

An application of The Department : Docket No. 109  
of Transportation for a Certificate :  
of Environmental Compatibility and : Connecticut  
Public Need for the construction : Siting  
of a telecommunications tower and : Council  
associated equipment in the City :  
of Hartford, Connecticut. : 25 July 1989

FINDINGS of FACT

1. The Department of Transportation (DOT) 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 9, 1989, for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a 140-foot telecommunications tower with antennas extending to 156 feet and associated equipment to provide two-way radio communication with State of Connecticut transit vehicles. (Record; Tr., 5/16/89, p.19)
2. The application was accompanied by proof of service as required by section 16-50l of the CGS. (Record)
3. The fee as prescribed by section 16-50v of the Regulations of State Agencies accompanied the application. (Record)
4. Affidavit of newspaper notice as required by section 16-50l of the CGS was supplied by the applicant. Newspaper notice of this application was published twice by the applicant in the Hartford Courant. (DOT 1, p.5)
5. The Council and its staff inspected the proposed site in the City of Hartford, on May 16, 1989. (Record)

6. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this application on May 16, 1989, at 3:30 p.m. and 6:30 p.m. in the Hartford Municipal building in Hartford, Connecticut. (Record)
7. Parties to the preceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompany these findings. (Record)
8. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to section 16-50j of the CGS. (Record)
9. Two way radio communication is essential to the general operation, maintenance, and safety needs of the State of Connecticut transit system. The system would be used to schedule, coordinate, and plan mass transit within the Hartford region and throughout the State. (DOT 1, p.7)
10. Two-way voice communication is an integral part of successfully providing a safe, efficient, and convenient transit service to the considerable numbers of citizens utilizing this public service. (DOT 3, p.3; and DOT 5)
11. Without the proposed telecommunications tower and associated equipment, daily delays in service would create a less reliable, less efficient, and inconvenient mass transit system. (DOT 3, p.4; and DOT 5)

12. The DOT now has an approximately 75-foot telecommunications tower located at their Vernon Street transit building in Hartford. (Tr., 5/16/89, p.18)
13. The existing telecommunications equipment would become obsolete when the DOT moves their operations to their new location. (Tr., 5/16/89, p.22)
14. The new DOT transit operations and maintenance building is on a 23.3 acre site and would dispatch approximately 235 buses during the morning and afternoon rush hours. (DOT 1, p.10 and p.19)
15. The proposed communications system would use three channels for bus, maintenance, and supervisory personnel. Approximately 250 radios could be operated on each channel without congestion. (Tr., 5/16/89, p.23)
16. A silent alarm mechanism, located on each vehicle, would be used by a driver to notify dispatch of an emergency situation. (Tr., 5/16/89, pp.25 and 26)
17. The proposed facility would have a standby generator for emergency power in case of an electric failure. (DOT 1, p.10; Tr., 5/16/89, p.28)
18. The zoning classification of the proposed site and surrounding area is for industrial use. (DOT 1, p.19)
19. The operations and maintenance building and site of the proposed tower would be located approximately 1100 feet west of the Connecticut River, and 1500 feet east of Interstate 91. (DOT 1, p.14)

20. The operations and maintenance building is built on four feet of gravel fill over 50 feet of clay base. A 5.6 acre wetland was filled beneath this building; but is not in the vicinity of the proposed tower site. (DOT 1, p.21; Tr., 5/16/89, pp.28 and 29)
21. The proposed Hartford facility would continue to work in conjunction with existing DOT tower sites at Talcott Mountain in Bloomfield, John Tom Hill in Glastonbury, and Vinegar Hill in Ledyard. (DOT 1, p.11)
22. An alternate location remote of the proposed site would be more expensive and reduce system reliability. In order for the communication system to operate cost effectively, the tower must be located at the new operations and maintenance building. (DOT 1, p.13)
23. Tower construction would cost approximately \$75,000.00. (DOT 1, p.22)
24. The existing DOT transit telecommunications tower and associated equipment, at Vernon Street in Hartford, would be dismantled once the proposed facility is operating. (Tr., 5/16/89, p.18)
25. The tower and all radio equipment would be new except for one antenna and a low frequency radio system that would be transferred from the existing facility for back-up purposes. (DOT 1, p.22; Tr., 5/16/89, p.18)
26. Notice of proposed tower construction has been submitted to the Federal Aviation Administration. (DOT 1, p.23 and Exhibit 8; Tr., 5/16/89, p.21)

27. The United States Department of Transportation, Urban Transportation Administration approved the proposed telecommunications system and tower on February 3, 1988. (DOT 1, p.23 and Exhibit 7)
28. The tower would consist of a three legged, heavy duty, lattice structure. (DOT 1, p.9)
29. The proposed tower would support nine various antennas; four stacked dipole antennas, four Yaggi antennas, and one eight-foot radome, none of which would exceed 16 feet in length. (DOT 1, pp.9 and 18)
30. The electromagnetic radio frequency at the mast base of the proposed site, assuming worst case operating scenerio, would be  $.027 \text{ mW/cm}^2$ , well below the American National Standard Institute (ANSI) standard of  $1.5 \text{ mW/cm}^2$ . (DOT 1, p.26 and Exhibit 9; DOT 2, Q.4)
31. Based on the applicant's consultation with the Natural Resource Center, "there are no known extant populations of federally endangered and threatened species or Connecticut 'species of special concern' occurring at the site." (DOT 2, Q.5)
32. The State Historic Preservation Office has determined that "the project will have no effect on historic, architectural, or archeological resources listed on or elegible for the National Register of Historic Places." (DOT 1, Exhibit 5(e))

33. According to the DEP, the telecommunications tower would be the tallest structure along the west bank of this river reach. DEP further stated that this should not pose a significant adverse visual impact to river users due to the height and density of the floodplain forest situated between the tower and the river. (Record)

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