proposed site. (Seiden letter, 7/26/84)

110. SNET prefers the alternate Westport tower site. (SNET 8, p. 63)

111. The State Historic Preservation Officer has determined that the use of the alternate Westport site as a cellular tower site would

have no effect on the historical ambience of the Merritt Parkway, which is eligible for inclusion in the National Register of Historic Places. (SNET LF 15)

112. The estimated potential cellular service radio telephone service subscribers for the Fairfield NECMA range from 13,812 to 19,452. (SNET 1, IV, p. 14)

113. The total cost to acquire and construct the Bridgeport cell site is estimated at $651,600. The construction costs, reflecting estimated engineering, material, building, and installation are:

Radio equipment	$ 65,900;
Antenna equipment	15,800;
Power & common equipment	364,200;
Land, building, mast	205,100; and
Miscellaneous	600.

(SNET 1, Section VI, p. 24)

114. The total cost to acquire and construct the Norwalk cell site is estimated at $622,900. The construction costs, reflecting estimated engineering, material, building, and installation are:

Radio equipment	$ 62,400;
Antenna equipment	12,800;
Power & common equipment	364,200;
Land, building, mast	182,900; and
Miscellaneous	600.

(SNET 1, VII, p. 21)

115. The total cost to acquire and construct the Shelton cell site is estimated at $581,300. The construction costs, reflecting estimated engineering, material, building, and installation are:

Radio equipment	$ 38,200;
Antenna equipment	13,700;
Power & common equipment	318,900;
Land, building, mast	210,100;
Miscellaneous	400.

(SNET 1, VIII, p. 25)

116. The total cost to acquire and construct the Shelton alternative site is estimated at $545,800. The construction costs, reflecting estimated engineering, materials, building, and installation costs are:

Radio equipment	$ 38,200;
Antenna equipment	13,700;
Power & common equipment	318,900;
Land, building, mast	174,600; and
Miscellaneous	400.

(SNET 1, Section VIII, p. 37)

117. The total cost to acquire and construct the Stamford cell site is estimated at $607,000. The construction costs, reflecting estimated engineering, material, building, and installation are:

Radio equipment	$ 59,000;
Antenna equipment	13,700;
Power & common equipment	318,900;
Land, building, mast	215,100; and
Miscellaneous	300.

(SNET 1, IX, p. 24)

118. The total cost to acquire and construct the original Westport cell site is estimated at $638,100. The construction costs, reflecting estimated engineering, material, building, and installation are:

Radio equipment	$ 62,400;
Antenna equipment	15,800;
Power & common equipment	364,200;
Land, building, mast	195,100; and
Miscellaneous	600.

(SNET 1, Section X, p. 24)

119. The estimated cost associated with the development of the Westport Nike site totals $639,300, including engineering,

material, and installation costs as follows:

Radio equipment	$ 62,400;
Antenna equipment	15,800;
Power & common equipment	364,200;
Land, building, mast	196,300; and
Miscellaneous	600.

(SNET Exhibit 8, Section X, p. 53)

120. SNET has negotiated a lease with the Town of Westport for a period of twenty-five years which insures the use of the former Nike Control Site for the proposed radio systems. (SNET Exhibit 8, Section X, p. 54)

121. SNET is willing to negotiate with public and private entities to share space on the proposed towers if legally, technically, economically, and environmentally feasible. (SNET 3, Q. 18)

122. Utilities for the Norwalk, Shelton, Bridgeport, and Westport sites will be installed underground, while the Stamford site utilities will be strung overhead. (SNET 3, Q. 2)

123. The cost to provide 280' of overhead and 70' underground utility lines at the Stamford site is estimated at $6,700. The cost to underground a utility cable the total distance is estimated at $18,300. Blasting, if required, would cost an additional $13 per linear foot. (SNET 3, Q. 2)

124. The cost to modify the existing tower on the Shelton alternate site is estimated at $25,000, including engineering, fabrication, and installation of the antenna supports. An estimated $150,000 is allocated to the construction of a new equipment building, installation of equipment, and site preparation. (SNET 3, Q. 5)

125. The Shelton alternate site would need an upgrading of the primary power supply from the street in order to provide the necessary

power to operate the cellular mobile equipment. (SNET 3, Q. 5)

126. SNET and the town of Westport have agreed to transfer the Town's antenna to the SNET mast and the town will dismantle its present tower. The cost to accomplish this is undetermined to date. (Tr. 8/14/84, pp. 23-24, 26)

127. The lease that the Town of Westport negotiated with SNET includes the condition that the cellular radio tower may not receive or transmit microwave signals over 999 megahertz. (Tr. 8/14/84, p. 100)

128. A lease has been signed between the Town of Westport and SNET to allow the use of 5,625 square feet of land at 184 Bayberry Lane, Westport, for the cellular mobile radio facility for a period of twenty-five years. The annual rental fee ranges from $15,000 for the first year to $48,376.50 for the twenty-fifth year. (SNET Exhibit 14)